

**PROGRAMMATIC AGREEMENT
AMONG
THE NORFOLK DISTRICT, U.S. ARMY CORPS OF ENGINEERS,
THE U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION III,
AND
THE VIRGINIA DEPARTMENT OF HISTORIC RESOURCES
REGARDING THE FORMER NANSEMOND ORDNANCE DEPOT, SUFFOLK, VIRGINIA,
SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
PURSUANT TO 36 CFR § 800.14(b)**

WHEREAS, the Norfolk District (District), U.S. Army Corps of Engineers is investigating and cleaning up ordnance, other unexploded safety hazards and other hazardous substances at the Former Nansemond Ordnance Depot (FNOD), a Formerly Used Defense Site (FUDS), pursuant to Public Law 98-212, the Environmental Restoration Defense Account, and the Defense Environmental Restoration Program (DERP), 10 U.S.C. § 2701 et seq.; and

WHEREAS, the District has determined that the investigation and cleanup of FUDS-related materials at the FNOD is an undertaking under Section 106 of the National Historic Preservation Act that may have an effect on historic properties, specifically archaeological sites, and has consulted with the Virginia State Historic Preservation Officer (SHPO) pursuant to Section 800.14 of the regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. 470f, and have invited the Advisory Council on Historic Preservation (Council) to participate in the consultation; and

WHEREAS, the U.S. Environmental Protection Agency, Region III (EPA) has responded in the past, and continues to respond, to actual or threatened releases of hazardous substances, pollutants or contaminants at the FNOD under the authority of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq.; and

WHEREAS, some of EPA's activities concern releases that the District is authorized to investigate and clean up under DERP, while other EPA activities concern releases that the District is not authorized to investigate or clean up under DERP; and

WHEREAS, EPA has determined that CERCLA response actions that it conducts, assists or oversees at the FNOD, including response actions not authorized by DERP, are undertakings under Section 106 of the National Historic Preservation Act that may have an effect on historic properties, specifically archaeological sites, and has consulted with the Virginia State Historic Preservation Officer (SHPO) pursuant to Section 800.14 of the regulations (36 CFR Part 800) implementing Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. 470f, and has invited the Advisory Council on Historic Preservation (Council) to participate in the consultation; and

WHEREAS, the FNOD consists of 975+ acres on the south shore of the James River, east of the intersection of the Nansemond River with the James, in the City of Suffolk, Virginia (as shown on the attached map), and was used by the DOD between 1917 and 1960; and

WHEREAS the District has prepared a report on the general historic background and contexts of the FNOD project area, entitled *Phase Ia Historical and Archaeological Assessment of the 1,000-Acre Former Nansemond Ordnance Depot, City of Suffolk, Virginia* (McDonald and Givens 1996) and the District and the EPA have prepared an Archaeological Work Plan (AWP) which provides procedures for inventory and evaluation of archaeological resources as part of all project planning and execution activities for the FNOD, and is included with this document as Attachment A; and

WHEREAS, as part of the DERP and CERCLA processes, the District and the EPA have informed the public about the project through various public notices, public hearings, the formation of a Restoration Advisory Board, and the Final Site Management Plan (February 2001). As a result of these efforts the District and the EPA in consultation with SHPO, have identified various parties that were invited to participate in the development of this Programmatic Agreement; and

WHEREAS, the following Native American tribes, organizations, agencies, and institutions (consulting parties) were invited to participate in consultation, and to concur in this Programmatic Agreement:

The Nansemond Indian Tribal Association, which represents the local Native Americans

The Virginia Council on Indians, which represents Native American interests statewide

The United Indians of Virginia, which represents Native American interests statewide

The Virginia Department of Environmental Quality, which represents State regulatory concerns in the cleanup process

The Virginia Community College System, which owns property within the FNOD

The Tidewater Community College, which operates on property within the FNOD

The Virginia Department of Transportation, which owns property within the FNOD

The City of Suffolk, which is the local government with jurisdiction over the FNOD

Dominion Lands, Incorporated, which owns property within the FNOD

General Electric Company, which owns property within the FNOD

NOW, THEREFORE, the District, the EPA, and the SHPO agree that the proposed environmental investigation and cleanup shall be carried out in accordance with the following stipulations in order to take into account the effects of these undertakings on historic properties:

STIPULATIONS

The District and the EPA shall insure that the following stipulations are carried out:

I. Project Archaeologist and Archaeological Work Plan (AWP)

Stipulation IA. For activities related to the investigation and cleanup of the FNOD that are authorized by DERP, it shall be understood that the "Project Archaeologist" shall be that individual provided by the Norfolk District, U.S. Army Corps of Engineers, meeting all the professional requirements of the Secretary of the Interior's "Standards and Guidelines", subject to the approval of the Virginia State Historic Preservation Officer, to implement the AWP, included as Attachment A, and other responsibilities assigned to the "Project Archaeologist" in this Programmatic Agreement.

Stipulation IB. For activities related to the investigation and cleanup of the FNOD that are authorized solely by CERCLA but not by DERP, it shall be understood that the "Project Archaeologist" shall be that individual provided by EPA meeting all the professional requirements of the Secretary of the Interior's "Standards and Guidelines", subject to the approval of the Virginia State Historic Preservation Officer, who shall implement the AWP included as Attachment A, and other responsibilities assigned to the "Project Archaeologist" in this Programmatic Agreement.

Stipulation IC. It is presently anticipated that the Project Archaeologist designated to carry out each agency's responsibilities under the AWP will be furnished by the Norfolk District, to the extent permissible under a separately negotiated agreement between EPA and Norfolk District. In the event such agreement cannot be reached or ceases to exist, EPA and the Norfolk District will furnish separate Project Archaeologists to carry out each agency's responsibilities under the AWP.

II. Identification and Evaluation

Stipulation IIA. The Project Archaeologist will implement the AWP which provides the technical details for the Identification and Evaluation of historic properties within the context of the ongoing project.

Stipulation IIB. The Project Archaeologist has prepared a detailed map of the project area delineating its potential to contain archeological properties, which the SHPO has approved, as indicated in Item 2 of the Archaeological Work Plan.

Stipulation IIC. Project Plans, Work Plans, Contracts

The Project Archaeologist shall review all existing and future general plans, work plans, scopes-of-work and contract documents for possible effects to previously identified and predicted archaeological resources as provided for in the AWP (Attachment A). These reviews will be done in cooperation with the EPA Project Manager and the District Project Manager. All scopes-of-work and contract documents prepared by or subject to the approval of the District shall contain a reference to this Programmatic Agreement as defining requirements that must be observed in the conduct of contracted work.

