TABLE OF CONTENTS

1. Executive Summary ........................................................................................................... 1
2. Project Description ........................................................................................................... 4
3. Purpose and Need ............................................................................................................. 5
4. Land Use, Zoning and Public Policy ............................................................................... 5
5. Socioeconomic Characteristics and Environmental Justice ............................................ 6
6. Community Facilities and Services .................................................................................. 7
7. Open Space ....................................................................................................................... 8
8. Historic/Cultural Resources ............................................................................................ 8
9. Archeological Resources ................................................................................................. 9
10. Urban Design and Visual Resources ............................................................................. 10
11. Shadows ........................................................................................................................... 10
12. Natural Resources .......................................................................................................... 11
13. Hazardous Materials ....................................................................................................... 12
14. Energy ............................................................................................................................. 13
15. Transportation/Traffic and Pedestrian Conditions ......................................................... 13
16. Air Quality ....................................................................................................................... 14
17. Noise ............................................................................................................................... 14
18. Public Health and Safety ............................................................................................... 15
19. Neighborhood Character ............................................................................................... 15
20. Construction- Staging, Duration, Temporary Impacts .................................................... 16
21. Alternatives Considered ................................................................................................. 17

Figures

Figure 1 - USGS Location Map
Figure 2 - Street Location Map
Figure 3 - Map of Battery Park City
Figure 4 - Zoning Map
Figure 5 - Census Tract Map
Figure 6 - Historic Resources Map
Figure 7 - NYSDEC Wetland Mapping
Figure 8 - FEMA Floodplain Mapping (Existing)
Figure 9 - FEMA Floodplain Mapping (New Base Advisory Flood Mapping)
Figure 10 - Coastal Zone Map
Figure 11 - NYSDEC Environmental Resources Map
Figure 12 - Proposed Lane and Area Closure Plan
Figure 13 - Existing Subsurface Utilities and Infrastructure Schematic
Figure 14 - Bridge Terminus Options 1 and 2 and Western Terminus Circular Stairway Option
Appendices

1. SEQR EAF and Supporting Documentation
2. NYSDOS Consistency Form and NYC Waterfront Revitalization Program Coastal Consistency Assessment Form
3. Relevant Project Correspondence
4. Supporting Traffic Analysis
5. Environmental Screening with Attachments
6. Hazardous/Contaminated Materials Screening with Attachments
7. Project Photographs with Photo-Control Map and Descriptions
8. West Thames Pedestrian Bridge Conceptual Visual Renderings
9. Archeological Documentary Study
10. Project Environmental Performance Commitments
11. Route 9A Programmatic Agreement, October 13, 2004 Amendment

List of Preparers
1. Executive Summary

Project Description

The Proposed Project would include the construction of a new, permanent pedestrian bridge across Route 9A/West Street, from the corner of the intersection of West Street and Joseph P. Ward Street to the corner of Little West Street and West Thames Street (the Proposed Project). The Proposed Project also includes the removal of the existing Rector Street Pedestrian Bridge, just north of the proposed West Thames Street Pedestrian Bridge. For construction of the new bridge, a single, mid-span pier will be placed in the median of Route 9A/West Street. The new pedestrian bridge will consist of a covered lenticular truss bridge with both an elevator and access stairway at each of the two terminus points. This new pedestrian bridge is planned as the permanent replacement to the existing Rector Street Pedestrian Bridge, which is an interim temporary bridge (see Figures 1, 2 and 3). Phase I of the project will be the construction of the West Thames Street Pedestrian Bridge and Phase II will be the removal of the Rector Street Pedestrian Bridge which will not be initiated until the new West Thames Street Pedestrian Bridge is open to the public. The Proposed Project, which is anticipated to cost approximately $18.9 million for construction (which includes removal of the Rector Street Bridge and restoration of the walkway and Rector Street Bridge landing area) and $8.6 for million for remaining soft costs, will receive approximately $20 million in federal funding from the United States Department of Housing and Urban Development (HUD), as part of a Community Development Block Grant (CDBG) through Lower Manhattan Development Corporation (LMDC), and approximately $7.5 million in funding from the Battery Park City Authority (BPCA). Established in the aftermath of September 11, 2001, LMDC coordinates the rebuilding and revitalization efforts in Lower Manhattan. LMDC is a subsidiary of the New York State Urban Development Corporation, conducting business as Empire State Development (ESD), a political subdivision and public benefit corporation of the State of New York.

LMDC is responsible, pursuant to Federal Statute, 42 USC 5304(g), as the recipient of HUD CDBG program funds, for conducting environmental reviews of projects receiving HUD funds in accordance with 24 Code of Federal Regulations (CFR) Part 58, as well as other laws and regulations. LMDC is conducting an environmental review of the Proposed Project under the National Environmental Policy Act (NEPA) and the New York State Environmental Quality Review Act (SEQRA). Because the Proposed Project is located in the City of New York (the City), the [City Environmental Quality Review (CEQR)] CEQR Technical Manual was used as a guide with respect to methodologies and impact criteria for evaluating the Proposed Project. In addition to NEPA and SEQRA, the review of the Proposed Project has been coordinated pursuant to other applicable laws and regulations, such as Section 106 of the National Historic Preservation Act of 1966 (NHPA). For the proposed West Thames Street Pedestrian Bridge Project (including removal of the existing, temporary Rector Street Bridge), LMDC is serving as Lead Agency under NEPA and SEQRA.

Prior to September 11, 2001, there were three pedestrian bridges across Route 9A/West Street in Lower Manhattan. The southernmost connected the World Financial Center to the Financial District at the south side of Liberty Street. To the north, another connected the World Financial Center’s Winter Garden to the World Trade Center just south of Vesey Street. The third and most
northerly bridge connected Tribeca to Stuyvesant High School and the Battery Park City North Neighborhood at Chambers Street. The attacks of September 11, 2001 destroyed the bridge at the Winter Garden and badly damaged the bridge at Liberty Street, leaving only the Tribeca Bridge open for use.

Two temporary bridges were constructed to restore grade-separated access to Battery Park City. One was located at Vesey Street, and the other was located further south, between Rector and Carlisle Streets and is known as the Rector Street Bridge. Subsequently, the damaged Liberty Street Bridge was repaired, and a temporary detour bridge and stairs were provided to connect it to the east side of the roadway. With the recent completion of the pedestrian concourse under Route 9A/West Street between the new PATH World Trade Center Terminal and the Winter Garden, the temporary bridge at Vesey Street has been deconstructed and removed. The temporary Rector Street Bridge, which is deteriorating and is nearing the end of its useful life, would be demolished as part of the Proposed Project. The 2005 Route 9A Reconstruction Final Supplemental Environmental Impact Statement (Route 9A FSEIS), for reconstructing the highway after the September 11, 2001 attacks, anticipated the removal of the temporary Rector Street Bridge and its replacement with a permanent structure.

New York City Economic Development Corporation (NYCEDC) has or will enter into design and construction contracts for the Proposed Project. Maintenance of the proposed West Thames Street Pedestrian Bridge will be provided by both the New York City Department of Transportation (NYCDOT) and BPCA, pursuant to a written Maintenance Agreement. The proposed bridge will be owned by the City, under the jurisdiction of NYCDOT.

Coordination efforts have included meetings with numerous agencies and the public regarding the design, maintenance and environmental review throughout the planning of the Proposed Project. A summary of the coordination is included in Appendix 3.

Potential Construction Period Impacts

The Proposed Project has the potential to result in minimal temporary impacts on traffic patterns, air quality and noise levels during construction. Potential construction related impacts would be minimized or avoided by incorporation of best management practices, minimization of construction duration to the maximum extent practicable, timing of lane closures to minimize traffic disruption and strict adherence to all permit conditions imposed by the pertinent agencies. The anticipated temporary impacts would be specifically associated with proposed temporary roadway lane closures and resultant traffic queuing as well as temporary construction related activities.

Construction of the proposed bridge could have the potential to damage the adjacent West Street underpass that is part of the Brooklyn Battery Tunnel (eligible for listing on the State and National Registers of Historic Places [S/NR-eligible]) when pilings for the mid-span pier are placed. It is also possible that deconstruction of the existing bridge could cause damage to the adjacent Barrett Building (S/NR-eligible) and New York Evening Post Building (listed on the State and National Register [S/NR]). These would be avoided by compliance with a Construction Protection Plan (CPP)
covering vibration impacts as well as other potential accidental construction damage. Construction of the new bridge may also affect archeological resources. Provided that certain measures (i.e., appropriate interpretive signage, State Historic Preservation Office [SHPO] review of final plans prior to construction) agreed to between NYCECD and SHPO are followed, no adverse impacts to historic/cultural resources are anticipated. SHPO has already issued a letter indicating their “No Adverse Effect Determination with conditions”, as noted above.

Impacts to the existing MTA garage at 70 Greenwich Street would be minimal and will be addressed by relocating a door and the outlet of the dry fire standpipe in the north stair to ensure that they remain accessible. These modifications have been coordinated with the MTA.

The design of the bridge is being coordinated with the design of the plaza at the future 50 West Street, currently under construction, and will allow passage between the two.

Provided that certain precautionary measures are taken to protect worker safety and safe disposal of excavated materials, no significant adverse impacts are anticipated due to hazardous or contaminated materials. These precautionary measures, which will be incorporated into the project bid specifications, would define testing requirements for material disposal as well as when, and to what level, workmen’s level of personal protective equipment will be required.

Overall construction of the Proposed Project would be subject to the Environmental Performance Commitments (EPCs) for the Lower Manhattan Recovery Projects, set forth in the World Trade Center Memorial and Redevelopment Plan Record of Decision.

Probable Impacts of the Proposed Project

The Proposed Project would beneficially affect pedestrian access between Battery Park City (BPC) and the Financial District. It would improve access to public transportation, the Hudson River waterfront, a unique natural feature (approximately 800’ to the west) and all the open spaces west of Route 9A/West Street.

The Proposed Project would result in the removal or relocation of six trees; three located adjacent to an existing dog run near the western terminus of the proposed West Thames Street Pedestrian Bridge and three trees in the roadway median planted areas. Given the supplemental landscape plantings, with both shade tree and shrub species being provided within the median planted area along with a rain garden and the expansion of the existing Liberty Community Garden and basketball courts, the Proposed Project would not result in any significant adverse impact to vegetated areas. The trees within the Route 9A/West Street median are under the jurisdiction of the New York State Department of Transportation (NYSDOT); the relocation of viable trees from the median to nearby locations within the bikeway planting areas is being coordinated with NYSDOT and BPCA. The three trees adjacent to the dog run are in City property and under the jurisdiction of the New York City Department of Parks and Recreation (NYCPR) and subject to restitution in accordance with Local Law 3 of 2010 and Chapter 5 of Title 56 of the Rules of the City of New York (NYCPR Rules). As a result, there are no significant adverse impacts to natural resources. No removal of trees will occur without obtaining all required approvals from the
agency having jurisdiction. Coordination with both NYSDOT and NYCDPR regarding the removal or relocation of trees will continue throughout the project.

There are no agricultural lands and no unique natural features within the immediate vicinity of the proposed project area.

Since the only water anticipated to be discharged to the City sewer system is a negligible amount from the proposed elevator and clean, non-roadway runoff from stormwater and maintenance washing, there are no anticipated impacts to surface water quality associated with the Proposed Project. Further, stormwater runoff from the Proposed Project would be directed into the proposed rain garden, which would be constructed in the median of Route 9A/West Street. The Proposed Project would not impact wetlands or waters, state or federal protected species, minority or low-income populations nor would it result in any business or residential displacements.

The Proposed Project would be located within the 100-year floodplain of the Hudson River, both per existing and new proposed FEMA floodplain mapping. A Floodplain Certification from the NYC Department of Buildings (DOB) would be obtained. The proposed bridge components have been designed taking into account all pertinent flood elevations. All electrical components would be placed above flood elevations and water level sensors would be installed that would send the elevator to the upper level when water is detected in the elevator pit. The Proposed Project also lies within the City’s Coastal Zone and a local and State Coastal Zone Compliance Statement has been prepared (see Appendix 2). Based upon the analysis required by the Compliance Statement(s), no significant adverse impacts on the City’s Coastal Zone are anticipated.

2. **Project Description**

The proposed West Thames Street Pedestrian Bridge is intended as a permanent replacement for the existing, temporary Rector Street Bridge; therefore, the Project comprises two separate but proximate sites. A new pedestrian bridge would span Route 9A/West Street from Joseph P. Ward Street on the east to Little West Street and West Thames Street on the west in BPC (see Figure 1). A single, mid-span pier would be placed in the median of West Street. Landscaping of the median and creation of a rain garden at the base of the pier would be components of the Proposed Project. The new permanent pedestrian bridge would consist of a covered lenticular truss bridge with both an elevator and an access stairway at each end. The uncovered access stairways will incorporate a snow melt system. The Proposed Project would also remove the existing temporary Rector Street Pedestrian Bridge and all associated structures (two stairways, a ramp, and an elevator) and restore the impacted sidewalk/median/buffer. Supplemental landscaping would be provided along the existing dog run near the western terminus of the new bridge. The existing community garden and basketball courts would also be expanded. Both bridge sites are surrounded by a dense developed urban area that includes a significant amount of streetscape and open space along the esplanade on the west side of Route 9A/West Street. The proposed bridge site is just north of the Brooklyn Battery Tunnel. The Bridge would span a seven lane roadway and two-lane greenway. There is a mix of commercial and residential uses along both sides of the roadway.
In the absence of the project, the Rector Street Bridge, which was constructed as an interim, temporary bridge, would continue to deteriorate and would require substantial upgrade/repairs to extend its serviceable life. The proposed bridge construction site would continue to be traversed via unsafe at-grade crossings without the added pedestrian benefit and safety of a new pedestrian bridge.

3. **Purpose and Need**

The primary purpose and need for the Proposed Project is the provision of a permanent, safe, grade-separated means of pedestrian access between the Financial District and BPC.

As noted above, the Rector Street Bridge was one of the two bridges erected to provide safe pedestrian crossings over Route 9A after September 11, 2001. The 2005 Route 9A Reconstruction Final Supplemental Environmental Impact Statement (Route 9A FSEIS), for reconstructing the highway after the September 11 attacks, anticipated the removal of the temporary Rector Street Bridge and its replacement with a permanent structure.

The final selection of a suitable bridge location has been on-going for a number of years. Based upon community input as well as consideration of the significant degree of residential growth in the area around West Thames Street, the proximity of the Battery Park City School (Public School [PS] No. 276) to the proposed bridge, and the recreational infrastructure including the BPC open spaces and the Hudson River Waterfront, it was determined that a new pedestrian bridge located closer to the southern end of Lower Manhattan would provide a needed connection to the Financial District. Thus, a multi-year planning and design process, with significant public input, has resulted in the selection of the current Proposed Project location for the West Thames Street Pedestrian Bridge.

The alternative to a pedestrian bridge at this site is to move the at-grade crossing further to the north of the intersection, eliminating the leg crossing right in front of the tunnel. However, a West Thames Intersection Analysis prepared by Weidlinger Associates Inc. (WAI) for the current project and completed in 2013 indicated that there is currently insufficient green time for pedestrians to safely cross the intersection. Adding green time to allow for a pedestrian-only crossing movement (leg) would significantly reduce the Level of Service (LOS), resulting in more queuing at the intersection and would likely exceed the acceptable delay times on any one of the vehicular intersection approaches. The additional queuing could also have a potential negative impact on air quality.

4. **Land Use, Zoning and Public Policy**

The proposed West Thames Street Pedestrian Bridge structure would be constructed completely within public rights-of-way and no private acquisitions are anticipated. The two project areas span a major north-south arterial along the west side of Manhattan. To the west, the land uses in BPC are predominantly residential and open space. To the east, is the Financial District, a traditionally commercial area with increasing residential use. The Special Battery Park City District is mapped
to the west and a C6-9 District is mapped to the east (see Figure 4). The C6-9 District is part of the Special Lower Manhattan District. The project is also located in the City’s Coastal Zone. The Coastal Zone Management Act of 1972 (CZMA) delegates authority and responsibilities to individual states to determine compliance with both the CZMA and approved state management plans. The New York State Waterfront Revitalization and Coastal Resources Act of 1981 led to the creation of the Coastal Management Program (CMP), a program that established 44 state policies and designated five (5) coastal zones, including one in New York City. The CMP also requires state agencies undertaking actions within the coastal zone to make a determination of consistency with state and local coastal area policies and file such determinations with the New York State Department of State (NYS DOS). For activities requiring federal agency funding or approval, NYS DOS reviews such activities for their consistency with the CMP or an approved local waterfront revitalization program. New York City’s Local Waterfront Revitalization Program contains 10 city specific policies. LMDC complied with the CZMA through the issuance of this Environmental Assessment, which demonstrates the Proposed Project is consistent with all 10 city coastal zone policies and which also includes the completed Coastal Zone Consistency Form and NYC Waterfront Revitalization Program Compliance Statement, included in Appendix 2. Based on these analyses, no significant impacts to New York City’s coastal zone are anticipated as a result of the Proposed Project. Furthermore, the Proposed Project advances the coastal zone policies by facilitating access to the waterfront. Finally, this Environmental Assessment demonstrates that the Proposed Project, to the extent practicable, meets the ten smart growth criteria set forth in the State Smart Growth Public Infrastructure Policy Act.

5. **Socioeconomic Characteristics and Environmental Justice**

The Proposed Project will not result in any primary or secondary displacements to residential or commercial uses, nor will it have any adverse effects on any industry.

The 2010 Census data on ethnic diversity, housing, age, income, poverty level and family size were obtained from the 2010 National Census. The data was analyzed to ensure that the West Thames Pedestrian Bridge Project would not pose excess hardship to people who are socially or economically disadvantaged. See Figure 5 for a map of the project area Census tracts.

There is less ethnic diversity in the study area, with a 68 percent white population as compared to Manhattan where 57 percent of the population is white. Asians comprise the second largest ethnic group, at 23 percent.

The average household size is between 1.63 and 2.03, which is comparable to Manhattan’s average of 1.99. This indicates that large families are not common within the project area. All Median Household incomes within the Census study area are well over $100,000 per year and at least $50,754 higher than the Median Household income for Manhattan.

In 2010 the poverty guideline for a family of two, which is about the average family size in the project study area, was $14,570 and in 2013 this figure has slightly risen to $15,510. About 4 percent or less of the population was below the poverty level, as compared to the 17 percent that were listed below the poverty level in all of Manhattan. People in Manhattan, and more so in the
project study area, had higher income than other residents of New York City, which had a poverty rate of 18.6% in 2010.

Based upon an analysis of the socioeconomic characteristics listed above, and summarized in Table 1 below, the West Thames Pedestrian Bridge Project is not located in an area considered to have a minority or low-income population, therefore eliminating the need to further assess environmental justice issues. The project is anticipated to have a net benefit to local and transient pedestrian traffic due to the enhanced level of pedestrian safety the proposed pedestrian bridge would provide.

**TABLE 1 – 2010 Census Data**

West Thames Pedestrian Bridge  
New York, New York

<table>
<thead>
<tr>
<th>Primary Study Area</th>
<th>Total Population</th>
<th>White</th>
<th>Black</th>
<th>Asian</th>
<th>Other</th>
<th>Hispanic</th>
<th>Total Housing Units</th>
<th>Housing Vacancy %</th>
<th>Owner</th>
<th>Renter</th>
<th>Total Households</th>
<th>Average Household Size</th>
<th>Median Household Income</th>
<th>Persons Below Poverty %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery Park City</td>
<td>5,677</td>
<td>3,731</td>
<td>176</td>
<td>1,443</td>
<td>327</td>
<td>482</td>
<td>3,638</td>
<td>23.30%</td>
<td>1253</td>
<td>1,537</td>
<td>2,790</td>
<td>2.03</td>
<td>$151,815</td>
<td>4.0%</td>
</tr>
<tr>
<td>Census tract 317.04</td>
<td>4,467</td>
<td>3,074</td>
<td>188</td>
<td>946</td>
<td>259</td>
<td>339</td>
<td>3,062</td>
<td>10.94%</td>
<td>385</td>
<td>2,342</td>
<td>2,727</td>
<td>1.63</td>
<td>$115,938</td>
<td>10.00%</td>
</tr>
<tr>
<td>Financial District</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Borough</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manhattan</td>
<td>1,665,873</td>
<td>911,073</td>
<td>246,687</td>
<td>179,552</td>
<td>403,577</td>
<td>847,090</td>
<td>9.83%</td>
<td>173961</td>
<td>589885</td>
<td>763,846</td>
<td>1.99</td>
<td>66,184</td>
<td>17.00%</td>
<td></td>
</tr>
</tbody>
</table>

1Includes all Census blocks in tract 317.04
3Including all Census tracts in Manhattan.
4Including individuals identifying themselves as American Indian and Alaska Native, Native Hawaiian and Pacific Islander, two or more races, or other.
5Per 2010 Census guidelines, designation as Hispanic is considered ethnicity and not race.

### 6. Community Facilities and Services

Community facilities in the immediate vicinity of the two project areas include Battery Park City Day Nursery on South End Avenue near Rector Place; PS 276 on Battery Place (approximately 750' southwest of the Proposed Project), two high schools at the intersection of Trinity Place and West Thames Street, Trinity Church, the 9/11 Memorial and Museum and the Skyscraper Museum and the Museum of Jewish Heritage, also on Battery Place. Police, fire and emergency services protection are provided by the New York Police Department and the New York Fire Department. Given the nature of the Proposed Project, which would act as an enhancement of community facilities due to safer pedestrian access, there are no anticipated adverse impacts to community facilities and services.
7. **Open Space**

Public open space is located both west of and within the Proposed Project area. Within and immediately adjacent to the Proposed Project itself, public open space includes the Hudson River Greenway, Route 9A bikeway/walkway and Liberty Community Garden and basketball courts. Existing amenities just west of the Hudson River Greenway include an existing dog run, planted areas and hardscaped areas. Planted areas are located within both the median of Route 9A/West Street as well as within the existing esplanade. Esplanade hardscaping includes benches for pedestrians as well as the adjacent dog run. In addition to West Thames Park to the immediate north of West Thames Street, the area west of and within the immediate vicinity of the Proposed Project has a number of additional public open space areas including Rector Park and the Hudson River Waterfront. The project area is also in relatively close proximity to the South Cove open space (see Figure 3). The Proposed Project would enhance pedestrian access to these public open spaces, including the Hudson River Waterfront with its unique viewsheds over New York Harbor, and Trinity and Edgar Plaza, now known as Elizabeth Berger Plaza at Trinity Place, by providing safe pedestrian access from residences and businesses east of Route 9A/West Street to these public open spaces. The Proposed Project will also include installations of supplemental landscape plantings and a rain garden in the median of Route 9A/West Street as well as along the existing dog run, all of which will enhance the quality of these existing open spaces.

The Proposed Project is anticipated to result in the removal of a minimal number of trees within the median of Route 9A/West Street as well as along the existing dog run near its western terminus. Given the proposed supplemental plantings noted above, which would include both shade tree and shrub species that will offset the loss of the trees, the Proposed Project is not anticipated to result in any significant adverse impact to public open space.

8. **Historic and Cultural Resources**

The proposed West Thames Street Pedestrian Bridge would not be located in or on any property listed on the State and National Register of Historic Places (S/NR) nor is it in, on or adjacent to a NYC Landmark (NYCL) (see Figure 6). However, its mid-span pier would be located adjacent to the West Street Underpass to the Brooklyn Battery Tunnel (S/NR-eligible). It would also be adjacent to recently altered addition to the Battery Garage (S/NR-eligible). The eastern end of the existing Rector Street Pedestrian Bridge and its stairs and elevator, to be removed as part of this project, is immediately south of and adjacent to the New York Post Building (NR) and the Barrett Building (NR-eligible). There is the potential for construction-related damage (vibrations and accidental events) to all these resources. All other historic resources are more distant from any proposed construction/deconstruction activities and are not likely to be damaged.

The bridge would be visible from, and within the view looking toward, several historic structures. However, given the existing mix of architectural styles currently within these same views, the bridge would not significantly alter the setting of any listed or eligible building. The visual context of these structures is not viewed to be a contributing element to their historic significance.
Provided that 1) a Construction Protection Plan (CPP) is implemented, meeting the requirements of SHPO, the requirements stipulated in the New York City Department of Building’s “Technical Policy Procedure Notice #10/88”, and the requirements outlined in Stipulation No. 6 of the 2004 Amendment to the 1994 Programmatic Agreement for the Route 9A Reconstruction Project (annexed as Appendix 11); and 2) SHPO reviews the final plans before construction to confirm compliance, it is not anticipated that there would be any significant adverse impacts on historic resources. Stipulation 6 requires that impacts to historic buildings and structures due to vibrations associated with construction operations be minimized through coordination with other Lower Manhattan construction, the New York State Department of Transportation (NYSDOT) Standard Specifications, and Special Notes to the construction documents which address potential vibration impacts to be developed in consultation with SHPO. SHPO will be afforded a 10-day period to review and comment on these notes. Stipulation 6 also requires the examination of the conditions of the structures and buildings by a NYS licensed Professional Engineer. These reviews will be conducted prior to the commencement of work, at locations and times during construction as determined by NYSDOT, and after completion of work under this contract. Finally, Stipulation 6 requires repair of damage reasonably attributable to the project.

The letter from SHPO dated April 16, 2013 in reference to the Proposed Project allows an alternative to Stipulation 6 which would be the preparation of a Construction Protection Plan for all historic buildings within 90 feet of the proposed construction and removal activities. By letter dated April 25, 2013, NYCEDC agreed that it would comply with the conditions in the SHPO letter of April 16, 2013. This correspondence is included in Appendix 3.

9. **Archeological Resources**

The Archeological Documentary Study (see Appendix 9) concluded that excavation for the proposed West Thames Street Pedestrian Bridge would potentially impact the Hudson River Bulkhead (S/NR-eligible). It is further concluded that the project may impact as-yet unknown resources, such as old piers, cribbing, bulkheads, and other objects contained in landfill dating to the 1840s and later.

These archeological resources are subject to potential project effects from the installation of the support micro-pilings for the pedestrian bridge. A 1929 section of the Hudson River Bulkhead lies immediately to the west of the western end of the bridge, and may be penetrated by micro-pilings to support the structure and stairs of the proposed bridge. Historic landfill and landfill retaining structures may lie deeply buried beneath the east, central, and west supports of the bridge.

The micro-pilings would extend deeper into the landfill than any prior disturbances except for the pilings for the 78” Intercepting Sewer that runs beneath the southbound West Street roadway. Construction of the foundations at the east and west ends and central support for the proposed bridge are not likely to impact significant archeological resources due to prior disturbance.

The use of micro-pilings was adopted so as to minimize potential impacts to potentially historically sensitive subsurface remains. The nature of the anticipated impacts – drilling for the 10-inch diameter micro-pilings – rules out conventional archeological testing or monitoring.
On April 16, 2013, SHPO issued a conditional “No Adverse Effect with conditions” letter for archeological resources. NYCEDC agreed it would comply with such conditions, by letter dated April 25, 2013, included in Appendix 3. The conditions require that interpretive signage as well as final construction plans be submitted for SHPO’s review and approval prior to construction.

On May 7, 2013, the NYC Landmarks Preservation Commission (LPC) issued a letter concurring with SHPO’s conclusions that the project had the potential to affect archeological resources and that, given the nature of the potential impact, measures such as the proposed interpretive signage should be developed. LPC also requested that final plans be submitted for its review once plans are complete but prior to construction.

10. Urban Design and Visual Resources

The Public Design Commission of the City of New York granted preliminary approval of the design for West Thames Street Pedestrian Bridge on December 8, 2014. Based on preliminary renderings of the proposed West Thames Street Pedestrian Bridge (see Appendix 8) the proposed bridge would be of a much more open construction than the existing Rector Street Bridge. The proposed bridge would feature a reduced footprint width, from a visual perspective, more open sides (i.e., wire and mesh fencing on both sides of the bridge) and a fritted glass roof to allow more light to pass through and to minimize impacts to the views from the south looking at the World Trade Center (WTC) site. The bridge would be painted “George Washington Bridge” grey. Given the open design approach for the new bridge and recognizing that the existing Rector Street Bridge and its stairs, ramp and elevator are being removed as part of the Proposed Project, the resulting views looking north on Route 9A/West Street would include a much lighter and less intrusive structure than currently exists.

From the perspective of views and shadows associated with the Rector Street Pedestrian Bridge removal, given that the existing bridge and its appurtenant structures are being removed, there are no anticipated adverse impacts to visual resources but, rather, an improvement in the overall views, both from the north as well as the south, associated with the removal of the Rector Street Bridge.

11. Shadows

At a total height of less than 40 feet the proposed West Thames Street Pedestrian Bridge would cast a shadow approximately 172 feet long. The surrounding buildings, however, which are located east and west of the proposed bridge, are much higher, with much longer shadows. Shadows associated with the proposed bridge, therefore, are not anticipated to have any additional impact to planted areas or public open space within the vicinity of the Proposed Project. Given these factors, it is not anticipated that the proposed bridge would have a significant adverse impact on views or impacts from shadows.
12. Natural Resources

In April 2013 an Environmental Screening was conducted within the project study area(s). A review of New York State Department of Environmental Conservation (DEC) GIS data indicated that no wetlands or waters located on or in the vicinity of the project area(s). The closest watercourse to the project is the Lower Hudson River, which is 780± feet away from the western end of the Bridge. Based on the Federal Emergency Management Agency’s (FEMA) Flood Insurance Rate Maps (FIRM) Floodplain Map (Panel 184#3604970184F), the project sites fall within the 100-year floodplain associated with the Hudson River. FEMA’s new Advisory Base Flood Maps, developed after Superstorm Sandy, also indicate that the project lies within the 100-year floodplain of the Hudson River. A permit application for building within a floodplain is currently being prepared for submittal to the DOB and all associated conditions will be complied with. The Proposed Project is also located within New York City’s Coastal Zone and both NYSDOS and NYC Waterfront Revitalization Program (WRP) Compliance Statements have been prepared and submitted to the pertinent review agencies. A copy of these two documents, with additional clarifying material, is included in Appendix 2 (see Figures 7 thru 11). Based upon the analyses, these Compliance Statements demonstrate that no significant impacts to New York City’s coastal zone are anticipated as a result of the Proposed Project. The WRP Compliance Statement was reviewed by the NYC Department of City Planning (NYCDCP). Coordination is ongoing between NYCDCP and the City and will continue throughout the project (see response letter in Appendix 3).

The geological formation underlying the site is documented as Cambrian/Ordovician metamorphic rock. Given the highly urban nature of the area and the long term history of land development in the area, there is no natural soil series mapped for the project study area(s). The current National Resource Conservation Service (NRCS) mapping classifies the two project areas as Pavements and Buildings, wet substratum, 0% to 5 percent slopes. The areas are further described as nearly level to gently sloping, highly urbanized areas with more than 80 percent of the surface covered by impervious pavement and buildings, over filled swampland, tidal marsh or waters, and generally located in urban centers. From a groundwater perspective, the project areas do not lie within a Sole Source Aquifer.

A review of DEC Threatened and Endangered species databases indicated that there are no listed threatened or endangered species within the project area. This GIS database search was subsequently confirmed by DEC via letter dated April 15, 2013 (See Appendix 3) that there are no threatened or endangered species within the project areas.

While no State or Federally listed threatened or endangered species are identified as being within the project area, the US Fish and Wildlife Service (USFWS) listed the Northern Long-eared Bat (Myotis septentrionalis) as a candidate for listing on the federal threatened or endangered species list in 2013, with the current intent of providing protection status in late 2014. This species decline is primarily due to “White-Nosed Syndrome”, a fungal infection that Northern Long-Eared Bats are particularly susceptible to.
The Northern Long-eared Bat has a somewhat similar life cycle and habitat requirements as the federally protected Indiana Bat. Since both species of bat can roost under or within deeper crevices in the bark of mature trees having an “exfoliating” type of bark or having sufficiently deep crevices in the bark to afford them protection, trees exhibiting those characteristics are considered by USFWS to be potential roosting habitat. The Proposed Project will result in the removal of six (6) street trees, including three (3) Callery Pear (Pyrus calleryana) trees and three (3) Hawthorns (Crataegus L.). The tree species being removed within the project area typically do not exhibit this type of bark. Compliance with USFWS timing restrictions on tree removal, which would allow tree removal from early November thru mid-April, or an USFWS approved alternate approach, such as a field survey of the six (6) trees by a certified biologist prior to removal to ensure there are no bats present, will be included in the project bid specifications. Based on these factors, the Proposed Project would have no impact on the Northern Long-eared Bat or its habitat. Coordination with USFWS will be continued throughout the tree removal activities.

On April 23, 2013 a field reconnaissance was completed as part of the overall Environmental Screening. The field reconnaissance confirmed the information obtained via the preliminary GIS-based research. The only non-impervious land area being impacted by the Proposed Project consists of a raised planting area in the median of the West Street roadway. Said planting area includes upland soils planted with a variety of common landscape tree and shrub species including Callery Pear (Pyrus calleryana). Based upon the absence of a significant amount of natural resource constraints within the Proposed Project area, and given that all regulatory requirements for those constraints that are impacted will be complied with, no significant impacts are anticipated upon implementation of the Proposed Project.

13. Hazardous Materials

A hazardous/contaminated materials screening was completed for the project areas in April 2013 consisting of a commercial database search, review of Sanborn mapping and historical aerial photography. In addition, a review of previous Technical Environmental Studies pertaining to hazardous/contaminated materials reviewed during the 1994 Route 9A Reconstruction Project Environmental Impact Statement (EIS) and the 2005 FSEIS was also completed. This was followed by a visual field reconnaissance of the project areas.

Given the nature of the underlying soil material, there is a potential for historic soil and groundwater contamination throughout the project site and surrounding area. Based upon a review of the 2013 Environmental Data Resources, Inc. (EDR) database search, there are four (4) specific areas of concern (AOC's) that are within the vicinity of the project site, which are discussed in more detail below.

Based upon a review of the EDR’s NY Spills database summary completed for this project, the proposed pedestrian bridge will involve construction within or adjacent to four areas, three on the eastern side of the proposed bridge area and one on the western side of the proposed bridge area, that are sites of previously documented spills of regulated chemical or petroleum-based materials. The previous spill areas, which occurred in 1987 (per documentation found in a recent EDR, Inc. database search), were identified Sites Nos. 1, A10, A19 and D27 on EDR’s Summary Map (see
Appendix 6). Similar spill sites were reported as part of the Route 9A Reconstruction Project, as documented in the original 1994 EIS and the 2005 FSEIS. Those documents outlined an approach for safe excavation and off-site disposal of contaminated (but non-hazardous) materials. It is anticipated that the same approach outlined in those previous documents will be followed for the currently proposed West Thames Street Pedestrian Bridge construction and removal of the temporary Rector Street Pedestrian Bridge. Based on preliminary estimates, approximately 480 cubic yards of material will need to be excavated to allow for construction of the foundation for the proposed bridge.

In advance of the excavation and removal of contaminated soil material, the selected contractor will be required to prepare and submit for review to New York City Department of Environmental Protection (NYCDEP) a Health and Safety Plan (HASP) to help ensure workers are protected from exposure to any contaminated material. This is a normal practice for most construction projects. In addition, it is anticipated that a Soil and Groundwater Management Plan would also be prepared to make sure that any soils not previously suspected of contamination are examined and properly handled.

14. Energy

The proposed pedestrian bridge would require an 800 amp, 120/208V, three phase, four wire electric service. The electric service switch, metering and distribution equipment will be located at an elevated level adjacent to the west pier/elevator tower. Power will come from the ConEd power supply/distribution system. A battery/inverter system will also be provided at each elevator tower to power the elevator cab, elevator shaft and machine room air conditioning equipment for one (1) hour. No adverse impacts are anticipated to the ConEd supply/distribution system or the surrounding area by implementation of the Proposed Project. The proposed bridge lighting will utilize LED fixtures, which are very energy efficient. The proposed bridge lighting itself will include lights along the center of the roof and additional aesthetic lighting, which will illuminate the chords.

15. Transportation/Traffic and Pedestrian Conditions

The Proposed Project would have a positive effect due to the increased level of pedestrian safety that a pedestrian bridge provides. Due to the increasing volume of pedestrian traffic in the area and the subsequent increase of potential risk of pedestrian/vehicle incidents, this is a significant public benefit. Recent pedestrian counts completed as part of a Pedestrian Management Program for Lower Manhattan prepared for BPCA by Sam Schwartz Engineering showed that from September 2010 to June 2011, pedestrian volumes in Lower Manhattan along Route 9A/West Street increased approximately 11 percent. The counts determined that approximately 4,200 pedestrians crossed West Street at West Thames Street on a typical September day in 2011. Additionally, a May 24, 2010 West Street Intersection Pedestrian Level of Service Analysis report, prepared for BPCA by LiRo Engineers, Inc., indicated that the Peak AM Hourly Pedestrian Count at the intersection of West Street and West Thames Street was 467, and the Peak PM Hourly Pedestrian Count was 384. From a vehicular traffic perspective, between 2009 and 2010, NYCDOT records indicated a 6.9 percent increase in traffic at the Brooklyn Battery Tunnel; between 2010
and 2012, there was an additional 1.7 percent increase. The increasing rates of both vehicular traffic (particularly from the Brooklyn Battery Tunnel, which exits to Route 9A/West Street at the proposed pedestrian bridge location) and pedestrian volumes at the West Thames Street/West Street intersection indicate the rising potential for pedestrian/vehicle conflicts. These conflicts would be significantly minimized by construction of the proposed pedestrian bridge, which is sufficiently wide to accommodate the number of pedestrians currently crossing this intersection, as well as allowing for significant future growth of pedestrians.

Placement of the stairs and elevator west of the highway would avoid interference with pedestrian flow (see Figure 12). On the east side of the highway, the stairs and elevator placement would necessitate moving the sidewalk slightly to avoid impact to the MTA garage staircase. The sidewalk would be shifted slightly to the south from its present location, would essentially retain its present width and would not significantly impede pedestrian flow. From a pedestrian capacity perspective, the proposed bridge has a high capacity. Based upon NYCDOT and CEQR criteria the bridge would have a capacity of approximately 3,950 pedestrians per hour. This significantly exceeds current peak hour pedestrian traffic and would thus provide future pedestrian capacity needs as the pedestrian population increases during the coming years, as anticipated.

