Port Authority of New York and New Jersey

World Trade Center (WTC) Vehicular Security Center and Tour Bus Parking Facility
New York, New York

World Trade Center Site Resource Protection Plan

JUNE 2007

United States Department of Transportation
Federal Transit Administration

THE PORT AUTHORITY OF NY & NJ

TABLE OF CONTENTS

1 INTRODUCTION 1

2 PROJECT HISTORIC ARCHITECT 2
2.1 Qualification and General Responsibilities 2
2.2 Design Phase Responsibilities 2
2.2.1 Pre-Construction Inspection 2
2.2.2 Review of Design Documents 2
2.3 Construction Phase Responsibilities 2
2.3.1 Review of Contractor-Generated Documents 2
2.3.2 Construction Oversight 2

3 CONSTRUCTION PROCEDURES AND CONTRACTOR REQUIREMENTS 4
3.1 General Requirements 4
3.2 Inspection of Existing Conditions of Historic Elements 4
3.3 Establishment of Protection Procedures 4
3.3.1 General Submittal Requirements 4
3.3.2 Performance Specifications for Historic Elements at the WTC Site 5
East, West, and South Slurry Walls for the Project 5
35% and 75% Review 5
100% Design Review 5
3.4 Establishment of a Monitoring Program 6
3.5 Establishing and Monitoring Construction Methods 6
3.5.1 Routine Monitoring 6
3.5.2 Unforeseen Conditions and Unanticipated Damage 7
3.6 Establishing Methods and Materials to Be Used for Repairs 7

4 CONTROLS FOR MANAGEMENT OF HISTORIC WTC SITE ELEMENTS 9
4.1 Compliance Process 9
4.2 Compliance Tracking and Reports 9
4.3 Resolution of Unanticipated Effects on Historic Elements 9

1 INTRODUCTION

Consistent with the Stipulations of the executed Memorandum of Agreement (MOA) for the World Trade Center (WTC) Vehicular Security Center and Tour Bus Parking Facility pursuant to Section 106 of the National Historic Preservation Act, this Resource Protection Plan (RPP) was developed by the Port Authority of New York and New Jersey's (PANYNJ) Priority Capital Programs Department (PCP) in consultation with its Project Historical Architect (PHA). The provisions of this RPP will be implemented by PANYNJ's Construction Contractor under the direction of PANYNJ in consultation with its PHA. Stipulation I.C of the MOA for the WTC Vehicular Security Center and Tour Bus Parking Facility (the "Project"), executed among the Federal Transit Administration (FTA), PANYNJ, New York State Office of Parks, Recreation and Historic Preservation (SHPO) and the Advisory Council on Historic Preservation (ACHP) in June 2006, requires PANYNJ to develop and implement a RPP for protection of the WTC Site historic elements, as defined in the Determination of Eligibility for the WTC Site on March 31, 2004, that are to remain in situ from inadvertent damage during construction activities of this Project. This Stipulation also calls for the involvement of a PHA in the design and construction phases of the Project.

Section 2 of this RPP establishes the participation of a PHA in the design and construction of the Project. It also describes the PHA's qualifications and responsibilities during the design and construction phases of the Project. This RPP applies only to historic elements within the WTC Site, as defined in Stipulation I.B of the MOA. In accordance with the MOA, PANYNJ will develop a separate Construction Protection Plan (CPP) for historic properties outside the confines of the WTC Site that are identified in the Project's Environmental Assessment (EA) . The CPP will be a separate document prepared by PANYNJ and the PHA, in consultation with SHPO and in coordination with the Lower Manhattan Development Corporation (LMDC) and, as appropriate, with the Metropolitan Transportation Authority / New York City Transit (MTA/NYCT), prior to performance of construction within 90 feet of these off-site historic properties. Pursuant to Stipulation III.B. of the MOA, PANYNJ will also prepare separate documentation, in consultation with SHPO and the New York City Landmarks Preservation Commission and in coordination with LMDC, for archaeological resources that may remain within the project site, including a Topic Intensive Study, Phase 1B Archaeological Testing and an Archaeological Monitoring Program.

