ENVIRONMENTAL ASSESSMENT

PROPOSED CONSTRUCTION OF AN ARMED FORCES RESERVE CENTER AND IMPLEMENTATION OF BRAC 05 REALIGNMENT ACTIONS IN THE VICINITY OF PEASE AIR NATIONAL GUARD BASE, NEW HAMPSHIRE

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Environmental Assessment for Proposed Construction of an Armed Forces Reserve Center and Implementation of BRAC 05 Realignment Actions in the Vicinity of the Pease Air National Guard Base, New Hampshire

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EXECUTIVE SUMMARY

ES-1 Introduction

ES1.1 Background

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

The BRAC Commission's recommendations for USAR components in New Hampshire (BRAC Commission, 2005 [Appendix A]) state:

> "Close Paul Doble Army Reserve Center in Portsmouth, NH, and relocate units to a new Armed Forces Reserve Center and associated training and maintenance facilities adjacent to Pease Air National Guard Base, NH, if the Army is able to acquire suitable land for the construction of the facilities. The new AFRC and complex will have the capability to accommodate New Hampshire National Guard units from the following New Hampshire ARNG Armories: Rochester, Portsmouth, Somersworth and Dover, NH, if the state decides to relocate those National Guard units."

In April 2009, land proposed for acquisition and construction of the Armed Forces Reserve Center (AFRC) adjacent to the Pease Air National Guard Base was no longer available to the Government. In Public Law No: 111-84, the National Defense Authorization Act for Fiscal Year 2010, language was subsequently adopted to revise the BRAC recommendations as follows:

> "The Secretary of the Army may use funds appropriated pursuant to the authorization of appropriations in section 2703 of the Military Construction Authorization Act for Fiscal Year 2009 (division B of Public Law 110-417; 122 Stat. 4715) for the purpose of constructing an Armed Forces Reserve Center at Pease Air National Guard Base, New Hampshire, to construct instead an Armed Forces Reserve Center in the vicinity of Pease Air National Guard Base at a location determined by the Secretary to be in the best interest of national security and in the public interest."

Because the Army was unable to acquire land adjacent to Pease Air National Guard Base, the USAR proposes to acquire suitable land and construct a new AFRC and related facilities in the vicinity of Pease Air National Guard Base in New Hampshire, to support the BRAC-directed changes in force structure.

ES1.2 Purpose and Need

The purpose of the Proposed Action is to implement those elements of the BRAC law that contain the BRAC Commission's recommendations pertaining to USAR components in New Hampshire.

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

For USAR components in New Hampshire, this BRAC action is expected to significantly enhance the readiness of the affected units by providing adequate classroom, storage, and administrative space required to train to Army standards and to meet antiterrorism (AT)/force protection (FP) standards. At the same time, these actions would likely reduce labor and associated operating costs for maintaining existing facilities and properties.

ES-2 PROPOSED ACTION

The new AFRC and associated support facilities would accommodate two USAR units relocating from the Paul A. Doble U.S. Army Reserve Center (USARC) in the vicinity of Pease Air National Guard Base. The proposed AFRC would require a minimum of 6 acres, which the Army would acquire to provide a 100-member training facility with administrative, educational, assembly, library, learning center, vault, weapons simulator, and physical fitness areas for two USAR units. Associated support facilities would include an unheated storage building, an approximately 12,000–square-foot (ft^2) stormwater management basin, two approximately 1,260- ft^2 water tanks, a fire pump on an approximately 200- ft^2 pad, and an electric transformer placed on an approximately 75- ft^2 pad. In addition, there would be approximately 2,325 square yards of paved areas, including 1,400 square yards of military equipment parking (MEP) areas and 925 square yards of privately owned vehicle (POV) and handicapped parking areas, walkways, and access roads.

Improvements proposed to complement the AFRC and associated facilities include land clearing, paving, fencing, the extension of utilities to service the project, and general site improvements. Access for the disabled would be provided. Physical security measures, including maximum standoff distance from roads, parking areas, and vehicle unloading areas, would be incorporated into the facility designs and siting. Berms, heavy landscaping, and bollards would be used to prevent access if standoff distances cannot be maintained (USAR, 2008).

There would be no change in workforce in the area because the number of personnel from the USAR units would remain the same. Approximately 90 personnel would be relocated from the existing Army Reserve Center in Portsmouth, approximately 2.3 miles away, to the new AFRC: 3 full-time personnel and 87 reservists. The two relocating units would bring their assigned vehicles, including 1 wheeled vehicle and 21 trailers. No tracked vehicles are associated with the two units that would relocate to the new AFRC and no other support vehicles would be stationed at the facility.

A siting analysis study was completed and three sites were determined to be potentially suitable for the new AFRC and support facilities. These sites are described below as the alternatives considered in this analysis.

ES-3 ALTERNATIVES

Construction of new facilities is driven by the need to ensure adequate available space for the mission requirements of the realigning units. The Army assessed multiple locations for their suitability for construction of the proposed AFRC in an Available Site Identification and Validation Report (ASIV) completed in August 2009 (U.S. Army Corps of Engineers [USACE], 2009a). The following criteria were used to determine a site's feasibility for implementing the Proposed Action:

- Site has a net usable area of 6 to 10 acres.
- Site dimensions meet AT/FP setback requirements.
- Site will support intended construction.
- Site is environmentally clean.
- Site has ready access to public utilities.
- Site topography allows for reasonable cut or fill requirements.
- Site is in proximity to a major roadway corridor.
- Site fair market appraisal will support the purchase price.
- Site meets appropriate zoning considerations.
- Site is within the vicinity of Pease Air National Guard Base

The ASIV determined that three sites were feasible for construction and these three sites are evaluated and analyzed as alternatives in this EA.

ES-3.1 Preferred Alternative - Portsmouth

The Preferred Alternative site is approximately 3.4 miles from the Pease Air National Guard Base and approximately 2.3 miles from the Paul A. Doble USARC. The Preferred Alternative site consists of 2 parcels that encompass 10.6 acres. The site includes a former gravel quarry that has been filled and surrounding cleared areas. Vegetation is typical of oldfield regrowth, with some fill material exposed on the surface. Emergent wetlands occur on the site. The site is fronted by US Route 1, but vehicle access would be from an access road to West Road rather than from US Route 1. The topography of the site is generally level. Adjacent land uses include office buildings, warehouse/industrial, retail, and residential housing. Utilities exist near the site and could easily be extended to the proposed facilities.

ES-3.2 Alternative 1 - Rye

The Alternative 1 site is at 295, 311, and 355 Lafayette Road in Rye, NH. The approximately 16–acre site has frontage along US Route 1. The site is approximately 6.6 miles from the Pease Air National Guard Base and approximately 5.2 miles from the Paul A. Doble USARC. No secondary streets are available and access would be from US Route 1 across from its intersection with Dow Lane. The frontage along Lafayette Road is an open disturbed asphalt area and is the site of a former motel. The remaining portion of the site is an upland wooded area consisting of mature eastern hemlock and mixed hardwoods. The topography of the site is generally level. Adjacent land uses include offices, retail, and residential housing. Utilities exist along Lafayette Road and could easily be extended to the proposed facilities.

ES-3.3 Alternative 2 - Exeter

The location of Alternative 2 is at 22 Continental Drive, Exeter, NH, approximately 15 miles southwest of Pease Air National Guard Base and approximately 14.3 miles from the Paul A. Doble USARC. The approximately 21-acre site is approximately 0.6 mile from the intersection of State Highway (SH) 101 and SH 27, at the rear of an industrial park. Vehicle access would be from SH 101, along Continental Drive through the industrial park. The parcel is entirely wooded, with maturing mixed conifers and hardwoods and a brush/shrub understory. Wetlands occur on the site, concentrated near the northern and western boundaries. A number of stone walls are scattered throughout the site. The topography of the site is hilly, but generally level in the area proposed for development. Adjacent land uses consist of wooded areas and several commercial facilities on Continental Drive. Utilities would have to be extended to the site from Continental Drive.

ES-3.4 Alternatives Not Considered in Detail

The ASIV examined seven potential sites that were available within the Pease-Newington area in southeastern New Hampshire. The three sites determined to be practicable are described above as the alternatives considered in this EA. The remaining four sites were eliminated from further analysis in the EA due to constraints that made the sites unfeasible, as described in a Site Survey Report that was completed by the Army in October 2009 (Appendix C). Sites dismissed from consideration included:

- 120 Shattuck Way, Newington, NH, property sold and no longer available.
- 549 US RT 1 Bypass, Portsmouth, NH, unacceptable health and safety issues related to high traffic volume, state regulators identified the site as problematic to permit due to stream/wetland and coastal resources, substantial additional cost associated with removal of existing foundations and paved parking areas unsuitable for reuse, and unacceptable AT/FP constraints.
- Old Indigo Hill Road, Rollinsford, NH, property sold and no longer available.
- Epping Road (SH 27 & SH 101), Exeter, NH, state regulators identified the site as problematic to permit due to stream/wetland and coastal resources, a previous attempt to sell this property was blocked by local/state/U.S. Environmental Protection Agency (USEPA) analysis, and additional development costs associated with extending utility services to the site.

ES-3.5 No Action Alternative

Under the No Action Alternative, the Army would not implement the Proposed Action. USAR units would continue to train at and operate from their current locations, which are over-utilized, do not meet current AT/FP setback requirements, and are not properly configured to allow the most effective training of personnel to complete mission requirements. However, routine replacement actions or renovation of facilities could occur through normal military maintenance and construction procedures as circumstances independently warrant.

CEQ regulations require the No Action Alternative to be included in an EA, as it serves as the baseline against which the impacts of the Proposed Action and alternatives will be evaluated. Accordingly, the No Action Alternative is evaluated in this EA.

Table ES-1 – Summary of Potential Environmental and Socioeconomic Consequences

Resource	Environmental and Socioeconomic Consequences			
	No Action	Preferred Alternative	Alternative 1	Alternative 2
Land Use	No Impact	Negligible Impact	Negligible Impact	Negligible Impact
Aesthetics and Visual Resources	No Impact	Negligible Impact	Minor Negative Impact due to clearing of forest	Minor Negative Impact due to clearing of forest
Air Quality	No Impact	Minor short-term impact from dust emissions related to construction activities that would be controlled through appropriate best management practices (BMPs). Negligible operational impact from building heating units and water heaters.	Minor short-term impact from dust emissions related to construction activities that would be controlled through appropriate BMPs. Negligible operational impact from building heating units and water heaters.	Minor short-term impact from dust emissions related to construction activities that would be controlled through appropriate BMPs. Negligible operational impact from building heating units and water heaters.
Noise	No Impact	Minor short term impacts from construction: appropriate worker safety measures would be implemented; no long-term effects from operation. Negligible nuisance disturbance, during construction, at nearby residential area possible. Negligible nuisance disturbance, during operation, at nearby residential area possible.	No significant impact from construction: appropriate worker safety measures would be implemented; no long-term effects from operation. Negligible nuisance disturbance, during construction, at nearby businesses or residences possible. Negligible nuisance disturbance, during operation, at nearby businesses possible.	No significant impact from construction: appropriate worker safety measures would be implemented; no long-term effects from operation. Negligible nuisance disturbance, during construction, at nearby businesses possible. Negligible nuisance disturbance, during operation, at nearby residential area possible.
Geology and Soils				
Geology and Soils	No Impact	Minor impacts: appropriate BMPs would be implemented to minimize erosion and impact from stormwater runoff.	Minor impacts: appropriate BMPs would be implemented to minimize erosion and impact from stormwater runoff.	Minor impacts: appropriate BMPs would be implemented to minimize erosion and impact from stormwater runoff.
Prime Farmland	No Impact	No Impact	No Impact	No Impact

Table ES-1 – Summary of Potential Environmental and Socioeconomic Consequences

Resource	Environmental and Socioeconomic Consequences			
	No Action	Preferred Alternative	Alternative 1	Alternative 2
Water Resources				
Surface Water	No Impact	Negligible impacts. See Biological Resources for Wetland Impacts.	Negligible impacts. See Biological Resources for Wetland Impacts.	Negligible impacts. See Biological Resources for Wetland Impacts.
Hydrology/Groundwater	No Impact	Negligible impacts: no change to onsite hydrology/groundwater as described under Stormwater.	Negligible impacts: no change to onsite hydrology/groundwater as described under Stormwater.	Negligible impacts: no change to onsite hydrology/groundwater as described under Stormwater.
Floodplains	No Impact	No Impact	No Impact	The proposed site layout would result in no encroachment into floodplains or floodprone areas. Therefore, no impact to floodplains would result.
Stormwater	No Impact	Negligible impact: use of appropriate BMPs would prevent impacts from construction activities. Stormwater controls, consistent with the NH Stormwater Manual and other guidance documents, would be designed to prevent post-construction runoff rate from exceeding pre-construction runoff rate and would prevent further degradation of impaired waters nearby.	Negligible impact: use of appropriate BMPs would prevent impacts from construction activities. Stormwater controls, consistent with the NH Stormwater Manual and other guidance documents, would be designed to prevent post-construction runoff rate from exceeding pre-construction runoff rate and would prevent further degradation of impaired waters nearby.	Negligible impact: use of appropriate BMPs would prevent impacts from construction activities. Stormwater controls, consistent with the NH Stormwater Manual and other guidance documents, would be designed to prevent post-construction runoff rate from exceeding pre-construction runoff rate and would prevent further degradation of impaired waters nearby.
Coastal Zone	No Impact	Negligible impact	Negligible impact	Negligible impact
Biological Resources				
Vegetation	No Impact	Negligible impact to common flora.	Minor impact to common flora.	Minor impact to common flora.
Wildlife	No Impact	Negligible impact to common fauna.	Minor impact to common fauna.	Minor impact to common fauna.

Table ES-1 – Summary of Potential Environmental and Socioeconomic Consequences

Resource	Environmental and Socioeconomic Consequences			
	No Action	Preferred Alternative	Alternative 1	Alternative 2
Wetlands	No Impact	Negligible adverse impacts to low quality wetlands	No Impact	Negligible adverse impacts to moderate quality wetlands
Sensitive Species	No Impact	No Impact	Negligible Impact	Negligible Impact
Cultural Resources	No Impact	No Impact	No Impact	No Impact
Historic Resources	No Impact	No Impact	No Impact	Moderate to severe adverse impacts to resources recommended as eligible for listing on National Register of Historic Places (NRHP).
Archeological Resources	No Impact	No Impact	No Impact	No Impact
Native American Resources	No Impact	No Impact	No Impact	No Impact
Socioeconomics				
Economic Development	No Impact	Minor short-term beneficial impact from construction activities Minor long-term loss of potential tax revenue generation from site.	Minor short-term beneficial impact from construction activities Minor long-term loss of potential tax revenue generation from site.	Minor short-term beneficial impact from construction activities Minor long-term loss of potential tax revenue generation from site.
Demographics	No Impact	No Impact	No Impact	No Impact
Housing	No Impact	No Impact	No Impact	No Impact
Environmental Justice	No Impact	No Impact	No Impact	No Impact
Protection of Children	No Impact	No Impact	No Impact	No Impact
Transportation	No Impact	Minor short-term impact from construction; Negligible impact on traffic flow during the week or weekend.	Minor short-term impact from construction; Negligible impact on traffic flow during the week. Minor impact on traffic flow during the weekend.	Minor short-term impact from construction; Negligible impact on traffic flow during the week. Minor impact on traffic flow during the weekend.

Table ES-1 – Summary of Potential Environmental and Socioeconomic Consequences

Resource	Environmental and Socioeconomic Consequences			
	No Action	Preferred Alternative	Alternative 1	Alternative 2
Utilities				
Potable Water	No Impact	No Impact, no increase in demand on Portsmouth water supply.	Minor Impact, slight increase in demand on Rye water supply, slight reduction in demand on Portsmouth water supply.	Minor Impact, slight increase in demand on Exeter water supply, slight reduction in demand on Portsmouth water supply.
Wastewater	No Impact	No Impact, Regionally no change in wastewater usage.	No Impact, Regionally no change in wastewater usage.	No Impact, Regionally no change in wastewater usage.
Energy	No Impact	No Impact, Regionally no change in energy usage.	No Impact, Regionally no change in energy usage.	No Impact, Regionally no change in energy usage.
Solid Waste	No Impact	Minor Impact, slight increase in demand for service during construction; Typical construction waste would be within the capacity of local waste disposal facilities. No operational impact, Regionally no change in solid waste service demand.	Minor Impact, slight increase in demand for service during construction; Typical construction waste would be within the capacity of local waste disposal facilities. No operational impact, Regionally no change in solid waste service demand.	Minor Impact, slight increase in demand for service during construction; Typical construction waste would be within the capacity of local waste disposal facilities. No operational impact, Regionally no change in solid waste service demand.
Hazardous/Toxic Materials				
Hazardous/Toxic Materials	No Impact	No impacts from construction. Negligible impact from minor quantities of cleaners, solvents, and lubricants associated with operation of AFRC.	No impacts from construction. Negligible impact from minor quantities of cleaners, solvents, and lubricants associated with operation of AFRC.	No impacts from construction. Negligible impact from minor quantities of cleaners, solvents, and lubricants associated with operation of AFRC.
Indirect and Cumulative Impacts	No Impact	No Impact	No Impact	No Impact

ES-4 CONSEQUENCES

Project design and site selection would minimize and avoid impacts to the extent practicable. Each of the alternatives could require some or all of the permits listed below and described in detail in the Affected Environment section:

- Alteration of Terrain Permit
- National Pollutant Discharge Elimination System (NPDES) Stormwater General Construction Permit
- New Hampshire Department of Environmental Services (NHDES) Wetland Permit
- USACE Wetland Permit
- Clean Water Act (CWA) Section 404 and 401 Certification
- Coastal Zone Management Act (CZMA) Federal Consistency Determination

ES-4.1 Consequences of the Preferred Alternative - Portsmouth

Implementation of the Preferred Alternative would result in negligible impacts to land use and aesthetics and visual resources, minor short-term adverse impacts to air quality from construction, and negligible impacts to air quality from operation of building heating units and water heaters, temporary construction-related noise, negligible noise disturbance during operation, minor alteration of soils, negligible impacts to water resources during construction and operation, negligible adverse impacts on common flora and fauna, negligible adverse impacts to wetlands, minor short-term impacts to traffic during construction and negligible impacts to traffic from operation, minor impacts on utilities during construction and no impacts on utilities during operation, negligible impacts on hazardous/toxic materials, and minor generation of construction-related waste. None of these impacts are considered to be significant. There would be no impact on any other resources evaluated in this EA.

ES-4.2 Consequences of Alternative 1 - Rye

Implementation of Alternative 1 would result in impacts similar to those of the Proposed Action. Among these are negligible impacts to land use and aesthetics and visual resources, minor short-term adverse impacts to air quality from construction and negligible impacts to air quality from operation of building heating units and water heaters, temporary construction-related noise, negligible noise disturbance during operation, minor alteration of soils, negligible impacts to water resources during construction and operation, minor adverse impacts on common flora and fauna, negligible impacts to protected species, minor short-term impacts to traffic during construction and negligible impacts to traffic during operation, minor impacts on utilities, negligible impacts on hazardous/toxic materials, and minor generation of construction-related waste. None of these impacts are considered to be significant. There would be no impact on any other resources evaluated in this EA.

ES-4.3 Consequences of Alternative 2 - Exeter

Implementation of Alternative 2 would result in negligible impacts to land use and aesthetics and visual resources, minor short-term adverse impacts to air quality from

construction and negligible impacts to air quality from operation of building heating units and water heaters, temporary construction-related noise, minor alteration of soils, negligible impacts to water resources during construction and operation, minor adverse impacts on common flora and fauna, negligible adverse impacts to wetlands, negligible impacts to protected species, minor short-term impacts to traffic during construction, minor impacts on utilities, negligible impacts on hazardous/toxic materials, and minor generation of construction-related waste.

Construction of the AFRC at the Exeter site, even with a 100-foot buffer around the N. Gilman Jr. Garrison House Site, would result in moderate to severe adverse impacts to this site that is recommended as eligible for listing on the NRHP. Because of the location within an industrial park, no operational noise impacts would be expected. There would be no impact on any other resources evaluated in this EA.

ES-4.4 Consequences of the No Action Alternative

Under the No Action Alternative, no construction or site preparation would occur. Units would continue to use the existing USARC. There would be no impact to any resources evaluated in this EA. There would be no beneficial impacts such as better energy and resource efficiencies under the No Action Alternative.

ES-5 CONCLUSIONS

Based upon the findings presented above, it has been concluded that no significant environmental or socioeconomic impacts would result from the Preferred Alternative (Proposed Action). Therefore, it is not necessary to prepare an Environmental Impact Statement to address the Proposed Action and a Finding of No Significant Impact should be issued.

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1.0 PURPOSE, NEED, AND SCOPE

1.1 Introduction

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

The BRAC law exempts consideration of the need for closing or realigning a military installation and consideration of alternative installations in preparing environmental documentation pursuant to the National Environmental Policy Act (NEPA). However, NEPA analysis and documentation are required to analyze how the BRAC actions will be implemented.

The following are the BRAC Commission's recommendations for USAR components in New Hampshire (BRAC Commission, 2005):

> "Close Paul Doble Army Reserve Center in Portsmouth, NH, and relocate units to a new Armed Forces Reserve Center and associated training and maintenance facilities adjacent to Pease Air National Guard Base, NH, if the Army is able to acquire suitable land for the construction of the facilities. The new AFRC and complex will have the capability to accommodate New Hampshire National Guard units from the following New Hampshire ARNG Armories: Rochester, Portsmouth, Somersworth and Dover, NH, if the state decides to relocate those National Guard units."

The BRAC Commission's recommendations considered the Secretary of Defense's justifications for recommended realignment actions at USAR components in New Hampshire. The Secretary's justifications, as quoted, are contained in Appendix A.

In April 2009, land proposed for acquisition and construction of the Armed Forces Reserve Center (AFRC) adjacent to the Pease Air National Guard Base was no longer available to the Government. In Public Law No: 111-84, the National Defense Authorization Act for Fiscal Year 2010, language was subsequently adopted to revise the BRAC recommendations as follows:

> "The Secretary of the Army may use funds appropriated pursuant to the authorization of appropriations in section 2703 of the Military Construction Authorization Act for Fiscal Year 2009 (division B of Public Law 110-417; 122 Stat. 4715) for the purpose of constructing an Armed Forces Reserve Center at Pease Air National Guard Base, New Hampshire, to construct instead an Armed Forces Reserve Center in the vicinity of Pease Air National Guard Base at a location determined by the Secretary to be in the best interest of national security and in the public interest."

Because the Army was unable to acquire land adjacent to Pease Air National Guard Base, the USAR proposes to acquire suitable land and construct a new AFRC and related facilities in the vicinity of Pease Air National Guard Base in New Hampshire, to support the BRAC-directed changes in force structure. Details on the Proposed Action are provided in Section 2.

1.2 Purpose and Need

The purpose of the Proposed Action is to implement those elements of the BRAC law that contain the BRAC Commission's recommendations pertaining to USAR components in New Hampshire.

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

1.2.1 Base Closure and Realignment

In previous rounds of BRAC, the explicit goal was to save money and downsize the military to reap a "peace dividend." In the 2005 BRAC round, the Department of Defense (DoD) recommendations sought to reorganize DoD installation infrastructure to more efficiently support its forces, increase operational readiness, and facilitate new ways of doing business; thus, BRAC represents more than cost savings. It supports advancing the goals of transformation, improving military capabilities, and enhancing military value. The Army needs to carry out the BRAC Commission's recommendations for USAR components in New Hampshire to achieve the objectives for which Congress established the BRAC process.

For USAR components in New Hampshire, this BRAC action is expected to significantly enhance the readiness of the affected units by providing adequate classroom, storage, and administrative space required to train to Army standards and to meet antiterrorism (AT)/force protection (FP) standards. At the same time, these actions would likely reduce labor and associated operating costs for maintaining existing facilities and properties.

1.3 Scope

The Environmental Assessment (EA) identifies, documents, and evaluates the potential environmental effects of the proposed BRAC realignment actions in New Hampshire, including the acquisition of land, any needed demolition of existing structures, and the construction and operation of the new facilities. The EA has been developed in accordance with NEPA and implementing regulations issued by the President's Council on Environmental Quality (CEQ) and the Army. The purpose of the EA is to inform decision-makers and the public of the likely environmental consequences of the Proposed Action and the alternatives for implementing it.

The Defense Base Closure and Realignment Act of 1990 specifies that NEPA does not apply to actions of the President, the Commission, or the DoD, except "(i) during the process of property disposal, and (ii) during the process of relocating functions from a military

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

1.4 Public Participation and Involvement

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

Public participation opportunities with respect to this EA and decision-making on the Proposed Action are guided by 32 Code of Federal Regulations (CFR) Part 651. A Notice of Availability was published in the *Portsmouth Herald* and the *Exeter News-Letter* (Appendix B). This EA is being made available to the public for 30 days, along with a draft Finding of No Significant Impact (FNSI). During this time, the Army will consider any comments submitted by individuals, agencies, or organizations on the Proposed Action, the EA, or the draft FNSI. At the conclusion of the comment period, the Army may, if appropriate, execute the FNSI and proceed with implementing the Proposed Action. If it is determined that implementing the Proposed Action would result in significant impacts, the Army will commit to mitigation actions sufficient to reduce impacts below significance levels or will publish in the *Federal Register* a Notice of Intent to prepare an Environmental Impact Statement (EIS).

Interested parties are invited to review and comment on the EA and draft FNSI within 30 days of publication. The EA and draft FNSI can be accessed on the World Wide Web at: http://www.hqda.army.mil/acsim/brac/env_ea_review.htm.

Copies of the EA also can be reviewed at the following local libraries:

Exeter Public Library 4 Chestnut Street Exeter, NH 03833-1850	Rye Public Library 581 Washington Road Rye, NH 03870-2353	Portsmouth Public Library 175 Parrott Avenue Portsmouth, NH 03801-4452

Comments on the EA and draft FNSI should be submitted during the 30-day public comment period via mail or electronic mail to:

Mr. Jeffrey M. Hrzic, Chief
Environmental Division, 99th RSC DPW
99th Regional Support Command
5231 South Scott Plaza
Fort Dix, NJ 08640-5000
Phone: 609.353.6727
Fax: 609.562.7983
Email: jeff.hrzic1@usar.army.mil

All comments received will be incorporated in the final decision document.

1.5 Impact analysis performed

An interdisciplinary team has analyzed the Proposed Action and alternatives in light of existing conditions and has identified relevant beneficial and adverse impacts associated with the action. Section 1 of the EA provides the purpose, need, and scope. The Proposed Action is described in Section 2, and the alternatives, including the No Action Alternative, are described in Section 3.

The selection of the Preferred Alternative rests on numerous factors such as mission requirements, schedule, availability of funding, and environmental considerations. In addressing environmental considerations, the Army is guided by relevant statutes (and their implementing regulations) and Executive Orders (EOs) that establish standards and provide guidance on environmental and natural resources management and planning.

1.5.1 Relevant Statutes and Executive Orders

Relevant statutes include, but are not limited to, the Clean Air Act (CAA), Clean Water Act (CWA), Noise Control Act, Endangered Species Act, National Historic Preservation Act (NHPA), Archaeological Resources Protection Act, Resource Conservation and Recovery Act, Toxic Substances Control Act, Farmland Protection Policy Act, Native American Graves Protection and Repatriation Act, and American Indian Religious Freedom Act. EOs bearing on the Proposed Action include EO 13514 (*Federal Leadership in Environmental, Energy, and Economic Performance*), EO 11988 (*Floodplain Management*), EO 11990 (*Protection of Wetlands*), EO 12088 (*Federal Compliance with Pollution Control Standards*), EO 12580 (*Superfund Implementation*), EO 12898 (*Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*), EO 13045 (*Protection of Children from Environmental Health Risks and Safety Risks*), EO 13175 (*Consultation and Coordination with Indian Tribal Governments*), EO 13186 (*Responsibilities of Federal Agencies to Protect Migratory Birds*), and EO 13423 (*Strengthening Federal Environmental, Energy, and Transportation Management*). These authorities are addressed in various sections throughout this EA when relevant to environmental resources and conditions. The full text of the laws, regulations, and EOs is available on the Defense Environmental Network and Information Exchange Web site at http://www.denix.osd.mil.

2.0 DESCRIPTION OF THE PROPOSED ACTION

2.1 Introduction

This section describes the Army's Proposed Action for implementing the BRAC Commission's recommendations for USAR components in New Hampshire (BRAC Commission, 2005), which were:

> "Close Paul Doble Army Reserve Center in Portsmouth, NH, and relocate units to a new Armed Forces Reserve Center and associated training and maintenance facilities adjacent to Pease Air National Guard Base, NH, if the Army is able to acquire suitable land for the construction of the facilities. The new AFRC and complex will have the capability to accommodate New Hampshire National Guard units from the following New Hampshire ARNG Armories: Rochester, Portsmouth, Somersworth and Dover, NH, if the state decides to relocate those National Guard units."

In April 2009, land proposed for acquisition and construction of the AFRC adjacent to the Pease Air National Guard Base was no longer available to the Government. In the National Defense Authorization Act for Fiscal Year (FY) 2010, language was subsequently adopted to revise the BRAC recommendations as follows:

> "The Secretary of the Army may use funds appropriated pursuant to the authorization of appropriations in section 2703 of the Military Construction Authorization Act for Fiscal Year 2009 (division B of Public Law 110-417; 122 Stat. 4715) for the purpose of constructing an Armed Forces Reserve Center at Pease Air National Guard Base, New Hampshire, to construct instead an Armed Forces Reserve Center in the vicinity of Pease Air National Guard Base at a location determined by the Secretary to be in the best interest of national security and in the public interest."

Because the Army was unable to acquire land adjacent to Pease Air National Guard Base, the USAR proposes to acquire suitable land and construct a new AFRC and related facilities in the vicinity of the Pease Air National Guard Base in New Hampshire, to support the BRAC-directed changes in force structure.

2.2 Proposed Action/Implementation proposed

A siting analysis study was completed and three sites were determined to be potentially suitable for the new AFRC and support facilities (Figure 2-1). The new AFRC and associated support facilities would accommodate two USAR units relocating from the Paul A. Doble U.S. Army Reserve Center (USARC) in the vicinity of Pease Air National Guard Base near Portsmouth, NH. The Proposed Action is further detailed below in the *Facilities* (Section 2.2.1), *Equipment* (Section 2.2.2), and *Personnel* (Section 2.2.3) subsections.

2.2.1 Facilities

The proposed AFRC would require a minimum of 6 acres, which the Army would acquire to provide a 100-member training facility with administrative, educational, assembly, library, learning center, vault, weapons simulator, and physical fitness areas for two USAR units. Associated support facilities would include an unheated storage building, an

LEGEND

Property Boundary

0 0.5 1 2
Miles

FIGURE 2-1
VICINITY MAP
Environmental Assessment - Pease, NH

approximately 12,000– ft^2 stormwater management basin, two approximately 1,260-ft^2 water tanks, a fire pump on an approximately 200- ft^2 pad, and an electric transformer on an approximately 75- ft^2 pad (Table 2-1). In addition, there would be approximately 2,325 square yards of paved areas, including 1,400 square yards of military equipment parking (MEP) areas and 925 square yards of privately owned vehicle (POV) and handicapped parking areas, walkways, and access roads.

Table 2-1. AFRC Complex Component Sizes

Building	Approximate Size
Armed Forces Reserve Center	20,833 square feet (ft^2)
Unheated Storage Building	610 ft^2
Water Tanks	2,520 ft^2
Fire Pump Pad	200 ft^2
Stormwater Management Basin	12,000 ft^2
Electric Transformer Pad	75 ft^2
Parking	4,356 square yards

Source: USAR, 2008

Supporting improvements proposed to complement the AFRC and associated facilities include land clearing, paving, fencing, the extension of utilities to service the project, and general site improvements. Access for the disabled would be provided. Physical security measures, including maximum standoff distance from roads, parking areas, and vehicle unloading areas, would be incorporated into the facility designs and siting. Berms, heavy landscaping, and bollards would be used to prevent access when standoff distances cannot be maintained (USAR, 2008).

2.2.2 Personnel

Implementing the BRAC Commission's recommendations in New Hampshire would result in the assignment of approximately 90 personnel to the new AFRC: 3 full-time personnel and 87 reservists. Units would be relocating from the existing Army Reserve Center in Portsmouth, approximately 2.3 miles away. Therefore, the BRAC realignment action would not result in a workforce increase within the region of influence, in this case Rockingham County, as the number of personnel from the USAR units would remain the same. The maximum number of personnel using the facilities on a drill weekend would be approximately 87. The potential direct and/or cumulative impacts on the environment from the increase in personnel associated with the new AFRC are considered in this EA. Table 2-2 provides a breakdown of the number of personnel by unit relocating to the new AFRC complex.

Table 2-2. 2005 BRAC Action – Pease, NH AFRC: Personnel Changes

Action	Organization	From	Total Number of Reservists	Total Number of Full-time Personnel
Incoming	Paul A. Doble USARC 378 Medical Detachment	Portsmouth, NH	38	1
Incoming	Paul A. Doble USARC 399 Combat Support Hospital, Company A	Portsmouth, NH	49	2
		TOTAL	**87**	**3**

Source: U.S. Army, 2008

2.2.3 Equipment

The relocation and realignment of units to the proposed AFRC also would bring associated unit vehicles, equipment, and materials. The number of vehicles that would relocate to the new AFRC is projected to be 22, including 1 wheeled vehicle and 21 trailers. No tracked vehicles are associated with the two units that would relocate to the new AFRC and no other support vehicles would be stationed at the facility.

2.3 Schedule

Under the BRAC law, the Army must complete all realignments no later than September 15, 2011. Section 2904(a), Public Law 101-510, as amended, provides that the Army must "…initiate all closures and realignments no later than two years after the date on which the President transmits a report [by the BRAC Commission] to the Congress… containing the recommendations for such closures or realignments; and… complete all such closures and realignments no later than the end of the six year period beginning on the date on which the President transmits the report …" The President took the specified action on September 15, 2005.

As discussed in Section 1.1, the Army was unable to acquire land adjacent to the Pease Air National Guard Base, and the National Defense Authorization Act for Fiscal Year 2010, Section 2712, allowed the Army to construct an AFRC in the vicinity of the Pease Air National Guard Base utilizing funding from the Army BRAC account. The Army reinitiated the site selection process to comply with the 2010 National Defense Authorization Act (NDAA). The implementation of the NDAA for FY 2010, Section 2712, requires the Army to declare the BRAC project unimplementable, but allows use of BRAC funding for the construction of the facility in the vicinity of Pease Air National Guard Base. As such, the project is no longer required to be completed by the BRAC deadline, since the Army is no longer implementing a BRAC required action.

The proposed schedule for implementing the action identifies a construction start date of April 2011, with the units relocated by March 2012 (Table 2-3).

Table 2-3. Construction and Relocation Schedule– Pease, NH AFRC

Action	Date
Construction Start	April 2011
Construction Complete	January 2012
Units Relocated	March 2012

Source: Beck, 2010, personal communication.

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3.0 ALTERNATIVES

3.1 Introduction

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

3.2 Alternatives

The BRAC Commission's recommendations direct that the existing Paul A. Doble USARC in Portsmouth, New Hampshire, be closed and the units relocated to a new AFRC to be constructed in the vicinity of the Pease Air National Guard Base, New Hampshire, if suitable land can be acquired, and that the facilities be able to accommodate Army National Guard units from Rochester, Portsmouth, Somersworth, and Dover, New Hampshire, if the state decides to relocate those units.

Construction of new facilities is driven by the need to ensure adequate space is available for the mission requirements of the realigning units. Upon reviewing available land for purchase, the Army identified three locations to be assessed for their suitability for construction of the proposed AFRC in an Available Site Identification and Validation Report (ASIV) completed in August 2009 (U.S. Army Corps of Engineers [USACE], 2009a). The following criteria were used to determine a site's feasibility for implementing the Proposed Action:

- Site has a net usable area of 6 to 10 acres.
- Site dimensions meet AT/FP setback requirements.
- Site will support intended construction.
- Site is environmentally clean.
- Site has ready access to public utilities.
- Site topography allows for reasonable cut or fill requirements.
- Site is in proximity to a major roadway corridor.
- Site fair market appraisal will support the purchase price.
- Site meets appropriate zoning considerations.
- Site is within the vicinity of Pease Air National Guard Base.

As discussed above, over the course of the search, the Army identified three potential sites and evaluated each site to determine whether these locations could be considered reasonable alternatives for implementing the Proposed Action. Three sites were determined to be feasible and are evaluated and analyzed in this EA. The remaining sites included in the initial screening and determined not to be feasible are discussed in Section 3.2.5.

3.2.1 Preferred Alternative – 1900 Lafayette Road, Portsmouth, NH

The Preferred Alternative site is at 1900 Lafayette Road, Portsmouth, NH (Figure 2-1, Figure 3-1). The Preferred Alternative site is approximately 3.4 miles from the Pease Air National Guard Base and approximately 2.3 driving miles from the Paul A. Doble USARC. The Preferred Alternative site initially consisted of 10.6 acres and included two parcels, which are fully evaluated in this EA. However, the U.S. Army is now acquiring only the 6-acre parcel for construction of this project and the remaining 4.6-acre parcel will not be used. The site includes a former gravel quarry that was filled and surrounding cleared areas. Vegetation is typical of oldfield regrowth, with some fill material exposed on the surface. The site is fronted by US Route 1, but vehicle access would be from West Road to avoid the heavy traffic on US Route 1 during summer weekends. The topography of the site is generally level. Adjacent land uses include office buildings, warehouse/industrial, retail, and residential housing. Utilities exist near the site and could easily be extended to the proposed facilities.

All of the components described for the Proposed Action (Table 2-1) would be built, as shown on Figure 3-1.

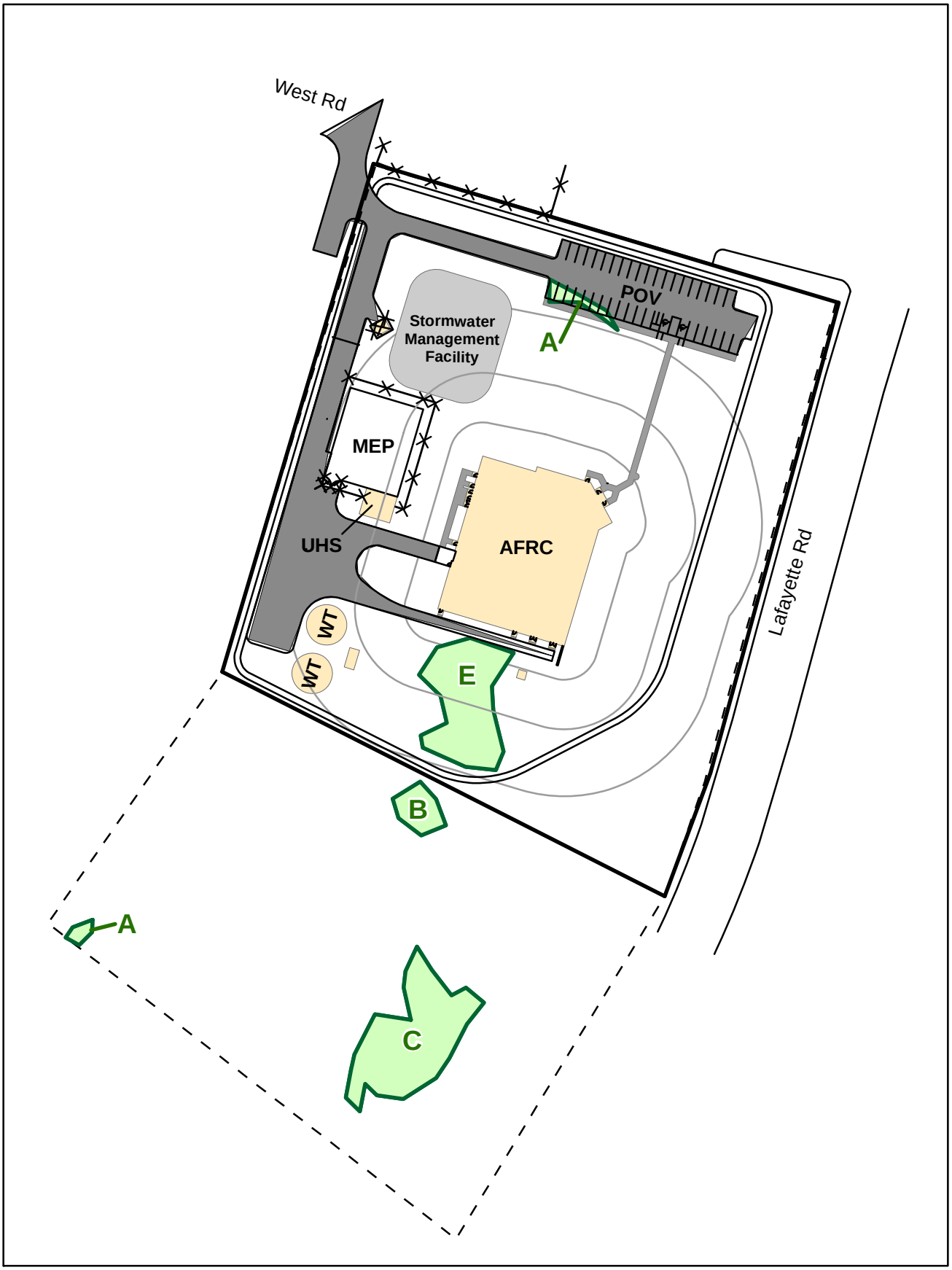
The property can accommodate the proposed facilities while also meeting AT/FP standoff distance requirements. The parcel would provide adequate facilities for all realigned Army units, as directed by the BRAC law. This alternative is fully evaluated in the EA.

3.2.2 Alternative 1 – 295, 311, and 355 Lafayette Road, Rye, NH

The Alternative 1 site is at 295, 311, and 355 Lafayette Road in Rye, NH (Figure 2-1, Figure 3-2). The approximately 16–acre site has frontage along Lafayette Road (US Route 1). The Alternative 1 site is approximately 6.6 miles from the Pease Air National Guard Base and approximately 5.2 miles from the Paul A. Doble USARC. No secondary streets are available and access would be from US Route 1 across from its intersection with Dow Lane. The frontage along Lafayette Road is an open disturbed asphalt area and is the site of a former motel. The remaining portion of the site is an upland wooded area consisting of mature eastern hemlock (*Tsuga canadensis*) and mixed hardwoods. An existing Superfund site, possibly associated with a former fuel pipeline for Pease Air Force Base, is adjacent to the western portion of the site. The topography of the site is generally level. Adjacent land uses include offices, retail, and residential housing. Utilities exist along Lafayette Road and could easily be extended to the proposed facilities.

All of the components described for the Proposed Action (Table 2-1) would be constructed under Alternative 1. However, the locations for the water tanks, fire pump, stormwater management basin, and electric transformer pad have not been determined. As discussed in Section 4, these items would not be constructed in the southwest portion of the site, where a contaminated groundwater plume occurs, nor would the water tanks be placed along Lafayette Road.

The property can accommodate the size and footprint of the proposed facilities, including AT/FP setbacks. Use of this site would require the clearing of mature upland woods. This alternative is fully evaluated in the EA.



Building
Pavement
Property Boundary
Preferred Alternative Site
Wetlands

0 25 50 100
Feet

FIGURE 3-1
PREFERRED ALTERNATIVE SITE
PROPOSED DESIGN
Environmental Assessment - Pease, NH

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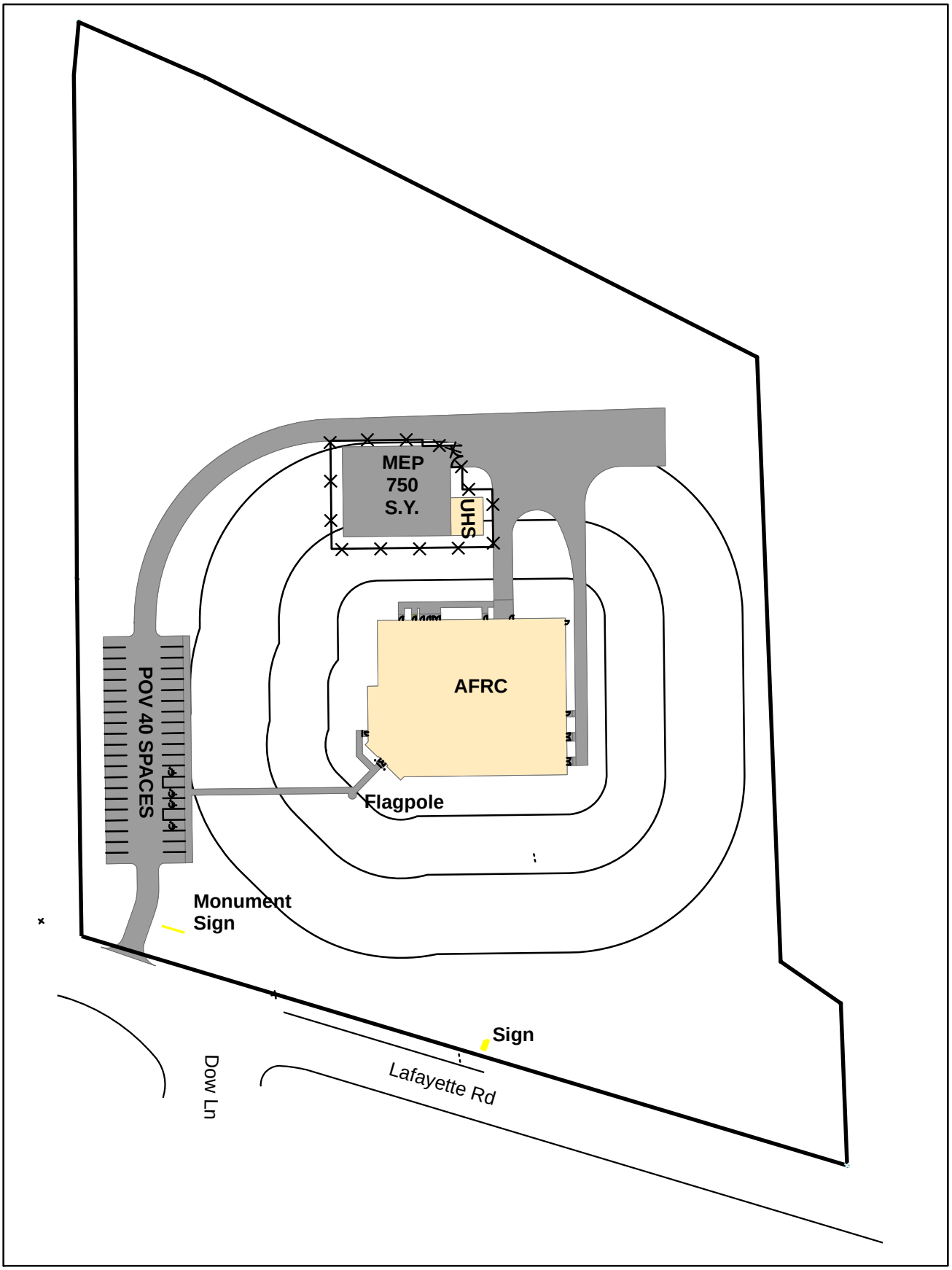


Building
Pavement
Sign
Property Boundary

0 25 50 100
Feet

FIGURE 3-2
ALTERNATIVE 1 PROPOSED DESIGN
Environmental Assessment - Pease, NH

3.2.3 Alternative 2 – 22 Continental Drive, Exeter, NH

The Alternative 2 site is at 22 Continental Drive, Exeter, NH (Figure 2-1, Figure 3-3), approximately 15 miles southwest of Pease Air National Guard Base and approximately 14.3 miles from the Paul A. Doble USARC. The approximately 21-acre Alternative 2 site is approximately 0.6 mile from the intersection of State Highway (SH) 101 and SH 27, at the rear of an industrial park. Vehicle access would be along Continental Drive through the industrial park. The parcel is entirely wooded, with maturing mixed conifers and hardwoods and a brush/shrub understory. Wetlands occur on the site, concentrated near the northern and western boundaries. A number of stone walls are scattered throughout the site. The topography of the site is hilly, but generally level in the area proposed for development. Adjacent land uses consist of wooded areas and several commercial buildings on Continental Drive. Utilities would have to be extended to the site from Continental Drive.

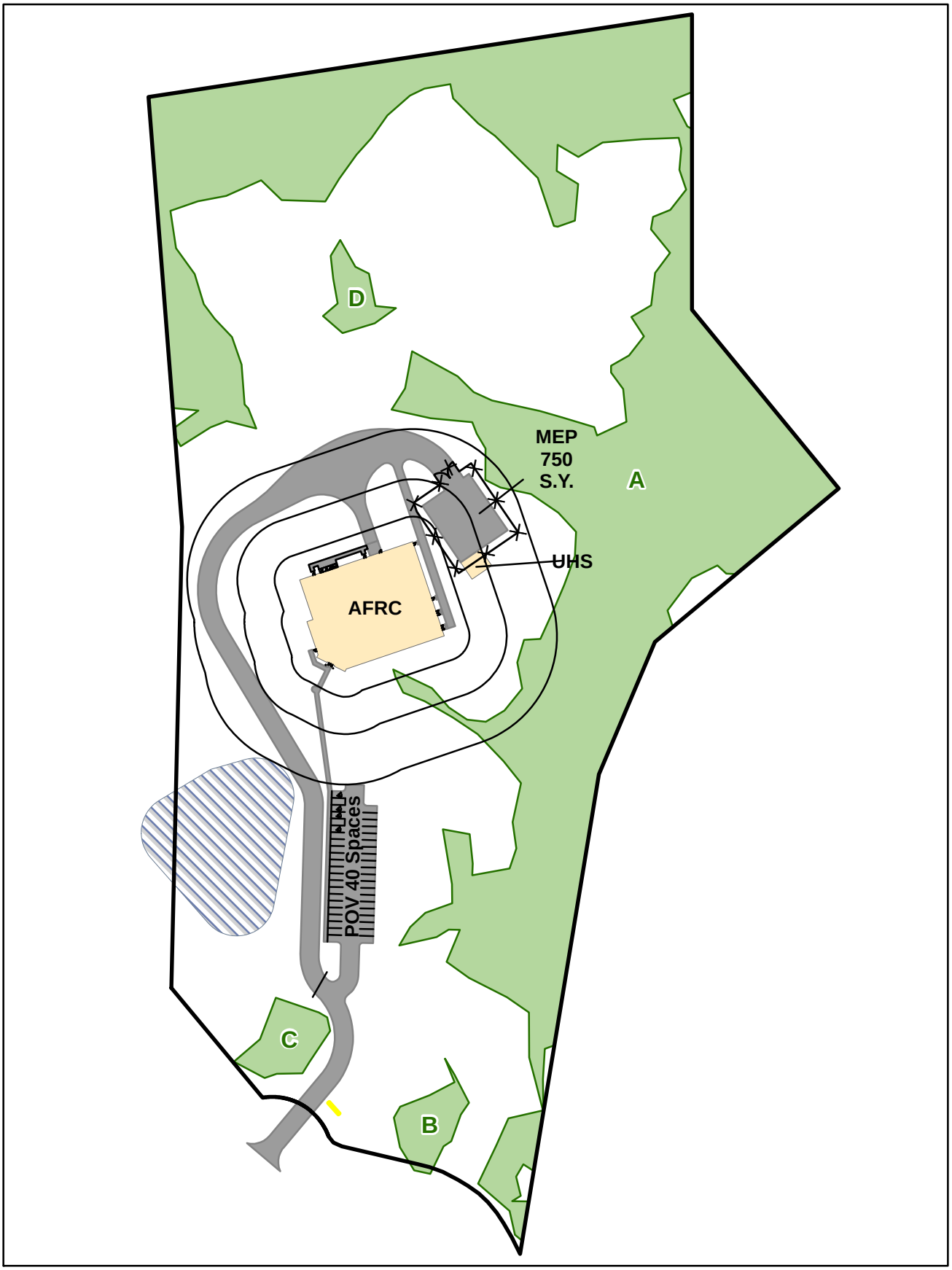
Not all of the components described for the Proposed Action (Table 2-1) would be constructed under Alternative 2. There is no need for onsite fire suppression infrastructure, so the water tanks and fire pump would not be built under Alternative 2. The locations for the stormwater management basin and electric transformer pad have not been determined. As discussed in the Section 4, these items would not be constructed in wetlands or within the setback area around the garrison house site.

The property can accommodate the size and footprint of the proposed facilities, including AT/FP setbacks. Development would require clearing of maturing and regrowth woods. This alternative is fully evaluated in the EA.

3.2.4 Alternatives Dismissed from Further Analysis

The ASIV examined seven potential sites that were available within the Pease-Newington area in southeastern New Hampshire. Three of these sites were determined to be practicable and are described above as the alternatives considered in this EA. The remaining four sites were eliminated from further analysis in the EA due to constraints that made the sites unfeasible, as described in a Site Survey Report that was completed by the Army in October 2009 (Appendix C). Sites dismissed from consideration included:

- 120 Shattuck Way, Newington, NH 03801, property sold and no longer available.
- 549 US RT 1 Bypass, Portsmouth, NH 03801, unacceptable health and safety issues related to high traffic volume, state regulators identified the site as problematic to permit due to stream/wetland and coastal resources, substantial additional cost associated with removal of existing foundations and paved parking areas unsuitable for reuse, and unacceptable AT/FP constraints.
- Old Indigo Hill Road, Rollinsford, NH 03869, property sold and no longer available.
- Epping Road (SH 27 & SH 101), Exeter, NH 03833, state regulators identified the site as problematic to permit due to stream/wetland and coastal resources, a previous attempt to sell this property was blocked by the U.S. Environmental Protection Agency (USEPA) analysis, and additional development costs associated with extending utility services to the site.



Property Boundary
Wetland
Building
Pavement
Garrision House Buffer
Monument Sign

0 25 50 100
Feet

FIGURE 3-3
ALTERNATIVE 2 PROPOSED DESIGN
Environmental Assessment - Pease, NH

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3.2.5 No Action Alternative

Under the No Action Alternative, the Army would not implement the Proposed Action. USAR units would continue to train at and operate from their current locations, which are over-utilized, do not meet current AT/FP setback requirements, and are not properly configured to allow the most effective training of personnel to complete mission requirements. However, routine replacement actions or renovation of facilities could occur through normal military maintenance and construction procedures as circumstances independently warrant.

CEQ regulations require the No Action Alternative to be included in an EA, as it serves as the baseline against which the impacts of the Proposed Action and alternatives will be evaluated. Accordingly, the No Action Alternative is evaluated in this EA.

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4.0 AFFECTED ENVIRONMENT AND CONSEQUENCES

4.1 Introduction

This section describes the existing environmental and socioeconomic conditions potentially affected by the Proposed Action, as well as the potential environmental and socioeconomic impacts of implementing the Proposed Action through one of the considered alternatives.

The existing conditions provide information to serve as a baseline from which to identify and evaluate environmental and socioeconomic changes likely to result from implementation of the Preferred Alternative or one of the considered alternatives. Baseline conditions represent current conditions.

In compliance with NEPA, CEQ guidelines, and 32 CFR Part 651, et seq., the description of the affected environment focuses on those resources and conditions potentially subject to impacts. These include land use, aesthetics and visual resources, air quality, noise, geology and soils, water resources, biological resources, cultural resources, socioeconomics, transportation, utilities, and hazardous and toxic substances.

Following the description of the components of the affected environment, this section presents the analysis of the direct, indirect, and cumulative environmental and socioeconomic effects that would likely occur with the Proposed Action, the alternative actions, and the No Action Alternative and identifies any adverse environmental effects that cannot be avoided through project design.

4.1.1 Direct versus Indirect Effects

The terms "effect" and "impact" are synonymous as used in this EA. Effects may be beneficial or adverse and may apply to the full range of natural, aesthetic, historic, cultural, and economic resources within the project area and also within the surrounding area. Definitions and examples of direct and indirect impacts as used in this document are as follows:

- ***Direct Impac*t.** A direct impact is one that would be caused directly by implementing an alternative and that would occur at the same time and place.
- ***Indirect Impac*t.** An indirect impact is one that would be caused by implementing an alternative that would occur later in time or farther removed in distance but would still be a reasonably foreseeable outcome of the action. Indirect impacts may include induced changes in the pattern of land use, population density, or growth rate, and indirect effects to air, water, and other natural resources and social systems.
- ***Relationship between Direct versus Indirect Impact*s.** Direct impacts are those that are caused by project activities at the project location. Indirect impacts may be caused by project activities, either away from the project site or at a later time, or by other actions that have an established relationship or connection to the project. These induced actions are those that would not or could not occur except for the implementation of the project. As noted above, they generally occur at a later time or some distance removed from the original action. For direct impacts to occur, a resource must be present. For example, if soils are disturbed as a result of the use of heavy equipment during construction, there

could be a direct effect on soils resulting from erosion on the project site. This could then lead to an indirect effect on water quality through increased turbidity, if stormwater runoff containing erosion-generated sediment from the construction site were to flow from the site and enter a stream located a half-mile away.

4.1.2 Short-Term versus Long-Term Effects

Effects are also expressed in terms of duration. For example, a short-term impact would be one that exists for the duration of the construction period. A long-term impact would occur because the AFRC exists in that location. As a result, a short-term visual impact would occur while the AFRC is being constructed and would include, for example, dirt piles, cranes, and other construction equipment on the site. A long-term visual impact would be the view of the completed building, landscaped grounds, parked military equipment, fencing, etc. Long-term impacts may continue in perpetuity, in which case they would also be described as permanent.

4.1.3 Significance

In accordance with CEQ regulations and implementing guidance, impacts are evaluated in terms of whether they are significant. Both short-term and long-term effects are relevant to the consideration of significance. "Significance," as defined in the CEQ regulations for implementing NEPA at 40 CFR 1508.27, requires consideration of context and intensity. Context requires that significance be considered with regard to society, the affected region, affected interests, and the locality. The scale of consideration for context varies with the setting and magnitude of the action. A small, site-specific action is best evaluated relative to that location rather than to the entire world.

4.1.4 Intensity of Effects

As noted above, the magnitude of effects of an action must be considered regardless of whether the effects are adverse or beneficial. The following terms are used to describe the magnitude of impacts:

No Impact - The action does not cause a detectable change.
Negligible - No Significant Impact. The impact is at the lowest level of detection.
Minor - No Significant Impact. The impact is slight but detectable.
Moderate - Significant Impact. The impact is readily apparent.
Major - Significant Impact. The impact is severely adverse or exceptionally beneficial.

4.2 Land Use

4.2.1 Affected Environment

4.2.1.1 Preferred Alternative- Portsmouth

The Preferred Alternative site for the new AFRC is in Portsmouth, NH, approximately 3.4 miles from Pease Air National Guard Base and approximately 2.3 miles from the Paul A. Doble Army Reserve Center. Surrounding cities and communities include Dover, Newmarket, and Kittery. Boston is the largest metropolitan area in the vicinity, and is about 45 miles to the south.

The Preferred Alternative site consists of a vacant cleared lot zoned as part of an Industrial District and designated as office research (City of Portsmouth, 2009). The land was mined

for aggregate (sand and gravel) extraction historically. The former quarry has been filled and the site is now generally level.

The surrounding land use north and west of the Preferred Alternative site includes commercial and industrial development and residential housing (Figure 4-1). This area is zoned as an Industrial District (City of Portsmouth, 2009). The lot just south of the Preferred Alternative contains undeveloped and partially forested land and is zoned as Office Research within an Industrial District (City of Portsmouth, 2009). There is further commercial development south of the vacant lot. The eastern edge of the Preferred Alternative site is bordered by Lafayette Road (US Route 1). Elwyn Park has more than 15 acres of greenspace and is approximately 1,000 feet (ft) west of Lafayette Road in the Elwyn Park neighborhood. Land use east of Lafayette Road consists mainly of single family housing in the Elwyn Park neighborhood and is zoned Single Residence B (SRB) (City of Portsmouth, 2009).

4.2.1.2 Alternative 1 - Rye

Alternative 1 is located in Rye, NH, approximately 6.6 miles from Pease Air National Guard Base and approximately 5.2 miles from the Paul A. Doble Army Reserve Center. Alternative 1 also is on Lafayette Road, approximately 3 miles south of the Preferred Alternative. Rye is within the same regional geographic setting as Portsmouth. Boston, the largest metropolitan area in the vicinity, lies approximately 37 miles south of Rye.

The Alternative 1 site consists of a partially paved area along Lafayette Road, with the western three-quarters forested. The paved area along Lafayette Road is the former site of the Southwind Motel, which has been demolished. Current land use of the site consists of a vacant partially wooded lot and the area is zoned Commercial (Rockingham Planning Commission, 2003). A small-proprietor vegetable stand may utilize the space on occasion.

Land use in the vicinity of the Alternative 1 site includes commercial development, a capped landfill, and residential areas (Figure 4-2). Land to the north, south, and east of the Alternative 1 site is zoned Commercial (Rockingham Planning Commission, 2003). There is light commercial development to the south of the site. The lot to the north is vacant. The eastern edge is bordered by Lafayette Road. There is light commercial development along Lafayette Road. Residential dwellings are along Dow Lane at the intersection of Lafayette Road. Land to the west of the site is vacant. The Coakley Landfill, no longer active and now capped, is west of the Alternative 1 site.

Property Boundary

0 125 250 500
Feet

FIGURE 4-1
LAND USE IN THE VICINITY OF THE PREFERRED ALTERNATIVE SITE
Environmental Assessment - Pease, NH

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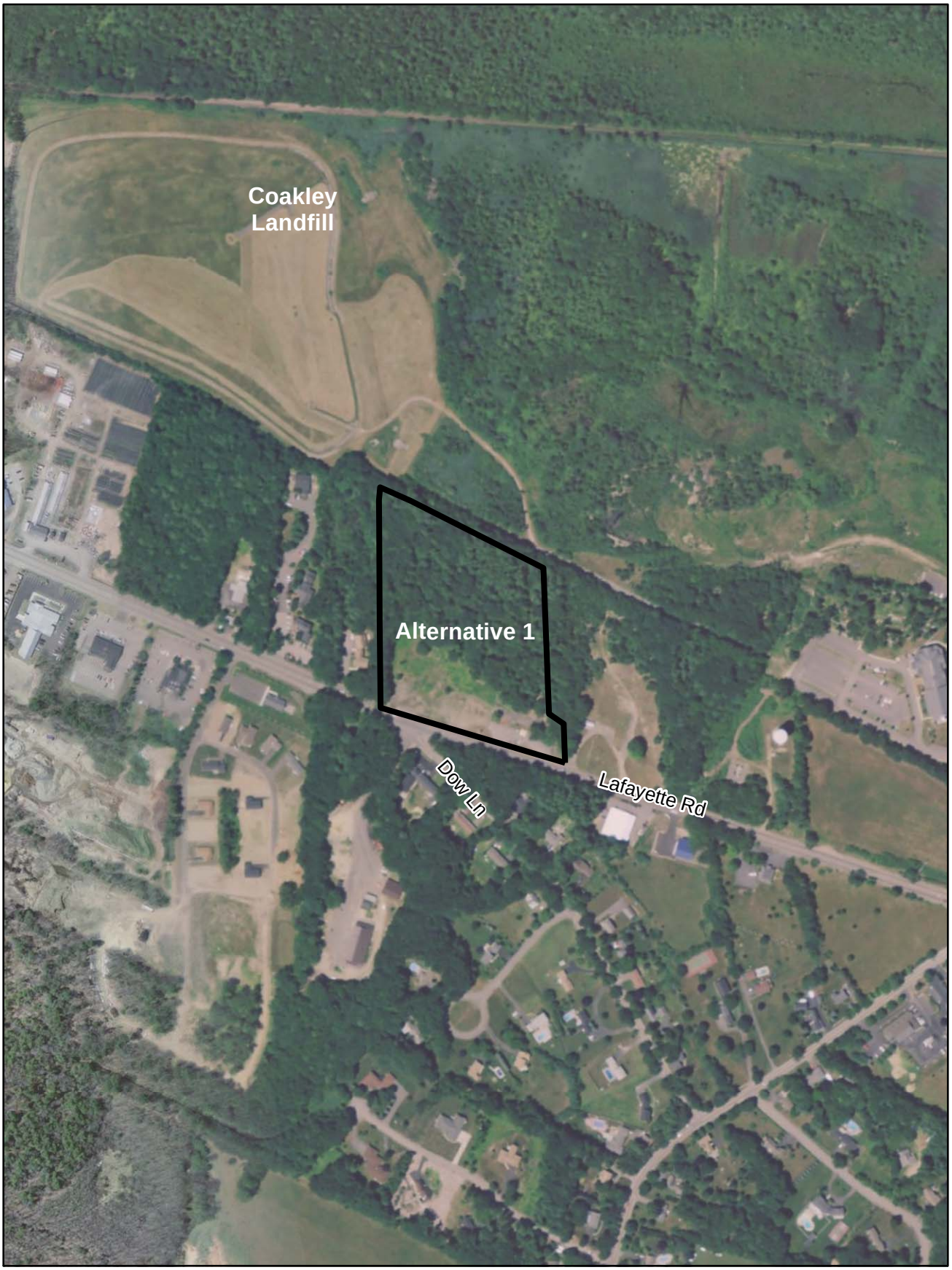

Property Boundary

N

0 125 250
Feet

FIGURE 4-2
LAND USE IN THE VICINITY OF THE ALTERNATIVE 1 SITE
Environmental Assessment - Pease, NH

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4.2.1.3 Alternative 2 - Exeter

Alternative 2 is located in Exeter, NH, approximately 15 miles southwest of Pease Air National Guard Base and approximately 14.3 miles from the Paul A. Doble Army Reserve Center. Surrounding cities and communities include Hampton, Newmarket, and Epping. Boston lies approximately 30 miles south of Exeter. The Alternative 2 site is an undeveloped, forested property located in an industrial/commercial area at the end of a cul-de-sac. The property is zoned Corporate Technology Park (CT-1) (USACE, 2009b).

The land immediately surrounding the Alternative 2 site is zoned Corporate Technology Park/Professional Technology Park (Rockingham Planning Commission, 2006). Within the industrial park, the parcels to the north, south, and west of the Alternative 2 site are vacant and there is a light commercial development immediately to the east along Continental Drive. Outside the industrial park, land to the east is zoned Commercial, and land to the north is zoned Industrial. The areas to the west and south are zoned Neighborhood Professional. Residential areas are approximately 0.5 mile south of the Alternative 2 site (Figure 4-3).The Little River Conservation Area, which abuts the Exeter site to the west, is used primarily for passive recreation activities such as hiking, birding, nature and wildlife viewing, and photography, as well as cross-country skiing and snowshoeing. Fishing is permitted and hunting is allowed (Town of Exeter, 2010a).

4.2.2 Consequences

4.2.2.1 Preferred Alternative - Portsmouth

Negligible impacts to land use would be expected under the Preferred Alternative. While an approximately 6-acre northern parcel would be converted from open space to a military facility (AFRC), the project would not require a change in zoning. The approximately 4-acre southern parcel would remain open space, but would remain subject to future development consistent with its zoning. The Preferred Alternative site provides little open space value other than the visual appearance of an open area because it is not accessible to the general public, has uneven surface topography, and contains construction/demolition debris on the surface. Adjacent land uses are similar to or compatible with the proposed AFRC. Construction and operation of the AFRC at the proposed location would not impact land use in Elwyn Park or in the Elwyn Park neighborhood.

4.2.2.2 Alternative 1 - Rye

Negligible impacts to land use would occur at the Alternative 1 site. The property is zoned Commercial and no change in zoning would be required. Approximately 6 acres of the site would be converted from forest to a military facility and a small area of forest would remain on the western part of the site. The AFRC would be compatible with surrounding land uses.

4.2.2.3 Alternative 2 - Exeter

Negligible impacts to land use would occur under Alternative 2. The property is zoned Corporate Technology Park/Professional Technology Park and no change in zoning would be required. Approximately 6 acres of the site would be converted from forest to a military facility and the majority of the property would remain forested. The AFRC would be compatible with surrounding land uses.

Property Boundary

0 500 1,000
Feet

FIGURE 4-3
LAND USE IN THE VICINITY OF THE ALTERNATIVE 2 SITE
Environmental Assessment - Pease, NH

4.2.2.4 No Action Alternative

No impact to overall land use is expected under the No Action Alternative. Under this alternative, no construction would take place and no changes to existing land use would occur.

4.3 Aesthetics and Visual Resources

4.3.1 Affected Environment

4.3.1.1 Preferred Alternative - Portsmouth

The Preferred Alternative site is currently unmaintained, vacant, and cleared. The site is visible to the public from Lafayette Road. Mounds of fill material can be seen from Lafayette Road in the southern portion of the site. With only scattered trees along the edge of the site, the industrial park along West Road is visible from Lafayette Road. The Elwyn Park Neighborhood is west of Lafayette Road, across from the Preferred Alternative site. Figure 4-4 shows the Preferred Alternative site as viewed from Lafayette Road.

Figure 4-4. View of Portsmouth Site along Lafayette Road

4.3.1.2 Alternative 1 - Rye

The Alternative 1 site is visible to the public along Lafayette Road. Currently the site consists of mature regrowth forest and a formerly developed area consisting of a parking area and the foundation of the former motel. The western three-quarters of the site is heavily forested with mature stands of eastern hemlock. The aesthetics of the site are likely to change in the near future. During the site investigation, it was determined that the hemlock woolly adelgid (*Adelges tsugae*) has infested trees on the site. Infested trees typically begin to die within 2 years and the remaining hemlocks are likely to be dead within 10 years (University of New Hampshire Cooperative Extension, 2010). Many of the residences in the area are on wooded lots, which would limit views of the Alternative 1 site. Figure 4-5 shows the Alternative 1 site as viewed from Lafayette Road along the west side of the site.

Figure 4-5 View along West Side of Rye Site

4.3.1.3 Alternative 2 - Exeter

The Alternative 2 site is an unmaintained and vacant parcel within an industrial park. The southern edge of the site is visible to the public from Continental Drive. However, only persons conducting business in the industrial park can see the site, as the Alternative 2 location would not be visible from Epping Road. Most of the site is heavily forested, with eastern white pine and eastern hemlock blocking the view of the property from the public on Continental Drive. The western portion of the site could be viewed by persons using the

Little River Conservation Area. Figure 4-6 shows the Alternative 2 site as viewed from the north side of the site.

Figure 4-6. View of Stone Wall from North Side of Exeter Property

4.3.2 Consequences

4.3.1.4 Preferred Alternative - Portsmouth

The proposed AFRC and the two water towers would be visible from along Lafayette Road and by residents of the Elwyn Park neighborhood who live near Lafayette Road. However, the facility would be constructed in an area that is already mostly developed as an industrial/commercial district. The current condition of the property is unmaintained and the industrial development west of the site is visible from Lafayette Road due to a lack of screening vegetation. The project would introduce a negligible change in this already-modified visual environment. The Army would plant appropriate screening vegetation along Lafayette Road as a visual buffer for the Elwyn Park neighborhood east of Lafayette Road. Any impacts to aesthetics and visual resources would likely be negligible as a result of implementation of the Preferred Alternative.

Because a monument marker identifying the AFRC would be placed along Lafayette Road, the Preferred Alternative would meet the Army's goal of being visible to the public.

4.3.1.5 Alternative 1 - Rye

The proposed AFRC and the two water towers would be visible from along Lafayette Road. Clearing of the mature forest would be required, greatly changing the appearance of the site, and the site would be visible to passersby from Lafayette Road. Additionally, the new

AFRC may affect the viewshed of a documented historic property southeast of the site. This historic site is discussed in detail in Section 4.9.1. However, the vicinity of the Alternative 1 site is zoned Commercial and other commercial development occurs in the vicinity. Minor negative impacts to aesthetics and visual resources would result from implementing Alternative 1.

Because the site is along Lafayette Road, Alternative 1 would meet the Army's goal of being visible to the public.

4.3.1.6 Alternative 2 - Exeter

Clearing of the mature forest would be required, greatly changing the appearance of the site. However, the area is zoned Corporate Technology Park/Professional Technology Park, and commercial development occurs in the vicinity of this site. Minor negative impacts to aesthetics and visual resources would result from implementing Alternative 2. The western portion of the site would not be developed and would remain wooded, so there would be no change in the view from the Little River Conservation Area.

Because the site is at the rear of an industrial park with no frontage on a regularly traveled road, Alternative 1 would not meet the Army's goal of being visible to the public.

4.3.1.7 No Action Alternative

No impacts to aesthetics or visual resources would occur, as no construction would be done. Conditions would remain as they are. However, a change from mature hemlock forest to young hardwood forest would occur at the Alternative 1 site as the adelgid infestation continues and eastern hemlocks are supplanted by rapidly colonizing hardwood species.

4.4 Air Quality

4.4.1 Affected Environment

4.4.1.1 Ambient Air Quality Conditions

The CAA requires the U.S. Environmental Protection Agency (USEPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. NAAQS include two types of air quality standards. Primary standards protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards protect public welfare, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings (USEPA, 2010a). USEPA has established NAAQS for six principal pollutants, which are called "criteria pollutants" (Table 4-1).

Areas that meet the air quality standard for the criteria pollutants are designated as being "in attainment." Areas that do not meet the air quality standard for one of the criteria pollutants may be subject to the formal rule-making process and designated as being "in nonattainment" for that standard.

Nonattainment areas for some pollutants, including ozone, are further classified as regulated under Subpart 1 or Subpart 2, based on the magnitude of the problem. Subpart 1 ("basic" nonattainment) is applied to those areas where the problem is less severe and contains general requirements for nonattainment areas. Subpart 2 is applied to areas with severe problems and establishes a classification scheme for ozone nonattainment areas with

more specific requirements. An area would be classified under Subpart 2 as marginal, moderate, serious, or severe based on the most recent 3 years of data. All other 8-hour ozone nonattainment areas are covered under Subpart 1 (USEPA, 2010b).

Table 4-1. NAAQS for Criteria Pollutants

Pollutant	Primary Standards	Averaging Times	Secondary Standards	
Carbon Monoxide	9 ppm (10 mg/m^3)	8-hour [a]	None	
	35 ppm (40 mg/m^3)	1-hour [a]	None	
Lead	0.15 µg/m^3	Rolling 3-Month Average	Same as Primary	
	1.5 µg/m^3	Quarterly Average	Same as Primary	
Nitrogen Dioxide	0.053 ppm (100 µg/m^3)	Annual (Arithmetic Mean)	Same as Primary	
	0.100 ppm[c]	1-hour	None	
Particulate Matter (PM)				
PM_{10}	150 µg/m^3	24-hour [a]	Same as Primary	
$PM_{2.5}$	15.0 µg/m^3	Annual [b] (Arithmetic Mean)	Same as Primary	
	35 µg/m^3	24-hour [c]	Same as Primary	
Ozone	0.075 ppm (2008 std)	8-hour [d]	Same as Primary	
	0.08 ppm (1997 std)	8-hour [e]	Same as Primary	
	0.12 ppm	1-hour [f]	Same as Primary	
Sulfur Dioxide	0.03 ppm	Annual (Arithmetic Mean)	0.5 ppm	3-hour
	0.14 ppm	24-hour [a]	0.5 ppm	3-hour
	75 parts per billion (ppb)	1-hour [a]	None	

Notes:
[a] Not to be exceeded more than once per year.
[b] 3-year average of the weighted annual mean PM2.5 concentrations from single or multiple community-oriented monitors must not exceed 15.0 µg/m.
[c] 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 35 µg/m.
[d] 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.075 ppm.
[e] 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.08 ppm.
[f] (a) USEPA revoked the 1-hour ozone standard in all areas, although some areas have continuing obligations under that standard ("anti-backsliding"). (b) Standard attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is ≤ 1.
µg/m^3 = microgram per cubic meter
mg/m^3 = milligram per cubic meter
ppm = part per million
Source: http://www.epa.gov/air/criteria.html (USEPA, 2010a)

4.4.1.2 Ambient Air Quality Attainment Status

Federal regulations at 40 CFR 81 delineate certain air quality control regions (AQCRs), based on population and topographic criteria closely approximating each air basin. The potential influence of emissions on regional air quality would typically be confined to the air basin in which the emissions occur. Therefore, the area that may be influenced by the Proposed Action is the Merrimack Valley-Southern New Hampshire Intrastate AQCR, which includes the following counties: Belknap, Cheshire, Hillsborough, Merrimack, Rockingham, Strafford, and Sullivan (Code of Federal Regulations, 2010).

The Boston-Manchester-Portsmouth area within the Merrimack Valley-Southern New Hampshire Intrastate AQCR is designated as nonattainment for 8-hour ozone (USEPA, 2010b). However, the USEPA is proposing that the Boston-Manchester-Portsmouth moderate 8-hour ozone nonattainment area be redesignated as in attainment with the 8-hour NAAQS for ozone. USEPA has reviewed air quality data from 2002 to the present and has concluded that this area attained the 8-hour ozone standard at the end of the 2004 ozone season. The area will remain a nonattainment area for the 1997 8-hour ozone standard until the USEPA has approved a maintenance plan and made the determination that the area has met the other requirements for redesignation. The New Hampshire Department of Environmental Services (NHDES) plans to submit its redesignation request for the 1997 ozone standard to the USEPA in 2010 and to have USEPA approval by the end of 2010; however, these dates are subject to change (Healy, 2010, personal communication). The region is listed as in attainment for other criteria pollutants.

4.4.1.3 Air Pollutant Emissions in Rockingham County

Rockingham County contains 187 facilities with documented air emission sources (USEPA, 2010c). A majority of these sources consist of small to medium sized businesses, which vary from dry cleaners to production facilities; larger facilities include industrial plants, factories, and power plants. These facilities primarily emit carbon monoxide (CO), nitrogen oxides (NOx), sulfur dioxide (SO_2), and volatile organic compounds (VOCs). Table 4-2 indicates the main air pollutants in Rockingham County from all sources.

Table 4-2 – Total Emissions for Rockingham County, NH, 2005

Pollutant	Amount (tons)
Total VOCs	15,200
Nitrogen Oxides	16,602
Carbon Monoxide	97,735
Sulfur Dioxide	19,787
Particulate Matter (10 µm[a])	13,044

[a]Micrometers
Source: USEPA, 2010d

4.4.1.4 Conformity Determination

General Conformity under the CAA, Section 176 has been evaluated for the project described above according to the requirements of 40 CFR 93, Subpart B. The requirements of this rule are not applicable to this action because total direct and indirect VOC and NO_X are below the conformity threshold values of 100 tons per year of either VOC or NOx established at 40 CFR 93.153 (b) and this action is not considered regionally significant under 40 CFR 93.153(i).

4.4.2 Consequences

4.4.2.1 Preferred Alternative - Portsmouth

A signed Record on Non-Applicability (RONA) is attached as Appendix D and certifies that emissions increases are well below the conformity threshold values. Therefore, a general conformity review is deemed unnecessary at this time. The Proposed Action would cause minor, short-term adverse impacts to air quality due to emissions from construction

activities (Appendix D). All construction emissions would likely be local and limited to the duration of the construction activities. Because of the proximity to the Paul A. Doble USARC (approximately 3 miles), no increase in commute distances and associated vehicle emissions would be expected.

Construction-related emissions would be generated by engine exhaust from construction workers' personal vehicles and from construction equipment, including earth-moving equipment, cranes, and trucks. Construction vehicle emissions would primarily consist of NOx, SO_2, PM, CO, and VOCs, which are typical of the emissions commonly observed at construction sites, and would not extend past the construction period. Construction emissions were modeled (Appendix D) and it was determined that peak construction emissions would be well below threshold values established at 40 CFR 93.153 (b) (Table 4-3).

During construction, air quality impacts also could occur from dust carried offsite and combustion emissions from construction equipment. The primary risks from blowing dust particles relate to human health and human nuisance values. Fugitive dust can contribute to respiratory health problems and create an inhospitable working environment. Deposition on surfaces can be a nuisance to those living or working downwind.

Table 4-3 –Construction and Operational Emissions for the Preferred Alternative

Pollutant	Peak Annual Construction Emissions (tons)	Annual Operational Emissions (tons)	Threshold Value (tons per year)
Total VOCs	1.76	0.01	100
Nitrogen Oxides	10.90	0.14	100

Source: Modeling presented in Appendix D

Best management practices (BMPs) that would be implemented during construction to reduce or eliminate fugitive dust emissions would include the following:

- *Sprinkling/Irrigation.* Sprinkling the ground surface with water until it is moist can be used to control dust on haul roads and other traffic routes. This practice can be applied to almost any site. When suppression methods involving water are used, care would be exercised to minimize over-watering that could cause the transport of mud onto adjoining roadways, which ultimately could increase the dust problem. Mechanical removal of mud from tires would be implemented if necessary.
- *Vegetative Cover*. In areas not expected to handle vehicle traffic, vegetative stabilization of disturbed soil is often desirable. Vegetation provides coverage to surface soils and decreases wind velocity at the ground surface, thus reducing the potential for dust to become airborne.
- *Mulch*. Mulching can be a quick and effective means of dust control for recently disturbed areas.

No substantial changes in air quality from the baseline conditions would be likely with implementation of the Preferred Alternative. Fugitive dust would increase in the immediate

area during construction, but impacts would be temporary and minor. Dust abatement measures discussed above would limit the direct and secondary creation of dust.

There would be no change in the number of personnel using the facility from the number currently using the Paul A. Doble USARC, 3 full-time weekly staff and 87 reservists split across two weekends each month. While the location of the facility would change by approximately 2.3 miles, no change in average commute distances would be expected. Persons using the AFRC live throughout the surrounding area and it is likely that specific commutes would change, either increasing or decreasing depending on the location of the residence, but that the average commute distance would remain essentially the same. Therefore, no change in emissions from commuter traffic would be expected.

Vehicular traffic in the immediate area may increase, and monthly training activities would result in increased local vehicle traffic that would be limited to weekends. However, the units currently exist within the same AQCR as the Preferred Alternative. Any increase in vehicle emissions at the Preferred Alternative location would be offset by a corresponding reduction in vehicle emissions in the vicinity of the Paul A. Doble USARC. As a result, there would be no change in vehicular in emissions for the AQCR.

Negligible permanent sources of air emissions would be created by the Proposed Action, including building heating units and water heaters. No change in vehicle emissions would be expected. The Preferred Alternative would result in a *de minimis* impact on air quality.

4.4.2.2 Alternative 1 - Rye

The impacts under Alternative 1 would not differ substantially from those of the Preferred Alternative. Construction emissions would be the same as modeled for the Preferred Alternative. While the location is approximately 3 miles farther from the Paul A. Doble USARC, the effect on driving distance by full-time staff and reservists would likely be similar. Personnel using the AFRC reside in various locations around the general Portsmouth area. While some personnel may have a longer commute to the Alternative 1 site, others would likely have a shorter commute.

Negligible permanent sources of air emissions would be created by the Proposed Action, including building heating units and water heaters. No change in vehicle emissions would be expected. The selection of Alternative 1 would result in a *de minimis* impact on air quality.

4.4.2.3 Alternative 2 - Exeter

The impacts under Alternative 2 would not differ substantially from those of the Preferred Alternative. Because the Alternative 2 site is more than 14 miles from the Paul A. Doble USARC, it is likely that there would be a net increase in commute distance for personnel. However, the General Conformity review of the Preferred Alternative indicated that peak construction emissions would be well below the threshold values for NOx and VOCs.

Negligible permanent sources of air emissions would be created by the Proposed Action, including building heating units and water heaters. The relatively small increase in average commute distance under Alternative 2 would remain below threshold values. The selection of Alternative 2 would result in a *de minimis* impact on air quality.

4.4.2.4 No Action Alternative

No emissions due to construction or added vehicle traffic would occur under the No Action Alternative. The units would continue to operate from the Paul A. Doble USARC and there would be no reduction in vehicle emissions in the vicinity of this facility. No impacts to air quality would occur under the No Action Alternative.

4.5 Noise

4.5.1 Affected Environment

For determination of impacts to human receptors, noise measurements are weighted to increase the contribution of noises within the normal range of human hearing and decrease the contribution of noises outside the normal range of human hearing. Human hearing is best approximated by using an A-weighted decibel (dBA) scale. When sound pressure doubles, the dBA level increases by 3. Psychologically, most humans perceive a doubling of sound as an increase of 10 dBA (USEPA, 1974). Sound pressure decreases with distance from the source. Typically, the amount of noise is halved as the distance from the source doubles (USEPA, 1974).

4.5.1.1 Preferred Alternative - Portsmouth

The Preferred Alternative is located in an area with light industrial, residential, and commercial uses. There are no noise sources at the site. The nearest noise source would be vehicular traffic on Lafayette Road. Noise levels in the proposed project area would likely range from 60 to 70 dBA, which is typical of commercial areas and areas within 300 ft of heavy traffic (Cowan, 1999).

4.5.1.2 Alternative 1 - Rye

Alternative 1 is located in an area with light commercial and residential developments. There are no noise sources at the site. The nearest noise source would be vehicular traffic on Lafayette Road. Noise levels in the proposed project area would likely range from 60 to 70 dBA, which is typical of commercial areas and high traffic areas (Cowan, 1999).

4.5.1.3 Alternative 2 - Exeter

Alternative 2 is located in an area with light commercial development. There are no noise sources at the site. The nearest noise source would be vehicular traffic on Continental Drive or vehicles serving light industrial facilities within the industrial park. Noise levels in the proposed project area would likely range from 60 to 70 dBA, which is typical of commercial areas (Cowan, 1999).

4.5.2 Consequences

4.5.2.1 Preferred Alternative - Portsmouth

Minor short-term adverse impacts associated with noise from construction activities would be likely from implementation of the Preferred Alternative. The noise impacts would be restricted to the daylight hours during weekdays. The noise levels of construction equipment most likely to be used during implementation of the Proposed Action range from 90 to 96 dBA at 50 ft from the source, which is typical of construction equipment noise (Occupational Safety and Health Administration [OSHA], 2003). Construction workers

would use hearing protection and would follow OSHA standards and procedures. No noise-related impacts to construction workers would be expected.

The closest residence is approximately 100 ft from the perimeter of the proposed project site. There would be an additional 160-ft setback for AT/FP requirements. The edge of the property bordering Lafayette Road could be planted with a row of trees for visual screening. Nearby workers and residents would notice construction-related noise, which would be above background levels.

As noted above, sound pressure decreases with distance from the source. Typically, the amount of noise is halved (reduced by 3 dBA) as the distance from the source doubles (USEPA, 1974). The closest residence is approximately 100 ft from the perimeter of the proposed project site. There would be an additional 160-ft setback for AT/FP requirements. Construction would not occur within the 160-ft setback. A total distance of 260 ft separates the AFRC construction area and the nearest house, which would reduce construction noise by 6 dBA. Typical homes have an effective noise attenuation rating of 15 dBA, making indoor noise levels less than the corresponding outdoor noise levels (USEPA, 1974). Allowing for the attenuation of noise from the structure of the house, indoor noise levels in the nearest residence would be 69-75 dBA during site preparation. Because of the timing of the construction-related noise (weekdays during the day), persons outdoors at the nearby houses could experience nuisance level noise that could interfere with normal conversations. Inside homes, the noise could be a minor nuisance and result in a need to increase the volume of televisions and radios. The minor, temporary impacts from construction noise would not be significant. No negative health impacts would result from construction-related noise.

No new noise sources would be expected from operation of the new AFRC. There would be three full-time employees and routine operation of the AFRC could result in a negligible increase in area noise during normal daytime working hours. During a training weekend, increased vehicle traffic during early morning hours could be audible in the nearby residential areas and could result in negligible nuisance disturbance. Reservists would train inside the buildings and would not be a noise source. As the units at the new AFRC are authorized to have only 1 wheeled vehicle and 21 trailers, no convoys or heavy military equipment that would generate greater noise levels would be onsite.

4.5.2.2 Alternative 1 - Rye

Minor short-term adverse impacts associated with noise from construction activities would be likely from implementation of the Preferred Alternative. The noise impacts would be restricted to the daylight hours during weekdays. The noise levels of construction equipment most likely to be used during implementation of the Proposed Action range from 90 to 96 dBA at 50 ft from the source, which is typical of construction equipment noise (OSHA, 2003). Construction workers would use hearing protection and would follow OSHA standards and procedures. No noise-related impacts to construction workers would be expected.

The nearest house to Alternative 1 would be approximately 150 ft away from the perimeter of the site. In accordance with AT/FP setback requirements, at least an additional 160 ft of space would separate Lafayette Road and the new AFRC. The total distance from the AFRC construction area to the nearest house would be approximately 310 ft. Allowing for the

attenuation of noise from the distance and the structure of the house, indoor noise levels in the nearest residence would be 69-75 dBA during site preparation. Because of the timing of the construction-related noise (weekdays during the day), persons outdoors at the nearby houses could experience nuisance level noise that could interfere with normal conversations. Inside homes, the noise could be a minor nuisance and result in a need to increase the volume of televisions and radios. No negative health impacts would result from construction-related noise.

No new noise sources would be expected from operation of the new AFRC. Three full-time employees and routine operation of the AFRC could result in a negligible increase in area noise during normal daytime working hours. During a training weekend, increased vehicle traffic during early morning hours could be audible in the nearby residential areas and could result in negligible nuisance disturbance. Reservists would train inside the buildings and would not be a noise source. As the units at the new AFRC are authorized to have only 1 wheeled vehicle and 21 trailers, no convoys or heavy military equipment that would generate greater noise levels would likely be onsite.

4.5.2.3 Alternative 2 - Exeter

Minor short-term adverse impacts associated with noise from construction activities would be likely from implementation of the Preferred Alternative. The noise impacts would be restricted to the daylight hours during weekdays. The noise levels of construction equipment most likely to be used during implementation of the Proposed Action range from 90 to 96 dBA at 50 ft from the source, which is typical of construction equipment noise (OSHA, 2003). Construction workers would use hearing protection and would follow OSHA standards and procedures. No noise-related impacts to construction workers would be expected.

There are no nearby sensitive receptors at the Alternative 2 location. The nearest residence is more than 0.5 mile away. Allowing for the attenuation of noise from the distance and the buildings, indoor noise levels in the nearest building would be 63-69 dBA during site preparation. Because of the timing of the construction-related noise (weekdays during the day), persons outdoors at the nearby buildings could experience nuisance level noise that could interfere with normal conversations. Inside offices, the noise could be a minor nuisance and result in a need to increase the volume of telecommunications equipment. No negative health impacts would result from construction-related noise.

No new noise sources would be expected from operation of the new AFRC. There would be three full-time employees and routine operation of the AFRC could result in a negligible increase in area noise during normal daytime working hours. During a training weekend, increased vehicle traffic during early morning hours could be audible in the nearby commercial areas and could result in negligible nuisance disturbance. Reservists would train inside the buildings and would not be a noise source. As the units at the new AFRC are authorized to have only 1 wheeled vehicle and 21 trailers, no convoys or heavy military equipment that would generate greater noise levels would likely be onsite.

4.5.2.4 No Action Alternative

There would be no impacts from noise under the No Action Alternative, as no construction would occur.

4.6 Geology and Soils

4.6.1 Affected Environment

4.6.1.1 Geologic and Topographic Conditions

The considered alternative sites are located within the Seacoast region of New Hampshire. Glacial deposits cover 90 percent of the region. Glacial tills average 15 ft in thickness, consisting of two distinct types. The upper or ablation till is fairly sandy and slightly weathered, whereas the deeper till is more compact and silty, and is considered deeply oxidized. The source of the glacial deposits is the bedrock of the region, which consists of metasandstone, phyllite, schist, gneiss, and granite (USGS, 2004). This area is considered a moderate risk level for earthquakes (USGS, 2005).

4.6.1.2 Soils

Preferred Alternative - Portsmouth

Native soils on the Preferred Alternative site were primarily Hoosic gravelly fine sandy loam with a 0 to 3 percent slope (Natural Resources Conservation Service [NRCS], 2010a). This soil type is somewhat excessively drained and has a high capacity to transmit water (2 to 20 inches per hour). The depth to the water table in undisturbed soils is greater than 80 inches (NRCS, 2010b). It was determined that the Preferred Alternative site had been used for mineral extraction historically and that the existing soils were predominantly imported fill material consisting of a mix of loamy sand material, marine silts, and clay. (GZA GeoEnvironmental, Inc., 2010a). Isolated depressions on top of the fill material have developed hydric soil characteristics. The NRCS has not remapped the area since the fill was placed and no hydric soils are indicated on the site from available remote data. The topography at the Preferred Alternative site is generally level but slopes gently downward in a southwestern direction.

Alternative 1 - Rye

The Hoosic gravelly fine sandy loam with a 0 to 3 percent slope is the only soil type found within the Alternative 1 site (NRCS, 2010c). This soil type was described under the Preferred Alternative. No hydric soils occur on the property. The topography at the Alternative 1 site is generally level but slopes downward in a northwestern direction.

Alternative 2 - Exeter

The Chatfield-Hollis-Canton complex (very stony) with a 3 to 8 percent slope and the Scitico silt loam with a 0 to 5 percent slope are the dominant soil types on the Alternative 2 site (NRCS, 2010d). The topography at the Alternative 2 site is moderately hilly, with areas of large boulders. The hills are generally small and the site slopes downward toward the north and west. The Chatfield-Hollis-Canton complex soil type is well drained and is primarily in the upland areas (NRCS, 2010e). The capacity of the most limiting layer to transmit water is low to high (0.01 to 6 inches per hour). The depth to the water table is greater than 80 inches in the Chatfield-Hollis-Canton soil complex. This facility would be sited to utilize the upland areas, with a deeper water table. The Scitico silt loam soil type is poorly drained and is considered a hydric soil (NRCS, 2010f; Tiner, 2007). The capacity of the most limiting layer to transmit water is very low to moderately high (0.00 to 0.20 inch per hour). The depth to the water table is about 0 to 12 inches in the Scitico soil complex.

4.6.1.3 Farmland Protection Policy Act

The Farmland Protection Policy Act (7 USC 4201, FPPA) protects the conversion of prime and unique farmlands and farmlands of statewide importance to non-agricultural uses.

- Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, oilseed, and other agricultural crops with minimum inputs of fuel, fertilizer, pesticides, and labor, and without intolerable soil erosion pesticides, and labor, and without intolerable soil erosion, as determined by the Secretary. Prime farmland includes land that possesses the above characteristics but is being used currently to produce live stock and timber. It does not include land already in or committed to urban development or water storage (7 USC 4201(c)(1)(A)).
- Unique farmland is land other than prime farmland that is used for the production of specific high-value food and fiber crops, as determined by the Secretary. It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or high yields of specific crops when treated and managed according to acceptable farming methods (7 U.S.C. 4201(c)(1)(B)).
- Farmland of statewide importance is farmland, other than prime or unique farmland, that is of statewide or local importance for the production of food feed, fiber, forage, or oilseed crops, as determined by the appropriate State or unit of local government agency or agencies, and that the Secretary determines should be considered as farmland for the purposes of this subtitle (7 U.S.C. 4201(c)(1)(C)).

The characteristics of prime farmland are identified in the NRCS National Soil Survey Handbook Part 622.04 (USDA, 2008).

Preferred Alternative - Portsmouth
Hoosic gravelly fine sandy loam soil, which historically occurred on the Preferred Alternative site, is considered farmland of statewide importance (USDA, 2008; NRCS, 2010g). However, because of past mining operations onsite, this soil type no longer occurs onsite and has been replaced with imported fill material. No prime farmland soils now occur on the Preferred Alternative site. The FPPA does not apply to the Preferred Alternative site because it is zoned for industrial use and is, therefore, not "farmland" as defined under the FPPA.

Alternative 1 - Rye
The Hoosic gravelly fine sandy loam soil, which occurs onsite, is typically considered farmland of statewide importance (USDA, 2008; NRCS, 2010h). Similar to the Preferred Alternative, the Alternative 1 site is zoned for commercial use and is, therefore, not subject to the FPPA.

Alternative 2 - Exeter
There are no soils that could be classified as prime or unique farmlands or farmlands of statewide importance on the Alternative 2 site (USDA, 2008; NRCS, 2010i). Similar to the Preferred Alternative, the Alternative 2 site is zoned for Corporate Technology use and is, therefore, not subject to the FPPA.

4.6.2 Consequences

4.6.2.1 Preferred Alternative - Portsmouth

Minor impacts would be likely from implementation of the Preferred Alternative. Under the Preferred Alternative, approximately 6 acres of land would be disturbed as a result of construction. Fill material would be removed as needed to ensure a solid foundation for the new AFRC. Only minimal grading would be required due to the level topography of the site. Implementation of construction BMPs would minimize impacts associated with erosion. These BMPs would include, but not be limited to, installation of silt fencing and sediment traps, and stabilization and revegetation of disturbed areas as soon as possible, where appropriate. There is no prime or unique farmland or farmland of statewide importance on the property, so no impacts to these lands would occur. Therefore, potential impacts to geologic and soil resources as a result of the Preferred Alternative would be minor.

Soil disturbance could result from increased erosion of exposed soils. BMPs to minimize the erosion potential consistent with the New Hampshire Stormwater Manual (NHDES, 2008a; 2008b) would be implemented and could include, but would not be limited to, installation and maintenance of hay bales, silt fencing, and sediment traps, as well as establishing temporary or permanent vegetation in disturbed areas with seed or sod as soon as possible (NHDES, 2008b).

4.6.2.2 Alternative 1 - Rye

Minor impacts would be likely from implementation of Alternative 1. Under Alternative 1, approximately 6 acres of land would be disturbed as a result of construction. Fill material would be added as needed to ensure a solid foundation for the new AFRC. Only minimal grading would be required due to the level topography of the site. Implementation of construction BMPs would minimize impacts associated with erosion. The impacts of this alternative action would be similar to those described for the Preferred Alternative.

There would be some disturbance and loss of soil that could be classified as a soil of statewide importance. However, there would be no impacts to prime or unique farmland or farmland of statewide importance because the Alternative 1 site is not “farmland” as defined under the FPPA. BMPs similar to those described for the Preferred Alternative would be implemented to minimize the potential for additional disturbance of exposed soils by erosive forces.

4.6.2.3 Alternative 2 - Exeter

Minor impacts would be likely from implementation of Alternative 2. Under Alternative 2, approximately 6 acres of land would be disturbed as a result of construction. Boulders would be removed as needed and fill material added as needed to ensure a solid foundation for the new AFRC. Only minimal grading would be required due to the level topography of the site. The facility would be sited to utilize the upland areas, with a deeper water table. Implementation of construction BMPs would minimize impacts associated with erosion. There is no prime or unique farmland or farmland of statewide importance on the property, so no impacts to these lands would occur. Therefore, potential impacts to geologic and soil resources as a result of Alternative 2 would be minor. BMPs similar to those described for the Preferred Alternative would be implemented to minimize the potential for additional disturbance of exposed soils by erosive forces.

4.6.2.4 No Action Alternative

Under the No Action Alternative, none of the proposed construction activities would occur, and there would be no impacts to geologic and soil resources.

4.7 Water Resources

4.7.1 Affected Environment

Waters in the State of New Hampshire have been assessed to determine whether these waters are of sufficient quality to meet their designated uses. Waters that do not meet their designated uses are considered impaired and further classified according to the water quality constituents that contribute to the impairment (such as chemical contaminants, excess sedimentation or turbidity, excess nutrients, elevated temperature, and low dissolved oxygen [DO] levels) (NHDES, 2010a).

The CWA requires clean-up of pollution sources that contribute to violations of water quality standards. NHDES maintains a list of impaired waters that do not meet water quality standards and require clean-up. NHDES establishes total maximum daily loads (TMDLs) for each water quality constituent that contributes to impairment and creates a clean-up plan for each watershed. Between the time waters are listed as impaired and the time a clean-up plan is implemented, no additional pollutant loading that would contribute to the impairment is allowed. NHDES, through the CWA Section 401 water quality certification program, ensures that projects implemented do not exacerbate or contribute to water quality impairment (NHDES, 2010a).

NHDES has not established TMDLs for all impaired waters in the state. Until TMDLs are established, no additional pollutant loading that would contribute to the impairment is allowed within 1 mile of impaired waters without established TMDLs. Therefore, new activities within the 1-mile buffer, where stormwater would contribute to violations of water quality standards, are required to include BMPs for stormwater pollution control so that the pollutant loading from the new activity does not exceed the pre-existing loading and new activities do not exacerbate existing impaired conditions (NHDES, 2010a).

4.7.1.1 Surface Water and Non-Wetland Waters of the United States

The term "waters of the United States" has broad meaning and incorporates both deepwater aquatic habitats and special aquatic sites, including wetlands, as discussed in 33 CFR Part 328.3(a)

For the purpose of this EA, the discussion of "waters of the United States" occurring within the project area is separated into wetlands and non-wetland waters. “Non-wetland waters” refers to all waters that do not meet the wetland criteria (hydrophytic vegetation, hydric soils, and hydrology), as defined in the 1987 Manual (USACE, 1987). Lakes, ponds, impoundments, and permanent and intermittent streams outside of wetlands are commonly included as non-wetland waters. Recent federal court rulings have limited the scope of CWA jurisdiction such that isolated wetlands and ephemeral streams are not considered waters of the United States. However, the authority for determining CWA jurisdiction lies with the USACE.

Preferred Alternative - Portsmouth
The Preferred Alternative site is within the Salmon Falls-Piscataqua Rivers watershed (New Hampshire Granit Data Mapper, 2010a). No streams, lakes, or ponds occur on the Preferred Alternative site (GZA GeoEnvironmental, Inc., 2010a). Five areas on the site were identified as meeting the definition of a wetland. Wetlands are discussed in Section 4.8.1.4. A small wetland, which appears to be a detention area in the southwest corner of the site, drains the site. Site runoff, including the drainage from the apparent detention area, flows to the west of the property and into a forested wetland area.

While there are no impaired waters on the property, a portion of the Preferred Alternative site is within a designated 1-mile buffer of Sagamore Creek and Pickering Brook, which are impaired waters without established TMDLs (Figure 4-7).

Alternative 1 - Rye
The Alternative 1 site is within the Salmon Falls-Piscataqua Rivers watershed (New Hampshire Granit Data Mapper, 2010b). No streams or wetlands occur on the site (GZA GeoEnvironmental, Inc., 2010b). While there are no impaired waters on the property, a portion of the Alternative 1 site is within a designated 1-mile buffer of Berrys Brook, which is an impaired water without established TMDLs (Figure 4-7).

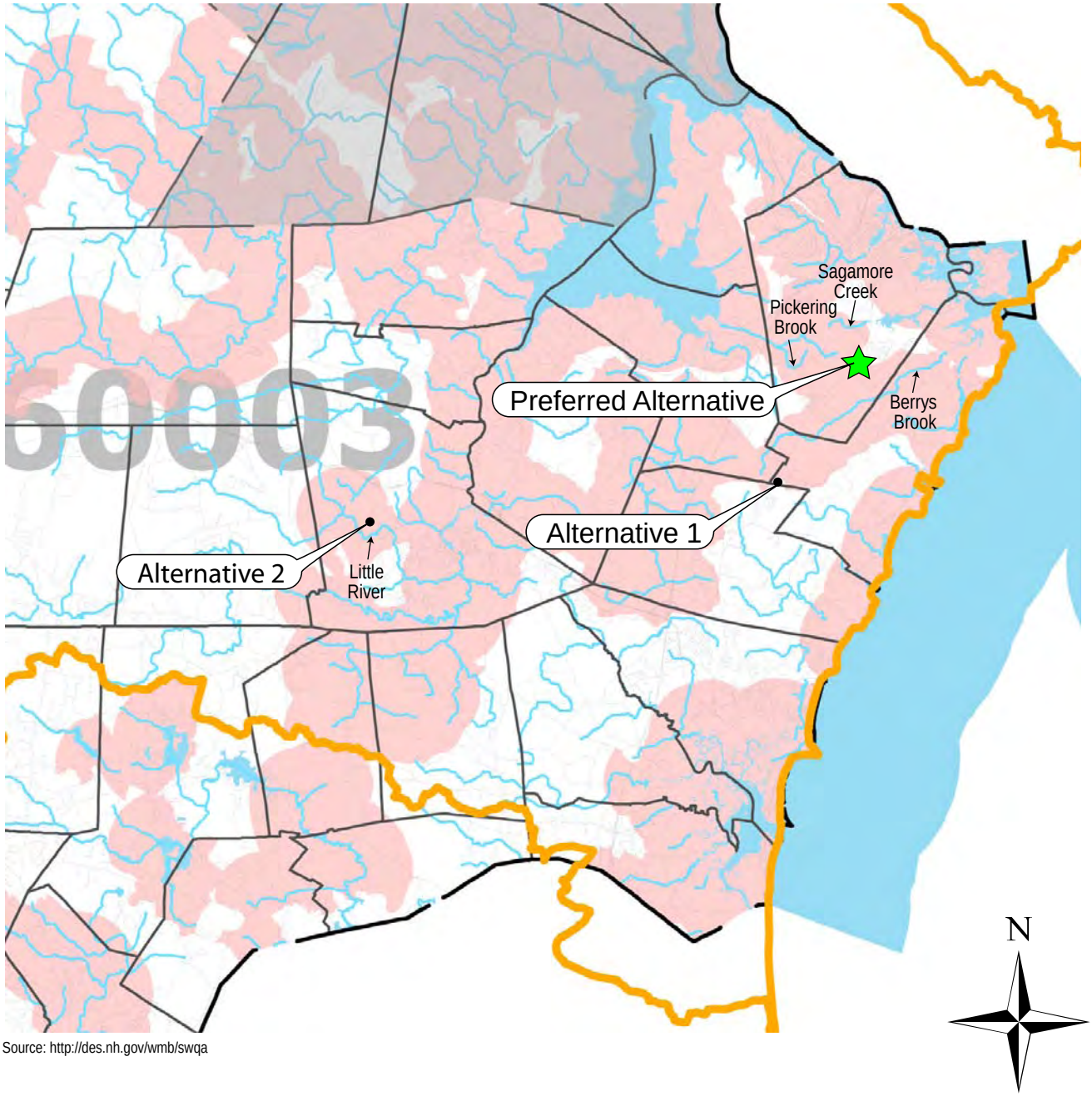
Alternative 2 - Exeter

The Alternative 2 site is within the Salmon Falls-Piscataqua Rivers watershed (New Hampshire Granit Data Mapper, 2010c). Four wetland areas occur on the Alternative 2 site, which are discussed in Section 4.8.1.4, but no other surface waters occur on the property (GZA GeoEnvironmental, Inc., 2010c). While there are no impaired waters on the property, the Alternative 2 site is within the designated 1-mile buffer of the Little River, which is an impaired water without established TMDLs (Figure 4-7).

4.7.1.2 Hydrology /Groundwater

The Seacoast region, including all of Rockingham County, is underlain by a fractured crystalline bedrock aquifer with a relatively thin overburden aquifer (USGS, 2009) oriented in a northeast-southwest-trending structural pattern (Mack, 2009). The flow of groundwater within the bedrock aquifer most likely follows short flowpaths, with the supply largely supported by storage in the overburden sediments and fractures in the crystalline bedrock, water bodies at the surface, wetlands, and streams (USGS, 2009; Mack, 2009). The water throughout the county typically ranges from 10 to 20 ft below the land surface, following the bedrock topography. There are exceptions in wetlands and surface water bodies, where the water table extends to the surface (Mack, 2009). Groundwater recharge occurs through precipitation and discharges to streams, wetlands, and other water bodies.

Preferred Alternative - Portsmouth
The Portsmouth site geological formations include the Rye Complex, which commonly consists of coarse-grained gneiss, quartzite, and schist, and Breakfast Hill granite of the Rye Complex. The generalized surface geology is characterized by sand and coarse-grained sediments (Mack, 2009).



Source: http://des.nh.gov/wmb/swqa

LEGEND

- Major Divides (HUC8)
- Roads (NHDOT)
- State Boundary
- County Boundary
- Town Boundary
- One Mile Buffer on No Additional Loading AUIDs

FIGURE 4-7
ONE-MILE BUFFER AROUND IMPAIRED WATERS NEAR PREFERRED ALTERNATIVE, ALTERNATIVE 1, AND ALTERNATIVE 2
Environmental Assessment - Pease, NH

CH2MHILL.

Alternative 1 – Rye
The Rye site geological formation includes the Rye Complex, which commonly consists of coarse-grained gneiss, quartzite, and schist. The generalized surface geology is characterized by sand and coarse-grained sediments (Mack, 2009).

Alternative 2 – Exeter
The Exeter site geological formation includes the Exeter diorite, which commonly consists of intrusive igneous rocks. The generalized surface geology is characterized by a mix of till and non-tidal wetlands (Mack, 2009).

4.7.1.3 Floodplains

Floodplains must be managed in accordance with EO 11988, Floodplain Management. Floodplains are low, typically flat areas adjoining surface waters. The Federal Emergency Management Agency (FEMA) identifies floodplains as areas where there is a 1 percent or greater chance of flooding in any given year.

Preferred Alternative - Portsmouth
Flood Insurance Rate Map Panel number 33015C0270E indicates that the Preferred Alternative site is outside the 1 percent annual chance floodplain (FEMA, 2005). In addition, a review of topographic maps and aerial photographs indicates that the Preferred Alternative site is not within a floodplain or floodprone area.

Alternative 1 - Rye
FEMA Flood Insurance Rate Map Panels numbers 33015C0270E and 33015C0265E indicate that the Alternative 1 site is outside the 1 percent annual chance floodplain (FEMA, 2005). In addition, a review of topographic maps and aerial photographs indicates that the Alternative 1 site is not within a floodplain or floodprone area.

Alternative 2 - Exeter
FEMA Flood Insurance Rate Map Panels numbers 3301C0401E and 2501030025E indicate that the northern portion of the Alternative 2 site is within the 1 percent annual chance floodplain (FEMA, 2005). Aerial photos and an onsite wetland survey indicate that the western portion of the site could be prone to retaining water (GZA GeoEnvironmental, Inc., 2010c).

4.7.1.4 Coastal Zone

The Preferred Alternative site, Alternative 1 site, and Alternative 2 site are located within the New Hampshire Coastal Zone. Actions within the New Hampshire Coastal Zone must be assessed for consistency with the Coastal Zone Management Act (CZMA), as implemented in New Hampshire.

4.7.2 Consequences

4.7.2.1 Preferred Alternative - Portsmouth

Any impacts to water resources that would occur as a result of implementing the Preferred Alternative would likely be negligible due to project design, as well as the management of stormwater during operation of the facility and BMPs that would be implemented during construction.

New Hampshire Alteration of Terrain (AoT) permits are issued by the NHDES AoT Program to protect surface waters, drinking water supplies, and groundwater in New

Hampshire by controlling soil erosion and managing stormwater runoff from developed areas (NHDES, 2010b). The New Hampshire Code of Administrative Rules, Chapter Env-Wq 1500 Alteration of Terrain, Section 1503.02(a) Permits Required, state:

> (a) Subject to (b), below, no person shall dredge, excavate, place fill, mine, transport forest products, or undertake construction in or on the borders of surface waters of the state and no person shall undertake any activity that will significantly alter the characteristics of the terrain without a general permit by rule, a timber harvesting permit by rule, or an alteration of terrain (AoT) permit obtained in accordance with this chapter.

Site preparation and construction at the Preferred Alternative site would disturb more than 100,000 ft^2, which would require an AoT permit. Information on the permit and the permitting process can be found at the NHDES website: http://des.nh.gov/organization/divisions/ water/aot/.

A National Pollutant Discharge Elimination System (NPDES) construction general stormwater permit, required for land disturbances greater than 1 acre in size, would be required prior to the start of construction. NPDES permits are obtained from USEPA, Region 1, as New Hampshire does not have authority to issue NPDES permits (Stormwaterauthority.org, 2010). The NPDES program, administered by USEPA, requires that stormwater be treated to the maximum extent practicable. Construction activities must also comply with the State's Nonpoint Source (NPS) program by implementing appropriate BMPs to minimize impacts on downstream water resources associated with erosion following precipitation, such as increased turbidity, siltation, and channel erosion. BMPs that would be implemented would be consistent with the New Hampshire Stormwater Manual (NHDES, 2008a; 2008b) and could include, but would not be limited to, installation and maintenance of hay bales, silt fencing, and sediment traps, as well as establishing temporary or permanent vegetation in disturbed areas with seed or sod as soon as possible (NHDES, 2008b).

Site preparation and construction at the Preferred Alternative site and the two alternative sites would disturb more than 1 acre, which would require an NPDES construction general stormwater permit. Information on the permit and the permitting process, and supporting information can be found at the NHDES website: http://des.nh.gov/organization/ divisions/water/aot/ and also at the USEPA website: http://cfpub1.epa.gov/ npdes/home.cfm?program_id=6.