The proposed bridge would provide a safe, replacement pedestrian access route between the Financial District and BPC. While there would be temporary impacts associated with construction, no impacts are anticipated once the proposed bridge is in operation. Given these factors, no significant adverse impacts are anticipated.

16. **Air Quality**

Given that the proposed structure is a pedestrian bridge, it is anticipated that only minor temporary construction-related air quality impacts would occur. These temporary impacts are associated with dust control, removal of concrete (associated with Rector Street Bridge removal), diesel emissions from construction vehicles and temporary traffic lane closures during the overall project construction duration, which may temporarily result in very minor localized air quality impacts due to temporary traffic queuing. Once in operation there would be no permanent or long-term adverse air quality impacts associated with the Proposed Project.

17. **Noise**

Given that the Proposed Project is construction of one pedestrian bridge and removal of an existing pedestrian bridge, the only permanent noise impact associated with the project would be a very minor noise increase associated with the elevator's operations, which would not exceed federal, State or City standards. In addition, the overall existing background noise is anticipated to exceed that of the elevator's operation. Temporary noise impacts associated with construction vehicles and equipment may result in minor adverse noise disturbances for a relatively short period of time. These impacts would be further minimized by strict adherence to City construction regulations, including restrictions on construction times. Given these factors and that the Proposed Project, i.e., construction of a new pedestrian bridge and removal of an existing
temporary bridge, is anticipated to be a short duration project of less than two years, no significant adverse noise impacts are anticipated for the project.

18. **Public Health and Safety**

While there may be minor temporary impacts to traffic, air and noise due to construction related activities, there are no permanent or long term significant adverse impacts to public health and safety anticipated for the Proposed Project. In the long term, the Proposed Project is anticipated to have an important benefit to public health and safety as it will minimize the potential for pedestrian accidents and will also promote walking as a safe mode of transportation within the general area.

19. **Neighborhood Character**

The Proposed Project spans two distinct neighborhoods: BPC to the west and the Financial District to the east, with Route 9A/West Street being the common neighborhood boundary. BPC (See Figure 3) is a planned community and the site of Brookfield Place (formerly the World Financial Center) along with numerous residential buildings and some commercial and institutional buildings. Battery Park City generally consists of three (3) major sections: i) a northern residential neighborhood, including high-rise residential buildings, a large hotel, Stuyvesant High School and a branch of the New York Public Library; ii) a central neighborhood, including the Gateway Plaza, the North Cove Marina, and Brookfield Place, a complex of commercial buildings with high-rise towers and the Winter Garden; and iii) a southern residential neighborhood (which is closest to the Proposed Project), including mid-rise and high-rise apartment buildings, Rector Place, Battery Place, museums, a hotel and open spaces.

On the east side of Route 9A/West Street lies the Financial District, which primarily consists of commercial and institutional buildings and is the home of many of the City’s major financial institutions, including the New York Stock Exchange and the Federal Reserve Bank of New York, World Trade Center (WTC), WTC Memorial and Zuccotti Park (formerly known as Liberty Street Park). However, many of the older commercial buildings have been converted to residential uses including several buildings along Route 9A/West Street.

The removal of the existing Rector Street Bridge, which is deteriorating and has exceeded its intended service life, and construction of the proposed West Thames Street Pedestrian Bridge, are compatible with the existing neighborhood character. Past planning studies have specifically included an additional pedestrian bridge and the local community has shown strong support for the proposed West Thames Street Pedestrian Bridge. The largely residential nature of BPC South lends itself to the use of a new pedestrian bridge in this area. Given these factors, there are no adverse impacts anticipated to the local neighborhood character.
20. **Construction-Staging, Duration, Temporary Impacts**

Construction of the proposed West Thames Street Pedestrian Bridge and the removal of the existing Rector Street Pedestrian Bridge are anticipated to take approximately 18 months to complete. Per the *CEQR Technical Manual*, this is generally considered to be a project of short duration. Minor temporary impacts associated with the proposed construction and demolition are anticipated to include minor air and noise impacts associated with the use of construction equipment and vehicles. Staging for construction would require temporary lane closures as the center median pier is constructed as well as for utility installations and some overhead deck work. As indicated above, the proposed bridge would cause temporary construction related impacts due to various temporary, short term lane closures. The current lane closure plan (see Figure 12) provides for a temporary closing of the far left lane on Route 9A/West Street northbound and, subsequently, the far left lane on Route 9A/West Street southbound, immediately adjacent to the median. This closure would be required for construction of the proposed center pier to be located in the median across from the intersection with West Thames Street. The closure of the southbound lane would end at the southern tip of the median and would have no impact on access to the Brooklyn Battery tunnel entrance and exit. In addition, the lane and area closure would include a narrow strip of Joseph P. Ward Street, where the proposed sidewalk closure in this area extends slightly into the roadway. It is not anticipated that this minor lane narrowing would preclude the use of the impacted travel lane. In addition to the roadway closings, a short stretch of sidewalk would be temporarily closed along and adjacent to Joseph P. Ward Street along with a section of the esplanade on the west side of West Street, immediately adjacent to the existing dog run at West Thames Park. These closures are of a temporary nature to allow construction of the various bridge components (elevators, stairs etc.). Actual lane closure time for the lane closures on Route 9A/West Street are anticipated to last approximately 1 week for each lane to allow for construction of the center pier and erection of the two spans over Route 9A/West Street's northbound and southbound lanes. Staging for construction would require temporary lane closures (see Figure 12) as the center median pier is constructed as well as for utility installations and some overhead deck work.

It is anticipated that temporary lane closures and pedestrian detours would be required throughout the 18 month construction period. It is also anticipated that full time lane closures would be required for periods lasting from 2 to 4 weeks. The cumulative duration of lane closures would be approximately 6 months. While lane closures for utility installation and pier and foundation construction could potentially extend up to six months, they would still be temporary in nature and traffic flow would still be maintained in accordance with strict NYCDOT traffic control requirements.

Phase I of the Proposed Project would be the construction of the West Thames Pedestrian Bridge and its appurtenant structures. It is anticipated that construction of the bridge would initially start with drilling and installation of the micro-piles and the bridge foundation. The second step in the sequence would be the construction of the mid-span or center pier, to be located within the median of Route 9A/West Street. The construction of the bridge piers associated with the two terminus points on either side of Route 9A/West Street would be the third step. Once the bridge
piers are in, the bridge spans, which may be constructed in a staging area on the esplanade just south of the existing dog run, would then be erected and placed on the bridge piers. Both the construction of the central bridge pier within the roadway median and placement of the preassembled spans would necessitate temporary lane closures on Route 9A/West Street. It is anticipated that these closures would take approximately one week for each span placement, which would take place over four weekends by utilizing short-term closure of multiple lanes on West Street. The final steps in the overall construction sequence would include the construction of the elevator structure and stairs at both the eastern and western terminus points as well as completion of the supplemental landscaping.

The final determination of the deconstruction and removal sequence for the existing Rector Street Bridge and its appurtenant structures is still being evaluated. The bridge removal, however, would include restoration of all sidewalk areas currently occupied by existing bridge structures as well as expansion of the existing community garden and basketball courts. It is anticipated that removal of the existing Rector Street Bridge spans would require temporary lane closures similar to those required for construction of the proposed West Thames Street Pedestrian Bridge and removal of the temporary pedestrian bridge at Vesey Street.

Given that the proposed structure is a pedestrian bridge, it is anticipated that only minor temporary construction impacts related to dust control from drilling to install micro-piles, removal of concrete (associated with Rector Street Bridge removal) and diesel emissions from construction vehicles would occur. These temporary impacts are minor in nature given that only 10 inch diameter micro-piles are being installed and that most of the Proposed Project would be located within an impervious area (concrete, asphalt etc.). While the proposed pedestrian bridge construction at West Thames Street and the removal of the existing Rector Street Bridge would require temporary traffic lane closures at certain periods during the overall project construction, which may result in very minor localized adverse air quality and noise impacts due to temporary traffic queuing associated with the lane closures, overall there would be no permanent or long-term adverse impacts associated with the Proposed Project. Temporary impacts would be further minimized by strict adherence to soil erosion control and construction regulations and conditions that will be required by traffic control permits from the NYCDOT-Office of Construction Mitigation and Coordination best management practices, including water spray or calcium chloride control for fugitive dust control. The Proposed Project would comply with all Lower Manhattan EPCs (see Appendix 10).

21. **Alternatives Considered**

The selection of a suitable bridge location has been on-going for a number of years. Based upon community input as well in consideration of the significant degree of residential growth in the area around West Thames Street, and in consideration of access to recreational infrastructure within BPC and the Hudson waterfront south of and west of the WTC Redevelopment Site, a new pedestrian bridge located closer to the southern end of Lower Manhattan (located within the area identified as the Greenwich South Corridor in the 2005 Route 9A Reconstruction SFEIS referenced above) would provide a needed connection from adjacent commercial and residential land uses to the east of Route 9A/West Street to recreational space west of Route 9A/West Street as well as for
primarily residential uses west of Route 9A/West Street to commercial uses on the east side of the roadway. This multi-year process, with significant public input, has resulted in selection of the current Proposed Project location.

**Site Specific Design Alternatives**

Once the preferred location for the proposed pedestrian bridge was determined, conceptual design provided for feasible alternative alignments that could be considered for the bridge. These included (1) a perpendicular alignment, from the corner of West Street NB and Joseph P. Ward Street, to West Thames Park at the northern corner of the intersection of West Thames Street and Little West Street and (2) a skewed alignment from the corner of West Street NB and Joseph P. Ward Street to just south of the southern corner of the intersection of West Thames Street and Little West Street. In addition, several foundation design approaches were also considered, including shallow and deep support structures (see Figure 13).

A number of factors were considered in making the selection of the skewed configuration as the final alignment, including the location of West Thames Park, the location of subsurface archeological resources as well as the number and locations of existing utilities, subsurface infrastructure and the location of the existing Brooklyn Battery Tunnel in relation to the proposed pedestrian bridge structure foundation(s) (see Figure 13).

Due to the significant number of utilities under reconstructed Route 9A, the identified presence of the historically significant Hudson River Bulkhead running longitudinally along the west side of Route 9A and the potential for archeological resources within the historic fill east of the bulkhead, it was determined that the use of micro-piles and pile caps would be less intrusive, and would reduce impacts to potential subsurface resources as compared to deeper and wider concrete foundations. With this design decision made, the remaining determination was which alignment would present the safest and least expensive design option. Given the subsurface location of the existing Brooklyn Battery Tunnel and the requisite support pile location for the bridge’s median support structure, an alignment perpendicular to Route 9A would bring the center pier too close to both the Brooklyn Battery Tunnel as well as to an existing 20” Ductile Iron Pipe waterline, thus potentially compromising the necessary degree of safety to the tunnel wall's integrity. It was noted that a perpendicular alignment would allow a direct connection to the existing West Thames Park on the west side of Little West Street. While beneficial in one sense in that it provides a direct connection to an existing recreational facility, given the premium on recreational space in Lower Manhattan, however, the stairs and elevator structure under this alignment would remove from future use a portion of the existing park area. Connection to the currently proposed location utilizing the skewed alignment outlined above, however, would still allow easy and safe access to West Thames Park, with minimal impact to the existing esplanade area. In addition, the proposed bridge, which crosses seven lanes of traffic plus a two-lane bikeway, is anticipated to minimize traffic disruptions, and the resultant queuing associated with the use of existing at-grade crossings across this very heavily travelled roadway segment.
An optional terminal design approach, utilizing a circular stairway option (see Figure 14) with a center elevator was proposed for the western terminus. While minimizing the currently proposed footprint further, this option would extend into an existing dog run under the skewed alignment while under the perpendicular alignment would still continue to remove from recreational use existing park area. It was also felt that this design approach did not aesthetically blend in well with either the proposed bridge design or the surrounding area. Given these factors, this option was dropped from further consideration.

In weighing the different factors listed above to determine which of the two potential alignments (i.e. skewed alignment or perpendicular alignment) provided the least impact feasible while still achieving the project purpose, it was recognized that the skewed alignment option moves the center bridge support structure further away from the Brooklyn Battery Tunnel (due as much to the curved nature of the tunnel alignment as to the skewed bridge alignment) and still provides a safe connection, via the existing crosswalk at West Thames Street, to West Thames Park. Based on all of these factors, it was determined that the skewed alignment was the better option and thus selected as the Preferred Alternative.

Subsequent to the selection of the preferred alignment alternative, which was supported by Resolution from CB1 in 2009, conceptual design advanced. Two design options for the East approach to the proposed bridge were further evaluated. These two options included the following:

- Option 1 for the east approach would have provided stairs and an elevator, but no additional walkway, and would have required curb realignment and coordination with the MTA Garage and 50 West Street.

- Option 1 for the west approach would feature a proposed 200' long walkway/ramp and a stair. This would make handicap access easier but would be a larger footprint of disturbance at sub-surface level and also larger in terms of tree removal impact.

- Option 2 for east and west approach: a stair and an elevator for each approach.

Given the length of the ramp/walkway for Option 1, it was determined that Option 2, which has a smaller footprint of disturbance and implicates the removal of fewer trees, made more sense, in addition to a cost effective consideration driven by the fact that an elevator is to be provided at the east approach in all design scenarios. Thus, Option 2 was selected as the preferred option for the east and west approaches to the proposed pedestrian bridge.

Additional Crosswalk Alternative

In addition to the bridge alternatives outlined above, the potential for constructing a new “at-grade” crosswalk in the same general location as the proposed bridge in lieu of the pedestrian bridge was also considered. This crosswalk would be constructed from the northeast corner of Joseph P. Ward Street to the northwest corner of West Thames Street. A traffic study was completed in April 2013 (see Appendix 4) utilizing recent traffic volumes and new counts, in order
to determine the safety and viability of a proposed new at-grade crosswalk. The study indicated that the current three phases of the existing intersection did not provide sufficient green time for the new fourth phase that the crosswalk would require. In order to provide enough green time for the proposed at-grade crosswalk to be considered safe per City and State criteria, green time would have to be reduced from the original three phases. The traffic model showed that, in doing this, the current intersection Levels of Service (LOS) would be degraded, some to the point of failure. This would result in an anticipated increase in traffic queuing as well as an anticipated increase in local air emissions due to increased idling time during queuing. This anticipated air emissions increase could potentially have localized adverse impacts to air quality. Given the nature of the intersection location near the Brooklyn Battery Tunnel, the adverse traffic impacts associated with queuing are anticipated to be significant. Given these factors, the “at-grade” crosswalk alternative was dropped from further consideration.

No Action Alternative

While there are existing at-grade pedestrian crossing locations along Route 9A/West Street near its intersection with West Thames Street, there are substantial local community concerns regarding pedestrian safety using at-grade crossings, particularly for students and parents of PS 276 and for anyone using the crossing at night. Should the No Action Alternative be chosen, the proposed pedestrian bridge at West Thames Street would not be constructed and the temporary, interim Rector Street Bridge would not be removed. This would result in people continuing to use both the Rector Street Bridge as well as unsafe “at-grade” crossings while the residential growth in the area continues. Given that the Rector Street Bridge was designed for a limited life span and has already shown significant signs of deterioration which has resulted in structural modifications to limit the degree of pedestrian traffic on the bridge at any one time, this could result in the need to continue with costly interior repairs to the bridge with no permanent solution to the local community's desire for a permanent pedestrian bridge in the area.
Figures

Figure 1. - USGS Location Map
Figure 2. - Street Location Map
Figure 3. - Map of Battery Park City
Figure 4. - Zoning Map
Figure 5. - Census Tract Map
Figure 6. - Historic Resources Map
Figure 7. - NYSDEC Wetland Mapping
Figure 8. - FEMA Floodplain Mapping (Existing)
Figure 9. - FEMA Floodplain Mapping (New Base Advisory Flood Mapping)
Figure 10. - Coastal Zone Map
Figure 11. - NYSDEC Environmental Resources Map
Figure 12. - Proposed Lane and Area Closure Plan
Figure 13. - Existing Subsurface Utilities and Infrastructure Schematic
Figure 14. - Bridge Terminus Options 1 and 2 and Western Terminus Circular Stairway Option
West Thames Street Pedestrian Bridge, Battery Park City, New York, New York

Figure 2
Census Tract Map

Legend

- 317.04
- 13
- Census Tract Reference Areas
- Limit of Census Study
- Tract Area Outside of Census Study
- Census Tract Boundary

West Thames Street Pedestrian Bridge, Battery Park City, New York, New York

NOTE: Please refer to Table 1 in EA Document

Figure 5
## National Register Listed and Eligible Resources

<table>
<thead>
<tr>
<th>Map label</th>
<th>Name</th>
<th>Address</th>
<th>NR Status</th>
<th>DFRHP NR or USN #</th>
<th>NYC Landmark</th>
<th>LP#</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>New York Evening Post Building</td>
<td>75 West St.</td>
<td>Listed</td>
<td>00NR01653</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>19 Rector Street</td>
<td>19 Rector St./69 Greenwich St.</td>
<td>Listed</td>
<td>02NR01912</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>21 West Street</td>
<td>19-21 West St.</td>
<td>Listed</td>
<td>98NR01402</td>
<td>X</td>
<td>01999</td>
</tr>
<tr>
<td>D</td>
<td>Wall Street Historic District</td>
<td></td>
<td>Listed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Hudson River Bullethead</td>
<td>West St. (9A) from Battery Place to W. 69th St.</td>
<td>Eligible</td>
<td>06101.009162</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Barrett Building/40 Rector St.</td>
<td>40 Rector St./67-69 West St.</td>
<td>Eligible</td>
<td>06101.014511</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Former St. George's Syrian Roman Catholic Church</td>
<td>103 Washington St.</td>
<td>Eligible</td>
<td>06101.001534</td>
<td>X</td>
<td>02167</td>
</tr>
<tr>
<td>4</td>
<td>Frasch Building</td>
<td>55 West St./33 Rector St.</td>
<td>Eligible</td>
<td>06101.007218</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>94 Greenwich St. House</td>
<td>94 Greenwich St.</td>
<td>Eligible</td>
<td>06101.001533</td>
<td>X</td>
<td>02218</td>
</tr>
<tr>
<td>6</td>
<td>94-96 Greenwich St.</td>
<td>94-96 Greenwich St.</td>
<td>Eligible</td>
<td>06101.013374</td>
<td>(see above)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Battery Garage</td>
<td>56 Greenwich St.</td>
<td>Eligible</td>
<td>06101.013375</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Robert and Anne Dickey House</td>
<td>67 Greenwich St.</td>
<td>Eligible</td>
<td>06101.001531</td>
<td>X</td>
<td>02166</td>
</tr>
<tr>
<td>9</td>
<td>Brooklyn Battery Tunnel</td>
<td>Governor's Island, Battery Pl., Greenwich St., Washington St.</td>
<td>Eligible</td>
<td>06101.019351</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Downtown Athletic Club Building</td>
<td>18 West St.</td>
<td>Eligible</td>
<td>06101.001316</td>
<td>X</td>
<td>02075</td>
</tr>
<tr>
<td>11</td>
<td>Whitehall Building</td>
<td>17 Battery Pl.</td>
<td>Eligible</td>
<td>06101.016120</td>
<td>X</td>
<td>02056</td>
</tr>
<tr>
<td>12</td>
<td>Pier 7 Complex Site</td>
<td>West Thames Park</td>
<td>Eligible</td>
<td>06101.009462, 9464, 9465, 9466, 9467, 9468, 9469, 9470</td>
<td>X</td>
<td>01961</td>
</tr>
</tbody>
</table>

*Figure 6*

West Thames Street Pedestrian Bridge, Battery Park City, New York, New York
There are no mapped wetlands or checkzones in or near the vicinity of the project area.

Project Location

Sources: Esri, DeLorme, NAVTEQ, USGS, Intermap, iPC, NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), TomTom, 2013

Figure 7
FEMA Floodplain Mapping (Existing)

West Thames Street Pedestrian Bridge, Battery Park City, New York, New York

- **FLOODWAY AREAS IN ZONE AE**
  - The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without

- **OTHER FLOOD AREA**
  - Areas of 0.2% Annual Chance of flood; areas of 1% chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by

Figure 8
Advisory Base Flood Elevations Map

Map Legend
- High Water Marks
- Limit of Advisory Base Flood Elevations
- Limit of Moderate Wave Action (LIMWA)
- Advisory Limit of the 1% Flood Hazard Area
- Advisory Zone V-A Boundary
- Advisory Shaded Zone X
- Advisory Base Flood Elevation Zones
- Provisional Hurricane Sandy Storm Surge Elevation

Flood Hazard Zones (Zone Type)
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

West Thames Street Pedestrian Bridge, Battery Park City, New York, NY

Figure 9
Coastal Zone Boundary of New York: Section 12

West Thames Street Pedestrian Bridge, Battery Park City, New York, New York

NEW YORK CITY DEPARTMENT OF CITY PLANNING
MAPPED STREETS AS OF JUNE 6, 1982
SHORELINE AND WATER BODIES AS OF JANUARY 1, 1968

NEW YORK CITY MAPPED STREETS; SECTION 12
BOROUGH OF MANHATTAN, NEW YORK COUNTY

Figure 10
Disclaimer:
This map does not show all natural resources regulated by NYS DEC, or for which permits from NYS DEC may be required. Please contact your DEC Regional office for more information.

Project Location

Classification I (marine waters) indicates a best usage for secondary contact recreation, and fishing,

There are no mapped NYSDEC protected species or natural communities.

West Thames Street Pedestrian Bridge, Battery Park City, New York, New York

- Classified Water Bodies
- Rare Plant and Rare Animals
- Natural Communities Vicinity
- Significant Natural Communities

Figure 11
Bridge Terminus Options 1 and 2 and Western Terminus Circular Stairway Option

West Thames Street Pedestrian Bridge, Battery Park City, New York, New York

Figure 14
LIST OF APPENDICES

APPENDIX 1  SEQR EAF FORM AND SUPPORTING DOCUMENTATION

APPENDIX 2  NYSDOS CONSISTENCY FORM AND NYC WATERFRONT REVITALIZATION PROGRAM COASTAL CONSISTENCY ASSESSMENT FORM

APPENDIX 3  RELEVANT PROJECT CORRESPONDENCE

APPENDIX 4  SUPPORTING TRAFFIC ANALYSIS

APPENDIX 5  ENVIRONMENTAL SCREENING WITH ATTACHMENTS

APPENDIX 6  HAZARDOUS/CONTAMINATED MATERIALS SCREENING WITH ATTACHMENTS

APPENDIX 7  PROJECT PHOTOGRAPHS WITH PHOTO-CONTROL MAP AND DESCRIPTIONS

APPENDIX 8  WEST THAMES STREET PEDESTRIAN BRIDGE CONCEPTUAL VISUAL RENDERINGS

APPENDIX 9  ARCHAEOLOGICAL DOCUMENTARY STUDY

APPENDIX 10  PROJECT ENVIRONMENTAL PERFORMANCE COMMITMENTS

APPENDIX 11  ROUTE 9A PROGRAMMATIC AGREEMENT, OCTOBER 13, 2004 AMENDMENT
APPENDIX 1.

SEQR EAF Form and Supporting Documentation
Purpose: The full EAF is designed to help applicants and agencies determine, in an orderly manner, whether a project or action may be significant. The question of whether an action may be significant is not always easy to answer. Frequently, there are aspects of a project that are subjective or unmeasurable. It is also understood that those who determine significance may have little or no formal knowledge of the environment or may not be technically expert in environmental analysis. In addition, many who have knowledge in one particular area may not be aware of the broader concerns affecting the question of significance.

The full EAF is intended to provide a method whereby applicants and agencies can be assured that the determination process has been orderly, comprehensive in nature, yet flexible enough to allow introduction of information to fit a project or action.

Full EAF Components: The full EAF is comprised of three parts:

Part 1: Provides objective data and information about a given project and its site. By identifying basic project data, it assists a reviewer in the analysis that takes place in Parts 2 and 3.

Part 2: Focuses on identifying the range of possible impacts that may occur from a project or action. It provides guidance as to whether an impact is likely to be considered small to moderate or whether it is a potentially-large impact. The form also identifies whether an impact can be mitigated or reduced.

Part 3: If any impact in Part 2 is identified as potentially-large, then Part 3 is used to evaluate whether or not the impact is actually important.

---

**THIS AREA FOR LEAD AGENCY USE ONLY**

**DETERMINATION OF SIGNIFICANCE -- Type 1 and Unlisted Actions**

Identify the Portions of EAF completed for this project: ☑ Part 1   ☐ Part 2   ☐ Part 3

Upon review of the information recorded on this EAF (Parts 1 and 2 and 3 if appropriate), and any other supporting information, and considering both the magnitude and importance of each impact, it is reasonably determined by the lead agency that:

☐ A. The project will not result in any large and important impact(s) and, therefore, is one which will not have a significant impact on the environment, therefore a negative declaration will be prepared.

☐ B. Although the project could have a significant effect on the environment, there will not be a significant effect for this Unlisted Action because the mitigation measures described in PART 3 have been required, therefore a CONDITIONED negative declaration will be prepared.*

☐ C. The project may result in one or more large and important impacts that may have a significant impact on the environment, therefore a positive declaration will be prepared.

* A Conditioned Negative Declaration is only valid for Unlisted Actions

Construction of West Thames St. Pedestrian Bridge & Removal of Rector St. Pedestrian Bridge

Name of Action

Name of Lead Agency

Print or Type Name of Responsible Officer in Lead Agency

Title of Responsible Officer

Signature of Responsible Officer in Lead Agency

Signature of Preparer (if different from responsible officer)

Date

Page 1 of 21
PART 1--PROJECT INFORMATION
Prepared by Project Sponsor

NOTICE: This document is designed to assist in determining whether the action proposed may have a significant effect on the environment. Please complete the entire form, Parts A through E. Answers to these questions will be considered as part of the application for approval and may be subject to further verification and public review. Provide any additional information you believe will be needed to complete Parts 2 and 3.

It is expected that completion of the full EAF will be dependent on information currently available and will not involve new studies, research or investigation. If information requiring such additional work is unavailable, so indicate and specify each instance.

Name of Action
Construction of West Thames St. Pedestrian Bridge and Removal of Rector St. Pedestrian Bridge

Location of Action (include Street Address, Municipality and County)
From north of and adjacent to Joseph P. Ward Street east over West St. (Rte. 9A) to Little West Street just south of West Thames Street and north of Third Pl. as well as from Rector Place east over West St. to just south of Carlisle Street.

Name of Applicant/Sponsor
New York City Economic Development Corporation

Address
110 William Street

City / PO New York State New York Zip Code 10038

Business Telephone 212-312-3745

Name of Owner (if different)
New York City Department of Transportation-LMBCO (POC: Suchi Sanagavarapu)

Address
59 Maiden Lane

City / PO New York State New York Zip Code 10038

Business Telephone 212-839-7143

Description of Action:
The City of New York, in coordination with the Lower Manhattan Development Corporation and the Battery Park City Authority, proposes to construct a pedestrian bridge over West Street (Route 9A) between Joseph P. Ward Street adjacent to the Brooklyn Battery Tunnel Exit Roadway and the promenade south of West Thames Street.

The project will consist of two distinct project sites.

Phase I of the project will include the construction of the West Thames Street Pedestrian Bridge to be located over West Street from the northeast corner of Joseph P. Ward Street and West Street to the southwest corner of West Thames Street and Little West Street. This portion of the project will include construction of a stairway and elevator connection along Joseph P. Ward Street; a lenticular truss bridge constructed from the NE corner of Joseph P. Ward Street and West Street to the southwest corner of West Thames Street and Little West Street with a single mid-span pier placed in the median of West Street and an elevator and a stairway or 200' + long ramp along the existing dog run and a stairway running south from the bridge between Little West Street and the adjacent dog run.

Phase II of the project will include the removal of the existing Rector Street pedestrian bridge located over West Street between Rector Street and Carlisle Street to West Thames Park in Manhattan.
A. SITE DESCRIPTION

Physical setting of overall project, both developed and undeveloped areas.

1. Present Land Use: ✓ Urban ☐ Industrial ☐ Commercial ☐ Residential (suburban) ☐ Rural (non-farm)
   ☐ Forest ☐ Agriculture ✓ Other

Project site is in public right-of-way and immediately adjacent to the Special Battery Park City District to the west and Commercial C6-9 district to the east

2. Total acreage of project area: 0.1641 acres.

APPROXIMATE ACREAGE

<table>
<thead>
<tr>
<th>Description</th>
<th>PRESENTLY</th>
<th>AFTER COMPLETION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meadow or Brushland (Non-agricultural)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forested</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural (Includes orchards, cropland, pasture, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wetland (Freshwater or tidal as per Articles 24,25 of ECL)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water Surface Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unvegetated (Rock, earth or fill)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Roads, buildings and other paved surfaces</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (Indicate type) Maintained Lawn and Landscaped area</td>
<td>0.0041 acres</td>
<td>0.001 acres</td>
</tr>
</tbody>
</table>

3. What is predominant soil type(s) on project site? Wet Substratum, Laguardia-Ebbets
   a. Soil drainage: ✓ Well drained 100% of site ☐ Moderately well drained ___% of site.
   ☐ Poorly drained ___% of site
   b. If any agricultural land is involved, how many acres of soil are classified within soil group 1 through 4 of the NYS Land Classification System? N/A acres (see 1 NYCRR 370).

4. Are there bedrock outcroppings on project site? ☐ Yes ☐ No
   a. What is depth to bedrock 60-70 feet (in feet)

5. Approximate percentage of proposed project site with slopes:
   ✓ 0-10% 100% ☐ 10-15% ___% ☐ 15% or greater ___%

6. Is project substantially contiguous to, or contain a building, site, or district, listed on the State or National Registers of Historic Places? ☐ Yes ☐ No

7. Is project substantially contiguous to a site listed on the Register of National Natural Landmarks? ☐ Yes ☐ No

8. What is the depth of the water table? ___>3.0 (in feet)

9. Is site located over a primary, principal, or sole source aquifer? ☐ Yes ☐ No

10. Do hunting, fishing or shell fishing opportunities presently exist in the project area? ☐ Yes ☐ No
11. Does project site contain any species of plant or animal life that is identified as threatened or endangered?  □ Yes  □ No

According to:
Per letter from NYCEDC, and USFWS IPAC map no threatened or endangered species within project area.

Identify each species:
N/A

12. Are there any unique or unusual land forms on the project site? (i.e., cliffs, dunes, other geological formations?)
□ Yes  □ No

Describe:
N/A

13. Is the project site presently used by the community or neighborhood as an open space or recreation area?
□ Yes  □ No

If yes, explain:
Site is used for passive recreation. Park benches and small shade trees border the existing dog run at the western terminus of the proposed pedestrian bridge. The proposed project will necessitate the relocation of several benches and the removal of an estimated three trees.

14. Does the present site include scenic views known to be important to the community?  □ Yes  □ No

The FEIS for the Rt. 9A Reconstruction included the current project site within the Southern Rt. 9A Visual District. The proposed bridge will be within the viewshed of the WTC when looking north from the site.

15. Streams within or contiguous to project area:
N/A

a. Name of Stream and name of River to which it is tributary
N/A

16. Lakes, ponds, wetland areas within or contiguous to project area:
N/A

b. Size (in acres):
N/A
17. Is the site served by existing public utilities? □ Yes □ No
   a. If YES, does sufficient capacity exist to allow connection? □ Yes □ No
   b. If YES, will improvements be necessary to allow connection? □ Yes □ No

18. Is the site located in an agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? □ Yes □ No

19. Is the site located in or substantially contiguous to a Critical Environmental Area designated pursuant to Article 8 of the ECL, and 6 NYCRR 617? □ Yes □ No

20. Has the site ever been used for the disposal of solid or hazardous wastes? □ Yes □ No

B. Project Description

1. Physical dimensions and scale of project (fill in dimensions as appropriate).
   a. Total contiguous acreage owned or controlled by project sponsor: ___ n/a-row ___ acres.
   b. Project acreage to be developed: __0.043__ acres initially; __0.048__ acres ultimately.
   c. Project acreage to remain undeveloped: __0.157__ acres.
   d. Length of project, in miles: __N/A__ (if appropriate)
   e. If the project is an expansion, indicate percent of expansion proposed: __N/A__ %
   f. Number of off-street parking spaces existing __N/A__ : proposed __________
   g. Maximum vehicular trips generated per hour: __N/A__ (upon completion of project)?
   h. If residential: Number and type of housing units:

<table>
<thead>
<tr>
<th>One Family</th>
<th>Two Family</th>
<th>Multiple Family</th>
<th>Condominium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initially</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ultimately</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   i. Dimensions (in feet) of largest proposed structure: __18' height: ___ 20' width: ___ 363' length:
   j. Linear feet of frontage along a public thoroughfare project will occupy is? __143__ ft.

2. How much natural material (i.e. rock, earth, etc.) will be removed from the site? __416 cy__ tons/cubic yards.

3. Will disturbed areas be reclaimed □ Yes □ No □ N/A
   a. If yes, for what intended purpose is the site being reclaimed?

   b. Will topsoil be stockpiled for reclamation? □ Yes □ No
   c. Will upper subsoil be stockpiled for reclamation? □ Yes □ No

4. How many acres of vegetation (trees, shrubs, ground covers) will be removed from site? __0.0031__ acres.
5. Will any mature forest (over 100 years old) or other locally-important vegetation be removed by this project?
   □ Yes    □ No

6. If single phase project: Anticipated period of construction: N/A months, (including demolition)

7. If multi-phased:
   a. Total number of phases anticipated ______ 2 (number)
   b. Anticipated date of commencement phase 1: _____ 8 month 2014 year, (including demolition)
   c. Approximate completion date of final phase: 7 month 2016 year.
   d. Is phase 1 functionally dependent on subsequent phases? □ Yes □ No

8. Will blasting occur during construction? □ Yes □ No

9. Number of jobs generated: during construction 150-200; after project is complete 10

10. Number of jobs eliminated by this project 0.

11. Will project require relocation of any projects or facilities? □ Yes □ No

   If yes, explain:
   

12. Is surface liquid waste disposal involved? □ Yes □ No
    a. If yes, indicate type of waste (sewage, industrial, etc) and amount ________________
    b. Name of water body into which effluent will be discharged ________________

13. Is subsurface liquid waste disposal involved? □ Yes □ No  Type ______________________

14. Will surface area of an existing water body increase or decrease by proposal? □ Yes □ No

   If yes, explain:
   

15. Is project or any portion of project located in a 100 year flood plain? □ Yes □ No

16. Will the project generate solid waste? □ Yes □ No
   a. If yes, what is the amount per month? ______ tons
   b. If yes, will an existing solid waste facility be used? □ Yes □ No
   c. If yes, give name ___________________________; location ________________________
   d. Will any wastes not go into a sewage disposal system or into a sanitary landfill? □ Yes □ No
e. If yes, explain:

17. Will the project involve the disposal of solid waste? □ Yes □ No
   a. If yes, what is the anticipated rate of disposal? _____ tons/month.
   b. If yes, what is the anticipated site life? _____ years.
18. Will project use herbicides or pesticides? □ Yes □ No
19. Will project routinely produce odors (more than one hour per day)? □ Yes □ No
20. Will project produce operating noise exceeding the local ambient noise levels? □ Yes □ No
21. Will project result in an increase in energy use? □ Yes □ No
   If yes, indicate type(s)

17. While the removal of the Rector Street Pedestrian Bridge will require disposal of construction material, the project does not involve long term disposal of solid waste. The associated construction debris would be removed throughout the bridge removal and all remaining construction debris would be removed at the conclusion bridge demolition process.
20. Given that the bridge is a pedestrian bridge, it would not result in noise levels exceeding the local ambient noise level. Local ambient noise levels may be temporarily exceeded, however, during the bridge construction period.
21. The proposed West Thames Street Pedestrian Bridge includes elevators at both the eastern and western termini. The operation of the elevators will require additional electrical energy usage.

22. If water supply is from wells, indicate pumping capacity N/A gallons/minute.
23. Total anticipated water usage per day N/A gallons/day.
24. Does project involve Local, State or Federal funding? □ Yes □ No
   If yes, explain:

US Department of Housing and Urban Development (HUD) federal monies will be used for the project. The Lower Manhattan Development Corporation (LMDC) will be the entity releasing the federal funds and, under existing regulations, will review the NEPA Environmental Assessment on behalf of HUD.
25. Approvals Required:

<table>
<thead>
<tr>
<th>Type</th>
<th>Submittal Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>City, Town, Village Board</td>
<td></td>
</tr>
<tr>
<td>☐ Yes</td>
<td></td>
</tr>
<tr>
<td>☐ No</td>
<td></td>
</tr>
<tr>
<td>CB No. 1</td>
<td>TBD</td>
</tr>
<tr>
<td>City, Town, Village Planning Board</td>
<td></td>
</tr>
<tr>
<td>☐ Yes</td>
<td></td>
</tr>
<tr>
<td>☐ No</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>City, Town Zoning Board</td>
<td></td>
</tr>
<tr>
<td>☐ Yes</td>
<td></td>
</tr>
<tr>
<td>☐ No</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>City, County Health Department</td>
<td></td>
</tr>
<tr>
<td>☐ Yes</td>
<td></td>
</tr>
<tr>
<td>☐ No</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Local Agencies</td>
<td></td>
</tr>
<tr>
<td>☐ Yes</td>
<td></td>
</tr>
<tr>
<td>☐ No</td>
<td></td>
</tr>
<tr>
<td>NYCDEP-Haz/Contam.Mtl.</td>
<td>TBD</td>
</tr>
<tr>
<td>NYC Planning-WRP</td>
<td>3-19-2014</td>
</tr>
<tr>
<td>NYCDOT-Trfc.,Structures</td>
<td>TBD</td>
</tr>
<tr>
<td>Other Regional Agencies</td>
<td></td>
</tr>
<tr>
<td>☐ Yes</td>
<td></td>
</tr>
<tr>
<td>☐ No</td>
<td></td>
</tr>
<tr>
<td>MTA-Bridges/Design</td>
<td>TBD</td>
</tr>
<tr>
<td>BPCA</td>
<td>TBD</td>
</tr>
<tr>
<td>State Agencies</td>
<td></td>
</tr>
<tr>
<td>☐ Yes</td>
<td></td>
</tr>
<tr>
<td>☐ No</td>
<td></td>
</tr>
<tr>
<td>NYSOPRHP- Cultural Res.</td>
<td>3-20-2013</td>
</tr>
<tr>
<td>NYSDOT</td>
<td>TBD</td>
</tr>
<tr>
<td>Federal Agencies</td>
<td></td>
</tr>
<tr>
<td>☐ Yes</td>
<td></td>
</tr>
<tr>
<td>☐ No</td>
<td></td>
</tr>
</tbody>
</table>

C. Zoning and Planning Information

1. Does proposed action involve a planning or zoning decision? ☐ Yes ☐ No

If Yes, indicate decision required:

☐ Zoning amendment ☐ Zoning variance ☐ New/revision of master plan
☐ Site plan ☐ Special use permit ☐ Resource management plan
☐ Subdivision ☐ Other
2. What is the zoning classification(s) of the site?

