

A. INTRODUCTION

This chapter identifies historic and cultural resources (including archaeological and architectural resources) in the Area of Potential Effect (APE) for the proposed project, probable effects on such resources, avoidance and minimization of harm to such resources, and coordination with appropriate agencies and stakeholders. The proposed project’s potential effects on historic and cultural resources due to both construction and operation are considered in this chapter. Construction effects are also discussed in Chapter 6.3, “Construction—Historic and Cultural Resources.”

The proposed project has two APEs: a Primary APE, in which construction and operation of the proposed project may directly or indirectly affect historic properties; and a more expansive, Secondary APE, in which the absence of the proposed project could result in direct effects to historic properties from future flood events. To facilitate the analysis of effects, the Primary APE has been subdivided to indicate the area in which the proposed project could cause potential direct construction-related effects (within 90 feet) and the area in which the proposed project could cause indirect visual or contextual effects (within 400 feet). Further, the APE for archaeological resources is limited to the portion of the project area from Montgomery Street to Rivington Street, the portion of the project area along East 23rd Street to East 25th Street, and the locations of the upland drainage management improvements.

The analysis in this Environmental Impact Statement (EIS) was prepared in accordance with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as implemented by federal regulations appearing in 36 CFR § 800, in consultation with the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), acting in its capacity as the New York State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation (ACHP), and the New York City Landmarks Preservation Commission (LPC). Comment letters from SHPO, LPC, the Delaware Nation, the Delaware Tribe of Indians, and the Stockbridge-Munsee Community Band of Mohicans are included in **Appendix E**.

B. PRINCIPAL CONCLUSIONS

ARCHAEOLOGICAL RESOURCES

Two Phase 1A Archaeological Documentary Studies were prepared for the APE in March 2016, and a Supplemental Phase IA Archaeological Documentary Study was prepared in March 2019. The March 2016 reports identified the following broad categories of historic-period archaeological resources that could be located in the APE—river bottom remains, landfill retaining structures and landfill deposits, historic streetbed resources, and former city block resources. Because of the potential presence of these resources, as mitigation, additional archaeological investigation will be performed in accordance with Section 106 regulations, based on a scope of work reviewed and approved by LPC and SHPO; this archaeological

investigation would include pre-construction testing and/or monitoring during project construction performed in accordance with the Secretary of the Interior's *Standards and Guidelines for Archaeology*, ACHP's *Section 106 Archaeological Guidance*, and the New York Archaeological Council's *Standards for Cultural Resource Investigations and Curation of Archaeological Collections*. The scope of work for additional archaeology would include: a sampling strategy that will select specific areas of the APE to be further investigated; identification of those areas that are believed to be most sensitive for recovering landfill retaining structures across the overall APE; a description of the basis for the proposed sampling design, including a tabulation of the various archaeological contexts within the APE and a quantification of the sample fraction for each context; and an unanticipated discoveries protocol. If significant archaeological resources are identified during testing and/or monitoring, further archaeology and/or mitigation would be completed in accordance with Section 106 regulations and the guidelines in the 2014 *City Environmental Quality Review (CEQR) Technical Manual*. In written communications dated April and May 2016, representatives of the Delaware Nation, Delaware Tribe of Indians, and Stockbridge-Munsee Community Band of Mohicans requested, in the case of an unanticipated discovery of an archaeological site or artifacts, that work be halted until the tribe is notified and the artifact can be evaluated by an archaeologist. The additional archaeological investigation will be stipulated in a Programmatic Agreement (PA) that is being prepared and will be included in the Final EIS (FEIS). It is expected that the PA will be executed among the U.S. Department of Housing and Urban Development (HUD), the New York City Office of Management and Budget (OMB), NYC Parks, SHPO, the Delaware Nation, the Delaware Tribe of Indians, the Shinnecock Nation, the Stockbridge-Munsee Community Band of Mohicans, and ACHP.

ARCHITECTURAL RESOURCES

There are 17 architectural resources within the Primary APE. In addition, there are 42 known architectural resources located within the Secondary APE beyond the boundaries of the project area.

NO ACTION ALTERNATIVE (ALTERNATIVE 1)

Non-Storm Conditions

One planned New York City Department of Parks and Recreation (NYC Parks) project within Project Area One could affect architectural resources that have been determined eligible for listing on the State and National Registers of Historic Places (S/NR)—construction of an exterior entrance ramp to the former Marine Engine Co. 66 Fireboat House (#4). This architectural resource would be offered some protection from accidental damage through Building Code Section BC 3309: Protection of Adjoining Property.

In addition, three projects within the 400-foot portion of the Primary APE could affect architectural resources in the No Action Alternative—reconstruction of the Baruch Playground within the Bernard Baruch Houses (#9, S/NR-eligible), resiliency measures at the Baruch Houses (#9, S/NR-eligible), and rehabilitation work at the Asser Levy Public Baths (#12, NYCL, S/NR).

Storm Conditions

In the absence of a comprehensive flood protection system, architectural resources located within the APEs would remain at risk to flooding, with the exception of the Bernard Baruch and

Jacob Riis Houses, which would be protected by resiliency measures being implemented by the New York City Housing Authority (NYCHA).

PREFERRED ALTERNATIVE (ALTERNATIVE 4): FLOOD PROTECTION SYSTEM WITH A RAISED EAST RIVER PARK

Non-Storm Conditions

The Preferred Alternative would directly affect the FDR Drive (#1, S/NR-eligible) through the installation of closure structures. As will be stipulated in the PA, construction affecting the FDR Drive would be coordinated with NYCDOT to ensure that it is protected during construction of the Preferred Alternative.

Construction of the Preferred Alternative would occur within 90 feet of the Asser Levy Public Baths (#12, S/NR, NYCL) and a small portion of the Jacob Riis Houses (#15, S/NR-eligible). In addition, construction of the drainage management components would occur within 90 feet of the following architectural resources: the FDR Drive (#1, S/NR-eligible); Williamsburg Bridge (#2, S/NR-eligible); Engine Co. 66 Fireboat House (#4, S/NR-eligible); Gouverneur Hospital (#5, S/NR); Gouverneur Hospital Dispensary (#6, S/NR-eligible); a portion of the Vladeck Houses within the Lower East Side Historic District (#7, S/NR); a portion of the Baruch Houses (#9, S/NR-eligible); a portion of the Jacob Riis Houses (#15, S/NR-eligible); a portion of Stuyvesant Town (#16, S/NR-eligible); and a portion of Peter Cooper Village (#17, S/NR-eligible). Therefore, as will be stipulated in the PA, the City, in consultation with LPC and SHPO, would develop and implement Construction Protection Plans (CPPs) for these architectural resources to avoid inadvertent construction-period damage from ground-borne vibrations, falling debris, collapse, dewatering, subsidence, or construction equipment.

It is not expected that the Preferred Alternative would result in any contextual effects on architectural resources. As will be stipulated in the PA, an effort would be made to design the floodwalls adjacent to the Asser Levy Public Baths (#12, S/NR, NYCL) so that they are compatible with the historic building, and the design would be coordinated with LPC.

Storm Conditions

In a future storm condition, the following two S/NR-eligible architectural resources could experience adverse direct effects from storm surge and flooding: the Williamsburg Bridge (#2) and East River Bulkhead (#3).

The portion of the FDR Drive (#1, S/NR-eligible) that runs through Project Area One would be located on the landward side of the flood protection system that would be constructed under the Preferred Alternative. It would, therefore, be protected from damage that could result from storm surge and flooding in a future storm condition. The portion of the FDR Drive (#1, S/NR-eligible) that runs through Project Area Two, however, would not be protected. Therefore, in a future storm condition, that portion of the FDR Drive could experience adverse direct effects from storm surge and flooding.

The architectural resources located within the 400-foot portion of the Primary APE and within the Secondary APE are landward of the flood protection system that would be constructed under the Preferred Alternative. Therefore, unlike with the No Action Alternative, they would be protected from damage that could result from storm surge and flooding in a future storm condition.

OTHER ALTERNATIVES

Effects to architectural resources in both the non-storm and storm conditions would be the same with the Flood Protection System on the West Side of East River Park – Baseline Alternative (Alternative 2) and the Flood Protection System on West Side of East River Park – Enhanced Park and Access Alternative (Alternative 3) and largely the same with the Flood Protection System East of FDR Drive Alternative (Alternative 5).

Unlike the Preferred Alternative and Alternatives 2 and 3, Alternative 5 would reconstruct the section of the FDR Drive (#1, S/NR-eligible) between approximately East 13th and East 18th Streets. However, it is not expected that this work would have adverse effects on the FDR Drive, as only an approximately 6-block section of the 9.44-mile-long FDR Drive would be reconstructed. Further, because the FDR Drive currently has elevated sections, raising the northbound lanes within a portion of Project Area Two would not affect the overall appearance of the highway, and it would still convey its historic significance. Also, the FDR Drive has been altered over time. Further, Alternative 5, unlike the Preferred Alternative and Alternatives 2 and 3, would protect the section of the FDR Drive between East 13th and East 18th Streets from storm surge and flooding.

MITIGATION

ARCHAEOLOGICAL RESOURCES

As will be stipulated in the PA, additional archaeological investigation prior to or during construction will be performed in accordance with Section 106 regulations. Such scope of work will be prepared in consultation with LPC and SHPO, and this further phase of archaeological work would include testing and/or monitoring conducted in consultation with LPC and SHPO and in accordance with the Secretary of the Interior’s *Standards and Guidelines for Archaeology*, ACHP’s *Section 106 Archaeological Guidance*, and the New York Archaeological Council’s *Standards for Cultural Resource Investigations and Curation of Archaeological Collections*. The testing and/or monitoring would not be done during the EIS process but would occur before and/or during project construction. The scope of work for additional archaeology would include: a sampling strategy that will select specific areas of the APE to be further investigated; identification of those areas that are believed to be most sensitive for recovering landfill retaining structures across the overall APE; a description of the basis for the proposed sampling design, including a tabulation of the various archaeological contexts within the APE and a quantification of the sample fraction for each context; and an unanticipated discoveries protocol. If significant archaeological resources are identified during testing and/or monitoring, further archaeology and/or mitigation would be completed as per the *CEQR Technical Manual*.

ARCHITECTURAL RESOURCES

The City, in consultation with LPC and SHPO, would develop and implement CPPs for the following architectural resources, or portions of multi-building resources, located within 90 feet of project construction: the FDR Drive (#1, S/NR-eligible); Gouverneur Hospital (#5, S/NR); Gouverneur Hospital Dispensary (#6, S/NR-eligible); a portion of the Vladeck Houses within the Lower East Side Historic District (#7, S/NR); a portion of the Baruch Houses (#9, S/NR-eligible); the Asser Levy Public Baths (#12, S/NR, NYCL); a portion of the Jacob Riis Houses (#15, S/NR-eligible); a portion of Stuyvesant Town (#16, S/NR-eligible); and a portion of Peter Cooper Village (#17, S/NR-eligible) to avoid inadvertent construction-period damage to these

architectural resources. The development and implementation of the CPPs will be stipulated in the PA. In addition, as will be stipulated in the PA, an effort would be made to design the floodwalls that would be located adjacent to the Asser Levy Public Baths (#12, NYCL, S/NR), so that they are compatible with the architectural resource, and the design of the floodwalls would be coordinated with LPC.

C. REGULATORY CONTEXT

The regulatory context for the proposed project includes the following federal and state laws under which each of the alternatives has been analyzed to result in a determination of environmental effects with project implementation.

NATIONAL HISTORIC PRESERVATION ACT (SECTION 106)

Section 106 mandates that federal agencies consider the effects of their actions on any properties listed on or determined eligible for listing on the National Register of Historic Places and afford the federal ACHP a reasonable opportunity to comment on such undertakings. The lead federal agency, in consultation with the SHPO and consulting parties, must determine whether a proposed project would have any adverse effects on historic properties within the area of potential effect. Section 106 requires consultation with the SHPO, federally recognized Indian tribes that might attach religious and cultural significance to historic properties affected by the project, and additional consulting parties with a demonstrated interest in the project based on a legal or economic relation to affected properties or on an interest in the project's effects on historic properties. In addition, ACHP may elect to participate in consultation, if certain criteria are met.

The review under Section 106 can be conducted in coordination with analyses conducted for the National Environmental Policy Act (NEPA). In addition, because the views of the public are essential to informed federal decision-making in the Section 106 process, the public should be informed about the project and its effects on historic properties and given the opportunity to comment. This public comment element can be combined with the public participation component required by NEPA. The public participation efforts being conducted for the proposed project are described in Chapter 3.0, "Process, Agency Coordination, and Public Involvement."

Section 101(d)(6)(B) of the NHPA requires the lead federal agency to consult with any Indian tribe that attaches religious and cultural significance to historic properties that may be affected by the undertaking. The lead federal agency shall ensure that consultation in the Section 106 process provides the Indian tribe a reasonable opportunity to identify its concerns about historic properties, advise on the identification and evaluation of properties, including those of traditional religious and cultural importance, articulate its views on the undertaking's effects on such properties, and participate in the resolution of adverse effects.

The basic steps of the Section 106 process are as follows:

- In consultation with the SHPO, the federal agency establishes an APE for the project, carries out appropriate steps to identify historic properties within the APE, and, in consultation with the SHPO, applies the National Register criteria for those properties that have not been previously evaluated for National Register eligibility. For properties of religious and cultural significance to participating Indian tribes, the federal agency also consults with the Tribal Historic Preservation Officer (THPO) or designated tribal representative to assess eligibility.

East Side Coastal Resiliency Project EIS

- If historic properties are identified, the federal agency, in consultation with the SHPO, applies the criteria of adverse effect (36 CFR § 800.5(a)(1) to identified historic properties within the APE, taking into consideration any views provided by consulting parties and the public. For properties of religious and cultural significance to tribal nations, the federal agency also consults with the THPO or designated tribal representative. In general, an adverse effect is found if the project may cause a change in the characteristics of the historic property that qualify it for inclusion in the National Register. The federal agency notifies the SHPO, ACHP, participating Indian tribes, and other consulting parties of its finding and provides supporting documentation meeting standards outlined in the regulations. The information is also made available to the public.
- If the assessment finds that the proposed project may have an adverse effect, consultation continues among the SHPO, ACHP, and other consulting parties to seek measures that would avoid, minimize, or mitigate adverse effects on historic properties. Members of the public are also provided an opportunity to articulate any views on resolving the project's adverse effects. This mitigation is typically implemented through an MOA or PA.
- Consultation typically results in an MOA or PA, outlining agreed-upon measures to avoid, minimize, or mitigate the project's effects on historic properties. Execution of the MOA or PA and implementation of its terms satisfy the requirements of Section 106, and the project proceeds under the terms of the MOA or PA. A PA for the proposed project is being prepared and will be included in the FEIS (see **Appendix E** for a draft outline of the PA stipulations). It is expected that the PA will be executed among HUD, OMB, NYC Parks, SHPO, the Delaware Nation, the Delaware Tribe of Indians, the Shinnecock Nation, and the Stockbridge-Munsee Community Band of Mohicans.

At the request of OMB, HUD¹ issued a notice in the Federal Register on November 17, 2015, advising the public of the preparation of an EIS and initiating the Section 106 process.

In addition to HUD, OMB (as NEPA lead agency), and SHPO, participants in Section 106 consultation for the proposed project include NYC Parks, acting as lead agency under the State Environmental Quality Review Act (SEQRA) and CEQR, LPC, and three federally recognized Indian tribes—the Delaware Nation, Delaware Tribe of Indians, and Stockbridge-Munsee Community Band of Mohicans. In March 2019, ACHP notified HUD of its decision to participate in Section 106 consultation for the proposed project, based on the Criteria for Council Involvement in Reviewing Individual Section 106 Cases (Appendix A to 36 CFR § 800).

As a result of Hurricane Sandy, in May 2013, a Programmatic Agreement was executed among the Federal Emergency Management Agency (FEMA), SHPO, the New York State Office of Emergency Management, the Delaware Nation, the Delaware Tribe of Indians, the Shinnecock Nation, the Stockbridge-Munsee Community Band of Mohicans, LPC, and ACHP (see **Appendix E**). This Programmatic Agreement ensures that federal disaster assistance programs in the State of New York are administered in accordance with certain stipulations to satisfy FEMA's Section 106 responsibilities. Other Federal agencies providing financial assistance for

¹ As described in Chapter 1.0, "Purpose and Need," the City of New York has entered into a grant agreement with HUD to disburse Community Development Block Grant-Disaster Recovery (CDBG-DR) Funds for the construction of the project. The City is the grantee of the CDBG-DR funds for Hurricane Sandy, which would be provided to OMB, and HUD has provided for assumption of its NEPA authority and NEPA lead agency responsibility to OMB for the purposes of administering the CDBG-DR Program in New York City.

the type of disaster assistance programs covered by the Agreement may, with the concurrence of ACHP, FEMA, and SHPO, satisfy their Section 106 responsibilities by accepting and complying with the terms of the Agreement. OMB has assumed HUD's environmental responsibilities as the Responsible Entity for New York City and has agreed to accept the terms and conditions of the Programmatic Agreement via Appendix D to the Programmatic Agreement and to take into account the effects of its undertakings and satisfy its Section 106 responsibilities for the Community Development Block Grant-Disaster Recovery (CDBG-DR) program for activities in New York City (see **Appendix E**).

NEW YORK STATE HISTORIC PRESERVATION ACT

The New York State Historic Preservation Act of 1980 (NYSHPA) closely resembles NHPA, and requires that state agencies consider the effect of their actions on properties listed on or determined eligible for listing on the State Register of Historic Places. When a project is being reviewed pursuant to Section 106 of the NHPA (and 36 CFR Part 800), the procedures of Section 14.09 of the NYSHPA do not apply, and any review and comment by SHPO must be within the framework of Section 106 procedures (NYSHPA § 14.09[2]). The proposed project is not reviewed separately under Section 14.09 of the NYSHPA.

NEW YORK CITY LANDMARKS LAW

The New York City Landmarks Law establishes LPC and gives it the authority to designate landmarks, interior landmarks, scenic landmarks, and historic districts, following the criteria provided in the Local Laws of the City of New York, New York City Charter, Administrative Code, Title 25, Chapter 3. Buildings, properties, or objects are eligible for landmark status when a part is at least 30 years old. Landmarks have a special character or special historical or aesthetic interest or value as part of the development, heritage, or cultural characteristics of the city, state, or nation.

The New York City Landmarks Law also gives LPC the authority to regulate any construction, reconstruction, alteration, or demolition of such landmarks and districts. Under the Landmarks Law, no new construction, alteration, reconstruction, or demolition can take place on privately owned properties that are landmarks, landmark sites, within designated New York City historic districts or pending designation as NYCLs until the LPC has issued a Certificate of No Effect on protected architectural features, Certificate of Appropriateness, or Permit of Minor Work. Publicly owned resources are also subject to review by LPC before the start of a project; however, LPC's role in projects sponsored by other city or state agencies generally is advisory only. Projects reviewed under CEQR that physically affect Landmarks or properties within New York City historic districts require mandatory review by LPC, in the case of private properties, and approval of LPC, in the case of certain City property.

D. METHODOLOGY

DEFINITION OF THE AREA OF POTENTIAL EFFECT

A required step in the Section 106 process is determining the APE, which is defined as “the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if such properties exist” (36 CFR § 800.16[d]). The APE is influenced by the scale and nature of an undertaking.

The APE for the proposed project has been developed in consultation with OMB, NYC Parks, and SHPO based on proposed work activities and their potential to affect historic properties, including potential direct and indirect effects caused by the construction and operation of the proposed project.

In general, adverse effects on architectural resources may include both direct physical effects—demolition, alteration, or damage from construction—and indirect effects, such as the introduction of visual, audible, or atmospheric elements that may alter the characteristics of the historic property that qualify it for inclusion in the National Register in a manner that would diminish the integrity of the property’s historic features. Archaeological resources are potentially affected by direct effects from construction activity resulting in disturbance to the ground surface (including submerged ground surfaces) such as excavation, grading, pile-driving, cutting and filling, dredging, and staging. The criteria for adverse effects, as defined by ACHP, are described in greater detail below.

The proposed project has two APEs: a Primary APE, in which construction and operation of the proposed project may directly or indirectly affect historic properties; and a more expansive, Secondary APE, in which the absence of the proposed project could result in direct effects to historic properties from future flood events. To facilitate the analysis of effects, the Primary APE has been subdivided to indicate the area in which the proposed project could cause potential direct construction-related effects (within 90 feet) and the area in which the proposed project could cause indirect visual or contextual effects (within 400 feet). The Secondary APE corresponds to the protected area described in Chapter 2.0, “Project Alternatives.” The APEs are depicted in **Figure 5.4-1**.