Stipulation IID. The Project Archaeologist shall submit plans for all actions by the District and/or EPA with the potential to affect historic properties to the SHPO for review and comment. If the SHPO does not provide comments within thirty days, the EPA and the District will assume concurrence and proceed. If the District and/or EPA in consultation with the SHPO determines that no historic properties are affected, work may proceed. If the District and/or EPA in consultation with the SHPO finds that further identification efforts are needed, the identification and evaluation of archaeological properties will proceed following the procedures outlined in the AWP.

Stipulation IIE. If archaeological properties are identified as a result of the execution of the procedures in the AWP (which includes unexpected discoveries), the District and/or EPA will consult with the SHPO and other consulting parties on ways to reduce, avoid, or mitigate project effects.

If the proposed actions will affect archaeological properties, the Project Archaeologist shall prepare a treatment plan in consultation with the District and/or EPA and the SHPO, and other consulting parties. The treatment plan may include, but need not be limited to, any one or more of the following:

- Avoidance
- Protection in place
- Stabilization
- Data recovery
- Incorporation into protected areas
- Curation
- Publication
- Public Interpretation
- Repatriation
- Long term management and co-management

The Project Archaeologist shall provide all treatment plans to the District and/or EPA, the SHPO, and all consulting parties for a thirty-day review period. Comments on the treatment plans shall be submitted to the Project Archaeologist.

Stipulation IIF. Any human remains encountered during the implementation of this Programmatic Agreement shall be treated in accordance with the "Regulations Governing Permits for the Archaeological Excavation of Human Remains" (17 VAC 5-20-20) found in the Code of Virginia (10.1-2305, et seq., Virginia Antiquities Act).

The District and/or EPA may obtain a permit from the SHPO for the removal of human remains in accordance with the regulations stated above. In reviewing a permit involving removal of Native American human remains, the SHPO will notify the District and EPA and the SHPO will notify and consult with the Nansemond Indian Tribal Association.

All reasonable efforts will be made to avoid disturbing Native American gravesites and associated artifacts.

Skeletal remains and funerary items shall be handled with respect beginning with the start of excavation, osteological examination and the final reinterment. Excavation of skeletal remains shall use a pedestal with the same positioning and orientation as originally found.

To the extent possible, the general public shall be excluded from viewing any Native American gravesites and associated artifacts.

Native American human skeletal remains shall be reinterred as determined by and in a location as agreed upon by the Nansemond Indian Tribal Association within two years after removal, with no extension.

Stipulation IIG. Unanticipated Discoveries: the EPA and the District will ensure that construction documents contain the following provisions for the treatment of unexpected discoveries:

“In the event that a previously unidentified historic property is discovered in the area of potential effect after implementation of this Programmatic Agreement or initiation of ground disturbing activities, all construction work involving subsurface disturbance or surface activity that might disturb subsurface remains will be halted in the area of the resource and in the surrounding area where further subsurface remains can reasonably be expected to occur. The Contractor shall immediately notify the District Project Manager and/or the EPA Project Manager who will consult with the Project Archaeologist, the SHPO and other appropriate parties, including the Nansemond Indian Tribal Association as appropriate, to determine if further investigations are warranted. The Project Archaeologist will immediately inspect the work site and determine the area and the nature of the affected archeological property. Work may then continue in the project area outside the site area.”

The District and/or the EPA, in consultation with the SHPO, will determine the National Register eligibility of the previously unidentified resource. Potentially eligible historic properties will be evaluated using the National Register criteria in accordance with 36 CFR 800.4(c). If the resource is determined to meet the National Register Criteria (36 CFR Part 60.6), the District and/or the EPA will ensure compliance with Section 800.11 of the Council's Regulations. Work in the affected area shall not proceed until either the development and implementation of an appropriate treatment plan, or the determination is made that the located resource is not eligible for inclusion on the National Register.

III. Previous Disturbance to Archaeological Sites

Stipulation IIIA. Some environmental investigation and cleanup was conducted without inventory to complete the identification of historic properties and assess effects prior to the execution of this Programmatic Agreement. Sites of this previous work will be visited, and an assessment of any effects to archaeological resources will be documented, following the procedures called for in the Archaeological Work Plan (Attachment A).

IV. Public Involvement

Stipulation IVA. The District and the EPA will arrange for public participation appropriate to the subject matter and the scope of work and involve the individuals, organizations and entities likely to be interested, in accordance with Section 800.2(d) and Section 800.8 of the regulations (36 CFR Part 800) implementing Section 106 of the NHPA, 16 U.S.C. 470f. Consultation with the Nansemond Indian Tribal Association and

other appropriate interested parties will take place as appropriate, on aspects of the archaeological resource work arising from this Programmatic Agreement, for example identification, evaluation, treatment, curation, treatment of human remains, and review of reports. Information contained in technical reports will be provided in an accessible, non-technical summary.

V. Dispute Resolution

Stipulation VA. Should any party to this Programmatic Agreement object to any action carried out or proposed with respect to implementation of this Programmatic Agreement, the EPA and/or the District, and the SHPO will consult with the objecting party to resolve the objection.

If after initiating such consultation, the EPA and the District determine that the objection cannot be resolved through consultation, the EPA and the District shall forward all documentation relevant to the objection to the ACHP, including the proposed response to the objection.

Within thirty days after the receipt of all pertinent documentation, the ACHP shall exercise one of the following options:

- (a) Advise the EPA and the District that the ACHP concurs in the proposed response to the objection, whereupon the EPA and the District will respond to the objection accordingly; or
- (b) Provide the EPA and the District with recommendations, which the EPA and the District shall take into account in reaching a final decision regarding its response to the objection; or
- (c) Notify the EPA and the District that the objection will be referred for ACHP comment pursuant to Section 110(l) of the NHPA and 36 CFR 800.6, and proceed to refer the objection for comment. Any ACHP comment rendered pursuant to this stipulation shall be understood to apply only to the subject of the objection; all other responsibilities of the parties stipulated in this Programmatic Agreement shall remain unchanged.

VI. Reports, Annual Reports, and Amendments

Stipulation VIA. All archaeological work conducted under the terms of this Programmatic Agreement will be the subject of a comprehensive report or reports, to be submitted to all signatory and interested parties, and the public, within two years of the termination of the undertakings associated with the cleanup at FNOD. All technical reports prepared pursuant to this Programmatic Agreement will be consistent with the federal standards entitled Archeology and Historic Preservation: Secretary of the Interior's Standards and Guidelines (48 FR 44716-44742, September 29, 1983) and the Guidelines for Preparing Identification and Evaluation Reports for Submission Pursuant to Sections 106 and 110, National Historic Preservation Act, Virginia Department of Historic Resources, June 1992.