The project site is located within public right-of-way. The adjacent zoning classifications are the Special Battery Park City District to the west and the C6-9 high density commercial district to the east.

3. What is the maximum potential development of the site if developed as permitted by the present zoning?

N/A

4. What is the proposed zoning of the site?

Site is within public right-of-way. Project will not result in any zoning changes.

5. What is the maximum potential development of the site if developed as permitted by the proposed zoning?

N/A

6. Is the proposed action consistent with the recommended uses in adopted local land use plans?  ■ Yes  □ No

7. What are the predominant land use(s) and zoning classifications within a ¼ mile radius of proposed action?

Special Battery Park City District (residential, commercial, institutional, hotel, parking and open space); Medium and High Density Commercial Districts C5-5, C6-4 and C6-9 (mix of commercial and residential); Special Lower Manhattan District LM (business district).

8. Is the proposed action compatible with adjoining/surrounding land uses with a ¼ mile?  ■ Yes  □ No

9. If the proposed action is the subdivision of land, how many lots are proposed?  N/A

a. What is the minimum lot size proposed?  N/A
10. Will proposed action require any authorization(s) for the formation of sewer or water districts?  □ Yes  □ No

11. Will the proposed action create a demand for any community provided services (recreation, education, police, fire protection)?
   □ Yes  □ No

   a. If yes, is existing capacity sufficient to handle projected demand?  □ Yes  □ No

   The proposed project will require that the proposed bridge be owned by The City and under the jurisdiction of NYCDOT, and jointly maintained by NYCDOT and BPCA.

12. Will the proposed action result in the generation of traffic significantly above present levels?  □ Yes  □ No

   a. If yes, is the existing road network adequate to handle the additional traffic.  □ Yes  □ No

D. Informational Details

Attach any additional information as may be needed to clarify your project. If there are or may be any adverse impacts associated with your proposal, please discuss such impacts and the measures which you propose to mitigate or avoid them.

E. Verification

I certify that the information provided above is true to the best of my knowledge.

Applicant/Sponsor Name: New York City Economic Development Corporation  Date

Signature

Title

If the action is in the Coastal Area, and you are a state agency, complete the Coastal Assessment Form before proceeding with this assessment.
COMPLETED COPY OF NYSDEC 10/2013 UPDATED VERSION OF SEQR PART 1
Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either “Yes” or “No”. If the answer to the initial question is “Yes”, complete the sub-questions that follow. If the answer to the initial question is “No”, proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Sponsor Information.

<table>
<thead>
<tr>
<th>Name of Action or Project:</th>
<th>Construction of West Thames Street Pedestrian Bridge and Removal of Rector Street Pedestrian Bridge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Location (describe, and attach a general location map):</td>
<td>See attached EA Text</td>
</tr>
<tr>
<td>Brief Description of Proposed Action (include purpose or need):</td>
<td>The City of New York, in coordination with the Lower Manhattan Development Corp. and the Battery Park City Authority, proposes to construct a pedestrian bridge over West Street (Rte. 9A) between Joseph P. Ward Street adjacent to the Brooklyn Battery Tunnel Exit Roadway and the promenade south of West Thames Street. The project consists of two distinct project sites. One will include the removal of the existing Rector St. pedestrian bridge located over West Street between Rector Street and Carlisle Street to West Thames Park in Manhattan. The other project site will include the construction of the West Thames Street Pedestrian Bridge to be located over West Street from the northeast corner of Joseph P. Ward Street and West Street to the southwest corner of West Thames Street and Little West Street. This portion of the project will include construction of a stairway and elevator connection along Joseph P. Ward Street; a lenticular truss bridge constructed from the NE corner of Joseph P. Ward Street and West Street to the SW corner of West Thames Street and Little West Street with a single mid-span pier placed in the median of West St. and an elevator and a stairway of 200+ long ramp along the existing dog run and a stairway running south from the bridge between Little West Street and the adjacent dog run.</td>
</tr>
<tr>
<td>Name of Applicant/Sponsor:</td>
<td>New York City Economic Development Corporation POC Len Greco</td>
</tr>
<tr>
<td>Telephone:</td>
<td>212-312-3743</td>
</tr>
<tr>
<td>E-Mail:</td>
<td><a href="mailto:lgreco@nycedc.com">lgreco@nycedc.com</a></td>
</tr>
<tr>
<td>Address:</td>
<td>110 William Street</td>
</tr>
<tr>
<td>City/PO:</td>
<td>New York</td>
</tr>
<tr>
<td>State:</td>
<td>NY</td>
</tr>
<tr>
<td>Zip Code:</td>
<td>10038</td>
</tr>
<tr>
<td>Project Contact (if not same as sponsor; give name and title/role):</td>
<td></td>
</tr>
<tr>
<td>Telephone:</td>
<td></td>
</tr>
<tr>
<td>E-Mail:</td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td></td>
</tr>
<tr>
<td>City/PO:</td>
<td></td>
</tr>
<tr>
<td>State:</td>
<td></td>
</tr>
<tr>
<td>Zip Code:</td>
<td></td>
</tr>
<tr>
<td>Property Owner (if not same as sponsor):</td>
<td>New York City Department of Transportation- POC Naim Rasheed</td>
</tr>
<tr>
<td>Telephone:</td>
<td>212-839-7710</td>
</tr>
<tr>
<td>E-Mail:</td>
<td></td>
</tr>
<tr>
<td>Address:</td>
<td>55 Water Street</td>
</tr>
<tr>
<td>City/PO:</td>
<td>New York</td>
</tr>
<tr>
<td>State:</td>
<td>NY</td>
</tr>
<tr>
<td>Zip Code:</td>
<td>10041</td>
</tr>
</tbody>
</table>
### B. Government Approvals

#### B. Government Approvals Funding, or Sponsorship.
("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)

<table>
<thead>
<tr>
<th>Government Entity</th>
<th>If Yes: Identify Agency and Approval(s) Required</th>
<th>Application Date (Actual or projected)</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. City Council, Town Board, or Village Board of Trustees</td>
<td>☑Yes ☐No CB No. 1</td>
<td>TBD</td>
</tr>
<tr>
<td>b. City, Town or Village Planning Board or Commission</td>
<td>☐Yes ☑No</td>
<td>TBD</td>
</tr>
<tr>
<td>c. City Council, Town or Village Zoning Board of Appeals</td>
<td>☐Yes ☑No</td>
<td>TBD</td>
</tr>
<tr>
<td>d. Other local agencies</td>
<td>☑Yes ☐No NYCDEP - Utilities; NYCDOT-Trfc., Structures; NYC Planning - Floodplain</td>
<td>TBD; TBD; TBD</td>
</tr>
<tr>
<td>e. County agencies</td>
<td>☐Yes ☑No</td>
<td>TBD</td>
</tr>
<tr>
<td>f. Regional agencies</td>
<td>☑Yes ☐No MTA-Bridges and Tunnels</td>
<td>TBD</td>
</tr>
<tr>
<td>h. Federal agencies</td>
<td>☑Yes ☐No HUD federal monies will be used, released by Lower Manhattan Dev. Corp. Requires NEPA EA</td>
<td>TBD</td>
</tr>
<tr>
<td>i. Coastal Resources.</td>
<td>☐Yes ☑No</td>
<td></td>
</tr>
<tr>
<td>ii. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway?</td>
<td>☑Yes ☐No</td>
<td></td>
</tr>
<tr>
<td>iii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?</td>
<td>☑Yes ☐No</td>
<td></td>
</tr>
<tr>
<td>iii. Is the project site within a Coastal Erosion Hazard Area?</td>
<td>☐Yes ☑No</td>
<td></td>
</tr>
</tbody>
</table>

#### C. Planning and Zoning

#### C.1. Planning and zoning actions.
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☑Yes ☐No
- If Yes, complete sections C, F and G.
- If No, proceed to question C.2 and complete all remaining sections and questions in Part 1

#### C.2. Adopted land use plans.

a. Do any municipally-adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☑Yes ☐No
If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☑Yes ☐No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☑Yes ☐No
If Yes, identify the plan(s):
- Special Lower Manhattan District and Special Battery Park City District

| c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? | ☑Yes ☐No |
| c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? | ☑Yes ☐No |

| c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? | ☑Yes ☐No |
| c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? | ☑Yes ☐No |
C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance? 
   □ Yes □ No
   The project is located within a public right-of-way. The adjacent zoning classifications are the Special Battery Park City District to the west and the C2-9 high density commercial district to the east.

b. Is the use permitted or allowed by a special or conditional use permit? 
   □ Yes □ No

c. Is a zoning change requested as part of the proposed action? 
   □ Yes □ No
   i. What is the proposed new zoning for the site?

C.4. Existing community services.

a. In what school district is the project site located? District 2

b. What police or other public protection forces serve the project site? 
   New York City Police Department and New York City Fire Department

c. Which fire protection and emergency medical services serve the project site? 
   New York City Fire Department

d. What parks serve the project site? 
   West Thames Park

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? Recreational

b. a. Total acreage of the site of the proposed action? 0.1641 acres
   b. Total acreage to be physically disturbed? 0.048 acres
   c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? N/A - public ROW acres

c. Is the proposed action an expansion of an existing project or use? 
   □ Yes □ No
   i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % Units: 

   d. Is the proposed action a subdivision, or does it include a subdivision? 
   □ Yes □ No
   i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)
   ii. Is a cluster/conservation layout proposed? 
       □ Yes □ No
   iii. Number of lots proposed?
   iv. Minimum and maximum proposed lot sizes? Minimum Maximum

   e. Will proposed action be constructed in multiple phases? 
   □ Yes □ No
   i. If No, anticipated period of construction: months
   ii. If Yes:
   • Total number of phases anticipated
   • Anticipated commencement date of phase 1 (including demolition) 10 month 2014 year
   • Anticipated completion date of final phase 10 month 2016 year
   • Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases:

   Phase I will include construction of West Thames Street Pedestrian Bridge and all supplemental utilities, lighting, landscaping and hardscape.
   Phase II will include deconstruction of existing Rector Street Bridge and all associated restoration of disturbed areas.
f. Does the project include new residential uses?  
   If Yes, show numbers of units proposed.
<table>
<thead>
<tr>
<th>One Family</th>
<th>Two Family</th>
<th>Three Family</th>
<th>Multiple Family (four or more)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial Phase</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>At completion of all phases</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

   ☐ Yes ☑ No

---

g. Does the proposed action include new non-residential construction (including expansions)?  
   If Yes, 
   i. Total number of structures: 1
   ii. Dimensions (in feet) of largest proposed structure: 18+/- height; 13+/- width; and 220+/- length
   iii. Approximate extent of building space to be heated or cooled: N/A, square feet

   ☐ Yes ☑ No

---

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage?  
   If Yes, 
   i. Purpose of the impoundment:
   ii. If a water impoundment, the principal source of the water: ☑ Ground water ☐ Surface water streams ☐ Other specify:
   iii. If other than water, identify the type of impounded/contained liquids and their source:
   iv. Approximate size of the proposed impoundment. Volume: ______ million gallons; surface area: ______ acres
   v. Dimensions of the proposed dam or impounding structure: ______ height; ______ length
   vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):

---

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both?  
   (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)  
   ☑ Yes ☐ No

   If Yes:
   i. What is the purpose of the excavation or dredging? to accommodate bridge piers and foundations
   ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?
      • Volume (specify tons or cubic yards): 480 cu
      • Over what duration of time? 2 months
   iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. mixed fill. Excavated material will be disposed of in accordance with project specifications and all local, state and federal requirements.
   iv. Will there be onsite dewatering or processing of excavated materials?  
      ☑ Yes ☐ No

   If yes, describe:

   v. What is the total area to be dredged or excavated? 0.048 acres
   vi. What is the maximum area to be worked at any one time? ______ acres
   vii. What would be the maximum depth of excavation or dredging? ______ feet
   viii. Will the excavation require blasting?  
        ☐ Yes ☑ No
   ix. Summarize site reclamation goals and plan:

---

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area?  
   ☐ Yes ☑ No

   If Yes:
   i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description):

---

Page 4 of 13
ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will proposed action cause or result in disturbance to bottom sediments? □ Yes □ No
   If Yes, describe:

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation? □ Yes □ No
   If Yes:
   • acres of aquatic vegetation proposed to be removed:
   • expected acreage of aquatic vegetation remaining after project completion:
   • purpose of proposed removal (e.g. beach clearing, invasive species control, boat access):
   • proposed method of plant removal:
   • if chemical/herbicide treatment will be used, specify product(s):

v. Describe any proposed reclamation/mitigation following disturbance:

c. Will the proposed action use, or create a new demand for water? □ Yes □ No
   If Yes:
   i. Total anticipated water usage/demand per day: ____________ gallons/day
   ii. Will the proposed action obtain water from an existing public water supply? □ Yes □ No
      If Yes:
      • Name of district or service area:
      • Does the existing public water supply have capacity to serve the proposal? □ Yes □ No
      • Is the project site in the existing district? □ Yes □ No
      • Is expansion of the district needed? □ Yes □ No
      • Do existing lines serve the project site? □ Yes □ No
   iii. Will line extension within an existing district be necessary to supply the project? □ Yes □ No
      If Yes:
      • Describe extensions or capacity expansions proposed to serve this project:
   iv. Is a new water supply district or service area proposed to be formed to serve the project site? □ Yes □ No
      If, Yes:
      • Applicant/sponsor for new district:
      • Date application submitted or anticipated:
      • Proposed source(s) of supply for new district:
   v. If a public water supply will not be used, describe plans to provide water supply for the project:
   vi. If water supply will be from wells (public or private), maximum pumping capacity: ____________ gallons/minute.

d. Will the proposed action generate liquid wastes? □ Yes □ No
   If Yes:
   i. Total anticipated liquid waste generation per day: ____________ gallons/day
   ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each):

iii. Will the proposed action use any existing public wastewater treatment facilities? □ Yes □ No
   If Yes:
   • Name of wastewater treatment plant to be used:
   • Name of district:
   • Does the existing wastewater treatment plant have capacity to serve the project? □ Yes □ No
   • Is the project site in the existing district? □ Yes □ No
   • Is expansion of the district needed?
iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? □Yes □No
   If Yes:
   - Applicant/sponsor for new district:
   - Date application submitted or anticipated:
   - What is the receiving water for the wastewater discharge?

v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

vi. Describe any plans or designs to capture, recycle or reuse liquid waste:

---

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? □Yes □No
   If Yes:
   i. How much impervious surface will the project create in relation to total size of project parcel?
   - ____ Square feet or ____ acres (impervious surface)
   - ____ Square feet or ____ acres (parcel size)
   ii. Describe types of new point sources.

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

- If to surface waters, identify receiving water bodies or wetlands:

---

iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? □Yes □No

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? □Yes □No
   If Yes, identify:
   i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)
   ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)
   iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

g. Will any air emission sources named in D.2.f. (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? □Yes □No
   If Yes:
   i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) □Yes □No
   ii. In addition to emissions as calculated in the application, the project will generate:
   - ____ Tons/year (short tons) of Carbon Dioxide (CO₂)
   - ____ Tons/year (short tons) of Nitrous Oxide (N₂O)
   - ____ Tons/year (short tons) of Perfluorocarbons (PFCs)
   - ____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆)
   - ____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs)
   - ____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)
h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)?
   If Yes:
   i. Estimate methane generation in tons/year (metric):
   ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring):

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations?
   If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust):

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services?
   If Yes:
   i. When is the peak traffic expected (Check all that apply): □ Morning □ Evening □ Weekend
      □ Randomly between hours of _________ to _________,
   ii. For commercial activities only, projected number of semi-trailer truck trips/day: __________
   iii. Parking spaces: Existing Proposed Net increase/decrease
   iv. Does the proposed action include any shared use parking? □ Yes □ No
   v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? □ Yes □ No
vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? □ Yes □ No
viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? □ Yes □ No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy?
   If Yes:
   i. Estimate annual electricity demand during operation of the proposed action:
   ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other):
   iii. Will the proposed action require a new, or an upgrade to, an existing substation? □ Yes □ No

l. Hours of operation. Answer all items which apply.
   i. During Construction:
      - Monday - Friday: N/A
      - Saturday: _________
      - Sunday: _________
      - Holidays: _________
   ii. During Operations:
      - Monday - Friday: 24 hours/day
      - Saturday: 24 hours/day
      - Sunday: 24 hours/day
      - Holidays: 24 hours/day
m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both?  
Yes □ No □

If yes:

i. Provide details including sources, time of day and duration:

| Given that the bridge is a pedestrian bridge, it would not result in noise levels exceeding the local ambient noise level. Local ambient noise levels may be temporarily exceeded during the bridge construction period but all environmental performance commitments, BMP's & regulatory requirements will be complied |

ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen?  
□ Yes □ No

Describe:

n. Will the proposed action have outdoor lighting?  
Yes □ No □

If yes:

i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures;

LED fixture lights will be located in center of bridge roof and will include aesthetic lighting to illuminate the bridge chords.

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen?  
□ Yes □ No

Describe:

o. Does the proposed action have the potential to produce odors for more than one hour per day?  
□ Yes □ No □

If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures:

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage?  
□ Yes □ No □

If Yes:

i. Product(s) to be stored

ii. Volume(s) per unit time (e.g., month, year)

iii. Generally describe proposed storage facilities:

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation?  
□ Yes □ No □

If Yes:

i. Describe proposed treatment(s):

ii. Will the proposed action use Integrated Pest Management Practices?  
□ Yes □ No □

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)?  
□ Yes □ No □

If Yes:

i. Describe any solid waste(s) to be generated during construction or operation of the facility:

- Construction: __________ tons per __________ (unit of time)
- Operation: __________ tons per __________ (unit of time)

ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:

- Construction:

- Operation:

iii. Proposed disposal methods/facilities for solid waste generated on-site:

- Construction:

- Operation:
s. Does the proposed action include construction or modification of a solid waste management facility? □ Yes ✔ No
   If Yes:
   i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities):
   ii. Anticipated rate of disposal/processing:
      • _______ Tons/month, if transfer or other non-combustion/thermal treatment, or
      • _______ Tons/hour, if combustion or thermal treatment
   iii. If landfill, anticipated site life: ___________________________ years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? □ Yes ✔ No
   If Yes:
   i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility:

   ii. Generally describe processes or activities involving hazardous wastes or constituents:

   iii. Specify amount to be handled or generated _______ tons/month
   iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents:

   v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? □ Yes □ No
      If Yes: provide name and location of facility:
      If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.
   i. Check all uses that occur on, adjoining and near the project site.
   ✔ Urban  □ Industrial  ✔ Commercial  □ Residential (suburban)  □ Rural (non-farm)
   □ Forest  □ Agriculture  □ Aquatic  ✔ Other (specify): Residential (urban)
   ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

<table>
<thead>
<tr>
<th>Land use or Covertypes</th>
<th>Current Acreage</th>
<th>Acreage After Project Completion</th>
<th>Change (Acres +/-)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads, buildings, and other paved or impervious surfaces</td>
<td>0.16</td>
<td>0.1631</td>
<td>+0.0031</td>
</tr>
<tr>
<td>Forested</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agricultural (includes active orchards, field, greenhouse etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surface water features (lakes, ponds, streams, rivers, etc.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wetlands (freshwater or tidal)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-vegetated (bare rock, earth or fill)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Other
   Describe: Maintained lawn and landscaped area           | 0.0041          | 0.001                           | -0.0031           |
c. Is the project site presently used by members of the community for public recreation? ☑ Yes ☐ No
   i. If Yes: explain: A dog run exists at the western terminus of the proposed pedestrian bridge. The bridge to be removed is also a pedestrian bridge.

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site?
   If Yes,
   i. Identify Facilities:
      Battery Park City School (55 Battery Place); Battery Park City Day Nursery (216 South End Avenue); Kinderspiel (280 Rector Place)

  e. Does the project site contain an existing dam?
     ☑ Yes ☐ No
     i. Dimensions of the dam and impoundment:
        • Dam height: ___________________ feet
        • Dam length: ___________________ feet
        • Surface area: ___________________ acres
        • Volume impounded: ___________________ gallons OR acre-feet
     ii. Dam's existing hazard classification:
     iii. Provide date and summarize results of last inspection:

  f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, ☑ Yes ☐ No or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility?
     If Yes:
     i. Has the facility been formally closed?
        ☑ Yes ☐ No
        • If yes, cite sources/documentation;
     ii. Describe the location of the project site relative to the boundaries of the solid waste management facility:
     iii. Describe any development constraints due to the prior solid waste activities:

  g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☑ Yes ☐ No
     If Yes:
     i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:

  h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☑ Yes ☐ No
     If Yes:
     i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply:
        ☑ Yes – Spills Incidents database
        ☑ Yes – Environmental Site Remediation database
        ☐ Neither database
        Provide DEC ID number(s): 9310242; 8702143; 0806441; 0106421

     ii. If site has been subject of RCRA corrective activities, describe control measures:

     iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☑ Yes ☐ No
         If yes, provide DEC ID number(s): 22231006

   iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):
      (i) 9310242 fuel oil spill 11/93, corrective action taken; 8702143-9/87, transformer fire/spill - cleaned up by Con-Edison; 0806441 - 9/2008, unk. matl spill, corrective action taken; 0106421 -9/2001, diesel fuel spill, corrective action taken; (ii) Rt. 9A Reconstruction Project. No further Action issued.
v. Is the project site subject to an institutional control limiting property uses? [□ Yes □ No]
   - If yes, DEC site ID number: ____________________________
   - Describe the type of institutional control (e.g., deed restriction or easement): _______________________________________
   - Describe any use limitations: _____________________________________________________________
   - Describe any engineering controls: ______________________________________________________
   - Will the project affect the institutional or engineering controls in place? [□ Yes □ No]
   - Explain: ________________________________________________________________

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? ____________________________ 60-70 feet

b. Are there bedrock outcappings on the project site? [□ Yes □ No]
   If Yes, what proportion of the site is comprised of bedrock outcappings? _________ %

c. Predominant soil type(s) present on project site: Wet Substratum, Laguardia-Ebbets _________ %

   ____________________________________________________________ %
   ____________________________________________________________ %

   ____________________________________________________________ %

d. What is the average depth to the water table on the project site? Average: _________ >3.0 feet

e. Drainage status of project site soils: [□ Yes □ No]
   - Well Drained: 100 % of site
   - Moderately Well Drained: _________ % of site
   - Poorly Drained: _________ % of site

f. Approximate proportion of proposed action site with slopes: [□ Yes □ No]
   - 0-10%: _________ % of site
   - 10-15%: _________ % of site
   - 15% or greater: 100 % of site

  g. Are there any unique geologic features on the project site? [□ Yes □ No]

     ____________________________________________________________

h. Surface water features:
   i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? [□ Yes □ No]
   ii. Do any wetlands or other waterbodies adjoin the project site? [□ Yes □ No]
   If Yes to either i or ii, continue. If No, skip to E.2.i.
   iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? [□ Yes □ No]

   iv. For each identified regulated wetland and waterbody on the project site, provide the following information:
   - Streams: Name ____________________________ Classification ____________________________
   - Lakes or Ponds: Name ____________________________ Classification ____________________________
   - Wetlands: Name ____________________________ Approximate Size ____________________________
   - Wetland No. (if regulated by DEC) ____________________________

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? [□ Yes □ No]

If yes, name of impaired water body/bodies and basis for listing as impaired: ____________________________________________________________

i. Is the project site in a designated Floodway? [□ Yes □ No]

j. Is the project site in the 100 year Floodplain? [□ Yes □ No]

k. Is the project site in the 500 year Floodplain? [□ Yes □ No]

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? [□ Yes □ No]
   If Yes:
   i. Name of aquifer: ____________________________
m. Identify the predominant wildlife species that occupy or use the project site:

<table>
<thead>
<tr>
<th>Various avian species</th>
<th>Various common mammalian species</th>
<th>Highly developed urban area</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>adapted to urban environment (ie. mice, chipmunks, squirrels, etc.)</td>
<td></td>
</tr>
</tbody>
</table>

n. Does the project site contain a designated significant natural community?
   If Yes:
   i. Describe the habitat/community (composition, function, and basis for designation):

   ii. Source(s) of description or evaluation:

   iii. Extent of community/habitat:
   - Currently: ________________________ acres
   - Following completion of project as proposed: ________________________ acres
   - Gain or loss (indicate + or -): ________________________ acres

o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species?
   - Yes [ ] No [x]

New York State DEC correspondence states no T&E species within project area. No Federally protected species listed by USFWS but a candidate species, the Northern Long-Eared Bat, may be listed by USFWS in late 2014. Correspondence with USFWS states project will comply with USFWS guidelines if necessary.

p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern?
   - Yes [x] No [ ]

q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing?
   If yes, give a brief description of how the proposed action may affect that use:
   - Yes [ ] No [x]

E.3. Designated Public Resources On or Near Project Site

a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304?
   - Yes [x] No [ ]

b. Are agricultural lands consisting of highly productive soils present?
   i. If Yes: acreage(s) on project site: ________________________
   ii. Source(s) of soil rating(s):
   - Yes [x] No [ ]

c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark?
   - Yes [ ] No [x]

   i. Nature of the natural landmark:
   - Biological Community [ ] Geological Feature [x]

   ii. Provide brief description of landmark, including values behind designation and approximate size/extent:

   - Yes [x] No [ ]

d. Is the project site located in or does it adjoin a state listed Critical Environmental Area?
   - Yes [x] No [ ]

   i. CEA name:
   ii. Basis for designation:
   iii. Designating agency and date:

Page 12 of 13
e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places? ☑ Yes ☐ No

If Yes:
   i. Nature of historic/archaeological resource: ☐ Archaeological Site ☑ Historic Building or District
   
   ii. Name: New York Post Building and Barrett Building

   iii. Brief description of attributes on which listing is based:

       See EA text.

f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? ☑ Yes ☐ No

   g. Have additional archaeological or historic site(s) or resources been identified on the project site? ☑ Yes ☐ No

       If Yes:

       i. Describe possible resource(s):

       ii. Basis for identification:

h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? ☑ Yes ☐ No

   If Yes:

       i. Identify resource: Southern Rt. 9A Visual District

       ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.):

       iii. Distance between project and resource: ___________ miles.

i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? ☑ Yes ☐ No

   If Yes:

       i. Identify the name of the river and its designation:

       ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? ☐ Yes ☐ No

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name ___________________________ Date ___________________________

Signature ___________________________ Title ___________________________
APPENDIX 2

NYSDOS CONSISTENCY FORM AND NYC WATERFRONT REVITALIZATION PROGRAM COASTAL CONSISTENCY ASSESSMENT FORM
NEW YORK STATE DEPARTMENT OF STATE
COASTAL MANAGEMENT PROGRAM

Federal Consistency Assessment Form

An applicant, seeking a permit, license, waiver, certification or similar type of approval from a federal agency which is subject to the New York State Coastal Management Program (CMP), shall complete this assessment form for any proposed activity that will occur within and/or directly affect the State’s Coastal Area. This form is intended to assist an applicant in certifying that the proposed activity is consistent with New York State’s CMP as required by U.S. Department of Commerce regulations (15 CFR 930.57). It should be completed at the time when the federal application is prepared. The Department of State will use the completed form and accompanying information in its review of the applicant’s certification of consistency.

A. APPLICANT (please print)

1. Name: New York City Economic Development Corporation POC  Mr. Dimitri Konon, Ex. VP

   110 William Street

2. Address:

3. Telephone: Area Code (212) 619-5000

B. PROPOSED ACTIVITY

1. Brief description of activity:

SEE ATTACHED SHEET

2. Purpose of activity:

The project purpose is to replace the existing Rector St. Pedestrian Bridge, which was designed as an interim bridge with limited life cycle, with a new pedestrian bridge at West Thames St. This will provide for maintaining a needed pedestrian connection between businesses and residences east of West Street with Battery Park City and the Hudson Waterfront.

3. Location of activity:

   New York County Manhattan West Thames St.; Rector St.

   County City, Town, or Village Street or Site Description

4. Type of federal permit/license required: HUD NEPA EA/FONSI

5. Federal application number, if known:

6. If a state permit/license was issued or is required for the proposed activity, identify the state agency and provide the application or permit number, if known:
C. COASTAL ASSESSMENT. Check either "YES" or "NO" for each of these questions. The numbers following each question refer to the policies described in the CMP document (see footnote on page 2) which may be affected by the proposed activity.

1. Will the proposed activity result in any of the following?
   a. Large physical change to a site within the coastal area which will require the preparation of an environmental impact statement? (11, 22, 25, 32, 37, 38, 41, 43) ........................................... \(\square \) \(\square \)
   b. Physical alteration of more than two acres of land along the shoreline, land under water or coastal waters? (2, 11, 12, 20, 28, 35, 44) ........................................... \(\square \) \(\square \)
   c. Revitalization/redevelopment of a deteriorated or underutilized waterfront site? (1) ........................................... \(\square \) \(\square \)
   d. Reduction of existing or potential public access to or along coastal waters? (19, 20) ........................................... \(\square \) \(\square \)
   e. Adverse effect upon the commercial or recreational use of coastal fish resources? (9,10) ........................................... \(\square \) \(\square \)
   f. Siting of a facility essential to the exploration, development and production of energy resources in coastal waters or on the Outer Continental Shelf? (29) ........................................... \(\square \) \(\square \)
   g. Siting of a facility essential to the generation or transmission of energy? (27) ........................................... \(\square \) \(\square \)
   h. Mining, excavation, or dredging activities, or the placement of dredged or fill material in coastal waters? (15, 35) ........................................... \(\square \) \(\square \)
   i. Discharge of toxics, hazardous substances or other pollutants into coastal waters? (8, 15, 35) ........................................... \(\square \) \(\square \)
   j. Draining of stormwater runoff or sewer overflows into coastal waters? (33) ........................................... \(\square \) \(\square \)
   k. Transport, storage, treatment, or disposal of solid wastes or hazardous materials? (36, 39) ........................................... \(\square \) \(\square \)
   l. Adverse effect upon land or water uses within the State's small harbors? (4) ........................................... \(\square \) \(\square \)

2. Will the proposed activity affect or be located in, on, or adjacent to any of the following?
   a. State designated freshwater or tidal wetland? (44) ........................................... \(\square \) \(\square \)
   b. Federally designated flood and/or state designated erosion hazard area? (11, 12, 17) ........................................... \(\square \) \(\square \)
   c. State designated significant fish and/or wildlife habitat? (7) ........................................... \(\square \) \(\square \)
   d. State designated significant scenic resource or area? (24) ........................................... \(\square \) \(\square \)
   e. State designated important agricultural lands? (26) ........................................... \(\square \) \(\square \)
   f. Beach, dune or barrier island? (12) ........................................... \(\square \) \(\square \)
   g. Major ports of Albany, Buffalo, Ogdensburg, Oswego or New York? (3) ........................................... \(\square \) \(\square \)
   h. State, county, or local park? (19, 20) ........................................... \(\square \) \(\square \)
   i. Historic resource listed on the National or State Register of Historic Places? (23) ........................................... \(\square \) \(\square \)

3. Will the proposed activity require any of the following?
   a. Waterfront site? (2, 21, 22) ........................................... \(\square \) \(\square \)
   b. Provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (5) ........................................... \(\square \) \(\square \)
   c. Construction or reconstruction of a flood or erosion control structure? (13, 14, 16) ........................................... \(\square \) \(\square \)
   d. State water quality permit or certification? (30, 38, 40) ........................................... \(\square \) \(\square \)
   e. State air quality permit or certification? (41, 43) ........................................... \(\square \) \(\square \)

4. Will the proposed activity occur within and/or affect an area covered by a State approved local waterfront revitalization program? (see policies in local program document) ........................................... \(\square \) \(\square \)
D. ADDITIONAL STEPS

1. If all of the questions in Section C are answered "NO", then the applicant or agency shall complete Section F and submit the documentation required by Section F.

2. If any of the questions in Section C are answered "YES", then the applicant or agent is advised to consult the CMP, or where appropriate, the local waterfront revitalization program document*. The proposed activity must be analyzed in more detail with respect to the applicable state or local coastal policies. On a separate page(s), the applicant or agent shall: (a) identify, by their policy numbers, which coastal policies are affected by the activity, (b) briefly assess the effects of the activity upon the policy, and, (c) state how the activity is consistent with each policy. Following the completion of this written assessment, the applicant or agency shall complete Section E and submit the documentation required by Section F.

H. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with the State's CMP or the approved local waterfront revitalization program, as appropriate. If this certification cannot be made, the proposed activity shall not be undertaken. If this certification can be made, complete this Section.

"The proposed activity complies with New York State’s approved Coastal Management Program, or with the applicable approved local waterfront revitalization program, and will be conducted in a manner consistent with such program."

New York City Economic Development Corporation POC Mr. Dimitri Konon, Ex. VP

Applicant/Agent’s Name: ____________________________
Address: _________________________________________
Telephone: Area Code (212) 619-5000 ___________________
Applicant/Agent’s Signature: __________________________
Date: __________________

F. SUBMISSION REQUIREMENTS

1. The applicant or agent shall submit the following documents to the New York State Department of State, Office of Coastal, Local Government and Community Sustainability, Attn: Consistency Review Unit, 1 Commerce Plaza, 99 Washington Avenue - Suite 1010, Albany, New York 12231.
   a. Copy of original signed form.
   b. Copy of the completed federal agency application.
   c. Other available information which would support the certification of consistency.

2. The applicant or agent shall also submit a copy of this completed form along with his/her application to the federal agency.

3. If there are any questions regarding the submission of this form, contact the Department of State at (518) 474-6000.

*These state and local documents are available for inspection at the offices of many federal agencies, Department of Environmental Conservation and Department of State regional offices, and the appropriate regional and county planning agencies. Local program documents are also available for inspection at the offices of the appropriate local government.
NEW YORK STATE DEPARTMENT OF STATE COASTAL MANAGEMENT
PROGRAM

Federal Consistency Assessment Form

ATTACHMENT NO. 1

B. PROPOSED ACTIVITY

1. Brief description of activity:

The City of New York in coordination with the Lower Manhattan Development Corporation and the Battery Park City Authority propose to construct a pedestrian bridge over West Street (NYS Rt. 9A) between Joseph P. Ward Street adjacent to the Brooklyn Battery Tunnel and the promenade south of West Thames Street. The project will consist of two distinct project sites. One will include the removal of the existing Rector Street pedestrian bridge located over West Street from between Rector Street and Carlisle Street to West Thames Street Park in Manhattan. The other project site will include the construction of the West Thames Street Pedestrian Bridge to be located over West Street from the NE corner of Joseph P. Ward Street and West Street to the SW corner of West Thames Street and Little West Street. This portion of the project will include construction of a stairway and elevator connection along Joseph P. Ward Street, a lenticular truss bridge constructed from the NE corner of Joseph P. Ward Street and West Street to the SW corner of West Thames St. and Little West Street with a single mid-span pier placed in the median of West Street and an elevator and a stairway or 200' long ramp along the existing dog run and a stairway running south from the bridge between Little West Street and the adjacent dog run.

D. ADDITIONAL STEPS

2. Given that questions 1(j), 1(k), 2(b) and 4(a) were checked yes, the approved local waterfront revitalization program (WRP) document was consulted and the local WRP form, with supporting answers, completed. The WRP documentation is attached to this State Coastal Assessment Form package.
NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form
With Supporting Information
NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM
Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City’s designated coastal zone, must be reviewed and assessed for their consistency with the New York City Waterfront Revitalization Program (WRP). The WRP was adopted as a 197-1 Plan by the Council of the City of New York on October 13, 1999, and subsequently approved by the New York State Department of State with the concurrence of the United States Department of Commerce pursuant to applicable state and federal law, including the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. As a result of these approvals, state and federal discretionary actions within the city’s coastal zone must be consistent to the maximum extent practicable with the WRP policies and the city must be given the opportunity to comment on all state and federal projects within its coastal zone.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, other state agencies or the New York City Department of City Planning in their review of the applicant’s certification of consistency.

A. APPLICANT

1. Name: New York Economic Development Corporation POC Mr. Dimitri Konon, Ex. VP

2. Address: 110 William Street, New York, New York 10038

3. Telephone: 212-619-5000 Fax: N/A E-mail: dkonon@nycedc.com

4. Project site owner: New York City Department of Transportation

B. PROPOSED ACTIVITY

1. Brief description of activity:

The City of New York in coordination with the Lower Manhattan Development Corporation and the Battery Park City Authority proposes to construct a pedestrian bridge over West Street (Route 8A) between Joseph P. Ward Street adjacent to the Brooklyn Battery Tunnel West Approach and the promenade south of West Thames Street. The project will consist of two distinct project phases and sites.

Phase I of the project will include the construction of the West Thames Pedestrian Bridge, to be located over West Street from the southeast corner of Joseph P. Ward Street and West Street to the southwest corner of West Thames Street and Little West Street. This portion of the project will include construction of a stairway and elevator connection along Joseph P. Ward Street, a pedestrian bridge constructed from the NE corner of Joseph P. Ward Street and West Street to the southwest corner of West Thames Street and Little West Street with a single mid-span pier placed in the median of West Street and an elevation and a stairway to 207 feet long ramp along the existing dog run and a stairway running south from the bridge between Little West Street and the adjacent dog run. Phase II of this project will include the removal of the Rector Street pedestrian bridge located over West Street from between Rector Street and Carlisle Street to West Thames Park in Manhattan.