Direct effects may include physical damage or destruction of a resource or its setting. The portion of the Primary APE in which there is the potential for the proposed project to cause direct effects includes all locations that could potentially be subject to direct ground-disturbing activities and adjacent areas within 90 feet. Project activities are anticipated to include demolition, excavation, pile-driving, cutting and filling, and staging. As defined in the New York City Department of Buildings (DOB) *Technical Policy and Procedure Notice (TPPN) #10/88* and in conformance with New York City Building Code Chapter 3309.4.4, adjacent construction is defined as any construction activity that would occur within 90 feet of a historic resource.

Indirect effects may include the introduction of visual, audible, or atmospheric elements that alter the characteristics of a historic property that qualify it for inclusion in the National Register. To account for potential indirect effects, the Primary APE extends 400 feet from the project area, following the guidelines of the *CEQR Technical Manual*.

IDENTIFICATION OF HISTORIC PROPERTIES WITHIN THE APE

The methodology used for identifying historic properties in the APEs is described below. Historic properties identified in the APEs are described below.

ARCHAEOLOGICAL RESOURCES

Archaeological resources are physical remnants, usually buried, of past human activities on a site. They can include archaeological resources associated with Native American populations that used or occupied a site and can include stone tools or refuse from tool-making activities, remnants of habitation sites, and similar items. These resources are also referred to as

Source: NYC Landmarks Preservation Commission, NYS OPRHP

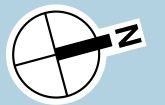


- Project Area One
- Project Area Two
- Primary (400-foot) APE
- Secondary APE

Known Historic and Cultural Resources

- East 10th Street Historic District (NYCL, S/NR-eligible)
- Lower East Side Historic District and Extension (S/NR)
- Stuyvesant Square Historic District (NYCL, S/NR)
- FDR Drive (S/NR)
- Individual Architectural Resources

0 1,000 FEET



“precontact,” since they were deposited before Native Americans’ contact with European settlers. Archaeological resources can also include remains from activities that occurred during the historic period, which began with the European colonization of the New York area in the 17th century; such resources can include remains associated with European contact with Native Americans, battle sites, landfill deposits, structural foundations, and domestic shaft features such as cisterns, wells, and privies.

On sites where later development occurred, archaeological resources may have been disturbed or destroyed by grading, excavation, and infrastructure installation and street improvements. However, some resources do survive in urban environments despite extensive development. Deposits can be protected when covered with pavement (i.e., a parking lot) or with a building with a shallow foundation and no basement. In both scenarios, archaeological deposits can be sealed beneath the ground surface, protected from further disturbance.

Archaeological Investigations typically proceed in a multi-phase process generally consisting of Phase I (determining the presence or absence of archaeological resources through documentary research and field testing), Phase II (gathering sufficient information to assess State and National Register eligibility), and Phase III (mitigating unavoidable effects through data recovery or other form of mitigation). The need for the next phase is dependent upon the results of the preceding phase.

On October 27, 2015, a report was submitted to LPC and SHPO that assessed whether any locations within the proposed project area could be eliminated from further in-depth archaeological study due to a lack of potential archaeological sensitivity.² That report determined that the APE for archaeological resources should be limited to the portion of the project area from Montgomery Street to Rivington Street and to the portion of the project area along East 23rd Street to East 25th Street. Further, the report concluded that no further archaeological consideration of the portion of the project area between Rivington Street and East 23rd Street was warranted, because that portion of the project area was under water through much of the 19th century. In addition, piers and wharves that were historically located in that portion of the project area dated to the late 19th and early 20th centuries when the construction of waterfront features had become standardized. The report also concluded that the project area had no sensitivity for precontact-period (i.e., Native American) archaeological resources. In a letter dated October 30, 2015, LPC concurred with the conclusions of the report. On December 10, 2015, SHPO concurred with the proposed definition of the APE for archaeological resources. Therefore, two Phase 1A Archaeological Documentary Studies were prepared in March 2016 for LPC and SHPO review, one for the portion of the APE between Montgomery and Rivington Streets and one for the portion of the APE from East 23rd to East 25th Street.

As part of the Phase 1A reports for the proposed project, research was conducted at the New York State Museum (NYSM) and SHPO to review previously identified archaeological sites located within one mile of the APE and previously completed cultural resource surveys for areas in or adjacent the APE. In addition, cartographic research and a site walkover survey by a Registered Professional Archaeologist were conducted to evaluate historic and modern land use factors that may have resulted in ground disturbance and affected potential archaeological resource preservation. The Phase 1A reports are summarized below.

² Historical Perspectives, Inc., *Refinement of Archaeological Area of Potential Effect, East Side Coastal Resiliency Project, Montgomery Street to East 25th Street, Manhattan, New York County, New York*. October 2015.

As requested by SHPO and LPC in letters dated January 7, 2019 and January 28, 2019, respectively, a Supplemental Phase 1A Archaeological Documentary Study was prepared in March 2019 that addresses project design refinements made subsequent to approval of the 2016 reports. Specifically, the Supplemental Phase 1A report addresses the upland drainage management improvements that lie outside of the original APE for archaeology and design refinements for the Preferred Alternative.

See **Appendix E** for SHPO and LPC correspondence.

ARCHITECTURAL RESOURCES

Once the APEs were determined, a list of officially recognized architectural resources within the APEs was compiled that includes National Historic Landmarks (NHL), S/NR-listed properties or properties determined eligible for such listing, New York City Landmarks (NYCLs) and Historic Districts, and properties that have been found by LPC to appear eligible for designation, considered for designation (“heard”) by LPC at a public hearing, or calendared for consideration at such a hearing (these are “pending” NYCLs).

Criteria for listing on the National Register are in the Code of Federal Regulations, Title 36, Part 63, and LPC has adopted these criteria for use in identifying architectural resources for CEQR review. Following these criteria, districts, sites, buildings, structures, and objects are eligible for the National Register if they possess integrity of location, design, setting, materials, workmanship, feeling, and association, and: (1) are associated with events that have made a significant contribution to the broad patterns of history (Criterion A); (2) are associated with significant people (Criterion B); (3) embody distinctive characteristics of a type, period, or method of construction, represent the work of a master, possess high artistic value, or that represent a significant and distinguishable entity whose components may lack individual distinction (Criterion C); or (4) may yield information important in prehistory or history. Properties that are younger than 50 years of age are ordinarily not eligible, unless they have achieved exceptional significance. Official determinations of eligibility are made by OPRHP/SHPO.

LPC designates historically significant properties in the City as NYCLs and/or Historic Districts, following the criteria provided in the Local Laws of the City of New York, New York City Charter, Administrative Code, Title 25, Chapter 3. Buildings, properties, or objects are eligible for landmark status when a part is at least 30 years old. Landmarks have a special character or special historical or aesthetic interest or value as part of the development, heritage, or cultural characteristics of the city, state, or nation. There are four types of landmarks: individual landmark, interior landmark, scenic landmark, and historic district.

An initial list of 13 potential historic resources—properties that appeared to meet the eligibility criteria for S/NR listing and/or NYCL designation—within the APEs was also compiled. These were identified based on field surveys of the APEs conducted by an architectural historian who met NPS Professional Qualification Standards for Architectural History, codified under 36 CFR § 61, and additional research. The inventory of 13 potential resources was submitted to SHPO and LPC for their evaluation and determination of eligibility. SHPO, in a letter dated April 25, 2016, found nine of the potential resources to be eligible for S/NR listing, while withholding determinations for three properties pending further evaluation. Additional consultation with SHPO was undertaken in the fall and winter of 2016. Of the nine potential architectural resources previously determined eligible, SHPO subsequently determined in December 2016 that four of the resources were in fact not eligible based on additional research and information.

Of the three previously undetermined properties, SHPO subsequently determined, in evaluations dated August 30, 2016 and December 6, 2016, that two of them meet the eligibility criteria for S/NR listing. Further, in December 2017, SHPO determined that East River Park did not meet the eligibility criteria for S/NR listing due to a loss of integrity. LPC did not find any of the potential architectural resources to warrant designation as NYCLs. See **Table 5.4-1** for the list of 17 historic resources in the APEs (see **Appendix E** for SHPO and LPC correspondence).

EVALUATION OF POTENTIAL EFFECTS ON HISTORIC PROPERTIES

Once the historic properties in the APEs were identified, the effects of the proposed project on those resources were assessed. As described above, effects on historic properties identified in this chapter may include both direct effects and indirect effects. Assessments of effects are based on ACHP's Criteria of Adverse Effect codified in 36 CFR § 800.5(a)(1) and (2). The assessment may result in three possible effects findings: no effect (no historic properties affected); no adverse effect; or adverse effect. According to ACHP's criteria, an adverse effect is found "when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the National Register in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association." Examples of adverse effects include, but are not limited to, "physical destruction or damage of all or part of the property;" "removal of the property from its historic location; change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;" and "introduction of visual, atmospheric, or audible elements that diminish the integrity of the property's significant historic features." Adverse effects may include "reasonably foreseeable effects caused by the undertaking that may occur later in time, be farther removed in distance, or be cumulative."

E. AFFECTED ENVIRONMENT

ARCHAEOLOGICAL RESOURCES

AREA OF POTENTIAL EFFECT – MONTGOMERY STREET TO RIVINGTON STREET

The Phase IA Archaeological Documentary Study for the APE between Montgomery and Rivington Streets determined that the entire APE was once under the East River and was landfilled at various times between the 1810s and about 1850, with city streets created to separate and define newly formed blocks. These blocks supported a range of structures over time, primarily mixed residential and commercial buildings and industrial facilities. Bulkheads and pierheads established the extent of waterfront resource boundaries. The APE became more developed over time and by the late 1930s, when the East River Drive (now the FDR Drive) and East River Park were created, each city block was almost completely covered with structures. Further, numerous piers were located along the waterfront. Historical maps and photographs show that these structures, including the piers, were demolished in preparation for construction of the East River Drive and East River Park. Based on previous archaeological studies within and adjacent to the APE, the Phase 1A report identified broad categories of potential historic-period archaeological resources that could be located in the APE. These categories and the potential sensitivity of the APE to host them are discussed below.

River Bottom Remains

River bottom remains are those items discarded onto the river floor prior to or during landfilling, and it is possible that archaeologically sensitive deposits are present on the historic river bottom within the APE. The depth of such deposits would depend on the vertical extent of the historic landfill and historic strata, which varies across the APE from 12 feet to 40 feet in thickness

Landfill Retaining Structures and Landfill Deposits (Including Sunken Vessels)

Landfill retaining structures can include repurposed historic piers, wharves, and docks, as well as timber structures built specifically for retaining fill, sometimes also referred to as bulkheads. At times, derelict maritime vessels were used as landfill retaining structures or as part of the landfill. Landfill by nature contains soil, but may also include concentrations of artifacts or other refuse material, such as ash, sometimes referred to as “cinders” in early soil boring logs.

Since the entire APE was once under water, there is a potential for historic landfill retaining structures from the first half of the 19th century throughout most of the APE. The exception is the former area bounded by Corlears Street, Water Street, and the East River (now the approximate location of the East River Park amphitheater), which was not enclosed by bulkheads and landfilled until the 1870s or 1880s. The current bulkhead that forms the eastern edge of East River Park dates to the 1930s, when the park was created, and SHPO has determined that East River Park does not meet the eligibility criteria for S/NR listing. In addition, it is not expected that there would be any historic landfill retaining structures between the historic bulkhead line and the current bulkhead line, as this area was landfilled in the 20th century in conjunction with the creation of East River Park.

While it is possible that landfill retaining structures could be found within the upper reach of the soil column (approximately 2 to 4 feet below the existing ground surface), previous archaeological investigations at other locations along the East River suggest that most of these types of resources are located at deeper depths. Additionally, the level of disturbance throughout the APE from various earthmoving episodes, including installation of utilities, construction of foundations and basements, and reconfiguration of the area during roadway and park construction, further suggests that the likelihood of encountering intact resources is diminished at these relatively shallow depths. Recent soil borings did not record any elements at these depths that appear to represent these resources (such as concentrations of wood).

Historic Streetbed Resources – Utilities, Transportation Elements, Artifact Deposits

The APE formerly contained a number of historic streets, including portions of Front Street, South Street, Montgomery Street, Gouverneur Street, Jackson Street, Corlears Street, Water Street, Cherry Street, East Street, Tompkins Street, Grand Street, Broome Street, Delancey Street, and Rivington Street. Most of these street segments were eliminated when the East River Drive and East River Park were built in the 1930s and 1940s.

Each of the former city streets had subsurface utilities. The lines of extant utilities attest to the former street locations. While it is unlikely that any of the iconic wooden water mains from before 1842 (when the Croton Aqueduct system began operation) would be located under any of these streets (as those mains were installed further south in Lower Manhattan), it is possible that early water and sewer lines from the 1850s and 1860s could still exist under city streets, if they were not removed during subsequent utility work.

Some of the historic streets had streetcar tracks. Those streets with tracks included portions of Montgomery Street, Front Street, South Street, Corlears Street, and Grand Street. While

subsequent disturbance to the streetbeds from utility replacement and construction of the East River Drive and East River Park likely eliminated many of these tracks, it is possible that segments could survive beneath these areas. It is also possible that former street pavements, such as cobblestones or paving blocks, may be found beneath some areas.

Archaeological monitoring of utility work in streetbeds of Lower Manhattan has shown that concentrations or pockets of discarded artifacts can be found beneath historic streets. It is not possible to predict where such dumping grounds may be located, although archaeologists have had some subsequent success tracing the provenance of certain artifact caches to neighboring businesses.

Areas of the APE that correspond with the footprints of historic streets may be sensitive for the varied types of resources described above if later disturbance has not affected them. Within the upper 2 to 4 feet of the soil column, there is less likelihood of encountering buried utilities, although it is possible that streetcar tracks, earlier street paving, and possible artifact dumps may be present.

Former City Block Resources – Foundation Remains, Historic Shaft Features

Those portions of the APE that were formerly developed within city blocks historically contained a variety of residential, commercial and industrial buildings and structures, as well as waterfront-related shipyards, coal yards, lumber yards, and the like. Potential archaeological resources on former city blocks could include former foundations or other components from these buildings, as well as shaft features, such as privies, wells, and cisterns, from domestic and commercial buildings that predate the introduction of municipal water and sewer lines in the 1850s and 1860s. Those locations that contained commercial yards such as shipyards, lumber yards, coal yards, and lime yards, would not be expected to have a significant archaeological footprint.

The likelihood of recovering yard remains depends on the level of disturbance, which varies by location. Those former yards that had subsequent buildings with basements would have been disturbed to the deepest extent, ranging from possibly 8–10 feet below grade. Some information is available about which buildings had basements from Sanborn fire insurance maps, although it is possible that not all basements were recorded. Building records for these former structures, which might also offer confirmation of basements, are no longer extant, as it was common practice to discard records of buildings after they were demolished. The remainders of the former lots have likely been disturbed from episodes of construction and demolition on the blocks and creation of East River Drive and East River Park. Although the depth of this disturbance is harder to discern, it is probable that the upper few feet might have been affected in most locations. Further, the construction of the Williamsburg Bridge included portions of historic lots south of Delancey Street, which should be assumed to be significantly disturbed.

As currently proposed, nearly all components of the flood protection systems proposed for Alternatives 2 through 5 in the APE between Montgomery and Rivington Streets are slated for locations on the river side of the FDR Drive. The exceptions are several proposed floodwalls along Montgomery and South Streets at the southern end of Project Area One and, under Alternatives 3 and 4, the Delancey Street and East 10th Street bridges over the FDR Drive, and under Alternative 4, the Corlears Hook bridge over the FDR Drive. Based on historic maps from the 1850s, the Phase 1A report identifies locations on former city blocks that may be sensitive for domestic, commercial, and/or industrial archaeological resources that were not later covered by buildings with basements, focusing primarily on areas south and/or east of the FDR Drive.

Summary

In summary, landfill retaining structures may exist throughout the APE (excepting the approximate area where the current East River Park amphitheater is located) and other potential archaeological resources may be situated in former streetbeds and historic city blocks. **Figures 5.4-2a through 5.4-2f** show the areas of potential archaeological sensitivity in the APE as identified in the 2016 Phase 1A Archaeological Documentary Studies. In letters dated February 23, 2016 and March 14, 2016, LPC and SHPO, respectively, concurred with the sensitivity determinations in the Phase 1A report, and in letters dated March 18, 2019, SHPO and LPC concurred with the findings of the Supplemental Phase 1A Archaeological Documentary Study. Further, in written communications from April and May 2016, representatives of the Delaware Nation, Delaware Tribe of Indians, and Stockbridge-Munsee Community Band of Mohicans determined that no religious or culturally significant sites of interest to their tribes are located within the project area. In February 2019, additional consultation was undertaken with the Delaware Nation, Delaware Tribe of Indians, and Stockbridge-Munsee Community Band of Mohicans regarding project refinements made since 2016. Responses are pending. See **Appendix E** for correspondence.

AREA OF POTENTIAL EFFECT – EAST 23RD STREET TO EAST 25TH STREET

The Phase IA Archaeological Documentary Study for the APE between East 23rd and East 25th Streets determined that the entire APE was once under the water of the East River and was landfilled at various times between the 1830s and the 1940s, with city streets created to separate and define newly formed blocks. Both East 23rd Street and East 24th Street began as piers and were later filled in to create streets. It is possible that remains of these piers, and possibly a former ferry house at the intersection of East 23rd Street and Avenue A, may still exist beneath the present streetbeds and sidewalks of these two streets. Based on previous archaeological studies within and adjacent to the APE, the Phase 1A report identified broad categories of potential historic-period archaeological resources that could be located in the APE. These categories and the potential sensitivity of the APE to host them are discussed below.

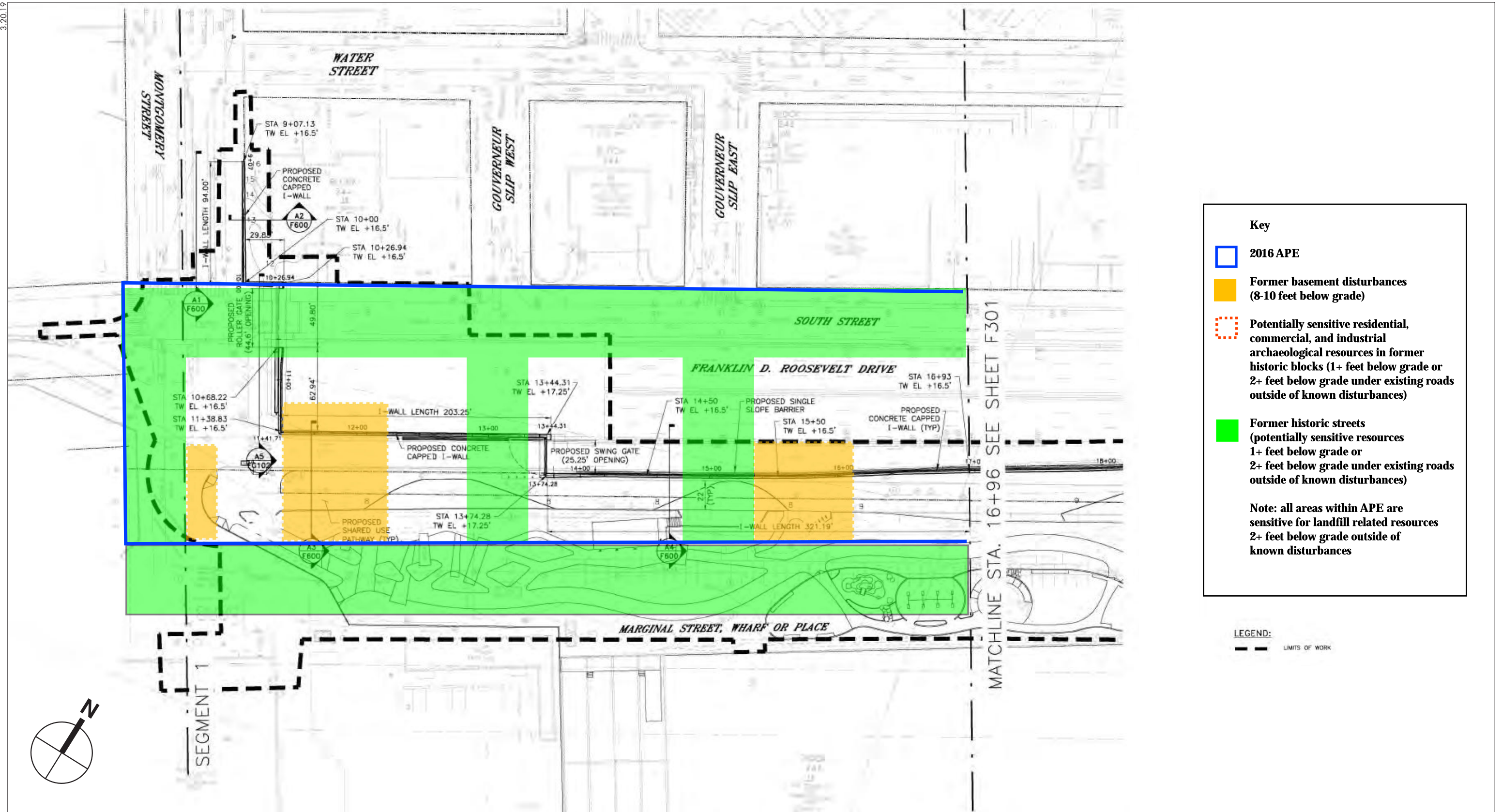
River Bottom Remains

Since the entire APE was once under water, it is possible that archaeologically sensitive deposits are present on the historic river bottom within the APE.

