

**MEMORANDUM OF AGREEMENT
BETWEEN
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY AND THE
NEW YORK STATE HISTORIC PRESERVATION OFFICE**

**FOR COMBINED SEWER OVERFLOW RETENTION TANK CONSTRUCTION
ASSOCIATED WITH THE GOWANUS CANAL SUPERFUND SITE, BROOKLYN,
NEW YORK.**

SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION

INTRODUCTION

The Gowanus Canal (“Canal”) is a brackish, tidal arm of the New York–New Jersey Harbor Estuary, extending for approximately 1.8 miles through Brooklyn, New York. The approximately 100-foot-wide canal runs southwest from Butler Street to Gowanus Bay and Upper New York Bay and includes several turning basins in addition to the main canal. The adjacent waterfront is primarily commercial and industrial, currently including concrete plants, warehouses, and parking lots, and the Canal is near several residential neighborhoods.

The Canal was constructed by bulk-heading and dredging a tidal creek and wetland. After its completion in the 1860s, the Canal quickly became one of the nation’s busiest industrial waterways, home to heavy industry including gas works (i.e., manufactured gas plants), coal yards, cement mixers, soap makers, tanneries, paint and ink factories, machine shops, chemical plants, and oil refineries.

Hazardous substances, pollutants and contaminants have entered the Canal and the sediments below and around the Canal via several transport pathways or mechanisms, including spillage during product shipping and handling, direct disposal or discharge, contaminated groundwater discharge, surface water runoff, storm water discharge (including combined sewer overflow), and contaminated soil erosion. As a result of decades of direct and indirect discharges of hazardous substances generated by industrial and other activity, the Canal became a repository for untreated industrial wastes, raw sewages and runoff, causing it to become one of New York’s most polluted waterways.

Much of the heavy industrial activity along the Canal has ceased, although many upland areas adjacent to the Canal remain zoned as manufacturing districts. Land uses along and near certain portions of the Canal are in the process of transitioning from heavy industrial to light industrial, commercial and residential uses. The Canal is currently used by some for recreational purposes such as boating, diving, and catching fish for consumption. The Canal and New York City harbor are subject to New York State fishing advisories.

The Gowanus Canal Superfund Site (“Site”) was placed on the National Priorities List pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), 42 U.S.C §9605, on March 2, 2010.

In April 2010, United States Environmental Protection Agency (EPA) entered into administrative consent orders with the City of New York and Brooklyn Union Gas Co. d/b/a National Grid New York (“National Grid”) to perform work in support of EPA’s remedial investigation/feasibility

study (RI/FS). An RI report was completed in January 2011 and an FS report was completed in December 2011. An FS addendum report was completed in December 2012.

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

Based on the results of the RI/FS, chemical contamination in the Canal sediments present an unacceptable ecological and human health risk, primarily due to exposure to PAHs, PCBs, and metals (barium, cadmium, copper, lead, mercury, nickel and silver).

On September 27, 2013, EPA issued a Record of Decision (ROD) for the Site that selected the following response actions:

- 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”);
- 2) in-situ stabilization (ISS) of those native sediments in select areas in the upper and mid-reaches of the canal contaminated with high levels of nonaqueous phase liquid (NAPL);
- 3) construction of a multilayer cap in the upper and mid-reaches of the Canal 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 Canal;
- 5) construction of a multilayer cap to isolate and prevent migration of PAHs from native sediments in the lower reach of the Canal;
- 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;
- 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;
- 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 insure that the remedy continues to function effectively, and;
- 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 stormwater, including from future upland development projects, are not discharged to the Canal.

The City is designing the CSO retention tanks pursuant to an Administrative Order for Remedial Design, Index Number CERCLA-02-2014-2019, issued by EPA on May 28, 2014, which was partially superseded by Administrative Settlement Agreement and Order for Remedial Design, Removal Action and Cost Recovery, Index Number CERCLA-02-2016-2003 (the “RH-034 Tank AOC”), issued by EPA on June 9, 2016.

The effect on historic properties from the proposed construction of the larger of the proposed CSO retention tanks associated with outfall RH-034, located at Butler and Nevins Streets, is the focus of this Memorandum of Agreement (MOA).