2. Purpose of activity:

The project purpose is to replace the existing Rector Street Pedestrian Bridge, which was only designed as an interim bridge with a limited life cycle, with a new permanent pedestrian bridge at West Thames Street. This will provide for maintaining a needed pedestrian connection between businesses and residences east of West Street with Battery Park City and the Hudson Waterfront.

3. Location of activity: (street address/borough or site description):

Across West Street and Little West Street from Joseph P. Ward Street near the mouth of the Brooklyn Battery Tunnel complex.
Proposed Activity Cont'd

4. If a federal or state permit or license was issued or is required for the proposed activity, identify the permit type(s), the authorizing agency and provide the application or permit number(s), if known:

No federal or state permits are anticipated for the proposed project.

5. Is federal or state funding being used to finance the project? If so, please identify the funding source(s).

Federal funding from the US Department of Housing and Urban Development (HUD), via the Lower Manhattan Development Corporation (LMDC) will be used for this project.

6. Will the proposed project require the preparation of an environmental impact statement?

Yes ______ No ______

If yes, identify Lead Agency:

Note: A NEPA Environmental Assessment and Finding of No Significant Impact are anticipated for the proposed project. NEPA Lead Agency is LMDC.

7. Identify city discretionary actions, such as a zoning amendment or adoption of an urban renewal plan, required for the proposed project.

NYCDOT approvals will be required as well as approvals from the New York City Department of Environmental Protection, New York City Department of Planning, New York City Building Department, the New York City Department of Parks and Recreation, the New York City, the NYC Fire Department and the local Community Board (CB No. 1)

C. COASTAL ASSESSMENT

<table>
<thead>
<tr>
<th>Location Questions:</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is the project site on the waterfront or at the water's edge?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Does the proposed project require a waterfront site?</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>3. Would the action result in a physical alteration to a waterfront site, including land along the shoreline, land underwater, or coastal waters?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Policy Questions

<table>
<thead>
<tr>
<th>Policy Questions</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Will the proposed project result in revitalization or redevelopment of a deteriorated or under-used waterfront site? (1)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>5. Is the project site appropriate for residential or commercial redevelopment? (1.1)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>6. Will the action result in a change in scale or character of a neighborhood? (1.2)</td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>

The following questions represent, in a broad sense, the policies of the WRP. Numbers in parentheses after each question indicate the policy or policies addressed by the question. The new Waterfront Revitalization Program offers detailed explanations of the policies, including criteria for consistency determinations.

Check either “Yes” or “No” for each of the following questions. For all “yes” responses, provide an attachment assessing the effects of the proposed activity on the relevant policies or standards. Explain how the action would be consistent with the goals of those policies and standards.

WRP consistency form - January 2003
<table>
<thead>
<tr>
<th>Policy Questions cont'd</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Will the proposed activity require provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (1.3)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>8. Is the action located in one of the designated Significant Maritime and Industrial Areas (SMIA): South Bronx, Newtown Creek, Brooklyn Navy Yard, Red Hook, Sunset Park, or Staten Island? (2)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>9. Are there any waterfront structures, such as piers, docks, bulkheads or wharves, located on the project sites? (2)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>10. Would the action involve the siting or construction of a facility essential to the generation or transmission of energy, or a natural gas facility, or would it develop new energy resources? (2.1)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>11. Does the action involve the siting of a working waterfront use outside of a SMIA? (2.2)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>12. Does the proposed project involve infrastructure improvement, such as construction or repair of piers, docks, or bulkheads? (2.3, 3.2)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>13. Would the action involve mining, dredging, or dredge disposal, or placement of dredged or fill materials in coastal waters? (2.3, 3.1, 4, 5.3, 6.3)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>14. Would the action be located in a commercial or recreational boating center, such as City Island, Sheepshead Bay or Great Kills or an area devoted to water-dependent transportation? (3)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>15. Would the proposed project have an adverse effect upon the land or water uses within a commercial or recreation boating center or water-dependent transportation center? (3.1)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>16. Would the proposed project create any conflicts between commercial and recreational boating? (3.2)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>17. Does the proposed project involve any boating activity that would have an impact on the aquatic environment or surrounding land and water uses? (3.3)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>18. Is the action located in one of the designated Special Natural Waterfront Areas (SNWA): Long Island Sound- East River, Jamaica Bay, or Northwest Staten Island? (4 and 9.2)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>19. Is the project site in or adjacent to a Significant Coastal Fish and Wildlife Habitat? (4.1)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>20. Is the site located within or adjacent to a Recognized Ecological Complex: South Shore of Staten Island or Riverdale Natural Area District? (4.1 and 9.2)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>21. Would the action involve any activity in or near a tidal or freshwater wetland? (4.2)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>22. Does the project site contain a rare ecological community or would the proposed project affect a vulnerable plant, fish, or wildlife species? (4.3)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>23. Would the action have any effects on commercial or recreational use of fish resources? (4.4)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>24. Would the proposed project in any way affect the water quality classification of nearby waters or be unable to be consistent with that classification? (5)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>25. Would the action result in any direct or indirect discharges, including toxins, hazardous substances, or other pollutants, effluent, or waste, into any waterbody? (5.1)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>26. Would the action result in the draining of stormwater runoff or sewer overflows into coastal waters? (5.1)</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>27. Will any activity associated with the project generate nonpoint source pollution? (5.2)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>28. Would the action cause violations of the National or State air quality standards? (5.2)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Policy Questions cont’d</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------</td>
<td>-----</td>
<td>----</td>
</tr>
<tr>
<td>29. Would the action result in significant amounts of acid rain precursors (nitrates and sulfates)? (5.2C)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>30. Will the project involve the excavation or placing of fill in or near navigable waters, marshes, estuaries, tidal marshes or other wetlands? (5.3)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>31. Would the proposed action have any effects on surface or ground water supplies? (5.4)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>32. Would the action result in any activities within a federally designated flood hazard area or state-designated erosion hazards area? (6)</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>33. Would the action result in any construction activities that would lead to erosion? (6)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>34. Would the action involve construction or reconstruction of a flood or erosion control structure? (6.1)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>35. Would the action involve any new or increased activity on or near any beach, dune, barrier island, or bluff? (6.1)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>36. Does the proposed project involve use of public funds for flood prevention or erosion control? (6.2)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>37. Would the proposed project affect a non-renewable source of sand? (6.3)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>38. Would the action result in shipping, handling, or storing of solid wastes, hazardous materials, or other pollutants? (7)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>39. Would the action affect any sites that have been used as landfills? (7.1)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>40. Would the action result in development of a site that may contain contamination or that has a history of underground fuel tanks, oil spills, or other form or petroleum product use or storage? (7.2)</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>41. Will the proposed activity result in any transport, storage, treatment, or disposal of solid wastes or hazardous materials, or the siting of a solid or hazardous waste facility? (7.3)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>42. Would the action result in a reduction of existing or required access to or along coastal waters, public access areas, or public parks or open spaces? (8)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>43. Will the proposed project affect or be located in, on, or adjacent to any federal, state, or city park or other land in public ownership protected for open space preservation? (8)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>44. Would the action result in the provision of open space without provision for its maintenance? (8.1)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>45. Would the action result in any development along the shoreline but NOT include new water-enhanced or water-dependent recreational space? (8.2)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>46. Will the proposed project impede visual access to coastal lands, waters and open space? (8.3)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>47. Does the proposed project involve publicly owned or acquired land that could accommodate waterfront open space or recreation? (8.4)</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>48. Does the project site involve lands or waters held in public trust by the state or city? (8.5)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>49. Would the action affect natural or built resources that contribute to the scenic quality of a coastal area? (9)</td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>50. Does the site currently include elements that degrade the area’s scenic quality or block views to the water? (9.1)</td>
<td></td>
<td>✔</td>
</tr>
</tbody>
</table>
Policy Questions cont'd

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>51. Would the proposed action have a significant adverse impact on historic, archeological, or cultural resources? (10)</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>52. Will the proposed activity affect or be located in, on, or adjacent to an historic resource listed on the National or State Register of Historic Places, or designated as a landmark by the City of New York? (10)</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

D. CERTIFICATION

The applicant or agent must certify that the proposed activity is consistent with New York City's Waterfront Revitalization Program, pursuant to the New York State Coastal Management Program. If this certification cannot be made, the proposed activity shall not be undertaken. If the certification can be made, complete this section.

"The proposed activity complies with New York State's Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."

New York City Economic Development Corporation

Applicant/Agent Name: ____________________________________________________________

Address: 110 William Street, New York, NY 10038

Telephone: ____________________________________________ Date: 3-5-2-14

Applicant/Agent Signature: ___________________________________________________________
Additional Supporting Documentation for Affected Coastal Policies

No. 21- Coastal Policy No. 5: Protect and improve water quality in the New York City coastal area. (5.1) Manage direct or indirect discharges to waterbodies.

The proposed West Thames Street Bridge has been designed to discharge pre-treated water (pretreatment via an oil-water separator) that is associated with the proposed elevator shaft and machine room. This treated residual water will subsequently be discharged to an existing sanitary sewer via one or more plumbing drains. Given that the water will be pre-treated and that the amount of such discharge is anticipated to be very minimal in volume, no degradation of any NYC coastal area water quality is anticipated.

Given the pedestrian nature of the proposed bridge, stormwater runoff from the proposed bridge is not anticipated to contain any petroleum-based contaminants typically found on vehicular roadways and bridges. From a stormwater volume perspective, given that most of the bridge runoff will be from spanning areas that are already paved, any increase in the overall stormwater runoff volume is anticipated to be so minimal as to be considered negligible.

In summary, the proposed bridge design complies with Policy No. 5 in that it protects the water quality in the New York City coastal area.

No. 32- Coastal Policy No. 6: Minimize loss of life, structures and natural resources caused by flooding and erosion.

The proposed project is located within the 100 year floodplain of the Hudson River. Given that the proposed structure is not a habitable building, that flood-proofing design approaches are used, including locating electrical systems and hydraulic systems above the 100 year flood elevation, that the anticipated depth of the 100 year flood within the project area is very minimal based on a comparison of the existing ground elevations with the 100 year flood elevations and that there are no erosive or natural shorelines associated with the proposed project, it is anticipated that the proposed project will be found to be in compliance with Policy No. 6.

No. 40 & 41-Coastal Policy No. 7: Minimize environmental degradation from solid waste and hazardous substances. (7.2) Prevent and remediate discharge of petroleum products.

Based upon a review of EDR Inc.'s NY Spills database summary, the proposed project will involve construction within or adjacent to four areas, three on the eastern side of the project area and one on the western side of the project area, that are the sites of previously documented spills of regulated chemical or petroleum based materials. The previous spill areas, which occurred in 1987, per documentation found in a recent Environmental Data Resources, Inc. database search, were identified as sites Nos. 1, A10, A19 and D27. Similar spill sites were reported as part of the Route 9A Final EIS and Final Supplemental EIS and it is anticipated that the same approach will be followed for this project. Potentially contaminated (but non-hazardous) soil would be excavated and removed for off-site disposal. Approximately 416 cubic yards of material will need to be excavated to allow for construction of the foundations.
In addition to the excavation and removal of any contaminated soil material, the selected contractor will prepare and submit for review a Health and Safety Plan (HASP) to help ensure that workers are protected from exposure to any contaminated material. In addition, a Soil and Groundwater Management Plan would also be prepared make sure that any soils not previously suspected of contamination are examined and properly handled.

Provided that the actions described above are taken, the proposed project complies with the overall Policy No. 7 criteria, as well as complying specifically with Section 7.2 of said policy.

No. 47- Coastal Policy No. 8- Providing public access to and along New York City’s coastal waters, (8.4) Preserve and develop waterfront open space and recreation on publicly owned lands at suitable locations.

The proposed West Thames Street Pedestrian Bridge complies with this provision of Policy No. 8 as it preserves the public’s ability to access and enjoy waterfront open space and recreation on public lands in an area that is suitable for the public’s use. Given that Battery Park City has been specifically planned to incorporate a large degree of public open space within its limits, including 36 parks, the need for continued and enhanced public access to these open space and recreational areas is obvious. The proposed pedestrian bridge construction ensures that such access is maintained, given the limited life cycle remaining for the Rector Street Bridge.

Nos. 51 & 52- Coastal Policy No. 10- Protect, preserve and enhance resources significant to the historical, archaeological and cultural legacy of the New York City coastal area.

The proposed project site, as well as all other potential bridge location sites within the vicinity that would provide the same public benefits as the proposed West Thames Pedestrian Bridge, are located within an archaeologically sensitive area. Moving the proposed bridge further north or south within a linear distance that would still allow the bridge to provide its intended benefits will not change that factor. Given the nature of the proposed improvements, the presence of eligible and potentially eligible historic and archaeological resources within the limits of the project area and, finally, the degree of transportation and utility related constraints also found within the limits of the project area, the proposed bridge has been designed to minimize impacts to historic and archaeologically important sites to the extent feasible. The micropile pilings and small, shallow foundations proposed were specifically selected to reduce potential excavation and further minimize impacts to subsurface resources. It should be noted that, while the proposed project is not in, on or adjacent to a property listed on the State or National Registers of Historic Places nor is it in, on or adjacent to a NYC Landmark, it can potentially impact properties that are eligible for the S/NR. While there may be a potential for some adverse impacts to eligible or potentially eligible historic and/or archaeological resources, these impacts have been minimized and will be further mitigated based upon mitigative measures that will be implemented per previous coordination with and approval by the State Historic Preservation Office (SHPO) for this project. The SHPO has issued a No Adverse Effects Determination with conditions for this project.
It should be noted that the Rector Street Bridge is adjacent to a building that is just south of and adjacent to the New York Post Building, which is listed on the National Register of Historic Places. The Rector Street Bridge, which was from its inception designed and utilized as a temporary, interim bridge, is being removed, not constructed. Provided the building protection specifications outlined in Stipulation No. 6 of the final Amendment to the 2004 Programmatic Agreement Among the Federal Highway Administration, the New York State Department of Transportation, the New York State Historic Preservation Office and the Advisory Council on Historic Preservation for the Route 9A Reconstruction Project are followed, or, as an alternate, that an approved Construction Protection Plan is implemented, it is not anticipated that there will be any effects on National Register listed properties. This was specifically required as part of the 2005 Supplemental FEIS for the Route 9A Reconstruction Project and has been incorporated as well for this project. The SHPO, as stated above, has issued a No Adverse Effects Determination with conditions for this project and the requirements listed above have been included in that Determination.

Additional Documentation

The project area has been evaluated previously for the Route 9A project. In addition, the Area of Potential Effect (APE) addressed for the World Trade Center Memorial and Redevelopment Plan extended to Joseph P. Ward Street. The following documents pertaining to these projects have been consulted: Route 9A Archaeological Assessment Report, Battery Place to Harrison Street (1990), Route 9A Final Environmental Impact Statement (1994), Route 9A Programmatic Agreement (1994), Route 9A Cultural Resources Summary Report (1996), Route 9A Amended Programmatic Agreement (2004), World Trade Center Memorial and Redevelopment Plan Generic EIS (2004), Route 9A Final Supplemental EIS (2005), Archaeological Monitoring, Treatment, and Data Recovery Plan for NYC Hudson River Bulkhead... (2005); Cultural Resources Survey Report of Archaeological Monitoring, Treatment, and Data Recovery for NYC Bulkhead and World Trade Center Site...(2011); Buildings and Structures Inventory Form for the NYC Hudson River Bulkhead (1997).

The 1992 Route 9A Contextual Study on Wharves and Piers was not available for review. However, the 232 piers, wharves and pier sheds, including those within the present project area, identified in that study were eliminated by SHPO from further consideration for archaeological potential for the Route 9A project (Cultural Resources Summary Report 1996). Subsequently, the Hudson River Bulkhead was deemed eligible for the National Register of Historic Places and has been recorded archaeologically.

The specific effects of the present project on cultural resources that were identified for the previous projects will require evaluation.

Buildings and Structures:

The proposed bridge is immediately adjacent to and spans the exit ramps of the Brooklyn Battery Tunnel (National Register eligible) and is adjacent to the Battery Garage (original structure - NR eligible). (The garage addition, which the proposed bridge will abut, dates to
the 1970s and therefore does not meet the threshold for consideration of eligibility. Additional NR listed and eligible structures as well as New York City Landmarks nearby (shown on attached mapping under the Supporting Documentation section) are not considered to be within the Area of Potential Effect for the proposed bridge. It should be noted that a new building, 50 West Street, is planned for the former location of the Crystal Building (a NR eligible structure that was demolished in 2008).

The removal of the temporary Rector Street Pedestrian Bridge may affect NR listed and eligible structures on the east side of West Street (the listed New York Evening Post Building, which is just north of the Rector Street Bridge, and the eligible Barrett Building) unless steps are taken to avoid any damage to said buildings. Potential effects of bridge removal to the New York Evening Post Building were previously addressed in Stipulation 6 of the Amended Programmatic Agreement for the Route 9A project. This should be the basis for coordinating avoidance, minimization, or mitigation of possible effects of the present project.

Archaeology:

The project is located within an archaeologically sensitive area. Its western terminus (with stairs and elevator) abuts one known NR eligible resource, the Hudson River Bulkhead. Its eastern terminus and median supporting structure are within landfill.

The eastern terminus is in a location that was in the Hudson River until the early 19th century, but was covered with landfill and buildings by mid-century. The project APE is within the front portion of the historic lot. While residential/commercial structures probably were built on the lot first, following landfilling, by the late 19th century the Babbitt soap factory had expanded to include the properties on this part of the block. In addition, 1950 saw the construction of the Brooklyn Battery Tunnel exit ramps and subterranean entrance ramp immediately adjacent to the project footprint. No archaeological resources are anticipated in the upper 6 feet of this portion of the project APE due to prior disturbances from factory buildings and tunnel construction.

The central medial support footprint is in a location that has potential for landfill deposits only. Due to the presence of utilities and the subterranean ramp to the Battery Tunnel adjacent to this location, the 6-foot deep foundation is not likely to encounter previously undisturbed strata.

The western terminus is just within (on the east side of) the Hudson River Bulkhead, as shown on a schematic profile developed from maps and borings logs (attached). The project footprint is within the former footprint of a large Pennsylvania Railroad pier building (freight warehouse), which stood here from c. 1870 until 1928, after which a smaller shed structure was in place. All buildings and piers were removed and land filled in for construction of Battery Park City beginning in the 1970s. Archaeological investigations at West Thames Park, on the block immediately to the north of the present project, resulted in the identification of the Pier 7 Complex Site, including bulkhead remains and remains of an early 20th-century pier shed. This complex was determined to be eligible for inclusion in the
National Register. See attachments for information on significance and a graphic depicting the below-ground resources at the Pier 7 Complex Site.

Project plans for the Promenade South project, which included construction of the promenade and landscaping in the present project's western terminus, have not been reviewed. These plans should provide information on the depth of disturbance from that undertaking. It is possible the present project's western foundation footprint is partially within previously undisturbed strata, though demolition of the Pennsylvania Railroad pier shed, development of Battery Park City, and the reconstruction of Route 9A are likely to have had an impact.

Archaeological testing for the deep micro-pilings is not feasible, though the pilings will likely affect buried early landfill deposits, piers, and bulkheads, including potentially the NR eligible Hudson River Bulkhead.
APPENDIX 3

RELEVANT PROJECT CORRESPONDENCE
December 8, 2014

CERTIFICATE 25217

RESOLVED That the Design Commission, having considered designs for the construction of the West Thames Pedestrian Bridge over Route 9A, Manhattan, submitted by the Economic Development Corporation and the Department of Transportation, represented by exhibits 4515-CD, CK, CL & CM of record in this matter, hereby gives to the same unanimous preliminary approval with the understanding that the team will (1) refine the connection between the vertical structural members and the horizontal roof supports and (2) submit drawings of the revised connection for committee review prior to developing final drawings.

Preliminary approval is conditioned upon submission of this project for final review and approval before December 8, 2016.

A true copy of resolution adopted by the Design Commission at its meeting on December 8, 2014.

Faith Rose
Executive Director
CORRESPONDENCE TO AND FROM THE NEW YORK STATE OFFICE OF PARKS, RECREATION AND HISTORIC PRESERVATION (STATE HISTORIC PRESERVATION OFFICE) AND THE NYC LANDMARKS PRESERVATION COMMISSION
January 14, 2015

Ms. Jean Howson
Principal Archaeologist
The RBA Group
7 Campus Dr., Suite 300
Parsippany, NJ 07054

Re: HUD
West Thames Street Pedestrian Bridge
Over West St. (at Battery Tunnel Entrance)
13PR01251

Dear Ms. Howson:

Thank you for continuing to consult with the New York State Historic Preservation Office (SHPO). We have reviewed the provided information in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic/Cultural resources.

We have reviewed the West Thames Street Pedestrian Bridge submission dated December 8, 2014 with updated renderings and details noting the design changes to the bridge. We understand that the shape of the piers have been modified to a Tapered Angled Arm design. We note that the roofs originally proposed above the stairs are no longer part of the design and that the cladding at the stair walls has been changed from brick to stainless steel. We find the design of the bridge to be appropriate.

The previous determination of No Adverse Effect with Conditions remains. We look forward to continued consultation as the project moves forward.

If further correspondence is required regarding this project, I can be reached at (518) 237-8643, ext. 3260 or at eric.kuchar@parks.ny.gov. Please be sure to refer to the Project Review (PR) number noted above.

Sincerely,

Eric N. Kuchar
Historic Preservation Technical Specialist

via e-mail only
May 7, 2014

Goldie Weixel
Assistant General Counsel
Lower Manhattan Development Corporation
One Liberty Plaza, 20th Floor
New York, NY 10006
(via e-mail only)

Re: HUD
West Thames Street Pedestrian Bridge
Over West St. (Route 9A) (at Battery Tunnel Entrance),
Manhattan, New York County
13PR01251

Dear Ms. Weixel:

We have received your memorandum dated April 9, 2014 with regards to the coordination of reviews for the proposed Thames Street Pedestrian Bridge. We understand that LMDC intends to serve as lead agency under NEPA and SEQRA and will coordinate review of the proposed action pursuant to Section 106.

Per the letter dated April 25, 2013 from NYCEDC, we understand that NYCEDC agrees to meet the four conditions we itemized in our letter dated April 16, 2013. SHPO cannot support the determination of “No Adverse Effect” until the conditions have been submitted to our office for review and have been satisfied. Our previous determination of No Adverse Effect with Conditions will remain at this time.

Please don’t hesitate to contact me should you have further questions. If further correspondence is required regarding this project, I can be reached at (518) 237-8643, ext. 3260 or at eric.kuchar@parks.ny.gov. Please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Eric N. Kuchar
Historic Preservation Technical Specialist
April 16, 2013

Jean Howson
Principal Archaeologist
The RBA Group
7 Campus Dr., Suite 300
Parsippany, New Jersey 07054
(via e-mail only)

Re: HUD
West Thames Street Pedestrian Bridge
Over West St. (Route 9A) (at Battery Tunnel Entrance),
Manhattan, New York County
13PR01251

Dear Ms. Howson:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic resources.

We have reviewed the submission and understand that the proposed project consists of two distinct project areas. The removal of the temporary pedestrian bridge at Rector Street is adjacent to National Register Listed New York Evening Post Building at 75 West Street and the National Register Eligible Barrett Building at 40 Rector Street/57-69 West Street. The bridge runs over the National Register Eligible Pier 7 Complex Site at West Thames Park. The proposed new pedestrian bridge is located adjacent to four historic resources including: National Register Eligible (NRE) Frasch Building at 56 West Street/33 Rector Street, the NRE Battery Garage at 56 Greenwich Street, the NRE Brooklyn Battery Tunnel, and the NRE Pier 7 Complex Site.

We note that the conceptual design of the proposed pedestrian bridge includes a stairway and elevator connection along Joseph P. Ward Street, a lenticular truss bridge with a single mid-span pier placed in the median of West Street, and an elevator and stairway or 200’ long ramp and a stairway running south from the bridge between Little West Street and the adjacent dog run.

Vibration, removal, and new construction effects will need to be addressed at the two projects site locations. As noted in the submission, potential effects of the bridge removal to the New York Evening Post Building were previously addressed in Stipulation 6 of the Amended Programmatic Agreement for the Route 9A project.
Based upon this review, it is the SHPO’s opinion that your project will have No Adverse Effect upon cultural resources in or eligible for inclusion in the National Registers of Historic Places provided that the following conditions are met:

1. Should Stipulation 6 of the Amended Programmatic Agreement for the Route 9A project not be utilized, a construction protection plan for all historic buildings within 90 feet of the proposed construction and removal activities is recommended. This plan should be created in accordance with the requirements stipulated in the New York City Department of Buildings, “Technical Policy Procedure Notice #10/88”.

2. Archeological Resources: After reviewing the submitted information and considering experience gained from nearby projects, it does appear that the deeper pilings required by the proposed project may have the ability to affect deeply buried structural archaeological features related to the early landfilling and development of Manhattan. Recent work associated with the reconstruction of the World Trade Center and surrounding areas has sampled similar structures and is providing a better overall understanding of this process. Although it is possible that the current project will have an Adverse Effect on similar structures, the nature of the proposed work does not make it feasible to conduct proper archaeological examination of whatever resources may be within the APE. Therefore, we suggest that rather than attempting to identify if similar resources are present, it would be more feasible to consider developing and educational opportunity which would help explain this process to the public. A project such as compiling the information produced recently at adjacent projects, and using it to develop educational signage that could be displayed on the bridge would serve to mitigate any Adverse Effects that the piles may have on buried structures, as well as serving as a way to better educate the public about the historic processes which formed this area of Manhattan as it is known today. Please contact Douglas Mackey at (518) 237-8643 x 3291 should you have any questions.

3. Proposed bridge drawings shall be submitted to our office for review and comment at the pre-final stages of development. Drawings shall include the street elevation.

4. If there are substantive changes to the project or these conditions cannot be met, consultation with our office should resume.

If further correspondence is required regarding this project, I can be reached at (518) 237-8643, ext. 3260 or at eric.kuchar@parks.ny.gov. Please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

Eric N. Kuchar
Weatherization Specialist
April 25, 2013

Mr. Eric N. Kuchar
Weatherization Specialist
New York State Office of Parks, Recreation, and Historic Preservation
Division for Historic Preservation
Peebles island, PO Box 189
Waterford, New York 12188-0189

Re:    HUD
West Thames Street Pedestrian Bridge over West Street (Route 9A) (at Battery Tunnel entrance),
Manhattan, New York County
13PR01251

Dear Mr. Kuchar,

We are in receipt of your letter dated April 16, 2013 to Jean Howson of our consultant firm, The RBA Group, transmitting State Historic Preservation Office Section 106 comments regarding historic resources for the above referenced project.

NYCEDC agrees to meet the four conditions itemized in your letter, as follows:

1. NYCEDC shall adhere to Stipulation 6 of the Amended Programmatic Agreement for the Route 9A Reconstruction Project (2004) to minimize impacts to historic buildings due to vibrations.

OR: NYCEDC shall implement a Construction Protection plan for all historic buildings within 90 feet of the proposed construction and removal activities, in accordance with the requirements stipulated in the NYC Department of Buildings Technical Policy Procedure Notice #10/88, "Procedures for the Avoidance of Damage to Historic Structures..."

2. NYCEDC shall develop and install signage that can be displayed on or near the proposed new bridge with content geared to public education on the historic processes which formed this area of Manhattan. This will serve to mitigate possible Adverse Effects on resources associated with early landfilling that may lie buried within the impact area, but that cannot be investigated archaeologically.

3. Drawings of the proposed bridge, including street elevations, shall be provided to your office for review and comment at pre-final stages of development.

4. Should there be any substantive changes to the project, consultation with your office shall be resumed.

NYCEDC understands that provided we meet these conditions, the West Thames Street Pedestrian Bridge project will have No Adverse Effect upon cultural resources listed in or eligible for listing in the National Register of Historic Places.

We appreciate your timely review and resulting comments.

Respectfully,

[Signature]

Dmitri Koron, PE.
ARCHAEOLOGY

Project number: ECONOMIC DEVELOPMENT CORP. / SEQRA-M
Project: WEST THAMES ST PEDESTRIAN BRIDGE
Date received: 5/7/2013

Comments: as indicated below. Properties that are individually LPC designated or in LPC historic districts require permits from the LPC Preservation department. Properties that are S/NR listed or S/NR eligible require consultation with SHPO if there are State or Federal permits or funding required as part of the action.

This document only contains Archaeological review findings. If your request also requires Architecture review, the findings from that review will come in a separate document.

Comments:

The LPC is in receipt of the, "Archaeological Documentary Study for West Thames St. Pedestrian Bridge," prepared by Jean Howsen and Richard Porter of the RBA Group, Inc and dated May 2013.

The LPC concurs with the findings that the project has the potential to impact potentially significant archaeological resources and that, therefore, given the nature of the potential impact, mitigation measures such as the proposed signage should be developed. The LPC would like to review the plans once they are developed.

Please submit another bound copy of the report and a pdf of it to the LPC for our archives.

cc: NYSHPO

5/13/2013

Amanda Sutphin, Director of Archaeology

File Name: 28378_FSO_ALS_05132013.doc
ENVIRO NMENTAL REVIEW

Project number: ECONOMIC DEVELOPMENT CORP. / SEQRA-M
Project: WEST THAMES ST PEDESTRIAN BRIDGE
Date received: 3/21/2013

Comments: as indicated below. Properties that are individually LPC designated or in LPC historic districts require permits from the LPC Preservation department. Properties that are S/NR listed or S/NR eligible require consultation with SHPO if there are State or Federal permits or funding required as part of the action.

The LPC is in receipt of the review request dated 3/19/13. The text regarding architectural properties is acceptable.

LPC review of archaeological sensitivity models and historic maps indicates that there is potential for the recovery of remains from 18th and 19th Century occupation on the project site. Accordingly, the Commission recommends that an archaeological documentary study be performed for this site to clarify these initial findings and provide the threshold for the next level of review, if such review is necessary (see CEQR Technical Manual 2010).

Cc: SHPO

______________________________
Gina Santucci

3/29/2013

SIGNATURE
Gina Santucci, Environmental Review Coordinator

DATE

File Name: 28378_FSO_DNP_03282013.doc
March 25, 2013

New York State Office of Parks, Recreation and Historic Preservation
Division for Historic Preservation
10 Delaware Avenue North
Peebles Island, Cohoes, NY 12047

Dear Sir/Madame:

On behalf of the New York City Economic Development Corporation (NYCEDC), I am submitting the West Thames Street Pedestrian Bridge project for Environmental Review. Attached are the Project Review Cover Form, requisite locator maps, photographs with key and supplemental information pertinent to the review. A copy of this submission is being filed with the New York City Landmarks Preservation Commission for their review.

Project Description:

The City of New York in coordination with the Lower Manhattan Development Corporation and the Battery Park City Authority proposes to construct a pedestrian bridge over West Street (Route 9A) between Joseph P. Ward Street adjacent to the Brooklyn Battery Tunnel Exit Roadway and the promenade south of West Thames Street.

The purpose of the West Thames Street Pedestrian Bridge is to replace the existing Rector Street Pedestrian Bridge, which was constructed as an interim crossing of West Street after September 11, 2001.

The project will consist of two distinct project sites. One will include the removal of the existing Rector Street pedestrian bridge located over West Street (Route 9A) from between Rector Street and Carlisle Street to West Thames Park in Manhattan. The other project site will include the construction of the West Thames Pedestrian Bridge to be located over West Street (Route 9A) from the northeast corner of Joseph P. Ward Street and West Street to the southwest corner of West Thames Street and West Street.

A conceptual design of the West Thames Street Pedestrian Bridge was developed by Weidlinger Associates and WXY Architecture that includes:

- a stairway and elevator connection along Joseph P. Ward Street;
- a lenticular truss bridge constructed from the northeast corner of Joseph P. Ward Street and West Street to the southwest corner of West Thames Street and Little West Street with a single mid-span pier placed in the median of West Street; and
- An elevator and a stairway or a 200’+ long ramp along the dog run and a stairway running south from the bridge between Little West Street and the adjacent dog run.
Subsurface impacts from bridge construction will be at three locations: each terminus and the support with the West Street median. At these locations construction of foundations up to 6 feet deep is proposed. Foundations will be supported with micro-pilings. The latter are 10-inch diameter drilled to bedrock.

The project area has been evaluated previously for the Route 9A project. In addition, the Area of Potential Effect (APE) addressed for the World Trade Center Memorial and Redevelopment Plan extended to Joseph P. Ward Street. The following documents pertaining to these projects have been consulted: Route 9A Archaeological Assessment Report, Battery Place to Harrison Street (1990), Route 9A Final Environmental Impact Statement (1994), Route 9A Programmatic Agreement (1994), Route 9A Cultural Resources Summary Report (1996), Route 9A Amended Programmatic Agreement (2004), World Trade Center Memorial and Redevelopment Plan Generic EIS (2004), Route 9A Final Supplemental EIS (2005), Archaeological Monitoring, Treatment, and Data Recovery Plan for NYC Hudson River Bulkhead... (2005); Cultural Resources Survey Report of Archaeological Monitoring, Treatment, and Data Recovery for NYC Bulkhead and World Trade Center Site... (2011); Buildings and Structures Inventory Form for the NYC Hudson River Bulkhead (1997).

The 1992 Route 9A Contextual Study on Wharves and Piers was not available for review. However, the 232 piers, wharves and pier sheds, including those within the present project area, identified in that study were eliminated by SHPO from further consideration for archaeological potential for the Route 9A project (Cultural Resources Summary Report 1996). Subsequently, the Hudson River Bulkhead was deemed eligible for the National Register of Historic Places and has been recorded archaeologically.

The specific effects of the present project on cultural resources that were identified for the previous projects will require evaluation.

**Buildings and Structures:**

The proposed bridge is immediately adjacent to and spans the exit ramps of the Brooklyn Battery Tunnel (National Register eligible) and is adjacent to the Battery Garage (original structure - NR eligible). (The garage addition, which the proposed bridge will abut, dates to the 1970s and therefore does not meet the threshold for consideration of eligibility). Additional NR listed and eligible structures as well as New York City Landmarks nearby (shown on attached mapping) are not considered to be within the Area of Potential Effect for the proposed bridge. It should be noted that a new building, 50 West Street, is planned for the former location of the Crystal Building (a NR eligible structure that was demolished in 2008). A rendering is attached.

The removal of the temporary Rector Street Pedestrian Bridge may affect NR listed and eligible structures on the east side of West Street (the listed New York Evening Post Building and the eligible Barrett Building). Potential effects of bridge removal to the New York Evening Post Building were previously addressed in Stipulation 6 of the Amended Programmatic Agreement for the Route 9A project. This should be the basis for coordinating avoidance, minimization, or mitigation of possible effects of the present project.
Archaeology:

The project is located within an archaeologically sensitive area. Its western terminus (with stairs and elevator) abuts one known NR eligible resource, the Hudson River Bulkhead. Its eastern terminus and median supporting structure are within landfill.

The eastern terminus is in a location that was in the Hudson River until the early 19th century, but was covered with landfill and buildings by mid-century. The project APE is within the front portion of the historic lot. While residential-commercial structures probably were built on the lot first, following landfilling, by the late 19th century the Babbitt soap factory had expanded to include the properties on this part of the block. In addition, 1950 saw the construction of the Brooklyn Battery Tunnel exit ramps and subterranean entrance ramp immediately adjacent to the project footprint. No archaeological resources are anticipated in the upper 6 feet of this portion of the project APE due to prior disturbances from factory buildings and tunnel construction.

The central medial support footprint is in a location that has potential for landfill deposits only. Due to the presence of utilities and the subterranean ramp to the Battery Tunnel adjacent to this location, the 6-foot deep foundation is not likely to encounter previously undisturbed strata.

The western terminus is just within (on the east side of) the Hudson River Bulkhead, as shown on a schematic profile developed from maps and borings logs (attached). The project footprint is within the former footprint of a large Pennsylvania Railroad pier building (freight warehouse), which stood here from c. 1870 until 1928, after which a smaller shed structure was in place. All buildings and piers were removed and land filled in for construction of Battery Park City beginning in the 1970s. Archaeological investigations at West Thames Park, on the block immediately to the north of the present project, resulted in the identification of the Pier 7 Complex Site, including bulkhead remains and remains of an early 20th-century pier shed. This complex was determined to be eligible for inclusion in the National Register. See attachments for information on significance and a graphic depicting the below-ground resources at the Pier 7 Complex Site.

Project plans for the Promenade South project, which included construction of the promenade and landscaping in the present project’s western terminus, have not been reviewed. These plans should provide information on the depth of disturbance from that undertaking. It is possible the present project’s western foundation footprint is partially within previously undisturbed strata, though demolition of the Pennsylvania Railroad pier shed, development of Battery Park City, and the reconstruction of Route 9A are likely to have had an impact.

Archaeological testing for the deep micro-pilings is not feasible, though the pilings will likely affect buried early landfill deposits, piers, and bulkheads, including potentially the NR eligible Hudson River Bulkhead.
Please contact me if you require any additional information for this review. Thank you.