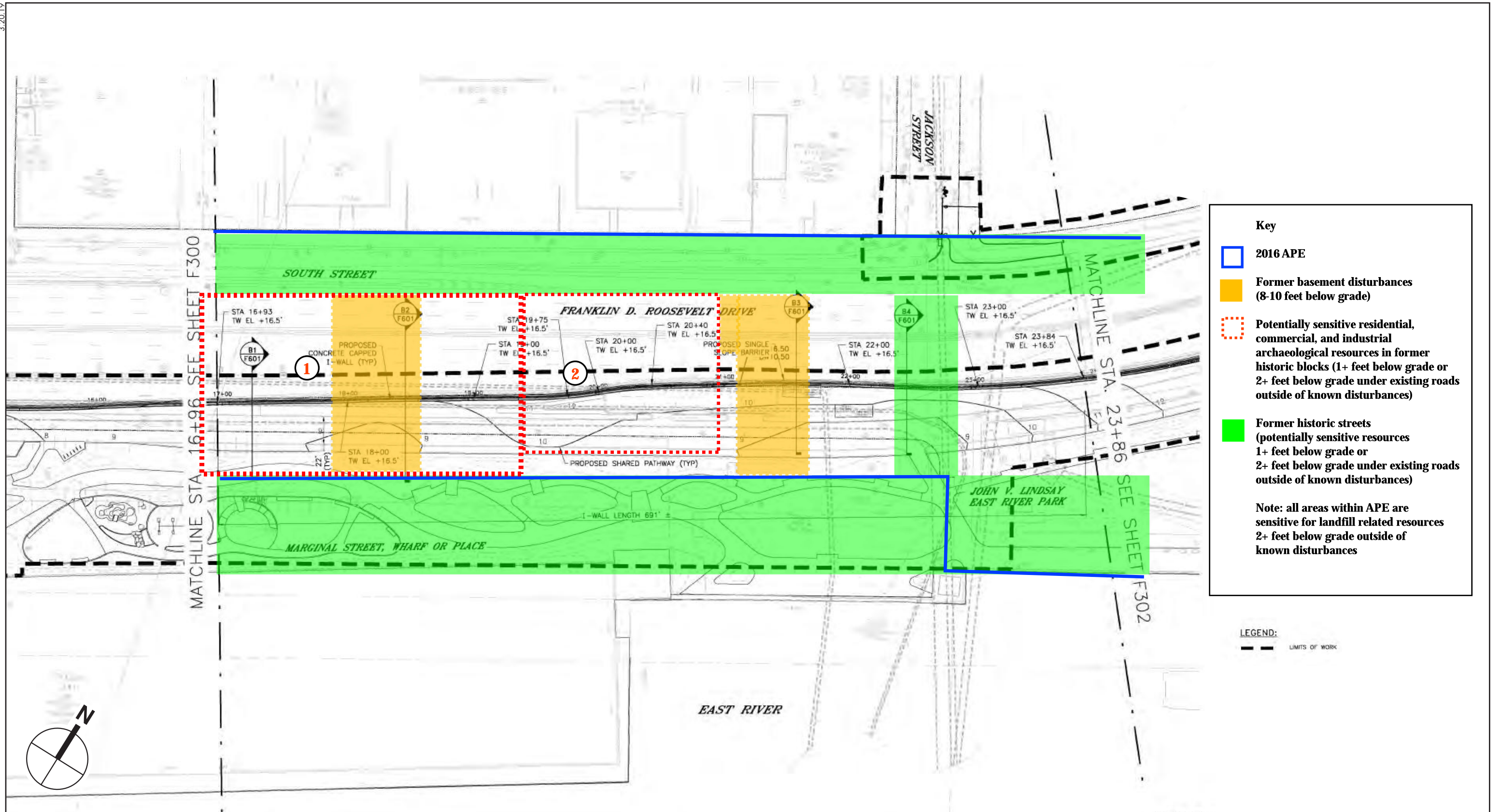
Landfill Retaining Structures and Landfill Deposits (Including Sunken Vessels)

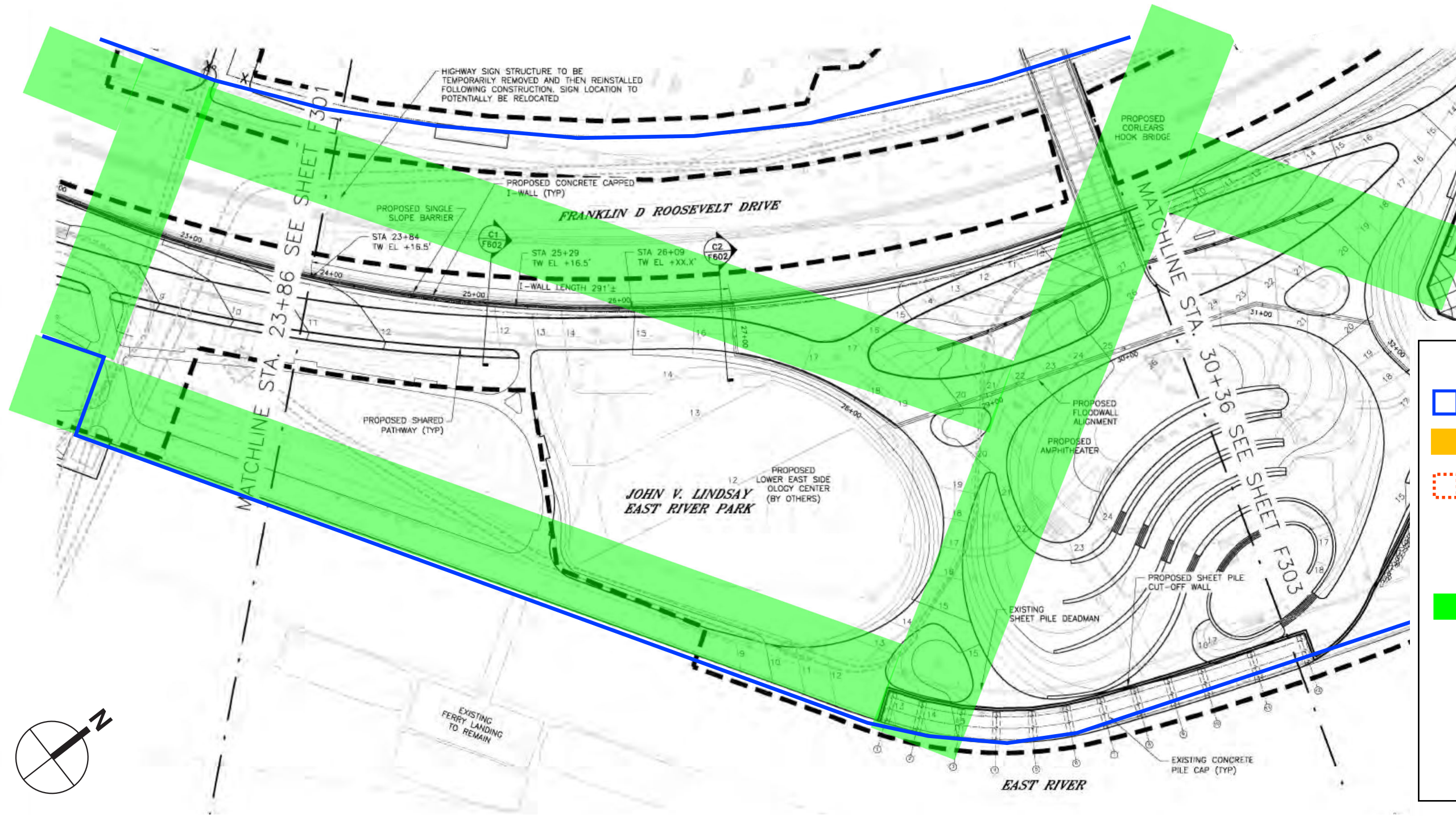
Since the entire APE was once under water, there is potential for the presence of archaeologically sensitive historic landfill retaining structures from the first half of the 19th century along East 23rd Street and East 25th Street. The remainder of the APE was landfilled after this period.

While it is possible that landfill retaining structures could be found within the upper reach of the soil column (approximately 2 to 4 feet below the existing ground surface), previous archaeological investigations at other locations along the East River suggest that most of these types of resources are located at deeper depths.



Montgomery Street to Gouverneur Slip East
 Area of Potential Effect – Montgomery to Rivington Streets
 Areas of Archaeological Sensitivity
Figure 5.4-2a

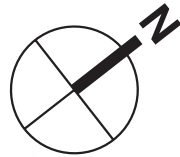




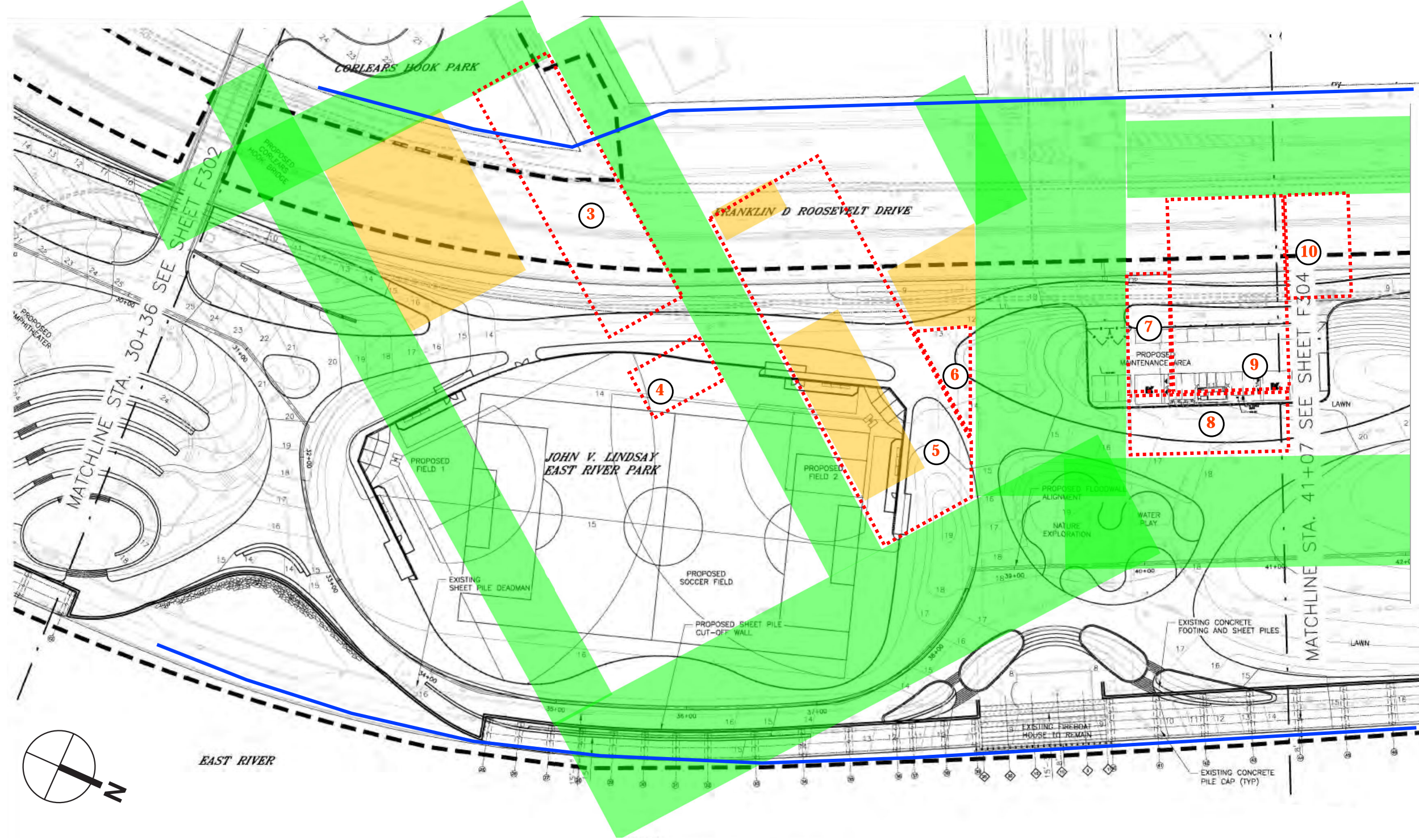
Key

- 2016 APE
- Former basement disturbances (8-10 feet below grade)
- Potentially sensitive residential, commercial, and industrial archaeological resources in former historic blocks (1+ feet below grade or 2+ feet below grade under existing roads outside of known disturbances)
- Former historic streets (potentially sensitive resources 1+ feet below grade or 2+ feet below grade under existing roads outside of known disturbances)

Note: all areas within APE are sensitive for landfill related resources 2+ feet below grade outside of known disturbances



LEGEND:
 LIMITS OF WORK

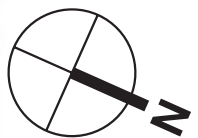


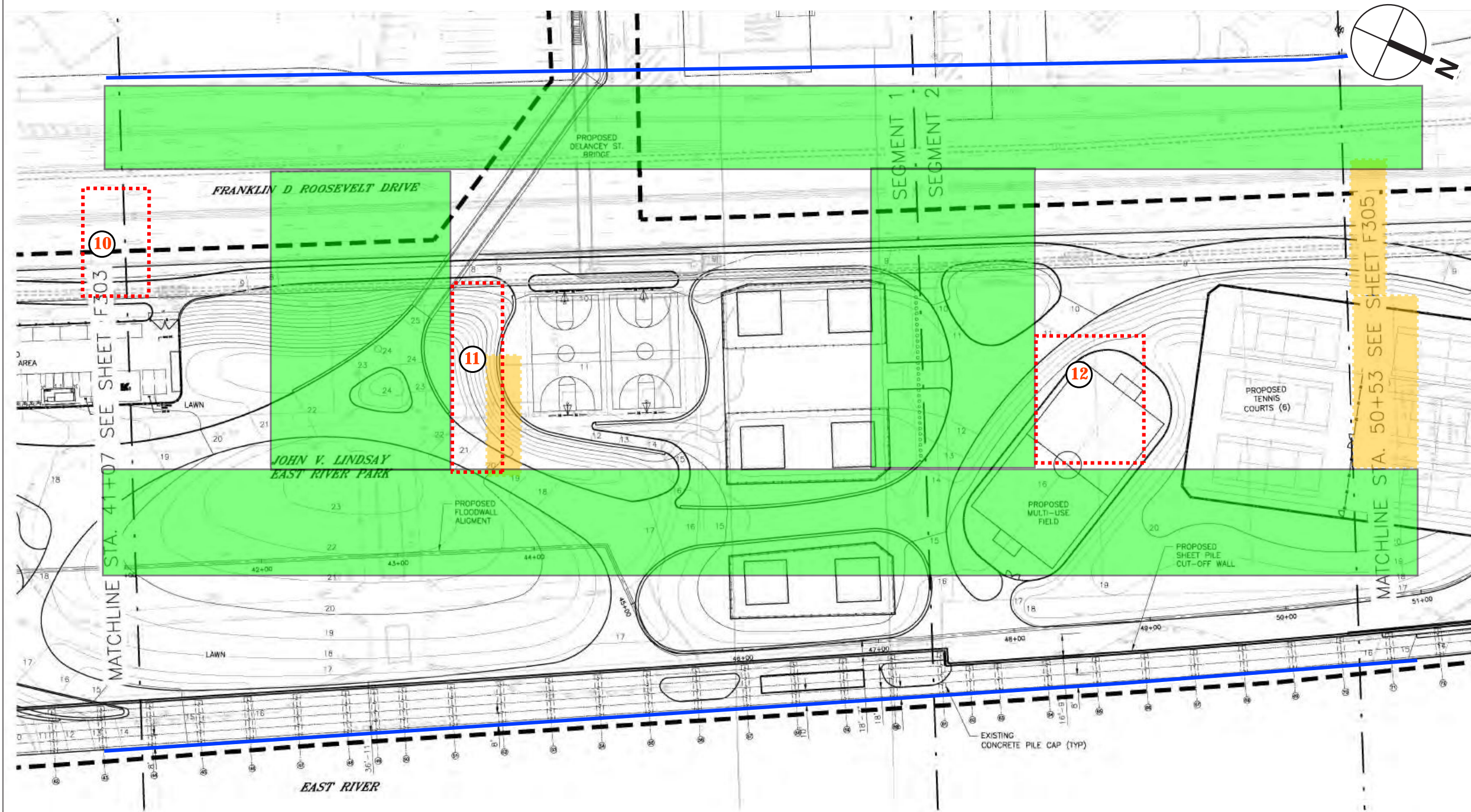
Key

- 2016 APE
- Former basement disturbances (8-10 feet below grade)
- Potentially sensitive residential, commercial, and industrial archaeological resources in former historic blocks (1+ feet below grade or 2+ feet below grade under existing roads outside of known disturbances)
- Former historic streets (potentially sensitive resources 1+ feet below grade or 2+ feet below grade under existing roads outside of known disturbances)

Note: all areas within APE are sensitive for landfill related resources 2+ feet below grade outside of known disturbances

LEGEND:
 LIMITS OF WORK



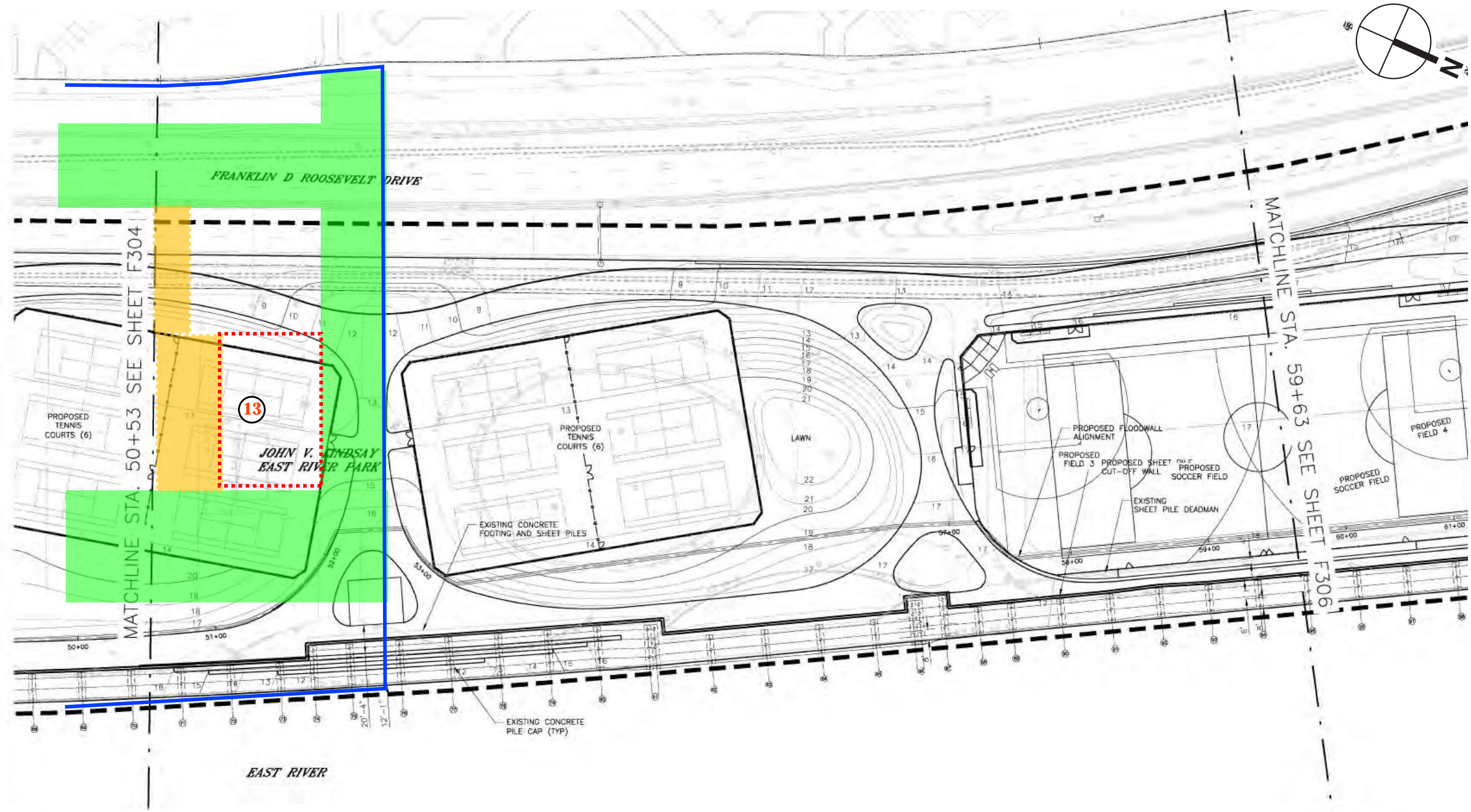


Key

- 2016 APE
- Former basement disturbances (8-10 feet below grade)
- Potentially sensitive residential, commercial, and industrial archaeological resources in former historic blocks (1+ feet below grade or 2+ feet below grade under existing roads outside of known disturbances)
- Former historic streets (potentially sensitive resources 1+ feet below grade or 2+ feet below grade under existing roads outside of known disturbances)

Note: all areas within APE are sensitive for landfill related resources 2+ feet below grade outside of known disturbances

LEGEND:
 LIMITS OF WORK



Key

- 2016 APE
- Former basement disturbances (8-10 feet below grade)
- Potentially sensitive residential, commercial, and industrial archaeological resources in former historic blocks (1+ feet below grade or 2+ feet below grade under existing roads outside of known disturbances)
- Former historic streets (potentially sensitive resources 1+ feet below grade or 2+ feet below grade under existing roads outside of known disturbances)

Note: all areas within APE are sensitive for landfill related resources 2+ feet below grade outside of known disturbances

LEGEND:
 LIMITS OF WORK

Historic Streetbed Resources – Utilities, Transportation Elements, Artifact Deposits

The APE contains portions of East 23rd, East 24th, and East 25th Streets. These street segments began as piers, East 23rd and East 25th Streets in the late 1830s and East 24th Street in the 1870s, and the streets were landfilled in stages during the course of the second half of the 19th century.