Stipulation VIB. On or before January 31st of each year until the EPA and the District determine that the terms of this Programmatic Agreement have been fulfilled and so notify other consulting parties, the District and/or EPA will prepare and provide an annual report to all parties to this Programmatic Agreement, addressing:

- 1 Status of Project Implementation
- 2 Progress in Work
- 3 Coordination of work with planning and construction schedules
- 4 Any problems or unexpected issues related to this Programmatic Agreement encountered during the year, and
- 5 Any changes that the EPA and/or the Corps believe should be made in implementation of this Programmatic Agreement.

The Annual Report will be prepared in non-technical, accessible language. The EPA and the District shall insure that the annual report is made available for public inspection, that potentially interested members of the public are made aware of its availability, and that interested members of the public are invited to provide comments to the EPA, the District, and other consulting parties.

Stipulation VIC. Based upon this annual review, any party to this Programmatic Agreement may propose to the EPA and the District that the Programmatic Agreement be amended, whereupon the EPA and the District will consult with the other parties to this Programmatic Agreement to consider such an amendment. All signatories (EPA, the District, and SHPO) to the Programmatic Agreement must agree to the proposed amendment in accordance with 36 CFR 800.6(c)(1)(i).

Stipulation VID. The distribution of the fourth annual report shall include a request to signatories and consulting parties to consult to evaluate the execution of the Programmatic Agreement, and consider whether to amend, continue or otherwise extend the Programmatic Agreement, which will otherwise terminate at the end of the fifth year (see Stipulation XA).

VII. Professional Qualifications

Stipulation VIIA. All archaeological work conducted under the terms of this Programmatic Agreement will be done under the direct supervision of qualified individuals meeting, at a minimum, the appropriate federal qualifications provided in 36 CFR Part 61, Appendix A, as provided for in the Archaeological Work Plan (Attachment A).

VIII. Curation

Stipulation VIIIA. Artifacts collected in the course of implementing this Programmatic Agreement are the property of the present landowners. The District and the EPA shall encourage the curation of these materials in accordance with 36 CFR Part 79. All archaeological field records and documents will be the property of the District and/or EPA, and will be curated in accordance with 36 CFR Part 79.

IX. Termination

Stipulation IXA. If the EPA or the District determines that the terms of this Programmatic Agreement cannot be carried out, or if the EPA, the District or the SHPO determines that the Programmatic Agreement is not being properly implemented, the EPA, the District and the SHPO shall consult to seek amendment of the agreement. If the agreement is not amended, any signatory may terminate it with thirty days notice to the other signatories. The EPA and the District shall then either execute a Memorandum of Agreement with signatories under 36 CFR 800.6(c)(1) or request the comments of the Council under 36 CFR 800.7 (a).

X. CERCLA Lead Agency Disclaimer

Stipulation XA. Nothing in this Programmatic Agreement shall be construed as a resolution, agreement or admission regarding which federal agency is the lead agency at the FNOD for purposes of CERCLA or to which federal agency the President of the United States has delegated his authority under CERCLA at the FNOD.

XI. Expiration

Stipulation XIA. This agreement will continue in full force and effect for 5 years. At some time in the six-month period prior to the expiration of the Agreement, all parties can agree to extend this agreement with or without amendments, indicating their agreement to the District and the EPA in writing.

Evidence of Compliance

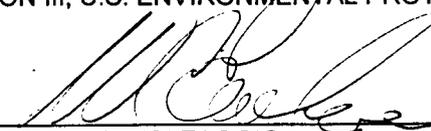
Execution and implementation of this Programmatic Agreement evidences that the District and the EPA have satisfied their Section 106 responsibilities for all individual undertakings of this program.

[Separate] SIGNATURE PAGE

NORFOLK DISTRICT, U.S. ARMY CORPS OF ENGINEERS:

By: _____ Date: _____
ALLAN B. CARROLL, JR.
Colonel, U.S. Army, District Engineer, Norfolk District

REGION III, U.S. ENVIRONMENTAL PROTECTION AGENCY:

By:  _____ Date: 5/25/01
THOMAS C. VOLTAGGIO
Acting Regional Administrator, U.S. EPA, Region III

VIRGINIA STATE HISTORIC PRESERVATION OFFICER:

By: _____ Date: _____
KATHLEEN S. KILPATRICK
Director, Virginia Department of Historic Resources

NANSEMOND INDIAN TRIBAL ASSOCIATION, INC.

By: _____ Date: _____
CHIEF BARRY W. BASS
Chief, Nansemond Indian Tribal Association, Inc.

ACCEPTED FOR ADVISORY COUNCIL ON HISTORIC PRESERVATION:

By: _____ Date: _____
JOHN M. FOWLER
Executive Director, Advisory Council on Historic Preservation

[Separate] SIGNATURE PAGE

NORFOLK DISTRICT, U.S. ARMY CORPS OF ENGINEERS:

By: _____ Date: _____
ALLAN B. CARROLL, JR.
Colonel, U.S. Army, District Engineer, Norfolk District

REGION III, U.S. ENVIRONMENTAL PROTECTION AGENCY:

By: _____ Date: _____
THOMAS C. VOLTAGGIO
Acting Regional Administrator, U.S. EPA, Region III

VIRGINIA STATE HISTORIC PRESERVATION OFFICER:

By:  _____ Date: 29 May 2001
KATHLEEN S. KILPATRICK
Director, Virginia Department of Historic Resources

NANSEMOND INDIAN TRIBAL ASSOCIATION, INC.

By: _____ Date: _____
CHIEF BARRY W. BASS
Chief, Nansemond Indian Tribal Association, Inc.

ACCEPTED FOR ADVISORY COUNCIL ON HISTORIC PRESERVATION:

By: _____ Date: _____
JOHN M. FOWLER
Executive Director, Advisory Council on Historic Preservation

[Separate] SIGNATURE PAGE

NORFOLK DISTRICT, U.S. ARMY CORPS OF ENGINEERS:

By: _____ Date: _____
ALLAN B. CARROLL, JR.
Colonel, U.S. Army, District Engineer, Norfolk District

REGION III, U.S. ENVIRONMENTAL PROTECTION AGENCY:

By: _____ Date: _____
THOMAS C. VOLTAGGIO
Acting Regional Administrator, U.S. EPA, Region III

VIRGINIA STATE HISTORIC PRESERVATION OFFICER:

By: _____ Date: _____
KATHLEEN S. KILPATRICK
Director, Virginia Department of Historic Resources

NANSEMOND INDIAN TRIBAL ASSOCIATION, INC.

