

1 **PROGRAMMATIC AGREEMENT**
2 **BETWEEN**
3 **THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
4 **AND**
5 **THE NEW YORK STATE HISTORIC PRESERVATION OFFICE**
6 **REGARDING**
7 **THE GOWANUS CANAL SUPERFUND SITE REMEDIATION**
8 **BOROUGH OF BROOKLYN, KINGS COUNTY, NEW YORK**

9 **WHEREAS**, the Gowanus Canal Superfund Site (Site), is located in Borough of Brooklyn, Kings County,
10 New York and is the subject of remedial actions carried out under the Comprehensive Environmental Response,
11 Compensation, and Liability Act (CERCLA); Attachment 1 contains a list of acronyms used throughout this
12 Programmatic Agreement (PA); and

13 **WHEREAS**, the Undertaking is the remedial or response actions for the Site and mandated by the United States
14 Environmental Agency (EPA) to satisfy remediation objectives under CERCLA; and

15 **WHEREAS**, the Site was placed on the National Priorities List (NPL) pursuant to Section 105 of the
16 Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C. §9605,
17 on March 2, 2010; and

18 **WHEREAS**, in April 2010, the EPA entered into administrative consent orders with the City of New York and
19 Brooklyn Union Gas Co. d/b/a National Grid New York to perform work in support of EPA's remedial
20 investigation/feasibility study (RI/FS). An RI report was completed in January 2011 and an FS report was completed
21 in December 2011. An FS addendum report was completed in December 2012; and

22 **WHEREAS**, sampling results from the RI/FS documented the presence of hazardous substances in groundwater,
23 soil, and Canal sediments at the Site. They include polycyclic aromatic hydrocarbons (PAHs), polychlorinated
24 biphenyls (PCBs), pesticides (such as methoxychlor and DDT), metals (such as barium, cadmium, copper, lead,
25 mercury, nickel and silver), as well as volatile organic compounds (such as benzene, toluene, ethylbenzene and
26 xylene). The contamination extends the entire length of the Canal; and

27 **WHEREAS**, based on the results of the RI/FS, chemical contamination in the sediments of the canal present an
28 unacceptable ecological and human health risk, primarily due to exposure to PAHs, PCBs, and metals (barium,
29 cadmium, copper, lead, mercury, nickel and silver); and

30 **WHEREAS**, EPA issued a Record of Decision (ROD) (*Record of Decision Gowanus Canal Superfund Site,*
31 *Brooklyn, Kings County, New York*) for the Site in September 2013 that described the EPA-selected remedy to meet
32 remediation goals for the Site. The selected remedy consisted of 12 components:

- 1) dredging of the entire column of hazardous substance-contaminated sediments which have accumulated above the native sediments (referred to as “soft sediments”) in the upper and mid-reaches of the Site;
- 2) in-situ stabilization (ISS) of those native sediments in select areas in the upper and mid-reaches of the Site contaminated with high levels of non-aqueous phase liquid (NAPL);
- 3) construction of a multilayer cap in the upper- and mid-reaches of the Site to isolate and prevent the migration of PAHs and residual NAPL from native sediments;
- 4) dredging of the entire soft sediment column in the lower reach of the Site;
- 5) construction of a multilayer cap to isolate and prevent migration of PAHs from native sediments in the lower reach of the Site;
- 6) off-Site treatment of the NAPL-impacted sediments dredged from the upper and mid-reaches of the Site with thermal desorption, followed by beneficial reuse off-Site (e.g., landfill daily cover) if possible;
- 7) off-Site stabilization of the less contaminated sediments dredged from the lower reach of the Site and the sediments in the other reaches not impacted by NAPL, followed by beneficial reuse off-site;
- 8) excavation and restoration of approximately 475 feet of the filled-in former 1st Street turning basin;
- 9) excavation and restoration of the portion of the 5th Street turning basin beginning underneath the 3rd Avenue bridge and extending approximately 25 feet to the east, and the installation of a barrier or interception system at the eastern boundary of the excavation;
- 10) implementation of institutional controls incorporating the existing fish consumption advisories (modified, as needed), as well as other controls to protect the integrity of the cap;
- 11) periodic maintenance of the cap and long-term monitoring to ensure that the remedy continues to function effectively, and;
- 12) Combined Sewer Overflow (CSO) controls to significantly reduce overall contaminated solid discharges to the Site, which include a) construction of retention tanks to retain discharges from outfalls RH-034 and OH-007; and b) implementation of appropriate engineering controls to ensure that hazardous substances and solids from separated storm water, including from future upland development projects, are not discharged to the Site; and

WHEREAS, actual or threatened releases of hazardous substances from the Site, if not addressed by implementing the response actions selected in the ROD, may present an imminent and substantial endangerment to public health, welfare or the environment; and

WHEREAS, EPA has the authority to respond with remedial response actions and construction of appropriate facilities at the Site in Brooklyn, New York, pursuant to CERCLA; and

WHEREAS, the Potentially Responsible Parties (PRPs), defined by CERCLA as any individual or organization—including owners, operators, transporters or generators—potentially responsible for, or contributing to, a spill or other contamination at a Superfund site, together with EPA, will carry out the remedial actions; and

WHEREAS, EPA is the lead federal agency responsible under regulations implementing Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 U.S.C. 470f) for taking into account the effects on historic properties from this Undertaking; and

WHEREAS, the clean-up of the Site will be a long-term process. This PA will guide EPA, address adverse effects of the Undertaking on historic properties, and meet its Section 106 responsibilities under NHPA; and

WHEREAS, the New York State Department of Environmental Conservation (NYSDEC) was consulted on the proposed remedy in accordance with CERCLA Section 121(f), 42 U.S.C. §9621(f); and

WHEREAS, there is a web site provided by EPA for public access that contains detailed overall project information (<https://cumulis.epa.gov/supercpad/cursites/csitinfo.cfm?id=0206222>); and

1 **WHEREAS**, historic properties are defined under Federal Regulations (36 CFR 800.16(l)) as prehistoric or historic
2 districts, sites, buildings, structures, or objects included in, or eligible for inclusion in the Nation Register of Historic
3 Places (NRHP), including artifacts, records, and material remains related to such a property; and

4 **WHEREAS**, the EPA has consulted with the New York State Historic Preservation Office (SHPO), and the
5 Advisory Council on Historic Preservation (ACHP), pursuant to 36 CFR 800; and

6 **WHEREAS**, EPA, in consultation with SHPO, has defined an area of potential effects (APE) for the Undertaking
7 that includes locations where project-related activities are anticipated to be conducted. The APE is shown in
8 Attachment 2; and

9 **WHEREAS**, EPA has consulted with the New York City Landmarks Preservation Commission (LPC) with respect
10 to the significance of historic structures within the APE; and

11 **WHEREAS**, the Canal (Site Number 04701.000001) was determined eligible for listing on the New York State and
12 National Registers of Historic Places (S/NR) under Criteria A, C, and D in 2004. The boundaries of the preliminary
13 district were defined by the bulkheads lining the main stem of the canal and the four extant 11th, 7th, 6th, and 4th
14 Street basins, from the terminus of the Canal at Butler Street to a line created by extending the alignment of Percival
15 Street across the canal. Timber bulkheading and cribbing forming the Canal were noted contributing properties to the
16 Canal's significance; and

17 **WHEREAS**, the Gowanus Canal Historic District (GCHD) (Site Number 04701.018517) was determined eligible
18 for listing in the NRHP in 2014 under Criteria A, C, and D in the areas of architecture, engineering, transportation,
19 and commerce, with a period of significance from 1853 to ca. 1965. The preliminary Gowanus Canal Historic
20 District (Site Number 04701.000001) identified in 2004 was fully incorporated into the expanded Gowanus Canal
21 Historic District. There are 367 properties within the district, of which, 283 are contributing elements and 84 are
22 non-contributing elements. The timber bulkheading and cribbing forming the Canal are contributing elements to the
23 Gowanus Canal Historic District. A map showing the boundaries of the district and a list of contributing and non-
24 contributing properties within the district are in Attachment 3; and

25 **WHEREAS**, EPA has consulted with the New York City Landmarks Preservation Commission and they have
26 identified properties designated as individual landmarks. These properties are listed in Attachment 3; and

27 **WHEREAS**, the EPA has consulted with the Community Advisory Group (CAG) and with local community groups
28 concerned with the preservation of local historical heritage and historic properties in the vicinity of the Site as part
29 of the continuing remediation efforts. The CAG and other consultation groups have included representatives of the
30 following organizations, hereinafter referred to in this document as the Consulting Parties:

- 31 • Gowanus Canal Superfund Site CAG
- 32 • Archaeology Committee of the CAG
- 33 • Cobble Hill Association
- 34 • Friends and Residents of Greater Gowanus (FROGG)
- 35 • Friends of Thomas Greene Park/Douglass
- 36 • Gowanus Alliance
- 37 • Gowanus by Design
- 38 • New York City Housing Authority (NYCHA) Communities United
- 39 • Park Slope Civic Council
- 40 • Sierra Club
- 41 • Families United for Racial and Economic Equality
- 42 • Fifth Avenue Committee