Each of the city streets has subsurface utilities. While it is unlikely that any of the iconic wooden water mains from before 1842 (when the Croton Aqueduct system began operation) would be located under any of these streets (as those mains were installed further south in Lower Manhattan), it is possible that early water and sewer lines from the 1850s and 1860s could still exist under city streets, if they were not removed during subsequent utility work.

East 23rd Street had streetcar tracks by the 1870s. While subsequent disturbance to the streetbeds from utility replacement may have disturbed or eliminated these tracks, it is still possible that segments could survive beneath the street. It is also possible that former street pavements, such as cobblestones or paving blocks, may be found beneath some areas.

Archaeological monitoring of utility work in streetbeds of Lower Manhattan has shown that concentrations or pockets of discarded artifacts can be found beneath historic streets. It is not possible to predict where such dumping grounds may be located, although archaeologists have had some subsequent success tracing the provenance of certain artifact caches to neighboring businesses.

East 23rd Street may be sensitive for these varied types of resources if later disturbance has not affected them. Within the upper 2 to 4 feet of the soil column, there is less likelihood of encountering buried utilities, although it is possible that streetcar tracks, earlier street paving, and possible artifact dumps may be present. These resources, however, would be more likely to be found in the present streetbed than within the sidewalks.

Former City Block Resources – Foundation Remains, Historic Shaft Features

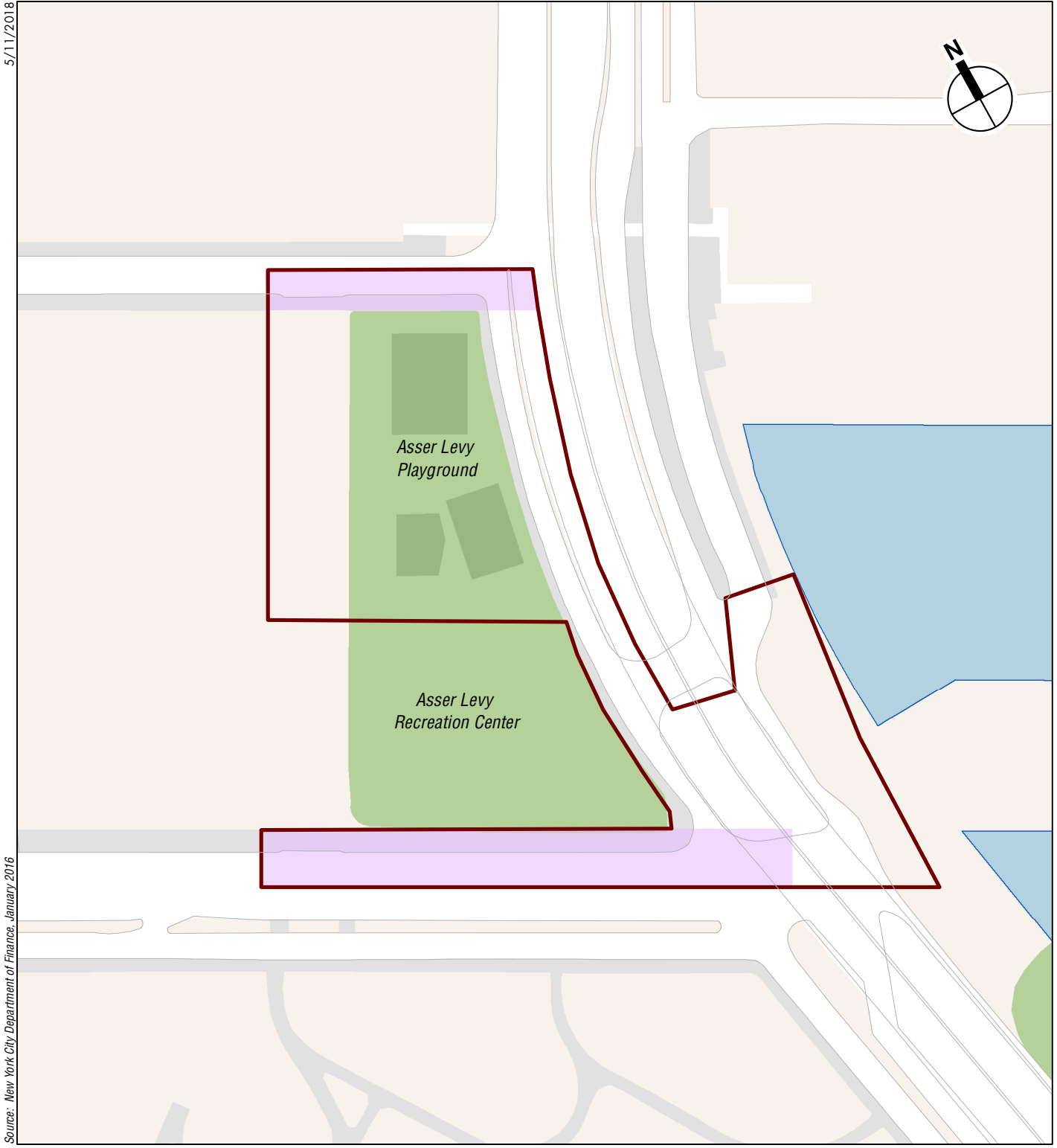
The only portion of the APE that includes the interior portion of a city block is the portion of Asser Levy Playground between the former alignment of East 24th Street and East 25th Street. This area was not landfilled until the 1890s, when it became a cement and concrete mixing facility. It then became part of the public park in the late 1930s. Therefore, the Phase 1A report concluded that there is no archaeological sensitivity within this portion of the block.

Summary

In summary, the Phase 1A report determined that the East 23rd and East 25th Street portions of the APE may possess historic period archaeological sensitivity. **Figure 5.4-2g** shows the areas of potential archaeological sensitivity in the APE. In letters dated February 29, 2016 and March 14, 2016, LPC and SHPO, respectively, concurred with the sensitivity determinations in the Phase 1A report. Further, in written communications from April and May 2016, representatives of the Delaware Nation, Delaware Tribe of Indians, and Stockbridge-Munsee Community Band of Mohicans determined that no religious or culturally significant sites of interest to their tribes are located within the project area.

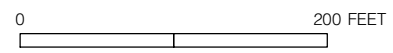
After LPC and SHPO review of the Phase 1A report, a small area at Asser Levy Playground that extends into the former East 24th Street was added to the APE. In a letter dated April 3, 2017, LPC noted that this area was included within the area assessed in the Phase 1A report and that LPC had no archaeological concerns for this area in Asser Levy Playground.

5/11/2018



Source: New York City Department of Finance, January 2016

-  APE
-  Archaeologically Sensitive Area (1+ Feet Below Grade)



AREA OF POTENTIAL EFFECTS — UPLAND DRAINAGE MANAGEMENT COMPONENTS

The March 2019 Supplemental Phase 1A Archaeological Documentary Study determined that a large portion of the upland drainage area was once under the waters of the East River and that locations within the upland drainage area were landfilled beginning at the end of the 18th century. After landfilling, the specific locations of the proposed upland drainage management improvements shown on **Figure 5.4-3** were historically in roadways or locations developed with buildings and a coal yard. A portion of the northernmost proposed parallel conveyance (at Avenue C and East 23rd Street) was studied in 2016 as part of the APE between East 23rd and East 25th Streets; that area is potentially sensitive for archaeological resources as described above.

The Supplemental Phase 1A Archaeological Documentary Study determined that the locations of the proposed M22-M23 parallel conveyance and the South Interceptor Gate and Building may be archaeologically sensitive. The portion of Water Street associated with the M22-M23 parallel conveyance may have historic-period archaeological sensitivity given the use of the area during the colonial and early American period and the uncertain degree of subsequent disturbance. The portions of Gouverneur Slip West, Jackson Street, and the FDR Drive Service Road/Corlears Hook Park associated with the M22-M23 parallel conveyance and the interceptor gate and building may be archaeologically sensitive for landfill retaining structures and historic streetbed resources. The Supplemental Phase 1A Archaeological Documentary Study determined that the other locations of the proposed upland drainage management improvements (that were not studied in the 2016 Phase 1A Archaeological Documentary Studies) do not possess any archaeological sensitivity due to documented prior disturbance and the lack of potential archaeological resources. In letters dated March 18, 2019, SHPO and LPC concurred with the findings of the report.

ARCHITECTURAL RESOURCES

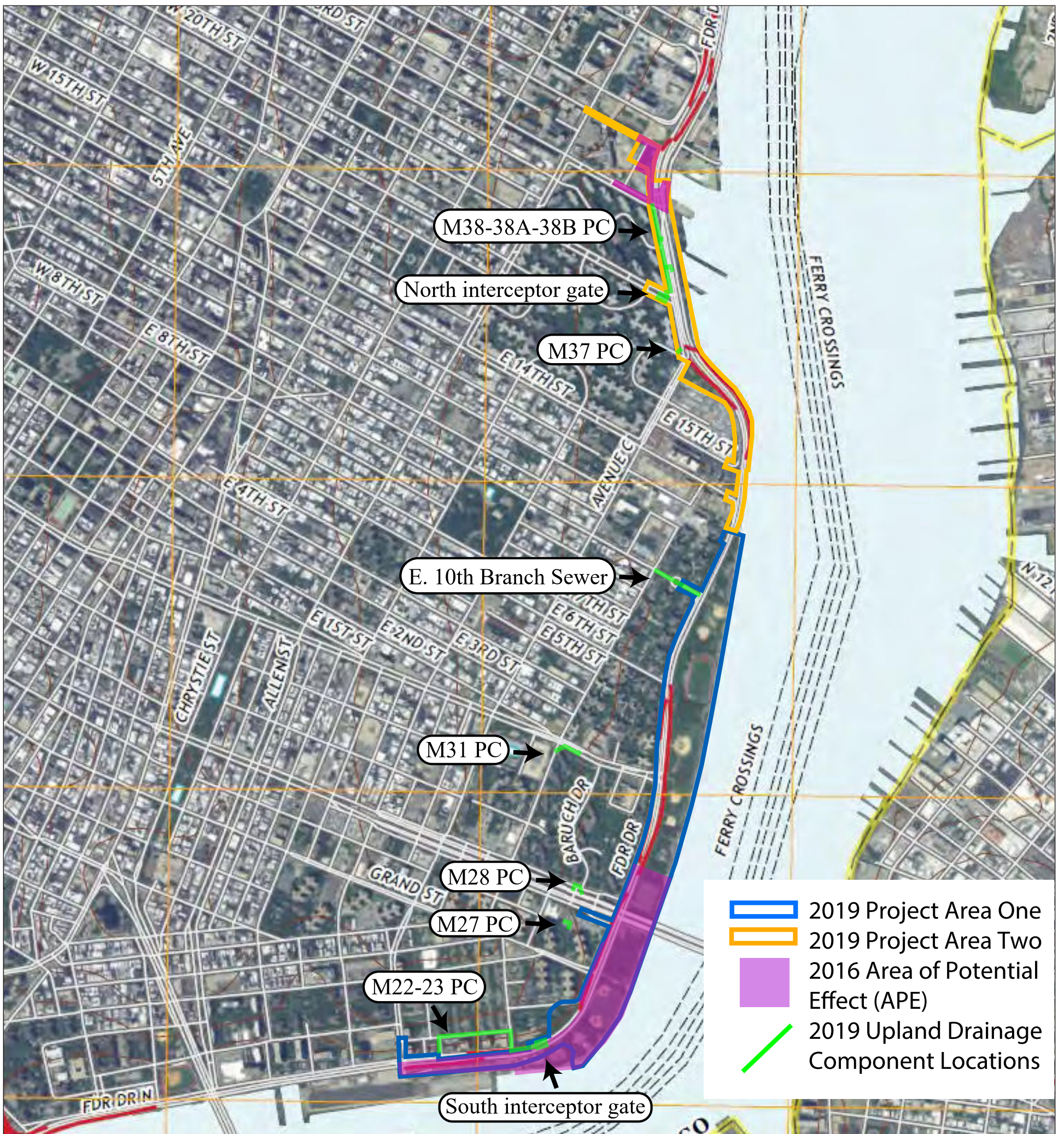
PRIMARY APE

There are 17 architectural resources in the Primary APE. These resources are shown on **Figure 5.4-1**, listed in **Table 5.4-1**, and described below.

Project Area One

There are four architectural resources located within Project Area One.

(#1) Franklin Delano Roosevelt Drive, S/NR-eligible. The FDR Drive is 9.44 miles long, beginning at the end of the Battery Park underpass and running north along the East River to the 125th Street/Triborough Bridge exit. Originally known as the East River Drive, the FDR Drive meets National Register Criterion A in the fields of transportation and community/regional planning as an important link in New York City's transportation infrastructure. The FDR Drive, the West Side Highway, the Henry Hudson Parkway, the Harlem River Drive, and the Triborough Bridge approach form a crucial highway loop around Manhattan. Construction began on the FDR Drive in 1934 under the direction of Robert Moses and was largely completed by 1967. The section of the highway that runs through the project area was originally constructed as a boulevard. Conversion of the boulevard to a controlled-access parkway occurred in 1960. Though segments of the structure have undergone alterations through the years, this linear resource has been determined to retain sufficient integrity overall to convey its historic significance.



Chapter 5.4: Historic and Cultural Resources

Through most of Project Area One, the FDR Drive runs at grade, passing under bridges at Corlears Hook Park, Delancey Street, East 6th Street, and East 10th Street and an overpass at East Houston Street. It is a six-lane highway with a center guardrail and concrete walls along the outer lanes (see **Figure 5.4-4**). In the southernmost portion of Project Area One, the FDR Drive is an elevated viaduct between approximately Gouverneur Slip East and Montgomery Street. It continues south as a viaduct to the Battery Park underpass.

**Table 5.4-1
Primary APE—Architectural Resources**

Map Ref. Letter #	Name/Type	Address/Location	NHL	S/NR	S/NR-eligible	NYCL-eligible	NYCL
Project Area One							
1	FDR Drive	Battery Park underpass to East 125th Street			X		
2	Williamsburg Bridge	Across East River Park at Delancey Street			X		
3	East River Bulkhead	Whitehall to Jackson Streets			X		
4	Engine Co. 66 Fireboat House	East River Park near Grand Street			X		
Project Area Two							
1	FDR Drive	Battery Park underpass to East 125th Street			X		
400-Foot Study Area							
5	Former Gouverneur Hospital	621 Water Street		X			
6	Gouverneur Hospital Dispensary	2 Gouverneur Slip East			X		
7	Lower East Side Historic District	Bounded by East Houston, Essex, Allen, and Division Streets, with blocks on East Broadway and Henry and Madison Streets		X		X	
8	Henry Street Settlement Buildings	263-267 Henry Street and 281 East Broadway		X			X
9	Baruch Houses	Bounded by FDR Drive, East Houston, Delancey, and Columbia Streets			X		
10	Public School 97 (Bard High School)	525 East Houston Street			X		
11	Lavanburg Homes	126 Baruch Place			X		
12	Asser Levy Public Baths	384 Asser Levy Place		X			X
13	East River Housing Cooperative	Bounded by FDR Drive, and Delancey, Lewis, Jackson and Cherry Streets			X		
14	Rivington Street Baths	Located within Baruch Houses			X	X	
15	Jacob Riis Houses	Bounded by FDR Drive, Avenue D, and East 6th and East 14th Streets			X		
16	Stuyvesant Town	Bounded by First Avenue, East 14th and East 20th Streets, Avenue C, and FDR Drive			X		
17	Peter Cooper Village	Bounded by First Avenue, East 20th and East 23rd Streets, and FDR Drive			X		
<p>Notes: NHL: National Historic Landmark S/NR: Listed on the State and National Registers of Historic Places. S/NR-eligible: Officially determined eligible for listing on the State and National Registers of Historic Places. NYCL: New York City Landmark Heard: Application has been heard at the NYC Landmarks Preservation Commission. NYCL-eligible: Determined to appear eligible for designation as a NYCL. Sources: New York State Office of Parks, Recreation, and Historic Preservation Cultural Resource Information System (CRIS), https://cris.parks.ny.gov/Login.aspx?ReturnUrl=%2f; NYCityMap, http://gis.nyc.gov/doitt/nycitymap/; Lower Manhattan Development Corporation, <i>East River Waterfront Esplanade and Piers Final Environmental Impact Statement (FEIS)</i>, May 18, 2007; NYCEDC, <i>Seward Park Mixed-Use Development Project FEIS</i>, August 10, 2012; Field surveys, July 2015; SHPO letter dated April 25, 2016.</p>							

(#2) *Williamsburg Bridge*, S/NR-eligible. The Williamsburg Bridge was constructed in 1903 from plans by Leffert L. Buck with ornamental detailing added by Gustav Lindenthal. This steel



FDR Drive (#1). View north to Corlears Hook Park bridge from Jackson Street 1



FDR Drive (#1). View north from Houston Street 2

suspension bridge spans the East River and connects Delancey Street on the Lower East Side of Manhattan to Marcy Avenue in Williamsburg, Brooklyn. It is 7,308 feet long with a main span of 1,600 feet and was the longest and heaviest suspension bridge in the world when it was built. The bridge is designed with two towers located within the East River close to the Manhattan and Brooklyn shorelines, and the span is suspended from four steel cables (see view 3 of **Figure 5.4-5**). On land, metal piers and granite abutments further support the span. Steel latticework extends almost the entire distance of the bridge. The J/M/Z subway runs over the bridge.

Three metal, arched piers are located within Project Area One (see view 4 of **Figure 5.4-5**). The two legs of each arched pier have an open framing system and sit on tall granite-faced footings capped by concrete. A perimeter ring of security bollards encloses the piers within East River Park. The piers of the Manhattan-side tower sit on granite-faced footings within the river. On the west side of the FDR Drive, a massive granite abutment supports the span as it transitions to a viaduct that meets grade at Clinton Street to the west.

(#3) East River Bulkhead, S/NR-eligible. The New York City Department of Docks, under the leadership of George B. McClellan, began construction of the bulkhead along the East River waterfront from Whitehall Street to Jackson Street in the early 1870s as part of a major seawall construction campaign. Like the S/NR-eligible bulkhead along the Hudson River waterfront between Battery Place and West 59th Street, which was part of the same construction initiative, surviving portions of the original East River bulkhead structure are significant under Criterion C for their engineering and architectural qualities.

Only the northernmost end of the bulkhead between Montgomery and Jackson Streets is located within Project Area One. According to annual reports of the Department of Docks, this section of the bulkhead north of Montgomery Street was likely reconstructed circa 1939 with the south end of East River Park, which was built partly on landfill under the leadership of Robert Moses. The section of the bulkhead immediately to the south between Pier 35 and Pier 42 (outside of Project Area One but within the Primary APE) was constructed in 1910. The bulkhead is not visible behind the platform and shed of Pier 42. However, the portion of the bulkhead east of Pier 42 is exposed. The visible portion of the bulkhead closest to the Pier 42 piershed appears to be concrete, followed to the east by a granite block section topped by replacement blocks of a lighter color, and then there is another concrete section with broken blocks above.³ The granite seawall ends approximately 250 feet east of Pier 42. The bulkhead within Project Area One is in overall fair condition, with some displaced stone, missing stones, and approximately 75 percent mortar loss from the mean high water line to the mud line.⁴

(#4) Former Marine Engine Co. 66 Fireboat House, S/NR-eligible. Located on the waterfront in the alignment of Grand Street, the former Marine Engine Co. 66 Fireboat House is a two-story brick Moderne-style building constructed around 1941. At the northern end of the building, there is a tall, square tower that was originally capped by a lantern, and a curved window bay is located at the southern end. Recessed courses and concrete coping provide some ornamentation (see **Figure 5.4-6**). Marine Engine Co. 66 was placed in service in 1898 with one fireboat, the William L. Strong. Prior to the construction of East River Park, the marine engine company

³ 2007, Lower Manhattan Development Corporation, *East River Waterfront Esplanade and Piers FEIS; Underwater Inspection and Condition Survey, Pier 42—Final Inspection Report* conducted in December 2013 by McLaren Engineering Group.