By: Barry W. Bass Date: 5-29-01
CHIEF BARRY W. BASS
Chief, Nansemond Indian Tribal Association, Inc.

ACCEPTED FOR ADVISORY COUNCIL ON HISTORIC PRESERVATION:

By: _____ Date: _____
JOHN M. FOWLER
Executive Director, Advisory Council on Historic Preservation

REFERENCES:

Benedict, Tod L.

1996 *Archeological Assessment of Sampling Grids, Ordnance and Explosives Engineering Evaluation/Cost Analysis, Former Nansmond Ordnance Depot, City of Suffolk, Virginia.* Letter Report, provided by John L. Milner Associates to Foster-Wheeler Environmental Corporation, December 12, 1996.

McDonald, Bradley M. and David M. Givens

1996 *Phase Ia Historical and Archaeological Assessment of the 1,000-Acre Former Nansmond Ordnance Depot, City of Suffolk, Virginia.* Report prepared by the James River Institute for Foster Wheeler Environmental Corporation.

Archaeological Work Plan
Former Nansemond Ordnance Depot
May 2000

Tim Thompson
Archaeologist
Project Management Division, Environmental Branch
Norfolk District
U.S. Army Corps of Engineers

Plan reviewed and approved:



Kenneth W. Hafner
Project Manager
Norfolk District, U.S. Army Corps of Engineers



Robert Thomson
Project Manager
Region III, U.S. Environmental
Protection Agency

Introduction

The U.S. Army Corps of Engineers has been conducting remedial investigations and removal of unexploded ordnance at the Former Nansmond Ordnance Depot (FNOD) since 1987. Under the Formerly Used Defense Site (FUDS) Program the Norfolk District, U.S. Army Corps of Engineers (USACE) has been addressing environmental concerns that resulted from Department of Defense use of the former depot. In 1996 the Norfolk District initiated consultation with the Virginia Department of Historic Resources, whose director is the Virginia State Historic Preservation Officer, on individual actions at FNOD.

In July 1999, the U.S. Environmental Protection Agency (EPA) added the former Nansmond Ordnance Depot, Suffolk, Virginia (FNOD) to the National Priorities List (NPL) pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq. As of May 2001, EPA has identified the U.S. Department of Defense and the General Electric Company as Potentially Responsible Parties (PRPs) under CERCLA for the FNOD. As of May 2001, EPA and General Electric Company are negotiating about environmental investigations that General Electric may conduct within the FNOD.

This work plan is intended to address the work being conducted at the FNOD by the USACE, EPA and their contractors. In addition, if General Electric Company or other PRPs perform investigations or other response actions at the FNOD under CERCLA with assistance or oversight from EPA, then EPA intends to ensure that these response actions incorporate procedures for identifying and preserving archaeological resources, as described in this work plan.

A number of specific actions related to the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been carried out. However, no overall plan for the identification, evaluation, protection and management of the historic properties within the FNOD has been completed. This Archaeological Work Plan (AWP) is intended to fill that void, and provide the basis for a Programmatic Agreement (PA) to establish compliance with Section 106.

The identification and remediation of unexploded ordnance (UXO) and other hazardous substances, pollutants and contaminants at FNOD is a complex process. This plan will group certain similar sets of activities together to provide generic procedures for insuring that the requirements of Section 106 of the NHPA are met. Reference will be made to the "Final Site Management Plan, Former Nansmond Ordnance Depot" (February, 2001), prepared by the Norfolk District, to identify activities requiring action to satisfy Section 106.

Before examining the project in more detail it is appropriate to review the Historic Preservation Contexts to insure that the work plan will address resources within those contexts. Previous reports and management recommendations are summarized in the section called "Historic Preservation Context." Next is a section on "General Procedures: Archaeological Work," which describes a set of general procedures governing the archaeological work at FNOD. These procedures will be applied to the investigations and cleanup process, which is described in the next section, "Undertaking: Process". Following this a procedure for evaluating work completed to this point is given in the section "Undertakings: Completed." This covers previous investigation, testing and remediation excavation that was not covered by previous Section 106 consultation.

The section "Undertaking: Locations" reviews the various areas at FNOD where UXO and other hazardous substances, pollutants, contaminants are known or suspected. The final section "Reports" provides for reports to be prepared regarding all archaeological investigation at the FNOD. Finally, a "References" section is provided.

Historic Preservation Context

Milner Report

On 26 September 1996 Robert Ogle, Chief of Planning Division, Norfolk District, sent a letter to David Dutton, Virginia Department of Historic Resources which gave a brief summary of the history of the property and included as an attachment "Ordnance and Explosives Engineering Evaluation/Cost Analysis [EE/CA] at the Former Nansmond Ordnance Depot, Suffolk County, Virginia". The attachment described the use of 100' by 100' sampling grids placed across the property to identify ordnance deposits. Thirty to forty sampling grids were used. The details of the procedures to identify archaeological sites in sampling grids are given in the section of this work plan called "General Archaeological Monitoring" and will be used to the degree applicable as part of this plan.

The sampling work was completed, and a letter report was submitted to Foster Wheeler Corporation. This letter report with the subject title "Archeological Assessment of Sampling Grids, Ordnance and Explosive Engineering Evaluation/Cost Analysis, Former Nansemond Ordnance Depot, City of Suffolk, Virginia" documents the completion of the archaeological procedures. Visual inspection, and the placement of one shovel test pit within each of 34 sample grid squares, were completed. The final recommendations by the archaeologist include the following statement:

Accordingly, no further archeological monitoring is recommended within the 34 grids examined during this investigation. However, if similar UXO testing is to be done elsewhere within the project area, in possibly less-disturbed loci, additional archeological monitoring is advised (12 December 96 - Letter Report, Todd Benedict, archaeologist, John Milner Associates, to Mark Shells, Project Manager, Foster-Wheeler Environmental Corporation).

Phase IA Report

In 1996, the James River Institute for Archaeology completed a "Phase IA Historical and Archaeological Assessment of the 1,000-Acre Former Nansemond Ordnance Depot, City of Suffolk, Virginia (McDonald and Givens 1996)" under contract to the Foster Wheeler Environmental Corporation. This study included a review of documentary and cartographic resources pertaining to the study area and included the results of previous archaeological studies within the area (Outlaw 1990; McSherry and Lucchetti 1992). Both prehistoric and historic period contexts were reviewed, and the following summary was included:

Approximately 130 prehistoric and historic archaeological sites are located in the immediate vicinity of the project area. It is therefore likely that unidentified archaeological resources exist within the project area, particularly along the terraces overlooking the tributaries of West and Streeter Creeks. Archaeological resources likely to be located within the project area include: (1) small prehistoric campsites dating to the Archaic or Woodland periods; (2) seventeenth-century domestic sites; (3) eighteenth-century domestic sites; (4) nineteenth-century domestic and agricultural sites; and (5) twentieth-century domestic and military sites. (MacDonald and Givens 1996: iii).