The addition of paved, impermeable surfaces to the site would likely increase the volume of stormwater runoff created by the facility, and less infiltration to shallow groundwater would occur. Under the Energy Independence and Security Act (EISA), Section 438 (Title 42, US Code, Section 17094), Federal facility projects over 5,000 ft^2 must "maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow" (DoD, 2010). The design will implement EISA Section 438 and the USEPA *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* (USEPA, 2009), using low impact development (LID) techniques. EISA Section 438 requirements are independent of stormwater requirements under the CWA and should not be included in stormwater permits unless a State or the USEPA has promulgated

regulations for EISA Section 438 requirements that are applicable to all regulated entities under its CWA authority (DoD, 2010). The DoD Unified Facilities Criteria on LID (UFC 3-210-10) mandates stormwater management to maintain hydrologic functions of a site and mitigate the potential adverse impacts of stormwater runoff. There would be negligible adverse impacts to hydrology and groundwater.

While no permit is required for compliance with these requirements, appropriate post-construction stormwater controls will be implemented. Post-construction stormwater controls consistent with the New Hampshire Stormwater Manual (NHDES, 2008a; 2008c) and with the *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* (USEPA, 2009) would be designed and implemented to ensure compliance with EISA and to ensure that the post-construction runoff rates do not exceed pre-construction runoff rates.

USACE CWA permits also require water quality certification under Section 401 of the CWA, which is administered by NHDES. Because the general CWA Section 401 Water Quality Certification (No. 2007-003) issued by NHDES for the USACE New Hampshire State Programmatic General Permit (PGP) may not sufficiently address impaired waters, any activities authorized under the New Hampshire State PGP may be subject to modification through imposed conditions to address impaired waters issues (NHDES, 2010a).

Waters in the State of New Hampshire have been assessed to determine whether these waters are of sufficient quality to meet their designated uses. Waters that do not meet their designated uses are considered impaired and further classified according to the water quality constituents that contribute to the impairment (such as chemical contaminants, excess sedimentation or turbidity, excess nutrients, elevated temperature, and low DO levels. The list of impaired waters, including the reasons for listing and a map of all impaired waters in New Hampshire can be obtained from the NHDES website at: http://des.nh.gov/organization/ divisions/water/wmb/swqa/2008/. Additional information on impaired waters and the New Hampshire 401 Water Quality Certification Program can be found at the NHDES website: http://des.nh.gov/organization/ divisions/water/wmb/section401/index.htm.

The CWA requires clean-up of pollution sources that contribute to violations of water quality standards. NHDES, through the CWA Section 401 water quality certification program, ensures that projects requiring certification do not exacerbate or contribute to water quality impairment. NHDES maintains a list of impaired waters that do not meet water quality standards and require clean-up. NHDES establishes TMDLs for each water quality constituent that contributes to impairment and creates a clean-up plan for each watershed. Between the time waters are listed as impaired and the time a clean-up plan is implemented, no additional pollutant loading that would contribute to the impairment is allowed (NHDES, 2010a).

NHDES has not established TMDLs for all impaired waters in the state. Until TMDLs are established, no additional pollutant loading that would contribute to the impairment is allowed within 1 mile of impaired waters without established TMDLs. Therefore, new activities within the 1-mile buffer, where stormwater could contribute to violations of water quality standards, are required to include BMPs for stormwater pollution control so that the

pollutant loading from the new activity does not exceed the pre-existing loading and new activities do not exacerbate existing impaired conditions (NHDES, 2010a).

NHDES identifies the impaired waters where 1-mile buffers are in effect by county on the *Impaired Waters Review Information* section of its website (http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm). The Preferred Alternative site and the alternative sites are within 1 mile of an impaired water without established TMDLs. Two streams that have been designated as impaired and are without established TMDLs are located within 1 mile of the Preferred Alternative site (Figure 4-7). The streams are identified below, along with the causes of impairment that have been identified based on the New Hampshire 2008 Section 305(b) and 303(d) Surface Water Quality Report (NHDES, 2008d).

- **Upper Sagamore Creek** is impaired from elevated levels of anthropogenic compounds, including acenaphthylene, aluminum, arsenic, benzo(A)pyrene (polycyclic aromatic hydrocarbons [PAHs]), benzo(A)anthracene, cadmium, chrysene (C1-C), copper, dibenz(A,H)anthracene, fluoranthene, lead, mercury, nickel, phenanthrene, pyrene, trans-nonachlor, polychlorinated biphenyls [PCBs], and dioxins. This stream also is impaired due to high levels of Enterococcus and fecal coliform bacteria. Upper Sagamore Creek also was determined to be impaired as a result of estuarine bioassessments.
- **Pickering Brook** is impaired from elevated levels of PCBs, mercury, and dioxins. This stream also is impaired due to high levels of Enterococcus and fecal coliform bacteria. Pickering Brook also was determined to be impaired as a result of estuarine bioassessments.

Construction of the stormwater management basin and implementation of appropriate BMPs, as described above, would be implemented to lessen impacts to onsite wetlands and to minimize the potential for indirect impacts to onsite and offsite wetlands. With implementation of appropriate BMPs, no further degradation of designated impaired waters would be expected.

As indicated by FEMA Flood Insurance Rate Map number 3301C0270E, the project area is outside the 1 percent annual chance floodplain (FEMA, 2005). There would be no impacts to floodplains under the Preferred Alternative.

Actions within the New Hampshire Coastal Zone must be assessed for consistency with the enforceable policies of the New Hampshire Coastal Management Program, as required by the CZMA. A CZMA federal consistency determination (Appendix E) concluded that there would be negligible effects within the coastal zone, and that the project is consistent to the extent practicable with the enforceable policies of the NH Coastal Zone Management Program. The New Hampshire Coastal Management Program reviewed the CZMA federal consistency determination and concurred with the Army's determination in a letter dated December 28, 2010. Site preparation, construction, staging, temporary storage, and other activities associated with the Proposed Action would occur in a manner consistent with the NH Coastal Zone Management Program enforceable policies to the maximum extent practicable.

4.7.2.2 Alternative 1 - Rye

The impacts of Alternative 1 would be similar to those of the Preferred Alternative. Construction and post-construction stormwater controls would be similar to those described for the Preferred Alternative.

Site preparation and construction at the Alternative 1 site would disturb more than 100,000 ft^2, which would require an AoT permit. Information on the permit and the permitting process can be found at the NHDES website: http://des.nh.gov/organization/divisions/ water/aot/.

Site preparation and construction at the Alternative 1 site would disturb more than 1 acre, which would require an NPDES construction general stormwater permit. Information on the permit and the permitting process can be found at the NHDES website: http://des.nh.gov/ organization/divisions/water/aot/ and also at the USEPA website: http://cfpub1.epa.gov/npdes/home.cfm?program_id=6.

While no permit is required for compliance with these requirements, appropriate post-construction stormwater controls will be implemented.

Berrys Brook is within 1 mile of the Alternative 2 site and has been designated as impaired (Figure 4-7). TMDLs have not been established for Berrys Brook. Based on the New Hampshire 2008 Section 305(b) and 303(d) Surface Water Quality Report (NHDES, 2008d), Berrys Brook is impaired due to low levels of DO, acidity (low pH), and elevated levels of *Escherichia coli* bacteria and Chlorophyll-a.

Construction of the stormwater management basin and implementation of appropriate BMPs, as described in Section 4.7.2.1, would be implemented to minimize the potential for indirect impacts to onsite and offsite receiving waters, including wetlands. With implementation of appropriate BMPs, no further degradation of designated impaired waters would be expected.

According to FEMA Flood Insurance Rate Map number 3301C0270E, there would be no impacts to floodplains (FEMA, 2005). Alternative 1 would be consistent with the CZMA (Appendix E).

4.7.2.3 Alternative 2 - Exeter

Alternative 2 would have construction related impacts similar to those of the Preferred Alternative. The Alternative 2 site layout would result in no encroachment into floodplains or floodprone areas for construction of the AFRC. Wetlands occur on the Alternative 2 site and are further discussed in Section 4.8.1.4. Construction and post-construction stormwater controls would be similar to those of the Preferred Alternative.

Site preparation and construction at the Alternative 2 site would disturb more than 100,000 ft^2, which would require an AoT permit. Information on the permit and the permitting process can be found at the NHDES website: http://des.nh.gov/organization/divisions/ water/aot/.

Site preparation and construction at the Alternative 2 site would disturb more than 1 acre, which would require an NPDES construction general stormwater permit. Information on the permit, the permitting process, and additional information can be found at the NHDES

website: http://des.nh.gov/ organization/divisions/water/aot/ and also at the USEPA website: http://cfpub1. epa.gov/npdes/home.cfm?program_id=6.

While no permit is required for compliance with these requirements, appropriate post-construction stormwater controls must be implemented.

The Little River is within 1 mile of the Alternative 2 site and has been designated as impaired (Figure 4-7). TMDLs have not been established for the Little River. Based on the New Hampshire 2008 Section 305(b) and 303(d) Surface Water Quality Report (NHDES, 2008d), the Little River is impaired due to acidity (low pH) and low levels of DO. Also, if the Exeter site is selected, the project would be within 0.25-mile of a designated river (Little River), the applicant would have to send a copy of the application for a State Wetland Permit (discussed in Section 4.8.2.4) by certified mail to the local advisory committee for the Little River before the application is submitted to the municipal clerk.

Construction of the stormwater management basin and implementation of appropriate BMPs, as described in Section 4.7.2.1, would be implemented to lessen impacts to onsite wetlands and to minimize the potential for indirect impacts to onsite and offsite wetlands. With implementation of appropriate BMPs, no further degradation of designated impaired waters would be expected.

As indicated by FEMA Flood Insurance Rate Panel numbers 3301C0401E and 2501030025E, the northern portion of the Alternative 2 site is within the floodplain (FEMA, 2005). The proposed site layout would prevent encroachment into floodplains or floodprone areas. There would be no impacts to floodplains under Alternative 2. Alternative 2 would be consistent with the CZMA (Appendix E).

4.7.2.4 No Action Alternative

Under the No Action Alternative, none of the proposed construction activities would occur. USAR units would continue to operate in the existing facilities and there would be no impacts to water resources, floodplains, or the New Hampshire Coastal Zone.

4.8 Biological Resources

4.8.1 Affected Environment

Investigations of the Preferred Alternative site and the Alternative 1 site were conducted on December 1, 2009. The Alternative 2 site was investigated on May 5, 2010. During the site investigations, onsite habitats were characterized to determine if suitable potential habitat for state or federally protected species occurred on the sites.

4.8.1.1 Vegetation

Preferred Alternative - Portsmouth

The Preferred Alternative site is mostly devoid of trees, though a planted windrow of ornamental trees is present along the northern edge of the property. The site is almost entirely covered by typical oldfield herbaceous vegetation, including multiple exotic grasses, goldenrods (*Solidago* spp.), and North American asters (*Symphyotrichum* spp., *Eurybi*a spp.). Because of the condition of vegetation at the late date of the site investigation, herbaceous plants were not identified to species. The site was historically used as a quarry and is maintained with regular mowing, as evidenced by the lack of young woody

vegetation within the site. Absent mowing, naturally colonizing hardwood saplings would be evident throughout the site.

Herbaceous emergent wetlands were scattered across the property and are described in Section 4.8.1.4.

Alternative 1 - Rye
The western three-quarters of the site is heavily forested with mature stands of eastern hemlock. During the December 1, 2009, site visit, it was observed that hemlock trees were infested with the hemlock woolly adelgid. While not all hemlocks on the property exhibited signs of adelgid infestation, the insects will spread throughout the stands. Affected hemlock trees begin dying within 2 years, with total stand loss likely within 10 years (University of New Hampshire Cooperative Extension Service, 2010). The northern portion of the site contains early successional hardwood forest dominated by red maple (*Acer rubrum*) and American beech (*Fagus grandifolia*). Ground cover was nearly absent except that the area along the road was dominated by planted exotic grasses.

Alternative 2 - Exeter
This site was investigated on May 5, 2010 and consists predominantly of maturing regrowth woods, with an overstory dominated by red maple, American beech, eastern white pine (*Pinus strobus*), and northern red oak (*Quercus rubra*). There are a few eastern hemlock in the overstory. The understory is primarily green ash (*Fraxinus pennsylvanica*), maple-leaf viburnum (*Viburnum acerifolium*), multiflora rose (*Rosa multiflora*), and amur honeysuckle (*Lonicera maackii*). There are forested wetlands along the northern and western portions of the site, which are described in Section 4.8.1.4.

4.8.1.2 Wildlife

Preferred Alternative - Portsmouth
The Preferred Alternative provides little habitat for wildlife, though species that typically adapt to living near human development such as rodents, raccoons, opossums, snakes, and amphibians could occur. The site is maintained and regularly mowed. No wildlife was observed during site visits. Wetlands on the site are small and of low quality but were identified as providing wildlife habitat functions based on the overland access to other wetlands available to wildlife (CH2M HILL, 2010). However, based upon the small size of the wetlands and the amount of surrounding development, any habitat value these wetlands would provide would be minimal.

The Migratory Bird Treaty Act (MBTA) regulates or prohibits the taking, killing, or possession of, or harm to, migratory bird species listed in 50 CFR Section 10.13. Birds may utilize the site for foraging. However, because of the level of disturbance in the area and the high level of human activity around the site, the habitat quality for migratory birds is low.

Alternative 1 - Rye
The Alternative 1 site is mostly forested with mature stands of hemlock. The forested portions of the site could provide suitable habitat for typical forest dwelling species, including birds (such as warblers, sparrows, and vireos), deer, squirrel, opossum, and raccoon. However, no wildlife or signs of wildlife use were observed during the site visit.

The MBTA regulates or prohibits the taking, killing, or possession of, or harm to, migratory bird species listed in 50 CFR Section 10.13. Birds may utilize the site for foraging. However,

because of the level of disturbance in the area and the high level of human activity around the site, the habitat quality for migratory birds is low.

Alternative 2 - Exeter
The Alternative 2 site is forested and surrounded by forested wetlands. The forested area could provide habitat for typical forest dwelling species, including birds (such as warblers, sparrows, and vireos), deer, squirrel, opossum, and raccoon. The wetlands are connected to the Little River and could provide habitat for wetland species or serve as a migration corridor.

The MBTA regulates or prohibits the taking, killing, or possession of, or harm to, migratory bird species listed in 50 CFR Section 10.13. Birds may utilize the site for foraging. Much of the surrounding land is forested, including the Little River Conservation Area, and the habitat quality for migratory birds is moderate to high. However, because of the human activity and disturbance to the east, the eastern portion of the Alternative 2 site where the building would be constructed offers lower quality habitat.

4.8.1.3 Sensitive Species

The New Hampshire Natural Heritage Bureau (NHNHB) database was reviewed prior to the site visit to determine if any federally or state listed endangered, threatened, or candidate species are likely to occur in the vicinity of the preferred and alternative sites. This review was based on published lists of sensitive plants and animals known to occur in and adjacent to the towns of Portsmouth, Rye, and Exeter (Table 4-4).

Preferred Alternative - Portsmouth
There are no federally listed wildlife species for this township Portsmouth that are likely to occur at the Preferred Alternative site (Table 4-4). The grasshopper sparrow (*Ammodramus savannarum*), listed as threatened by the state, and the upland sandpiper (*Bartramia longicauda*), listed as endangered by the state, could occur at the Preferred Alternative site. These species prefer open field, grassland habitats. However, due to human activity and the poor quality of habitat at the site, the species would likely not occur at the Preferred Alternative site.

The Preferred Alternative site is occasionally mowed and there is a high level of human activity in the area. There are no federally listed plant species in Portsmouth. State listed species are known to occur in Portsmouth, but none would occur at the Preferred Alternative site. State listed species in Portsmouth are mainly found along or in salt marshes and mudflats. None of these species were observed on the site during the December site visit and, due to the level of previous land disturbance, the property does not provide suitable habitat for any of these species. No potentially suitable habitat for federally or state listed species occurs on the site and no protected species were observed during the site visit. Therefore, it is unlikely protected plant species would occur at the Preferred Alternative site.

The property has not been designated as critical habitat for any protected species.

Alternative 1 - Rye
There are no federally protected plant or animal species that would likely occur at the Alternative 1 site (Table 4-4). The state species of concern, purple martin (*Progne subis*), typically occurs in residential areas, on golf courses, and in open fields. The Alternative 1 site is surrounded by residential areas and there is open field habitat nearby. The purple martin could occur in the area and have incidental use of the site. No additional state protected animal species would likely occur onsite.

The state threatened black maple (*Acer nigrum*) occurs in rich forests, which are typically mixed forests with mesic moisture regimes with deep, fertile, nearly neutral pH soils. Mesic moisture regimes are characterized by non-limiting soil moisture – neither excessively dry nor excessively wet. The hardwood forested portion of the site could support black maple. However, the species was not observed during the site visit in December 2009.

Alternative 2 - Exeter
There are no federally listed wildlife species documented in Exeter. State listed species that could occur at the site include:

- Least Bittern (*Ixobrychus exilis*) Species of State Concern
- Pied-billed Grebe (*Podilymbus podiceps*) State Threatened
- Blanding's Turtle (*Emydoidea blandingii*) State Endangered
- Northern Black Racer (*Coluber constrictor constrictor*) State Threatened
- Spotted Turtle (*Clemmys guttata*) State Threatened
- Slender Blue Flag (*Iris prismatica*) State Endangered

These species are mainly associated with wetlands and the edges of wetlands. The adjacent Little River Conservation Area could provide habitat for protected species. The only protected species that would likely occur in the upland part of the site would be the northern black racer. This species occurs in xeric and mesic forests and around swamp and marsh edges (New Hampshire Fish and Game Department [NHFGD], 2010). Xeric forests are limited by soil moisture and primarily support woody species adapted to drier conditions. Xeric forest soils typically are thin and acidic. The Least Bittern, Great Blue Heron (Rookery), Northern Black Racer, and the Slender Blue flag were identified by the NH Natural Heritage Bureau as occurring within 1.5 miles from the alternative 2 site (NHNHB, 2010).

There are no federally listed plant species documented as occurring in Exeter. State listed species that could occur are listed in Table 4-4. These species are mainly associated with swamps, marshes, mudflats, and floodplain forests. It would be unlikely that these species would occur in the upland portion of the site.

4.8.1.4 Wetlands

Wetland delineations were conducted on the Preferred Alternative site and on the alternative sites. Each site is discussed, and wetlands are identified and described based on the U.S. Fish and Wildlife Service (USFWS) classification system for wetlands and deepwater habitats (Cowardin et al., 1979).

Table 4-4 – State Protected Species Potentially Occurring in the Vicinity of the Proposed Sites based on Potentially Suitable Habitat Present

Common Name	Scientific Name	Status	Habitat	Preferred Alternative Portsmouth	Alternative 1 Rye	Alternative 2 Exeter
Grasshopper Sparrow	*Ammodramus savannarum*	ST	Dry fields with sparse grasses (usually bunch grasses) and weeds, few shrubs, and patches of bare ground.	X		
Least Bittern	*Ixobrychus exilis*	SC	Freshwater or brackish marshes with scattered woody vegetation.			X
Pied-billed Grebe	*Podilymbus podiceps*	ST	Wetlands, ponds or slow portions of streams with dense stands of emergent vegetation; submerged aquatic bed.			X
Purple Martin	*Progne subis*	SC	Golf courses, lakeshore residential areas, open fields, and low-density residential areas.		X	
Upland Sandpiper	*Bartramia longicauda*	SE	Grassland habitats; airfields and mixed agricultural areas.	X		
Great Blue Heron (Rookery)	*Ardea Herodias*	-	Freshwater marsh or swamp and nearby trees. Prefers remote locations with little disturbance from people.			X
Blanding's Turtle	*Emydoidea blandingii*	SE	Marshes, ponds, forested and shrub swamps, fens, shallow slow-moving rivers, backwaters, oxbows, and vernal pools.			X
Northern Black Racer	*Coluber constrictor constrictor*	ST	Xeric and mesic forests; brushy areas; meadows; oldfields; rocky ridges and ledges; and swamp and marsh edges.			X
Spotted Turtle	*Clemmys guttata*	ST	Marshes, wet meadows, ponds, forested and shrub swamps, fens, shallow slow-moving streams and rivers, and vernal pools.			X
Black Maple	*Acer nigrum*	ST	Floodplain forest, rich woods and talus.		X	
Climbing Hempweed	*Mikania scandens*	ST	Medium-depth and deep emergent marsh, Wet meadows (poor), Riverbanks, poor swamps.			X
Green Adder's Mouth	*Malaxis unifolia*	ST	Rich fens and seeps; acid bogs, fens, and seeps; rich woods and talus; acidic mesic forests; rich swamps; poor swamps.			X

Table 4-4 – State Protected Species Potentially Occurring in the Vicinity of the Proposed Sites based on Potentially Suitable Habitat Present

Common Name	Scientific Name	Status	Habitat	Preferred Alternative Portsmouth	Alternative 1 Rye	Alternative 2 Exeter
Hairy-fruited Sedge	*Carex trichocarpa*	SE	Rich swamps.			X
Loesel's Twayblade	*Liparis loeselii*	ST	Wet meadow (rich); calcareous riverside seeps; rich fens and seeps; rich swamps.			X
Slender Blue Flag	*Iris prismatica*	SE	Medium-depth and deep emergent marsh; Wet meadow (rich)			X
Pale Green Orchid	*Platanthera flava* var. *herbiola*	ST	Rich fens and seeps; acid bogs, fens, and seeps; rich swamps; poor swamps; wet meadow (rich, poor); floodplain forest.			X
Robust Knotweed	*Persicaria robustior*	SE	Riverbanks; poor swamps; sandy pond shores / sand plain basin marshes.			X
Tufted Loosestrife	*Lysimachia thyrsiflora*	ST	Rich fens and seeps; acid bogs, fens, and seeps; rich swamps; poor swamps; medium-depth and deep emergent marsh.			X
Water-plantain Spearwort	*Ranunculus ambigens*	SE	Aquatic bed; riverbank; poor swamps.			X

Notes:

SE = State Endangered

ST = State Threatened

SC = State Species of Concern

Source: NHNHB, 2009; NHNHB, 2010.

Preferred Alternative – Portsmouth

Wetland surveys were conducted at the Preferred Alternative site on December 17, 18, 21, and 22, 2009. Five wetlands were identified within the approximately 10.6- acre survey area (Figure 4-8, Table 4-5). Wetlands identified on the site appear to have developed as a result of past human activity rather than as naturally occurring systems (GZA GeoEnvironmental, Inc., 2010a). Wetlands on the Preferred Alternative site occur as isolated depressions on top of imported fill material in areas where low permeability results in water retention of sufficient duration to support a hydrophytic plant community (GZA GeoEnvironmental, Inc., 2010a). All five wetlands on the property are classified as palustrine emergent persistent, seasonally flooded/saturated and excavated wetlands.

Table 4-5 – Wetlands Identified on the Preferred Alternative Site

Wetland ID	Wetland Size (acres)	Wetland Impacts (acres)
Wetland A	0.017	0.017
Wetland B	0.038	None
Wetland C	0.229	None
Wetland D	0.008	None
Wetland E	0.183	0.022
Total	0.475	0.039

Alternative 1 - Rye

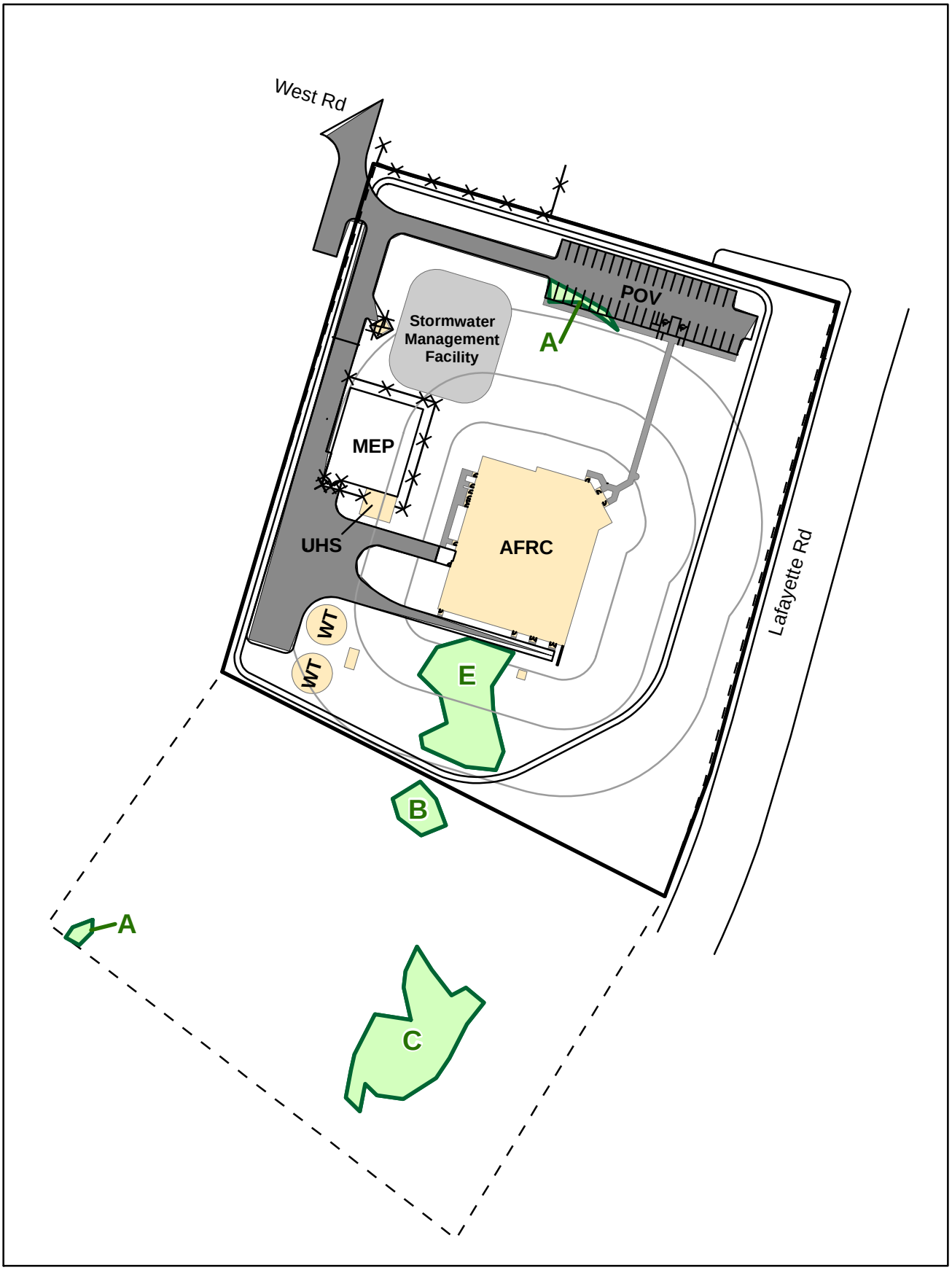
The December 1, 2009 site investigation found no evidence of wetlands on the property (CH2M HILL, 2010). Subsequently, a wetland survey via aerial photography was conducted for the Alternative 1 site on December 15, 2009. No vegetative communities indicative of a wetland system were identified. In addition, during previous site visits conducted on the Alternative 1 site, no wetlands, vernal pools, or other jurisdictional waters were observed (GZA GeoEnvironmental, Inc., 2010b).

Alternative 2 – Exeter

An initial wetland survey of the proposed 21.1-acre Alternative 2 site on December 15, 2009, identified four wetlands (Figure 4-9; Table 4-6), including three areas that may have been vernal pools (GZA GeoEnvironmental, Inc., 2010c).

Table 4-6 – Wetlands Identified on the Alternative 2 Site

Wetland ID	Wetland Size (acres)	Wetland Impacts (acres)
Wetland A	7.289	0.002
Wetland B	0.159	None
Wetland C	0.173	None
Wetland D	0.119	None
Total	7.740	0.002
a Denotes wetland acreage onsite, but wetland is larger and extends offsite		



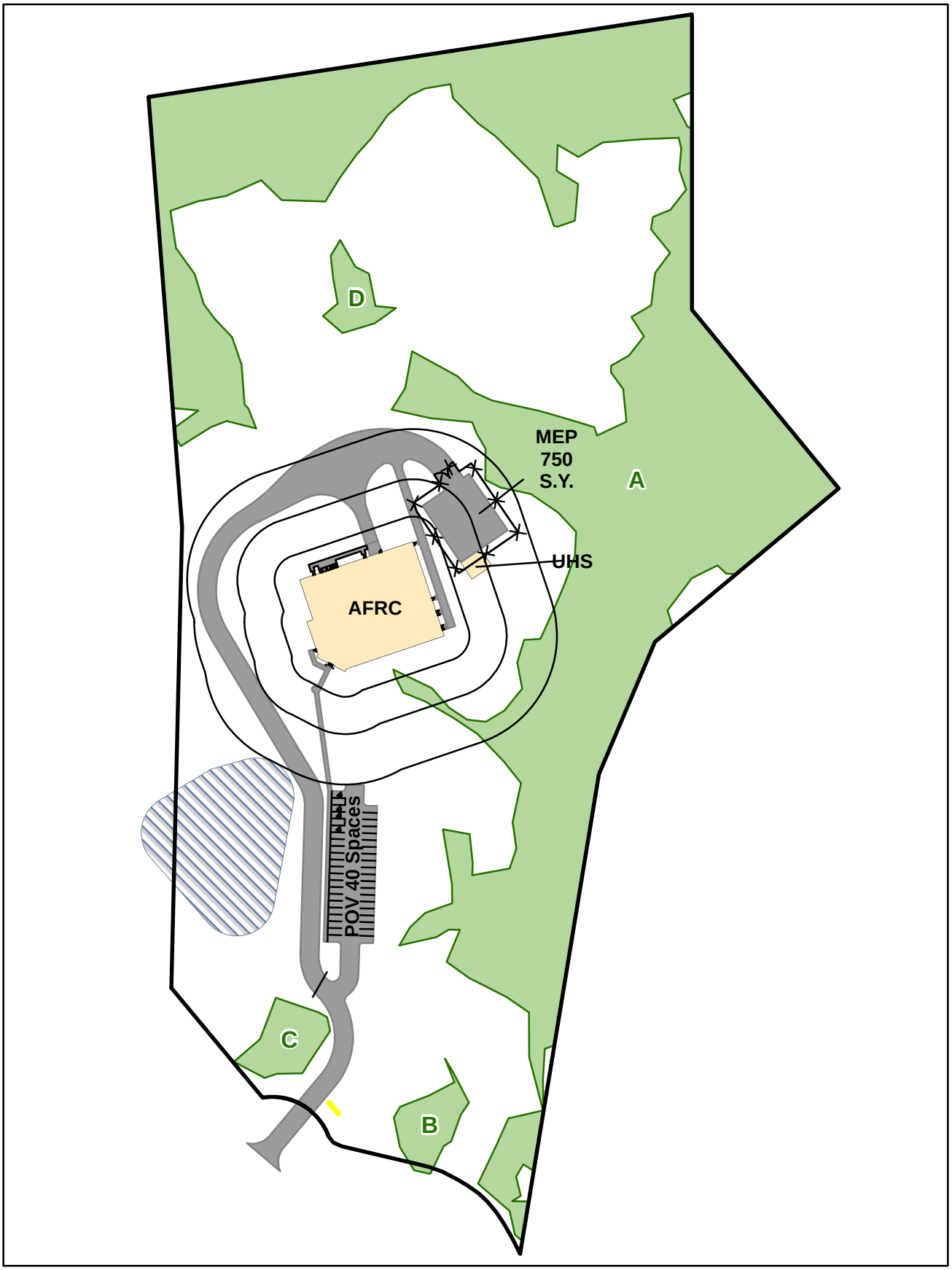
Building
Pavement
Property Boundary
Preferred Alternative Site
Wetlands

0 25 50 100
Feet

FIGURE 4-8
WETLANDS IDENTIFIED ON THE PREFERRED ALTERNATIVE SITE
Environmental Assessment - Pease, NH

CH2MHILL

\\GALILEO\PROJ\PEASE_EA_386171\MAPFILES\EA\WETLANDS-PREFERREDALTERNATIVE.MXD SSMITH21 6/14/2010 15:49:12



Property Boundary
Wetland
Building
Pavement
Garrision House Buffer
Monument Sign

0 25 50 100
Feet

FIGURE 4-9
WETLANDS IDENTIFIED ON THE ALTERNATIVE 2 SITE
Environmental Assessment - Pease, NH

CH2MHILL

\\GALILEO\PROJ\PEASE_EA_386171\MAPFILES\EA\WETLANDS-ALTERNATIVE2.MXD SSMITH21 6/15/2010 14:41:36

Wetland A is associated with the Little River complex and contains several different wetland types, including a palustrine forested broad leaved deciduous wetland, a palustrine scrub-shrub wetland, and a palustrine emergent persistent wetland. Canopy dominants are red maple and white pine and the understory is dominated by ferns. The scrub-shrub wetlands understory was fern-dominated, with young red maple and winterberry the dominant shrubs. Some large white pine and red maple are present, but not in numbers sufficient to constitute a dominant canopy layer. Wetlands associated with the Little River complex occur primarily along the northern and western portions of the site. The Little River is located approximately 0.20 mile to the south of the site.

Wetland B, Wetland C, and Wetland D were identified as potential vernal pools during the delineation. However, a subsequent site investigation during the typical amphibian breeding season (April 20, 2010) determined that these three areas were small wetlands that would not pond water during the amphibian breeding period and are not vernal pools. Wetland B, Wetland C, and Wetland D are isolated palustrine forested broad leaved deciduous and needle-leaved evergreen wetlands (GZA GeoEnvironmental, Inc., 2010d). Approximately one-third of the site consists of wetlands (GZA GeoEnvironmental, Inc., 2010c).

4.8.2 Consequences

4.8.2.1 Preferred Alternative - Portsmouth

Negligible impacts to common flora and fauna would result from implementation of the Preferred Alternative. Construction of the proposed AFRC would result in permanent conversion of low-quality wildlife habitat to a developed building site and parking area. This could result in displacement of mobile species and the potential incidental loss of individuals of less mobile species. Operation of the new AFRC would not be expected to cause impacts to wildlife.

Because of the lack of potentially suitable habitat, no potential impacts to protected species would be anticipated. A scoping letter was submitted to the USFWS on February 25, 2010, stating that no critical habitat has been designated in the project area and that the Proposed Action would not adversely impact any federally listed threatened or endangered plant or animal species (Appendix F). To date, no response has been received from USFWS.

Permanent impacts to wetlands would occur from development at the Preferred Alternative site. However, because the wetlands apparently were created incidental to human activity and the quality of the wetlands is poor, impacts to wetland resources would likely be negligible. A function and values assessment of the wetlands on the Preferred Alternative site was completed and it was determined that these wetlands provide minimal ecological functions and offer little in the way of human values (Appendix G).

Because development of the site would include disturbance of wetlands, permitting through NHDES and USACE would be required. Permits for dredge and fill of wetlands are issued by the Regulatory Division of the USACE New England District in accordance with Section 404 of the CWA. The Regulatory Division also makes the final determination on the jurisdictional status of wetlands. USACE has suspended use of Nationwide Permits in New England and instead has authorized the use of state-specific general permits (USACE, 2010a). The New England District issued a New Hampshire PGP to expedite review of

minimal impact work in waters of the United States (USACE, 2010b; Appendix H). The PGP can authorize three levels of projects, depending on the magnitude of potential impacts:

- Minimum Impact
- Minor Impact
- Major Impact

Construction of the AFRC at the Preferred Alternative site would be eligible for authorization as a Minimum Impact Project under the conditions outlined in the PGP (Appendix H).

A State Wetland Permit (Appendix I), issued by the NHDES Wetlands Bureau, is required to authorize work under a USACE PGP. This permit authorizes work in wetlands regulated by the State of New Hampshire. As part of this permit process, the applicant is required to notify abutters and adjacent property owners by certified mail of applications for wetland permits from the NHDES Wetlands Bureau (New Hampshire Revised Statutes Annotated 482-A:3, I(d)). Development of the Preferred Alternative site would involve dredging or filling to place a structure (building or pavement) in a wetland. This work would not qualify for a "Minimum Impact Expedited Application" and would require a standard application.

Construction of the stormwater management basin and implementation of appropriate BMPs, as described in Section 4.7.2.1, would be implemented to lessen impacts to onsite wetlands and to minimize the potential for indirect impacts to onsite and offsite wetlands. If required, permanent impacts to wetlands would be mitigated, as specified in the NHDES and USACE permits. With the implementation of appropriate BMPs and any required mitigation, impacts to wetlands from construction of the Preferred Alternative would be negligible. No operational impacts to wetlands would be expected.

4.8.2.2 Alternative 1 - Rye

Alternative 1 would require clearing of rich mixed woods and mature eastern hemlock stands. However, it was observed that the eastern hemlock trees on the site are infested with the hemlock woolly adelgid during the site visit on December 1, 2009. Absent intensive treatment, adelgid infestations are 100 percent lethal to native hemlock stands within a few years. Because the mature hemlock forest would be in the process of dying when cleared for the project, the impact from forest clearing would be minor. There would be displacement of resident animals, with some incidental mortality likely as a result of Alternative 1.

Removal of the regrowth hardwood forest component would reduce potential habitat for black maple. It is unlikely that this species would occur at this site. There would be negligible adverse impacts on sensitive species and minor adverse impacts on common flora and fauna. A scoping letter was submitted to the USFWS on February 25, 2010 stating that no critical habitat has been designated in the project area and that the Proposed Action would not impact any federally listed threatened or endangered plant or animal species (Appendix F). To date, no response has been received from USFWS.

There are no wetlands on the Alternative 1 site and there is no potential for direct impacts to wetlands from construction and operation of Alternative 1. Construction of the stormwater management basin and implementation of appropriate BMPs, as described in Section 4.7.2.1, would be implemented to minimize the potential for indirect impacts to offsite wetlands.

4.8.2.3 Alternative 2 – Exeter

Alternative 2 would result in clearing of maturing regrowth mixed forest. However, the site has been disturbed historically and the forest understory has sizeable numbers of invasive exotic species, primarily amur honeysuckle and multiflora rose. A functional value assessment was completed for the wetlands on the Alternative 2 site (GZA Environmental, Inc. 2010d, Appendix J). The large wetland hydrologically connected with the Little River Conservation Area provides a primary function of wildlife habitat and also provides other functions and values. Because of the small amount of the wetland that would be encroached upon (less than 0.01 acre) any affects to functions and values of this wetland would be negligible. There would likely be displacement of resident animals during construction, with some incidental mortality also likely. During operation, the level of human activity at the AFRC, particularly on training weekends also could displace wildlife from near the AFRC. There would be minor impacts on common flora and fauna.

A scoping letter was submitted to the USFWS on February 25, 2010 stating that no critical habitat has been designated on the Alternative 2 site and that the Proposed Action would not adversely impact any federally listed threatened or endangered plant or animal species (Appendix F). To date, no response has been received from USFWS. Protected species in the adjacent Little River Conservation Area could travel onto the Alternative 2 site. However, since the majority of the protected species identified as potentially occurring onsite would occur in the wetland areas, it is unlikely there would be impacts to sensitive species. There would be negligible impacts on sensitive species. The site design for Alternative 2 was developed to limit impacts to wetlands on the property. Approximately 0.002 acre of Wetland A would be impacted.

While locations for the stormwater management basin and electric transformer pad have not yet been determined, these components will be placed such that construction and operation will not result in impacts to wetlands.

Construction of the stormwater management basin and implementation of appropriate BMPs, as described in Section 4.7.2.1, would be implemented to lessen impacts to onsite wetlands and to minimize the potential for indirect impacts to onsite and offsite wetlands. If required, permanent impacts to wetlands would be mitigated, as specified in the NHDES and USACE permits. With the implementation of appropriate BMPs and any required mitigation, the impacts to wetlands from construction of Alternative 2 would be minor. No operational impacts to wetlands would be expected.

4.8.2.4 No Action Alternative

Under the No Action Alternative, construction activities would not occur and there would be no impacts to biological resources.

4.9 Cultural Resources

Cultural resources include historic and prehistoric sites of interest and may include structures, archaeological sites, or religious sites of importance to Native American cultures. Section 106 of the NHPA requires Federal agencies to consult with the State Historic Preservation Officer (SHPO) and interested tribes to identify potential significant cultural resources.

Within this section, the terms "significant" and "significance" are used in the context of the NEPA and the NHPA. When referring to structures, objects, or artifacts, the terms are used as defined in 36 CFR Part 800 for the NHPA. When referring to impacts, the terms are applied relative to their meaning under the NEPA.

Regulations implementing Section 106 of the NHPA, 36 CFR Part 800.8, encourage the coordination of two processes: (1) the review of possible impacts to the environment under NEPA and (2) the assessment of effects of undertakings required under the NHPA.

The Area of Potential Effect (APE) for purposes of compliance with Section 106 of the NHPA includes the immediate vicinity of the proposed construction, where direct effects of the construction might affect historic properties. The APE also includes adjacent areas where the setting of existing historic structures may be compromised as a result of construction. Additionally, there could be long-term indirect impacts to cultural or archeological resources resulting from increased human use of an area following implementation of the project.

The New Hampshire Division of Historical Resources (NHDHS) was contacted by letter dated February 25, 2010. The letter, issued by the 99th Regional Support Command (RSC), requested that the NHDHS provide any key information or concerns regarding the Preferred and alternative sites.

4.9.1 Affected Environment

Cultural resources are defined in Army Regulation 200-1, Environmental Protection and Enhancement, Headquarters, Department of the Army, as:

- Historic Properties, protected through the NHPA
- Archaeological Resources, protected through the Archaeological Resources Protection Act (ARPA)
- Cultural Items, as defined by the Native American Graves Protection and Repatriation Act (NAGPRA)
- Sacred Sites, as referenced in the American Indian Religious Freedom Act (AIRFA) and EO 13007
- Significant paleontological items as described by 16 USC 431-433 (Antiquities Act of 1906)
- Collections of artifacts and records pertaining to them as directed in 36 CFR 79

4.9.1.1 Prehistoric and Historic Background

This section provides a summary of the pre- and post-contact period history of southeastern New Hampshire. The following text is summarized from the Phase I Archaeological Survey (Public Archeology Laboratory [PAL], 2010).

> Approximately 16,000 years ago the Laurentide ice sheet receded into northern New England, initiating the PaleoIndian Period. During this period, the level areas next to river channels were selected repeatedly for settlement. Large base camps and small residential camps appear to be the primary settlement models during this period

(PAL, 2010). The Archaic Period (7000-900 before Christ [B.C.]) is differentiated by a gradual movement into and settling of the region. Archaeological evidence suggests that settlement and subsistence patterns were somewhat dynamic and shifting, likely in response to changing climatic conditions (PAL, 2010). The Woodland Period (900 B.C – 1600 Anno Domini [A.D.]) is marked by continuity with the previous Archaic traditions during the early part of the period. By the end of the period, the development of horticulture and the earliest contacts with Europeans changed Native American lifeways. The development of horticulture was the most significant cultural adaptation during the Late Woodland period, resulting in markedly more sedentary settlement patterns with villages adjacent to cultivated fields occupied throughout the growing season. Contact with European populations completely disrupted Native American social, economic, and political culture (PAL, 2010).

The first European venture into the Portsmouth area occurred in 1603 and the area was being settled by 1631 (PAL, 2010). New Hampshire was recognized as a distinct province by 1680. The early development of New Hampshire followed two lines, with shipping and fishing dominating along the coast and farming dominating the inland areas. During and following the industrial revolution, the New Hampshire economy suffered as the industrial center shifted to Boston and the small farms were ill suited to compete with the larger farms of the South and Midwest (PAL, 2010).

4.9.1.2 Previous Investigations and Archival Research

Preferred Alternative - Portsmouth

Archival research indicated that no aboveground historic resources or pre-contact or post-contact period archaeological sites have been recorded within the Preferred Alternative site and that no cultural resource surveys had been conducted for the parcel. There are no recorded pre-contact sites located within 1 mile of the Preferred Alternative site, but there are five within a 3-mile radius of the Preferred Alternative site (PAL, 2010). There are 4 recorded post-contact sites located within 1 mile of the Preferred Alternative site, and 39 within a 3-mile radius. The Eastern Railroad Historic District corridor, a National Register of Historic Places (NRHP) eligible resource, is approximately 1 mile west of the Preferred Alternative site.

Nineteenth- and early-twentieth-century town maps do not indicate any documented structures or other improvements within the Preferred Alternative site. The maps indicate that the Preferred Alternative site was unimproved land between home/farmsteads situated along Route 1 south of Portsmouth. Gravel mines are depicted near the Preferred Alternative site on the 1956 USGS map (PAL, 2010).

Alternative 1 - Rye

Archival research indicates that no aboveground historic resources or pre-contact or post-contact period archaeological sites have been recorded within the Alternative 1 site and no cultural resource surveys have been undertaken for the Alternative 1 site. There are no recorded pre-contact sites located within a 3-mile radius of the Alternative 1 site. There are no recorded post-contact sites located within 1-mile of the Alternative 1 site, but there are eight sites within a 3-mile radius. The Eastern Railroad Historic District corridor, an NRHP eligible resource, is located approximately 0.4 mile west of the Alternative 1 site (PAL, 2010).

Nineteenth- and early-twentieth-century town maps do not indicate any documented structures or other improvements within the property until the hotel was built. The 1956 USGS map shows the hotel and several ancillary buildings along Lafayette Road/Route 1 and several gravel pits west of the Alternative 1 site (PAL, 2010).

Alternative 2 - Exeter
Archival research identified no documented aboveground historic resources or pre-contact or post-contact period archaeological sites and no cultural resource surveys within the boundaries of the Alternative 2 site. Research identified 25 pre-contact period and 21 post-contact period archaeological sites within a 3-mile radius of the Alternative 2 site. Three of the pre-contact and two of the post-contact period sites are within 1 mile of the Alternative 2 site (PAL, 2010).

Nineteenth- and early-twentieth-century town maps were reviewed for the Alternative 2 site. The 1857 town map depicts a Garrison House owned by N. Gilman Jr. in the southeastern portion of the Alternative 2 site (Figure 3-3). A garrison house is defined as an early fortified house generally constructed of stone or hewn logs. The road on which the Garrison House was situated is depicted on all historical maps reviewed and remains visible on contemporary aerial photographs, although a portion of the road was converted to a utility easement. The majority of the Alternative 2 site is situated between land owned by Gilman and that owned by A.S. Smith to the north and west of a discontinued section of Old Route 101. However, it is unclear whether Gilman or Smith historically owned the majority of the Alternative 2 site. The Garrison House is not depicted on the 1892 map of Exeter. The remaining maps (dated 1894, 1932, and 1934) indicate that the Alternative 2 site was unimproved land between homes or farmsteads.

4.9.1.3 Pedestrian Investigation

Preferred Alternative - Portsmouth

No subsurface testing was conducted at the Preferred Alternative site. The initial walkover survey determined that the Preferred Alternative site had experienced extensive previous gravel quarrying.

Alternative 1 - Rye
A subsurface investigation of the Alternative 1 site consisting of 35 test pits conducted in the woods behind the previously disturbed area associated with the motel found no cultural material on the property.

Alternative 2 - Exeter
Seventy-one test pits were excavated at the Alternative 2 site. The investigation avoided areas on the Alternative 2 site containing wetlands, visible erratic rocks, and exposed bedrock. A historic stone-lined cart path runs east to west along the southern portion of the site. Subsurface testing located the N. Gilman Jr. Garrison House Site in the southeastern portion of the site. The site consists of an approximately 31 x 19-ft rough cut granite foundation and cellar hole; an approximately 9 x 11-ft outbuilding depression; a stone well; two intersecting cart paths; and stone walls with gate openings. The Garrison House Site and cart paths are shown on a 1802 map of Exeter. An 1857 town map shows the intersection of the two cart paths and an area indicated as the N. Gilman Jr. Garrison House. The subsurface investigation also identified numerous artifacts including creamware,

pearlware, brick, domestic refuse, white salt glazed stoneware, and brick. It is likely that the located artifacts were associated with the Garrison House.

4.9.1.4 Native American Resources

Through letters dated February 25, 2010, the 99th RSC requested that the Mohegan Tribal Council, the Passamaquoddy Tribe, the Penobscot Nation, and the Wampanoag Tribe of Gay Head-Aquinnah identify any issues or concerns of their respective tribes regarding the considered actions.

Preferred Alternative - Portsmouth
No Native American resources were identified at the Preferred Alternative site during the SHPO archival research.

Alternative 1 - Rye
No Native American resources were identified at the Alternative 1 site during the SHPO archival and file search or during the Phase I Archaeological Survey.

Alternative 2 - Exeter
No Native American resources were identified at the Alternative 2 site during the SHPO archival and file search or during the Phase I Archaeological Survey.

4.9.2 Consequences

To date, letters have been received from the Passamaquoddy Tribe and the Penobscot Nation; however, these responses did not raise any issues regarding the project (Appendix F). No other correspondence has been received from the tribes. To date no responding correspondence has been received from the NHDHS about the Proposed Action for the Preferred and alternative sites. Further coordination with NHDHS will occur if required once Phase I reports are submitted to the SHPO.

4.9.2.1 Preferred Alternative

A Phase I cultural resources investigation was not conducted for the 10.6-acre project area due to the initial pedestrian survey revealing previous extensive gravel quarrying. NHDHS concurred with the assessment of no subsurface investigation needed in correspondence dated February 16, 2010. No sites were identified that were listed in or potentially eligible for the NRHP in the project area. No impacts to architectural resources would be likely as a result of implementation of the Proposed Action. No significant impacts to archaeological resources would be likely as a result of implementation of the Proposed Action. Therefore, no impacts to cultural resources would be expected from implementation of the Proposed Action.

Should any significant or potentially significant historic or archeological artifacts be inadvertently discovered during construction, all activities would halt in the immediate area. The U.S. Army Reserve would consult with the SHPO and other parties to implement appropriate follow-on actions.

4.9.2.2 Alternative 1 - Rye

A Phase I cultural resources investigation of the 16-acre project area conducted in April 2010 did not find any prehistoric or historic cultural materials. No sites were identified that were listed in or potentially eligible for the NRHP in or near the project area. No impacts to

architectural resources would be likely as a result of implementation of the Proposed Action. Therefore, no impacts to cultural resources would be expected from implementation of the Proposed Action.

4.9.2.3 Alternative 2 - Exeter

A Phase I cultural resources survey of the 21-acre project area conducted in April 2010 identified the foundation remains of an early- to mid-nineteenth century garrison house called N. Gilman Jr. Garrison House, a smaller outbuilding depression, a stone well, two intersecting cart paths, and stone walls with gate openings, all located in the southeast portion of the parcel. The cultural resources report recommends the N. Gilman Jr. Garrison House Site as eligible for listing in the NRHP. Initially, consultants recommended a minimum 100-ft buffer around the structures and the artifact deposits in order to avoid potential impacts. However, upon review of the draft report, the Army indicated that a 100-ft buffer around the site would not be sufficient to ensure avoidance of impacts to the site. Several factors led to the Army's conclusions concerning the proposed avoidance measures. One, the exact site boundaries have not been determined based on the Phase I testing. Second, there are clearly existing features that may be contributing elements to the site's eligibility located outside of the 100-ft area (these include a cart path and a stone wall). Finally, the nature of the site increases the possibility that additional, as-yet undiscovered features may occur outside of the buffer, since Phase I testing intervals are relatively widespread.

Based on the result of the Phase I study, the Army has determined that development of the site is likely to cause adverse effects to the N. Gilman Jr. Garrison House Site. If the Exeter site were chosen, Phase II testing would be required to confirm NRHP eligibility of the site and to determine the full extent of the site and any associated features. Consultation with the SHPO to include review of any Phase II testing plan would be required. Should the site's eligibility be confirmed, further consultation would be required in order to resolve adverse effects to the archaeological site as per requirements at 36 CFR 800. Requirements would include notification of adverse effects and invitation to participate being sent to the Advisory Council on Historic Preservation (ACHP). A Memorandum of Agreement (MOA) would also need to be negotiated with the SHPO, ACHP (should they choose to participate), and other interested parties as identified. The MOA would outline mitigation measures for adverse effect resolution.

The selection of the Exeter site would likely have unavoidable adverse effects to the Garrison House Site. Therefore, impacts to cultural resources would be expected from implementation of the Proposed Action.

4.9.2.4 No Action Alternative

Under the No Action Alternative, none of the proposed construction activities would occur and there would be no impacts to cultural resources.

4.10 SOCIOECONOMICS

4.10.1 Affected Environment

4.10.1.1 Economics

Socioeconomic resources are defined as the basic attributes associated with the human environment, particularly population and economic activity. Population is described as the magnitude, characteristics, and distribution of people. Economic activity is described in terms of employment distribution, personal income, and business growth.

Preferred Alternative - Portsmouth
The Preferred Alternative site is in Portsmouth, Rockingham County, New Hampshire. The population of Portsmouth decreased between 2000 and 2008 (Table 4-7), while Rockingham County increased in population by approximately 6.5 percent. In 2015, Portsmouth is projected to have a population of 21,990 and Rockingham County is projected to have a population of 320,490 (New Hampshire Office of Energy and Planning [NHOEP], 2007).

Table 4-7 – Economic and Population Data from 2000 U.S. Census

Geographic Area	Total Population in 2000 [a]	Estimated Population in 2008[b]	Median Household Income [a]	Population Below Poverty Level [a]
Portsmouth	20,874	20,520	$45,195	9.30 %
Rye	5,182	5,133	$63,152	3.50 %
Exeter	14,058	14,497	$49,618	5.40 %
Rockingham County	277,359	295,525	$58,150	4.50 %
New Hampshire	1,235,786	1,315,000	$49,467	6.50 %
United States	281,421,906	304,059,724[c]	$41,994	12.4 %

Sources: [a] U.S. Census Bureau [USCB], 2000; [b] NHOEP, 2009

Median household income in Portsmouth was above the national average but approximately 23 percent lower than that for Rockingham County. Median household income in Portsmouth was closer to the state average, approximately 9.5 percent less than for the State of New Hampshire (Table 4-7).

The labor force in Rockingham County as of March 2010 was 175,960, and the unemployment rate was 7.4 percent. The Rockingham County unemployment rate was comparable to the New Hampshire average of 7.3 percent (New Hampshire Economic and Labor Market Information Bureau [NHELMIB], 2010).

The Rockingham County labor force is considered the available labor force for Portsmouth. The majority of the labor force in Rockingham County is employed in the goods producing and service industries. Major employers in Rockingham County include Insight Technologies, Columbia HCA Hospital, Exeter Hospital, FPL Energy, City of Portsmouth, U.S. Department of State National Passport Center, Liberty Mutual Insurance, and Timberlane Regional School District (NHELMIB, 2009).

Alternative 1 - Rye
The Alternative 1 site is located in Rye in Rockingham County, New Hampshire. Rye experienced a slight decline in population from 2000 through 2008 (Table 4-7). The population of Rye is projected to grow slightly, with an estimated population of 5,640 by

2015 (NHOEP, 2007). Median household income in Rye is 8.6 percent above that for Rockingham County and more than 27 percent above the median income for the state (Table 4-7). For analysis purposes, the potential labor force for Rye is considered Rockingham County, the same as that discussed for Portsmouth.

Alternative2 - Exeter
The Alternative 2 site is located in Exeter in Rockingham County, New Hampshire. Exeter experienced a slight growth in population from 2000 to 2008, increasing by 3.1 percent during that period (Table 4-7). The population of Exeter is projected to be 15,580 by 2015 (NHOEP, 2007). The average median household income in Exeter in 2000 was $49,618, which is lower than the Rockingham County average, but similar to the State of New Hampshire average (Table 4-7). For analysis purposes, the potential labor force for Exeter is considered Rockingham County, the same as that discussed for Portsmouth.

4.10.1.2 Environmental Justice

EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations,* was enacted to ensure 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. Fair treatment means that no group of people, including racial, ethnic, or socioeconomic groups, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or the execution of federal, state, tribal, or local programs and policies.

For this analysis, the region of influence (ROI) for environmental justice analysis consists of the Census Tract (CT) and Block Group (BG) level for the locations considered for the new AFRC. For purposes of comparison, reference populations are defined as Portsmouth, Rockingham County, New Hampshire, and the United States. Disproportionate impacts are defined as impacting a meaningfully greater population, which is considered approximately 20 percentage points higher than the reference populations.

Preferred Alternative - Portsmouth
The Preferred Alternative site is in CT 696 BG 4, which includes the central southern portion of the City of Portsmouth west of Lafayette Road, bounded to the north by Peverly Hill Road, a railroad line to the west, and the city of Rye to the south. The Preferred Alternative location had populations of minorities comparable to those of the surrounding region with the exception of the Asian population. The Asian population in CT 696 BG 4 is 9.7 percent, which is approximately 9 percent higher than in the surrounding area (Table 4-8).

The Black or African American Alone population percentage in CT 696 BG 4 is approximately 3 percent higher than in the surrounding region and is comparable to the City of Portsmouth percentage (Table 4-8).

The poverty level in the area of the Preferred Alternative was 4.3 percent less than in Portsmouth and comparable to those in Rockingham County and the State of New Hampshire (Table 4-9).

Alternative 1 - Rye
The Alternative 1 site is in CT 710 BG 3, which encompasses most of the central and western parts of the Rye city limits and extends to the Atlantic Ocean. The racial makeup in CT 710

BG 3 was 98.7 percent white, and the minority population in this area was comparable to that of the region (Table 4-8).

Table 4-8 – Race and Ethnicity Data for the Considered Alternatives

Race	White Alone	Black or African American Alone	American Indian and Alaska Native Alone	Asian Alone	Native Hawaiian and Other Pacific Islander Alone	Other Race Alone	Two or More Races	Hispanic or Latino[a]
CT[b] 696 BG[c] 4 (Preferred Alternative)	85.2%	3.4%	0.3%	9.7%	0.0%	0.7%	0.6%	1.8%
CT 710 BG 3 (Alternative 1)	98.7%	0.2%	0.2%	0.4%	0.0%	0.1%	0.5%	0.9%
CT 610.01 BG 2 (Alternative 2)	97.2%	0.6%	0.1%	0.8%	0.0%	0.1%	1.1%	0.5%
Portsmouth	93.5%	2.1%	0.2%	2.4%	0.0%	0.3%	1.4%	1.3%
Rye	98.7%	0.1%	0.1%	0.5%	0.0%	0.1%	0.5%	0.6%
Exeter	97.2%	0.4%	0.2%	0.9%	0.0%	0.3%	1.0%	0.9%
Rockingham County	96.8%	0.6%	0.2%	1.1%	0.0%	0.4%	0.9%	1.2%
New Hampshire	96.0%	0.7%	0.2%	1.3%	0.0%	0.6%	1.1%	1.7%
United States	75.1%	12.3%	0.9%	3.6%	0.1%	5.5%	2.4%	12.5%

Source: USCB, 2000

[a] Hispanic: The 2000 Census included a category for Hispanic or Latino. This category is for individuals who classify themselves in one of the specific Hispanic or Latino categories such as "Mexican," "Puerto Rican," or "Cuban," as well as those who indicate that they are "other Spanish, Hispanic, or Latino." Origin can be viewed as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before arrival in the U.S. People who identify their origin as Spanish, Hispanic, or Latino may be of any race. Therefore, the totals may not add up to 100%.

[b] CT = Census Tract

[c] BG = Block Group

With a poverty level of 6.2 percent, CT 710 BG 3 was 1.7 percent higher than Rockingham County and comparable to New Hampshire (Table 4-9).

Alternative2 - Exeter

The Alternative 2 site is in CT 610.01 BG 2, which is bounded by the Exeter city limits to the north and west, Epping Road to the east, and Brentwood Road to the south. The racial makeup in CT 610.01 BG 2 was 97.2 percent white, and the minority population in this area was comparable to that in the region (Table 4-8).

The percentage of individuals living in poverty in CT 610.01 BG 2 was 2.8 percent, which was lower than in the surrounding area and reference populations (Table 4-9).

Table 4-9 – Poverty Level and Individuals Under the Age of 18

Geographic Area	Total Population	Poverty Level	Individuals Under the Age of 18	Percentage of Individuals Under the Age of 18
Census Tract 696 Block Group 4 (Preferred Alternative)	1,098	5.0%	202	18.4%
Census Tract 710 Block Group 3 (Alternative 1)	1,729	6.2%	379	21.9%
Census Tract 610.01 Block Group 2 (Alternative 2)	2,173	2.8%	591	27.2%
Portsmouth	20,874	9.30%	3565	17.2%
Rockingham County	277,359	4.5%	73,329	26.4%
New Hampshire	1,235,786	6.5%	309,562	25.0%
United States	281,421,906	12.4%	72,293,812	25.7%

Source: USCB, 2000

4.10.1.3 Protection of Children

EO 13045, *Protection of Children from Environmental Health Risks and Safety Risks*, was enacted to prioritize the identification and assessment of environmental health and safety risks that may affect children, and to ensure that federal agency policies, programs, activities, and standards address environmental and safety risks to children. These risks are defined as "risks to health or to safety that are attributable to products or substances that the child is likely to come in contact with or ingest." This section identifies the distribution of children and locations where the number of children in the affected area may be proportionately high (schools, childcare centers, etc.).

Preferred Alternative - Portsmouth

The percentage of individuals under the age of 18 living near the Preferred Alternative site was comparable to that percentage in Portsmouth and below the percentages for Rockingham County and New Hampshire. The percentage of the population of Portsmouth under the age of 18 was 17.2 percent, less than in Rockingham County and New Hampshire, which were 26.4 and 25 percent, respectively (Table 4-9).

Some schools near the Preferred Alternative site include Mary C. Dondero Elementary School and the City of Portsmouth Peep Community Campus. Mary C. Dondero Elementary School is approximately 0.5 mile east of the proposed AFRC location in the Elwyn Park neighborhood and across Lafayette Road. The school serves kindergarten through fifth grade and has 324 students (NCES, 2010a). Peep School is located approximately 0.5 mile west of the proposed AFRC location on Campus Drive. This school serves pre-school only (NCES, 2010b).

Alternative 1 - Rye

The percentage of individuals under the age of 18 in CT 710 BG 3 was higher than in Portsmouth, but less than the Rockingham County and State percentages (Table 4-9). The closest school is Rye Country Day School, a pre-school and early childhood development

facility, located approximately 0.4 mile north of the Alternative 1site along Washington Road (Rye Country Day School, 2010).

Alternative2 - Exeter
The percentage of individuals under the age of 18 in CT 610.01 BG 2 was comparable to Rockingham County and New Hampshire (Table 4-9) percentages. The nearest school to this site is Exeter High School, approximately 0.5 mile to the west. This school serves grades 9 through 12 and has 1,649 students (NCES, 2010c).

4.10.2 Consequences

4.10.2.1 Impact Methodology

The initial step in estimating socioeconomic effects is to characterize aspects of the construction and operational phases of the Proposed Action. With the aid of economic impact modeling techniques (described below), the economic effects of each aspect of the Proposed Action are translated into measures such as jobs and income.

The primary catalyst for changes to socioeconomic resources is a change in economic activity, i.e., industrial output (value of goods and services), employment, and income. Changes in employment have the potential to affect population, housing, and associated community services and infrastructure.

A distinction is made between direct effects and secondary effects, the latter being consisting of both indirect and induced effects.

- Direct effects are defined as changes in expenditures on goods and services directly related to construction and operation. For example, an increase in the final demand for construction inputs such as concrete block and brick of $25 million will cause the concrete block and brick manufacturing sector to increase output by $25 million worth of concrete block and brick.
- Indirect effects are defined as backward linkages through expenditures on intermediate goods or services required by the direct industry in order to increase output. These include operation labor and other inputs. For example, $25 million worth of additional concrete block and brick would require increased output by the cement producing industry (to produce additional cement) and aggregate industry (to produce additional sand/gravel).
- Induced effects are defined as forward linkages derived from employees (both direct and indirect) spending wages within a region. For example, if additional employees were hired to work in the industries supporting and providing inputs to the construction sector, their personal consumption expenditures would induce employment.

The differentiation that is made between direct, indirect, and induced effects contributes to the “economic multiplier” concept. The larger and more highly urbanized the area, the more complex and integrated the economy is likely to be. Thus, more of the additional economic activity will likely occur within the area and increase the size of the multiplier.

The U.S. Army's Economic Impact Forecast System (EIFS) model is used to assess the economic effects of BRAC recommendations. The EIFS model, its inputs, outputs, and significance measures are discussed in more detail in Appendix K.

4.10.2.2 Economic Impacts of Construction

Preferred Alternative - Portsmouth

Implementation of the Preferred Alternative requires the relocation of all reserve units to a new AFRC that would be constructed within approximately 2 miles of the existing AFRC. However, units would not be expected to relocate to new housing as a result of the Proposed Action.

In the economic modeling, Rockingham County was used as the ROI. It utilized construction cost estimates for the project developed by the U.S. Army Reserve, which are included in Appendix K. It is anticipated that the large majority of economic effects associated with the proposed construction project would occur in the ROI.

Short-term minor beneficial effects would be expected. In the short term, the expenditures and employment associated with the construction project would increase the sales volume, employment, and income in the ROI, as estimated by the EIFS model results. Table 4-10 displays the change in direct and total economic growth (which includes induced growth). The sales and income estimates are in 2008 dollars.

Table 4-10 –EIFS Model Output for the Proposed Construction Project

Indicator	Projected Change	Percentage Change	RTV Range
Direct Sales Volume	$6,920,000		
Total Sales Volume	$21,382,800	0.15%	-9.46% to 11.38%
Direct Income	$1,114,270		
Total Income	$3,443,096	0.04%	-6.07% to 11.93%
Direct Employment	28		
Total Employment	87	0.06%	-6.87% to 4.77%
Local Population	0	0	-1.72 to 1.96%

See Appendix K for detailed EIFS model report.

While the federal government owned facility would not be subject to local taxation, the amount that would be forgone would not pose a significant impact to the City of Portsmouth given the size of the property to the be purchased. In addition, the City of Portsmouth will receive the Paul Doble Army Reserve Center for redevelopment. The preferred site is part of an industrial district designated as office research. It is surrounded by commercial and industrial development, and some residential housing. The AFRC is compatible with this purpose and should not inhibit development in surrounding areas. The Army will coordinate with the community to address any issues if they arise.

These economic benefits would be temporary, lasting only for the duration of construction. These changes in specific economic parameters would fall well within historical fluctuations, as represented by the rational threshold values (RTVs) shown in Table 4-10, and would be considered minor. The construction project would not be expected to trigger a

temporary movement of workers to the area to fill the supply of construction job opportunities.

Alternative 1 - Rye
The economic impacts of construction for Alternative 1 would be the same as for the Preferred Alternative. Alternative 1 would also be located in Rockingham County and would affect the same ROI. Any affect to tax revenues would be in Rye rather than Portsmouth.

Alternative 2 Exeter
The economic impacts of construction for Alternative 2 would be the same as for the Preferred Alternative. Alternative 2 would also be located in Rockingham County and would affect the same ROI. Any affect to tax revenues would be in Exeter rather than Portsmouth.

No Action Alternative
Under the No Action Alternative, units would continue to use the existing facility and there would be no economic changes from the current conditions. There would be no beneficial short-term economic impact from construction, as no project construction would occur.

4.10.2.3 Economic Impacts of Operations

Under the considered alternatives, including the No Action Alternative, there would be no changes in personnel or operations. Because no changes from current conditions would be expected during operation, no economic impacts from operations would be expected as a result of any of the alternatives.

4.10.2.4 Environmental Justice

Preferred Alternative - Portsmouth
While the minority population of the area surrounding the Preferred Alternative location is higher than for the region, the elevated numbers do not constitute a significant difference from the reference population. The percentage of individuals living in poverty in the area is comparable to that of the region. Impacts from the Preferred Alternative would be confined to the immediate property and would not have potential to disproportionately affect any minority groups or any individuals living in poverty.

Alternative 1 Rye
There are no minority populations or concentrations of individuals living in poverty in the vicinity of the Alternative 1 site. Impacts from Alternative 1 would be confined to the immediate property and would not have potential to disproportionately affect any minority groups or any individuals living in poverty.

Alternative 2 - Exeter
There are no minority populations or concentrations of individuals living in poverty in the vicinity of the Alternative 2 site. Impacts from Alternative 2 would be confined to the immediate property and would not have potential to disproportionately affect any minority groups or any individuals living in poverty.

No Action Alternative
Under the No Action Alternative, units would continue to use the existing facility and there would be no changes relative to environmental justice from the current conditions. There

would be no disproportionate impacts to low-income or minority populations under the No Action Alternative.

4.10.2.5 Protection of Children

Preferred Alternative - Portsmouth
There would be no environmental health or safety risks to children created under the Preferred Alternative. The project may have a beneficial impact on protection of children, as a vacant lot would be occupied and a potential temptation for children to cross Lafayette Road would be eliminated.

Alternative 1 - Rye
There would be no environmental health or safety risks to children created under Alternative 1. The project would be implemented on a property to which children would not routinely have access.

Alternative 2 - Exeter
There would be no environmental health or safety risks to children created under Alternative 2. The project would be implemented in an industrial park where children would not have access to the site.

No Action Alternative
Under the No Action Alternative, units would continue to use the existing facility and there would be no changes relative to Protection of Children from the current conditions. There would be no impacts to children under the No Action Alternative.

4.11 TRANSPORTATION

4.11.1 Affected Environment

Regional Transportation Network
The regional transportation system in the Portsmouth area includes interstate highways, public and private bus lines, airports, and Amtrak rail service.

Highway System
Interstate Highway 95 (I-95) serves the eastern portion of New Hampshire. The highway parallels the seacoast and serves as a major artery for tourist traffic to coastal cities. It is located to the west of the Preferred Alternative and Alternative 1 sites and east of the Alternative 1 site (Figure 4-10). In New Hampshire, the highway is a toll road known as The Blue Star Turnpike. The highway extends approximately 16 miles from the City of Seabrook at the Massachusetts state line to Portsmouth at the Maine state line. The road connects with several major highways in New Hampshire, including SH 101, US 4, and the Spaulding Turnpike (State of New Hampshire Department of Transportation [NHDOT], 2010a). These highways serve as major routes of travel connecting interior New Hampshire with the coastal region.

Bus Service
The Portsmouth area is served by one private and two public bus services. Wildcat Transit, associated with the University of New Hampshire, provides connections to the cities of Durham, Dover, Newington, Newmarket, and Portsmouth (University of New Hampshire, 2010). The Cooperative Alliance for Seacoast Transportation (COAST) serves the Seacoast area, including the cities of Portsmouth, Dover, Somersworth, Rochester, Newington, and

LEGEND

Airport

Amtrak Station

Railway

Alternative

0 2.5 5 10
Miles

FIGURE 4-10
TRANSPORTATION NETWORK
Environmental Assessment - Pease, NH

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Farmington (COAST, 2010a; 2010b). C&J is a private bus service providing connections from Dover, Durham, and Portsmouth, New Hampshire to Boston, Massachusetts (C&J, 2010)

Train Service
Amtrak provides intercity rail service between Portland, Maine and Boston, Massachusetts via its Downeaster Passenger Rail Service. Stops include Dover, Durham, and Exeter, New Hampshire (Amtrak, 2010a). The closest rail stop to the Preferred Alternative site and alternative sites is in Exeter (Amtrak, 2010b) (Figure 4-10).

Air Service
The region is served by four airports – Portsmouth International, Portland International Jetport, Boston Logan International, and Manchester-Boston Regional (Figure 4-10).

Portsmouth International Airport is located near I-95 in Portsmouth, New Hampshire. It provides an international/domestic passenger terminal, but is not currently served by passenger airlines (Portsmouth International Airport, 2010).

The Portland International Jetport is located in Portland, Maine. It is served by Air Canada, Air Tran, Continental, Delta, JetBlue, United, US Airways, and Twin Cities Air Service (Portland International Jetport, 2010a; 2010b).

Boston Logan International Airport is the largest airport in the region, ranking 19th in the nation in passenger volume. It is served by 35 regional, national, and international passenger airlines (Massachusetts Port Authority, 2010a; 2010b).

Manchester-Boston Regional Airport is located in Manchester, New Hampshire. The airport is served by Air Canada, Continental, Continental Express, Delta, Delta Connection, Southwest, United, United Express, US Airways, and US Airways Express (Manchester-Boston Regional Airport, 2010).

4.11.1.1 Local Transportation Network

The following sections describe the local transportation network in the vicinity of the Preferred Alternative and the other considered alternatives.

Preferred Alternative - Portsmouth
The entrance to the Preferred Alternative site would be from West Road. West Road is an approximately 0.7-mile semi-circle loop that intersects Lafayette Road. Access to the Preferred Alternative site would be from I-95 to US Route 1 to West Road or south on US Route 1 approximately 2.5 miles from downtown Portsmouth to West Road. Other roads that could be utilized for site access from I-95 include Middle Road and Peverly Hill Road to US Route 1 to West Road.

The Average Annual Daily Traffic (AADT) on Lafayette Road (US Route 1) south of South Road, located approximately 1.5 miles north of the Preferred Alternative site, was 13,000 in 2006 and 12,000 in 2003 (NHDOT, 2009a). The AADT on Lafayette Road south of Greenleaf Avenue, approximately 1.25 miles north of the Preferred Alternative site, was 12,000 in 2005 and 2007 (NHDOT, 2009a).

Alternative 1 - Rye
The entrance to the Alternative 1 site would be on Lafayette Road between the intersections with Dow Lane and Washington Road. The site is on the west side of Lafayette Road, which is currently a two-lane, asphalt road with no turning lane for access to the site.

The AADT on Lafayette Road (US Route 1) north of Ocean Road, located less than 2 miles north of the Alternative 1 site, was 22,000 in 2004 and 2007. The AADT on Lafayette Road north of the B&M bridge, located approximately 1 mile south of the Alternative 1 site, was 16,674 in 2008 and 16,527 in 2007 (NHDOT, 2009b).

Alternative 2 - Exeter
The entrance to the Alternative 2 site would be at the end of Continental Drive within the industrial park. Continental Drive is a 0.5-mile, two-lane road that intersects Epping Road west of the site. Access to the Alternative 2 site would be from SH 101 to Epping Road (Exit 9) to Continental Drive.

The AADT on Epping Road west of NH 111a (Brentwood Road), located approximately 1.5 miles southeast of the Alternative 2 site, was 8,700 in 2005 and 8,200 in 2008 (NHDOT, 2009c). The AADT on SH 101 west of Epping Road between Exit 8 and Exit 9 was 41,000 in 2006 and 42,000 in 2009. The AADT on SH 101 east of Epping Road between Exit 9 and Exit 10 was 47,000 in 2006 and 44,000 in 2009 (NHDOT, 2010b).

4.11.2 Consequences

4.11.2.1 Regional Transportation Network

There would likely be no new permanent jobs created and no jobs lost. Relocation of personnel into or out of the region is not anticipated. Therefore, no impacts to the regional transportation network would occur under the Preferred Alternative, Alternative 1, or Alternative 2.

4.11.2.2 Local Transportation Network

Preferred Alternative - Portsmouth
Negligible impacts to traffic conditions at the site would be expected under the Preferred Alternative. New parking spaces would be provided at the site, as would an entrance to the property from West Road. These changes would have a negligible impact on traffic flow in the area. During construction, workers would use appropriate controls, such as flagmen, to maintain safe traffic conditions. Construction of the Preferred Alternative would have a negligible, short-term effect on traffic in the immediate area.

As part of the Proposed Action, a 100-member training facility would be constructed. However, these 100 personnel would consist of two USAR units and would generally use the facility in shifts and mainly on the weekends. There would be only three full-time employees at the facility on a regular basis. The full-time employees would increase the amount of traffic entering the area daily; however, this would be a negligible impact on traffic or transportation. The addition of approximately three workers in this area with associated daily commutes would result in an increase of less than 0.03 percent in the number of daily commuters traveling in the area. Even at full capacity, if all reservists were at the facility on the same weekend and driving individually, the addition of 100 vehicles would result in an increase of less than 1 percent in daily traffic. This would be a negligible impact on traffic flow in the area. A slight increase in traffic would be anticipated during

summer weekends when AFRC use would be highest and US Route 1 would typically experience heavy recreational traffic to and from the beaches. Due to the very small percentage increase in traffic anticipated for the Proposed Action, even on the weekends when all personnel might be onsite, no effects on adjacent businesses would be anticipated. The new AFRC would have sufficient parking to accommodate all military and privately owned vehicles, and would be accessible from West Road only. There would be no access to the new AFRC from Lafayette Road.

Alternative 1 - Rye

Alternative 1 could cause minor adverse impacts to traffic on Lafayette Road on weekends. The road currently experiences heavy traffic in the vicinity of the Alternative 1 site, approximately 50 percent more vehicles on an average day than at the Preferred Alternative site. At the Dow Lane intersection, Lafayette Road lacks a turning lane and there is no traffic signal.

The addition of 3 workers in this area with associated daily commutes would result in an increase of less than 0.02 percent in the number of daily commuters traveling in the area. Therefore, impacts to weekday traffic would likely be negligible.

At full capacity, with all reservists at the facility on the same weekend and driving individually, there would be an increase of approximately 0.5 percent in daily traffic. On weekends with high beach traffic, any impacts in the morning would likely be negligible, as AFRC reservists would typically arrive for training earlier than people would be traveling to beaches. However, Sunday afternoon traffic could be subject to additional delays due to interaction with reservists leaving the AFRC. Because the traffic increase would be small (less than 0.5 percent), any negative impacts to traffic would likely be minor.

Alternative 2 - Exeter

The additional traffic on SH 101, even if all traffic were to come by way of this road, would be negligible, representing an increase of less than 0.01 percent on weekdays and less than 0.25 percent on weekends.

Traffic on Epping Road would increase by less than 0.4 percent during the week and less than 1.2 percent on weekends. There would be potential for minor adverse impacts to traffic flow on Epping Road because there is no traffic signal at the intersection and no turn lane. This would be substantially offset because the majority of the traffic using the AFRC would likely travel in the direction of lightest traffic flow. Most staff and personnel would likely come from SH 101 in the morning and return to SH 101 in the afternoons, because most would likely live in the direction of Portsmouth. During the morning, the heaviest traffic flow on Epping Road is from Exeter, to the south, moving northward toward SH 101, and this is pattern reverses in the afternoon.

Negligible impacts to traffic on Continental Drive would be expected. Continental Drive is a cul-de-sac, and the Alternative 2 site is near the back of the cul-de-sac. Most of the AFRC traffic would be concentrated during weekend training, when use of the remainder of the industrial park would be minimal.

No Action Alternative

There would be no impacts on traffic conditions under the No Action Alternative, as no construction would occur.

4.12 Utilities

4.12.1 Affected Environment

4.12.1.1 Preferred Alternative - Portsmouth

The Preferred Alternative site has water and sewer service through the City of Portsmouth, natural gas is provided by Northern Utilities, and electricity is available through the Public Service of New Hampshire (PSNH) (EXCEL Engineering, Inc. [EXCEL], 2010a). A majority of the City of Portsmouth's water comes from Bellamy Reservoir. Some water is withdrawn from the Collins and Portsmouth wells in Portsmouth (Portsmouth Water Division, 2008). A fire hydrant is present at the site and the nearest fire station is approximately 1 mile away. The nearest police station is approximately 1 mile away (USACE, 2009a).

4.12.1.2 Alternative 1 - Rye

The Alternative 1 site has electric service available through PSNH and water available through Aquarian Water Works (EXCEL, 2010b). The primary source of water for the Town of Rye is groundwater from the Garland and Bailey Brook wells (Town of Rye, 2009). No natural gas service is available at the Alternative 1 site and the nearest sewer line, provided by the City of Hampton, is approximately 0.5 mile away (EXCEL, 2010b). The nearest fire hydrant is 1,000 ft away. The nearest fire station and police station are approximately 2.6 miles away (USACE, 2009c).

4.12.1.3 Alternative 2 - Exeter

The Alternative 2 site would have access to water and sewer service through the Exeter Water Department. Electricity would be provided through Exeter and Hampton Electric, which has existing service along Continental Drive. The natural gas supplier is Northern Utilities. The Town of Exeter, which would supply the Alternative 2 site, uses both surface water and groundwater sources. The groundwater supply comes from the Lary Lane well (Town of Exeter, 2010b). There is a fire hydrant along Continental Drive to serve the site. The nearest fire station is 1.6 miles away and the nearest police station is 1.7 miles away (USACE, 2009b).

4.12.2 Consequences

4.12.2.1 Preferred Alternative - Portsmouth

There would be no adverse impacts on the utilities infrastructure from the Preferred Alternative. The new facility would relocate within Portsmouth and there would be no change in utility providers. New utility lines, including gas, electricity, communications, water, sewer, and storm drain piping, would be installed at the site as part of construction. There would be no increase in regional utility demand as a result of the new AFRC and utility usage could decrease due to more efficient buildings and appliances. No impact to utility providers would be expected. The new AFRC would be within the same region as the Paul A. Doble USARC and no new personnel would be added as a result of the project. Minor long-term beneficial impacts on utilities would be expected due to operation of the new, more efficient AFRC.

While there is a fire hydrant at the property boundary, flow analysis indicated that water pressure is insufficient to adequately provide service to the Preferred Alternative site. The two water tanks and fire suppression systems that would be constructed under the Preferred Alternative would provide adequate fire protection.

4.12.2.2 Alternative 1 - Rye

Alternative 1 would require connecting to a sewer line approximately 0.5 mile away, which would result in greater land disturbance than the Preferred Alternative or Alternative 2. Operational impacts of the AFRC would be the same as for the Preferred Alternative. Therefore, no increase in utility usage would result and minor long-term beneficial impacts on utilities could result due to operation of the new, more efficient AFRC.

There would be changes to some utility providers, including a reduction in demand on the City of Portsmouth water, sanitary sewer, and storm sewer systems. There would be an increase in demand for service from Aquarian Water Works and the City of Hampton sanitary sewer and storm sewer systems. Available capacity would likely be sufficient to meet the increased demands for water and sewer services at the Alternative 1 site.

While there is a fire hydrant along Lafayette Road, water pressure is insufficient to adequately provide service to the Alternative 1 site. The two water tanks and fire suppression systems that would be constructed under Alternative 1 would provide adequate fire protection.

4.12.2.3 Alternative 2 - Exeter

There would be no adverse impacts on the utilities infrastructure from Alternative 2. New utility lines, including gas, electricity, communications, water, and sewer, would be installed at the site as part of construction. There would be no increase in regional utility demand as a result of the new AFRC and utility usage could decrease due to more efficient buildings and appliances. Minor long-term beneficial impacts on utilities would be expected due to operation of the new, more efficient AFRC.

There would be changes to some utility providers, including a reduction in demand on the City of Portsmouth water, sanitary sewer, and storm sewer systems and a reduction in demand on electricity from PSNH. There would be an increase in demand for service from Exeter and Hampton Electric and for water and sewer service through the Exeter Water Department. Available capacity would likely be sufficient to meet the increased demands for water and sewer services at the Alternative 2 site.

4.12.2.4 No Action Alternative

No impact to utilities would result from the No Action Alternative. However, there would be no potential for long-term reduction in demand for utilities because a more efficient building with more efficient appliances would not be constructed.

4.13 HAZARDOUS AND TOXIC SUBSTANCES

4.13.1 Affected Environment

An Environmental Condition of Property (ECP) Report was prepared for the Preferred Alternative site, the Alternative 1 site, and the Alternative 2 site (EXCEL, 2010a; 2010b; 2010c). The following sections describe the existing conditions with regard to hazardous and toxic substances on each property based on the information provided by EXCEL. Each ECP Report complies with Army Regulation 200-1, Section 15-5 c(6) Environmental Protection and Enhancement. In addition, the ECP Reports comply with USEPA's All Appropriate Inquiry rules under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and specifically with ASTM International Designation: E 1527-05,

Standard Practice for Environmental Site Assessments: Phase l Environmental Site Assessment Process.

4.13.1.1 Preferred Alternative - Portsmouth

There are no known past or present uses of hazardous materials at the Preferred Alternative site. The Preferred Alternative site is a former gravel quarry where native soils have been replaced with imported fill material. The ECP Report identified no evidence of hazardous or toxic materials associated with the property and concluded that no additional investigations pertaining to the environmental conditions of the property are warranted (EXCEL, 2010a).

Alternative 1 - Rye

There are no known past or present uses of hazardous materials at the Alternative 1 site. The site is predominantly vacant forested land and contains an area where a motel formerly existed. The ECP Report identified no evidence of hazardous or toxic materials associated with the past use of the property (EXCEL, 2010b).

The Coakley Landfill is a Superfund site designated by USEPA under CERCLA. The site is on the adjoining property to the west of the Alternative 1 site, with the closed landfill approximately 500 ft southwest of the Alternative 1 site (EXCEL, 2010b). Prior to being permitted as a sanitary landfill on April 21, 1971, the site was a sand and gravel operation. The landfill was operational from 1972 to 1985, and both municipal and industrial wastes were disposed of onsite (USEPA, 2010e). Incinerator residue from the incinerator recovery was also accepted at the landfill between 1982 and 1985 as a result of the Refuse to Energy Project. VOCs and metals are the predominant contaminants of concern (COCs) in the area (USEPA, 2010e). In 1979, leachate breakouts were detected in the surrounding areas of the landfill. In 1983, the testing of a nearby drinking water well revealed the presence of five VOCs. The site was listed on the National Priorities List (NPL) in 1983 and the landfill ceased operations in July 1985 (EXCEL, 2010b).

A cooperative agreement between the USEPA and the State of New Hampshire to conduct a Remedial Investigation/Feasibility Study (RI/FS) was signed on August 12, 1985 and the RI/FS was completed on March 2, 1990. USEPA issued a Record of Decision (ROD) for the source control operable unit (OU1) of the site on June 28, 1990. USEPA has issued several Explanations of Significant Differences (ESDs) concerning modifications to the source control remedy between 1991 and 2007, and the latest ESD from September 2007 indicates that contaminants are still present in groundwater. Predominant groundwater flow from the landfill is toward the west and northwest, away from the Alternative 1 site, but groundwater may leave the site in other directions. Plume delineation maps provided in the September 2007 ESD indicate that the southwest corner of the Alternative 1 site has the potential for subsurface impacts from VOCs and metals, including benzene, chromium, vanadium, nickel, arsenic, and lead (EXCEL, 2010b).

The stormwater management basin, water tanks, fire pump, and electric transformer would be located away from the contaminated groundwater plume in the southwestern part of the property.

Alternative 2 - Exeter

There are no known past or present uses of hazardous materials at the Alternative 2 site. The site is predominantly undeveloped forested land and contains a 17th Century home site.

The ECP Report identified no evidence of hazardous or toxic materials associated with the property and concluded that no additional investigations pertaining to the environmental conditions of the property are warranted (EXCEL, 2010c).

4.13.2 Consequences

4.13.2.1 Preferred Alternative - Portsmouth

Because there are no existing site conditions regarding subsurface or groundwater contamination on the Preferred Alternative site, construction workers would not be required to implement precautions or specialized protective equipment against accidental exposure.

Operation of the AFRC would result in use or generation of small amounts of regulated substances, including cleaning solvents, mineral spirits, and oils and lubricants for vehicles and equipment. All hazardous and toxic substances that would be used or generated would be managed and disposed of in compliance with all applicable laws and regulations. Negligible impacts on the generation or disposal of hazardous or toxic waste or materials would be expected under the Preferred Alternative.

4.13.2.2 Alternative 1 - Rye

Potential groundwater contamination on the Alternative 1 site occurs at depths of 20 to 30 ft below the ground surface. The potential contamination also is limited to the southwestern portion of the site, where no construction would occur. Because of the location of planned construction (see Figure 3-2), there would be no risk to construction workers. Construction workers would not be required to implement precautions or specialized protective equipment against accidental exposure.

However, should contaminated groundwater be encountered during construction, appropriate precautions would be implemented and personal protective equipment, as necessary, would be worn by workers. Following construction, neither full-time staff nor reservists would be exposed to groundwater, as all water would be derived from the municipal supply. Onsite groundwater would not be used.

The operational impacts of Alternative 1 would be the same as described for the Preferred Alternative.

4.13.2.3 Alternative 2 - Exeter

Because there are no existing site conditions regarding subsurface or groundwater contamination on the Alternative 2 site, construction workers would not be required to implement precautions or specialized protective equipment against accidental exposure.

The operational impacts of Alternative 2 would be the same as described for the Preferred Alternative.

4.13.2.4 No Action Alternative

Under the No Action Alternative, there would be no change in existing conditions and no impacts to or from hazardous or toxic materials.

4.14 CUMULATIVE EFFECTS SUMMARY

The most severe environmental degradation may not result from the direct effects of any particular action, but from the combination of effects of multiple, independent actions over time. As defined in 40 CFR 1508.7 CEQ regulations, a cumulative effect is the:

> [I]mpact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions.

Some authorities contend that most environmental effects can be seen as cumulative because almost all systems have already been modified. Principles of cumulative effects analysis are described in the CEQ guide *Considering Cumulative Effects under the National Environmental Policy Act*. CEQ guidance on cumulative impacts analysis states:

> For cumulative effects analysis to help the decision-maker and inform interested parties, it must be limited through scoping to effects that can be evaluated meaningfully. The boundaries for evaluating cumulative effects should be expanded to the point at which the resource is no longer affected significantly or the effects are no longer of interest to affected parties (CEQ, 2006).

4.14.1 Preferred Alternative - Portsmouth

The City of Portsmouth has developed plans for the redevelopment of the Paul A. Doble USARC in its current Capital Improvement Plan (City of Portsmouth, 2010). However, because of the distance between the proposed AFRC and the Paul A. Doble USARC, there would be limited potential for interaction with the Preferred Alternative. There would be an incremental increase in demand for utility services, but the plans account for the new AFRC and redevelopment of the Paul A. Doble USARC. Therefore, any cumulative impacts to utilities from redevelopment of the Paul A. Doble USARC would likely be negligible.

Multiple road transportation projects are included for implementation during FYs 2010 through 2012 in the Capital Improvement Plan with potential to interact with construction of the Preferred Alternative (City of Portsmouth, 2010). Peverly Hill Road, which crosses Lafayette Road as the first major intersection north of the Preferred Alternative site, will be improved through the addition of striped shoulders and sidewalks from the YMCA to Middle Road. Middle Road, which serves as a main arterial connecting Lafayette Road with I-95, is planned to have sidewalks replaced between Middle Street and Spinney Road to provide biking and walking alternatives and improve the overall safety of the roadways. The City of Portsmouth has plans for FY 2010 to replace the signal systems at the intersection of South Street and Lafayette Road. These projects are planned for completion prior to construction of the Preferred Alternative and could result in minor beneficial traffic impacts through reduction in automobile traffic on Lafayette Road due to better signal control and greater use of alternative methods of transportation. There are plans for street paving, management, or rehabilitation on Middle Road from Peverly Hill Road to the US 1 Bypass during FY 2011 - 2012. The City of Portsmouth has plans to rehabilitate and replace bridges on the US 1 Bypass between Sagamore Creek and the traffic circle at I-95 in FY 2011, and on the US 1 Bypass between the traffic circle and the Sarah Long Bridge in FY 2012.

These roadwork projects could interact with construction-related traffic near the Preferred Alternative site and result in traffic delays. There are alternate routes of access in the area for motorists and construction traffic, and any cumulative traffic impacts would likely be minor.

Striped shoulders and sidewalks would be added to US Route 1 from Hoover Drive to Constitution Road to provide biking and walking alternatives and improve the overall safety of the roadways. This roadwork project would be approximately 0.2 mile south of the Preferred Alternative site. During construction the project could result in incremental interaction with operation of the AFRC, particularly on training weekends, that would result in minor additional traffic delays in the area. Once complete, the improvements could result in minor beneficial traffic impacts through reduction in automobile traffic on Lafayette Road due to greater use of alternative methods of transportation.

NHDOT has initiated several projects, in concert with the City of Portsmouth, in response to a 1989 US Route 1 (Lafayette Road) study (City of Portsmouth, 2010). For FY 2013, there are plans to signalize and widen the US Route 1 and Constitution Avenue intersection, which is just south of the preferred alternative site. The project would improve access management and capacity on US Route 1 and reduce diversion to other roads. During construction, there could be incremental interaction with operation of the AFRC, particularly on training weekends, that would result in minor additional traffic delays in the area. Once complete, the signalized intersection should result in improved traffic flow in the area.

There are long-range plans (2020) to reconstruct the US Route 1 corridor between Wilson Road and Constitution Avenue to provide better access management and capacity. During construction, there could be incremental interaction with operation of the AFRC, particularly on training weekends, that would result in minor additional traffic delays in the area. Once complete, the reconstructed road should result in improved traffic flow in the area.

No other NHDOT projects are planned that would have potential to interact with the Preferred Alternative (NHDOT, 2009d). There are improvements planned along I-95 through Portsmouth that will cause traffic delays, but these projects would not be expected to interact with the Preferred Alternative.

Should Lafayette Road be widened in the future to better accommodate beach traffic, there could be conflict with the mandatory setback distance for AT/FP at the AFRC. However, there are no current plans for any such widening (NHDOT, 2009d).

There are no planned construction projects in the vicinity of the Preferred Alternative site. The Preferred Alternative would have limited potential to interact with other future or recently completed projects in the area because there would be no change in the relationship between the AFRC and the non-military community, just a relocation of the services by approximately 2.3 miles from the existing Paul A. Doble USARC location. All potential impacts, except for traffic, would be limited to the project area and would not extend into the surrounding community.

4.14.2 Alternative 1 - Rye

The Town of Rye has not identified specific projects in its Capital Improvement Plan (Town of Rye, 2009), but has indicated that all roads should have paved shoulders, appropriate signage, and roadway stripes to provide biking and walking alternatives and improve the overall safety of the roadways. During construction, the project could result in incremental interaction with operation of the AFRC, particularly on training weekends, that would result in minor additional traffic delays in the area. Once complete, the improvements could result in minor beneficial traffic impacts through reduction in automobile traffic on Lafayette Road due to greater use of alternative methods of transportation.

No NHDOT projects are planned that would have potential to interact with the Preferred Alternative (NHDOT, 2009d).

The Town of Rye has no plans to improve sewer service in the vicinity of the Alternative 1 site. However, the City of Rye is negotiating with the City of Portsmouth regarding potential future expansion of Portsmouth-provided and user-financed sewer service along Lafayette Road. This is being done to support development along the Lafayette Road corridor (Town of Rye, 2009). Should additional development occur as a result of improved sewer service, there could be cumulative negative impacts to utility service and traffic in this area. It is expected that the City would plan to provide upgrades to utility services and improve roads as development occurs such that any cumulative impacts would be minor.

Should Lafayette Road be widened in the future to better accommodate beach traffic, there could be conflict with the mandatory setback distance for AT/FP at the AFRC. However, there are no current plans for any such widening (NHDOT, 2009d).

An assisted living center is planned for the property immediately north of the Alternative 1 site. Because of the proximity of the planned assisted living center, there could be cumulative impacts to utility services and to traffic.

There are no other planned construction projects in the vicinity of the Alternative 1 site. However, as future construction occurs, there would be the potential for cumulative impacts to forested habitats through incremental losses from the Alternative 1 site and potential loss from construction projects. However, the Town of Rye has a conservation fund that is used to purchase easements or land to maintain greenspace in the community and ensure against future development (Town of Rye, 2009). Continued use of this conservation fund would help to minimize any cumulative impacts to open space and forested habitat that may occur. Because of the Town of Rye conservation fund and because of the extent of forested land in southern New Hampshire and New England, any cumulative impacts to forested habitat would likely be minor.

Alternative 1 would have limited potential to interact with other future or recently completed projects in the area because there would be no change in the relationship between the AFRC and the non-military community, just a relocation of the services by approximately 2.3 miles from the existing Paul A. Doble USARC location. Following construction, potential impacts, except for traffic, would be limited to the project area and would not extend into the surrounding community.

4.14.3 Alternative 2 - Exeter

The Town of Exeter has plans to improve and widen road shoulders and potentially link sidewalks along arterial roads in Exeter (Town of Exeter, 2008). The town anticipates widening an approximately 100-ft section of road each year. Epping Road is one of five priority arterial roads and would be improved within the next 20 years. If this work were to occur during construction of the AFRC, there could be minor temporary cumulative impacts to traffic. If this work were to occur after the AFRC is built, there could be incremental interaction with operation of the AFRC, particularly on training weekends, that would result in minor additional traffic delays in the area. Once complete, the improvements could result in minor beneficial traffic impacts through reduction in automobile traffic on Lafayette Road due to greater use of alternative methods of transportation.

The Town of Exeter has plans to build a fire sub-station on Epping Road (Town of Exeter, 2008). If the sub-station were to be built during construction of the AFRC, there could be minor temporary cumulative impacts to traffic. If the sub-station were built after the AFRC is built, there could be incremental interaction with operation of the AFRC, particularly on training weekends, that would result in minor additional traffic delays. Following construction, the proximity of the fire sub-station would result in improved response times and enhanced fire protection services in the vicinity.

Construction of the sub-station, and future development within the industrial park, would incrementally interact with Alternative 2 to reduce forest habitat within the region. Because of the extent of forested land in southern New Hampshire and New England, any cumulative impacts to forested habitat would likely be minor.

NHDOT is implementing ramp improvements along SH 101. These projects will be complete in the vicinity of the Alternative 2 site prior to construction of the AFRC and will provide improved traffic service in the area. No other NHDOT projects are planned that would have potential to interact with the Preferred Alternative (NHDOT, 2009d).

Alternative 2 would have limited potential to interact with other future or recently completed projects in the area because there would be no change in the relationship between the AFRC and the non-military community, just a relocation of the services by approximately 2.3 miles from the existing Paul A. Doble USARC location. Following construction, potential impacts, except for traffic, would be limited to the project area and would not extend into the surrounding community.

4.15 MITIGATION SUMMARY

4.15.1 Mitigation Measures to be Implemented to Avoid, Minimize, or Compensate for Impacts

Implementation of the Preferred Alternative or Alternative 1 would not result in significant impacts to environmental or socioeconomic resources. Because there would be no significant impacts, no mitigation is proposed. Implementation of Alternative 2 could result in significant impacts to cultural resources. A negotiated MOA would outline mitigation measures for adverse effects if Alternative 2 were chosen. Alternative 2 would not result in significant impact to other environmental or socioeconomic resources. Because there would no significant impacts to the remaining resources, no mitigation is proposed for these resources.

This section summarizes the procedures and project design features that would be implemented as part of the chosen alternative to avoid or minimize impacts to the extent practical.

The USAR would obtain any required permits, approvals, or certifications prior to implementing construction activities.

Personnel conducting construction activities would strictly adhere to all applicable occupational safety requirements during construction activities.

Generation of fugitive dust is unavoidable during construction. Specific project design features that would be implemented to minimize or eliminate impacts from fugitive dust include the use of sprinkling, irrigation, or mulching to prevent generation of airborne dust and the use of revegetation and mulching as soon as work is complete to minimize the exposure of bare soil.

Construction-related noise would occur, but would be limited to weekdays and daylight hours to minimize disturbance to residents in the area.

Appropriate BMPs that would be implemented and maintained to minimize the potential impacts on downstream water resources associated with erosion following precipitation, such as increased turbidity, siltation, and channel erosion. BMPs that would be implemented would be consistent with the New Hampshire Stormwater Manual (NHDES, 2008a; 2008b) and could include, but would not be limited to, installation and maintenance of hay bales, silt fencing, and sediment traps, as well as establishing temporary or permanent vegetation in disturbed areas with seed or sod as soon as possible (NHDES, 2008a).

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5.0 FINDINGS AND CONCLUSIONS

5.1 FINDINGS

Table 5-1 summarizes the consequences of the Preferred Alternative, Alternative 1, Alternative 2, and the No Action Alternative. The following sections provide a summary of the anticipated impacts of each alternative.

5.1.1 Consequences of the Preferred Alternative - Portsmouth

Implementation of the Preferred Alternative would result in negligible impacts to land use and aesthetics and visual resources, minor short-term adverse impacts to air quality from construction, and negligible impacts to air quality from operation of building heating units and water heaters, temporary construction-related noise, negligible noise disturbance during operation, minor alteration of soils, negligible impacts to water resources during construction and operation, negligible adverse impacts on common flora and fauna, negligible adverse impacts to wetlands, minor short-term impacts to traffic during construction and negligible impacts to traffic from operation, minor impacts on utilities during construction and no impacts on utilities during operation, negligible impacts on hazardous/toxic materials, and minor generation of construction-related waste. There would be a minor long-term loss of tax revenue. None of these impacts are considered to be significant.

There would be no impact on any other resources evaluated in this EA.

5.1.2 Consequences of Alternative 1 - Rye

Implementation of Alternative 1 would result in impacts similar to those of the Proposed Action. Among these are negligible impacts to land use and aesthetics and visual resources, minor short-term adverse impacts to air quality from construction and negligible impacts to air quality from operation of building heating units and water heaters, temporary construction-related noise, negligible noise disturbance during operation, minor alteration of soils, negligible impacts to water resources during construction and operation, minor adverse impacts on common flora and fauna, negligible impacts to protected species, minor short-term impacts to traffic during construction and negligible impacts to traffic during operation, minor impacts on utilities, negligible impacts on hazardous/toxic materials, and minor generation of construction- related waste. There would be a minor long-term loss of tax revenue. None of these impacts are considered to be significant.

There would be no impact on any other resources evaluated in this EA.

5.1.3 Consequences of Alternative 2 - Exeter

Implementation of Alternative 2 would result in negligible impacts to land use and aesthetics and visual resources, minor short-term adverse impacts to air quality from construction and negligible impacts to air quality from operation of building heating units and water heaters, temporary construction-related noise, minor alteration of soils, negligible impacts to water resources during construction and operation, minor adverse impacts on common flora and fauna, negligible adverse impacts to wetlands, negligible impacts to protected species, minor short-term impacts to traffic during construction, minor impacts on

Table 5-1 – Summary of Potential Environmental and Socioeconomic Consequences

Resource	Environmental and Socioeconomic Consequences			
	No Action	Preferred Alternative	Alternative 1	Alternative 2
Land Use	No Impact	Negligible Impact	Negligible Impact	Negligible Impact
Aesthetics and Visual Resources	No Impact	Negligible Impact	Minor Negative Impact due to clearing of forest	Minor Negative Impact due to clearing of forest
Air Quality	No Impact	Minor short-term impact from dust emissions related to construction activities that would be controlled through appropriate BMPs. Negligible operational impact from building heating units and water heaters.	Minor short-term impact from dust emissions related to construction activities that would be controlled through appropriate BMPs. Negligible operational impact from building heating units and water heaters.	Minor short-term impact from dust emissions related to construction activities that would be controlled through appropriate BMPs. Negligible operational impact from building heating units and water heaters.
Noise	No Impact	Minor short term impacts from construction: appropriate worker safety measures would be implemented; no long-term effects from operation. Negligible nuisance disturbance, during construction, at nearby residential area possible. Negligible nuisance disturbance, during operation, at nearby residential area possible.	No significant impact from construction: appropriate worker safety measures would be implemented; no long-term effects from operation. Negligible nuisance disturbance, during construction, at nearby businesses or residences possible. Negligible nuisance disturbance, during operation, at nearby businesses possible.	No significant impact from construction: appropriate worker safety measures would be implemented; no long-term effects from operation. Negligible nuisance disturbance, during construction, at nearby businesses possible. Negligible nuisance disturbance, during operation, at nearby residential area possible.
Geology and Soils				
Geology and Soils	No Impact	Minor impacts: appropriate BMPs would be implemented to minimize erosion and impact from stormwater runoff.	Minor impacts: appropriate BMPs would be implemented to minimize erosion and impact from stormwater runoff.	Minor impacts: appropriate BMPs would be implemented to minimize erosion and impact from stormwater runoff.
Prime Farmland	No Impact	No Impact	No Impact	No Impact

Table 5-1 – Summary of Potential Environmental and Socioeconomic Consequences

Resource	Environmental and Socioeconomic Consequences			
	No Action	Preferred Alternative	Alternative 1	Alternative 2
Water Resources				
Surface Water	No Impact	Negligible impacts. See Biological Resources for Wetland Impacts.	Negligible impacts. See Biological Resources for Wetland Impacts.	Negligible impacts. See Biological Resources for Wetland Impacts.
Hydrology/Groundwater	No Impact	Negligible impacts: no change to onsite hydrology/groundwater as described under Stormwater.	Negligible impacts: no change to onsite hydrology/groundwater as described under Stormwater.	Negligible impacts: no change to onsite hydrology/groundwater as described under Stormwater.
Floodplains	No Impact	No Impact	No Impact	The proposed site layout would result in no encroachment into floodplains or floodprone areas. Therefore, no impact to floodplains would result.
Stormwater	No Impact	Negligible impact: use of appropriate BMPs would prevent impacts from construction activities. Stormwater controls, consistent with the NH Stormwater Manual and other guidance documents, would be designed to prevent post-construction runoff rate from exceeding pre-construction runoff rate and would prevent further degradation of impaired waters nearby	Negligible impact: use of appropriate BMPs would prevent impacts from construction activities. Stormwater controls, consistent with the NH Stormwater Manual and other guidance documents, would be designed to prevent post-construction runoff rate from exceeding pre-construction runoff rate and would prevent further degradation of impaired waters nearby.	Negligible impact: use of appropriate BMPs would prevent impacts from construction activities. Stormwater controls, consistent with the NH Stormwater Manual and other guidance documents, would be designed to prevent post-construction runoff rate from exceeding pre-construction runoff rate and would prevent further degradation of impaired waters nearby.
Coastal Zone	No Impact	Negligible impact	Negligible impact	Negligible impact
Biological Resources				
Vegetation	No Impact	Negligible impact to common flora.	Minor impact to common flora.	Minor impact to common flora.
Wildlife	No Impact	Negligible impact to common fauna.	Minor impact to common fauna.	Minor impact to common fauna.

Table 5-1 – Summary of Potential Environmental and Socioeconomic Consequences

Resource	Environmental and Socioeconomic Consequences			
	No Action	Preferred Alternative	Alternative 1	Alternative 2
Wetlands	No Impact	Negligible adverse impacts to low quality wetlands	No Impact	Negligible adverse impacts to moderate quality wetlands
Sensitive Species	No Impact	No Impact	Negligible Impact	Negligible Impact
Cultural Resources	No Impact	No Impact	No Impact	No Impact
Historic Resources	No Impact	No Impact	No Impact	Moderate to severe adverse impacts to resources recommended as eligible for listing on NRHP.
Archeological Resources	No Impact	No Impact	No Impact	No Impact
Native American Resources	No Impact	No Impact	No Impact	No Impact
Socioeconomics				
Economic Development	No Impact	Minor short-term beneficial impact from construction activities Minor long-term loss of potential tax revenue generation from site.	Minor short-term beneficial impact from construction activities Minor long-term loss of potential tax revenue generation from site.	Minor short-term beneficial impact from construction activities Minor long-term loss of potential tax revenue generation from site.
Demographics	No Impact	No Impact	No Impact	No Impact
Housing	No Impact	No Impact	No Impact	No Impact
Environmental Justice	No Impact	No Impact	No Impact	No Impact
Protection of Children	No Impact	No Impact	No Impact	No Impact
Transportation	No Impact	Minor short-term impact from construction; Negligible impact on traffic flow during the week or weekend.	Minor short-term impact from construction; Negligible impact on traffic flow during the week. Minor impact on traffic flow during the weekend.	Minor short-term impact from construction; Negligible impact on traffic flow during the week. Minor impact on traffic flow during the weekend.
Utilities				

Table 5-1 – Summary of Potential Environmental and Socioeconomic Consequences

Resource	Environmental and Socioeconomic Consequences			
	No Action	Preferred Alternative	Alternative 1	Alternative 2
Potable Water	No Impact	No Impact, no increase in demand on Portsmouth water supply	Minor Impact, slight increase in demand on Rye water supply, slight reduction in demand on Portsmouth water supply	Minor Impact, slight increase in demand on Exeter water supply, slight reduction in demand on Portsmouth water supply
Wastewater	No Impact	No Impact, Regionally no change in wastewater usage.	No Impact, Regionally no change in wastewater usage.	No Impact, Regionally no change in wastewater usage.
Energy	No Impact	No Impact, Regionally no change in energy usage.	No Impact, Regionally no change in energy usage.	No Impact, Regionally no change in energy usage.
Solid Waste	No Impact	Minor Impact, slight increase in demand for service during construction; Typical construction waste would be within the capacity of local waste disposal facilities No operational impact, Regionally no change in solid waste service demand.	Minor Impact, slight increase in demand for service during construction; Typical construction waste would be within the capacity of local waste disposal facilities No operational impact, Regionally no change in solid waste service demand.	Minor Impact, slight increase in demand for service during construction; Typical construction waste would be within the capacity of local waste disposal facilities No operational impact, Regionally no change in solid waste service demand.
Hazardous/Toxic Materials				
Hazardous/Toxic Materials	No Impact	No impacts from construction. Negligible impact from minor quantities of cleaners, solvents, and lubricants associated with operation of AFRC.	No impacts from construction. Negligible impact from minor quantities of cleaners, solvents, and lubricants associated with operation of AFRC	No impacts from construction. Negligible impact from minor quantities of cleaners, solvents, and lubricants associated with operation of AFRC
Indirect and Cumulative Impacts	No Impact	No Impact	No Impact	No Impact

utilities, negligible impacts on hazardous/toxic materials, and minor generation of construction-related waste. There would be a minor long-term loss of tax revenue. None of these impacts are considered to be significant.

Construction of the AFRC at the Exeter site, even with a 100-foot buffer around the N. Gilman Jr. Garrison House Site, would result in moderate to severe adverse impacts to this site that is recommended as eligible for listing on the NRHP.

Because of the location within an industrial park, no operational noise impacts would be expected. There would be no impact on any other resources evaluated in this EA.

5.1.4 Consequences of the No Action Alternative

Under the No Action Alternative, no construction or site preparation would occur. Units would continue to use the existing USARC. There would be no impact to any resources evaluated in this EA from the No Action Alternative. There would be no beneficial impacts such as improved energy and resource efficiencies under the No Action Alternative.

5.2 Permitting Summary

5.2.1 Alteration of Terrain Permit

New Hampshire AoT permits are issued by the NHDES AoT Program to protect surface waters, drinking water supplies, and groundwater in New Hampshire by controlling soil erosion and managing stormwater runoff from developed areas (NHDES, 2010b).

Site preparation and construction at the Preferred Alternative site and the two alternative sites would disturb more than 100,000 ft^2, which would require an AoT permit. Information on the permit, the permitting process, and supporting information can be found at the NHDES website: http://des.nh.gov/organization/divisions/water/aot/.

5.2.2 NPDES Construction Stormwater Permit

An NPDES stormwater general construction permit, required for land disturbances greater than 1 acre in size, would be required prior to the start of construction. NPDES permits are obtained from USEPA, Region 1, as New Hampshire does not have authority to issue NPDES permits (Stormwaterauthority.org, 2010). The NPDES program requires that stormwater be treated to the maximum extent practicable.

Construction activities must also comply with the State NPS program by implementing appropriate BMPs to minimize impacts on downstream water resources associated with erosion following precipitation, such as increased turbidity, siltation, and channel erosion. BMPs must be consistent with the New Hampshire Stormwater Manual (NHDES, 2008a; 2008b) and could include, but would not be limited to, installation and maintenance of hay bales, silt fencing, and sediment traps, as well as establishing temporary or permanent vegetation in disturbed areas with seed or sod as soon as possible (NHDES, 2008b).

Site preparation and construction at the Preferred Alternative site and the two alternative sites would disturb more than 1 acre, which would require an NPDES stormwater general construction permit. Information on the permit, the permitting process, and supporting information can be found at the NHDES website: http://des.nh.gov/organization/

divisions/water/aot/ and also at the USEPA website: http://cfpub1.epa.gov/npdes/home.cfm?program_id=6.

5.2.3 Post-Construction Stormwater Controls

The addition of paved, impermeable surfaces would increase the volume of stormwater runoff from a site and reduce infiltration to shallow groundwater. Under the EISA, Section 438 (Title 42, US Code, Section 17094), Federal facility projects over 5,000 ft^2 must "maintain or restore, to the maximum extent technically feasible, the predevelopment hydrology of the property with regard to the temperature, rate, volume, and duration of flow" (DoD, 2010). The design would implement EISA Section 438 and the USEPA *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* (USEPA, 2009), using LID techniques. EISA Section 438 requirements are independent of stormwater requirements under the CWA and typically are not included in stormwater permits unless a State or the USEPA has promulgated regulations for EISA Section 438 requirements that are applicable to all regulated entities under its CWA authority (DoD, 2010). The DoD Unified Facilities Criteria on LID (UFC 3-210-10) mandates stormwater management to maintain hydrologic functions of a site and mitigate the potential adverse impacts of stormwater runoff.