Very truly yours,

Jean Howson  
Principal Archaeologist

cc: New York City Landmarks Preservation Commission  
Environmental Review  
1 Centre Street, 9th Floor North  
New York, NY 10007
Project area (removal of temporary bridge)

Project area

National Register Listed and Eligible

West Thames Street Pedestrian Bridge
Battery Park City
New York, New York
# National Register Listed and Eligible Resources

<table>
<thead>
<tr>
<th>Map label</th>
<th>Name</th>
<th>Address</th>
<th>NR Status</th>
<th>OPRHP NR or USN #;</th>
<th>NYC Landmark</th>
<th>LP#</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>New York Evening Post Building</td>
<td>75 West St.</td>
<td>Listed</td>
<td>00NR01653</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>19 Rector Street</td>
<td>19 Rector St. / 88 Greenwich St.</td>
<td>Listed</td>
<td>02NR01912</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>21 West Street</td>
<td>19-21 West St.</td>
<td>Listed</td>
<td>98NR01402</td>
<td>X</td>
<td>01999</td>
</tr>
<tr>
<td>D</td>
<td>Wall Street Historic District</td>
<td>Listed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Hudson River Bulkhead</td>
<td>West St. (9A) from Battery Place to W. 59th St.</td>
<td>Eligible</td>
<td>06101.009182</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Barrett Building/40 Rector St.</td>
<td>40 Rector St. / 57-69 West St.</td>
<td>Eligible</td>
<td>06101.014511</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Former St. George's Syrian Roman Catholic Church</td>
<td>103 Washington St.</td>
<td>Eligible</td>
<td>06101.001534</td>
<td>X</td>
<td>02167</td>
</tr>
<tr>
<td>4</td>
<td>Frasch Building</td>
<td>56 West St. / 33 Rector St.</td>
<td>Eligible</td>
<td>06101.007218</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>94 Greenwich St. House</td>
<td>94 Greenwich St.</td>
<td>Eligible</td>
<td>06101.001533</td>
<td>X</td>
<td>02218</td>
</tr>
<tr>
<td>6</td>
<td>94-96 Greenwich St.</td>
<td>94-96 Greenwich St.</td>
<td>Eligible</td>
<td>06101.013374</td>
<td>(see above)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Battery Garage</td>
<td>56 Greenwich St.</td>
<td>Eligible</td>
<td>06101.013375</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Robert and Anne Dickey House</td>
<td>67 Greenwich St.</td>
<td>Eligible</td>
<td>06101.001531</td>
<td>X</td>
<td>02166</td>
</tr>
<tr>
<td>9</td>
<td>Brooklyn Battery Tunnel</td>
<td>Governor's Island, Battery Pl., Greenwich St., Washington St.</td>
<td>Eligible</td>
<td>06101.018351</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Downtown Athletic Club Building</td>
<td>18 West St.</td>
<td>Eligible</td>
<td>06101.001318</td>
<td>X</td>
<td>02056</td>
</tr>
<tr>
<td>11</td>
<td>Whitehall Building</td>
<td>17 Battery Pl.</td>
<td>Eligible</td>
<td>06101.018120</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Pier 7 Complex Site</td>
<td>West Thames Park</td>
<td>Eligible</td>
<td>06101.018120</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lamp posts</td>
<td>various</td>
<td>Eligible</td>
<td>06101.009482, 9464, 9465, 9466, 9467, 9468, 9469, 9470</td>
<td>X</td>
<td>01961</td>
</tr>
</tbody>
</table>
COMMUNITY BOARD #1 – MANHATTAN
RESOLUTION

DATE: JUNE 30, 2009

COMMITTEE OF ORIGIN: BATTERY PARK CITY

COMMITTEE VOTE: 6 In Favor 0 Opposed 0 Abstained 0 Recused
PUBLIC VOTE: 0 In Favor 0 Opposed 0 Abstained 0 Recused
BOARD VOTE: 36 In Favor 0 Opposed 0 Abstained 0 Recused

RE: Proposed design for West Thames Street Pedestrian Bridge over West Street by SHoP Architects

WHEREAS: SHoP Architects, which is the Battery Park City Authority's consultant, has presented an initial design for a permanent pedestrian bridge over West Street at West Thames:

WHEREAS: SHoP Architects has acknowledged the following requests and concerns made by the Battery Park City Committee at the June 17, 2009 meeting:

1. Request for hourly vehicle counts, for comparison to hourly pedestrian counts.
2. Request for current daily vehicles, as compared to 2025 projection.
3. Request for detailed breakdown and explanation of summarized pedestrian traffic counts, both current and projected.
4. Request for list of all agencies and stakeholders involved in bridge.
5. Request for emergency phone in elevator and located on ramp.
6. Request for lighting elements to be fully implemented and illustrated in presentation. Lighting cited as an important device for creating safe and comfortable pedestrian conditions.
7. Concern over decking material of bridge and ramp with respect to traction. Wood cited as a potential slip hazard.
8. Concern over current arbor diagram's effective shading. Photo of Kowsky Plaza cited as lacking shading.
9. Suggestion for extending function of shade arbor along west approach ramp to serve as rain screen. Dog and dog owners cited as lacking weather cover in the current dog run.
10. Request for a high quality, permanent bridge that will require minimal maintenance downtimes and will age well.
11. Concern over removal of large trees lining the dog run. Trees cited as a preferable source of shade and cover. Suggested relocation of west approach ramp to either the esplanade walkway or the planter between the esplanade walkway and the bike path.
12. Concern expressed over elevator uptime and quality of elevator. General concern for quality and reliability of stroller, disabled, and other non-stair access.

13. General consensus over preference for covered bridge. Bridge cover cited as a respite from the elements and a way of increasing poor weather usability, among other reasons. Request for a cover of high quality that will resist leaks. Multiple statements of support.

THEREFORE
BE IT
RESOLVED
THAT:
Community Board #1 supports a bridge in concept, even though most of the details are not yet worked out, provided that the BPCA, Sam Schwartz Engineering and SHoP Architects agree to continue to engage in dialogue with the community about details of the bridge and follow through in addressing the above-stated requests and concerns to the satisfaction of Community Board #1, and

BE IT
FURTHER
RESOLVED
THAT:
Community Board One supports this general location for the bridge, subject to further discussion on the exact location and configuration of the west approach ramp. A bridge in this general vicinity is needed to provide safe passage over West Street for the expanding population of southern Battery Park City and local school students, and

BE IT
FURTHER
RESOLVED
THAT:
Community Board #1 supports full funding for building a bridge, rather than cutting corners or sacrificing quality, and

BE IT
FURTHER
RESOLVED
THAT:
Community Board #1 insists that any bridge built be a covered bridge, and

BE IT
FURTHER
RESOLVED
THAT:
Community Board #1 insists that there are two elevators on each end of the bridge.
NYSDEC AND US FISH AND WILDLIFE SERVICE LIST OF NATURAL RESOURCES OF CONCERN DATABASE SEARCH RESULTS FOR WEST THAMES PEDESTRIAN BRIDGE PROJECT AREA
April 15, 2013

Heather Aupperle
R B A  Group
7 Campus Drive, Suite 300
Parsippany, NJ 07054

Dear Ms. Aupperle:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the Proposed Pedestrian Bridge – Battery Park, New York City, as indicated on your enclosed map, located in New York City.

We have no records of rare or state listed animals or plants, or significant natural communities, on, or in the immediate vicinity, of your project site.

The absence of data does not necessarily mean that rare or state-listed species, or significant natural communities, do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

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

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities and other significant habitats maintained in the Natural Heritage Databases. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,

Nicholas Conrad, Information Services
NYS Department Environmental Conservation

Enc.
cc: Reg, 2, Wildlife Mgr.
FEDERALLY LISTED ENDANGERED AND THREATENED
SPECIES AND CANDIDATE SPECIES IN NEW YORK (By County)

This list represents the best available information regarding known or likely County occurrences of Federally-listed and candidate species and is subject to change as new information becomes available.

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>MONROE</td>
<td>Bald eagle</td>
<td><em>Haliaeetus leucocephalus</em></td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>Bog turtle (Riga and Sweden Townships)</td>
<td><em>Clemmys [=Glyptemys] muhlenbergii</em></td>
<td>T</td>
</tr>
<tr>
<td>MONTGOMERY</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NASSAU</td>
<td>Piping plover*</td>
<td><em>Charadrius melodus</em></td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>Roseate tern</td>
<td><em>Sterna dougallii dougallii</em></td>
<td>E</td>
</tr>
<tr>
<td></td>
<td>Sandplain gerardia</td>
<td><em>Agalinis acuta</em></td>
<td>E</td>
</tr>
<tr>
<td></td>
<td>Seabeach amaranth</td>
<td><em>Amaranthus pumilus</em></td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>Small whorled pogonia <em>(Historic)</em></td>
<td><em>Isotria medeoloides</em></td>
<td>T</td>
</tr>
<tr>
<td>NIAGARA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bald eagle</td>
<td><em>Haliaeetus leucocephalus</em></td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>Eastern prairie fringed orchid <em>(Historic)</em></td>
<td><em>Platanthera leucophaea</em></td>
<td>T</td>
</tr>
<tr>
<td>ONEIDA</td>
<td>Bog turtle (Camden, Florence Townships)</td>
<td><em>Clemmys [=Glyptemys] muhlenbergii</em></td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>Indiana bat (S)</td>
<td><em>Myotis sodalis</em></td>
<td>E</td>
</tr>
<tr>
<td>ONONDAGA</td>
<td>American hart's-tongue fern</td>
<td><em>Asplenium scolopendrium var. americana</em></td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>Bald eagle</td>
<td><em>Haliaeetus leucocephalus</em></td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>Bog turtle</td>
<td><em>Clemmys [=Glyptemys] muhlenbergii</em></td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>Eastern massasauge</td>
<td><em>Sistrurus catenatus catenatus</em></td>
<td>C</td>
</tr>
<tr>
<td></td>
<td>Eastern prairie fringed orchid <em>(Historic)</em></td>
<td><em>Platanthera leucophaea</em></td>
<td>T</td>
</tr>
<tr>
<td></td>
<td>Indiana bat <em>(W/S)</em></td>
<td><em>Myotis sodalis</em></td>
<td>E</td>
</tr>
<tr>
<td></td>
<td>Small whorled pogonia <em>(Historic)</em></td>
<td><em>Isotria medeoloides</em></td>
<td>T</td>
</tr>
</tbody>
</table>

Page 4 of 9 – Revised July 16, 2012
FEDERALLY LISTED ENDANGERED AND THREATENED
SPECIES AND CANDIDATE SPECIES IN NEW YORK (By County)
This list represents the best available information regarding known or likely County occurrences of Federally-listed and candidate species and is subject to change as new information becomes available.

<table>
<thead>
<tr>
<th>COUNTY</th>
<th>Common Name</th>
<th>Scientific Name</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>WYOMING</td>
<td>Bald eagle&lt;sup&gt;2&lt;/sup&gt;</td>
<td><em>Haliaeetus leucocephalus</em></td>
<td>D</td>
</tr>
<tr>
<td>YATES</td>
<td>Bald eagle</td>
<td><em>Haliaeetus leucocephalus</em></td>
<td>D</td>
</tr>
<tr>
<td></td>
<td>Leedy's roseroot</td>
<td><em>Rhodiolta integrifolia ssp. leedyi</em> (=<em>Sedum integrifolium</em> ssp. <em>l.</em>)</td>
<td>T</td>
</tr>
</tbody>
</table>

E=endangered  T=threatened  P=proposed  C=candidate  D=delisted
W=winter  S=summer - Please note that the Indiana bat may occur in additional counties but we have listed the counties with the greatest likelihood of Indiana bat presence.

1 Except for sea turtle nesting habitat, principal responsibility for these species is vested with the National Oceanic and Atmospheric Administration Fisheries. Please visit the following website for more information http://www.nmfs.noaa.gov/pr/species/esa.htm.

2 Except for occasional transient individuals, no Federally-listed or proposed endangered or threatened species, or candidate species under our jurisdiction are known to exist in these counties.

3 While Indiana bats were known to winter in Albany County, we now believe they are likely extirpated or in such small numbers that it is unlikely that they would be present and impacted by any specific proposed projects in Albany, Rensselaer, Saratoga, Schenectady, and Schoharie Counties. This determination may change as we receive new information.

4 Piping plovers are found in Suffolk and Nassau County; however, their early successional habitat is only found at the shoreline, on barrier islands, sandy beaches, and dredged material disposal islands. Please see the fact sheet at http://nyfo.fws.gov/es/PipingPloverFactSheet07.pdf for more information on suitable habitat.
Natural Resources of Concern

This resource list is to be used for planning purposes only — it is not an official species list.

Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:

LONG ISLAND ECOLOGICAL SERVICES FIELD OFFICE
340 SMITH ROAD
SHIRLEY, NY 11967
(631) 286-0485

Project Name:
West Thames
Natural Resources of Concern

Project Location Map:

Project Counties:
New York, NY

Geographic coordinates (Open Geospatial Consortium Well-Known Text, NAD83):
MULTIPOLYGON (((-74.0151981 40.7086102, -74.0148548 40.7084151, -74.0146831 40.7081223, -74.0147904 40.7077644, -74.0149406 40.7075367, -74.0153054 40.7072276, -74.0159062 40.7073252, -74.0162495 40.707553, -74.0163354 40.7078945, -74.0158429 40.7084638, -74.0151981 40.7086102)))

Project Type:
Transportation
Endangered Species Act Species List (USFWS Endangered Species Program).
There are no listed species found within the vicinity of your project.

There are no refuges found within the vicinity of your project.

FWS Migratory Birds (USFWS Migratory Bird Program).
Most species of birds, including eagles and other raptors, are protected under the Migratory Bird Treaty Act (16 U.S.C. 703). Bald eagles and golden eagles receive additional protection under the Bald and Golden Eagle Protection Act (16 U.S.C. 668). The Service’s Birds of Conservation Concern (2008) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

NWI Wetlands (USFWS National Wetlands Inventory).
The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.
PROJECT CORRESPONDENCE WITH NEW YORK CITY DEPARTMENT OF CITY PLANNING REGARDING THEIR WRP REVIEW COMMENTS
May 30, 2014

Ms. Jessica Fain, Planner
New York City Department of City Planning
Waterfront and Open Space Division
22 Reade Street, 6th Floor
New York, New York 10007

Re: West Thames Pedestrian Bridge WRP Coastal Consistency Review Comments

Dear Jessica:

Thank you for your comments concerning the above referenced project. I have checked with the bridge designer, Weidlinger Associates, Inc. (WAI) as to the 50 West Street project. Per WAI, they have been coordinating with the owner of 50 West Street throughout the project and have already incorporated a landing on the proposed bridge stairs with an opening at the elevation of their proposed plaza to allow direct access to the bridge stairs. This is consistent with the land use approvals issued by DCP in December, 2013 you referenced in your comment.

Should you have any additional comments, or need additional information, please feel free to contact me at any time.

Sincerely,

[Signature]

Odit Oliner
Assistant Vice President, Capital Program
New York City Economic Development Corporation
PROJECT COORDINATION DOCUMENTATION
<table>
<thead>
<tr>
<th>Meeting Date</th>
<th>Agencies/Stake Holders</th>
<th>Main Topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/14/2013</td>
<td>LMDC, NYSDOT, BPCA, MTA NYCDOT, Battery Park City Park Conservancy (BPCPC), Mayor’s Office</td>
<td>Review of project schedule, environmental review process, bridge design standards, agency coordination and review process, design criteria and options, etc.</td>
</tr>
<tr>
<td>2/28/2013</td>
<td>NYCEDC and its environmental consultants along with LMDC and its environmental team, LMDC</td>
<td>Steps to prepare materials to satisfy CEQR, SEQR, and NEPA.</td>
</tr>
<tr>
<td>3/20/2013</td>
<td>NYCEDC and the design team, Time Equity</td>
<td>Bridge design; and the design for 50 West Street; coordination issues and process of these two projects.</td>
</tr>
<tr>
<td>3/21/2013</td>
<td>NYCEDC and the design team, BPCA</td>
<td>Project status on materials palette for roof, deck, railing and fence; options for roof and deck drainage; drainage, lighting, elevators; and cost estimates.</td>
</tr>
<tr>
<td>3/28/2013</td>
<td>NYCEDC and the project team Community Board 1 (CB1)</td>
<td>Same topics as those in the 3/21/2013 meeting with BPCA.</td>
</tr>
<tr>
<td>4/1/2013</td>
<td>NYCEDC and the project team, Public Design Commission (PDC)</td>
<td>Design concepts, such as truss superstructure, roof, elevators, stairs and material palette.</td>
</tr>
<tr>
<td>4/12/2013</td>
<td>NYCEDC and the project team, City Hall (Council Member Chin)</td>
<td>Same as 4/1/2013 meeting.</td>
</tr>
<tr>
<td>4/16/2013</td>
<td>NYCEDC and the design team, Mayor’s office, HRPT</td>
<td>Metes and Bounds, maintenance responsibilities of the bridge site, protection of dog run, roof runoff, etc.</td>
</tr>
<tr>
<td>4/18/2013</td>
<td>NYCEDC and the project team, BPCA</td>
<td>Revised roof and bridge concept after the PDC comments, associated maintenance issues, selection of lighting and electrical equipment, and issues related to the removal of Rector Street Bridge.</td>
</tr>
<tr>
<td>5/2/2013</td>
<td>NYCEDC and the project team, PCA, NYSDOT, HRPT</td>
<td>Review of bridge concept, background and ownership of the site; construction staging; maintenance responsibilities; coordination during construction, etc.</td>
</tr>
<tr>
<td>Meeting Date</td>
<td>Agencies/Stake Holders</td>
<td>Main Topics</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>5/3/2013</td>
<td>NYCEDC and the project team, MTA</td>
<td>Overview of the bridge design; potential impacts on MTA garage and Brooklyn Battery Tunnel; maintenance issues/concerns; construction impacts; and MTA concerns.</td>
</tr>
<tr>
<td>5/13/2013</td>
<td>NYCEDC and the project team, PDC</td>
<td>Design concepts, such as truss superstructure, roof, elevators, stairs and material palette, to PDC.</td>
</tr>
<tr>
<td>10/28/2013</td>
<td>NYCEDC and Weidlinger Utilities companies: ConEd, ECS/Verizon</td>
<td>Utility impacts from the construction of this bridge. All agreed to exchange information on utilities of the site and coordinate the work on test pits. Any needed utility relocation will be included in Section U, which will be developed by ConEd and ECS at the beginning of January.</td>
</tr>
<tr>
<td>11/8/2013</td>
<td>NYCEDC and the project team, LMDC, BPCA, NYSDOT and NYCDOT</td>
<td>Latest project development, and answers to questions related to the design and maintenance issues.</td>
</tr>
<tr>
<td>12/3/2013</td>
<td>NYCEDC and the project team, CB1</td>
<td>Project design and answers to questions from the local community. The committee voted in favor of the current bridge design.</td>
</tr>
<tr>
<td>12/9/2013</td>
<td>Project team PDC</td>
<td>Design presentation and responses to comments from this meeting and the previous EDC meeting (5/13/2013).</td>
</tr>
<tr>
<td>1/28/2014</td>
<td>Project team and MTA</td>
<td>Met MTA staff at the MTA Parking Garage to inspect areas outside and inside the staircase, as well as discuss modifications to the garage.</td>
</tr>
<tr>
<td>3/6/2014</td>
<td>Project team and (NYCDOT's) Office of Construction Mitigation and Coordination (OCMC)</td>
<td>The project team presented the bridge design and the removal of Rector St. Bridge and discussed possibilities for maintenance and protection of traffic.</td>
</tr>
<tr>
<td>5/19/2014</td>
<td>Project team and PDC</td>
<td>PDC committee meeting to review comments on the design from previous meeting.</td>
</tr>
<tr>
<td>12/8/2014</td>
<td>Project team and PDC</td>
<td>Presented revised design to PDC; the design received preliminary approval.</td>
</tr>
</tbody>
</table>
APPENDIX 4

SUPPORTING TRAFFIC ANALYSIS
Assumptions:
LOS D, v/c = 1.33
Friction Factor (Ff) = 0.9
Surging Factor (Sf) = 1.0 (No surges of pedestrians at this location)

Passageway Capacity:
Equation 16-1
\[
W_e = 10 \text{ feet} \quad (12' \text{ minus } 12'' \text{ buffer on each side})
\]
\[
v = \frac{V}{(225 \times W_e \times Ff)} \quad \text{OR} \quad V = (v/c) \times (225 \times W_e \times Ff)
\]
\[
V = 1.33 \times 225 \times 10' \times 0.9
\]
\[
V = 2693 \text{ p/15min}
\]
\[
V = 10773 \text{ p/hr}
\]

Stairway Capacity:
Equation 16-2
\[
W_e = 5.5 \text{ feet} \quad (6.5' \text{ minus } 6'' \text{ buffer on each side})
\]
\[
v = \frac{V}{(150 \times W_e \times Sf \times Ff)} \quad \text{OR} \quad V = (v/c) \times (150 \times W_e \times Sf \times Ff)
\]
\[
V = 1.33 \times 150 \times 5.5' \times 0.9
\]
\[
V = 988 \text{ p/15min}
\]
\[
V = 3950 \text{ p/hr}
\]
MEMORANDUM

TO
Qi Ye

FROM
Peter Bakarich

DATE
May 22, 2013

SUBJECT
West Thames – Intersection Analysis

MESSAGE
As per direction from the Mayor’s Office, Weidlinger has investigated adding an additional crosswalk across West Street from the northeast corner of Joseph P. Ward Street to the northwest corner of West Thames Street. The following is our analysis of this issue.

There are currently three phases for this intersection:
1. Phase 1 – vehicles travel north and south on West Street, pedestrians use crosswalk on east side;
2. Phase 2 – vehicles travel north and south on West Street and NB vehicles turn right into the Brooklyn Battery Tunnel (BBT), pedestrians not permitted to use east side crosswalk;
3. Phase 3 – vehicles exit the BBT and turn left or right onto West Street, pedestrian cross West Street within crosswalk located between vehicles turning left and right.

Pedestrians utilizing this new crosswalk on the north leg of the intersection cannot safely cross West Street during any of these three existing phases, a separate signal phase would be needed for just this pedestrian crossing movement. This additional phase would require approximately 40 seconds for pedestrians to cross safely (3.5 feet/second walking speed). In order to maintain the cycle lengths for the intersection (135 seconds during the AM peak periods and 120 seconds the remainder of the day), the time needed for the new phase would have to be removed from the existing phases. By decreasing the green time in the other three phases, vehicles travelling on West Street (Phases 1 and 2) and/or those exiting the BBT (Phase 3) will have less time to clear the intersection. The vehicular level of service for the intersection will be significantly worse than the current values, most likely exceeding acceptable delay times on any one of the approaches. Listed below is a table summarizing the Approach Level of Service (LOS) for this area.

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Eastbound (from West Thames) LOS</th>
<th>Westbound (Tunnel exit) LOS</th>
<th>Northbound (Route 9A) LOS</th>
<th>Southbound (Route 9A) LOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Existing</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>D</td>
</tr>
<tr>
<td>AM with additional crosswalk</td>
<td>B</td>
<td>D</td>
<td>F</td>
<td>F</td>
</tr>
<tr>
<td>PM Existing</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
<tr>
<td>PM with additional crosswalk</td>
<td>D</td>
<td>B</td>
<td>C</td>
<td>F</td>
</tr>
</tbody>
</table>
### General Information
- **Analyst**: Joseph Pontillo
- **Agency or Co.**: Weidlinger
- **Date Performed**: 5/15/2013
- **Time Period**: PM existing

### Site Information
- **Intersection**: 
- **Area Type**: All other areas
- **Jurisdiction**: 
- **Analysis Year**: 
- **Project ID**: 

### Volume and Timing Input

<table>
<thead>
<tr>
<th></th>
<th>EB</th>
<th>WB</th>
<th>NB</th>
<th>SB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of Lanes, N</strong></td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td>LT</td>
</tr>
<tr>
<td><strong>Lane Group</strong></td>
<td>R</td>
<td>L</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td><strong>Volume, V (vph)</strong></td>
<td>120</td>
<td>564</td>
<td>817</td>
<td>720</td>
</tr>
<tr>
<td><strong>% Heavy Vehicles, %HV</strong></td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Peak-Hour Factor, PHF</strong></td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
</tr>
<tr>
<td><strong>Pretimed (P) or Actuated (A)</strong></td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
</tr>
<tr>
<td><strong>Start-up Lost Time, h</strong></td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Extension of Effective Green, e</strong></td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Arrival Type, AT</strong></td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Unit Extension, UE</strong></td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Filtering/Metering, I</strong></td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td><strong>Initial Unmet Demand, Qo</strong></td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Ped / Bike / RTOR Volumes</strong></td>
<td>100</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Lane Width</strong></td>
<td>16.0</td>
<td>14.0</td>
<td>12.0</td>
<td>12.0</td>
</tr>
<tr>
<td><strong>Parking / Grade / Parking</strong></td>
<td>N</td>
<td>0</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td><strong>Parking Maneuvers, Nm</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Buses Stopping, Na</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Min. Time for Pedestrians, Gp</strong></td>
<td>16.7</td>
<td>43.8</td>
<td>38.1</td>
<td></td>
</tr>
</tbody>
</table>

### Phasing
- **EW Perm**: 02, 03, 04, Thru Only, Thru & RT, 07, 08

### Timing
- **G = 41.0**, **G = 0.0**, **G = 0.0**, **G = 57.0**, **G = 4.0**, **G = 0.0**, **G = 0.0**
- **Y = 7**, **Y = 0**, **Y = 0**, **Y = 5**, **Y = 6**, **Y = 0**, **Y = 0**

### Duration of Analysis, T = 0.25

### Lane Group Capacity, Control Delay, and LOS Determination

<table>
<thead>
<tr>
<th></th>
<th>EB</th>
<th>WB</th>
<th>NB</th>
<th>SB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Adjusted Flow Rate, v</strong></td>
<td>130</td>
<td>613</td>
<td>888</td>
<td>783</td>
</tr>
<tr>
<td><strong>Lane Group Capacity, c</strong></td>
<td>569</td>
<td>2928</td>
<td>1965</td>
<td>2791</td>
</tr>
<tr>
<td><strong>v/c Ratio, X</strong></td>
<td>0.23</td>
<td>0.21</td>
<td>0.45</td>
<td>0.28</td>
</tr>
<tr>
<td><strong>Total Green Ratio, g/C</strong></td>
<td>0.34</td>
<td>0.34</td>
<td>0.34</td>
<td>0.55</td>
</tr>
<tr>
<td><strong>Uniform Delay, d</strong></td>
<td>28.2</td>
<td>28.0</td>
<td>30.8</td>
<td>14.4</td>
</tr>
<tr>
<td><strong>Progression Factor, PF</strong></td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td><strong>Delay Calibration, k</strong></td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>Incremental Delay, d</strong></td>
<td>0.9</td>
<td>0.2</td>
<td>0.8</td>
<td>0.3</td>
</tr>
<tr>
<td><strong>Initial Queue Delay, d</strong></td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

---

5/21/2013
<table>
<thead>
<tr>
<th>Control Delay</th>
<th>29.1</th>
<th>28.2</th>
<th>31.5</th>
<th>14.6</th>
<th>44.8</th>
<th>22.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lane Group LOS</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>B</td>
<td>D</td>
<td>C</td>
</tr>
<tr>
<td>Approach Delay</td>
<td>29.1</td>
<td>30.1</td>
<td>32.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach LOS</td>
<td>C</td>
<td></td>
<td>C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersection Delay</td>
<td>$X_c = 0.62$</td>
<td>Intersection LOS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### General Information
- **Analyst**: Joseph Pontillo
- **Agency or Co.**: Waidinger
- **Date Performed**: 5/15/2013
- **Time Period**: PM with additional crosswalk

### Site Information
- **Intersection**: 
- **Area Type**: All other areas
- **Jurisdiction**: 
- **Analysis Year**: 
- **Project ID**: 

### Volume and Timing Input

<table>
<thead>
<tr>
<th></th>
<th>EB</th>
<th></th>
<th></th>
<th>WB</th>
<th></th>
<th></th>
<th>NB</th>
<th></th>
<th></th>
<th>SB</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
</tr>
<tr>
<td><strong>Number of Lanes, N</strong></td>
<td>1</td>
<td>5</td>
<td></td>
<td>1</td>
<td>6</td>
<td></td>
<td>1</td>
<td>2</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Lane Group</strong></td>
<td>R</td>
<td>L</td>
<td></td>
<td>R</td>
<td>R</td>
<td></td>
<td>TR</td>
<td>R</td>
<td></td>
<td>TR</td>
<td>R</td>
<td></td>
</tr>
<tr>
<td><strong>Volume, V (vph)</strong></td>
<td>120</td>
<td>564</td>
<td></td>
<td>817</td>
<td></td>
<td>1003</td>
<td>1296</td>
<td>62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>% Heavy Vehicles, HV</strong></td>
<td>2</td>
<td>2</td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td><strong>Peak Hour Factor, PHF</strong></td>
<td>0.92</td>
<td>0.92</td>
<td></td>
<td>0.92</td>
<td>0.92</td>
<td></td>
<td>0.92</td>
<td>0.92</td>
<td></td>
<td>0.92</td>
<td>0.92</td>
<td></td>
</tr>
<tr>
<td><strong>P-Actuated (P) or Actuated (A)</strong></td>
<td>P</td>
<td></td>
<td></td>
<td>P</td>
<td></td>
<td></td>
<td>P</td>
<td></td>
<td></td>
<td>P</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Start-up Lost Time, T</strong></td>
<td>2.0</td>
<td>2.0</td>
<td></td>
<td>2.0</td>
<td>2.0</td>
<td></td>
<td>2.0</td>
<td>2.0</td>
<td></td>
<td>2.0</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td><strong>Extension of Effective Green, c</strong></td>
<td>2.0</td>
<td>2.0</td>
<td></td>
<td>2.0</td>
<td>2.0</td>
<td></td>
<td>2.0</td>
<td>2.0</td>
<td></td>
<td>2.0</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td><strong>Arrival Type, AT</strong></td>
<td>3</td>
<td>3</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Unit Extension, UE</strong></td>
<td>3.0</td>
<td>3.0</td>
<td></td>
<td>3.0</td>
<td>3.0</td>
<td></td>
<td>3.0</td>
<td>3.0</td>
<td></td>
<td>3.0</td>
<td>3.0</td>
<td></td>
</tr>
<tr>
<td><strong>Filtering/Metering, I</strong></td>
<td>1000</td>
<td>1000</td>
<td></td>
<td>1000</td>
<td>1000</td>
<td></td>
<td>1000</td>
<td>1000</td>
<td></td>
<td>1000</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td><strong>Initial Unmet Demand, Qs</strong></td>
<td>0.0</td>
<td>0.0</td>
<td></td>
<td>0.0</td>
<td>0.0</td>
<td></td>
<td>0.0</td>
<td>0.0</td>
<td></td>
<td>0.0</td>
<td>0.0</td>
<td></td>
</tr>
<tr>
<td><strong>Ped / Bike / RTOR Volumes</strong></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Lane Width</strong></td>
<td>16.0</td>
<td>14.0</td>
<td></td>
<td>12.0</td>
<td>12.0</td>
<td></td>
<td>12.0</td>
<td>12.0</td>
<td></td>
<td>12.0</td>
<td>12.0</td>
<td></td>
</tr>
<tr>
<td><strong>Parking / Grade / Parking</strong></td>
<td>N</td>
<td>0</td>
<td>N</td>
<td>N</td>
<td>0</td>
<td>N</td>
<td>N</td>
<td>0</td>
<td>N</td>
<td>N</td>
<td>0</td>
<td>N</td>
</tr>
<tr>
<td><strong>Parking Maneuvers, Nn</strong></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Buses Stopping, Nb</strong></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Min. Time for Pedestrians, Ts</strong></td>
<td>16.7</td>
<td>43.8</td>
<td></td>
<td>39.2</td>
<td>38.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Phasing
- **Phasing**: EW Perm 03
- **Phasing**: EW Perm 04
- **Phasing**: Thru Only 07
- **Phasing**: Thru & RT 08

### Timing
- **Timing**: G = 24.0
- **Timing**: Y = 7
- **Timing**: G = 36.0
- **Timing**: Y = 5

### Duration of Analysis, T = 0.25
- **Duration of Analysis, T = 0.25**: Cycle Length, C = 120.0

### Lane Group Capacity, Control Delay, and LOS Determination

<table>
<thead>
<tr>
<th></th>
<th>EB</th>
<th></th>
<th></th>
<th>WB</th>
<th></th>
<th></th>
<th>NB</th>
<th></th>
<th></th>
<th>SB</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
</tr>
<tr>
<td><strong>Adjusted Flow Rate, v</strong></td>
<td>130</td>
<td>613</td>
<td>888</td>
<td>783</td>
<td>1090</td>
<td>1409</td>
<td>67</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lane Group Capacity, c</strong></td>
<td>365</td>
<td>2923</td>
<td>1776</td>
<td>93</td>
<td></td>
<td></td>
<td>684</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>v/c Ratio, X</strong></td>
<td>0.36</td>
<td>0.30</td>
<td>0.44</td>
<td>1.14</td>
<td>0.08</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total Green Ratio, g/C</strong></td>
<td>0.20</td>
<td>0.00</td>
<td>0.56</td>
<td>0.35</td>
<td>0.03</td>
<td>0.35</td>
<td>0.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Uniform Delay, d1</strong></td>
<td>41.3</td>
<td>14.1</td>
<td>30.0</td>
<td>39.0</td>
<td>12.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Progression Factor, PF</strong></td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Delay Calibration, k</strong></td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Incremental Delay, d2</strong></td>
<td>2.7</td>
<td>0.3</td>
<td>0.8</td>
<td>71.3</td>
<td>0.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Queue Delay, $d_3$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Delay</td>
<td>44.0</td>
<td>14.4</td>
<td>30.8</td>
<td>110.3</td>
<td>12.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lane Group LOS</td>
<td>$D$</td>
<td>$B$</td>
<td>$C$</td>
<td>$F$</td>
<td>$B$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach Delay</td>
<td>44.0</td>
<td></td>
<td></td>
<td></td>
<td>105.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach LOS</td>
<td>$D$</td>
<td></td>
<td></td>
<td></td>
<td>$F$</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersection Delay</td>
<td></td>
<td></td>
<td>$X_c = 0.00$</td>
<td></td>
<td>Intersection LOS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Copyright © 2008 University of Florida, All Rights Reserved

HCS+™ Version 5.4

Generated: 5/21/2013 4:07 PM
### General Information
- **Analyst**: Joseph Pontillo
- **Agency or Co.**: Weidlinger
- **Date Performed**: 5/15/2013
- **Time Period**: AM existing

### Site Information
- **Intersection**: 
- **Area Type**: All other areas
- **Jurisdiction**: 
- **Analysis Year**: 
- **Project ID**: 

### Volume and Timing Input

|          | EB |      |      |      | WB |      |      |      |      | NB |      |      |      |      |      |      |      |      | SB |      |      |      |      |
|----------|----|------|------|------|----|------|------|------|------|----|------|------|------|------|------|------|------|----|------|------|------|------|
|          | LT | TH   | RT   |      | LT | TH   | RT   |      | LT | TH   | RT   |      | LT | TH   | RT   |      | LT | TH   | RT   |      |      |      |      |      |
| Number of Lanes, N | 1  | 5    | 4    |      | 3  | 2    |      |      | 2  | 1    |      |      |      |      |      |      |      |      |      |      |      |      |
| Lane Group | R  | L    | R    |      | R  | R    |      |      | R  | R    |      |      |      |      |      |      |      |      |      |      |      |      |
| Volume, V (vph) | 160 | 864  | 1445 |      | 1701 | 541 |      | 1241 | 59  |      |      |      |      |      |      |      |      |      |      |      |      |
| % Heavy Vehicles, %HV | 2  | 2    | 2    |      | 2  | 2    |      |      | 2  | 2    |      |      |      |      |      |      |      |      |      |      |
| Peak-Hour Factor, PHF | 0.92 | 0.92 | 0.92 |      | 0.92 | 0.92 |      | 0.92 | 0.92 |      |      |      |      |      |      |      |      |      |      |
| Prelimed (P) or Actuated (A) | P  | P    | P    |      | P  | P    |      |      | P  | P    |      |      |      |      |      |      |      |      |
| Start-up Lost Time, t | 2.0 | 2.0  | 2.0  |      | 2.0 | 2.0  |      |      | 2.0 | 2.0  |      |      |      |      |      |      |      |
| Extension of Effective Green, e | 2.0 | 2.0  | 2.0  |      | 2.0 | 2.0  |      |      | 2.0 | 2.0  |      |      |      |      |      |      |
| Arrival Type, AT | 3  | 3    | 3    |      | 3  | 3    |      |      | 3  | 3    |      |      |      |      |      |      |
| Unit Extension, UE | 3.0 | 3.0  | 3.0  |      | 3.0 | 3.0  |      |      | 3.0 | 3.0  |      |      |      |      |      |
| Filtering/Metering, I | 1.000 | 1.000 | 1.000 |      | 1.000 | 1.000 |      | 1.000 | 1.000 |      |      |      |      |      |      |
| Initial Unmet Demand, Qa | 0.0  | 0.0  | 0.0  |      | 0.0  | 0.0  |      | 0.0  | 0.0  |      |      |      |      |      |
| Ped / Bike / RTOR Volumes | 0  | 0    | 0    |      | 0  | 0    |      |      | 0  | 0    |      |      |      |      |
| Lane Width | 16.0 | 14.0 | 12.0 |      | 12.0 | 12.0 |      | 12.0 | 12.0 |      |      |      |      |
| Parking / Grade / Parking | N  | N    | N    |      | N  | N    |      |      | N  | N    |      |      |      |      |
| Parking Maneuvers, Nm |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Buses Stopping, Na | 0  | 0    | 0    |      | 0  | 0    |      |      | 0  | 0    |      |      |      |      |
| Min. Time for Pedestrians, Gp | 16.1 | 43.2 |      |      |      |      |      |      |      |      |      |      |      |

### Lane Group Capacity, Control Delay, and LOS Determination

<table>
<thead>
<tr>
<th></th>
<th>EB</th>
<th></th>
<th></th>
<th></th>
<th>WB</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>NB</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>SB</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td></td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td></td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td></td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td></td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phasing</td>
<td>EW Perm</td>
<td>02</td>
<td>03</td>
<td>04</td>
<td>Thru Only</td>
<td>07</td>
<td>08</td>
<td>Thru &amp; RT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Timing</td>
<td>G = 65.0</td>
<td>G = 0.0</td>
<td>G = 0.0</td>
<td>G = 48.0</td>
<td>G = 4.0</td>
<td>G = 0.0</td>
<td>G = 0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duration of Analysis, T = 0.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cycle Length, C = 135.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Notes
- **file:///C:/Users/pontillo/AppData/Local/Temp/s2k107F.tmp**
- **5/21/2013**
<table>
<thead>
<tr>
<th>Control Delay</th>
<th>20.6</th>
<th>20.5</th>
<th>25.8</th>
<th>40.4</th>
<th>17.6</th>
<th>45.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lane Group LOS</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>D</td>
<td>B</td>
<td>D</td>
</tr>
<tr>
<td>Approach Delay</td>
<td>20.6</td>
<td>23.8</td>
<td>34.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Approach LOS</td>
<td>C</td>
<td>C</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intersection Delay</td>
<td>$X_c = 0.72$</td>
<td>Intersection LOS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### HCS+ DETAILED REPORT