The following recommendations were given:

The Cultural Resources assessment of the former Nansemond Ordnance Depot suggests that most of the project area has not been surveyed archaeologically. Given the concentration of both prehistoric and historic sites in the immediate vicinity of the study area, it is likely that -- barring significant construction disturbances--the unsurveyed areas have moderate to high potential to contain a variety of archaeological sites, particularly along the terraces overlooking the tributaries of West and Streeter Creeks. Archaeological Resources located on the property may include prehistoric sites, seventeenth-century domestic sites, eighteenth-century domestic sites, nineteenth-century domestic and farmstead sites, and twentieth-century domestic and military sites.

One site previously identified within the general bounds of the former Nansemond Ordnance Depot, 44SK399, was deemed potentially eligible for nomination to the National Register of Historic Places. Espey, Huston, and Associates recommended this site should be investigated at the Phase II level if future work will impact this area. Also within the bounds of the project area, 44SK6 was identified in 1977; at that time, the site was visibly eroded, but the site form does not indicate the need for further work. JRIA suggests that Site 44SK6 should be re-examined if the proposed plan of work at the depot will disturb this area (McDonald and Givens 1996:47).

This work plan is designed to address these recommendations.

Unexpected Discovery: Burial

On Tuesday, 14 April 1998, human bones were discovered in a road cut placed to provide access for test drilling on the beach on the James River. The Suffolk Police Department removed some of these as possible "crime scene" evidence, and when they were found to be ancient, they were returned to the site. During consultation with the Virginia State Historic Preservation Officer (SHPO) staff and the Nansemond Tribe, it was agreed that this location would be treated as a prehistoric burial site. The Norfolk District placed filter cloth and a thick layer of gravel over the remains to protect them from further erosion. It was agreed that if this location were subject to any further disturbance, that consultation would resume and a more thorough investigation would be completed to determine the limits of any site that might be present and to design measures to protect the site or complete data recovery. This site was assigned the site number 44SK481 by the Virginia Department of Historic Resources. It was further agreed that a Programmatic Agreement would be prepared to cover the entire project.

General Procedures: Archaeological Work

1. Project Archaeologist

The archaeologist presently employed by the Norfolk District, U.S. Army Corps of Engineers, is assigned the role of "Project Archaeologist". That individual meets the professional standards established by the Secretary of the Interior (Federal Register 62(119):33707-33723). If this role is reassigned, these qualifications will be required. Project Archaeologist actions carried out to address investigations and remediation connected to the use of the project area by various Department of Defense agencies will be supported by funding provided through the Formerly Used Defense Sites program ("FUDS").

Certain activities of the Project Archaeologist that cannot be funded by the FUDS program (e.g., reviewing plans for investigating hazardous substances that are not connected to Department of Defense activities) may be funded through an Interagency Agreement between the EPA and the Norfolk District, U.S. Army Corps of Engineers.

2. Probability Map

The Phase IA report (McDonald and Givens 1996) indicated that the entire project area possessed a medium to high probability for containing significant archaeological resources. The Project Archaeologist has reviewed previous studies to refine this probability statement and provide a more detailed map indicating specific areas of high and medium probability. This map will be used to guide decisions about archaeological resources in specific portions of this complex project area. The following elements were used to create predictive models and the map:

1. Distribution of topographic and drainage features
2. Prehistoric settlement patterns
3. Historic period settlement patterns
4. Disturbance analysis of recent land use actions in the area.

The Probability Map has been approved by the Virginia SHPO.

3. Unexpected Discoveries: archaeological resources

All contractor personnel and government personnel will be alerted to the possibility that significant archaeological resources may be encountered at any point in the study area. Of particular concern is the possibility that additional human remains from either the prehistoric or the historic period may be encountered.

Anyone conducting any excavation or ground disturbance that observes possible archaeological resources, particularly human burials, will immediately cease work and contact the Norfolk District Project Manager, or his designated representative, to arrange for a field evaluation of the discovery by the Project Archaeologist. This policy will be established immediately for all ongoing work, and will be made a contract requirement for all future contracts.

Treatment of the unexpected discovery of human remains shall be in accordance with § 10.1-2300 et seq. of the Code of Virginia, and Virginia Administrative Code 17 VAC 5-20-20, and the SHPO shall be notified immediately. In the case of remains that are, or are suspected to be of Native American Origin, the Virginia Council on Indians, the United Indians of Virginia, and the Nansemond Tribal Association shall be notified immediately to participate in consultation on the treatment of such remains.

4. Site Management and Work Plan Review

Thorough reviews of the Final Site Management Plan ("SMP"; U.S. Army Corps of Engineers, 2001) and other specific work plans for investigation and clean up are ongoing. All segments of these plans that might result in the disturbance of archaeological resources, particularly contractors' work plans and project scopes, will be identified and subject to review by the Project Archaeologist. This will allow for the identification of archaeological resource management problems and the formulation of specific procedures prior to the initiation of field activities for investigation, testing or remediation. Specific procedures are given below, in the section "Integrating Archaeological Protection and the Cleanup Process." The Site Management Plan and other work plans will be changed as necessary to ensure compliance with Section 106 of the NHPA.

Changes and modifications to the SMP and other work plans will likewise be reviewed by the Project Archaeologist, and the AWP adjusted to address these changes.

5. Scopes of Work and Contracts

Existing scopes of work and contracts will be reviewed by the Project Archaeologist as soon as possible to identify needs for compliance with Section 106 of the NHPA. Soils and surface condition data generated by previous studies will be used to aid in the disturbance analysis, which is a factor in the creation of the probability map.

Future work plans, scopes of work, and contracts will be reviewed in consultation with the Project Archaeologist to identify needs for compliance with Section 106 of the NHPA. These scopes of work and contracts will be revised as necessary to ensure compliance with the NHPA.

6. Other Activities

Any activities connected with the FNOD investigation and cleanup that involve ground disturbance or excavation of any kind that are not covered in the Site Management Plan or other work plans will be submitted to the Norfolk District Project Manager for review by the Project Archaeologist with sufficient lead time to allow for the design of any project modifications that may be necessary to insure the protection of any archaeological resources, and to complete any needed archaeological field investigations, as described below in the section "Integrating Archaeological Protection and the Cleanup Process."