INTRODUCTORY CLAUSES

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

WHEREAS, the EPA has consulted with the New York State Historic Preservation Office (NYSHPO), and the Advisory Council on Historic Preservation (ACHP), pursuant to 36 CFR 800, regarding the regulations implementing Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended (16 U.S.C. 470f);

WHEREAS, EPA, in consultation with NYSHPO, has defined an area of potential effect (APE), referred to as the Site, to include the viewsheds of the existing historic district and the footprints of any proposed new construction or supporting activities;

WHEREAS, the EPA has consulted with the New York City Landmarks Preservation Commission with respect to the significance of historic structures within the project area;

WHEREAS, the EPA has consulted with local community groups concerned with the preservation of local historical heritage, and historic resources in the APE including:

- Cobble Hill Association
- Friends of Thomas Greene Park/Douglass
- Gowanus Alliance
- Gowanus by Design
- NYCHA Communities United
- Sierra Club
- Families United for Racial and Economic Equality
- Fifth Avenue Committee
- Riverkeeper
- FROGG
- American Can Factory
- Gowanus 4 Life
- Park Slope Neighbors
- Red Hook Civic Association
- South Brooklyn Industrial Development Corp.
- 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 and Canoe Club
- Gowanus Canal Superfund Site Community Advisory Group (CAG)

WHEREAS, the EPA has identified and evaluated a number of terrestrial and underwater cultural resources (see Attachment B), along with areas of sensitivity;

WHEREAS, the EPA has required terrestrial and underwater cultural resources investigations of the Site in consultation with the NYSHPO and that these investigations have been documented in the referenced reports (see Attachment B);

WHEREAS, historic bulkheads, associated with the Gowanus Canal, will be documented consistent with existing remediation protocols established for the site (see Attachment B).

WHEREAS, the study area falls within the state/National Historic Register-eligible Gowanus Canal Historic District (Attachment A);

WHEREAS, the proposed CSO facility is in an archaeologically sensitive area. Both precontact and historic period sites have previously been identified in this vicinity. Two early historic mills are known to have existed in this general area. Their precise locations are not known and substantial landscape modifications over the past several centuries make the correlation between the positions of Gowanus Creek and the Gowanus Canal problematic. Therefore it cannot be excluded that the tide mills, their associated tidal mill ponds and earthen dams may be close to and are likely associated with the APE. Furthermore, other archaeological sites may also exist at the proposed facility location;

WHEREAS, the properties at 242-244 Nevins Street and 270 Nevins Street contribute to the State/National Register-eligible Gowanus Canal Historic District. The proposed demolition of each would constitute an Adverse Effect as defined in Section 106 of the NHPA;

WHEREAS, the properties at 122 5th Street and 22 2nd Avenue, if utilized for the CSO tank associated with the OH-007 outfall, are non-contributing, and therefore there is no concern with their potential demolition;

WHEREAS, partial or full demolition of 234 Butler Street would constitute an Adverse Effect;

WHEREAS, there appear to be no prudent and feasible alternatives to demolition of 270 and 242-244 Nevins Street and a portion of 234 Butler Street (the western-most roughly square shaped portion) buildings as part of the CSO retention tank and supporting facilities construction, which are contributing buildings within the National Register-eligible Gowanus Canal Historic District (see Attachment B);

NOW, THEREFORE, the parties hereto agree that the following stipulations address the substantive Section 106 requirements of the Site remediation for the combined sewer overflow retention tank construction:

STIPULATIONS

The stipulations of this MOA shall be implemented in conjunction with the remedial action. EPA shall carry out, or shall require New York City to carry out a series of measures designed to avoid, minimize, or mitigate any unavoidable adverse effects on significant historic properties. These measures shall include the following:

1. Curation of the retrieved archaeological collections from National Register-eligible sites 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 New York State Museum, with a preference for a facility in close geographic proximity to the Site, so that Gowanus area residents may have access to the collections.
2. For any proposed construction work within the streetbed, we recommend salvaging and reinstalling the historic Belgian block pavers, and/or replacing any unusable ones in kind.
3. For Areas within the APE that have identified potential for deeply buried archaeological deposits, preliminary stratigraphic investigation (a geoarchaeological study) should be undertaken to assess the nature and extent of potentially culture-bearing deposits within the APE. The results of this investigation would provide the basis for determining whether further archaeological studies are needed and, if so, the most appropriate method for carrying out such work.
4. The mitigation of anticipated adverse effects on the contributing historic structures at 270 and 242-244 Nevins Street, shall at a minimum include the recordation of the salient architectural features of the building, appropriate photo documentation, and the development of an historic context for their role and appearance in the community.
5. In addition to the above recordation procedures, carefully dismantle the Nevins Street and a specified portion (approximately 25-30 linear feet) of the Butler Street facades (which accounts for the poor condition of the current structure), and to the extent practicable preserve the materials and use them in the reconstruction of the facades near the original locations as part of the future headhouse building, into which the facades would be incorporated. Finally, other historic elements of the building fabric, not retained and incorporated, will be evaluated for potential incorporation into the proposed new building. These elements include, but are not limited to, the removal and re-use of terra cotta window pediments, stone sills, stone water table, and brick. On-going consultation by NYC with NYSHPO, EPA and the consulting party group will be required during the design of the new building.”