Post-construction stormwater controls consistent with the New Hampshire Stormwater Manual (NHDES, 2008a; 2008c) and with *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* (USEPA, 2009) would be designed and implemented to ensure compliance with EISA and to ensure that the post-construction runoff rates do not exceed pre-construction runoff rates.

While no permit is required for compliance with these requirements, appropriate measures must be implemented to assure compliance. The New Hampshire Stormwater Manual can be downloaded at: http://des.nh.gov/organization/divisions/water/aot/ and the *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* can be downloaded from the USEPA website at: http://www.epa.gov/owow/nps/lid/section438/.

5.2.4 Wetlands and Water Quality Permitting

Each of the permits or certifications identified in this section would be required for development at 1900 Lafayette Road, Portsmouth, or at 22 Continental Drive, Exeter, if there is encroachment into wetlands that are classified as waters of the United States. The CWA Section 404 and 401 approvals typically are handled through concurrent review of a single permit application. The State Wetland Permit would be required if there are any impacts to wetlands on the property and would be submitted as a separate application. Websites with information on these permits/certifications are identified in the appropriate section below.

5.2.4.1 Clean Water Act Section 404

If development would include disturbance of wetlands, permitting through NHDES and USACE would be required. Permits for dredge and fill of wetlands are issued by the Regulatory Division of the USACE New England District in accordance with Section 404 of the CWA. The Regulatory Division also makes the final determination of the jurisdictional status of any identified wetlands. USACE has suspended use of Nationwide Permits in New

England and instead has authorized the use of state-specific general permits (USACE, 2010a). The New England District issued a New Hampshire PGP to expedite review of minimal impact work in waters of the United States (USACE, 2010b; Appendix H).

Construction of an AFRC would be eligible for authorization as a Minimum Impact Project under the conditions outlined in the PGP.

Information on the New Hampshire PGP can be obtained from the USACE website at: http://www.nae.usace.army.mil/reg/index.htm. Specific additional conditions may be placed on the PGP issued for the project and the site development would be required to comply with those conditions.

5.2.4.2 Clean Water Act Section 401

USACE CWA permits also require water quality certification under Section 401 of the CWA, which is administered by NHDES. Because the general CWA Section 401 Water Quality Certification (No. 2007-003) issued by NHDES for the USACE New Hampshire PGP may not sufficiently address impaired waters, any activities authorized under the New Hampshire PGP may be subject to modification through imposed conditions to address impaired waters issues (NHDES, 2010a).

Waters in the State of New Hampshire have been assessed to determine whether they are of sufficient quality to meet their designated uses. Waters that do not meet their designated uses are considered impaired and further classified according to the water quality constituents that contribute to the impairment (such as chemical contaminants, excess sedimentation or turbidity, excess nutrients, elevated temperature, and low DO). The list of impaired waters, including the reasons for listing and a map of all impaired waters in New Hampshire, can be obtained from the NHDES website at: http://des.nh.gov/organization/divisions/water/wmb/swqa/2008/. Additional information on impaired waters and the New Hampshire 401 Water Quality Certification Program can be found at the NHDES website: http://des.nh.gov/organization/divisions/water/wmb/section401/index.htm

The CWA requires clean-up of pollution sources that contribute to violations of water quality standards. NHDES maintains a list of impaired waters that do not meet water quality standards and require clean-up. NHDES establishes TMDLs for each water quality constituent that contributes to impairment and creates a clean-up plan for each watershed. Between the time waters are listed as impaired and the time a clean-up plan is implemented, no additional pollutant loading that would contribute to the impairment is allowed. NHDES, through the CWA Section 401 water quality certification program, ensures that projects implemented do not exacerbate or contribute to water quality impairment (NHDES, 2010a).

NHDES has not established TMDLs for all impaired waters in the state. Until TMDLs are established, no additional pollutant loading that would contribute to the impairment is allowed within 1 mile of impaired waters without established TMDLs. Therefore, new activities within the 1-mile buffer, where stormwater could contribute to violations of water quality standards, are required to include BMPs for stormwater pollution control so that pollutant loading from the new activity does not exceed the pre-existing loading and new activities do not exacerbate existing impaired conditions (NHDES, 2010a).

NHDES identifies the impaired waters where 1-mile buffers are in effect by county on the *Impaired Waters Review Information* section of on its website (http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm). The Preferred Alternative site and the alternative sites are within 1 mile of an impaired water without established TMDLs. The following paragraphs identify the impaired waters with buffers that overlap all or portions of the three sites and indicate the causes of impairment that have been identified based on the New Hampshire 2008 Section 305(b) and 303(d) Surface Water Quality Report (NHDES, 2008d).

Appropriate BMPs consistent with the New Hampshire Stormwater Manual (http://des.nh.gov/organization/divisions/water/aot/), and compliance with EISA Section 438 through procedures described in with *Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act* (http://www.epa.gov/owow/nps/lid/section438/), as described above, would minimize the potential for indirect impacts to receiving waters and should not contribute further to the impairment of the listed waters.

Additional information on the CWA Section 401 Water Quality Certification from NHDES can be obtained from the NHDES website at: http://des.nh.gov/organization/divisions/water/wmb/section401/index.htm

5.2.4.3 State Wetland Permit

A State Wetland Permit issued by the NHDES Wetlands Bureau (Appendix I) is required to authorize work under a USACE PGP. This permit would authorize work in wetlands regulated by the State of New Hampshire. As part of this permit process, the applicant is required to notify abutters and adjacent property owners, but not those across a public road, by certified mail of applications for wetland permits from the NHDES Wetlands Bureau. Postal receipts or copies must be presented to the municipal clerk when the application form is submitted (NHDES, 2008e).

If the project would involve dredging or filling to place a structure (building or pavement) in a wetland, the project would not qualify for a "Minimum Impact Expedited Application" and would require a standard application. Information on this permit can be obtained from the NHDES Wetlands Bureau website at:
http://des.nh.gov/organization/divisions/water/wetlands/index.htm.

5.2.5 Coastal Zone Management Act Consistency

Actions within the New Hampshire Coastal Zone must be assessed for consistency with the enforceable policies of the New Hampshire Coastal Management Program as required by the CZMA. A CZMA federal consistency determination, prepared for this EA concluded that there would be no effects within the coastal zone, and that the project is consistent to the maximum extent practicable with the enforceable policies of the NH Coastal Zone Management Program. The NH Coastal Zone Management Program concurred with this determination in a letter dated December 28, 2010.

No additional compliance permitting would be required for CZMA consistency. However, site preparation, construction, staging, temporary storage, and other activities associated with the Proposed Action would occur in a manner consistent with the NH Coastal Zone Management Program enforceable policies to the maximum extent practicable. There may

be conditions placed on other permits to assure consistency with the coastal zone management enforceable policies.

5.3 Conclusions

Based upon the findings presented above, it has been concluded that no significant environmental or socioeconomic impacts would result from the Preferred Alternative (Proposed Action). Therefore, it is not necessary to prepare an EIS to address the Proposed Action and a FNSI should be issued.

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8.0 REFERENCES

Amtrak. 2010a. Amtrak Downeaster Home. http://www.amtrakdowneaster.com/?utm_source=thedowneaster&utm_medium=redirect&utm_campaign=thedowneaster. Website accessed, May 28, 2010.

Amtrak. 2010b. Downeaster Exeter Station. http://www.amtrakdowneaster.com/stations/exeter. Website accessed, May 28, 2010.

Beck, B./U.S. Army Corps of Engineers, Louisville District. 2010. Personal communication with Rich Reaves/CH2M HILL. May 2010.

C&J Bus Service (C&J). 2010. Website: http://www.ridecj.com/. Website accessed, May 28, 2010.

CEQ (President's Council on Environmental Quality). 2006. Considering Cumulative Effects Under the National Environmental Policy Act. http://ceq.eh.doe.gov/nepa/ccenepa/ccenepa.htm. Accessed December 19, 2008.

CH2M HILL. 2010. Wetlands Functions and Values Assessment: 1900 Lafayette Road, Portsmouth, New Hampshire.

City of Portsmouth. 2009. Zoning Districts. Adopted December 21, 2009, Effective January 1, 2010.

City of Portsmouth. 2010. City of Portsmouth, N.H. Capital Improvement Plan FY' 2011 – FY' 2016. Planning Board Adoption: January 21, 2010.

Code of Federal Regulations. 2010. Title 40: Protection of Environment Part 81 – Designation of Areas for Air Quality Planning Purposes, Subpart B – Designation of Air Quality Control Regions. http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?type=simple;c=ecfr;cc=ecfr;sid=6456bec19e2a2756127072fa24a896a5;idno=40;region=DIV1;q1=81.81;rgn=div8;view=text;node=40%3A17.0.1.1.1.2.1.70. Accessed February 1, 2010.

Cooperative Alliance for Seacoast Transportation (COAST). 2010a. About. http://www.coastbus.org/about.html. Website accessed, May 28, 2010.

Cooperative Alliance for Seacoast Transportation (COAST). 2010b. Take a Closer Look. http://www.coastbus.org/. Website accessed, May 28, 2010.

Cowan, James P. 1999. Planning To Minimize Highway Noise Impacts. APA National Planning Conference. Website: http://www.asu.edu/caed/proceedings99/COWAN/COWAN.HTM. Website accessed December 4, 2008.

Cowardin, L.M., V. Carter, F.C. Goulet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Department of interior. FWS/OBS-79/31. December 1979.

Department of Defense (DoD). 2010. Memorandum of DOD Implementation of Storm Water Requirements under Section 438 of the Energy Independence and Security Act (EISA). January 19.

EXCEL Engineering, Inc (EXCEL). 2010a. Draft Environmental Condition of Property Report: Approximate 10.6-Acre Undeveloped Parcel, 1900 Lafayette Road, Portsmouth, Rockingham County, New Hampshire.

EXCEL Engineering, Inc (EXCEL). 2010b. Draft Environmental Condition of Property Report: Approximate 9.56-Acre Undeveloped Parcel, 355 Lafayette Road, Rye, Rockingham County, New Hampshire

EXCEL Engineering, Inc (EXCEL). 2010c. Draft Environmental Condition of Property Report: Approximate 21-Acre Undeveloped Parcel, Exeter, New Hampshire

Federal Emergency Management Agency (FEMA). 2005. Map Service Center. Mapping Information Center Flood Map Viewer. https://hazards.fema.gov/wps/portal/mapviewer. Website accessed April 28, 2010.

GZA GeoEnvironmental, Inc. 2010a. Wetland/Surface Water Delineation Report: 1900 Lafayette Road, Portsmouth, New Hampshire. January 2010.

GZA GeoEnvironmental, Inc. 2010b. Letter to Rick Bernet, Re: 295, 311, & 355 Lafayette Road, Rye New Hampshire. January 7, 2010.

GZA GeoEnvironmental, Inc. 2010c. Wetland/Surface Water Delineation Report: 22 Continental Drive, Exeter, New Hampshire. January 2010.

GZA GeoEnvironmental, Inc. 2010d. Wetland Functions and Values Assessment: 22 Continental Drive, Tax map 46, Lot 4, Exeter, New Hampshire. June 2010.

Healy, D./New Hampshire Department of Environmental Services Air Resources Division. 2010. Telephone conversation with David Healy, May 12, 2010.

Mack, T.J., 2009, Assessment of ground-water resources in the Seacoast region of New Hampshire: U.S. Geological Survey Scientific Investigations Report 2008-5222, Available online at http://pugs.usgs.gov/sir/2008/5222.

Manchester-Boston Regional Airport. 2010. About MHT. http://www.flymanchester.com/about/. Website accessed, May 28, 2010.

Massachusetts Port Authority. 2010a. Massport: About Massport. http://www.massport.com/about/about.html. Website accessed, May 28, 2010.

Massachusetts Port Authority. 2010b. Massport: Logan Airport, About Logan. http://www.massport.com/logan/about.asp. Website accessed, May 28, 2010.

National Center for Education Statistics (NCES). 2010a. Mary C. Dondero Elementary School. http://nces.ed.gov/globallocator/sch_info_popup.asp?Type=Public. Accessed April 28, 2010.

National Center for Education Statistics (NCES). 2010b. Peep School – Pre-School Program. http://nces.ed.gov/globallocator/sch_info_popup.asp?Type=Public. Accessed April 28, 2010.

National Center for Education Statistics (NCES). 2010c. Exeter High School. http://nces.ed.gov/globallocator/sch_info_popup.asp?Type=Public. Accessed April 28, 2010.

Natural Resources Conservation Service (NRCS). 2010a. Web soil survey, Preferred Alternative Soils. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Website accessed January 12, 2010.

Natural Resources Conservation Service (NRCS). 2010b. Web soil survey, Preferred Alternative Soils Water Table. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Website accessed January 12, 2010.

Natural Resources Conservation Service (NRCS). 2010d. Web soil survey, Alternative 1 Soils. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Website accessed January 12, 2010.

Natural Resources Conservation Service (NRCS). 2010e. Web soil survey, Alternative 1 Soils, Chatfield-Hollis-Canton Complex Drainage. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Website accessed January 12, 2010.

Natural Resources Conservation Service (NRCS). 2010f. Web soil survey, Alternative 1 Scitico Silt. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Website accessed January 12, 2010.

Natural Resources Conservation Service (NRCS). 2010c. Web soil survey, Alternative 2 Soils. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Website accessed January 12, 2010.

Natural Resources Conservation Service (NRCS). 2010g. Web soil survey, Preferred Alternative Prime Farmland Soils. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Website accessed January 12, 2010.

Natural Resources Conservation Service (NRCS). 2010i. Web soil survey, Alternative 1 Prime Farmland Soils. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Website accessed January 12, 2010.

Natural Resources Conservation Service (NRCS). 2010h. Web soil survey, Alternative 2 Prime Farmland Soils. http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx. Website accessed January 12, 2010.

New Hampshire (NH) Granit Data Mapper. 2010a. New Hampshire Statewide GIS Clearinghouse, Data Mapper-Preferred Alternative. http://mapper.granit.unh.edu/viewer.jsp. Website accessed January 13, 2010.

New Hampshire (NH) Granit Data Mapper. 2010b. New Hampshire Statewide GIS Clearinghouse, Data Mapper- Alternative 1. http://mapper.granit.unh.edu/viewer.jsp. Website accessed January 13, 2010.

New Hampshire (NH) Granit Data Mapper. 2010c. New Hampshire Statewide GIS Clearinghouse, Data Mapper- Alternative 2. http://mapper.granit.unh.edu/viewer.jsp. Website accessed January 13, 2010.

New Hampshire Department of Environmental Services (NHDES). 2010a. Impaired Waters Review Information. http://des.nh.gov/organization/divisions/water/wmb/section401/impaired_waters.htm. Accessed May 20, 2010.

New Hampshire Department of Environmental Services (NHDES). 2010b. Alteration of Terrain Program. http://des.nh.gov/organization/divisions/water/aot/index.htm. Website accessed March 25, 2010.

New Hampshire Department of Environmental Services (NHDES). 2008a. New Hampshire Stormwater Manual, Volume 1: Stormwater and Antidegradation. WD-08-20A. December 2008.

New Hampshire Department of Environmental Services (NHDES). 2008b. New Hampshire Stormwater Manual, Volume 3: Erosion and Sediment Controls During Construction. WD-08-20C. December 2008.

New Hampshire Department of Environmental Services (NHDES). 2008c. New Hampshire Stormwater Manual, Volume 2: Post-Construction Best Management Practices Selection and Design. WD-08-20B. December 2008.

New Hampshire Department of Environmental Services (NHDES). 2008d. New Hampshire 2008 Section 305(b) and 303(d) Surface Water Quality Report.

New Hampshire Department of Environmental Services (NHDES). 2008e.Instruction for the Completion of a Standard Dredge and Fill Application. http://des.nh.gov/organization/divisions/water/wmb/section401/documents/rockingham.pdf. Accessed May 19, 2010.

New Hampshire Department of Transportation (NHDOT). 2010a. Blue State Turnpike website: http://www.nh.gov/dot/org/operations/turnpikes/system/bluestar.htm. Website accessed, May 28, 2010.

New Hampshire Department of Transportation (NHDOT). 2010b. Bureau of Planning, Traffic Section, Traffic Reports – Exeter. February 18.

New Hampshire Department of Transportation (NHDOT). 2009a. Bureau of Planning, Traffic Section, Traffic Reports – Portsmouth. April 27.

New Hampshire Department of Transportation (NHDOT). 2009b. Bureau of Planning, Traffic Section, Traffic Reports – Exeter. April 27.

New Hampshire Department of Transportation (NHDOT). 2009c. Bureau of Planning, Traffic Section, Traffic Reports – U.S. 1. April 27.

New Hampshire Department of Transportation (NHDOT). 2009d. Draft Ten Year Transportation Improvement Plan 2011 – 2020. DECEMBER 21, 2009.

New Hampshire Economic and Labor Market Information Bureau (NHELMIB). 2009. Rockingham County Profile.

New Hampshire Economic and Labor Market Information Bureau (NHELMIB). 2010. Unemployment Rates by County. http://www.nh.gov/nhes/elmi/lausbrief.htm. Accessed April 29, 2010.

New Hampshire Fish and Game Department (NHFGD). 2010. New Hampshire Wildlife Action Plan. http://www.wildlife.state.nh.us/Wildlife/wildlife_plan.htm. Website accessed January 20, 2010.

New Hampshire Natural Heritage Bureau (NHNHB). 2009. Rare Plants, Rare Animals, and Exemplary Natural Communities in New Hampshire Towns. July 2009.

New Hampshire Natural Heritage Bureau (NHNHB). 2010. Rare Species and Natural Communities Database Search – Exeter, NH. May 4, 2010.

New Hampshire Office of Energy and Planning (NHOEP). 2007. Municipal Population Projections 2010 to 2030. January.

New Hampshire Office of Energy and Planning (NHOEP). 2009. 2008 Population Estimates of New Hampshire Cities and Towns. June.

Occupational Safety and Health Administration (OSHA). 2003. *OSHA's Approach to Noise Exposure in Construction.* http://www.osha.gov/SLTC/constructionnoise/index.html Accessed December 19, 2008.

Office of the Deputy Assistant Secretary of the Army. 2002. Federal Register (Vol. 67, No. 61). March 29, 2002. Rules and Regulations - Department of Defense, Department of the Army, 32 CFR Part 651 [Army Regulation 200–2] Environmental Analysis of Army Actions.

Public Archeology Laboratory (PAL). 2010. Technical Report, Phase I Archaeological Survey, Proposed Armed Forces Reserve Center, Pease Air National Guard Base, Preferred, Alternative #2 and Alternative #7 Parcels, Portsmouth, Rye, and Exeter, New Hampshire. Submitted to CH2M HILL and U.S. Army Corps of Engineers. June 2010.

Portland International Jetport. 2010a. Welcome. http://www.portlandjetport.org/. Website accessed, May 28, 2010.

Portland International Jetport. 2010b. About Us. http://www.portlandjetport.org/airlines Website accessed, May 28, 2010.

Portsmouth International Airport. 2010. Website: http://www.peasedev.org/pease/airport.asp. Website accessed, May 28, 2010.

Portsmouth Water Division. 2008. 2008 Annual Water Quality Report.

Rockingham Planning Commission. 2003. Zoning Map, Rye, New Hampshire, Generalized Zoning Districts.

Rockingham Planning Commission. 2006. Zoning Map, Exeter, New Hampshire, Generalized Zoning Districts.

Rye Country Day School. 2010. Rye Country Day School Main Page. http://www.ryecountrydaynh.com/. Website accessed April 29, 2010.

Stormwaterauthority.org. 2010. New Hampshire Stormwater Rules. http://www.stormwaterauthority.org/regulatory_data/state.aspx?id=150. Website accessed March 25, 2010.

Tiner, R.W. 2007. New Hampshire Wetlands and Waters: Results of the National Wetlands Inventory. U.S. Fish and Wildlife Service, Northeast Region, Hadley, MA. NWI Technical Report. 21 pp.

Town of Exeter. 2008. Town of Exeter Capital Improvement Program Fiscal year 2009 – 2014. Draft Report Department Worksheets. August 2008.

Town of Exeter. 2010a. Exeter Conservation Land-Use policy. Little River Conservation Area. http://town.exeter.nh/conserve/land_use.cfm. Website accessed May 28, 2010.

Town of Exeter. 2010b. Water and Sewer Department. http://town.exeter.nh.us/water/index.cfm. Website accessed February 1, 2010.

Town of Rye. 2009. Rye, New Hampshire Capital Improvements Plan 2010 – 2015. Presented to the Rye Board of Selectmen on 7/27/2009.

U.S. Army. 2008. 1391 Form for Army Reserve Center, Pease AFRC. Pease, New Hampshire.

U.S. Army Corps of Engineers (USACE). 1987. *Corps of Engineers Wetlands Delineation Manual*. Environmental Laboratory, Department of the Army. January.

U.S. Army Corps of Engineers (USACE). 2009a. Available Site Identification and Validation Report, Site 1. August 28, 2009.

U.S. Army Corps of Engineers (USACE). 2009b. Available Site Identification and Validation Report, Site 7. August 28, 2009.

U.S. Army Corps of Engineers (USACE). 2009c. Available Site Identification and Validation Report, Site 2. August 28, 2009.

U.S. Army Corps of Engineers (USACE). 2010a. Regulatory/Permitting. http://www.nae.usace.army.mil/reg/index.htm. Website accessed June 15, 2010.

U.S. Army Corps of Engineers (USACE). 2010b. Department of the Army Programmatic General Permit State of New Hampshire. General Permit No: NAE-2007-461.

U.S. Army Reserve (USAR). 2008. Mission Statement. http://www.armyreserve.army.mil/ARWEB/MISSION/ Accessed November 3, 2008.

U.S. Census Bureau (USCB). 2000. Detailed Tables – American Factfinder, Summary Files 1 and 3. http://www.census.gov/main/www/cen2000.html. Accessed April 28, 2009.

U.S. Department of Agriculture (USDA). 2008. NRCS Prime Farmland Definition. http://soils.usda.gov/technical/handbook/contents/part622.html. Website accessed December 4, 2008.

U.S. Environmental Protection Agency (USEPA). 1974. Information Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety. EPA/ONAC 550/9-74-004. March 1974.

U.S. Environmental Protection Agency (USEPA). 2009. Technical Guidance on Implementing the Stormwater Runoff Requirements for Federal Projects under Section 438 of the Energy Independence and Security Act. EPA 841-B-09-001. December 2009.

U.S. Environmental Protection Agency (USEPA). 2010a. http://www.epa.gov/air/criteria.html Accessed January 27, 2010 and July 26, 2010.

U.S. Environmental Protection Agency (USEPA). 2010b. Currently Designated Nonattainment Areas for All Criteria Pollutants. http://www.epa.gov/oar/oaqps/greenbk/ancl.html. Website accessed February 1, 2010.

U.S. Environmental Protection Agency (USEPA). 2010c. Air Releases (AIRS/AFS), Query Results for Rockingham County, New Hampshire. http://oaspub.epa.gov/enviro/fii_master.fii_retrieve?county_name=Rockingham&state_code=NH&all_programs=YES&program_search=1&report=1&page_no=1&output_sql_switch=TRUE&database_type=AIRS%2FAFS. Accessed February 1, 2010.

U.S. Environmental Protection Agency (USEPA). 2010d. 2005 National Emissions Inventory Data & Documentation. http://www.epa.gov/ttn/chief/net/2005inventory.html# inventorydata. Website accessed May 12, 2010.

U.S. Environmental Protection Agency (USEPA). 2010e. Waste Site Cleanup & Reuse in New England: Coakley Landfill. http://yosemite.epa.gov/r1/npl_pad.nsf/51dc4f173ce ef51d85256adf004c7ec8/406c3d9b0f2c81c58525690d00449684!OpenDocument. Website accessed February 3, 2010.

U.S. Geological Survey (USGS). 2004. Conversion of Surficial Geologic Maps to Digital Format in the Seacoast Region of New Hampshire. http://pubs.usgs.gov/of/2004/ 1451/bennett/index.html. Website accessed February 1, 2010.

U.S. Geological Survey (USGS). 2005. Reducing Earthquake Losses Throughout the United States, Monitoring Earthquake Shaking in Federal Buildings. http://pubs.usgs.gov/fs/ 2005/3052/. Website accessed February 1, 2010.

U.S. Geological Survey (USGS). 2009. Seacoast New Hampshire Groundwater Availability Study. http://nh.water.usgs.gov/projects/seacoast/gw_model.htm. Website accessed January 13, 2010.

University of New Hampshire Cooperative Extension. 2010. Hemlock Woolly Adelgid Invades State. http://extension.unh.edu/news/new72204.htm. Website accessed 14, 2010.

University of New Hampshire. 2010. Wildcat Transit website: http://www.unh.edu/transportation/wildcat/index.htm. Website accessed, May 28, 2010.

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10.0 ACRONYMS AND ABBREVIATIONS

AADT	Average Annual Daily Traffic
ACHP	Advisory Council on Historic Preservation
A.D.	Anno Domini
AFRC	Armed Forces Reserve Center
AIRFA	American Indian Religious Freedom Act
AoT	Alteration of Terrain
APE	Area of Potential Effect
AR	Army Regulation
Army	United States Army
ARPA	Archaeological Resources Protection Act
AQCR	Air Quality Control Region
ASIV	Available Site Identification and Validation Report
AT	antiterrorism
B.C.	Before Christ
bgs	Below Ground Surface
BMP	Best Management Practice
BP	Before Present
BRAC	Base Realignment and Closure
CAA	Clean Air Act
CEQ	President's Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CO	Carbon Monoxide
COAST	Cooperative Alliance for Seacoast Transportation
CT	Census Tract
CWA	Clean Water Act
dBA	A-weighted decibel
DO	dissolved oxygen
E	Endangered
EA	Environmental Assessment
EIFS	Economic Impact Forecast System
EIS	Environmental Impact Statement
EO	Executive Order
ESA	Endangered Species Act
ft^2	Square Feet
FEMA	Federal Emergency Management Agency
FNSI	Finding of No Significant Impact
FP	force protection
ft	Feet

FY	fiscal year
I-95	Interstate Highway 95
$\mu g/m^3$	micrograms per cubic meter
µm	micrometer
mg/m^3	milligrams per cubic meter
m	meter
MEP	military equipment parking
MOA	Memorandum of Agreement
MSA	Metropolitan Statistical Area
NAAQS	National Ambient Air Quality Standards
NAGPRA	Native American Graves Protection and Repatriation Act
NCES	National Center for Education Statistics
NEPA	National Environmental Policy Act
NHDES	New Hampshire Department of Environmental Services
NHDHS	New Hampshire Division of Historical Resources
NHPA	National Historic Preservation Act
NMCRC	Naval-Marine Corps Reserve Center
NOI	Notice of Intent
NOx	Nitrogen Oxides
NPS	Nonpoint Source
NRCS	Natural Resources Conservation Service
PAL	Public Archeology Laboratory
PGP	Programmatic General Permit
PM	Particulate Matter
POV	privately owned vehicle
ppb	parts per billion
ppm	parts per million
RCRA	Resource Conservation and Recovery Act
ROI	Region of Influence
RONA	Record of Non-Applicability
RSC	Regional Support Command
SARA	Superfund Amendments and Reauthorization Act
SHPO	State Historic Preservation Officer
SO_2	Sulfur Dioxide
T	Threatened
TCP	Traditional Cultural Place
TSCA	Toxic Substances Control Act
USACE	U.S. Army Corps of Engineers
USAR	U.S. Army Reserve
USCB	U.S. Census Bureau
USDA	U.S. Department of Agriculture

USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
VOC	Volatile Organic Compound
WQA	Water Quality Act

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Appendix A
BRAC Recommendations

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BRAC Commission Findings and Recommendations

Department of the Army

Note: The recommendations appear in this report in the exact same order, and using the exact same titles, as they appeared in the Department of Defense report submitted May 13, 2005. Paragraphs titled "Secretary of Defense Recommendations," and "Secretary of Defense Justification" are from the May 13, 2005, report submitted by the Secretary to the BRAC Commission. Where bases not originally listed by DoD have been "added" by the Commission, they will appear at the end of the relevant Report section.

Fort Wainwright, Alaska

Recommendation # 1 (Army 5)

One-time Cost:	$0.05M
Annual Recurring Costs/(Savings):	($0.05M)
20-Year Net Present Value:	($0.7M)
Payback Period:	2 Years

Secretary of Defense Recommendation

Realign Fort Wainwright, AK, by relocating the Cold Regions Test Center (CRTC) headquarters from Fort Wainwright, AK, to Fort Greely, AK.

Secretary of Defense Justification

This recommendation relocates CRTC headquarters to Fort Greely to improve efficiency of operations and personnel safety. Sufficient capacity exists at Fort Greely. This would not affect Force Structure. This recommendation relocates headquarters closer to the CRTC's test mission execution on the Bolio Lake Range Complex. This complex, although realigned under Fort Wainwright in BRAC 95, is only 10 miles south of Fort Greely but 100 miles from Fort Wainwright's cantonment area. This action would improve interoperability and reduce costs by permitting personnel to live closer to their primary work site, thus avoiding a 200-mile round trip between quarters and work sites. It also decreases the risks associated with the required year-round travel in extreme weather conditions and results in more efficient and cost effective monitoring and control of arctic testing of transformational systems. This recommendation did not consider other locations since the CRTC headquarters manages testing at only one site.

Community Concerns

There were no formal expressions from the community.

Commission Findings

The Commission found that this recommendation would reverse a 1995 BRAC decision realigning Fort Greely by placing the CRTC headquarters at Fort Wainwright. The original proposal essentially mothballed Fort Greely and moved two major activities, the Northern Warfare Training Center and the Cold Regions Test Activity (now the Cold Region Test Center), off the installation.

Reserve Component Transformation in New Hampshire

Recommendation # 31 (Army 65)

One-time Cost:	$54.2M
Annual Recurring Costs/(Savings):	($3.1M)
20-Year Net Present Value:	$12.9M
Payback Period:	26 Years

Secretary of Defense Recommendation

Close Paul Doble Army Reserve Center in Portsmouth, NH, and relocate units to a new Armed Forces Reserve Center and associated training and maintenance facilities adjacent to Pease Air National Guard Base, NH, if the Army is able to acquire suitable land for the construction of the facilities. The new AFRC and complex will have the capability to accommodate New Hampshire National Guard units from the following New Hampshire ARNG Armories: Rochester, Portsmouth, Somersworth and Dover, NH, if the state decides to relocate those National Guard units.

Secretary of Defense Justification

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

This recommendation is the result of a state-wide analysis of Reserve Component installations and facilities conducted by a team of functional experts from Headquarters, Department of the Army, the Office of the State Adjutant General, and the Army Reserve Regional Readiness Command.

This recommendation closes one Armed Forces Reserve Center in Portsmouth, NH and constructs a multicomponent, multifunctional Armed Forces Reserve Center on land adjacent to Pease Air National Guard Base. The Department understands that the State of New Hampshire will close four New Hampshire Army National Guard Readiness Centers: Rochester, Portsmouth, Somersworth and Dover. The Armed Forces Reserve Centers will have the capability to accommodate these units if the state decides to relocate the units from the closed facilities into the new AFRC.

This recommendation considered feasible locations within the demographic and geographic areas of the closing facilities and affected units. The site selected was determined as the best location because it optimizes the Reserve Components' ability to recruit and retain Reserve Component soldiers and to train and mobilize units affected by this recommendation.

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

Although not captured in the COBRA analysis, this recommendation avoids an estimated $14.6M in mission facility renovation costs and procurement avoidances associated with meeting AT/FP construction standards and altering existing facilities to meet unit training and communications requirements. Consideration of these avoided costs would reduce costs and increase the net savings to the Department of Defense in the 6-year BRAC implementation period and in the 20-year period used to calculate NPV.

Community Concerns

There were no formal expressions from the community.

Commission Findings

The Commission found no reason to disagree with the recommendation of the Secretary of Defense. In addition, the Commission notes that the Army's process was well thought-out and inclusive of the leadership of the Reserve Components and the State.

Commission Recommendations

The Commission found the Secretary's recommendation consistent with the final selection criteria and force structure plan. Therefore, the Commission approved the recommendation of the Secretary.

Reserve Component Transformation in New Jersey

Recommendation # 32 (Army 66)

One-time Cost:	$15.1M
Annual Recurring Costs/(Savings):	($3.0M)
20-Year Net Present Value:	($26.6M)
Payback Period:	5 Years

Secretary of Defense Recommendation

Close the Nelson Brittin Army Reserve Center in Camden, NJ, and relocate units to a new consolidated Armed Forces Reserve Center in Camden, NJ, if the Army can acquire suitable land for the construction of the new facilities. The New AFRC shall have the capability to accommodate units from the New Jersey ARNG Armory, Burlington, if the state decides to relocate those units.

Secretary of Defense Justification

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

This recommendation is the result of a state-wide analysis of Reserve Component installations and facilities conducted by a team of functional experts from Headquarters, Department of the Army, the Office of the State Adjutant General, and the Army Reserve Regional Readiness Command.

This recommendation closes Brittin Army Reserve Center in Camden, NJ, and constructs a multicomponent, multifunctional Armed Forces Reserve Center (AFRC) in Camden, NJ. This recommendation reduces costs for maintaining existing facilities by collapsing two separate facilities into one modern AFRC. The Department understands that the State of New Jersey will close one National Guard Armory in Burlington, NJ. The Armed Forces Reserve Centers will have the capability to accommodate these units if the state decides to relocate units to the new multifunctional AFRC in Camden, NJ.

This recommendation considered feasible locations within the demographic and geographic areas of the closing facilities and affected units. The sites selected were determined as the best locations because they optimize the Reserve Components' ability to recruit and retain Reserve Component soldiers and to train and mobilize units affected by this recommendation. This recommendation provides the opportunity for other Local, State, or Federal organizations to partner with the Reserve Components to enhance homeland security and homeland defense at a reduced cost to those agencies.

Although not captured in the COBRA analysis, this recommendation avoids an estimated $14.5M in mission facility renovation costs and procurement avoidances associated with meeting AT/FP construction standards and altering existing facilities to meet unit training and communications requirements. Consideration of these avoided costs would reduce costs and increase the net savings to the Department of Defense in the 6-year BRAC implementation period and in the 20-year period used to calculate NPV.

Community Concerns

There were no formal expressions from the community.

Appendix B
Public Notice of Availability

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AFFIDAVIT OF PUBLICATION

I hereby certify that the foregoing legal notice was published once in the Portsmouth Herald and Exeter News Letter on October 5th, 2010.

Andy Ambrogio
Advertising Representative

STATE OF NEW HAMPSHIRE
COUNTY OF ROCKINGHAM

Sworn to this 5 day of October, 2010

Before me,

Sandra S. Titus
Notary Public

SANDRA S. TITUS
Notary Public - New Hampshire
My Commission Expires December 3, 2013

LEGAL NOTICE

PUBLIC NOTICE OF AVAILABILITY

ENVIRONMENTAL ASSESSMENT AND DRAFT FINDING OF NO SIGNIFICANT IMPACT FOR THE CONSTRUCTION OF AN ARMED FORCES RESERVE CENTER AND IMPLEMENTATION OF BRAC 2005 REALIGNMENT ACTIONS IN PORTSMOUTH, NH

Pursuant to the Council on Environmental Quality regulations for implementing the procedural provisions of the National Environmental Policy Act (40 CFR 1500) and 32 CFR 651 Environmental Analysis of Army Actions, the U.S. Army conducted an Environmental Assessment (EA) of the potential environmental and socioeconomic effects associated with implementing the Defense Base Closure and Realignment (BRAC) Commission's recommendations for Portsmouth, NH. The new facilities included in the Proposed Action implementing the BRAC Commission's recommendations are proposed to be constructed in the vicinity of Pease Air National Guard Base, and include:

Armed Forces Reserve Center (AFRC) and supporting facilities. The proposed AFRC would require a minimum of 6 acres to meet force protection requirements. The Army would provide a 100-member training facility with administrative, educational, assembly, library, learning center, vault, weapons simulator, and physical fitness areas for two USAR units. Associated support facilities would include an unheated storage building, an approximately 12,000-square foot (ft^2) stormwater management basin, two approximately 1,260- ft^2 water tanks, a fire pump on an approximately 200- ft^2 pad, and an electric transformer placed on an approximately 75- ft^2 pad. In addition, there would be approximately 2,325 square yards of paved areas, including 1,400 square yards of military equipment parking (MEP) areas and 925 square yards of privately owned vehicle (POV) and handicapped parking areas, walkways, and access roads.

The EA and Draft Finding of No Significant impact (FNSI) will undergo a 30-day public comment period, from October 5, 2010 through November 4, 2010. This is in accordance with requirements specified in 32 CFR Part 651.14 Environmental Analysis of Army Actions. During this period the public may submit comments on the EA and the Draft FNSI.

The EA and Draft FNSI can be accessed on the World Wide Web at:
http://www.hqda.army.mil/acsim/brac/env_ea_eview.htm

Printed copies of the EA and Draft FNSI can also be viewed at the following libraries:

Exeter Public Library	Rye Public Library	Portsmouth Public Library
4 Chestnut Street	581 Washington Road	175 Parrott Avenue
Exeter, NH 03833-1850	Rye, NH 03870-2353	Portsmouth, NH 03801-4452

Comments on the EA and Draft FNSI should be submitted during the 30-day public comment period via mail, fax, or electronic mail to: Ms. Amanda Murphy NEPA Coordinator, Innovar Environmental supporting 99th RSC DPW, Environmental Division, Phone: 609.562.7664, Email: amanda.w.murphy.ctr@us.army.mil.

#31082 1tPE10/5

LEGAL NOTICE

PUBLIC NOTICE OF AVAILABILITY

ENVIRONMENTAL ASSESSMENT AND DRAFT FINDING OF NO SIGNIFICANT IMPACT FOR THE CONSTRUCTION OF AN ARMED FORCES RESERVE CENTER AND IMPLEMENTATION OF BRAC 2005 REALIGNMENT ACTIONS IN PORTSMOUTH, NH

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Comments on the EA and Draft FNSI should be submitted during the 30-day public comment period via mail, fax, or electronic mail to: Ms. Amanda Murphy NEPA Coordinator, Innovar Environmental supporting 99th RSC DPW, Environmental Division, Phone: 609.562.7664, Email: amanda.w.murphy.ctr@us.army.mil.

#31082 1tPE10/5

OBITUARIES/COMMUNITY

William A. Rand Sr.

SOUTH PARIS, Maine — William A. Rand Sr., 75, died Monday, Oct. 18, 2010, in Stephens Memorial Hospital, Norway.

He was born June 7, 1935, in Exeter, N.H., the son of the late Forrest and Flora (Brown) Rand. He was raised in Fremont, N.H., had resided in Kensington and Brentwood, N.H., moving to South Paris nine years ago.

Mr. Rand was a meter mechanic for Exeter & Hampton Electric Company for 40 years.

He is survived by his wife of 48 years, Brenda (Nason) Rand of South Paris; three daughters and their husbands, Beth and Joseph Nichols of Portsmouth, Va., Debbie and Carl Schrempf Sr. of Hampton Falls, N.H., and Denise and John Hall of North Hampton, N.H; one son and his wife, William and Brenda Rand Jr. of Kensington, N.H.; four grandchildren, Carl, Katie, Ricky and Morgan; three great-grandsons; one sister, Bernice Turner of Newton, N.H.; and several nieces and nephews.

WE REMEMBER: He was a graduate of Sanborn Regional High School and a U.S. Air Force veteran.

He was a dedicated family man and devoted grandfather, and was well known for his sense of humor and woodworking skills.

SERVICES: Calling hours will be held Saturday, Oct. 23, at 10 a.m. in the Brewitt Funeral Home, 14 Pine St., Exeter. Memorial services will follow at 11 a.m. in the funeral home, with the Rev. Robert Thompson officiating.

In lieu of flowers, memorial donations may be made to the American Heart Association, Heart Gifts Processing Center, P.O. Box 3049, Syracuse, NY 13220-3049; or to the American Diabetes Association, 249 Canal St., Manchester, NH 03101.

To sign an online guest book visit www.brewittfuneralhome.com.

Sharlyn J. Fernald

BRENTWOOD — Sharlyn J. Fernald, 60, died Wednesday, Oct. 20, 2010, from complications of rheumatoid arthritis at Rockingham County Nursing Home.

She was born in Providence, R.I., the daughter of the late Ralph A. and Lucille M. (Collins) Fernald, and lived most of her life in southern New Hampshire.

She was a 1968 graduate of Exeter High School.

Ms. Ferland enjoyed a long career with Liberty Mutual Insurance Company as a technical writer in Boston, Dallas, Tex., and Portsmouth.

She maintained an upbeat attitude with a view of the glass half full throughout her life.

She was a talented writer, artist and photographer.

She is survived by one brother, Dennis G. Fernald of Portland, Ore.; one sister, Marilyn J. Fernald of Danville; one niece, Autumn M. Fernald of Portland; a longtime friend, Donna (Bradford) LeRoy; and several aunts, uncles and cousins.

SERVICES: At Ms. Fernald's request, services will be private.

Memorial donations may be made to the Rheumatoid Arthritis Foundation, P.O. Box 96280, Washington, DC 20077-7491, or to a charity of one's choice.

Arrangements are by the Brewitt Funeral Home, Exeter.

To sign an online guest book, visit www.brewittfunralhome.com.

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Legal Notice
Town of Exeter is seeking bids to develop a Natural Resource Inventory. Details at http://town.exeter.nh.us under Bids. Proposals due Nov 19. Contact Kristen Murphy, Exeter Planning Dept for more info.
#936 7tPHE10/21, 22, 23, 24, 25, 26, 27

Albert F. Carbonneau Jr.

WEST HARTFORD, Conn. — Albert F. "Bob" Carbonneau Jr., 83, died Thursday, Oct. 14, 2010, after a courageous battle with Parkinson's disease.

He was born May 7, 1927, in Exeter, N.H., the son of Albert and Ruth Carbonneau.

The widower of Patricia Carbonneau, he is survived by two sons, the Rev. Robert Carbonneau, CP, of Baltimore, Md., and Michael Carbonneau and his wife Lisa of Colchester; five daughters and their husbands, Mary Ruth and Bob Reitznd of Lincoln Park, N.J., Patrice and Michael Freeman of Farmington, N.H., Kathleen and Mark Hayner of Belmont, Mass., Jane and Jeff Ferketic of West Hartford, and Beth and Joe Andrews of Stuttgart, Germany; 17 grandchildren; three great-grandchildren; two sisters and their husbands, Phyllis and Donald Biron of Brewster, Mass., and Sally and Richard Wilson of Newmarket, N.H., and Ruskin, Fla.; and many extended family members in the Seacoast area.

He was predeceased by an infant daughter, Theresa.

WE REMEMBER: Mr. Carbonneau was a physical education teacher, classroom teacher and principal at seven West Hartford public schools, retiring after 38 years of service.

He graduated from Exeter High School and completed a post-graduate year at Phillips Exeter Academy. He excelled in athletics, was captain of the football team, was all-state in basketball and ran a 4:57-minute mile.

He received his bachelor of arts degree from Springfield College and his master in education degree from the University of Hartford.

After serving in the U.S. Navy he met his wife, Pat, at Hampton Beach, N.H. Together they raised seven children.

After retiring, he remained involved in the community as a charter member of West Hartford Vision and organized a fund-raising committee to make Faxon Branch Library handicap accessible.

He was a communicant of St. Brigid Church.

He spent many happy summers with his family in Falmouth, Mass.

Memorial donations may be made to The Passionist Community, 303 Tunxis Road, West Hartford, CT 06107.

Shirley J. Barr

ROCHESTER — Shirley J. Barr, 80, died Monday, Oct. 18, 2010, in Frisbie Memorial Hospital after a lengthy battle with cancer.

She was born Aug. 7, 1930, in Kingston, the daughter of the late William L. and Annie (Simes) Moody. She was raised in Brentwood and had resided in Exeter for many years.

Mrs. Barr was dedicated to raising her five children and had a zest for life that was displayed through her humor, generosity and love for all people.

She is survived by her husband, Howard I. Barr; five children, Eric Barr, Susan Barr, Julie Barr-Alexander, Karen Barr Weaver, and Todd Barr, M.D.; eight grandchildren; six great-grandchildren; one brother, William Thomas Moody; and many nieces and nephews.

Following private services, burial will be in Exeter Cemetery.

Memorial donations may be made to Frisbie Memorial Hospital, Fund Development Office, 11 Whitehall Road, Rochester, NH 03867.

To sign an online guest book, visit www.brewittfuneralhome.com.

Marion Doran Outerson

EXETER — Marion Doran Outerson, 95, died Saturday, Oct. 16, 2010, at RiverWoods at Exeter, after a period of declining health .

She was born in 1915, in New Brunswick, N.J., and resided in Storrs, Conn., before coming to Exeter.

She was active in church, community and P.E.O, and was an accomplished artist.

She is survived by one daughter, Judith Gibbs of Hudson, Fla.; one son, David Doran and his wife Dian of Deerfield; a son-in-law, Bruce Gross of Ellenton, Fla.; eight grandchildren; 11 great-grandchildren; one brother, Marvin Vliet of Quilcene, Wash.; one stepdaughter, Gay Hathaway and her husband Jim of Little Rock, Ark.; one stepson, Michael Outerson and his wife June, of Phoenix, Md., and their families.

She was predeceased by her first husband, Gerald Doran; her second husband, Capt. William Outerson; and one daughter, Gail Gross.

Memorial donations may be made to her P.E.O. chapters or to Seacoast Hospice, Exeter.

Catherine Gaudet

EPPING — Catherine Gaudet, 83, died Tuesday, Oct. 19, 2010, in Exeter Hospital after a period of failing health.

She was born June 18, 1927, in Belfast, Northern Ireland, the daughter of the late John and Catherine (McBrearty) Doherty.

Mrs. Gaudet was a teacher at the Walter E. Fernald State School in Waltham, Mass., for 25 years. She devoted her life to educating others and the less fortunate.

The widow of John C. Gaudet, she is survived by two sisters, Margaret Martell of S. Boston, Mass., and Mary E. MacDougall of Groveland, Mass.; one brother and his wife, Joseph and Cathy Doherty of South Carolina; one sister-in-law, Jean Doherty of Revere, Mass.; many nieces, nephews, great-nieces, great-nephews; a dear friend, Jimmy Bryant of Epping; and many friends at Pine & Pond Mobile Home Park in Epping.

She was predeceased by two brothers, Michael and John Doherty.

SERVICES: There are no calling hours.

A memorial mass will be celebrated Monday, Oct. 25, at 11 a.m. in St. Joseph Church, 208 Pleasant St., Epping. Burial will follow in St. Joseph Cemetery, Epping.

In lieu of flowers, memorial donations may be made to the St. Charles Children's Home, 19 Grant St., Rochester, NH 03867.

Arrangements are by the Brewitt Funeral Home, Epping.

To sign an online guest book, visit www.brewittfuneralhome.com.

Film has a 'fresh' perspective

On Friday, Oct. 22 at 7 p.m. Kathy Gallant, owner of the Blue Moon, will introduce the film, "Fresh," which is about current changes to healthier, sustainable food alternatives. The show is at the Congregational Church at 21 Front St. in Exeter near the bandstand.

Chamber music at Christ Church

Aliento Chamber Players presents "With a Song in Our Hearts" with soprano Angelynne Hinson and mezzo-soprano Melinda McMahon in a vocal chamber music program of extraordinary beauty on Friday, Oct. 22 at 7 p.m., Christ Church Episcopal, 43 Pine St. in Exeter.

Tickets (at suggested donations) are online at AlientoChamber.org, by calling 603-944-7070 or at the door. Suggested donations are $15 for adult, $12 for seniors, and $3 student/child. The church is handicap-accessible and has ample parking.

Stratham Community Church hosts supper

The Stratham Community Church, 3 Emery Lane, is hosting a turkey dinner on Saturday, Oct. 23. The dinner also includes desserts and beverages. There is a suggested donation of $7 for adults and $5 for children. Children 3 and under are free. The church begins serving at 4:30 p.m.

Halloween Haunt in Newmarket

The Newmarket Recreation Department, along with the Local Business Organization, invite you to a day filled with Halloween fun for all ages!

The Halloween Haunt is on Main Street on Saturday, Oct. 23. Beginning at 1:30 p.m., children and parents of all ages are invited to take part in the costume parade down Main Street and compete for one of the best costumes awards! Meet behind the library to participate in the parade. Parade begins at 2 p.m. and costume judging will commence at the conclusion of the parade in front of the post office.

The "kid fun" activities from 2:30 to 4:30 p.m.

Halloween Dance at the Legion

The American Legion Post 51 is hosting a Halloween dance featuring the Stumpy and The Goats Band on Saturday, Oct. 23. This is a high energy rhythm and blues, funk and rock band that puts it all on the line with every show.

There will be prizes for the best costumes, a 50/50 raffle, and snacks. Doors open at 8 p.m. and the cost is $6 per person at the door. A cash bar will be open. The event will be held at the American Legion on Route 125 in Epping (across from Telly's Restaurant). For more information call Darlene at 603-793-6090 or Janet at 603-944-3288.

Enjoy a family Halloween concert

Come in Costume! to the Family Halloween Concert at Exeter Town Hall on Sunday, Oct. 24 at 3 p.m.

The Seacoast Wind Ensemble, a favorite concert band in the Seacoast region of Maine, New Hampshire and northern Massachusetts will perform a family Halloween concert, under the direction of Mark Zielinski, music director.

The one-hour program features music appropriate to the season for all ages. Children in costume are invited to participate in the Grand March to receive a Halloween treat. Band members will also be in costume.

Admission by donation at the door. They'll also be collecting canned goods for local food pantries.

Legal Notice
Town of North Hampton
Request for Sealed Bids

The Town of North Hampton requests Sealed Bids on three former Police Cruisers. One is a 2002 Crown Victoria, VIN # 2FAFP71W1XX203904 with the current mileage being 87,796. The second is a 2006 Crown Victoria, VIN # 2FAHP71W87X151325 with a current mileage of 73,095. Sealed bids must be forwarded attention to the North Hampton Select Board, 233 Atlantic Avenue, North Hampton, NH 03862, and must be received by 4:00 pm on Friday November 5, 2010.

#1955 3t PHE 10/22, P 10/23,24

LEGAL NOTICE
REQUEST FOR PROPOSALS
TOWN OF EXETER, NH
Is requesting professional consulting services for
Stormwater Pollution Prevention Plans (SWPPPs) &
Update Spill Prevention, Control and Countermeasures (SPCC) Plan
Prepare a SWPPP and update the existing SPCC Plan for the Department of Public Works Complex, and prepare SWPPPs for the Fire Department maintenance garage, Recreation Department maintenance garage and the Transfer Station.
For a copy of the RFP, please visit the Town website at
www.town.exeter.nh.us
The RFP is located under the Bid Tab.

#936 1tE 10/22

Legal Notice
REQUEST FOR QUALIFIED BIDDERS
State of New Hampshire, Department of Employment Security is seeking qualified bidders to prepare walls for painting and paint Portsmouth NHES, 6 Marsh Brook Rd, approximately 7,500 square feet. Responses must meet detailed proposal specifications, which can be obtained by contacting NH Employment Security at (603)228-4158, or by email to helen.a.dinsmore@nhes.nh.gov. There is a mandatory walk-through at Portsmouth NH Employment Security on November 3, 2010, 1:30 PM. Completed proposals must be returned no later than November 17, 2010, 2:00 PM.
#13683 6tPHE10/19,22,24,26,29,31

Legal Notice
Commissioner's Notice

The subscriber having been noticed by the Judge of Probate for the County of Rockingham commissioner to examine and allow the claims of the creditors to the estate of Mark Lee Worrall, late of Exeter, in said County, deceased, decreed to be administered as insolvent, and six months from the 26th day of July, A.D. 2010, being allowed for that purpose, hereby gives notice that she will attend to the duties assigned her, at the Law Offices of Sharon J. Rondeau of 10 Franklin Street, in Exeter, in said County, on the 2nd day of November, on the 4th day of November, and on the 8th day of November, A.D. 2010, from 3:00 to 5:00 o'clock in the afternoon on each of said days.

Dated the 4th day of October, A.D., 2010

Sharon J. Rondeau, Esq.
Commissioner

#31087 3tE10/8,15,22

Obituary Guidelines

For guidelines on how to submit an obituary, visit www.seacoastonline.com/SubmitObit

Legal Notice
Little Boar's Head
North Hampton Planning Board

The Little Boar's Head Planning Board will hold a public hearing on Thursday, November 4, 2010 in the Mary Herbert Conference room at 6:30pm to consider the following:
To discuss, review and possibly adopt Planning Board Regulations and Subdivision Regulations.

Respectfully submitted,
Peter Simmons
LBH PB Member

#1955 1tH10/22

Legal Notice
PUBLIC NOTICE OF EXTENSION OF PUBILC COMMENT PERIOD
ENVIRONMENTAL ASSESSMENT AND DRAFT FINDING OF NO SIGNIFICANT IMPACT FOR THE CONSTRUCTION OF AN ARMED FORCES RESERVE CENTER AND IMPLEMENTATION OF BRAC 2005 REALIGNMENT ACTIONS IN PORTSMOUTH, NH

On October 5, 2010, the Army issued a Notice of Availability announcing the 30-day public review for the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FNSI) for the construction of an Armed Forces Reserve Center for the implementation of BRAC 2005 realignment actions in the vicinity of Pease, New Hampshire, that would continue until November 4, 2010. In accordance with 32 CFR Part 651.14 Environmental Analysis of Army Actions, the Army has determined that the public review period for the EA and Draft FNSI will be extended by 16 days and will continue through November 20, 2010. During this period the public may submit comments on the EA and the Draft FNSI. Individuals or organizations that previously submitted comments via email or phone are encouraged to re-submit to assure that all comments are received.

The EA and Draft FNSI can be accessed on the World Wide Web at:
http://www.hqda.army.mil/acsim/brac/env_ea_review.htm

Printed copies of the EA and Draft FNSI can also be viewed at the following libraries through November 20:

Exeter Public Library 4 Chestnut Street Exeter, NH 03833-1850	Rye Public Library 581 Washington Road Rye, NH 03870-2353	Portsmouth Public Library 175 Parrott Avenue Portsmouth, NH 03801-4452

Comments on the EA and Draft FNSI should be submitted during the 30-day public comment period via mail, fax, or electronic mail to: Jeffrey M. Hrzic, Chief, Environmental Division 99th RSC DPW, 99th Regional Support Command, 5231 South Scott Plaza, Fort Dix, NJ 08640-5000. Phone: 609.353.6727. Fax: (609) 562-7983. Email: jeff.hrzic1@usar.army.mil

#31082 1tPHE10/22

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Insertion Number: N/A
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Color Type: N/A
Advertiser: N/A
Agency: N/A
Section-Page-Zone(s): B-10-All
Description: COMM. NOTICE
Exeter News-Letter
Friday, October 22, 2010

OBITUARIES

Joseph L. Kashmer Jr.

YORK, Maine — Joseph L. Kashmer Jr., 83, of Mill Lane in York, died Tuesday, Oct. 19, 2010, at his home following a period of failing health.

Born July 25, 1927, in Freemont, Ohio, he was a son of Jane A. (Kwapick) and Joseph Kashmer Sr., and attended schools in Toledo, Ohio.

Joe is survived by his loving wife, Lois; son Joseph L. "Larry" Kashmer III and wife Nancy of Eliot; daughter Elizabeth "Kim" Kashmer Lytle of York; grandchildren Nancy Jo and Joseph Haarmann of Orlando, Fla., Joseph L. "Larry" Kashmer IV and wife Tricia Kashmer of Kittery, Rebecca and Bryan Davis of North Berwick, Jonathan and Misty Kashmer of South Berwick, Nathaniel and Sheila Lytle of Eliot and Marci E. Lytle of Eliot; great-grandchildren Taylor and Matthew, Johnna and Jenna Kashmer, and Owen and Julia Lytle; brother James Kashmer of Toledo, Ohio; and sisters Jane Lovejoy of Kittery, and Janice Iott and Jackie Korte of Michigan.

He was predeceased by a brother, John Kashmer.

WE REMEMBER: A fixture on the York Harbor waterfront for many years, Joe personified the New England lobster fisherman: strong work ethic, loving family man and placed the value of his word and the relationships he formed only second to caring and providing for his family.

He met and married his loving wife, Lois, and together they made a home in York Harbor for many years, raising a family and working hard. In 1972, they built their home on Mill Lane.

As well as a lifetime of lobster fishing, he worked for a time as a drill blaster for Iafolla Industries, spent time on the dredging of Boston Harbor, as a mover for Wood Moving, and with his boat often brought supplies to Boone Island for the U.S. Coast Guard, as well as worked as a harpoon man for Bud Donnell on his tuna fishing boat. He never let the difficulty of the task or the ferociousness of the sea deter him.

Joe traveled throughout New England to Boston, Vermont and beyond to sell his fresh fish in his signature truck with "York Fisheries" on the side.

He enjoyed time spent with friends at Cox's, Ricks and Perks, having coffee each day, talking about daily events or his love of the ocean and the many stories his adventures brought about.

He enjoyed time spent with his family, especially his grandchildren and great-grandchildren.

He looked forward to decorating the freshly cut Christmas tree that his granddaughter, Marci, would pick out each year for her grandfather, "Popeye." Together with his grandchildren, they would enjoy making, decorating and eating gingerbread cookies before opening gifts before bed.

He was always available for help on a home project, feeding the horses or offering a ride home from school, with a special snack from Grampa for the ride home. His love for animals was abundant; each one held a special place in his heart. He especially loved his cats; they were a great comfort to him and could be found curled up asleep with him.

SERVICES: A funeral will be held at 2 p.m. Sunday, Oct. 24, in the J.S. Pelkey Funeral Home, 125 Old Post Road, Kittery, with the Rev. Deb Shipp officiating. Friends may visit with Joe's family from 5 to 8 p.m. Saturday, Oct. 23, at the funeral home. Family flowers only are requested; donations may be made in his memory to Another Chance Animal Rescue, P.O. Box 552, North Berwick, ME 03906. Arrangements are entrusted to the J.S. Pelkey Funeral Home.

Lillian E. Colson

HAMPTON — Lillian E. Colson, 82, formerly of Newton, died Wednesday, Oct. 20, 2010, at the Oceanside Nursing Home in Hampton.

She was born April 15, 1928, in Fremont, the daughter of the late Sylvester and Abby (West) Young.

Family members include her sons, Gregory E. Colson of Newton and Frederick L. Colson Jr. of Colorado; her grandchildren, Kendra Colson and Mark Colson; her sister, Kathleen Dennis of Florida and companion Anthony Procopio of Haverhill, Mass.; and several nieces and nephews.

SERVICES: A celebration of her life will be held at 11 a.m. Saturday, Oct. 23, at Stockbridge Funeral Home, 141 Epping Road, Exeter. Relatives and friends are respectfully invited and may visit with the family from 10 a.m. until the hour of the service. Burial will be in the Exeter Cemetery, Exeter. In lieu of flowers, donations may be made to the N.H. Society for the Prevention of Cruelty to Animals, P.O. Box 196, Stratham, NH 03885. Visit www.stockbridgefh.com for details.

Edward W. Libby

GREENLAND — Edward W. Libby, 67, of Maple Drive in Greenland, died Wednesday, Oct. 20, 2010, after a short, courageous battle against cancer.

Ed was born in Portsmouth, a son of Chester and Jean (Nimmo) Libby. He attended schools in Everett, Mass., where he was raised by his beloved mother and stepfather Pasquale LoRusso.

Ed proudly served his country as a member of the 101st Airborne, serving two tours in Vietnam as a UDT specialist with SEAL Team 2.

He is survived by his loving wife, Colleen, of Greenland; daughter Lisa Plummer and husband Maurice of Greensboro, N.C.; grandson Matthew Ring and wife Jessica of Biddeford, Maine; granddaughter Desiree Davis of Greensboro, N.C.; his beloved great-granddaughter, Alexis Ring; brothers David Libby and wife Carol of Everett, Mass., Joe Pete LoRusso of Colorado, and Michael LoRusso and wife Toni of Malden, Mass.; adopted sons Richard Libby of California, Russell Libby of Texas; and several nieces and nephews.

WE REMEMBER: Ed enjoyed membership with the Veterans of Foreign Wars and the American Legion in support of his fellow veterans.

He continued to serve his community after his military service as a police officer. He worked for a number of years as a patrolman for the city of Dover, and for many years until his retirement from police work in the town of Rollinsford, serving as a patrolman, detective sergeant and acting chief of police.

Following his law enforcement career, Ed worked as director of operations for several corporations, including New England Development Corp., Shopco Management Corp. and most recently as field operations manager for Alliance Security in Everett, Mass.

In 2004, he married his loving companion of over 20 years, Colleen Primmer Libby, and together they made a home for a time in Danvers, Mass.; Wells, Maine; and for the last 10 years, they enjoyed their home in Greenland.

Ed loved to relax by spending time riding his motorcycle, being on the water doing boating activities or just socializing with his many friends.

Ed is a charter member of the Maine Five chapter of the International Blue Knights Police Motorcycle Club, serving in many leadership rolls, including past president. He held current, full membership in the Defenders Law Enforcement Motorcycle Club of Boston. He was also very active in the Beverly Chapter of the Power Squadron, serving in many roles, including past commander and, most recently, lieutenant commander of the District 18 USPS.

Those who knew and loved him will dearly miss him.

SERVICES: A memorial service will be celebrated at 11 a.m. Saturday, Oct. 23, in the J.S. Pelkey Funeral Home, 125 Old Post Road, Kittery, Maine. Immediately following will be a celebration of life at Breakfast Hill Country Club, 339 Breakfast Hill Road, Greenland. With Ed's love of supporting charitable organizations and events, in lieu of cards and flowers, please forward all donations to Amedisys Hospice Service of Portsmouth, 95 Brewery Lane, Portsmouth, NH 03801, in memory of Edward Libby. Arrangements are entrusted to the J.S. Pelkey Funeral Home.

Charles T. Papadinis

KITTERY, Maine — Charles T. "Chuck" Papadinis, 59, of Kittery, died Monday, Oct. 18, 2010.

He was born Jan. 12, 1951, in Portsmouth, N.H., the son of Muriel (Wade) Augusta of Eliot and the late Thomas Papadinis.

He graduated from Portsmouth High School, Class of 1969.

Chuck was a painter in the Seacoast area for many years. He loved fishing and had a passion for music, playing bass guitar in local bands since high school. He formerly attended St. John's Episcopal Church in Portsmouth.

Besides his mother, survivors include his sister, Constance LaBounty and husband Erik of Portsmouth; nephew John Hobbs of Dover; niece Christina Hobbs Brownfield; stepmother Rowena Papadinis of Portsmouth; and cousins, aunts and uncles.

Chuck was predeceased by his stepfather, Chuck Augusta in 2007.

SERVICES: A private graveside will be held at the convenience of the family. There are no visiting hours; please omit flowers. Memorial contributions may be made to N.H. SPCA, P.O. Box 196, Stratham, NH 03885-0196. Visit www.jvwoodfuneralhome.com to sign the online guest book.

William Hartley Jr.

NEWMARKET — William Hartley Jr. (KOBA), 61, of Exeter Road died Wednesday, Oct. 20, 2010, at home after a long illness.

Born Jan. 16, 1949, in Baltimore City, Md., he was the son of William R. and Carmelita Josephine (Bonavich) Hartley.

He joined the U.S. Marine Corps and served during the Vietnam War.

William loved hunting, fishing and riding his Harley.

Survivors include his wife of 26 years, Eleanor E. (Edgerly) Hartley of Newmarket; his son, Erik W. Hartley of Newmarket; and other family members, Ray and Lorna Levesque of Sebring, Fla., Frank and Sandy Edgerly of Somersworth, Lois and Brittany Johnston and Nikole St. Laurent, all of Newmarket, Tony and Kim Levesque and family of Amherst, and Shawn and Karen Levesque and family of Tallahassee, Fla.

SERVICES: A memorial gathering will be held from 1 to 3 p.m. Saturday, Oct. 23, 2010, at the Kent & Pelczar Funeral Home, 77 Exeter St., Newmarket. In lieu of flowers, memorial donations may be made to the American Cancer Society, 360 State Route 101, Suite 501, Bedford, NH 03110. Visit www.kentandpelczarfh.com to sign an online guestbook.

Yvonne Ricker

PORTSMOUTH — Yvonne (Martin) Ricker, 83, of Portsmouth, died Friday, Oct. 15, 2010, after battling a lengthy illness.

She was born in Steven's Point, Wis., to John and the late Edna Martin, and attended the local schools.

Moving to Riverside, Calif., in 1946, she met and married her husband, the late Carroll Ricker, of Eliot, Maine, who was stationed there with the military. They relocated to Wisconsin and then back to Portsmouth, where they both worked and lovingly raised their six children.

Yvonne got involved in politics and was employed at Warren's Lobster House and The Rosa restaurant.

She was an avid reader and loved making fudge, cookies and more for family and friends.

Survivors include her sister, Constance Knutson of Steven's Point, Wis.; sons and daughters-in-law Alan and Clara Ricker of Hooksett, and Mark and Carolyn Ricker of Dover; daughter Carol Phaneuf and partner James Pelkey of Maine and North Carolina; sons Jack and Stephen of Portsmouth; as well as many grandchildren.

In addition to her husband and mother, she is predeceased by son Ronald Ricker and brother Jack Martin.

A private family memorial will be held in the spring.

Legal Notice
REQUEST FOR QUALIFIED BIDDERS

State of New Hampshire, Department of Employment Security is seeking qualified bidders to prepare walls for painting and paint Portsmouth NHES, 6 Marsh Brook Rd, approximately 7,500 square feet. Responses must meet detailed proposal specifications, which can be obtained by contacting NH Employment Security at (603)228-4158, or by email to helen.a.dinsmore@nhes.nh.gov. There is a mandatory walk-through at Portsmouth NH Employment Security on November 3, 2010, 1:30 PM. Completed proposals must be returned no later than November 17, 2010, 2:00 PM.

#13683 6tPHE10/19,22,24,26,29,31

www.seacoastlegals.com

The place to find all legal notices published in Seacoast Media Group's five newspapers:

Portsmouth Herald, Exeter News-Letter, Hampton Union, York Weekly, York County Coast Star

LEGAL NOTICE OF PUBLIC SALE

The following individual lessees are in default of their lease with Donhauser Enterprises, LLC, d/b/a Eliot Rent-A-Space and Self Storage. The contents of the storage units are subject to a lien and unless all past due rent and fees are paid by 10:00 AM on or before November 8, 2010 at the office of Eliot Rent-A-Space, 61 Dow Hwy, Rte. 236, Eliot, Maine 03903, the contents of the storage unit will be sold by public sale at 10:00 AM November 8, 2010. Potential buyers are encouraged to attend sale.

Kenneth Estes	#109
Dawn Tripp	#116
Robert Lane	#211
Steve LaBonte	#230
Richard Cooper	#333
Schani Krug	#342
Michael Murphy	#441
Matthew Connolly	#631
Benjamin Magoun	#742
Bonnie Morris	#SS-14
Maryann Robertson	#SS – 28 & SS - 68

#30641 2tP10/22,29

Legal Notice
Town of North Hampton
Request for Sealed Bids

The Town of North Hampton requests Sealed Bids on three former Police Cruisers. One is a 2002 Crown Victoria, VIN # 2FAFP71W1XX203904 with the current mileage being 87,796. The second is a 2006 Crown Victoria, VIN # 2FAHP71W87X151325 with a current mileage of 73,095. Sealed bids must be forwarded attention to the North Hampton Select Board, 233 Atlantic Avenue, North Hampton, NH 03862, and must be received by 4:00 pm on Friday November 5, 2010.

#1955 3t PHE 10/22, P 10/23,24

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Portsmouth (603) 436-2005
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Rochester (603) 335-6003
1-800-491-3194
Orders of 200 gallons or more receive an additional 2¢ off.
VISA Price subject to change.

Legal Notice
Town of Exeter is seeking bids to develop a Natural Resource Inventory. Details at http://town.exeter.nh.us under Bids. Proposals due Nov 19. Contact Kristen Murphy, Exeter Planning Dept for more info.
#936 7tPHE10/21, 22, 23, 24, 25, 26, 27

Legal Notice
PUBLIC NOTICE OF EXTENSION OF PUBILC COMMENT PERIOD
ENVIRONMENTAL ASSESSMENT AND DRAFT FINDING OF NO SIGNIFICANT IMPACT FOR THE CONSTRUCTION OF AN ARMED FORCES RESERVE CENTER AND IMPLEMENTATION OF BRAC 2005 REALIGNMENT ACTIONS IN PORTSMOUTH, NH

On October 5, 2010, the Army issued a Notice of Availability announcing the 30-day public review for the Environmental Assessment (EA) and Draft Finding of No Significant Impact (FNSI) for the construction of an Armed Forces Reserve Center for the implementation of BRAC 2005 realignment actions in the vicinity of Pease, New Hampshire, that would continue until November 4, 2010. In accordance with 32 CFR Part 651.14 Environmental Analysis of Army Actions, the Army has determined that the public review period for the EA and Draft FNSI will be extended by 16 days and will continue through November 20, 2010. During this period the public may submit comments on the EA and the Draft FNSI. Individuals or organizations that previously submitted comments via email or phone are encouraged to re-submit to assure that all comments are received.

The EA and Draft FNSI can be accessed on the World Wide Web at:
http://www.hqda.army.mil/acsim/brac/env_ea_review.htm

Printed copies of the EA and Draft FNSI can also be viewed at the following libraries through November 20:

Exeter Public Library 4 Chestnut Street Exeter, NH 03833-1850	Rye Public Library 581 Washington Road Rye, NH 03870-2353	Portsmouth Public Library 175 Parrott Avenue Portsmouth, NH 03801-4452

Comments on the EA and Draft FNSI should be submitted during the 30-day public comment period via mail, fax, or electronic mail to: Jeffrey M. Hrzic, Chief, Environmental Division 99th RSC DPW, 99th Regional Support Command, 5231 South Scott Plaza, Fort Dix, NJ 08640-5000. Phone: 609.353.6727. Fax: (609) 562-7983. Email: jeff.hrzic1@usar.army.mil

#31082 1tPHE10/22

Legal Notice
PUBLIC NOTICE

The New Hampshire Coastal Program (NHCP) is reviewing the following activities for consistency with its enforceable policies:

- The National Marine Fisheries Service (NMFS) is proposing a rule to add the roundscale spearfish to the Atlantic billfish management unit and recognize the change of the genus of Atlantic white marlin in the implementing regulations of the Magnuson- Stevens Fishery Conservation and Management Act and the Atlantic Highly Migratory Species regulations.
- NMFS is proposing a rule to list three distinct population segments (DPSs) of Atlantic sturgeon under the Endangered Species Act as follows: a) the Gulf of Maine DPS as threatened; b) the New York Bight DPS as endangered; and c) the Chesapeake Bay DPS as endangered. The Gulf of Maine DPS is defined as all anadromous Atlantic sturgeon whose range occurs in watersheds from the Maine/Canadian border and extending southward to include all associated watersheds draining into the Gulf of Maine as far south as Chatham, MA, as well as wherever these fish occur in coastal bays and estuaries and the marine environment.
- NMFS is proposing Amendment 5 to the Monkfish Fishery Management Plan (FMP). The primary purpose of Amendment 5 is to bring the Monkfish FMP into compliance with the annual catch limit and accountability measure requirements of the Magnuson-Stevens Fishery Conservation and Management Act by the start of the 2011 fishing year.

The deadline for written comments on the above proposals is November 5, 2010. For additional information please visit the NHCP web site at **http://des.nh.gov/organization/divisions/water/wmb/coastal/public_notices.htm**, or Christian Williams at (603) 559-0025 or **Christian.Williams@des.nh.go.**

#28706 1t P 10/22

Ad Number: 068030
Insertion Number: N/A
Size: 3 Col x 5 in
Color Type: N/A
Advertiser: CH2M Hill
Agency: N/A
Section-Page-Zone(s): A-7-All
Description: ENVIRON. ASSESS

PORTSMOUTH HERALD
Friday, October 22, 2010

Appendix C
Site Survey Report

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Site Survey Report

Pease – Newington, New Hampshire
7 – 8 October 2009

Prepared by:

Ken Dunham, 99th RSC
Real Estate Specialist
Earl Greenwood ACSIM-ODR,
Real Estate Project Coordinator,
J. M. Waller Associates, Inc.

Contending Site Map

Center of Search Area

Site 1 -1900 Lafayette Road, Portsmouth, NH

Site 2 – 295, 311, 355 Lafayette Road, Rye, NH

Site 3 – 120 Shattuck Way, Newington, NH

Site 4 – 549 US Route 1 Bypass, Portsmouth, NH

Site 5 - Old Indigo Hill Road, Rollinsford, NH (SOLD)

Site 6 – Epping Road, Exeter, NH

Site 7 - 22 Continental Drive, Exeter, NH

1. This site survey team (SST) convened at the Portsmouth, NH USARC to evaluate and select a suitable six (6) acre net buildable site to support the FY 2010 Military Construction Army Reserve (MCAR) Project Number 64919 to construct a BRAC replacement Army Reserve Center in the vicinity of Pease/Newington, New Hampshire. A list of the Site Survey Team participants is attached as enclosure 1.

2. On 7 October 2009, Mr. Michael Lohan, Community Planner 99th RSC, and Mr. Earl Greenwood, Real Estate Contractor – ACSIM-ODR, presented a briefing to all team members prior to opening discussion of the ASIV Report prepared by New England Corps of Engineer District. Site # 7 was added as a replacement for Site # 5 which went under contract prior to the site visit. The following comments provide a summary of observations captured by the SST.

a. Site # 1 consists of two lots one 4.5 acres and the other approximately 6.5 acres. It is located just off US Highway 1 (AKA – Lafayette Road) in the vicinity of Pease ARNG Base and the current Army Reserve Center. The site is mostly level with access to the rear of the property away from the heavily traveled highway. Water, sewer and electricity are readily available, natural gas service is questionable. Site was previously use as a gravel quarry and may pose some geotechnical issues, but little site preparation will be required. Lots are located near mixed use area with some residential homes nearby. According to the real estate broker, a brewery had attempted to purchase the property but because of opposition for residence withdrew their offer. Since the site is located within a quarter mile of beaches it is anticipated that traffic in the area will be extremely heavy during the summer. This has been a problem with the existing center, which they have learned to live with. This site is recommended as the primary site for this project. Since neither of the parcels meets the project requirements by themselves it is recommended that the entire 11 acres be acquired.

Address: 1900 Lafayette Road (Rt. 1), Portsmouth, NH
Congressional District: 1st Congressional District

Senior Senator: Judd Gregg
Junior Senator: Jeanne Shaheen
Representative: Carol Shea-Porter, District 1

Site Access: I95 North, Exit 5, to US1 Bypass, Roundabout 1st Exit, Becomes Lafayette Rd. (US 1), to 1900 Lafayette Road

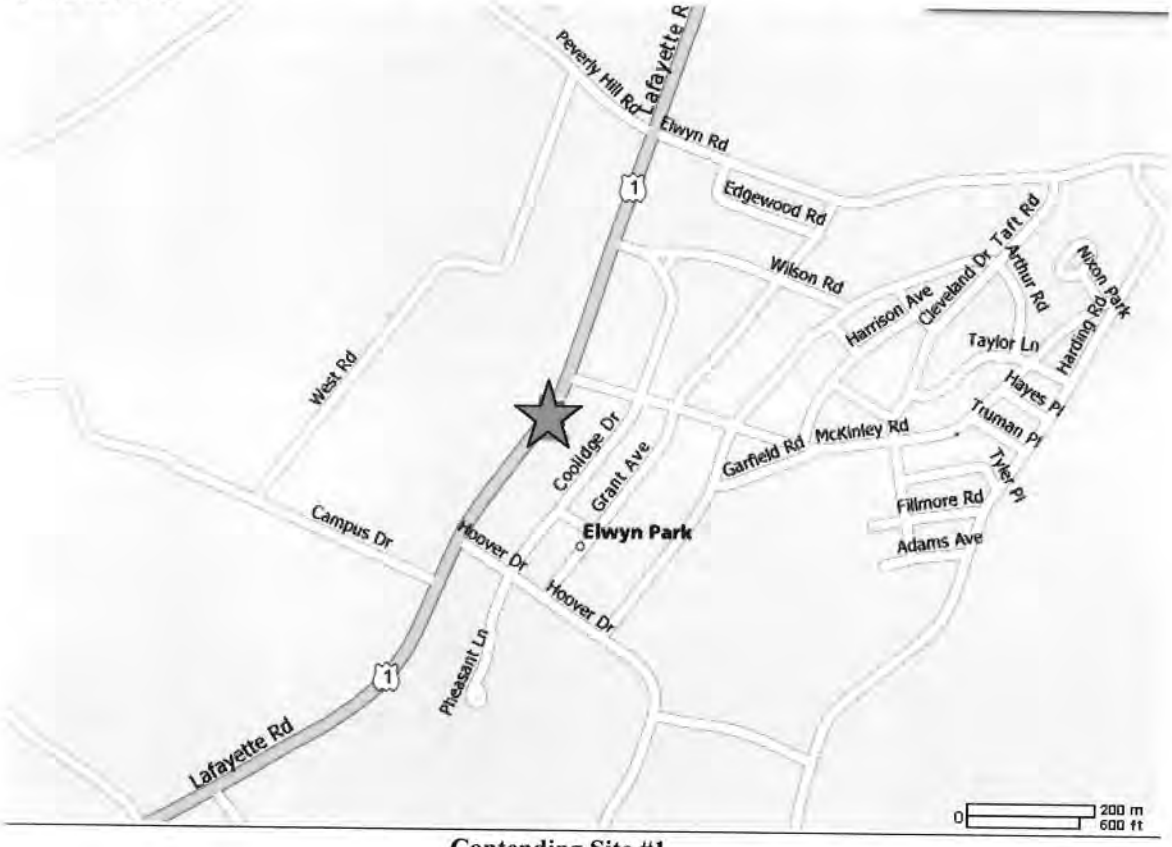
Authorized Representative Contact Information:

NAME: Jeffrey Marple
ADDRESS: Marple & James
PHONE NUMBER: (603) 433-5550 x100
FAX NUMBER: (603) 431-0204
EMAIL ADDRESS: jmarple@marplejames.com

Site Description: Open Land of Two Lots (formerly gravel quarry)

Size: 10.6 Acres Approximately (Two lots 4.1 & 6.5 acres each)
Linear feet of site measurements: Combined two lots (835' x 500' X 995' x 500')

Configuration: Two Lots Rectangular in Shape
Environmental Concerns Present: Unknown
Flood Plan Data: See FEMA Map Attached – Zone X
Topography Aspects: Map attached
Utilities: Electric, Sewer, gas, & Water at Site
Current Use: Not in use
Buildings on Site: No
Relocation of Current Occupants Required: No
Demolition Required: No
Cut and fill Requirements: Unknown
Zoning: Commercial
Unknown if the City of Portsmouth, NH supports this acquisition
Fenced: None
Parking sufficient net useable land available: Yes
Distance to nearest Fire Station: Approx. 1 mile
Distance to nearest Fire Hydrant: At Site
Distance to nearest Police Station: 1 mile
Subject to Easements: No
Mineral Rights Reserved: No
Purchase Data:
Available Date: Immediately Asking Price: $2,745,000 for 6.5 acres, or $4,770,000 for total acreage
Additional Comments: Five miles east of NHANG. Located on a major road (US 1). Level land formerly a gravel quarry. All utilities at site. High cost area. Access to lot also from 140 West Road. Total Assessed Value is $1,949,400.

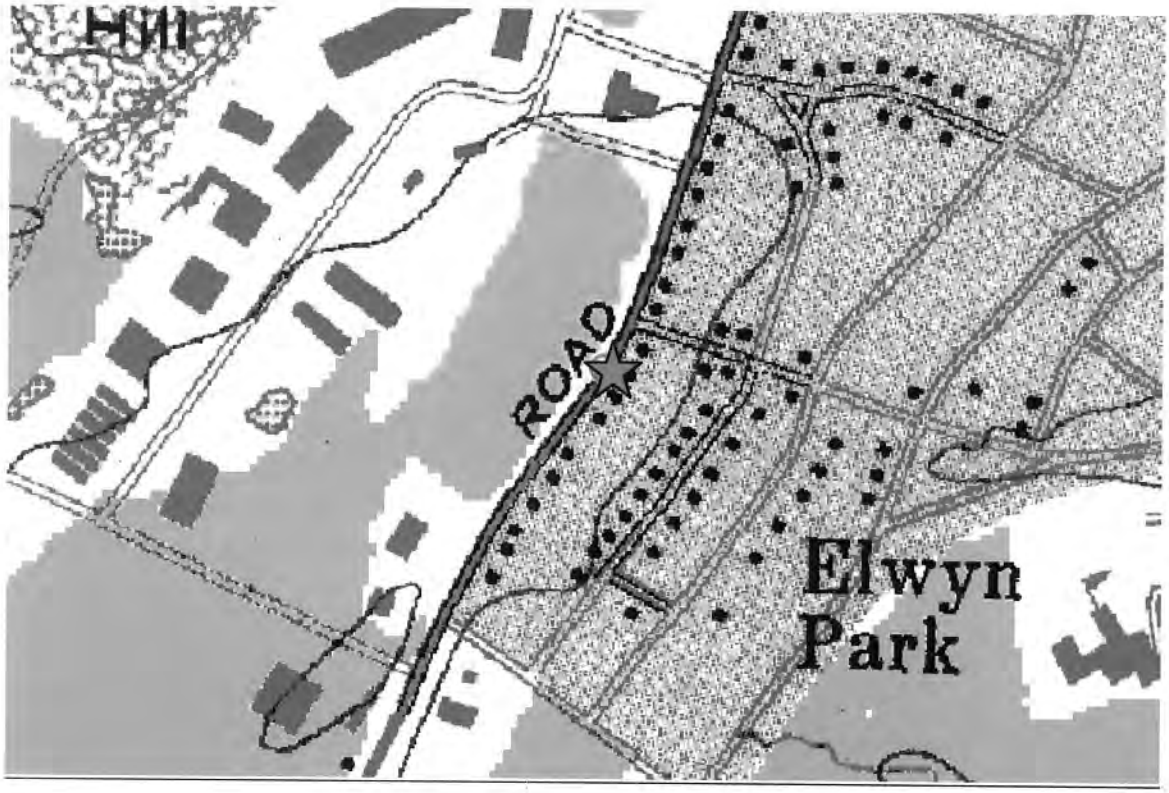


Contending Site #1

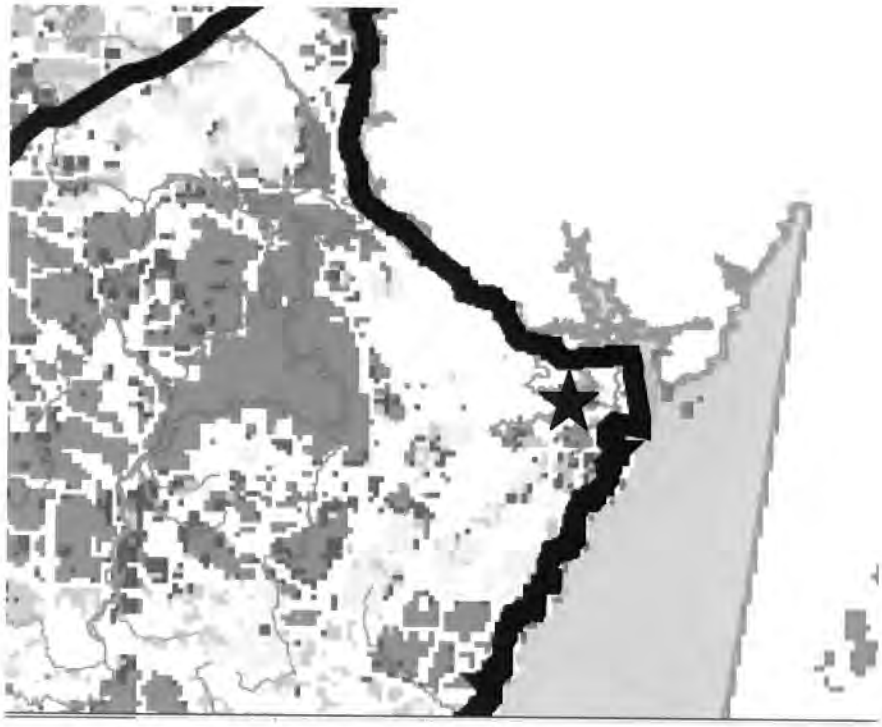
Contending Site #1 – Aerial View

Contending Site #1 – Shows Second Access from 140 West Road

Contending Site #1 - Flood Plain Map – Zone X
Moderate to Minimal Flood Hazard



Contending Site #1 - Topographical Map



HIGHEST RANKED WILDLIFE HABITAT BY ECOLOGICAL CONDITION

Highest Ranked Habitat in NH
Highest Ranked Habitat in Biological Region
Supporting Landscapes
Contending Site #1 Approximate Location

Contending Site #1 – Endangered Species Map

Contending Site #1 – Lot Configuration (Two Lots)

Contending Site #1 – View off Rt. 1 (Front of Lots)

Contending Site #1 – Route 1 North

Contending Site #1 – Level Open Lot

Contending Site #1 – View from Rear of Lots to West Road

b. Site # 3 is centrally located between Pease and Newington. It has good visibility and is just off a major transportation route with bus service. The site has a total of 8.4 acres with approximately .2 acres lost to wetland. The site itself has a gentile slope to the rear, so some fill and grading will be required as well as tree removal. There is a 50' gas transmission line easement at the front of the property, but with the building setback requirements from the City this should not pose a problem with design and layout of the facility. There is a service road, to TYCO warehouse, on the west side of the property that could be used for Military Vehicle access to the equipment park. According to the real estate broker this is a private road and permission would have to be negotiated with the company. Although cost of this site is significantly less than Site # 1, it is recommended as the first alternate since the buildable acreage is somewhat restrictive.

Address: 120 Shattuck Way, Newington, NH 03801

Congressional District: 1st Congressional District

Senior Senator: Judd Gregg
Junior Senator: Jeanne Shaheen
Representative: Carol Shea-Porter, District 1

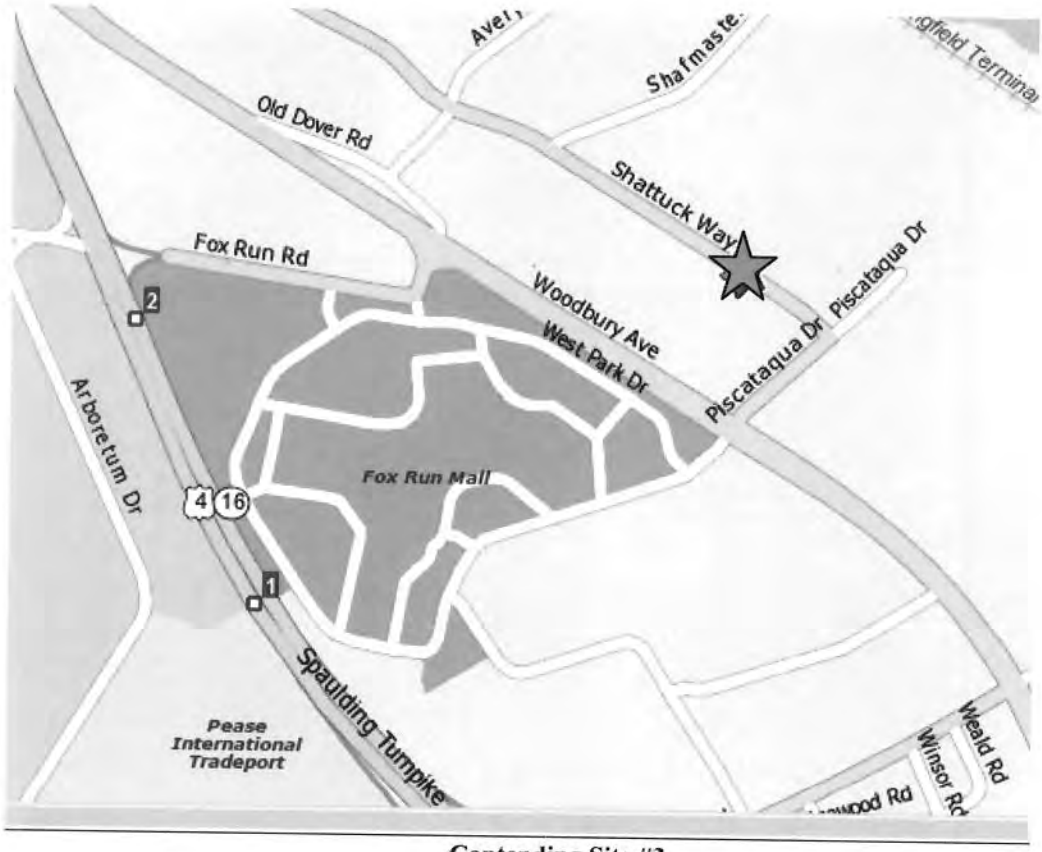
Site Access: I-95N, Exit 6 Woodbury Ave., Left on Woodbury Ave., Right on Piscataqua Road, Left on Shattuck Way

Authorized Representative Contact Information:

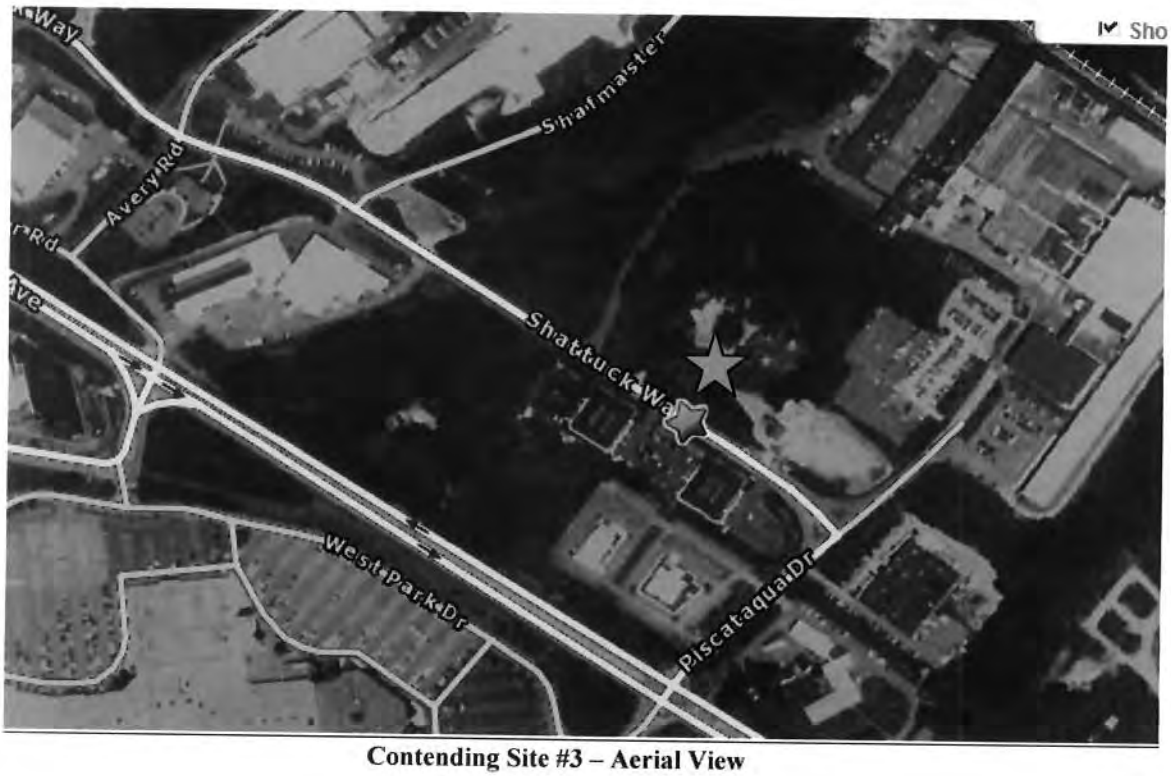
NAME: Jeffrey Marple
ADDRESS: Marple & James
PHONE NUMBER: (603) 433-5550 x100
FAX NUMBER: (603) 431-0204
EMAIL ADDRESS: jmarple@marplejames.com

Site Description: Wooded Land
Size: 8.4 Acres
Linear feet of site measurements: 466.66' x 774.96' x 638.04' x 461.42 (See attached plan)
Configuration: Irregular
Environmental Concerns Present: Unknown
Flood Plan Data: See FEMA Map Attached – Zone X
Topography Aspects: Map attached
Utilities: Electric, Gas, & Water at Site
Current Use: Not in use
Buildings on Site: No
Relocation of Current Occupants Required: No
Demolition Required: No
Cut and fill Requirements: Unknown
Zoning: General Industrial Zone
Unknown if the City of Newington, NH supports this acquisition
Fenced: None
Parking sufficient net useable land available: Yes
Distance to nearest Fire Station: Approx. 2.66 miles
Distance to nearest Fire Hydrant: Every 200 feet on Shattuck Way
Distance to nearest Police Station: 2.69 miles

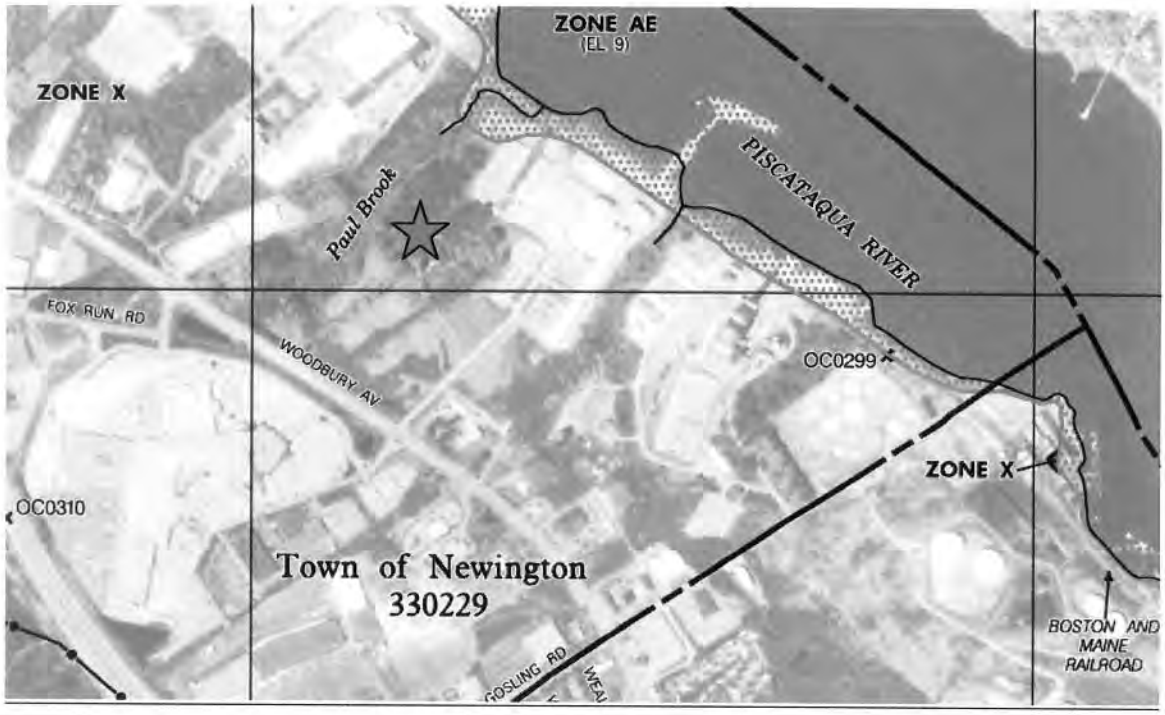
Subject to Easements: Drainage and gas line easement at front of lot
Mineral Rights Reserved: Unknown
Purchase Data:
Available Date: Immediately Asking Price: $2,300,000
Additional Comments: 2 miles of NHANG. Land assessment $891,000.



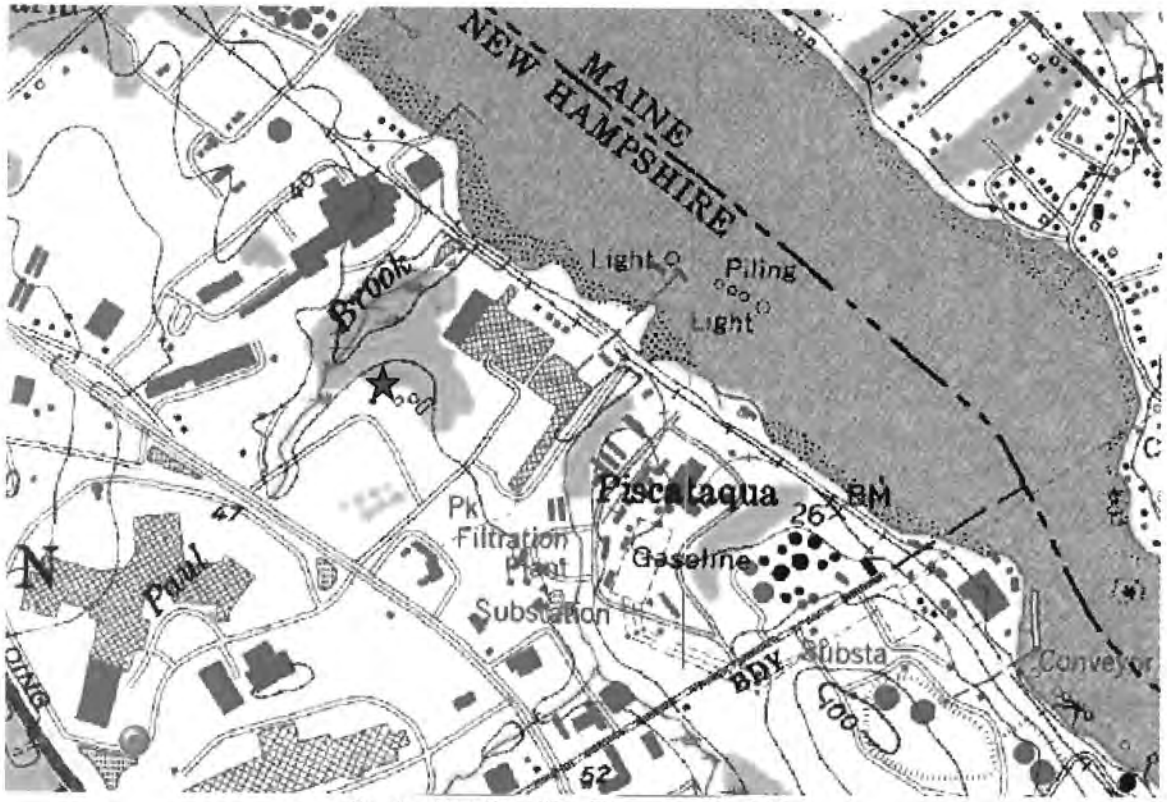
Contending Site #3



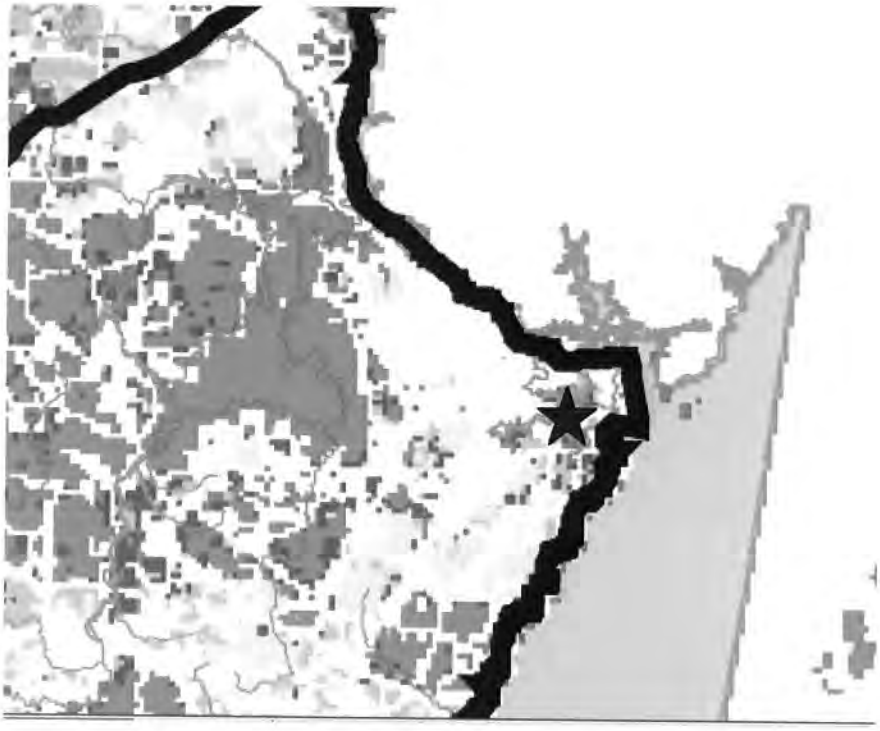
Contending Site #3 – Aerial View



Contending Site #3 - Flood Plain Map – Zone X
Moderate to Minimal Flood Hazard



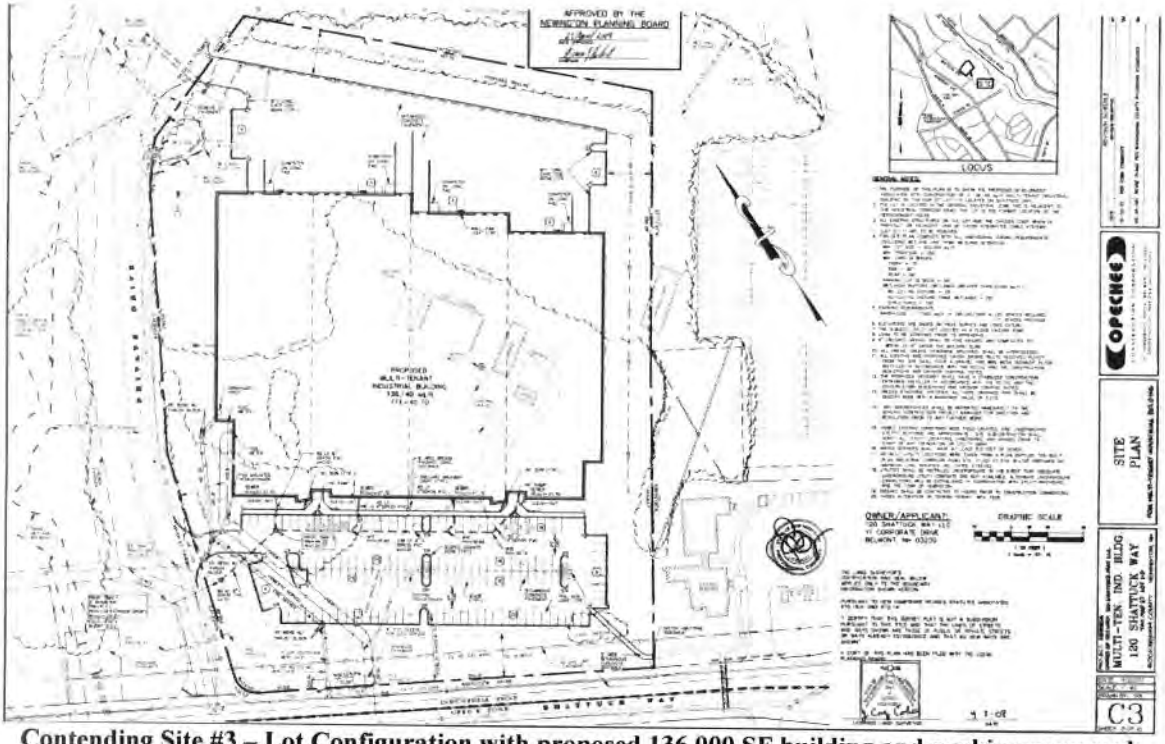
Contending Site #3 – Topographical Map



HIGHEST RANKED WILDLIFE HABITAT BY ECOLOGICAL CONDITION

Highest Ranked Habitat in NH
Highest Ranked Habitat in Biological Region
Supporting Landscapes
Contending Site #3 Approximate Location

Contending Site #3 – Endangered Species Map



Contending Site #3 – Lot Configuration with proposed 136,000 SF building and parking proposed for site

c. Site # 2 – Like Site #1, this one is located off US Highway 1, but is approximately 7 miles south of Pease / Newington. This is also a heavily traveled road to beaches and the City of Rye is a resort area with extremely heavy traffic during the summer. The site is a former motel site with all buildings and utility lines that serviced that motel removed. The adjoining lot (approximately 6 acres of the 15.4 total acreage) has recently been sold to an organization that plans to build a senior citizen long term care facility. Access to the site will be directly off US Highway 1, therefore construction of turn lane(s) will more than likely be required. Water and electrical service are readily available, but sewer service may have to be extended from one mile away. There is no natural gas service in the area. The site is mostly flat with mature trees and a 15 foot drop at the rear of the property. It is also located in close proximity of a Super Fund site (run off from the former Pease Air Force Base). There were underground storage tanks (UST's) on the site which have been removed. There is evidence that some monitoring of the site has been done, but could not determine if it was monitoring of the Super Fund Site or the UST's, so additional research will be required to establish that site is free of contamination. The survey team recommends this as the second alternate site.

Address: 295, 311, and 355 Lafayette Road, Rye, NH
Congressional District: 1st Congressional District

Senior Senator: Judd Gregg
Junior Senator: Jeanne Shaheen
Representative: Carol Shea-Porter, District 1

Site Access: 95N, Exit 1, Route 107, Left on US 1N, to 355 Lafayette Road, Rye, NH.

Authorized Representative Contact Information:

NAME: Jeffrey Marple
ADDRESS: Marple & James
PHONE NUMBER: (603) 433-5550 x100
FAX NUMBER: (603) 431-0204
EMAIL ADDRESS: jmarple@marplejames.com

Site Description: Open Land of Three Lots (former Southwind Motel)
Size: 15.36 Acres Approximately as per plan (16.92 as per Assessor's records)

Linear feet of site measurements: 1117.71 x 717.11 x 1751.79 x 617.96

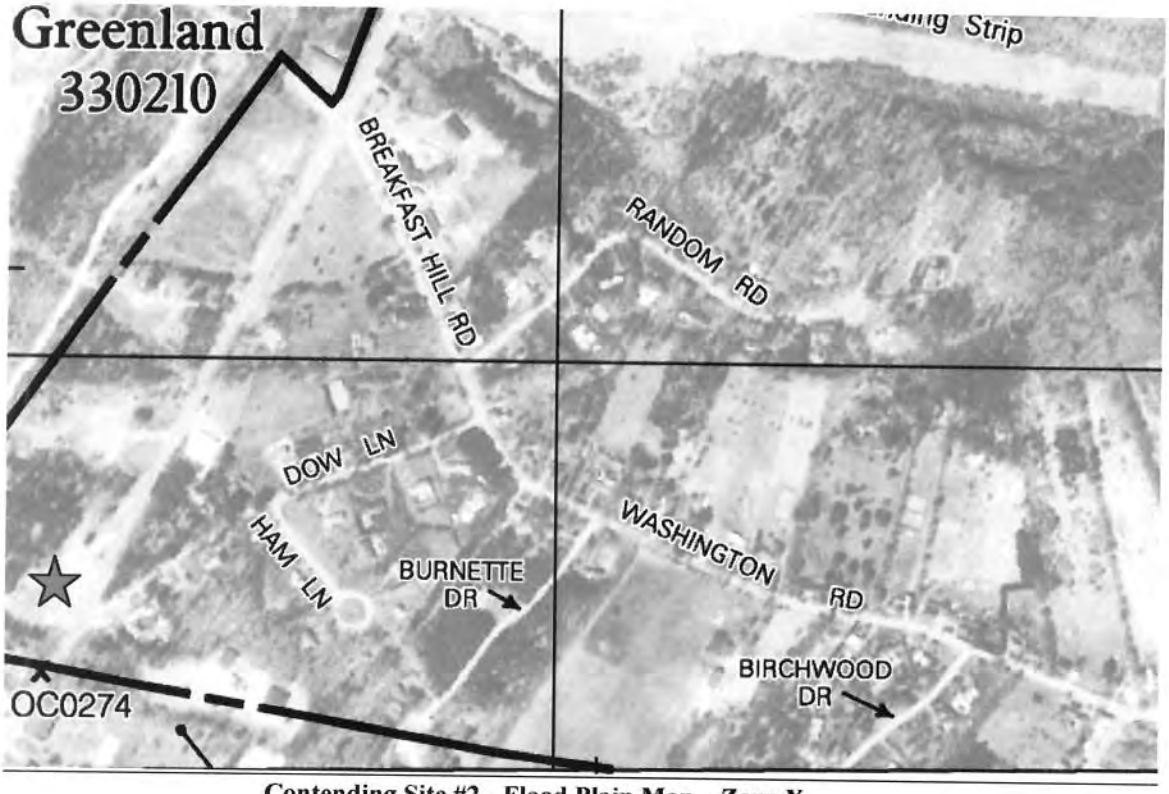
Configuration: Three Lots (see map below)
Environmental Concerns Present: Unknown
Flood Plan Data: See FEMA Map Attached – Zone X
Topography Aspects: Map attached
Utilities: Electric and water at site, sewer within ½ miles
Current Use: Not in use
Buildings on Site: No
Relocation of Current Occupants Required: No
Demolition Required: No

Cut and fill Requirements: Unknown
Zoning: Commercial
Unknown if the City of Rye, NH supports this acquisition
Fenced: None
Parking sufficient net useable land available: Yes
Distance to nearest Fire Station: Approx. 2.63 miles
Distance to nearest Fire Hydrant: 1000 feet
Distance to nearest Police Station: 2.63 miles
Subject to Easements: Yes, Portsmouth Power Co.
Mineral Rights Reserved: Unknown
Purchase Data:
Available Date: Immediately Asking Price: $3,500,000 for 5 acres and $5,500,000 for total acreage

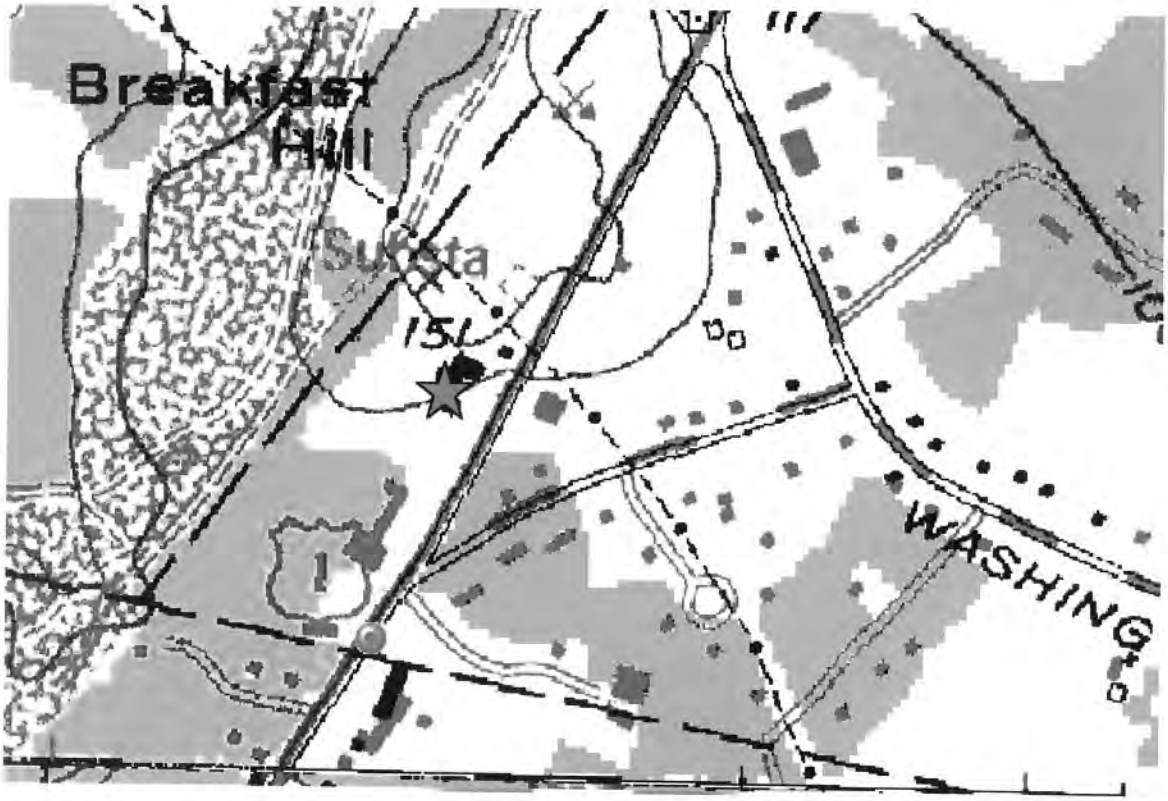
Additional Comments: Seven miles southeast of NHANG. Located on a major road (US 1). Level land formerly a motel site. Water at site. Sewer approximately ½ miles down road. High cost area. Total Assessed Value is $1,899,000.