⁴ *Underwater Inspection and Condition Survey, Pier 42—Final Inspection Report* conducted in December 2013 by McLaren Engineering Group.



Williamsburg Bridge (#2). View north within East River Park 3



Williamsburg Bridge (#2). View north within East River Park adjacent to FDR Drive 4



Fireboat house (#4). View within East River Park 5



Fireboat house (#4). View from East River 6

occupied a pier at the foot of Grand Street. The Fireboat House closed in the mid-1990s, at which point NYC Parks assumed ownership. The building now houses the Lower East Side Ecology Center. In a letter dated April 25, 2016, SHPO determined that the former Marine Engine Co. 66 Fireboat House appears eligible under Criterion A in the area of community planning and Criterion C in the area of architecture. Following that determination, SHPO requested additional information on the Fireboat House, which was provided. In an evaluation dated February 8, 2017, SHPO affirmed that the Fireboat House meets eligibility Criteria A and C.

Project Area Two

There is one architectural resource (the FDR Drive) located within Project Area Two, which is also located in Project Area One. No potential architectural resources that appeared to meet the eligibility criteria for S/NR listing and/or NYCL designation were identified in Project Area Two.

(#1) *Franklin Delano Roosevelt Drive, S/NR-eligible.* As described above, the FDR Drive meets Criterion A. Within Project Area Two, the FDR Drive becomes elevated just east of Avenue C (see **Figure 5.4-7**). It continues as a viaduct north of the APE.

400-Foot Portion of the Primary APE

As shown on **Figure 5.4-1** and listed in **Table 5.4-1**, there are 13 architectural resources located within the 400-foot portion of the Primary APE beyond the boundaries of the project area.

(#5) *Gouverneur Hospital, S/NR.* The former Gouverneur Hospital is a brick, five-story Renaissance Revival-style structure occupying the full block between Water and South Streets and Gouverneur Slips East and West. Its U-shaped design is composed of a central section on Water Street and two projecting wings that terminate in curved ends with bracketed metal balconies (see **Figure 5.4-8**). Ornamentation includes terra cotta window arches, keystones, entablatures, and quoins. The Water Street entrance is set within a grand terra cotta arch with a scrolled keystone and flanking roundels. This building is the second Gouverneur Hospital to have stood on this site and was constructed around the still-functioning older building, which was subsequently demolished. When it opened in 1901, the building was the most modern and best-equipped hospital in the city. The architect John Rochester Thomas was noted for his designs of public and institutional buildings in the eastern U.S. The hospital's original hipped roof of terra-cotta blocks covered with slate was replaced by a fifth story in 1930. In addition, the original wing balconies were replaced with the current ones. Following its loss of accreditation in 1961, the hospital was used as a school for the developmentally disabled under the New York State Willowbrook Hospital system until 1978. Community Access acquired and then renovated the building in the early 1990s. Since 1994, it has served as supportive housing for individuals with mental illnesses or HIV/AIDS. The former Gouverneur Hospital meets Criterion C in the area of architecture.

(#6) *Gouverneur Hospital Dispensary, S/NR-eligible.* The former Gouverneur Hospital Dispensary is located at the northeast corner of Gouverneur Slip East and South Street. It was designed by McKim, Mead & White and built in 1914–1917. The building was originally used as a dispensary for patients of the nearby Gouverneur Hospital; it also contained residences for nurses. The seven-story building is rectangular in form and clad in brick with stone ornament (see view 10 of **Figure 5.4-9**). The rear of the building, facing Water Street, is unornamented and surrounded by a chain link fence. In 1977, the building was converted to housing for homeless individuals suffering from substance abuse. The former Gouverneur Hospital



FDR Drive (#1). View north at Avenue C 7



Gouverneur Hospital (#5). Water Street façade 8



Gouverneur Hospital (#5). South Street façade 9



Gouverneur Hospital Dispensary (#6). Water Street façade 10



Lower East Side Historic District (#7), Vladeck Houses. View south on Jackson Street from Madison Street 11

Dispensary meets Criterion C in the area of architecture and Criterion A in the area of healthcare and medicine for its association with Gouverneur Hospital.

(#7) *Lower East Side Historic District and Extension, S/NR*. The Lower East Side Historic District and Extension comprises 38 blocks in the Lower East Side neighborhood, largely beyond the boundaries of the APEs. The main portion of the roughly L-shaped district is bounded by East Houston Street on the north, Essex Street on the east, Allen Street on the west, and Division Street on the south. The district also includes several blocks along Henry and Madison Streets and East Broadway and the Vladeck Houses on Madison Street between Gouverneur and Jackson Streets. Residential structures with ground-floor commercial spaces constitute the majority of the historic district. Most of these buildings are 19th-century, five- and six-story, brick and stone-clad tenements with cornices. Other resources in the district include Federal and Greek Revival-style row houses, industrial loft structures, cast-iron and brick commercial buildings, Seward Park, and several synagogues and other institutional buildings. The Lower East Side Historic District is historically significant for its association with immigration in America between 1820 and 1940 and meets Criteria A and C in the areas of architecture, ethnic history, social history, and religion.

The southeast portion of the historic district that falls within the Primary APE contains a portion of the Vladeck Houses. Envisioned as a slum clearance and neighborhood revitalization project, the Vladeck Houses occupy an approximately 15-acre site bounded by Henry, Madison, Jackson, Cherry, Water, and Gouverneur Streets. They are named after labor activist Baruch Charney Vladeck. Constructed in 1939–40, the complex consists of 24 six-story buildings designed by William F.K. Ballard and Sylvan Bien under the supervision of R. H. Shreve of Shreve, Lamb and Harmon, architects of the Empire State Building. The administration of Mayor Fiorello LaGuardia developed the Vladeck Houses as the city's first municipally sponsored housing development, although most of the project ended up being financed by the federal government. The buildings are arranged in a zig-zag pattern set at 45-degree angles to the street, and linear parks and playgrounds occupy more than half of the grounds (see view 11 of **Figure 5.4-9** and view 12 of **Figure 5.4-10**).

(#8) *Henry Street Settlement, 263-267 Henry Street and 281 East Broadway, S/NR, NYCL*. This collection of four brick buildings houses the Henry Street Settlement, which Lillian Wald founded in 1893 to assist and Americanize the immigrant population of the Lower East Side (see view 13 of **Figure 5.4-10**). The two Federal-style houses at 263 and 265 Henry Street date to 1827 with later alterations that include façade changes to 263 Henry Street. The Colonial Revival building at 267 Henry Street is a 1900 update of an older Greek Revival house, and the Federal-style row house at 281 East Broadway dates to around 1829. These four buildings are also located within the Lower East Side Historic District.

Adjacent to the east at 269 Henry Street (within the Lower East Side Historic District) is a four-story Romanesque Revival firehouse built in 1884 as Engine Company 15 and designed by Napoleon LeBrun & Sons, prolific 19th-century designers of firehouses in Manhattan.

(#9) *Bernard Baruch Houses, S/NR-eligible*. SHPO has determined a number of NYCHA's post-World War II housing complexes in New York City eligible for listing on the S/NR. Within the Primary APE, these include the Bernard Baruch Houses (#9) and the Jacob Riis Houses (#14). In an evaluation dated August 30, 2016, SHPO determined that the Bernard Baruch Houses meet Criterion A in the areas of social history, politics/government, and community development and Criterion C in the areas of architecture and community planning and development.



Lower East Side Historic District (#7). View south through Vladeck Houses from Madison Street 12



Henry Street Settlement, 263-267 Henry Street (#8) 13

The Bernard Baruch Houses are bounded by East Houston Street, the FDR Drive, Delancey Street, and Columbia Street. Baruch Drive runs north-south through the complex, and the eastern end of Rivington Street extends partially into the complex. Built between 1954 and 1959 by NYCHA with federal assistance, the Bernard Baruch Houses occupy 27 acres and consist of 17 residential towers of heights between 7 and 14 stories set within landscaped grounds. Emery Roth & Sons were the architects. The free-standing brick buildings have unornamented zig-zagged façades, and they are set at varying angles to each other to provide river views for many of the apartments (see view 14 of **Figure 5.4-11**). The complex also includes the large Baruch Playground, which contains a small brick comfort station with a hipped roof, basketball and handball courts, play equipment, and soccer fields. In addition, the complex includes a 23-story senior center from 1977 and a modernist church at the northeast corner of Columbia and Rivington Streets—the DeWitt Reformed Church, designed by Edgar Tafel and built in 1957 from salvaged bricks.

(#10) *Public School 97, S/NR-eligible*. Located at 525 East Houston Street within the Baruch Houses, Public School 97 (now Bard High School Early College) dates to 1915. Although it has an East Houston address, it fronts on a remnant of Mangin Street, a former north-south street that ran through the area. It is a five-story brick, Collegiate Gothic building (see view 15 of **5.4-11**). Public School 97 meets Criterion C in the area of architecture. It may also meet Criterion A in the area of education.

(#11) *Lavanburg Homes, S/NR-eligible*. Located on the west side of Public School 97 at 126 Baruch Place, the Lavanburg Homes are model tenements built in 1927 by the Lavanburg Foundation, a low-income non-profit housing corporation established by industrialist and philanthropist Fred L. Lavanburg. The 6-story model tenement has an E-plan with two street-facing courtyards (see view 16 of **Figure 5.4-12**). Decorative brickwork and stone trim provides some ornamentation. Sommerfeld and Sass were the architects. The Lavanburg Homes meet Criteria A and C in the areas of social history and architecture.

(#12) *Asser Levy Public Baths, S/NR, NYCL*. The Asser Levy Public Baths are located within the Asser Levy Playground on the former Asser Levy Place and East 23rd Street, near the FDR Drive. Constructed in 1904-06 to the designs of Brunner & Aiken, the Asser Levy Public Baths were the largest free public baths built under the 1895 State law that provided for the establishment of free public baths throughout New York State. Although it is a small one-story building with a cruciform footprint, its main (west) façade on Asser Levy Place has the monumental façade of a Roman Bath—raised above the street with two flights of stairs, with three arched openings, paired stone columns supporting a heavy stone entablature and cornice, and a balustraded parapet with massive stone urns (see view 17 of **Figure 5.4-12** and view 18 of **Figure 5.4-13**). The south façade on East 23rd Street is primarily faced in brick; there are stone water and drip courses and recessed and arched windows set within recessed square openings. A simple stone cornice encircles the building, and there is a tall brick stack above the building's eastern end. The building is set back from East 23rd Street behind a planted area enclosed by a metal fence. An outdoor swimming pool from the 1960s is located at the southeast corner of the building. A plain brick wall and metal fence enclose the pool. A playground is located on the north side of the pool. The Asser Levy Public Baths continue to function as a City-owned public recreation and pool facility. It meets Criterion A in the area of social/humanitarian history and Criterion C in the area of architecture.

(#13) *East River Housing Cooperative, S/NR-eligible*. The East River Housing Cooperative consists of four residential buildings and one commercial building on a 12-acre site bounded by



Baruch Houses (#9). View west from East River Park near tennis courts 14



Public School 97 (#10) 15



Lavanburg Homes (#11) 16



Asser Levy Public Baths (#12). Main (west) façade 17



Asser Levy Public Baths (#12). South (West 23rd Street) façade 18



East River Housing Cooperative (#13). View west from East River Park near Delancey Street 19

Delancey Street, the FDR Drive, and Cherry, Lewis, and Jackson Streets. Grand Street bisects the complex. Constructed between 1953 and 1955, the East River Housing Cooperative was the first middle-income residential development undertaken in New York City under Title 1 of the National Housing Act of 1949, which provided for federal assistance to local communities in slum clearance and to private enterprise in residential development projects. The cooperative development was largely financed through a low-interest mortgage loan by the International Ladies Garment Workers Union (ILGWU). The ILGWU also provided low-interest loans to union members for shares in the cooperative, although there were no restrictions on non-union membership or on race and religion. ILGWU president David Dubinsky, Eleanor Roosevelt, Mayor Robert F. Wagner, and other politicians attended the dedication ceremony in October 1955.

The four residential buildings are nearly identical in footprint and massing, although two are 20 stories and two are 21 stories. Herman Jessor was the architect; he also designed other cooperative residential developments throughout the city that were sponsored by unions, like the Seward Park Cooperative at Grand and Essex Streets (1959) and Co-Op City in the Bronx (1965–1970). Each modernist brick building is arranged into three parallel apartment blocks connected by a central, perpendicular core that contains apartments and the elevators for each section; this massing creates eight bays and four large light courts (see view 19 of **Figure 5.4-13**). The corner apartments of each bay have recessed balconies, and there are larger balconies on the top three floors. Landscaped lawns with mature trees and playgrounds surround the residential buildings. The two-story commercial building occupies a triangular parcel occupied by Grand, Madison, and Jackson Streets. An auditorium (now occupied by a dance company) is located at the western end of the building on the second floor. The complex also includes two parking lots (one on Delancey Street and one on Cherry Street) and a power plant at the corner of Lewis and Delancey Streets. In a letter dated April 25, 2016, SHPO determined that the East River Housing Cooperative appears eligible under Criterion A in the areas of social history, politics/government, and community development and possibly under Criterion C in the areas of architecture and community planning and development.

(#14) Rivington Street Bath, S/NR-eligible. The vacant three-story brick building located within the Bernard Baruch Houses is the former Rivington Street Bath. Built in 1901, it was the first municipally funded public bath in New York City and was originally located at 326 Rivington Street. When the Baruch Houses were constructed, the public bath building was converted into a recreational facility. In 1892, the State Legislature approved a bill that authorized municipalities to establish public bathing facilities; in 1895, a new law made the establishment of public bathing facilities mandatory in cities above a certain size. The Rivington Street Bath (renamed the Baruch Public Bath in 1917 after Dr. Simon Baruch, an advocate of public baths and the father of Bernard Baruch) opened with 91 showers for men and women and both indoor and outdoor bathing pools. The brick bath building has a Renaissance Revival-style design detailed with arched openings, rustication, quoins, and a bracketed cornice (see view 20 of **Figure 5.4-14**). The door and window openings have been infilled with masonry. A modern mural is painted on the east façade. In a letter dated April 25, 2016, SHPO determined that the Rivington Street Bath appears eligible under Criterion A in the areas of community planning and social/humanitarian history and Criterion C in the area of architecture. The Rivington Street Bath is located at the southern end of the Baruch Playground.

(#15) Jacob Riis Houses, S/NR-eligible. The Jacob Riis Houses consist of 19 buildings, ranging in height from six to 14 stories, completed in 1949 on a site bounded by East 6th Street, the FDR Drive, East 14th Street, and Avenue D. The brick buildings have either modified H-plans or X-



Rivington Street Baths (#14) 20



Jacob Riis Houses (#15). View north from East River Park at East 6th Street pedestrian bridge 21

plans, and the façades rise without setbacks and with unornamented façades (see view 21 of **Figure 5.4-14**). James Mackenzie and the firm of Walker & Gillette were the architects. The freestanding buildings are set within landscaped grounds. East 10th Street bisects the development; a landscaped traffic circle is located in the middle of the street. The north and south sections of the Jacob Riis Houses each have a landscaped mall oriented north-south. In 1965, landscape architect M. Paul Friedberg redesigned a central lawn into these malls, which create an interior open area and provide playgrounds, a basketball court, benches, and an amphitheater. The amphitheater is original to the 1965 design. In an evaluation dated December 6, 2016, SHPO determined that the Jacob Riis Houses may meet Criterion A in the areas of social history, politics/government, and community development and Criterion C in the areas of architecture and community planning and development.

(#16) Stuyvesant Town, S/NR-eligible. After the New York State Legislature made amendments to the Urban Redevelopment Companies Law that encouraged private firms to undertake slum clearance projects, the Metropolitan Life Insurance Company developed Stuyvesant Town in 1943–1947—the company’s second large-scale residential development, following Parkchester in the Bronx (from 1942). Approximately 600 buildings on 18 blocks were razed to make way for the massive development on a superblock bounded by East 14th and East 20th Streets, the FDR Drive, Avenue C, and First Avenue. The architects Irwin Clavan and Gilmore Clark planned the development with 35 freestanding, brick buildings of 13 and 14 stories arranged around a central oval. The residential buildings have rectilinear footprints of multiple bays and unornamented façades. Playgrounds and lawns are interspersed throughout the development. On the perimeter, the buildings are set to the street grid, and commercial spaces are located along portions of the First Avenue and East 14th and East 20th Street frontages (see view 22 of **Figure 5.4-15**). Entrances to a below-grade parking garage are located on Avenue C. Originally, only white families were allowed to rent apartments, but after significant public outcry, the Metropolitan Life Insurance Company changed the rental restrictions in 1950. Recently, alterations to ground-floor spaces throughout the complex have been made to create more transparent residential amenities. In a letter dated April 25, 2016, SHPO determined that Stuyvesant Town appears eligible under Criterion A in the areas of social history and community planning/development and Criterion C in the areas of architecture and landscape design.

(#17) Peter Cooper Village, S/NR-eligible. The Metropolitan Life Insurance Company also developed Peter Cooper Village across East 20th Street from Stuyvesant Town in 1947–1949. Unlike that development, Peter Cooper Village was constructed without land assembly by the City and without tax exemptions. Similar to Stuyvesant Town and designed by the same architect, Irwin Clavan, Peter Cooper Village consists of 21 buildings ranging in height from 12 to 15 stories on a superblock bounded by East 20th and East 23rd Streets, the FDR Drive, and First Avenue. The buildings of Peter Cooper Village have slab forms and are set at an angle to the street grid, with some buildings set at opposing diagonals to each other (see view 23 of **Figure 5.4-15**). Lawns and recreation areas are located throughout the grounds. In a letter dated April 25, 2016, SHPO determined that Peter Cooper Village appears eligible under Criterion A in the areas of social history and community planning/development and Criterion C in the areas of architecture and landscape design.

SECONDARY AREA OF POTENTIAL EFFECT (PROTECTED AREA)

There are 42 architectural resources located within the Secondary APE beyond the boundaries of the project area. These resources are shown on **Figure 5.4-1** and listed in **Table 5.4-2**. These



Stuyvesant Town (#16). View southwest on West 20th Street 22



Peter Cooper Village (#17). View northwest at FDR Drive and East 20th Street 23

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resources comprise two historic districts, schools, churches, synagogues, row houses, libraries, banks, and other building types.