- Riverkeeper
- American Can Factory
- Gowanus 4 Life
- Park Slope Neighbors
- Red Hook Civic Association
- South Brooklyn Industrial Development Corp.
- Carroll Gardens Coalition for Respectful Development (CG CORD)
- Carroll Gardens Neighborhood Association
- Gowanus Canal Conservancy
- 280 Nevins Street Tenants Organization
- Carroll Gardens Association Inc.
- South Brooklyn Local Development Corp.
- Gowanus Residents Association
- Gowanus Dredgers Canoe Club;
- New York City Landmarks Preservation Commission; and

WHEREAS, under the May 4, 2011 EPA Policy on Consultation and Coordination with Indian Tribes and the EPA Region 2 May 22, 2013 Superfund Program Guidance on Indian Program Consultation, the identification of sites wherein tribal interest may exist for consultation, includes sites of cultural or historical significance. EPA Region 2 issued a consultation letter to the New York Tribal Council requesting notification of any tribal interest related to the Site; and

WHEREAS, since its addition to the NPL, the Gowanus Canal Superfund Site has been the subject of consistent public interest, including local, national and international media coverage. Such coverage has frequently included cultural resource issues; and

WHEREAS, EPA has required terrestrial and underwater cultural resources investigations of the Site in consultation with SHPO. Numerous previously identified terrestrial and underwater cultural resources within or adjacent to the Gowanus Canal, along with areas of archaeological sensitivity, have been identified. Reports on some of these investigations have been documented in the databases of LPC, SHPO and EPA's information library for the Site. A bibliography of the surveys is included as Attachment 4; and

WHEREAS, areas of known cultural resources and areas of sensitivity are discussed in prior cultural resource investigation documents listed in Attachment 4, which will serve as planning documents for determining areas of sensitivity along the canal bulkheads, within the submerged Canal bottom, and in proximity to the Canal; and

WHEREAS, it is likely that previously unidentified cultural resources will be encountered and adversely affected by the Undertaking; and

WHEREAS, the Undertaking's actions may include replacement of the existing bulkhead or cribbing in whole or part, along sections of the Canal. This action may constitute an adverse effect; and

WHEREAS, a recent geoarchaeological assessment of the CSO project site indicated that much of the project impact area has low to moderate archaeological sensitivity (Schuldenrein and Wiley 2018/Revised 2019; Allee, King, Rosen, and Fleming and Geoarchaeology Research Associates, 2019).; and

WHEREAS, a minimum of 29 potential submerged archaeological features that potentially may include ship or barge wrecks, large examples of debris (e.g. submerged cars), and possible debris from timber bulkhead and cribbing

failures were identified in the Canal by a 2010 *Side Scan Sonar Report for the Gowanus Canal, Brooklyn, Kings County, New York* (Cox, 2010); and

WHEREAS, recent archaeological monitoring of 30% field activities for the restoration of the 1st Turning Basin determined that the basin retains its sensitivity for the presence of historic ship hulls and structural components of the canal itself such as the bulkhead, but that fill soils within the basin are not archaeologically sensitive; (Allee, King, Rosen, and Fleming and KSE, 2018); and

WHEREAS, recent archaeological monitoring of limited test dredging along other portions of the Canal excavated relatively large amounts of cultural material from sediments dating to various periods and representing various functional classes; and

WHEREAS, a sunken vessel (Point O'Woods V) (USN Number: 04701.01911) located within the 4th Street Turning Basin of the Canal was determined not eligible for listing in the NRHP and not a contributing element to the GCHD; and

WHEREAS, SHPO has overseen prior bulkhead repair projects along the Canal (SHPO Project Review Numbers: 14PR00489, 13PR03671, 13PR03673, 13PR04975); and

WHEREAS, there is an executed Memorandum of Agreement (MOA) for Combined Sewer Overflow Retention Tank Construction Associated with the Gowanus Canal Superfund Site between the EPA and the New York SHPO, dated February 20, 2019 (see SHPO project number 16PR02427); this MOA is included as Attachment 5; and

WHEREAS, as a part of the 2019 MOA, EPA notified ACHP of a finding that the Project would adversely affect historic properties pursuant to 36 CFR 800 regarding the effects of federal actions. ACHP elected not to participate in the MOA, which was the precursor to this programmatic agreement; and

WHEREAS, it is concluded that implementation of each of the 12 remedy response actions identified in the ROD will cause adverse effects on historic properties and are:

- **Remedial Component #1:** Dredging of the entire column of hazardous substance-contaminated sediments which have accumulated above the native sediments in the upper and mid-reaches of the Canal (referred to as "soft sediments").

Effects on Historic Properties: Remedial Component #1 will adversely affect submerged vessels, structures, machinery and other technology buried in the sediments and bulkheading and cribbing.

- **Remedial Component #2:** ISS of those native sediments in select areas in the upper and mid-reaches of the canal contaminated with high levels of NAPL.

Effects on Historic Properties: Remedial Component #2 will impact submerged vessels, structures, machinery and other technology buried in the native sediments.

- **Remedial Component #3:** Construction of a multilayer cap in the upper and mid-reaches of the Canal to isolate and prevent the migration of Polycyclic Aromatic Hydrocarbons (PAHs) and residual NAPL from native sediments.

Effects on Historic Properties: Remedial Component #3 will isolate the native sediments underlying the proposed multilayer cap. The loss of access to the sites via capping would not alter the characteristics that qualify a site for NRHP eligibility, so would not be considered an adverse effect on the site.

- **Remedial Component #4:** Dredging of the entire soft sediment column in the lower reach of the Canal.

Effects on Historic Properties: Remedial Component #4 will impact submerged vessels, structures, machinery, bulkheading and cribbing, artifacts, and other technology buried in the sediments which will be remediated.

- **Remedial Component #5:** Construction of a multilayer cap to isolate and prevent migration of PAHs from native sediments in the lower reach of the Canal.

Effects on Historic Properties: Remedial Component #5 will isolate the native sediments underlying the proposed multilayer cap. The loss of access to the sites via capping would not alter the characteristics that qualify a site for NRHP eligibility, so would not be considered an adverse effect on the site.

- **Remedial Component #6:** Off-site treatment of the NAPL-impacted sediments dredged from the upper and mid-reaches of the Canal with thermal desorption, followed by beneficial reuse off-site (e.g., landfill daily cover) if possible.

Effects on Historic Properties: Remedial Component #6 will require the establishment of construction staging, processing, and support areas at undetermined locations. Those facilities could require trenching and other excavations associated with the construction of remediation-related structures and work areas, as well as the installation of utilities and other necessities. Such actions could affect cultural resources at those locations. This could include prehistoric sites, archaeological sites, artifacts, Revolutionary War sites, historic period farmsteads, and burial grounds.

- **Remedial Component #7:** Off-site stabilization of the less contaminated sediments dredged from the lower reach of the Canal and the sediments in the other reaches not impacted by NAPL, followed by beneficial reuse off-site.

Effects on Historic Properties: Remedial Component #7 will require the establishment of construction staging, processing, and support area at undetermined locations. Those facilities could require trenching and other excavations associated with the construction of remediation-related structures and work areas, as well as the installation of utilities and other necessities. Such actions could affect cultural resources at those locations. This could include prehistoric sites, archaeological sites, artifacts, Revolutionary War sites, historic period farmsteads, and burial grounds.

- **Remedial Component #8:** Excavation and restoration of approximately 475 feet of the filled-in former 1st Street turning basin.

Effects on Historic Properties: Remedial Component #8 will affect formerly submerged vessels, structures, machinery, bulkheading and cribbing, artifacts, and other technology buried in the fill which will be remediated.

- **Remedial Component #9:** Excavation and restoration of the portion of the 5th Street turning basin beginning underneath the 3rd Avenue bridge and extending approximately 25 feet to the east, and the installation of a barrier or interception system at the eastern boundary of the excavation.

Effects on Historic Properties: Remedial Component #9 will affect formerly submerged vessels, structures, machinery, and other technology buried in the fill which will be remediated.

- **Remedial Component #10:** Implementation of institutional controls incorporating the existing fish consumption advisories (modified, as needed), as well as other controls to protect the integrity of the cap.

Effects on Historic Properties: Remedial Component #10 will have no adverse effects on historic properties.

- **Remedial Component #11:** Periodic maintenance of the cap and long-term monitoring to ensure that the remedy continues to function effectively.'

Effects on Historic Properties: Remedial Component #11 will have no adverse effects on historic properties.

- **Remedial Component #12:** Combined Sewer Overflow (CSO) controls to significantly reduce overall contaminated solid discharges to the Canal, which include a) construction of retention tanks to retain discharges from outfalls RH-034 and OH-007. and b) implementation of appropriate engineering controls to ensure that hazardous substances and solids from separated storm water, including from future upland development projects, are not discharged to the Canal.

Effects on Historic Properties: The adverse effects to historic properties from Remedial Component #12 are addressed in the existing MOA between the EPA and the New York SHPO, dated February 20, 2019 (see SHPO project number 16PR02427) in Attachment 5; and

WHEREAS, the Signatories to this PA are EPA and New York SHPO.

NOW, THEREFORE, the Signatories agree that the Undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the Undertaking on historic properties.