Section 3 of this RPP describes the construction procedures of the Project's contractor(s) related to the historic elements of the WTC Site, as defined in the Stipulations of the MOA cited above. It outlines procedures for inspecting and reporting the existing conditions of the WTC Site's historic elements, establishes protection procedures and a monitoring program, and establishes and monitors construction methods. Finally, it establishes methods and materials to be used for any repairs to historic elements.

Section 4 of this RPP describes the process and procedures in place to track and report on compliance with the RPP and the MOA, including the resolution of unanticipated effects on historic elements.

Those WTC Site resources outlined in the Coordinated Determination of Eligibility (DOE) that are not expected to be adversely affected by this Project, will also be considered by this RPP, and will receive an appropriate level of resource protection (in accordance with the posting and comment period protocols specified in the MOA), if it is determined by the Engineer, in consultation with the PHA, that the proximity of the specific project construction activities to the resource warrants such action.

2 PROJECT HISTORIC ARCHITECT

2.1 Qualification and General Responsibilities

The PHA will meet the U.S. Secretary of the Interior's professional qualifications standards (48 F.R. 44716) in historic preservation. The PHA will advise PANYNJ as a member of its Environmental Consultant Team for the Project. The PHA will provide professional advice and counsel to the Chief Engineer of PANYNJ or the Engineer's designee (Engineer) regarding the management and protection of historic elements within the WTC Site during construction of this Project. Such professional advice and counsel will also assist PANYNJ in its fulfillment of the provisions of the Project's MOA.

2.2 Design Phase Responsibilities

2.2.1 Pre-Construction Inspection

The PHA will review existing site documentation (such as the Historic American Buildings Survey/Historic American Engineering Record [HABS/HAER] documentation) and conduct a preconstruction inspection of those historic elements at the WTC Site cited in the MOA's Stipulations (listed above) that may be affected by construction, to determine existing material and structural conditions. The PHA will present the results of this inspection in a report to the Engineer. The report (which may include one or more of the following: text, color photographs, and other graphics, as appropriate) will describe existing material and structural conditions of each historic element, and will provide initial recommendations for remediation and/or for securing areas of concern prior to the commencement of construction activities within the affected area of the WTC Site.

2.2.2 Review of Design Documents

The PHA will review and provide comment to the Engineer on design plans at the preliminary (35%) and pre-final (75%) stages regarding treatment of historic WTC Site elements. Such review and comment will specifically cover *but will not be limited to* design plans for the east, west, and south slurry walls as specified in Stipulations I.B of the MOA.

The PHA will review design plans involving these elements prior to submission of these design plans to SHPO, National Park Service (NPS) and Consulting Parties, which submission is specified in the Project MOA, and will provide comments to the Engineer for consideration, in accordance with the Stipulations of the MOA.

2.3 Construction Phase Responsibilities

2.3.1 Review of Contractor-Generated Documents

The PHA will review Contractor-Generated submittals that affect historic elements of the WTC Site, including but not limited to documents concerning construction sequencing, staging, shoring, phasing and transportation and will provide comments to the Engineer for consideration, in accordance with the Stipulations of the MOA.

2.3.2 Construction Oversight

The PHA will conduct periodic site reviews to monitor the progress of construction and the level of compliance with the measures for protection of historic site elements contained in approved Contract Documents and the Contractor-Generated submittals (cited in Section 3.3 below). The PHA will submit a site review report to the Engineer, with recommendations as appropriate to ensure protection of historic site elements over the remainder of the construction process. The

PHA will attend construction meetings scheduled at the direction of the Engineer and will provide to the Engineer meeting notes, observations and recommendations as appropriate regarding management and protection of historic site elements.

The PHA will provide recommendations to the Engineer regarding repairs, mitigation or remedial actions that may be necessary to address inadvertent damage to historic elements of the WTC Site as further described in Sections 3.5 and 3.6.

3 CONSTRUCTION PROCEDURES AND CONTRACTOR REQUIREMENTS

3.1 General Requirements

Contractors are responsible for compliance with all requirements, as discussed in this section, for protection of historic WTC Site elements that each construction contract states must remain undamaged and in situ during construction. Contractors will require that each subcontractor be in compliance with the requirements for protection of historic elements of the WTC Site. Contractors will cooperate fully in implementing any project-specific procedures and guidelines developed by the Engineer or the PHA regarding protection of historic WTC Site elements. Contractors will identify their respective staff responsible for issues relating to protection of historic WTC Site elements.