Contending Site #2 Location

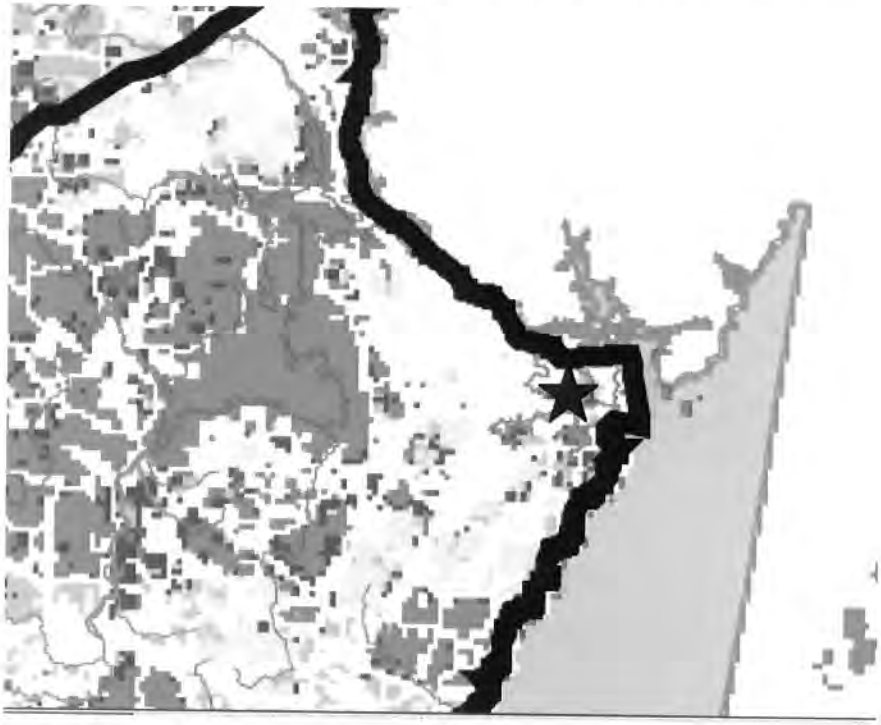
Contending Site #2 – Aerial View



Contending Site #2 - Flood Plain Map – Zone X
Moderate to Minimal Flood Hazard



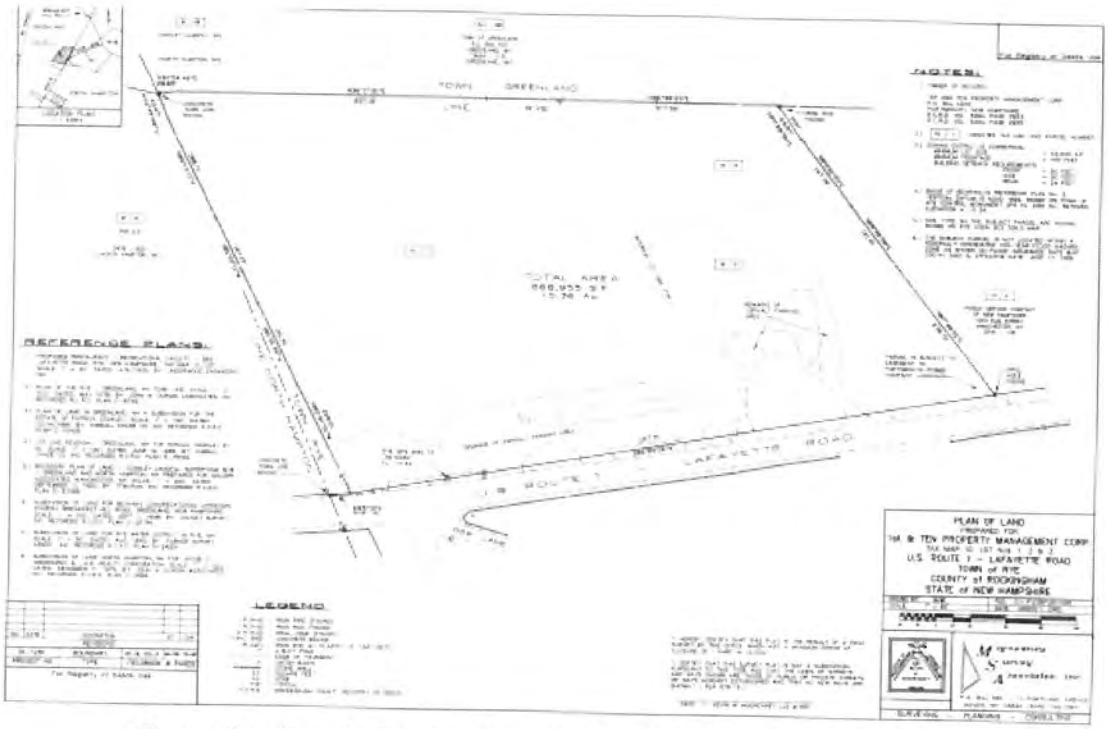
Contending Site #2 - Topographical Map



HIGHEST RANKED WILDLIFE HABITAT BY ECOLOGICAL CONDITION

Highest Ranked Habitat in NH
Highest Ranked Habitat in Biological Region
Supporting Landscapes
Contending Site #2 Approximate Location

Contending Site #2 – Endangered Species Map



Contending Site #2 – Lot Configuration (Three Lots – Lot on Right Sold)

Contending Site #2 – View Rt. 1 South

Contending Site #2 – Route 1

Contending Site #2 – Route 1 North

Contending Site #2

Contending Site #2

d. Site # 7 This site is located in the City of Exeter approximately 15 miles to the east of the Cities of Pease / Newington, NH. There are a total of 22 acres of land available for consideration. The site is remote with little or no troop support facilities in the immediate area. It is heavily treed and would require extensive site preparation. Electricity and water are available within close proximity of the site, but sewer line would have to be extended more than half a mile. There is no gas service available in the area. The site is located in an industrial park and one of the covenants is only one curb cut. There are extensive wet lands in and around the site and some of it is in the 100 year flood plain, so the actual buildable area is less than half of the total acres. If selected extensive survey work would be required to establish boundaries of the 100 year flood plain; set backs for wet land areas and complete cultural / historical survey. Since time line for selection of site is short, site was rated as 4 of 4 of the sites evaluated by the survey team.

Address: 22 Continental Drive, Exeter, NH 03833
Congressional District: 1st Congressional District

Senior Senator: Judd Gregg
Junior Senator: Jeanne Shaheen
Representative: Carol Shea-Porter, District 1

Site Access: I-95, Exit 2 NH 101W, Exit 9 NH 27, 2nd right onto Continental Drive

Authorized Representative Contact Information:

NAME: Jeffrey Marple
ADDRESS: Marple & James
PHONE NUMBER: (603) 433-5550 x100
FAX NUMBER: (603) 431-0204
EMAIL ADDRESS: jmarple@marplejames.com

Site Description: Wooded Land
Size: 21.11 Acres (cannot be subdivided)
Linear feet of site measurements: See attached layout
Configuration: Irregular
Environmental Concerns Present: None Known
Flood Plan Data: Part in 100 year flood plain remainder – Zone X
Topography Aspects: Map attached
Utilities: Electric, sewer, & water at Continental Drive
Current Use: Not in use
Buildings on Site: No
Relocation of Current Occupants Required: No
Demolition Required: No
Cut and fill Requirements: Some, not major
Zoning: CT-1 Corporate Technology
Unknown if the Town of Exeter, NH supports this acquisition
Fenced: None
Parking sufficient net useable land available: Yes
Distance to nearest Fire Station: 1.64 miles
Distance to nearest Fire Hydrant: Along Continental Drive
Distance to nearest Police Station: 1.70 miles

Subject to Easements: None known
Mineral Rights Reserved: No
Purchase Data:
Available Date: Immediately
Additional Comments: Industrial Park does have CC&R's
Asking Price is $900,000

Contending Site #7 – 22 Continental Drive, Exeter, NH

Contending Site #7 – 22 Continental Drive, Exeter, NH Aerial View

No Image

MBLU :	46/ / 4/ /
Location:	22 CONTINENTAL DR
Owner Name:	22 CONTINENTAL DR LLC
Account Number:	E2972R

Powered by Vision Appr

Parcel Value

Item	Appraised Value	Assessed Value
Buildings	0	0
Xtra Bldg Features	0	0
Outbuildings	0	0
Land	668,900	668,900
Total:	**668,900**	**668,900**

Owner of Record

22 CONTINENTAL DR LLC
11 CORPORATE DR
BELMONT, NH 03220

Ownership History

Owner Name	Book/Page	Sale Date	Sale Price
22 CONTINENTAL DR LLC	4866/1705	11/30/2007	500,000
RENOLIT REAL ESTATE LLC	3451/0389	1/21/2000	473,000

Land Use

Land Use Code	Land Use Description
4400	IND LD DV MDL-00

Land Line Valuation

Size	Zone	Neighborhood	Appraised Value	Assessed Value
21.11 AC	CT-1	I2	668,900	668,900

Construction Detail

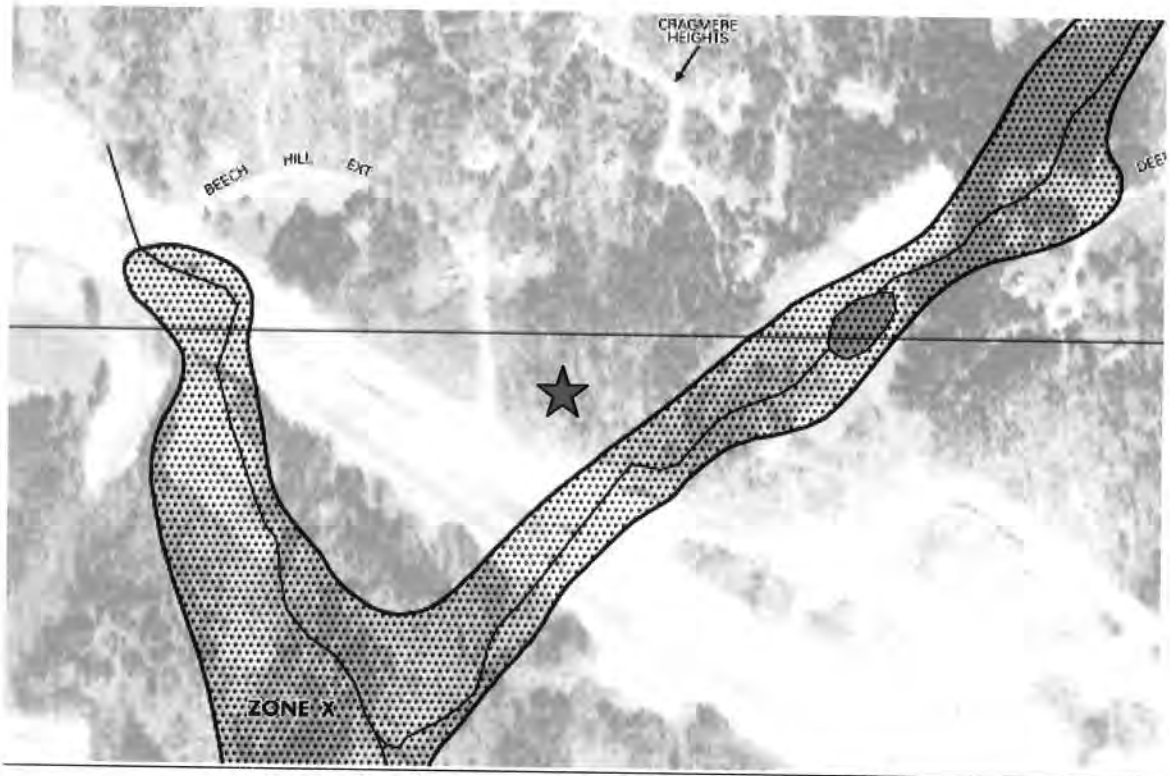
Building # 1
STYLE Vacant Land
MODEL Vacant

Building Valuation

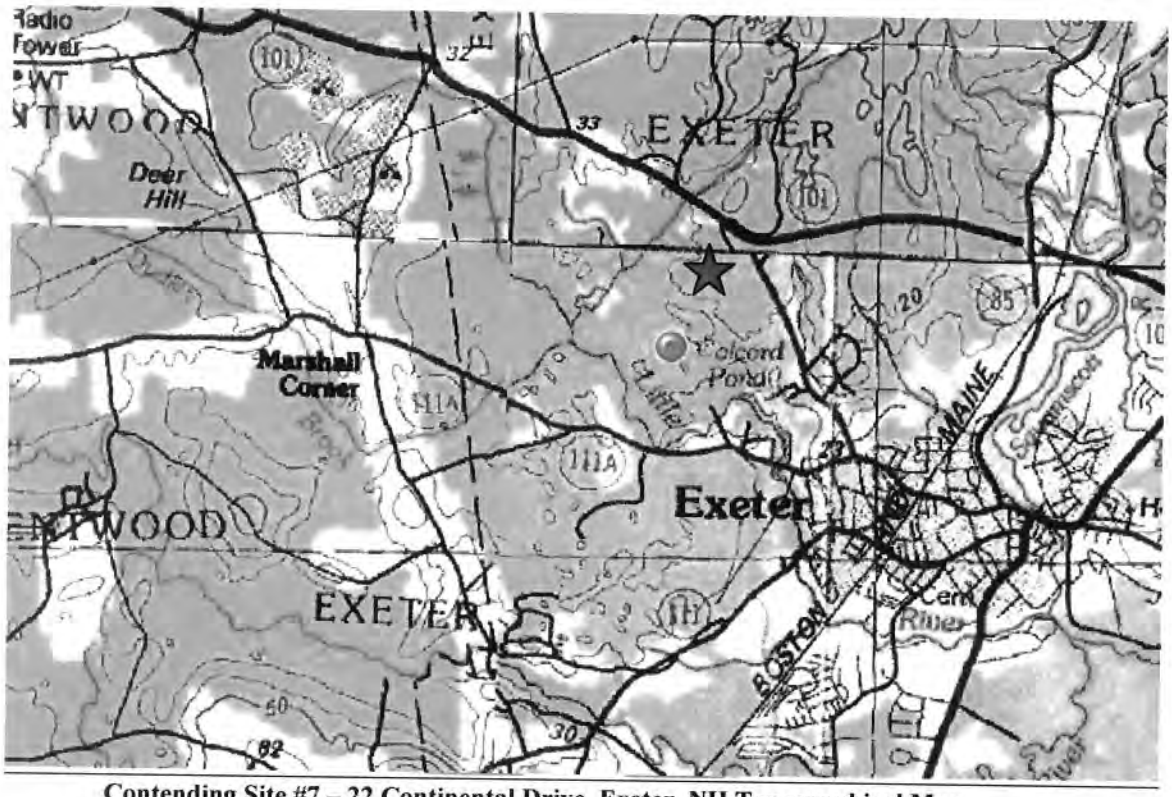
Living Area: 0 square feet
Building Value: 0
Replacement Cost: 0
Year Built:

Contending Site #7 – 22 Continental Drive, Exeter, NH – Tax Card

Contending Site #7 – 22 Continental Drive, Exeter, NH - Lot Configuration



Contending Site #7 - 22 Continental Drive, Exeter, NH
Flood Plain Map – Zone X
Moderate to Minimal Flood Hazard



Contending Site #7 – 22 Continental Drive, Exeter, NH Topographical Map

e. Site #4, 549 US Route 1 Bypass, Portsmouth, NH and Site # 6, Epping Road (Rt. 27 & 101), Exeter, NH were visited by the Site Survey Team and were not considered for evaluation by the team. The negative aspects of the sites far exceed the positive aspects. Site #4 is located adjacent to a high volume traffic circle and presents life safety as well as AT/FP problems. Site # 6 is approximately 20 miles for the Cities of Pease / Newington, NH in a remote area with no troop support facilities in the immediate area. This site was originally considered for a Wal-Mart shopping center but met local opposition from the residents of the City of Exeter, so Wal-Mart withdrew their option to purchase the site. Data from the ASIV for each of the follows:

Site # 4 Data

Address: 549 US RT 1 Bypass, Portsmouth, NH 03801
Congressional District: 1st Congressional District

Senior Senator: Judd Gregg
Junior Senator: Jeanne Shaheen
Representative: Carol Shea-Porter, District 1

Site Access: I-95N to Exit 5, Site is on right side of the exit ramp

Authorized Representative Contact Information:

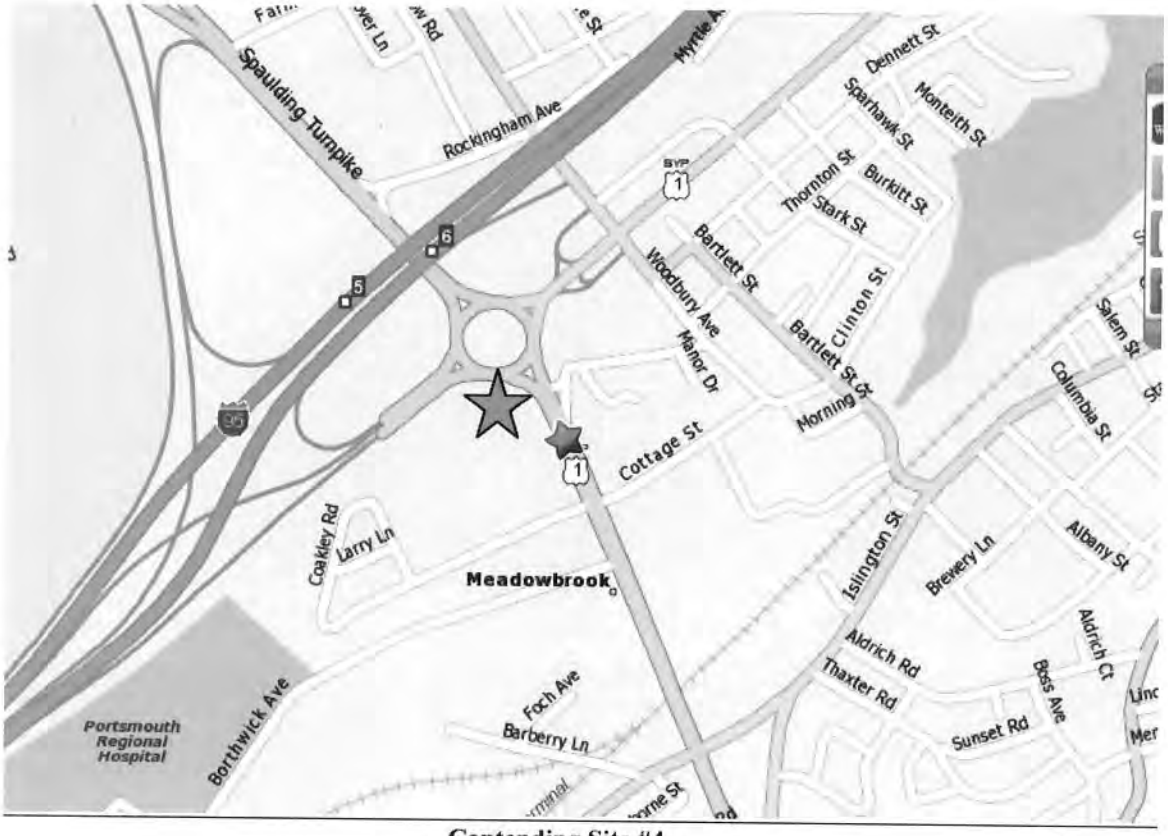
NAME: Jeffrey Marple
ADDRESS: Marple & James
PHONE NUMBER: (603) 433-5550 x100
FAX NUMBER: (603) 431-0204
EMAIL ADDRESS: jmarple@marplejames.com

Site Description: Former Meadowbrook Inn Site, now vacant land

Size: 18.05 Acres

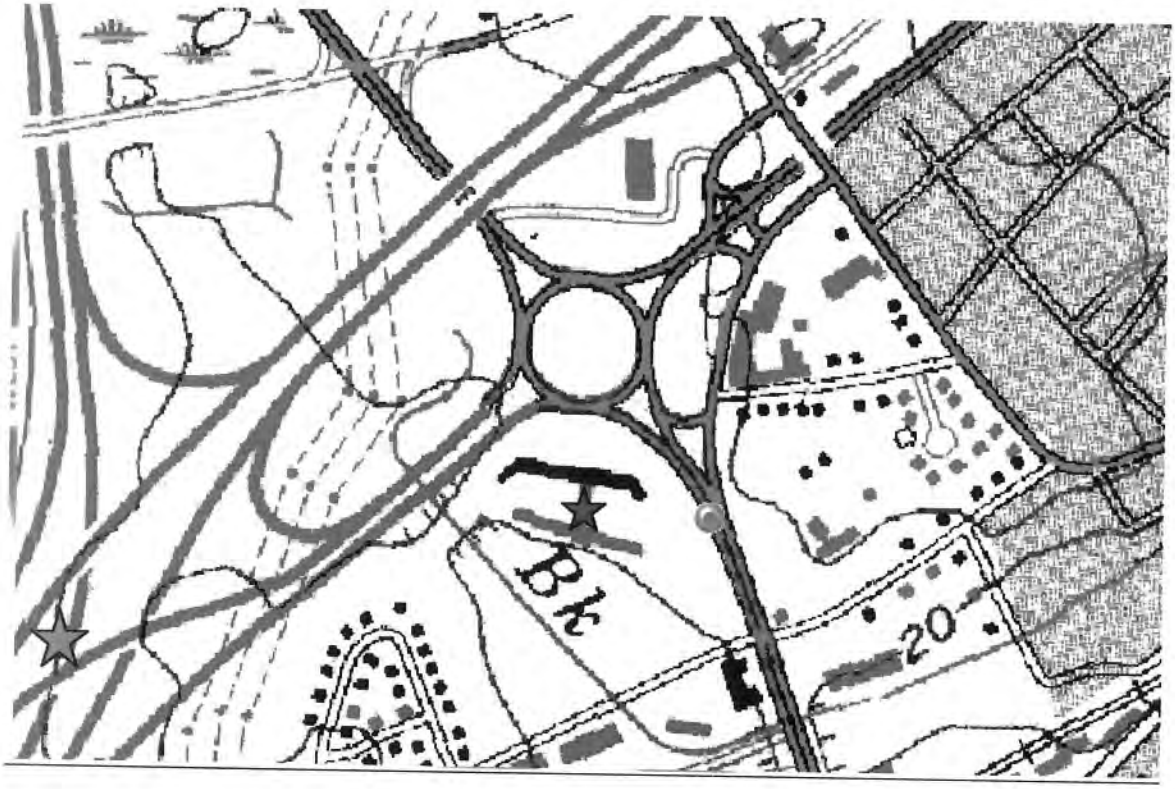
Linear feet of site measurements: Unable to obtain (see attached below)
Configuration: Irregular
Environmental Concerns Present: Unknown
Flood Plan Data: See FEMA Map Attached – Zone X
Topography Aspects: Map attached
Utilities: All utilities at site
Current Use: Not in use
Buildings on Site: No
Relocation of Current Occupants Required: No
Demolition Required: Yes, some foundation still remaining
Cut and fill Requirements: Unknown
Zoning: Commercial
Unknown if the City of Portsmouth, NH supports this acquisition
Fenced: None
Parking sufficient net useable land available: Yes
Distance to nearest Fire Station: Approx. 3 miles
Distance to nearest Fire Hydrant: At Site

Distance to nearest Police Station: Approx. 3 miles
Subject to Easements: Unknown
Mineral Rights Reserved: Unknown
Purchase Data:
Available Date: Immediately Asking Price: (Make Offer)
Assessed for $3,306,000
Additional Comments: 2.9 miles northeast of NHANG. Located on the Portsmouth Rotary just off Route 95, Exit 5, very desirable site, much activity



Contending Site #4

Contending Site #4



Contending Site #4 - Topographical Map

Contending Site #4

Contending Site #4

Contending Site #4

Contending Site #4

Site # 6 Data

Address: Epping Road (Rt. 27 & 101), Exeter, NH 03833

Congressional District: 1st Congressional District

Senior Senator: Judd Gregg
Junior Senator: Jeanne Shaheen
Representative: Carol Shea-Porter, District 1

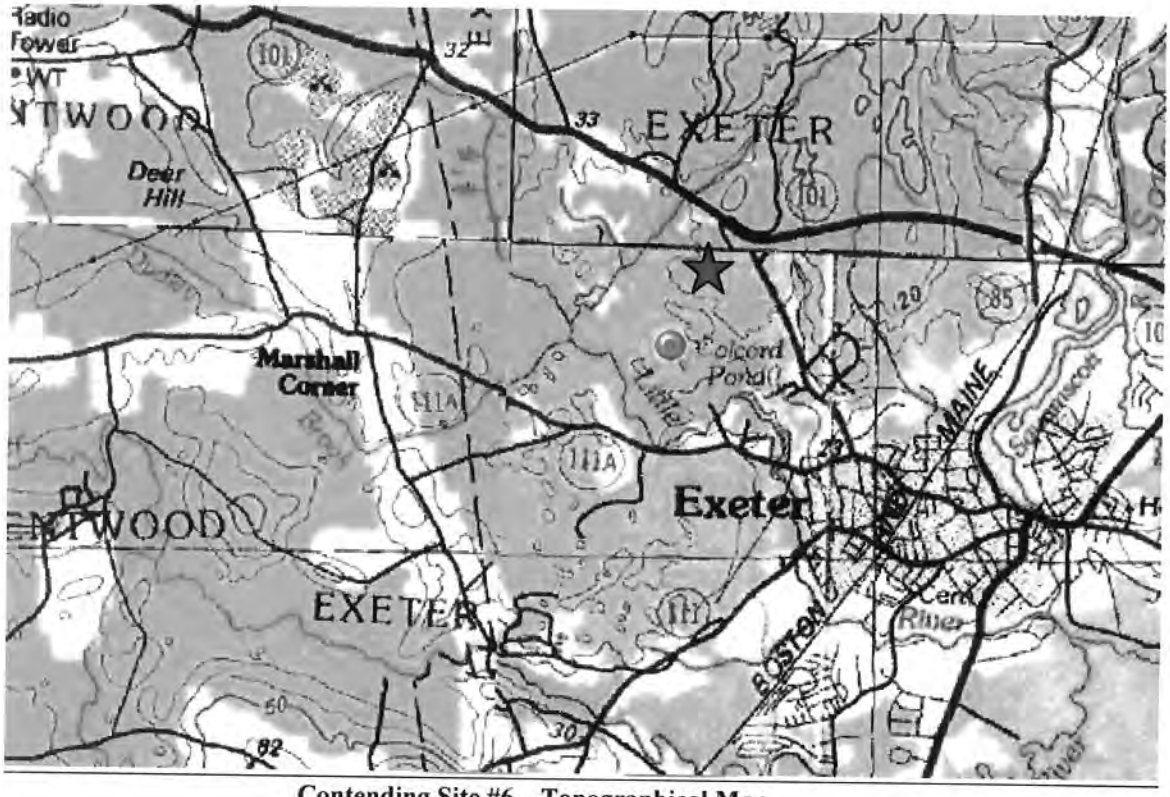
Site Access: I95N, Exit 2 to 101W, Exit 9 NH27, Right on Epping Road
Authorized Representative Contact Information:

NAME: Jeffrey Marple
ADDRESS: Marple & James
PHONE NUMBER: (603) 433-5550 x100
FAX NUMBER: (603) 431-0204
EMAIL ADDRESS: jmarple@marplejames.com

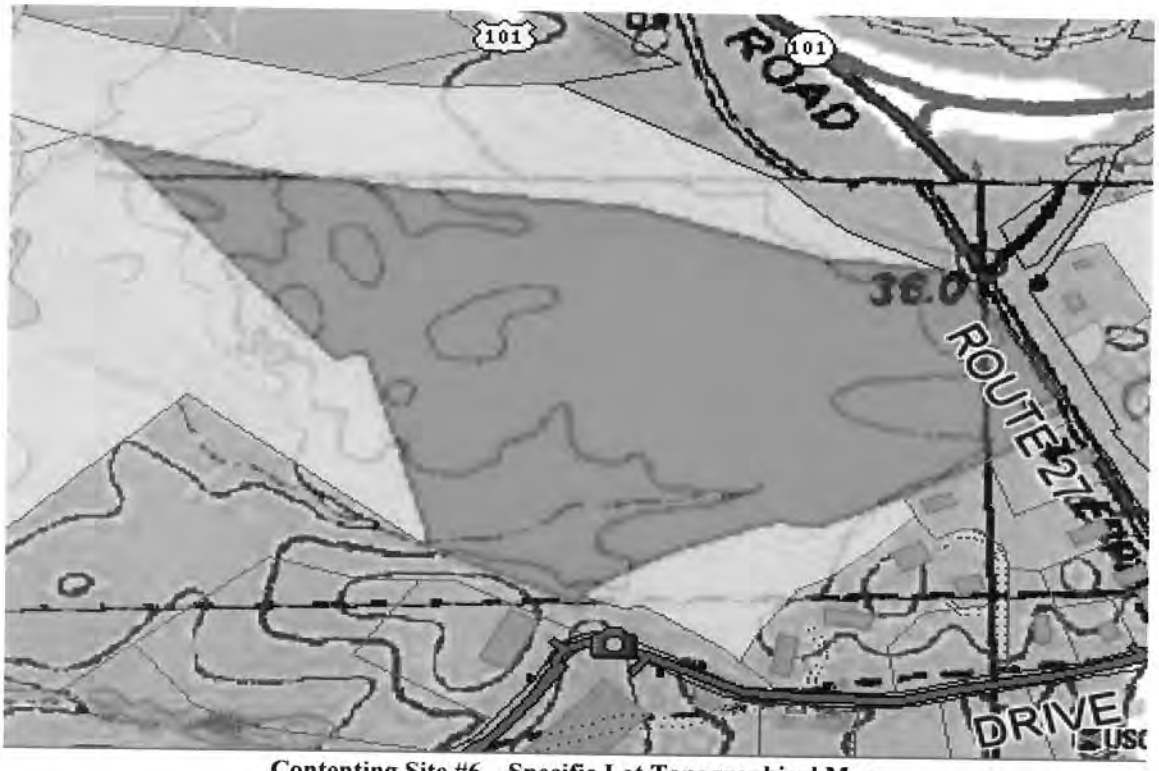
Site Description: Wooded Land
Size: 60 Acres, 40 Buildable Acres
Linear feet of site measurements: See attached layout
Configuration: Irregular
Environmental Concerns Present: Unknown
Flood Plan Data: See FEMA Map Attached – Zone X
Topography Aspects: Map attached
Utilities: Electric at site, sewer & water approx. 1000 feet at Continental Drive
Current Use: Not in use
Buildings on Site: No
Relocation of Current Occupants Required: No
Demolition Required: No
Cut and fill Requirements: Unknown
Zoning: C-3 Commercial
Unknown if the Town of Exeter, NH supports this acquisition
Fenced: None
Parking sufficient net useable land available: Yes
Distance to nearest Fire Station: 1.61 miles
Distance to nearest Fire Hydrant: Approx. 1000 feet
Distance to nearest Police Station: 1.67 miles
Subject to Easements: Unknown
Mineral Rights Reserved: Unknown
Purchase Data:
Available Date: Immediately
Additional Comments: 20 miles Southwest of NHANG. Asking Price is $3,500,000

Contending Site #6 – Epping Road, Exeter, NH

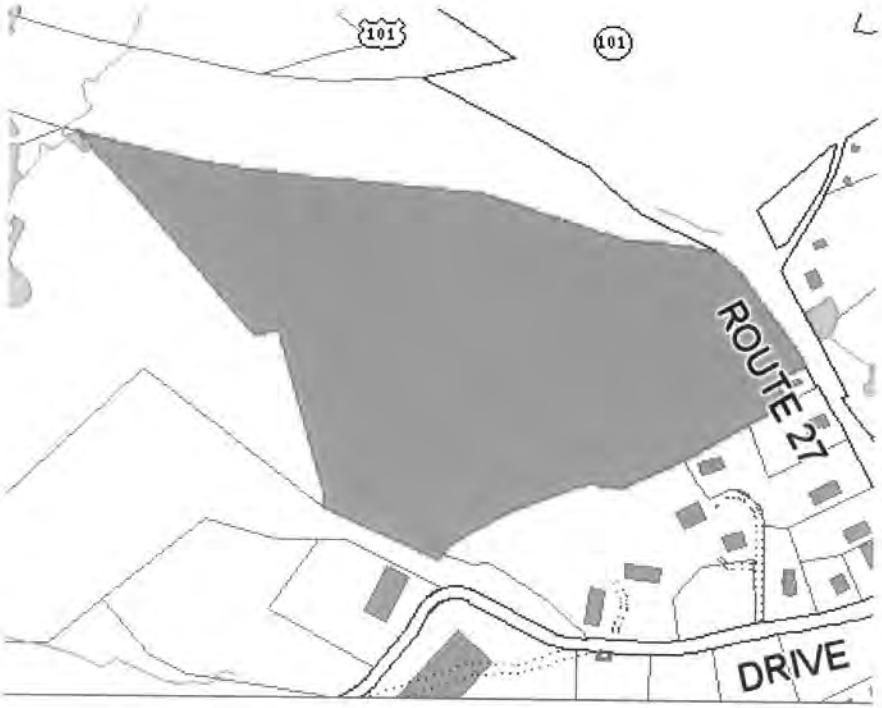
Contending Site #6 – Aerial View



Contending Site #6 – Topographical Map



Contenting Site #6 – Specific Lot Topographical Map



Contending Site #6 – Lot Configuration
Epping Road, Exeter, NH

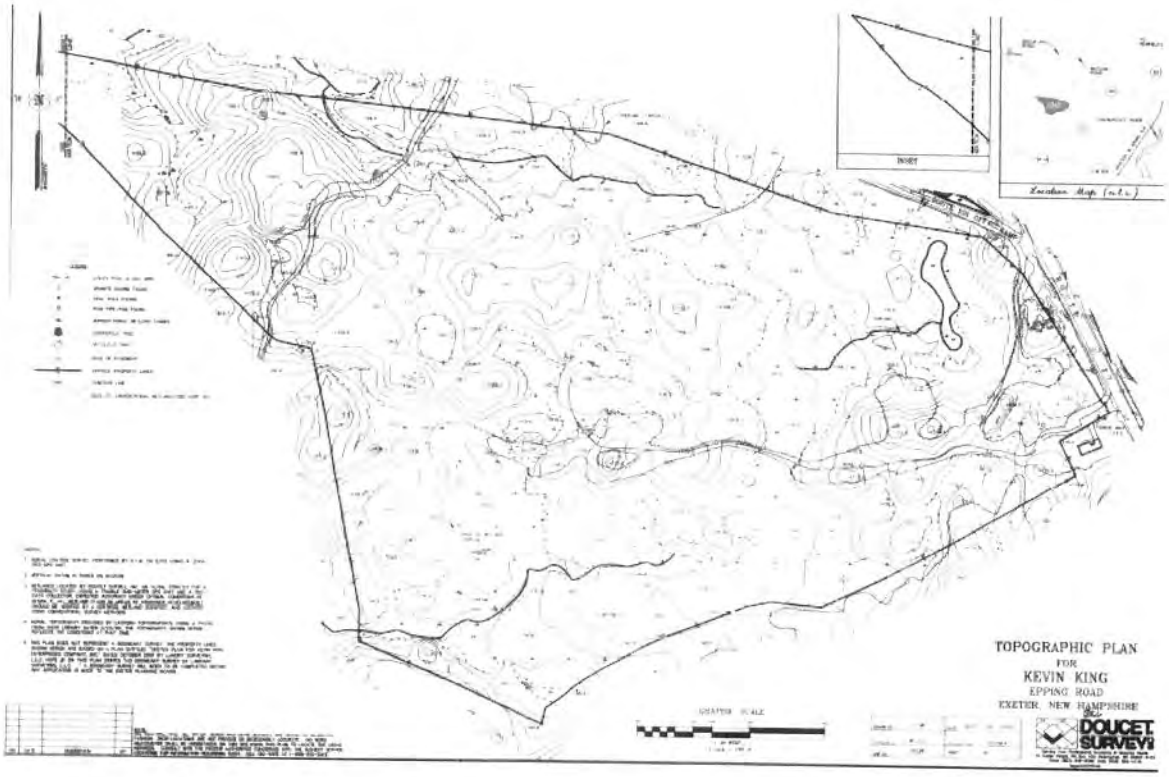
Parcel Value

Item	Appraised Value	Assessed Value
Buildings	0	0
Extra Building Features	0	0
Outbuildings	0	0
Land	152,700	5,528
Total:	**152,700**	**5,528**

Owner of Record

KING KEVIN M SR IRREV TR
KING KEVIN M JR TRUSTEE
PO BOX 216
STRATHAM, NH 03885

Contending Site #6 – Appraised/Assessed Value - Epping Road, Exeter, NH



Contending Site #6 – Survey Map

Contending Site #6

Contending Site #6

DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT CHIEF OF STAFF FOR INSTALLATION MANAGEMENT
600 ARMY PENTAGON
WASHINGTON, DC 20310-0600

NOV 17 2009

DAIM-ODR

MEMORANDUM FOR Headquarters, U.S. Army Corps of Engineers, CERE-RE, 441 G. Street NW, Washington, DC 20314-1000

SUBJECT: Site Survey Report (SSR) Approval for Pease, NH

1. Reference memorandum 99th Regional Support Command, ARRC-SNJ-DPW, 30 October 2009, subject Site Survey Report (SSR), Pease - Newington, New Hampshire BRAC PN 64919, enclosed.

2. The purpose of this memorandum is to request the Corps of Engineers acquire Rights-of-Entry (ROE) to Sites #1, #2 and #3. Site #1, the primary site, is located off U.S. Highway 1 in the vicinity of Pease ARNG Base and the current Army Reserve Center. It consists of two parcels, 4.5 acres and 6.5 acres. Neither parcel alone will meet Antiterrorism Force Protection (ATFP) requirements, therefore, ROE's for both parcels, totaling approximately 11 acres is required. Site #3 is the preferred alternate consisting of approximately 8.4 acres located in the vicinity of Site #1. Site #3 contains the minimum buildable acres required to accommodate this project. Site #2 is the second alternate site consisting of approximately 15.36 acres located off U.S. Highway 1, approximately 7 miles south of Pease, NH. The land is required to support FY 2010 BRAC05 Military Construction Project #64919. The Defense Authorization Act of 2010 authorizes the Army Reserve to construct the Army Reserve facility adjacent to or in the vicinity of Pease Air National Guard Base, Pease, New Hampshire.

3. The Rights of Entry will allow the Army time to accomplish the appropriate environmental and engineering feasibility studies to determine site suitability prior to acquisition.

4. My points of contacts are: MILCON Project Officer, LTC Sean McDonald, DAIM-ODR, 703-602-8623, e-mail: sean.p.mcdonald@conus.army.mil, and for Real Estate it is Marcia DeVille, DAIM-ODR 703-602-5492 e-mail: Marcia.deville@conus.army.mil.

DONATO M. DINELLO
GS, COL
Chief, Army Reserve Division

Encl
as

CF
US Army Corps of Engineers, CELRL-RE-M

Printed on Recycled Paper

Appendix D
Record of Non-Applicability

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General Conformity – Record of Non-Applicability

Project/Action Name: Construction and Operation of an Armed Forces Reserve Center and Implementation of BRAC 05 Realignment Actions in the vicinity of the Pease Air National Guard Base, New Hampshire

Project/Action Point of Contact: Laura Dell'Olio
Environmental/NEPA Specialist
Innovar Environmental Inc., supporting
99th RSC, DPW ENV
5231 South Scott Plaza
Fort Dix, NJ 08640
609-562-7661
Laura.dellolio@usar.army.mil

Begin Date: April 2011

End Date: January 2012

General Conformity under the Clean Air Act, Section 176 has been evaluated for the project described above according to the requirements of 40 CFR 93, Subpart B. The General Conformity Rule applies to federal actions occurring in regions designated as being in non-attainment for the NAAQS or attainment areas subject to maintenance plans (maintenance areas). Threshold (*de minimis)* rates of emissions have been established for federal actions with the potential to have significant air quality impacts. If a project/action located in an area designated as non-attainment or maintenance exceeds these *de minimis* levels, a general conformity analysis is required. Rockingham County is designated as a moderate ozone (8-hour) non-attainment area. Because ozone forms from other emissions, the analysis focuses on ozone precursors, volatile organic compounds (VOCs) and nitrogen oxides (NO_X). The region is in attainment for other criteria pollutants.

A General Conformity Analysis of this project/action is not required because maximum annual direct and indirect emissions from this project/action have been estimated for all alternatives as:

VOCs 1.76 tons peak construction and 0.01 tons per year of operation.

NO_X 10.9 tons peak construction and 0.14 tons per year of operation.

These are below the *de minimis* levels established in 40 CFR 93.153(b) of:

VOCs 100 tons per year.

NO_X 100 tons per year.

Furthermore, the project/ action is not considered regionally significant under 40 CFR 93.153(i). Rockingham County is in attainment for criteria pollutants (carbon monoxide, lead, particulate matter (10 micron diameter), particulate matter (2.5 micron diameter), and sulfur dioxide) and, therefore, these pollutants are not subject to conformity review.

Supporting documentation and emission estimates can be found in Section 4.4 and Appendix D of the Environmental Assessment document.

JOSE E. CEPEDA
Colonel, U.S. Army Reserve
Regional Engineer

TABLE OF CONTENTS

TABLE OF CONTENTS **3**
1.0 PROPOSED ACTION **4**
2.0 CALCULATION OF EMISSIONS **5**
2.1 Mobile Sources 5
2.2 Construction-Related Emissions 5
2.0 CONCLUSION **6**

LIST OF ATTACHMENTS

Attachment 1: Model Results

GENERAL CONFORMITY REVIEW (GCR)

CONSTRUCTION AND OPERATION OF ARMED FORCES RESERVE CENTER AND IMPLEMENTATION OF BRAC 05 REALIGNMENT ACTIONS IN THE VICINITY OF THE PEASE AIR NATIONAL GUARD BASE, NEW HAMPSHIRE

1.0 PROPOSED ACTION

From April 2011 through January 2012, the U.S. Army Reserve (USAR) proposes to construct an Armed Forces Reserve Center (AFRC) and associated facilities on land in the vicinity of the Pease Air National Guard Base, New Hampshire.

This section describes the Army's Proposed Action for implementing the BRAC Commission's recommendations for USAR components in New Hampshire. The following are the BRAC Commission's recommendations for New Hampshire (BRAC Commission 2005):

> "Close Paul Doble Army Reserve Center in Portsmouth, NH, and relocate units to a new Armed Forces Reserve Center and associated training and maintenance facilities adjacent to Pease Air National Guard Base, NH, if the Army is able to acquire suitable land for the construction of the facilities. The new AFRC and complex will have the capability to accommodate New Hampshire National Guard units from the following New Hampshire ARNG Armories: Rochester, Portsmouth, Somersworth and Dover, NH, if the state decides to relocate those National Guard units."

In April 2009, land proposed for acquisition and construction of the Armed Forces Reserve Center (AFRC) adjacent to the Pease Air National Guard Base was no longer available to the Government. In Public Law No: 111-84, the National Defense Authorization Act for Fiscal Year 2010, language was subsequently adopted to revise the BRAC recommendation as follows:

> "The Secretary of the Army may use funds appropriated pursuant to the authorization of appropriations in section 2703 of the Military Construction Authorization Act for Fiscal Year 2009 (division B of Public Law 110-417; 122 Stat. 4715) for the purpose of constructing an Armed Forces Reserve Center at Pease Air National Guard Base, New Hampshire, to construct instead an Armed Forces Reserve Center in the vicinity of Pease Air National Guard Base at a location determined by the Secretary to be in the best interest of national security and in the public interest."

Because the Army was unable to acquire land adjacent to Pease Air National Guard Base, the USAR proposes to acquire suitable land and construct a new AFRC and related facilities in the vicinity of the Pease Air National Guard Base in New Hampshire to support the BRAC-directed changes in force structure.

No new significant stationary sources will be added during operation of the proposed facility. The general conformity review for this project pertains only to construction-related emissions and facility space heating. The emissions types of interest are volatile organic compounds (VOCs) and nitrogen oxides (NO_X).

2.0 CALCULATION OF EMISSIONS

2.1 Mobile Sources

The Preferred Alternative site is approximately 3.4 miles driving distance from the Pease Air National Guard Base and approximately 2.0 driving miles from the Paul A. Doble USARC. Because personnel will be commuting from multiple locations in the area, the proposed action will not cause a significant increase in the daily and/or weekend commuting distances to the proposed AFRC. Additionally, the annual mileage driven by Government Owned Vehicles is not expected to increase significantly. Therefore, emissions from mobile sources are not expected to increase significantly.

2.2 Construction-Related Emissions

The proposed project will include a 20,833 sq ft AFRC and a 610 sq ft unheated storage building. The project will also include 6,750 sq ft for organizational parking.

The U.S. Air Force Air Conformity Application Model (ACAM), version 4.4.5, was used to estimate construction-related emissions and facility space heating emissions. For construction related-emissions, ACAM splits facility construction into two phases; Phase 1 is grading and Phase 2 is the actual construction activity. The following data were input into the model:

- Gross Sq ft Office/Employment Units – 21,433 sq ft
    - AFRC – 20,833 sq ft
    - Storage Bldg. – 610 sq ft
- Duration of Phase 1 – 30 days
- Gross Area to be Graded – 0.94 acres (includes proposed buildings and parking area)
    - Buildings – 21,433 sq ft (0.49 acres)
        - AFRC – 20,833 sq ft
        - Storage Bldg. – 610 sq ft
    - Parking – 19,602 sq ft (0.45 acres)
        - Organizational Parking – 6,534 sq ft (0.15 acre)
        - POVs, handicapped parking, walkways, access roads – 13,068 sq ft (0.30) acres)
- Soil Piles – covered or watered twice daily
- Loads – Secure Cover
- Exposed Surface/Grading – watered with frequency, keeping soil moist at all times

- Truck Hauling Road – unpaved and watered twice daily
- Start Date of Construction – 3rd Quarter 2010
- End Date of Construction – 1st Quarter 2012
- Duration of Phase 2 – 450 days
- Total Acres Paved with Asphalt – 0.45 acres
    - Organizational Parking – 6,534 sq ft (0.15 acres)
    - POVs, handicapped parking, walkways, access roads – 13,068 sq ft (0.30 acres)

The model calculates emissions for the following activities:

- Grading Equipment Emissions (pounds/day, assume 1 grader, 1 wheeled and 1 tracked loader/grader per 10 acres. All equipment is diesel powered and used 6 hours per day)
- Emissions Due to Construction Worker Trips (based on 0.42 trip per 1,000 sq ft-day)
- Stationary Equipment Emissions (based on sq ft to be constructed during Phase 2, assume 2 pieces of gasoline-powered equipment per 10,000 sq ft, equipment used 6 hours per day, and equipment average horsepower of 10 hp each)
- Mobile Equipment Emissions (mobile equipment used during Phase 2 construction, assume 2 pieces of diesel-powered equipment per 10,000 sq ft and equipment used 6 hours per day)
- Grading Operations Emissions (pounds/day, assume one storage pile on 1/5 of an acre per 10 acres graded, 3 pieces of heavy equipment per day per 10 acres graded)
- Architectural Coating Emissions (based on square root of gross sq ft of non-residential building space)
- Daily VOC Emissions from Asphalt paving (based on total acres to be paved)
- Facility Heating (based on regional heating energy requirements and emission factors for natural gas)

Based on ACAM, an increase of 10.9 tons of NO_X and 1.76 tons of VOCs would be expected due to the construction project (see Attachment 1) in 2011, the highest annual emissions during construction. The annual increase in NO_X and VOC emissions will be 0.14 tons per year and 0.01 tons per year, respectively, during operation of the proposed AFRC (See Attachment 1). These increases are well below the conformity threshold values.

2.0 CONCLUSION

Total annual emissions generated by the AFRC project are expected to peak with the release of 10.9 tons of NO_X and 1.76 tons of VOCs due to construction-related emissions in 2011, as well as an ongoing increase of 0.14 ton/year of NO_X and 0.01 ton/year of VOC during operation of the proposed AFRC. These increases are well below the conformity threshold values. Therefore, a general conformity review is deemed unnecessary at this time.

Attachment 1
Model Results

Attachment 1 - ACAM Output

SOURCE CATEGORY	CO	NO_X	SO_2	VOC	PM_{10}
Emissions (tpy)					
2010					
Area Sources					
Other Phase I Const. – Grading Operations	0.00	0.00	0.00	0.00	0.34
Other Phase II Const. – Acres Paved	0.00	0.00	0.00	0.00	0.00
Other Phase II Const. – Mobile & Stationary Eqip. (Non-Aircraft Facilities)	4.46	4.53	0.61	0.69	0.38
Other Phase II Const. – Non-Res. Arch. Ctgs.	0.00	0.00	0.00	0.05	0.00
Other Phase II Const. – Res. Arch. Ctgs.	0.00	0.00	0.00	0.00	0.00
Other Phase II Const. – Workers Trips	0.13	0.01	0.00	0.01	0.00
Other Phase I Const. – Grading Equipment	0.01	0.02	0.00	0.00	0.00
Total	**4.60**	**4.56**	**0.61**	**0.75**	**0.72**
2010 Total	**4.60**	**4.56**	**0.61**	**0.75**	**0.72**
2011					
Area Sources					
Other Phase II Const. – Workers Trips	0.31	0.02	0.00	0.01	0.00
Other Phase II Const. – Acres Paved	0.00	0.00	0.00	0.00	0.00
Other Phase II Const. – Mobile & Stationary Eqip. (Non-Aircraft Facilities)	10.67	10.84	1.46	1.64	0.92
Other Phase II Const. – Non-Res. Arch. Ctgs.	0.00	0.00	0.00	0.11	0.00
Other Phase II Const. – Res. Arch. Ctgs.	0.00	0.00	0.00	0.00	0.00
Total	**10.98**	**10.86**	**1.46**	**1.76**	**0.92**
Point Sources					
Other Const. – Facility Heating	0.02	0.02	0.00	0.00	0.00
Total	**0.02**	**0.02**	**0.00**	**0.00**	**0.00**
2011 Total	**11.00**	**10.88**	**1.46**	**1.76**	**0.92**
2012					
Area Sources					
Other Phase II Const. – Mobile & Stationary Eqip. (Non-Aircraft Facilities)	8.63	8.76	1.18	1.33	0.74
Other Phase II Const. – Non-Res. Arch. Ctgs.	0.00	0.00	0.00	0.09	0.00
Other Phase II Const. – Res. Arch. Ctgs.	0.00	0.00	0.00	0.00	0.00
Other Phase II Const. – Workers Trips	0.25	0.01	0.00	0.01	0.00
Other Phase II Const. – Acres Paved	0.00	0.00	0.00	0.00	0.00
Total	**8.88**	**8.77**	**1.18**	**1.43**	**0.74**
Mobile Sources					
Off-Road Base Support Vehicles	0.09	0.04	0.00	0.01	0.00
Total	**0.09**	**0.04**	**0.00**	**0.01**	**0.00**
Point Sources					
Miscellaneous Point Sources	0.00	0.00	0.00	0.00	0.00
Other Const. – Facility Heating	0.08	0.10	0.00	0.00	0.01
Residential Space Heating	0.00	0.00	0.00	0.00	0.00
Total	**0.08**	**0.10**	**0.00**	**0.00**	**0.01**
2012 Total	**9.05**	**8.91**	**1.18**	**1.44**	**0.75**

Attachment 1 - ACAM Output

SOURCE CATEGORY	CO	NO_X	SO_2	VOC	PM_{10}
Emissions (tpy)					
2013					
Mobile Sources					
Off-Road Base Support Vehicles	0.09	0.04	0.00	0.01	0.00
Total	**0.09**	**0.04**	**0.00**	**0.01**	**0.00**
Point Sources					
Miscellaneous Point Sources	0.00	0.00	0.00	0.00	0.00
Other Const. – Facility Heating	0.08	0.10	0.00	0.00	0.01
Residential Space Heating	0.00	0.00	0.00	0.00	0.00
Total	**0.08**	**0.10**	**0.00**	**0.00**	**0.01**
2012 Total	**0.17**	**0.14**	**0.00**	**0.01**	**0.01**

Appendix E
Coastal Zone Management Act Consistency Determination

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

3 December 2010

Mr. Chris Williams
Federal Consistency Coordinator
Coastal Program
Pease Field Office
222 International Drive, Suite 175
Portsmouth, NH 03801

RE: Federal Coastal Zone Management Act Consistency Determination for Construction and Operation of an Armed Forces Reserve Center in Portsmouth, New Hampshire

Mr. Williams,

This document provides the New Hampshire Coastal Program (NHCP) with the U.S. Army consistency determination under CZMA § 307(c)(2) and 15 C.F.R. part 930, subpart C, for the Construction and Operation of an Armed Forces Reserve Center in Portsmouth, New Hampshire. The information in this consistency determination is provided pursuant to 15 C.F.R. § 930.39.

This activity is described in Sections 2 and 3 of the Environmental Assessment that was published for public review between October 5, 2010 and November 20, 2010.

The U.S. Army has determined that the Construction and Operation of an Armed Forces Reserve Center in Portsmouth, New Hampshire affects the land or water uses or natural resources of the state of New Hampshire in the following manner: The preferred alternative (Portsmouth) and Alternative 2 (Exeter, if chosen) would have a minor impact to non-tidal, freshwater wetlands. No direct impacts to resources of primary concern are associated with the proposed federal project. Each of the 3 potential sites evaluated in the EA would result in the minor reduction of upland forest habitat that is not being managed for management and conservation of wildlife resources.

The NHCP contains the following applicable enforceable policies:

1. Protect and preserve and, where appropriate, restore the water and related land resources of the coastal and estuarine environments. The resources of primary concern are coastal and estuarine waters, tidal and freshwater wetlands, beaches, sand dunes, and rocky shores.

2. Manage, conserve and, where appropriate, undertake measures to maintain, restore, and enhance the fish and wildlife resources of the state.

4. Undertake oil spill prevention measures, safe oil handling procedures and, when necessary, expedite the cleanup of oil spillage that will contaminate public waters. Institute legal action to collect damages from liable parties in accordance with state law.

5. Encourage investigations of the distribution, habitat needs, and limiting factors of rare and endangered animal species and undertake conservation programs to ensure their continued perpetuation.

6. Identify, designate, and preserve unique and rare plant and animal species and geologic formations which constitute the natural heritage of the state. Encourage measures, including acquisition strategies, to ensure their protection.

8. Preserve the rural character and scenic beauty of the Great Bay estuary by limiting public investment in infrastructure within the coastal zone in order to limit development to a mixture of low and moderate density.

9. Reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to preserve the natural and beneficial value of floodplains, through the implementation of the National Flood Insurance Program and applicable state laws and regulations, and local building codes and zoning ordinances.

10. Maintain the air resources in the coastal area by ensuring that the ambient air pollution level, established by the New Hampshire State Implementation Plan pursuant to the Clean Air Act, as amended, is not exceeded.

11. Protect and preserve the chemical, physical, and biological integrity of coastal water resources, both surface and groundwater.

13. Allow only water dependent uses and structures on state properties in Portsmouth-Little Harbor, Rye Harbor, and Hampton-Seabrook Harbor, at state port and fish pier facilities and state beaches (except those uses or structures which directly support the public recreation purpose). For new development, allow only water dependent uses and structures over waters and wetlands of the state. Allow repair of existing over-water structures within guidelines. Encourage the siting of water dependent uses adjacent to public waters.

15. Support the preservation, management, and interpretation of historic and culturally significant structures, sites and districts along the Atlantic coast and in the Great Bay area.

The remaining enforceable policies are not applicable to this project.

Based upon the following information, data and analysis the U.S. Army finds that the Construction and Operation of an Armed Forces Reserve Center in Portsmouth, New Hampshire is consistent to the maximum extent practicable with the enforceable policies of the NHCP. The documents listed below support the determination of consistency with the applicable enforceable policies:

- Environmental Assessment for Proposed Construction of an Armed Forces Reserve Center and Implementation of BRAC 05 Realignment Actions in the Vicinity of the Pease Air National Guard Base, New Hampshire; and
- NH Coastal Zone Management Act Consistency Determination Document (EA, Appendix E).

Pursuant to 15 C.F.R. § 930.41, the NHCP has 60 days from the receipt of this letter in which to concur with or object to the consistency determination, or to request an extension. Concurrence will be presumed if the NHCP's response is not received by the U.S. Army on the 60th day from receipt of this letter. Please submit your response to: Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix NJ 08640-5000 or by email at Amanda.w.murphy@usar.army.mil. If you have any questions, please contact Ms. Murphy at 609-521-8047.

Sincerely,

Jeffrey M. Hrzic
Chief, Environmental Division

NEW HAMPSHIRE COASTAL ZONE MANAGEMENT ACT CONSISTENCY DETERMINATION

The Army is preparing an Environmental Assessment (EA) for Proposed Construction of an Armed Forces Reserve Center (AFRC) and Implementation of BRAC 05 Realignment Actions in the vicinity of the Pease Air National Guard Base, New Hampshire. The following three alternative sites are under consideration by the Army for locating the new AFRC, and are evaluated in the EA:

- Preferred Alternative (Portsmouth): 1900 Lafayette Road, Portsmouth, NH
- Alternative 1 (Rye): 295, 311, and 355 Lafayette Road, Rye, NH
- Alternative 2 (Exeter): 22 Continental Drive, Exeter, NH

The EA provides a description of each of the considered actions and the potential affects to coastal resources. Each of these alternatives would be located in the New Hampshire coastal zone and each would be consistent to the maximum extent practicable with the enforceable policies of the New Hampshire Coastal Program, as described in the following sections.

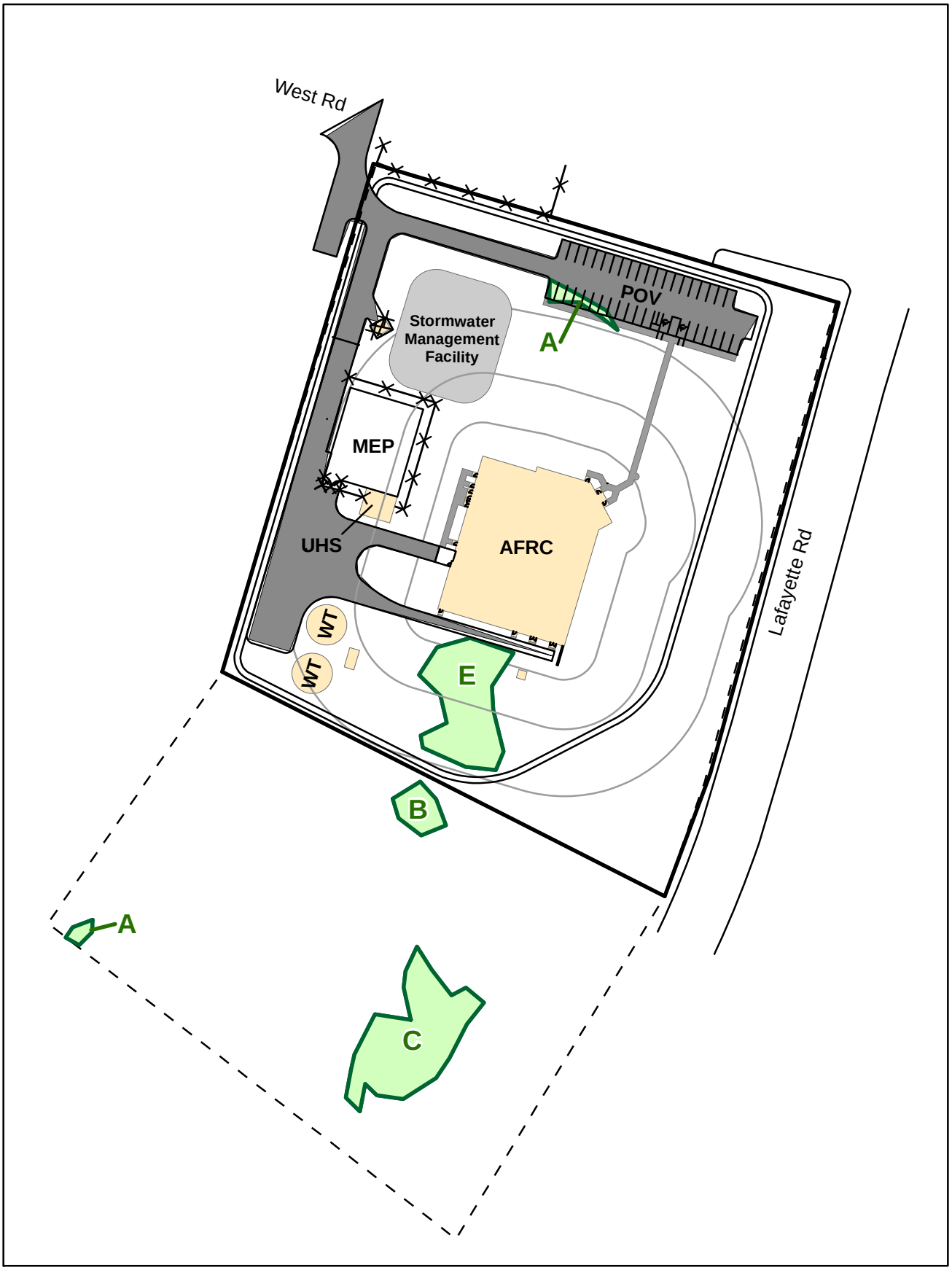
PROTECTION OF COASTAL RESOURCES

1. Protect and preserve and, where appropriate, restore the water and related land resources of the coastal and estuarine environments. The resources of primary concern are coastal and estuarine waters, tidal and freshwater wetlands, beaches, sand dunes, and rocky shores.

The considered actions are consistent with this enforceable policy to the maximum extent practicable. No beaches, sand dunes, or rocky shores would be affected by any of the considered alternatives.

Preferred Alternative (Portsmouth)

The planned site design would avoid direct impacts to any of the resources of primary concern with the exception of freshwater wetlands. A wetland delineation was conducted that determined that there are five emergent wetlands on the property (Figure 1, Table 1) and there would be unavoidable impacts to two of these wetlands from construction. Wetland A would be completely filled and Wetland E would be slightly encroached to establish the cleared setback area.



Building
Pavement
Property Boundary
Preferred Alternative Site
Wetlands

0 25 50 100
Feet

FIGURE 1
WETLANDS IDENTIFIED ON THE PREFERRED ALTERNATIVE SITE
CZMA Consistency Determination - Pease, NH

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Table 1 – Wetlands identified on the Preferred Alternative Site.

Wetland	Wetland Size (acres)	Wetland Impacts (acres)
Wetland A	0.017	0.017
Wetland B	0.038	0.000
Wetland C	0.226	0.000
Wetland D	0.008	0.000
Wetland E	0.181	0.022

It was determined the freshwater wetlands that would be affected were created as a result of past human activity, are dominated by exotic pest plant species. A Functions and Values Assessment was completed and determined that the ecological functions of the wetlands are limited due to small size and limited hydrologic connections to other wetlands or natural habitat areas.

The main function of these wetlands is to pond water following precipitation events and this function would be replaced onsite through post-construction stormwater controls. Prior to construction, the Army would apply for authorization for unavoidable impacts to waters of the United States from the U.S. Army Corps of Engineers and the State of New Hampshire through the New Hampshire Regional General Permit program and also would apply for a New Hampshire State Wetlands permit. Construction work would comply with all permit conditions. Additional project design elements and best management practices (BMPs) would be implemented to minimize the potential for indirect impacts. BMPs implemented would be consistent with the New Hampshire Stormwater Manual (http://des.nh.gov/organization/divisions/water/stormwater/manual.htm).

The Preferred Alternative site is within 1 mile of two surface waters that have been designated as impaired, but that have not yet had Total maximum Daily Loads (TMDLs) established by the NHDES:

- **Upper Sagamore Creek** is impaired from elevated levels of anthropogenic compounds including acenaphthylene, aluminum, arsenic, benzo(A)pyrene (PAHS), benzo(A)anthracene, cadmium, chrysene (C1-C), Copper, bibenz(A,H)anthracene, fluoranthene, lead, mercury, nickel, phenanthrene, pyrene, , trans-nonachlor, polychlorinated biphenyls, and dioxins. This stream also is in impairment due to high

levels of Enterococcus and fecal coliform bacteria. Upper Sagamore Creek also was determined to be impaired as a result of estuarine bioassessments.

- **Pickering Brook** is impaired from elevated levels of polychlorinated biphenyls, mercury, and dioxins. This stream also is in impairment due to high levels of Enterococcus and fecal coliform bacteria. Pickering Brook also was determined to be impaired as a result of estuarine bioassessments.

Because TMDLs have not been established for these waters, new projects must be designed, constructed, and operated such that no additional pollutant loading that would contribute further to the impairment of the impaired waters. Appropriate BMPs would be implemented to minimize the potential for erosion and sediment transport during construction and to prevent off-site transport of contaminants during operation of the facility. With implementation of appropriate BMPS, no further degradation of designated impaired waters would occur.

Alternative 1 (Rye)

The site design would avoid direct impacts to any of the resources of primary concern, as none of these resources occur on the property. Additional project design elements and BMPs would be implemented to minimize the potential for indirect impacts from stormwater run-off. BMPs implemented would be consistent with the New Hampshire Stormwater Manual (http://des.nh.gov/organization/divisions/water/stormwater/manual.htm).

Berrys Brook is within 1 mile of the Alternative 1 site and has been designated as impaired, but that has not yet had Total maximum Daily Loads (TMDLs) established by the NHDES. Berrys Brook is impaired due to low levels of dissolved oxygen, acidity (low pH) and elevated levels of E. coli and Chlorophyll-a. Because TMDLs have not been established for these waters, new projects must be designed, constructed, and operated such that no additional pollutant loading that would contribute further to the impairment of the impaired waters. Appropriate BMPs would be implemented to minimize the potential for erosion and sediment transport during construction and to prevent off-site transport of contaminants during operation of the facility. With implementation of appropriate BMPS, no further degradation of designated impaired waters would occur.

Alternative 2 (Exeter)

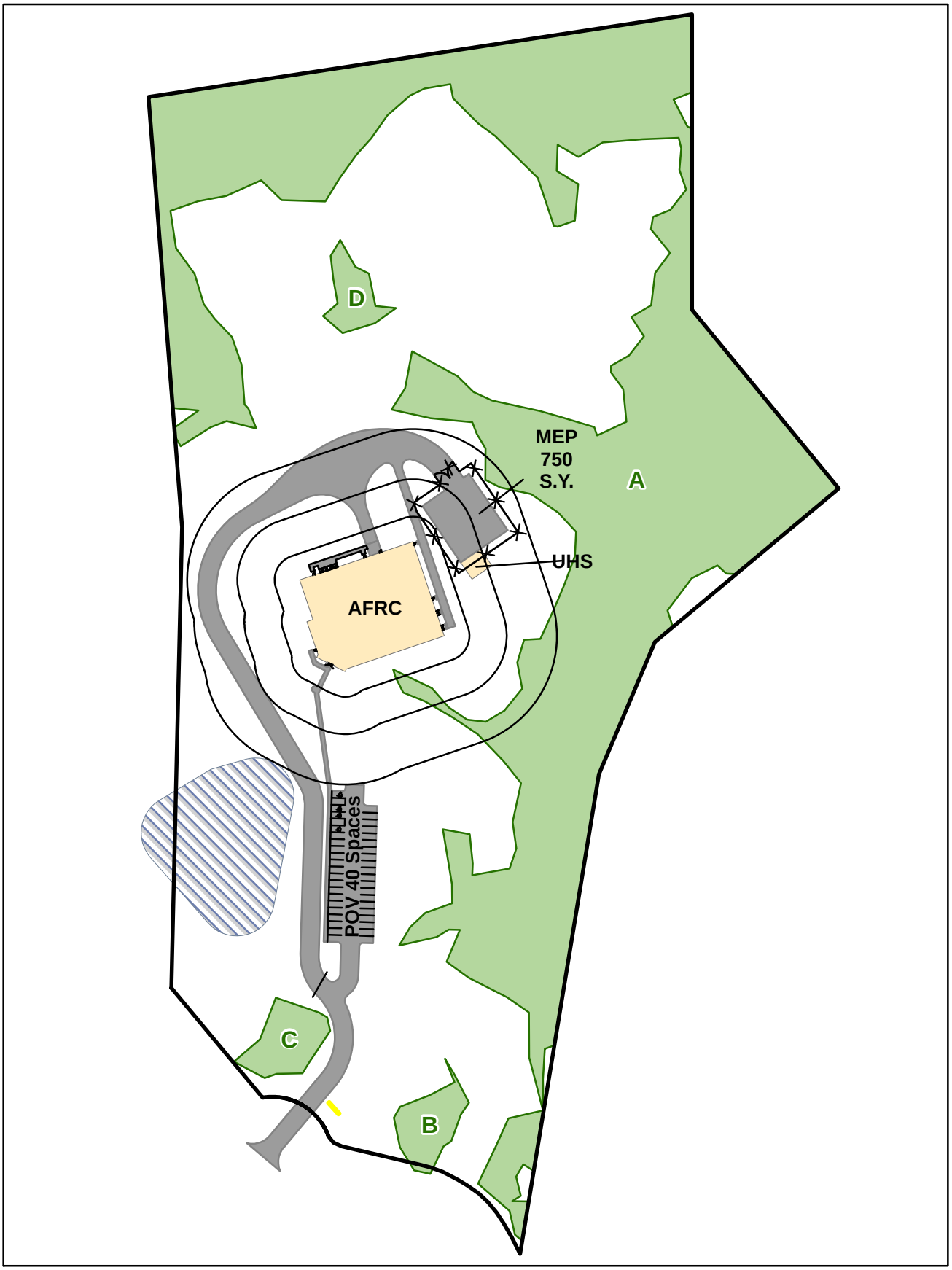
The planned site designs would avoid direct impacts to any of the resources of primary concern with the exception of freshwater wetlands. A wetland delineation was conducted that determined that there are five emergent wetlands on the property (Figure 2, Table 2).

Table 2 – Wetlands identified on the Alternative 2 Site.

Wetland Number	Wetland Size (acres)	Wetland Impacts (acres)
Wetland A [a]	7.289	0.005
Wetland B	0.159	None
Wetland C	0.173	None
Wetland D	0.119	None
a Denotes wetland acreage onsite, but wetland is larger and extends offsite		

Additional project design elements and BMPs would be implemented to minimize the potential for indirect impacts from stormwater run-off. BMPs implemented would be consistent with the New Hampshire Stormwater Manual (http://des.nh.gov/organization/divisions/water/stormwater/manual.htm).

The little River is within 1 mile of the Alternative 2 site and has been designated as impaired, but that has not yet had Total maximum Daily Loads (TMDLs) established by the NHDES. The Little River is impaired due to low levels of dissolved oxygen and acidity (low pH). Because TMDLs have not been established for these waters, new projects must be designed, constructed, and operated such that no additional pollutant loading that would contribute further to the impairment of the impaired waters. Appropriate BMPs would be implemented to minimize the potential for erosion and sediment transport during construction and to prevent off-site transport of contaminants during operation of the facility. With implementation of appropriate BMPS, no further degradation of designated impaired waters would occur.



Property Boundary
Wetland
Building
Pavement
Garrision House Buffer
Monument Sign

0 25 50 100
Feet

FIGURE 2
WETLANDS IDENTIFIED ON THE ALTERNATIVE 2 SITE
CZMA Consistency Determination - Pease, NH

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2. Manage, conserve and, where appropriate, undertake measures to maintain, restore, and enhance the fish and wildlife resources of the state.

The considered actions are consistent with this enforceable policy to the maximum extent practicable.

Preferred Alternative (Portsmouth)

Because of past disturbance from mineral extraction activities and the preponderance of exotic invasive plant species, the Portsmouth site provides little value for wildlife resources and no fish resource value. While there would be unavoidable encroachment into low-quality wetlands, development of this site would not affect management and conservation of fish and wildlife resources.

No indirect impacts to nearby impaired waters, discussed under Enforceable Policy 1 would occur. Implementation of appropriate BMPs would prevent the project from further contributing to impairment in Upper Sagamore Creek and Pickering Brook.

Alternative 1 (Rye)

Site design would maximize the amount of forest retained on the site following development of the AFRC. There would be an unavoidable reduction in upland forest habitat within the coastal zone as a result of this alternative. However, the habitat that would be lost is not currently managed for fish and wildlife resources, so the reduction in upland forest habitat would not affect management and conservation of wildlife resources.

Development of this site would not affect management and conservation of fish resources because there would be no impacts to surface water quality or quantity or to riparian areas that could contribute value to fish habitat.

No indirect impacts to nearby impaired waters, discussed under Enforceable Policy 1 would occur. Implementation of appropriate BMPs would prevent the project from further contributing to impairment in Berrys Brook.

Alternative 2 (Exeter)

Site design would maximize the amount of forest retained on the site following development of the AFRC. There would be an unavoidable reduction in upland forest habitat within the coastal zone as a result of this alternative. However, the habitat that

would be lost is not currently managed for fish and wildlife resources, so the reduction in upland forest habitat would not affect management and conservation of wildlife resources.

Development of this site would not affect management and conservation of fish resources because there would be no impacts to surface water quality or quantity or to riparian areas that could contribute value to fish habitat.

No indirect impacts to nearby wetlands and impaired waters, discussed under Enforceable Policy 1 would occur. Implementation of appropriate BMPs would prevent the project from further contributing to impairment in the Little River system.

3. Regulate the mining of sand and gravel resources in offshore and onshore locations so as to ensure protection of submerged lands, and marine and estuarine life. Ensure adherence to minimum standards for restoring natural resources impacted from onshore sand and gravel operations.

The considered actions are consistent with this enforceable policy. None of the considered alternatives would include sand and gravel mining. This enforceable policy would not apply to the considered actions.

4. Undertake oil spill prevention measures, safe oil handling procedures and, when necessary, expedite the cleanup of oil spillage that will contaminate public waters. Institute legal action to collect damages from liable parties in accordance with state law.

The considered actions are consistent with this enforceable policy. Vehicle maintenance would not occur onsite under any of the considered actions. There would be no potential for spills of oils, lubricants, or other fluids to occur.

5. Encourage investigations of the distribution, habitat needs, and limiting factors of rare and endangered animal species and undertake conservation programs to ensure their continued perpetuation.

The considered actions are consistent with this enforceable policy to the maximum extent practicable. Existing databases (federal and state) and published natural history information were reviewed to identify species with potential to occur in the vicinity of considered alternatives. Each site was investigated to determine whether rare and endangered animal species known to occur in the vicinity, or their potentially suitable habitat, occurred within proposed project boundaries. The Army coordinated with the United States Fish and Wildlife Service and the New Hampshire Natural Heritage Program with regard to protected species that may occur on the properties.

Preferred Alternative (Portsmouth)

Habitats on the Preferred Alternative site have been degraded as a result of previous human activity (sand and gravel extraction). A site reconnaissance determined that the property does not provide suitable habitat for any of the rare and endangered animal species known from the township and county.

Alternative 1 (Rye)

A portion of the site has been altered and paved as a result of previous human activity. A site reconnaissance determined that the remainder of the property does not provide suitable habitat for any of the rare and endangered animal species known from the area.

Alternative 2 (Exeter)

This site contains maturing forested wetlands that extend into a large off-site wetland complex in the Little River Conservation Area. These wetlands may provide suitable habitat for rare and endangered species, at least during portions of the year. A site reconnaissance determined that the remainder of the property does not provide suitable habitat for any of the rare and endangered animal species known from the area.

The proposed site design was modified to avoid impacts to wetlands to the extent practicable. Because wetland impacts would be limited to the extreme distal portion of a finger projection of wetland, the potential for impacts to protected species would be minimal.

6. Identify, designate, and preserve unique and rare plant and animal species and geologic formations which constitute the natural heritage of the state. Encourage measures, including acquisition strategies, to ensure their protection.

The considered actions are consistent with this enforceable policy to the maximum extent practicable. Existing state databases and published natural history information were reviewed to identify species with potential to occur in the vicinity of considered alternatives. Each site was investigated to determine whether unique and rare plant and animal species known to occur in the vicinity, or their potentially suitable habitat, or unique and rare geologic formations occurred within proposed project boundaries. The Army coordinated with the New Hampshire Natural Heritage Program with regard to unique and rare species that may occur on the properties.

Preferred Alternative (Portsmouth)

Habitats and geologic formations on the Preferred Alternative site have been degraded as a result of previous human activity (sand and gravel extraction). A site reconnaissance determined that the property does not provide suitable habitat for any of the rare and unique plant and animal species known from the area and the site contains no rare and unique geologic features.

Alternative 1 (Rye)

Review of existing information and site reconnaissance determined that this site would provide potentially suitable habitat for black maple, which is tracked by the State of New Hampshire. However, the species was not observed during site investigations. The site does not provide potentially suitable habitat for other unique or rare plant and animal species known to occur in the vicinity. No unique or rare geologic formations exist on the site. No impacts to these resources would result from development of the site.

Alternative 2 (Exeter)

This site contains maturing forested wetlands that extend into a large off-site wetland complex in the Little River Conservation Area. These wetlands may provide suitable habitat for rare and endangered species, at least during portions of the year. A site reconnaissance determined that the remainder of the property does not provide suitable habitat for any of the rare and endangered animal species known from the area.

The proposed site design was modified to avoid impacts to wetlands to the extent practicable. Because wetland impacts would be limited to the extreme distal portion of a finger projection of wetland, the potential for impacts to protected species would be minimal.

RECREATION AND PUBLIC ACCESS

7. Provide a wide range of outdoor recreational opportunities including public access in the seacoast through the maintenance and improvement of the existing public facilities and the acquisition and development of new recreational areas and public access.

The considered actions are consistent with this enforceable policy. None of the considered alternatives would affect outdoor recreational opportunities. This enforceable policy would not apply to the considered actions.

MANAGING COASTAL DEVELOPMENT

8. Preserve the rural character and scenic beauty of the Great Bay estuary by limiting public investment in infrastructure within the coastal zone in order to limit development to a mixture of low and moderate density.

All of the considered actions are consistent with this enforceable policy. Each considered action would be compatible with low and moderate density development. The project would not create any new permanent jobs; the project only would just relocate existing jobs to a nearby location. Because there would be no change in the number of personnel assigned to the units and no associated relocation of personnel and families into or out of the area, there would be no increase in demand for goods and services and the project would not induce additional development.

9. Reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to preserve the natural and beneficial value of floodplains, through the implementation of the National Flood Insurance Program and applicable state laws and regulations, and local building codes and zoning ordinances.

All of the considered actions are consistent with this enforceable policy. None of the considered alternatives would encroach upon floodplains or flood-prone areas. Post-construction stormwater controls, consistent with the New Hampshire Stormwater Manual would ensure that runoff rates do not increase as a result of increased impervious area from implementation of the alternative.

Construction of a new AFRC at any of the alternative sites would not induce growth because there would be no change in the number of personnel assigned to the units and no relocation of personnel and families into the area. Therefore, the action would not contribute to incidental development that could occur in floodplains or flood-prone areas.

10. Maintain the air resources in the coastal area by ensuring that the ambient air pollution level, established by the New Hampshire State Implementation Plan pursuant to the Clean Air Act, as amended, is not exceeded.

The considered actions are consistent with this enforceable policy to the maximum extent practicable.

The portion of Rockingham County where the three considered properties occur is within the Boston-Manchester-Portsmouth area within the Merrimack Valley-Southern New Hampshire Intrastate Air Quality Control Region, which is designated as nonattainment for 8-hour ozone standards. However, air quality data from 2002 to the present time indicate that the Boston-Manchester-Portsmouth moderate 8-hour ozone nonattainment area had attained the 8-hour standard for ozone standard at the end of the 2004 ozone season. The area remain designated as a nonattainment area for 8-hour ozone standards until the United States Environmental Protection Agency approves a maintenance plan and makes the determination that the area had met the other requirements for redesignation. All other criteria within the region are in attainment.

A General Conformity Determination (GCD) supporting a Record of Non Applicability was completed because of the maintenance designation for ozone in the towns in Rockingham County. Because the action would be the same at each location, only a single GCD was prepared. The GCD found that there would be no exceedances of Ambient Air Quality Standards established in the New Hampshire State Implementation Plan under the Preferred Alternative, Alternative 1, or Alternative 2 Any impacts to air quality would be *de minimis*.

11. Protect and preserve the chemical, physical, and biological integrity of coastal water resources, both surface and groundwater.

The considered actions are consistent with this enforceable policy. Project design elements and best management practices (BMPs) would be implemented to minimize the potential for indirect impacts. Both construction BMPs and post-construction BMPS consistent with the New Hampshire Stormwater Manual would be implemented to minimize the potential for indirect impacts to surface water and groundwater resources.

The preferred Alternative site, the Alternative 1 site, and the Alternative 2 site are within one mile of designated impaired waters. While no direct impacts to any of these waters

would occur, there would be potential for indirect impacts to impaired waters under each alternative. Appropriate BMPs would be implemented to minimize the potential for erosion and sediment transport during construction and to prevent off-site transport of contaminants during operation of the facility. With implementation of appropriate BMPS, no further degradation of designated impaired waters would occur.

12. Ensure that the siting of any proposed energy facility in the coast will consider the national interest and will not unduly interfere with the orderly development of the region and will not have an unreasonable adverse impact on aesthetics, historic sites, coastal and estuarine waters, air and water quality, the natural environment and the public health and safety.

The considered actions are consistent with this enforceable policy. No energy facilities are included as part of any of the considered actions. This enforceable policy would not apply to the considered actions.

COASTAL DEPENDENT USES

13. Allow only water dependent uses and structures on state properties in Portsmouth-Little Harbor, Rye Harbor, and Hampton-Seabrook Harbor, at state port and fish pier facilities and state beaches (except those uses or structures which directly support the public recreation purpose). For new development, allow only water dependent uses and structures over waters and wetlands of the state. Allow repair of existing over-water structures within guidelines. Encourage the siting of water dependent uses adjacent to public waters.

The considered actions are consistent with this enforceable policy to the maximum extent practicable. None of the considered alternatives would result in encroachment on Portsmouth-Little Harbor, Rye Harbor, and Hampton-Seabrook Harbor, at state port and fish pier facilities and state beaches. Other wetlands and waters of the state occur on two of the three alternative sites and are discussed below.

Preferred Alternative (Portsmouth)

There would be unavoidable encroachment into freshwater wetlands under this alternative, as described under Enforceable Policy 1. Site design constraints to satisfy anti-terrorism/force protection set-back requirements minimized encroachment into wetlands, but to meet all requirements, some low-quality freshwater emergent wetlands would be directly impacted.

Alternative 1 (Rye)

No waters of the state or wetlands of the state occur on the alternative 1 site. There would be no impacts to these resources under this alternative.

Alternative 2 (Exeter)

There would be unavoidable encroachment into freshwater wetlands under this alternative, as described under Enforceable Policy 1. Site design constraints to satisfy anti-terrorism/force protection set-back requirements minimized encroachment into wetlands, but to meet all requirements, some moderate-quality freshwater forested wetlands would be directly impacted.

14. Preserve and protect coastal and tidal waters and fish and wildlife resources from adverse effects of dredging and dredge disposal, while ensuring the availability of navigable waters to coastal-dependent uses. Encourage beach renourishment and wildlife habitat restoration as a means of dredge disposal whenever compatible.

The considered actions are consistent with this enforceable policy. None of the considered alternatives would affect the resources identified in this enforceable policy. This enforceable policy would not apply to the considered actions.

PRESERVATION OF HISTORIC AND CULTURAL RESOURCES

15. Support the preservation, management, and interpretation of historic and culturally significant structures, sites and districts along the Atlantic coast and in the Great Bay area.

The considered actions are consistent with this enforceable policy.

Preferred Alternative (Portsmouth)

No historic or culturally significant resources occur on this site. The site has been highly disturbed from previous mining activities and any historic or culturally significant resources that may have existed on the site have been compromised or destroyed.

Alternative 1 (Rye)

No historic or culturally significant resources occur on this site. A cultural resource survey of the property was conducted and no historic or culturally significant resources were found.

Alternative 2 (Exeter)

A cultural resource survey of the property was conducted and identified potentially significant historic resources, recommended as eligible for listing on the NRHP, near the central southern boundary. The site design was modified to avoid this area and maintain a minimum 100-foot buffer around the potentially significant resources. Construction of the AFRC at the Exeter site, even with a 100-foot buffer around the N. Gilman Jr. Garrison House Site, would result in moderate to severe adverse impacts to this site.

MARINE AND ESTUARINE RESEARCH AND EDUCATION

16. Promote and support marine and estuarine research and education that will directly benefit coastal resource management.

The considered actions are consistent with this enforceable policy. None of the considered sites would affect marine or estuarine research. This enforceable policy would not apply to the considered actions.

Appendix F
Government and Agency Correspondence

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DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

January 22, 2010

REPLY TO
ATTENTION OF

Real Estate Division

Mr. John P. Bohenko
City Manager
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801

Re: 1900 Lafayette Road, Portsmouth, NH

Dear Mr. Bohenko:

As you are probably aware, the Government has been seeking approximately six buildable acres of land in the area of Portsmouth, NH for construction of an Army Reserve Center. The above site at 1900 Lafayette Road is being considered as a potential site for this project. The property consists of two ownerships. One parcel is owned by the Estate of Michael Iafolla and the second parcel is owned by the Aphrodite Georgopoulos Revocable Trust. A map showing the location of the property is attached.

We would appreciate hearing from you regarding any questions or concerns regarding this site. Please call me at (978) 318-8585 or e-mail me at joseph.m.redlinger@usace.army.mil to discuss this site.

Sincerely,

Joseph M. Redlinger
Chief, Real Estate Division

Enclosure

Tax

CITY OF PORTSMOUTH

Municipal Complex
1 Junkins Avenue
Portsmouth, New Hampshire 03801
(603) 610-7200
Fax (603) 427-1526

Thomas G. Ferrini
Mayor

February 9, 2010

Joseph M. Redlinger, Chief
Real Estate Division
Department of the Army
New England District, Corps of Engineers
696 Virginia Road
Concord, MA 01742-2751

Re: 1900 Lafayette Road
Portsmouth, NH

Dear Mr. Redlinger:

City Manager John P. Bohenko provided the City Council and me with a copy of your letter dated January 22, 2010, regarding the Department of the Army's interest in two (2) parcels of land at 1900 Lafayette Road. These parcels total approximately 10.5 acres.

Please be advised that the City Council has reviewed this matter and is concerned with the federal government purchasing such a large tract of land along a major gateway of the City of Portsmouth. Our primary concern is this potential transaction represents significant opportunity costs in terms of future tax revenue and vibrancy of the proposed new Gateway District. In addition to the tax revenue implications, the opportunity to revitalize the corridor as envisioned will be negatively impacted as a result of this change.

From a financial perspective, the prime location and development potential of these parcels means this transaction would represent a very sizable cost to the City in terms of lost future revenues. Because the federal government is a non-taxable entity, this transaction would add ten and a half acres of prime developable land on Route 1 to the list of tax exempt properties in the City. Presently, 14% of the total property in Portsmouth is non-taxable, of which ten (10) parcels owned by the federal government already represent approximately $35 million in land value and a loss of $600,000 in annual tax revenue. To add more non-taxable land to Portsmouth's already burdened property tax list would not be in best long-term interest of the City. Therefore, we ask the Department of the Army to reconsider its review of this property given its private economic development potential.

If this project were to move forward, the City Council would have other concerns as it relates to land use issues for the construction of a facility by the federal government. It is our understanding that the federal government does not need to follow local land use regulations, but does use a "good neighbor" policy. Because of the importance of this corridor, it would be essential that any development by the federal government on this location be in keeping with the intent of our proposed Gateway District.

In closing, I, along with the City Council, appreciate the opportunity that the Department of the Army has given us to comment on this project.

Sincerely,

Thomas G. Ferrini
Mayor

TGF/jed

c: Carol Shea-Porter, U.S. Representative
Judd Gregg, U.S. Senator
Jeanne Shaheen, U.S. Senator
John P. Bohenko, City Manager

DEPARTMENT OF THE ARMY
NEW ENGLAND DISTRICT, CORPS OF ENGINEERS
696 VIRGINIA ROAD
CONCORD, MASSACHUSETTS 01742-2751

REPLY TO
ATTENTION OF

March 5, 2010

Real Estate Division

Honorable Thomas G. Ferrini
Mayor, City of Portsmouth
Municipal Complex
1 Junkins Avenue
Portsmouth, NH 03801

Dear Mayor Ferrini,

This letter is in response to your letter of February 9, 2010 regarding the site in Portsmouth, New Hampshire being considered for the new Pease, NH Armed Forces Reserve Center (AFRC).

Thank you for your comments regarding the property located at 1900 Lafayette Road. I understand your concerns that government-owned property does not provide tax revenue to the city, but this would be true of any property that the government acquired and is not unique to the 1900 Lafayette Road location. That said, the government is continuing to work all aspects of the site selection process, including engineering feasibility studies, initial design considerations, environmental and archeological studies, and real estate acquisition analyses on multiple sites. Once this process is completed the government will be able to make a more informed evaluation of the various sites under consideration.

The U.S. Army Corps of Engineers prides itself on all aspects of its business practices being transparent and strives for open, two-way communications with communities and elected officials. To view current information and fact sheets on the Pease AFRC project, please visit our web site at: http://www.lrl.usace.army.mil/ – click on the Projects of Interest tab, then on the Pease, New Hampshire, Army Reserve Center link.

As an aside, I would like for you to understand further that I am simply acting in my capacity as the real estate member of the project delivery team being managed out of our Louisville District. For this reason, it is probably more appropriate that all future correspondence pertaining to the Pease, NH AFRC project be addressed to the Project Manager, Ms. Betty Beck. Betty can be reached by mail at U.S. Army Corps of Engineers, Louisville Romano Mazzoli Federal Building, 600 Dr. Martin Luther King, Jr. Place, Louisville, Kentucky 40202, or via email at Betty.C.Beck@usace.army.mil. Her telephone number is (502) 315-6861.

Our mission for this project is to provide the men and women of the New Hampshire Army Reserve with a new Army Reserve Center that matches their dedication and selfless service. We count on your support to help us accomplish this great mission.

Sincerely,

Joseph M. Redlinger
Chief, Real Estate Division

Copy Furnished:
Carol Shea-Porter, U.S. Representative
Judd Gregg, U.S. Senator
Jeanne Shaheen, U.S. Senator

DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NEW JERSEY 08640-5000

REPLY TO
ATTENTION OF

February 25, 2010

Ralph W. Sturges, Chief
Mohegan Tribal Council
Eastern Area Office
27 Church Lane
Uncasville, CT 06382

Dear Chief Sturges:

The United States Army Reserve (USAR), Regional Support Command (RSC) is proposing land acquisition, construction, and operation of a U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire (NH), in accordance with the Base Closure and Realignment (BRAC) Commission. On September 8, 2005, the BRAC Commission recommended that certain realignment actions occur at USAR components in New Hampshire: close Paul Doble Army Reserve Center in Portsmouth, and relocate units to a new AFRC and associated training and maintenance facilities in the vicinity of the Pease Air National Guard Base. Three properties are being considered within Rockingham County for the proposed project. The Preferred Alternative site is an 11-acre open field located at 1900 Lafayette Road, Portsmouth, NH. Alternative 1 site is a 21-acre wooded area located at 22 Continental Drive, Exeter, NH. Alternative 2 site is a 16-acre upland wooded area located at 295, 311, and 355 Lafayette Road, Rye, NH. The three sites are identified on Figures 1, 2 and 3.

The new AFRC complex would require approximately 6 acres of land and consist of an approximately 21,000-square-foot AFRC, a 610-square-foot unheated storage building, and 750 square yards of military equipment and privately owned vehicle parking.

Due to past activity as a functioning quarry, the Preferred Alternative site is believed to be highly disturbed. Onsite soils have been determined to be primarily non-native fill material. A review of the New Hampshire historical records and a site walk over on December 15, 2009 indicates no known sensitive historic or archeological significant areas. It is the recommendation of the 99th RSC that a cultural resources survey is not necessary for the Preferred Alternative site due to the extensive disturbance from past activities.

Alternative 1 site is entirely wooded and based on a preliminary review by Public Archaeology Laboratory cultural resource specialists, the area is considered highly sensitive for Native American and historic EuroAmerican resources. A Phase IB survey will be conducted for Alternative 1.

Alternative 2 site consists of a portion along Lafayette Road (Route 1). A portion of the site is adjacent to Lafayette Road, where the former Southwind Motel was located. The western portion of the property is forested with mature eastern hemlock and hardwoods. A Phase IB Survey will be conducted for the undisturbed portion of this property, primarily for Native American resources.

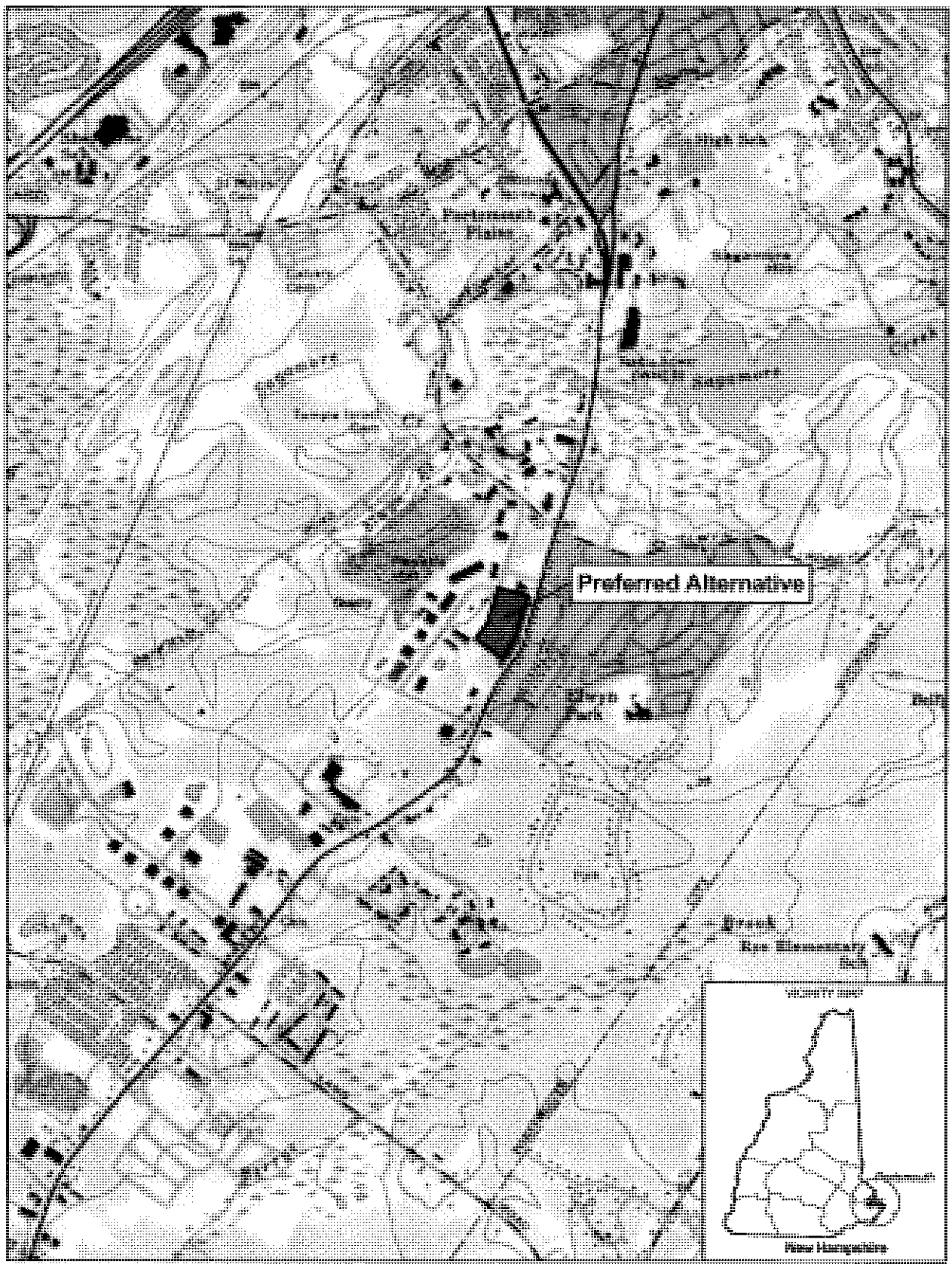
Please accept this correspondence as notification and invitation to participate in the consultation process concerning this action, as required by the National Historic Preservation Act of 1966 (NHPA), as amended; the Archaeological Resources Protection Act of 1979; the Native American Graves Protection and Repatriation Act of 1990; and Presidential Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments*. In accordance with the above regulations, we are proposing to conduct cultural resources assessments as discussed above for these properties. If you wish to participate in this process, please contact us within 30 days of the date of this letter. In addition, we are requesting that you provide information about any known Traditional Cultural Properties or sacred sites within the proposed development tracts.

I look forward to working with you or your designated representative. If we do not hear from you within 30 days, we will assume that you concur with our determination and will proceed as discussed above. If you require additional information or have questions or concerns pertaining to this correspondence, please contact Ms. Robyn Mock, U. S. Army Reserve 99th RSC, Department of Public Works, at (609) 562-7662 or at robyn.mock@usar.army.mil.

Sincerely,

Joseph H. Ledlow
Colonel, US Army Reserve
Regional Engineer

Enclosures:
Figure 1: Preferred Alternative
Figure 2: Alternative 1
Figure 3: Alternative 2



LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 1
Location Map
Preferred Alternative Property
1900 Lafayette Road
Portsmouth, New Hampshire

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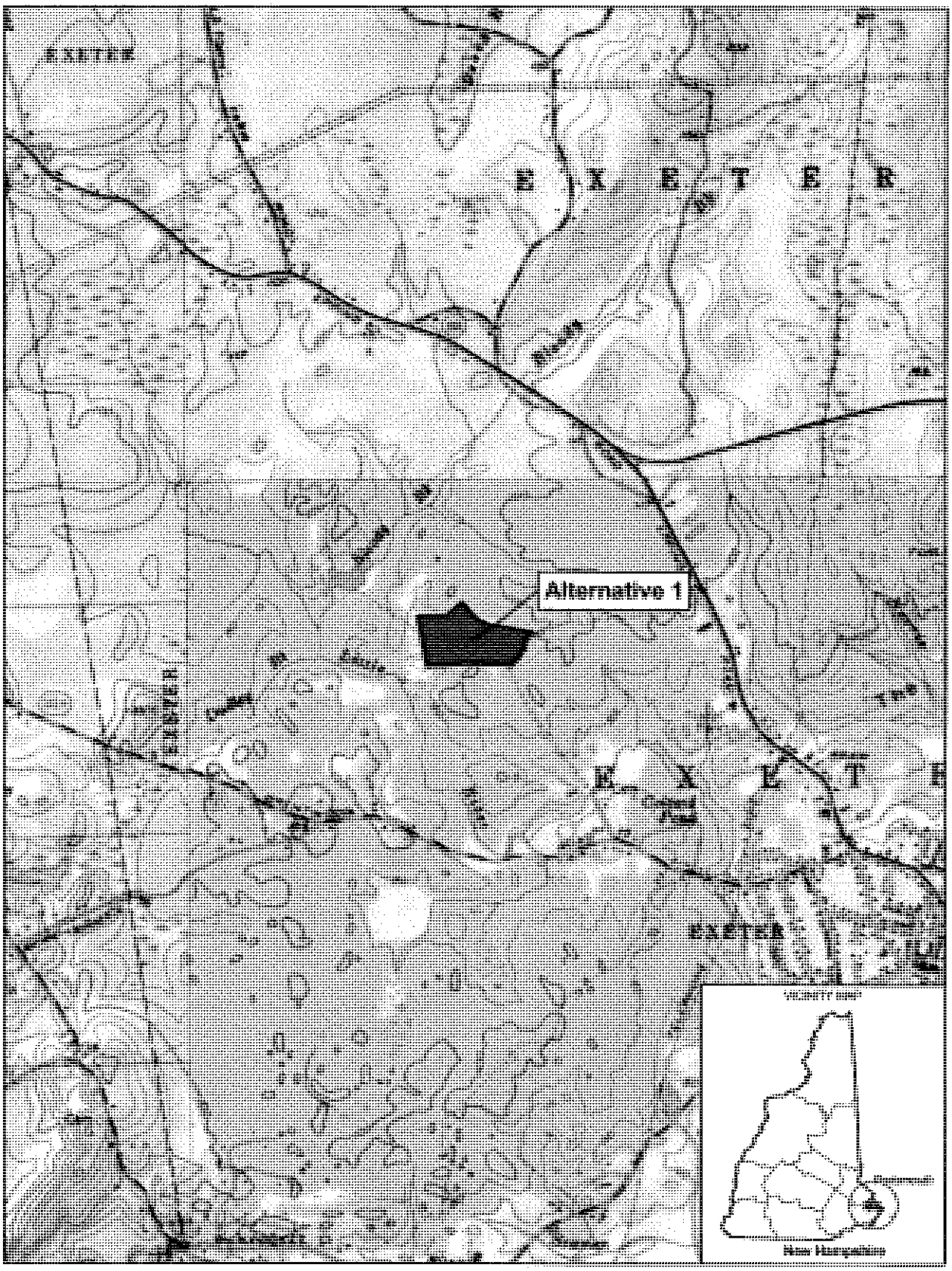

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Exeter Quadrangle, USGS 1:24k DRG

FIGURE 2
Location Map
Alternative 1 Property
22 Continental Drive
Exeter, New Hampshire

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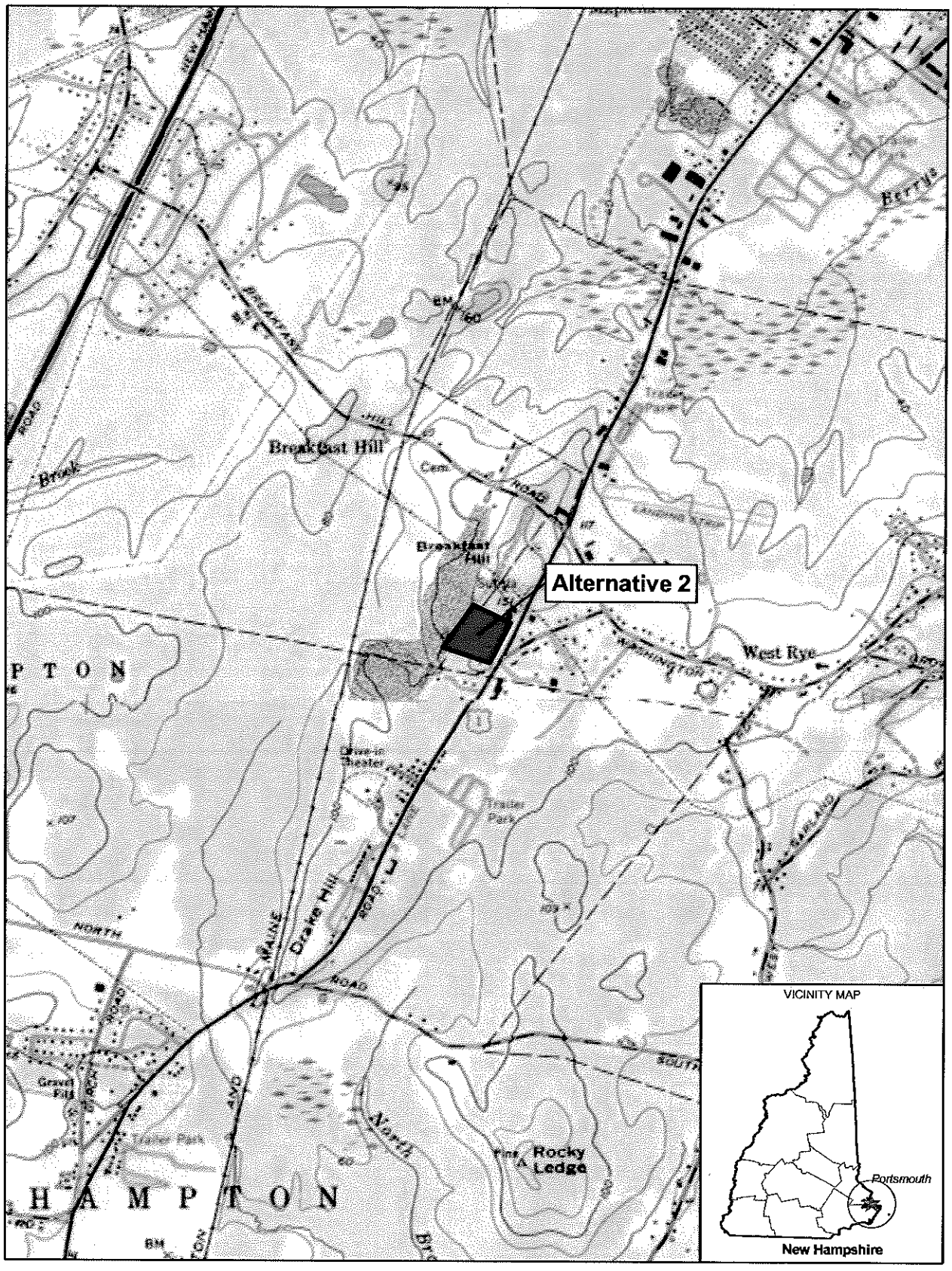

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 3
Location Map
Alternative 2 Property
295, 311, and 355 Lafayette Road
Rye, New Hampshire

CH2MHILL

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NEW JERSEY 08640-5000

REPLY TO
ATTENTION OF

February 25, 2010

Frank D.Richardson, Ph.D
Senior Wetlands Inspector
Southeast Region Supervisor
NH DES Wetlands Bureau
Pease Field Office
50 International Drive
Portsmouth, NH 03801

Dear Dr. Richardson:

The United States Army Reserve (USAR), Regional Support Command (RSC) is proposing land acquisition, construction, and operation of a U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire (NH), in accordance with the Base Closure and Realignment (BRAC) Commission. On September 8, 2005, the BRAC Commission recommended that certain realignment actions occur at USAR components in New Hampshire: close Paul Doble Army Reserve Center in Portsmouth, and relocate units to a new AFRC and associated training and maintenance facilities in the vicinity of the Pease Air National Guard Base. Three parcels of land are being considered within Rockingham County for the proposed project. The Preferred Alternative site is an 11-acre open field located at 1900 Lafayette Road, Portsmouth, NH. Alternative 1 site is a 21-acre wooded area located at 22 Continental Drive, Exeter, NH. Alternative 2 site is a 16-acre upland wooded area located at 295, 311, and 355 Lafayette Road, Rye, NH. The three sites are identified on Figures 1, 2, and 3.

The new AFRC complex would require approximately 6 acres of land and consist of an approximately 21,000-square-foot AFRC, a 610-square-foot unheated storage building, and 750 square yards of military equipment and privately owned vehicle parking.

In regard to the Preferred Alternative site, the U.S. Army Corps of Engineers, New England District (NAE) Regulatory Division and the Army are coordinating with Ms. Dory Wiggin of your office regarding wetlands present on the site, and associated permitting requirements. As you are aware, NAE Regulatory and the Army have been coordinating with you regarding Alternative Site 1 at 22 Continental Drive in Exeter, New Hampshire. The Army conducted a wetland and surface water delineation survey of the site in December 2009 to determine the extent of wetlands on the property. A "Wetland/Surface Water Delineation Report" dated January 2010 prepared by GZA GeoEnvironmental, Inc. was previously provided to you. The survey identified three potential vernal pools to be located on the site. A vernal pool assessment will be conducted on the site in the spring when amphibian breeding would be likely. We will provide the results of that assessment to your office, and continue to coordinate with you regarding State of New Hampshire wetland permitting requirements.

In regard to Alternative Site 2, the site was surveyed by New Hampshire Certified Wetland Scientists in December 2009 and no wetlands or vernal pools were observed.

Please accept this correspondence as notification, as required by the National Environmental Policy Act (NEPA).

As part of the early project coordination and NEPA scoping process, we are requesting that federal and state agencies and Native American organizations identify key issues that would be addressed as part of this evaluation. Please provide your comments relative to the following topics:

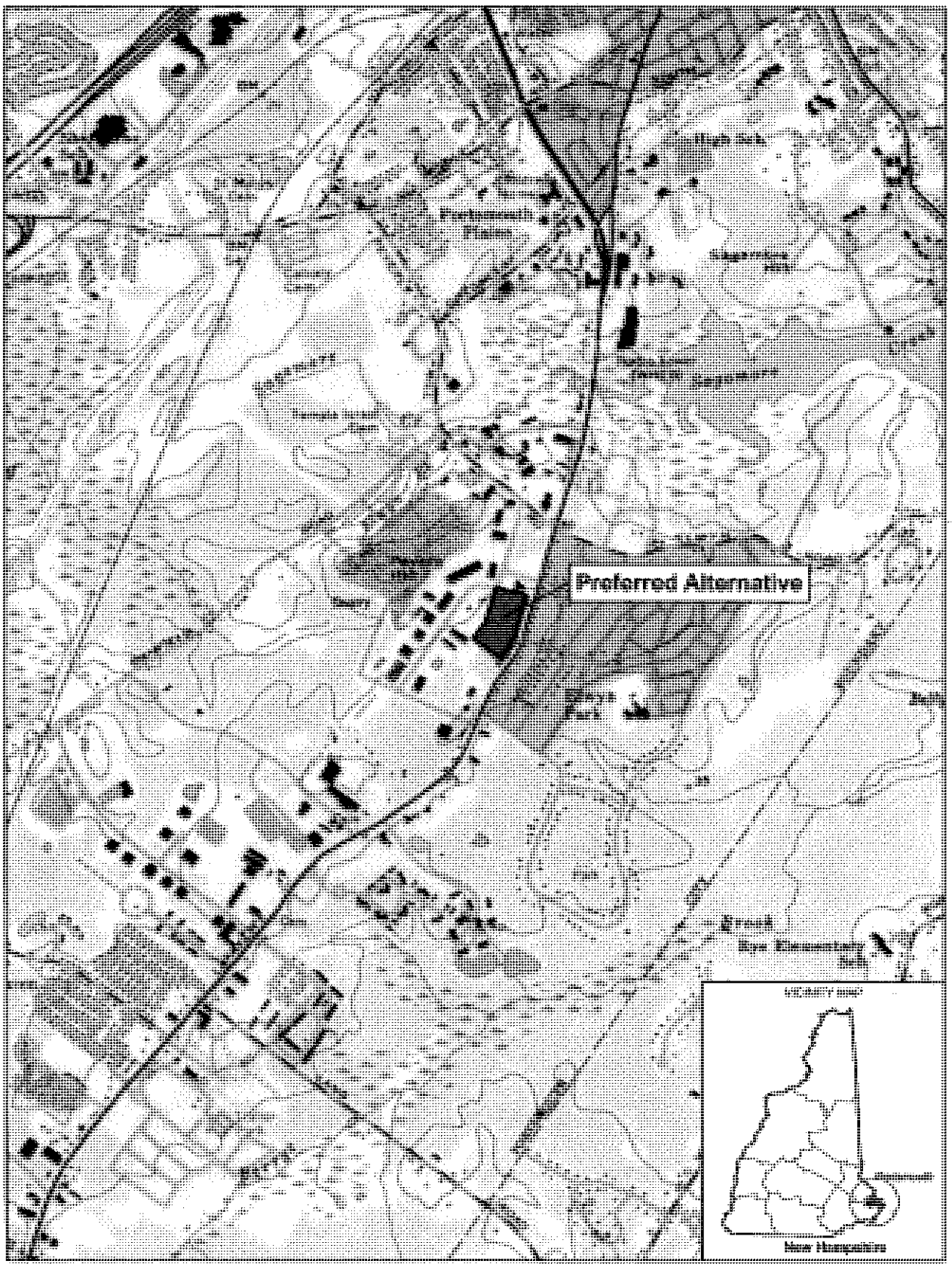
- Specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction
- Available technical information regarding these issues
- Mitigation or permitting requirements that may be necessary for project implementation

To sufficiently address key project issues while maintaining the project schedule, we request that you provide a written response to this letter within 30 days of receipt. If you require additional information or have questions or concerns pertaining to this correspondence, please contact Ms. Robyn Mock, U. S. Army Reserve 99th RSC, Department of Public Works, at (609) 562-7662 or at robyn.mock@usar.army.mil.