STIPULATIONS

I. ARCHAEOLOGY MONITORING PLAN

- A. EPA, in consultation with the other Signatory to this PA and Consulting Parties, shall complete an Archaeology Monitoring Plan within 6 months of execution of this PA, using the 2016 *Cultural Resource Monitoring Plan Gowanus Canal Superfund Site Borough of Brooklyn, New York* as a guide.
- B. The Archaeology Monitoring Plan, at a minimum, will include: methodologies; background research requirements; a brief history of the Canal; archaeological monitoring of remedial response action activities; procedures and criteria for NRHP eligibility determinations; archaeological survey; geo-archaeological studies, archaeological data recovery; curation procedures; and unanticipated discoveries during construction of additional historic properties or human remains or sacred objects within locations affected by the Undertaking.
1. Archaeological Monitoring. Archaeological monitoring will be conducted within the APE on one of two levels as described in the Monitoring Plan. Areas of archaeological monitoring potentially include any sonar contacts that could be potential cultural resources in the water, the full scope of the bulkhead structure, and the first 10 feet on the landward side of the bulkhead walls included in the APE or any equipment or supply staging areas within the APE not previously reviewed for cultural resources.
 - a. NRHP-eligible archaeological resources. If monitoring uncovers any potentially NRHP-eligible resources, the on-site archaeological monitor will make any recommendations of cultural value in consultation with the Principal Archaeologist, SHPO, and EPA, who will obtain additional Consulting Party input, as appropriate. Off-site screening will follow the on-site screening.
 - b. Archaeological resources that are not NRHP-eligible. No monitoring would be required at archaeological sites that are not eligible for listing in the NRHP.
 - c. Artifacts or debris that are not affiliated with an archaeological site but could be of interest to the community for display or interpretation shall be offered to a CAG interest group.
 2. Data Recovery. If resources are determined to be historic properties and data recovery investigations are recommended as mitigation of adverse effects in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, a data recovery plan will be developed in consultation with SHPO.
 3. Curation
 - a. Curation of retrieved archaeological collections from S/NR sites, or other finds of local interest, shall be in accordance with the provisions of 36 C.F.R. Part 79 (Curation of Federally-Owned and Administered Archaeological Collections) at a recognized curatorial facility identified in consultation with the LPC, SHPO, and the New York State Museum, with a preference for a facility in close geographic proximity to the Undertaking, so that Gowanus area residents may have access to the collections
 - b. EPA, in consultation with SHPO, shall assure that materials and records resulting from cultural resource investigations conducted under this PA will be curated in accordance with federal, state, and local guidelines.
 - c. Materials and records recovered from the investigations shall be maintained until their analysis is complete and, if applicable, are returned to their owner(s).
 - d. A permanent repository, in consultation with EPA and SHPO, will be identified for artifact assemblages or finds that a property owner may not request be returned.
 - e. The curatorial standards and guidelines in effect for the local repositories will be adhered to.
- C. For areas within the APE, but outside the Canal that have potential for deeply buried archaeological deposits which will be adversely impacted by remedial response actions, preliminary stratigraphic

1 investigation (a geo-archaeological study) shall be undertaken to assess the nature and extent of such
2 potentially culture-bearing deposits within the APE.

- 3 1. The results of this investigation will assist in determining whether further archaeological studies are
4 needed and, if so, the most appropriate method for carrying out such work.

- 5 D. As remedial designs of response actions are completed, EPA will develop scopes of work for cultural
6 resource investigations for said actions. The results of each investigation will provide data to determine
7 whether further investigations are warranted.

- 8 1. The objective of cultural resource investigations for archaeology will be to determine whether significant
9 archaeological resources are present within remediation areas. If no historic properties are identified,
10 further investigations need not occur. If historic properties are identified by the first phase of
11 investigation, an evaluation of NRHP eligibility would be made by EPA.

- 12 2. Following completion of fieldwork related to archaeological investigations or other treatment, EPA will
13 prepare a draft report of findings including recommendations for further treatment of affected historic
14 properties. EPA will submit the report to the other Signatory for review and comment in accordance with
15 Stipulation IV Coordination.

- 16 3. Following the completion of archaeological fieldwork related to archaeological monitoring, identification,
17 evaluation, data recovery or other treatment under this PA, EPA will prepare and submit a Management
18 Summary of findings and recommendations.

- 19 i. The Management Summary will be submitted to the other Signatory and the CAG Archaeology
20 Committee for review and comment in accordance with Stipulation IV Coordination.

- 21 ii. After SHPO comments on the Management Summary, a final report will be prepared in accordance
22 with the Monitoring Plan, NY SHPO guidelines and Secretary of the Interior's Standards and
23 Guidelines for Archaeology and Historic Preservation.

- 24 iii. EPA will notify Consulting Parties of the final results.

- 25 E. EPA will submit the Monitoring Plan to SHPO and Consulting Parties for review and comment in
26 accordance with Stipulation IV Coordination.

27 **II. PRESERVATION PLAN**

- 28 A. Within 18 months of execution of the PA, EPA will prepare a Preservation Plan for previously
29 identified structures and buildings eligible for listing on or listed on the NRHP, as well as for historic
30 properties discovered during implementation.

- 31 B. The Preservation Plan shall include at a minimum: historic background of historic properties,
32 including the Canal; background of the historic district, including the significance of the bulkheading
33 and cribbing; contributing elements to the historic district; maps and figures illustrating identified
34 historic properties in the APE; description of the APE; procedures for evaluating structures and
35 buildings for NRHP and applicable criteria; the process for identifying and determining the need for
36 architectural surveys; survey methodologies; research objectives; reuse of historic materials; and
37 consultation requirements.

- 38 C. The Preservation Plan shall include methodologies for recordation of architectural features of
39 buildings, define appropriate photo documentation, and define which historic contexts would be
40 appropriate to develop further to address the adverse effects on structures from the Undertaking.

- 41 D. EPA shall use previously completed cultural resource investigations to identify the presence of
42 historic timber bulkheading and cribbing as well as other historic properties, to aid in defining specific

1 field methodologies and research objectives to be used to determine which studies will be carried out
2 as a result of actions associated with the Undertaking.

3 E. If an historic property is identified during implementation of the Undertaking and avoidance is not
4 possible, EPA will consult with SHPO. The specific scope of further work is dependent on the nature
5 of the historic property encountered and consultations with SHPO.

6 F. EPA will submit the Preservation Plan to SHPO and Consulting Parties for review and comment in
7 accordance with Stipulation IV Coordination.

8 **III. STRUCTURES AND BUILDINGS**

9 1. Gowanus Canal Bulkheading and cribbing – EPA will photo document and record the historic
10 bulkheading and cribbing of the canal.

11 a. Bulkheading and cribbing will be documented as it is discovered during construction.
12 Documentation shall include photographing the materials and mapping the location of the bulkheads
13 and cribbing.

14 b. EPA will maintain the documentation and records until completion of the project.

15 B. Gowanus Canal Historic District – EPA will collect and collate the documentation of the bulkheading
16 and cribbing and any other documentation completed during remediation activities.

17 C. Buildings – If there is an adverse effect on a building from the remediation activities (excluding those
18 covered in the MOA in Attachment 5¹), the mitigation will be: recordation of the salient architectural
19 features of the building, appropriate photo documentation, and the development of an historic context
20 for their role and appearance in the community. Any documentation under this stipulation will be
21 collected and collated together with the materials in Stipulation II.B.3. It is not anticipated that any
22 other buildings will be adversely affected by the Undertaking.

23 **IV. COORDINATION**

24 A. EPA shall give notice to the Other Signatory and the Consulting Parties by posting on its project
25 website cultural resource plans, investigation reports and memos, and other related documents
26 stipulated in this PA.

27 1. The Other Signatory and the Consulting Parties will have 30 days to review draft reports and
28 documentation.

29 2. EPA will take into consideration the views of the other Signatory and the Consulting Parties.

30 3. EPA will post the final version of the cultural resource plans, investigation reports and memos, and other
31 related documents stipulated in this PA on its website after addressing comments received as a result of
32 Signatory and Consulting Party review.

33 B. EPA must report to SHPO changes that occur to the Undertaking's design during project
34 implementation.

¹ Stipulation 4 of the MOA is hereby amended to also include recordation of 234 Butler Street by New York City, which requirement was inadvertently omitted.

- C. EPA shall conduct a meeting in person, via telephone, or via other electronic method 5 years after execution of the PA to discuss and evaluate the effectiveness of the PA and whether any changes are needed to the PA for the remaining 5 years.
- D. EPA will make presentations to the SHPO and the CAG once per year and will include updates regarding NHPA activities and findings from documents prepared pursuant to this PA.
- E. Documentation prepared pursuant to this PA that is not confidential shall be made available for public inspection at the information repository for the site project.
 1. Information regarding the locations of identified archaeological sites will be withheld in accordance with the Freedom of Information Act and *National Register Bulletin 29*, if it appears that this information could jeopardize archaeological sites.
 2. Comments received from the public under this PA shall be taken into account by EPA.

V. UNANTICIPATED DISCOVERIES

EPA shall follow the Unanticipated Discovery Plan (UDP) in Attachment 6, which includes the SHPO Human Remains Protocol. The UDP will also be attached to the Monitoring Plan. The UDP specifies the procedures for evaluating unanticipated discoveries of cultural resources for NRHP eligibility or human remains during implementation of the Undertaking. The UDP identifies responsible parties to be notified in the event of a discovery. EPA will ensure that the UDP is implemented during construction.

- A. If unanticipated cultural resources are encountered during remedial activity that resource shall immediately be reported to EPA which will inform SHPO for further consultation.