Contractors will follow the protocol outlined in their respective construction contracts to ensure that the necessary methods, practices, procedures and resources essential to be employed throughout the design and construction of the Project will conform with the Stipulations of the MOA.

The Contractor will be notified by the Engineer (in consultation with the PHA) when non-compliance with WTC Site historic element protection requirements is observed. Conversely, if the Contractor observes any non-compliance with site element protection requirements, they are required to immediately notify the Engineer. In all cases, the Contractor will be required to immediately implement and maintain corrective actions.

3.2 Inspection of Existing Conditions of Historic Elements

The Contractor will inspect the existing conditions of all historic elements on the WTC Site that may be impacted by the Project as identified in the MOA, including, but not limited to: the east, west, and south slurry walls.

3.3 Establishment of Protection Procedures

3.3.1 General Submittal Requirements

The Contractor conducting work on the WTC Site will submit documents pertaining to protection of historic elements to the Engineer for review and approval. The PHA will provide consultation to the Engineer on this document. The Contractor will not locate any equipment or deliver any materials or commence any work whatsoever that may impact historic elements on the WTC Site until the said documents are approved.

Each Contractor-Generated Submittal will include the following information:

- General location map of the WTC Site showing where work on the Contract will be performed, including notation on the map of location of the historic element(s); and
- Listing of materials, products or construction equipment to be used in the course of the Contract that will or may come in contact with any of the WTC Site's historic elements, and the proposed methods to be employed to prevent any damage to said historic elements.

In the event that the Contractor identifies potentially more effective and/or efficient methods of protection as construction proceeds, the Contractor will propose said measures for consideration by the Engineer in consultation with the PHA. Approved adjustments and modifications will be documented.

3.3.2 Performance Specifications for Historic Elements at the WTC Site

East, West, and South Slurry Walls for the Project

As noted in Stipulation I.B.1. of the MOA, the design of the Project may result in the removal of portions of the south slurry wall and portions of the east slurry wall and minor alterations to the west slurry wall in areas that will not be visible to the public.

As noted in Stipulation I.B.2. of the MOA, the design for the Project will not alter portions of the west or east slurry walls that will be maintained for public view as part of the Permanent WTC PATH Terminal Project.

As noted in Stipulation I.B.3. of the MOA, PANYNJ, in cooperation with LMDC and in consultation with SHPO, has conducted Level II Historic American Buildings Survey/Historic American Engineering Record ("HABS/HARE") documentation of the east, west, and south slurry walls, which was accepted by SHPO on August 16, 2005.

When constructing any connectors or other aspects of the Project that come in contact with either the east, west, or south slurry walls, the Contractor will implement the necessary protection measures to ensure that those portions of the east and west slurry walls listed in the Permanent WTC PATH Terminal's MOA remain visible and appreciable to the public as a result of this Project are protected from damage arising from construction activities, movement of equipment and materials, and materials storage.

35% and 75% Review

Consistent with the Stipulations of the Project MOA as set forth under Stipulations I.B.4, PANYNJ will follow the process described below.

- Design plans for the treatments will be developed in consultation with SHPO and submitted at the preliminary (35%) and pre-final (75%) review for SHPO's comments. NPS and the Consulting Parties will be given the opportunity to comment on the treatment design plans.
- Design plans will be made available, subject to Stipulation VII.D of the Project MOA, to the Consulting Parties and the public via the PANYNJ website at www.panynj.gov/pathrestoration. The Consulting Parties will be informed of the availability of the plans by electronic notification as plans are posted on the project website, and the Consulting Parties will have 21 calendar days to comment on the plans. PANYNJ will provide paper copies of such plans to Consulting Parties upon request.
- The review of the plans will focus on the treatments pertaining to the specific elements identified in Stipulations I.B.1 of the Project MOA.
- If SHPO makes substantive comments during the pre-final design review, SHPO may request the opportunity to concur on the final design as described below.
- SHPO will respond within 30 calendar days or earlier to the design plans at each stage of completion as described above.
- Prior to approval of submitted plans and specifications, PANYNJ will consider and respond to all comments received from SHPO and the Consulting Parties within the specified comment period. If SHPO does not respond within the comment period, PANYNJ may assume that SHPO concurs with the submitted plans and specifications.