Sincerely,

Joseph H. Ledlow
Colonel, US Army Reserve
Regional Engineer

Enclosures:
Figure 1: Preferred Alternative
Figure 2: Alternative 1
Figure 3: Alternative 2



LEGEND

Property Boundary

0 500 1,000 2,000

Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 1
Location Map
Preferred Alternative Property
1900 Lafayette Road
Portsmouth, New Hampshire

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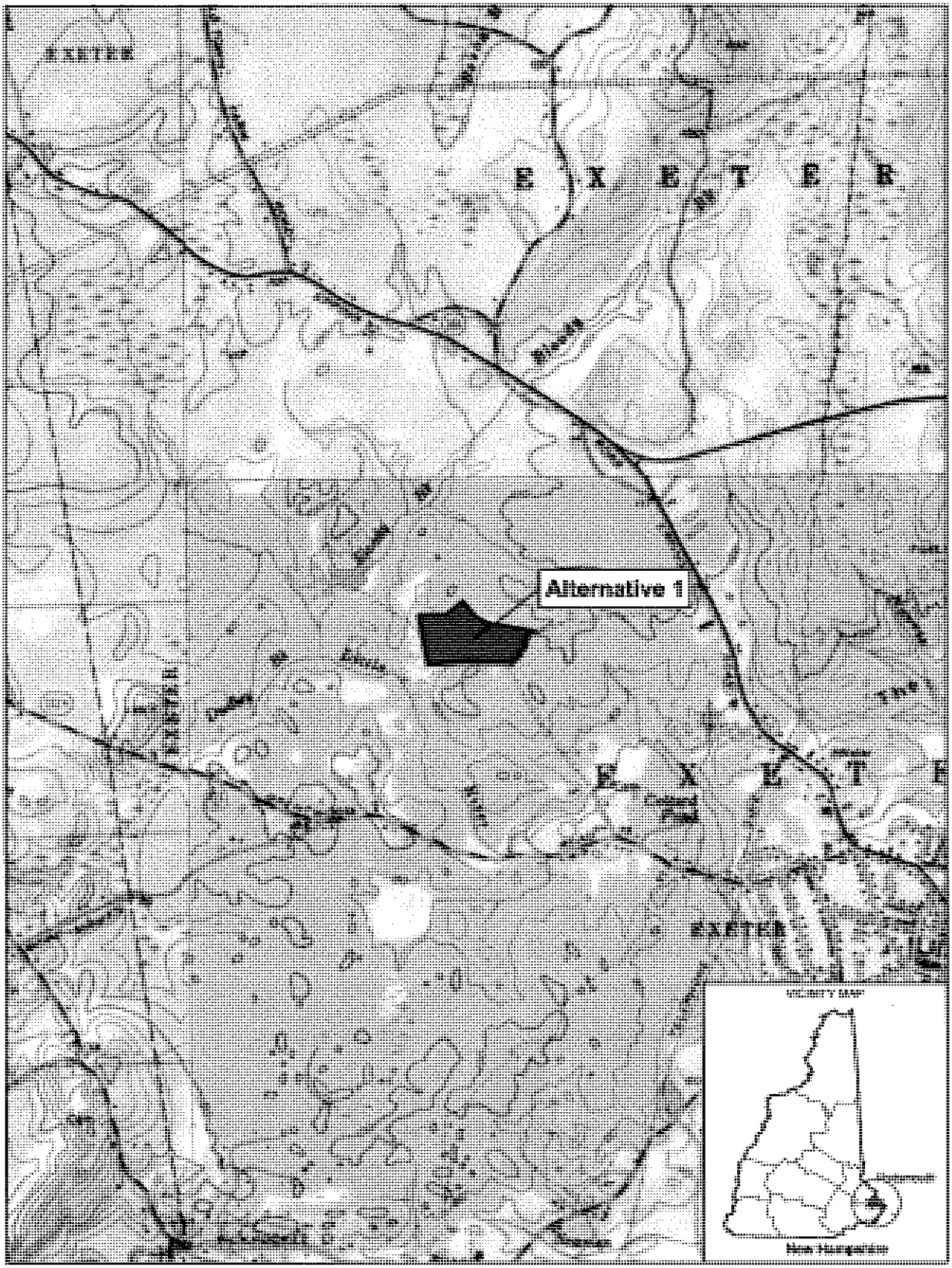

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Exeter Quadrangle, USGS 1:24k DRG

FIGURE 2
Location Map
Alternative 1 Property
22 Continental Drive
Exeter, New Hampshire

CH2MHILL

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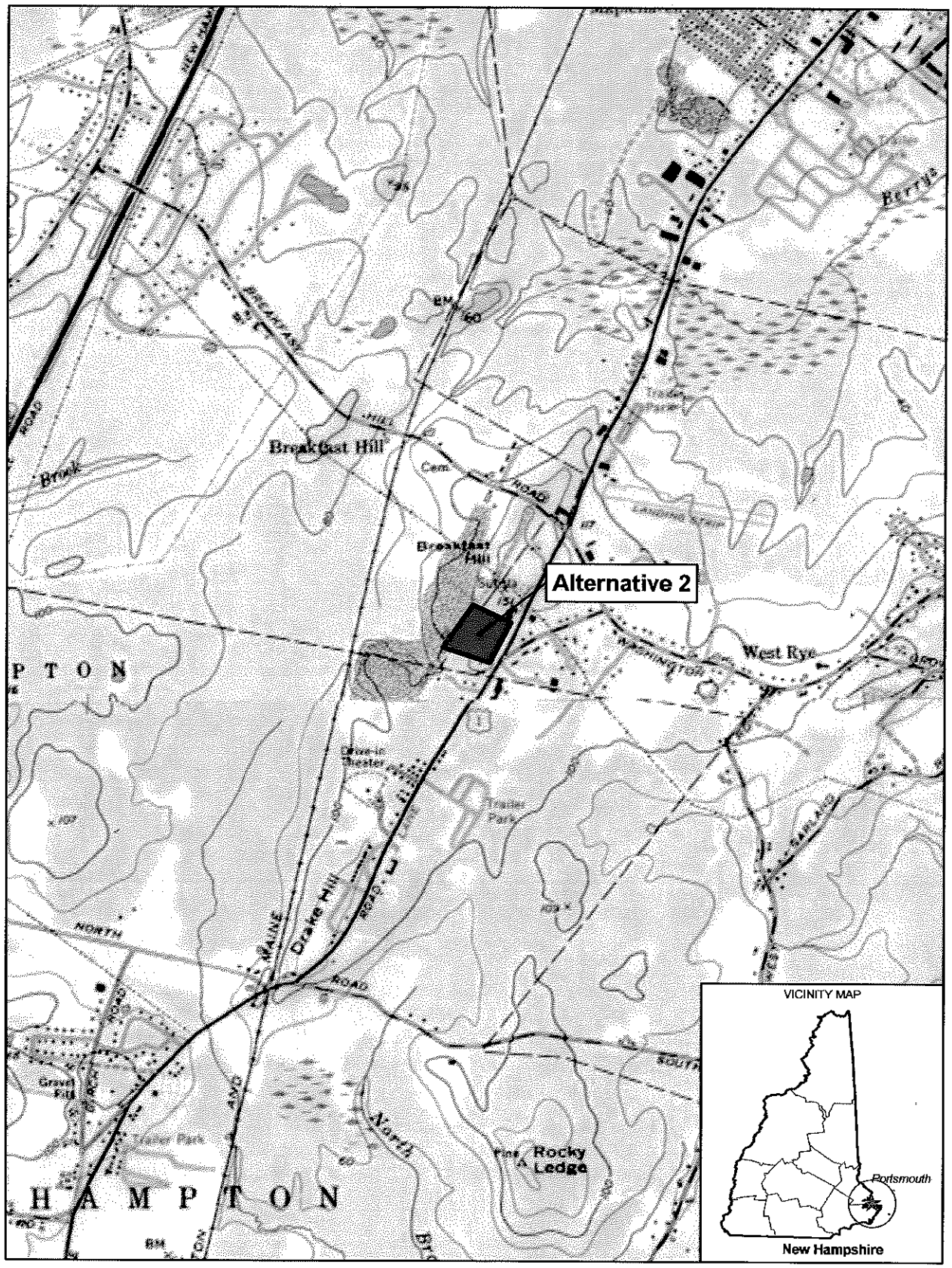

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 3
Location Map
Alternative 2 Property
295, 311, and 355 Lafayette Road
Rye, New Hampshire

CH2MHILL

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NEW JERSEY 08640-5000

REPLY TO
ATTENTION OF

February 25, 2010

Melissa Coppola, Environmental Information Specialist
Natural Heritage Bureau
172 Pembroke Rd
PO Box 1856
Concord, NH 03301-1856

Dear Ms. Coppola:

The United States Army Reserve (USAR), Regional Support Command (RSC) is proposing land acquisition, construction, and operation of a U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire (NH), in accordance with the Base Closure and Realignment (BRAC) Commission. On September 8, 2005, the BRAC Commission recommended that certain realignment actions occur at USAR components in New Hampshire: close Paul Doble Army Reserve Center in Portsmouth, and relocate units to a new AFRC and associated training and maintenance facilities in the vicinity of the Pease Air National Guard Base. Three parcels of land are being considered within Rockingham County for the proposed project. The Preferred Alternative site is an 11-acre open field located at 1900 Lafayette Road, Portsmouth, NH. Alternative 1 site is a 21-acre wooded area located at 22 Continental Drive, Exeter, NH. Alternative 2 site is a 16-acre upland wooded area located at 295, 311, and 355 Lafayette Road, Rye, NH. The three sites are identified on Figures 1, 2 and 3.

The Preferred Alternative site was apparently quarried for aggregates in the past and now consists of non-native fill material. The site contains several scattered emergent wetlands that appear to have formed as a result of placement of fill material following cessation of aggregate mining. Alternative Site 1 is a mix of mature and maturing hardwood forest with some conifers. The site contains forested wetlands, including potential vernal pools. A vernal pool assessment will be conducted in the spring on this site. The eastern and northern portions of Alternative Site 2 were developed as a motel, which has since been demolished. The remainder of the parcel is primarily mature eastern hemlock forest with some hardwoods around the periphery. No wetlands are present on the site.

The new AFRC complex would require approximately 6 acres of land and consist of an approximately 21,000-square-foot AFRC, a 610-square-foot unheated storage building, and 750 square yards of military equipment and privately owned vehicle parking.

As part of the early project coordination and NEPA scoping process, we are requesting that federal and state agencies and Native American organizations identify key issues that would be addressed as part of this evaluation. Please provide your comments relative to the following topics:

- Specific issues regarding state-protected species that may occur on the sites
- Available technical information regarding these issues

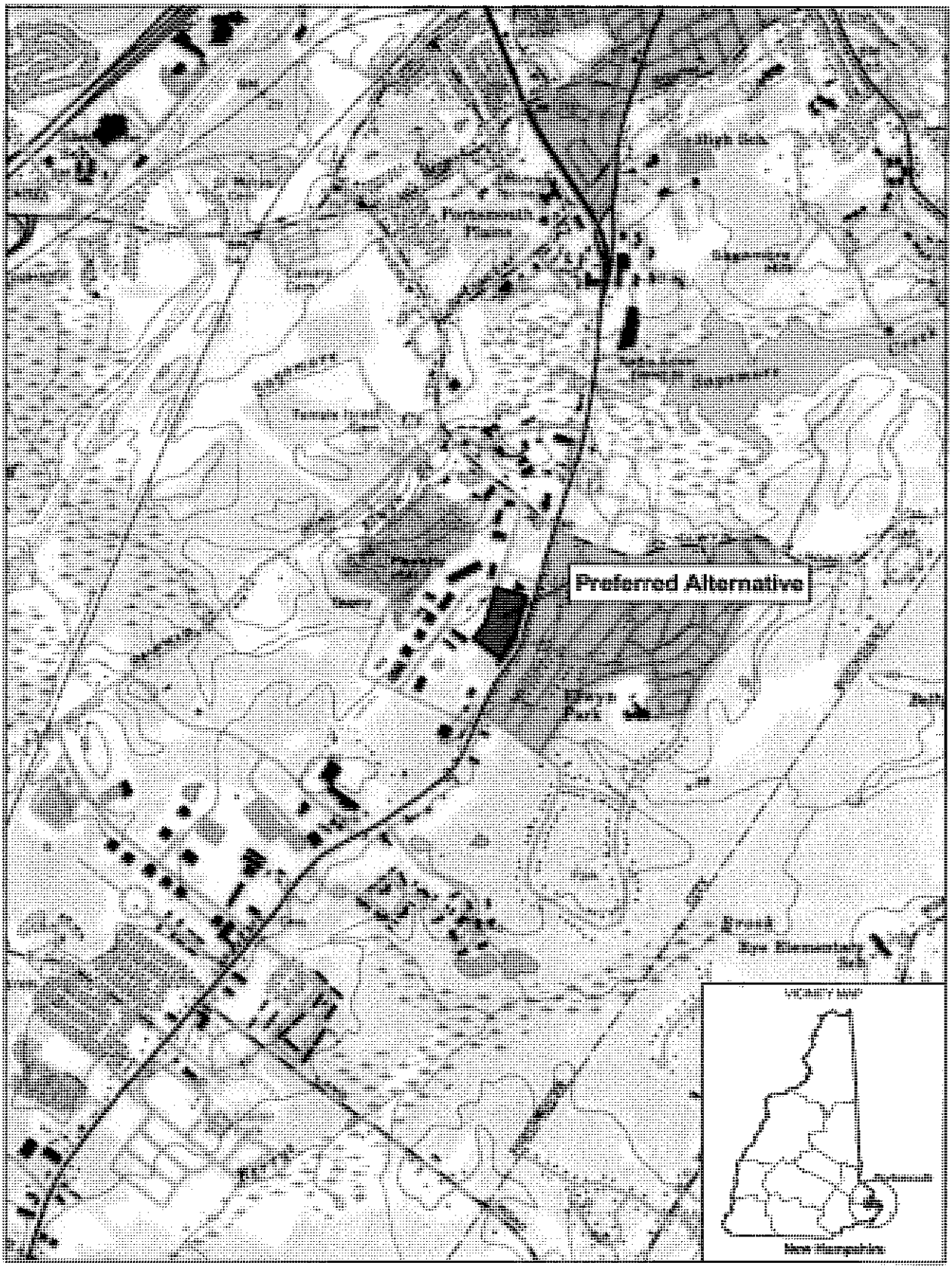
- Mitigation or permitting requirements that may be necessary for project implementation
- Other issues within your regulatory jurisdiction

To sufficiently address key project issues while maintaining the project schedule, we request that you provide a written response to this letter within 30 days of receipt. If you require additional information or have questions or concerns pertaining to this correspondence, please contact Ms. Robyn Mock, U. S. Army Reserve 99th RSC, Department of Public Works, at (609) 562-7662 or at robyn.mock@usar.army.mil.

Sincerely,

Joseph H. Ledlow
Colonel, US Army Reserve
Regional Engineer

Enclosures:
Figure 1: Preferred Alternative
Figure 2: Alternative 1
Figure 3: Alternative 2



LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 1
Location Map
Preferred Alternative Property
1900 Lafayette Road
Portsmouth, New Hampshire

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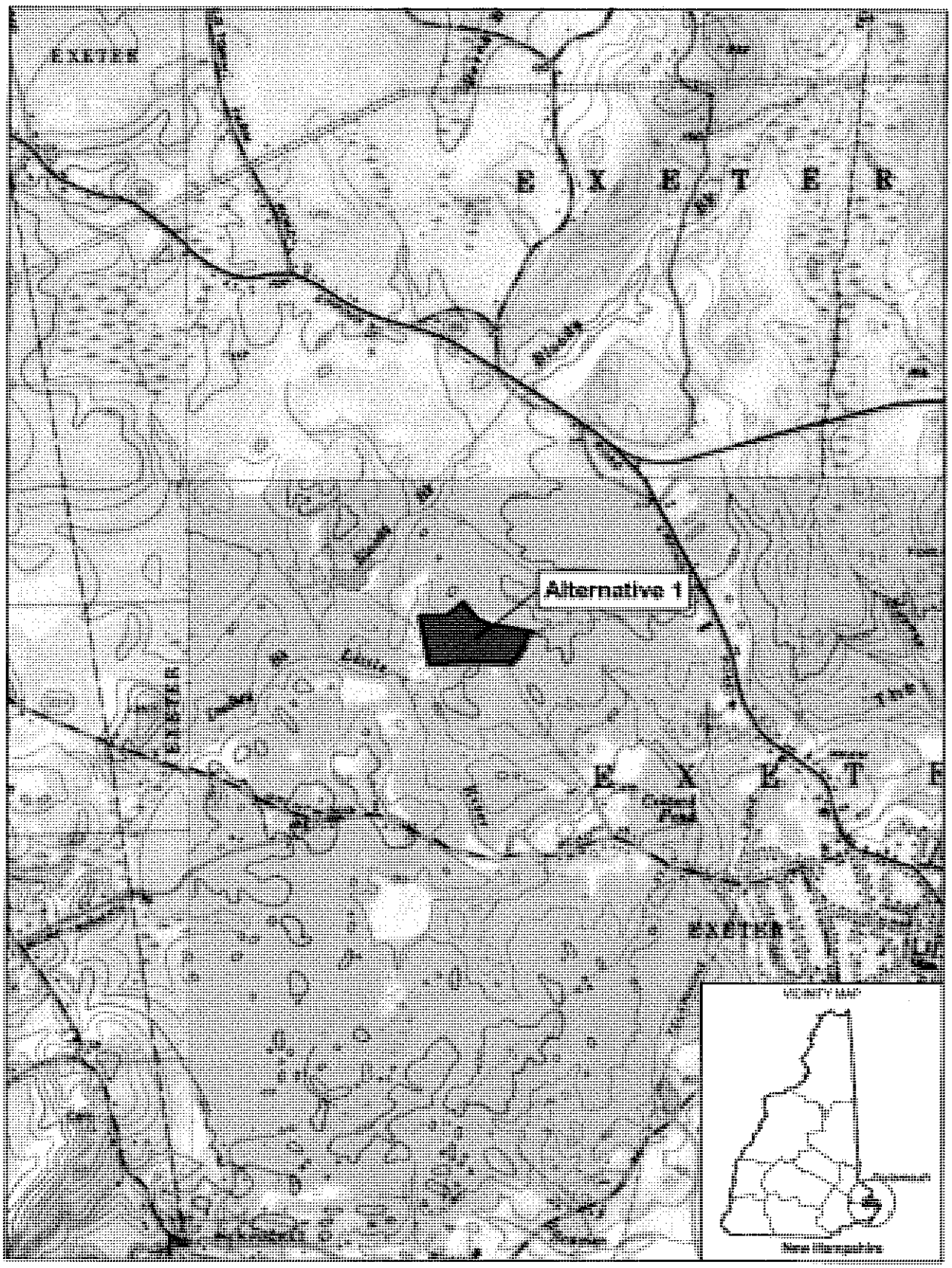

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Exeter Quadrangle, USGS 1:24k DRG

FIGURE 2
Location Map
Alternative 1 Property
22 Continental Drive
Exeter, New Hampshire

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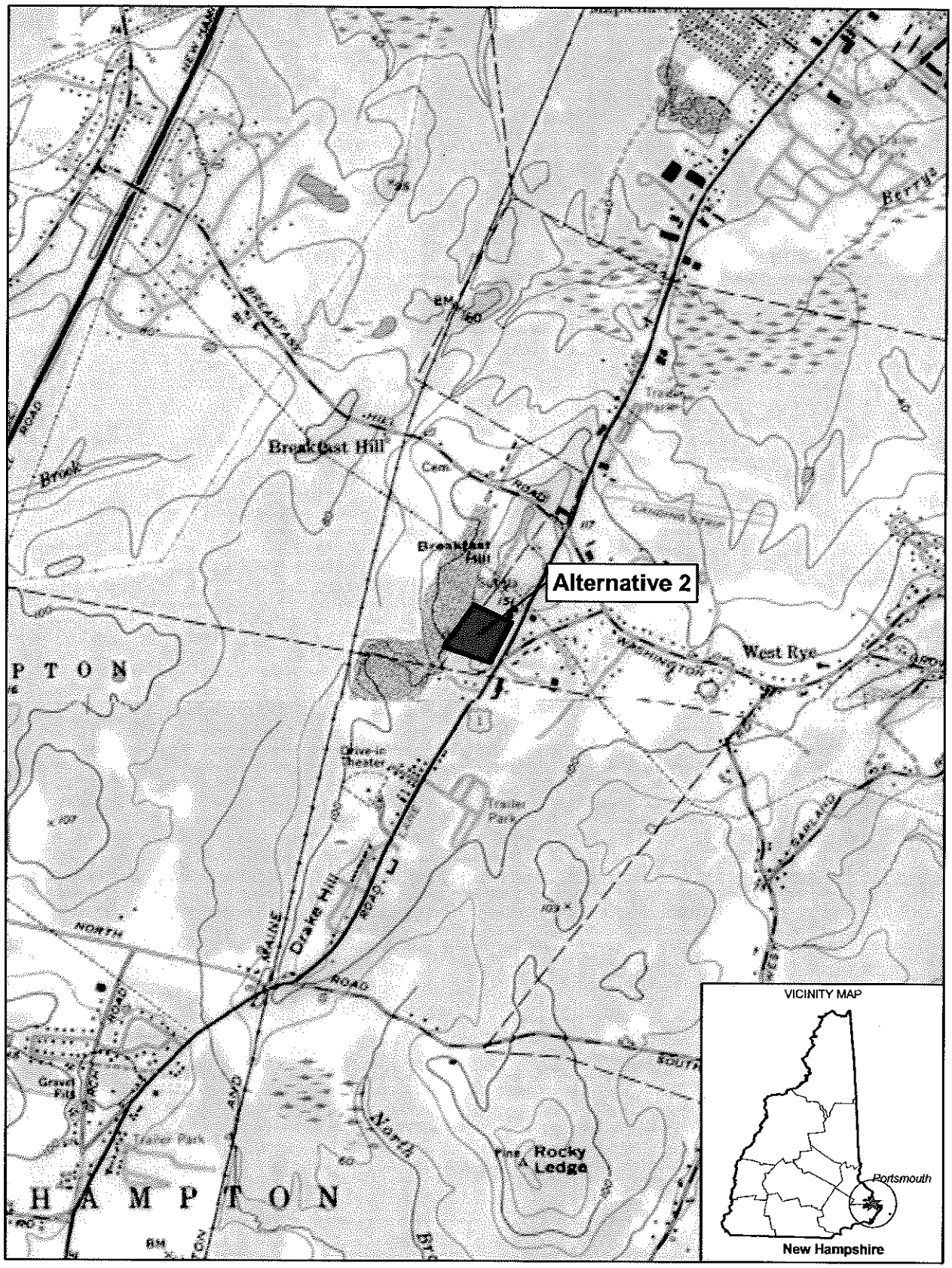

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 3
Location Map
Alternative 2 Property
295, 311, and 355 Lafayette Road
Rye, New Hampshire

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CH2MHILL

DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NEW JERSEY 08640-5000

REPLY TO
ATTENTION OF

February 25, 2010

Ms. Katherine L. Swain, MLRA Soil Survey Leader
NRCS and County Conservation District
10 Ferry St., Box 312
Suite 211
Concord, NH 03301-5081

Dear Ms. Swain:

The United States Army Reserve (USAR), Regional Support Command (RSC) is proposing land acquisition, construction, and operation of a U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire (NH), in accordance with the Base Closure and Realignment (BRAC) Commission. On September 8, 2005, the BRAC Commission recommended that certain realignment actions occur at USAR components in New Hampshire: close Paul Doble Army Reserve Center in Portsmouth, and relocate units to a new AFRC and associated training and maintenance facilities in the vicinity of the Pease Air National Guard Base. Three parcels of land are being considered within Rockingham County for the proposed project. The Preferred Alternative site is an 11-acre open field located at 1900 Lafayette Road, Portsmouth, NH. Alternative 1 site is a 21-acre wooded area located at 22 Continental Drive, Exeter, NH. Alternative 2 site is a 16-acre upland wooded area located at 295, 311, and 355 Lafayette Road, Rye, NH. The three sites are identified on Figures 1, 2 and 3.

The new AFRC complex would require approximately 6 acres of land and consist of an approximately 21,000-square-foot AFRC, a 610-square-foot unheated storage building, and 750 square yards of military equipment and privately owned vehicle parking.

Please accept this correspondence as notification, as required by the National Environmental Policy Act (NEPA). As part of the early project coordination and NEPA scoping process, we are requesting that federal and state agencies and Native American organizations identify key issues that would be addressed as part of this evaluation. Please provide your comments relative to the following topics:

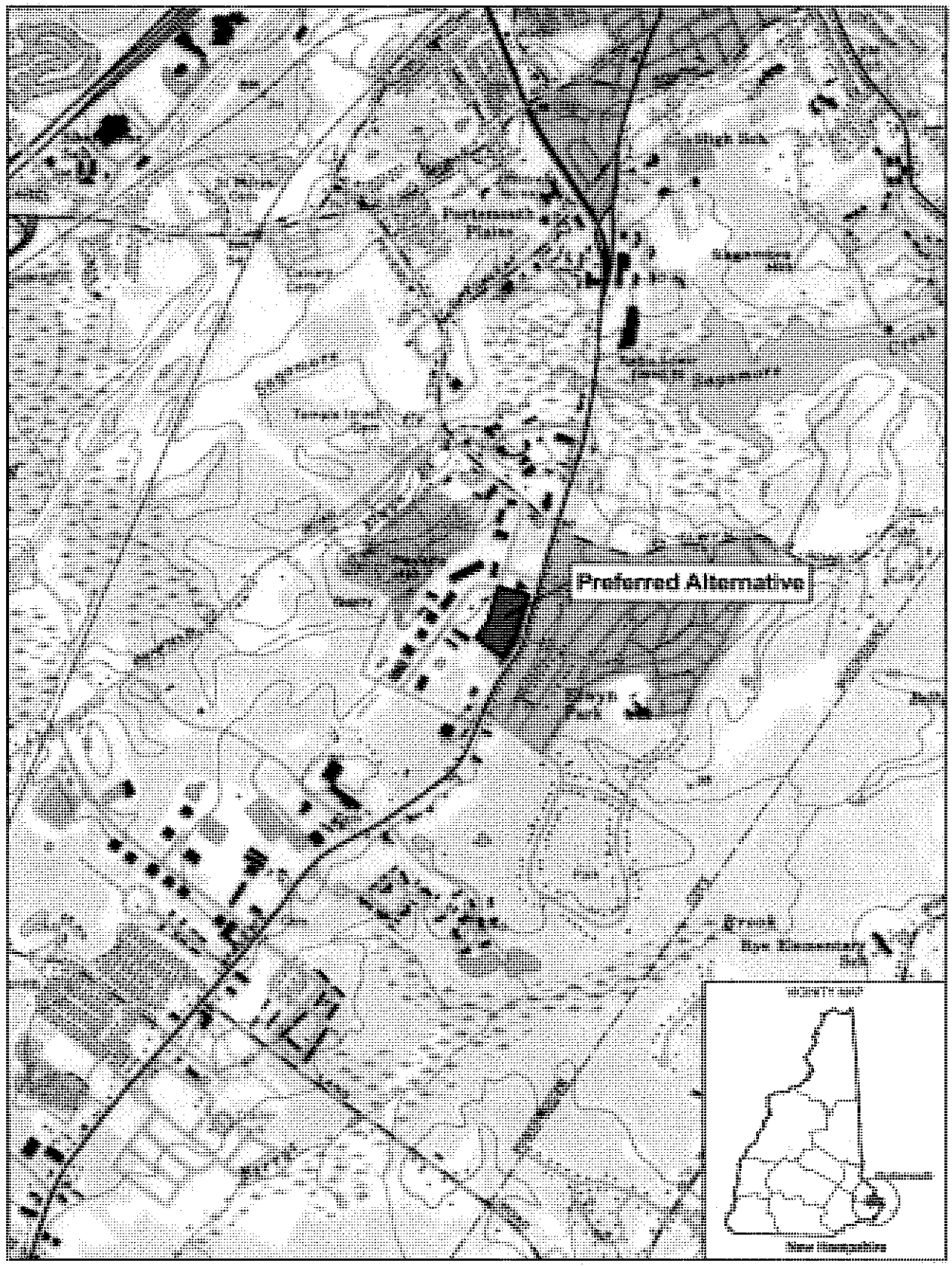
- Specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction, particularly the presence of prime farmland soils or farmland of statewide importance.
- Available technical information regarding these issues
- Mitigation or permitting requirements that may be necessary for project implementation

To sufficiently address key project issues while maintaining the project schedule, we request that you provide a written response to this letter within 30 days of receipt. If you require additional information or have questions or concerns pertaining to this correspondence, please contact Ms. Robyn Mock, U. S. Army Reserve 99th RSC, Department of Public Works, at (609) 562-7662 or at robyn.mock@usar.army.mil.

Sincerely,

Joseph H. Ledlow
Colonel, US Army Reserve
Regional Engineer

Enclosures:
Figure 1: Preferred Alternative
Figure 2: Alternative 1
Figure 3: Alternative 2



LEGEND

Property Boundary

0 500 1,000 2,000

Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 1
Location Map
Preferred Alternative Property
1900 Lafayette Road
Portsmouth, New Hampshire

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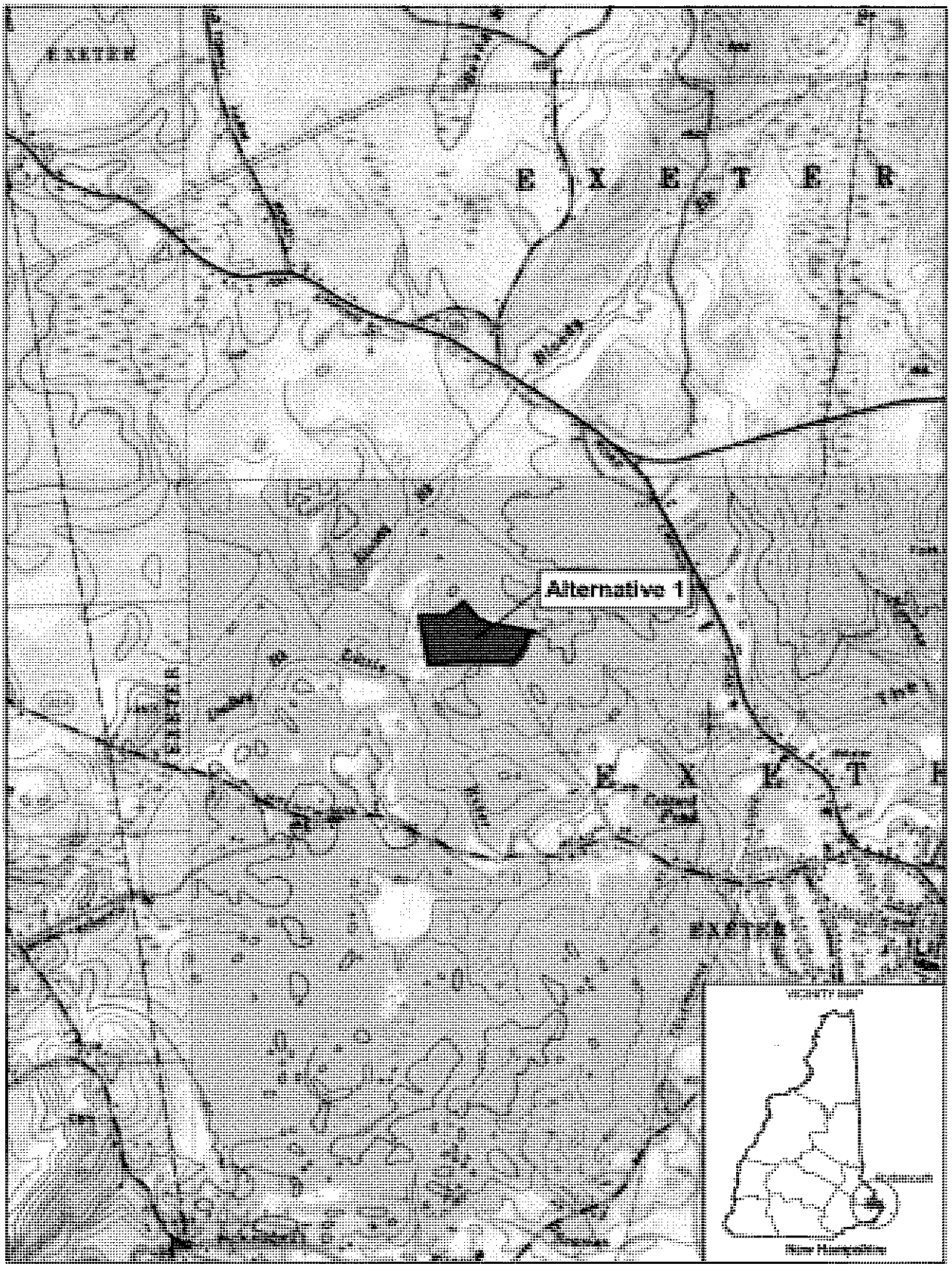

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Exeter Quadrangle, USGS 1:24k DRG

FIGURE 2
Location Map
Alternative 1 Property
22 Continental Drive
Exeter, New Hampshire

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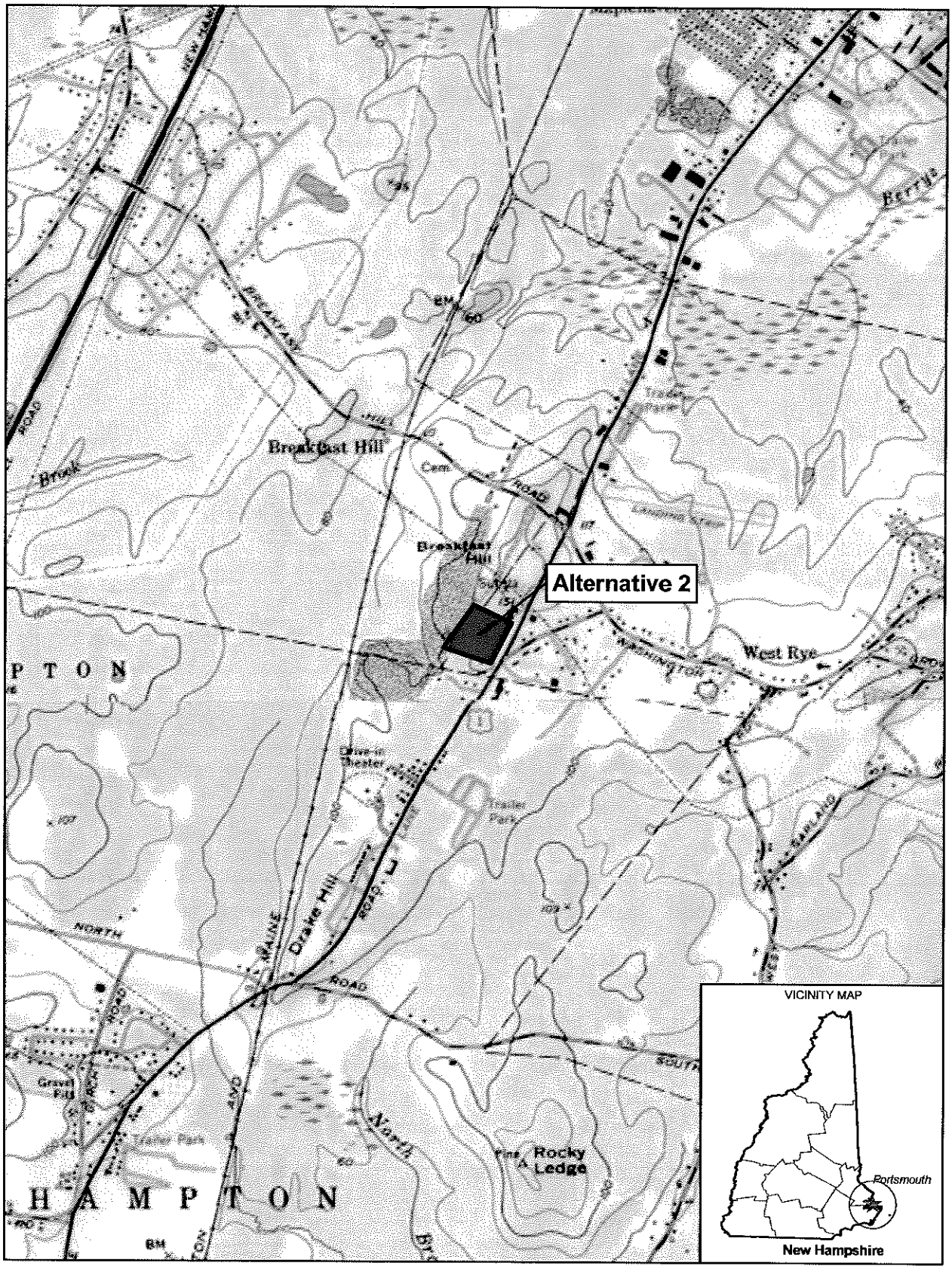

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 3
Location Map
Alternative 2 Property
295, 311, and 355 Lafayette Road
Rye, New Hampshire

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CH2MHILL

DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NEW JERSEY 08640-5000

REPLY TO
ATTENTION OF

February 25, 2010

Donald Soctomah, THPO
Passamaquoddy Tribe
PO Box 159
Princeton, ME 04668

Dear Mr. Soctomah:

The United States Army Reserve (USAR), Regional Support Command (RSC) is proposing land acquisition, construction, and operation of a U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire (NH), in accordance with the Base Closure and Realignment (BRAC) Commission. On September 8, 2005, the BRAC Commission recommended that certain realignment actions occur at USAR components in New Hampshire: close Paul Doble Army Reserve Center in Portsmouth, and relocate units to a new AFRC and associated training and maintenance facilities in the vicinity of the Pease Air National Guard Base. Three properties are being considered within Rockingham County for the proposed project. The Preferred Alternative site is an 11-acre open field located at 1900 Lafayette Road, Portsmouth, NH. Alternative 1 site is a 21-acre wooded area located at 22 Continental Drive, Exeter, NH. Alternative 2 site is a 16-acre upland wooded area located at 295, 311, and 355 Lafayette Road, Rye, NH. The three sites are identified on Figures 1, 2 and 3.

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Alternative 2 site consists of a parcel along Lafayette Road (Route 1). A portion of the site is adjacent to Lafayette Road, where the former Southwind Motel was located.

The western portion of the property is forested with mature eastern hemlock and hardwoods. A Phase IB Survey will be conducted for the undisturbed portion of this property, primarily for Native American resources.

Please accept this correspondence as notification and invitation to participate in the consultation process concerning this action, as required by the National Historic Preservation Act of 1966 (NHPA), as amended; the Archaeological Resources Protection Act of 1979; the Native American Graves Protection and Repatriation Act of 1990; and Presidential Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments*. In accordance with the above regulations, we are proposing to conduct cultural resources assessments as discussed above for these properties. If you wish to participate in this process, please contact us within 30 days of the date of this letter. In addition, we are requesting that you provide information about any known Traditional Cultural Properties or sacred sites within the proposed development tracts.

I look forward to working with you or your designated representative. If we do not hear from you with in 30 days, we will assume that you concur with our determination and will proceed as discussed above. If you require additional information or have questions or concerns pertaining to this correspondence, please contact Ms. Robyn Mock, U. S. Army Reserve 99th RSC, Department of Public Works, at (609) 562-7662 or at robyn.mock@usar.army.mil.

Sincerely,

Joseph H. Ledlow
Colonel, US Army Reserve
Regional Engineer

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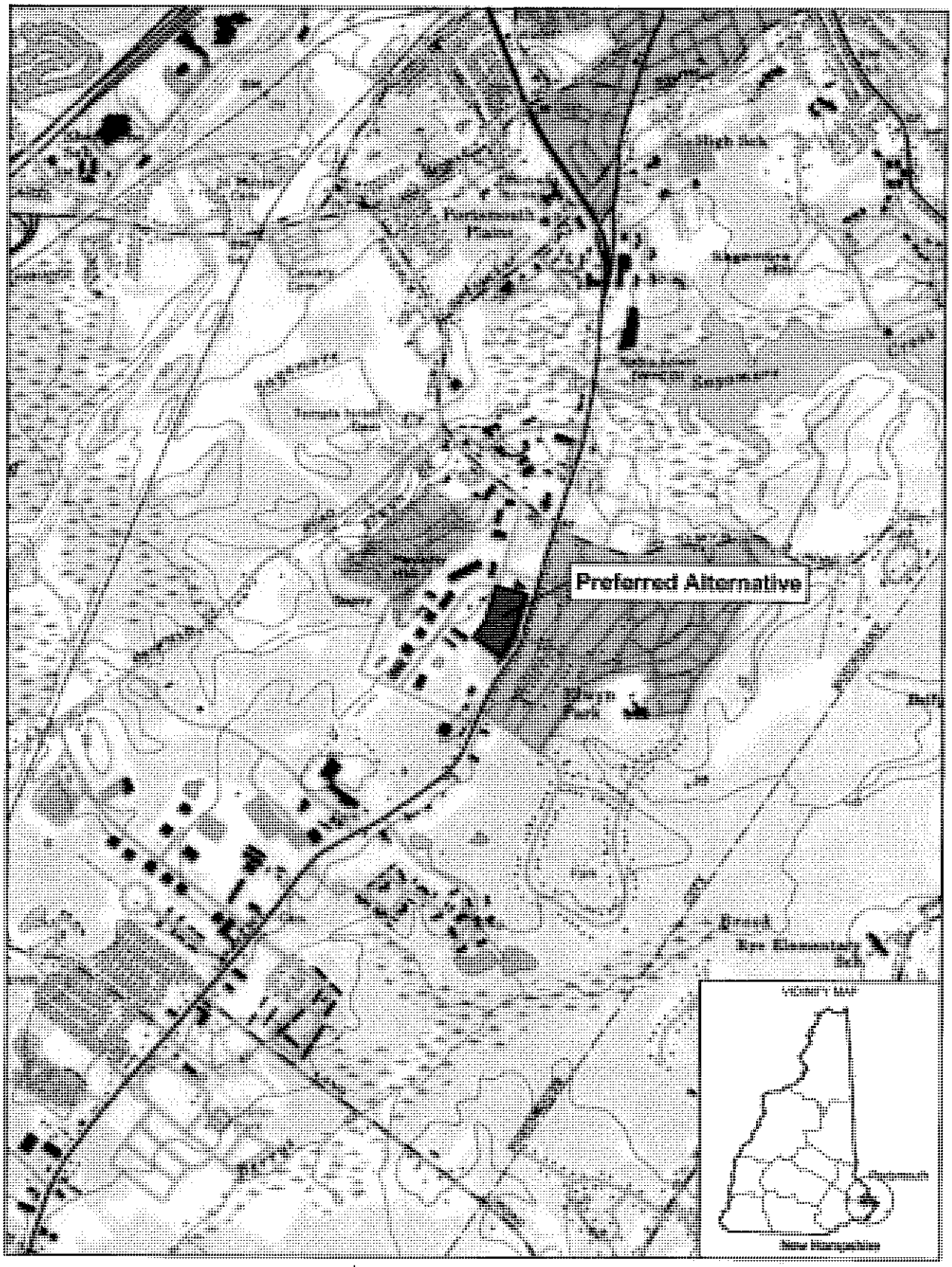
Figure 2: Alternative 1
Figure 3: Alternative 2



LEGEND

Property Boundary

0 500 1,000 2,000

Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 1
Location Map
Preferred Alternative Property
1900 Lafayette Road
Portsmouth, New Hampshire

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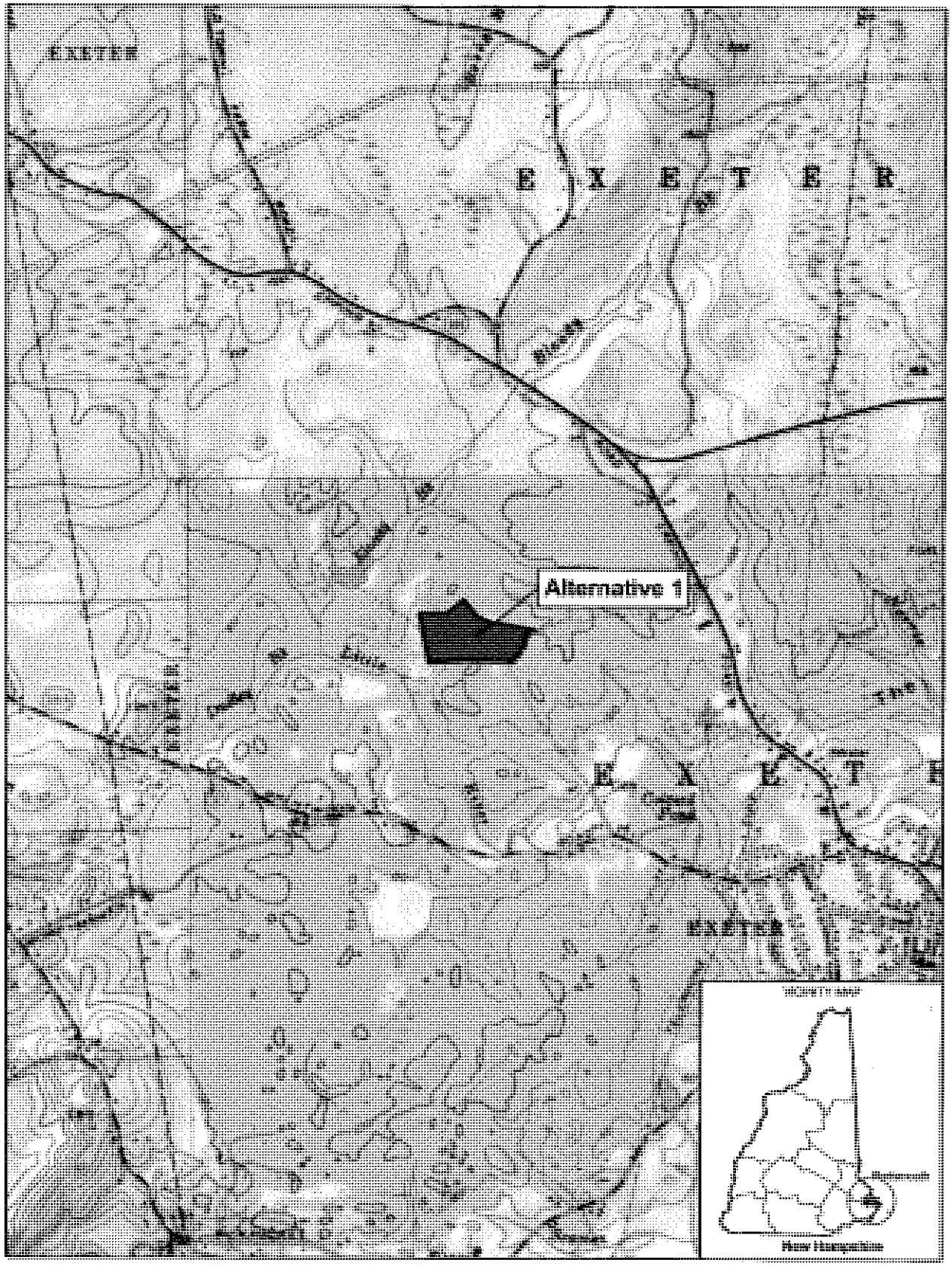

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Exeter Quadrangle, USGS 1:24k DRG

FIGURE 2
Location Map
Alternative 1 Property
22 Continental Drive
Exeter, New Hampshire

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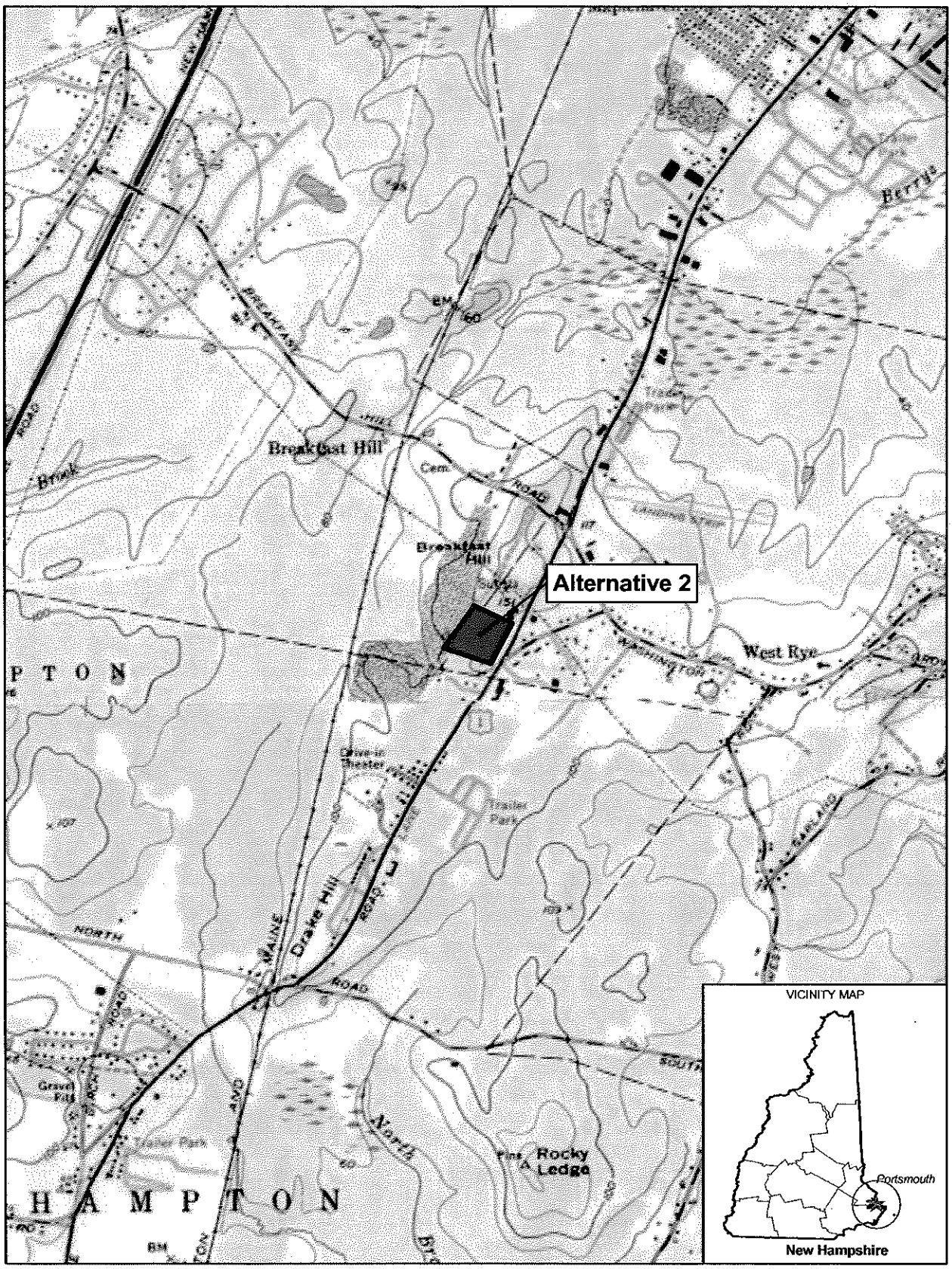

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 3
Location Map
Alternative 2 Property
295, 311, and 355 Lafayette Road
Rye, New Hampshire

CH2MHILL

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NEW JERSEY 08640-5000

REPLY TO
ATTENTION OF

February 25, 2010

Mr. Christian Williams, Federal Consistency Coordinator
New Hampshire Department of Environmental Services
New Hampshire Coastal Program
50 International Drive
Suite 200
Portsmouth, NH 03801

Dear Mr. Williams:

The United States Army Reserve (USAR), Regional Support Command (RSC) is proposing land acquisition, construction, and operation of a U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire (NH), in accordance with the Base Closure and Realignment (BRAC) Commission. On September 8, 2005, the BRAC Commission recommended that certain realignment actions occur at USAR components in New Hampshire: close Paul Doble Army Reserve Center in Portsmouth, and relocate units to a new AFRC and associated training and maintenance facilities in the vicinity of the Pease Air National Guard Base. Three parcels of land are being considered within Rockingham County for the proposed project. The Preferred Alternative site is an 11-acre open field located at 1900 Lafayette Road, Portsmouth, NH. Alternative 1 site is a 21-acre wooded area located at 22 Continental Drive, Exeter, NH. Alternative 2 site is a 16-acre upland wooded area located at 295, 311, and 355 Lafayette Road, Rye, NH. The three sites are identified on Figures 1, 2, and 3.

The new AFRC complex would require approximately 6 acres of land and consist of an approximately 21,000-square-foot AFRC, a 610-square-foot unheated storage building, and 750 square yards of military equipment and privately owned vehicle parking. Construction of the new AFRC could potentially require 6 acres of land disturbance.

Please accept this correspondence as notification, as required by the National Environmental Policy Act (NEPA). As part of the early project coordination and NEPA scoping process, we are requesting that federal and state agencies and Native American organizations identify key issues that would be addressed as part of this evaluation. Please provide your comments relative to the following topics:

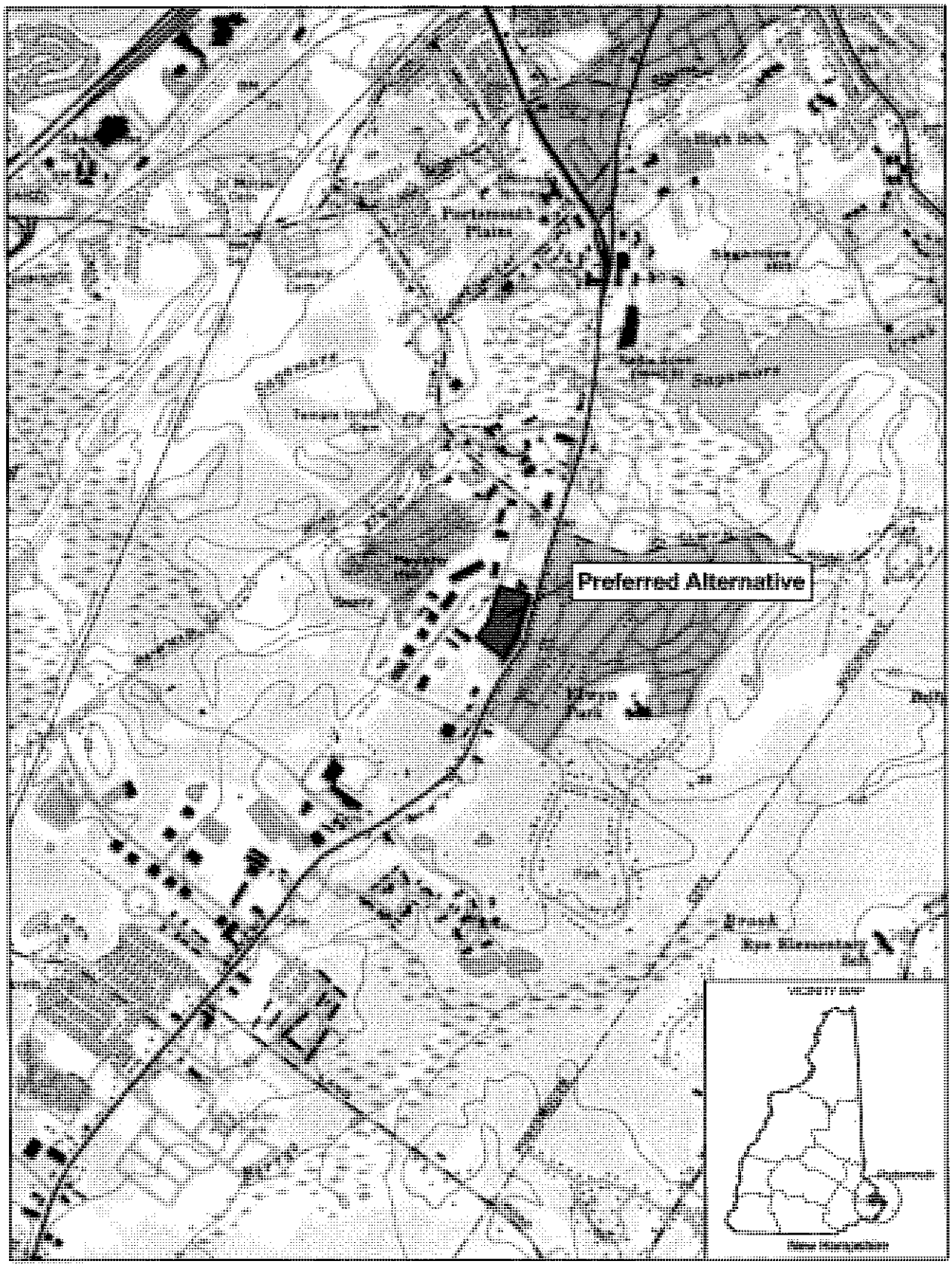
- Specific issues regarding the federal consistency provision of Section 307 of the Coastal Zone Management Act
- Other issues of concern within your regulatory jurisdiction
- Available technical information regarding these issues
- Mitigation or permitting requirements that may be necessary for project implementation

I would like to thank you in advance for your efforts. We request your comments and concurrence on the proposed undertaking within 30 days of receiving this correspondence.

Correspondence and other communication regarding this matter should be directed to Robyn Mock, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix, NJ 08640-5000, Phone: (609)562-7662, Email: Robyn.Mock@usar.army.mil.

Sincerely,

Joseph H. Ledlow
Colonel, US Army Reserve
Regional Engineer



LEGEND

Property Boundary

0 500 1,000 2,000

Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 1
Location Map
Preferred Alternative Property
1900 Lafayette Road
Portsmouth, New Hampshire

CH2MHILL

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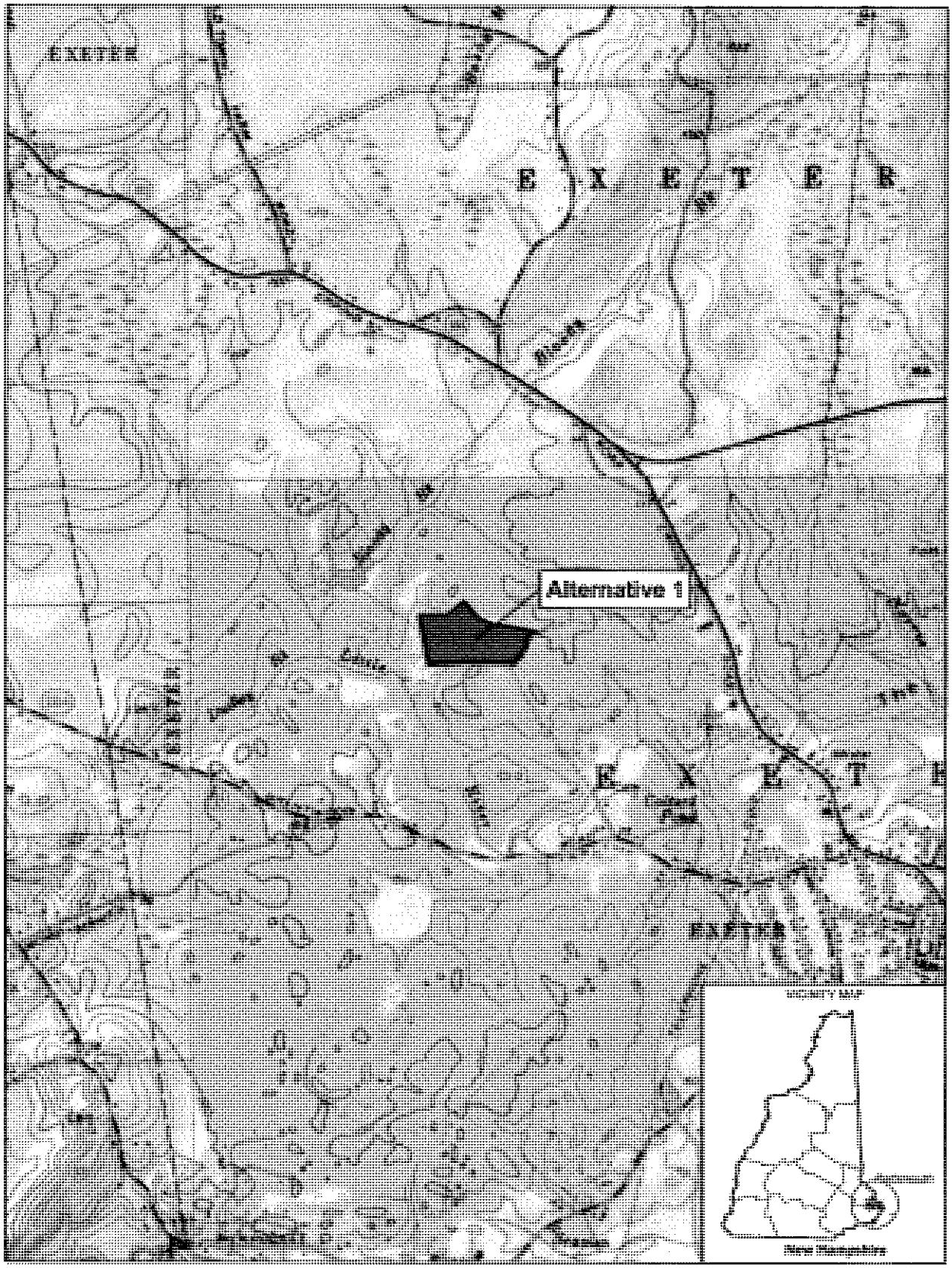

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Exeter Quadrangle, USGS 1:24k DRG

FIGURE 2
Location Map
Alternative 1 Property
22 Continental Drive
Exeter, New Hampshire

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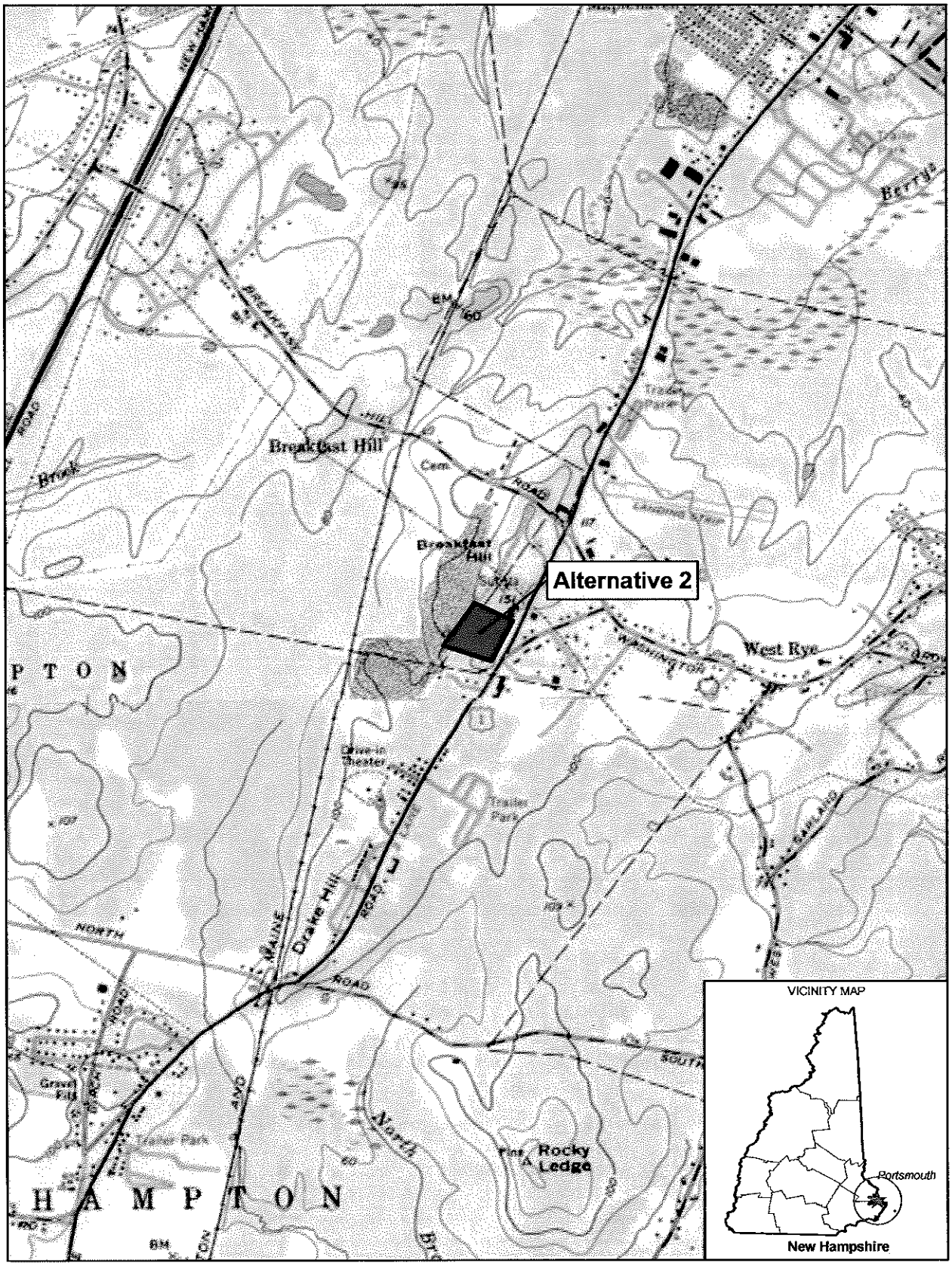

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 3
Location Map
Alternative 2 Property
295, 311, and 355 Lafayette Road
Rye, New Hampshire

CH2MHILL

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NEW JERSEY 08640-5000

REPLY TO
ATTENTION OF

February 25, 2010

Mr. Ridgley Mauck, Program Supervisor
New Hampshire Department of Environmental Services
Alteration of Terrain Bureau
29 Hazen Drive
P.O. Box 95
Concord, NH 03301

Dear Mr. Mauck:

The United States Army Reserve (USAR), Regional Support Command (RSC) is proposing land acquisition, construction, and operation of a U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire (NH), in accordance with the Base Closure and Realignment (BRAC) Commission. On September 8, 2005, the BRAC Commission recommended that certain realignment actions occur at USAR components in New Hampshire: close Paul Doble Army Reserve Center in Portsmouth, and relocate units to a new AFRC and associated training and maintenance facilities in the vicinity of the Pease Air National Guard Base. Three parcels of land are being considered within Rockingham County for the proposed project. The Preferred Alternative site is an 11-acre open field located at 1900 Lafayette Road, Portsmouth, NH. Alternative 1 site is a 21-acre wooded area located at 22 Continental Drive, Exeter, NH. Alternative 2 site is a 16-acre upland wooded area located at 295, 311, and 355 Lafayette Road, Rye, NH. The three sites are identified on Figures 1, 2, and 3.

The new AFRC complex would require approximately 6 acres of land and consist of an approximately 21,000-square-foot AFRC, a 610-square-foot unheated storage building, and 750 square yards of military equipment and privately owned vehicle parking. Construction of the new AFRC could potentially require 6 acres of land disturbance.

Please accept this correspondence as notification, as required by the National Environmental Policy Act (NEPA). As part of the early project coordination and NEPA scoping process, we are requesting that federal and state agencies and Native American organizations identify key issues that would be addressed as part of this evaluation. Please provide your comments relative to the following topics:

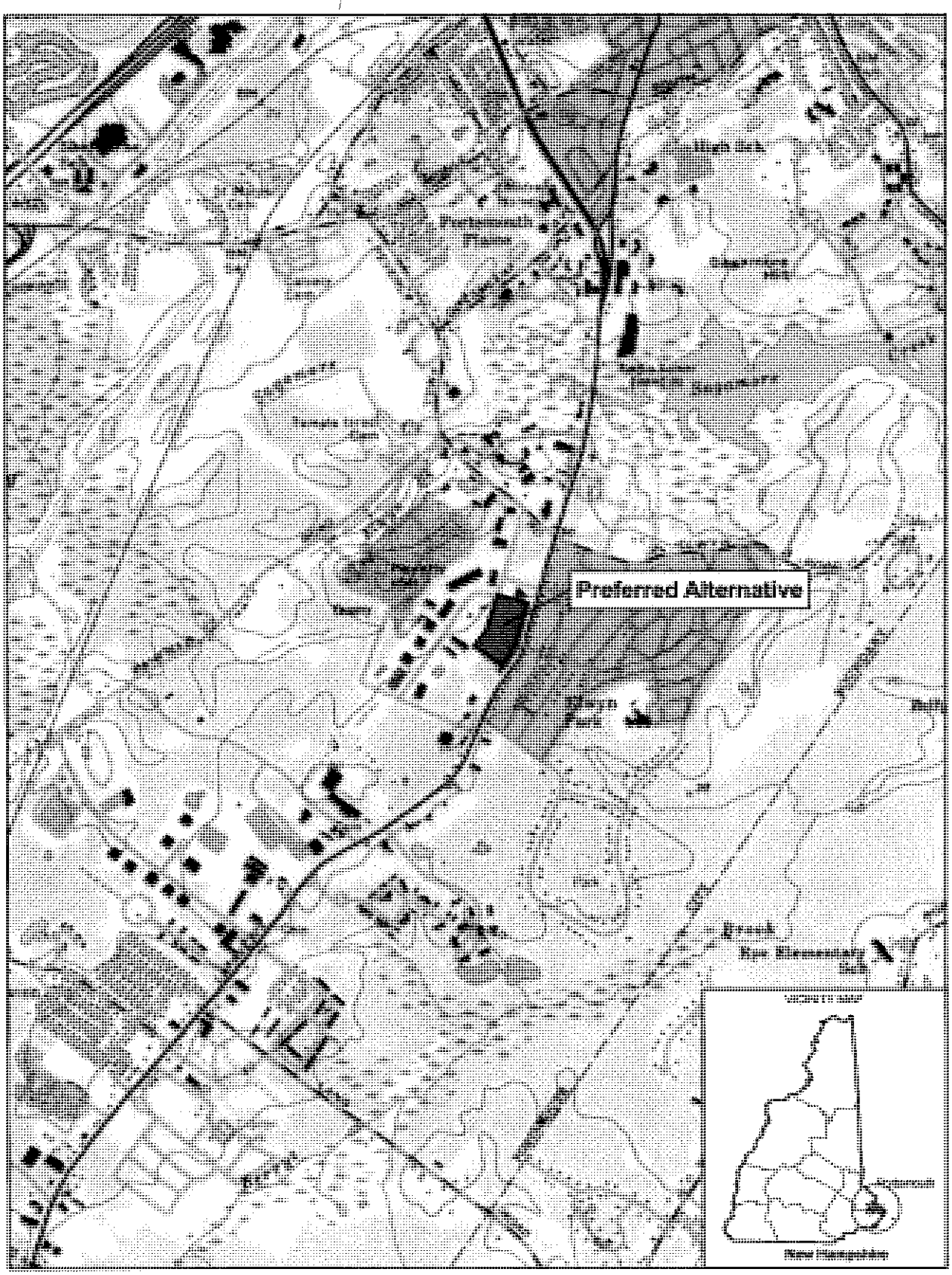
- Alteration of Terrain permit
- Other issues of concern within your regulatory jurisdiction
- Available technical information regarding these issues
- Mitigation or permitting requirements that may be necessary for project implementation

I would like to thank you in advance for your efforts. We request your comments and concurrence on the proposed undertaking within 30 days of receiving this correspondence. Correspondence and other communication regarding this matter should be directed to Robyn

Mock, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix, NJ 08640-5000, Phone: (609)562-7662, Email: Robyn.Mock@usar.army.mil.

Sincerely,

Joseph H. Ledlow
Colonel, US Army Reserve
Regional Engineer



LEGEND

Property Boundary

0 500 1,000 2,000
Feet

FIGURE 1
Location Map
Preferred Alternative Property
1900 Lafayette Road
Portsmouth, New Hampshire

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

CH2MHILL

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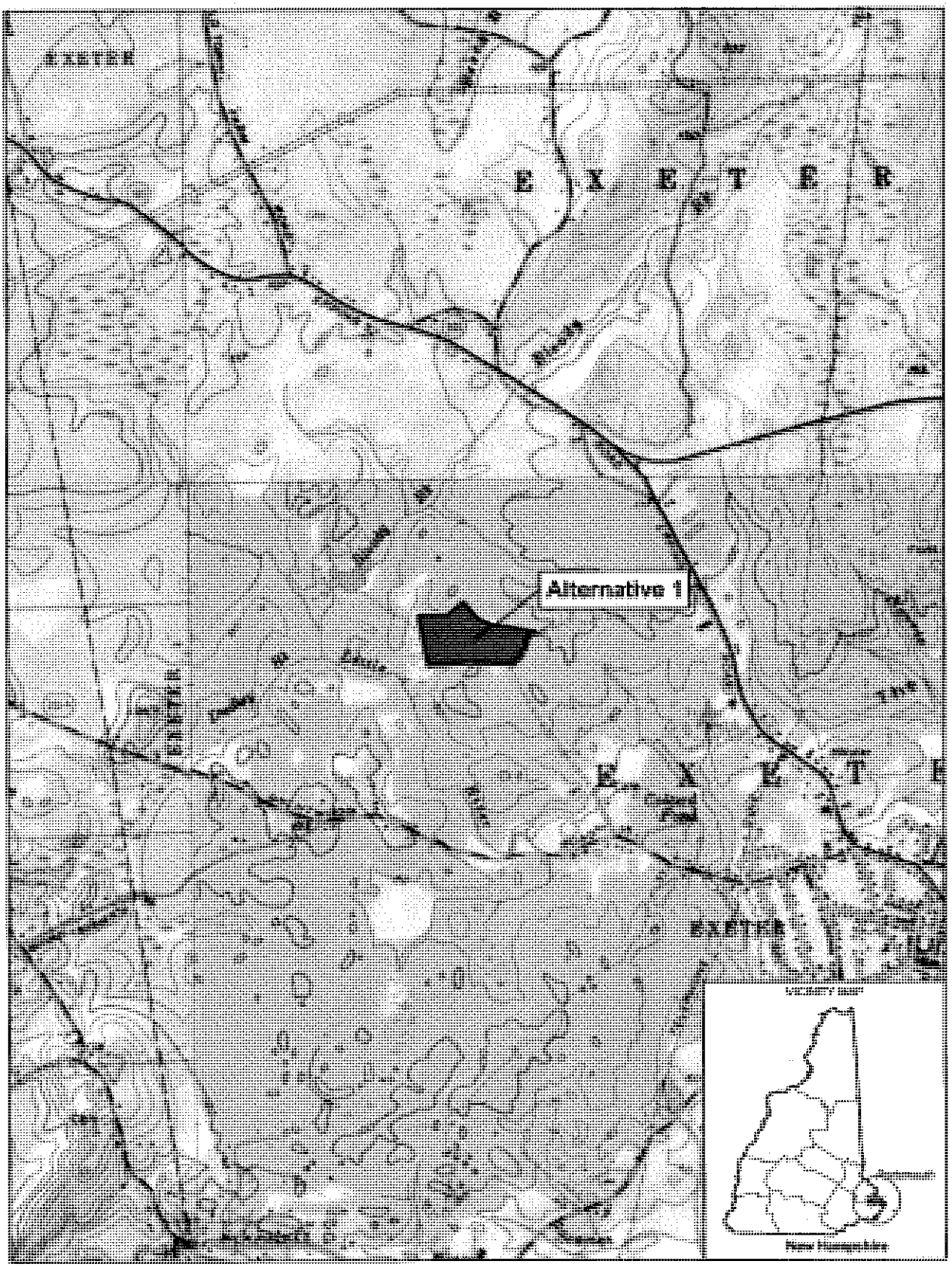

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Exeter Quadrangle, USGS 1:24k DRG

FIGURE 2
Location Map
Alternative 1 Property
22 Continental Drive
Exeter, New Hampshire

CH2MHILL

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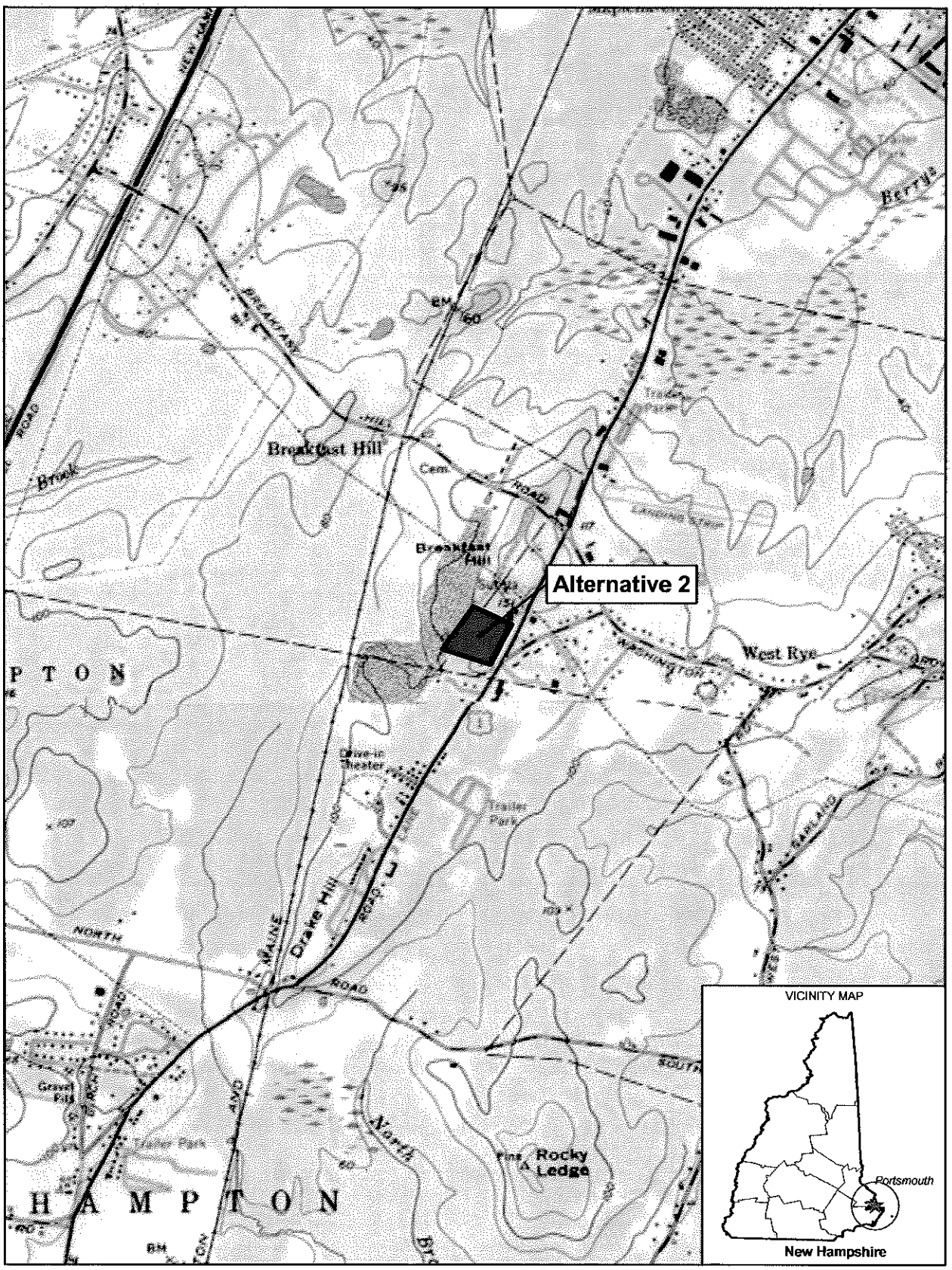

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 3
Location Map
Alternative 2 Property
295, 311, and 355 Lafayette Road
Rye, New Hampshire

CH2MHILL

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NEW JERSEY 08640-5000

REPLY TO
ATTENTION OF

February 25, 2010

Mr. Scott Hilton
New Hampshire Department of Environmental Services
Waste Management Division
50 International Drive
Suite 200
Portsmouth, NH 03801

Dear Mr. Hilton:

The United States Army Reserve (USAR), Regional Support Command (RSC) is proposing land acquisition, construction, and operation of a U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire (NH), in accordance with the Base Closure and Realignment (BRAC) Commission. On September 8, 2005, the BRAC Commission recommended that certain realignment actions occur at USAR components in New Hampshire: close Paul Doble Army Reserve Center in Portsmouth, and relocate units to a new AFRC and associated training and maintenance facilities in the vicinity of the Pease Air National Guard Base. Three parcels of land are being considered within Rockingham County for the proposed project. The Preferred Alternative site is an 11-acre open field located at 1900 Lafayette Road, Portsmouth, NH. Alternative 1 site is a 21-acre wooded area located at 22 Continental Drive, Exeter, NH. Alternative 2 site is a 16-acre upland wooded area located at 295, 311, and 355 Lafayette Road, Rye, NH. The three sites are identified on Figures 1, 2 and 3.

The Preferred Alternative site was apparently quarried for aggregates in the past and now consists of non-native fill material. Alternative Site 1 consists of a mix of mature and maturing hardwood forest with some conifers, and forested wetlands. The eastern and northern portions of Alternative Site 2 were previously developed with a motel, which has since been demolished. The remainder of the parcel is primarily mature eastern hemlock forest with some hardwoods around the periphery.

The new AFRC complex would require approximately 6 acres of land and consist of an approximately 21,000-square-foot AFRC, a 610-square-foot unheated storage building, and 750 square yards of military equipment and privately owned vehicle parking.

Please accept this correspondence as notification, as required by the National Environmental Policy Act (NEPA). As part of the early project coordination and NEPA scoping process, we are requesting that federal and state agencies and Native American organizations identify key issues that would be addressed as part of this evaluation. Please provide your comments relative to the following:

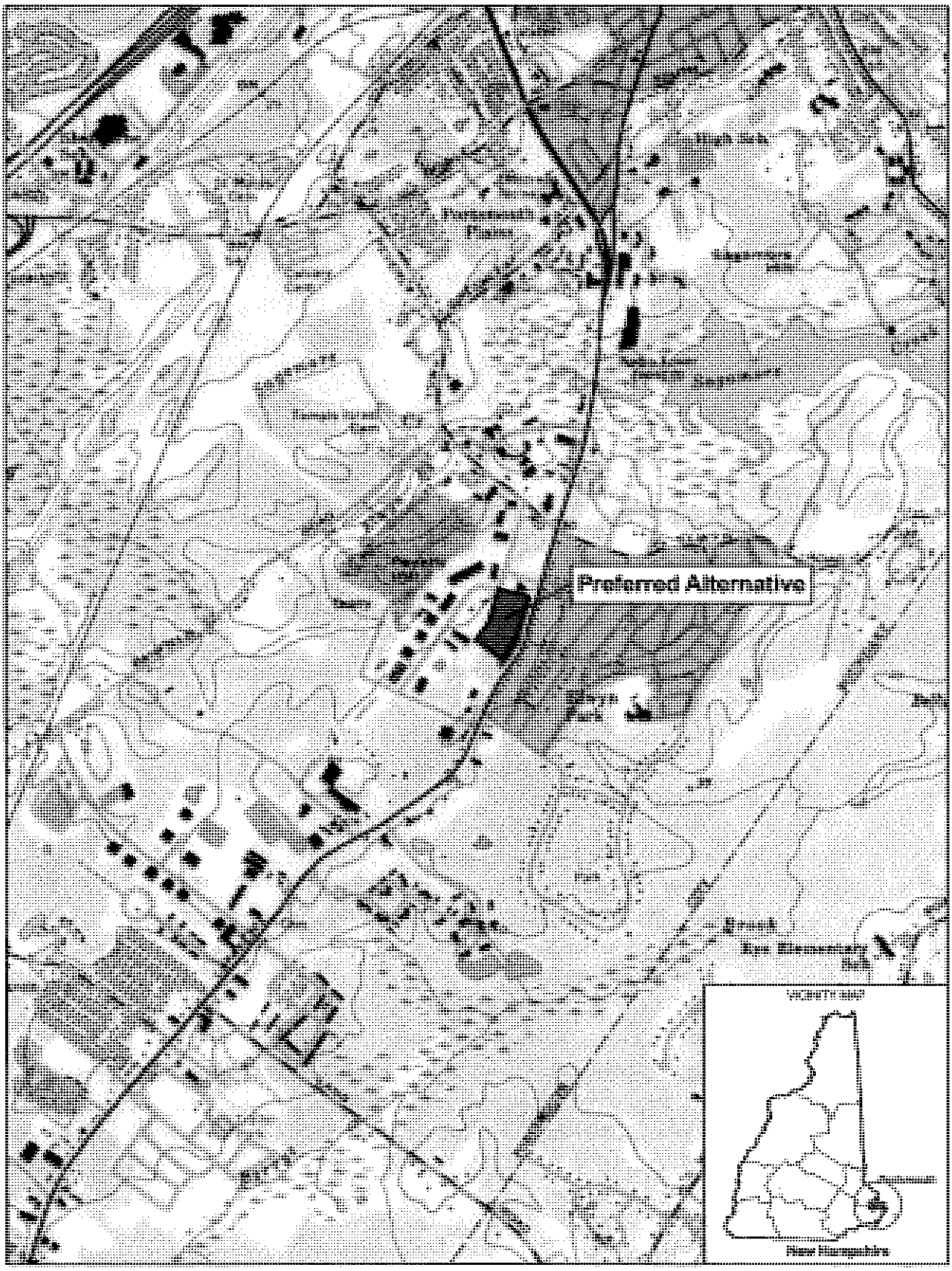
- Specific issues regarding Coakley Landfill at 480 Breakfast Hill Road, which is just north of Alternative Site 2
- Specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction
- Available technical information regarding these issues

- Mitigation or permitting requirements that may be necessary for project implementation

To sufficiently address key project issues while maintaining the project schedule, we request that you provide a written response to this letter within 30 days of receipt. If you require additional information or have questions or concerns pertaining to this correspondence, please contact Ms. Robyn Mock, U. S. Army Reserve 99th RSC, Department of Public Works, at (609) 562-7662 or at robyn.mock@usar.army.mil.

Sincerely,

Joseph H. Ledlow
Colonel, US Army Reserve
Regional Engineer



LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 1
Location Map
Preferred Alternative Property
1900 Lafayette Road
Portsmouth, New Hampshire

CH2MHILL

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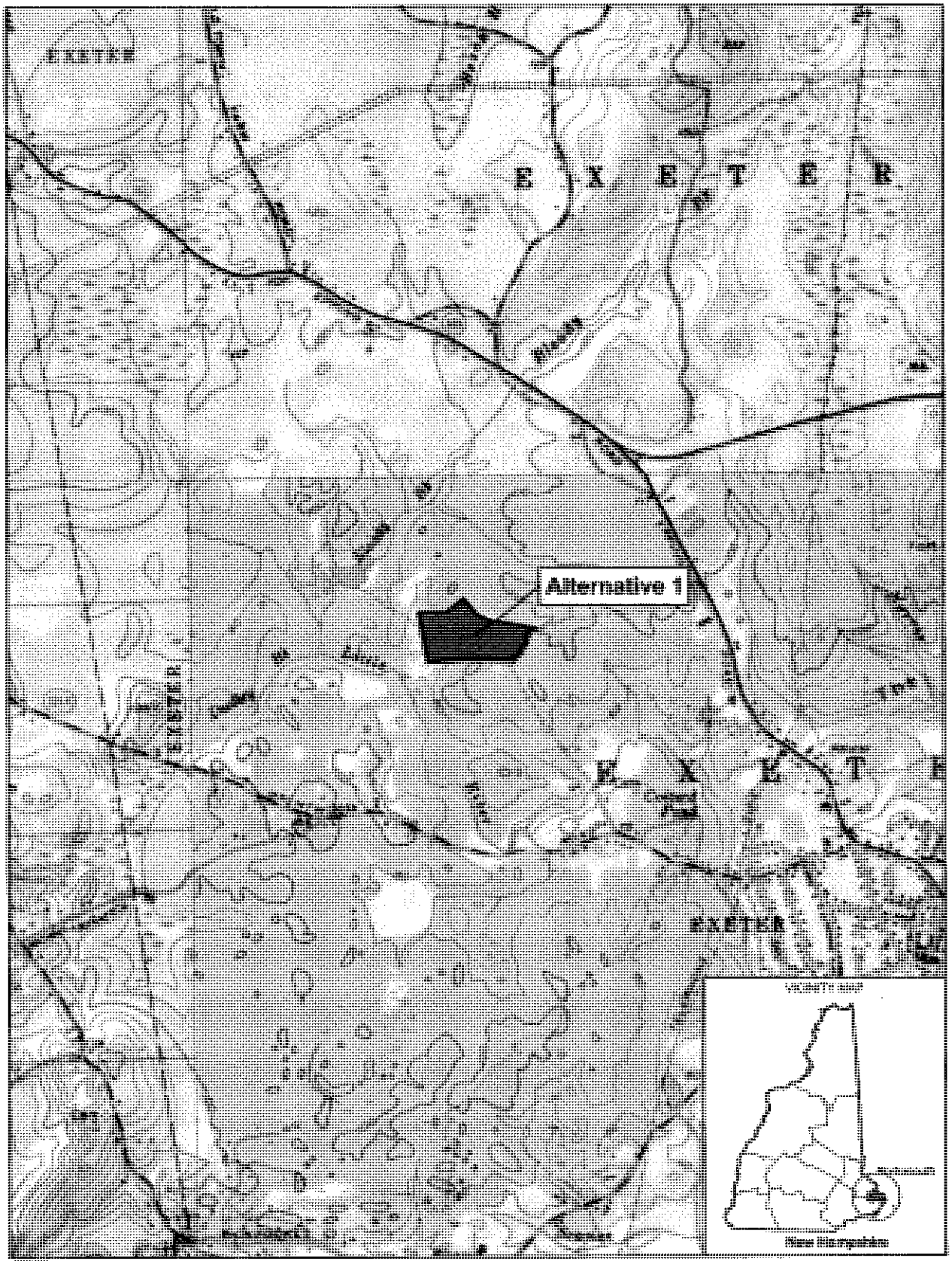

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Exeter Quadrangle, USGS 1:24k DRG

FIGURE 2
Location Map
Alternative 1 Property
22 Continental Drive
Exeter, New Hampshire

CH2MHILL

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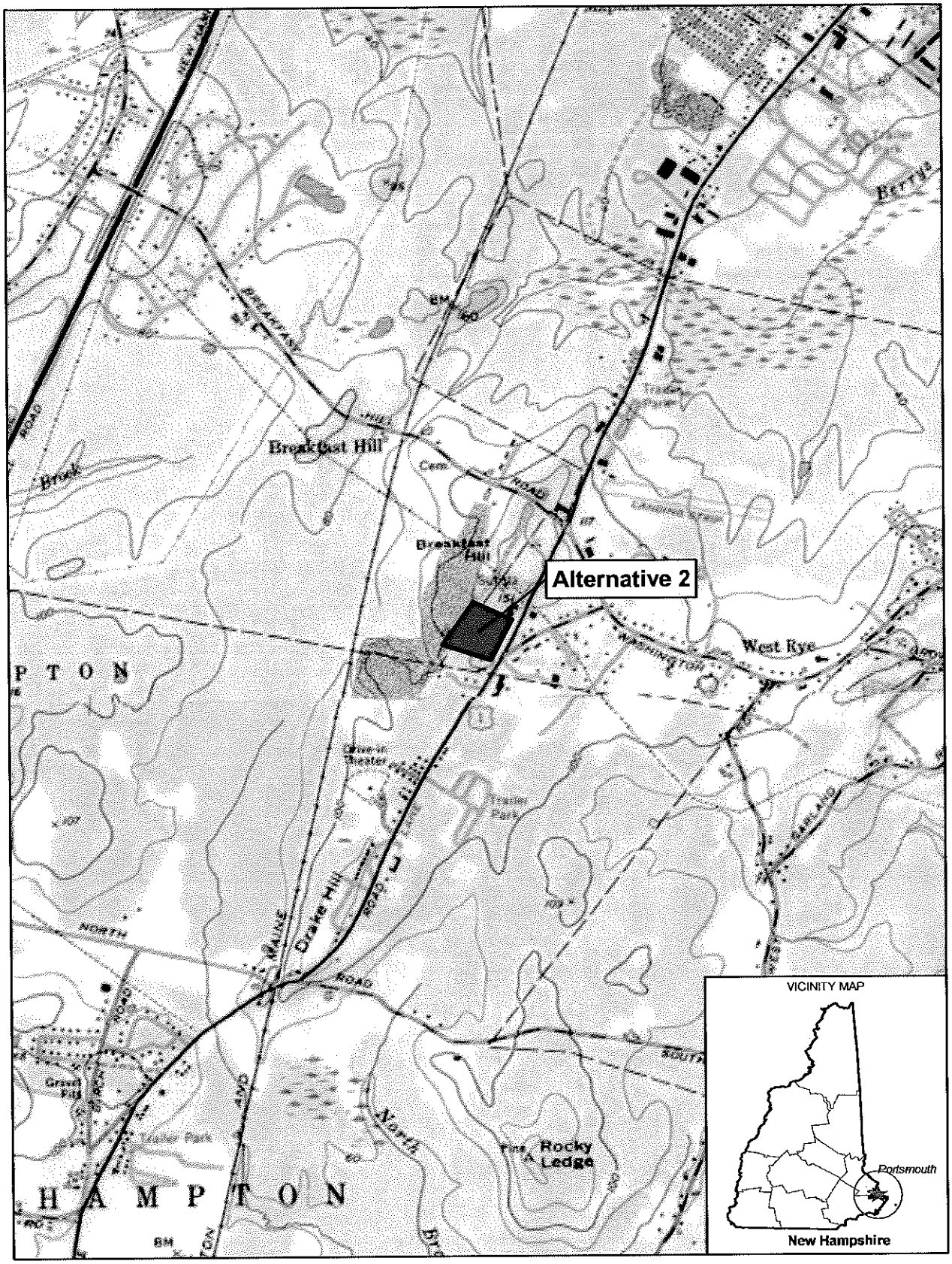

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 3
Location Map
Alternative 2 Property
295, 311, and 355 Lafayette Road
Rye, New Hampshire

CH2MHILL

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NEW JERSEY 08640-5000

REPLY TO
ATTENTION OF

February 25, 2010

Cheryl Andrews-Maltais, THPO
Wampanoag Tribe of Gay Head-Aquinnah
20 Black Brook Rd.
Aquinnah, MA 02535-9701

Dear Ms. Andrews-Maltais:

The United States Army Reserve (USAR), Regional Support Command (RSC) is proposing land acquisition, construction, and operation of a U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire (NH), in accordance with the Base Closure and Realignment (BRAC) Commission. On September 8, 2005, the BRAC Commission recommended that certain realignment actions occur at USAR components in New Hampshire: close Paul Doble Army Reserve Center in Portsmouth, and relocate units to a new AFRC and associated training and maintenance facilities in the vicinity of the Pease Air National Guard Base. Three properties are being considered within Rockingham County for the proposed project. The Preferred Alternative site is an 11-acre open field located at 1900 Lafayette Road, Portsmouth, NH. Alternative 1 site is a 21-acre wooded area located at 22 Continental Drive, Exeter, NH. Alternative 2 site is a 16-acre upland wooded area located at 295, 311, and 355 Lafayette Road, Rye, NH. The three sites are identified on Figures 1, 2 and 3.

The new AFRC complex would require approximately 6 acres of land and consist of an approximately 21,000-square-foot AFRC, a 610-square-foot unheated storage building, and 750 square yards of military equipment and privately owned vehicle parking.

Due to past activity as a functioning quarry, the Preferred Alternative site is believed to be highly disturbed. Onsite soils have been determined to be primarily non-native fill material. A review of the New Hampshire historical records and a site walk over on December 15, 2009 indicates no known sensitive historic or archeological significant areas. It is the recommendation of the 99th RSC that a cultural resources survey is not necessary for the Preferred Alternative site due to the extensive disturbance from past activities.

Alternative 1 site is entirely wooded and based on a preliminary review by Public Archaeology Laboratory, Inc. cultural resource specialists, the area is considered highly sensitive for Native American and historic EuroAmerican resources. A Phase IB survey will be conducted for Alternative 1.

Alternative 2 site consists of a parcel along Lafayette Road (Route 1). A portion of the site is adjacent to Lafayette Road, where the former Southwind Motel was located.

The western portion of the property is forested with mature eastern hemlock and hardwoods. A Phase IB Survey will be conducted for the undisturbed portion of this property, primarily for Native American resources.

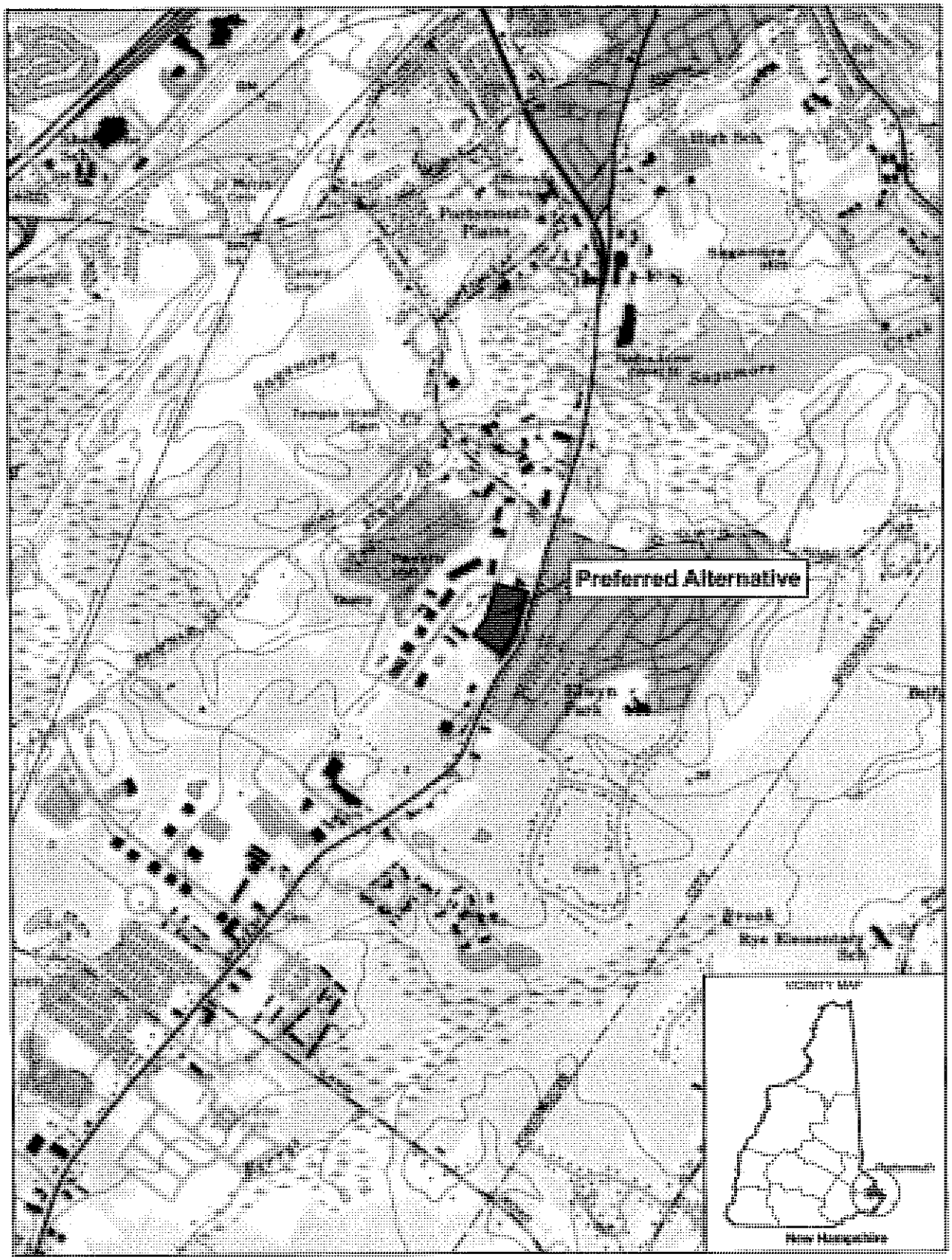
Please accept this correspondence as notification and invitation to participate in the consultation process concerning this action, as required by the National Historic Preservation Act of 1966 (NHPA), as amended; the Archaeological Resources Protection Act of 1979; the Native American Graves Protection and Repatriation Act of 1990; and Presidential Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments.* In accordance with the above regulations, we are proposing to conduct cultural resources assessments as discussed above for these properties. If you wish to participate in this process, please contact us within 30 days of the date of this letter. In addition, we are requesting that you provide information about any known Traditional Cultural Properties or sacred sites within the proposed development tracts.

I look forward to working with you or your designated representative. If we do not hear from you within 30 days, we will assume that you concur with our determination and will proceed as discussed above. If you require additional information or have questions or concerns pertaining to this correspondence, please contact Ms. Robyn Mock, U. S. Army Reserve 99th RSC, Department of Public Works, at (609) 562-7662 or at robyn.mock@usar.army.mil.

Sincerely,

Joseph H. Ledlow
Colonel, US Army Reserve
Regional Engineer

Enclosures:
Figure 1: Preferred Alternative
Figure 2: Alternative 1
Figure 3: Alternative 2



LEGEND

Property Boundary

0 500 1,000 2,000

Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 1
Location Map
Preferred Alternative Property
1900 Lafayette Road
Portsmouth, New Hampshire

CH2MHILL

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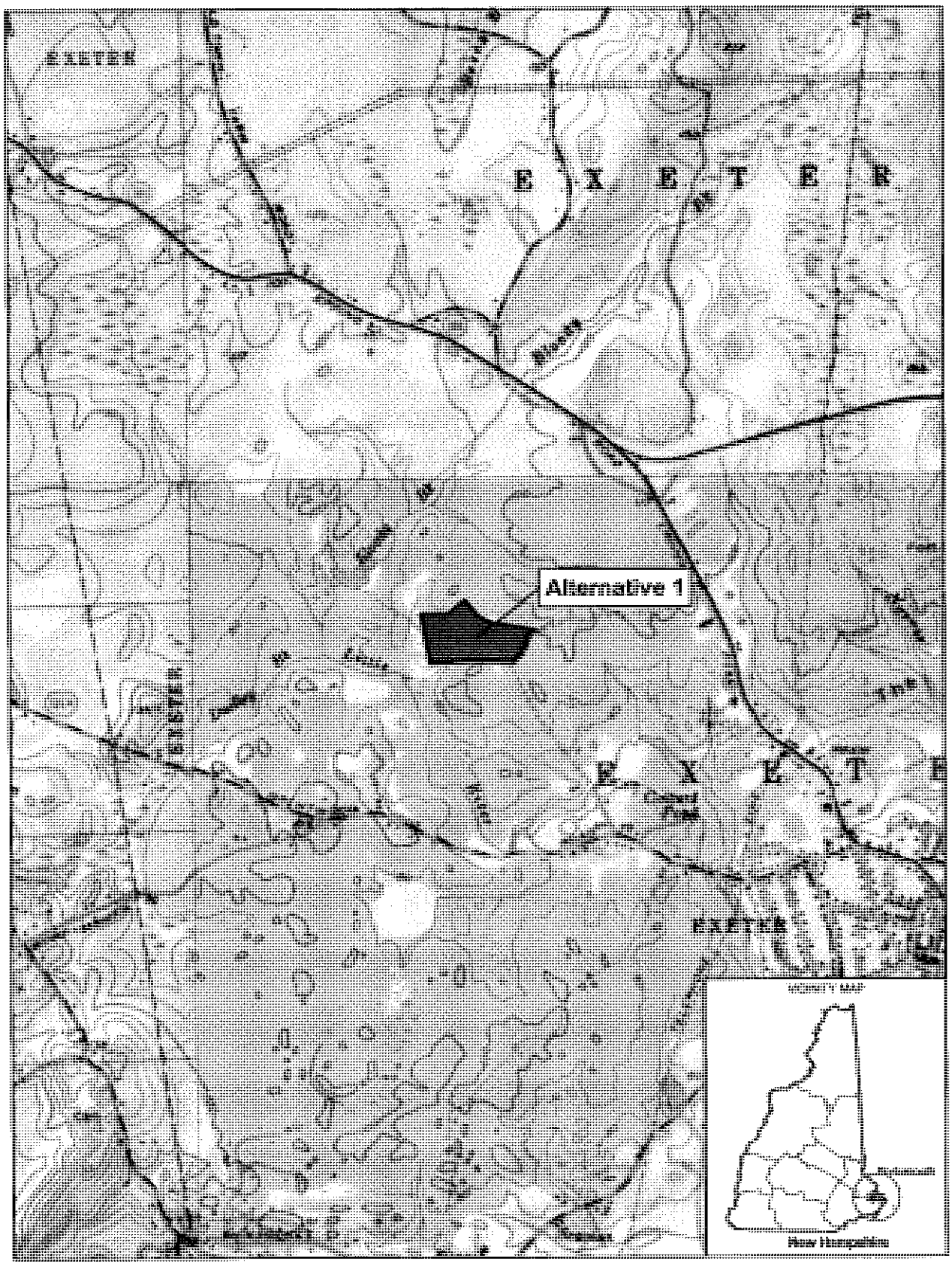

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Exeter Quadrangle, USGS 1:24k DRG

FIGURE 2
Location Map
Alternative 1 Property
22 Continental Drive
Exeter, New Hampshire

CH2MHILL

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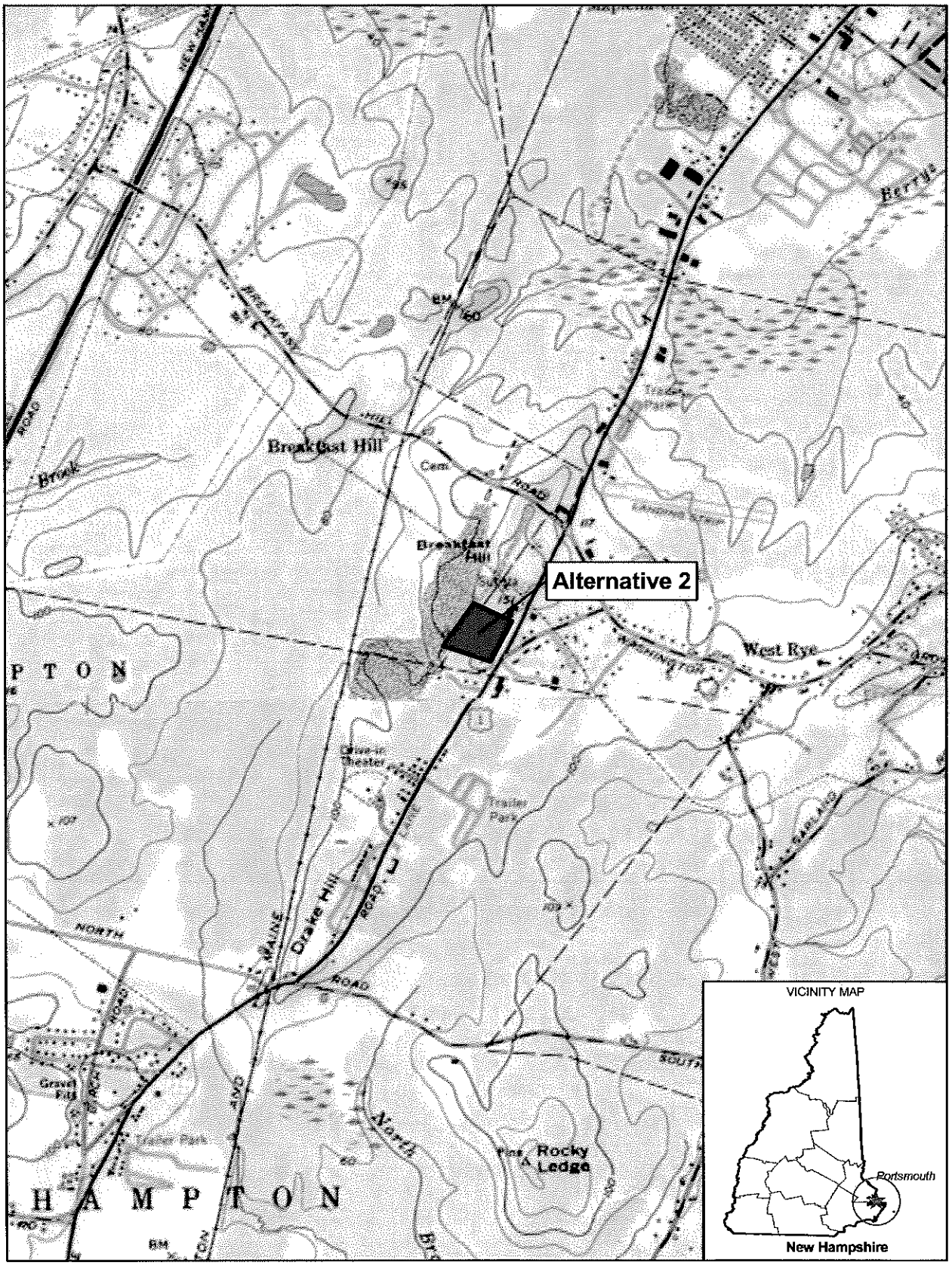

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 3
Location Map
Alternative 2 Property
295, 311, and 355 Lafayette Road
Rye, New Hampshire

CH2MHILL

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NEW JERSEY 08640-5000

REPLY TO
ATTENTION OF

February 25, 2010

Ms. Dori Wiggin, Wetlands Bureau Inspector
New Hampshire Department of Environmental Services
Wetlands Bureau
50 International Drive
Suite 200
Portsmouth, NH 03801

Dear Ms. Wiggin:

The United States Army Reserve (USAR), Regional Support Command (RSC) is proposing land acquisition, construction, and operation of a U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire (NH), in accordance with the Base Closure and Realignment (BRAC) Commission. On September 8, 2005, the BRAC Commission recommended that certain realignment actions occur at USAR components in New Hampshire: close Paul Doble Army Reserve Center in Portsmouth, and relocate units to a new AFRC and associated training and maintenance facilities in the vicinity of the Pease Air National Guard Base. Three parcels of land are being considered within Rockingham County for the proposed project. The Preferred Alternative site is an 11-acre open field located at 1900 Lafayette Road, Portsmouth, NH. Alternative 1 site is a 21-acre wooded area located at 22 Continental Drive, Exeter, NH. Alternative 2 site is a 16-acre upland wooded area located at 295, 311, and 355 Lafayette Road, Rye, NH. The three sites are identified on Figures 1, 2, and 3.

The new AFRC complex would require approximately 6 acres of land and consist of an approximately 21,000-square-foot AFRC, a 610-square-foot unheated storage building, and 750 square yards of military equipment and privately owned vehicle parking.

Thank you for your participation at the site walkover for the Preferred Alternative site on December 1, 2009 at the Preferred Alternative site with representatives from the Army, the U.S. Army Corps of Engineers, New England District (NAE), Regulatory Division, and, CH2MHill, who is preparing an Environmental Assessment (EA) for this proposed project as required by the National Environmental Policy Act (NEPA). Based on the site walkover and discussions with you regarding the site, it was determined that the site contained wetlands which are regulated by your office. The Army conducted a wetland and surface water delineation survey of the site on December 16, 2009. The "Wetland/Surface Water Delineation Report" dated January 2010 prepared by GZA GeoEnvironmental, Inc. is enclosed. We will continue to coordinate with you regarding State of New Hampshire wetland permitting requirements associated with this site.

The Army is coordinating with Dr. Frank Richardson of your office regarding Alternative Site 1 located in Exeter, New Hampshire. The Army also performed a wetland delineation at this site and wetlands were observed, including potential vernal pools. A vernal pool assessment will be conducted on Alternative Site 1 in the spring when amphibian breeding would be likely.

Alternative Site 2 was also visited by New Hampshire Certified Wetland Scientists and no wetlands or vernal pools were observed on the site.