OBJECTIONS and DISPUTE RESOLUTION

Should any signatory to this MOA object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, EPA will consult with such party in an effort to resolve the objection. If EPA determines that such objection cannot be resolved, EPA will:

1. Forward all documentation relevant to the dispute, including the EPA’s proposed resolution, to the ACHP. The ACHP shall provide EPA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, EPA may, in its discretion, prepare a written response that takes into account any timely advice or comments regarding the dispute from the ACHP and signatories and provide them with a copy of this written response. EPA will then proceed according to EPA’s final decision.
2. If the ACHP does not provide its advice regarding the dispute within the thirty (30) day time period, EPA may make a final decision on the dispute and proceed

accordingly. Prior to reaching such a final decision, EPA may, in its discretion, prepare a written response that takes into account any timely comments regarding the dispute from the signatories to the MOA, and provide them and the ACHP with a copy of such written response.

3. EPA responsibility or authority to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remains unchanged.

AMENDMENTS

This MOA may be amended when such an amendment is agreed to in writing by the signatories. The signed amendment will be effective on the date it is filed by EPA with the ACHP.

POST-REVIEW DISCOVERIES

If additional historic properties are discovered that may be historically significant or unanticipated effects on historic properties found, EPA will implement the discovery plan included as Attachment C.

TERMINATION

If any signatory to this MOA determines that its terms will not or cannot be carried out, that party shall immediately consult with the other signatories to attempt to develop an amendment. If within thirty (30) days (or another time period agreed to by the signatories) an amendment cannot be reached, a signatory may terminate the MOA upon written notification to the other signatories. Once the MOA is terminated, EPA will either (a) seek to enter into a new MOA with the parties pursuant to 36 CFR § 800.6(c); or (b) request, take into account, and respond to the comments of the ACHP under 36 CFR § 800.7. EPA shall notify the signatories as to the course of action it will pursue.

DURATION

This MOA shall cease to have effect 10 years from the date of the last signature on this MOA, unless extended or terminated pursuant to the preceding section.

EXECUTION

Execution of this MOA by EPA and the other parties, its subsequent acceptance by the ACHP, and implementation of its terms is evidence that EPA has afforded the ACHP an opportunity to comment on the project and its effect on historic properties and that EPA has taken into account the effects of the undertaking on historic properties.

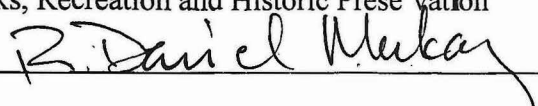
U.S. ENVIRONMENTAL PROTECTION AGENCY

By: Peter D. Lopez, Regional Administrator, United States Environmental Protection Agency, Region 2

Signed:  Date: 2/20/19

NEW YORK STATE HISTORIC PRESERVATION OFFICE

By: R. Daniel Mackay, Deputy Historic Preservation Officer, New York State Office of Parks, Recreation and Historic Preservation

Signed:  Date: 2/13/2019

ATTACHMENTS

Attachment A: US Department of Interior, National Parks Service, Draft National Register of Historic Places Registration Form, Gowanus Canal Historic District, City of New York, Borough of Brooklyn, Kings County, Code 047

Attachment B: Bibliography

Gowanus Canal CSO Facilities Final Environmental Impact Statement CEQR No. 17DEP040K. Flushing, NY: New York City Department of Environmental Protection, 2018. Chapter 7.

Final Report National Register of Historic Places Eligibility Evaluation and Cultural Resources Assessment for the Gowanus Canal, Borough of Brooklyn, Kings County, New York in Connection with the Proposed Ecosystem Restoration Study. Trenton, NJ: Hunter Research Inc., et al, 2004.

Archaeological Sensitivity Study, Gowanus Canal, Brooklyn Borough, City of New York, Kings County, New York. Trenton, NJ: Hunter Research Inc., 2011.

Gowanus Canal Area Historic Resources Inventory and Limited Phase 1A Documentary & Archaeological Sensitivity Report. New York, NY: Gregory Dietrich Preservation Consulting, et al, 2012.