100% Design Review

Historic element protection measures may be accomplished through techniques to be submitted by the Contractor for review and approval by the Engineer (in consultation with the PHA). The

Contractor will submit the Contractor-Generated submittals described above to the Engineer. The Engineer will forward the Contractor-Generated submittals to the PHA for review and comment. The Engineer will not approve Contractor-Generated submittals without concurrence from the PHA

If SHPO makes substantive comments during the pre-final (75%) design review, and requests the opportunity to concur on the final design, PANYNJ will forward Contractor-Generated submittals to SHPO. SHPO will respond within 30 calendar days or earlier on the final design plans. If SHPO does not respond within the comment period, PANYNJ may assume that SHPO concurs with the submitted plans and specifications.

3.4 Establishment of a Monitoring Program

A monitoring program will be initiated immediately after the award of Contract. The Contractor will submit the Contractor-Generated submittals, and will not proceed with work that may affect WTC Site historic elements identified in said submittals until approved by the Engineer, in consultation with the PHA, as discussed in Section 3.3.

Prior to construction, the Contractor will meet with the Engineer and the PHA to establish a program to periodically inspect and examine all protection measures in place, to verify that they remain in compliance with the MOA and this RPP.

Prior to construction, the Contractor will provide for the approval of the Engineer, in consultation with the PHA, an Emergency Remediation Plan, which outlines procedures to be followed should an unforeseen condition or unanticipated damage arise that compromises or places at risk any historic elements on the WTC Site. Once said Plan is approved, the Contractor will set aside the relevant materials, products and equipment in a safe and easily accessible location on-site, so that they may be quickly dispatched and properly employed should the need arise. The PANYNJ may make the approved Emergency Remediation Plan available to consulting parties upon request.

3.5 Establishing and Monitoring Construction Methods

3.5.1 Routine Monitoring

During the course of construction, the PHA will meet with the Contractor at the direction of the Engineer to examine the protection measures, and to examine specific issues that may arise during the course of the Contract.

At each site visit, the PHA and the Contractor will inspect all protection measures in place and verify that they remain intact and that they have performed as required since the previous inspection. Additional items to be examined are:

- Progress achieved since the previous inspection, and how the protection measures performed, and if they did not perform as required, what adjustments or changes should be made to bring them into compliance with the requirements of the MOA and this RPP;
- Upcoming scheduled work activities, and review of whether the existing protection will be capable of accommodating said activities, and if not, what supplemental measures need to be implemented to provide commensurate levels of protection; and
- Foreseeable work activities that were not anticipated in the original Contractor-Generated submittals, and review of whether the existing protection will be capable of accommodating said activities, and if not, what supplemental measures need to be implemented to provide commensurate levels of protection.

3.5.2 Unforeseen Conditions and Unanticipated Damage

Should an unforeseen condition arise or unanticipated damage occur during construction that compromises the integrity of the in-place protection measures, or adversely affects any historic elements on the WTC Site, the Contractor will cease all work in the affected area immediately and implement the relevant measures outlined in the Emergency Remediation Plan, described above. As soon as possible thereafter, the Contractor will notify the Engineer and the PHA to review:

- The situation that arose;
- Its cause, if known;
- Mitigation measures implemented; and
- Recommendations for further intervention, if any.

At that time, the Engineer, in consultation with the PHA, will determine whether the Contractor may resume work in the affected area, or whether additional remediation measures are required. Also at that time, the PHA, in consultation with the Engineer and the Contractor, will determine whether to conduct a supplemental site visit to examine the situation:

- If not, the situation will be reviewed at the next regularly scheduled construction meeting or site visit, and noted in the minutes thereof; and
- If so, the Engineer and/or the PHA (as appropriate) will meet on-site with the Contractor to review the situation and issue instructions to the Contractor on the needed supplemental remediation and mitigation measures. The PHA or the Engineer (as appropriate) will also notify FTA and SHPO in writing of the situation and steps taken to remediate and mitigate it. Finally, at the next regularly scheduled construction meeting or site visit, the Contractor will re-examine the Emergency Remediation Plan and revise it, as required, to accommodate the lessons learned from the situation.