Please accept this correspondence as notification, as required by the NEPA. As part of the early project coordination and NEPA scoping process, we are requesting that federal and state agencies and Native American organizations identify key issues that would be addressed as part of this evaluation. Please provide your comments relative to the following topics:

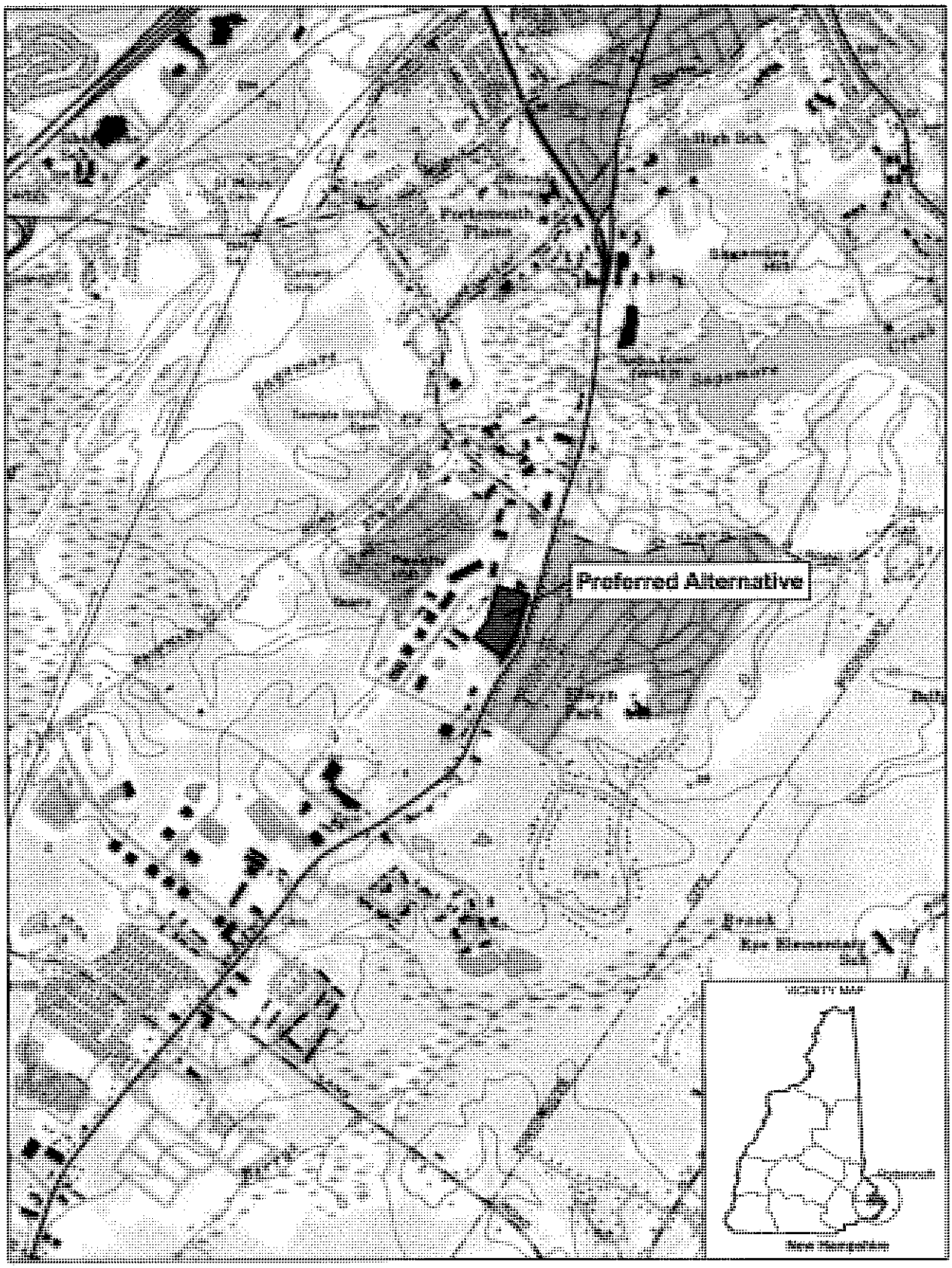
- Specific issues or geographic areas of concern, based on your expertise or regulatory jurisdiction
- Available technical information regarding these issues
- Mitigation or permitting requirements that may be necessary for project implementation

To sufficiently address key project issues while maintaining the project schedule, we request that you provide a written response to this letter within 30 days of receipt. If you require additional information or have questions or concerns pertaining to this correspondence, please contact Ms. Robyn Mock, U. S. Army Reserve 99th RSC, Department of Public Works, at (609) 562-7662 or at robyn.mock@usar.army.mil.

Sincerely,

Joseph H. Ledlow
Colonel, US Army Reserve
Regional Engineer

Enclosures:
Figure 1: Preferred Alternative
Figure 2: Alternative 1
Figure 3: Alternative 2
Wetland/Surface Water Delineation Report – 1900 Lafayette Road, Portsmouth, NH



LEGEND

Property Boundary

N

0 500 1,000 2,000

Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 1
Location Map
Preferred Alternative Property
1900 Lafayette Road
Portsmouth, New Hampshire

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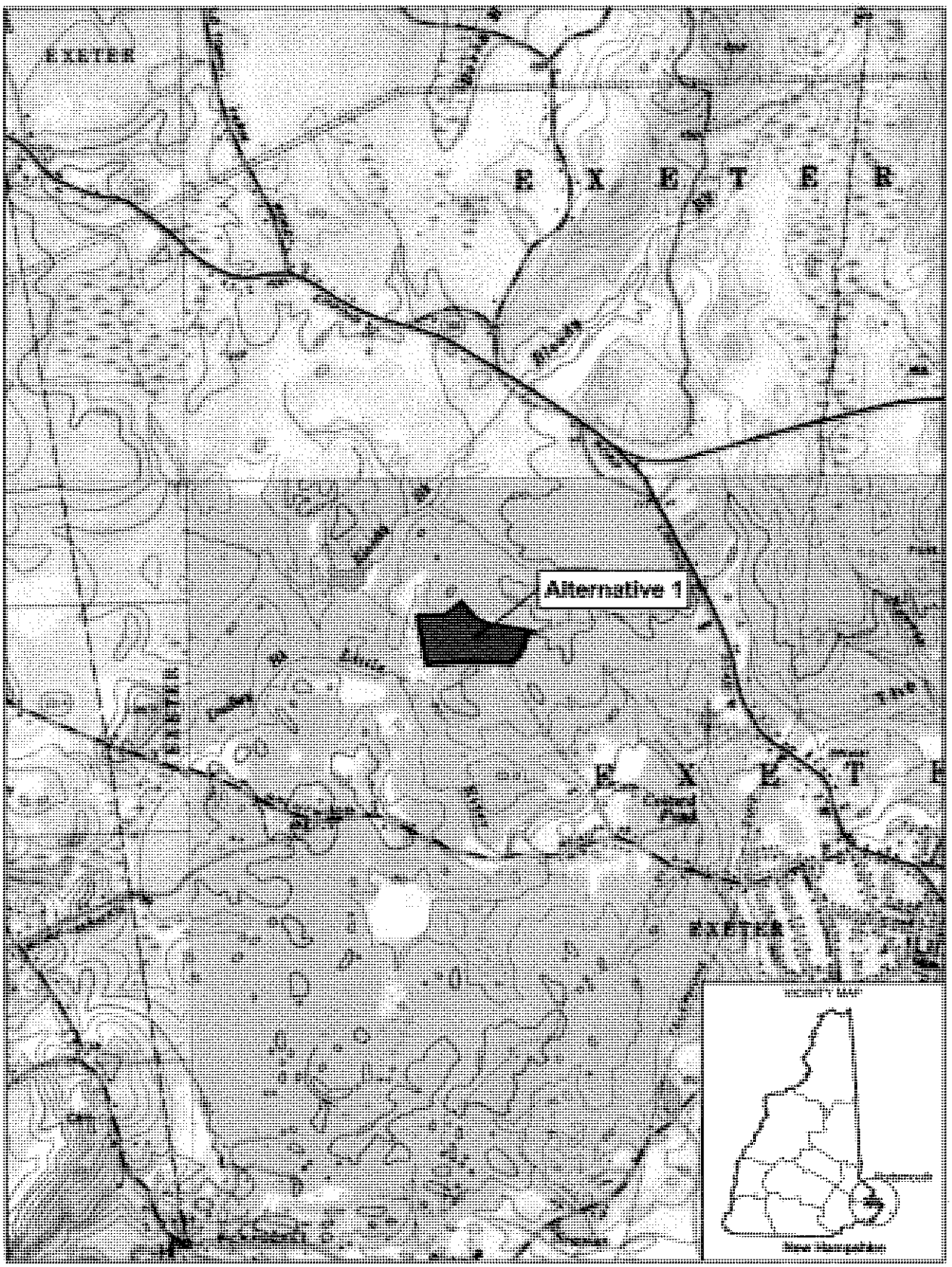

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Exeter Quadrangle, USGS 1:24k DRG

FIGURE 2
Location Map
Alternative 1 Property
22 Continental Drive
Exeter, New Hampshire

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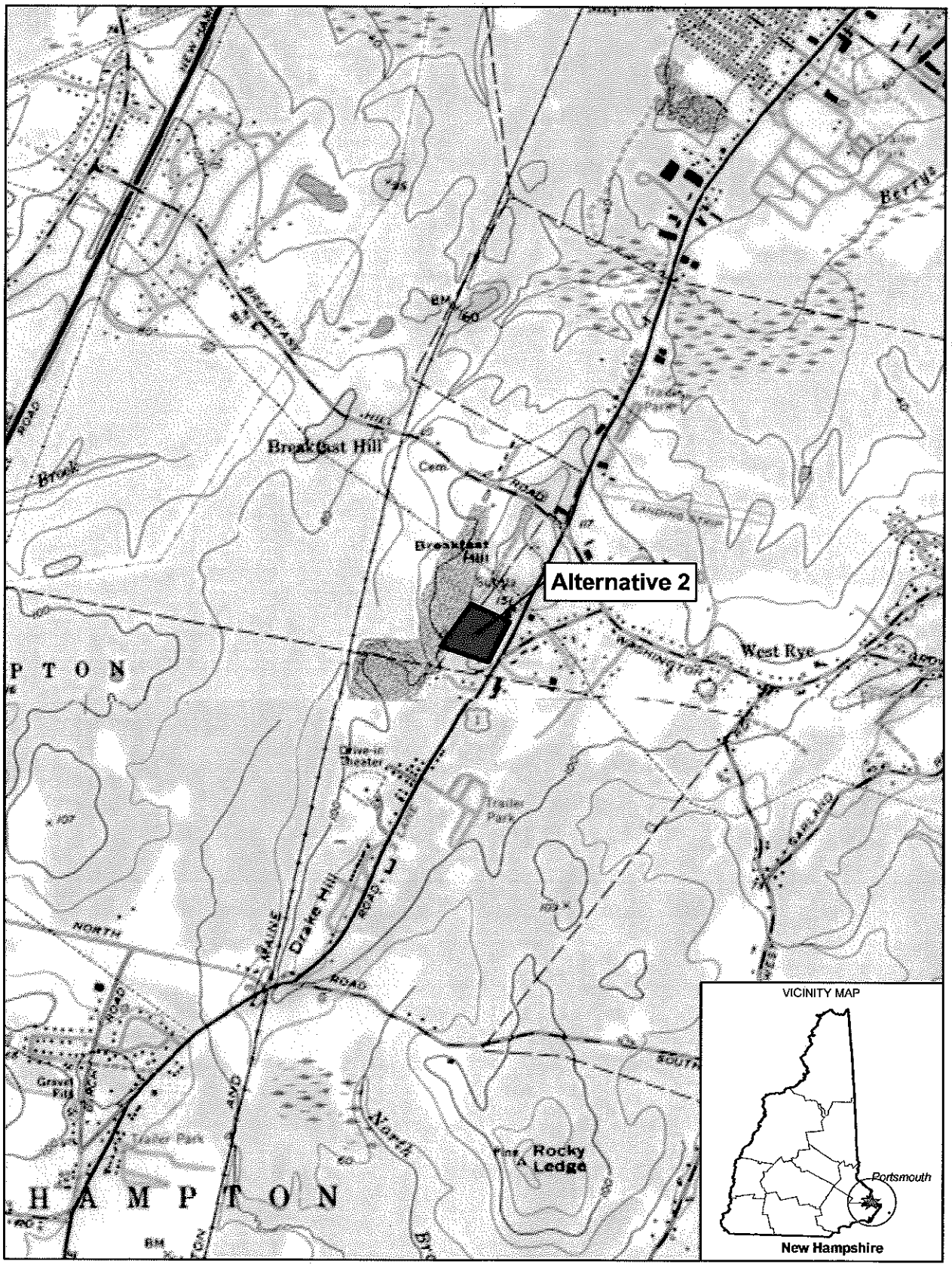

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 3
Location Map
Alternative 2 Property
295, 311, and 355 Lafayette Road
Rye, New Hampshire

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NEW JERSEY 08640-5000

REPLY TO
ATTENTION OF

February 25, 2010

Bonnie Newsom, THPO
Penobscot Nation
Cultural and Historic Preservation Program
12 Wabanaki Way
Indian Island, ME 04468

Dear Ms. Newsom:

The United States Army Reserve (USAR), Regional Support Command (RSC) is proposing land acquisition, construction, and operation of a U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire (NH), in accordance with the Base Closure and Realignment (BRAC) Commission. On September 8, 2005, the BRAC Commission recommended that certain realignment actions occur at USAR components in New Hampshire: close Paul Doble Army Reserve Center in Portsmouth, and relocate units to a new AFRC and associated training and maintenance facilities in the vicinity of the Pease Air National Guard Base. Three properties are being considered within Rockingham County for the proposed project. The Preferred Alternative site is an 11-acre open field located at 1900 Lafayette Road, Portsmouth, NH. Alternative 1 site is a 21-acre wooded area located at 22 Continental Drive, Exeter, NH. Alternative 2 site is a 16-acre upland wooded area located at 295, 311, and 355 Lafayette Road, Rye, NH. The three sites are identified on Figures 1, 2 and 3.

The new AFRC complex would require approximately 6 acres of land and consist of an approximately 21,000-square-foot AFRC, a 610-square-foot unheated storage building, and 750 square yards of military equipment and privately owned vehicle parking.

Due to past activity as a functioning quarry, the Preferred Alternative site is believed to be highly disturbed. Onsite soils have been determined to be primarily non-native fill material. A review of the New Hampshire historical records and a site walk over on December 15, 2009 indicates no known sensitive historic or archeological significant areas. It is the recommendation of the 99th RSC that a cultural resources survey is not necessary for the Preferred Alternative site due to the extensive disturbance from past activities.

Alternative 1 site is entirely wooded and based on a preliminary review by Public Archaeology Laboratory, Inc. cultural resource specialists, the area is considered highly sensitive for Native American and historic EuroAmerican resources. A Phase IB survey will be conducted for Alternative 1.

Alternative 2 site consists of a portion along Lafayette Road (Route 1). A portion of the site is adjacent to Lafayette Road, where the former Southwind Motel was located. The western portion of the property is forested with mature eastern hemlock and hardwoods. A Phase IB Survey will be conducted for the undisturbed portion of this property, primarily for Native American resources.

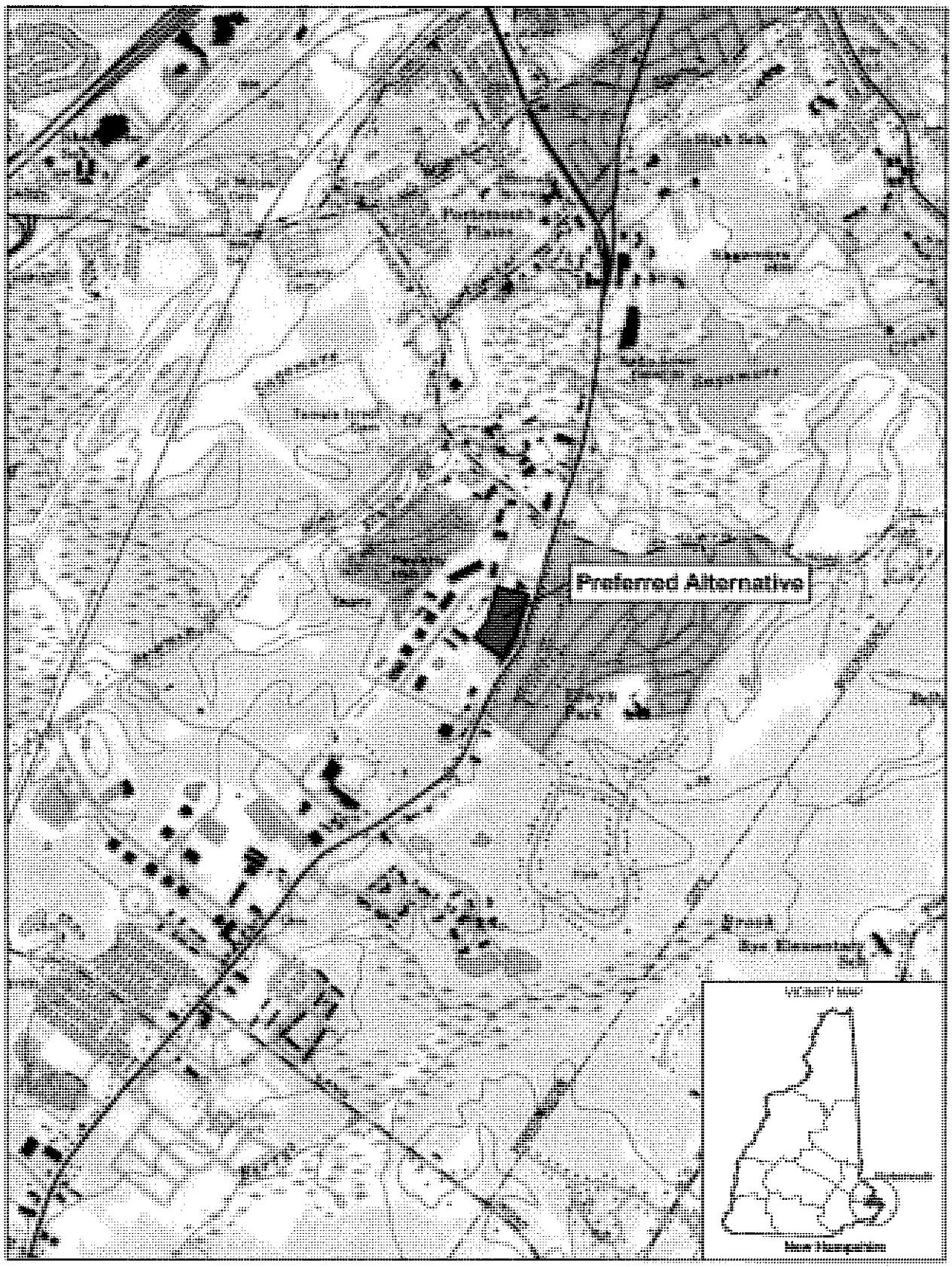
Please accept this correspondence as notification and invitation to participate in the consultation process concerning this action, as required by the National Historic Preservation Act of 1966 (NHPA), as amended; the Archaeological Resources Protection Act of 1979; the Native American Graves Protection and Repatriation Act of 1990; and Presidential Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments.* In accordance with the above regulations, we are proposing to conduct cultural resources assessments as discussed above for these projects. If you wish to participate in this process, please contact us within 30 days of the date of this letter. In addition, we are requesting that you provide information about any known Traditional Cultural Properties or sacred sites within the proposed development tracts.

I look forward to working with you or your designated representative. If we do not hear from you within 30 days, we will assume that you concur with our determination and will proceed as discussed above. If you require additional information or have questions or concerns pertaining to this correspondence, please contact Ms. Robyn Mock, U. S. Army Reserve 99th RSC, Department of Public Works, at (609) 562-7662 or at robyn.mock@usar.army.mil.

Sincerely,

Joseph H. Ledlow
Colonel, US Army Reserve
Regional Engineer

Enclosures:
Figure 1: Preferred Alternative
Figure 2: Alternative 1
Figure 3: Alternative 2



LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 1
Location Map
Preferred Alternative Property
1900 Lafayette Road
Portsmouth, New Hampshire

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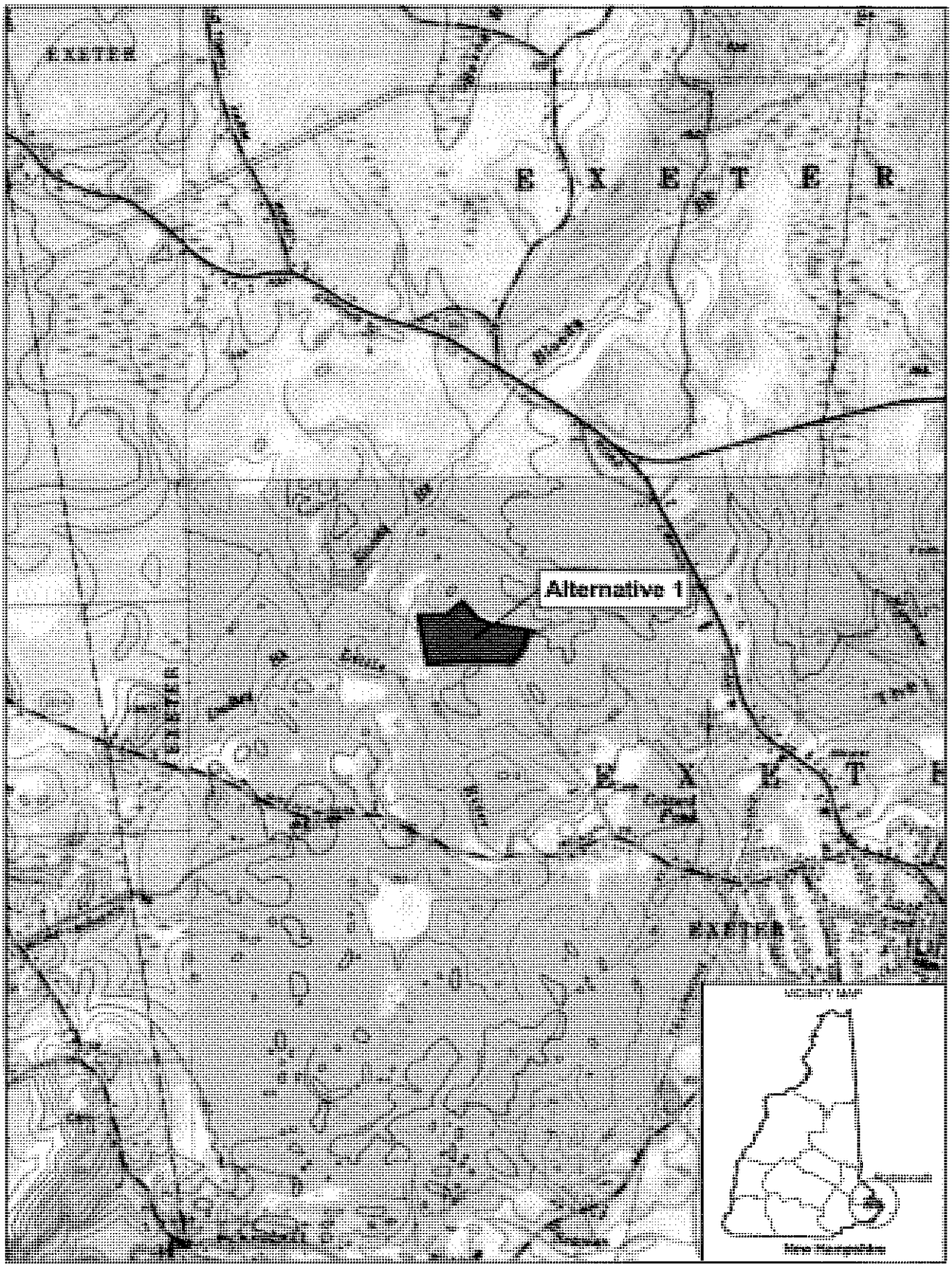

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Exeter Quadrangle, USGS 1:24k DRG

FIGURE 2
Location Map
Alternative 1 Property
22 Continental Drive
Exeter, New Hampshire

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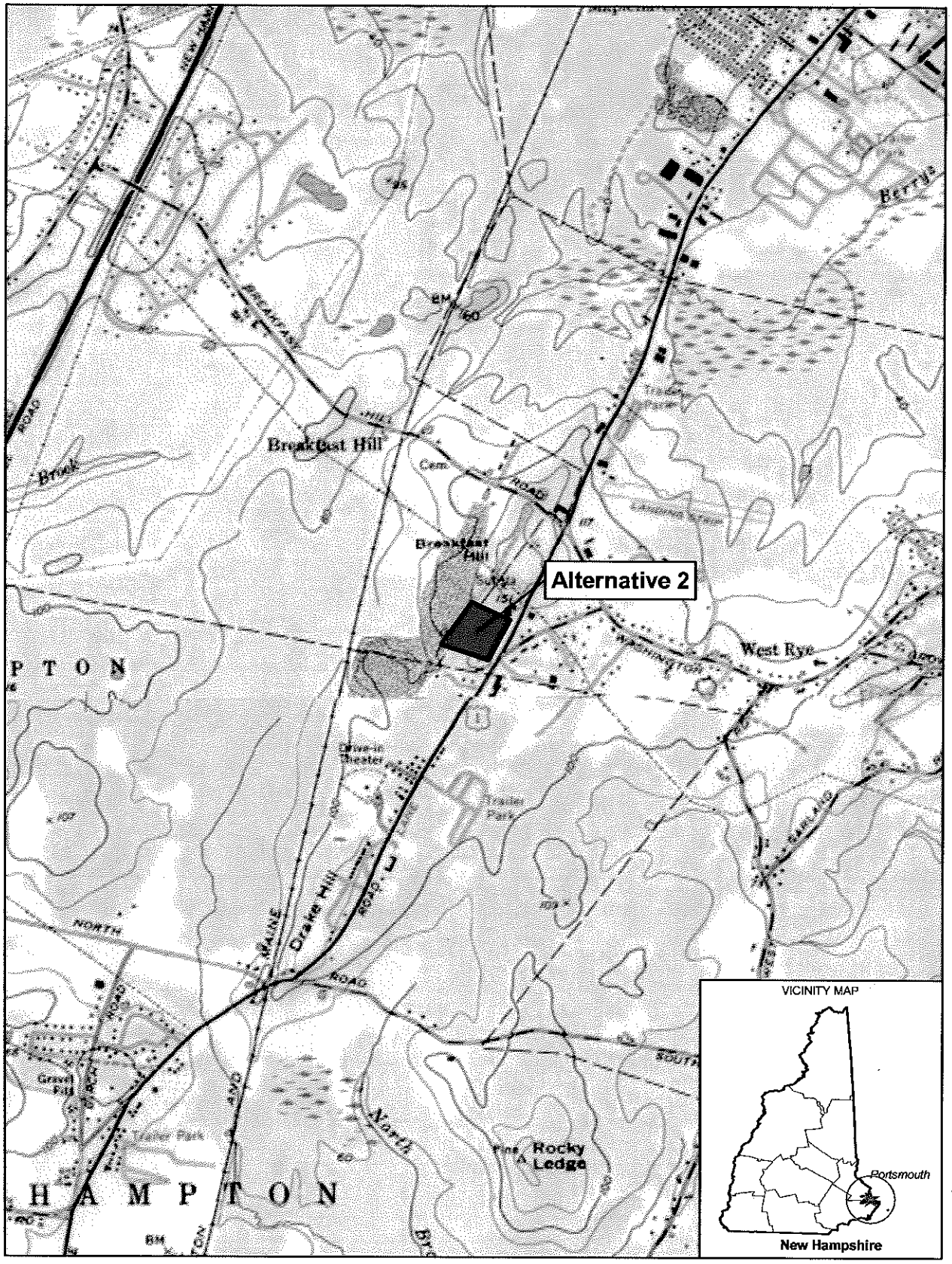

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 3
Location Map
Alternative 2 Property
295, 311, and 355 Lafayette Road
Rye, New Hampshire

CH2MHILL

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NEW JERSEY 08640-5000

REPLY TO
ATTENTION OF

February 25, 2010

Ms Elizabeth H. Muzzey, Director and SHPO
ICO: Ms. Edna Feighner, Project Review and Compliance Coordinator New Hampshire Division of Historical Resources
19 Pillsbury Street, 2nd Floor
Concord, NH 03301-3570

Dear Ms. Muzzey:

The United States Army Reserve Regional Support Command (RSC) is proposing land acquisition and construction and operation of a U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire (NH), in accordance with the Base Closure and Realignment (BRAC) Act of 1990 (Public Law 101-510), as amended. On September 8, 2005, the BRAC Commission recommended that certain realignment actions occur at USAR components in New Hampshire: close Paul Doble Army Reserve Center in Porstmouth, and relocate units to a new AFRC and associated training and maintenance facilities in the vicinity of the Pease Air National Guard Base. In following with BRAC Army policy, a cultural resource assessment will be conducted in strict accordance with the National Environmental Policy Act of 1969, as amended (42 USC 4321 et seq.); National Historic Preservation Act of 1966, as amended (PL 89-6650), its implementing authority, Section 106 of 36 CFR 800; Archaeological and Historic Preservation of 1974; Native American Graves Protection and Repatriation Act of 1990; Executive Order #11593; Council on Environmental Quality) Regulations (40 CFR 1500-1508); and Environmental Analysis of Army Actions (32 CFR Part 651).

Three parcels of land are being considered within Rockingham County for the proposed project. The Preferred Alternative site is an 11-acre open field located at 1900 Lafayette Road, Portsmouth, NH. Alternative 1 site is a 21-acre wooded area located at 22 Continental Drive, Exeter, NH. Alternative 2 site is a 16-acre upland wooded area located at 295, 311, and 355 Lafayette Road, Rye, NH. The Preferred and alternative sites are identified on Figures 1, 2 and 3. The new AFRC complex would require approximately 6 acres of land and consist of an approximately 21,000 square foot AFRC, a 610-square foot unheated storage building, and 750 square yards of military equipment and privately owned vehicle parking.

Due to past activity as a functioning quarry, the Preferred Alternative site is highly disturbed. A review of the New Hampshire historical records and a site walk over on December 15, 2009 indicates no known sensitive historic or archeological significant areas. It is the recommendation of the 99th RSC that a cultural resources survey is not necessary for the Preferred Alternative site due to the extensive disturbance from past land use activities and use of that location would have no effect on historic properties as per 36 CFR 800.4(d)(1).

Alternative 1 site is entirely wooded and based on a preliminary review by the Public Archaeology Laboratory, Inc. cultural resource specialists, the area is considered highly sensitive for Native American and historic EuroAmerican resources. A Phase IB survey is recommended for the Alternative 1 site.

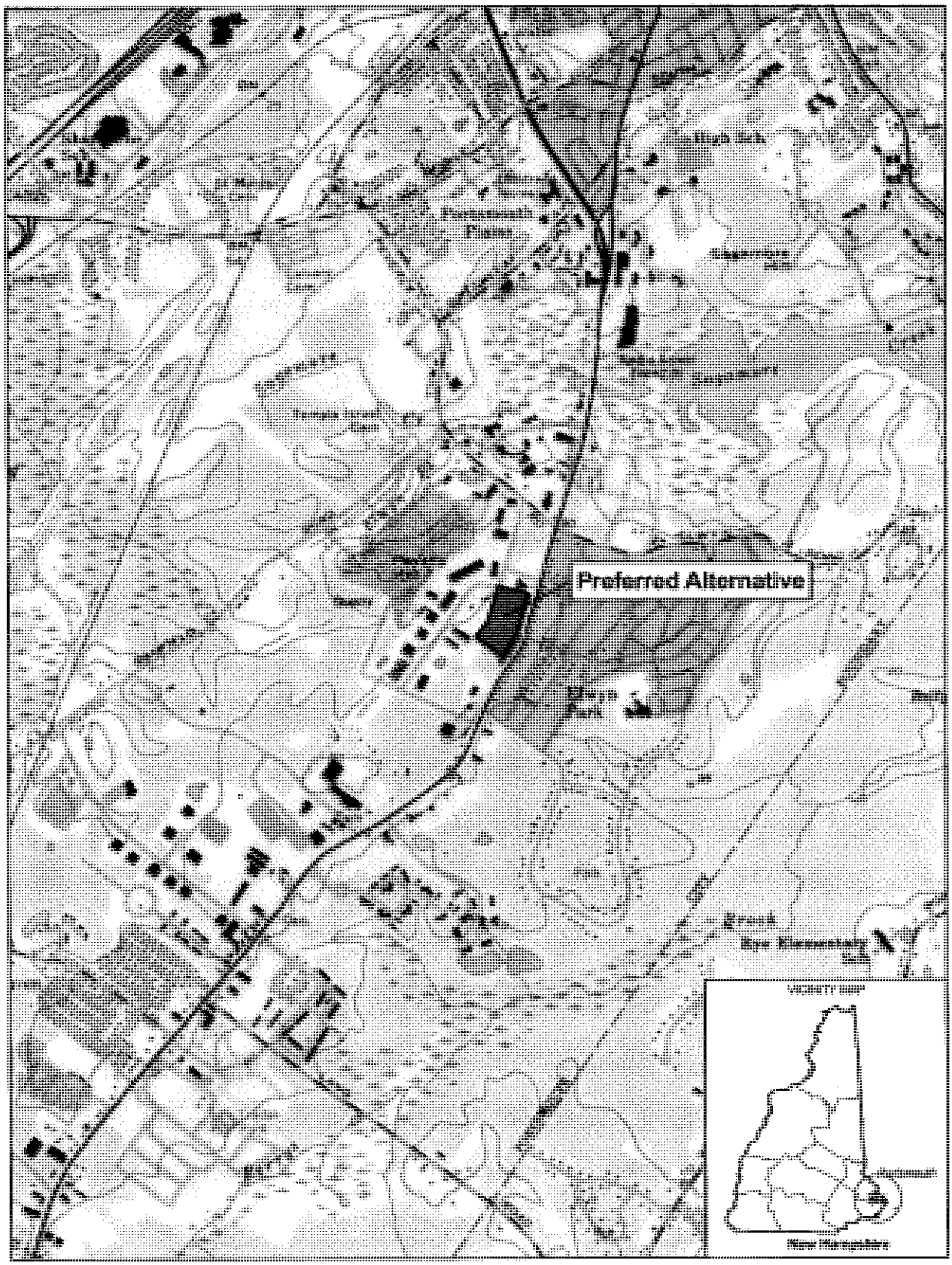
Alternative 2 site consists of a parcel along Lafayette Road (Route 1). A portion of the site is adjacent to Lafayette Road, where the former Southwind Motel was located. The western portion of the property is forested with mature eastern hemlock and hardwoods. A Phase IB Survey is recommended for the undisturbed portion of this property, primarily for Native American resources.

We seek your concurrence with the recommendations discussed above. If you require additional information or have questions or concerns pertaining to this correspondence, please contact Ms. Robyn Mock, U. S. Army Reserve 99th RSC, Department of Public Works, at (609) 562-7662 or at robyn.mock@usar.army.mil.

Sincerely,

Joseph H. Ledlow
Colonel, US Army Reserve
Regional Engineer

Enclosures:
Figure 1: Preferred Alternative
Figure 2: Alternative 1
Figure 3: Alternative 2



LEGEND

Property Boundary

0 500 1,000 2,000
Feet

FIGURE 1
Location Map
Preferred Alternative Property
1900 Lafayette Road
Portsmouth, New Hampshire

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

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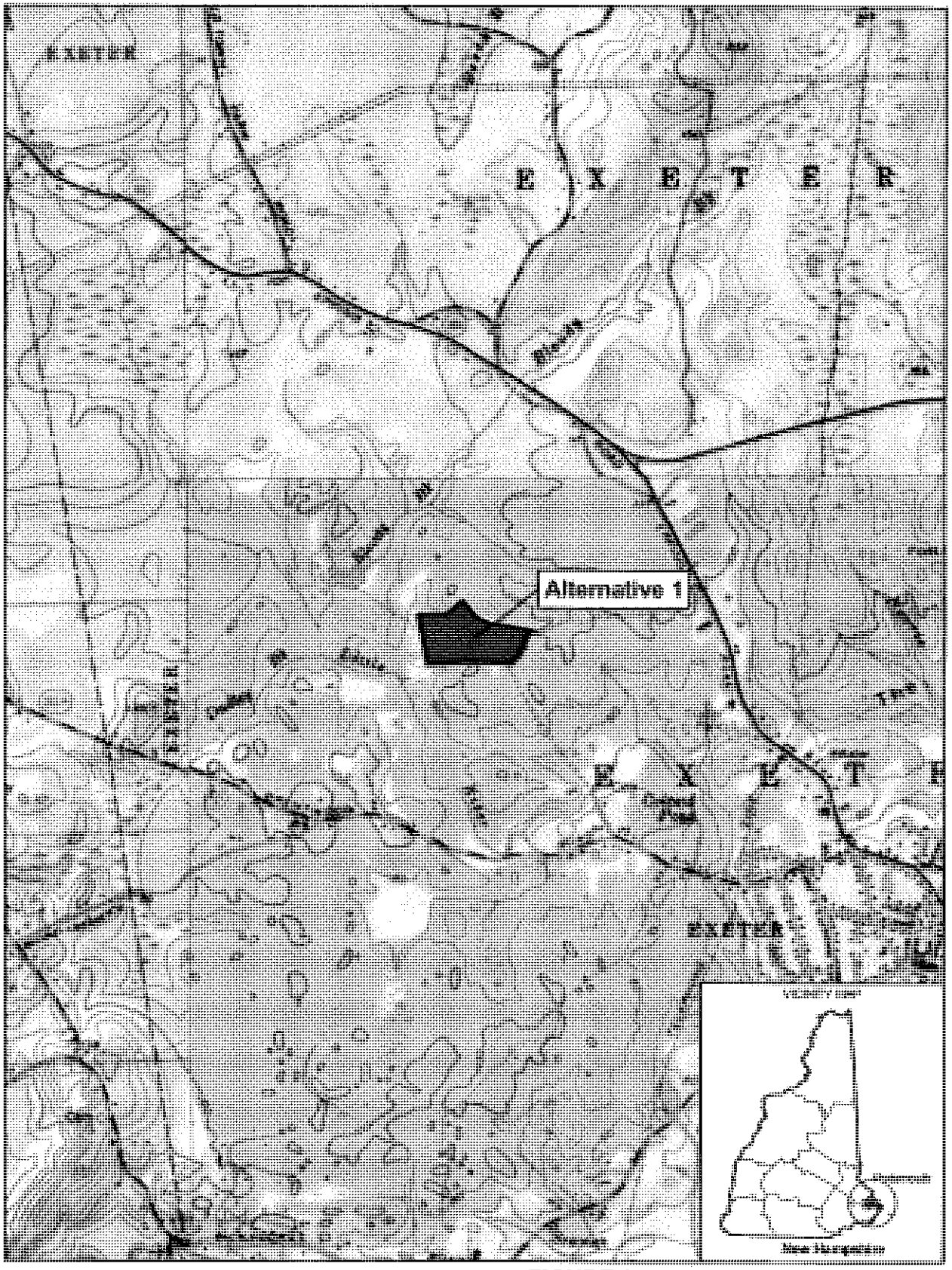

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Exeter Quadrangle, USGS 1:24k DRG

FIGURE 2
Location Map
Alternative 1 Property
22 Continental Drive
Exeter, New Hampshire

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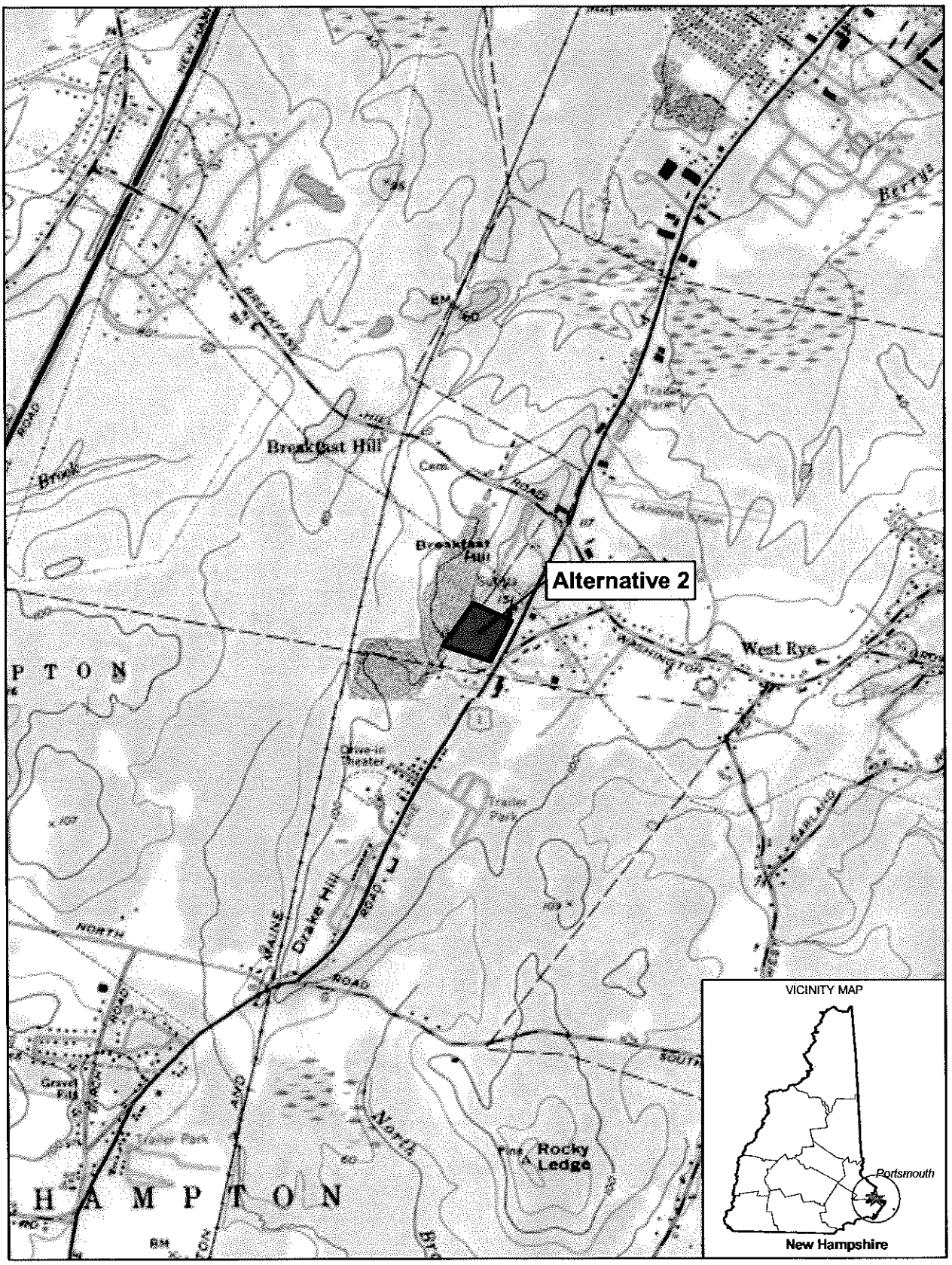

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 3
Location Map
Alternative 2 Property
295, 311, and 355 Lafayette Road
Rye, New Hampshire

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NEW JERSEY 08640-5000

REPLY TO
ATTENTION OF

February 25, 2010

Mr. Thomas R. Chapman, Supervisor
United States Department of the Interior
Fish and Wildlife Service
New England Field Office
70 Commercial St., Suite 300
Concord, NH 03301-5087

Dear Mr. Chapman:

The United States Army Reserve (USAR), Regional Support Command (RSC) is proposing land acquisition, construction, and operation of a U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire (NH), in accordance with the Base Closure and Realignment (BRAC) Commission. On September 8, 2005, the BRAC Commission recommended that certain realignment actions occur at USAR components in New Hampshire: close Paul Doble Army Reserve Center in Portsmouth, and relocate units to a new AFRC and associated training and maintenance facilities in the vicinity of the Pease Air National Guard Base. Three parcels of land are being considered within Rockingham County for the proposed project. The Preferred Alternative site is an 11-acre open field located at 1900 Lafayette Road, Portsmouth, NH. Alternative 1 site is a 21-acre wooded area located at 22 Continental Drive, Exeter, NH. Alternative 2 site is a 16-acre upland wooded area located at 295, 311, and 355 Lafayette Road, Rye, NH. The three sites are identified on Figures 1, 2 and 3.

The new AFRC complex would require approximately 6 acres of land and consist of an approximately 21,000-square-foot AFRC, a 610-square-foot unheated storage building, and 750 square yards of military equipment and privately owned vehicle parking.

The Army is initiating this consultation in accordance with National Environmental Policy Act and the Endangered Species Act to evaluate the potential impacts (both beneficial and adverse) of implementing the proposed action.

The Preferred Alternative site was apparently quarried for aggregates in the past and now consists of non-native fill material. The site contains scattered emergent wetlands that appear to have formed as a result of placement of fill material following cessation of aggregate mining. Alternative Site 1 is a mix of mature and maturing hardwood forest with some conifers. The site contains forested wetlands, including potential vernal pools. A vernal pool assessment will be conducted in the spring on this site. The eastern and northern portions of Alternative Site 2 were previously developed with a motel, which has since been demolished. The remainder of the parcel is primarily mature eastern hemlock forest with some hardwoods around the periphery. No wetlands are present on the site.

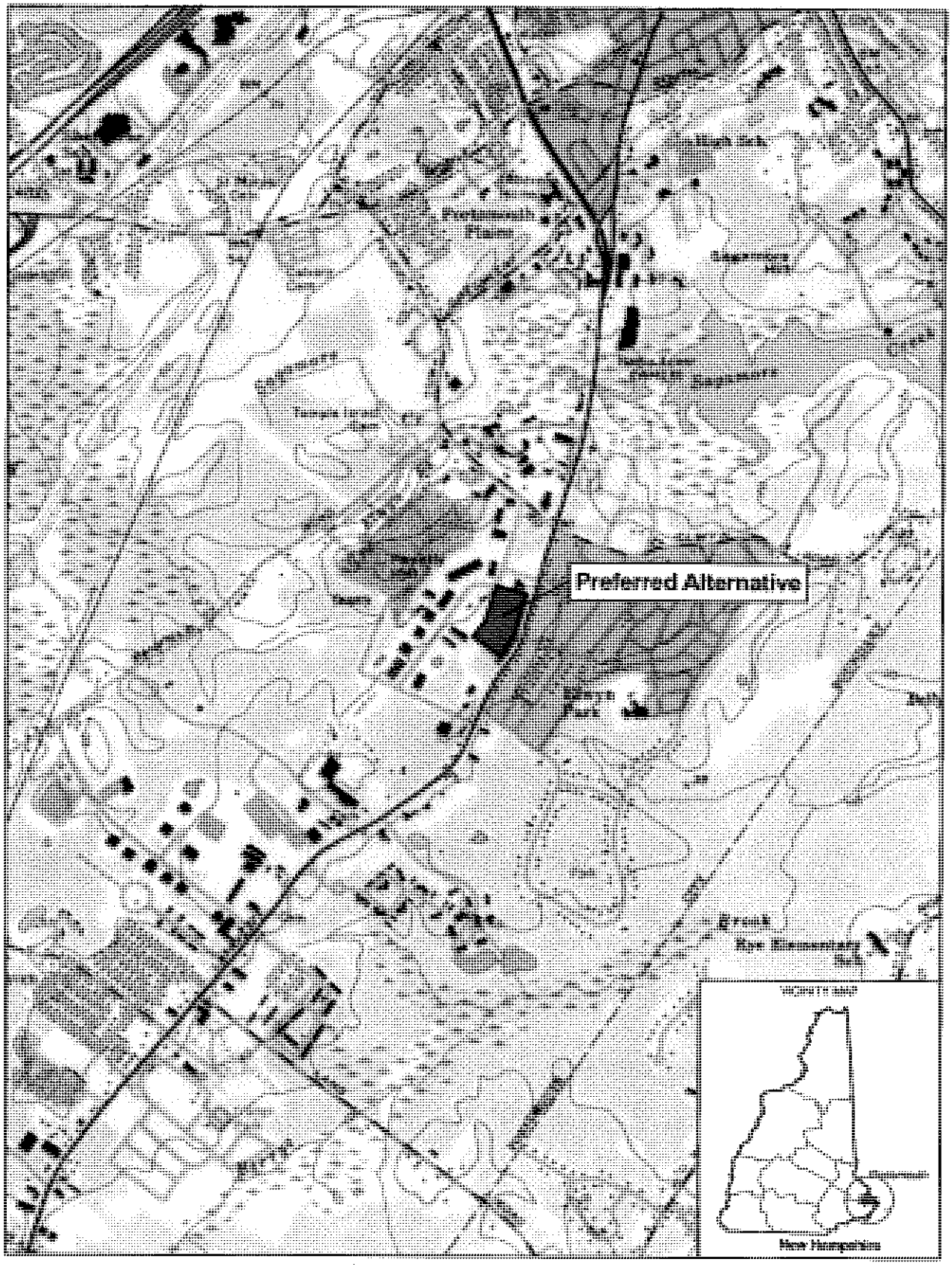
Please confirm that no federally endangered, threatened or candidate species occur in the proposed project areas and that no additional or formal consultation under Section 7 of the

Endangered Species Act is necessary. To sufficiently address key project issues while maintaining the project schedule, we request that you provide a written response to this letter within 30 days of receipt. If you require additional information or have questions or concerns pertaining to this correspondence, please contact Ms. Robyn Mock, U. S. Army Reserve 99th RSC, Department of Public Works, at (609) 562-7662 or at robyn.mock@usar.army.mil.

Sincerely,

Joseph H. Ledlow
Colonel, US Army Reserve
Regional Engineer

Enclosures:
Figure 1: Preferred Alternative
Figure 2: Alternative 1
Figure 3: Alternative 2



LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 1
Location Map
Preferred Alternative Property
1900 Lafayette Road
Portsmouth, New Hampshire

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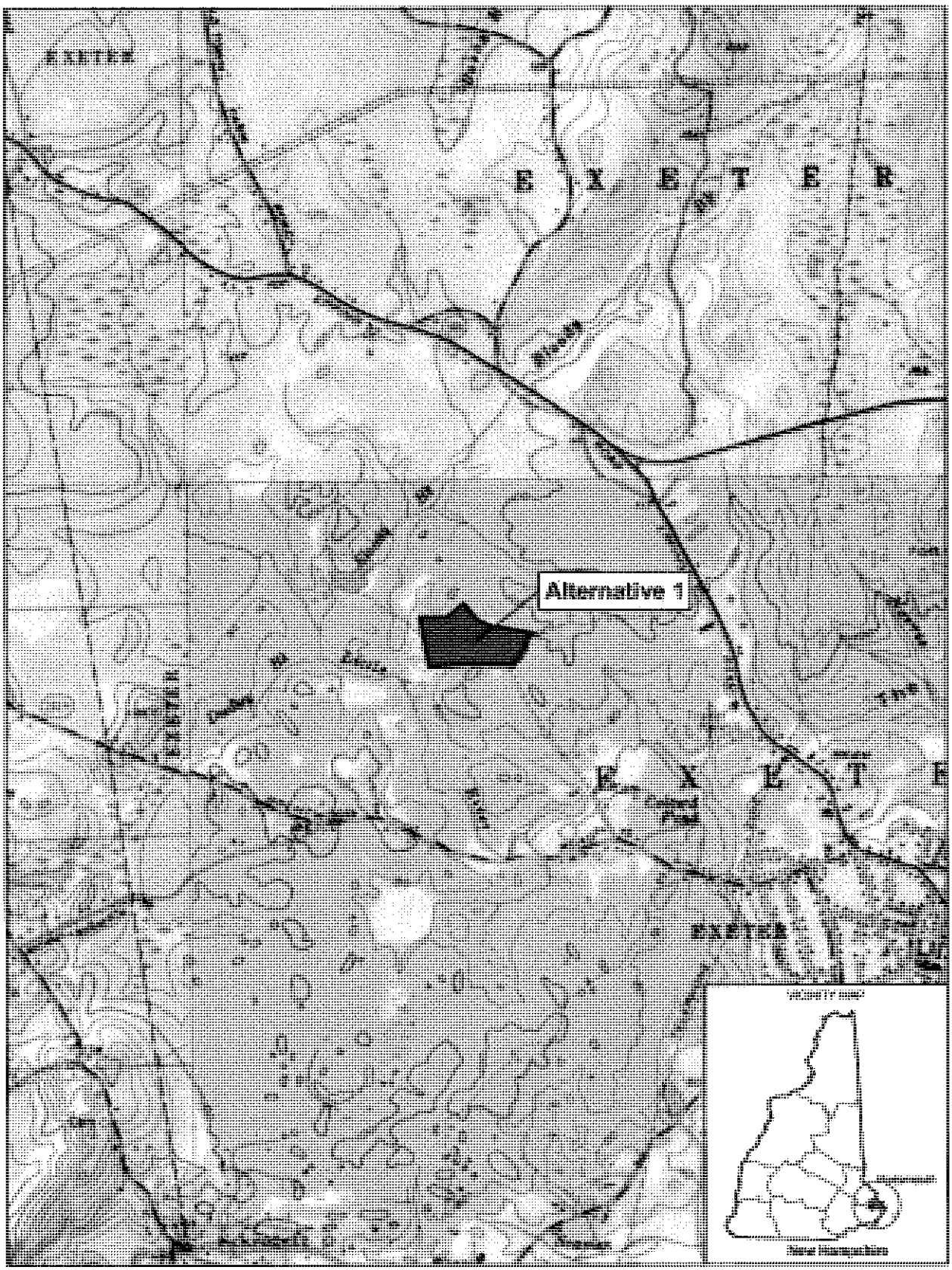

LEGEND

Property Boundary

0 500 1,000 2,000

Feet

Imagery: Exeter Quadrangle, USGS 1:24k DRG

FIGURE 2
Location Map
Alternative 1 Property
22 Continental Drive
Exeter, New Hampshire

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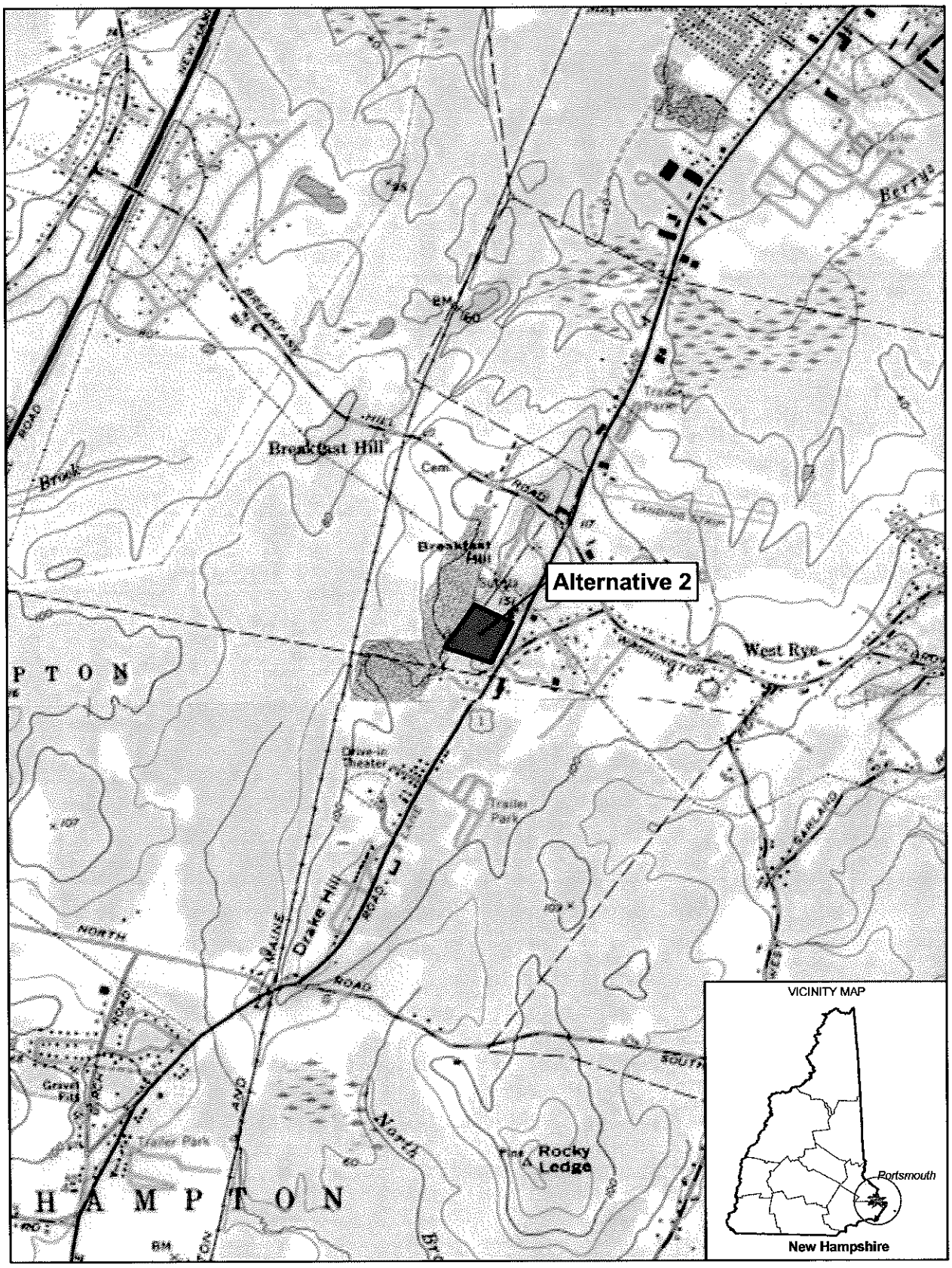

LEGEND

Property Boundary

0 500 1,000 2,000
Feet

Imagery: Portsmouth Quadrangle, USGS 1:24k DRG

FIGURE 3
Location Map
Alternative 2 Property
295, 311, and 355 Lafayette Road
Rye, New Hampshire

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Memo

NH Natural Heritage Bureau

To: Sergio Bonilla, NHSC, Inc.
202 Kent PLace
Newmarket, NH 03857

From: Melissa Coppola, NH Natural Heritage Bureau
Date: 5/4/2010 1:43:37 PM (valid for one year from this date)
Re: Review by NH Natural Heritage Bureau
NHB File ID: NHB10-0957 Town: Exeter
Project type: Buildings and Related Structures: Single commercial building lot Location: Continental Drive
cc: Kim Tuttle

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

Comments:

Plant species	State[1]	Federal	Notes
Slender Blue Flag (*Iris prismatica*)	E	--	Since this plant grows at wetland edges (marshes, wet meadows, seashore), it would be threatened by changes in local water levels or shoreside development.

Vertebrate species	State[1]	Federal	Notes
Great Blue Heron (Rookery) (*Ardea herodias*)	--	--	Contact the NH Fish & Game Dept (see below).
Least Bittern (*Ixobrychus exilis*)	SC	--	Contact the NH Fish & Game Dept (see below).
Northern Black Racer (*Coluber constrictor constrictor*)	T	--	Contact the NH Fish & Game Dept (see below).

[1]Codes: "E" = Endangered, "T" = Threatened, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

Contact for all animal reviews: Kim Tuttle, NH F&G, (603) 271-6544.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. For some purposes, including legal requirements for state wetland permits, the fact that no species of concern are known to be present is sufficient. However, an on-site survey would provide better information on what species and communities are indeed present.

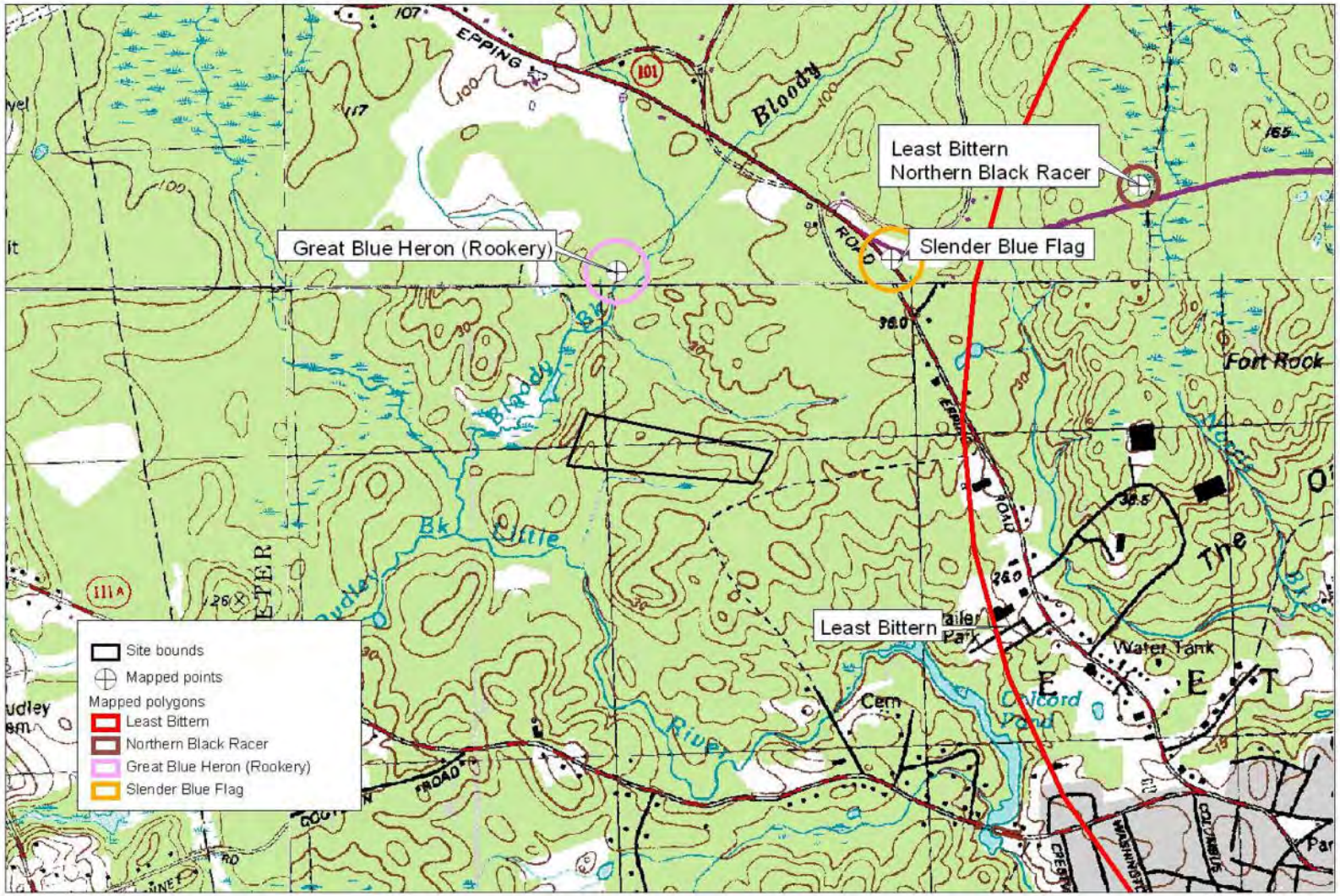
Department of Resources and Economic Development
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DRED/NHB
PO Box 1856
Concord NH 03302-1856

NH NATURAL HERITAGE BUREAU

Known locations of rare species and exemplary natural communities

Note: Mapped locations are not always exact. Occurrences that are not in the vicinity of the project are not shown.



*Historical record

1:18000

Valid for one year from this date: 11 Jun 2010

New Hampshire Natural Heritage Bureau - Plant Record

Slender Blue Flag (*Iris prismatica*)

Legal Status

Federal: Not listed
State: Listed Endangered

Conservation Status

Global: Apparently secure but with cause for concern
State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 1991: 100 plus plants.
General Area: 1991: Roadside wet ditch with *Pogonia ophioglossoides* (rose pogonia).
General Comments:
Management Comments:

Location

Survey Site Name: Junction of Rtes. 101 and 27
Managed By:

County: Rockingham
Town(s): Exeter
Size: 7.7 acres

USGS quad(s): Newmarket (4307018)
Lat, Long: 430003N, 0705832W
Elevation:

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: 1991: corner of Rtes 101 and 27

Dates documented

First reported: 1991-06-15
Last reported: 1991-06-15

New Hampshire Natural Heritage Bureau - Animal Record

Great Blue Heron (Rookery) (*Ardea herodias*)

Legal Status

Federal: Not listed
State: Not listed

Conservation Status

Global: Demonstrably widespread, abundant, and secure
State: Not ranked (need more information)

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 2003: 16 active nests with 32 adults and 20+ young.
General Area: 2003: Freshwater marsh or swamp.
General Comments: 2003: Good remote location with little disturbance from People. Photos take by Eric Orff.
Management Comments:

Location

Survey Site Name: Bloody Brook
Managed By: Conner Farm WMA

County: Rockingham
Town(s): Exeter
Size: 7.7 acres

USGS quad(s): Newmarket (4307018)
Lat, Long: 430002N, 0705911W
Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2003: South of Rte 101 on Blood Brook at Connor Farm Wildlife Management Area.

Dates documented

First reported: 2003
Last reported: 2003

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Least Bittern (*Ixobrychus exilis*)

Legal Status

Federal: Not listed
State: SC

Conservation Status

Global: Demonstrably widespread, abundant, and secure
State: Not ranked (need more information)

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 1994: One juvenile observed.
General Area:
General Comments:
Management Comments:

Location

Survey Site Name: Exeter Sewage Lagoons
Managed By: Henderson-Swasey Town Forest

County: Rockingham
Town(s): Exeter
Size: 4592.3 acres

USGS quad(s): Exeter (4207088)
Lat, Long: 425945N, 0705634W
Elevation: 50 feet

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: [From Rte 101 in Exeter, take Newfields Road heading south to the Sewage Ponds.]

Dates documented

First reported: 1994-09-03
Last reported: 1994-09-03

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Northern Black Racer (*Coluber constrictor constrictor*)

Legal Status

Federal: Not listed
State: Listed Threatened

Conservation Status

Global: Demonstrably widespread, abundant, and secure
State: Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 1991: One adult observed.
General Area: 1991: Roadside.
General Comments: 1991: Snake was observed sunning itself by Andy Soha.
Management Comments:

Location

Survey Site Name: Rte. 101
Managed By:

County: Rockingham
Town(s): Exeter
Size: 3.1 acres

USGS quad(s): Newmarket (4307018)
Lat, Long: 430010N, 0705757W
Elevation: 160 feet

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: In Exeter, on the north side of Rte. 101, 1/2 mile east of traffic light.

Dates documented

First reported: 1991-09-08
Last reported: 1991-09-08

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

Public Archaeology Laboratory

February 9, 2010

Edna Feighner
Archaeologist/Review and Compliance Coordinator
New Hampshire Division of Historical Resources
19 Pillsbury Street, 2nd Floor
Concord, New Hampshire 03301

Re: Pease Air National Guard, Proposed Armed Forces Reserve Center (AFRC)
Phase I Archaeological Survey
PAL #2341

Dear Ms. Feighner:

On behalf of the U.S. Army Corps of Engineers, as the lead federal agency for the project, please find a completed Request for Project Review form, along with PAL's technical report for the *Proposed Construction of an Armed Forces Reserve Center and Implementation of BRAC 05 Realignment Actions, Phase IA Cultural Resource Survey, Portsmouth, Rye, and Exeter. New Hampshire, January 13, 2010.*

Also enclosed is PAL's technical proposal for the *Proposed Armed Forces Reserve Center, Alternative #2 and Alternative #7 Parcels, Phase IB Subsurface Testing, Exeter and Rye, New Hampshire, February 8, 2010.*

If you have any questions or require further information, please do not hesitate to contact Deborah C. Cox, President, or me, at your convenience.

Sincerely,

Suzanne G. Cherau, RPA
Principal Investigator

/bb

Enclosures

cc: Sue Holtham, U.S. Army Corps of Engineers (w/encl.)
Richard Reaves, CH2M Hill (w/encl.)

210 Lonsdale Avenue Pawtucket, RI 02860 | 401.728.8780 Main | 401.728.8784 Fax
palinc.com

Please mail the completed form and required material to:

New Hampshire Division of Historical Resources
State Historic Preservation Office
Attention: Review & Compliance
19 Pillsbury Street, Concord, NH 03301-3570

RECEIVED FEB 1 1 2010

DHR Use Only	
R&C #	1749
Log In Date	___/___/___
Response Date	___/___/___
Sent Date	___/___/___

Request for Project Review by the New Hampshire Division of Historical Resources

☐ This Project is funded by the **American Recovery and Reinvestment Act of 2009**

☐ This is a new submittal ☒ This is additional information relating to DHR Review #: not known

GENERAL PROJECT INFORMATION

Project Title **Proposed Armed Forces Reserve Center – BRAC 05 Realignment (formerly Pease AFRC)**

Project Location **Portsmouth, Rye, and Exeter**

Tax Map & Lot # **Rye – Map 10, Lots 1, 2, 3 ; Exeter – Map 46, Lot 4**

NH State Plane - Feet Geographic Coordinates: Easting Northing WGS84 datum
(see RPR Manual and R&C FAQ's for help accessing this data)

Lead Federal Agency **U.S. Army Corps of Engineers**
(Agency providing funds, licenses, or permits)
Permit or Job Reference #

State Agency and Contact (if applicable)
Permit or Job Reference #

APPLICANT INFORMATION

Applicant Name **PAL, Inc. on behalf of the U.S. Army Corps of Engineers**

Street Address **210 Lonsdale Avenue** Phone Number **401-728-8780**

City **Pawtucket** State **RI** Zip **02860** Email **scherau@palinc.com**

CONTACT PERSON TO RECEIVE RESPONSE

Name/Company **Suzanne Cherau/ PAL Inc.**

Street Address **210 Lonsdale Avenue** Phone Number **401-288-6323**

City **Pawtucket** State **RI** Zip **02860** Email **scherau@palinc.com**

Please refer to the Request for Project Review manual for direction on completing this form. Submit one copy of this project review form for each project for which review is requested. Include a self-addressed stamped envelope to expedite review response. Project submissions will not be accepted via facsimile or e-mail. This form is required. Review request form must be complete for review to begin. Incomplete forms will be sent back to the applicant without comment. Please be aware that this form may only initiate consultation. For some projects, the Division of Historical Resources (DHR) may require additional information to complete our review. All items and supporting documentation submitted with a review request, including photographs and publications, must be retained by the DHR as part of its review records. Items to be kept confidential should be clearly identified. For questions regarding the DHR review process, please visit our website at: http://www.nh.gov/nhdhr/review or contact the R&C Specialist at 603.271.3558.

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in
ture

PROJECT BOUNDARIES AND DESCRIPTION

PROJECTS CANNOT BE PROCESSED WITHOUT THIS INFORMATION

REQUIRED

☒ Attach the relevant portion of a 7.5' USGS Map (photocopied or computer-generated) ***indicating the defined project boundary.***

☒ Attach a detailed written description of the proposed project. Include: (1) a narrative description of the proposed project; (2) site plan; (3) photos and description of the proposed work if the project involves rehabilitation, demolition, additions, or alterations to existing buildings or structures; and (4) a photocopy of the relevant portion of a soils map (if accessible) for ground-disturbing projects.

Architecture

Are there any buildings or structures within the project area? ☐ Yes ☒ No

If yes, submit all of the following information:

Approximate age(s):

☐ Photographs of ***each*** building located within the project area along with a photo key. Include streetscape images if applicable. (Digital photographs are accepted. All photographs must be clear, crisp and focused)

☐ DHR file review conducted on

Please note that as part of the review process, the DHR may request an architectural survey or other additional information.

Archaeology

Does the proposed undertaking involve ground-disturbing activity? ☒ Yes ☐ No

If yes, submit all of the following information:

☒ Project specific map and/or preliminary site plan that fully describes the project boundaries and areas of proposed excavation.

☒ Description of current and previous land use and disturbances.

☒ Any available information concerning known or suspected archaeological resources within the project area.

Please note that as part of the review process, the DHR may request an archaeological survey or other additional information.

DHR COMMENT *This Space for Division of Historical Resources Use Only*

☐ No Potential to cause Effects ☑ Additional information is needed in order to complete our review

☐ No Adverse Effect ☐ No Historic Properties Affected ☐ Adverse Effect

Comments: The DHR concurs w/ recommendations of sensitivity. If alternatives #2 or #7 are considered for undertaking then the DHR looks forward to Phase IB review.

If plans change or resources are discovered in the course of this project, you must contact the Division of Historical Resources as required by federal law and regulation.

Authorized Signature: Edna Hughes Date: 2/16/10

NEW HAMPSHIRE DIVISION OF HISTORICAL RESOURCES
State of New Hampshire, Department of Cultural Resources
19 Pillsbury Street, Concord, NH 03301-3570
TDD Access: Relay NH 1-800-735-2964
www.nh.gov/nhdhr
603-271-3483
603-271-3558
FAX 603-271-3433
preservation@dcr.nh.gov

November 22, 2010

Ms. Amanda Murphy
99th RSC DPW
Environmental Division
5231 South Scott Plaza
Fort Dix, NH 08640-5000

Re: Request for Comments on Phase I Archeological Survey, Proposed Armed Forces Center Preferred Alternative #2 and alternative #7 Parcels: Portsmouth, Rye, and Exeter, New Hampshire (PAL #2341) (DHR #1749)

Dear Ms. Murphy:

Thank you for providing the Division of Historical Resources (DHR) an opportunity to comment on your proposed undertaking and the alternatives and provide comment on the report cited above prepared by the Public Archaeology Laboratory. The DHR does concur with the recommendations provided in the report and concurs with the 99th RSC findings as stated in your October 29th correspondence:

1. If Alternative 1 (Alternative Site #2 from report) is selected, no additional cultural resources investigations and no additional coordination with the DHR would be necessary.
2. If Alternative 2 (Alternative Site #7 from report) is selected, Phase II testing would be required to confirm NRHP eligibility of the site and to determine the full extent of the site and associated features. If the site's eligibility is confirmed, further consultation would be required to resolve adverse effects prior to any disturbance of the property.

The DHR looks forward to working with you in the future. If you have any questions please contact Edna Feighner at 603-271-2813.

Sincerely,

Linda Ray Wilson

Linda R. Wilson,
Deputy State Historic Preservation Officer

LRW:emf

Cc: PAL

Jorgensen, Elizabeth/ATL

From: Williams, Chris [Christian.Williams@des.nh.gov]
Sent: Friday, March 12, 2010 3:32 PM
To: Mock, Robyn A CTR CTR USAR 99TH RSC -NA-
Cc: Holtham, Susan E NAE
Subject: RE: NH Armed Forces Reserve Center Land Acquisition, Construction & Operation (UNCLASSIFIED)

Hello Robyn,

Per your suggestion (see correspondence below), I've spoken with Susan Holtham at the Army Corps of Engineers New England District about the proposed land acquisition, construction, and operation of an Armed Forces Reserve Center in Rockingham County, New Hampshire.

As it turns out, Susan and I have previously discussed the project on two separate occasions. The first was during a meeting at the New Hampshire Coastal Program (NHCP) Office in April 2009, when the proposed location of the Reserve Center was at the Pease Tradeport in Newington, NH. The second was during a meeting at the Army Reserve Center in Portsmouth, NH in October 2009 when six potential sites for the Reserve Center were discussed. At both meetings, I discussed in detail the NHCP's federal consistency process, pursuant to Section 307 of the Coastal Zone Management Act (CZMA).

As I indicated at both meetings, the proposed project is subject to CZMA federal consistency review by the NHCP. The federal consistency process is described in detail in the NHCP's Federal Consistency Guide ("Guide") located on our web site at: http://des.nh.gov/organization/divisions/water/wmb/coastal/cfcp/index.htm. Appendix D, Section I of the Guide describes the federal consistency procedures for federal agency activities. The second bullet on page D-1 lists the information and documentation that must be included with a consistency determination for it to be deemed complete by the NHCP. Page D-2 further describes the federal consistency process, including review timelines and public participation procedures. A list of the enforceable policies referenced on pages D-1 and D-2 can be found in Appendix B of the Guide. You'll note that not all 16 enforceable policies will necessarily be relevant to the proposed acquisition, construction and operation project. Finally, the federal consistency determination should be submitted in a format similar to that provided in Appendix F (Federal Consistency Determination Template).

While the NHCP does not have specific concerns with any of the three parcels identified as potential locations for the Reserve Center, it should be noted (as was noted at the April and October 2009 meetings) that development of the sites will also likely require permits from the New Hampshire Department of Environmental Services Wetlands Bureau and Alteration of Terrain Program.

The NHCP appreciates the opportunity to comment on the proposal. Should you have any questions, please feel free to contact me.

Sincerely,

Christian Williams
Federal Consistency Coordinator
New Hampshire Coastal Program
Pease Field Office
222 International Drive, Suite 175
Portsmouth, NH 03801
Phone: (603) 559-0025
Fax: (603) 559-1510

-----Original Message-----
From: Mock, Robyn A CTR CTR USAR 99TH RSC -NA- [mailto:robyn.mock@usar.army.mil]
Sent: Thursday, March 11, 2010 8:57 AM
To: Williams, Chris
Cc: Holtham, Susan E NAE
Subject: RE: NH Armed Forces Reserve Center Land Acquisition, Construction & Operation (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Christian,
In regards to the amount of detail necessary in the letter, I think it's best to speak with Ms. Susan Holtham. Her contact information is listed above in the Cc... line.

Thank you,

Robyn Mock
Environmental Conservation Specialist
Contractor,Innovar Environmental, Inc.
99th RSC DPW, Environmental Division
Office: 609-562-7662
Cell: 570-885-1970

-----Original Message-----
From: Williams, Chris [mailto:Christian.Williams@des.nh.gov]
Sent: Monday, March 08, 2010 9:42 AM
To: Mock, Robyn A CTR CTR USAR 99TH RSC -NA-
Subject: NH Armed Forces Reserve Center Land Acquisition, Construction & Operation

Hello Ms. Mock,

I've received a letter from Colonel Joseph Ledlow dated February 25, 2010 regarding the U.S. Army Reserve Regional Support Command proposal to acquire land and subsequently construct and operate an Armed Forces Reserve Center in Rockingham County, New Hampshire. The letter was sent to fulfill the early project coordination and scoping requirements of the National Environmental Policy Act. The letter identifies three parcels of land that are being considered for the proposed project and requests comments on a number of topics, including the federal consistency provision (Section 307) of the Coastal Zone Management Act (CZMA).

As it turns out, I've already met on two separate occasions (April 14, 2009 and October 8, 2009) with members of the Army Corps of Engineers, and the Army Reserves to discuss the proposal and the federal consistency provision of the CZMA. Prior to preparing a formal response to Colonel Ledlow's letter, I was hoping to chat with you briefly to ascertain how detailed my response needs to be.

Would you please give me a call at the number below at your earliest convenience?

Thanks very much.

Christian Williams

Federal Consistency Coordinator

New Hampshire Coastal Program

Pease Field Office

222 International Drive, Suite 175

Portsmouth, NH 03801

Phone: (603) 559-0025

Fax: (603) 559-1510

Classification: UNCLASSIFIED
Caveats: FOUO

From: Williams, Chris [mailto:Christian.Williams@des.nh.gov]
Sent: Monday, October 18, 2010 1:50 PM
To: Murphy, Amanda W Ms CTR 99TH RSC ARIM
Subject: Environmental Assessment for Armed Forces Reserve Center in New Hampshire

Hello Amanda,

As a follow-up to our telephone conversation earlier this afternoon, below is a copy of my earlier email to you that was returned as "undeliverable."

Hello Ms. Murphy,

On October 6, 2010, the New Hampshire Coastal Program (NHCP) received a Draft Finding of No Significant Impact (FONSI) and an Environmental Assessment (EA) for the proposed construction of an Armed Forces Reserve Center in the vicinity of the Pease Air National Guard Base in New Hampshire. Based on review of the Draft FONSI and the EA, the NHCP has the following comments:

1. Appendix E of the EA includes the Coastal Zone Management Act (CZMA) Consistency Determination. Will the Army's final CZMA federal consistency determination be submitted to the NHCP under separate cover after comments on the EA have been received?; and

2. Section 4.0 (Public Comment) of the Draft FONSI states "The NHDES was contacted by letter on February 25, 2010. Consultation letters were sent to the.New Hampshire Coastal Program.requesting questions or concerns with the preferred alternative sites. To date, no responses have been received." The NHCP did, in fact, submit a written response, dated March 12, 2010. This written response is included in Appendix F (Government & Agency Correspondence) of the EA (pg. 322).

The NHCP has no further comments on the Draft FONSI or EA at this time.

Please feel free to contact me should you have any questions.

Christian Williams
Federal Consistency Coordinator
New Hampshire Coastal Program
Pease Field Office
222 International Drive, Suite 175
Portsmouth, NH 03801
Phone: (603) 559-0025
Fax: (603) 559-1510
Email: Christian.Williams@des.nh.gov

Classification: UNCLASSIFIED
Caveats: NONE

DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

3 December 2010

Mr. Chris Williams
Federal Consistency Coordinator
Coastal Program
Pease Field Office
222 International Drive, Suite 175
Portsmouth, NH 03801

RE: Federal Coastal Zone Management Act Consistency Determination for Construction and Operation of an Armed Forces Reserve Center in Portsmouth, New Hampshire

Mr. Williams,

This document provides the New Hampshire Coastal Program (NHCP) with the U.S. Army consistency determination under CZMA § 307(c)(2) and 15 C.F.R. part 930, subpart C, for the Construction and Operation of an Armed Forces Reserve Center in Portsmouth, New Hampshire. The information in this consistency determination is provided pursuant to 15 C.F.R. § 930.39.

This activity is described in Sections 2 and 3 of the Environmental Assessment that was published for public review between October 5, 2010 and November 20, 2010.

The U.S. Army has determined that the Construction and Operation of an Armed Forces Reserve Center in Portsmouth, New Hampshire affects the land or water uses or natural resources of the state of New Hampshire in the following manner: The preferred alternative (Portsmouth) and Alternative 2 (Exeter, if chosen) would have a minor impact to non-tidal, freshwater wetlands. No direct impacts to resources of primary concern are associated with the proposed federal project. Each of the 3 potential sites evaluated in the EA would result in the minor reduction of upland forest habitat that is not being managed for management and conservation of wildlife resources.

The NHCP contains the following applicable enforceable policies:

1. Protect and preserve and, where appropriate, restore the water and related land resources of the coastal and estuarine environments. The resources of primary concern are coastal and estuarine waters, tidal and freshwater wetlands, beaches, sand dunes, and rocky shores.

2. Manage, conserve and, where appropriate, undertake measures to maintain, restore, and enhance the fish and wildlife resources of the state.

4. Undertake oil spill prevention measures, safe oil handling procedures and, when necessary, expedite the cleanup of oil spillage that will contaminate public waters. Institute legal action to collect damages from liable parties in accordance with state law.

5. Encourage investigations of the distribution, habitat needs, and limiting factors of rare and endangered animal species and undertake conservation programs to ensure their continued perpetuation.

6. Identify, designate, and preserve unique and rare plant and animal species and geologic formations which constitute the natural heritage of the state. Encourage measures, including acquisition strategies, to ensure their protection.

8. Preserve the rural character and scenic beauty of the Great Bay estuary by limiting public investment in infrastructure within the coastal zone in order to limit development to a mixture of low and moderate density.

9. Reduce the risk of flood loss, to minimize the impact of floods on human safety, health and welfare, and to preserve the natural and beneficial value of floodplains, through the implementation of the National Flood Insurance Program and applicable state laws and regulations, and local building codes and zoning ordinances.

10. Maintain the air resources in the coastal area by ensuring that the ambient air pollution level, established by the New Hampshire State Implementation Plan pursuant to the Clean Air Act, as amended, is not exceeded.

11. Protect and preserve the chemical, physical, and biological integrity of coastal water resources, both surface and groundwater.

13. Allow only water dependent uses and structures on state properties in Portsmouth-Little Harbor, Rye Harbor, and Hampton-Seabrook Harbor, at state port and fish pier facilities and state beaches (except those uses or structures which directly support the public recreation purpose). For new development, allow only water dependent uses and structures over waters and wetlands of the state. Allow repair of existing over-water structures within guidelines. Encourage the siting of water dependent uses adjacent to public waters.

15. Support the preservation, management, and interpretation of historic and culturally significant structures, sites and districts along the Atlantic coast and in the Great Bay area.

The remaining enforceable policies are not applicable to this project.

Based upon the following information, data and analysis the U.S. Army finds that the Construction and Operation of an Armed Forces Reserve Center in Portsmouth, New Hampshire is consistent to the maximum extent practicable with the enforceable policies of the NHCP. The documents listed below support the determination of consistency with the applicable enforceable policies:

- Environmental Assessment for Proposed Construction of an Armed Forces Reserve Center and Implementation of BRAC 05 Realignment Actions in the Vicinity of the Pease Air National Guard Base, New Hampshire; and
- NH Coastal Zone Management Act Consistency Determination Document (EA, Appendix E).

Pursuant to 15 C.F.R. § 930.41, the NHCP has 60 days from the receipt of this letter in which to concur with or object to the consistency determination, or to request an extension. Concurrence will be presumed if the NHCP's response is not received by the U.S. Army on the 60th day from receipt of this letter. Please submit your response to: Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix NJ 08640-5000 or by email at Amanda.w.murphy@usar.army.mil. If you have any questions, please contact Ms. Murphy at 609-521-8047.

Sincerely,

Jeffrey M. Hrzic
Chief, Environmental Division

The State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

Thomas S. Burack, Commissioner

December 28, 2010

Amanda Murphy
99th RSC DPW
Environmental Division
5231 South Scott Plaza
Fort Dix, NJ 08640-5000

RE: **File No. 2010-19; Construction & Operation of an Armed Forces Reserve Center in Portsmouth, New Hampshire**

Dear Ms. Murphy:

The New Hampshire Coastal Program (NHCP) has received the Department of the Army's federal consistency determination for the proposed construction and operation of an Armed Forces Reserve Center in Portsmouth, New Hampshire, pursuant to Section 307(c)(1) of the Coastal Zone Management Act, 16 U.S.C. § 1456(c)(1). After reviewing the proposal, we find it to be consistent, to the maximum extent practicable, with the enforceable policies of New Hampshire's federally approved coastal management program.

Should you have any questions, please feel free to contact me at (603) 559-0025.

Sincerely,

Christian Williams

Christian Williams
Federal Consistency Coordinator
New Hampshire Coastal Program

DES Web site: **www.des.nh.gov**
222 International Drive, Suite 175, Portsmouth, New Hampshire 03801
Telephone: (603) 559-1500 • Fax: (603) 559-1510 • TDD Access: Relay NH 1-800-735-2964

DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

REPLY TO
ATTENTION OF
ARRC-SNJ-PW-E

29 October 2010

Bruce Bozsum, Chairman
Mohegan Tribe
5 Crow Hill Road
Uncasville, CT 06382

SUBJECT: Review of Environmental Assessment and Draft Finding of No Significant Impact Proposed Construction of U.S. Army Reserve, Armed Forces Reserve Center and Implementation of BRAC 05 Realignment Actions, near Pease Air National Guard Base, New Hampshire

Dear Chief Sturges,

The United States Army Reserve, 99th Regional Support Command (RSC) is proposing land acquisition, construction, and operation of an U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire, in accordance with the Base Realignment and Closure Act (BRAC). The new AFRC complex would require approximately 6 acres of land and consist of an approximately 21,000-square-foot AFRC, a 610-square-foot unheated storage building, and 750 square yards of military equipment and private vehicle parking.

Please accept this correspondence as notification of the proposed undertaking as required by the National Historic Preservation Act of 1966, as amended; the Archaeological Resources Protection Act of 1979; the Native American Graves Protection and Repatriation Act of 1990; and Presidential Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments*. In accordance with the above laws and regulations, we are requesting any comments you may have regarding tribal interests that may be affected by the proposed undertaking.

The 99th RSC looks forward to working with you or your designated representative. Please submit any comments within 30 days from the date on this letter to, Ms. Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix, NJ 08640-5000 or by E-mail at amanda.w.murphy@usar.army.mil. If you have any questions please do not hesitate to contact Ms. Murphy at 609-562-7666.

Sincerely,

Jeffrey M. Hrzic
Chief, Environmental Division

Enclosures:
Environmental Assessment and Draft Finding of No Significant Impact

DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

REPLY TO
ATTENTION OF
ARRC-SNJ-PW-E

29 October 2010

Ms. Cheryl Andrews-Maltais
THPO, Wampanoag Tribe of Gay Head-Aquinnah
20 Black Brook Road
Aquinnah, MA 02535-9701

SUBJECT: Review of Environmental Assessment and Draft Finding of No Significant Impact Proposed Construction of U.S. Army Reserve, Armed Forces Reserve Center and Implementation of BRAC 05 Realignment Actions, near Pease Air National Guard Base, New Hampshire

Dear Ms. Andrews-Maltais:

The United States Army Reserve, 99th Regional Support Command (RSC) is proposing land acquisition, construction, and operation of an U.S. Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire, in accordance with the Base Realignment and Closure Act (BRAC). The new AFRC complex would require approximately 6 acres of land and consist of an approximately 21,000-square-foot AFRC, a 610-square-foot unheated storage building, and 750 square yards of military equipment and private vehicle parking.

Please accept this correspondence as notification of the proposed undertaking as required by the National Historic Preservation Act of 1966, as amended; the Archaeological Resources Protection Act of 1979; the Native American Graves Protection and Repatriation Act of 1990; and Presidential Executive Order 13175, *Consultation and Coordination with Indian Tribal Governments*. In accordance with the above laws and regulations, we are requesting any comments you may have regarding tribal interests that may be affected by the proposed undertaking.

The 99th RSC looks forward to working with you or your designated representative. Please submit any comments within 30 days from the date on this letter to, Ms. Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix, NJ 08640-5000 or by E-mail at amanda.w.murphy@usar.army.mil. If you have any questions please do not hesitate to contact Ms. Murphy at 609-562-7666.

Sincerely,

Jeffrey M. Hrzic
Chief, Environmental Division

Enclosures:
Environmental Assessment and Draft Finding of No Significant Impact

DEPARTMENT OF THE ARMY
HEADQUARTERS, 99TH REGIONAL SUPPORT COMMAND
5231 SOUTH SCOTT PLAZA
FORT DIX, NJ 08640-5000

REPLY TO
ATTENTION OF
ARRC-SNJ-PW-E

29 October 2010

Ms. Edna Feighner
Project Review and Compliance Coordinator
New Hampshire Division of Historical Resources
19 Pillsbury Street, 2nd Floor
Concord, NH 03301-3570

SUBJECT: Phase I Archeological Survey, Proposed Armed Forces Center Preferred Alternative #2 and Alternative #7 Parcels: Portsmouth, Rye, and Exeter, New Hampshire (PAL #2341)

Ms. Feighner,

The United States Army Reserve 99th Regional Support Command (RSC) is proposing land acquisition, construction, and operation of an Armed Forces Reserve Center (AFRC) in Rockingham County, New Hampshire consistent with the Base Realignment and Closure Act (BRAC). The AFRC complex would disturb approximately 6 acres of land and consist of an approximately 21,000 square foot AFRC, a 610-square foot unheated storage building, and 750 square yards of military equipment and private vehicle parking.

Three properties in Rockingham County are under consideration for the proposed project. The Preferred Alternative is an 11-acre open field located at 1900 Lafayette Road, Portsmouth, NH. Alternative 1 is a 21-acre wooded site located at 22 Continental Drive, Exeter, NH. Alternative 2 is a 16-acre upland wooded site located at 295, 311, and 355 Lafayette Road, Rye, NH.

Pursuant to Section 106 of the National Historic Preservation Act, and its implementing regulation (36 CFR 800), a cultural resource assessment was conducted for the three proposed AFRC sites. The 99th RSC submitted an initial request to the New Hampshire Department of Historical Resources (DHR) for review and concurrence in February 2010. In a response dated February 16, 2010, DHR concurred that a cultural resources survey would not be necessary for the Preferred Alternative site due to the extensive disturbance from past activities. However, in that response, DHR requested additional Phase IB surveys of the two alternative sites. Enclosed is the Final Phase IB report providing the results of that additional work.

The Phase IB reports that no further archeological work is recommend for Alternative 1 site (Alternative Site #2 in the report). No cultural materials were recovered from 35 test pits on this property and no potentially significant pre-contact period or post-contact period archeological deposits or features were identified.

The report recommends additional archeological investigations and additional coordination with the DHR for the Alternative 2 (Alternative Site #7 in the report), should it not be possible to avoid disturbance within 100 feet of the N. Gilman Jr. Garrison House, a property recommended as eligible for listing on the National Register of Historic Places. Upon review of the enclosed report, the Army determined that a 100 ft buffer would not be sufficient to ensure avoidance of impacts to the Garrison House site. This determination was based on three factors: (1) The exact site boundaries could not be

determined based on the Phase I testing; (2) there are existing features (including a cart path and a stone wall) that may be contributing elements to the site's eligibility located outside of the 100-ft area; and (3) the nature of the site increases the possibility that additional undiscovered features may occur outside of the buffer.

The 99th RSC requests your written concurrence on the following findings within 30 days from the date on this letter:

- If Alternative 1 (Alternative Site #2 in the report) is selected, no additional cultural resources investigations and no additional coordination with the DHR would be necessary.

- If Alternative 2 (Alternative Site #7 in the report) is selected, Phase II testing would be required to confirm NRHP eligibility of the site and to determine the full extent of the site and associated features. If the site's eligibility is confirmed, further consultation would be required to resolve adverse effects prior to any disturbance of the property.

The 99th RSC looks forward to working with you or your designated representative. Please submit any comments to: Ms. Amanda Murphy, 99th RSC DPW, Environmental Division, 5231 South Scott Plaza, Fort Dix, NJ 08640-5000 or by E-mail at amanda.w.murphy@usar.army.mil. If you require additional information or have questions pertaining to this correspondence, please contact Ms. Murphy at 609-562-7666.

Sincerely,

Jeffrey M. Hrzic
Chief, Environmental Division

Enclosure:
Phase I Archeological Survey, Proposed Armed Forces Center Preferred Alternative #2 and Alternative #7 Parcels: Portsmouth, Rye, and Exeter, New Hampshire.

Jorgensen, Elizabeth/ATL

From: Holtham, Susan E NAE [Susan.E.Holtham@usace.army.mil]
Sent: Friday, March 12, 2010 7:57 AM
To: Reaves, Richard/ATL
Subject: FW: Letter dated Feb 25, 2010 addressed to Scott Hilton NHDES (UNCLASSIFIED)

First response to Pease Agency coordination letters. Thanks.

V/R,

Sue Holtham

U.S. Army Corps of Engineers
New England District
696 Virginia Rd.
Concord, MA 01742

Tel.No. (978) 318-8536
FAX No. (978) 318-8560
Cell Phone No. (978) 505-8749

-----Original Message-----
From: Mock, Robyn A CTR CTR USAR 99TH RSC -NA- [mailto:robyn.mock@usar.army.mil]
Sent: Thursday, March 11, 2010 9:40 AM
To: Holtham, Susan E NAE
Subject: FW: Letter dated Feb 25, 2010 addressed to Scott Hilton NHDES (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

See below

Robyn Mock
Environmental Conservation Specialist
Contractor,Innovar Environmental, Inc.
99th RSC DPW, Environmental Division
Office: 609-562-7662
Cell: 570-885-1970

-----Original Message-----
From: Hilton, Scott [mailto:Scott.Hilton@des.nh.gov]
Sent: Tuesday, March 09, 2010 2:24 PM
To: Mock, Robyn A CTR CTR USAR 99TH RSC -NA-
Subject: Letter dated Feb 25, 2010 addressed to Scott Hilton NHDES

Ms.Mock

I have received your letter dated February 25, 2010 regarding a new proposed AFRC in Rockingham County, New Hampshire. I am the Pease AFB project manager and only deal with environmental issues at the former Pease Air Base. For questions regarding Coakley Landfill

you should contact Joe Donovan at 603-271-6811. Also regarding permitting issues for your proposed AFRC, DES has a Public Information and Permitting Unit that assists the public with permitting issues and questions, you should contact them at
603-271-2975 for assistance.

Sorry I could not be of further help.

Scott Hilton

Pease Project Manager

Classification: UNCLASSIFIED
Caveats: FOUO

Jorgensen, Elizabeth/ATL

From: Holtham, Susan E NAE [Susan.E.Holtham@usace.army.mil]
Sent: Thursday, April 08, 2010 9:31 AM
To: Reaves, Richard/ATL
Cc: Giliberti, Joseph A SAM
Subject: FW: Pease AFRC at (UNCLASSIFIED) - Response frokm Penobscot Tribe - no objection

FYI...no objection response from the Penobscot tribe on the Pease project.
Thanks.

V/R,

Sue Holtham

U.S. Army Corps of Engineers
New England District
696 Virginia Rd.
Concord, MA 01742

Tel.No. (978) 318-8536
FAX No. (978) 318-8560
Cell Phone No. (978) 505-8749

-----Original Message-----
From: Mock, Robyn A CTR CTR USAR 99TH RSC -NA- [mailto:robyn.mock@usar.army.mil]
Sent: Wednesday, April 07, 2010 3:19 PM
To: Holtham, Susan E NAE
Cc: Dellolio, Laura A CTR CTR USAR 99TH RRC -NA-
Subject: New AFRC at Portsmouth (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Sue,

Penobscot Nation response below.

Robyn Mock
Environmental Conservation Specialist
Contractor,Innovar Environmental, Inc.
99th RSC DPW, Environmental Division
Office: 609-562-7662
Cell: 570-885-1970

https://xtranet/Organization/MSCs/RSCs/99RSC/dpw/environmental/Pages/Environmental%20Division%20Homepage.aspx

-----Original Message-----
From: Bonnie Newsom [mailto:Bonnie.Newsom@penobscotnation.org]
Sent: Wednesday, April 07, 2010 3:01 PM
To: Mock, Robyn A CTR CTR USAR 99TH RSC -NA-

Subject: RE: New AFRC at Portsmouth (UNCLASSIFIED)

Thanks Robyn,

I have no objection to the project. Do you need a formal letter?

Bonnie

-----Original Message-----
From: Mock, Robyn A CTR CTR USAR 99TH RSC -NA- [mailto:robyn.mock@usar.army.mil]
Sent: Wednesday, April 07, 2010 2:26 PM
To: Bonnie Newsom
Subject: RE: New AFRC at Portsmouth (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Ms. Newsom,
I apologize for the delayed response. Yes you are correct our archeologists from Public Archaeology Laboratory, Inc. (PAL) walked the site in mid-December to determine if Phase 1B surveys should be recommended. There was no snow on the ground at that time. Based on that walkover, PAL recommended Phase 1B surveys on the 2 alternative sites. The NHSHPO has concurred with that recommendation. These surveys are being completed as we speak.

Thank you ,

Robyn Mock
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Cell: 570-885-1970

https://xtranet/Organization/MSCs/RSCs/99RSC/dpw/environmental/Pages/Environmental%20Division%20Homepage.aspx

-----Original Message-----
From: Bonnie Newsom [mailto:Bonnie.Newsom@penobscotnation.org]
Sent: Tuesday, March 30, 2010 3:51 PM
To: Mock, Robyn A CTR CTR USAR 99TH RSC -NA-
Subject: New AFRC at Portsmouth

Dear Ms. Mock,

I'm writing in reference to a letter sent to us last month about construction of a new AFRC in Portsmouth. The letter states that a walkover of the preferred alternative was conducted in December of 2009.
I'm assuming that this walkover was done by professional archaeologists when there was no snow on the ground. Please confirm that for me and then I can get a "no objection" letter out to you.

Thank you,

Bonnie Newsom

Tribal Historic Preservation Officer
Penobscot Nation
12 Wabanaki Way
Indian Island, ME 04468
Classification: UNCLASSIFIED
Caveats: FOUO

Classification: UNCLASSIFIED
Caveats: FOUO

Jorgensen, Elizabeth/ATL

From: Holtham, Susan E NAE [Susan.E.Holtham@usace.army.mil]
Sent: Monday, March 15, 2010 10:59 AM
To: Mock, Robyn A CTR CTR USAR 99TH RSC -NA-; Dellolio, Laura A CTR CTR USAR 99TH RRC -NA-
Cc: Giliberti, Joseph A SAM; Reaves, Richard/ATL
Subject: RE: Pease AFRC - Tribal response

Thanks Robyn!

V/R,

Sue Holtham

U.S. Army Corps of Engineers
New England District
696 Virginia Rd.
Concord, MA 01742

Tel.No. (978) 318-8536
FAX No. (978) 318-8560
Cell Phone No. (978) 505-8749

-----Original Message-----
From: Mock, Robyn A CTR CTR USAR 99TH RSC -NA- [mailto:robyn.mock@usar.army.mil]
Sent: Monday, March 15, 2010 10:51 AM
To: Holtham, Susan E NAE; Dellolio, Laura A CTR CTR USAR 99TH RRC -NA-
Subject: FW: AFRC Realignment (UNCLASSIFIED)

Classification: UNCLASSIFIED
Caveats: FOUO

Tribal Response

No effect

Robyn Mock
Environmental Conservation Specialist
Contractor,Innovar Environmental, Inc.
99th RSC DPW, Environmental Division
Office: 609-562-7662
Cell: 570-885-1970

-----Original Message-----
From: soctomah@ainop.com [mailto:soctomah@ainop.com]
Sent: Saturday, March 13, 2010 1:55 PM
To: Mock, Robyn A CTR CTR USAR 99TH RSC -NA-
Subject: AFRC Realignment

Tribal Historic Preservation Office

Passamaquoddy Tribe

PO Box 159 Princeton, Me. 04668

207-796-2301

Department of the Army

5231 South Scott Plaza

Fort Dix, NJ

Robyn.mock@usar.army.mil

March 13, 2010

Re: Rockingham County, New Hampshire â€“AFRC Realignment

Dear Robyn Mock;

The Passamaquoddy THPO has reviewed the following application regarding the historic properties and significant religious and cultural properties in accordance with NHPA, NEPA, AIRFA, NAGPRA, ARPA, Executive Order 13007 Indian Sacred Sites, Executive Order 13175 Consultation and Coordination with Indian Tribal Governments, and Executive Order 12898 Environmental Justice.

The above listed proposed project will not have any impact on cultural and historical concerns of the Tribe and is not on tribal lands. The three alternatives have been reviewed.

Sincerely;

Donald Soctomah

Donald Soctomah

Soctomah@ainop.com

THPO

Passamaquoddy Tribe

---- Msg sent via the Aroostook Internet Webmail System - http://www.ainop.com
Classification: UNCLASSIFIED
Caveats: FOUO

Appendix G
Wetlands Functions and Values Assessment
Preferred Alternative Site

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Functions and Values Assessment
for
Wetlands Identified
on the Property at
1900 Lafayette Road,
Portsmouth, New Hampshire

Prepared by: CH2M HILL

June, 2010

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Introduction

A wetland survey was conducted by GZA Geo Environmental on the Property at 1900 Lafayette Road, Portsmouth, New Hampshire in mid-December 2009. Five wetlands were identified within the survey area (GZA Geo Environmental, 2010; Table 1). The locations of the wetlands are shown on the attached figure from the wetland delineation report. Wetlands identified on the site appear to have developed as a result of past human activity and do not appear to be naturally occurring systems (GZA Geo Environmental, 2010). The wetlands are located in isolated depressions on top of imported fill material. The fill material has low permeability in some areas and retains water long enough to support a plant community of hydrophytes (GZA Geo Environmental, 2010).

Table 1
Wetlands Identified on the Site.

Wetland Identifier	Wetland Size (acres [a])
Wetland A	0.02
Wetland B	0.18
Wetland C	0.04
Wetland D	0.23
Wetland E	0.01

[a] Acreage rounded to nearest hundredth of an acre.

This document provides an evaluation of the functions and values provided by the five wetlands identified on the property. The assessment follows the method established in the U.S. Army Corps of Engineers New England District publication *The Highway Methodology Workbook Supplement: Wetlands Functions and Values A descriptive Approach* (U.S. Army Corps of Engineers, 1999). This methodology identifies eight ecological functions that wetlands may perform and five human values that may be assigned to wetlands. The functions and values for particular wetlands are described, but no effort is made to rank those functions and values through subjective weightings.

The site was assessed for wetlands functions and values during a site visit on December 1, 2009. Each of the five wetlands is discussed below with the functions and values identified and the supporting rationale for assigning those functions and values to the wetland.

Of the five wetlands identified on the site, only Wetland A and Wetland E would be impacted by the proposed project. Wetland A would be completely filled by the proposed project, resulting in a loss of approximately 0.02 acre of wetland. The northern portion of Wetland E would be filled by the proposed project, resulting in a loss of approximately 0.02 acre of the approximately 0.18-acre wetland. The amount of impact to each wetland that would result from the proposed project also is discussed.

Wetland A

Wetland A is in a small swale, covering approximately 0.02 acre, near the northern boundary of the property. This wetland is covered by emergent vegetation and is dominated by the invasive giant reed (*Phragmites australis*). The small size precludes many potential functions from this wetland. Wetland A appears to be seasonally wet, and likely dries during dry periods of the year. It was determined that the wetland performs two ecological functions and could provide two human values.

Wildlife Habitat

Wetland A is connected with other wetlands by undeveloped overland access routes. This wetland could provide limited habitat value to wildlife. Because of the amount of surrounding development and the small size of the wetland, the wildlife habitat function would be limited.

Production Export

Because Wetland A has a high density of the dominant plant species, the wetland could provides limited production export functions. However, the very small size of the wetland would limit any such function.

Educational/Scientific Value

Wetland A could offer educational scientific value regarding invasion of wetlands by non-native species. However, because it is small and located on private land without ready access to the public or scientific community, any scientific educational value would be limited.

Recreation

Even though Wetland A is on private land and not readily accessible to the public, it is very close to a populated residential area and can be seen from Lafayette Road. Therefore, Wetland

A could provide recreation value to nearby residents for bird watching, as birds may perch on the giant reed stems. However, its small size would limit any such value.

Wetland A does not provide other functions and values. The reasons for this are provided below.

Groundwater Recharge/Discharge

Wetland A is perched on fill material and does not receive groundwater discharge or contribute to groundwater recharge.

Floodflow Alteration

This wetland does not receive floodwater flow or retain runoff that would contribute to floodflow alteration

Sediment/Toxicant Retention

Because of surrounding higher ground, Wetland A does not receive runoff from the surrounding developed areas. There are no sources of sediments or toxicants that contribute to this wetland. Wetland A does not contribute to Sediment/Toxicant Retention.

Nutrient Removal

There are no nutrient sources that contribute to this wetland. Wetland A does not provide a nutrient removal function.

Visual Quality/Aesthetics

Wetland A formed on deposited fill material and is dominated by an invasive plant species. The landscape setting contains visible construction debris. This wetland provides no visual quality or aesthetics to viewers.

Fish/Shellfish Habitat

Wetland A does not support fish or shellfish populations. It is isolated from other waters that may provide these functions and does not retain water for a sufficient period to support these animal populations.

Sediment/Shoreline Stabilization

Wetland A has no defined shoreline or stream bank. This wetland is not subject to erosive flows due to its position in the landscape.

Uniqueness/Heritage

Wetland A is not a type of wetland that is considered locally unique or rare. It formed on deposited fill material and is dominated by the exotic giant reed. Wetland A has no uniqueness or heritage value.

Endangered Species Habitat

Data from the New Hampshire Natural heritage Bureau indicates that no rare species or special natural communities occur at or near Wetland A. No protected species or potentially suitable habitats for protected species were observed in the wetland during site investigation. Because of its small size, landscape isolation, and dominance by exotic species, this wetland provides no endangered species habitat.

Wetland B

Wetland B is the second largest wetland on the property, covering approximately 0.18 acre. It is a small emergent wetland that formed on deposited fill material. This wetland is covered by emergent vegetation, including a mix of native and exotic plants. This wetland receives sheet flow from the surrounding landscape and contains no defined channels for water flow. Wetland B appears to be seasonally wet, and likely dries during dry periods of the year. It was determined that the wetland performs two ecological functions and could provide two human values.

Wildlife Habitat

Wetland B is connected with other wetlands by undeveloped overland access routes. This wetland could provide limited habitat value to wildlife, particularly amphibians and aquatic insects. Because of the amount of surrounding development and the small size of the wetland, the wildlife habitat function would be limited.

Production Export

Because Wetland B has a high density of plant species, the wetland could provides limited production export functions with regard to nutrients. However, its small size would limit any such function.

Educational/Scientific Value

Wetland B could offer educational or scientific value because of the sheet flow connection with other emergent wetlands. However, because it is small and located on private land without ready access to the public or scientific community, any scientific educational value would be limited.

Recreation

Even though Wetland B is on private land and not readily accessible to the public, it is very close to a populated residential area and can be seen from Lafayette Road. Therefore, Wetland B could provide recreation value to nearby residents for bird watching with regard to birds that use grassland/oldfield habitats. However, its small size would limit any such value.

Wetland B was determined to have no potential for other functions and values, as discussed below.

Groundwater Recharge/Discharge

Wetland B is perched on fill material and does not receive groundwater discharge or contribute to groundwater recharge.

Floodflow Alteration

This wetland does not receive floodwater flow or retain runoff that would contribute to floodflow alteration

Sediment/Toxicant Retention

Wetland B does not receive runoff from the surrounding developed areas. Runoff from Lafayette Road is directed away from the property. There are no sources of sediments or toxicants that contribute to this wetland. Wetland B does not contribute to Sediment/Toxicant Retention.

Nutrient Removal

There are no nutrient sources that contribute to this wetland. Wetland B does not provide a nutrient removal function.

Visual Quality/Aesthetics

Wetland B formed on deposited fill material and is dominated by a mix of exotic and native low-growing forbs and grasses. The landscape setting contains visible construction debris. This wetland provides no visual quality or aesthetics to viewers.

Fish/Shellfish Habitat

Wetland C does not support fish or shellfish populations. It does not retain water for a sufficient period to support these animal populations.

Sediment/Shoreline Stabilization

Wetland B has no defined shoreline or stream bank. Water flow is via unconfined sheet flow. This wetland is not subject to erosive flows due to its position in the landscape.

Uniqueness/Heritage

Wetland B is not a type of wetland that is considered locally unique or rare. It formed on deposited fill material a mix of native and exotic species. Wetland B has no uniqueness or heritage value.

Endangered Species Habitat

Data from the New Hampshire Natural heritage Bureau indicates that no rare species or special natural communities occur at or near Wetland B. No protected species or no potentially suitable habitats for protected species were observed in the wetland during site investigation. Because of its small size and the amount of surrounding development, and because the wetland formed in non-native fill material, this wetland provides no endangered species habitat.

Wetland C

Wetland C is a small emergent wetland, covering approximately 0.04 acre that formed on deposited fill material. This wetland is covered by emergent vegetation, including a mix of native and exotic plants. This wetland receives sheet flow from the surrounding landscape and contains no defined channels for water flow. Wetland C appears to be seasonally wet, and likely

dries during dry periods of the year. It was determined that the wetland performs two ecological functions and could provide two human values.

Wildlife Habitat

Wetland C is connected with other wetlands by undeveloped overland access routes. This wetland could provide limited habitat value to wildlife, particularly amphibians and aquatic insects. Because of the amount of surrounding development and the small size of the wetland, the wildlife habitat function would be limited.

Production Export

Because Wetland C has a high density of plant species, the wetland could provides limited production export functions. However, its small size would limit any such function.

Educational/Scientific Value

Wetland C could offer educational or scientific value because of the sheet flow connection with other emergent wetlands. However, because it is small and located on private land without ready access to the public or scientific community, any scientific educational value would be limited.

Recreation

Even though Wetland C is on private land and not readily accessible to the public, it is very close to a populated residential area and can be seen from Lafayette Road. Therefore, Wetland C could provide recreation value to nearby residents for bird watching with regard to birds that use grassland/oldfield habitats. However, its small size would limit any such value.

Wetland C was determined to have no potential for other functions and values, as discussed below.

Groundwater Recharge/Discharge

Wetland C is perched on fill material and does not receive groundwater discharge or contribute to groundwater recharge.

Floodflow Alteration

This wetland does not receive floodwater flow or retain runoff that would contribute to floodflow alteration

Sediment/Toxicant Retention

Wetland C does not receive runoff from the surrounding developed areas. Runoff from Lafayette Road is directed away from the property. There are no sources of sediments or toxicants that contribute to this wetland. Wetland C does not contribute to Sediment/Toxicant Retention.

Nutrient Removal

There are no nutrient sources that contribute to this wetland. Wetland C does not provide a nutrient removal function.

Visual Quality/Aesthetics

Wetland C formed on deposited fill material and is dominated by a mix of exotic and native low-growing forbs and grasses. The landscape setting contains visible construction debris. This wetland provides no visual quality or aesthetics to viewers.

Fish/Shellfish Habitat

Wetland C does not support fish or shellfish populations. It does not retain water for a sufficient period to support these animal populations.

Sediment/Shoreline Stabilization

Wetland C has no defined shoreline or stream bank. Water flow is via unconfined sheet flow. This wetland is not subject to erosive flows due to its position in the landscape.