Identification and Historical Assessment of Targets 37a, 37b, 37c, and 39, Located in the 6th Street Basin, and Targets 31 and 31b, Located in Turning Basin 4, of Gowanus Canal. Rock Tavern, NY: Archaeology & Historic Resource Services, LLC., 2016.

Cultural Resource Monitoring Plan Gowanus Canal Superfund Site Brooklyn, New York. Rock Tavern, NY: Archaeology & Historic Resource Services, LLC., 2016.

Debris Memo – Review Items from Clean Earth; Debris Staging at Clean Earth – Claremont; Turning Basin 4 Dredging and Capping; Gowanus Canal Remediation Project Brooklyn, Kings County, NY. Rock Tavern, NY: Archaeology & Historic Resource Services, LLC., September 17, 2018.

Memo 7 – Preliminary Results of Level 1 Cultural Resource Review; Debris Staging at Citizen Site – Brooklyn; Turning Basin 4 Dredging and Capping; Gowanus Canal Remediation Project Brooklyn, Kings County, NY. Rock Tavern, NY: Archaeology & Historic Resource Services, LLC., October 22, 2018.

Gowanus Canal Bulkhead and Cribbing Documentation at Storage Deluxe 163 6th Street, Brooklyn, Kings County New York. New York, NY: Langan Engineering, Environmental, Surveying, and Landscape Architecture, D.P.C., 2017.

Memo - Preliminary Results of Level 1 Cultural Resource Review at Clean Earth – Claremont; Turning Basin 4 Dredging and Capping; Gowanus Canal Remediation Project Brooklyn, Kings County, NY. Rock Tavern, NY: Archaeology & Historic Resource Services, LLC., May 16, 2018.

Identification and Historical Assessment of “Target 31a” 4th Street Basin Gowanus Canal Superfund Site Brooklyn, New York Site Number 04701.019115. Rock Tavern, NY: Archaeology & Historic Resource Services, LLC., March 2016.

Gowanus Canal Preliminary Bulkhead Study, Brooklyn, Kings County, New York. John Milner Associates, 2010.

Gowanus Canal Bulkhead and Cribbing Documentation at Benson Scrap Metal Brooklyn Kings County, New York. Langan Engineering, Environmental, Surveying, and Landscape Architecture, D.P.C., 2014.

Gowanus Canal Bulkhead and Cribbing Documentation at Bayside Oil Brooklyn, Kings County, New York. Langan Engineering, Environmental, Surveying, and Landscape Architecture, D.P.C., 2014.

Gowanus Bulkhead and Cribbing Documentation 155 3rd Street. Langan Engineering, Environmental, Surveying, and Landscape Architecture, D.P.C., 2018.

Memo 4 – Preliminary Results of Level 1 Cultural Resources Review Debris Staging at Clean Earth – Claremont Turning Basin 4 Dredging and Capping Gowanus Canal Remediation Project. September 2018.

Phase 1A Archaeological Documentary Study: Proposed Pre-Kindergarten Center; 168 8th Street, Brooklyn, Kings County, New York. AKRF, Inc., 2016.

Tribal Consultation Memorandum, Gowanus Canal, Brooklyn, Kings County New York. EPA Region 2, February 2019.

Attachment C: UNANTICIPATED DISCOVERIES PROTOCOL for Combined Sewer Overflow Tank Construction Associated with the Gowanus Canal Superfund Site, Brooklyn, New York

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. (November 28, 2008).

State Historic Preservation Office/ New York State Office of Parks, Recreation and Historic Preservation Human Remains Discovery Protocol (November 28, 2008)

In the event that human remains are encountered during construction or archaeological investigations, the New York State Historic Preservation Office (SHPO) recommends that the following protocol is implemented:

- At all times human remains must be treated with the utmost dignity and respect. Should human remains be encountered work in the general area of the discovery will stop immediately and the location will be immediately secured and protected from damage and disturbance.
- Human remains or associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.
- The county coroner/medical examiner, local law enforcement, the SHPO, the appropriate Indian Nations, and the involved agency will be notified immediately. The coroner and local law enforcement will make the official ruling on the nature of the remains, being either forensic or archaeological.
- If human remains are determined to be 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 choice of the SHPO and the Indian Nations. The involved agency will consult SHPO and appropriate Indian Nations to develop a plan of action that is consistent with the Native American Graves Protection and Repatriation Act (NAGPRA) guidance.
- 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 choice of the SHPO. Consultation with the SHPO and other appropriate parties will be required to determine a plan of action.