#### General Information
- **Analyst**: Joseph Pontillo
- **Agency or Co.**: Weidlinger
- **Date Performed**: 5/15/2013
- **Time Period**: AM with additional crosswalk

#### Site Information
- **Intersection**: 
- **Area Type**: All other areas
- **Jurisdiction**: 
- **Analysis Year**: 
- **Project ID**: 

#### Volume and Timing Input

<table>
<thead>
<tr>
<th></th>
<th>EB</th>
<th></th>
<th></th>
<th>WB</th>
<th></th>
<th></th>
<th>NB</th>
<th></th>
<th></th>
<th>SB</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LT</strong></td>
<td>TH</td>
<td>RT</td>
<td>TH</td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
</tr>
<tr>
<td>Number of Lanes, N:</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lane Group</td>
<td>R</td>
<td>L</td>
<td>R</td>
<td>TR</td>
<td>R</td>
<td>TR</td>
<td>TR</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volume, V (vph)</td>
<td>150</td>
<td>664</td>
<td>1445</td>
<td>1701</td>
<td>541</td>
<td>1241</td>
<td>59</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Heavy Vehicles, %HV</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peak-Hour Factor, PHF</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td>0.92</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prelim (P) or Actuated (A)</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td>P</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Start-up Lost Time, h</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extension of Effective Green, e</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arrival Type, AT</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit Extension, UE</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filtering/Metering, I</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial Unmet Demand, Qb</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ped / Bike / RTOR Volumes</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lane Width</td>
<td>16.0</td>
<td>14.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td>12.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking / Grade / Parking</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parking Maneuvers, Nm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buses Stopping, Na</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Min. Time for Pedestrians, Sp</td>
<td>16.1</td>
<td>43.2</td>
<td>39.2</td>
<td>39.2</td>
<td>39.2</td>
<td>39.2</td>
<td>39.2</td>
<td>39.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Phasing
- EW Perm | 03 | 04 | Thru Only | Thru & RT | 07 | 08
- G | 42.0 | 36.0 | 0.0 | 30.0 | 4.0 | 0.0
- Y | 7 | 5 | 0 | 5 | 6 | 0

#### Duration of Analysis, T = 0.25
- Cycle Length, C = 135.0

#### Lane Group Capacity, Control Delay, and LOS Determination

<table>
<thead>
<tr>
<th></th>
<th>EB</th>
<th></th>
<th></th>
<th>WB</th>
<th></th>
<th></th>
<th>NB</th>
<th></th>
<th></th>
<th>SB</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>LT</strong></td>
<td>TH</td>
<td>RT</td>
<td>TH</td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
<td>LT</td>
<td>TH</td>
<td>RT</td>
</tr>
<tr>
<td>Adjusted Flow Rate, v</td>
<td>174</td>
<td>939</td>
<td>1571</td>
<td>1849</td>
<td>588</td>
<td>1349</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lane Group Capacity, c</td>
<td>1150</td>
<td>5396</td>
<td>1789</td>
<td>1466</td>
<td>1972</td>
<td>1025</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>v/c Ratio, X</td>
<td>0.15</td>
<td>0.17</td>
<td>0.88</td>
<td>1.26</td>
<td>0.30</td>
<td>1.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Green Ratio, g/C</td>
<td>0.63</td>
<td>0.63</td>
<td>0.31</td>
<td>0.29</td>
<td>0.70</td>
<td>0.29</td>
<td>0.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uniform Delay, d1</td>
<td>10.2</td>
<td>10.4</td>
<td>44.1</td>
<td>48.0</td>
<td>7.5</td>
<td>48.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Progression Factor, PF</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delay Calibration, k</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
<td>0.50</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incremental Delay, d2</td>
<td>0.3</td>
<td>0.1</td>
<td>6.5</td>
<td>123.2</td>
<td>0.4</td>
<td>149.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### File Information
- File: C:/Users/pontillo/AppData/Local/Temp/s2k56F1.tmp
- Date: 5/21/2013
<table>
<thead>
<tr>
<th>Initial Queue Delay, $d_3$</th>
<th>10.5</th>
<th>10.5</th>
<th>50.6</th>
<th>171.2</th>
<th>7.9</th>
<th>197.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Delay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lane Group LOS</td>
<td>B</td>
<td>B</td>
<td>D</td>
<td>F</td>
<td>A</td>
<td>F</td>
</tr>
<tr>
<td>Approach Delay</td>
<td>10.5</td>
<td></td>
<td>35.6</td>
<td></td>
<td></td>
<td>131.8</td>
</tr>
<tr>
<td>Approach LOS</td>
<td>B</td>
<td></td>
<td>D</td>
<td></td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Intersection Delay</td>
<td></td>
<td></td>
<td></td>
<td>$X_c = 0.53$</td>
<td></td>
<td>Intersection LOS</td>
</tr>
</tbody>
</table>
APPENDIX 5

ENVIRONMENTAL SCREENING WITH ATTACHMENTS
## ENVIRONMENTAL SCREENING SUMMARY

<table>
<thead>
<tr>
<th>Date:</th>
<th>March, 2013 <strong>Updated April 29, 2013</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Request for this screening made by:</td>
<td>Support for SEQR and NEPA Documentation</td>
</tr>
<tr>
<td>Project Name:</td>
<td>West Thames Pedestrian Bridge Project</td>
</tr>
<tr>
<td>Project Description:</td>
<td>Construction of new Ped. Bridge; Removal of Temp. Ped Bridge</td>
</tr>
<tr>
<td>County and Municipality:</td>
<td>New York, New York</td>
</tr>
</tbody>
</table>

## ENVIRONMENTAL CONSTRAINTS/OPPORTUNITIES:

<table>
<thead>
<tr>
<th>Cultural Resources</th>
<th>Yes / No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there any 50+ year old structures in the project study area?</td>
<td>Yes</td>
</tr>
<tr>
<td>Are there known buildings or structures on or eligible for the State and/or National Register of Historic Places in the project study area?</td>
<td>Yes</td>
</tr>
<tr>
<td>Is there involvement with a historic bridge or culvert?</td>
<td>No</td>
</tr>
<tr>
<td>Is the project located in a known or potential Historic District?</td>
<td>No</td>
</tr>
<tr>
<td>Are there any undisturbed areas, old foundations or building rubble in the project study area?</td>
<td>No</td>
</tr>
<tr>
<td>Are there any known archaeological sites or potential underground cultural resources within the project study area?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Enhancement Opportunities: Possible interpretive signage for bridge as a mitigative option.

Comments: A documentary study (Phase 1A equivalent) is being prepared per a request from NYC Landmarks Commission for archaeological resources only. NYSOPRHP (State Historic Preservation Office) has issued a letter dated April 16, 2013 stating that, provided listed conditions were met, then the proposed project would have a “No Adverse Effect”. NYCEDC responded in a letter dated April 25, 2013 agreeing to the SHPO conditions.
### Section 4(f) Properties NOT APPLICABLE-HUD FUNDED PROJECT

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes / No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there any recreational facilities within the project study area?</td>
<td>Yes</td>
</tr>
<tr>
<td>Is there publicly owned open space in the project study area?</td>
<td>Yes</td>
</tr>
<tr>
<td>Is there a Wildlife Refuge or Wildlife Management Area in the project study area?</td>
<td>No</td>
</tr>
<tr>
<td>Is there a school or school athletic fields in the project study area?</td>
<td>No</td>
</tr>
<tr>
<td>Is there a community park or parkland within the project study area?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Enhancement Opportunities:**

**Comments:** GIVEN THAT THE PROJECT IS FUNDED VIA HUD, AND NOT VIA A FEDERAL TRANSPORTATION AGENCY, SECTION 4(F) OF THE US TRANSPORTATION ACT IS NOT APPLICABLE TO THIS PROJECT.

### Air/Noise

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes / No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there any sensitive receptors (i.e. residences, schools, hospitals, and churches) within 300 feet of the project?</td>
<td>No</td>
</tr>
<tr>
<td>Will the project change the vertical or horizontal alignment of the roadway?</td>
<td>No</td>
</tr>
<tr>
<td>Does the project provide for a significant increase in vehicle operating speeds of roadway capacity?</td>
<td>No</td>
</tr>
<tr>
<td>Is an intersection Carbon Monoxide Analysis required?</td>
<td>No</td>
</tr>
<tr>
<td>Is the project in a non-attainment area?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Mitigation Opportunities:**

**Comments:** Given the nature of the proposed project, i.e. a pedestrian bridge, other than temporary air and noise impacts associated with construction, no permanent air and noise impacts are anticipated.
<table>
<thead>
<tr>
<th>Ecology</th>
<th>Yes / No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there any wetlands, floodplains, sole source aquifer, stream crossings or wildlife habitat in the project study area?</td>
<td>No</td>
</tr>
<tr>
<td>Are there any Category I waters or Wild and Scenic rivers in the project study area?</td>
<td>No</td>
</tr>
<tr>
<td>Are there any potential or known vernal pool habitats with the project study area?</td>
<td>No</td>
</tr>
<tr>
<td>Are there any trout maintenance or trout production streams within the project study area?</td>
<td>No</td>
</tr>
<tr>
<td>Is there any potential for rare, threatened or endangered species or their habitats within the project study area?</td>
<td>No</td>
</tr>
<tr>
<td>Are there any environmentally-sensitive areas that are possible project design constraints?</td>
<td>No</td>
</tr>
<tr>
<td>Are there any potential stormwater management mitigation areas in project area or upstream of project area?</td>
<td>No</td>
</tr>
<tr>
<td>Describe ecology in the project study area: (ie heavily forested, urban, residential, etcetera)</td>
<td></td>
</tr>
</tbody>
</table>

The following environmental permits and interagency coordination may be necessary:

<table>
<thead>
<tr>
<th>Permit/Coordination</th>
<th>Yes / No</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Coast Guard (Bridge)</td>
<td>No</td>
</tr>
<tr>
<td>USACOE Section 404</td>
<td>No</td>
</tr>
<tr>
<td>USACOE Section 10 (Navigable Waters)</td>
<td>No</td>
</tr>
<tr>
<td>Federal Coastal Zone Consist. Deter.</td>
<td>Yes</td>
</tr>
<tr>
<td>NYC/NYS Coastal Zone Compliance</td>
<td>Yes</td>
</tr>
<tr>
<td>PDES for Construction Stormwater</td>
<td>No</td>
</tr>
<tr>
<td>401 Water Quality Certificate</td>
<td>No</td>
</tr>
<tr>
<td>NYS/NYC Freshwater Wetlands</td>
<td>No</td>
</tr>
<tr>
<td>Forest Area Impacts</td>
<td>No</td>
</tr>
<tr>
<td>Impacts to Tidal Waters</td>
<td>No</td>
</tr>
<tr>
<td>100 Year Floodplain Impacts</td>
<td>Yes</td>
</tr>
<tr>
<td>Vegetated Riparian Area Impacts</td>
<td>No</td>
</tr>
<tr>
<td>USEPA-Sole Source Aquifer</td>
<td>No</td>
</tr>
<tr>
<td>Essential Fish Habitat</td>
<td>No</td>
</tr>
</tbody>
</table>

**Comments:** Project is in NYC Coastal Zone and in 100 year floodplain. Both an NYC WRP and NYSDOS Fed. Consistency Assessment completed. NYC Bldg. Dept. will issue permit for construction of bridge in a floodplain.

<table>
<thead>
<tr>
<th>Socioeconomics</th>
<th>Yes / No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will the project affect farmland or community facilities?</td>
<td>Yes</td>
</tr>
<tr>
<td>Based on the proposed improvements for this project, will there be possible displacement of businesses or residences?</td>
<td>No</td>
</tr>
<tr>
<td>Will the project affect access to community facilities, bus stop shelters, playgrounds or parks or gardens?</td>
<td>No</td>
</tr>
<tr>
<td>Are there any observable safety issues or concerns in the project study area?</td>
<td>No</td>
</tr>
<tr>
<td>Does project have potential for Environmental Justice involvement?</td>
<td>No</td>
</tr>
</tbody>
</table>

**Comments:** Minimal impact to community open space involving removal of three small shade trees along exiting dog run. See attached socioeconomic data and summary.
<table>
<thead>
<tr>
<th>Hazardous Waste</th>
<th>Yes / No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are there any known or suspected hazardous waste sites (UST, landfills, known NJDEP Case, ECRA Case), within the project study area?</td>
<td>Yes</td>
</tr>
<tr>
<td>Are there active or abandoned industries, service stations or repair shops within the project study area?</td>
<td>No</td>
</tr>
<tr>
<td>Is there evidence of potential contamination (monitoring wells, stained soils, etc.)?</td>
<td>No</td>
</tr>
<tr>
<td>Are railroad or railyards located in the project study area?</td>
<td>No</td>
</tr>
</tbody>
</table>

Enhancement Opportunities:

Comments: Four AOC’s documented in project area per EDR database search. In addition, review of previous 2005 Supplemental FEIS for Reconstruction of Rt. 9A indicates historically contaminated soil and groundwater. Recommended that same approach requiring a project specific Health and Safety Plan (HASP) and Groundwater Management Plan (GMP) be required as a contract specification item to be prepared by the contractor and reviewed by pertinent review agency.

Environmental Screening Summary: Provided SHPO conditions are complied with and a HASP and GMP are prepared and followed by contractor, no significant environmental impacts were noted.

Prepared & Recommended By: Patrick McHugh/Supervising Environmental Specialist, The RBA Group

______________________________    _____________________________
Patrick McHugh                        April 29, 2013
RBA Environmental Staff Representative Date
ENVIRONMENTAL SCREENING SITE INVESTIGATION SUMMARY

OFFICE INVESTIGATION

Prior to RBA’s Environmental Screening site visit, an office investigation was conducted of the project area. A review of the NYDEC GIS data indicated that no wetlands are located on or in the facility of the project area. The closest waterbody was the Lower Hudson River and no regulated waterbodies were identified within or immediately adjacent to the project area. The NYDEC GIS mapping indicated no presence of Threatened or Endangered species within the project area. A letter was also sent to NYDEC requesting further verification that no rare species are known near the project and the USFWS County protected species listing was examined as well. Both of these efforts confirmed our initial findings that there were no protected species or habitat within the project area. It should be noted that the previous Environmental Impact Statement indicated that the protected Peregrine Falcon could be found in the area. The two project areas, however, do not provide suitable habitat.

From a geology and soils perspective, upon reviewing the NRCS documentation of geological information associated with this site it was determined that the project area does not lie within a Sole Source Aquifer. The geological formation underlying the site is documented as Cambrian/Ordovician metamorphic rock. The soil the site is located on is classified as Pavement & Buildings, wet substratum, 0 to 5% slopes and is described to be nearly level to gently sloping, highly urbanized areas with more than 80% of the surface covered by impervious pavement and buildings, over filled swamp, tidal marsh or water; generally located in urban centers.

A review of the FEMA FIRM Floodplain Map Panel 184 #3604970184F indicated that the project does fall within the 100 year floodplain associated with the Hudson River. RBA also reviewed FEMA’s new Base Advisory Flood Maps. These maps also indicate that the project lies within the 100 year floodplain of the Hudson River.

FIELD INVESTIGATION

Representatives from The RBA Group’s Environmental staff conducted a field visit on April 23, 2013 as part of an Environmental Screening of the project area. RBA Environmental staff inspected the project site, and its adjacent areas, for the presence of regulated wetlands communities, adjacent areas and waterways as well as visual indications of significant hazardous/contaminated materials issues. No such regulated areas were identified near or adjacent to the project area. These observations concurred with current NYDEC GIS mapping. The only non-impervious ground being impacted by the proposed project consisted of a raised planting area in the median of the West Street roadway. Said planting area contained upland soil and planted landscape tree and shrub species, including Callery Pear (Pyrus calleryana) and Rose (Rosa sp.), both upland ornamental species. As was supported by the NYDEC mapping as well as the response letters from NJDEC and USFW, RBA observed no suitable habitat for any threatened or endangered species.
RBA also conducted a hazardous/contaminated materials screening, a summary of which is included in the next section. During our site inspection, indicated no visual evidence of significant contamination was noted within the project area.
SOCIOECONOMIC AND ENVIRONMENTAL JUSTICE IMPACT POTENTIAL ANALYSIS

Note- Based on 2010 Census Data Analysis

The primary study area, which includes the census tracts of Battery Park City, Broadway Corridor, and North of the World Trade Center Site, are within the Borough of Manhattan, to which socioeconomic characteristics can be compared. Information about ethnic diversity, housing, age, income, poverty, and family size were obtained from the United States Census Bureau, from the 2010 National Census. The data from these areas was analyzed to ensure that the West Thames Pedestrian Bridge project would not pose excess hardship to people in who are socially or economically disadvantaged.

There is less ethnic diversity in the study area, with a 68% white population, as compared to Manhattan where 57% of the population is white. Asians comprise the second largest ethnic group at 23%, which is likely due to the proximity of the study area to Chinatown, a historically Asian populated neighborhood.

The average household size is between 1.63 and 2.03, which is comparable to the Manhattan’s average of 1.99. This indicates that most households have just 1 or 2 people, and that large families are not common. The Median Household income in the study area is at least $46,036 higher than the Median Household income for the rest of Manhattan. All Median Household incomes within the study area are well over $100,000 a year and at least $50,754 higher than the Median Household income for Manhattan.

In 2010 the poverty guideline for a family of 2, which is the about the average in the study area, was $14,570. About 4% of the population was below the poverty line, as compared to the 17% that were listed below the poverty line in all of Manhattan. People in Manhattan, and more so in the study area, fared better than other residents of New York City, which had a poverty rate of 18.6% in 2010.

Based upon an analysis of the socioeconomic characteristics listed above, the West Thames Pedestrian Bridge project is not located in an area that would be considered to have a minority population or a low-income population, therefore eliminating the need to further assess environmental justice issues. The project will have a net benefit to local and transient pedestrian traffic with an improved pedestrian bridge, which includes elevators and stairways at both terminus points, and access across West Street will not be significantly hindered during the construction due to the reduced project footprint.
# West Thames Pedestrian Bridge
## New York, New York

### 2010 Census Data - Primary Study Area

<table>
<thead>
<tr>
<th>Primay Study Area</th>
<th>Total Population</th>
<th>White</th>
<th>Black</th>
<th>Asian</th>
<th>Other</th>
<th>Hispanic</th>
<th>Total Housing Units</th>
<th>Housing Vacancy %</th>
<th>Owner</th>
<th>Renter</th>
<th>Total Households</th>
<th>Average Household Size</th>
<th>Median Household Income</th>
<th>Persons Below Poverty %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery Park City</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Census tract 317.04</td>
<td>5,677</td>
<td>3,731</td>
<td>176</td>
<td>1,443</td>
<td>327</td>
<td>482</td>
<td>3,638</td>
<td>23.30%</td>
<td>1253</td>
<td>1537</td>
<td>2,790</td>
<td>2.03</td>
<td>$ 151,815</td>
<td>4.0%</td>
</tr>
<tr>
<td>Financial District</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Census tract 13</td>
<td>4,467</td>
<td>3,074</td>
<td>188</td>
<td>946</td>
<td>259</td>
<td>339</td>
<td>3,062</td>
<td>10.94%</td>
<td>385</td>
<td>2342</td>
<td>2,727</td>
<td>1.63</td>
<td>$ 115,938</td>
<td>0.00%</td>
</tr>
<tr>
<td>Borough</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manhattan</td>
<td>1,585,873</td>
<td>911,073</td>
<td>246,687</td>
<td>179,552</td>
<td>248,561</td>
<td>403,577</td>
<td>847,090</td>
<td>9.83%</td>
<td>173961</td>
<td>589885</td>
<td>763,846</td>
<td>1.99</td>
<td>$ 65,184</td>
<td>17.00%</td>
</tr>
</tbody>
</table>

1. Includes all Census blocks in tract 317.04.
3. Includes all Census tracts in Manhattan.
4. Including individuals identifying themselves as American Indian and Alaska Native, Native Hawaiian and Pacific Islander, two or more races, or other.
5. Per 2010 Census guidelines, designation as Hispanic is considered ethnicity and not race.
APPENDIX 6

HAZARDOUS/CONTAMINATED MATERIALS SCREENING WITH ATTACHMENTS
Hazardous/Contaminated Materials Screening Summary

A hazardous/contaminated materials screening was completed for the project area consisting of a database search, review of Sanborn mapping and historical aerial photography as well as a review of the previous Technical Environmental Studies pertaining to hazardous/contaminated materials reviewed during the 1994 Route 9A Reconstruction Project Environmental Impact Statement (EIS) and the 2005 Route 9A Reconstruction Project Supplemental Final Environmental Impact Statement. This was followed by a visual field reconnaissance of the project area.

Given the nature of the underlying fill material, there is a historic potential for soil and groundwater contamination throughout the project site and surrounding area. Based upon a review of a 2013 Environmental Data Resources database search, there are four (4) specific areas of concern (AOC’s) that are within the vicinity of the project site, which are discussed in more detail below.

Based upon a review of EDR Inc.’s NY Spills database summary, the proposed project will involve construction within or adjacent to four areas, three on the eastern side of the project area and one on the western side of the project area, that are the sites of previously documented spills of regulated chemical or petroleum based materials. The previous spill areas, which occurred in 1987, per documentation found in a recent Environmental Data Resources, Inc. database search, were identified as sites Nos. 1, A10, A19 and D27. Similar spill sites were reported as part of the Route 9A Reconstruction Project, as documented in the Final EIS and Final Supplemental EIS for that project, and it is anticipated that the same approach will be followed for this project. Potentially contaminated (but non-hazardous) soil would be excavated and removed for off-site disposal. Approximately 416 cubic yards of material will need to be excavated to allow for construction of the foundations.

In addition to the excavation and removal of any contaminated soil material, the selected contractor will prepare and submit for review a Health and Safety Plan (HASP) to help ensure that workers are protected from exposure to any contaminated material. In addition, a Soil and Groundwater Management Plan would also be prepared make sure that any soils not previously suspected of contamination are examined and properly handled.
<table>
<thead>
<tr>
<th>Map ID</th>
<th>Direction</th>
<th>Distance</th>
<th>Elevation</th>
<th>Site</th>
<th>Database(s)</th>
<th>EDR ID Number</th>
<th>EPA ID Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1000384273</td>
<td></td>
</tr>
</tbody>
</table>

**Hudson River PCBs (Continued)**

- GENERAL ELECTRIC COMPANY
- GENERAL ELECTRIC COMPANY
- GENERAL ELECTRIC COMPANY
- GENERAL ELECTRIC COMPANY
- GENERAL ELECTRIC COMPANY
- GENERAL ELECTRIC COMPANY
- GOLUB PROPERTIES OF WATERVIET INC
- NEW YORK STATE CANAL CORPORATION
- NIAGARA MOHAWK POWER COMPANY
- TOWN OF HALFM OON NEW YORK
- VILLAGE OF STILLWATER
- WATER COMMISSIONERS OF THE TOWN OF WATERFORD

1

**NNE**

< 1/8 mi. 0.006 mi. 31 ft.

### Relative:

- **Higher**

### Actual:

- **8 ft.**

#### Spills:

| Facility ID | DER Facility ID | Facility Type | Site ID | DEC Region | Spill Number | Spill Date | Spill Cause | Spill Class | Spill Closed Date | SWIS | Investigator | Referred To | Reported to Dept | C/D | Water Affected | Spill Source | Spill Notifier | Cleanup Ceased | Cleanup Meets Std | Last Inspection | Recommended Penalty | UST Trust | Remediation Phase | Date Entered In Computer | Spill Record Last Update | Spiller Name | Spiller Company | Spiller Address | Spiller City, St, Zip | Spiller Phone | Contact Name | Contact Phone |
|-------------|-----------------|---------------|---------|------------|--------------|------------|-------------|-------------|-------------------|------|--------------|-------------|-----------------|-----|---------------|-------------|----------------|----------------|-------------------|-----------------|----------------|----------------|----------------|------------------|---------------|--------------|---------------|

#### Material:

SEWERS Diked - CALL TO DEP CLEANED BY SPILLER.
### MAP FINDINGS

**RECTOR ST & WEST ST. (Continued)**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site ID:</td>
<td>127390</td>
</tr>
<tr>
<td>Operable Unit ID:</td>
<td>989157</td>
</tr>
<tr>
<td>Operable Unit:</td>
<td>01</td>
</tr>
<tr>
<td>Material ID:</td>
<td>392866</td>
</tr>
<tr>
<td>Material Code:</td>
<td>0001A</td>
</tr>
<tr>
<td>Material Name:</td>
<td>#2 Fuel Oil</td>
</tr>
<tr>
<td>Case No.:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Material FA:</td>
<td>Petroleum</td>
</tr>
<tr>
<td>Quantity:</td>
<td>-1</td>
</tr>
<tr>
<td>Units:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Recovered:</td>
<td>No</td>
</tr>
<tr>
<td>Resource Affected:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Oxygenate:</td>
<td>False</td>
</tr>
</tbody>
</table>

**Tank Test:**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site ID:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spill Tank Test:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Tank Number:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Tank Size:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Test Method:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Leak Rate:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Gross Fall:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Modified By:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Last Modified:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Test Method:</td>
<td>Not reported</td>
</tr>
</tbody>
</table>

**NY Hist Spills:**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region of Spill:</td>
<td>2</td>
</tr>
<tr>
<td>Spill Number:</td>
<td>9310242</td>
</tr>
<tr>
<td>Investigator:</td>
<td>CAMMISA</td>
</tr>
<tr>
<td>Caller Name:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Caller Agency:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Caller Phone:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Notifier Name:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Notifier Agency:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Notifier Phone:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spill Date/Time:</td>
<td>11/23/93 06:52</td>
</tr>
<tr>
<td>Reported to Dept Date/Time:</td>
<td>11/23/93 08:52</td>
</tr>
<tr>
<td>SWRS:</td>
<td>62</td>
</tr>
<tr>
<td>Spiller Name:</td>
<td>UNK - MYSTIC</td>
</tr>
<tr>
<td>Spiller Contact:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spiller Phone:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spiller Address:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spiller City,St,Zip:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spill Cause:</td>
<td>Unknown</td>
</tr>
<tr>
<td>Reported to Dept:</td>
<td>On Land</td>
</tr>
<tr>
<td>Water Affected:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spill Source:</td>
<td>12</td>
</tr>
<tr>
<td>Spill Notifier:</td>
<td>Federal Government</td>
</tr>
<tr>
<td>PBS Number:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Cleanup Ceased:</td>
<td>11/23/93</td>
</tr>
<tr>
<td>Cleanup Meets Std:</td>
<td>True</td>
</tr>
<tr>
<td>Last Inspection:</td>
<td>/ /</td>
</tr>
<tr>
<td>Recommended Penalty:</td>
<td>Penalty Not Recommended</td>
</tr>
<tr>
<td>Spiller Cleanup Dt:</td>
<td>/ /</td>
</tr>
</tbody>
</table>
RECTOR ST & WEST ST. (Continued)

Enforcement Date: / /  
Investigate Completed: / /  
UST Involvement: False  
Spill Class: Known release with minimal potential for fire or hazard, DEC Response. Willing Responsible Party. Corrective action taken.  
Spill Closed Date: 11/23/93  
Corrective Action Plan Submitted: / /  
Date Region Sent Summary to Central Office: / /  
Date Spill Entered in Computer Data File: 11/24/93  
Date Spill Entered in Computer Data File: Not reported  
Update Date: / /  
Is Updated: False  

Tank:  
PBS Number: Not reported  
Tank Number: Not reported  
Tank Size: Not reported  
Test Method: Not reported  
Leak Rate Failed Tank: Not reported  
Gross Leak Rate: Not reported  

Material:  
Material Class Type: Petroleum  
Quantity Spilled: 1  
Unknown Quantity Spilled: False  
Units: Not reported  
Quantity Recovered: 0  
Unknown Quantity Recovered: False  
Material: #2 FUEL OIL  
Class Type: #2 FUEL OIL  
Times Material Entry in File: 24464  
CAS Number: Not reported  
Last Date: 19941207  
DEC Remarks: Not reported  
Remark: SEWERS Diked - CALL TO DEP CLEANED BY SPILLER.

A2 COMMERCIAL PROP  
SSW 47 WEST ST  
< 1/8 NY, NY 10006  
0.030 mi.  
159 ft.  
Site 1 of 4 in cluster A  

Relative:  
Higher  
Actual: 6 ft.  

AST:  
Region: STATE  
DEC Region: 2  
Site Status: Unregulated  
Facility Id: PBS  
Program Type: 2-269822  
UTM X: 5832200.0106300003  
UTM Y: 4506632.1935296998  
Expiration Date: N/A  

Affiliation Records:  
Site Id: 10739  
Affiliation Type: Owner  
Company Name: TIME EQUITIES INC. C/O WEST ST. EQUITIES GROUP  
Contact Type: AGENT  
Contact Name: RICHARD RECNY  
Address: 55 FIFTH AVE

TC3530241.2s Page 36
40 RECTOR OWNER LLC (Continued)

Owner/Operator Summary:
Owner/operator name: 40 RECTOR OWNER LLC C/O PIHC
Owner/operator address: Not reported
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 01/19/2001
Owner/Op end date: Not reported

Owner/operator name: 40 RECTOR OWNER LLC C/O PIHC
Owner/operator address: MADISON AVE 2ND FLOOR
NEW YORK, NY 10017
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 01/19/2001
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HWM: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Hazardous Waste Summary:
Waste code: D008
Waste name: LEAD
Violation Status: No violations found
19 WEST ST (Continued)

<table>
<thead>
<tr>
<th>Spill Date:</th>
<th>6/15/1987</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spill Cause:</td>
<td>Other</td>
</tr>
<tr>
<td>Spill Class:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spill Closed Date:</td>
<td>6/5/1987</td>
</tr>
<tr>
<td>SWIS:</td>
<td>3101</td>
</tr>
<tr>
<td>Investigator:</td>
<td>UNASSIGNED</td>
</tr>
<tr>
<td>Referred To:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Reported to Dept:</td>
<td>6/15/1987</td>
</tr>
<tr>
<td>CID:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Water Affected:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spill Source:</td>
<td>Commercial/Industrial</td>
</tr>
<tr>
<td>Spill Notifier:</td>
<td>Fire Department</td>
</tr>
<tr>
<td>Cleanup Ceased:</td>
<td>6/5/1987</td>
</tr>
<tr>
<td>Cleanup Meets Std:</td>
<td>True</td>
</tr>
<tr>
<td>Last Inspection:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Recommended Penalty:</td>
<td>False</td>
</tr>
<tr>
<td>UST Trust:</td>
<td>False</td>
</tr>
<tr>
<td>Remediation Phase:</td>
<td>0</td>
</tr>
<tr>
<td>Date Entered in Computer:</td>
<td>9/11/1987</td>
</tr>
<tr>
<td>Spill Record Last Update:</td>
<td>11/17/1997</td>
</tr>
<tr>
<td>Spiller Name:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spiller Company:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spiller Address:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spiller City, St, Zip:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spiller Phone:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Contact Name:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Contact Phone:</td>
<td>Not reported</td>
</tr>
<tr>
<td>DEC Memo:</td>
<td>Prior to Sept, 2004 data translation this spill Lead_DEC Field was &quot; &quot; Not reported</td>
</tr>
<tr>
<td>Remarks:</td>
<td>EXPLODED TRANSFORMER, FIRE DEPT EXTINGUISHED FIRE AND CON EDISON WILL REPAIR TRANSFORMER, (SAME AS 872138) RANDY CONFIRMED THIS SPILL.</td>
</tr>
</tbody>
</table>

Material:
- Site ID: 70813
- Operable Unit ID: 906435
- Operable Unit: 01
- Material ID: 472021
- Material Code: 0068A
- Material Name: UNKNOWN PETROLEUM
- Case No.: Not reported
- Material FA: Petroleum
- Quantity: -1
- Units: Pounds
- Recovered: No
- Resource Affected: Not reported
- Oxygenate: False

Tank Test:
- Site ID: Not reported
- Spill Tank Test: Not reported
- Tank Number: Not reported
- Tank Size: Not reported
- Test Method: Not reported
- Leak Rate: Not reported
- Gross Fall: Not reported
- Modified By: Not reported
- Last Modified: Not reported
19 WEST ST (Continued)

Test Method: Not reported

NY Hist Spills:
- Region of Spill: 2
- Spill Number: 8702143
- Investigator: Not reported
- Caller Name: Not reported
- Caller Agency: Not reported
- Caller Phone: Not reported
- Notifier Name: Not reported
- Notifier Agency: Not reported
- Notifier Phone: Not reported

Spill Date/Time: 06/15/1987 14:00

Reported to Dept Date/Time: 06/15/87 19:01

SWS: 62

Spiller Name: CON EDISON
Spiller Contact: Not reported
Spiller Phone: Not reported
Spiller Address: Not reported
Spiller City,St,Zip: Not reported
Spill Cause: Other

Reported to Dept: Air
Water Affected: Not reported
Spill Source: 01
Spill Notifier: Fire Department
PBS Number: Not reported
Cleanup Ceased: 06/05/87
Cleanup Meets Std: True

Last inspection: / /

Recommended Penalty: Penalty Not Recommended
Spiller Cleanup D: / /
Enforcement Date: / /
Insignt Complete: / /
UST involvement: False

Spill Class: Not reported
Spill Closed Dt: 06/05/87
Corrective Action Plan Submitted: / /
Date Region Sent Summary to Central Office: / /
Date Spill Entered In Computer Data File: 09/11/87
Date Spill Entered In Computer Data File: Not reported
Update Date: 11/17/87
Is Updated: False

Tank:
- PBS Number: Not reported
- Tank Number: Not reported
- Tank Size: Not reported
- Test Method: Not reported
- Leak Rate Failed Tank: Not reported
- Gross Leak Rate: Not reported

Material:
- Material Class Type: Petroleum
- Quantity Spilled: 1
- Unknown Quantity Spilled: False
- Units: Pounds
- Quantity Recovered: 0
J. HILL ASSOCIATES/POST TOWERS (Continued)

Tank Location: 6
Tank Type: Steel/carbon steel
Date Test: Not reported
Registered: True
Modified By: TRANSLAT
Last Modified: 03/04/2004

A19
SSW
< 1/8
0.051 mi.
267 ft.
MANHATTEN, NY
Site 4 of 4 in cluster A

SPILLS:

Relative:
Higher

Actual:
6 ft.

Facility ID: 0806441
DER Facility ID: 362948
Facility Type: ER
Site ID: 403723
DEC Region: 2
Spill Number: 0806441
Spill Date: 9/4/2008
Spill Cause: Other
Spill Class: Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.

Spill Closed Date: Not Closed
SWIS: 3101
Investigator: RMPI/ER
Reported To: Not reported
Reported to Dept: 9/8/2008
CID: Not reported
Water Affected: Not reported
Spill Source: Unknown
Spill Notifier: Other
Cleanup Ceased: Not reported
Cleanup Meets Std: False
Last Inspection: Not reported
Recommended Penalty: False
UST Trust: False
Remediation Phase: 1
Date Entered in Computer: 9/8/2008
Spill Record Last Update: 9/16/2008
Spiller Name: Not reported
Spiller Company: EXISTING SPILL
Spiller Address: Not reported
Spiller City,St,Zip: NY
Spiller Company: 999
Contact Name: 47-50 WEST ST
Contact Phone: Not reported
DEC Memo: Piper- I spoke wit Smila Day at Langan. They are redeveloping the site and test pits showed cont soil. Langan collected composite samples and a work plan is being generated to remove the existing abandoned inplace 3K and 5K #6 oil usts. cont is present and will need to be removed. 2-269905

Remarks: Caller indicates that while taking test samples an unknown contamination was found at the site, results have come back on samples. Dispatch called R2; R2 responded immediately.

Material:
47-50 WEST ST (Continued)

Site ID: 403723
Operable Unit ID: 1160410
Operable Unit: 01
Material ID: 2151581
Material Code: 0064A
Material Name: UNKNOWN MATERIAL
Case No.: Not reported
Material FA: Other
Quantity: Not reported
Units: Not reported
Recovered: Not reported
Resource Affected: Not reported
Oxygenate: False

Tank Test:
Site ID: Not reported
Spill Tank Test: Not reported
Tank Number: Not reported
Tank Size: Not reported
Test Method: Not reported
Leak Rate: Not reported
Gross Fail: Not reported
Modified By: Not reported
Last Modified: Not reported
Test Method: Not reported

125 W THAMES ST
NEW YORK, NY 10001
Site 1 of 2 in cluster D

Relative: EDR Historical Auto Stations:
Lower
Name: AMERICAN 24 HR AUTO REPAIR
Year: 2003
Address: 125 W THAMES ST

Actual:
4 ft.
Name: AMERICAN 24 HR AUTO REPAIR
Year: 2004
Address: 125 W THAMES ST

Name: AMERICAN 24 HOUR AUTO REPAIR
Year: 2010
Address: 125 W THAMES ST

Name: AMERICAN TWENTY FOUR HR AUTOMOBILE REPAIR
Year: 2012
Address: 125 W THAMES ST
FORT WASHINGTON REHAB (FORT WASHINGTON) (Continued)

Tank:
- PBS Number: Not reported
- Tank Number: Not reported
- Tank Size: Not reported
- Test Method: Not reported
- Leak Rate Failed Tank: Not reported
- Gross Leak Rate: Not reported

Material:
- Material Class Type: Hazardous Material
- Quantity Spilled: 3
- Unknown Quantity Spilled: False
- Units: Gallons
- Quantity Recovered: 3
- Unknown Quantity Recovered: False

Material:
- Class Type: ANTIFREEZE
- Times Material Entry In File: 0
- CAS Number: Not reported
- Last Date: Not reported
- Material Class Type: Hazardous Material
- Quantity Spilled: 0
- Unknown Quantity Spilled: False
- Units: Gallons
- Quantity Recovered: 0
- Unknown Quantity Recovered: False

Remark: BRINE SOLUTION LEAKED OUT OF ROOF UNIT INTO AN APARTMENT

DEC Remarks: This spill originally occurred in August and DEC has been aware of its occurrence since that time. Since the material was a no-petroleum, non-hazardous and unclassified material, it was not previously reported to the spill hotline. However, Malone was concerned that their contractor would not be able to dispose of the material without a spill number so it was reported.