7. Unexpected Discovery: Unexploded Ordnance, Other Hazards

If explosive ordnance or any item or chemical that is an immediate threat to life or property is discovered unexpectedly, and immediate response is required, the Norfolk District Project Manager will be notified, and the Project Archaeologist will be given an opportunity to examine any excavation after the threat is removed and before the excavation is backfilled. This provision applies to situations where an emergency prevents the Project Archaeologist from reviewing work plans or other documents before the response is carried out.

8. General Archaeological Monitoring

Two archaeological monitoring procedures are provided here. The first is for testing, evaluation and removal of ordnance, explosives and related items that the U.S. Army Corps of Engineers (or its contractor) performs in areas known as "grids." The second procedure is for investigation, testing, evaluation, removal and remedial actions that are performed in areas other than grids.

a. Archaeological monitoring for testing, evaluation and removal of ordnance, explosives and related items in grids

This part of the plan is based on the model originally specified in the "Ordnance and Explosives Engineering Evaluation/Cost Analysis at the Former Nansmond Ordnance Depot, Suffolk County, Virginia." The details of this procedure are quoted below. The Virginia State Historic Preservation Office approved this procedure in 1997 for the limited sampling area covered by this EE/CA.

Procedures will be implemented to identify archaeological sites and to avoid damage to such sites. Prior to the start of excavation work, the contractor must first locate and stake the corners of the sampling grids. Grids in areas of heavy vegetation must be cleared enough so that workers carrying geophysical instruments can gain access to the grid. Once the grids have been

staked and cleared of vegetation, the contractor's archaeologist (with the accompaniment and guidance of ordnance specialists) will visually survey the areas for anything of archaeological significance and indicate the locations where archaeological samples shall be taken. If anything of archaeological significance is found at the grid, no ordnance sampling will be done and the Virginia SHPO will be notified. (Grids eliminated from ordnance sampling due to archaeological significance will generally be shifted to avoid areas of archaeological significance or replaced by newly established grids outside the areas of archaeological significance). If there is no indication of archaeological significance for the grid, the archaeologist will move on to the next grid, and the contractor's ordnance specialists will begin the ordnance sampling. (Safety regulations require that only persons trained in ordnance operation be allowed within 1250 feet of ordnance sampling operations. Therefore, the archaeologist may not be present during the ordnance sampling operations.) After completion of ordnance sampling, but prior to backfilling of holes, the archaeologist will conduct quality assurance inspections on ordnance excavations.

These procedures are here modified to set the withdrawal of the archaeologist to the "Public Withdrawal Distance" (PWD) specified for particular locations in the contractor's work plans, and to allow for their use in intrusive geophysical and other testing actions, in addition to ordnance removal.

b. Archaeological monitoring for investigation, testing, evaluation, removal and remedial actions in non-grid areas

These archaeological monitoring procedures apply to investigation, testing, evaluation, removal and remedial actions involving explosives, ordnance and related items and other hazardous substances, pollutants and contaminants. The basic sequence of events will normally involve the preparation of a work plan which will identify the specific locations for ground disturbing activity. These plans will be provided to the Project Archaeologist for review and evaluation prior to the initiation of excavation, unless a compelling property or personnel hazard exists.

The Project Archaeologist will evaluate each location where excavation is proposed in comparison to the archaeological probability map, and use field judgement to determine whether further archaeological action is needed. In cases where there is a potential for damage to an archaeological resource, the Project Archaeologist will prepare an action plan and submit it to the Virginia SHPO for review and comment. The action plan will be prepared in consultation with EPA and Norfolk District Project Managers and will take into account the nature of the ordnance or other hazardous substances, pollutants or contaminants expected, and whether a prior archaeological investigation can be conducted safely. It will allow for post-excavation inspection by the archaeologist in cases where a prior investigation is unsafe.

9. Exceptions

Some activities that are part of routine sampling operations do not create sufficient disturbance to require immediate archaeological attention. Two activities are specified:

a. Placement of groundwater monitoring wells

These wells are created by drilling an encased shaft two to three inches in diameter into the water table to provide for periodic monitoring of the chemical constituents of the groundwater.

b. Hand Auger soil sampling

This sampling procedure uses hand operated augers to sample soil below the surface for various constituents needed to evaluate the need for more extensive intrusive testing. This sampling procedure creates an auger hole three to four inches in diameter, normally to a depth no greater than four feet.

While these activities in themselves do not create sufficient effects to require immediate archaeological attention, more extensive earthmoving, such as excavation or grading for access roads associated with them may be more damaging. For this reason, the Project Archaeologist should be notified of these procedures prior to their conduct, and any additional ground disturbance associated with them should be indicated and evaluated by the Project Archaeologist to determine whether archaeological testing or monitoring is required.

10. Archaeological Investigations

a. Previously identified archaeological sites

There are eight previously identified archaeological sites within the project boundaries. Seven of these are listed in the Phase IA archaeological report submitted by James River Institute (McDonald and Givens 1996:43):

44SK6
44SK379
44SK396
44SK398
44SK399
44SK401
44SK403

Of these, five had been recommended not eligible for nomination to the National Register of Historic Places (44SK379, 44SK396, 44SK398, 44SK401, and 44SK403) and no further action is required under this plan. 44SK6 was recommended "status unclear", and will require further evaluation. This site is just to the west of the portion of the project referred to as the "James River Beachfront". 44SK399 is classified "potentially eligible." A Phase II archaeological evaluation, as defined in Virginia Department of Historic Resources (VaDHR) guidance, is recommended. This site is on the west edge of the "Impregnite Kit Area Geophysics Coverage area".

An eighth site, 44SK481, is represented by the "Unexpected Discovery" of a human burial, mentioned above. This location, based on very limited evidence, contains a possibly prehistoric burial. It is some distance to the east of 44SK6, a historic period site, and may be associated with it, as it contains early post-colonial artifacts.

Before an intrusive investigation, removal or other ground disturbance is conducted in the vicinity of 44SK6, 44SK399, or the burial site, the SHPO will be consulted to determine whether or not further archaeological evaluation is required.

b. Archaeological sites discovered during the project

Any archaeological sites identified during the further conduct of the project will be evaluated in the field by the Project Archaeologist. Any intrusive work at or near an archaeological site location will be suspended until this evaluation is complete. The Project Archaeologist will prepare a recommendation based on the nature of the site and the nature of any intrusive work that is needed to complete the project, and it will immediately be submitted to the Virginia SHPO for consultation. Phase II archaeological evaluation, as defined in VaDHR guidance, will be recommended if absolutely necessary. Every effort will be made to avoid disrupting or delaying any environmental investigations or other response actions.