1. Work in the area of the resource may be halted under the direction of EPA.
2. Cultural resource investigations deemed necessary through consultation with SHPO shall be conducted according to the guidelines and standards in the Monitoring Plan.
3. The discovery of human remains and items of cultural patrimony, as defined by Section 3001 of the Native American Graves Protection and Repatriation Act (NAGPRA), in any cultural resource investigations requires special consideration and care.
4. If any in-situ human remains or other mortuary/funerary/ritual related sites and artifacts are encountered during implementation of the Undertaking, activities shall immediately be halted in the area of the find.
5. The medical examiner or appropriate law enforcement official and other officials of EPA and New York City shall immediately be notified.
6. Protective measures such as barriers or fencing shall be erected until the plan for treatment is complete.
7. Work shall not proceed in the area of the find until consultation among EPA, LPC, SHPO, and any other appropriate authorities is completed, and EPA has issued a written notice to proceed.
8. If human remains are recovered from an excavation screen or spoil pile they will be separated from other cultural items, placed in an appropriate container, and investigation in the area from which the screened soil derived halted.
9. In all cases, any human remains encountered will be treated with the utmost respect and dignity.
10. If the remains are determined to be Native American, representatives of appropriate Native American tribal groups will be contacted by EPA. Further consultations among interested parties will occur and a consensus arrived at as to the appropriate way to proceed.

1 11. If the remains are determined to date to the historic period, the find area will be treated as a significant
2 archaeological site. Attempts will be made to determine the period of the interment(s) and the identity of
3 the individual(s) buried and to locate any of their living lineal descendants.

4 12. Consultations among Signatories to this PA will take place to arrive at a consensus as to the appropriate
5 way to proceed.

6 **VI. DISPUTE RESOLUTION**

7 A. If either Signatory to this PA objects to actions proposed or the manner in which the terms of this PA
8 are implemented or resulting plans, documents, or reports required under the terms of this PA within
9 30 days after receipt, the Signatories shall consult among themselves to resolve the objection pursuant
10 to 36 C.F.R. § 800.6(c)(8).

11 B. Signatories shall comply with 36 C.F.R. § 800.7(a) if the Signatories determine that the objection
12 cannot be resolved. If so, documentation relevant to the dispute will be sent to EPA for submittal to
13 the ACHP.

14 1. Within 30 days of receipt of pertinent documentation, ACHP will provide EPA with comments and
15 recommendations, which will be considered in reaching a final decision regarding the dispute.

16 2. Recommendations or comments provided by ACHP will be understood to pertain only to the subject
17 of the dispute.

18 C. Prior to reaching a final decision on the dispute, EPA may, at its discretion, prepare a written response
19 that takes into account advice or comments regarding the dispute from the ACHP and Other Signatory
20 and provide them with a copy of this written response.

21 D. EPA will continue to carry out the other actions under this PA that are not the subject of the dispute,
22 which will remain unchanged.

23 **VII. AMENDMENTS**

24 Either Signatory to this PA may request that it be amended, whereupon the Signatories will consult in
25 accordance with appropriate statutes and regulations to consider such amendment. The PA may be amended
26 when such an amendment is agreed to in writing by the Signatories. The signed amendment will be effective on
27 the date it is filed by EPA with the ACHP.

28 **VIII. TERMINATION**

29 A. If any Signatory to this PA determines that its terms will not or cannot be carried out, that party shall
30 immediately consult with the Other Signatory to attempt to develop an amendment (in accordance with
31 Stipulation VII Amendments) to address the concern. If within thirty (30) days (or another time period
32 agreed to by the Signatories) an amendment cannot be reached, a Signatory may terminate the PA
33 upon written notification to the Other Signatory.

34 B. Once the PA is terminated, and prior to work continuing on the Undertaking, EPA will either

35 1. seek to enter into a new PA with the party or parties pursuant to 36 C.F.R. § 800.6(c); or

36 2. request, take into account, and respond to the comments of the ACHP under 36 C.F.R. § 800.7.

37 C. EPA shall notify the Other Signatory as to the course of action it will pursue.

1 **IX. DURATION**

2 This PA will continue in full force until completion of the Undertaking or for ten (10) years from the date of
3 its execution, whichever is earlier. Prior to said time, EPA may consult with the other Signatory to
4 reconsider the duration of the PA and amend it in accordance with Stipulation VII Amendments.

5 **X. PROFESSIONAL QUALIFICATIONS AND PERMITS**

6 EPA shall ensure that the stipulations of this PA are carried out by or under the direct supervision of a person or
7 persons who meet(s) or exceed(s) the pertinent qualifications in the *Secretary of the Interior's Professional*
8 *Qualification Standards* in those areas in which the qualifications are applicable for the specific work
9 performed. Work conducted under this PA will follow the Secretary of the Interior's Standards for
10 Archaeological Investigations, Secretary of the Interior's Standards and Guidelines for Archaeology and
11 Historic Preservation (48 Fed Reg. 44738-39), and the standards followed by NY SHPO (NYAC 1995,2000;
12 New York State Office of Parks, Recreation and Historic Preservation 2005).

13 **EXECUTION** of this PA by EPA and the Other Signatory and implementation of its terms is evidence that EPA has
14 taken into account the effects of the Undertaking on historic properties and afforded the ACHP an opportunity to
15 comment.

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PROGRAMMATIC AGREEMENT
BETWEEN
THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
AND
THE NEW YORK STATE HISTORIC PRESERVATION OFFICE
REGARDING
THE GOWANUS CANAL SUPERFUND SITE REMEDIATION
BOROUGH OF BROOKLYN, KINGS COUNTY, NEW YORK

SIGNATORIES

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

By: United States Environmental Protection Agency, Region 2

Signed: **DONALD PACE** Digitally signed by DONALD PACE Date: 2023.05.12 12:05:21 -04'00' Date: _____
Donald Pace, Director, Mission Support Division

1 **PROGRAMMATIC AGREEMENT**
2 **BETWEEN**
3 **THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
4 **AND**
5 **THE NEW YORK STATE HISTORIC PRESERVATION OFFICE**
6 **REGARDING**
7 **THE GOWANUS CANAL SUPERFUND SITE REMEDIATION**
8 **BOROUGH OF BROOKLYN, KINGS COUNTY, NEW YORK**

9
10 **SIGNATORIES**

11 **NEW YORK STATE HISTORIC PRESERVATION OFFICER**

12 By: New York State Historic Preservation Officer

13 Signed:

R. Daniel Mackay

Date:

3/20/2023

14 R. Daniel Mackay
15 Deputy Commissioner for Historic Preservation
16 Deputy SHPO

1 **PROGRAMMATIC AGREEMENT**
2 **BETWEEN**
3 **THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**
4 **AND**
5 **THE NEW YORK STATE HISTORIC PRESERVATION OFFICE**
6 **REGARDING**
7 **THE GOWANUS CANAL SUPERFUND SITE REMEDIATION**
8 **BOROUGH OF BROOKLYN, KINGS COUNTY, NEW YORK**

9
10 **ATTACHMENTS**

11 **ATTACHMENT 1 – List of Acronyms**

12 **ATTACHMENT 2 – Area of Potential Effects Map**

13 **ATTACHMENT 3 – Gowanus Canal Historic District**

14 **ATTACHMENT 4 – Bibliography**

15 **ATTACHMENT 5 – Memorandum of Agreement between the United States Environmental Protection**
16 **Agency and the New York State Historic Preservation Office for Combined Sewer Overflow Retention Tank**
17 **Construction Associated with the Gowanus Canal Superfund Site**