Uniqueness/Heritage

Wetland C is not a type of wetland that is considered locally unique or rare. It formed on deposited fill material a mix of native and exotic species. Wetland C has no uniqueness or heritage value.

Endangered Species Habitat

Data from the New Hampshire Natural heritage Bureau indicates that no rare species or special natural communities occur at or near Wetland C. No protected species or potentially suitable habitats for protected species were observed in the wetland during site investigation. Because of its small size and the amount of surrounding development, and because the wetland formed in non-native fill material, this wetland provides no endangered species habitat.

Wetland D

Wetland D is a small wetland, covering approximately 0.04 acre, consisting of emergent vegetation around the perimeter and a deeper flooded area in the center. Water enters the wetland via sheet flow from upslope and the wetland has a drain outlet that connects with downstream waters. A portion of this wetland appears to hold water throughout the year. It was determined that the wetland performs six ecological functions and could provide two human values.

Wildlife Habitat

Wetland D is connected with other wetlands by undeveloped overland access routes. This wetland could provide limited habitat value to wildlife, particularly amphibians and aquatic insects. Because of the amount of surrounding development and the small size of the wetland, the wildlife habitat function would be limited.

Production Export

Because Wetland D has a permanent outlet to downstream waters, the wetland could provide limited production export functions. However, the small size of the upslope drainage area would limit any such function.

Groundwater Recharge/Discharge

Wetland D received overland flow from the upslope landscape and transfers water to downstream areas. It could contribute to groundwater recharge through direct infiltration or by contributing to downstream recharge. However, the small size of the wetland and the drainage area would limit any groundwater recharge function. Wetland D receives no groundwater discharge.

Floodflow Alteration

Wetland D provides floodflow alteration because it retains runoff from upslope areas and because the flood storage upslope of Wetland D is ineffective.

Sediment/Toxicant Retention

Wetland D provides Sediment/Toxicant Retention because it retains runoff from upslope areas, allowing settling of sediment particles and precipitation or uptake potential toxicants. Because

the upslope drainage area is small and has limited sources of toxicants, this function would be limited.

Nutrient Removal

Wetland D provides nutrient removal because it retains runoff from upslope areas, allowing algae and emergent macrophytes to utilize nutrients in the water for growth. Because the upslope drainage area is small and has limited sources of toxicants, this function would be limited.

Educational/Scientific Value

Wetland D could offer educational or scientific value because of landscape position and because it connects the upslope sheet flow wetlands with downstream receiving waters. However, because it is small and located on private land without ready access to the public or scientific community, any scientific educational value would be limited.

Recreation

Even though Wetland D is on private land and not readily accessible to the public, it is very close to a populated residential area and can be seen from Lafayette Road and nearby businesses. Therefore, Wetland D could provide recreation value to nearby residents for bird watching with regard to shorebirds or birds that would perch on tall emergent vegetation. However, its small size would limit any such value.

Wetland D was determined to have no potential for other functions and values, as discussed below.

Visual Quality/Aesthetics

Wetland D appears to have been excavated as a stormwater retention area and is dominated by a mix of exotic and native low-growing forbs and grasses. The landscape setting contains visible construction debris and is across the road from an industrial development. This wetland provides no visual quality or aesthetics to viewers.

Fish/Shellfish Habitat

Wetland D does not support fish or shellfish populations. While it appears to retain water throughout the year, its small size would preclude viable fish or shellfish populations.

Sediment/Shoreline Stabilization

Wetland D has a defined shoreline but no defined stream bank. Water inflow is via unconfined sheet flow and outflow is through a constructed permanent outlet. This wetland appears to function as a stormwater detention area and is not subject to erosive flows.

Uniqueness/Heritage

Wetland D is not a type of wetland that is considered locally unique or rare. It formed on deposited fill material a mix of native and exotic species. Wetland D has no uniqueness or heritage value.

Endangered Species Habitat

Data from the New Hampshire Natural heritage Bureau indicates that no rare species or special natural communities occur at or near Wetland D. No protected species or potentially suitable habitats for protected species were observed in the wetland during site investigation. Because of its small size and the amount of surrounding development, this wetland provides no endangered species habitat.

Wetland E

Wetland E is the largest wetland on the property, covering approximately 0.23 acre. This wetland is covered by emergent vegetation, including a mix of native and exotic plants. This wetland formed on fill material and receives sheet flow from the surrounding landscape and contains no defined channels for water flow. Wetland E appears to be seasonally wet, and likely dries during dry periods of the year. It was determined that the wetland performs two ecological functions and could provide two human values.

Wildlife Habitat

Wetland E is connected with other wetlands by undeveloped overland access routes. This wetland could provide limited habitat value to wildlife, particularly amphibians and aquatic insects. Because of the amount of surrounding development and the small size of the wetland, the wildlife habitat function would be limited.

Production Export

Because Wetland E has a high density of plant species, the wetland could provides limited production export functions. However, its small size would limit any such function.

Educational/Scientific Value

Wetland E could offer educational or scientific value because of the sheet flow connection with other emergent wetlands. However, because it is small and located on private land without ready access to the public or scientific community, any scientific educational value would be limited.

Recreation

Even though Wetland E is on private land and not readily accessible to the public, it is very close to a populated residential area and can be seen from Lafayette Road. Therefore, Wetland E could provide recreation value to nearby residents for bird watching with regard to birds that use grassland/oldfield habitats. However, its small size would limit any such value.

Wetland E was determined to have no potential for other functions and values, as discussed below.

Groundwater Recharge/Discharge

Wetland E is perched on fill material and does not receive groundwater discharge or contribute to groundwater recharge.

Floodflow Alteration

This wetland does not receive floodwater flow or retain runoff that would contribute to floodflow alteration

Sediment/Toxicant Retention

Wetland E does not receive runoff from the surrounding developed areas. Runoff from Lafayette Road is directed away from the property. There are no sources of sediments or toxicants that contribute to this wetland. Wetland E does not contribute to Sediment/Toxicant Retention.

Nutrient Removal

There are no nutrient sources that contribute to this wetland. Wetland E does not provide a nutrient removal function.

Visual Quality/Aesthetics

Wetland E formed on deposited fill material and is dominated by a mix of exotic and native low-growing forbs and grasses. The landscape setting contains visible construction debris. This wetland provides no visual quality or aesthetics to viewers.

Fish/Shellfish Habitat

Wetland E does not support fish or shellfish populations. It does not retain water for a sufficient period to support these animal populations.

Sediment/Shoreline Stabilization

Wetland E has no defined shoreline or stream bank. Water flow is via unconfined sheet flow. This wetland is not subject to erosive flows due to its position in the landscape.

Uniqueness/Heritage

Wetland E is not a type of wetland that is considered locally unique or rare. It formed on deposited fill material a mix of native and exotic species. Wetland E has no uniqueness or heritage value.

Endangered Species Habitat

Data from the New Hampshire Natural heritage Bureau indicates that no rare species or special natural communities occur at or near Wetland E. No protected species or potentially suitable habitats for protected species were observed in the wetland during site investigation. Because of its small size and the amount of surrounding development, and because the wetland formed in non-native fill material, this wetland provides no endangered species habitat.

Summary

This section provides a summary of the functions and values provided by the wetlands identified on the property at 1900 Lafayette Road, Portsmouth, New Hampshire. A summary table is presented (table 2) followed by a brief discussion of the wetlands.

Table 2
Summary of Wetland Functions and Values
1900 Lafayette Road, Portsmouth, New Hampshire

	Wetland Identifier and Classification [a]				
	Wetland A	Wetland B	Wetland C	Wetland D	Wetland E
Functions and Values [b]	**PEM1e**	**PEM1e**	**PEM1e**	**PEM1e/ PUBc**	**PEM1e**
Groundwater Recharge/Discharge				X	
Floodflow Alteration				X	
Fish and Shellfish Habitat					
Sediment/Toxicant Removal				X	
Nutrient Removal					
Production/Export	X	X	X	X	X
Sediment/Shoreline Stabilization					
Wildlife Habitat	X	X	X	X	X
Recreation	X	X	X	X	X
Educational/Scientific Value	X	X	X	X	X
Uniqueness/Heritage					
Visual Quality/Aesthetics					
Endangered/Threatened Species Habitat					

[a] Follows the US Fish and Wildlife Service Classification System (Cowardin et al., 1979:
PEM1e = palustrine emergent persistent and seasonally saturated
PUBc = palustrine unconsolidated bottom permanently flooded
[b] X = Function Present, Blank = Function Absent, P = Principal Function/Value of Wetland

Wetlands A, B, C, and E are similar and may provide the same functions and values. These wetlands could provide habitat functions for wildlife and could provide production and export functions for nutrients or materials. Wetlands A, B, C, and E also could offer educational scientific value regarding invasion of wetlands by non-native species and provide recreation value to nearby residents for bird watching. However, the small size of these wetlands and the surrounding development would limit any such functions and values. These four wetlands do not provide other functions and values.

Wetland D

Wetland D would have the same potential functions and values as described for Wetlands A, B, C, and E. However, because of its landscape position and hydrologic connection to other waters, Wetland D has the potential to offer additional functions and values. Wetland D receives sheet flow runoff from the remainder of the property and can contribute to floodflow

alteration. Also, because Wetland D contributes water to downstream systems, it may contribute to downstream groundwater recharge. Wetland D impounds water, providing the opportunity for physical settling and precipitation of sediments and toxicants and biological uptake and transformation of nutrients before water continues downstream. Because of then wetland's small size, the small size of its drainage area, and the amount of surrounding development, any functions and values provided by Wetland D would be limited. Wetland D does not provide other functions and values.

References

Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Jamestown, ND: Northern Prairie Wildlife Research Center Online. http://www.npwrc.usgs.gov/resource/wetlands/classwet/index.htm (Version 04DEC1998). Accessed June 7, 2010.

GZA GeoEnvironmental, Inc. 2010. Wetland/Surface Water Delineation Report: 1900 Lafayette Road, Portsmouth, New Hampshire. January 2010.

U.S. Army Corps of Engineers. 1999. *The Highway Methodology Workbook Supplement: Wetlands Functions and Values A descriptive Approach*. NAEEP-360-1-30a. September 1999.

Site Map

0 60 120 240

SCALE IN FEET

NO.	ISSUE/DESCRIPTION	BY	DATE

WETLAND DELINEATION SKETCH OVER 2005 AERIAL PHOTOGRAPH

1680 LAFAYETTE ROAD, PORTSMOUTH, NH.

PREPARED BY: GZA GeoEnvironmental, Inc. Engineers and Scientists

PREPARED FOR: MICHAEL BAKER, JR., INC.

PROJ MGR: JAL	REVIEWED BY: LEM	CHECKED BY: AFT	FIGURE 1
DESIGNED BY: JPN	DRAWN BY: JPN	SCALE: 1" = 120'	
DATE: JANUARY 2009	PROJECT NO. 17.[redacted]	REVISION NO.	SHEET NO.

Wetland Function-Value Forms

Wetland Function-Value Evaluation Form

Total area of wetland 0.02ac Human made? YES Is wetland part of a wildlife corridor? NO or a "habitat island"? NO

Adjacent land use Light Industrial / Residential Distance to nearest roadway or other development 50 ft

Dominant wetland systems present PEM1E(x) Contiguous undeveloped buffer zone present NO

Is the wetland a separate hydraulic system? YES If not, where does the wetland lie in the drainage basin?

How many tributaries contribute to the wetland? Ø Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Portsmouth A
Latitude 43.042 Longitude -70.776
Prepared by: RPR Date 4-22-2010
Wetland Impact:
Type Fill Area 0.02ac

Evaluation based on:
Office X Field X
Corps manual wetland delineation completed? Y X N

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge		X			man made depression, tied drainage with minimal input
Floodflow Alteration		X			wetland does not store floodwater
Fish and Shellfish Habitat		X			small + isolated
Sediment/Toxicant Retention		X			no upstream sources
Nutrient Removal		X			no upstream sources
Production Export	X		7		
Sediment/Shoreline Stabilization		X			no sediment source, no shoreline influence
Wildlife Habitat	X		5,7	X	
Recreation	X		12		
Educational/Scientific Value	X		10		
Uniqueness/Heritage		X			man made on fill material
Visual Quality/Aesthetics		X			man made on fill material
ES Endangered Species Habitat		X			none
Other					

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland 0.04ac Human made? YES Is wetland part of a wildlife corridor? NO or a "habitat island"? NO

Adjacent land use Light Industrial / Residential Distance to nearest roadway or other development 250 ft

Dominant wetland systems present PEM1E(x) Contiguous undeveloped buffer zone present NO

Is the wetland a separate hydraulic system? YES If not, where does the wetland lie in the drainage basin?

How many tributaries contribute to the wetland? Ø Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Portsmouth B
Latitude 43.041 Longitude -70.777
Prepared by: RPR Date 4-22-10
Wetland Impact:
Type none Area
Evaluation based on:
Office X Field X
Corps manual wetland delineation completed? Y X N

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge		X			Man made depression, top of drainage with min. mal input
Floodflow Alteration		X			wetland does not store floodwater
Fish and Shellfish Habitat		X			small + isolated
Sediment/Toxicant Retention		X			no upstream sources
Nutrient Removal		X			no upstream sources
Production Export	X		7		
Sediment/Shoreline Stabilization		X			no sediment source, no shoreline influence
Wildlife Habitat	X		5,7	X	
Recreation	X		12		
Educational/Scientific Value	X		10		
Uniqueness/Heritage		X			man made on fill material
Visual Quality/Aesthetics		X			Man made on fill material
ES Endangered Species Habitat		X			none
Other					

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland 0.23ac Human made? YES Is wetland part of a wildlife corridor? NO or a "habitat island"? NO

Adjacent land use Light Industrial / Residential Distance to nearest roadway or other development 250 ft

Dominant wetland systems present _____ Contiguous undeveloped buffer zone present NO

Is the wetland a separate hydraulic system? YES If not, where does the wetland lie in the drainage basin? _____

How many tributaries contribute to the wetland? Ø Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Portsmouth C

Latitude 43.040 Longitude -70.777

Prepared by: RPR Date 4-22-10

Wetland Impact:
Type none Area _____

Evaluation based on:
Office X Field X

Corps manual wetland delineation completed? Y X N _____

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge		X			Man made depression, topo/drainage with minimal input
Floodflow Alteration		X			wetland does not store floodwater
Fish and Shellfish Habitat		X			small + isolated
Sediment/Toxicant Retention		X			no upstream sources
Nutrient Removal		X			no upstream sources
Production Export	X		7		
Sediment/Shoreline Stabilization		X			no sediment source, no shoreline influence
Wildlife Habitat	X		5,7	X	
Recreation	X		12		
Educational/Scientific Value	X		10		
Uniqueness/Heritage		X			man made in fill material
Visual Quality/Aesthetics		X			Man made in fill material
ES Endangered Species Habitat		X			none
Other					

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland 0.01ac Human made? YES Is wetland part of a wildlife corridor? NO or a "habitat island"? NO

Adjacent land use Light Industrial/Residential Distance to nearest roadway or other development 50 ft

Dominant wetland systems present _____ Contiguous undeveloped buffer zone present NO

Is the wetland a separate hydraulic system? NO If not, where does the wetland lie in the drainage basin? Upper reach

How many tributaries contribute to the wetland? Ø Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Portsmouth D

Latitude 43.041 Longitude -70.779

Prepared by: RBR Date 4-22-10

Wetland Impact:
Type none Area _____

Evaluation based on:
Office _____ Field _____

Corps manual wetland delineation completed? Y ____ N ____

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	X		7		
Floodflow Alteration	X		3		
Fish and Shellfish Habitat		X			small, unpassable downstream connection
Sediment/Toxicant Retention	X		3,6,12	X	
Nutrient Removal	X		2,5,9		
Production Export	X		10		
Sediment/Shoreline Stabilization		X			no sediment source, no shoreline influence
Wildlife Habitat	X		7		
Recreation	X		12		
Educational/Scientific Value	X		10		
Uniqueness/Heritage		X			man made on fill material
Visual Quality/Aesthetics		X			man made on fill material
ES Endangered Species Habitat		X			none
Other					

Notes:

* Refer to backup list of numbered considerations.

Wetland Function-Value Evaluation Form

Total area of wetland 0.18ac Human made? YES Is wetland part of a wildlife corridor? NO or a "habitat island"? NO

Adjacent land use Light Industrial/Residential Distance to nearest roadway or other development 250ft

Dominant wetland systems present _____ Contiguous undeveloped buffer zone present NO

Is the wetland a separate hydraulic system? YES If not, where does the wetland lie in the drainage basin? _____

How many tributaries contribute to the wetland? Ø Wildlife & vegetation diversity/abundance (see attached list)

Wetland I.D. Portsmouth E

Latitude 43.041 Longitude -70.777

Prepared by: RPR Date 4-22-2010

Wetland Impact:
Type Fill Area 0.02ac

Evaluation based on:
Office X Field X

Corps manual wetland delineation completed? Y X N ____

Function/Value	Suitability Y	Suitability N	Rationale (Reference #)*	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge		X			man made depression, top of drainage with minimal input
Floodflow Alteration		X			wetland does not store floodwater
Fish and Shellfish Habitat		X			small + isolated
Sediment/Toxicant Retention		X			no upstream sources
Nutrient Removal		X			no upstream sources
Production Export	X		7		
Sediment/Shoreline Stabilization		X			no sediment source, no shoreline influence
Wildlife Habitat	X		5,7	X	
Recreation	X		12		
Educational/Scientific Value	X		10		
Uniqueness/Heritage		X			man made on fill material
Visual Quality/Aesthetics		X			man made on fill material
ES Endangered Species Habitat		X			none
Other					

Notes:

* Refer to backup list of numbered considerations.

Appendix H
New Hampshire Programmatic General Permit

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General Permit No: NAE-2007-461 Effective Date: June 28, 2007
Applicant: General Public in New Hampshire Expiration Date: June 28, 2012

Department of the Army
Programmatic General Permit
State of New Hampshire

The New England District of the U.S. Army Corps of Engineers (Corps) hereby issues this Programmatic General Permit (PGP) that expedites review of minimal impact work in coastal and inland waters and wetlands within the State of New Hampshire. This New Hampshire PGP minimizes duplication between New Hampshire's Regulatory Program governing work within coastal and inland waters and wetlands and the Corps Regulatory program. Subject to certain exclusions and conditions, the PGP eliminates the need to apply for separate approval from the Corps for most minor, non-controversial work in New Hampshire when that work is authorized by the New Hampshire Department of Environmental Services (DES) Wetlands Bureau.

The Corps will review projects according to the State of New Hampshire classification of Minimum, Minor and Major impact projects per the State of New Hampshire Wetland Rules Env-Wt 100 - 800. The Corps review thresholds (see Appendix A) are typically the same as the State's thresholds, but may differ. For example, the wetland fill thresholds for a Minimum are <3,000 square feet (SF) (State and Corps), Minor [≥3,000 to <20,000 SF (State and Corps)] and Major [≥20,000 SF (State); ≥20,000 SF to <3 acres (Corps)].

I. GENERAL CRITERIA:

Activities with minimal impacts, as specified by this PGP's terms (Pages 1 – 7), general conditions (Pages 8 – 17), and Appendix A - Definition of Categories, qualify for authorization under this PGP as either a Minimum Impact Project, or Minor or Major Impact Project.

Proponents should **first** review Appendix A - Definition of Categories to see if a project is eligible under this PGP:

- Minimum Impact Project:
  [Minimum Impact Projects may proceed after receiving DES Wetlands Bureau authorization unless the applicant receives written notification from the Corps (see Page 3). An application to the State and the secondary impact information required in Appendix B (this is also attached to the State's application) is required for all projects, unless exempt from State regulation.];
- Minor or Major Impact Project:
  [Minor Impact Projects may proceed after 30 days from the date of the NH Wetland Bureau authorization unless the applicant receives written notification from the Corps (see Page 4).
  Major Impact Projects require written authorization from the Corps. An application to and written authorization from the State is required.]

If you determine that your project is eligible as a Minimum Impact Project after reviewing Appendix A, you must then ensure that your project is in full compliance with this PGP's terms and general conditions. If any of these terms or general conditions are not met, your project must be reviewed under the Minor or Major Impact Project procedures or Individual Permit procedures. The Individual Permit thresholds are defined in Appendix A and the procedures are briefly described on Page 7. This PGP does not affect the Corps Individual Permit review process or activities exempt from Corps regulation.

II. ACTIVITIES COVERED:

- Work and structures that are located in, or that affect, navigable waters of the United States (U.S.) [33 CFR 328.4(c)] (regulated by the Corps under Section 10 of the Rivers and Harbors Act of 1899);
- The discharge of dredged or fill material into waters of the U.S. (regulated by the Corps under Section 404 of the Clean Water Act)[1]; [33 CFR 323.4, Discharges not requiring permits, states any discharge of dredged or fill material that may result from normal farming, silviculture and ranching activities is not prohibited by or otherwise subject to regulation under Section 404 (except as specified in paragraphs (b) and (c) of that section).] and;
- The transportation of dredged material for the purpose of disposal in the ocean (regulated by the Corps under Section 103 of the Marine Protection, Research and Sanctuaries Act). The term "discharge of dredged or fill material" also includes certain discharges resulting from excavation. Applicants should contact the Corps to determine if a particular excavation discharge occurring within waters or wetlands is a regulated activity.

III. PROCEDURES:

1. <u>State Approvals</u>

a. In order for PGP authorizations to be valid, when any of the following state approvals are also required, the approvals must be obtained prior to the commencement of work in Corps jurisdiction (see General Condition 1). Applicants are responsible for applying for and obtaining any of the required State approvals.

(i) Water Quality Certification (WQC) under Section 401 of the Federal Clean Water Act (CWA) (33 USC 1341). The CWA requires applicants to obtain a WQC or waiver from the state water pollution control agency (DES, Watershed Management Bureau) for any activity that may discharge pollutants during construction or operation of the activity. The DES has granted WQC #2007-003 for PGP activities, provided that the applicant obtains the required state wetlands and Alteration of Terrain approvals and complies with PGP conditions. Under condition E-2 of the WQC, PGP activities shall be subject to DES review to determine whether additional conditions or an Individual 401 Certification application is necessary to ensure compliance with surface water quality standards.

(ii) Coastal Zone Management Act (CZMA) Federal Consistency Concurrence pursuant to Section 307 of the CZMA of 1972, as amended. The NH DES administers the NH Coastal Program (NHCP). The NHCP has determined that any project in the NH Coastal Zone that is authorized under the Minimum, Minor or Major Impact Project categories of this PGP is consistent with the NHCP and does not require additional CZMA Federal consistency review. The landward boundary of the state's coastal zone encompasses the jurisdictional borders of the 17 coastal municipalities subject to tidal influence. The seaward boundary of the state's coastal zone extends three nautical miles offshore.

(iii) Dredge, fill or construction in and adjacent to wetlands or waters of the state requires a permit from NH DES pursuant to RSA 482-A. Alteration of sand dunes or its vegetation, the upland tidal buffer zone, or in areas adjacent to designated prime wetlands also requires a DES wetlands permit.

(iv) Pursuant to RSA 482-A:17 and Env-Ws 415.03 an Alteration of Terrain is required from DES Alteration of Terrain program prior to commencing: projects involving dredging, excavation, filling, mining, transporting of forest products, construction, earth moving, or other significant alteration of the characteristics of the terrain as defined in Env-Ws 415.02 that will occur in or on the border of the surface waters of the state; or construction, earth moving, or other significant alteration of the characteristics of the terrain as defined Env-Ws 415.02 when a contiguous area of 50,000 square feet or more if within the protected shoreland as defined by RSA 483-B or 100,000 square feet or more in all other areas will be disturbed.

(v) Comprehensive Shoreland Protection Act: Excavation, filling and construction within the Protected Shoreland zone will require approval from DES in accordance with the Comprehensive Shoreland Protection Act pursuant to RSA 483-B. Minimum standards for the maintenance of a natural woodland buffer and lots sizing as well as impervious surface limits are also set by this statute.

(vi) Rivers Management and Protection Act: The DES and other state agencies are required to coordinate with the DES Rivers Coordinator prior to issuing permits affecting any river or segment designated rivers.

b. The following authorizations from the State of New Hampshire may also be required:

(i) The NH Endangered Species Conservation Act ("Endangered Species Act (ESA)") may also be applicable to DES review under the Wetlands, Shoreland and Water Pollution Acts. The Endangered Species Act provides that "[s]pecies of wildlife normally occurring within this state which may be found to be in jeopardy should be accorded such protection as is necessary to maintain and enhance their numbers." RSA 212-A:3, I. The Endangered Species Act requires state agencies to cooperate with the New Hampshire Fish & Game Department in protecting endangered species, and voids state laws inconsistent with its provisions. Id.; RSA 212-A:8, RSA 212-A:9, III. Thus, DES review and permitting decisions under the Wetlands, Shoreland and Water Pollution Acts must ensure the protection of any endangered or threatened species at or near the project site.

2. Corps Authorizations

The 3 PGP review categories (Minimum, Minor and Major) are listed below. The Corps reserves the right to require a PGP or Individual Permit review for Minimum Impact Projects, or an Individual Permit review for Minor or Major Impact Projects, if the Corps determines the project will have more than minimal environmental impacts, or based on a concern for any other factor of the public interest.

MINIMUM IMPACT PROJECTS

Eligibility

Activities in NH that:

- Are subject to Corps jurisdiction [see General Condition (GC) 2, Page 8];
- Meet the general conditions of this PGP (Pages 8 - 17);
- Are listed under the heading Minimum Impact Project in Appendix A;
- Meet the definitions of a State of New Hampshire Minimum Impact Project;
- Receive approval from the DES Wetlands Bureau and all other applicable State agencies; and
- Receive all other required Federal and State approvals listed on Page 2;

may proceed upon authorization from the DES Wetlands Bureau unless notification is received from the Corps requiring further review or additional information.

Abbreviated Application Procedures (Minimum Impact Project)

Applicants must submit the information at Appendix B, which includes the Corps Secondary Impacts Checklist. For convenience, Appendix B is also attached to the DES Wetlands Bureau application and Permit by Notification forms. The Corps will review this information for all projects to assess direct, indirect (secondary impacts) and cumulative impacts. The Corps will decide that the project:

- as proposed will have no more than minimal environmental impacts, which means the project may then proceed upon authorization from the DES Wetlands Bureau without waiting for Corps confirmation, or

- will receive a higher review level if there are concerns for the aquatic environment, any other factor of the public interest, or for any potential secondary impacts. If a higher level review is required, the Corps will attach a notification to the DES Wetlands Bureau decision. The Corps will later contact the applicant to notify them of their project status and request any additional information that may be required.

Project proponents seeking Minimum Impact Project authorizations are not relieved of the obligation to comply with this PGP's general conditions (Pages 8 - 17) and other Federal laws such as the National Historic Preservation Act, the Endangered Species Act and the Wild and Scenic Rivers Act. Therefore, consultation with the Corps and/or agencies such as the NH Historic Preservation Officer is required when there is a high likelihood of the presence of resources of concern. Secondary impacts must be included when determining if a project qualifies as a Minimum Impact Project (see GC 3). Fill area includes all temporary and permanent fill.

MINOR AND MAJOR IMPACT PROJECTS

Eligibility

Activities in NH that:

- Are subject to Corps jurisdiction (see General Condition 2, Page 8);
- Meet the general conditions of this PGP (Pages 8 through 17);
- Meet the definition of Minor or Major Impact Projects in Appendix A;
- Meet the definitions of a State of NH Minor or Major Impact Project;
- Meet the definition of Minimum Impact Project but have been determined by the Corps to have concerns for the aquatic environment, any other factor of the public interest, or for any potential secondary impacts (see Page 3);
- Receive approval from the DES Wetlands Bureau and all other applicable State agencies;
- Receive all other required Federal and State approvals (Page 2); and
- Have been reviewed by the Corps and the Federal resource agencies (Page 5);

for **Minor Impact Projects**, may proceed after 30 days from the DES Wetlands Bureau decision unless the applicant receives written notification from the Corps either requesting additional information or requiring modifications to the proposal, or requiring an Individual Permit for the project.

for **Major Impact Projects,** may proceed upon receipt of written authorization from the Corps. The Corps will notify the applicant within 30 days from their DES Wetlands Bureau decision if: their project is authorized under the PGP, additional information is needed or an Individual Permit review is required.

Env-Wt 303 Classification of Projects specifies the classifications for Major, Minor and Minimum Impact Projects. The DES Wetlands Bureau will classify a project once it has been found to be technically complete and will provide that classification to the proponent along with their DES Wetlands Bureau decision. For inland wetland fill projects, the DES Wetlands Bureau thresholds are 3,000 to <20,000 SF (Minor Impact Project) and ≥20,000 SF (Major Impact Project).

C. Application Procedures (Minor and Major Impact Project)

For projects qualifying as Minor or Major Impact Projects, the town clerk will send a copy of the State application package to the DES Wetlands Bureau. After the DES Wetlands Bureau assigns a State file number, the State will make a copy available to the Corps. The State agencies have their own application process and the DES will make applications available to the Corps.

All applicants shall submit a copy of their application materials to the NH State Historic Preservation Officer (SHPO) (see Page 19) to be reviewed for the presence of historic/archaeological resources in the permit area that may be affected by the proposed work. The SHPO will notify the Corps if there are State concerns that the proposed work will have an effect on historic resources. The applicant must submit with their application to the DES Wetlands Bureau, either a copy of their cover letter, or a statement of having sent their application materials to the SHPO.

Information Required:

See Appendix B (Required Information), which is also an addendum to the New Hampshire DES Wetland Bureau application.

D. Federal/State Review Procedures (Minor and Major Impact Project)

The Corps, Federal resource agencies [U.S. Fish and Wildlife Service (US FWS), U.S. Environmental Protection Agency (EPA), and National Marine Fisheries Service (NMFS)] and the DES Wetlands Bureau will comprise the interagency review team. The Corps will review all applications for Minor and Major projects with the interagency review team at monthly interagency review meetings ("Joint Processing Meetings") at the DES Wetlands Bureau. The Corps and the Federal resource agencies at the branch chief or equivalent level may agree on certain activities that do not require coordination at these meetings or may substitute a different review process.

The Corps may determine on its own or in consultation with the interagency review team, if applications for Minor and Major projects work:

1. Are eligible under the PGP as proposed;
2. Require additional information;
3. Will require project modification, mitigation or other special conditions to avoid or minimize adverse environmental impacts and protect the aquatic environment to be eligible for authorization under this PGP; or
4. Are ineligible under the terms and/or conditions of this PGP;
5. Require Individual Permit review irrespective of whether the terms and general conditions of this PGP are met, based on concerns for the aquatic environment or any other factor of the public interest (see General Condition 4).

If the Corps determines that a project is eligible for this PGP and there are no Federal agency concerns, no further contact with the Corps is necessary.

- **For Minor Impact Projects**, applicants may proceed after the 30 day waiting period.
- **For Major Impact Projects,** the applicant must wait for written authorization from the Corps. If an applicant for a Major Impact Project does not hear from the Corps within the 30 day waiting period, the applicant should call the Corps. To proceed with a Major Impact Project without written authorization is a violation of this permit and the applicant may be subjected to an enforcement action by the Corps.

The Corps, or the Federal resource agencies within ten business days of the review meeting, may 1) request additional information, 2) recommend modification, mitigation, or special conditions to avoid or minimize adverse environmental impacts associated with the aquatic environment and to ensure the terms and general conditions of the PGP are met, or 3) require Individual Permit review.

The Federal resource agencies may request additional information within their area of expertise within ten business days of the review meeting. This information shall be commensurate to the level of impact and agreed upon by the Corps. The agencies are allowed an additional ten business days after their receipt of additional information to provide special conditions or a written Individual Permit request to the Corps.

The Corps will contact the applicant either by phone or in writing if there are concerns. For additional information requests, the Corps will copy the DES Wetlands Bureau and the Federal resource agency making the request. If the applicant is unable to resolve the concerns or modify the project, the Corps may determine that a project is ineligible under this PGP, "kickout" the project to the Individual Permit review category, and begin its Individual Permit review procedures. The Corps will send a "Kickout Letter" to the applicant and copy the DES Wetlands Bureau and the commenting Federal resource agency on any written correspondence to the applicant. The Corps may reinstate a project's eligibility under the PGP provided the Federal agencies' concerns are satisfied.

The Corps will also "kickout" the project and begin its Individual Permit review procedures at the request of the Federal resource agencies if an agency within ten business days of either the review meeting date or receiving additional information expresses a concern within their area of expertise, states the resource or species that could be impacted by the project, and describes the impacts that, either individually or cumulatively, will be more than minimal. This ten-day notice may be verbal and is not required to be fully documented, but the Corps will require confirmation with a written response within an additional ten business days from the verbal comment date if the agency decides not to reinstate the project's eligibility under the PGP and proceeds with their Individual Permit request. Written responses must be signed by the Federal resource agency field supervisor or branch chief, as appropriate, and must identify the affected resource within their area of expertise. The intent of the verbal notification is to allow the Corps to give timely notification to the applicant that additional information is needed and/or an Individual Permit may be required.

In accordance with regional environmental concerns, most proposals for work which involve impacts >1 acre will require an Individual Permit application and review, an alternatives analysis and mitigation. Projects impacting >3 acres of wetlands will require an Individual Permit. Generally, the following types of impacts are viewed as minimal and are eligible for PGP authorization (subject to agency review and Corps approval) for projects impacting from 1 and 3 acres of wetlands:

- Widenings of transportation projects and expansions of existing projects.
- Wetland edge encroachments and/or wetland crossings to access usable uplands
- Low or degraded wetlands

E. Emergency Procedures: Minor and Major Impact Projects

Any project proponent may request emergency authorization from the Corps. However, the Corps will determine if a project qualifies for these emergency situation procedures. Contact the Corps and the State in the event of an emergency situation (contact info on page 18.) The State's emergency procedures are listed at Env-Wt 503 Emergency Procedures.

Emergency work shall be authorized by the Corps when a threat to public safety or public health exists or significant damage to private property is imminent and the event causing the emergency occurred within 5 days of the request for emergency approval. Emergency authorization shall be limited to stabilization of the site or mitigation of the immediate threat.

The work proponent shall submit a description of all work performed during an emergency, except for those projects classified minimum impact, in lieu of a permit application. Applications as required under Env-Wt 501 shall be submitted for any permanent repairs, restoration, or other activities proposed to be conducted after the emergency has ended.

F. Construction of Solid Fill Structures and Fills Along the Coastline or Baseline From Which the Territorial Sea is Measured (Minor and Major Impact Projects)

Projects with construction of solid fill structures or discharge of fill that may extend beyond the coastline or the baseline from which the territorial sea is measured (i.e., mean low water), must be coordinated with MMS, Outer Continental Shelf (OCS) Survey group, pursuant to the Submerged Lands Act (43 USC 1301-1315, 33 CFR 320.4(f)). The Corps will forward project information to MMS for their review. The MMS will coordinate their determination with the Department of the Interior (DOI) Solicitor's Office. The DOI will have 15 calendar days from the date MMS received the project information to determine if the baseline will be affected. If the Corps is not notified within the 15 day period it will assume a "no effect" determination. If the solicitor's notification to the Corps is verbal, it must be followed with a written confirmation within 10 business days of the date of the verbal notification. This procedure will be eliminated if the State of New Hampshire provides a written waiver of interest in any increase in submerged lands caused by a change in the baseline resulting from solid fill structures or fills authorized under this PGP.

IV. INDIVIDUAL PERMIT

Work that is in the Individual Permit category listed in Appendix A, or work that does not meet the terms and general conditions of this PGP, will require an application for an Individual Permit from the Corps (33 CFR 325.1). Applicants should submit the appropriate application materials directly to the Corps as early as possible to expedite the permit review process. General information and application forms can be obtained at our web site or by calling us (see Page 18). Individual 401 WQC and/or CZM Federal consistency concurrence from the appropriate NH agencies are required before the Corps issues an Individual Permit. Filing an Individual Permit application does not relieve the applicant from their obligation to obtain all required Federal and State approvals.

V. GENERAL PERMIT CONDITIONS:

The following general conditions apply to all activities authorized under this PGP, including all Minimum, Minor and Major Impact Projects.

General Requirements:

1. Other Permits. Authorization under this general permit does not obviate the need to obtain other Federal, state, or local authorizations required by law or to comply with all Federal, State of New Hampshire, or local laws.

2. Federal Jurisdictional Boundaries. Applicability of this GP shall be evaluated with reference to Federal jurisdictional boundaries. Applicants are responsible for ensuring that the boundaries used satisfy the Federal criteria defined at 33 CFR 328-329. These sections prescribe the policy, practice and procedures to be used in determining the extent of jurisdiction of the Corps concerning "waters of the U.S." and "navigable waters of the U.S." Wetland boundaries shall be performed in accordance with the January 1987 Corps of Engineers Wetlands Delineation Manual, located at www.saj.usace.army.mil/ permit/documents /87manual.pdf and applicable regional supplements. The USFWS published the 1988 National List of Plant Species that Occur in Wetlands, located at www.nwi.fws.gov. The Corps will publish future updates of this plant list and make it available on their website. The Natural Resources Conservation Service (NRCS) publishes the current hydric soil definition, criteria and lists, located at http://soils.usda.gov/use/hydric/. We encourage the use of a regional guide entitled, "Field Indicators for Identifying Hydric Soils in N.E." See www.neiwpcc.org/hydricsoils.asp.

3. Minimal Effects and Secondary (Indirect) and Cumulative Impacts. Projects authorized by this PGP shall have no more than minimal individual, secondary and cumulative adverse environmental impacts to waters of the U.S. as a result of construction and operation of the project. The PGP does not impose any obligation on DES to assess secondary impacts that does not already exist in state law. See Appendix A, Endnote 3 for a secondary impacts definition. In order for the Corps to determine whether independent Corps review of a project with possible secondary and cumulative impacts is required, applicants must complete the Corps Secondary Impacts Checklist at Appendix B. For convenience, Appendix B is also provided as an attachment to the DES Wetlands Bureau application and Permit by Notification forms.

- For waterway and/or wetland areas, secondary impacts (e.g., areas drained, flooded, cleared, excavated or fragmented) shall be added to the total fill area when determining the project review category (Minimum, Minor/Major or Individual Permit review) for the Corps**.**
- For the project area, the Corps, State and Federal resource agencies will review projects to determine if there are discernable secondary impacts on waters and wetlands necessitating a higher review level. The Corps Secondary Impacts Checklist will assist with this review.

4. Discretionary Authority. Not withstanding compliance with the terms and general conditions of this PGP, the Corps retains discretionary authority to require either a Minor/Major Project review or an Individual Permit review for any project, including a higher level review for a Minimum Impact Project, based on concerns for the aquatic environment or for any other factor of the public interest (33 CFR 320.4(a)). This authority is invoked on a case-by-case basis whenever the Corps determines that the potential impacts of the proposal warrant either a Minor/Major Project review or an Individual Permit review based on the concerns stated above. This authority may be invoked for projects with cumulative environmental impacts that are more than minimal, or if there is a special resource or concern associated with a particular project that is not already covered by the remaining conditions of the PGP and that warrants greater review. Whenever the Corps notifies an applicant that either a Minor/Major Impact

Project review or Individual Permit review is required, authorization under this PGP is void, and no work may be conducted until the Corps issues the required authorization or until the Corps notifies the applicant that further review has demonstrated that the work may proceed under this PGP.

5. Single and Complete Projects. This PGP shall not be used for piecemeal work and shall be applied to single and complete projects. All components of a single project and/or all planned phases of a multi-phased project shall be treated together as constituting one single and complete project, unless the Corps determines that a component has independent utility. For linear projects, such as power lines or pipelines with multiple crossings, the "single and complete project" (i.e., single and complete crossing) will apply to each crossing of a separate water of the U.S. (i.e., single waterbody) at that location; except that for linear projects crossing a single waterbody several times at separate and distant locations, each crossing is considered a single and complete project, and may qualify for Minimum Impact Project eligibility. (However, individual channels in a braided stream or river, or individual arms of a large, irregularly-shaped wetland or lake, etc., are not separate waterbodies.) If any crossing requires a Minor/ Major Impact Project review, then the entire linear project shall be reviewed as one project under the Minor/Major Impact Project review procedures provided that the impact thresholds in Appendix A are met. Also, this PGP shall not be used for any activity that is part of an overall project for which an Individual Permit is required, unless the Corps determines the activity has independent utility. Note that modifications to State permits may not constitute a separate project. Modifications which involve Corps jurisdiction will be reviewed at the regular review meetings in order to ascertain compliance with the PGP. Keep in mind that a linear project normally qualifying as a Minimum Impact Project will trigger a higher-level Corps review if the impacts exceed this PGP's general conditions.

6. Permit On-Site. For Minor/Major projects, the permittee shall ensure that a copy of this PGP and the accompanying authorization letter are at the work site (and the project office) authorized by this PGP whenever work is being performed, and that all personnel with operation control of the site ensure that all appropriate personnel performing work are fully aware of its terms and conditions. The entire permit authorization shall be made a part of any and all contracts and sub-contracts for work that affects areas of Corps jurisdiction at the site of the work authorized by this PGP. This shall be achieved by including the entire permit authorization in the specifications for work. The term "entire permit authorization" means this PGP and the authorization letter (including its drawings, plans, appendices and other attachments) and also includes permit modifications. If the authorization letter is issued after the construction specifications, but before receipt of bids or quotes, the entire permit authorization shall be included as an addendum to the specifications. If the authorization letter is issued after receipt of bids or quotes, the entire permit authorization shall be included in the contract or sub-contract as a change order. Although the permittee may assign various aspects of the work to different contractors or sub-contractors, all contractors and sub-contractors shall be obligated by contract to comply with all environmental protection provisions contained within the entire PGP authorization, and no contract or sub-contract shall require or allow unauthorized work in areas of Corps jurisdiction.

General Conditions Related to National Concerns:

7. Historic Properties. Any activity authorized by this PGP shall comply with Section 106 of the National Historic Preservation Act. Information on the location and existence of historic resources can be obtained from the New Hampshire Historic Preservation Office (See page 18) and the National Register of Historic Places. Project proponents shall apply to the Corps for all projects that would otherwise qualify for a Minimum Impact Project if there is the potential for an effect on a historic property within the permit area or any known historic property that may occur outside the permit area. Historic properties include those that are eligible for inclusion, but not necessarily listed on the National

Register. If the permittee, during construction of work authorized herein, encounters a previously unidentified archaeological or other cultural resource within the area subject to Corps jurisdiction that might be eligible for listing in the National Register of Historic Places, he/she shall stop work and immediately notify the Corps and the New Hampshire Historic Preservation Office.

8. National and Corps Lands. Activities authorized by this PGP shall not impinge upon the value of any National Wildlife Refuge, National Forest, National Estuarine Research Preserves, National Marine Sanctuary, National Park or any other area administered by the U.S. FWS, U.S. Forest Service, National Oceanic and Atmospheric Administration**,** or National Park Service. No Minimum Impact Project work is allowed on Corps properties & Corps-controlled easements (see Appendix A, Endnote 8).

9. Endangered Species. No activity may be authorized under this PGP which:

- May affect a threatened or endangered species, a proposed species, designated critical habitat, or proposed critical habitat identified under the Federal Endangered Species Act (ESA);
- Would result in a "take" of any threatened or endangered species of fish or wildlife; or
- Would result in any other violation of Section 9 of the ESA protecting threatened or endangered species of plants.

Applicants shall notify the Corps if any listed species or their critical habitat, or proposed species or their critical habitat, is in the vicinity of the project and shall not begin work until notified by the Corps that the requirements of the ESA have been satisfied and that the activity is authorized. Information on the location of threatened and endangered species and their critical habitat can be obtained from the U.S. FWS and NMFS (see page 19). If consultation with the FWS or NMFS results in project modifications or permit conditions which resolve the issue, the Corps may issue a PGP. State-listed species are also considered under this PGP.

10. Essential Fish Habitat (EFH). EFH is designated in most of New Hampshire's coastal waters, estuaries, and rivers. In addition, rivers and streams designated as EFH for Atlantic salmon are listed in Appendix C. As stated in Appendix A, work in EFH waters are not allowed as a Minimum Impact Project. As part of the PGP review process, the Corps will coordinate with NMFS in accordance with the 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act to protect and conserve the habitat of marine, estuarine and anadromous finfish, mollusks, and crustaceans. "EFH" and is broadly defined to include "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." For additional information on designations, descriptions, and/or locations, see www.nero.noaa.gov/hcd or contact NMFS (see Page 18).

11. Wild and Scenic Rivers. Any activity that occurs in a component of, or within 0.25 miles up or downstream of the main stem or tributaries of a river segment of, or that has the potential to alter flows within a river within the National Wild and Scenic River System, must be reviewed by the Corps under the review procedures of this PGP regardless of the size of impact. This condition applies to both designated Wild and Scenic Rivers and rivers officially designated by Congress as Study Rivers for possible inclusion while such rivers are in an official study status. If preapplication consultation between the applicant and the administering agency [National Park Service (NPS) or USDA Forest Service] has occurred whereby NPS has made a determination that the proposed project is appropriate for authorization under this PGP (with respect to Wild and Scenic River issues), this determination should be furnished to the Corps with submission of the application. National Wild and Scenic Rivers System segments for New Hampshire as of February 2007, include: Wildcat Brook from its headwaters to the confluence with the Ellis River (administered through the White Mountain National Forest), and the Lamprey River from the West Epping Dam to the confluence with the Piscassic River (administered by the NPS, Northeast Region).

12. Federal Navigation Project. Any structure or work that extends closer to the horizontal limits of any Corps Federal Navigation Project (FNP) than a distance of three times the FNP's authorized depth shall be subject to removal at the owner's expense prior to any future Corps dredging or the performance of periodic hydrographic surveys. See Appendix D for a list of FNPs.

13. Navigation. (a) There shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein, and no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized herein. (b) The permittee understands and agrees that if future operations by the U.S. require the removal, relocation or other alteration of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps, to remove, relocate or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

14. Federal Liability. In issuing this PGP, the Federal Government does not assume any liability for the following: (a) damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes; (b) damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the U.S. in the public interest; (c) damages to persons, property or to other permitted or unpermitted activities or structures caused by the activity authorized by the PGP; (d) design or construction deficiencies associated with the permitted work; (e) damage claims associated with any future modification, suspension or revocation of this permit.

General Conditions Related to Minimizing Environmental Impacts:

15. Avoidance, Minimization and Mitigation. Discharges of dredged or fill material into waters of the U.S. and any secondary impacts shall be avoided and minimized to the maximum extent practicable. Permittees may only fill those jurisdictional wetlands and waterways that the Corps authorizes to be filled and impact those areas that the Corps authorizes as secondary impacts. If not specifically authorized, any unauthorized fill or secondary impact to wetlands may be considered as a violation of the CWA. Mitigation will likely be required for fills >10,000 SF, stream work >200 FT, and other circumstances (see Env-Wt 302 and 800).

- Unless specifically authorized, no work shall drain a water of the U.S. by providing a conduit for water on or below the surface.

16. Heavy Equipment in Wetlands. Heavy equipment other than fixed equipment (drill rigs, fixed cranes, etc.) working in wetlands shall not be stored, maintained or repaired in wetlands, unless it is less environmentally damaging otherwise, and as much as possible shall not be operated there. Where construction requires heavy equipment operation in wetlands, the equipment shall either have low ground pressure (<3 psi), or shall not be located directly on wetland soils and vegetation; it shall be placed on swamp mats[1] that are adequate to support the equipment in such a way as to minimize

[1] "Swamp mats" is a generic term used to describe structures that distribute equipment weight to prevent wetland damage while facilitating passage and providing work platforms for workers and equipment. They are comprised of sheets or mats made from a variety of materials in various sizes. A type of swamp mat is a timber mat, which consists of large timbers bolted or cabled together. Corduroy roads, which are not considered to be swamp mats, are cut trees and/or saplings with the crowns and branches removed, and the trunks lined up next to one another. Corduroy roads are typically installed as permanent structures. Like swamp mats, they are considered as fill whether they're installed temporarily or permanently.

disturbance of wetland soil and vegetation. Swamp mats are to be placed in the wetland from the upland or from equipment positioned on swamp mats if working within a wetland. Dragging swamp mats into position is prohibited. Other support structures that are less impacting and are capable of safely supporting equipment may be used with written Corps authorization. Similarly, not using mats during frozen, dry or other conditions may be allowed with written Corps authorization. (See GC 17 below.) An adequate supply of spill containment equipment shall be maintained on site. Corduroy roads and swamp/construction mats are considered as fill whether they're installed temporarily or permanently.

17. Temporary Fill. If a project's combined temporary and permanent fill totals <3,000 SF, the project may be authorized as a Minimum Impact Project if it meets this definition in Appendix A and it is in compliance with this PGP's terms and general conditions. If a project's combined temporary and permanent fill is ≥3,000 SF, no temporary fill (e.g., access roads, cofferdams) shall be placed in waters of the U.S. (including wetlands) unless the Corps conducts a Minor/Major Impact Project review and 30 days have elapsed after receiving your DES Wetlands Bureau authorization without hearing from the Corps. See GC 3 for calculating secondary impacts.

- Swamp/construction mats and corduroy roads (see GC 16 above) are considered as temporary fill when they are removed immediately upon work completion.
- All temporary fill shall be stabilized to prevent its eroding into portions of waters of the U.S. where it is not authorized.
- Unconfined temporary fill authorized for discharge into waters of the U.S. shall consist of material that minimizes impacts to water quality (e.g. sandbags or clean, gravel and/or stone).
- Temporary fill authorized for discharge into wetlands shall be placed on geotextile fabric laid on the pre-construction wetland grade. (Swamp and timber mats are excluded from this requirement.)
- Temporary fill shall be removed as soon as it is no longer needed, and it shall be disposed of at an upland site and suitably contained to prevent its subsequent erosion into waters of the U.S.
- Waters of the U.S. where temporary fill was discharged shall be restored (see GC 18).
- If temporary fill is staged and then returned to its original location, e.g., sewer projects through wetlands, the original location shall be restored.
- Temporary fills shall be disposed of at an upland site and suitably contained to prevent erosion and/or transport to a waterway or wetland.
- Swamp mats shall be properly installed (i.e., not dragged into position) and removed immediately upon the completion of work.

18. Work Site Restoration.

- Upon completion of construction, all disturbed wetland areas shall be properly stabilized. Any seed mix shall contain only plant species native to New England.
- The <u>introduction</u> or <u>spread</u> of invasive plant species in disturbed areas is prohibited (see GC 25).
- In areas of authorized temporary disturbance, if trees are cut they shall be cut at ground level and not uprooted in order to prevent disruption to the wetland soil structure and to allow stump sprouts to revegetate the work area, unless otherwise authorized.
- Wetland areas where permanent disturbance is not authorized shall be restored to their original condition and elevation, which under no circumstances shall be higher than the pre-construction elevation. Original condition means careful protection and/or removal of existing soil and vegetation, and replacement back to the original location such that the original soil layering and vegetation schemes are approximately the same, unless otherwise authorized.

19. Sedimentation and Erosion Control. Adequate sedimentation and erosion control management measures, practices and devices, such as phased construction, vegetated filter strips, geotextile silt fences, stormwater detention and infiltration systems, sediment detention basins, or other devices shall be installed and properly maintained to reduce erosion and retain sediment on-site during and after construction. They shall be capable of preventing erosion, of collecting sediment, suspended and floating materials, and of filtering fine sediment. The disturbed areas shall be stabilized and these devices shall be removed upon completion of work. The sediment collected by these devices shall be removed and placed at an upland location, in a manner that will prevent its later erosion into a waterway or wetland. All exposed soil and other fills shall be permanently stabilized at the earliest practicable date.

20. Bank Stabilization. Projects involving construction or reconstruction/maintenance of bank stabilization structures within Corps jurisdiction should be designed to minimize environmental effects, effects to neighboring properties, scour, etc. to the maximum extent practicable. Applicants must use the least intrusive method to stabilize the bank, follow the details at Env-Wt 404 Criteria for Shoreline Stabilization and the following sequential minimization process: diversion of water, vegetative stabilization, stone-sloped surfaces, and walls. Vertical bulkheads should only be used in situations where reflected wave energy can be tolerated. This generally eliminates bodies of water where the reflected wave energy may interfere with or impact on harbors, marinas, or other developed shore areas. A revetment is sloped and is typically employed to absorb the direct impact of waves more effectively than a vertical seawall. It typically has a less adverse effect on the beach in front of it, abutting properties and wildlife. For more information, see the Corps Coastal Engineering Manual at http://chl.erdc.usace.army.mil. Select "Products/Services" and then "Publications." Part 5, Chapter 7-8, a(2)c is particularly relevant.

21. Waterway/Wetland Work and Crossings

(a) All temporary and permanent crossings of waterbodies and wetlands shall be suitably culverted, bridged, or otherwise designed to withstand and to prevent the restriction of high flows, to maintain existing low flows, and to not obstruct the movement of aquatic life indigenous to the waterbody beyond the actual duration of construction.

(b) Aquatic Life Movements. No activity may substantially disrupt the necessary life-cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water.

(c) All temporary and permanent crossings of rivers, streams, brooks, etc. (here on referred to as "streams") shall conform to the "New Hampshire Stream Crossing Guidelines" when the State has adopted these guidelines as regulations. The Corps shall review projects under the Minor/Major or IP review procedures if conforming to the Guidelines is impractical. The Guidelines typically require bridge spans, open bottom arches or embedded culverts. Bridge spans are generally preferred.

(d) The requirements to comply with the Guidelines in order to proceed as a Minimum Impact Project as stated in (c) above do not apply to the following:

i. Temporary crossings in place for less than 90 days (the requirements in (a) do apply). Temporary culverts must be embedded unless they're installed during low flow (Jul. 15 – Oct. 1), the appropriate culvert radius is 36 inches or less, and it's placed on geotextile fabric laid on the stream bed to ensure restoration to the original grade;

ii. Constructed drainage systems designed primarily for the conveyance of storm water or irrigation. Also, non-tidal drainage and irrigation ditches excavated on dry land are not Federally-regulated.

(e) Only maintenance or replacement of serviceable crossings with an exact replica crossing (size, material, elevation, etc.) in the same footprint with no expansion or change in use/circumstances is considered as a maintenance project, and therefore may proceed as a Minimum Impact Project. Any

deviation deems the crossing as "new." Note: The State of NH's maintenance provisions differ from the Corps and will likely require reporting and written authorization from the State.
(f) Culverts shall be installed with their inverts embedded below existing streambed grade to avoid "hanging" and associated impediments to fish passage.
(g) Culverts at wetland and waterbody crossings shall be installed in such a manner as to preserve hydraulic connectivity, at its present level, between the wetlands on either side of the road. The permittee shall take necessary measures to correct wetland damage due to lack of hydraulic connectivity.
(h) Projects using slip lining (retrofitting an existing culvert by inserting a smaller diameter pipe), non-corrugated plastic pipes, High Density Polyethylene Pipes (HDPP) or retrofit methods increasing flow velocity, are not allowed to proceed as a Minimum Impact Project, either as new or maintenance work.
(i) No projects involving open trench excavation in flowing waters are allowed to proceed as a Minimum Impact Project. Open trench excavation projects may qualify for the PGP if they are reviewed pursuant to the Minor/Major project review procedures and conditioned to protect the aquatic environment [work should not occur in flowing waters (requires using management techniques such as temporary flume pipes, culverts, cofferdams, etc.) and normal flows are maintained within the stream boundary's confines (see Appendix A, Endnote 5)]. Projects utilizing these management techniques must meet the other Minimum Impact Project requirements (see Appendix A) and all of this PGP's terms and general conditions. If not, they will require review under the Minor/Major project review procedures. Projects proposing no management techniques to avoid open trench excavation will require written authorization.
(j) Construction equipment crossing or accessing streams without using temporary bridges, culverts or cofferdams are not eligible as a Minimum Impact Project. (Note: Areas of fill and/or cofferdams must be included in total waterway/ wetlands impacts to determine applicability of this PGP).
(k) For projects that otherwise meet the definition of a Minimum Impact Project, in-stream (e.g., rivers, streams, brooks, etc.) construction work shall be conducted only during the low flow period of Jul. 15 – Oct. 1 in any year. Projects that are conducted outside of that time period are ineligible as a Minimum Impact Project and shall be reviewed pursuant to Minor/Major Impact Project procedures, regardless of the waterway and wetland fill and/or impact area.
(l) Any work that impacts upstream or downstream flooding or wetlands must be reviewed under the Minor/Major Project procedures.

22. Water Pollution Prevention and Control. Construction or operation of any activity involving a discharge into a water of the U.S. authorized under this PGP shall be consistent with applicable water quality standards, effluent limitations, standards of performance, prohibitions, and pretreatment standards and management practices established pursuant to the CWA (33 USC 1251), and applicable State and local laws. If applicable water quality standards, limitations, etc., are revised or modified during the term of this permit, the authorized work shall be modified to conform to these standards within six months of the effective date of such revision or modification, or within a longer period of time deemed reasonable by the Corps in consultation with the EPA. Any activity involving a discharge of pollutants shall be constructed and operated so that the activity results in no additional discharge of relevant pollutants to impaired waters. Projects will be reviewed to determine if a project may result in a discharge of a relevant pollutant to an impaired water. Any project which may result in a discharge of a relevant pollutant into an impaired water will necessitate a higher-level review. Unless otherwise notified by the NH DES, applicants may presume that the Section 401 WQC for this PGP constitutes the Section 401 WQC for their Section 404 activity, provided the terms and conditions of this PGP are met.

23. Spawning Areas. Discharges of dredged or fill material, and/or suspended sediment producing activities in fish and shellfish spawning or nursery areas, or amphibian and migratory bird breeding areas, during spawning or breeding seasons shall be avoided. Impacts to these areas shall be minimized to the maximum extent practicable during all times of the year. Information on spawning habitat for

species managed under the Magnuson-Stevens Fishery Conservation and Management Act (i.e., EFH for spawning adults) can be obtained from the NMFS website at: www.nero.noaa.gov/hcd.

24. Storage of Seasonal Structures. Coastal structures such as pier sections, floats, etc., that are removed from the waterway for a portion of the year (often referred to as seasonal structures) shall be stored in an upland location, located above mean high water (MHW) and not in tidal wetlands. These seasonal structures may be stored on the fixed, pile-supported portion of the structure that is seaward of MHW. This is intended to prevent structures from being stored on the marsh substrate and the substrate seaward of MHW.

25. Environmental Functions and Values. The permittee shall make every reasonable effort to 1) carry out the construction or operation of the work authorized herein in a manner that minimizes adverse impacts on fish, wildlife and natural environmental values, and 2) prohibit the establishment or spread of plant species identified as non-native invasive species by any Federal or State agency. See the section on Invasive Species at www.nae.usace.army.mil/reg/index.htm for control methods.

26. Protection of Special Resources (Special Aquatic Sites, Shellfish Beds, Special Wetlands and Vernal Pools).
These are defined at Appendix A, Endnotes/Definitions. These waters (e.g., riffle and pool complexes) and wetlands are more valuable and may be more sensitive to fragmentation, non-point source runoff, and other secondary impacts. Secondary impacts (e.g., site clearing, grading, and construction activities) should be limited.
Special Aquatic Sites (SAS): Projects with temporary or permanent fill in, or secondary impacts to, SAS (other than inland wetlands) do not qualify for this PGP (see Appendix A). For Minor/Major projects, all SAS (other than inland wetlands) within the project area shall be delineated.
Shellfish beds: Projects proposing to fill or dredge in NH Fish and Game designated shellfish beds (open or closed) used for recreation harvest, whether directly or indirectly, do not qualify for authorization under this PGP and must be reviewed as an Individual Permit project. Applicants must ensure that all projects proposed in or adjacent to any shellfish beds identified on these maps are designed to avoid and minimize adverse affects. Maps of designated shellfish beds used for recreation harvest are located at: www.nae.usace.army.mil/reg/NHFGRecreatonHarvestShellfishBeds.pdf.
New Hampshire Special Wetlands: Projects with temporary or permanent fill in, or secondary impacts to special wetlands, do not qualify as a Minimum Impact Project (see Appendix A). For Minor/Major projects, the applicant shall delineate all special wetlands including VPs on the property using Federal delineation methods (see GC 2). The Corps and the DES may waive these delineation requirements on a case-by-case basis after consultation with the each other, the EPA and U.S. FWS. Naturally vegetated upland buffers are especially essential to protect their functions.
Vernal Pools (VP): These are a type of Special Wetland. The applicant must minimize surrounding upland impacts to the greatest extent practicable, with the effort to minimize impacts being commensurate with the value of the VP. Impact minimization should be in accordance with *Best Development Practices: Conserving pool-breeding amphibians in residential and commercial development in the northeastern U.S.*, 2002; Calhoun and Klemens. E.g., site clearing, grading and construction activities should be limited to <25% of the VP seasonal pool terrestrial habitat, and roads and driveways should be excluded from the VP envelope. For Minor/Major Impact projects, the applicant shall delineate all VPs on the property in accordance with Federal boundaries (see GC 2). The Corps may waive this requirement on a case-by-case basis.

Procedural Conditions:

27. Inspections. The permittee shall allow the Corps to make periodic inspections at any time deemed necessary in order to ensure that the work is being or has been performed in accordance with the terms and conditions of this permit. The Corps may also require post-construction engineering drawings for completed work, and post-dredging survey drawings for any dredging work.

28. Maintenance. The permittee shall maintain the work authorized herein in good condition and in conformance with the terms and general conditions of this permit. Permittees must contact the Corps if maintenance will not take place or if they want to modify the existing project design. The requirement to maintain the authorized work does not include maintenance of dredging projects. Maintenance dredging is subject to the review thresholds in Appendix A and/or any special conditions included in a written Corps authorization. Maintenance dredging includes only those areas and depths previously authorized by the Corps and dredged.

29. Property Rights. This PGP does not convey any property rights, either in real estate or material, or any exclusive privileges, nor does it authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations.

30. Modification, Suspension, and Revocation. This PGP may be either modified, suspended, or revoked in whole or in part pursuant to the policies and procedures of 33 CFR 325.7. Any such action shall not be the basis for any claim for damages against the U.S.

31. Restoration Directive. The permittee, upon receipt of a notice of revocation of authorization under this PGP, shall restore the wetland or waterway to its former conditions without expense to the U.S., and as directed by the Secretary of the Army or his authorized representative. If the permittee fails to comply with such a directive, the Secretary or his designee may restore the wetland or waterway to its former condition, by contract or otherwise, and recover the cost from the permittee.

32. Special Conditions. The Corps may impose other special conditions on a project authorized pursuant to this PGP that are determined necessary to minimize adverse navigational and/or environmental effects or based on any other factor of the public interest. Failure to comply with all general conditions of the authorization, including special conditions, constitutes a permit violation and may subject the permittee to criminal, civil, or administrative penalties or restoration.

33. False or Incomplete Information. If the Corps makes a determination regarding the eligibility of a project under this PGP and subsequently discovers that it has relied on false, incomplete, or inaccurate information provided by the permittee, the PGP authorization may not be valid and the U.S. Government may institute legal proceedings.

34. Abandonment. If the permittee decides to abandon the activity authorized under this PGP, unless such abandonment is merely the transfer of property to a third party, he/she may be required to restore the area to the satisfaction of the Corps.

35. Enforcement cases. The PGP does not apply to any existing or proposed activity in Corps jurisdiction associated with a Corps or EPA enforcement action until such time as the enforcement action is resolved or the Corps or EPA as appropriate determines that the activity may proceed independently without compromising the enforcement action.

Duration of Authorization/Grandfathering:

36. Duration of Authorization. Activities authorized under this PGP that have commenced (i.e., are under construction) or are under contract to commence before this PGP's expiration date have the following time allowances to complete the work in Corps jurisdiction:

- For Minimum and Minor Impact Projects that haven't received an authorization letter, 12 months after this PGP's expiration date.
- For projects that have received an authorization letter, until the project-specific date that the Corps provides to the permittee in the PGP authorization letter.

Activities authorized and completed under this PGP will continue to remain authorized after this PGP's expiration date. The permittee must be able to document that the project was under construction or contract by the appropriate date. Activities authorized as a Minor/Major Impact Project under this PGP (or by an Individual Permit) for the transport of dredged or fill material for the purpose of disposing of it in ocean waters will specify a completion date for the disposal not to exceed three years from the date of authorization.

PGP activities will remain authorized as specified above unless:

- The PGP is either modified or is revoked, or
- Discretionary authority has been exercised on a case-by-case basis to modify, suspend or revoke the authorization in accordance with 33 CFR 325.2(e)(2).

37. Previously Authorized Activities.
(a) Projects that the Corps authorized under the Nationwide Permits or under the previous NH PGPs prior to issuance of this PGP shall remain authorized as specified in each authorization.
(b) Activities authorized pursuant to 33 CFR 330.3 (activities occurring before certain dates) are not affected by this PGP.

for Christine Godfrey
DISTRICT ENGINEER

6-28-07
DATE

VI. NH PGP CONTACTS:

1. FEDERAL

U.S. Army Corps of Engineers
New England District, Regulatory Branch
696 Virginia Road
Concord, MA 01742-2751
(800) 343-4789, (978) 318-8335
(978) 318-8303 (fax)

U.S. Environmental Protection Agency
Region 1
1 Congress Street, Suite 1100
Boston, MA 02114-2023
(617) 918-1589

U.S. Fish and Wildlife Service
70 Commercial Street
Suite 300
Concord, NH 02813
(603) 223-2541

Federal Endangered Species & EFH
National Marine Fisheries Service
Northeast Region
One Blackburn Drive
Gloucester, MA 01930
(978) 281-9102

National Park Service
National Park Service
North Atlantic Region
15 State Street
Boston, MA 02109
(617) 223-5191

Natural Resources Conservation Service
Federal Building
2 Madbury Road
Durham, NH 03824-2043
(603) 868-7581

2. STATE

Dept. of Environmental Services
New Hampshire DES Wetlands Bureau
29 Hazen Drive
Concord, NH 03302
(603) 271-2147
(603) 271-6588(fax)

New Hampshire Coastal Program
Suite 200
50 International Drive
Portsmouth, NH 03801
(603) 559-1500, (603) 559-1510 (fax).

(State Endangered Species)
NH Fish and Game Department.
Non-Game Endangered Wildlife Program
2 Hazen Drive
Concord, NH 03302-0095
(603) 271-3421

3. HISTORIC RESOURCES

NH State Historic Preservation Officer
Department of Cultural Affairs
Division of Historical Resources
19 Pillsbury Street
Concord, NH 03301
(603) 271-3483

Dept. of Resources & Economic Development
Natural Heritage Bureau
172 Pembroke Rd.
P.O. Box 1856
Concord, NH 03302
(603) 271-3623

4. ORGANIZATIONAL WEBSITES:

Army Corps of Engineers	www.nae.usace.army.mil/reg/index.htm
Army Corps of Engineers Headquarters	www.usace.army.mil (click "Obtain a Permit?")
Environmental Protection Agency	www.epa.gov/owow/wetlands
National Marine Fisheries Service	www.nero.noaa.gov/hcd (northeast region)
	www.nmfs.noaa.gov/habitat (national headquarters)
U.S. Fish and Wildlife Service	www.fws.gov
National Park Service	www.nps.gov/rivers/index.html
NH DES Wetland Bureau	www.des.state.nh.us/wetlands
NH wetland rules (Adopted Rule 97-010)	www.des.state.nh.us/wetlands/pdf/100-800.pdf
NH Fish and Game Department	www.wildlife.state.nh.us
New Hampshire Coastal Program	www.des.nh.gov/Coastal
NH Division of Historical Resources	www.nh.gov/nhdhr
NH GIS	www.granit.sr.unh.edu

APPENDIX A: DEFINITION OF CATEGORIES

The Corps must review all projects not qualifying as a Minimum Impact Project as a Minor, Major or Individual Permit project. All Minimum, Minor/Major Impact Projects must comply with all of this PGP's applicable terms (Pages 1 - 7) and general conditions (GCs) (Pages 8 - 17). Proponents must read the entire PGP and Appendices to determine the reporting requirements for their project. E.g., a project may appear to qualify as a Minimum Impact Project when reviewing "(c) BANK STABILIZATION PROJECTS." However, if the project fills over 3,000 SF of wetlands or waterways (see (a) NEW FILL/EXCAVATION DISCHARGES below), impacts historic properties (GC 7, Page 9), endangered species, (GC 9, Page 10), or doesn't meet the Minimum Impact Project requirements stated in any other general condition(s), Corps review is required.

I. INLAND WATERS & WETLANDS	**Inland Waters and Wetlands:** Waters that are regulated under Section 404 of the CWA, including rivers, streams, lakes, ponds and wetlands [33 CFR 328.4)(c)]. This Inland Waters and Wetlands section excludes tidal waters, but regulates fill in the Federally-designated navigable waters (Merrimack River from the MA-NH State line to Concord, NH); Lake Umbagog within NH; and the Connecticut River to Pittsburg, NH. The jurisdictional limits are the ordinary high water (OHW) mark in the absence of adjacent wetlands, beyond the OHW mark to the limit of adjacent wetlands when adjacent wetlands are present, and the wetland limit when only wetlands are present. For the purposes of this PGP, fill placed in the area between the mean high water (MHW) and the high tide line (HTL), and in the bordering and contiguous wetlands[1] to tidal waters are reviewed in II. Tidal/Navigable Waters (see Page 4 below).		
	MINIMUM IMPACT PROJECTS [2]	**MINOR & MAJOR IMPACT PROJECTS**	**INDIVIDUAL PERMIT**
(a) NEW FILL/ EXCAVATION DISCHARGES	<3,000 SF of waterway and/or wetland fill and secondary[3] impacts, (e.g., areas drained, flooded, cleared, excavated or fragmented). Fill area includes all temporary and permanent fill, and certain excavation discharges (except for incidental fallback[4]). Swamp mats and corduroy roads are considered as fill (see General Condition (GC) 17). Provided: • Projects comply w/all GCs, including: GC 5 - Single and Complete Projects GC 15 - Avoidance, Minimization and Mitigation This category excludes: • Dams, dikes, or activities involving water diversions[5]. • Work in EFH waters (see GC 10 and Appendix C) • Work in special aquatic sites (SAS)[6] other than wetlands, and work in special wetlands[7] [including vernal pools[7] (VPs)]. • Work on Corps properties & Corps-controlled easements[8]	3,000 SF to ≤3 acres waterway and/or wetland fill and secondary[3] impacts, (e.g., areas drained, flooded, cleared, excavated or fragmented). Fill area includes all temporary and permanent fill, and certain excavation discharges (except for incidental fallback[4]). Swamp mats and corduroy roads are considered as fill (see GC 17). Swamp mats filling any area ≥3,000 SF are reviewed as Minor Impact Projects (see GCs 16 & 17). Projects with proactive restoration[9] as a primary purpose with impacts of any size ≥3,000 SF. Specific activities with impacts ≥3,000 SF required to effect the containment, stabilization, or removal of hazardous or toxic waste materials performed, ordered or sponsored by a government agency with established legal or regulatory authority. Wetlands must be restored in place. The applicant shall delineate all special wetlands[7] including VPs on the property using Federal delineation methods (see GC 2). The Corps and the DES may waive these delineation requirements on a case-by-case basis after consultation with each other, the EPA and U.S. FWS.	>3 acres waterway and/or wetland fill and secondary[3] impacts, (e.g., area drained, flooded, cleared, excavated or fragmented). Fill area includes all temporary and permanent fill, and certain excavation discharges (except for incidental fallback[4]).

(b) RIVER/STREAM /BROOK WORK & CROSSINGS. WATERWAY/ WETLAND CROSSINGS	Stream crossings conform with the NH Stream Crossing Guidelines, when the State has adopted these guidelines as regulations, and this PGP's general conditions. The requirements in GC 21 are especially relevant: • In-stream work limited to Jul 15-Oct 1. • Culverts installed with inverts embedded below existing streambed grade to avoid "hanging" & associated impediments to fish passage. • Culverts at waterbody crossings preserve hydraulic connectivity, at its present level, between the wetlands on either side of the road. <u>Excludes</u>: • Slip lining, plastic pipes, HDPP & flow velocity increases (GC 21) • No open trench excavation in flowing waters (GC 21). • In-stream work limited to Jul 15-Oct 1 (GC 21). • Work in SAS[6] and special wetlands[7] (GC 26). • Work in EFH waters (see GC 10 and Appendix C). • No work on Corps properties & Corps-controlled easements[8].	Stream crossings not conforming with the NH Stream Crossing Guidelines, when the State has adopted these guidelines as regulations. All SAS[6] & special wetlands[7] within the project area shall be delineated.	
(c) BANK STABILIZATION PROJECTS	Inland bank stabilization <100 FT long and <1 CY of fill per linear foot below ordinary high water (OHW) <u>Provided</u>: • In-stream work limited to Jul 15-Oct 1. • No work in VPs[7] • No work in SAS[6] and special wetlands[7]. • No open trench excavation in flowing waters (see GC 21). • No structures angled steeper than 3H:1V allowed. Only rough-faced stone or fiber roll revetments allowed. • No work on Corps properties & Corps-controlled easements[8].	Inland bank stabilization projects ≥100 FT long or ≥1 CY per linear foot below OHW. All SAS[6] & special wetlands[7] within the project area shall be delineated. The Corps may waive this requirement on a case-by-case basis in consultation with the EPA, NMFS and U.S. FWS.	
(d) REPAIR AND MAINTENANCE OF AUTHORIZED FILLS	Repair/maintenance of existing, currently-serviceable, authorized fills, including maintenance of existing flood control facilities, with no expansion or change in use. • Conditions of the original authorization apply • Minor deviations in fill design allowed[10]. Note: The State's maintenance provisions differ from the Corps and may require written authorization from the State, even though it's not required from the Corps.	Repair/maintenance of existing, currently-serviceable, authorized fills, with an expansion or a change in use ≥3000 SF and <3 acres. Replacement of non-serviceable authorized fills ≥3000 SF and <3 acres.	Repair/maintenance of existing, currently-serviceable, authorized fills, with an expansion or a change in use ≥3 acres. Replacement of non-serviceable authorized fills, ≥3 acres.
(e) MISC.	Oil spill clean-up discharges. Fish and wildlife harvesting such as duck blinds. Scientific measurement devices and survey activities, e.g., exploratory drilling, surveying, sampling. Doesn't include oil/gas exploration and fills for roads or construction pads. Includes monitoring wells.		

II. TIDAL/ NAVIGABLE WATERS	**Tidal/Navigable Waters of the U.S.:** Waters that are subject to the ebb and flow of the tide (Section 10 Rivers & Harbors Act of 1899) (33 CFR 329) and *structures and dredging* in the Federally-designated navigable waters, which are regulated below in Activities (b), (c), (d), (e) and (f). (*Fill* in the Federally-designated navigable waters are regulated in I. Inland Waters and Wetlands above.) The Federally-designated navigable waters are the Merrimack River from the MA-NH State line to Concord, NH; Lake Umbagog within NH; and the Connecticut River to Pittsburg, NH. The jurisdictional limits for this section, II. Tidal/Navigable Waters, are the mean high water (MHW) line in tidal waters and the OHW mark in non-tidal portions of the Federally designated navigable waters. For the purposes of this PGP, fill placed between MHW and the high tide line (HTL) and in the bordering and contiguous wetlands[1] to tidal waters are reviewed in this Tidal/Navigable Waters section.		
	Projects not meeting the Minimum Project criteria must apply/report to the Corps as either a Minor/Major Project or Individual Permit project. All Minimum or Minor/Major projects must comply with all of this PGP's applicable terms (Pages 1-7) and General Conditions (Pages 8-17).		
	MINIMUM PROJECTS [2]	**MINOR & MAJOR PROJECTS**	**INDIVIDUAL PERMIT (IP)**
(a) FILL	No new or previously unauthorized fills, other than: • Discharges of dredged or fill material incidental to the construction of bridges across navigable waters of the U.S., including cofferdams, abutments, foundation seals, piers, and temporary construction and access fills provided the U.S. Coast Guard authorizes such discharges as part of the bridge permit. Causeways and approach fills are not included in this category and require Minor/Major or Individual Permit authorization.	≤1 acre waterway fill and secondary waterway impacts (e.g., areas drained, flooded, cleared, or fragmented). Fill area includes all temporary and permanent waterway fills. Excludes work in SAS[6] and shellfish beds[11]. Specific activities with impacts of any area required to effect the containment, stabilization, or removal of hazardous or toxic waste materials performed, ordered or sponsored by a government agency with established legal or regulatory authority. Wetlands must be restored in place. Projects with proactive restoration[9] (SAS[6], anadromous fish runs, shellfish beds[11], etc.) as a primary purpose with impacts of any size.	>1 acre waterway fill and secondary waterway impacts (e.g., areas drained, flooded, cleared or fragmented). Fill area includes all temporary and permanent waterway fills. Temporary or permanent fill and/or excavation in SAS[6] or shellfish beds[11]. EIS required by the Corps.
(b) REPAIR AND MAINT. WORK	Repair or maintenance of existing, currently serviceable, authorized structures and fills. <u>Provided:</u> • No expansion or change in use. • Must be rebuilt in same footprint, however minor deviations in structure design allowed.[10]	Repair/maintenance of currently serviceable authorized fills with expansion or a change in use <1 acre. Replacement of non-serviceable authorized fills, including expansion or a change in use <1 acre. Repair/maintenance of currently serviceable authorized structures w/expansion where the structure (existing + expansion) qualifies as a Minor/Major [see (e) below]. Replacement of non-serviceable authorized structures w/expansion where the structure (existing + expansion) qualifies as a Minor/Major [see (e) below].	Repair/maintenance of currently serviceable authorized fills with expansion or a change in use ≥1 acre. Replacement of non-serviceable authorized fills, including expansion or a change in use, totaling ≥1 acre. Repair/maintenance of currently serviceable, authorized structures w/expansion where the structure (existing + expansion) qualifies for an IP [see (e) below]. Replacement of non-serviceable, authorized structures where the structure (existing + expansion, if any) qualifies for an Individual Permit [see (e) below].

(c) DREDGING	For waters that are subject to the ebb and flow of the tide, maintenance dredging[13] for navigational purposes ≤3,000 SF with upland disposal. Includes return water from upland contained disposal area. <u>Provided</u>: • Dredging & disposal operation limited to Nov 15 – Mar 15. • No impacts to SAS[6] or shellfish beds[11]. • No dredging in intertidal areas. • Proper siltation controls are used. For Federally-designated navigable waters (see definition of Tidal/Navigable Waters of the U.S. above), maintenance dredging[13] ≤3,000 SF with upland disposal. Includes return water from upland contained disposal area.	For waters that are subject to the ebb & flow of the tide, maintenance dredging[13] >3,000 SF or new dredging[13] <20,000 SF. <u>Provided:</u> • Dredging & disposal operation limited to Nov 15-Mar15. • No impacts to SAS[6] or shellfish beds[11]. • Disposal includes: 1.upland; 2.beach nourishment of any size provided the primary purpose of the dredging is navigation; or 3.open water & confined aquatic disposal, if Corps, in consultation with Federal and State agencies, finds the material suitable. For Federally-designated navigable waters (see def. of Tidal/ Navigable Waters of the U.S. above), maintenance[12] dredging of any area >3,000 SF or new dredging[12] of any area. Includes return water from upland contained disposal area. Projects with proactive restoration[9] (SAS[6], shellfish beds[11], anadromous fish run, etc.) as a primary purpose with impacts of any size. Specific activities with impacts of any area or cubic yardage required affecting the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with established legal or regulatory authority may be reviewed as a Minor/Major project. Wetlands must be restored in place. All SAS[6] and shellfish beds[11] within the project area shall be delineated.	New dredging[13] ≥20,000 SF Dredging for non-navigational purposes (sand mining). E.g., the primary purpose of obtaining the sand is for beach nourishment or upland use.
(d) MOORINGS	Private, non-commercial, non-rental, single-boat moorings. <u>Provided</u>: • Proper/eco-friendly moorings are used so chains or other connections do not rest on the bottom in veg. shallows[15]. • Authorized by the State. • Not associated with a boating facility[14]. • Moorings in Federal Anchorage[12] not associated with a boating facility[14]. • Not located within the buffer zone of the horizontal limits of a Federal Channel[12]. • No interference with navigation.	Moorings not meeting the terms of a Minimum project. Moorings located such that they, and/or vessels docked or moored at them, are within the buffer zone of the horizontal limits of a Federal Channel[12].	Moorings and/or their moored vessels within the horizontal limits of a Federal Channel[12].

(e) PILE-SUPPORTED STRUCTURES AND FLOATS	No allowances for pile-supported structures and floats.	All SAS[6] and shellfish beds[11] within the project area shall be delineated. Recommendations for private structures and floats: • Bottom-anchored floats ≤400 SF • Pile-supported structures for navigational access to the waterway ≤400 SF with attached floats ≤150 SF. • Pile-supported structures are ≤6' wide and have at least a 1:1 height:width ratio[16]. • Float stops, chains, or other devices must be used to provide ≥ 2.5-foot clearance between the bottom of the float and the substrate during all tides. • Pile-supported structures & floats are not located within 25' of vegetated shallows[15] and moored vessels are not positioned over SAS[6]. • Structures extend ≤75 FT waterward from MHW. • No structure extends across >25% of the waterway width at MLW. • Not located within the buffer zone of the horizontal limits of an FNP[12].	Structures or floats located such that they and/or vessels docked at them are within the horizontal limits of an FNP[12]. Structures or floats associated with a new or previously unauthorized boating facility.[14]

	MINIMUM PROJECTS [2]	**MINOR & MAJOR PROJECTS**	**IP**
(f) MISC.	Activities not regulated by the DES Wetlands Bureau, formerly authorized under the Nationwide Permit Program and listed in **Appendix A** of this document. Research, educational, experimental or publicly funded aquaculture projects that don't exceed 1,000 SF in area, aren't located in SAS[6] or intertidal areas, culture only indigenous species, use only "transient gear" type cages or bottom culture with predator netting, are marked to inform mariners of the location of the gear, have a minimum clearance of 4 FT between the top of the gear and the elevation of MLW in areas where the elevation of the sea floor is above – 15 FT MLW, have a minimum clearance of 10 FT between the top of the gear and the elevation of MLW in areas where the elevation of the sea floor is equal to or below –15 FT MLW, and have been reviewed and approved in writing by the NH DES. Temporary oil spill clean up structures and fill. Temporary buoys, markers, floats, etc. for recreational use during specific events, provided: • They are in place for no more than 30 days and are removed within 15 days after use is discontinued. • Proper/eco-friendly moorings must be used so chains or other connections don't rest on the bottom for buoys, floats and vessels located over vegetated shallows[15]	Aquaculture projects that do not meet the terms of a Minimum Impact Project and aren't located in SAS[6]. Structures/work in or affecting tidal or navigable waters that are not defined under any other headings. Includes but is not limited to utility lines, aerial transmission lines, pipelines, outfalls, boat ramps, bridges, tunnels and horizontal directional drilling activities seaward of the MHW line.	EIS required by the Corps.

	• Float stops, chains, or other devices must be used to provide ≥2.5-foot clearance between the bottom of the float and the substrate during all tides Temporary buoys, markers, floats, etc. for recreational use during specific events at Corps reservoirs. The reservoir manager must approve each buoy or marker individually. The placement of aids to navigation and regulatory markers which are approved by and installed in accordance with the requirements of the U.S. Coast Guard. (See 33 CFR 66, Chapter I, subchapter C). Structures, buoys, floats and other devices placed within anchorage or fleeting areas to facilitate moorage of vessels where such areas have been established for that purpose by the U.S. Coast Guard, provided: • Placement in the area is away from vegetated shallows • If the above isn't possible, proper/eco-friendly moorings are used so chains or other connections don't rest on the bottom in veg. shallows[15]. • Float stops, chains, or other devices must be used to provide ≥2.5-foot clearance between the bottom of the float and the substrate during all tides Scientific measurement devices, and small weirs and flumes constructed primarily to record water quantity and velocity provided the discharge of fill is limited to 10 cubic yards. No work may restrict movement of aquatic species or potentially threaten to impact or entangle sea turtles or marine mammals in near-coastal waters. Fish and wildlife harvesting devices and activities such as pound nets, crab traps, crab dredging, eel pots, lobster traps, duck blinds, clam and oyster digging, shellfish seeding, and small fish attraction devices such as open water fish concentrators (sea kites, etc.). Provided: no hazard to navigation; activity is not in wetlands or sites that support submerged vegetation (including sites where submerged aquatic vegetation is determined to exist, but may not be present in a given year). This does not authorize artificial reefs or impoundments and semi-impoundments of waters of the U.S. for the culture or holding of motile species such as lobster, or the use of covered oyster trays or clam racks. Survey activities including core sampling, seismic exploratory operations, plugging of seismic shot holes, other exploratory-type bore holes and oil and gas test wells, soil survey and sampling, and historic resources surveys. Discharges and structures associated with the recovery of historic resources are not authorized. Drilling and the discharge of excavated material from test wells for oil and gas exploration are not authorized. Fill placed for roads, pads and other similar activities is not authorized, nor is any permanent structure.		

End Notes/Definitions

[1] **Bordering and Contiguous Wetlands:** A bordering wetland is immediately next to its adjacent waterbody and may lie at, or below, the OHW mark (MHW in navigable waters) of that waterbody and is directly influenced by its hydrologic regime. Contiguous wetlands extend landward from their adjacent waterbody to a point where a natural or manmade discontinuity exists. Contiguous wetlands include bordering wetlands as well as wetlands that are situated immediately above the ordinary high water mark and above the normal hydrologic influence of their adjacent waterbody. Note, with respect to the Federally designated navigable rivers, the wetlands bordering and contiguous to the tidally influenced portions of those rivers are reviewed under "II. Navigable Waters."

[2] **Regulation**: Either DES or NHCP must regulate an activity for it to be eligible for authorization as a Minimum Impact Project of this NH PGP. The Minimum Impact Project category does not apply to activities exempt from State regulation. These activities must report to the Corps.

[3] **Direct, Secondary (Indirect), and Cumulative Impacts:**

Direct Impacts: The immediate loss of aquatic ecosystem within the footprint of the fill.

Secondary (Indirect) impacts: These are effects on an aquatic ecosystem that are associated with a discharge of dredged or fill materials, but do not result from the actual placement of the dredged or fill material. (40 CFR 230.11 (h)). Secondary impacts are those impacts outside the footprint of the fill (e.g., beyond the bounds of the disposal site) that arise from and are associated with the direct discharge of dredged or fill material. Some examples are: I) Habitat Fragmentation. This occurs when a relatively undisturbed habitat block is interrupted or broken apart by roads, ditches, disturbance of vegetation, or development of structures. II) Interruption of Travel Corridors. Travel corridors are routes that many species travel on to find food, mates, shelter, and cover. Many aquatic species follow stream channels and wetlands, and follow established routes season after season. III) Vernal Pools. These are critically important breeding habitats for amphibians. Many amphibians disperse several hundred feet from their breeding ponds into the adjacent upland habitat after the breeding season has ended. IV) Hydrology, hydrological functions and non-point source impacts: A) Interference with the migration or movement of fish and shellfish from one area to another, such as placement of a dam eliminating access to spawning grounds for anadromous fish. B) Greater amounts of sediment, nutrients, and other pollutants such as lead, oil, gas, and salt that could impact wetlands and streams. Sediment causes turbidity, which reduces aquatic life and usually transports pesticides, heavy metals and other toxins into streams. This is especially a concern in watersheds where the streams are already listed as impaired by NHDES. C) Submerged aquatic vegetation is very dependent on light transmission and small changes in ambient turbidity can preclude it from growing in certain areas. D) Trout spawning areas are selected in areas that are well flushed and aerated, and new amounts of deposition may result in a spawning area being eliminated due to siltation of fish eggs. E) Physical effects such as erosion, accretion, entrenchment, sedimentation, embedment, channel or shoreline migration and failure to pass bedload material, organic matter and large woody debris.

Cumulative Impacts: The extent of past, present, and foreseeable developments in the area may be an important consideration in evaluating the significance of a particular project's impacts. Although the impacts associated with a particular discharge may be minor, the cumulative effect of numerous similar discharges can result in a large impact. Cumulative impacts should be estimated only to the extent that they are reasonable and practical.

[4] **Incidental Fallback:** The term "discharge of dredged or fill material" also includes certain discharges resulting from excavation.

[5] **Water Diversions:** Water diversions are activities such as bypass pumping or water withdrawals. Temporary flume pipes, culverts or cofferdams where normal flows are maintained within the stream boundary's confines aren't water diversions. "Normal flows" are defined as no change in flow from pre-project conditions. See GC 21.

[6] **Special Aquatic Sites:** These include both inland & saltmarsh wetlands, mud flats, vegetated shallows[15], coral reefs, and riffle & pool complexes. (40 CFR 230).

[7] **Special Wetlands:** These include 1. enriched/calcareous seepage swamps, estuarine wetlands, floodplains, peatlands, unique basin swamps/marshes, and vernal pools, 2. all wetlands that provide habitat for threatened or endangered species, and 3. all exemplary wetland natural community occurrences as designated by the NH Natural Heritage Bureau (NHNHB). The wetland types provided in 1 above are expanded below and fully described in Natural Community Systems of New Hampshire and Natural Communities of New Hampshire, which are available at www.dred.state.nh.us/divisions/forestandlands/bureaus/naturalheritage/. Note: The Corps will use the definition of vernal pools that is listed below, not the definition in the above documents. The applicant is required to have NHNHB check the wetland types listed in 2 and 3 above by either requesting a hard copy review or using their DataCheck Tool at www2.des.state.nh.us/nhb%5Fdatacheck/.

Enriched/Calcareous seepage swamps: Wetlands characterized by the discharge of enriched groundwater. Floristic composition is an indicator of these conditions.

- Calcareous sloping fen system
- Circumneutral seepage swamp (natural community)
- Circumneutral hardwood forest seep (natural community)
- Calcareous riverside seep (natural community)
- Red maple-black ash-swamp saxifrage swamp (natural community)
- Northern hardwood-black ash-conifer swamp (natural community)

Estuarine wetlands: Wetland communities occurring in subtidal and intertidal coastal habitats connected to the ocean but semi-enclosed by land and protected from high-energy wave action. These wetlands are periodically exposed and flooded by tides.

- Salt marsh system
- Brackish tidal riverbank marsh system
- Sparsely vegetated intertidal system
- Subtidal system

Floodplains: Areas of low land along a watercourse that are subject to periodic flooding and sediment deposition.

- Montane/near boreal floodplain system
- Major river silver maple floodplain system
- Temperate minor river floodplain system
- Swamp white oak floodplain forest (natural community)

Peatlands: Peat-accumulating wetlands, including bogs, fens, cedar swamps, which are often dominated with sphagnum moss, heath family plants and sedges.

- Alpine/subalpine bog system
- Kettle hole bog system
- Poor level fen/bog system
- Medium level fen system
- Montane sloping fen system
- Patterned fen system
- Calcareous sloping fen system
- Black spruce peat swamp system
- Coastal conifer peat swamp system
- Temperate peat swamp system
- Near-boreal minerotrophic peat swamp system

Unique basin swamps/marshes: Closed wetland basins with no inlet or outlet and broadly fluctuating water levels that contain unique plant species composition. This includes both swamps and sand plain marshes.

- Sandy pond shore system
- Sand plain basin marsh system
- Swamp white-oak basin swamp (natural community)
- Red maple-black gum basin swamp (natural community)

Vernal Pool (VP) and Habitat: VPs are confined basin depressions with water for two or more continuous months in the spring and/or summer, for which evidence of one of more of the following indicator vernal pools species: wood frogs (*Rana sylvatica)*, mole salamanders (*Ambystoma* spp), and fairy shrimp (*Eubranchipus* spp) has been documented **OR** for which evidence of two or more of the following facultative organisms: caddisfly (*Trichoptera*) larvae casings, fingernail clams (*Sphaeriidae*), or amphibious snails (*Basammatophora*) and evidence that the pool does not contain an established reproducing fish population has been documented. Vernal pool habitat is the seasonal pool depression, seasonal pool envelope (100 FT radius from the VP edge) and seasonal pool terrestrial habitat (750 FT radius from the VP edge). The Corps will determine on a case-by-case basis which vernal pools are within their jurisdiction.

[8] **Corps Properties & Easements:** Contact the Corps, Real Estate Division (978) 318-8580 to initiate reviews about both Corps holdings and permit requirements.

[9] **Restoration:** The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former wetland (called re-establishment) or a degraded wetland (called rehabilitation). Restoration means the result of actions which, in the opinion of the Federal and State resource agencies, reinstates, or will reinstate, insofar as possible, the functions and values of a wetland which has been altered. Restoration is the re-creation or rehabilitation of wetland ecosystems whose natural functions have been destroyed or impaired. The Corps will decide if a project qualifies as proactive restoration and must determine in consultation with Federal and State agencies that the net effects are beneficial.

[10] **Minor deviations** in the structure's configuration or filled area, including those due to changes in materials, construction techniques, or current construction codes or safety standards, which are necessary to make repair, rehabilitation, or replacement are permitted, provided the adverse environmental effects resulting from such repair, rehabilitation, or replacement are minimal. Currently serviceable means useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

[11] **Shellfish Beds:** Shellfish beds (open or closed) used for recreation harvest as designated by the NH Fish and Game Department. Maps of these shellfish beds are located at: www.nae.usace.army.mil/reg/NHFGRecreatonHarvestShellfishBeds.pdf.
[12] **Federal Navigation Projects (FNPs):** FNPs are comprised of Federal channels and Federal anchorages. See Appendix D for a list of FNPs. Contact the Corps for specific locations and information. **Horizontal Limits:** The outer edge of an FNP. **Buffer zone:** Equal to three times the authorized depth of that channel.
[13] **Maintenance Dredging.** Includes areas and depths previously dredged and authorized by the Corps. Proof of authorization is required. **New Dredging:** Includes dredging proposed in previously un-dredged areas and/or in areas exceeding previously authorized dimensions (deeper or wider than previously authorized) excluding normal overdredge.
[14] **Boating Facilities:** Facilities that provide, rent or sell mooring space, e.g., marinas, yacht clubs, boat yards, dockominiums.
[15] **Vegetated Shallows:** Subtidal areas that support rooted aquatic vegetation such as eelgrass (Zostera marina) and widgeon grass (Ruppia martima). (Doesn't include salt marsh.)
[16] **Height:Width Ratio:** The height of structures shall at all points be equal to or exceed the width of the deck. For the purpose of this definition, height shall be measured from the marsh substrate to the bottom of the longitudinal support beam.

US Army Corps of Engineers®
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Programmatic General Permit (PGP)
Appendix B - Required Information and Corps Secondary Impacts Checklist

In order for the Corps of Engineers to properly evaluate your application, applicants must submit the following information along with the DES Wetlands Bureau application or permit notification forms. Some projects may require more information. For a more comprehensive checklist, see www.nae.usace.army.mil/reg/Application_PlanGuidelines.doc. Check with the Corps at (978) 318-8832 for project-specific requirements. For your convenience, this Appendix B is also attached to the State of New Hampshire DES Wetlands Bureau application and Permit by Notification forms.

Required information for all projects:

- 8½"x11" plans: Locus map, plan views of the entire property and project limits with existing and proposed conditions. On each plan show the NGVD 1929 equivalent for the project's vertical datum with the vertical units. Do not use local datum.

Required information for Federal inland (Section 404) wetland/waterway fill projects:

- Complete the "Corps Secondary Impacts Checklist" provided on the following page;
- Each plan should show the ordinary high water (OHW) line in the absence of a contiguous wetland.
- National Wetlands Inventory Map(s) (www.fws.gov/nwi/) showing the impacted wetland system(s);
- For Minor/Major Impact Projects, delineate special aquatic sites (SAS) and special wetlands, including vernal pools [see General Condition (GC) 26].

Information typically required for stream crossing projects (perennial and intermittent unless otherwise specified):

- Rosgen classification for perennial streams. See Applied River Morphology, Dave Rosgen, 1996;
- PE stamp on all perennial stream projects when required by the State;
- Crossing impact analysis of hydraulic capacity, hydrogeomorphic compatibility, watershed size above a crossing, upstream and downstream direct and secondary impacts from a proposed crossing;
- Stream bank full, and bank dimensions, channel dimensions, extent of the floodplain prone area;
- Crossing impact assessment to wildlife and fisheries and aquatic organisms (pre- and post design) including direct and secondary impacts;
- Replacements: an analysis of current crossing compatibility, stability of upstream and downstream channel and bank, recent scour events, systems analysis on hydrology, ecological stability and sediment loading.

Required information for projects in tidal waters:

- Each plan should show the mean high water (MHW), mean low water (MLW), mean lower low water (MLLW), high tide line (HTL) or other tidal datum;
- Delineate special aquatic sites (SAS) and special wetlands (see GC 26);
- Show or state the size of the waterbody;
- Limits of any Federal Navigation Project (FNP) within 100' of the project area and State Plane Coordinates for the limits of the proposed work closest to the FNP;
- Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands and the areas below the HTL.

Required information for tidal water dredge projects:

- Sediment testing, including physical (e.g., grain-size analysis), chemical and biological testing. For projects proposing open water disposal, applicants should contact the Corps as early as possible regarding sampling and testing protocols. Sediment sampling and testing without such contact would be at the applicant's risk;
- Any existing sediment grain size and bulk sediment chemistry data;
- Nature of material (e.g., silty sand);
- Any nearby projects;
- The area in square feet and volume of material to be dredged below HTL;
- Existing and proposed water depths;
- Type of dredging equipment to be used;
- Location of the disposal site (include locus sheet);
- Information on the location and nature of municipal or industrial discharges and occurrence of any contaminant spills in or near the project area;
- Shellfish survey;
- Identify and describe potential impacts to essential fish habitat (see GC 10);
- Delineation of submerged aquatic vegetation (e.g., eelgrass beds).

U.S. Army Corps of Engineers
Programmatic General Permit (PGP)
Appendix B
Corps Secondary Impacts Checklist
(for inland wetland/waterway fill projects in New Hampshire)

1. Attach any explanations to this checklist. Lack of information could delay a Corps permit determination.
2. All references to "work" include all work associated with the project construction and operation. Work includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.
3. See PGP, GC 5 regarding single and complete projects.
4. Contact the Corps at (978) 318-8832 with any questions.

1. Impaired Waters	Yes	No
1.1 Will any work occur upstream within 1 mile upstream in the watershed of an impaired water? See www.des.state.nh.us/wmb/Section401/ to determine if there is an impaired water in the vicinity of your work area.*		
2. Wetlands		
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200' of any proposed work?		
2.2 Are there proposed impacts to SAS, shellfish beds, special wetlands and vernal pools (see PGP, GC 26)? Applicants may obtain information from the NH Department of Resources and Economic Development Natural Heritage Bureau (NHB) website, www.dred.state.nh.us/divisions/forestandlands/bureaus/naturalheritage, specifically the book Natural Community Systems of New Hampshire.		
2.3 If wetland crossings are proposed, they are not adequately designed to maintain hydrology, sediment transport & wildlife passage.		
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent to streams where vegetation is strongly influenced by the presence of water. They are often thin lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream banks. They are also called vegetated buffer zones.)		
2.5 The overall project site is more than 40 acres.		
2.6 What is the size of the existing impervious surface area?		
2.7 What is the size of the proposed impervious surface area?		
2.8 What is the % of the impervious area (new and existing) to the overall project site?		
3. Wildlife	Yes	No
3.1 Has the NHB determined that there are known occurrences of rare species, exemplary natural communities, Federal and State threatened and endangered species and habitat, in the vicinity of the proposed project? (All projects require a NHB determination.)		
3.2 Would work occur in an area identified by NH Fish and Game Department as "Highest Ranked Habitat by Ecological Condition in NH" (magenta areas on maps) or "Highest Ranked Habitat by Ecological Condition in biological region" (green areas on maps)? www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/highest_ranking_habitat.htm. The map is currently available as a PDF for download that can be zoomed in on.*		
3.3 Would work occur in an area identified as a "Conservation Focus Area" (purple areas). www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/conservation_focus.htm? The map is currently available as a PDF for download that can be zoomed in on.*		
3.4 Would the project impact more than 20 acres of an undeveloped land block (upland, wetland/waterway) on the entire project site and/or on an adjoining property(s)?		
3.5 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?		
3.6 If stream crossings are proposed, will they impede hydrology, sediment transport & wildlife passage. (Note: Stream crossings should be designed in accordance with the PGP, GC 21.)		

4. <u>Flooding/Floodplain Values</u>	Yes	No
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?		
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of flood storage?		

*Although this checklist utilizes state information, its submittal to the Corps is a Federal requirement.

APPENDIX C - EFH RIVERS FOR ATLANTIC SALMON (See General Condition 10)

CONNECTICUT RIVER AND TRIBUTARIES

Ashuelot River
Sprague Brook
Liscomb Brook
Ash Swamp Brook
The Gulf
Hubbard Brook
Governors Brook
Ox Brook
Partridge Brook
Mill Brook
Great Brook
Cobb Brook
Cold River
Hackett Brook
Benware Brook
Beaver Brook

Little Sugar River
Smith Brook
Gully Brook
Sugar River
Walker Brook
Beaver Brook
Bloods Brook
Mascoma River
Mink Brook
Coleman Brook
Slade Brook
Petes Brook
Hewes Brook
Grant Brook
Eastman Brook
Oliverian Brook

Clark Brook
Ammonoosuc River
Burton Brook
Bendell Brook
Hunt Mountain Brook
Roaring Brook
Scarritt Brook
Carter Brook
Bill Little Brook
Conmary Brook
Smarts Mill Brook
Roaring Brook
Kimball Brook
Lyman Brook
Sweatt Brook
Cone Brook

Cow Brook
Carpenters Brook
Johns River
Isreal River
Roaring Brook
Moore Brook
Ames Brook
Potter Brook
Upper Ammonoosuc River
Simms Stream
Mohawk River
Beaver Brook
Dyer Brook
Arlin Brook

MERRIMACK RIVER AND TRIBUTARIES

Second Brook
Nashua River
Chase Brook
Nesenkeag Brook
Horseshoe Pond - Naticook Brook
Souhegan River
Riddle Brook
Sawmill Brook
Watts Brook
Pointer Club Brook
Little Cohas Brook
Cohas Brook
Chandler Brook

Bowman Brook
Baker Brook
Ray Brook
Piscataquog River
South Branch River
Penacook Lake
Hayward Brook
Contoocook River
Cold Brook
Tannery Brook
Burnham Brook
Messer Brook
Millstone Brook
Dalton Brook

Brickyard Brook
Browns Brook
Suncook River
Bow Bog Brook
Bow Brook
Soucook River
Bryant Brook
Glines Brook
Stirrup Iron Brook
Allen Brook
Cross Brook
Punch Brook
Shaw Brook
Winnipesaukee River

Cate Brook
Giles Pond - Salmon Brook
Weeks Brook
Bennett Brook
Knox Brook
Needle Shop Brook
Pemigewasset River
Turkey River
Bradleys Island
Horseshoe Island
Woods Brook

ANDROSCOGGIN RIVER AND TRIBUTARIES

Conner Brook
Austin Mill Brook
Gates Brook
Clement Brook
East Brook
Peabody Brook
Leadmine Brook
Rattle River
Josh Brook

Kidder Brook
Pea Brook
Stony Brook
Moose Brook
Perkins Brook
Moose River
Tinker Brook
Cascade Alpine Brook
Dead River

Bean Brook
Horne Brook
Stearns Brook
Leavitt Stream
Chickwolnepy Stream
Island Brook
Goose Pond
Sessions Brook
Bog Brook

Bear Brook
Moose Pond
Munn Pond
Smoky Camp Brook
Mollidgewock Brook
Clear Stream
Umbagog Lake

SACO RIVER AND TRIBUTARIES

Swift River
Mason Brook
Artist Brook
Kearsage Brook
Lucy Brook
Conway Lake
Echo Lake

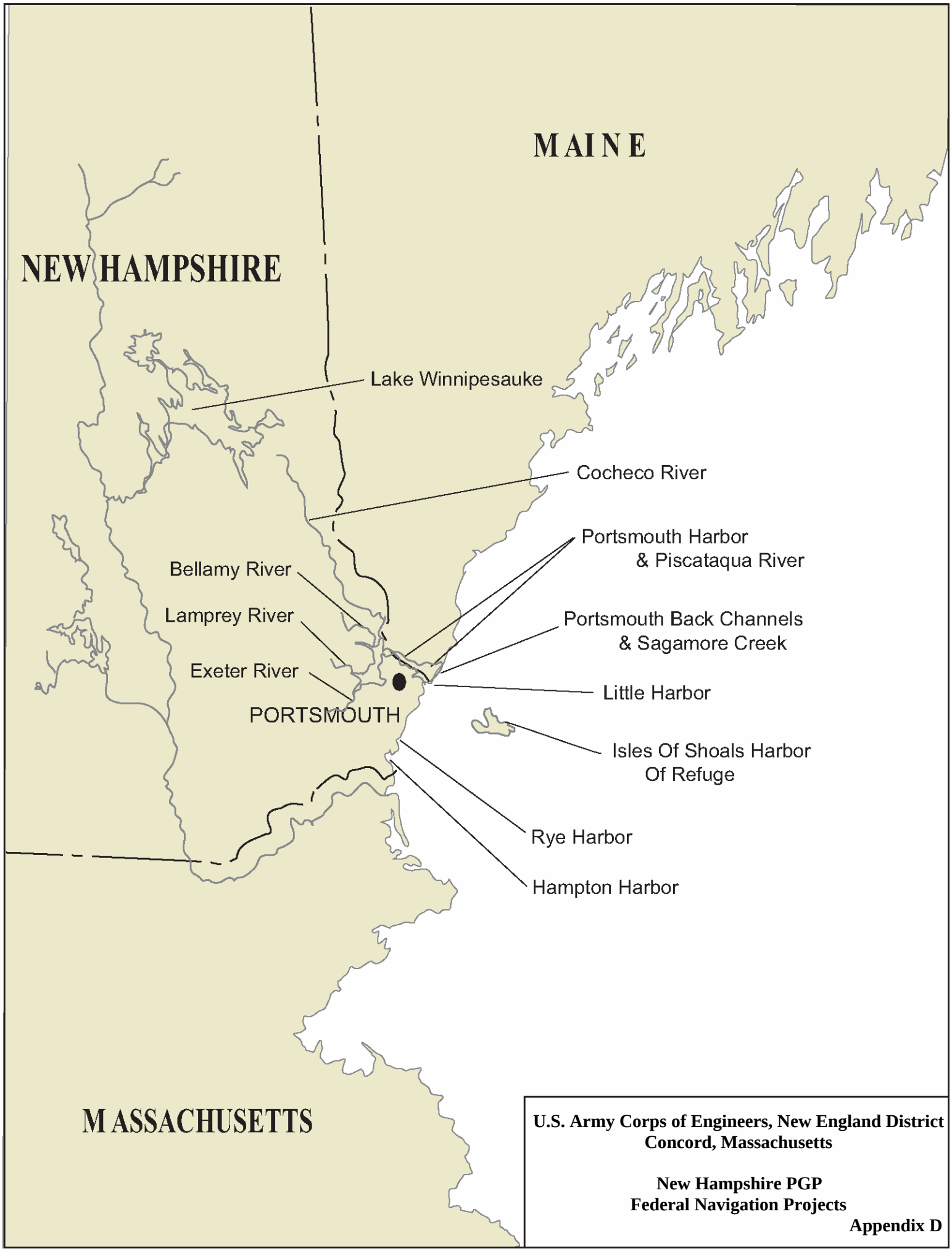
E.Branch Saco River
Ellis River
Rocky Branch
Mountain Brook
Meadow Brook
Barlett Brook
Razor Brook

Albany Brook
Sawyer River
Nancy Brook
Sleeper Brook
Davis Brook
Benis Brook
Avalanche Brook

Kendron Brook
Willey Brook
Flume Cascade
Ossipee River
Beech River
Bearcamp River

COCHECO RIVER
LAMPREY RIVER

Note: Rivers and Tributaries that are <u>bolded</u> are specifically included as rivers that are contained in various State and Federal anadromous fish restoration programs and should be the primary focus for Atlantic salmon protections.



U.S. Army Corps of Engineers, New England District
Concord, Massachusetts

New Hampshire PGP
Federal Navigation Projects
Appendix D

Appendix I
New Hampshire State Wetland Permit

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NHDES Wetlands Application Processing Guidance for Municipal Clerks

Refer to RSA 482-A:3, I, (d) Excavating and Dredging Permit;
The town or city clerk shall immediately sign the application and forward by certified mail to the DES Wetlands Bureau, the application, plan, map and filing fee to the department. The postal receipts or copies shall be retained by the municipality. One copy shall remain with the city or town clerk, and shall be made reasonably accessible to the public.

Note: As of July 2009, if the project is within ¼-mile of a Designated River, a certified mail receipt for the transmittal of the application to the river's Local Advisory Committee must be provided to the municipal clerk. This applies to the four application types noted below that are required to be signed by the municipal clerk.

Wetlands Application	Signature of municipal clerk required?	Municipal Clerk (MC) Responsibilities (follow appropriate steps for application type)	Special Notes
Standard Dredge & Fill	Yes	1) Review applications for postal receipts to ensure that abutter notifications were sent to abutters by certified mail; 2) Retain postal receipts or copies; 3) Ensure appropriate number of copies have been provided; 4) Sign original and four copies of the application; 5) Send original by certified mail to DES; 6) Distribute copies as appropriate (MC, CC, planning board, board of selectmen).	**Note:** For projects in utility rights-of-way, no abutters notice required. [see Env-Wt 501.01(c)]
Minimum Impact Expedited	Yes	1) Application must go to the Conservation Commission (CC) for review **before the municipal clerk signs** it. 2) Review applications for postal receipts to ensure that abutter notifications were sent to abutters by certified mail; 3) Retain postal receipts or copies; 4) Ensure appropriate number of copies have been provided; 5) Sign original and four copies of the application; 6) Send original by certified mail to DES; 7) Distribute copies as appropriate (MC, CC, planning board, board of selectmen).	If the CC chooses to **not** sign the application because of concerns about the project, the CC needs to provide that information to you when the application is sent back to you for signature and mailing by certified mail to DES.
Minimum Impact Agriculture	Yes	1) Sign original and four copies of the application; 2) Send original by certified mail to DES; 3) Distribute copies as appropriate (MC, CC, planning board, board of selectmen).	**No abutters notice required** for the Minimum Impact Agriculture application. [see Env-Wt 501.01(c)]
Permit By Notification	Yes	1) Review applications for postal receipts to ensure that abutter notifications were sent to abutters by certified mail; 2) Retain postal receipts or copies; 3) Ensure appropriate number of copies have been provided; 4) Sign original and four copies of the application; 5) Send original by certified mail to DES; 6) Distribute copies as appropriate (MC, CC, planning board, board of selectmen).	**Do not hold for CC comments!** DES review depends on timely mailing of the notification following the municipal clerk's signature. **Do not sign or date** the notification **until** you are ready to send it out by certified mail immediately!
Notification of **Routine Roadway** & Railway Maintenance Activities	No	Applicant sends application and materials directly to DES Wetlands Bureau (for some applications, copies go to the municipality at the same time). No municipal clerk signature required.	
Notification of Minimum Impact **Forestry**	No		
Notification of Minimum Impact **Trails**	No		
Seasonal Dock Notification for Lakes & Ponds	No		For **seasonal docks on rivers**, use the Minimum Impact Expedited or Standard Dredge and Fill application.
Recreational **Mineral Dredging**	No		

482-A:3 Excavating and Dredging Permit; (excerpts from law)

I. (a) ... The permit application together with a detailed plan and a map showing the exact location of the proposed project, along with 4 copies of the permit application, plan and map, shall be submitted to the town or city clerk, accompanied by a filing fee in the form of a check made out by the applicant to the state of New Hampshire. (d) At the time the permit application is submitted to the city or town clerk, the applicant shall provide postal receipts or copies, verifying that abutters, as defined in the rules of the department, and except as further provided in said rules, have been notified by certified mail. The postal receipts or copies shall be retained by the municipality. **The town or city clerk shall immediately sign the application and forward by certified mail, the application, plan, map and filing fee to the department.** The town or city clerk shall then immediately send a copy of the permit application, plan and map to the local governing body, the municipal planning board, if any, and the municipal conservation commission, if any, and may require **an administrative fee not to exceed $10 plus the cost of postage by certified mail**. **One copy shall remain with the city or town clerk, and shall be made reasonably accessible to the public.** The foregoing procedure notwithstanding, applications and fees for projects by agencies of the state may be filed directly with the department, with 4 copies of the application, plan and map filed at the same time with the town or city clerk to be distributed as set forth above.

Env-Wt 501.01 Applications for Regular Review.