Undertaking: Process

Cleanup Process

This section of the plan provides a general analysis of the FNOD investigation and clean up process and some general procedures that will be followed as the investigation and cleanup work continues. The process used to investigate and clean up FNOD is not unlike that followed in archaeological studies. It begins with the identification of possible unexploded ordnance (UXO) or other hazardous substances, pollutants or contaminants. This is followed by an investigation to determine if the UXO or other hazardous substances, pollutants or contaminants are really a threat, a decision about the best course of action, a cleanup action, and a closeout of the process. At several points, a decision can be made to take no further action if circumstances do not warrant action. Investigation and clean up can be broken into the following stages, each of which involves documentation:

Preliminary Assessment/Site Inspection (PA/SI)
Remedial Investigation/Feasibility Study (RI/FS)
Record of Decision (ROD)
Remedial Design/Remedial Action (RD/RA)
Close-out

In addition, at any stage of the process a removal action can be taken if the UXO or hazardous substances, pollutants or contaminants may present an imminent and substantial danger to human health or the environment. In the case of a removal action which is "non-time critical" -- that is, where more than six months are available for planning -- a document called an "Engineering Evaluation/Cost Analysis (EE/CA)" is prepared. This is a document that may be used to analyze and justify the procedures to be used and the costs to be incurred. In cases which are time-critical, and actions must be initiated with less than six months lead time, the EE/CA may be dispensed with.

Several of these stages, including site inspection, remedial investigation/feasibility study, remedial design and remedial or removal action, may involve excavation. Excavation may be used, for example, to gather samples for testing or analysis, to evaluate geophysical anomalies that may indicate the presence of UXO, or to remove or remediate UXO or other hazardous substances, pollutants or contaminants. Field excavation may be done by hand (for example, for geophysical anomalies detected near the surface) or with a backhoe or other excavation machinery (for example, to remove contaminated soil). If excavation of a geophysical anomaly reveals that it is or might be unexploded ordnance, the ordnance may be detonated in place or removed to a detonation site as soon as it is discovered.

Since there are several different locations at FNOD that have already been identified as candidates for investigation and possible removal or remedial action, there may be several investigation, evaluation, removal or remedial actions running on parallel tracks, each of which may cause an adverse effect to archaeological resources. This is particularly true since no comprehensive archaeological inventory of the property has been conducted.

In many cases investigation reports, evaluation reports and work plans are prepared, sometimes after actions have taken place that might otherwise have required review and consultation pursuant to Section 106 of the National Historic Preservation Act (NHPA).

Individual sites may be subject to different sequences of investigation, evaluation, removal or remedial action. In addition, sites at the FNOD may be subject to what is referred to as a "Superfund Accelerated Cleanup Model" with fewer opportunities for review of work plans.

The process described here, in practical execution, generates numerous activities that could have an adverse effect on archaeological resources. The General Procedures for archaeological work, given at the beginning of this plan, have been designed to provide maximum flexibility in completing appropriate archaeological evaluation in a timely way, in order to not retard the process of identifying, removing or remediating UXO or other hazardous substances, pollutants or contaminants.

Integrating Archaeological Protection and the Cleanup Process

The Project Archaeologist will work closely with the FNOD project management team, both for the Norfolk District, U.S. Army Corps of Engineers, and EPA Region III, to identify archaeological and assessment needs for all activities involving ground disturbance, using the general archaeological procedures described in the beginning of this AWP.

1. In any case where investigation, testing, evaluation, removal or remedial action may involve ground disturbance and is outside the scope of any existing work plan, such action will be referred to the Project Archaeologist for evaluation.

a. If the location is within an area of high probability for the presence of significant archaeological resources, sufficient lead time will be given for the Project Archaeologist to make a field inspection of the area after vegetation has been cleared. If an UXO or other hazard exists, the Project Archaeologist will be accompanied by an appropriate expert(s) to insure the safety of all parties. If an archaeological resource is identified or suspected, a limited archaeological test excavation will be conducted, subject to the supervision and control of an appropriate site safety expert. If this cannot be done within the standard safety protocols in place for the overall conduct of the site cleanup, it will be deferred. If a significant archaeological resource is identified, the Project Archaeologist will immediately advise the Virginia SHPO of the location and nature of the resource and evaluation of the potential effects of the ground disturbing procedure. If any alternatives to the

procedure exist, they will be provided. In the case of excavation for general site characterization, excavations will be shifted to avoid affecting significant archaeological resources, if possible. The Project Archaeologist will confer with the project manager to determine whether or not the procedure (including removal) is essential to the completion of the cleanup mission. If it is the Project Archaeologist will recommend procedures to minimize the effects to the archaeological resource. If such procedures are not feasible, the project manager will advise the SHPO that the action must be carried out, and provide minimal documentation of the decision.

In all areas that have high probability of containing significant archaeological resources, whether or not significant resources are identified in advance, the Project Archaeologist will inspect all excavations before they are backfilled and document any resources that have been revealed, if any.

b. In areas that have a low or medium probability of containing significant archaeological resources, the Project Archaeologist will inspect excavations after they are complete and before they are backfilled, on a sampling basis. Any resources revealed will be documented, and the probability map adjusted, if necessary.

2. In the case of actions for which scopes of work or work plans have been prepared, the Project Archaeologist will review such documents and identify any actions needed to insure the protection of archaeological resources, using the general procedures for archaeology and the specific procedures described in item 1., immediately above.

3. In all cases the general procedures for archaeological work, given above will be followed, particularly Item 3 (Unexpected Discoveries: Archaeological Resources), Item 7 (Unexpected Discovery: Unexploded Ordnance, Other Hazards), and Item 8 (General Archaeological Monitoring).

Undertakings: Completed

Work has been underway at FNOD that has not undergone review for compliance with Section 106 of the NHPA. It is desirable to do field evaluations of locations where extensive excavation has taken place to determine if any archaeological resources were present. The Project Archaeologist will review project documentation to tabulate a list of such locations. These will be visited on a time-available basis, without interrupting the procedures given above which are necessary to complete the timely closeout of all sites at FNOD. Any new data generated by the field review may be used to modify the archaeological probability map.

Undertaking: Locations

The Final Site Management Plan (SMP) identifies several different categories of locations and of actions to be taken at the FNOD. These include "Removal Actions", "NPL Source Areas" and "Areas of Concern". These are shown in aerial photographs in the SMP.