Site 2 of 2 in cluster D

SPILLS:
- Facility ID: 0106421
- DER Facility ID: 118841
- Facility Type: ER
- Site ID: 139043
- DEC Region: 2
- Spill Number: 0106421
- Spill Date: 9/22/2001
- Spill Cause: Unknown
- Spill Class: Known release with minimal potential for fire or hazard. DEC Response.
- Spill Closed Date: 12/12/2003

SPILLS:
- Facility ID: SWIS: 3101
<table>
<thead>
<tr>
<th>Map ID</th>
<th>Direction</th>
<th>Distance</th>
<th>Elevation</th>
<th>Site</th>
<th>Database(s)</th>
<th>EDR ID Number</th>
<th>EPA ID Number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>S105142305</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**IN ROADWAY (Continued)**

<table>
<thead>
<tr>
<th>Investigator:</th>
<th>TJDEMEO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referred To:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Reported to Dept:</td>
<td>9/19/2001</td>
</tr>
<tr>
<td>CID:</td>
<td>390</td>
</tr>
<tr>
<td>Water Affected:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spill Source:</td>
<td>Unknown</td>
</tr>
<tr>
<td>Spill Notifier:</td>
<td>DEC</td>
</tr>
<tr>
<td>Cleanup Ceased:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Cleanup Meets Std:</td>
<td>False</td>
</tr>
<tr>
<td>Last Inspection:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Recommended Penalty:</td>
<td>False</td>
</tr>
<tr>
<td>UST Trust:</td>
<td>False</td>
</tr>
<tr>
<td>Remediation Phase:</td>
<td>0</td>
</tr>
<tr>
<td>Date Entered in Computer:</td>
<td>9/19/2001</td>
</tr>
<tr>
<td>Spill Record Last Update:</td>
<td>12/12/2003</td>
</tr>
<tr>
<td>Spiller Name:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spiller Company:</td>
<td>UNK</td>
</tr>
<tr>
<td>Spiller Address:</td>
<td>UNK</td>
</tr>
<tr>
<td>Spiller City,St,Zip:</td>
<td>UNK, ZZ</td>
</tr>
<tr>
<td>Spiller Company:</td>
<td>001</td>
</tr>
<tr>
<td>Contact Name:</td>
<td>UNK</td>
</tr>
<tr>
<td>Contact Phone:</td>
<td>(000) 000-0000 0</td>
</tr>
<tr>
<td>DEC Memo:</td>
<td>Prior to Sept. 2004 data translation the spill Lead_DEC Field was &quot;DEMEO&quot;12/12/03 TJDEMEO minor roadway spill. Contained and cleaned by Ground Zero contractor (Earth Tech). No further action possible.</td>
</tr>
</tbody>
</table>

**Remarks:**
unf source - dop is doing clean up

**Material:**

<table>
<thead>
<tr>
<th>Site ID:</th>
<th>139043</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operable Unit ID:</td>
<td>843534</td>
</tr>
<tr>
<td>Operable Unit:</td>
<td>01</td>
</tr>
<tr>
<td>Material ID:</td>
<td>531279</td>
</tr>
<tr>
<td>Material Code:</td>
<td>0006</td>
</tr>
<tr>
<td>Material Name:</td>
<td>Diesel</td>
</tr>
<tr>
<td>Case No.:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Material FA:</td>
<td>Petroleum</td>
</tr>
<tr>
<td>Quantity:</td>
<td>10</td>
</tr>
<tr>
<td>Units:</td>
<td>Gallons</td>
</tr>
<tr>
<td>Recovered:</td>
<td>No</td>
</tr>
<tr>
<td>Resource Affected:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Oxygenate:</td>
<td>False</td>
</tr>
</tbody>
</table>

**Tank Test:**

| Site ID:          | Not reported |
| Spill Tank Test:  | Not reported |
| Tank Number:      | Not reported |
| Tank Size:        | Not reported |
| Test Method:      | Not reported |
| Leak Rate:        | Not reported |
| Gross Fail:       | Not reported |
| Modified By:      | Not reported |
| Last Modified:    | Not reported |
| Test Method:      | Not reported |

**NY Hist Spills:**

| Region of Spill: | 2       |

TC3530241.2s  Page 108
**IN ROADWAY (Continued)**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spill Number:</td>
<td>0105421</td>
</tr>
<tr>
<td>Investigator:</td>
<td>DEMEO</td>
</tr>
<tr>
<td>Caller Name:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Caller Agency:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Caller Phone:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Notifier Name:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Notifier Agency:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Notifier Phone:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spill Date/Time:</td>
<td>09/19/2001 00:23</td>
</tr>
<tr>
<td>Reported to Dept Date/Time:</td>
<td>09/19/01 01:02</td>
</tr>
<tr>
<td>SWIS:</td>
<td>62</td>
</tr>
<tr>
<td>Spiller Name:</td>
<td>UNK</td>
</tr>
<tr>
<td>Spiller Contact:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spiller Phone:</td>
<td>(000) 000-0000</td>
</tr>
<tr>
<td>Spiller Contact:</td>
<td>UNK</td>
</tr>
<tr>
<td>Spiller Phone:</td>
<td>(000) 000-0000 0</td>
</tr>
<tr>
<td>Spiller Address:</td>
<td>UNK</td>
</tr>
<tr>
<td>Spiller City,St,Zip:</td>
<td>UNK</td>
</tr>
<tr>
<td>Spill Cause:</td>
<td>Unknown</td>
</tr>
<tr>
<td>Reported to Dept:</td>
<td>On Land</td>
</tr>
<tr>
<td>Water Affected:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Spill Source:</td>
<td>DEC</td>
</tr>
<tr>
<td>PBS Number:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Cleanup Ceased:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Cleanup Meets Std:</td>
<td>False</td>
</tr>
<tr>
<td>Last Inspection:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Recommended Penalty:</td>
<td>Penalty Not Recommended</td>
</tr>
<tr>
<td>Spiller Cleanup Dt:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Enforcement Date:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Investg Complete:</td>
<td>Not reported</td>
</tr>
<tr>
<td>UST Involvement:</td>
<td>False</td>
</tr>
<tr>
<td>Spill Class:</td>
<td>Known release with minimal potential for fire or hazard. DEC Response. Willing Responsible Party. Corrective action taken.</td>
</tr>
<tr>
<td>Spill Closed Dt:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Corrective Action Plan Submitted:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Date Region Sent Summary to Central Office:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Date Spill Entered in Computer Data File:</td>
<td>09/19/01</td>
</tr>
<tr>
<td>Date Spill Entered in Computer Data File:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Update Date:</td>
<td>09/19/01</td>
</tr>
<tr>
<td>Is Updated:</td>
<td>False</td>
</tr>
</tbody>
</table>

**Tank:**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>PBS Number:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Tank Number:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Tank Size:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Test Method:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Leak Rate Failed Tank:</td>
<td>Not reported</td>
</tr>
<tr>
<td>Gross Leak Rate:</td>
<td>Not reported</td>
</tr>
</tbody>
</table>

**Material:**

<table>
<thead>
<tr>
<th>Field</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material Class Type:</td>
<td>Petroleum</td>
</tr>
<tr>
<td>Quantity Spilled:</td>
<td>10</td>
</tr>
<tr>
<td>Unknown Quantity Spilled:</td>
<td>False</td>
</tr>
<tr>
<td>Units:</td>
<td>Gallons</td>
</tr>
<tr>
<td>Quantity Recovered:</td>
<td>0</td>
</tr>
<tr>
<td>Unknown Quantity Recovered:</td>
<td>True</td>
</tr>
<tr>
<td>Material:</td>
<td>DIESEL</td>
</tr>
</tbody>
</table>
### IN ROADWAY (Continued)

- **Class Type:** DIESEL
- **Times Material Entry in File:** 10625
- **CAS Number:** Not reported
- **Last Date:** 1994-07-28
- **DEC Remarks:** Not reported
- **Remark:** unk source - dep is doing clean up

<table>
<thead>
<tr>
<th>F28</th>
<th>BANK OF NEW YORK</th>
<th>NY UST</th>
<th>U003074637</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENE</td>
<td>110 WASHINGTON ST</td>
<td>NY HIST UST</td>
<td>N/A</td>
</tr>
<tr>
<td>&lt; 1/8 ft.</td>
<td>NEW YORK, NY 10015</td>
<td>NY AST</td>
<td>NY HIST AST</td>
</tr>
<tr>
<td>0.062 m.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>330 ft.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Relative:** UST

**Higher**
- Facility Id: 2-326437
- Region: STATE

**Actual**
- DEC Region: 2
- Site Status: Administratively Closed
- Program Type: PBS
- Expiration Date: N/A
- UTM X: 583300.71420000005
- UTM Y: 4508888.5105600003

**Affiliation Records**
- Site Id: 15210
- Affiliation Type: Owner
- Company Name: BANK OF NEW YORK
- Contact Type: Not reported
- Contact Name: Not reported
- Address1: 48 WALL STREET
- City: NEW YORK
- State: NY
- Zip Code: 10286
- Country Code: 001
- Phone: (212) 495-2445
- Phone Ext: Not reported
- Email: Not reported
- Fax Number: Not reported
- Modified By: TRANSLAT
- Date Last Modified: 3/4/2004

**Affiliation Records**
- Site Id: 15210
- Affiliation Type: Mail Contact
- Company Name: BANK OF NEW YORK
- Contact Type: Not reported
- Contact Name: MICHAEL GILENSAN
- Address1: 48 WALL STREET BUILDING OFFICE
- City: NEW YORK
- State: NY
- Zip Code: 10248
- Country Code: 001
- Phone: (212) 495-2445
- Phone Ext: Not reported
- Email: Not reported
- Fax Number: Not reported
- Modified By: TRANSLAT
<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Type</th>
<th>Filer</th>
<th>Location</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>16C231086</td>
<td>Former Getty Service Station Maspeth Construction and Demolition Site</td>
<td>BCP</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>239 10th Avenue</td>
</tr>
<tr>
<td>17B00034</td>
<td>Ellis Island Drum Storage Area</td>
<td>ERP</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>47th Street, Off Metropolitan Avenue</td>
</tr>
<tr>
<td>18231001</td>
<td>Wards Island WPCP Interim Plan</td>
<td>HW</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>Ellis Island</td>
</tr>
<tr>
<td>19231002</td>
<td>Castle Williams, Governors Island</td>
<td>HW</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>Governor's Island between 18th &amp; 20th Streets and 10th &amp; 11th Avenue</td>
</tr>
<tr>
<td>20231003</td>
<td>Consolidated Gas 18th St. Station</td>
<td>HW</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>Battery Pk and 59th St. Route 9A</td>
</tr>
<tr>
<td>21231005</td>
<td>Route 9A Reconstruction Project</td>
<td>HW</td>
<td>N</td>
<td>NEW_YORK Manhattan</td>
<td>203-209 West 146th Street</td>
</tr>
<tr>
<td>22231006</td>
<td>Film Storage Warehouse Site</td>
<td>HW</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>1427 York Avenue</td>
</tr>
<tr>
<td>23231009</td>
<td>Celebrity French Cleaner &amp; Tailors</td>
<td>HW</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>Pleasant Avenue</td>
</tr>
<tr>
<td>24231057</td>
<td>Pleasant Avenue Plume Trackdown East 60th Street, Con Ed Steam Station</td>
<td>HW</td>
<td>N</td>
<td>NEW_YORK NEW YORK</td>
<td>514 EAST 60TH STREET</td>
</tr>
<tr>
<td>25231066</td>
<td>West Block #57 Project</td>
<td>HW</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>830 12th Avenue</td>
</tr>
<tr>
<td>26231068</td>
<td>Former Nu Brite Cleaners Proposed Federal Express Distribution Ce</td>
<td>HW</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>1299 First Avenue Between 17th &amp; 18th Streets &amp; 10th &amp; 11th Aves.</td>
</tr>
<tr>
<td>27231071</td>
<td>2350 Fifth Avenue Kips Bay Fuel Terminal (First Ave, prop)</td>
<td>VCP</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>2350 Fifth Avenue</td>
</tr>
<tr>
<td>28231072</td>
<td>19th Street Development Site</td>
<td>VCP</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>616 First Ave.</td>
</tr>
<tr>
<td>30V00256</td>
<td>Generating Station (First av p)</td>
<td>VCP</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>700 First Ave.</td>
</tr>
<tr>
<td>31V00430</td>
<td>19th Street Development Site</td>
<td>VCP</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>80 11th Avenue</td>
</tr>
<tr>
<td>32V00431</td>
<td>19th Street Development Site</td>
<td>VCP</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>80 11th Avenue</td>
</tr>
<tr>
<td>33V00432</td>
<td>19th Street Development Site</td>
<td>VCP</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>80 11th Avenue</td>
</tr>
<tr>
<td>34V00624</td>
<td>19th Street Development Site</td>
<td>VCP</td>
<td>N</td>
<td>NEW_YORK New York</td>
<td>80 11th Avenue</td>
</tr>
</tbody>
</table>

Refine Current Search
APPENDIX 7

PROJECT PHOTOGRAPHS WITH PHOTO-CONTROL MAP AND DESCRIPTIONS
NOTES TO PHOTOGRAPHS:

1 – TO WEST ALONG JOSEPH P. WARD ST.

2. – TO WEST BETWEEN GARAGE WALL AND BLOCK 17, LOT 8 CONSTRUCTION SITE

3 – TO NORTHWEST ALONG JOSEPH P. WARD ST. ADJACENT TO GARAGE WALL

4 – TO NORTHWEST AT CORNER OF JOSEPH P. WARD ST. AND WEST ST.

5 – TO NORTHEAST AT CORNER OF JOSEPH P., WARD ST. AND WEST ST.

6 – TO WEST ACROSS WEST ST.

7 – TO SOUTEAST LOOKING AT CORNER OF GARAGE ADDITION. ORIGINAL GARAGE VISIBLE AT LEFT BEHIND CONSTRUCTION SITE

8 – TO SOUTH ALONG MEDIAN BETWEEN NB AND S WEST ST.

9 – TO SOUTHEAST FROM WEST STREET MEDIAN

10 – TO NORTH ALONG MEDIAN BETWEEN NB AND SB WEST ST. VIEW OF WORLD TRADE TOWER

11 – TO SOUTH ALONG ESPLANADE ON WEST SIDE OF WEST ST.

12 – TO SOUTH ALONG ESPLANADE ON WEST SIDE OF WEST ST. – DOG RUN

13 – TO EAST ACROSS WEST ST. TOWARD OVERHEAD GARAGE ADDITION

14 – TO NORTH FROM SOUTHEAST CORNER OF JOSEPH P. WARD ST. ALONG EAST SIDE OF WEST ST.

15 – UTILITIES WITHIN ESPLANADE LANDSCAPED ISLAND

16 – TO EAST FROM CENTER OF WEST THAMES ST. AT GARAGE ADDITION, WITH ORIGINAL GARAGE VISIBLE AT RIGHT.

17 – LOOKING NORTH ALONG EAST SIDE OF WEST ST. TOWARDS THE RECTOR STREET BRIDGE

18 – LOOKING NORTH FROM CROSSWALK BETWEEN SB AND NB WEST ST.

19 – LOOKING NORTH AT ENTRANCE RAMP TO RECTOR STREET BRIDGE.

20 – LOOKING WEST AT RECTOR STREET BRIDGE CROSSING OF WEST STREET.
APPENDIX 8

WEST THAMES STREET PEDESTRIAN BRIDGE CONCEPTUAL VISUAL RENDERINGS
EXISTING CONDITIONS - PHOTOGRAPHS
EXISTING CONDITIONS - PHOTOGRAPHS

(5) WEST THAMES ST & WEST ST, LOOKING SW

(6) WEST THAMES ST, LOOKING SW
DOG RUN AT RIGHT

(7) MTA GARAGE,
LOOKING NW

(8) WEST THAMES ST & WEST ST,
LOOKING SOUTH
PROPOSED BRIDGE SPAN SOUTH ELEVATION

SCALE: 1/16" = 1'

NYC EDC  WESTTHAMES STREET PEDESTRIAN BRIDGE  WXY | WEIDLINGER
PROPOSED PIER SUPPORT
SECTION
AXOVIEW OF WEST LANDING LOOKING EAST – RENDERING
PROPOSED SECTION – LIGHTING LAYOUT TYPICAL AT MAIN SPAN

- FRITTED GLASS TO PROVIDE REFLECTED LIGHT ON PEDESTRIAN
- LINEAR FIXTURE (DETAIL 1), EXACT LOCATION TBD
- LENTICULAR MESH IN-FILL ACCENTUATED BY GRAZING
- REVEAL INTENDED TO HIDE LINEAR FIXTURES
- MESH BELOW AND ABOVE LENTICULAR TRUSS ELEMENTS UNLIT

1: LINEAR LED MESH LIGHT
2: LINEAR LED CEILING UPLIGHT
SECTION - CENTRE PIER

ALUMINIUM GRATING
GLASS PANEL

MAIN STRUT (BUILT-UP)
MESH GUARD BET TRUSS ELEMENTS
W8TYP
HANDRAIL TYP
FRP DECK
W8TYP

NON-PRISMATIC ELEMENT

3" DIA. DRAIN LINE TO RAIN GARDEN BELOW
GRADE TO DRAIN AWAY FROM ABUTMENT

VARIES
2'-10"
MEDIAN RAIN GARDEN - PLANTINGS

SWAMP MILKWEED
Asclepias incarnata

KARL FORESTER FETHER REED GRASS
Calamagrostis x Acutiflora 'karl forester'

'BABY JOE' JOE PYE WEED
Eupatorium dubium 'Baby Joe'

PRAIRIE WIDFIRE DAYLILY
Hemerocallis 'Prairie Wildfire'

BIG BLUE LILY TURF
Liriope muscari 'Big Blue'

HEAVY METAL SWITCHGRASS
Panicum virgatum 'Heavy metal'

SWAMP ROSE
Rosa Palustris

SOFT RUSH
Juncus effusus

SCARLET MEIDILAND ROSE
Rosa 'Scarlet meidiland'

WHITE MEIDILAND ROSE
Rosa 'Scarlet White'

'SHAM ROCK' INKBERRY
Ilex glabra 'Shamrock'
MATERIAL PALETTE

F R I T T E D  G L A S S  A T  R O O F S
main span

F R I T T E D  G L A S S
elevator shaft walls

1" CABLE MESH GUARD
full height at main span
42" high at landings and stairs

D O T  G E O R G E  W A S H I N G T O N
BRIDGE GRAY
steel structure

F R P  D E C K I N G
main span (exact color T BD)

S A N D  B L A S T E D  S T A I N L E S S
STEEL
walls and structures under stairs

S L I P  N O T  G R I P  G A T E  F I N I S H
CAST METAL
stair treads, landings, end piers
APPENDIX 9

ARCHAEOLOGICAL DOCUMENTARY STUDY
Archaeological Documentary Study

West Thames Pedestrian Bridge

Borough of Manhattan, City and County of New York, New York

Prepared for
New York City Economic Development Corporation

Prepared by
Jean Howson and Richard L. Porter
The RBA Group, Inc.

May 2013
Management Summary

Phase of Survey: Phase IA

Location: Borough of Manhattan, New York County, New York – West Street at West Thames and Joseph P. Ward Streets.

Survey Area: East and west access points/supports and central support for bridge

USGS Quadrangle: Jersey City, NJ

Results: Potential impacts to significant archaeological resources, including landfill/landfill retaining structures and the Hudson River Bulkhead; no feasible testing or monitoring strategy; mitigation of potential effects through public outreach recommended.

Report Authors: Jean Howson and Richard L. Porter, The RBA Group, Inc.

Date of Report: May 2013
TABLE OF CONTENTS

1. INTRODUCTION .................................................................................................................. 1

2. BACKGROUND RESEARCH .............................................................................................. 2
   2.A. File Search .................................................................................................................. 2
   2.B. Environmental Setting .............................................................................................. 5
   2.C. Prehistoric Context And Sensitivity .......................................................................... 6
   2.D. Historic Context And Sensitivity .............................................................................. 6
   2.E. Prior Disturbance ........................................................................................................ 10

3. CONCLUSIONS AND RECOMMENDATIONS .................................................................... 11

REFERENCES

APPENDICES:

A. Environmental Review Letter from New York State Office of Parks, Recreation, and Historic Preservation

B. Excerpts from Schematic Design Report

List of Figures

1. Project Location, U.S.G.S. Jersey City, NJ Quadrangle .................................................. 12
2. Detailed Project Location .................................................................................................. 13
3. Project Location, 2005 Sanborn Insurance Map .............................................................. 14
4. Project Plan ..................................................................................................................... 15
5. National Register listed and eligible resources in vicinity ............................................... 16
6. 1817 Stout (Longworth) Map ......................................................................................... 17
7. 1844 Tanner Map ........................................................................................................... 18
8. 1846 Burr Map ............................................................................................................... 19
9. 1850 Smith Map ............................................................................................................. 20
10. 1857 Perris Map ............................................................................................................. 21
11. 1873 Keiller Department of Docks Map ......................................................................... 22
12. 1879 Taylor View .......................................................................................................... 23
13. 1885 Robinson Atlas ..................................................................................................... 24
14. 1894 Sanborn Map ....................................................................................................... 24
15. 1894 Sanborn Map of Piers ......................................................................................... 25
16. 1905 Sanborn Map ....................................................................................................... 26
17. 1916 Bromley Atlas ..................................................................................................... 27
18. 1925 Photograph of 45 West Street .............................................................................. 28
19. 1924 Aerial .................................................................................................................. 29
20. 1929 View of filling at demolished Pennsylvania RR Pier ............................................. 30
List of Figures, continued

21. 1930 View of Hudson River Waterfront with new Pier 3 .........................31
22. 1927 and 1937 Photographs of 45-46 West Street ................................32
23. 1950 Sanborn Map ........................................................................33
24. Borings Profile ..............................................................................34
27. Route 9A Reconstruction Project Utilities Map, 2009 ........................37
28. Existing topography and utilities in project area, 2013 ......................38
29. Key to Photo Locations ...................................................................39

List of Tables

1. Previously Identified Historic Resources in Project Vicinity ...............3

List of Plates

1. View to west between garage and 50 West Street site ..........................40
2. View to northwest at corner of Joseph P. Ward and West Streets ....40
3. View to northeast at corner of Joseph P. Ward and West Streets .......41
4. View to north up West Street .............................................................41
5. View to west across West Street .......................................................42
6. View to southeast from median .......................................................42
7. View to south along esplanade on west side of West Street ............43
8. View to south showing dog run on west side of West Street ..........43
9. View of landscaped island with utilities .........................................44
10. View to east from West Thames Street .........................................44
1. INTRODUCTION

The proposed West Thames Street Pedestrian Bridge and Removal of Rector Street Temporary Pedestrian Bridge project areas are located in the Borough of Manhattan, City and County of New York, New York (Figures 1 through 3). The City of New York Economic Development Corporation (EDC), in coordination with the Lower Manhattan Development Corporation and the Battery Park City Authority, proposes to construct a pedestrian bridge over West Street (Route 9A) between Joseph P. Ward Street adjacent to the Brooklyn Battery Tunnel Exit Roadway and the promenade south of West Thames Street. The purpose of the West Thames Street Pedestrian Bridge is to replace the existing temporary Rector Street Pedestrian Bridge, which was constructed as an interim crossing of West Street after September 11, 2001. The Rector Street Pedestrian Bridge will be removed as part of this project.

This Archaeological Documentary Study has been prepared pursuant to a request from the New York City Landmarks Preservation Commission (LPC) resulting from their Environmental Review of preliminary documents submitted in March, 2013. LPC cited the potential for remains from 18th and 19th Century occupation on the project site. A request for environmental review was also submitted to the New York Office of Parks, Recreation and Historic Preservation (OPRHP). The OPRHP response is included here as Appendix A.

A conceptual design of the West Thames Street Pedestrian Bridge was developed by Weidlinger Associates and WXY Architecture. Excerpts from the Schematic Design Report prepared by the Weidlinger Associates team are provided below in Appendix B. The design includes the following (see Figure 1.4 and Appendix B):

- a stairway and elevator connection along Joseph P. Ward Street;
- a lenticular truss bridge constructed from the northeast corner of Joseph P. Ward Street and West Street to the southwest corner of West Thames Street and Little West Street with a single mid-span pier placed in the median of West Street; and
- An elevator and a stairway and a stairway running south from the bridge between Little West Street and the adjacent dog run.

Subsurface impacts from bridge construction will be at the east and west access points and at the support with the West Street median. At these locations construction of foundations up to 6 feet deep is proposed. Foundations will be supported with 10-inch diameter micro-pilings drilled to glacial till or bedrock. Project engineers have stated that some micropilings may be angled so as to provide adequate support, and thus will extend beyond the foundation footprints.
2. BACKGROUND RESEARCH

2.A. File Search

National Register of Historic Places

National Register listed and eligible properties and sites in the project vicinity are shown on Figure 5 and listed in Table 1. Two National Register eligible archaeological sites are immediately adjacent to the project area.

- Hudson River Bulkhead, west of the western foundation for the proposed bridge. Information on the Hudson River Bulkhead and its eligibility is contained in the Building-Structure Inventory Form on file at OPRHP (Raber 1997). The section on the west side of the current project area is a Type IV Bulkhead, which is the latest type (1920-1960); its eligibility is explained as follows:

  Even the latest type...similar to relieving-platform designs used elsewhere in the ports of New York and other cities, remains significant as part of the [Docks] Department’s long sequence of bulkhead designs. The masonry bulkhead appear well-documented in surviving drawings, descriptions of construction methods...and possibly in surviving original specifications. It is possible, however, that the surviving structures include undocumented details reflecting minor adaptations to bottom or other site conditions. Such undocumented details in the masonry or timber bulkheads could meet Criterion D (Raber 1997:10).

  The bulkhead is the subject of a monitoring and recordation protocol that was developed for the Route 9A Reconstruction project (Sopko 2005).

- Pier 7 Complex Site, located immediately across West Thames Street from the proposed bridge (Lenardi 2011). The Pier 7 Complex Site includes a portion of the Hudson River Bulkhead.

Previously recorded sites

There are no recorded Pre-Contact sites within the project area or just to the east along what would have been the shoreline of lower Manhattan in the later Pre-Contact and Contact Period (see discussion of environmental setting below). Several locations (former small islands, knolls, and headlands) identified through an analysis of boring data as having potential sensitivity for inundated prehistoric sites – which would now lie beneath the landfill – are sited further south and north along the West Street corridor (Historic Conservation and Interpretation, Inc. 1983:41-63; Hartgen Archaeological Associates and Historical Perspectives, Inc. 1990:V-11, V-13). The closest of these locations, near the present-day intersection of Morris and West Streets (Area #1
<table>
<thead>
<tr>
<th>Map label</th>
<th>Name</th>
<th>Address</th>
<th>NR Status</th>
<th>OPRHP NR or USN #'s</th>
<th>NYC Landmark</th>
<th>LP#</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>New York Evening Post Building</td>
<td>75 West St.</td>
<td>Listed</td>
<td>00NR01653</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>19 Rector Street</td>
<td>19 Rector St./ 88 Greenwich St.</td>
<td>Listed</td>
<td>02NR01912</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>21 West Street</td>
<td>19-21 West St.</td>
<td>Listed</td>
<td>98NR01402</td>
<td>X</td>
<td>01999</td>
</tr>
<tr>
<td>D</td>
<td>Wall Street Historic District</td>
<td></td>
<td>Listed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Hudson River Bulkhead</td>
<td>West St. (8A) from Battery Place to W. 59th St.</td>
<td>Eligible</td>
<td>06101.009182</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Barrett Building/40 Rector St.</td>
<td>40 Rector St./ 57-69 West St.</td>
<td>Eligible</td>
<td>06101.014511</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Former St. George’s Syrian Roman Catholic Church</td>
<td>103 Washington St.</td>
<td>Eligible</td>
<td>06101.001534</td>
<td>X</td>
<td>02167</td>
</tr>
<tr>
<td>4</td>
<td>Frasch Building</td>
<td>56 West St./ 33 Rector St.</td>
<td>Eligible</td>
<td>06101.007218</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>94 Greenwich St. House</td>
<td>94 Greenwich St.</td>
<td>Eligible</td>
<td>06101.001533</td>
<td>X</td>
<td>02218</td>
</tr>
<tr>
<td>6</td>
<td>94-96 Greenwich St.</td>
<td>94-96 Greenwich St.</td>
<td>Eligible</td>
<td>06101.013374</td>
<td>(see above)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Battery Garage</td>
<td>56 Greenwich St.</td>
<td>Eligible</td>
<td>06101.013375</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Robert and Anne Dickey House</td>
<td>67 Greenwich St.</td>
<td>Eligible</td>
<td>06101.001531</td>
<td>X</td>
<td>02166</td>
</tr>
<tr>
<td>9</td>
<td>Brooklyn Battery Tunnel</td>
<td>Governor's Island, Battery Pl., Greenwich St., Washington St.</td>
<td>Eligible</td>
<td>06101.018351</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Downtown Athletic Club Building</td>
<td>18 West St.</td>
<td></td>
<td></td>
<td>X</td>
<td>02075</td>
</tr>
<tr>
<td>11</td>
<td>Whitehall Building</td>
<td>17 Battery Pl.</td>
<td>Eligible</td>
<td>06101.001318</td>
<td>X</td>
<td>02056</td>
</tr>
<tr>
<td>12</td>
<td>Pier 7 Complex Site</td>
<td>West Thames Park</td>
<td>Eligible</td>
<td>06101.018120</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lamp posts</td>
<td>various</td>
<td>Eligible</td>
<td>06101.009462, 9464, 9465, 9466, 9467, 9468, 9469, 9470</td>
<td>X</td>
<td>01961</td>
</tr>
</tbody>
</table>
in the Historic Conservation and Interpretation, Inc. 1983 study) was possibly an island 5,000 to 6,500 years ago, and is now 30' below sea level and buried by landfill.

The above-noted Hudson River Bulkhead and Pier 7 Complex Site, both recorded by SHPO as eligible for National Register listing, are the only historic period archaeological sites located adjacent to the project area.

Previous cultural resource surveys

The project area has been evaluated previously for the NYSDOT Route 9A and Route 9A Reconstruction projects (and their predecessor, the West Side Highway/Westway). In addition, resources that extend into the project area were evaluated for the World Trade Center redevelopment project. The following documents, listed chronologically, pertaining to these projects have been consulted:

- West Side Highway Cultural Resource Survey Archaeological Work Program: Cultural Resources Research (Historic Conservation and Interpretation, Inc. 1983)

- Route 9A Reconstruction Project Draft Archaeological Assessment Report, Battery Place to Harrison Street (Hartgen Archeological Associates and Historical Perspectives Inc. 1990)

- Route 9A Reconstruction Project Revised Draft Contextual Study: Sunken Ships and Landfill Retaining Devices (Hartgen Archeological Associates and Historical Perspectives Inc. 1992a)

- Route 9A Reconstruction Project Contextual Study: Wharves and Piers (Hartgen Archeological Associates and Historical Perspectives, Inc. 1992b)


- Buildings and Structures Inventory Form for the NYC Hudson River Bulkhead (Raber 1997).


- Route 9A Final Supplemental Environmental Impact Statement (2005)
Archaeological Monitoring, Treatment, and Data Recovery Plan for NYC Hudson River Bulkhead... (Sopko 2005)

Cultural Resources Survey Report of Archaeological Monitoring, Treatment, and Data Recovery for NYC Bulkhead and World Trade Center Site...(Lenardi 2011)

The 1990 Route 9A Reconstruction Archaeological Assessment indicated that the only potential sensitivity within the stretch of that project corridor between Morris and Rector Streets was for the nineteenth century piers which may have become part of the landfill beneath West and Marginal Streets. The 232 piers, wharves and pier sheds, including Site # 139 within the present project area, that were identified in the further Route 9A studies were eliminated from further consideration for archaeological potential due to lack of archaeological visibility and lack of research potential (Hartgen Archaeological Associates and Historical Perspectives, Inc. 1990, 1992b; Vollmer Associates and Allee King Rosen & Flemming, Inc. 1996).

Additional archaeological investigations conducted in proximity to the current project area include a study of the Exchange Project Site, located one block south of Joseph P. Ward Street (Geismar 1987), specific studies conducted for the World Trade Center Memorial and Redevelopment Project (Historical Perspectives, Inc. 2003, 2004; AKRF, Inc. 2009); and the South Ferry Terminal Project (The Louis Berger Group, Inc. 2003, 2004; Dallal et al. 2012). None of these archaeological investigations extended into the APE for the current project. They provide additional background, however, on archaeological issues in the area. Although the Battery Tunnel would have destroyed archaeological resources in its path, Geismar (1987) noted the potential for waterfront and landfill retaining structures such as wharf cribbing within undisturbed locations flanking the tunnel blower building, as well as potential for early historic and even prehistoric resources on the block just east of the Battery Garage, which possibly overlapped the edge of an original shoreline bluff or beach. World Trade Center studies conducted by Historical Perspectives, Inc. (2003, 2004) and AKRF (2009) identified potential for landfill retaining structures as well as for domestic shaft features such as cisterns, privies, and wells that might have extended beneath later building basements. The latter are typically present within the rear portions of lots developed prior to the availability of utilities. The Dallal et al. (2012) South Ferry study describes the archaeological investigation of the Battery Wall and Whitehall Slip, and includes a thorough assessment of cultural resources work undertaken to date on waterfront landfill-retaining structures (2012:4-70 to 4-107).

2.B. Environmental setting

The West Thames Street Bridge project area is in a densely developed urban setting, along a major transportation corridor (Route 9A) passing through residential and commercial districts of lower Manhattan, where access ramps enter and exit the mid-20th century Brooklyn-Battery Tunnel (Figure 3; Plates 1 through 10). This setting belies the location's environmental history—it was under the Hudson River at the time of European settlement. Filling began in the 1760s and continued in the 1830s, 1850s, and 1870s. The process of making land along the Hudson
River continued into the late 20th century with the construction of Battery Park City (see Figures 5 through 23 for historic map sequence through 1950).

The Contact Period shoreline of Manhattan, however, was relatively recent in geological terms. Sea level at the time the ice sheets retreated from the area was approximately 300' lower than that of historic times. The project area would have been well inland, and the river channel would have been further west. The river valley would be drowned beginning around 15,000 years ago. Sites that are now 30' below sea level would have been islands around 6,500 years ago; before that, they would have been small hills on the mainland. One such site, located near present-day Morris and West Streets, was probably a small hill, possibly next to a pond, around 7,200 to 6,500 years ago, after which it became an island as the shoreline moved eastward (Historic Conservation and Interpretation, Inc. 1983:56). Such sites would have been attractive for prehistoric occupation. By 5,000 years ago, however, they would be inundated by the expanding Hudson River estuary.

Borings (see Figure 24) indicate that in the project area a stratum of organic silt and clay underlies the fill at depths of approximately 12' at the east end dipping to 28' at the far west end just inside the bulkhead. The silt and clay layer is in turn underlain by alluvial sands and glacial outwash sands and glacial till above bedrock. There is no geological evidence of a pre-inundation shoreline promontory, island, or knoll in this location.

2.C. Pre-Contact Context and Sensitivity

As noted, the project area is fully within historic landfill, having been under water from about 5,000 years ago. Occupation of the general area prior to that time is likely. Previous studies have located possible sensitive locations beneath the fill, but none of these locations are within the present project area, which was not on a former hill or island (Historic Conservation and Interpretation, Inc. 1983:48 and Hartgen Archaeological Associates and Historical Perspectives, Inc. 1990:10-20). Due to the projected low-lying contour, to long-term inundation, to sequential episodes of pier and bulkhead construction and filling, and dredging of the former slips, the survival beneath the fill of any traces of early occupants here is unlikely.

2.D. Historic Context and Sensitivity

Shoreline history: bulkheads, piers, and landfill

The project area is within landfill that extended Manhattan’s Hudson River shoreline westward beginning in the 1760s and continuing through the late 20th century. Specifically, the east end of the bridge is within blocks of land granted by the city for filling and development in 1839; the location of the central support for the bridge was in the river between piers and was filled in the first decade of the 20th century; and the west end was in a pier shed built adjacent to the fill forming West Street circa 1873, then filled in in 1928/29. Landfill is considered
archaeologically sensitive in this part of the city. It can contain buried early piers, former
bulkheads, and scuttled ships, as well as structures such as cribbing built to hold the fill (see
Hartgen Archeological Associates and Historical Perspectives, Inc. 1990, 1992a; Parsons
Brinkerhoff et al. 2004; and most recently Dallal et al. 2012).

As shown on a map of 1817 (Figure 6), the earliest pier in the project area (#5) extended west
from present-day Washington Street into the river, approximately along present-day Joseph P.
Ward Street. This pier would be re-numbered as number 6 by 1824 (Hartgen Archeological
Associates and Historical Perspectives, Inc. 1990 [citing 1824 Hooker Map]). Some portions of
the blocks between Washington Street and West Street began to be filled in by 1827 (Ewen
1827-1830); the one in the present project area was granted in 1839 (see Figure 11) but
apparently not filled in until 1845 (Figures 7 and 8). The 1846 Burr map (Figure 8) shows Pier 6
extending west from West Street along the same approximate alignment as the earlier pier. The
1850 Smith survey (Figure 9) shows the proposed project area extending into the river between
Piers 5 and 6. There would have been a bulkhead along the west side of West Street at this time,
though the official bulkhead line established in 1857 was further out (west of the street, as shown
on Figure 11).