**Table 5.4-2
Secondary APE—Architectural Resources**

Map Ref. Letter #	Name/Type	Address	NHL	S/NR	S/NR-eligible	NYCL	NYCL-eligible
18	St. Augustine's Chapel	333 Madison Street		X		X	
19	Row houses	511-513 Grand Street		X		X	
20	Public School 110	285 Delancey Street			X		
21	Neighborhood Playhouse	466 Grand Street	X			X	
22	Bialystoker Synagogue	7 Bialystoker Place				X	
23	Lamppost 84	Former intersection of Broome and Sheriff Streets				X	
24	Junior High School 22 and NYPL, Hamilton Fish Park Branch	111 Columbia Street			X		X ¹
25	Hamilton Fish Play Center	130 Pitt Street				X	
26	Our Lady of Sorrows Church, Rectory, and School	103 Pitt Street, 213-215 Stanton Street, and 221 Stanton Street			X		X ¹
27	Orthodox Home	320 East 3rd Street			X ²		X ¹
28	Row house	314 East 3rd Street					X ¹
29	San Ysidora Y San Leandro Orthodox Catholic Church of the Hispanic Rite	345-347 East 4th Street			X ²		
30	Congregation Beth Hamedrash Hagadol Anshe Ungam	242 East 7th Street			X	X	
31	Row houses	258-266 East 7th Street			X		X ³
32	Row house	268 East 7th Street					X ³
33	Row house	269 East 7th Street			X ²		
34	Row house	271 East 7th Street			X		
35	Row house	275 East 7th Street			X ²		
36	Public National Bank of New York	106 Avenue C				X	
37	Wheatworth Factory	444 East 10th Street				X	
38	Sixth Street Industrial School	630 East 6th Street			X		
39	United Brethren Mission and Congregation Ahawath Yeshurun Shara Torah	636-638 East 6th Street			X		
40	St. Brigid's Roman Catholic Church	119 Avenue B			X		
41	Tompkins Square Lodging House for Boys and Industrial School	296 East 8th Street				X	
42	Christodora House	147 Avenue B		X			
43	Charlie Parker Residence	151 Avenue B		X		X	
44	Public School 64	605-615 East 9th Street			X	X	
45	East 10th Street Historic District	East 10th Street between Avenues A and B			X	X	

**Table 5.4-2 (cont'd)
Secondary APE—Architectural Resources**

Map Ref. Letter #	Name/Type	Address	NHL	S/NR	S/NR-eligible	NYCL	NYCL-eligible
46	NYPL, Tompkins Square Branch	331 East 10th Street			X	X	
47	11th Street Public Bath	538 East 11th Street				X	
48	Father's Heart Ministry Center	543-547 East 11th Street		X		X	
49	St. Nicholas of Myra Orthodox Church	288 East 10th Street			X ²	X	
50	Church of the Most Holy Redeemer	161-173 East Third Street			X		
51	Nazareth House	206-212 East 4th Street			X		
52	Roman Catholic Church of the Immaculate Conception	406-414 East 14th Street		X		X	
53	Former Stuyvesant High School	331 East 15th Street			X	X	
54	Stuyvesant Square Historic District	Bounded by East 18th, East 17, and East 15th Streets, N.D. Perlman Place, and Third Avenue		X		X	
55	Row houses	306-310 East 15th Street		X			
56	Hebrew Technical School for Girls	238-246 Second Avenue			X		
57	Mechanics and Metals National Bank	230 Second Avenue			X		
58	Row houses	326-330 East 18th Street		X		X	
59	Public School 40	319 East 19th Street			X		

Notes:
 NHL: National Historic Landmark
 S/NR: Listed on the State and National Registers of Historic Places.
 S/NR-eligible: Officially determined eligible for listing on the State and National Registers of Historic Places.
 NYCL: New York City Landmark
 Heard: Application has been heard at the NYC Landmarks Preservation Commission.
 NYCL-eligible: Determined to appear eligible for designation as a NYCL.
¹ LPC determined that this property appears eligible for NYCL designation in the *East Village/Lower East Side Rezoning Final Environmental Impact Statement (FEIS)*.
² LPC determined that this property appears S/NR eligible in the *East Village/Lower East Side Rezoning FEIS*.
³ LPC determined that the row houses at 258-266 East 7th Street, along with the row house at 268 East 7th Street, appear to be an LPC-eligible historic district in the *East Village/Lower East Side Rezoning FEIS*.

Sources:
 New York State Office of Parks, Recreation and Historic Preservation CRIS, <https://cris.parks.ny.gov/Login.aspx?ReturnUrl=%2f>; NYCityMap, <http://gis.nyc.gov/doitt/nycitymap/>; NYC Department of City Planning, *East Village/Lower East Side Rezoning FEIS* (September 26, 2008).

F. ENVIRONMENTAL EFFECTS

A detailed description of the alternatives analyzed in this chapter is presented in Chapter 2.0, “Project Alternatives.”

NO ACTION ALTERNATIVE (ALTERNATIVE 1)

The No Action Alternative is the future condition without the proposed project and assumes that no new comprehensive coastal protection system is installed in the proposed project area. However, as described in Chapter 2.0, “Project Alternatives,” there are a number of projects planned or under construction in the Primary and Secondary APEs that are expected to be complete by the build year for the proposed project, 2025. Note that although the superstructure of the shared-use flyover bridge for the proposed project would be completed in 2025, the flood

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protection and enhanced park and access features under Alternative 4 (the Preferred Alternative) would be completed in 2023.

ARCHAEOLOGICAL RESOURCES

Area of Potential Effect – Montgomery Street to Rivington Street

Construction of two planned projects could potentially affect archaeological resources that could potentially be present in the APE—construction of an exterior entrance ramp to the former Marine Engine Co. 66 Fireboat House at Grand Street and a capital project to upgrade the existing composting operations in the area that is currently operated by the Lower East Side Ecology Center.

Area of Potential Effect – East 23rd Street to East 25th Street

There are no planned projects that could potentially affect archaeological resources that could potentially be present in the APE.

Area of Potential Effect – Upland Drainage Management Improvements

There are no planned projects that could potentially affect archaeological resources that could potentially be present in the APE.

ARCHITECTURAL RESOURCES

Overview

In the future without the proposed project, the status of architectural resources could change. S/NR-eligible resources could be listed on the Registers, NYCL-eligible properties could be calendared for a designation hearing, and properties pending designation as Landmarks could be designated. It is also possible, given the proposed project's completion year of 2025, that additional sites could be identified as architectural resources and/or potential architectural resources in this time frame.

In the future without the proposed project, changes to architectural resources or to their settings could occur. For instance, indirect effects from future projects could include: a change in scale, visual prominence, or visual context of any building, structure, or object or landscape feature; screening or elimination of publicly accessible views; or introduction of significant new shadows or significant lengthening of the duration of existing shadows on a historic landscape or on a historic structure if the features that make the resource significant depend on sunlight. It is also possible that some architectural resources in the APE could deteriorate or experience direct effects through alteration or demolition, while others could be restored.

Architectural resources that are listed on the S/NR or that have been found eligible for listing are given a measure of protection under Section 106 of the National Historic Preservation Act from the effects of projects sponsored, assisted, or approved by federal agencies. Although preservation is not mandated, federal agencies must attempt to avoid adverse effects on such resources through a notice, review, and consultation process. Properties listed on the Registers are similarly protected against effects resulting from projects sponsored, assisted, or approved by State agencies under the State Historic Preservation Act. However, private owners of properties eligible for, or even listed on, the Registers using private funds can alter or demolish their properties without such a review process. Privately owned properties that are NYCLs, in New York City Historic Districts, or pending designation as NYCLs are protected under the New

York City Landmarks Law, which requires LPC review and approval before any alteration or demolition can occur, regardless of whether the project is publicly or privately funded. Publicly owned resources are also subject to review by LPC before the start of a project; however, LPC's role in projects sponsored by other city or state agencies generally is advisory only.

The 2014 New York City Building Code, in Section BC 3309: Protection of Adjoining Property, provides protection measures for all properties against accidental damage from adjacent construction by requiring that all buildings, lots, and service facilities adjacent to foundation and earthwork areas be protected and supported. Further, Section BC 3309.4.4 requires that "historic structures that are contiguous to or within a lateral distance of 90 feet...from the edge of the lot where an excavation is occurring" be monitored during the course of excavation work. In addition, the New York City Department of Buildings *TPPN #10/88* applies to NYCLs, properties within New York City Historic Districts, and NR-listed properties. *TPPN #10/88* supplements the standard building protections afforded by the Building Code by requiring a monitoring program to reduce the likelihood of construction damage to adjacent NYCLs and NR-listed properties (within 90 feet) and to detect at an early stage the beginnings of damage so that construction procedures can be changed.

Non-Storm Conditions

Primary Area of Potential Effect

Project Area One. Under the No Action Alternative, no new comprehensive coastal flood protection systems will be implemented in Project Area One.

There are, however, several projects planned or under construction in Project Area One, as described more fully in Chapter 2.0, "Project Alternatives." Two projects that could affect architectural resources in the No Action Alternative are described below.

One of the planned projects within Project Area One that could affect architectural resources is a NYC Parks project to improve facilities within East River Park. NYC Parks is proposing to construct an exterior entrance ramp to the former Marine Engine Co. 66 Fireboat House (#4, S/NR-eligible) that complies with the Americans with Disabilities Act. In addition, NYC Parks plans interior renovations to the building. As the former Fireboat House has undergone previous interior renovations to house the Lower East Side Ecology Center and to provide public restrooms, it is not expected that the planned interior renovations would result in an adverse effect on the Fireboat House. However, depending on the plans for the exterior ramp, this project could adversely affect the integrity of the building's materials, design, and/or setting. This adjacent architectural resource would be offered some protection from accidental damage through Building Code Section BC 3309: Protection of Adjoining Property.

A portion of the S/NR-eligible East River Bulkhead (#3) lies within the Pier 42 project site. In accordance with a Programmatic Agreement between SHPO, LMDC, and ACHP, signed on August 3, 2007, for the East River Waterfront Esplanade and Piers Project, LMDC and the City are consulting with SHPO regarding the design of the Pier 42 project on or around the historic, granite portions of the East River Bulkhead. Further, the Pier 42 project will repair the portion of the bulkhead within the Pier 42 project site by grout replacement and by replacement of deteriorated modern concrete caps. Therefore, the Pier 42 project will not adversely affect the East River Bulkhead.

Project Area Two. There are no projects planned or under construction in Project Area Two that could affect architectural resources.

400-Foot Portion of the Primary Area of Potential Effect. There are several projects planned or under construction in the 400-foot portion of the Primary APE. Three of these projects could affect architectural resources in the No Action Alternative; they are described below.

NYC Parks plans to reconstruct the comfort station of the Baruch Playground located within the grounds of the Bernard Baruch Houses (#9, S/NR-eligible). The playground is an original feature of the Bernard Baruch Houses, but it has been renovated twice, in 1975 and 2000. While the Baruch Playground project could affect the integrity of the comfort station's materials, design, and/or setting, it is not expected that this project would affect the overall integrity of the Bernard Baruch Houses. Therefore, it would not result in any direct or indirect effects to the development. Building Code Section BC 3309: Protection of Adjoining Property would offer the adjacent Rivington Street Bath (#13, S/NR-eligible) some protection from accidental construction-related damage that could potentially result from the Baruch Playground project.

Hurricane Sandy damaged the Bernard Baruch (#9, S/NR-eligible) and Jacob Riis Houses (#14, S/NR-eligible). To prevent any further damages to these complexes from flooding, NYCHA is proposing resiliency measures for them. At the Bernard Baruch Houses, NYCHA proposes to install a floodwall along the west side of Baruch Drive, individually floodproof the buildings east of Baruch Drive, construct an electrical annex to each building east of Baruch Drive, and construct a new boiler plant in the center of the development. At the Jacob Riis Houses, NYCHA proposes to floodproof each building and construct an electrical annex to each building. Site restoration would also be undertaken at each development. These projects are undergoing environmental review pursuant to NEPA, and NYCHA is consulting with SHPO regarding the potential for these resiliency projects to result in adverse effects to the Bernard Baruch and Jacob Riis Houses.

NYC Parks is planning to reconstruct the roofing systems of the Asser Levy Playground. As the Asser Levy Public Baths (#11) portion of the Asser Levy Playground is a NYCL (and also listed on the Registers), this project will be coordinated with LPC so that there will be no adverse effects to this architectural resource.

Secondary Area of Potential Effect (Protected Area)

There are a number of projects under construction or planned or projected for development within the Secondary APE. Some of these projects could result in direct or indirect effects to architectural resources.

Storm Conditions

In the absence of the construction of comprehensive coastal flood protection systems within the project area, architectural resources located throughout the APEs would remain at risk of future flooding effects. However, the Bernard Baruch and Jacob Riis Houses would be protected, as described above.

REFERRED ALTERNATIVE (ALTERNATIVE 4): FLOOD PROTECTION SYSTEM WITH A RAISED EAST RIVER PARK

ARCHAEOLOGICAL RESOURCES

Area of Potential Effect – Montgomery Street to Rivington Street

Construction of the floodwalls and closure structures under the Preferred Alternative would involve excavation to depths of 2 to 4 feet below the current grade to install the upper

components, and for pile caps. Impacts below these depths would be by sheet piles, which would be mechanically driven into the ground to depths of around 40 feet and would not afford visibility of any underlying soils. The Preferred Alternative would also include the installation of new sewers within East River Park, and the installation of the new sewers would involve the excavation of trenches to depths of between 15 and 20 feet below existing grade. Therefore, additional archaeological investigation will be performed prior to or during construction as will be stipulated in the PA.

Area of Potential Effect – East 23rd Street to East 25th Street

The Phase 1A report identified historic-period archaeological sensitivity for the East 23rd and East 25th Street portions of the APE. The different types of potential archaeological resources within the sensitive areas may be found below the existing and former street and sidewalk pavement layers and bedding, which generally extend at least one foot below the present grade. Therefore, potential resources may be located beginning at one foot below grade. Most project effects of the Preferred Alternative would consist of excavation to depths of 2 to 4 feet below the current grade to install the upper components of floodwalls and closure structures, and for pile caps. Disturbance below these depths would be by sheet piles, which would be mechanically driven into the ground and will not afford visibility of any underlying soils. Areas where deeper and wider impacts may occur are where existing utilities could be encased or relocated. Therefore, additional archaeological investigation will be performed prior to or during construction.

Area of Potential Effect – Upland Drainage Management Improvements

The Supplemental Phase 1A Archaeological Documentary Study identified historic-period archaeological sensitivity for the locations of the proposed M22-M23 parallel conveyance and the South Interceptor Gate and Building. The interceptor gate would be installed at a depth of at least 36 feet below existing grade to connect with the existing interceptor. The new parallel conveyance would be installed between approximately 10 and 28 feet below grade. Therefore, additional archaeological investigation will be performed prior to or during construction.

Additional Archaeological Investigation

A scope of work for the additional investigation will be prepared in consultation with LPC and SHPO in accordance with Section 106 regulations, and the City will complete any further phase of archaeological work per the guidance in the *CEQR Technical Manual* and in accordance with the Secretary of the Interior's *Standards and Guidelines for Archaeology*, ACHP's *Section 106 Archaeological Guidance*, and the New York Archaeological Council's *Standards for Cultural Resource Investigations and Curation of Archaeological Collections*. This further phase of archaeological work will be stipulated in the PA and would include testing and/or monitoring conducted in consultation with LPC and SHPO. The testing and/or monitoring would not be done during the EIS process but would occur before and/or during project construction. The scope of work for additional archaeology would include: a sampling strategy that will select specific areas of the APE to be further investigated; identification of those areas that are believed to be most sensitive for recovering landfill retaining structures across the overall APE; a description of the basis for the proposed sampling design, including a tabulation of the various archaeological contexts within the APE and a quantification of the sample fraction for each context; and an unanticipated discoveries protocol. If significant archaeological resources are identified during testing and/or monitoring, further archaeology and/or mitigation would be completed in accordance with Section 106 regulations and the guidance in the *CEQR Technical*

Manual. In written communications dated April and May 2016, representatives of the Delaware Nation, Delaware Tribe of Indians, and Stockbridge-Munsee Community Band of Mohicans requested, in the case of an unanticipated discovery of an archaeological site or artifacts, that work be halted until the tribe is notified and the artifact can be evaluated by an archaeologist.

ARCHITECTURAL RESOURCES

Non-Storm Conditions

Primary Area of Potential Effect

Project Area One – Potential Direct Effects through Demolition or Alteration. In Project Area One, the Preferred Alternative would directly affect the FDR Drive (#1, S/NR-eligible) through the construction of closure structures across the highway in the vicinity of Montgomery Street and East 13th Street. However, it is not expected that this work would have adverse effects on the FDR Drive. The highway has been modified over time through conversion from a boulevard to a controlled-access parkway, which involved the construction of exit ramps and overpasses and the installation of concrete barrier walls and medians, and the proposed construction of the closure structures would not affect the overall historical integrity of the highway, which runs from the Battery Park underpass to the 125th Street/Triborough Bridge exit. Construction affecting the FDR Drive would be coordinated with NYCDOT to ensure that it is protected during construction of the Preferred Alternative.

Project Area One – Potential Direct Effects from Adjacent Construction. Construction of the Preferred Alternative would occur within 90 feet of the following three S/NR-eligible architectural resources located within Project Area One: the FDR Drive (#1); Williamsburg Bridge (#2); and Engine Co. 66 Fireboat House (#4) (see **Figure 5.4-16**). (For a more detailed discussion of project construction within 90 feet of these architectural resources, see Chapter 6.0, “Construction Overview.”) Therefore, as will be stipulated in the PA, the City, in consultation with LPC and SHPO, would develop and implement CPPs for these three architectural resources to avoid inadvertent construction-period damage from ground-borne vibrations, falling debris, collapse, dewatering, subsidence, or construction equipment. The plans would be expected to follow the guidelines of *TPPN #10/88*, which “requires a monitoring program to reduce the likelihood of construction damage to adjacent historic structures and to detect at an early stage the beginnings of damage so that construction procedures can be changed.” It is expected that the CPPs will also be prepared in accordance with LPC’s guidance document *Protection Programs for Landmarked Buildings* and the National Park Service’s *Preservation Tech Notes, Temporary Protection #3: Protecting a Historic Structure during Adjacent Construction*. With the CPPs in place, construction would not be expected to result in adverse effects to these three S/NR-eligible architectural resources. Further, construction adjacent to the FDR Drive and the Williamsburg Bridge would be coordinated with NYCDOT to ensure that they are protected during construction of the Preferred Alternative.

Project Area One – Potential Contextual Effects. It is not expected that the Preferred Alternative would result in any contextual effects on architectural resources located in Project Area One. As described in *the CEQR Technical Manual*, contextual effects can include a change in scale, visual prominence, or visual context of any building, structure, object, or landscape feature; screening or elimination of publicly accessible views; or introduction of significant new shadows or significant lengthening of the duration of existing shadows on an historic landscape or an historic structure if the features that make the structure significant depend on sunlight. The

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- Project Area One
- Project Area Two
- Primary (400-foot) APE
- Individual Architectural Resources
- East 10th Street Historic District (NYCL, S/NR-eligible)
- Lower East Side Historic District and Extension (S/NR)
- Stuyvesant Square Historic District (NYCL, S/NR)
- FDR Drive (S/NR)
- Preferred Alternative Limits of Work

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Preferred Alternative would not result in any of these types of effects to architectural resources in Project Area One.

The proposed floodwalls, raised park, new bridges at Corlears Hook Park and Delancey and East 10th Streets, and the interceptor gate building at Corlears Hook Park would not result in a change in scale, visual prominence, or visual context of any of the architectural resources located in Project Area One. The Preferred Alternative would not affect the visual context of these resources, as it would not result in any land use changes, and East River Park would retain the character of a landscaped, waterfront park. Under the Preferred Alternative, raised areas would be constructed around the Engine Co. 66 Fireboat House (#4, S/NR-eligible). These raised areas would block limited eastward views of the fireboat house from Grand Street west of the FDR Drive, but this architectural resource is not considered a visual resource, these views are not significant, and this resource would continue to be visually prominent from within East River Park. The planted, raised areas would also change the immediate setting of the fireboat house, but its setting would remain that of a waterfront park, and there would not be an adverse contextual effect to the architectural resource. As none of the proposed design features would be greater than 50 feet tall, the Preferred Alternative would not have the potential to result in shadow effects on architectural resources. For a more thorough discussion of visual resources and views, see Chapter 5.5, “Urban Design and Visual Resources.”