(a) Applications shall be submitted in a complete manner as specified in Env-Wt 300, Env-Wt 400, Env-Wt 500, and RSA 482-A before department action.
(b) The applicant shall submit 5 copies in accordance with (e), below. Photo copies shall be acceptable.
(c) At the time of filing, the applicant shall notify in writing all abutters, as specified in RSA 482-A, of the application.
This notification shall not be required for logging operations, minimum impact agricultural projects, projects in utility rights-of-way, or public highway construction.
(e) All 5 copies of the application and 5 copies of the data specified in Env-Wt 501.02 shall be presented to the town/city clerk of the municipality where the proposed project is located. All 5 copies shall be signed and dated by the town/city clerk. The clerk shall retain and distribute the 5 copies pursuant to RSA 482-A:3, I.

For Wetlands Permits

Env-Wt 101.02 "Abutter" means any person who owns property immediately adjacent and contiguous to the property on which the project will take place. This does not include those properties across a public road. An abutter includes an owner of any flowage rights on or immediately adjacent to the property on which the project will take place. If the project is located on waterfront or another area which by its configuration would cause the project to affect non-contiguous properties, owners of those properties are considered as abutters.
The term does not include the owner of a parcel of land located more than one-quarter mile from the limits of the proposed project.

Shoreland Permits - Process

The applicant sends notices of the impending application submittal by certified mail to the municipality and the abutters (slightly different abutter definition than wetlands permitting).
The applicant does not provide any copies of the Shoreland Permit application to the municipality.

RSA 483-B:4, I "Abutter" means any person who owns property that is immediately contiguous to the property on which the proposed work will take place, or who owns flowage rights on such property. The term does not include those properties separated by a public road or more than 1/4 mile from the limits of the proposed work. If contiguous properties are owned by the person who is proposing the work, then the term includes the person owning the next contiguous property, subject to the 1/4 mile limitation.

DEPARTMENT OF ENVIRONMENTAL SERVICES
WETLANDS BUREAU
29 Hazen Drive, PO Box 95
Concord, NH 03302-0095
Phone: (603) 271-2147 Fax: (603) 271-6588
Website: www.des.nh.gov/wetlands Email: wetmail@des.nh.gov

Standard Dredge and Fill Application Form

The Standard Dredge and Fill application package to be submitted to DES consists of:

1. Application form (this document).
2. Checklist(s) with required information attached. ("Checklist for Submission of your Standard Dredge and Fill Application," and if appropriate, "Compensatory Mitigation Information and Checklist").

Type or print clearly -- missing information may result in your application review being delayed if it is considered administratively incomplete. If you are completing this as a Word version on your computer, use your **tab key** to move through the document to enter data in the appropriate areas.

If you have questions about any terms used, check the Definitions section of the Instructions.

1.	**Name of Landowner* (last, first, middle initial)**	**Owner daytime phone number**	**Owner fax number**	**Owner email**
		( )	( )	

* If there are multiple landowners, please attach a separate page with the names of all landowners, and documentation as to the one person who represents the interests of the entire group.

Landowner (permanent) mailing address or PO Box	**Town/City (owner mailing address)**	**State**	**Zip code**

2.	**Name of Applicant, if not the landowner**	**Applicant phone number**	**Applicant fax number**	**Applicant email**
		( )	( )	

Applicant street address	**Applicant town/city**	**State**	**Zip code**

3.	**Company and Name of Agent**	**Agent phone number**	**Agent fax number**	**Agent email**
		( )	( )	

Agent Street mailing address or PO Box	**Town/City (agent mailing address)**	**State**	**Zip code**

4.	**Location(s) of the proposed work** (fill in below)						
Street address(es) or nearest intersection(s)							
Town/City		**Tax map**		**Block**		**Lot number(s)**	

5.	**For projects classified as minor or major impact, are there any vernal pools located on the subject property?** If "**Yes,**" identify and label the location(s) of vernal pool(s) on the project plans.	**Circle one: Yes / No**

6.	Based on information obtained from the Natural Heritage Bureau (NHB), are there any state or federal threatened or endangered species or exemplary natural communities on the subject property? Provide the NHB file number: [ ] and attach the documentation (letter/memo & map) Natural Heritage information can be obtained at www.nhnaturalheritage.org. Click on "Services" for links to: 1) the DataCheck web tool, or 2) a hard copy form to obtain the required letter and map from NHB. If you do not have Internet access, you may contact NHB directly at (603) 271-2215 x 323 for information about obtaining the required documentation.	**Circle one:** **Yes / No**
7.	If there are any state or federal threatened or endangered species or exemplary natural communities located on the subject property, please provide a letter from NHB stating that the applicant has consulted with NHB. The letter should indicate either there is no impact, or include NHB guidelines for preventing or mitigating impacts.	
8.	**Jurisdictional areas(s) where work is proposed; check box(es) below. Check the definitions in the instructions for additional information.** ***(If your resource type is not listed, contact DES for guidance):***	

Nontidal wetland: swamp, wet meadow, etc.		Bank of surface water body		Intermittent (seasonal) stream		Name of water body from USGS topographic map:	
Vernal pool		Lake or pond		Perennial stream or river		Tributary to:	
Upland tidal buffer zone		Sand dune		Tidal wetland		Prime Wetland Buffer (within 100 feet of prime wetland)	
Freshwater marsh		Bog/fen (peatland)		Atlantic Ocean		Municipally designated prime wetland	

9.	**Provide a brief description** of all proposed work including: 1) the **size of the impact area** (square feet) in the resource, 2) the size (in acres) of the entire parcel(s), and 3) the compensatory mitigation proposed, if applicable, per Env-Wt 302.03(c). Attach a separate page if you are not completing this using a computer.	
10.	Does the project require compensatory mitigation to offset unavoidable impacts to wetlands? If **Yes**, attach a copy of the completed **Mitigation Checklist**.	**Yes / No**
11.	Have you requested a waiver of any wetland rules per Env-Wt 204? If **Yes**, attach your waiver request to this application.	**Yes / No**
12.	Is there any DES emergency authorization associated with this property? Are you aware of any DES enforcement issues related to this property? If **Yes**, provide the file number(s): _____	**Yes / No**
13.	Explain why it is necessary to impact a wetland or other jurisdictional area to construct your project.	

14.	Explain why your project design proposes less environmental impact on areas in DES Wetlands jurisdiction than other alternatives. What other alternatives were considered? (Attach a separate page if you are not completing this expandable box on a computer)

15. **Amount of Impact Proposed By Jurisdictional Area**

Indicate whether **permanent** or **temporary** impacts. This information is necessary to calculate the fee and classify your project. Leave box blank if not applicable to your proposed project.

Jurisdictional area	Impact Type (indicate whether temporary or permanent)			
	Dredge	**Fill**	**Structure**	**Total**
Wetlands				sq. ft.
Impacts to very poorly drained soils (only required for pond construction)				sq. ft.
Prime wetland				sq. ft.
Vernal pool				sq. ft.
Prime Wetland Buffer (within 100 feet of designated prime wetland)				sq. ft.
Stream or River				sq. ft.
Bank of stream or river				sq. ft.
Bed of perennial stream				linear feet
				sq. ft.
Thread of Intermittent Stream				linear feet
Bank of Lake (for beach construction & replenishment, bank stabilization)				
Shoreline (see following page for how to calculate this average length)				linear feet
Dredge/fill within bank				sq. ft.
Dredge/fill within bank				cubic yards
Lake or Pond (below full lake elevation) Impacts for docks and structures listed in item 15 are entered below.				
Shoreline subject to impacts				linear feet
				sq. feet
Dredge or fill of lakebed				cubic yards
				sq. ft.
Sand dune				sq. ft.
Tidal wetland				sq. ft.
Upland tidal buffer zone				sq. ft.
Undeveloped?/ Developed? (choose one or both, as appropriate)				

16. Calculate and provide length of shoreline frontage.
Shoreline frontage is the average of two distances, 1) the actual natural navigable shoreline footage, and 2) a straight line drawn between property lines, both of which are measured at the normal high water line.

(a) Pin to pin distance (linear feet)	(b) Actual natural navigable shoreline (from pin to pin)	(a) + (b) / 2 =	Shoreline frontage (linear feet)

17. Enter the information below if you are proposing any **docking structures**. Your plans must show proposed and existing docking structures.

Docking structures (proposed)	Square Feet
Surface area of all **permanent** structures:	
Surface area of all **seasonal** structures:	

18. Other DES Permitting Requirements

____ **Have you addressed requirements of Comprehensive Shoreland Protection Act (CSPA), RSA 483-B?**
If your property is in the "protected shoreland" -- the area that is within 250 feet of a fourth order stream, a designated river, a lake or pond 10 acres or greater in size (on the DES *Official List of Public Waters)*, or tidal water, you will need to comply with the requirements of the Comprehensive Shoreland Protection Act (CSPA).

What is considered "protected shoreland"? To determine if your property is located in "protected shoreland," go to www.des.nh.gov/cspa or the following websites:

- A "fourth order" or larger stream or river (www.des.nh.gov/cspa).
- Any river or river segment designated as protected under the N.H. Designated Rivers Program, RSA 483 (www.des.nh.gov/rivers/).
- Public waters (www.des.nh.gov/Dam/)
- Tidal waters.

As of July 1, 2008, projects that involve construction, excavation, or filling within the protected shoreland, require a DES Shoreland Permit, unless the work is specifically permitted under a Wetlands Permit, OR exempted under Rule Env-Wq 1406.03 or Env-Wq 1406.04 (see des.nh.gov/rules/desadmin_list.htm#env-wq1400), and a DES Alteration of Terrain permit 50,000 square feet if any part of disturbance is within the protected shoreland. For more information: www.des.nh.gov/AOT/ and RSA 485-A:17.

____ **Does this project require a DES Alteration of Terrain (AoT) permit?** If yes, does this application and the other application reflect the same project area in its entirety?
Date of submittal to DES: _____
DES AoT File number: _____

____ **Does this project require a DES Subdivision or Subsurface Disposal System permit(s)?** If yes, does this application and the other application reflect the same project area in its entirety?
Date of Subsurface/Subdivision application submittal to DES: _____
DES Subsurface/Subdivision File number: _____

19. In accordance with RSA 482-A:3, XIV (b), I, _____, hereby authorize DES to communicate all matters relative to this application electronically with the individual identified below at the email address identified below. I agree to send an electronic return/read receipt of all emails sent by the department and understand that the department will do the same. I also agree that DES will be notified immediately of any change in the email address identified below. Please note that DES limits the size of documents that can be received or stored electronically. Any submittals that have a file size over 5 MB must be provided in hard copy.

(Check one box only and supply email address)

❒ Landowner email: _____ ❒ Applicant email: _____

❒ Agent email: _____

20. FILING FEE: A check or money order payable to the NH DES Wetlands Bureau must accompany this application. The minimum fee is $200. Minor and major impact projects are charged at the rate of: $0.20 per square foot of requested impact (if less than 1,000 square feet of impact is proposed, the minimum fee of $200 applies). All applications for shoreline structures shall include a base fee of $200. In addition, minor and major impact shoreline projects shall include fees charged at the rate of: $0.20 per square foot for requested dredge or fill impacts; $1 per square foot for requested seasonal docking structure; and $2 per square foot for requested permanent docking structure. The application will be considered administratively incomplete until the required fee is paid in full. **Attach the appropriate fee calculation worksheet(s).**

21. APPLICANT SIGNATURE. By signing this application, I am certifying that:

1) All abutters have been identified in accordance with the definition given in the instructions and I or my agent have/has sent notices to those abutters by Certified Mail.
2) I have read and provided the required information outlined in Env-Wt 302.04 and listed on the "Checklist for Submission of Your Standard Dredge and Fill Application," dated June 2008.
3) I have read and understand Env-Wt 302.03 and have chosen the least impacting alternative.
4) I have reviewed the information being submitted and that to my knowledge the information is true and accurate.
5) I have submitted a copy of the application materials to the NH State Historic Preservation Officer.
6) Authorize the municipal conservation commission to inspect the site of the proposed project.
7) I understand that the willful submission of falsified or misrepresented information to the New Hampshire Department of Environmental Services is a criminal act, which may result in legal action.

Signature of applicant(s)	**Print applicant's name(s)**	**Date**
Signature of authorized agent (if applicable)	**Print agent name**	**Date**

22. TOWN CLERK SIGNATURE: I hereby certify that the applicant has filed five sets of all materials with the town/city of _____ as required by Chapter 482-A:3, and I have received and retained certified postal receipts (or copies) for all abutters identified by the applicant. Upon signing the application below, I will forward immediately by <u>certified mail</u> to the DES the original application materials, including the filing fee, and distribute the three copies to each of the following: the local governing body, the municipal planning board, if any, and the municipal conservation commission, if any. Town clerk retains one copy.

Signature of town/city clerk	**Date**

For DES Office Use Only:

Fee received (amount): _____ DES File # _____ Name on check: _____

_____	_____	_____	_____	_____
date of check	date check received	check#	amount	initials

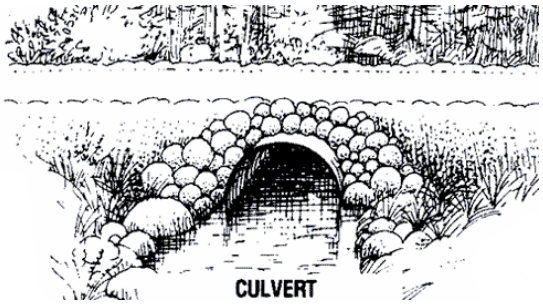
Additional check: Date of check:_____ Date check received:_____ Check number:_____ Check amount:_____

The U.S. Army Corps of Engineers has reissued its New Hampshire Programmatic General Permit (PGP) effective June 28, 2007. The Corps is requiring the submission of a new Corps Secondary Impacts Checklist to be submitted with the DES wetland application. The Corps will review this information to assess direct, indirect (secondary impacts) and cumulative impacts. The Corps **Secondary Impacts Checklist,** Appendix B to the New Hampshire PGP, is attached to this DES wetland application. The PGP does not impose any obligation on DES to assess secondary impacts that does not already exist in state law.

Calculating the Appropriate Application Fee to be Submitted with a Standard Dredge and Fill Application

Worksheet A

Use this worksheet for a project with no construction or modification of docking facilities.

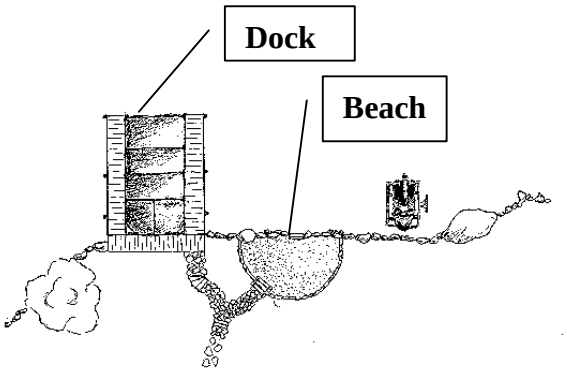


For Minor and Major Impact Projects:		Fee calculation rate and square feet of impact	Fee (subtotals and total)
1	**Minimum application fee**		**$200**
	OR		
2a	**Total area of new* impacts to wetland and other jurisdictional areas (excluding surface water) as measured in square feet**		
2b	**Multiply line 2a by the $0.20 fee per square foot of new impact to determine fee based on area of impacts to wetlands, bank or other jurisdictional area(s).**		$
3	**Which has the larger amount, line 1 or 2b? Circle one.**		**1** or **2b**
4	**Required Fee: Enter the** larger amount **of 1 OR 2b.**		$

"New" impact means work or activity beyond the limits (footprint) of a previously permitted or grandfathered project, including temporary impacts. For example, replacement of a 20-foot long culvert with a 40-foot long culvert would calculate 2b based on the 20 feet of new culvert length (times the width, etc.) used in 2a. This does not apply to shoreline structures that use Worksheet B.)

Calculating the Appropriate Application Fee to be Submitted with a Standard Dredge and Fill Application

Worksheet B



Use this worksheet for the following **shoreline structure** projects:

- Construction or modifications of seasonal or permanent docking facilities.
- Dredge or fill within lake bed
- Excavation, fill or construction within the banks of surface water body.

For Minor and Major Impact Projects:		**Fee calculation rate and square feet of impact**	**Fee (subtotals and total)**
1	**Base application fee**		**$200**
2a	**Total square feet of new impacts to wetland, bank, and other jurisdictional areas**		
2b	**Multiply line 2a by $0.20 fee per square foot of new impacts to determine the** ADDITIONAL fee for wetlands, bank or other jurisdictional area		**$**
3a	**Total square feet of dredge and fill of surface waters**		
3b	**Multiply line 3a by $0.20 fee per square foot of impact to determine the** ADDITIONAL fee for surface water dredge and fill.		$
4a	**Total square feet of proposed seasonal docking structure**		
4b	**Multiply line 4a by $1 fee per square foot of impact to determine the** ADDITIONAL fee for seasonal structure(s):		$
5a	**Total square feet of proposed permanent docking structure**		
5b	**Multiply line 5a by $2 fee per square foot of impact to determine the** ADDITIONAL fee for permanent structure(s):		$
6	**Required Fee: Add lines 1, 2b, 3b, 4b, and 5b**		$

US Army Corps of Engineers®
New England District

U.S. Army Corps of Engineers
Programmatic General Permit (PGP)
(http://www.nae.usace.army.mil/reg/NHPGPpermit.PDF)
Appendix B - Required Information and Corps Secondary Impacts Checklist

In order for the Corps of Engineers to properly evaluate your application, applicants must submit the following information along with the DES Wetlands Bureau application or permit notification forms. Some projects may require more information. For a more comprehensive checklist, see www.nae.usace.army.mil/reg/Application_PlanGuidelines.doc. Check with the Corps at (978) 318-8832 for project-specific requirements. For your convenience, this Appendix B is also attached to the State of New Hampshire DES Wetlands Bureau application and Permit by Notification forms.

Required information for all projects:

- **8½"x 11" plans: Locus map, plan views of the entire property and project limits with existing and proposed conditions. On each plan show the NGVD 1929 equivalent for the project's vertical datum with the vertical units. Do not use local datum.**

Required information for Federal inland (Section 404) wetland/waterway fill projects:

- Complete the "Corps Secondary Impacts Checklist" provided on the following page;
- **Each plan should show the ordinary high water (OHW) line in the absence of a contiguous wetland.**
- National Wetlands Inventory Map(s) (www.fws.gov/nwi/) showing the impacted wetland system(s);
- For Minor/Major Impact Projects, delineate special aquatic sites (SAS) and special wetlands, including vernal pools [see General Condition (GC) 26].

Information typically required for stream crossing projects (perennial and intermittent unless otherwise specified):

- Rosgen classification for perennial streams. See Applied River Morphology, Dave Rosgen, 1996;
- PE stamp on all perennial stream projects when required by the State;
- Crossing impact analysis of hydraulic capacity, hydrogeomorphic compatibility, watershed size above a crossing, upstream and downstream direct and secondary impacts from a proposed crossing;
- Stream bank full, and bank dimensions, channel dimensions, extent of the floodplain prone area;
- Crossing impact assessment to wildlife and fisheries and aquatic organisms (pre- and post design) including direct and secondary impacts;
- Replacements: an analysis of current crossing compatibility, stability of upstream and downstream channel and bank, recent scour events, systems analysis on hydrology, ecological stability and sediment loading.

Required information for projects in tidal waters:

- **Each plan should show the mean high water (MHW), mean low water (MLW), mean lower low water (MLLW), high tide line (HTL) or other tidal datum;**
- Delineate special aquatic sites (SAS) and special wetlands (see GC 26);
  Show or state the size of the waterbody;
- Limits of any Federal Navigation Project (FNP) within 100' of the project area and State Plane Coordinates for the limits of the proposed work closest to the FNP;
- Volume, type, and source of fill material to be discharged into waters and wetlands, including the area(s) (in square feet or acres) of fill in wetlands and the areas below the HTL.

Required information for tidal water dredge projects:

- Sediment testing, including physical (e.g., grain-size analysis), chemical and biological testing. For projects

proposing open water disposal, applicants should contact the Corps as early as possible regarding sampling and testing protocols. Sediment sampling and testing without such contact would be at the applicant's risk;

- Any existing sediment grain size and bulk sediment chemistry data;
- Nature of material (e.g., silty sand);
- Any nearby projects;
- The area in square feet and volume of material to be dredged below HTL;
- Existing and proposed water depths;
- Type of dredging equipment to be used;
- Location of the disposal site (include locus sheet);
- Information on the location and nature of municipal or industrial discharges and occurrence of any contaminant spills in or near the project area;
- Shellfish survey;
- Identify and describe potential impacts to essential fish habitat (see GC 10);
- Delineation of submerged aquatic vegetation (e.g., eelgrass beds).

U.S. Army Corps of Engineers
Programmatic General Permit (PGP)
Appendix B
Corps Secondary Impacts Checklist
(for inland wetland/waterway fill projects in New Hampshire)

1. Attach any explanations to this checklist. Lack of information could delay a Corps permit determination.
2. All references to "work" include all work associated with the project construction and operation. Work includes filling, clearing, flooding, draining, excavation, dozing, stumping, etc.
3. See PGP, GC 5 regarding single and complete projects.
4. Contact the Corps at (978) 318-8832 with any questions.

1. Impaired Waters	**Yes**	**No**
1.1 Will any work occur upstream within 1 mile upstream in the watershed of an impaired water? See www.des.nh.gov/wmb/Section401/ to determine if there is an impaired water in the vicinity of your work area.*		
2. Wetlands		
2.1 Are there are streams, brooks, rivers, ponds, or lakes within 200' of any proposed work?		
2.2 Are there proposed impacts to SAS, shellfish beds, special wetlands and vernal pools (see PGP, GC 26)? Applicants may obtain information from the NH Department of Resources and Economic Development Natural Heritage Bureau (NHB) website, www.dred.state.nh.us/divisions/forestandlands/bureaus/naturalheritage, specifically the book Natural Community Systems of New Hampshire.		
2.3 If wetland crossings are proposed, they are not adequately designed to maintain hydrology, sediment transport & wildlife passage.		
2.4 Would the project remove part or all of a riparian buffer? (Riparian buffers are lands adjacent to streams where vegetation is strongly influenced by the presence of water. They are often thin lines of vegetation containing native grasses, flowers, shrubs and/or trees that line the stream banks. They are also called vegetated buffer zones.)		
2.5 The overall project site is more than 40 acres.		
2.6 What is the size of the existing impervious surface area?		
2.7 What is the size of the proposed impervious surface area?		
2.8 What is the % of the impervious area (new and existing) to the overall project site?		
3. Wildlife	Yes	No
3.1 Has the NHB determined that there are known occurrences of rare species, exemplary natural communities, Federal and State threatened and endangered species and habitat, in the vicinity of the proposed project? (All projects require a NHB determination.)		
3.2 Would work occur in an area identified by NH Fish and Game Department as "Highest Ranked Habitat by Ecological Condition in NH" (magenta areas on maps) or "Highest Ranked Habitat by Ecological Condition in biological region" (green areas on maps)? www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/highest_ranking_habitat.htm. The map is currently available as a PDF for download that can be zoomed in on.*		
3.3 Would work occur in an area identified as a "Conservation Focus Area" (purple areas). www.wildlife.state.nh.us/Wildlife/Wildlife_Plan/conservation_focus.htm? The map is currently available as a PDF for download that can be zoomed in on.*		
3.4 Would the project impact more than 20 acres of an undeveloped land block (upland, wetland/waterway) on the entire project site and/or on an adjoining property(s)?		
3.5 Does the project propose more than a 10-lot residential subdivision, or a commercial or industrial development?		
3.6 If stream crossings are proposed, will they impede hydrology, sediment transport & wildlife passage. (Note: Stream crossings should be designed in accordance with the PGP, GC 21.)		
4. Flooding/Floodplain Values	**Yes**	**No**
4.1 Is the proposed project within the 100-year floodplain of an adjacent river or stream?		
4.2 If 4.1 is yes, will compensatory flood storage be provided if the project results in a loss of flood storage?		

*Although this checklist utilizes state information, its submittal to the Corps is a Federal requirement.

Appendix J
Wetlands Functions and Values Assessment
Alternative Site 2

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WETLAND FUNCTIONS AND VALUES ASSESSMENT

22 CONTINENTAL DRIVE
TAX MAP 46, LOT 4
EXETER, NEW HAMPSHIRE

PREPARED FOR:
CH2M Hill
Northpark 400
1000 Abernathy Road
Suite 1600
Atlanta, Georgia 30328

PREPARED BY:
GZA GeoEnvironmental, Inc.
202 Kent Place
Newmarket, New Hampshire

June 2010
File No. 17.0028320.00

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WETLAND FUNCTIONS AND VALUES ASSESSMENT

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Project Manager/Senior Wetland Scientist

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Associate Principal

Deborah Zarta Gier
Consultant/Reviewer

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WETLAND FUNCTIONS AND VALUES ASSESSMENT

WETLAND FUNCTIONS AND VALUES ASSESSMENT

INTRODUCTION

This report provides an assessment of functions and values for freshwater wetlands located on the proposed site at 22 Continental Drive in Exeter, New Hampshire. This report was compiled for CH2M Hill, Inc., in support of an Alternatives Analysis being conducted for siting a potential Army Reserve Center.

The subject parcel is approximately 21.1 acres in size and is identified as Tax Map 46, Lot 4, hereinafter referred to as the Site. The location of the Site is identified on the United States Geologic Survey (USGS) topographic map included in this report (**Figure 1, Site Locus Map**). The Site is located in the Town of Exeter Corporate Technology Park Zone (CT-1), and surrounding land use is commercial and/or undeveloped land (**Figure 2, Tax Map**). Land use directly adjacent to the north and east of the Site consists of commercial buildings with associated parking, and stormwater treatment structures.

Town of Exeter Prime Wetlands, associated with the Little River, are located approximately 800 feet to the north and northwest of the Site (**Figure 3, Prime Wetlands Map**). All wetlands on the Site are located within the same watershed and the large wetland complex (Wetland A) is within the Little River drainage basin. The New Hampshire Natural Heritage Bureau (NHB) has records of known occurrences of an exemplary natural community and species of concern in the project vicinity. Four NHB records have been identified and all are located more than 0.25 mile from the Site. These include: great blue heron (*Ardea herodias*) bird rookery, State exemplary natural community; least bittern (*Ixobrychus exilis*), State bird species of special concern; northern black racer (*Coluber constrictor constrictor*), State Threatened reptile (snake) species; and slender blue flag (*Iris prismatica*), State Endangered herbaceous plant. There are no known records of federally designated species of concern in the project vicinity.

METHODS

Fieldwork associated with the delineation of wetlands on the Site was conducted in December 2009 by GZA GeoEnvironmental, Inc. (GZA) in accordance with the 1987 United States Army Corps of Engineers (ACOE) Wetlands Delineation Manual, using the Routine Determinations Method. For purposes of identification, wetlands on the Site have been designated as Wetland A, Wetland B, Wetland C, and Wetland D (**Appendix A, Wetland Identification and Photo Location Plan**).

Functions and values of these wetlands were assessed by GZA on April 20, 2010 using the ACOE's Highway Methodology Workbook Supplement (ACOE, September 1999). Wetland areas were classified according to "Classification of Wetlands and Deepwater Habitats of the United States" (United States Fish and Wildlife Service, 1979). Each assessed area, with associated functions and values, is described in detail in the

functions-values evaluation forms (**Appendix B, Wetland Functions-Values Evaluation Forms**). A general summary of wetland functions and values is also provided in the attached **summary table** (**Figure 4, Functions-Values Summary Table**).

Functions and values assessed for each wetland system include: groundwater recharge/discharge, floodflow alteration, fish/shellfish habitat, sediment/toxicant retention, nutrient removal, production export, sediment/shoreline stabilization, wildlife habitat, recreation, education/scientific value, visual quality/aesthetics, uniqueness/ heritage and endangered species habitat. Functions and values are considered "principal" if they are determined to be an important component of a wetland ecosystem. Functions and values may be considered "capable" if a wetland can provide any given function or value on a limited basis. The rationale for the assignment of functions as principal or capable is based upon professional judgment, with guidance provided by a list of considerations outlined in the ACOE methodology. In addition, lists of observed plant species, as well as potential and observed wildlife species are attached (**Appendices C** and **D,** respectively).

A photo log documenting typical wetland conditions within each of the assessed wetlands is included with this report (**Appendix E, Photo Log**). The NHB database was consulted relative to any records of Endangered, Threatened, species of special concern and/or exemplary natural communities being present on or near the Site. The NHB database search results are included with this report (**Appendix F, New Hampshire Natural Heritage Bureau Database Review**). The capability of the wetland systems on site to provide habitat for these species or communities was evaluated based on the assessed characteristics of these wetlands and the known preferences of these species or communities.

DISCUSSION

WETLAND A

Wetland A contains a small intermittent drainage way, without any discernable bank, which flows in a southwesterly direction from the portion of the Site adjacent to Continental Drive along the easterly margin of the Site (**Photo 1**). Hydrology supporting Wetland A is provided by seasonal groundwater discharge and surface water runoff from several jurisdictional finger-like projections (part of Wetland A) and overland flow from adjacent upland portions of the Site (**Photo 2**). Wetland A contributes hydrology to the Little River to the south and northwest, portions of which are designated as Prime Wetlands. The Little River flows in a north-to-south direction and is adjacent to the portion of Wetland A west of the Site. This portion of Wetland A contains very poorly-drained hydric soils and exhibits the highest functions and values on the property.

Wetland A contains several wetland classification systems. The portion closest to Continental Drive and the associated drainage ways are classified as palustrine forested broad-leaved deciduous/needle-leaved evergreen wetland systems that are seasonally

flooded or saturated (PFO1/4E). The wetland is dominated by red maple (*Acer rubrum*), highbush blueberry (*Vaccinium corymbosum*), winterberry holly (*Ilex verticillata*), northern arrowwood (*Viburnum dentatum*), black birch (*Betula lenta*), beaked hazelnut (*Corylus cornuta*), cinnamon fern (*Osmunda cinnamomea*), sensitive fern (*Onoclea sensibilis*), sedges (*Carex* spp.), Canada mayflower (*Maianthemum canadense*), partridgeberry (*Mitchella repens*), teaberry (*Gaultheria procumbens*), and bristly dewberry (*Rubus hispidus*).

The north and northwesterly portion of Wetland A is classified as a palustrine scrub-shrub deciduous wetland system that is seasonally flooded or saturated (PSS1E). This portion contains more diverse shrub and herbaceous communities forming a complex of hummock/hollows and tussocks, a unique habitat structure for selected herptiles and bird species (**Photo 3**). Dominant vegetation in this portion of the wetland is winterberry holly, highbush blueberry, elderberry (*Sambucus canadensis*), northern arrowwood, wild raisin (*Viburnum cassinoides*), royal fern (*Osmunda regalis*), sphagnum moss (*Sphagnum* spp.), blue flag iris (*Iris versicolor*), and tussock sedge (*Carex stricta*). The southwesterly portion of Wetland A is comprised of palustrine emergent persistent/scrub-shrub wetlands with deciduous vegetation that is seasonally flooded or saturated (PSS/EM1E). The portion of Wetland A along the southern portion of the property is comprised of a palustrine forested wetland system similar to that of the northeastern portion and drainage ways.

Wetland A is capable of providing nine functions and values, one of which is considered principal for the reasons described below.

Wildlife Habitat

Wetland A is relatively large in size and contains multiple habitat types which increase habitat diversity with minimal fragmentation. Evidence of wildlife utilization by foraging birds and nesting four-toed salamanders (*Hemidactylium scutatum*) was observed in the scrub-shrub portion of Wetland A. In addition, an eastern garter snake (*Thamnophis sirtalis*) was observed basking on rocks in a canopy opening in the southerly forested portion of Wetland A (**Photo 4**). The diversity and structure within this wetland complex provides principal wildlife habitat functions.

Groundwater Recharge/Discharge

Wetland A hydrology is supported by groundwater discharge. Wetland A is not capable of groundwater recharge due to a marine clay component in the wetter areas inhibiting recharge.

Floodflow Alteration

Wetland A, by virtue of its hydrologic connection to the wetlands associated with Little River, is capable of providing some flood storage capacity; however, the gradient and pitch associated with the forested wetland drainage ways limits its capacity to provide floodflow alteration functions.

Sediment/Toxicant Retention

The dense herbaceous layers within the northerly and northwesterly portions of Wetland A are indicative of the capacity for trapping sediments and toxicants; however, in the existing conditions, a potential source from Continental Drive is limited by distance and an existing stormwater management system associated with the cul-de-sac of Continental Drive.

Nutrient Removal

The dense herbaceous plant community encountered in both the PSS and PEM portions of this wetland complex provides a productive wetland system capable of metabolizing excess nutrient loads. This aids in improving water quality downstream and in the direction of the Prime Wetlands located to the northwest. However, in the existing condition, it is unlikely that nutrient loads are contributing to this wetland complex.

Production Export

Wildlife food sources exist in the form of several berry producing shrubs; however, production export in Wetland A is limited to removal by wildlife in the northerly and northwesterly portions of Wetland A.

Educational/Scientific Value

This wetland complex may provide an opportunity for the study of ecological relationships from the watershed perspective; however, the Site is currently privately-owned land and not easily accessible to the public.

Visual Quality/Aesthetics

Portions of the Wetland A complex contrast with the surrounding upland, and viewing locations of the several wetland classifications are present from rock outcrops; however, the Site is currently privately-owned land and not easily accessible to the public.

Endangered Species Habitat

In general, the western portions of Wetland A (emergent meadow and scrub-shrub habitats) potentially provide habitat for the three species of concern identified by NHB (least bittern, northern black racer, and slender blue flag). During the site assessment, none of the aforementioned species of concern or the exemplary community were observed.

The remaining functions and values are not capable of being provided by Wetland A for reasons individually outlined below.

Fish/Shellfish Habitat

Wetland A has no capability to provide fish or shellfish habitat because these areas do not have the appropriate hydroperiod to support fish and/or shellfish populations.

Sediment and Shoreline Stabilization

Wetland A lacks a defined shoreline or stream bank, and lacks a source of erosive flows.

Recreation

Wetland A offers no recreational opportunity as it is located on private property.

Uniqueness/Heritage

Wetland A has no contributing importance to uniqueness/heritage as none of the wetland classes are locally unique or rare. Moreover, this wetland is not mapped as a Prime Wetland.

WETLAND B

Wetland B consists of a small isolated forested wetland system with deciduous and needle-leaved evergreen vegetation that is seasonally flooded or saturated (PFO1/4E) and is located directly adjacent and downgradient of the Continental Drive cul-de-sac. Evidence of rutting, presumably from recreational ATV use, was observed (**Photos 5** and **6**). Hydrology for this wetland is provided by a perched water table, with spring runoff rapidly evaporating and precluding permanent surface water. This wetland is dominated by white pine, red maple, winterberry holly, highbush blueberry, cinnamon fern, and smaller amounts of sedges, Canada mayflower, and goldthread.

Wetland B is capable of providing one function; however, it is not considered a principal function as described below.

Production Export

Production export is provided on a small scale. Berry- or mast-producing vegetation within this isolated wetland may produce a food source for wildlife, but the small nature of this wetland limits the amount of food this wetland can provide.

The remaining functions or values are not capable of being provided by Wetland B for the reasons individually outlined below.

Groundwater Recharge/Discharge

Wetland B is not capable of groundwater recharge due mainly to the presence of a glacial till or bedrock inhibiting recharge. Wetland B contains basin morphology and a perched water table supported by surface water; therefore, it is not capable of providing groundwater discharge.

Floodflow Alteration

Wetland B is not associated with a watercourse and cannot receive or detain excessive flood water or runoff.

Fish/Shellfish Habitat

Wetland B is not capable of providing fish habitat based upon limited hydrology, which is not conducive to fish or shellfish.

Sediment/Toxicant Retention

Wetland B does not contain a dense herbaceous layer required to perform sediment/toxicant removal and also lacks a source for these pollutants.

Nutrient Removal

Wetland B does not contain a dense herbaceous layer required to perform nutrient removal and also lacks an excess source of nutrients.

Wildlife Habitat

Wetland B is limited by size and upland fragmentation for utilization by wetland-dependent wildlife. A vernal pool assessment conducted on April 20, 2010 concluded that there was no evidence of breeding by primary vernal pool species. In addition, the hydroperiod present would not support breeding habitat requirements of primary vernal pool species.

Sediment and Shoreline Stabilization

Wetland B lacks a defined shoreline or stream bank, and also lacks a source of erosive flows.

Recreational/Educational/Scientific Opportunity

Wetland B offers no recreational, educational, or scientific opportunities as it is located on private property and does not represent a valuable outdoor laboratory.

Uniqueness/Heritage and Visual Quality/Aesthetics

Wetland B has no contributing importance to uniqueness/heritage or visual quality/aesthetics as the wetlands are not locally unique or rare and provide limited diversity. Moreover, this wetland is not mapped as a Prime Wetland.

Endangered Species Habitat

No habitat is present in Wetland B that would support the three species of concern or the exemplary natural community identified by NHB. During the site assessment, none of the aforementioned species of concern or the exemplary community were observed.

WETLAND C

Wetland C consists of a small isolated forested wetland system with both deciduous and needle-leaved evergreen vegetation that is seasonally flooded or saturated (PFO1/4E). Wetland C is located directly adjacent and downgradient of the Continental Drive cul-de-sac, similar to Wetland B (**Photos 7** and **8**). Hydrology for this wetland is provided by a perched water table, with spring runoff rapidly evaporating and precluding permanent surface water. This wetland is dominated by eastern hemlock, red maple, winterberry holly, highbush blueberry, soft rush, cinnamon fern, partridgeberry, and smaller amounts of sedges and goldthread.

Wetland C is capable of providing one function; however, it is not considered a principal function as described below.

Production Export

Production export is provided on a small scale. Berry- or mast-producing vegetation within this isolated wetland may produce a food source for wildlife, but the small nature of this wetland limits the amount of food this wetland can provide.

The remaining functions or values are not capable of being provided by Wetland C for the reasons individually outlined below.

Groundwater Recharge/Discharge

Wetland C is not capable of groundwater recharge due mainly to the presence of a glacial till or bedrock inhibiting recharge. Wetland C contains basin morphology and a perched water table supported by surface water; therefore, it is not capable of providing groundwater discharge.

Floodflow Alteration

Wetland C is not associated with a watercourse and cannot receive or detain excessive flood water or runoff.

Fish/Shellfish Habitat

Wetland C is not capable of providing fish habitat based upon limited hydrology, which is not conducive to fish or shellfish.

Sediment/Toxicant Retention

Wetland C does not contain a dense herbaceous layer required to perform sediment/toxicant removal and also lacks a source for these pollutants.

Nutrient Removal

Wetland C does not contain a dense herbaceous layer required to perform nutrient removal and also lacks an excess source of nutrients.

Wildlife Habitat

Wetland C, like Wetland B, is limited by size and upland fragmentation for utilization by wetland-dependent wildlife. A vernal pool assessment conducted on April 20, 2010 concluded that there was no evidence of breeding by primary vernal pool species. In addition, the hydroperiod present would not support breeding habitat requirements of primary vernal pool species.

Sediment and Shoreline Stabilization

Wetland C lacks a defined shoreline or stream bank, and also lacks a source of erosive flows.

Recreational/Educational/Scientific Opportunity

Wetland C offers no recreational, educational, or scientific opportunities as it is located on private property and does not represent a valuable outdoor laboratory.

Uniqueness/Heritage and Visual Quality/Aesthetics

Wetland C has no contributing importance to uniqueness/heritage or visual quality/aesthetics as the wetlands are not locally unique or rare and provide limited diversity. Moreover, this wetland is not mapped as a Prime Wetland.

Endangered Species Habitat

No habitat is present in Wetland C that would support the three species of concern or the exemplary natural community identified by NHB. During the site assessment, none of the aforementioned species of concern or the exemplary community were observed.

WETLAND D

Wetland D consists of a small isolated forested wetland system with both deciduous and needle-leaved evergreen vegetation that is seasonally flooded or saturated (PFO1/4E). Wetland D is located approximately 60 feet upgradient of one of the drainage ways of Wetland A (**Photos 9** and **10**). The hydrology for this wetland is provided by a perched water table and overland flow. Water depth at the time of the assessment was approximately 0.5 feet, however, Site conditions suggest that any ponding is very short-lived. This wetland is dominated by red maple, red oak, white pine, winterberry holly, highbush blueberry, soft rush, cinnamon fern, partridgeberry, and Canada mayflower.

Wetland D is capable of providing one function; however, it is not considered a principal function as described below.

Production Export

Production export is provided on a small scale. Berry- or mast-producing vegetation within this isolated wetland may produce a food source for wildlife, but the small nature of this wetland limits the amount of food this wetland can provide.

The remaining functions or values are not capable of being provided by Wetland D for the reasons individually outlined below.

Groundwater Recharge/Discharge

Wetland D is not capable of groundwater recharge due mainly to the presence of a glacial till or bedrock inhibiting recharge. Wetland D contains basin morphology and a perched water table supported by surface water; therefore, it is not capable of providing groundwater discharge.

Floodflow Alteration

Wetland D is not associated with a watercourse and cannot receive or detain excessive flood water or runoff.

Fish/Shellfish Habitat

Wetland D is not capable of providing fish habitat based upon limited hydrology, which is not conducive to fish or shellfish.

Sediment/Toxicant Retention

Wetland D does not contain a dense herbaceous layer required to perform sediment/toxicant removal and also lacks a source for these pollutants.

Nutrient Removal

Wetland D does not contain a dense herbaceous layer required to perform nutrient removal and also lacks an excess source of nutrients.

Wildlife Habitat

Wetland D, located near the larger Wetland A complex, is limited by size and upland fragmentation for utilization by wetland dependent wildlife. A vernal pool assessment conducted on April 20, 2010 concluded that there was no evidence of breeding by primary vernal pool species. In addition, the hydroperiod present would not support breeding habitat requirements of primary vernal pool species.

Sediment and Shoreline Stabilization

Wetland D lacks a defined shoreline or stream bank, and also lacks a source of erosive flows.

Recreational/Educational/Scientific Opportunity

Wetland D offers no recreational, educational, or scientific opportunities as it is located on private property and does not represent a valuable outdoor laboratory.

Uniqueness/Heritage and Visual Quality/Aesthetics

Wetland D has no contributing importance to uniqueness/heritage or visual quality/aesthetics as the wetlands are not locally unique or rare and provide limited diversity. Moreover, this wetland is not mapped as a Prime Wetland.

Endangered Species Habitat

No habitat is present in Wetland D that would support the three species of concern or the exemplary natural community identified by NHB. During the site assessment, none of the aforementioned species of concern or the exemplary community were observed.

CONCLUSION

The wetlands present on the Site were assessed based on their capacity to provide functions and possess values according to the United States Army Corps of Engineers' Highway Methodology. The Site contains three low-quality, isolated wetlands (Wetlands B through D) that are each limited to the capability of providing a production export function, offer no principal functions, and provide no habitat for the NHB species or community of concern. Wetland A is the most valuable wetland on the Site with more capabilities overall (nine functions and values) and one principal function of wildlife habitat. Wetland A is located on the western portion of the Site, closest to valuable surface waters and Town of Exeter Prime Wetlands. Additionally, the western portions of Wetland A have the potential to provide habitat for the three species of concern identified by NHB.

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FIGURES

FIGURE 1

SITE LOCUS MAP

SITE LOCUS MAP

22 Continental Drive
Tax Map 46, Lot 4
Exeter, New Hampshire

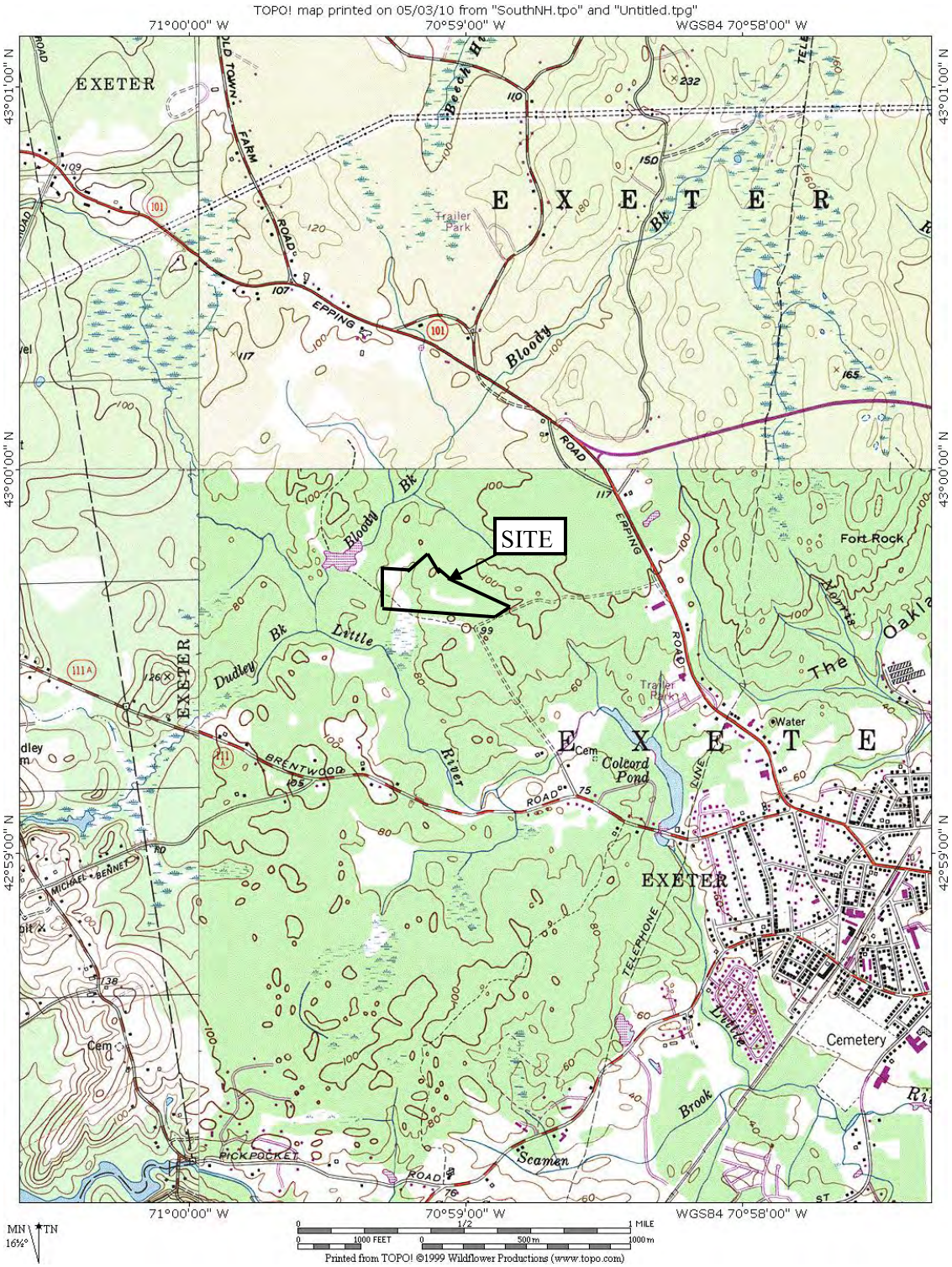
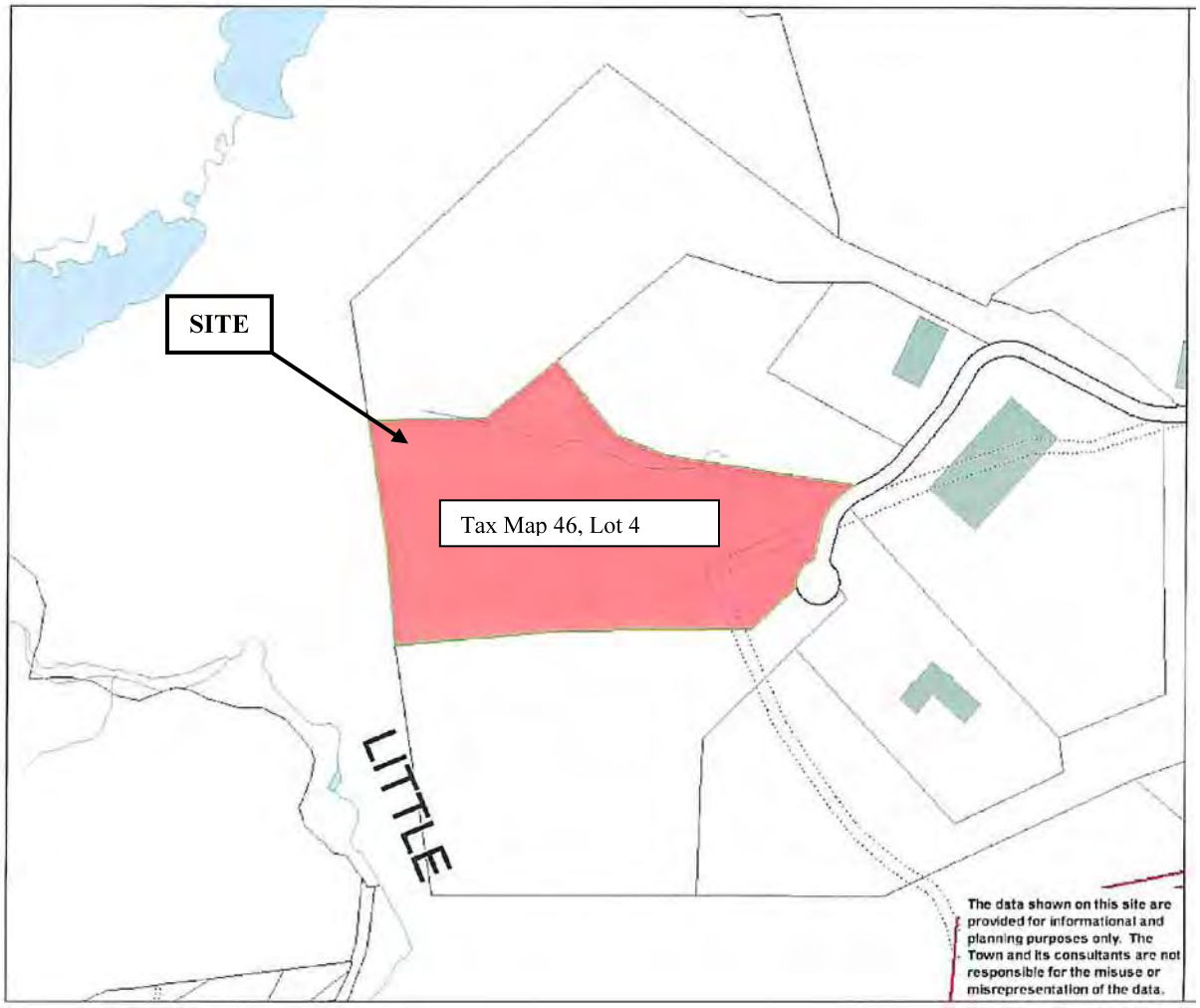


FIGURE 2

TAX MAP

TAX MAP

Tax Map 46, Lot 4
22 Continental Drive
Exeter, New Hampshire



Source: Town of Exeter GIS Maps Online

FIGURE 3

PRIME WETLANDS MAP

PRIME WETLANDS MAP

Tax Map 46, Lot 4
22 Continental Drive
Exeter, New Hampshire

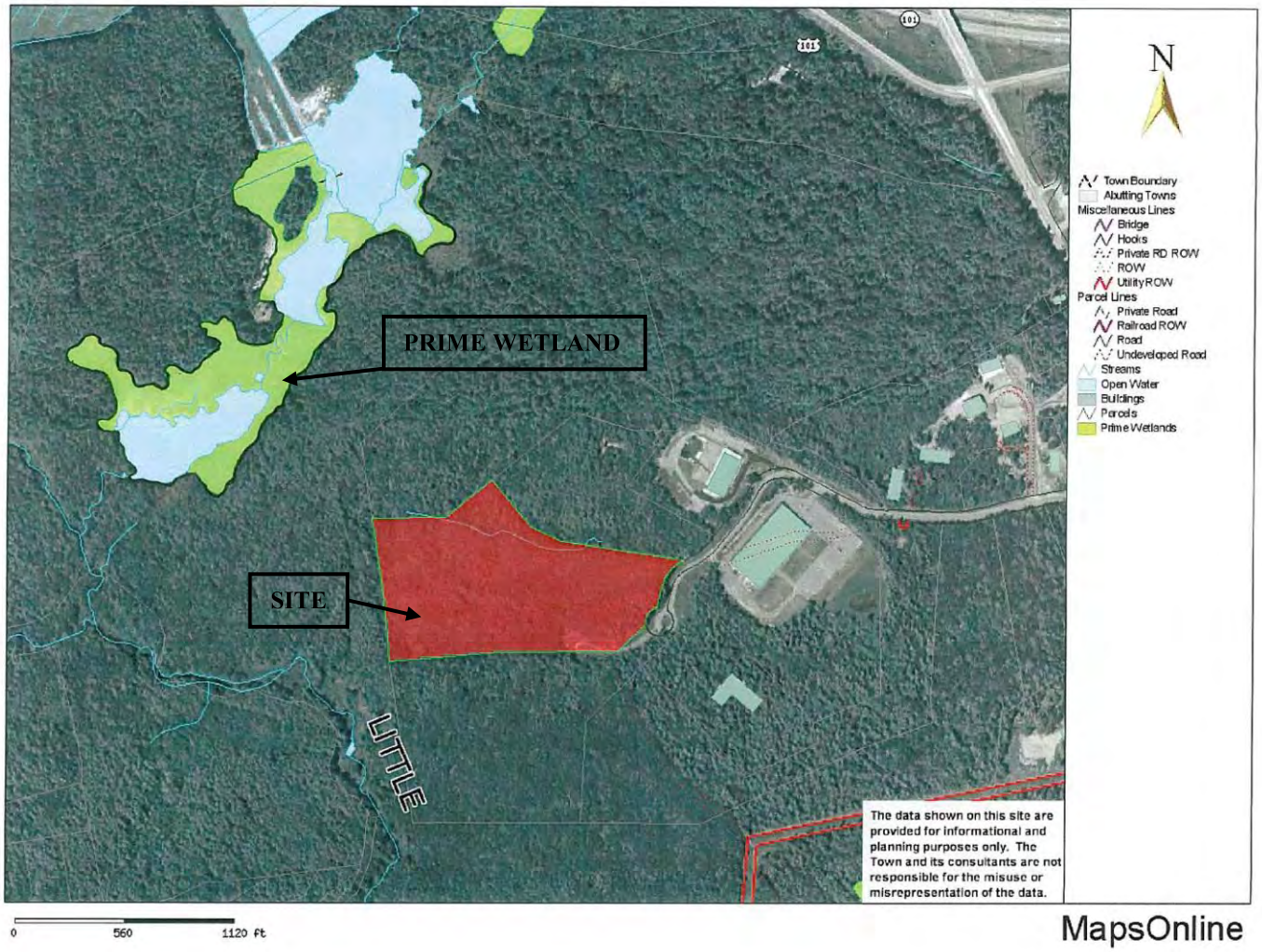


FIGURE 4

FUNCTIONS-VALUES SUMMARY TABLE

Summary Table of Wetland Functions and Values
Tax Map 46, Lot 4
22 Continental Drive
Exeter, New Hampshire

Wetland ID Number	Classification (1) (Cowardin et al. 1979)	Functions / Values (2)												
		GW	FA	FH	STR	NR	PE	SS	WH	RE	ES	UH	VQ	ESH
A	PFO1/4E; PSS/PEM1E	X	X		X	X	X		P		X		X	X
B	PFO1/4E						X							
C	PFO1/4E						X							
D	PFO1/4E						X							

(1) Key to classifications:

P = palustrine wetland system
FO = forested
SS = scrub-shrub
1 = deciduous
4 = needle-leaved evergreen
EM = emergent
1 = persistent
E = saturated or seasonally flooded

(2) Key to functions and values:

GW = groundwater recharge/discharge
FA = floodflow alteration
FH = fish and shellfish habitat
STR = sediment/toxicant retention
NR = nutrient removal
PE = production export (nutrient)
SS = sediment/shoreline stabilization
WH = wildlife habitat
RE = recreation
ES = educational/scientific value
UH = uniqueness/heritage
VQ = visual quality/aesthetics
ESH = endangered/threatened species habitat

Key to function/value occurrence symbols:

Blank space = function/value is not occurring in this system
X = system is capable of performing this function/value, though it is not considered a principal function/value
P = function/value is occurring in this system and is considered a principal function/value

P:\17.0028320.00 CH2MHill\FVA\06d_17.0028320.00 FVATable.docm

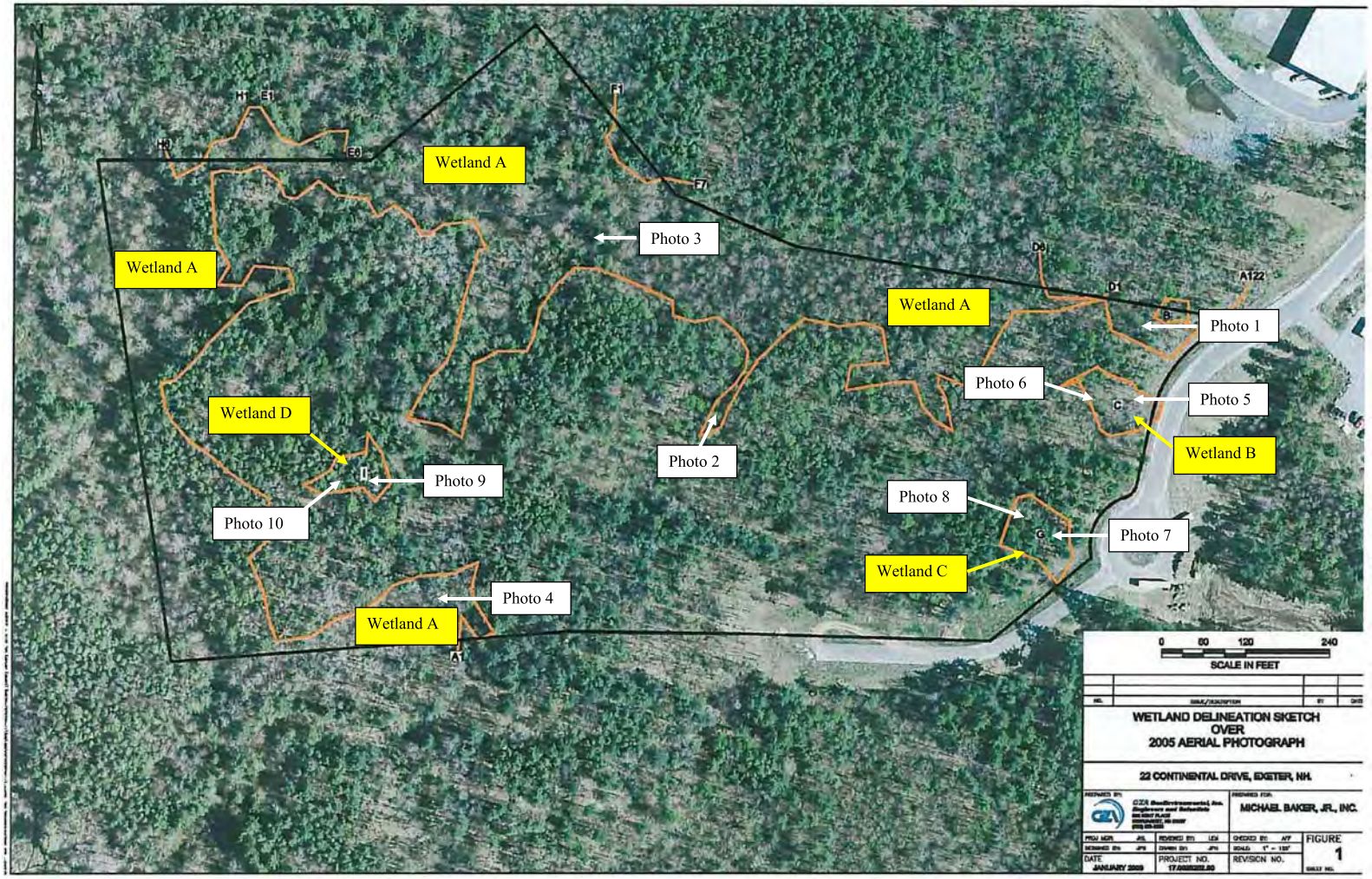
APPENDICES

APPENDIX A

WETLAND IDENTIFICATION AND PHOTO LOCATION PLAN

WETLAND IDENTIFICATION AND PHOTO LOCATION PLAN

22 Continental Drive
Tax Map 46, Lot 4
Exeter, New Hampshire



APPENDIX B

WETLAND FUNCTIONS-VALUES EVALUATION FORMS

Wetland Description: The Wetland A complex contains a diversity of four different wetland classes in varying stretches. The interior, more forested system identified in the northeasterly portion of the system, along with any drainage saddles emanating from overland flow with hydrologic contributions to the overall wetland complex, are classified as palustrine forested broad leaved deciduous wetland systems with deciduous and needle-leaved evergreen vegetation that are seasonally flooded or saturated (PFO1/4E). The generally northerly and northwesterly portion of this wetland system is classified as a palustrine scrub-shrub wetland system that is seasonally flooded or saturated (PSS1E) with several dead and dying red maple (*Acer rubrum*) trees, while the southwesterly extent is classified as a combination of a palustrine emergent persistent wetland system that is seasonally flooded or saturated and PSS/PEM1E. The main portion of the complex along the margin of the site derives it hydrology from overland flow with hydrologic input from the drainage saddles located in the interior portion of the site and contributes to the perennial water course, Little River, located to the west and a Town of Exeter Prime Wetland several hundred feet from the site.	File Number: 17.0028320.00 Wetland Identifier A Latitude: Longitude: Preparer(s): Sergio Bonilla, PWS, CWS Area: 317,531 sq. ft. Date: 4/20/10

Function/Value	Capability Y	Capability N	Summary	Principal Yes/No
Groundwater Recharge/Discharge	X		The majority of the Wetland A contains a marine clay component in the very-poorly drained areas. Therefore, the capability to rapidly recharge groundwater tables is limited onsite. In addition, the gradient of the interior forested drainage saddles precludes rapid infiltration of any surface water. Groundwater contributes hydrology to the wetland system (i.e., discharge).	**NO**
Floodflow Alteration	X		As Wetland A is hydrologically contiguous with Little River, it is capable of proving flood storage potential; however, based on the FEMA Firmette, designated flood zones do not appear to extend onto the site.	**NO**
Fish and Shellfish Habitat		X	None of the wetland classes included in this wetland system appear to have the appropriate hydroperiod to sustain a fish population, therefore there is no capability for fish and shellfish habitat.	**NO**
Sediment/Toxicant Retention	X		Wetland is large in size, has the ability to retain large amounts of water, and has dense vegetation in some areas. Potential source exists to the east; however, does not appear to be a significant source of sediment.	**NO**
Nutrient Removal	X		The emergent and scrub shrub portion of the wetland system may provide the function of nutrient removal with the dense herbaceous community in areas that receive full sun. The herbaceous vegetation may serve to metabolize natural nutrient load; however excessive, anthropogenic nutrients are not likely contributing to this system in the undeveloped condition.	**NO**
Production Export	X		Wildlife food sources available on a small scale, production export is limited to food removal by wildlife.	**NO**
Sediment/Shoreline Stabilization		X	Lacks shoreline or streambank.	**NO**
Wildlife Habitat	X		Wetland is large in size and contains multiple habitat types. Evidence of diverse wildlife use was observed. The association of this wetland to Little Brook located offsite, can be considered important as a small-scale corridor for wildlife movement.	**YES**
Recreation		X	Wetland offers no recreational opportunities.	**NO**
Educational/Scientific Value	X		Wetland contains multiple wetland classes, and multiple functions and values. Wetland is located on private property, limiting this function.	**NO**
Uniqueness/Heritage		X	Wetland contains a diversity of systems; however, none by themselves are unique to this area of New Hampshire, limiting this value.	**NO**
Visual Quality/Aesthetics	X		Portions of the wetland contrast with the surrounding upland, and viewing locations are present. However, the wetland is located on private property.	**NO**
ES Endangered Species Habitat	X		Wetland A is capable of providing habitat for the three species of concern identified by the NHB; however, none were observed in Wetland A during the time of the site assessment; therefore, it is not considered a principal value.	**NO**
Other			See attached report, as well as wildlife and plant lists	

Notes:

*attach list of considerations

Wetland Description: Wetland B is classified as a palustrine forested broad leaved deciduous and needle-leaved evergreen wetland system that is seasonally flooded or saturated (PFO1/4E). This wetland is a small isolated system that is most likely supported by perched water tables.	File Number: 17.0028320.00
	Wetland Identifier B
	Latitude: Longitude:
	Preparer(s): Sergio Bonilla, PWS, CWS
	Area: 6,907 sq. ft.
	Date: 4/20/10

Function/Value	Capability Y	Capability N	Summary	Principal Yes/No
Groundwater Recharge/Discharge		X	Not capable due to restrictive features. The wetland hydrology is supported by surface water.	NO
Floodflow Alteration		X	Limited due to small size of wetlands and lack of association with a watercourse.	NO
Fish and Shellfish Habitat		X	None of the wetland classes included in this wetland system appear to have the appropriate hydroperiod to sustain a fish population, therefore there is no capability for fish and shellfish habitat.	NO
Sediment/Toxicant Retention		X	No fish or shellfish habitat present.	NO
Nutrient Removal		X	Wetlands lack dense herbaceous vegetation for sediment/toxicant retention, wetlands also lack a source and long duration water retention.	NO
Production Export	X		Wildlife food sources available on a small scale, production export is limited to food removal by wildlife.	NO
Sediment/Shoreline Stabilization		X	Lacks shoreline or streambank.	NO
Wildlife Habitat		X	Wetlands too small and fragmented to provide habitat for wetland species. No evidence of utilization by primary vernal pool indicator species was observed.	NO
Recreation		X	Wetland offers no recreational opportunities.	NO
Educational/Scientific Value		X	Wetlands contain only one wetland class, and offer no educational or scientific value.	NO
Uniqueness/Heritage		X	Wetlands are not locally rare or unique.	NO
Visual Quality/Aesthetics		X	Wetlands are small and contain only one wetland class on private property.	NO
ES Endangered Species Habitat		X	None observed or known to occur.	NO
Other			See attached report, as well as wildlife and plant lists	

Notes:

*attach list of considerations

Wetland Description: Wetland C is classified as a palustrine forested broad leaved deciduous and needle-leaved evergreen wetland system that is seasonally flooded or saturated (PFO1/4E). This wetland is a small isolated system that is most likely supported by perched water tables.	File Number: 17.0028320.00
	Wetland Identifier C
	Latitude: Longitude:
	Preparer(s): Sergio Bonilla, PWS, CWS
	Area: 7,549 sq. ft.
	Date: 4/20/10

Function/Value	Capability Y	Capability N	Summary	Principal Yes/No
Groundwater Recharge/Discharge		X	Not capable due to restrictive features. The wetland hydrology is supported by surface water.	NO
Floodflow Alteration		X	Limited due to small size of wetlands and lack of association with a watercourse.	NO
Fish and Shellfish Habitat		X	None of the wetland classes included in this wetland system appear to have the appropriate hydroperiod to sustain fish population, therefore there is no capability for fish and shellfish habitat.	NO
Sediment/Toxicant Retention		X	No fish or shellfish habitat present.	NO
Nutrient Removal		X	Wetlands lack dense herbaceous vegetation for sediment/toxicant retention, wetlands also lack a source and long duration water retention.	NO
Production Export	X		Wildlife food sources available on a small scale, production export is limited to food removal by wildlife.	NO
Sediment/Shoreline Stabilization		X	Lacks shoreline or streambank.	NO
Wildlife Habitat		X	Wetlands too small and fragmented to provide habitat for wetland species. No evidence of utilization by primary vernal pool indicator species was observed.	NO
Recreation		X	Wetland offers no recreational opportunities.	NO
Educational/Scientific Value		X	Wetlands contain only one wetland class, and offer no educational or scientific value.	NO
Uniqueness/Heritage		X	Wetlands are not locally rare or unique.	NO
Visual Quality/Aesthetics		X	Wetlands are small and contain only one wetland class on private property.	NO
ES Endangered Species Habitat		X	None observed or known to occur.	NO
Other			See attached report, as well as wildlife and plant lists	

Notes:

*attach list of considerations

Wetland Description: Wetland D is classified as a palustrine forested broad leaved deciduous and needle-leaved evergreen wetland system that is seasonally flooded or saturated (PFO1/4E). This wetland is a small isolated system that is most likely supported by perched water tables.	File Number: 17.0028320.00
	Wetland Identifier D
	Latitude: Longitude:
	Preparer(s): Sergio Bonilla, PWS, CWS
	Area: 5,166 sq. ft.
	Date: 4/20/10

Function/Value	Capability Y	Capability N	Summary	Principal Yes/No
Groundwater Recharge/Discharge		X	Not capable due to restrictive features. The wetland hydrology is supported by surface water.	NO
Floodflow Alteration		X	Limited due to small size of wetlands and lack of association with a watercourse.	NO
Fish and Shellfish Habitat		X	None of the wetland classes included in this wetland system appear to have the appropriate hydroperiod to sustain a fish population, therefore there is no capability for fish and shellfish habitat.	NO
Sediment/Toxicant Retention		X	No fish or shellfish habitat present.	NO
Nutrient Removal		X	Wetlands lack dense herbaceous vegetation for sediment/toxicant retention, wetlands also lack a source and long duration water retention.	NO
Production Export	X		Wildlife food sources available on a small scale, production export is limited to food removal by wildlife.	NO
Sediment/Shoreline Stabilization		X	Lacks shoreline or streambank.	NO
Wildlife Habitat		X	Wetlands too small to provide habitat for wetland species. No evidence of utilization by primary vernal pool indicator species was observed.	NO
Recreation		X	Wetland offers no recreational opportunities.	NO
Educational/Scientific Value		X	Wetlands contain only one wetland class, and offer no educational or scientific value.	NO
Uniqueness/Heritage		X	Wetlands are not locally rare or unique.	NO
Visual Quality/Aesthetics		X	Wetlands are small and contain only one wetland class on private property.	NO
ES Endangered Species Habitat		X	None observed or known to occur.	NO
Other			See attached report, as well as wildlife and plant lists	

Notes: *attach list of considerations

APPENDIX C

PLANT SPECIES LIST

PLANT SPECIES LIST

Wetland Function and Values Assessment
Tax Map 46, Lot 4
22 Continental Drive
Exeter, New Hampshire

WETLAND A

COMMON NAME	SCIENTIFIC NAME
Herbaceous layer:	
Sensitive fern	*Onoclea sensibilis*
Cinnamon fern	*Osmunda cinnamomea*
Tussock sedge	*Carex stricta*
Sedges	*Carex* spp.
Royal fern	*Osmunda regalis*
Sphagnum moss	*Sphagnum* spp.
Goldthread	*Coptis trifolia*
Bristly dewberry	*Rubus hispidus*
Partridgeberry	*Mitchella repens*
Teaberry	*Gaultheria procumbens*
Wild sarsasparilla	*Aralia nudicaulis*
Blue flag iris	*Iris versicolor.*
Hayscented fern	*Dennstaedtia punctilobula*
Black cherry	*Prunus serotina*
Tree clubmoss	*Lycopodium obscurum*
Canada mayflower	*Maianthemum canadense*
Starflower	*Trientalis borealis*
Reed canary grass	*Phalaris arundinacea*
Scouring rush	*Equistetum arvense*
Wood anemone	*Anemone quinquefolia*
Shrubs:	
Highbush blueberry	*Vaccinium corymbosum*
Beaked hazelnut	*Corylus cornuta*
American beech	*Fagus grandifolia*
Winterberry holly	*Ilex verticillata*
Black birch	*Betula lenta*
White pine	*Pinus strobus*
Red maple	*Acer rubrum*
Elderberry	*Sambucus canadensis*
Eastern hemlock	*Tsuga canadensis*
Skunk currant	*Ribes glandulosum*
Northern arrowwood	*Viburnum dentatum*
Lowbush blueberry	*Vaccinium angustifolium*
Musclewood	*Carpinus caroliniana*
Morrow's honeysuckle	*Lonicera morrowii*
Wild raisin	*Viburnum cassinoides*
Sheep laurel	*Kalmia angustifolium*
Steeplebush	*Spiraea tomentosa*
Meadowsweet	*Spiraea latifolia*

PLANT SPECIES LIST

Wetland Function and Values Assessment
Tax Map 46, Lot 4
22 Continental Drive
Exeter, New Hampshire

(Wetland A, continued)

Saplings:

American elm	*Ulmus americana*
American beech	*Fagus grandifolia*
Red maple	*Acer rubrum*
White pine	*Pinus strobus*

Trees:

Red maple	*Acer rubrum*
White oak	*Quercus alba*
Black cherry	*Prunus serotina*
Eastern hemlock	*Tsuga canadensis*
Shagbark hickory	*Carya ovata*
White pine	*Pinus strobus*

PLANT SPECIES LIST

Wetland Function and Values Assessment
Tax Map 46, Lot 4
22 Continental Drive
Exeter, New Hampshire

WETLAND B

COMMON NAME	SCIENTIFIC NAME
Herbaceous layer:	
Soft rush	*Juncus effusus*
Cinnamon fern	*Osmunda cinnamomea*
Sedges	*Carex* spp.
Teaberry	*Gaultheria procumbens*
Goldthread	*Coptis trifolia*
Lowbush blueberry	*Vaccinium angustifolium*
Bristly dewberry	*Rubus hispidus*
Canada mayflower	*Maianthemum canadense*
Shrubs:	
Highbush blueberry	*Vaccinium corymbosum*
Sheep laurel	*Kalmia angustifolium*
Winterberry holly	*Ilex verticillata*
Lowbush blueberry	*Vaccinium angustifolium*
Speckled alder	*Alnus rugosa*
Red maple	*Acer rubrum*
Saplings:	
Shagbark hickory	*Carya ovata*
Trees:	
Red maple	*Acer rubrum*
White pine	*Pinus strobus*
American beech	*Fagus grandifolia*

PLANT SPECIES LIST

Wetland Function and Values Assessment
Tax Map 46, Lot 4
22 Continental Drive
Exeter, New Hampshire

WETLAND C

COMMON NAME	SCIENTIFIC NAME
Herbaceous layer:	
Partridgeberry	*Mitchella repens*
Cinnamon fern	*Osmunda cinnamomea*
Sedges	*Carex* spp.
Soft rush	*Juncus effusus*
Teaberry	*Gaultheria procumbens*
Goldthread	*Coptis trifolia*
Shrubs:	
Highbush blueberry	*Vaccinium corymbosum*
Lowbush blueberry	*Vaccinium angustifolium*
Sheep laurel	*Kalmia angustifolium*
Winterberry holly	*Ilex verticillata*
Black huckleberry	*Gaylussacia baccata*
Red maple	*Acer rubrum*
Saplings:	
Red maple	*Acer rubrum*
Trees:	
Red maple	*Acer rubrum*
Eastern hemlock	*Tsuga canadensis*
White pine	*Pinus strobus*

PLANT SPECIES LIST

Wetland Function and Values Assessment
Tax Map 46, Lot 4
22 Continental Drive
Exeter, New Hampshire

WETLAND D

COMMON NAME	SCIENTIFIC NAME
Herbaceous layer:	
Partridgeberry	*Mitchella repens*
Cinnamon fern	*Osmunda cinnamomea*
Sedges	*Carex* spp.
Soft rush	*Juncus effusus*
Canada mayflower	*Maianthemum canadense*
Teaberry	*Gaultheria procumbens*
Goldthread	*Coptis trifolia*
Wood anemone	*Anemone quinquefolia*
Starflower	*Trientalis borealis*
Bristly dewberry	*Rubus hispidus*
Christmas fern	*Polystichum acrostichoides*
Shrubs:	
Highbush blueberry	*Vaccinium corymbosum*
Alternate-leaved dogwood	*Cornus alternifolia*
Red maple	*Acer rubrum*
Black cherry	*Prunus serotina*
Winterberry holly	*Ilex verticillata*
Northern arrowood	*Viburnum dentatum*
Wild raisin	*Viburnum cassinoides*
Raspberry	*Rubus* spp.
Saplings:	
Shagbark hickory	*Carya ovata*
Trees:	
Red maple	*Acer rubrum*
White oak	*Quercus alba*
White pine	*Pinus strobus*

APPENDIX D

POTENTIAL AND OBSERVED WILDLIFE SPECIES LIST

Potential and Observed Wildlife Species List

Wildlife Species						
Common Name	**Scientific Name**	**Status***	**Wetland A**	**Wetland C**	**Wetland G**	**Wetland I**
Eastern American toad	*Bufo americanus*		X	X	X	O
Northern spring peeper	*Psuedacris crucifer*		X		X	X
Gray treefrog	*Hyla versicolor*		X	X	O	X
Green frog	*Rana clamitans melanota*		X	X	X	X
Bullfrog	*Rana catesbiana*		X	X	X	X
Four-toed salamander	*Hemidactylium scutatum*		O			
Painted turtle	*Chrysemys picta*		X			
Northern brown snake	*Storeria d. dekayi*		X	X	X	X
Eastern garter snake	*Thamnophis s. sirtalis*		X	X	X	O
Sharp-shinned hawk	*Accipiter striatus*		X	X	X	X
Red-tailed hawk	*Buteo jamaicensis*		X	X	X	X
Ruffed grouse	*Bonasa umbellus*		X	X	X	X
American woodcock	*Scolopax minor*		X	X	X	X
Wild turkey	*Meleagris gallopavo*		X	X	X	X
Mourning dove	*Zenaida macroura*		X	X	X	X
Great horned owl	*Bubo virginianus*		X	X	X	X
Northern saw whet owl	*Aegolius acadius*			X	X	X
Barred owl	*Strix varia*		X	X	X	X
Black-throated blue warbler	*Dendroica caerulescens*		X	X	O	O
Swamp sparrow	*Melospiza georgiana*		X			
Cedar waxwing	*Bombycilla cedrorum*		X	X	X	X
Great crested flycatcher	*Myiarchus crinitus*		X			
Red-winged blackbird	*Agelaius phoeniceus*		X			
American redstart	*Setophaga ruticilla*		X	X	X	X
Common yellowthroat	*Geothlypis trichas*		X	X	X	X
Alder flycatcher	*Empidonax alnorum*		X			
Eastern phoebe	*Sayornis phoebe*		X	X	X	X
Downy woodpecker	*Picoides pubescens*		X	X	X	X
Hairy woodpecker	*Picoides villosus*		O	X	O	X
Pileated woodpecker	*Drycopus pileatus*		X	X	X	X
Red-eyed vireo	*Vireo olivaceus*		X	X	X	X
Blue jay	*Cyanocitta cristata*		X	O	O	X
American crow	*Corvus brachyrhynchos*		X	X	X	X
Black-capped chickadee	*Poecile articapillus*		X	O	O	O
Tufted titmouse	*Baeolophus bicolor*		X	X	O	X
White-breasted nuthatch	*Sitta carolinensis*		X	O	O	O
American robin	*Turdus migratorius*		X	O	O	X
Veery	*Catharus fuscesens*		X	X	X	X
Wood thrush	*Hylocichla mustelina*		X	X	X	X
Yellow warbler	*Dendroica petechia*		X	X	X	X
Chipping sparrow	*Spizella passerina*		X	X	X	X
Scarlet tanager	*Piranga olivacea*		X	X	X	X
Northern oriole	*Icturus galbula*		X	X	X	X
Northern short-tailed shrew	*Blarina brevicauda*		X	X	X	X
Star-nosed mole	*Condylura cristata*		X	X	X	X
Eastern pipstrelle	*Pipistrellus subflavus*		X	X	X	X
Red fox	*Vulpes vulpes*		X	X	X	X
Little brown myotis	*Myotis lucifugus*		X	X	X	X
Virginia opossum	*Didelphis virginiana*			X	X	X
Eastern coyote	*Canis latrans*			X	X	X
Raccoon	*Procyon lotor*			X	X	X
White-tailed deer	*Odocoileus virginianus*		O	X	O	O

A species is considered observed when an animal is seen or presence is verified by tracks, scat, call or song. Observed species are indicated by an "O" and potential species (i.e. those that may use the property based on available habitat types) are indicated by an "X".

*Species that are listed as Threatened, Endangered, or Species of Special Concern are indicated by a "T", "E", and "S", respectively.

APPENDIX E

PHOTO LOG

PHOTO LOG

Wetland Functions and Values Assessment
Tax Map 46, Lot 4
22 Continental Drive
Exeter, New Hampshire

Photographs taken April 20, 2010

PHOTOGRAPH NO. 1 - Facing westerly at the upper portion of Wetland A closest to Continental Drive.

PHOTOGRAPH NO. 2 - Facing northerly at one of several wetland drainage projections associated with and hydrologically contiguous with Wetland A.

PHOTO LOG

Wetland Functions and Values Assessment
Tax Map 46, Lot 4
22 Continental Drive
Exeter, New Hampshire

Photographs taken April 20, 2010

PHOTOGRAPH NO. 3 - Facing westerly at the scrub-shrub habitat on the northern portion of Wetland A.

PHOTOGRAPH NO. 4 - Looking at an eastern garter snake (*Thamnophis sirtalis*) encountered within a forested wetland drainage projection on the southerly extent of Wetland A.

PHOTO LOG

Wetland Functions and Values Assessment
Tax Map 46, Lot 4
22 Continental Drive
Exeter, New Hampshire

Photographs taken April 20, 2010

PHOTOGRAPH NO. 5 - Facing easterly at isolated Wetland B located directly adjacent to the cul-de-sac of Continental Drive.

PHOTOGRAPH NO. 6 - Facing westerly at isolated Wetland B located directly adjacent to the cul-de-sac of Continental Drive. Note tire ruts within the wetland.

PHOTO LOG

Wetland Functions and Values Assessment
Tax Map 46, Lot 4
22 Continental Drive
Exeter, New Hampshire

Photographs taken April 20, 2010

PHOTOGRAPH NO. 7 - Facing easterly at isolated Wetland C located directly adjacent to the cul-de-sac of Continental Drive.

PHOTOGRAPH NO. 8 - Facing westerly at isolated Wetland C located directly adjacent to the cul-de-sac of Continental Drive.

PHOTO LOG

Wetland Functions and Values Assessment
Tax Map 46, Lot 4
22 Continental Drive
Exeter, New Hampshire

Photographs taken April 20, 2010

PHOTOGRAPH NO. 9 - Facing westerly at isolated Wetland D located approximately 70 feet upgradient of the southwesterly portion of Wetland A.

PHOTOGRAPH NO. 10 - Facing northeasterly at isolated Wetland D.

APPENDIX F

NEW HAMPSHIRE NATURAL HERITAGE BUREAU DATABASE REVIEW

Memo

NH Natural Heritage Bureau

To: Sergio Bonilla, NHSC, Inc.
202 Kent PLace
Newmarket, NH 03857

From: Melissa Coppola, NH Natural Heritage Bureau
Date: 5/4/2010 1:43:37 PM (valid for one year from this date)
Re: Review by NH Natural Heritage Bureau
NHB File ID: NHB10-0957 Town: Exeter
Project type: Buildings and Related Structures: Single commercial building lot Location: Continental Drive
cc: Kim Tuttle

As requested, I have searched our database for records of rare species and exemplary natural communities, with the following results.

Comments:

Plant species	**State**[1]	**Federal**	**Notes**
Slender Blue Flag (*Iris prismatica*)	E	--	Since this plant grows at wetland edges (marshes, wet meadows, seashore), it would be threatened by changes in local water levels or shoreside development.

Vertebrate species	**State**[1]	**Federal**	**Notes**
Great Blue Heron (Rookery) (*Ardea herodias*)	--	--	Contact the NH Fish & Game Dept (see below).
Least Bittern (*Ixobrychus exilis*)	SC	--	Contact the NH Fish & Game Dept (see below).
Northern Black Racer (*Coluber constrictor constrictor*)	T	--	Contact the NH Fish & Game Dept (see below).

[1]Codes: "E" = Endangered, "T" = Threatened, "--" = an exemplary natural community, or a rare species tracked by NH Natural Heritage that has not yet been added to the official state list. An asterisk (*) indicates that the most recent report for that occurrence was more than 20 years ago.

Contact for all animal reviews: Kim Tuttle, NH F&G, (603) 271-6544.

A negative result (no record in our database) does not mean that a sensitive species is not present. Our data can only tell you of known occurrences, based on information gathered by qualified biologists and reported to our office. However, many areas have never been surveyed, or have only been surveyed for certain species. For some purposes, including legal requirements for state wetland permits, the fact that no species of concern are known to be present is sufficient. However, an on-site survey would provide better information on what species and communities are indeed present.

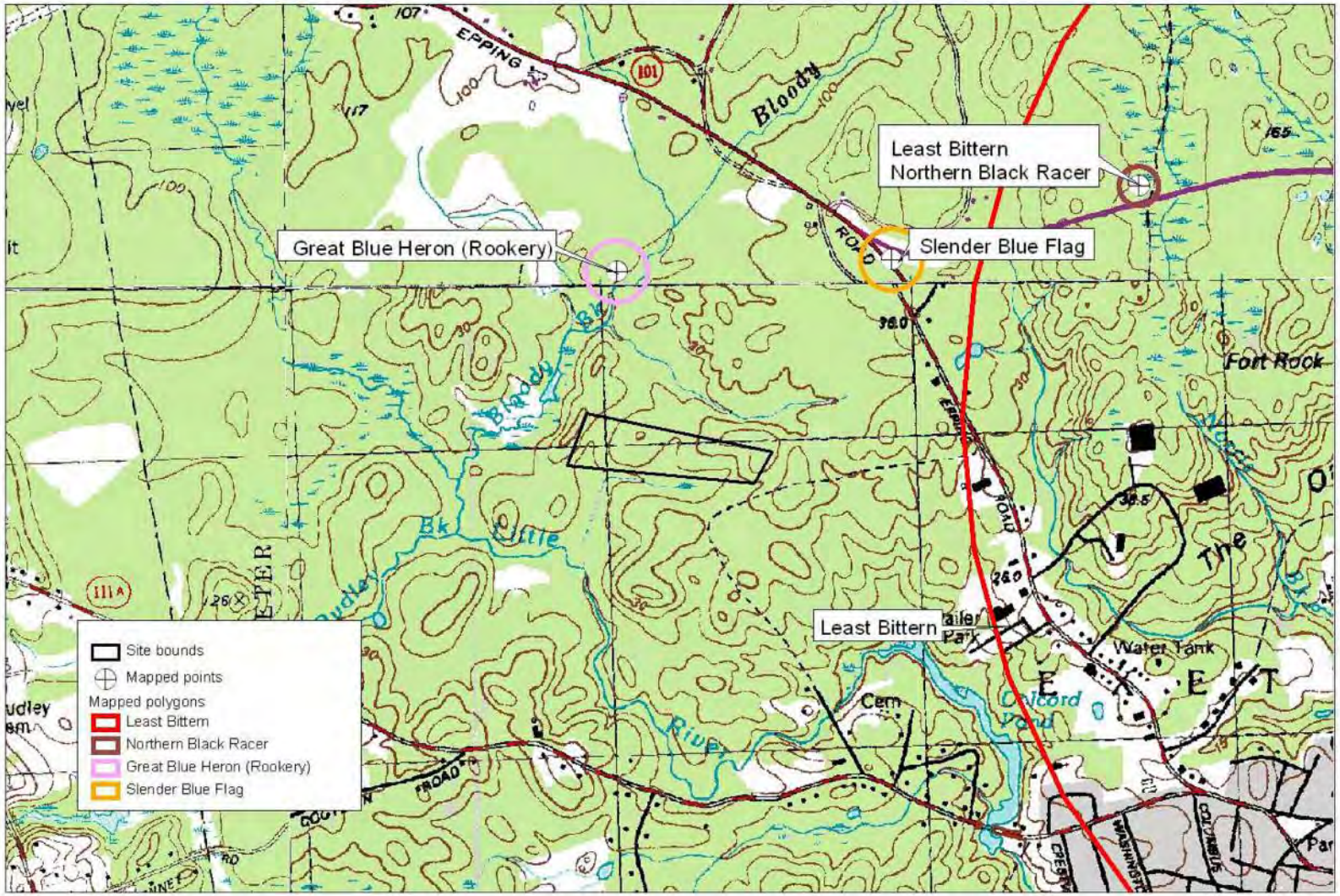
Department of Resources and Economic Development
Division of Forests and Lands
(603) 271-2214 fax: 271-6488

DRED/NHB
PO Box 1856
Concord NH 03302-1856

NH NATURAL HERITAGE BUREAU

Known locations of rare species and exemplary natural communities

Note: Mapped locations are not always exact. Occurrences that are not in the vicinity of the project are not shown.



*Historical record

1:18000

Valid for one year from this date: 11 Jun 2010

New Hampshire Natural Heritage Bureau - Plant Record

Slender Blue Flag (*Iris prismatica*)

Legal Status

Federal: Not listed
State: Listed Endangered

Conservation Status

Global: Apparently secure but with cause for concern
State: Critically imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 1991: 100 plus plants.
General Area: 1991: Roadside wet ditch with *Pogonia ophioglossoides* (rose pogonia).
General Comments:
Management Comments:

Location

Survey Site Name: Junction of Rtes. 101 and 27
Managed By:

County: Rockingham
Town(s): Exeter
Size: 7.7 acres

USGS quad(s): Newmarket (4307018)
Lat, Long: 430003N, 0705832W
Elevation:

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: 1991: corner of Rtes 101 and 27

Dates documented

First reported: 1991-06-15
Last reported: 1991-06-15

New Hampshire Natural Heritage Bureau - Animal Record

Great Blue Heron (Rookery) (*Ardea herodias*)

Legal Status

Federal: Not listed
State: Not listed

Conservation Status

Global: Demonstrably widespread, abundant, and secure
State: Not ranked (need more information)

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 2003: 16 active nests with 32 adults and 20+ young.
General Area: 2003: Freshwater marsh or swamp.
General Comments: 2003: Good remote location with little disturbance from People. Photos take by Eric Orff.
Management Comments:

Location

Survey Site Name: Bloody Brook
Managed By: Conner Farm WMA

County: Rockingham
Town(s): Exeter
Size: 7.7 acres

USGS quad(s): Newmarket (4307018)
Lat, Long: 430002N, 0705911W
Elevation:

Precision: Within (but not necessarily restricted to) the area indicated on the map.

Directions: 2003: South of Rte 101 on Blood Brook at Connor Farm Wildlife Management Area.

Dates documented

First reported: 2003
Last reported: 2003

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Least Bittern (*Ixobrychus exilis*)

Legal Status

Federal: Not listed
State: SC

Conservation Status

Global: Demonstrably widespread, abundant, and secure
State: Not ranked (need more information)

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 1994: One juvenile observed.
General Area:
General Comments:
Management Comments:

Location

Survey Site Name: Exeter Sewage Lagoons
Managed By: Henderson-Swasey Town Forest

County: Rockingham
Town(s): Exeter
Size: 4592.3 acres

USGS quad(s): Exeter (4207088)
Lat, Long: 425945N, 0705634W
Elevation: 50 feet

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: [From Rte 101 in Exeter, take Newfields Road heading south to the Sewage Ponds.]

Dates documented

First reported: 1994-09-03
Last reported: 1994-09-03

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

New Hampshire Natural Heritage Bureau - Animal Record

Northern Black Racer (*Coluber constrictor constrictor*)

Legal Status

Federal: Not listed
State: Listed Threatened

Conservation Status

Global: Demonstrably widespread, abundant, and secure
State: Imperiled due to rarity or vulnerability

Description at this Location

Conservation Rank: Not ranked
Comments on Rank:

Detailed Description: 1991: One adult observed.
General Area: 1991: Roadside.
General Comments: 1991: Snake was observed sunning itself by Andy Soha.
Management Comments:

Location

Survey Site Name: Rte. 101
Managed By:

County: Rockingham
Town(s): Exeter
Size: 3.1 acres

USGS quad(s): Newmarket (4307018)
Lat, Long: 430010N, 0705757W
Elevation: 160 feet

Precision: Within 1.5 miles of the area indicated on the map (location information is vague or uncertain).

Directions: In Exeter, on the north side of Rte. 101, 1/2 mile east of traffic light.

Dates documented

First reported: 1991-09-08
Last reported: 1991-09-08

The New Hampshire Fish & Game Department has jurisdiction over rare wildlife in New Hampshire. Please contact them at 11 Hazen Drive, Concord, NH 03301 or at (603) 271-2461.

Appendix K
Economic Impact Forecast System

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ECONOMIC IMPACT FORECAST SYSTEM

THE NEED FOR SOCIOECONOMIC IMPACT ASSESSMENT

Assessing socioeconomic impacts that result from Federal agency actions can be one of the more controversial issues related to the relocation of an installation. The economic and social well-being of a local community can be dependent upon the activities of an installation. The objective of a socioeconomic analysis of Federal agency actions is an open, realistic, and documented assessment of the potential effects.

The requirement to assess socioeconomic impacts in environmental assessments (EAs) or environmental impact statements (EISs) has been a source of legal discussion since the passage of the National Environmental Policy Act (NEPA). Although NEPA is predominantly oriented toward the biophysical environment, court decisions have supported the need for analyzing socioeconomic impacts when they are accompanied by biophysical impacts.

THE ECONOMIC IMPACT FORECAST SYSTEM

The U.S. Army developed the Economic Impact Forecast System (EIFS) with the assistance of many academic and professional economists and regional scientists to address the economic impacts pursuant to NEPA and to measure the significance of the impacts. EIFS is designed for the scrutiny of a populace affected by the actions being studied. The algorithms in EIFS are simple and easy to understand, but still have firm, defensible bases in regional economic theory.

EIFS, in its current form, exists as a World Wide Web-based application. The application resides on a Web server hosted by the U.S. Army Corps of Engineers, Mobile District. The EIFS model is available to U.S. government employees, contractors, and other people who have an approved login and password. U.S. Army Corps of Engineers planners, analysts and their contractors are authorized to access the EIFS application for the purpose of preparing the Proposed Base Closure and Realignment (BRAC) for Construction and Operation of a New Armed Forces Reserve Center in the vicinity of Pease Air National Guard Base in New Hampshire and other documentation as authorized.

As currently configured, EIFS provides:

- Selected statistics about the socioeconomic characteristics of any county or any multi-county area in the United States, including metropolitan statistical areas (MSA) and planning commission regions.
- An analytical process for estimating the magnitude and significance of potential socioeconomic effects of proposed Federal agency activities in these areas.

THE EIFS IMPACT MODEL

The basis of the EIFS analytical capabilities is the calculation of multipliers that are used for estimating the impacts resulting from U.S. Army-related changes in local expenditures and employment. In calculating the multipliers, EIFS uses the economic base model approach that relies on the ratio of total economic activity to "basic" economic activity. Basic, in this context, is defined as the production or employment engaged to supply goods and services outside the Region of Influence (ROI) (in this case Rockingham County) or by Federal activities (such as military installations and their employees). According to economic base theory, the ratio of total income to basic income is measurable (as the multiplier) and sufficiently stable so that future changes in economic activity can be forecast. This technique is especially appropriate for estimating "aggregate" impacts and makes the economic base model ideal for the EA/EIS process.

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

The EIFS model produces output that includes:

- Change in total sales by local businesses
- Change in total income
- Change in total employment
- Change in total population
- The significance of these changes

THE SIGNIFICANCE OF SOCIOECONOMIC IMPACTS

Once model projections are obtained, the rational threshold values (RTV) enable the user to evaluate the significance of the impacts. This analytical tool shows the historical trends for the defined region and develops measures of local historical fluctuations in sales volume, employment, income, and population. The evaluation identifies a range of positive and negative changes, within which a project can affect the local economy without creating a significant impact.

The techniques have two major strengths: (1) they are specific to the region under analysis and (2) they are based on actual historical time series data for the defined region. The use of the EIFS impact model in combination with the RTV has proven very successful in addressing perceived socioeconomic impacts. The EIFS model and the significance-measuring techniques are theoretically sound and have been reviewed on numerous occasions.

RTVs are positive and negative percent changes that establish an acceptable range around the maximum historic percentage fluctuations in the ROI. The average yearly decreases or increases in the ROI are obtained by analyzing regional data for the last 16 to 19 years, depending on data availability. For each variable (sales volume, employment, income, and population), the current time-series data available from the U.S. Bureau of Economic Analysis (BEA) for the ROI is used. The average annual change is calculated as the difference between the first and last observations in the particular data set, divided by the number of years in the time series. The maximum percent positive and negative deviations from that average are the basis for the RTVs.

Negative RTVs are percentages of the maximum negative deviations. These percentages are weighted to reflect the severity of potential impacts on individuals. Population changes are the most heavily weighted, at 50 percent, followed by employment and personal income changes (67 percent); changes in sales volume receive the least weight (75 percent). Using population as an example, if the greatest historic negative deviation from the annual average population change in the ROI was -0.952 percent, a population decrease of more than half of that (-0.476 percent) would be considered significant.

Positive RTVs represent the maximum positive historical fluctuation in the ROI, because of the generally positive connotations of economic growth. If the maximum historic positive deviation from annual average employment growth was 2.368 percent, an increase of more than 2.368 percent would be considered significant in the ROI.

Definitions

Change in Local Expenditures: Dollar value of expenditures for all services and supplies that are related to the action. This figure is entered by the user when the local purchases are not known. The system then computes an estimated value for the local purchases. Items supplied by General Services Administration (GSA) or Defense Logistics Agency (DLA) are not normally included in expenditures. A negative value is entered for a decrease in activity and a positive value is used if there is an expansion.

Change in Civilian Employment: Number of civilian personnel affected by the action. These are separated or newly added civilian employees. Personnel shifted from one position to another within the same geographic area should not be included. Enter a positive number for an increase or a negative number for a decrease.

Average Income of Affected Civilian Personnel: Average annual gross (before tax) income of civilian personnel affected by the action. Average income figures are entered as positive numbers. Income, in EIFS, is a broader concept than just the wages and salaries of employees. Consideration should also be given, if possible, to income earned from second jobs, working dependents, unearned income (i.e., interest, dividends, and rents), etc.

Percent of Civilians Expected To Relocate: The actual value will vary depending on work force composition and local availability of labor in the required skill categories. If the employees affected generally are clerical, professional, or highly skilled technical personnel, then it is likely that some of these workers will move to or from other geographic areas. If the action involves a large number of personnel, the proportion of those relocating is also likely to increase.

Employment Multiplier: The export-employment multiplier based on the location quotient methodology.

Income Multiplier: The export-income multiplier based on the location quotient methodology.

Sales Volume – Direct: Direct change in business activity attributable to the Federal action. This represents the change in sales volume at local retail and wholesale service establishments where civilian personnel spend their wages and salaries and where local procurements are made. Housing expenditures are also included in this variable.

Sales Volume – Induced: Induced change in local business volume due to the Federal action. Defined as the difference between total change and direct change of local business volume.

Sales Volume – Total: Total change in local business volume due to the Federal action. Business volume is defined as local business activity or sales and is the sum of total retail and wholesale trade sales, total selected service receipts, and value added by manufacturing.

Employment – Direct: Direct change in local employment due to the Federal action. These are establishments that are initially affected by the Federal action.

Employment – Total: Total change in local employment due to the Federal action. This not only includes the direct and secondary changes in local employment, but also includes those Federal personnel who are initially affected by the Federal action.

Income – Direct: Direct change in local wages and salaries due to the Federal action. This is assumed to be earnings of the employees in local retail, wholesale, and service establishments that are initially affected by the Federal action.

Income – Total (place of work): Total change in local wages and salaries earned in the area due to the Federal action. This is the sum of the direct and secondary changes in wages and salaries plus the income of the Federal personnel affected by the Federal action.

Income - Total (place of residence): Total change in local personal income of residents due to the Federal action. This not only includes the direct and secondary changes in local personal income, adjusted for commuting patterns, but also includes the income of the Federal personnel initially affected by the Federal action.

Economic Impact Forecast System
US Army Corps of Engineers
Mobile District

EIFS REPORT

PROJECT NAME

Pease BRAC EA Construction

STUDY AREA

33015 Rockingham, NH

FORECAST INPUT

Change In Local Expenditures	$6,920,000
Change In Civilian Employment	0
Average Income of Affected Civilian	$0
Percent Expected to Relocate	0
Change In Military Employment	0
Average Income of Affected Military	$0
Percent of Militart Living On-post	0

FORECAST OUTPUT

Employment Multiplier	3.09	
Income Multiplier	3.09	
Sales Volume - Direct	$6,920,000	
Sales Volume - Induced	$14,462,800	
Sales Volume - Total	$21,382,800	0.15%
Income - Direct	$1,114,270	
Income - Induced)	$2,328,825	
Income - Total(place of work)	$3,443,096	0.04%
Employment - Direct	28	
Employment - Induced	59	
Employment - Total	87	0.06%
Local Population	0	
Local Off-base Population	0	0%

RTV SUMMARY

	Sales Volume	Income	Employment	Population
Positive RTV	11.38 %	11.93 %	4.77 %	1.96 %
Negative RTV	-9.46 %	-6.07 %	-6.87 %	-1.72 %

******** End of Report ********

Appendix L
Comments Received

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CITY OF PORTSMOUTH

Community Development Department
(603) 610-7232

Planning Department
(603) 610-7216

November 4, 2010

Ms. Betty Beck, Project Manager
U.S. Army Corps of Engineers, Louisville
Romano Mazzoli Federal Building
600 Dr. Martin Luther King, Jr. Place
Louisville, KY 40202

RE: Environmental Assessment and Draft Finding of No Significant Impact for Proposed Construction of an Armed Forces Reserve Center and Implementation of BRAC 05 Realignment Actions in the Vicinity of the Pease Air National Guard Base, New Hampshire

Dear Ms. Beck:

Please allow this letter to serve as written comment on the Environmental Assessment and Draft Finding of No Significant Impact for the construction of an Armed Forces Reserve Center and implementation of BRAC realignment actions in Portsmouth, New Hampshire.

As you may know, earlier this year Portsmouth Mayor Thomas G. Ferrini sent a letter expressing concerns about the appropriateness of the site for the proposed use, including the adverse impact on the City of removing a prime commercial property from the tax rolls. Having now reviewed the Environmental Assessment and the Draft Finding of No Significant Impact, we are concerned that the site selection process did not adequately consider other potential sites in Portsmouth that would have better regional highway access and better compatibility with surrounding uses, including greater proximity to similar facilities.

Alternatives Analysis

Generally speaking, the City would prefer a site closer to both Interstate 95 and the Pease Air National Guard Base than the preferred alternative identified in the Environmental Assessment.

The Environmental Assessment states that "land proposed for acquisition and construction of the Armed Forces Reserve Center (AFRC) adjacent to the Pease Air National Guard Base [is] no longer available to the Government" and therefore the law was amended to allow the AFRC to be constructed "in the vicinity of" (rather than "adjacent to") the Pease Air National Guard Base

1 Junkins Avenue
Portsmouth, New Hampshire 03801
Fax (603) 427-1593

(page ES-1). However, the Site Survey Report and Environmental Assessment do not indicate that any other sites at the Pease International Tradeport were investigated. Any such sites would be much closer to the Pease ANG Base than the preferred alternative and would have better regional highway access.

The Environmental Assessment mentions alternative sites that were explored in addition to the three sites which are the subject of the analysis, but does not indicate why some of these sites were not more thoroughly examined for the location of this facility. At least two of these sites, including one in Portsmouth, have better regional highway access and better compatibility with surrounding uses. Additional explanation should be provided for not moving forward with other identified locations that may meet the site requirements listed in the Executive Summary.

The Site Survey Report attached to the Environmental Assessment (Appendix C) includes a site in Portsmouth that would appear to be far better for the AFRC than the selected preferred alternative site. Compared to the preferred alternative, Site #4 has better highway access, is closer to Pease, is more distant from residential neighborhoods, has greater buffering potential, and has a lower assessed valuation on both a gross and net acreage basis. It would therefore appear to be less costly for the Government to acquire and develop, as well as being a less valuable commercial development site. The Site Survey Report states that this site "is located adjacent to a high volume traffic circle and presents life safety as well as AT/FP problems." However, the City is not aware of any life safety issues at this site, and most traffic to the preferred alternative site at 1900 Lafayette Road would pass through the same high-volume traffic circle.

Finally, the Government's current site development plans for 1900 Lafayette Road may not be consistent with the planning and analysis contained in the Environmental Assessment. The Site Survey Report (Appendix C of the Environmental Assessment) states that the parcel at 1900 Lafayette Road does not by itself meet the project requirements, and recommends developing it in combination with an adjacent parcel. The preferred alternative includes both parcels, for a total site area of 10.6 acres (Environmental Assessment, page ES-3; and Finding of No Significant Impact, page 2). However, the owner of the adjacent parcel states that the Army Corps of Engineers has informed him that the Government does not intend to acquire his parcel because it is not needed for the AFRC. This is a significant disparity that needs to be explained.

Land Use

Since the City's land use regulations do not have controlling legal authority over the development of this site by the U.S. Government it is important that the proposed use be in keeping with surrounding uses as much as possible. The Environmental Assessment finds that the proposal will have negligible impact on land use. The City does not agree with this conclusion, and instead contends that the proposed use will be detrimental to the City's goal of redeveloping the Lafayette Road corridor for a mix of high-quality commercial and residential uses.

The proposed use as an Armed Forces Reserve Center is not similar to or compatible with typical uses in the Office Research District (City of Portsmouth Zoning Ordinance, Article 4, Section 10.440 – Table of Uses), or with the Residential zoning district that lies directly across Lafayette Road from the site. Lafayette Road is zoned for either business or residential uses along its entire length; and the proposed AFRC site is bordered by commercial uses on the west side of Lafayette Road and faces an established residential neighborhood across the street. Therefore, an Armed Forces Reserve Center in this location would be out of character with the surrounding uses in this area. There are suitable locations within the City of Portsmouth for this use, but the preferred alternative location is not one of them.

The Environmental Assessment contains some factual errors that undermine the analysis. The EA states that "the project would not require a change in zoning" and "Adjacent land uses are similar to or compatible with the proposed AFRC" (page 4-6). In fact, the project is inconsistent with existing zoning (although the Federal government is not required to comply with local zoning regulations), and there are *no* similar land uses in the surrounding area.

Economic Development

The economic impacts of the proposed action are considered at the county level and are limited to civilian employment and short-term construction impacts. This is an overly narrow approach which leaves out important indirect economic impacts in the local context. For example, the "minor short-term impact" finding does not take into account the significant gap between the economic activity resulting from the proposed action and the economic activity possible with the development of a flat six-acre parcel along a major business corridor. In addition to minimal job creation, the economic vibrancy envisioned for the U.S. Route 1 corridor as laid out in the City's 2005 Master Plan as well as the 2010 Zoning Ordinance will not be realized. This would be a significant impact to the City in terms of corridor vibrancy and economic opportunity for residents.

The section of the report on socioeconomic consequences compares the economic impacts of the proposed project to the existing Doble ARC, but does not consider the long-term impacts of removing a prime commercial site from potential economic uses: in other words, the analysis ignores the *opportunity costs* of the action. No effort has been made to compare the community economic consequences of the preferred alternative to the consequences of using other alternative sites.

Conclusion

Portsmouth has been home to military installations throughout its history, and the City is proud of this tradition. We hope that the Army Corps of Engineers will continue the site selection process and work with City officials to identify an alternative preferred location that will be sensitive to the City of Portsmouth Master Plan and avoid detriment to the City's potential for future economic growth. In addition, the Planning Department and Planning Board would like the opportunity to review and comment on the site plan in accordance with the Federal government's "Good Neighbor" policy.

Thank you for the opportunity to provide comment on the Environmental Assessment. If you have any questions at this time, please do not hesitate to contact me at (603) 610-7290.

Sincerely,

Rick Taintor
Planning Director

copy: John P. Bohenko, City Manager
Cindy Hayden, Deputy City Manager
Planning Board

COPY FOR
City Planner
Rick Taintor
427-1593 FAX

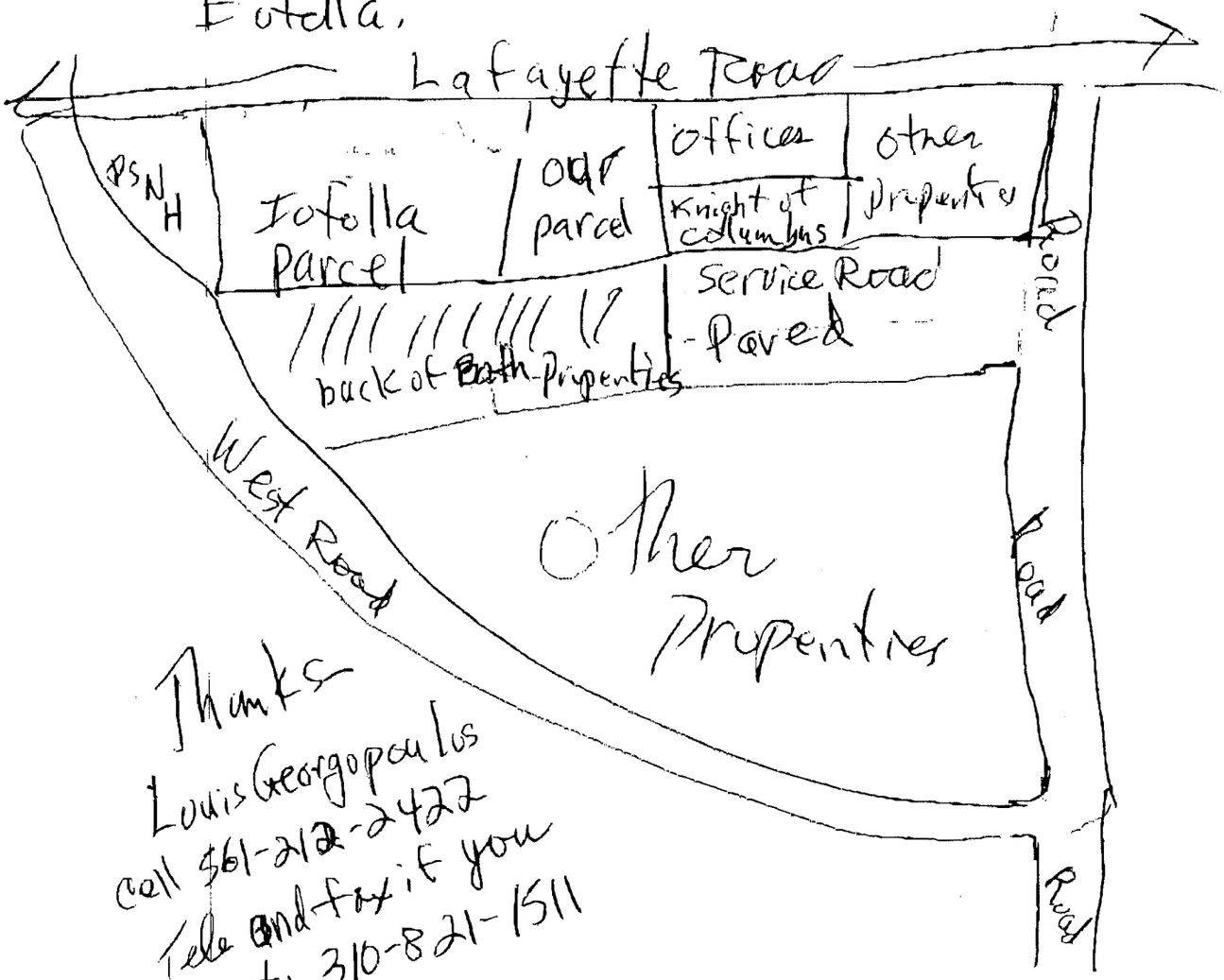
603

10-26-10

FAX FOR
Joe Redlinger
Tele 978-318-8555 FAX 978-318-8867

Dear Joe,

I hope you are going to connect the service road from Iofolla's land and connect with the service road south of our parcel & Iofolla.



Thanks
Louis Georgopoulos
call 561-212-2422
Tele and fax if you
call 1st. 310-821-1511

Army
609-562-7983
10-26-10
Pg 1 of 2

FAX FOR

City Planner, Rick Taintor

Dear Mr. Taintor,

I have enclosed a copy of Fax sent to Joe Redlinger — Nat Guard.

Maybe you can help me find out if they are connecting the service road, from West Road to road paved behind Knights of Columbus; to the road to the South. I should think this would be a requirement of Portsmouth.

Thanks,

Louis Mangopoulos

310-821-1511
Cell- 561-212-2422

Copy: Atty Paul McEachern