Removal Action Areas

The SMP identifies five Removal Action Areas, as follows:

1. Removal Action Area 1: TCC Geophysical Anomaly Investigation
2. Removal Action Area 2: FNOD Main Burning Ground Area
3. Removal Action Area 3: James River Beachfront Area
4. Removal Action Area 4: Nansemond River Beachfront Area
5. Other Removal Actions

Removal Action Area 1: TCC Geophysical Anomaly Investigation

There are five areas of concern (AOCs) that have been identified related to the possibility of unexploded ordnance. Additional investigations are planned for these areas. Some areas have already been subject to limited investigations and remediation. These will be subject to a field impact evaluation by the Project Archaeologist on a time available basis, without interrupting the schedule for dealing with the AOCs.

1. TNT Removal Area. Some investigation and removal has been completed in this area, but it has been expanded to insure that all ordnance and explosive safety hazards have been or will be identified.

2. Athletic Field (South and North). Based on the terrain of this area, it was included in the geophysical survey.

3. Renovation Plant area. This area was previously used to renovate shells.

4. Buildings L-11 and L-12. These magazine buildings were destroyed by fire in the 1920s.

5. Building 410. This magazine building was destroyed by fire in 1937.

Removal Action Area 2: FNOD Main Burning Ground Area

The Ordnance and Explosives Final Engineering Evaluation/Cost Analysis (OE EE/CA) identified trenches that may contain ordnance, explosives and related items. These areas are in the main burning ground source area. That area is also defined as an NPL source area.

Removal Action Area 3: James River Beachfront Area

The James River Beachfront is also designated Source Area 2 in the EPA's "Hazard Ranking System" documentation. A removal is scheduled for June 2001.

Removal Action Area 4: Nansemond River Beachfront Area

This area was identified by consensus between the Corps of Engineers, the EPA, and Virginia Department of Environmental Quality as the highest priority Area of Concern (AOC) at FNOD.

Source Areas will be subject to testing, investigation, removal and/or remediation in the near future. This AWP will address work planned at these Source Areas in the order that investigations are planned. The Source Areas include the following:

1. Source Area: TNT removal area, residual soil evaluation
2. Source Area: James River beach front, metallic debris field
3. Source Area: Impregnite test kit area
4. Source Area: Horseshoe Pond
5. Source Area: Main Burning Ground and Steamout Pond
6. Source Area: Track K dump

Each of these will be analyzed and informal Source Area Archaeological Work Plans prepared for each in the order in which investigations will proceed. The general procedures for "Integrating Archaeological Protection and the Cleanup Process," given above will be used to designate specific actions that will be carried out to identify and protect any archaeological resources that may be present.

"Areas of concern" (AOCs) will be subject to testing, investigation, removal and/or remediation in the near future. This AWP will address work planned at these AOCs in the order that investigations are planned. The AOCs include the following:

- AOC 1: Nansemond River Beachfront
- AOC 2: Streeter Creek/Lakeview Drive Ground Scars
- AOC 3: Off-shore area (from Streeter Creek to Pig Point, encompassing original and existing shoreline).
- AOC 4: GE Pond/Nansemond Culvert
- AOC 5: Tidewater Community College Lake
- AOC 6: Marine Corps Power Generator
- AOC 7: Area J Lake and Possible Burning Ground Area
- AOC 8: Tract A - Explosive Magazine Line & Eastern Disposal Area/Pit
- AOC 9: Tract A & B - Burning Ground
- AOC 10: Tract G - Explosive Magazine Line ground scars and mounding
- AOC 11: Tract H and I - Explosive Magazine Line ground scars and mounding

- AOC 12: Track J - Explosive Magazine Line ground scars and mounding
- AOC 13: Unknown abandoned structure
- AOC 14: Track K - Explosive Magazine Line ground scars and mounding (H-1, H-4)
- AOC 15: Track K - Explosive Magazine Line landfill (H-5)
- AOC 16: Removed Steam Heating Plant
- AOC 17: PCB Transformer Removal
- AOC 18: Buried Underground Storage Tanks (UST)
- AOC 19: TCE Contamination adjacent to the James River Beachfront Source Area
- AOC 20: Abandoned Water Treatment Plant near FNOD Building H-413

As plans are developed for investigations at these AOCs they will be reviewed by the Project Archaeologist, following the procedures outlined above.

Additional Areas

Other areas may be identified at FNOD that will require investigation and/or cleanup. Such areas will be treated according to this plan.

Reports

Prior to project closeout, the Project Archaeologist will prepare archaeological reports on each of the project sites, and an overall summary report on the archaeological work will be prepared. In the case of any remediation site where no archaeological resources were identified, a brief description of what was done will be provided. Any needed funding for these reports will be secured in advance.

References

Benedict, Todd

- 1996 "Archeological Assessment of Sampling Grids, Ordnance and Explosives Engineering Evaluation/Cost Analysis, Former Nansemond Ordnance Depot, City of Suffolk, Virginia." Letter Report, Todd Benedict, archaeologist, John Milner Associates, to Mark Shells, Project Manager, Foster-Wheeler Environmental Corporation.

Foster Wheeler Environmental Corporation

- n.d. Ordnance and Explosives Engineering Evaluation/Cost Analysis at the Former Nansemond Ordnance Depot, Suffolk County, Virginia.

McDonald, Bradley M., and David M. Givens

- 1996 **Phase IA Historical and Archaeological Assessment of the 1,000-Acre Former Nansemond Ordnance Depot, City of Suffolk, Virginia.** James River Institute for Archaeology, submitted to Foster Wheeler Environmental Corporation, 8 October 1996.

McSherry, Perry, and Nicholas Lucchetti

- 1992 **Phase I Archaeological Survey of Nansemond Waste Water Treatment Plant, Suffolk, Virginia.** James River Institute for Archaeology, Williamsburg, Virginia.

Ogle, Robert

- 1996 Letter, Robert Ogle, Chief of Planning Division, Norfolk District, to David Dutton, Virginia Department of Historic Resources. 26 September 1996.

Outlaw, Alain C.

- 1990 **Phase I Archaeological Survey at Pig Point, Suffolk, Virginia.** Espey, Huston & Associates, reported submitted to Dominion Resources, Richmond, Virginia.

U.S. Army Corps of Engineers, Norfolk District

- 2001 **Final Site Management Plan, Former Nansemond Ordnance Depot.** February, 2001, U.S. Army Corps of Engineers, Norfolk District, Norfolk, Virginia.