3.6 Establishing Methods and Materials to Be Used for Repairs

As previously discussed in Section 3.3, the Contractor will submit the Contractor-Generated submittals, described above. The submittals will contain a listing of materials, products or equipment to be used in the course of the Contract that will or may come in contact with any of the WTC Site's historic elements and the proposed methods to be employed to prevent any damage to said historic elements. The Contractor will not commence any work on the WTC Site that impacts the historic elements until the Engineer, in consultation with the PHA, approves the Contractor-Generated submittals.

During the course of construction, the Engineer and the PHA (as appropriate) will review the Contractor's employed methods and materials for installing new construction in the vicinity of the WTC Site's protected historic elements and the measures being taken to continue to protect said elements. In the event that the Contractor identifies potentially more effective and/or efficient methods of protection, the Contractor will propose said measures for consideration by the Engineer, in consultation with the PHA. Approved adjustments and modifications will be documented.

Should an unforeseen condition arise or unanticipated damage occur during construction that adversely affects historic elements on the WTC Site (see Section 3.5), the Contractor will cease all work in the affected area immediately and implement the relevant measures outlined in the Emergency Remediation Plan, as described above, including the installation of repair materials and procedures as developed in consultation with the PHA. All repair work will be done in such a manner as to minimize the adverse impact on the intact historic elements. The Contractor will

not remove any damaged, marred or otherwise unsalvageable historic elements from the WTC Site until review and approval is given by the Engineer, in consultation with the PHA, FTA, and SHPO.

CONTROLS FOR MANAGEMENT OF HISTORIC WTC SITE ELEMENTS

3.7 Compliance Process

Compliance with the RPP will be achieved through:

- Incorporation of all applicable requirements for historic WTC Site element protection into project design specifications, construction planning and construction Contract documents;
- Observation of all construction activities and their cumulative effect on historic WTC Site elements;
- Communication with FTA, SHPO and Consulting Parties;
- Establishment of procedures, responsibilities and accountability for Project-wide environmental compliance, specifically including compliance with requirements for protection and treatment of historic WTC Site elements, and problem resolution; and
- Involvement of the PHA throughout the design, construction planning and construction processes, and involvement of other consultants with technical expertise and problem-solving capability as required by the Engineer.

3.8 Compliance Tracking and Reports

The Project MOA and Environmental Assessment (EA) identify and describe measures and commitments for treatment of the WTC Site and historic elements. These measures and commitments will be incorporated into construction planning and field implementation. Compliance will be tracked with the active and ongoing participation (including periodic monitoring) and professional counsel of the PHA. Compliance will be reported on a monthly basis to FTA and implemented in accordance with Stipulation VII.C of the Project MOA.

3.9 Resolution of Unanticipated Effects on Historic Elements

In the event the PHA determines that construction activities of the Project will affect or has affected a historic element in an unanticipated manner, the Engineer (in consultation with the PHA) will stop Project construction in the vicinity of the affected resource and will take reasonable measures with respect to the Project, to avoid harm to the resource. Additional measures may be taken to secure the job site if it is determined that unfinished work in the vicinity of the affected historic element will cause major safety or security concerns. The Contractor will not restart work in the area of the affected historic element until the Engineer has granted clearance, after receiving word from the PHA that the unanticipated effect on the historic element has been resolved through avoidance, changes in construction methods, protection or other measures.

The process of resolving unanticipated effects on historic elements may include but not be limited to:

- Preparation of a treatment or mitigation plan, as described above, for review by the Engineer and the PHA in consultation with FTA and SHPO;
- A 14-calendar-day review and comment period on the developed treatment or mitigation plan, described above, by FTA and SHPO;
- Implementation of the agreed-upon treatment or mitigation plan; and
- Approval for the Contractor to resume construction following consultation with the Engineer (in consultation with the PHA) to communicate the implementation of the plan and to receive concurrence that the unanticipated affect on the historic element has been resolved.