18 **ATTACHMENT 6 – Unanticipated Discoveries**

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Attachment 1

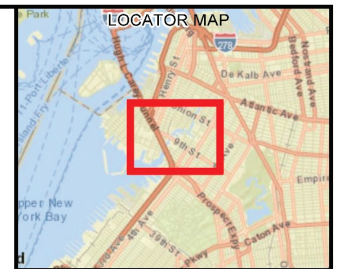
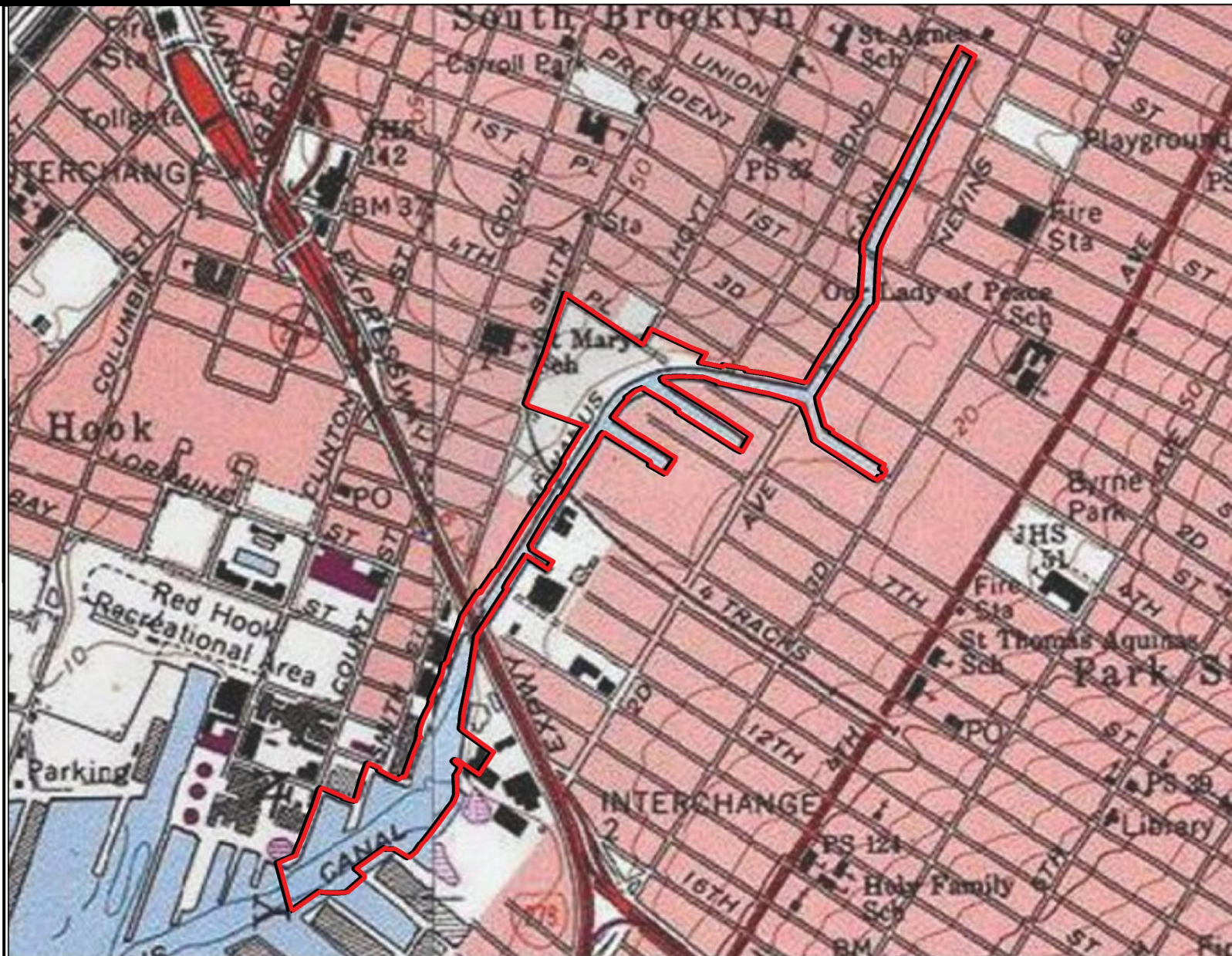
List of Acronyms

List of Acronyms

ACHP	Advisory Council on Historic Preservation
APE	Area of Potential Effects
CAG	Community Advisory Group
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSO	Combined Sewer Overflow
EPA	U.S. Environmental Protection Agency
FS	feasibility study
GCHD	Gowanus Canal Historic District
ISS	in-situ stabilization
LPC	Landmarks Preservation Commission
NAGPRA	Native American Graves Protection and Repatriation Act
NAPL	nonaqueous phase liquid
NHPA	National Historic Preservation Act
NPL	National Priorities List
NRHP	Nation Register of Historic Places
NYCHA	New York City Housing Authority
NYSDEC	New York State Department of Environmental Conservation
OPRHP	Office of Parks, Recreation and Historic Preservation
PA	Programmatic Agreement
PAH	polycyclic aromatic hydrocarbons
PCB	polychlorinated biphenyl
PRP	Potentially Responsible Parties

RI	remedial investigation
ROD	Record of Decision
SHPO	State Historic Preservation Office
UDP	Unanticipated Discovery Plan
USACE	U.S. Army Corps of Engineers

Attachment 2
Area of Potential Effects Map



LEGEND:

Area of Potential Effects

BASE MAP SOURCE:
ESRI USA Topo



0 500 1,000
Scale In Feet



Gowanus Canal, NY

Attachment 2

**GOWANUS CANAL SUPERFUND SITE
REMEDATION Project APE**

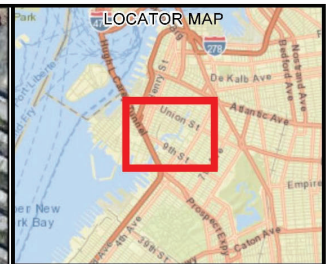
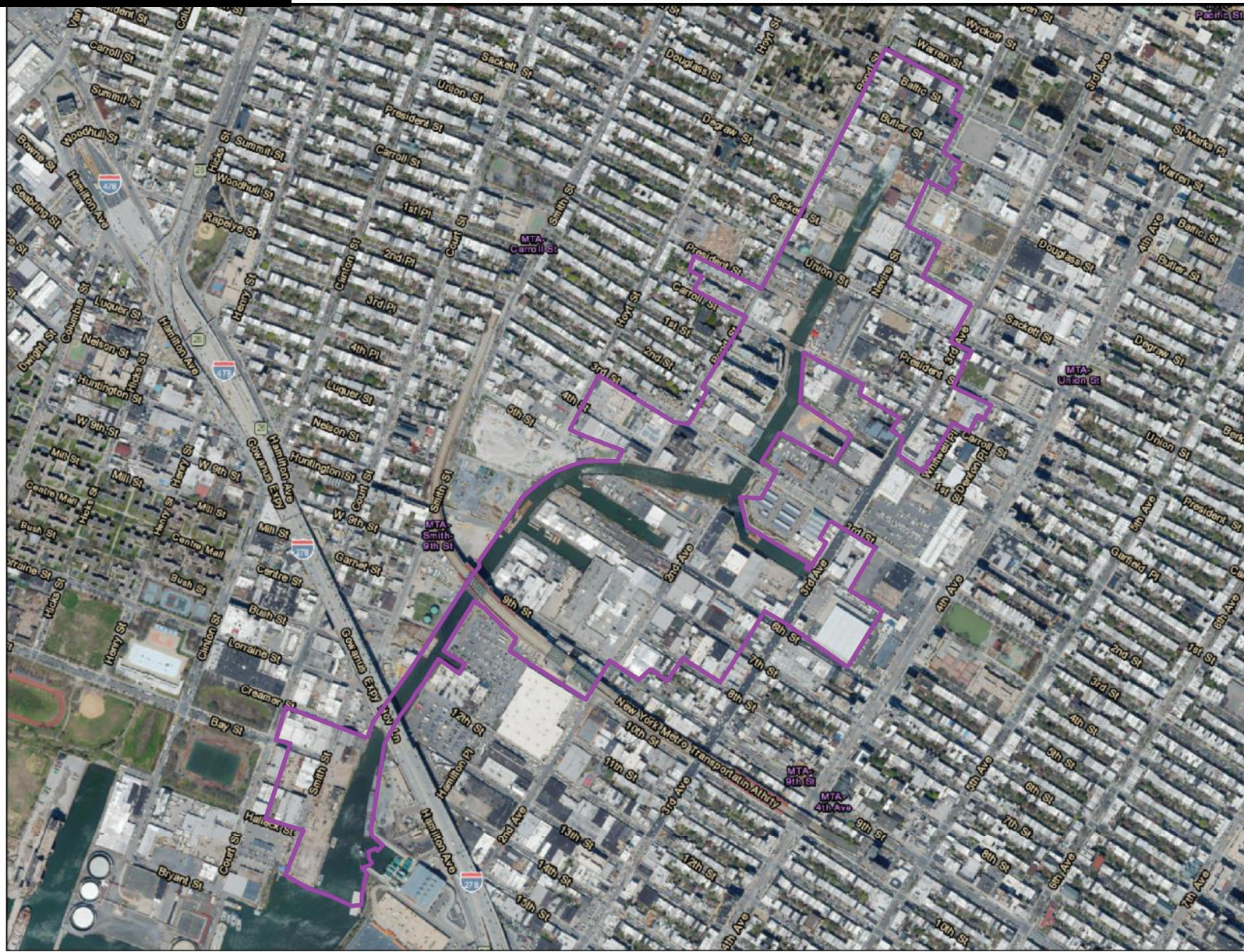
PN: 681861CH DATE: 10/23/2020

REATED BY: RD

REVIEWED BY: AF

Jacobs

Attachment 3
Gowanus Canal Historic District



LEGEND:

- Gowanus Canal
- Historic District

BASE MAP SOURCE:
ESRI World Imagery



Gowanus Canal, NY

Attachment 2
Gowanus Canal Historic District

PN: 681861CH

DATE: 10/23/2020

CREATED BY: RD

REVIEWED BY: AF

Jacobs

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
Gowanus Canal	Including 4th, 6th, 7th, & 11th Street Basins, Butler Street to Gowanus Bay	Structure (canal)	Contributing
Union Street Bridge	Union Street over Gowanus Canal	Structure (bridge)	Contributing
Carroll Street Bridge and Gatehouse	400-402A Carroll Street	Structure (bridge)	Contributing
Canal Boat Shipwreck Site	40° 40.47958' N 073° 59.39437' W (WGS84)	Site	Contributing
Canal Barge Shipwreck Site	40° 40.51506' N 073° 59.58847' W (WGS84)	Site	Contributing
Canal Boat Shipwreck Site	40° 40.49858' N 073° 59.54452' W (WGS84)	Site	Contributing
	189 1st Street	Garage	Contributing
	195 1st Street (aka 24 Whitwell Place)	Commercial Building	Contributing
	36 2nd Avenue	Warehouse complex	Contributing
	48-54 2nd Avenue	Factory complex	Contributing
	1-25 2nd Avenue	Mixed-use	Contributing
	33-41 2nd Avenue	Warehouse	Contributing
	43-51 2nd Avenue	Warehouse	Contributing
	53-67 2nd Avenue	Garage	Contributing
	119-129 2nd Street	Warehouse complex	Contributing
	134 2nd Street	Garage	Contributing
	142-144 2nd Street	Garage	Contributing
	255 3rd Avenue	Mixed-use	Contributing
	257 3rd Avenue	Mixed-use	Contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	259 3rd Avenue	Garage	Contributing
	279 3rd Avenue	Mixed-use	Contributing
	281 3rd Avenue	Mixed-use	Contributing
	283 3rd Avenue	Mixed-use	Contributing
	285 3rd Avenue	Mixed-use	Contributing
	287 3rd Avenue	Mixed-use	Contributing
	289 3rd Avenue	Tenement	Contributing
	254 3rd Avenue	Mixed-use	Contributing
	268 3rd Avenue	Garage	Contributing
	270 3rd Avenue	Mixed-use	Contributing
	276 3rd Avenue	Mixed-use	Contributing
	280 3rd Avenue	Parking lot	Contributing
	282 3rd Avenue	Mixed-use	Contributing
	284 3rd Avenue	Mixed-use	Contributing
	286 3rd Avenue	Mixed-use	Contributing
	288 3rd Avenue	Mixed-use	Contributing
	290 3rd Avenue	Mixed-use	Contributing
	292 3rd Avenue	Mixed-use	Contributing
	299 3rd Avenue	Mixed-use	Contributing
	301 3rd Avenue	Mixed-use	Contributing
	303 3rd Avenue	Mixed-use	Contributing
	305 3rd Avenue	Garage	Contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	315 3rd Avenue	Mixed-use	Contributing
	319 3rd Avenue	Mixed-use	Contributing
	294 3rd Avenue	Mixed-use	Contributing
	271 3rd Avenue	Mixed-use	Contributing
	273 3rd Avenue	Mixed-use	Contributing
Somers Brothers Decorated Tinware Company	252-258 3rd Street	Factory	Contributing
	469 Carroll Street	Two-family dwelling	Contributing
	256 3rd Avenue	Mixed-use	Contributing
	258 3rd Avenue	Vacant lot	Contributing
	302 3rd Avenue	Garage	Contributing
	304 3rd Avenue	Rowhouse	Contributing
	306 3rd Avenue	Rowhouse	Contributing
Brooklyn Rapid Transit Powerhouse	322 3rd Avenue	Industrial	Contributing
New York and Long Island Coignet Stone Company	360-370 3rd Avenue	Commercial	Contributing
	381-385 3rd Avenue	Factory	Contributing
	386-398 3rd Avenue	Warehouse complex	Contributing
	389-395 3rd Avenue	Parking lot	Contributing
	399-403 3rd Avenue	Parking lot	Contributing
	68-70 3rd Street	Factory	Contributing
	74A 3rd Street (aka 75-87 4th Street)	Factory complex	Contributing
	76 3rd Street	Factory	Contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
The International Tile Company	78 3rd Street	Factory	Contributing
	80-96 3rd Street	Parking lot	Contributing
	102 3rd Street	Vacant lot	Contributing
	104 3rd Street	Vacant lot	Contributing
	125-129 3rd Street	Warehouse	Contributing
	131-135 3rd Street	Factory	Contributing
	148 3rd Street	Vacant lot	Contributing
	154 3rd Street	Factory complex	Contributing
	186 3rd Street	Vacant lot	Contributing
	190 3rd Street	Vacant lot	Contributing
	210 3rd Street	Vacant lot	Contributing
	214 3rd Street	Vacant lot	Contributing
American Can Company	238-246 3rd Street	Factory	Contributing
	93 4th Street	Vacant lot	Contributing
	97 4th Street	Parking lot	Contributing
	99 4th Street	Parking lot	Contributing
	101 4th Street	Shotgun Residence	Contributing
	58-64 4th Street	Factory	Contributing
	66 4th Street	Factory	Contributing
	76-78 4th Street	Warehouse	Contributing
	80-96 4th Street	Warehouse	Contributing
	80-100 5th Street	Parking lot	Contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	102-112 5th Street	Warehouses	Contributing
	65-77 6th Street	Parking lot	Contributing
	89 6th Street	Parking lot	Contributing
	105-107 6th Street	Parking lot	Contributing
	129-137 6th Street	Garage	Contributing
	76 6th Street	Warehouse	Contributing
Burns Bros. Coal Pockets	141-149 6th Street	Warehouse/Structures	Contributing
	167 6th Street	Factory complex	Contributing
The Commercial Garage and Machine Company	195-199 6th Street	Factory	Contributing
	152 6th Street	Garage	Contributing
	156 6th Street	Factory	Contributing
	168 6th Street	Commercial	Contributing
	192-196 6th Street	Factory	Contributing
Eagle Clothes	213 6th Street	Factory	Contributing
	149-155 7th Street	Warehouse	Contributing
	157-159 7th Street	Warehouse	Contributing
	161-167 7th Street	Warehouse	Contributing
	171-183 7th Street	Warehouse	Contributing
	185-187 7th Street	Warehouse	Contributing
	193 7th Street	Warehouse	Contributing
	138-148 7th Street	Warehouse	Contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	156 7th Street	Warehouse	Contributing
	160-166 7th Street	Factory	Contributing
Royal Metal Furniture Company	168-180 7th Street (aka 125-129 8th Street)	Factory	Contributing
	182 7th Street	Warehouse	Contributing
Faust Machine Works	113-115 8th Street	Factory	Contributing
Royal Metal Furniture Company	131-139 8th Street	Factory	Contributing
	94-110 8th Street	Factory complex	Contributing
	112 8th Street	Warehouse	Contributing
	114 8th Street	Mixed-use	Contributing
	116 8th Street	Warehouses	Contributing
The New York Tartar Company	61 9th Street	Factory Complex	Contributing
Kentile Floors Complex	83-125 9th Street	Factory	Contributing
Thomas Roulston Grocery	70-92 9th Street	Factory	Contributing
Thomas Roulston Grocery	94-126 9th Street	Factory complex	Contributing
	445-451 Baltic Street	Mixed-use	Contributing
	453-455 Baltic Street	Warehouse	Contributing
	457 Baltic Street	Warehouse	Contributing
	459 Baltic Street	Warehouse	Contributing
	465-469 Baltic Street	Warehouse	Contributing
	471 Baltic Street	Warehouse	Contributing
	479-481 Baltic Street	Warehouse	Contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	483-485 Baltic Street	Warehouse	Contributing
	487-489 Baltic Street	Rowhouse	Contributing
	454 Baltic Street (aka 215 Bond Street)	Garage	Contributing
	456 Baltic Street	Rowhouse	Contributing
	458 Baltic Street	Factory	Contributing
	460 Baltic Street	Warehouse	Contributing
	462 Baltic Street	Vacant lot	Contributing
	468-470 Baltic Street	Vacant lot	Contributing
	472 Baltic Street	Warehouse	Contributing
	474 Baltic Street	Warehouse	Contributing
	476 Baltic Street	Warehouse	Contributing
	215 Bay Street	Factory	Contributing
	220 Bay Street	Parking lot	Contributing
	236 Bay Street	Factory complex	Contributing
	199 Bond Street	Tenement	Contributing
	201 Bond Street	Tenement	Contributing
	203 Bond Street	Garage	Contributing
	207 Bond Street	Mixed-use	Contributing
	217 Bond Street	Factory	Contributing
	243 Bond Street	Mixed-use	Contributing
	245 Bond Street	Mixed-use	Contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
John H. O'Rourke Ice Factory	261 Bond Street	Factory	Contributing
John H. O'Rourke Ice Factory	247-255 Bond Street (aka 182-190 Douglass Street)	Factory	Contributing
	267-285 Bond Street	Factory complex	Contributing
	287-293 Bond Street	Factory	Contributing
	295 Bond Street	Mixed-use	Contributing
	297 Bond Street	Mixed-use	Contributing
	315 Bond Street	Parking lot	Contributing
	323 Bond Street	Parking lot	Contributing
	325 Bond Street	Parking lot	Contributing
	327-331 Bond Street	Warehouse	Contributing
	333 Bond Street	Factory	Contributing
	347-355 Bond Street	Factory	Contributing
	357-363 Bond Street	Warehouse complex	Contributing
Leonhard Michel Brewing Company Complex	409-411 Bond Street	Factory complex	Contributing
	413-419 Bond Street	Warehouses	Contributing
Empire City Hygeia Ice Company	421-431 Bond Street	Factory	Contributing
	201 Butler Street	Vacant lot	Contributing
	203 Butler Street	Vacant lot	Contributing
	209 Butler Street	Vacant lot	Contributing
	211 Butler Street	Rowhouse	Contributing
	213 Butler Street	Rowhouse	Contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	215 Butler Street	Mixed-use	Contributing
	217 Butler Street	Factory	Contributing
ASPCA Memorial Building	223-237 Butler Street	Institutional	Contributing
R. G. Dun and company	239-257 Butler Street (aka 484-498 Baltic Street)	Factory	Contributing
	192 Butler Street	Vacant lot	Contributing
	194 Butler Street	Rowhouse	Contributing
Flushing Tunnel and Pumping Station	196 Butler Street	Utility	Contributing
Gowanus Station	234 Butler Street (aka 226 Nevins Street)	Utility	Contributing
	236 Butler Street	Factory	Contributing
Planet Mills Factory	337-357 Carroll Street	Factory	Contributing
	383 Carroll Street	Stable/Factory	Contributing