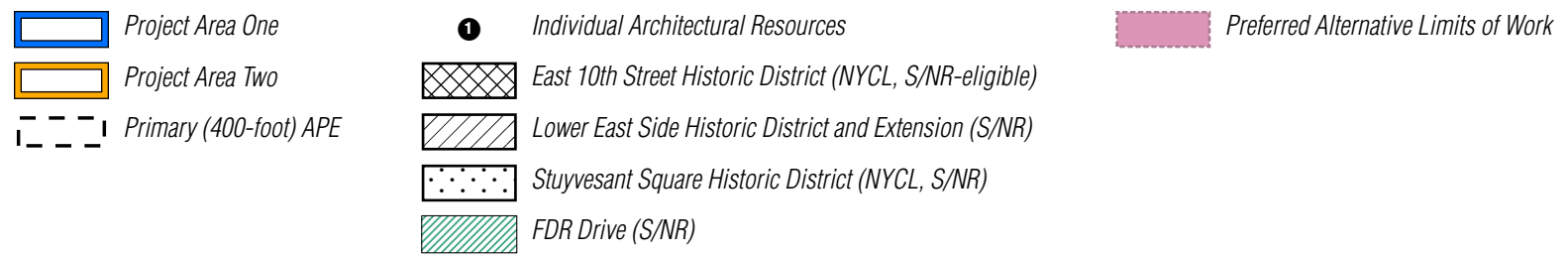
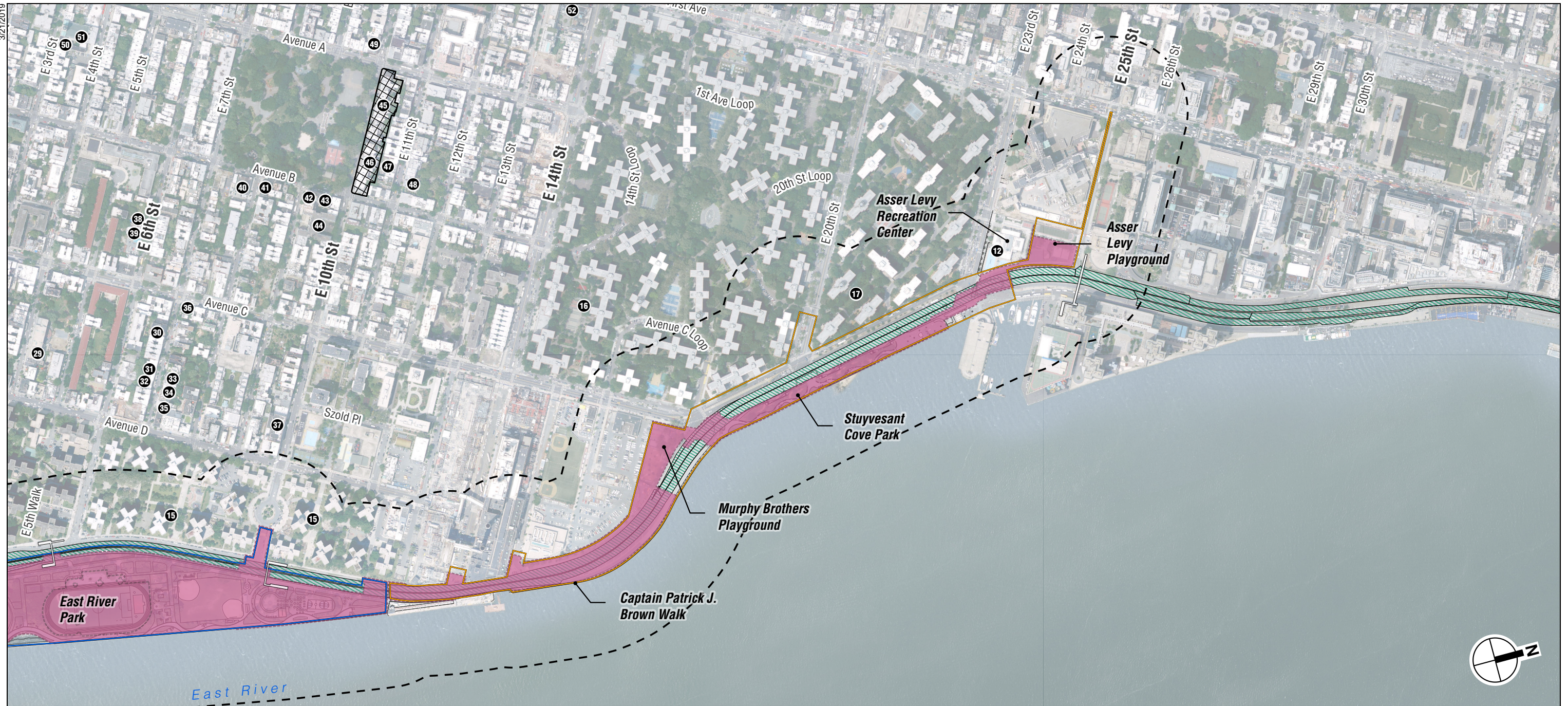
Project Area Two – Potential Direct Effects through Demolition or Alteration. In Project Area Two, the Preferred Alternative would directly affect the FDR Drive (#1, S/NR-eligible) through the construction of closure structures across the highway at Avenue C. As with the construction in Project Area One that would directly affect the highway, it is not expected that construction of these closure structures would have adverse effects on the FDR Drive. As described above, the highway has been modified over time, and the installation of closure structures at Avenue C (considered individually and cumulatively with the work performed in Project Area One) would not affect the overall historical integrity of the highway. Construction affecting the FDR Drive would be coordinated with NYCDOT to ensure that it is protected during construction of the Preferred Alternative.

Project Area Two – Potential Direct Effects from Adjacent Construction. Construction of the Preferred Alternative would occur within 90 feet of the FDR Drive (#1, S/NR-eligible) (see **Figure 5.4-17**). (For a more detailed discussion of project construction within 90 feet of this architectural resource, see Chapter 6.0, “Construction Overview.”) Therefore, as will be stipulated in the PA, the City, in consultation with LPC and SHPO, would develop and implement a CPP to avoid inadvertent construction-period damage from ground-borne vibrations, falling debris, collapse, dewatering, subsidence, or construction equipment to the FDR Drive. The plan would be expected to follow the guidance documents noted above. With the CPP in place, construction would not be expected to result in adverse effects to the FDR Drive (#1, S/NR-eligible). Further, construction adjacent to the FDR Drive would be coordinated with NYCDOT to ensure that it is protected during construction of the Preferred Alternative.

Project Area Two – Potential Contextual Effects. It is not expected that the Preferred Alternative would result in any contextual effects on the FDR Drive (#1, S/NR-eligible), the only architectural resource located within Project Area Two.

400-Foot Portion of the Primary Area of Potential Effect
Potential Direct Effects from Adjacent Construction. Construction of the Preferred Alternative would occur within 90 feet of the Asser Levy Public Baths (#12, S/NR, NYCL) and a small portion of the Jacob Riis Houses (#15, S/NR-eligible) (see **Figures 5.4-16 and 5.4-17**). (For a

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more detailed discussion of project construction within 90 feet of these architectural resources, see Chapter 6.0, “Construction Overview.”) In addition, construction of the drainage management components would occur within 90 feet of Gouverneur Hospital (#5, S/NR); Gouverneur Hospital Dispensary (#6, S/NR-eligible); a portion of the Vladeck Houses within the Lower East Side Historic District (#7, S/NR); a portion of the Baruch Houses (#9, S/NR-eligible); a portion of the Jacob Riis Houses (#15, S/NR-eligible); a portion of Stuyvesant Town (#16, S/NR-eligible); and a portion of Peter Cooper Village (#17, S/NR-eligible). Therefore, as will be stipulated in the PA, the City, in consultation with LPC and SHPO, would develop and implement CPPs for these architectural resources to avoid inadvertent construction-period damage from ground-borne vibrations, falling debris, collapse, dewatering, subsidence, or construction equipment. The CPPS would be expected to follow the guidance documents noted above and, with their implementation, construction would not be expected to result in adverse effects to these resources.

Potential Contextual Effects. It is not expected that the Preferred Alternative would result in any contextual effects on architectural resources in the 400-foot portion of the APE. In general, the Preferred Alternative would not result in a change in scale, visual prominence, or visual context of any building, structure, object, or landscape feature; screening or elimination of publicly accessible views; or introduction of significant new shadows or significant lengthening of the duration of existing shadows on an historic landscape or an historic structure if the features that make the structure significant depend on sunlight. (For a more thorough discussion of visual resources and views, see Chapter 5.5, “Urban Design and Visual Resources.”)

The proposed combination of floodwalls, raised park, new bridges at Corlears Hook Park and Delancey and East 10th Streets, and the interceptor gate buildings would not result in a change in scale, visual prominence, or visual context of any of the architectural resources located in the 400-foot portion of the APE. East River Park and Stuyvesant Cove Park would continue to provide a waterfront open space visual context and the floodwalls along Montgomery Street, the FDR Drive, and between East 23rd and East 25th Streets would be new streetscape features in a densely developed urban environment where the FDR Drive runs on elevated segments, the Con Ed East River Generating Facility between East 13th and East 15th Streets is enclosed by walls and fences, and the large residential housing developments along the FDR Drive are set back from the street behind fences. Therefore, the Preferred Alternative would not adversely affect the visual context of any architectural resource in the 400-foot portion of the APE.

The new bridge at Delancey Street would have an access ramp, in the same general location as the existing ramp to the existing bridge, that extends along Delancey Street adjacent to the parking lot of the East River Housing Cooperative (#13, S/NR-eligible) north parcel that is located between Grand and Delancey Streets. In addition, the new span over the FDR Drive would be located approximately 150 feet south of the existing span. However, this new bridge would not cause a change in scale, visual prominence, or visual context of the East River Housing Cooperative, as the existing bridge is located adjacent to the north of the parking lot that is part of the large residential development. The reconstructed bridge would not be a new feature in the immediate context of the architectural resource. Similarly, the new East 10th Street bridge would not cause a change in scale, visual prominence, or visual context of the Jacob Riis Houses (#15, S/NR-eligible). The new bridge would be located approximately 50 feet south of the existing bridge and would, therefore, not change the context or views of the surrounding buildings.

In addition, the proposed floodwalls and raised park would, for the most part, have limited effects on views of architectural resources in the 400-foot portion of the APE. From within East River Park, raising the majority of the park would likely affect the views of the Baruch Houses (#9, S/NR-eligible), Public High School 97 (#10, S/NR-eligible), the Lavanburg Homes (#11, S/NR-eligible), the East River Housing Cooperative (#13, S/NR-eligible), the Rivington Street Baths (#14, S/NR-eligible), and the Jacob Riis Houses (#15, S/NR-eligible), but these resources would still be prominently visible from within the park, and they would continue to be visible from other locations within the APE.

On East 20th Street near Avenue C, an interceptor gate would be constructed as part of the drainage management improvements. The interceptor gate would include an above-grade building located in the median of East 20th Street near the building at the northeast corner of Stuyvesant Town (#16, S/NR-eligible). The interceptor gate building would be approximately 10 feet tall, 50 feet long, and 10 feet wide. Therefore, this relatively small structure in East 20th Street would not affect the visual prominence of the large Stuyvesant Town complex.

At the northern end of the project area, floodwalls and closure structures would be constructed along the east and north sides of the Asser Levy Public Baths (#12, S/NR, NYCL), adjacent to the outdoor swimming pool from the 1960s, which is currently enclosed by a plain brick wall and metal fence. The southern façade and the monumental west façade that fronts onto the former Asser Levy Place would remain visually prominent under this alternative. Further, as will be stipulated in the PA, an effort would be made to design these walls—in terms of proportions and finishes—so that they are compatible with the historic public baths building, and the design would be coordinated with LPC.

Secondary Area of Potential Effect (Protected Area)

The Preferred Alternative would not have any direct or indirect effects on architectural resources located in the Secondary APE. Architectural resources in the Secondary APE are too far from the project area to be affected by this alternative.

Storm Conditions

Primary Area of Potential Effect

Project Area. In a future storm condition, the following two S/NR-eligible architectural resources could experience adverse direct effects from storm surge and flooding: the Williamsburg Bridge (#2) and East River Bulkhead (#3). The Engine Co. 66 Fireboat House (#4, S/NR-eligible) would not be raised with the rest of the park, but measures, such as the construction of raised areas around its perimeter, would serve to avoid or lessen effects to the architectural resource from storm surge and flooding in a future storm condition.

The portion of the FDR Drive (#1, S/NR-eligible) that runs through Project Area One would be located on the landward side of the flood protection system that would be constructed under the Preferred Alternative. It would, therefore, be protected from damage that could result from storm surge and flooding in a future storm condition.

The portion of the FDR Drive (#1, S/NR-eligible) that runs through Project Area Two would not be similarly protected. Due to the physical constraints of Project Area Two, the flood protection system proposed in this area under the Preferred Alternative would be constructed on the western side of the FDR Drive. Therefore, in a future storm condition, the portion of the FDR Drive that runs through Project Area Two could experience adverse direct effects from storm surge and flooding.

400-Foot Portion of the Primary Area of Potential Effect. The architectural resources located within the 400-foot portion of the Primary APE are landward of the flood protection system that would be constructed under the Preferred Alternative. Therefore, unlike with the No Action Alternative, they would be protected from damage that could result from storm surge and flooding in a future storm condition.

Secondary Area of Potential Effect (Protected Area)

All of the architectural resources located within the Secondary APE are landward of the flood protection systems that would be constructed under the Preferred Alternative. Therefore, unlike with the No Action Alternative, they would be protected from damage that could result from storm surge and flooding in a future storm condition.

OTHER ALTERNATIVE (ALTERNATIVE 2): FLOOD PROTECTIONS SYSTEM ON THE WEST SIDE OF EAST RIVER PARK – BASELINE

ARCHAEOLOGICAL RESOURCES

As described above, additional archaeological investigation will be performed prior to or during construction as will be stipulated in the PA. A scope of work will be prepared in consultation with LPC and SHPO, and the City will complete any further phase of archaeological work per the guidance in the *CEQR Technical Manual* and in accordance with the Secretary of the Interior's *Standards and Guidelines for Archaeology*, ACHP's *Section 106 Archaeological Guidance*, and the New York Archaeological Council's *Standards for Cultural Resource Investigations and Curation of Archaeological Collection*. See the archaeology discussion above for the Preferred Alternative for more information.

ARCHITECTURAL RESOURCES

Non-Storm Conditions

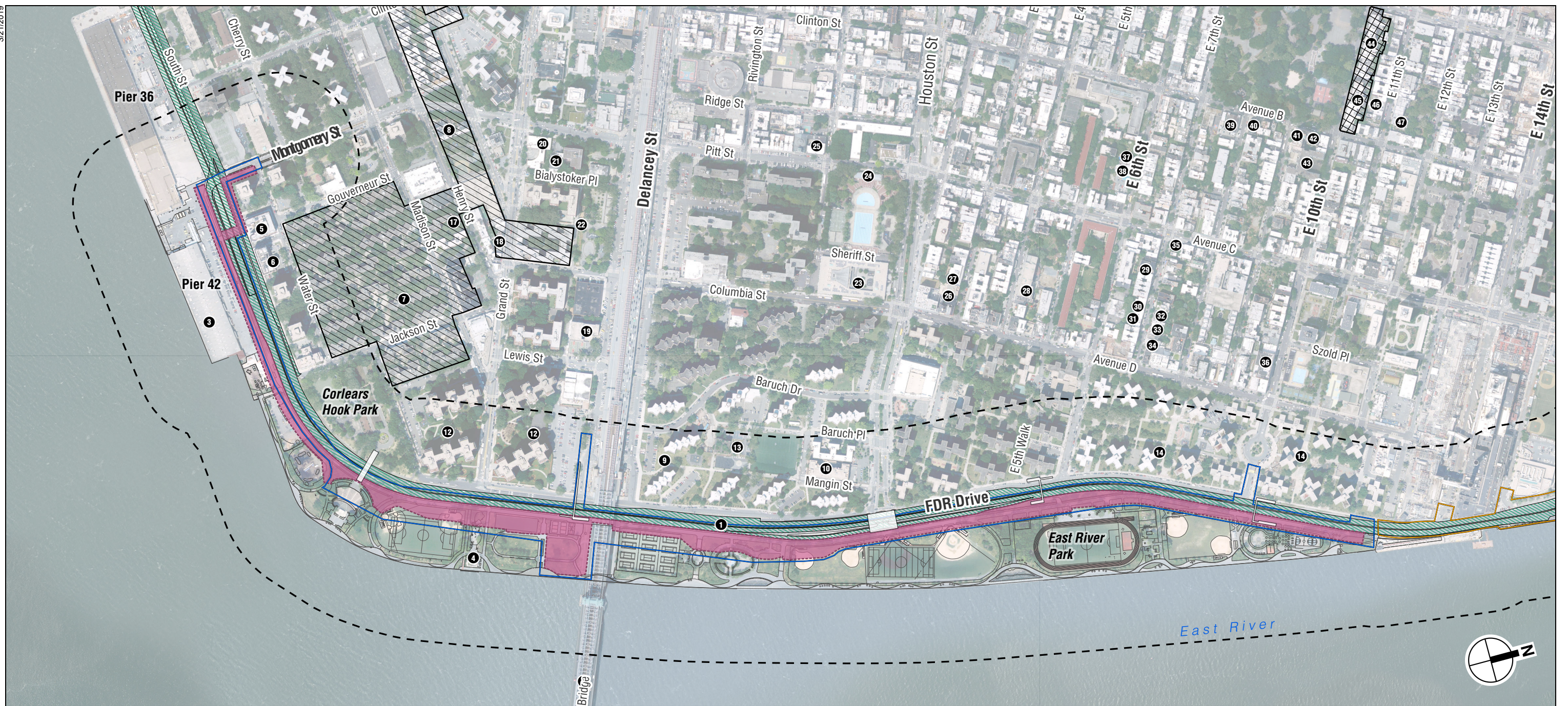
Primary Area of Potential Effect

Project Area One – Potential Direct Effects through Demolition or Alteration. This alternative, like the Preferred Alternative, would directly affect the portion of the FDR Drive (#1, S/NR-eligible) in Project Area One, but it is not expected that this work would have adverse effects on the FDR Drive. In addition, construction affecting the FDR Drive would be coordinated with NYCDOT to ensure that it is protected during construction of Alternative 2.

Project Area One – Potential Direct Effects from Adjacent Construction. Construction of Alternative 2 would occur within 90 feet of the following three S/NR-eligible architectural resources located within Project Area One: the FDR Drive (#1); Williamsburg Bridge (#2); and Engine Co. 66 Fireboat House (#4) (see **Figure 5.4-18**). Therefore, as will be stipulated in the PA, the City, in consultation with LPC and SHPO, would develop and implement CPPs for these three architectural resources as under the Preferred Alternative. Further, construction adjacent to the FDR Drive and the Williamsburg Bridge would be coordinated with NYCDOT to ensure that they are protected during construction of this alternative.

Project Area One – Potential Contextual Effects. Like the Preferred Alternative, it is not expected that Alternative 2 would result in any contextual effects on architectural resources from a change in scale, visual prominence, or visual context of any building, structure, object, or landscape feature; screening or elimination of publicly accessible views; or introduction of significant new shadows or significant lengthening of the duration of existing shadows on an

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- Project Area One
- Project Area Two
- Primary (400-foot) APE
- Individual Architectural Resources
- East 10th Street Historic District (NYCL, S/NR-eligible)
- Lower East Side Historic District and Extension (S/NR)
- Stuyvesant Square Historic District (NYCL, S/NR)
- FDR Drive (S/NR)
- Alternative 2 Limits of Work

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historic landscape or an historic structure if the features that make the structure significant depend on sunlight.

Project Area Two – Potential Direct Effects through Demolition or Alteration. Like the Preferred Alternative, Alternative 2 would directly affect the portion of the FDR Drive (#1, S/NR-eligible) in Project Area, but it is not expected that construction of these closure structures would have adverse effects on the FDR Drive. Construction affecting the FDR Drive would be coordinated with NYCDOT to ensure that it is protected during construction of Alternative 3.

Project Area Two – Potential Direct Effects from Adjacent Construction. As under the Preferred Alternative, the City, in consultation with LPC and SHPO, would develop and implement a CPP for the FDR Drive (#1, S/NR-eligible). (For a more detailed discussion of project construction within 90 feet of this architectural resource, see Chapter 6.0, “Construction Overview.”) Further, construction adjacent to the FDR Drive would be coordinated with NYCDOT to ensure that it is protected during construction of Alternative 3.

Project Area Two – Potential Contextual Effects. As with the Preferred Alternative, it is not expected that Alternative 2 would result in any contextual effects on the FDR Drive (#1, S/NR-eligible), which is the only architectural resource located in Project Area Two.

400-Foot Portion of the Primary Area of Potential Effect

Potential Direct Effects from Adjacent Construction. Within the 400-foot portion of the Primary APE, construction under Alternative 2—like construction under the Preferred Alternative—would occur within 90 feet of Gouverneur Hospital (#5, S/NR); Gouverneur Hospital Dispensary (#6, S/NR-eligible); a portion of the Vladeck Houses within the Lower East Side Historic District (#7, S/NR); a portion of the Baruch Houses (#9, S/NR-eligible); Asser Levy Public Baths (#12, S/NR, NYCL); a portion of the Jacob Riis Houses (#15, S/NR-eligible); a portion of Stuyvesant Town (#16, S/NR-eligible); and a portion of Peter Cooper Village (#17, S/NR-eligible). Therefore, as will be stipulated in the PA, the City, in consultation with LPC and SHPO, would develop and implement CPPs and, with these CPPs in place, construction would not be expected to result in adverse effects to these architectural resources (see **Figures 5.4-18 and 5.4-19**).

Potential Contextual Effects. It is not expected that Alternative 2 would result in any contextual effects on architectural resources in the 400-foot portion of the APE. This alternative—like the Preferred Alternative—would not result in a change in scale, visual prominence, or visual context of any building, structure, object, or landscape feature; screening or elimination of publicly accessible views; or introduction of significant new shadows or significant lengthening of the duration of existing shadows on an historic landscape or an historic structure if the features that make the structure significant depend on sunlight.