Maps of the 1850s and 1860s show no change to the configuration of the waterfront in the
project area. The next major alteration was the construction of the Pennsylvania Railroad Pier
Complex (Piers 4 and 5 with a large connecting pier shed) in circa 1873 (Figure 11). A new
bulkhead line had been established in 1871, and the Pennsylvania's pier shed extended west to
this line. The pier shed was on pilings, however, so a bulkhead would not have been constructed
at the new bulkhead line in this location at this time. The Rector Street Section of bulkhead,
which abutted the pier shed immediately to the north, was constructed circa 1903 (Lenardi 2011;
see Hoag 1906 for a history and discussion of New York's regulation of the waterfront and
bulkheads up to that time). Between 1899 and 1905, the area behind the 1871 bulkhead line to
the north and south of the Pennsylvania's pier shed was filled in to create a new, wider marginal
(wharf) street - the stretch of West Street in front of the Pennsylvania's pier would remain a very
narrow thoroughfare, creating a bottleneck for another 25 years. A 1924 aerial photograph
(Figure 19) shows the configuration of Marginal and West Streets in relation to the
Pennsylvania's pier complex at that time.

In 1928 the Pennsylvania Railroad's Pier Complex was demolished, and construction of the
company's new Pier 3 (which replaced Piers 4 and 5) was underway the following year (Figures
20 and 21). Most of the former footprint of the large old pier shed was filled and incorporated
into Marginal Street, though a narrow concrete pier shed was built between the west side of
Marginal Street and the bulkhead line. At this time the bulkhead that runs along the line
established in 1871 would have been built (to the west of the west end of the proposed bridge -
south of the 1903 Rector Street Section of bulkhead documented by Lenardi [2011]). The
bulkhead at this location is classified as Type IV, a concrete bulkhead with timber relieving
platform, as was typically constructed from 1920-1960 (Raber 1997; see sketch on Figure 24).

Beginning in the late 1960s, piers along the west side of Manhattan were removed and a massive
landfill operation began, using material excavated for the World Trade Center, to be followed by
construction of Battery Park City. By 1973 the piers and associated structures south of present-day West Thames Street, including in the current project area, had been demolished, and by the following year landfilling here was underway.

**Sensitivity – bulkheads, piers and landfill:** The mid-19th-century fill may contain remains of the first pier that extended along present-day Joseph P. Ward Street, other unrecorded fill retaining structures or deposits, and remains of the mid-19th-century bulkhead. Later fill, which formed part of Marginal Street in the former footprint of the Pennsylvania Railroad warehouse, may contain pilings or other features. The Type IV bulkhead structure, built in 1929 at the 1871 bulkhead line, which lies just to the west of the west end of the proposed bridge, may be extant below the present landscaping. *The Area of Potential Effect of the micropilings proposed for the pedestrian bridge is sensitive for remains of waterfront infrastructure, including the Hudson River Bulkhead. The latter may be penetrated if angled micro-pilings are used in this location.*

**Historic buildings within project footprint**

East end of the proposed bridge:

After being filled in in 1845, the lots at numbers 45 and 46 West Street were quickly developed. Buildings are shown here on fire insurance maps of 1852 (Perris 1852, not reproduced here) and 1857 (Figure 10). A potash factory, later to become the B.T. Babbitt Soap Factory, had appeared on the block, and number 46 may have been part of this industrial complex, as it is listed as hazardous on the 1857 map. The soap works had all but surrounded the buildings at numbers 45 and 46 by 1885 (Figures 12 and 13). The 1894 Sanborn (Figure 14) indicates a brick 4-story building at number 45 with both a store and dwelling, and a brick or stone 5-story building at number 46, with an elevator in the southwest corner, used as a warehouse (possibly for the soap factory). Based on their footprints, which match those shown on the 1852 through 1857 fire insurance maps, these are the original structures. The 1905 Sanborn Map provides additional details: the one at number 46 had a basement, and had definitely been incorporated into the Babbitt Soap Works factory (used for “storage”).

Between 1911, when the soap factory was gone (Bromley 1911), and 1913, the structure at number 46 was replaced or substantially remodeled – from 1913 on it was labeled on maps as a 3-story building (Sanborn Map Company 1913). Buildings adjacent to the south of and behind numbers 45 and 46 had been torn down by 1915 (see Figure 17 – new buildings went up in 1929 at number 44 and on the lots behind 45 and 46, but the other cleared lots would remain empty). The 1923 Sanborn map indicates that the buildings at both 45 and 46 had basements (Sanborn Map Company 1923). Number 45 housed the Bowling Green Neighborhood Association in that year, while number 46 was commercial, containing dry paints. A photograph from 1925 shows the rear of number 45 with the cleared lots behind and to the south, and suggests this building did indeed have a basement level (Figure 18). The West Street facades of the two buildings are shown in 1927 and 1937 photographs reproduced in Figure 22. The two buildings were demolished, along with the new building that had been built at number 44, when the Brooklyn Battery Tunnel was constructed in the 1940s (Figure 23). After the tunnel opened in 1950, Crystal Street, later renamed Joseph P. Ward Street, would be opened in the block between Washington and West Streets where the buildings once stood.
West end of the proposed bridge:

As noted above, by 1873 the Pennsylvania Railroad had constructed a pier complex comprising Piers 4 and 5 and a large connecting pier shed along West Street. This pier shed was situated between the west side of West Street and the 1871 bulkhead line. It may have consisted of several adjoining structures: the 1879 Taylor view shows a total of 5 adjoining buildings with fronts on West Street (Figure 12). The large central building had 2 identical bays (with a sawtooth roof line), and the flanking buildings to the north and south were not-quite mirror images of each other. Some artistic license may have been taken in rendering the facades, as all of the earlier and later maps showing the pier shed indicate it was a single structure with a wider footprint, but the arrangement of bays roughly agrees with later detailed fire maps. The Taylor view depicts the south facade of the structure, showing that it was on pilings – the entire pier shed was doubtless built similarly to the covered piers extending into the river. Some details on the building’s superstructure are available from maps of 1893 (Robinson 1893), 1894 (reproduced here in Figure 15), and 1905 (Sanborn Map Company 1905). It had a wide central bay flanked by two bays each on the north and south, was clad with corrugated iron, and had plank flooring. The roof, which was labeled as gravel in 1894 and as composition (asphalt shingle) and frame truss in 1905, had numerous skylights. In one year, 1893, the Pennsylvania Railroad was leasing the northernmost bay of the pier shed to the Baltimore & Ohio Railroad Continental Line (Robinson 1893). As shown on the 1924 aerial photograph (Figure 19), the building still had six bays. It fronted the original, narrow West Street, and its northern side was now abutting Marginal Street, which had been filled in before 1905.

As noted above, the Pennsylvania Railroad pier shed was demolished in 1928 and replaced by paved fill (Marginal Street) and a narrower concrete pier shed between the street and the bulkhead (Figures 20 and 21). This shed and Pier 3 were leased by the United Fruit Company circa 1939. The structures were demolished circa 1973 for construction of the massive landfill of Battery Park City.

**Sensitivity — buildings and associated deposits:** The buildings erected on Block 17, Lots 16 and 17 (numbers 45 and 46 West Street) in the late 1840s may have had back yard infrastructure, but the footprint of the proposed pedestrian bridge is at the front portion of the lots, beneath the buildings. The building at number 46, used for commercial/industrial purposes from the 1850s, and the one at number 45, which was used as a residence as well as a storefront, both had basements. The building at 46 was substantially altered or replaced circa 1912. *There is little or no potential for deposits associated with pre-development use of the filled lots, or with the 19th-century occupants of the buildings, within the east end of the project area.* At the west end of the proposed pedestrian bridge, the 1873 Pennsylvania Railroad pier shed was constructed on pilings and stood on the east side of the 1871 bulkhead line. Its footprint was filled in following demolition in 1928. A narrow, concrete pier shed along the west side of Marginal Street was constructed as part of the new Pier 3 complex in 1929. The current project’s west end footprint is within the interior of this later shed. There is little or no potential for significant remains of the 1973 pier shed within the relatively shallow foundation footprint of the proposed bridge. *The deeper Area of Potential Effect for the micropilings proposed for the pedestrian bridge is sensitive for remains of the 1873 Pennsylvania Railroad pier shed, specifically pilings.*
2.E. Prior Disturbance

Mid-19th-century construction at the east end of the proposed bridge would have disturbed the 1840s landfill to approximately 8 feet below the surface. The buildings that stood on the front part of Block 17, Lots 16 and 17 were demolished in the 1940s for construction of the Brooklyn-Battery Tunnel.

Prior disturbances to remnants of the original (1873) Pennsylvania Railroad Pier Shed include its demolition in 1928, with subsequent filling and construction of the bulkhead, Pier 3, a new concrete pier shed, and a section of Marginal Street. The 1929 pier shed was demolished for construction of the Battery Park City landfill in the early 1970s. The reconstruction of Route 9A in the late 1990s and the reconstruction following 9-11 involved various further disturbances for installation and subsequent removal of catch basins, utilities and landscape features, including most recently the concrete dog run and redesigned landscaping adjacent to the west end of the proposed bridge (Figures 24 through 28).

Prior disturbances to the deeper landfill are from installation of utilities and construction of the depressed ramp to the Battery Tunnel, which curves beneath West Street across the project area (see Figures 3 and 25). The deepest of the utilities is a 78" Interceptor Sewer, which runs under West Street at a depth of 19' and is built on pilings extending to bedrock. It is paralleled by 48", 20", and 12" water lines. A number of branching water lines are located at the intersection of West Thames and Joseph P. Ward Streets. Catch basins that were located near the west end of the proposed bridge were removed as part of the Route 9A Reconstruction Project. Gas and electric lines are also present below grade, though at shallower depths. Despite these deep disturbances, undisturbed portions of the landfill remain within the project Area of Potential Effect.
3. CONCLUSIONS AND RECOMMENDATIONS

It is the conclusion of this Archaeological Documentary Study that the proposed West Thames Street Pedestrian Bridge will potentially impact one archaeological resource that has been determined to meet eligibility criteria for inclusion in the National Register of Historic Places and is a potential New York City Landmark, the Hudson River Bulkhead. It is further concluded that the project may impact as-yet unknown resources, such as old piers, cribbing, bulkheads, and other objects contained in landfill dating to the 1840s and later.

These archaeological resources are subject to potential project effects from the installation of the support micro-pilings for the pedestrian bridge (see Appendix B). A 1929 section of the Hudson River Bulkhead lies to the west of the west end of the bridge, and may be penetrated by micropilings drilled at angles. Historic landfill and landfill retaining structures may lie deeply buried beneath the east, central, and west supports of the bridge. The micro-pilings will extend deeper into the landfill than any prior disturbances except for the pilings for the 78” Intercepting Sewer. Construction of the foundations at the east and west ends and central support for the proposed bridge is not likely to impact significant historic resources due to prior disturbance.

The use of micro-pilings was adopted so as to minimize potential impacts to potentially historically sensitive subsurface remains. The nature of the anticipated impacts—drilling for the 10-inch diameter micropilings—rules out conventional archaeological testing or monitoring.

Because the proposed project is federally funded, an Environmental Review submission was made to the New York State Office of Parks, Recreation, and Historic Preservation (OPRHP) for State Historic Preservation Officer comments. The response is included below in Appendix A. Due to the infeasibility of conducting archaeological testing of the APE for the micropilings, educational outreach was suggested as a means of mitigating any possible Adverse Effects from the undertaking.

It is recommended, as per the suggestion of the OPRHP, that signs be created for installation on or adjacent to the bridge, that will explain the process of landfilling along the Hudson River in this part of Manhattan. The signs should be designed with text and graphic content geared to the general public, drawing on the information produced for recent projects nearby and the current project.
Figure 1. Project Location, U.S.G.S. Jersey City, NJ Quadrangle. Arrow points to location of proposed West Thames Pedestrian Bridge
Figure 2. Project locations with 400-foot radius around proposed new construction.
2005 Certified Sanborn Map

This Certified Sanborn Map combines the following sheets. Outlined areas indicate map sheets within the collection.

Volume 15, Sheet 60
Volume 15, Sheet 90
Volume 15, Sheet 9
Volume 15, Sheet 3

Figure 3. Project Location, 2005 Sanborn Map.
Figure 6. Detail from map of New York published by David Longworth in 1817 (Stout 1817). Project area circled.
Figure 5. National Register Listed and Eligible Resources.
Figure 7. Detail from map of New York in 1844 (Tanner 1844). Arrow points to project site.
Figure 8. Detail from map of New York in 1846 (Burr 1846). Arrow points to project site.
Figure 9. Detail from Map of Wharves and Piers on North River... (Smith 1850). Portion of survey showing Old Piers 4, 5, 6 and 7. Depths below the high water mark are shown for water (==) and mud (#). The project area (circled) is partially in the water, just south of Pier 6. The water here was 12-14 feet deep, and the mud extended to 25-27 feet.
Figure 10. Detail from Perris Map of 1857 showing Block 17 between West and Washington Streets (Perris 1857). The project alignment is shown with dashed white line.
Figure 11. 1873 New York City Department of Docks Map Showing the High and Low Water Mark and the Original City Grants Under Water… (Keiller 1873). The Pennsylvania Railroad pier complex included Piers 4 and 5 and a large pier shed extending from West Street to the 1871 bulkhead line (just west of the word “West”). The property at the east end of the proposed bridge was granted to Duncan Campbell & Herman LeRoy, executors of William Edgar, in 1839.
Figure 12. Detail from the Will L. Taylor bird’s-eye view of New York in 1879. The six adjoining buildings at the head of the Pennsylvania Railroad piers (Piers 4 and 5) were on pilings, occupying space between West Street and the new (1871) bulkhead line. The project area is shown with dashed white line.
Figure 13. 1885 insurance map showing the east side of West Street (Robinson and Pidgeon 1885). Project alignment shown with dashed white line.

Figure 14. 1894 Sanborn Map showing the east side of West Street. The smaller buildings at numbers 45 and 46 were subsumed within the Babbitt Soap Factory & Warehouse. Immediately adjacent at 47-49 West Street was an 8-story structure that was built 1882-1885 and later would become known as the “Crystal Building,” which remained standing until 2008. The east end of project area is circled.
Figure 15. Sanborn Map Company map of piers in 1894. The large Pennsylvania Railroad Co. pier warehouse had corrugated iron sides, a gravel roof, and numerous skylights.
Figure 16. Sanborn Map of 1905 showing the central part of Block 17, between West Street (left) and Washington Street (right). Number 46 West Street was shown as a 5-story building with a basement.
Figure 17. G.W. Bromley Atlas of 1916. The project alignment is shown with a dashed white line.
Figure 18. 1925 photograph of the rear of number 45 West Street. Source: New York Public Library, "45 West Street..."
Figure 19. 1924 view of project area. The 6-bay dark-roofed structure at center is the Pennsylvania Railroad pier shed. The arrow points to number 45 West Street. Note the empty lots. Source: Aerial Photography of New York City.
Figure 20. 1929 view of fill at Pennsylvania Railroad pier complex, demolished in 1928. For orientation, the arrow points to 46 West Street. Source: New York Public Library, “West Street, north across Morris Street.”
Figure 21. 1930 photograph showing the newly-completed Pier 3 and pier shed along Marginal Street (Fairchild Aerial Surveys 1930). Dashed white line shows project location.
Figure 22. Two views of 45 and 46 West Street in 1927 (left) and 1937 (right). Note wide cobbled width of West Street in the photograph at right. The proposed pedestrian bridge will be mainly within the footprint of #46. The elevator will be within the former front west corner of #45. Source: New York Public Library, "45-46 West Street..." and "The Same at a later date."
Figure 23.  Sanborn Map of 1950.  Project Location shown with dashed red line.
Figure 24. Soil boring and subsurface information, profile across the project area (west to east) (New York State Department of Transportation 2004). The rendering of the bulkhead is as depicted in Raber 1997.
Figure 26. Underdrain plan for Route 9A in project area, 2004. Project alignment shown with dashed line. Note removal of catch basins 152 and 153 at west end of proposed alignment. Route 9A Reconstruction Project Record Plans (New York State Department of Transportaion 2004).
Figure 27. Composite Utility Plan. Project alignment shown with dashed line. Route 9A Reconstruction Project (New York State Department of Transportation 2009).
Figure 28. Existing topography and utilities in project area. Project alignment shown with dashed line (The RBA Group, 2013).
Plate 1. View to west between garage wall and 50 West Street construction site.

Plate 2. View to northwest at corner of Joseph P. Ward St. and West St.
Plate 3. View to northeast at corner of Joseph P. Ward St. and West St. Fence is for construction site at 50 West Street.

Plate 4. View to north from southeast corner of Joseph P. Ward St. up West St.
Plate 5. View to west across West St.

Plate 6. View to southeast from West St. median.
Plate 7. View to south along esplanade on west side of West St.

Plate 8. View to south along esplanade on west side of West St. showing dog run.
Plate 9. View of landscaped island within esplanade with utilities.

Plate 10. View to east from center of West Thames St.
REFERENCES

45 West Street, east side, between Morris and Recto Streets, showing the rear of the building

45-46 West Street, east side, between Morris and Rector Streets

Aerial Photography of New York City

AKRF, Inc.

Allee King Rosen & Fleming and Hartgen Archaeological Associates
1994 Route 9A Reconstruction Project Final Environmental Impact Statement, Appendix C: Cultural Resources.

Bromley, George W. and Walter S.

Burr, D.H.

Dallal, Diane (AKRF), Meta Janowitz (URS), and Linda Stone

Ewen, Daniel

Fairchild Aerial Surveys

Geismar, Joan H.
1987 Stage 1A Archaeological Evaluation of the Exchange Project Site, 10 Battery Place, New York City. Prepared for EEA, Inc.

G.W. Bromley & Co.
Hartgen Archaeological Associates and Historical Perspectives


Historical Perspectives, Inc.
2003   Phase 1A Archaeological Assessment: World Trade Center Memorial and Redevelopment Project, Southern Site… Prepared for AKRF, Inc.


Historic Conservation and Interpretation, Inc.

Hoag, Sidney W.

Keiller, David T.
1873   Map Showing the High and Low Water Mark and the Original City Grants of Lands Under Water Made to Various Parties from 1686 to 1873, Extending from Battery to Fifty-first Street, Hudson and East Rivers, New York City, also the Several Pier and Bulkhead Lines Established from 1750 to 1873. New York Department of Docks, New York.

Lenardi, Michael J. (New York State Museum)
2011   Cultural Resource Survey Report, Archaeological Monitoring, Treatment, and Data Recovery for New York City Hudson River Bulkhead and World Trade Center Site, at Two Locations: Utility Trench at Southern End of West Thames Park and BIN 2-24549-0 Liberty Street Bridge… Prepared for New York State Department of Transportation and the Federal Highway Administration
Louis Berger & Associates, Inc.


The Louis Berger Group, Inc.


New York State Department of Transportation

2004 Reconstruction of Route 9A. Record Plans.


Parsons Brinckerhoff, Historical Perspectives, Inc., and The Louis Berger Group

Perris, William


Raber, Michael S.
1997 Building-Structure Inventory Form for New York City’s Hudson River Bulkhead from Battery Place to West 59th Street. On file, New York State Office of Parks, Recreation, and Historic Preservation.

The RBA Group, Inc.
2013 Topography and Utilities Map, West Thames Street Pedestrian Bridge (draft).

Robinson, E., and R.H. Pidgeon


Sanborn Map Company
Sanborn Map Company, New York.


Sanborn Map Company, New York.


Sanborn Map Company, New York.

Sanborn-Perris Map Company

Smith, Edwin
1850  Map of Wharves and Piers on North River from Battery Place to Hammond Street. McSpedon & Baker, New York.

Sopko, Joseph

Stout, James D.
1817  This Actual Map and Comparative Plans Showing 88 Years Growth of the City of New York. David Longworth, New York.

Tanner, Henry S.

Taylor, Will L.

The same (45-46 West Street), at a later date
1937  July 2\textsuperscript{nd}.  \url{http://digitalgallery.nypl.org/nypldigital/index.cfm}.

Vollmer Associates and Allee King Rosen & Flemming


West Street, north across Morris Street, showing a further view north

1929  July 3\textsuperscript{rd}.  \url{http://digitalgallery.nypl.org/nypldigital/index.cfm}. 
APPENDIX A

Review Letter from New York State Office of Parks, Recreation and Historic Preservation
April 16, 2013

Jean Howson  
Principal Archaeologist  
The RBA Group  
7 Campus Dr., Suite 300  
Parsippany, New Jersey 07054  
(via e-mail only)

Re:  
HUD  
West Thames Street Pedestrian Bridge  
Over West St.(Route 9A) (at Battery Tunnel Entrance),  
Manhattan, New York County  
13PR01251

Dear Ms. Howson:

Thank you for requesting the comments of the State Historic Preservation Office (SHPO). We have reviewed the project in accordance with Section 106 of the National Historic Preservation Act of 1966. These comments are those of the SHPO and relate only to Historic resources.

We have reviewed the submission and understand that the proposed project consists of two distinct project areas. The removal of the temporary pedestrian bridge at Rector Street is adjacent to National Register Listed New York Evening Post Building at 75 West Street and the National Register Eligible Barrett Building at 40 Rector Street/57-69 West Street. The bridge runs over the National Register Eligible Pier 7 Complex Site at West Thames Park. The proposed new pedestrian bridge is located adjacent to four historic resources including: National Register Eligible (NRE) Frasch Building at 56 West Street/33 Rector Street, the NRE Battery Garage at 56 Greenwich Street, the NRE Brooklyn Battery Tunnel, and the NRE Pier 7 Complex Site.

We note that that conceptual design of the proposed pedestrian bridge includes a stairway and elevator connection along Joseph P. Ward Street, a lenticular truss bridge with a single mid-span pier placed in the median of West Street, and an elevator and stairway or 200’ long ramp and a stairway running south from the bridge between Little West Street and the adjacent dog run.

Vibration, removal, and new construction effects will need to be addressed at the two projects site locations. As noted in the submission, potential effects of the bridge removal to the New York Evening Post Building were previously addressed in Stipulation 6 of the Amended Programmatic Agreement for the Route 9A project.
Based upon this review, it is the SHPO’s opinion that your project will have No Adverse Effect upon cultural resources in or eligible for inclusion in the National Registers of Historic Places provided that the following conditions are met:

1. Should Stipulation 6 of the Amended Programmatic Agreement for the Route 9A project not be utilized, a construction protection plan for all historic buildings within 90 feet of the proposed construction and removal activities is recommended. This plan should be created in accordance with the requirements stipulated in the New York City Department of Buildings, “Technical Policy Procedure Notice #10/88”.

2. Archeological Resources: After reviewing the submitted information and considering experience gained from nearby projects, it does appear that the deeper pilings required by the proposed project may have the ability to affect deeply buried structural archeological features related to the early landfilling and development of Manhattan. Recent work associated with the reconstruction of the World Trade Center and surrounding areas has sampled similar structures and is providing a better overall understanding of this process. Although it is possible that the current project will have an Adverse Effect on similar structures, the nature of the proposed work does not make it feasible to conduct proper archeological examination of whatever resources may be within the APE. Therefore, we suggest that rather than attempting to identify if similar resources are present, it would be more feasible to consider developing and educational opportunity which would help explain this process to the public. A project such as compiling the information produced recently at adjacent projects, and using it to develop educational signage that could be displayed on the bridge would serve to mitigate any Adverse Effects that the piles may have on buried structures, as well as serving as a way to better educate the public about the historic processes which formed this area of Manhattan as it is known today. Please contact Douglas Mackey at (518) 237-8643 x 3291 should you have any questions.

3. Proposed bridge drawings shall be submitted to our office for review and comment at the pre-final stages of development. Drawings shall include the street elevation.

4. If there are substantive changes to the project or these conditions cannot be met, consultation with our office should resume.

If further correspondence is required regarding this project, I can be reached at (518) 237-8643, ext. 3260 or at eric.kuchar@parks.ny.gov. Please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

[Signature]

Eric N. Kuchar
Weatherization Specialist
APPENDIX B

Excerpts from Schematic Design Report
APPENDIX 10

PROJECT ENVIRONMENTAL PERFORMANCE COMMITMENTS
EXHIBIT A-9

LOWER MANHATTAN ENVIRONMENTAL PERFORMANCE COMMITMENTS

In addition to measures required by applicable environmental laws and regulations, these environmental performance commitments are required on construction projects funded by the Lower Manhattan Development Corporation through its Community Development Block Grant from the United States Department of Housing and Urban Development. Additional environment-specific measures may be included as part of the project's governmental entities coordination plan, construction environmental protection plan, design documents and contracts.

Air Quality:

<table>
<thead>
<tr>
<th>Commitments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use ultra low sulfur diesel fuel in off-road construction equipment with engine horsepower (HP) rating of 60 HP and above.</td>
</tr>
<tr>
<td>Where practicable, use diesel engine retrofit technology in off-road equipment to further reduce emissions. Such technology may include diesel oxidation catalyst / diesel particulate filters, engine upgrades, engine replacements, or combinations of these strategies.</td>
</tr>
<tr>
<td>Limit unnecessary idling times on diesel powered engines to 3 minutes.</td>
</tr>
<tr>
<td>Locate diesel powered exhausts away from fresh air intakes.</td>
</tr>
<tr>
<td>Control dust related to construction site through a soil erosion sediment control plan that includes, among other things:</td>
</tr>
<tr>
<td>a. spraying of a suppressing agent on dust pile (non-hazardous, biodegradable);</td>
</tr>
<tr>
<td>b. containment of fugitive dust; and</td>
</tr>
<tr>
<td>c. adjustment for meteorological conditions as appropriate.</td>
</tr>
</tbody>
</table>

Noise and Vibration:

<table>
<thead>
<tr>
<th>Commitments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Where practicable, schedule individual project construction activities to avoid or minimize adverse impacts.</td>
</tr>
<tr>
<td>Coordinate construction activities with projects under construction in adjacent and nearby locations to avoid or minimize impacts.</td>
</tr>
<tr>
<td>Consider condition of surrounding buildings, structures, infrastructure, and utilities as appropriate.</td>
</tr>
<tr>
<td>Prepare contingency measures in the event established limits are exceeded.</td>
</tr>
</tbody>
</table>

Cultural and Historic Resources:

<table>
<thead>
<tr>
<th>Commitments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish coordination among projects to avoid or minimize interruption in access to cultural and historic sites.</td>
</tr>
<tr>
<td>Initiate public information and involvement outreach with sensitivity to local cultural resources.</td>
</tr>
<tr>
<td>Receive and provide current information to public about access during construction.</td>
</tr>
</tbody>
</table>
Monitor noise and vibration during construction as appropriate at any culturally significant sites identified by New York State Office of Historic Preservation and New York City Landmarks Preservation Commission.

### Access and Circulation:

<table>
<thead>
<tr>
<th>Commitments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Establish a project-specific pedestrian and vehicular maintenance and protection plan.</strong></td>
</tr>
<tr>
<td><strong>Promote public awareness through mechanisms such as:</strong></td>
</tr>
<tr>
<td>a. signage;</td>
</tr>
<tr>
<td>b. telephone hotline; and</td>
</tr>
<tr>
<td>c. web site updates.</td>
</tr>
<tr>
<td><strong>Ensure sufficient alternate street, building, and station access during construction period.</strong></td>
</tr>
<tr>
<td><strong>Coordination construction efforts by and among appropriate agencies of the City of New York.</strong></td>
</tr>
</tbody>
</table>

### Economic Effects:

<table>
<thead>
<tr>
<th>Commitments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Undertake coordination and communication efforts to minimize residential and retail impacts.</strong></td>
</tr>
<tr>
<td><strong>Add appropriate signage for affected businesses and amenities.</strong></td>
</tr>
</tbody>
</table>

### Conservation:

<table>
<thead>
<tr>
<th>Commitments</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conserve water and other materials and resources as appropriate and practicable.</strong></td>
</tr>
<tr>
<td><strong>Incorporate environment-friendly operations and maintenance as appropriate and practicable.</strong></td>
</tr>
<tr>
<td><strong>Manage and recycle waste as appropriate and practicable.</strong></td>
</tr>
</tbody>
</table>
APPENDIX 11

ROUTE 9A PROGRAMMATIC AGREEMENT, OCTOBER 13, 2004
AMENDMENT
AMENDMENT TO THE PROGRAMMATIC AGREEMENT
AMONG THE
FEDERAL HIGHWAY ADMINISTRATION
THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION
THE NEW YORK STATE HISTORIC PRESERVATION OFFICE
AND THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING THE ROUTE 9A PROJECT
NEW YORK CITY, NEW YORK

WHEREAS, a Programmatic Agreement for the Reconstruction of Route 9A (Attachment A), executed in 1994 by the Federal Highway Administration (FHWA), New York State Historic Preservation Officer (SHPO), and Advisory Council for Historic Preservation (ACHIP), with concurrence by the New York State Department of Transportation (NYSDOT), established procedures for implementation pursuant to Sections 106 and 110(f) of the National Historic Preservation Act (16 USC 470f); and

WHEREAS, the reconstruction of Route 9A (Battery Place to 59th Street) implemented pursuant to the 1994 FEIS was nearly complete at the time of the September 11, 2001 terrorist attacks, however those attacks destroyed an approximately half-mile section of Route 9A in the vicinity of the World Trade Center (WTC); and

WHEREAS, the New York State Department of Transportation (NYSDOT), in coordination with the FHWA, currently proposes reconstruction of the half-mile section of Route 9A in the vicinity of the WTC and lying between Chambers and West Thames Streets that was destroyed or damaged by the attacks on September 11, 2001, and subsequent WTC site cleanup and/or recovery activities; and

WHEREAS, the FHWA, the Lower Manhattan Development Corporation (LMDC), and the Federal Transit Administration (FTA) coordinated the Section 106 determination of National Register eligibility for the WTC Site due to the proximity to the Site of their respective proposed undertakings; and

WHEREAS, the Area of Potential Effect (APE) for the proposed reconstruction of Route 9A has been modified since 1994 and includes, as shown in Figure C-1:

1. the right-of-way for the Route 9A roadway alignment between West Thames Street and Chambers Street; and

2. areas along intersecting streets east of Route 9A between West Thames Street and Chambers Street, including locations where construction may occur outside of the Route 9A right-of-way (e.g. foundations of potential pedestrian bridges); and

WHEREAS, historic properties within the modified APE include, as shown in Figure C-1:

1. the WTC Site, which was determined eligible for the National Register of Historic Places, and documented in the Coordinated Determination of National Register Eligibility for the WTC Site, dated March 31, 2004 (Attachment B); and

2. additional resources listed in or eligible for listing in the National Register of Historic Places, identified in Attachment C; and

3. the New York City Hudson River Bulkhead as a potential archaeological site.

WHEREAS, it is intended that the 1994 Programmatic Agreement be amended to address: 1) the potential effects of the proposed undertaking to the World Trade Center Site; 2) the identification of additional historic resources located within the Area of Potential Effect (APE); 3) inclusion of the treatment and documentation of the bulkhead; and 4) the increased role of consulting parties so as to fully consider the views of the consulting parties and ensure that FHWA/NYSDOT have the information needed to make a reasoned assessment of how the proposed undertaking affects historic properties; and
WHEREAS, the proposed undertaking is part of the overall restoration of the transportation system of Lower Manhattan, and is an independent undertaking from those undertakings mentioned above and proposed by LMDC and FTA for projects at or adjacent to the WTC site; and

WHEREAS, during the course of consultation to identify additional historic properties within the modified APE an expansive list of consulting parties (Attachment D) participated in the identification process and are hereby recognized under the terms of this agreement; and

WHEREAS, consulting parties under this agreement shall have all opportunities for review and comment stipulated for interested parties under the original 1994 agreement, and accorded to consulting parties under revised Section 106 regulations effective August 5, 2004; and

WHEREAS, in accordance with comprehensive efforts for redevelopment under the Coordinated Construction Act for Lower Manhattan (11700 and 11716-A), signed August 10, 2004, the development and implementation of mitigation measures will be coordinated with other agencies involved in the Lower Manhattan Redevelopment projects; and

NOW, THEREFORE, FHWA, NYSDOT, SHPO and ACHP agree that the proposed undertaking covered by this Agreement shall be administered in accordance with the terms of the 1994 Programmatic Agreement for the Reconstruction of Route 9A and the following stipulations to satisfy FHWA’s Section 106 responsibilities.

STIPULATIONS

FHWA, in coordination with NYSDOT, will ensure that the following stipulations are implemented as part of the subsequent planning, design and construction of the selected project alternative:

1. If FHWA proposes a finding of no adverse effect, it shall notify all consulting parties of the finding and provide them with the Analysis of Effect documentation. If within the 30-day review period the SHPO or any consulting party notifies FHWA in writing that it disagrees with the finding and specifies the reasons for disagreement, FHWA shall either consult with the party to resolve the disagreement, or request the Council to review the finding pursuant to 36 CFR 800.5(c)(2)(i) or (c)(2)(ii).

2. If the project is found to have an adverse effect, the FHWA shall so notify the SHPO and the consulting parties accompanied by documentation consistent with that required pursuant to 36 CFR 800.11(c) of the revised regulations. FHWA and NYSDOT shall consult further to develop monitoring and treatment plans and mitigation measures in coordination with the SHPO pursuant to Stipulation II of the 1994 Programmatic Agreement and taking into account the views presented by any consulting parties.

3. Monitoring, treatment and mitigation of the Hudson River Bulkhead:

(a) Archaeological monitoring will be conducted during construction in the location of the Hudson River Bulkhead in order to identify and document the condition, integrity, depth, and extent of any existing subsurface remains of the Hudson River Bulkhead. Monitoring will be conducted in accordance with a monitoring plan prepared by an archaeologist qualified under National Park Service standards (36 CFR 61). The monitoring plan shall include standard plans for treatment of any anticipated adverse effects to contributing features of the bulkhead. The monitoring plan will be developed and approved in accordance with Stipulation I.E.6 of the original agreement prior to implementation of any ground disturbing activity in the vicinity of the bulkhead.

(b) Consulting parties will be afforded a 30-day period to review and comment on the monitoring and treatment plan. The standard treatment plan will be implemented if the project is found to have an adverse effect on contributing features of the Hudson River bulkhead. Unless unanticipated effects to contributing features are discovered, implementation of the standard treatment plan shall conclude the
requirements for mitigation of effects to this resource. Unanticipated effects shall be addressed in accordance with 36 CFR 800.13(b)(3) of the revised regulations implementing Section 106.

4. Provisions of the 1994 Programmatic Agreement for the Reconstruction of Route 9A shall be implemented for all other historic properties within the revised APE.

5. In accordance with the revised regulations implementing Section 106 (36 CFR Part 800), consulting parties shall be entitled to share their views, receive and review pertinent documentation, offer ideas, and consider possible solutions together with the Federal agency and other consulting parties. Consulting parties will receive copies of the analysis of effects and proposed treatment plans for each of the additional historic properties identified within the modified APE. Consulting parties shall have 30 days following the receipt of any documentation in which to provide their comments to FHWA and NYSDOT. FHWA/NYSDOT will fully consider any comments from consulting parties submitted within the 30-day review period in finalizing determinations of effect and in developing and evaluating measures to minimize or mitigate adverse effects.

6. Impacts to historic buildings and structures, due to vibrations associated with construction operations, will be minimized through coordination of construction activities associated with other Lower Manhattan projects, the Department’s Standard Specifications, and Special Notes to be included in the Contract Documents.
   a. Special Notes to address potential vibration impacts will be developed in consultation with the SHPO. The SHPO will be afforded a 10-day period to review and comment on these Notes.
   b. Measures to avoid and minimize vibration impact will include:
      i. The examination of the conditions of structures and buildings by a NYS licensed Professional Engineer. These reviews will be conducted prior to the commencement of work, at locations and times during construction as determined by NYSDOT, and after the completion of work under this contract.
      ii. Vibration monitoring performed in accordance with the Special Note, titled: "Building Condition Survey and Vibration Criteria", in the Contract Documents.
   c. If it is determined that NYSDOT construction activities caused damage to "Adversely Effect" a historic building or structure, NYSDOT, after consultation with the SHPO and the property owner as noted in Stipulation #2, will repair that damage that is reasonably attributable to the project activities.
Route 9A - AMENDMENT TO THE PROGRAMMATIC AGREEMENT

Execution and implementation of this amendment to the original agreement evidence that FHWA has satisfied its Section 106 responsibilities for the Route 9A project.

ADVISORY COUNCIL ON HISTORIC PRESERVATION

By: _______________ Date: _______________

John M. Fowler, Director
Route 9A - AMENDMENT TO THE PROGRAMMATIC AGREEMENT

Execution and implementation of this amendment to the original agreement evidence that FHWA has satisfied its Section 106 responsibilities for the Route 9A project.

NEW YORK STATE HISTORIC PRESERVATION OFFICER

By: ___________________________ Date: 10/21/04

Bernadette Castro, Commissioner
Execution and implementation of this amendment to the original agreement evidence that FHWA has satisfied its Section 106 responsibilities for the Route 9A project.

NEW YORK STATE DEPARTMENT OF TRANSPORTATION

By: [signature]  Date: 10.8.04

Richard Schmalz, Rte. 9A - Project Director
Route 9A - AMENDMENT TO THE PROGRAMMATIC AGREEMENT

Execution and implementation of this amendment to the original agreement evidence that FHWA has satisfied its Section 106 responsibilities for the Route 9A project.

FEDERAL HIGHWAY ADMINISTRATION

By: __________________________ Date: __10-12-04__

Robert Arnold, Division Administrator
LIST OF PREPARERS

New York City Economic Development Corporation (NYCEDC)

Odit Oliner, Assistant Vice President, Capital Program

Lower Manhattan Development Corporation (LMDC)

David Emil, President
Goldie Weixel, Assistant General Counsel

Battery Park City Authority (BPCA)

Shari C. Hyman, President and Chief Operating Officer
Alix S. Pustilnik, General Counsel

Environmental Consultant- The RBA Group

Linda Reardon, PE- Principal-in-Charge
Patrick McHugh, Supervising Environmental Specialist


Qi Ye, PE- Principal
Courtney Clark, Associate

Environmental Consultant to LMDC- AKRF, Inc.

Anne M. Locke, Principal-in-Charge
Charles Fields, Senior Technical Director

Legal Counsel to LMDC- Carter Ledyard & Milburn LLP

Stephen L. Kass, Esq.
Judith Wallace, Esq.