Pure Oil Company Complex	388-400 Carroll Street	Factory complex	Contributing
	431 Carroll Street	Parking lot	Contributing
	433 Carroll Street	Two-family dwelling	Contributing
	437 Carroll Street	Two-family dwelling	Contributing
	439 Carroll Street	Tenement	Contributing
	443 Carroll Street	Mixed-use	Contributing
	445 Carroll Street	Rowhouse	Contributing
	451 Carroll Street	Mixed-use	Contributing
	453 Carroll Street	Two-family dwelling	Contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	459 Carroll Street	Tenement	Contributing
	465 Carroll Street	Parking lot	Contributing
	487 Carroll Street	Mixed-use	Contributing
Hildebrand Baking Company	497 Carroll Street	Factory complex	Contributing
	434-440 Carroll Street	Garage	Contributing
	442-450 Carroll Street	Parking lot	Contributing
	452 Carroll Street	Mixed-use	Contributing
	454 Carroll Street	Vacant lot	Contributing
	462-464 Carroll Street	Mixed-use	Contributing
	466-468 Carroll Street	Garage	Contributing
	472 Carroll Street	Mixed-use	Contributing
	476 Carroll Street	Mixed-use	Contributing
	478 Carroll Street	Mixed-use	Contributing
	482 Carroll Street	Mixed-use	Contributing
	486-488 Carroll Street	Mixed-use	Contributing
	496 Carroll Street	Mixed-use	Contributing
	500 Carroll Street	Mixed-use	Contributing
	502 Carroll Street	Mixed-use	Contributing
	504 Carroll Street	Mixed-use	Contributing
W. C. Creamer and Company Brooklyn	232-256 Creamer Street	Factory Complex	Contributing
	195-199 Douglass Street	Factory	Contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	206-210 Douglass Street (aka 479-495 DeGraw Street)	Factory	Contributing
Barrett Manufacturing Company	199-205 Halleck Street	Factory	Contributing
	399 Hoyt Street (aka 64-66 3rd Street)	Vacant lot	Contributing
	431 Hoyt Street	Factory complex	Contributing
Scranton and Lehigh Coal Company Garage	235 -243 Nevins Street (aka 233-241 Douglass Street)	Garage	Contributing
	242-244 Nevins Street	Factory complex	Contributing
	258-270 Nevins Street	Factory	Contributing
	285 Nevins Street	Mixed-use	Contributing
	287 Nevins Street	Tenement	Contributing
	291 Nevins Street	Tenement	Contributing
	295 Nevins Street	Garage	Contributing
	325-329 Nevins Street (aka 466-474 President Street)	Warehouse	Contributing
	331-335 Nevins Street	Mixed-use	Contributing
	339 Nevins Street	Parking lot	Contributing
	341 Nevins Street	Parking lot	Contributing
	307 President Street	Warehouse/Garage	Contributing
	465-471 President Street	Warehouse	Contributing
	473-491 President Street	Factory	Contributing
	495-497 President Street	Warehouse	Contributing
	499 President Street	Garage	Contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	501 President Street	Tenement	Contributing
	503 President Street	Vacant lot	Contributing
	505 President Street	Mixed-use	Contributing
	507-509 President Street	Mixed-use	Contributing
Planet Mills Factory	370-372 President Street	Factory	Contributing
Planet Mills Factory	374-402 President Street	Factory	Contributing
Planet Mills Factory	406-410 President Street	Factory/Warehouse	Contributing
	484 President Street	Mixed-use	Contributing
	492 President Street	Vacant lot	Contributing
	494 President Street	Mixed-use	Contributing
	498 President Street	Warehouse	Contributing
	508 President Street	Tenement	Contributing
	510 President Street	Tenement	Contributing
	528 President Street	Garage	Contributing
	495-505 Sackett Street	Vacant lot	Contributing
	498-502 Sackett Street	Warehouse	Contributing
	508-520 Sackett Street	Factory	Contributing
Majestic Company	537-545 Sackett Street	Factory	Contributing
	554 Sackett Street	Vacant lot	Contributing
	566 Sackett Street	Vacant lot	Contributing
	568 Sackett Street	Rowhouse	Contributing
	572 Sackett Street	Mixed-use	Contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	576 Sackett Street	Rowhouse	Contributing
	578-580 Sackett Street	Mixed-use	Contributing
	584 Sackett Street	Rowhouse	Contributing
S. W. Bowne Grain Storehouse	595-601 Smith Street	Warehouse	Contributing
	627-641 Smith Street	Warehouse	Contributing
Smith Street Dock Corporation	643-661 Smith Street	Warehouse	Contributing
	592-608 Smith Street	Factory complex	Contributing
	610-628 Smith Street	Factory	Contributing
	487-493 Union Street	Mixed-use	Contributing
	499 Union Street	Warehouses	Contributing
	519-527 Union Street	Factory	Contributing
National Packing Box Factory	533-543 Union Street	Factory	Contributing
Thomas Paulson and Son, Inc. Brass Founders	450-482 Union Street	Factory	Contributing
	545 Union Street	Garage	Contributing
	555 Union Street	Tenement	Contributing
	557 Union Street	Tenement	Contributing
	561-563 Union Street	Free-standing house	Contributing
	565 Union Street	Tenement	Contributing
	567 Union Street	Mixed-use	Contributing
	569 Union Street	Mixed-use	Contributing
	571 Union Street	Tenement	Contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	573 Union Street	Tenement	Contributing
	575 Union Street	Tenement	Contributing
	577 Union Street	Garage	Contributing
	581-599 Union Street	Factory	Contributing
	534 Union Street (aka 493 President Street)	Mixed-use	Contributing
	536 Union Street	Garage	Contributing
	538 Union Street	Warehouse	Contributing
	540 Union Street	Warehouse	Contributing
	542 Union Street	Warehouse	Contributing
	562-568A Union Street (aka 251 3rd Avenue)	Mixed-use	Contributing
	10 Whitwell Place	Mixed-use	Contributing
	12 Whitwell Place	Mixed-use	Contributing
	14 Whitwell Place	Mixed-use dwelling	Contributing
	16 Whitwell Place	Garage	Contributing
	18 Whitwell Place	Garage	Contributing
	137 3rd Street	Garage	Contributing
3rd Street Bridge	3rd Street over Gowanus Canal	Structure (bridge)	Non-contributing
3rd Avenue Bridge	3rd Avenue over 4th Street Basin	Structure (bridge)	Non-contributing
9th Street Bridge	9th Street over Gowanus Canal	Structure (bridge)	Non-contributing
Hamilton Avenue Bridge		Structure (bridge)	Non-contributing
	126 2nd Street	Residence	Non-contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	128 2nd Street	Residence	Non-contributing
	140 2nd Street	Mixed-use	Non-contributing
	269 3rd Avenue	Motel	Non-contributing
	277 3rd Avenue	Mixed-use	Non-contributing
	252 3rd Avenue (aka 554 Union Street)	Mixed-use	Non-contributing
	262-266 3rd Avenue	Mixed-use	Non-contributing
	272 3rd Avenue	Mixed-use	Non-contributing
	274 3rd Avenue	Mixed-use	Non-contributing
	297 3rd Avenue	Mixed-use	Non-contributing
	308 3rd Avenue	Tenement	Non-contributing
	110-112 3rd Street	Factory	Non-contributing
	123 3rd Street	Tenement	Non-contributing
	141-167 3rd Street	Warehouse	Non-contributing
	61-73 4th Street	Factory	Non-contributing
Wesley Lacquer Company	95 4th Street	Factory	Non-contributing
Knickerbocker Ice Cream Company	98-112 4th Street	Factory	Non-contributing
	169-175 6th Street	Warehouse	Non-contributing
	107-111 8th Street	Warehouse	Non-contributing
	139 9th Street	Warehouse	Non-contributing
	461 Baltic Street	Warehouse	Non-contributing
	463 Baltic Street	Rowhouse	Non-contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	475-477 Baltic Street	Warehouse	Non-contributing
	452 Baltic Street	Rowhouse	Non-contributing
	478-482 Baltic Street	Warehouse	Non-contributing
	209 Bond Street	Garage	Non-contributing
	211 Bond Street	Factory	Non-contributing
	213 Bond Street	Factory	Non-contributing
	219 Bond Street	Garage	Non-contributing
	221-225 Bond Street	Mixed-use	Non-contributing
	235 Bond Street (aka 229-237 Bond Street)	Factory	Non-contributing
	239-241 Bond Street	Garage	Non-contributing
	299-303 Bond Street	Warehouse	Non-contributing
	335-345 Bond Street	Warehouse	Non-contributing
	205 Butler Street	Rowhouse	Non-contributing
	207 Butler Street	Rowhouse	Non-contributing
	182 Butler Street	Factory	Non-contributing
	184 Butler Street	Rowhouse	Non-contributing
	186 Butler Street	Rowhouse	Non-contributing
	188 Butler Street	Tenement	Non-contributing
	190 Butler Street	Tenement	Non-contributing
	435 Carroll Street	Rowhouse	Non-contributing
	441 Carroll Street	Single-family dwelling	Non-contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	455 Carroll Street	Factory	Non-contributing
	461 Carroll Street	Multi-family dwelling	Non-contributing
	463 Carroll Street	Tenement	Non-contributing
	467 Carroll Street	Two-family dwelling	Non-contributing
	404-428 Carroll Street	Factory complex	Non-contributing
	456 Carroll Street	Mixed-use	Non-contributing
	458-460 Carroll Street	Mixed-use	Non-contributing
	470 Carroll Street	Mixed-use	Non-contributing
	474 Carroll Street	Single-family dwelling	Non-contributing
	480 Carroll Street	Mixed-use	Non-contributing
	494 Carroll Street	Mixed-use	Non-contributing
	193 Douglass Street	Factory	Non-contributing
Knickerbocker Ice Cream Company Garage	198-202 Douglass Street	Warehouse	Non-contributing
	289 Nevins Street	Rowhouse	Non-contributing
National Packing Box Factory	280-290 Nevins Street	Factory	Non-contributing
	300-344 Nevins Street	Utility	Non-contributing
	337 Nevins Street	Tenement	Non-contributing
	511 President Street	Free-standing house	Non-contributing
	442 President Street	Factory	Non-contributing
	478 President Street	Mixed-use	Non-contributing
	482 President Street	Mixed-use	Non-contributing
	486 President Street	Mixed-use	Non-contributing