Secondary Area of Potential Effect (Protected Area)

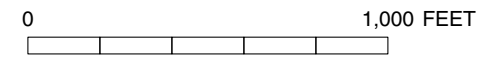
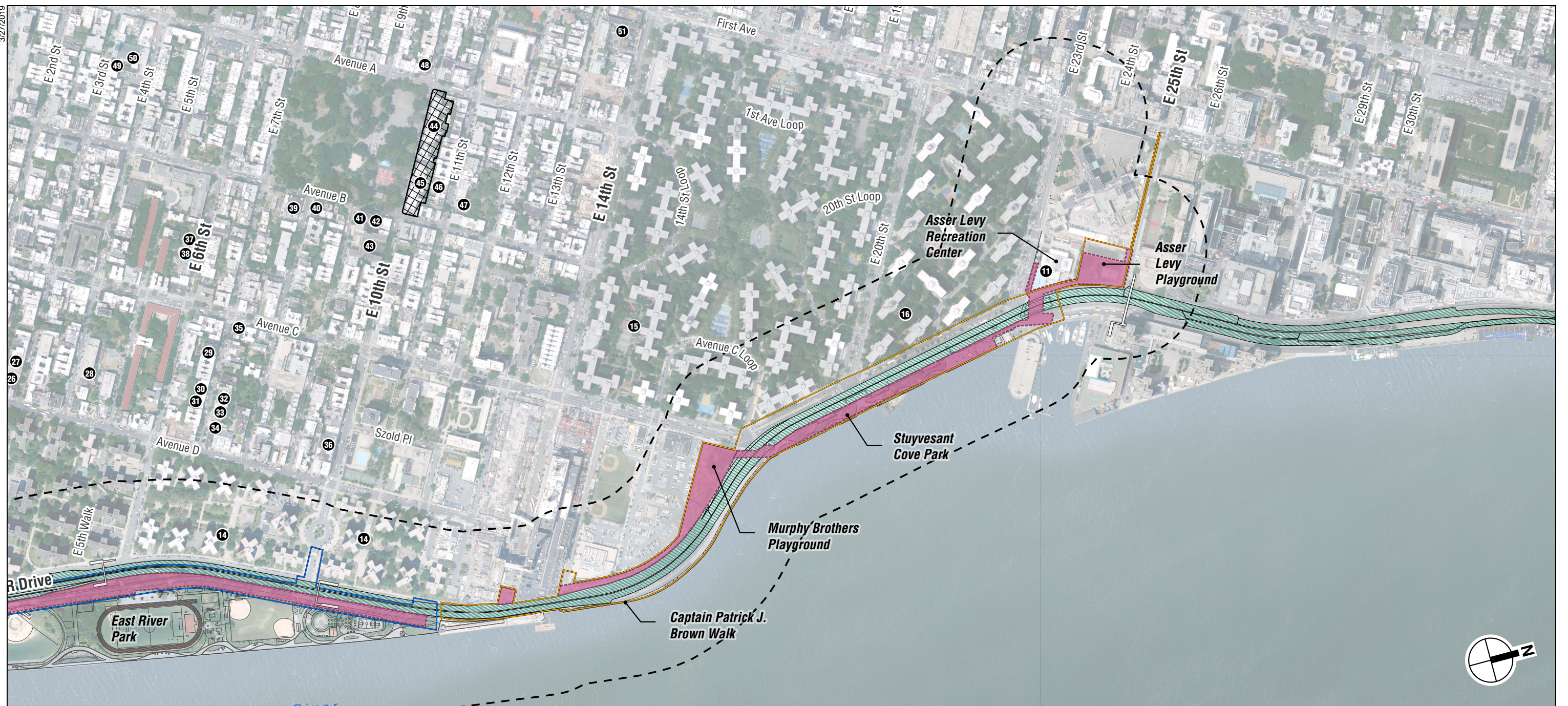
Alternative 2 (like the Preferred Alternative) would not have any direct or indirect effects on architectural resources located in the Secondary APE. Architectural resources in the Secondary APE are too far from the project area to be affected by this alternative.

Storm Conditions

Primary Area of Potential Effect

Under Alternative 2, like under the Preferred Alternative, the Williamsburg Bridge (#2, S/NR-eligible) and East River Bulkhead (#3, S/NR-eligible) could still experience adverse direct effects from storm surge and flooding. In addition, the Engine Co. 66 Fireboat House (#4, S/NR-

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eligible) would be on the waterside of the flood protection system that would be constructed under Alternative 2 and could also experience adverse direct effects from storm surge and flooding.

As under the Preferred Alternative, the portion of the FDR Drive (#1, S/NR-eligible) that runs through Project Area One would be protected from damage that could result from storm surge and flooding in a future storm condition. The portion of the FDR Drive that runs through Project Area Two would not be similarly protected, as under the Preferred Alternative.

400-Foot Portion of the Primary Area of Potential Effect.

The architectural resources located within the 400-foot portion of the Primary APE would be protected under Alternative 2 from damage that could result from storm surge and flooding in a future storm condition.

Secondary Area of Potential Effect (Protected Area)

All of the architectural resources located within the Secondary APE are landward of the flood protection systems that would be constructed under Alternative 2. Therefore, like with the Preferred Alternative, they would be protected from damage that could result from storm surge and flooding in a future storm condition.

OTHER ALTERNATIVE (ALTERNATIVE 3): FLOOD PROTECTION SYSTEM ON THE WEST SIDE OF EAST RIVER PARK – ENHANCED PARK AND ACCESS

ARCHAEOLOGICAL RESOURCES

As described above, additional archaeological investigation will be performed prior to or during construction as will be stipulated in the PA. A scope of work will be prepared in consultation with LPC and SHPO, and the City will complete any further phase of archaeological work per the guidance in the *CEQR Technical Manual* and in accordance with the Secretary of the Interior's *Standards and Guidelines for Archaeology*, ACHP's *Section 106 Archaeological Guidance*, and the New York Archaeological Council's *Standards for Cultural Resource Investigations and Curation of Archaeological Collection*. See the archaeology discussion above for the Preferred Alternative for more information.

ARCHITECTURAL RESOURCES

Non-Storm Conditions

Primary Area of Potential Effect

Project Area One – Potential Direct Effects. Like the Preferred Alternative and Alternative 2, Alternative 3 would directly affect the portion of the FDR Drive (#1, S/NR-eligible) in Project Area One through the construction of closure structures. As under Alternative 2, it is not expected that this work would have adverse effects on the FDR Drive. In addition, construction affecting the FDR Drive would be coordinated with NYCDOT to ensure that it is protected during construction of Alternative 3.

The potential direct effects to architectural resources from adjacent construction under Alternative 3 would be similar to what is described under the Preferred Alternative.

Project Area One – Potential Contextual Effects. Like the Preferred Alternative, it is not expected that Alternative 3 would result in any contextual effects on architectural resources.

Project Area Two – Potential Direct Effects. Like the Preferred Alternative, Alternative 3 would directly affect the portion of the FDR Drive (#1, S/NR-eligible) in Project Area Two and could result in the same potential direct effects to architectural resources from adjacent construction.

Project Area Two – Potential Contextual Effects. As with Alternative 2, it is not expected that Alternative 3 would result in any contextual effects on the FDR Drive (#1, S/NR-eligible), which is the only architectural resource located in Project Area Two.

400-Foot Portion of the Primary Area of Potential Effect

Potential Direct Effects from Adjacent Construction. As with construction of the Preferred Alternative, construction of Alternative 3 would occur within 90 feet of Gouverneur Hospital (#5, S/NR); Gouverneur Hospital Dispensary (#6, S/NR-eligible); a portion of the Vladeck Houses within the Lower East Side Historic District (#7, S/NR); a portion of the Baruch Houses (#9, S/NR-eligible); the Asser Levy Public Baths (#12, S/NR, NYCL); a portion of the Jacob Riis Houses (#15, S/NR-eligible); a portion of Stuyvesant Town (#16, S/NR-eligible); and a portion of Peter Cooper Village (#17, S/NR-eligible) (see **Figures 5.4-20 and 5.4-21**).

Potential Contextual Effects. Like the Preferred Alternative, it is not expected that Alternative 3 would result in any contextual effects on architectural resources in the 400-foot portion of the APE.

The proposed floodwalls and levees of Alternative 3 would, for the most part, have limited effects on views of architectural resources in the 400-foot portion of the APE. From within East River Park, the proposed floodwalls and levees would partially obstruct views of the lower floors of the Baruch Houses (#9, S/NR-eligible), Public High School 97 (#10, S/NR-eligible), the Lavanburg Homes (#11, S/NR-eligible), the East River Housing Cooperative (#13, S/NR-eligible), the Rivington Street Baths (#14, S/NR-eligible), and the Jacob Riis Houses (#15, S/NR-eligible), but these resources would still be prominently visible from within the park, and they would continue to be visible from other locations within the APE.

Secondary Area of Potential Effect (Protected Area)

Alternative 3 (like the Preferred Alternative) would not have any direct or indirect effects on architectural resources located in the Secondary APE. Architectural resources in the Secondary APE are too far from the project area to be affected by this alternative.

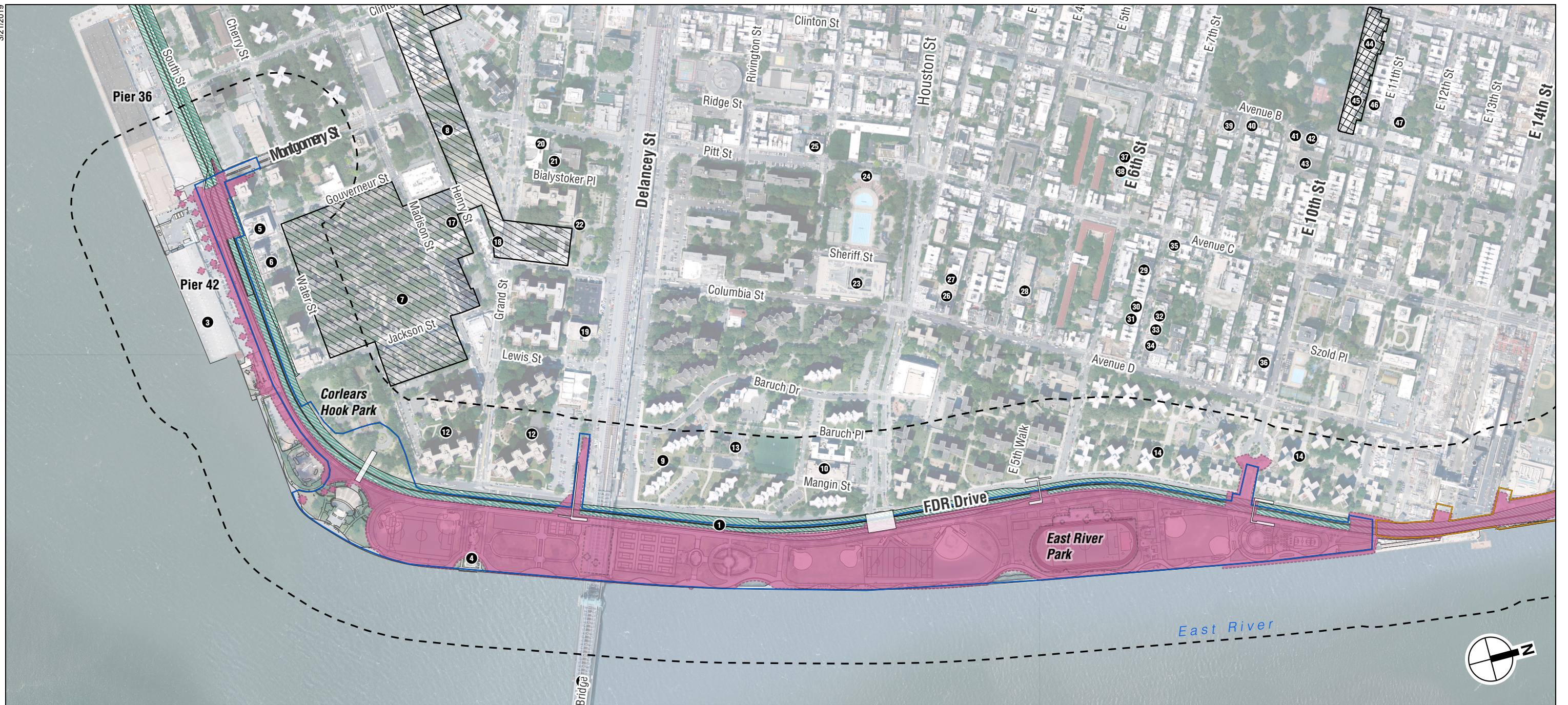
Storm Conditions

Primary Area of Potential Effect

Project Area. In a future storm condition, the following three S/NR-eligible architectural resources could experience adverse direct effects from storm surge and flooding as under Alternative 2: the Williamsburg Bridge (#2); East River Bulkhead (#3); and Engine Co. 66 Fireboat House (#4). Under the Preferred Alternative, design measures would serve to avoid or lessen effects to the Engine Co. 66 Fireboat House (#4, S/NR-eligible) from storm surge and flooding in a future storm condition.

As under the Preferred Alternative, the portion of the FDR Drive (#1, S/NR-eligible) that runs through Project Area One would be protected from damage that could result from storm surge and flooding in a future storm condition, but the portion of the FDR Drive (#1, S/NR-eligible) that runs through Project Area Two would not be similarly protected and could experience adverse direct effects from storm surge and flooding as under Alternative 2.

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- Project Area One
- Project Area Two
- Primary (400-foot) APE
- East 10th Street Historic District (NYCL, S/NR-eligible)
- Lower East Side Historic District and Extension (S/NR)
- Stuyvesant Square Historic District (NYCL, S/NR)
- FDR Drive (S/NR)
- 1 Individual Architectural Resources
- Alternative 3 Limits of Work

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- Project Area One
- Project Area Two
- Primary (400-foot) APE
- Individual Architectural Resources
- East 10th Street Historic District (NYCL, S/NR-eligible)
- Lower East Side Historic District and Extension (S/NR)
- Stuyvesant Square Historic District (NYCL, S/NR)
- FDR Drive (S/NR)
- Alternative 3 Limits of Work

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400-Foot Portion of the Primary Area of Potential Effect. The architectural resources located within the 400-foot portion of the Primary APE would be protected under Alternative 3 from damage that could result from storm surge and flooding in a future storm condition.

Secondary Area of Potential Effect (Protected Area)

All of the architectural resources located within the Secondary APE are landward of the flood protection system that would be constructed under Alternative 3. Therefore, like with the Preferred Alternative, they would be protected from damage that could result from storm surge and flooding in a future storm condition.

ALTERNATIVE 5 – FLOOD PROTECTION SYSTEM EAST OF FDR DRIVE

ARCHAEOLOGICAL RESOURCES

As described above, additional archaeological investigation will be performed prior to or during construction as will be stipulated in the PA. A scope of work will be prepared in consultation with LPC and SHPO, and the City will complete any further phase of archaeological work per the guidance in the *CEQR Technical Manual* and in accordance with the Secretary of the Interior’s *Standards and Guidelines for Archaeology*, ACHP’s *Section 106 Archaeological Guidance*, and the New York Archaeological Council’s *Standards for Cultural Resource Investigations and Curation of Archaeological Collection*. See the archaeology discussion above for the Preferred Alternative for more information.

ARCHITECTURAL RESOURCES

Non-Storm Conditions

Primary Area of Potential Effect

Project Area One – Potential Direct Effects. This alternative, like the Preferred Alternative and Alternatives 2 and 3, would directly affect the portion of the FDR Drive (#1, S/NR-eligible) in Project Area One. In addition, construction of Alternative 5 would occur within 90 feet of the following three S/NR-eligible architectural resources located within Project Area One: the FDR Drive (#1); Williamsburg Bridge (#2); and Engine Co. 66 Fireboat House (#4).

Project Area One – Potential Contextual Effects. Like the Preferred Alternative and Alternatives 2 and 3, it is not expected that this alternative would result in any contextual effects on architectural resources.

Project Area Two. Unlike the Preferred Alternative, this alternative would reconstruct the section of the FDR Drive (#1, S/NR-eligible) between approximately East 13th and East 18th Streets. However, it is not expected that this work would have adverse effects on the FDR Drive, as only an approximately 5-block section of the 9.44-mile-long FDR Drive would be reconstructed. Further, because the FDR Drive currently has elevated sections, raising the northbound lanes within a portion of Project Area Two would not affect the overall appearance of the highway, and it would still convey its historic significance. Also, the FDR Drive has been altered over time. Construction affecting the FDR Drive would be coordinated with NYCDOT to ensure that it is protected during construction Alternative 5.

With a CPP in place for work north of East 18th Street, adjacent construction would not be expected to result in adverse effects to the FDR Drive.

400-Foot Portion of the Primary Area of Potential Effect

Potential Direct Effects from Adjacent Construction. Within the 400-foot portion of the Primary APE, construction under Alternative 5—like under the Preferred Alternative and Alternatives 2 and 3—would occur within 90 feet of Gouverneur Hospital (#5, S/NR); Gouverneur Hospital Dispensary (#6, S/NR-eligible); a portion of the Vladeck Houses within the Lower East Side Historic District (#7, S/NR); a portion of the Baruch Houses (#9, S/NR-eligible); Asser Levy Public Baths (#12, S/NR, NYCL); a portion of the Jacob Riis Houses (#15, S/NR-eligible); a portion of Stuyvesant Town (#16, S/NR-eligible); and a portion of Peter Cooper Village (#17, S/NR-eligible).

Potential Contextual Effects. Like the Preferred Alternative and Alternatives 2 and 3, it is not expected that Alternative 5 would result in any contextual effects on architectural resources in the 400-foot portion of the APE.

Secondary Area of Potential Effect (Protected Area)

Alternative 5 (like the Preferred Alternative and Alternatives 2 and 3) would not have any direct or indirect effects on architectural resources located in the Secondary APE. Architectural resources in the Secondary APE are too far from the project area to be affected by this alternative.

Storm Conditions

Primary Area of Potential Effect

In a future storm condition, the following three S/NR-eligible architectural resources could experience adverse direct effects from storm surge and flooding under Alternative 5: the Williamsburg Bridge (#2); East River Bulkhead (#3); and Engine Co. 66 Fireboat House (#4). Under the Preferred Alternative, design measures would serve to avoid or lessen effects to the Engine Co. 66 Fireboat House (#4, S/NR-eligible) from storm surge and flooding in a future storm condition.

As under the Preferred Alternative and Alternatives 2 and 3, the portion of the FDR Drive (#1, S/NR-eligible) that runs through Project Area One would be protected from damage that could result from storm surge and flooding in a future storm condition. Unlike those other three alternatives, Alternative 5 would also protect the portion of the FDR Drive that runs through Project Area Two from storm surge and flooding.

400-Foot Portion of the Primary Area of Potential Effect.

The architectural resources located within the 400-foot portion of the Primary APE would be protected under Alternative 5 from damage that could result from storm surge and flooding in a future storm condition.

Secondary Area of Potential Effect (Protected Area)

All of the architectural resources located within the Secondary APE are landward of the flood protection systems that would be constructed Alternative 5. Therefore, like with the Preferred Alternative and Alternatives 2 and 3, they would be protected from damage that could result from storm surge and flooding in a future storm condition.

MITIGATION

ARCHAEOLOGICAL RESOURCES

As will be stipulated in the PA, additional archaeological investigation will be performed prior to or during construction in accordance with Section 106 regulations. A scope of work will be prepared in consultation with LPC and SHPO, and this further phase of archaeological work would include testing and/or monitoring conducted in consultation with LPC and SHPO and in accordance with the Secretary of the Interior's *Standards and Guidelines for Archaeology*, ACHP's *Section 106 Archaeological Guidance*, and the New York Archaeological Council's *Standards for Cultural Resource Investigations and Curation of Archaeological Collections*. The testing and/or monitoring would not be done during the EIS process but would occur before and/or during project construction. The scope of work for additional archaeology would include: a sampling strategy that will select specific areas of the APE to be further investigated; identification of those areas that are believed to be most sensitive for recovering landfill retaining structures across the overall APE; a description of the basis for the proposed sampling design, including a tabulation of the various archaeological contexts within the APE and a quantification of the sample fraction for each context; and an unanticipated discoveries protocol. If significant archaeological resources are identified during testing and/or monitoring, further archaeology and/or mitigation would be completed in accordance with Section 106 regulations and the guidance in the *CEQR Technical Manual*. In written communications dated April and May 2016, representatives of the Delaware Nation, Delaware Tribe of Indians, and Stockbridge-Munsee Community Band of Mohicans requested, in the case of an unanticipated discovery of an archaeological site or artifacts, that work be halted until the tribe is notified and the artifact can be evaluated by an archaeologist.

ARCHITECTURAL RESOURCES

The City, in consultation with LPC and SHPO, would develop and implement CPPs for the following architectural resources, or portions of multi-building resources, located within 90 feet of project construction: the FDR Drive (#1, S/NR-eligible); Gouverneur Hospital (#5, S/NR); Gouverneur Hospital Dispensary (#6, S/NR-eligible); a portion of the Vladeck Houses within the Lower East Side Historic District (#7, S/NR); a portion of the Baruch Houses (#9, S/NR-eligible); the Asser Levy Public Baths (#12, S/NR, NYCL); a portion the Jacob Riis Houses (#15, S/NR-eligible); a portion of Stuyvesant Town (#16, S/NR-eligible); and a portion of Peter Cooper Village (#17, S/NR-eligible) to avoid inadvertent construction-period damage to these architectural resources. The development and implementation of the CPPs will be stipulated in the PA. In addition, as will be stipulated in the PA, an effort would be made to design the floodwalls that would be located adjacent to the Asser Levy Public Baths (#12, NYCL, S/NR) under the Preferred Alternative and Alternatives 2, 3, and 5, so that they are compatible with the architectural resource, and the design of the floodwalls would be coordinated with LPC. *