Properties within the Gowanus Canal Historic District			
Property Name	Location	Property Type	State/NRHP Status
	488 President Street	Mixed-use	Non-contributing
	490 President Street	Mixed-use	Non-contributing
	496 President Street	Mixed-use	Non-contributing
	502 President Street	Mixed-use	Non-contributing
	504 President Street	Mixed-use	Non-contributing
	506 President Street	Mixed-use	Non-contributing
	556 Sackett Street	Rowhouse	Non-contributing
	558-562 Sackett Street	Warehouse/Garage	Non-contributing
	564 Sackett Street	Two-family dwelling	Non-contributing
	570 Sackett Street	Rowhouse	Non-contributing
	582 Sackett Street	Rowhouse	Non-contributing
	553 Union Street	Garage	Non-contributing
	546 Union Street	Mixed-use	Non-contributing
George F. Driscoll	550 Union Street	Mixed-use	Non-contributing
	22 Whitwell Place	Tenement	Non-contributing
	205 Bond Street (<i>See 445-451 Baltic Street</i>)		

Properties within the Gowanus Canal Historic District Designated as Landmarks by the New York City Landmarks Preservation Commission			
Property Name	Location	Property Type	LPC Status
Carroll Street Bridge (includes Gatehouse)		Bridge and gate house	Individual Landmark
Somers Brothers Tinware Factory (later American Can Company)	238-246 3 rd Street, 365-379 3 rd Avenue, and 232-236 3 rd Street (aka 361-363 3 rd Avenue)	Industrial	Individual Landmark
Brooklyn Rapid Transit Co. Central Power Station Engine House	153 Second Avenue (aka 322 3 rd Avenue, 340 3 rd Avenue)	Transportation power station	Individual Landmark
New York and Long Island Coignet Stone Company Building	360 3 rd Avenue (aka 370 3 rd Avenue; 230 3 rd Street)		Individual Landmark
American Society for the Prevention of Cruelty to Animals, Brooklyn Office		Animal Shelter and garage	Individual Landmark
Gowanus Canal Flushing Tunnel Pumping Station and Gate House	201 Douglass Street (aka 196 Butler Street)	Pumping Station and gate house	

Attachment 4

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ATTACHMENT 4

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Attachment 5
Unanticipated Discoveries Protocol

Attachment 5

UNANTICIPATED DISCOVERIES

and

State Historic Preservation Office/**New York State Office of Parks, Recreation and Historic Preservation****Human Remains Discovery Protocol****(August 2018)****UNANTICIPATED DISCOVERIES**

To assist EPA in meeting the requirements of Section 106 of the National Historic Preservation Act as defined in the Advisory Council on Historic Preservation (Council) regulations “Protection of Historic Properties” (36 CFR Part 800), the following Unanticipated Discovery Protocol which will be implemented should new or additional historic properties be found after construction has begun on the Combined Sewer Overflow Tank Construction Associated with the Gowanus Canal Superfund Site, Brooklyn, New York. This protocol has been developed through reference to the regulations embodied in “Protection of Historic Properties” issued by the Council (revised August 2004, <https://www.govinfo.gov/content/pkg/CFR-2018-title36-vol3/xml/CFR-2018-title36-vol3-part800.xml>) and consultation with the New York State Historic Preservation Office (SHPO) [New York Office of Parks, Recreation, and Historic Preservation (OPRHP)].

Termed “unanticipated discovery” or “post-review discovery,” the identification of new or additional historic properties during implementation of an undertaking can occur in the case of projects that involve excavation or ground-disturbing activities. This Protocol will be implemented if previously undiscovered archaeological resources and/or human remains are identified. Archaeological resources include man-made objects (precontact and historic period artifacts such as stone tools, pottery, glass, nails, bones, etc.) and features (e.g. stone or brick walls or pavements, pits, fireplaces, other evidence of burning, or other remnants of human activity).

Environmental inspectors and construction contractors and subcontractors will receive training regarding the identification and preliminary treatment of unanticipated discoveries and their responsibilities for protecting discoveries and initiating implementation of the Protocol. Training will occur as part of the pre-construction on-site training program for foremen, company inspectors, and construction supervisors and will be given by a qualified cultural resource specialist. During construction, the Environmental Inspectors (EI) will be responsible for advising construction contractor personnel on the procedure to follow in the event that an unanticipated discovery is made. The EI will advise all operators of equipment involved in grading, stripping, or trenching activities to stop work immediately if they observe any indications of the presence of cultural materials, contact the EI as soon as possible, comply with the unanticipated discovery procedures (outlined below), and treat human remains with dignity and respect (see Human Remains Discovery Protocol).

Procedure When Cultural Materials Are Observed

The following measures will be implemented should an unanticipated historic property / cultural resource discovery be made by an inspector, a contractor, or subcontractor during construction of the proposed undertaking:

- 1) Construction activities within the immediate area of an unanticipated discovery will be halted (“immediate area” is a context-specific measure, however 30 to 50 feet is generally adequate, although special attention should be given to the possible extension of a new find beyond this buffer zone), and the discovery protected from further disturbance;

- 2) The cultural resources consultant [CONSULTANT], will notify by telephone EPA and SHPO / OPRHP. In case of a finding of human remains the Brooklyn County Medical Examiner Coroner will be notified. These notifications will take place within 24 hours of an unanticipated discovery;
- 3) Specific EPA and SHPO / OPRHP instructions concerning an unanticipated discovery resulting from the notification as described above will be followed and may require, archaeological work be performed on the unanticipated discovery location to stabilize deposits, protect deposits from scavengers or looters, and to collect readily available samples (e.g. for radiocarbon dating) which may help pinpoint the age of deposits; and
- 4) Further consultation with EPA and SHPO/ OPRHP will determine any additional measures necessary subsequent to the initial archaeological work. This may involve further archaeological study or consultation with Native American nations or other parties with established cultural affiliation. Construction activities will remain halted until EPA and SHPO / OPRHP indicate work may proceed in the area of a specified unanticipated discovery

In the case of an unanticipated discovery of human remains, all relevant state and federal laws and recommendations regarding treatment of human remains will be followed. It is important to recognize the importance of providing careful and respectful treatment of human remains recovered as an unanticipated discovery, or as part of an archaeological investigation. Additionally, in the event of an unanticipated discovery of human remains, the *Human Remains Discovery Protocol* developed by the SHPO/OPRHP will be followed. (2018).

**State Historic Preservation Office/
New York State Office of Parks, Recreation and Historic Preservation
Human Remains Discovery Protocol
(August 2018)**

- ☐ If human remains are encountered during construction or archaeological investigations, the New York State Historic Preservation Office (SHPO) recommends that the following protocol is implemented:
- ☐ Human remains must be treated with dignity and respect at all times. Should human remains or suspected human remains be encountered, work in the general area of the discovery will stop immediately and the location will be secured and protected from damage and disturbance.
- ☐ If skeletal remains are identified and the archaeologist is not able to conclusively determine whether they are human, the remains and any associated materials must be left in place. A qualified forensic anthropologist, bioarchaeologist or physical anthropologist will assess the remains in situ to help determine if they are human.
- ☐ No skeletal remains or associated materials will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.
- ☐ The SHPO, the appropriate Indian Nations, the involved state and federal agencies, the coroner, and local law enforcement will be notified immediately. Requirements of the coroner and local law enforcement will be adhered to. A qualified forensic anthropologist, bioarchaeologist or physical anthropologist will assess the remains in situ to help determine if the remains are Native American or non-Native American.
- ☐ If human remains are determined to be Native American, they will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. Please note that avoidance is the preferred option of the SHPO and the Indian Nations. The involved agency will consult SHPO and the appropriate Indian Nations to develop a plan of action that is consistent with the Native American Graves Protection and Repatriation Act (NAGPRA) guidance. Photographs of Native American human remains and associated funerary objects should not be taken without consulting with the involved Indian Nations.
- ☐ If human remains are determined to be non-Native American, the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. Please note that avoidance is the preferred option of the SHPO. Consultation with the SHPO and other appropriate parties will be required to determine a plan of action.
- ☐ To protect human remains from possible damage, the SHPO recommends that burial information not be released to the public.

Division for Historic Preservation

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