
BULKHEAD REPLACEMENT WORK PLAN

For

**President Street Properties Site
426 President Street
Brooklyn, New York**

Prepared For:

**President Carroll LLC (Current Volunteer)
President Union LLC (New Volunteer Owner)
505 Flushing Avenue
Brooklyn, NY 11205**

Prepared By:

**Langan Engineering, Environmental, Surveying,
Landscape Architecture and Geology, D.P.C.
21 Penn Plaza
360 West 31st Street, 8th Floor
New York, New York 10001**

**Kenneth A. Huber, PE
Professional Engineer License No. 093150**

**Gregory L. Biesiadecki, P.E
New York State Professional Engineer License No. 063718**

LANGAN

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INTRODUCTION

This report presents our work plan for the proposed bulkhead replacement along a portion of the Gowanus Canal adjacent to the President Street Properties Site in Brooklyn, New York. This work plan is being prepared for implementation of soil erosion and sediment control measures, execution of an archaeological field investigation, and installation of a new bulkhead.

This work plan was prepared by Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. (Langan) for President Carroll LLC and President Union LLC at their request. Langan has been retained to design a new bulkhead at the referenced site to accommodate future dredging activity proposed by the United States Environmental Protection Agency (USEPA) in the Gowanus Canal.

This Work Plan has been prepared in accordance with EPA Consent Order AOC 02-2018-2006 dated 27 September 2018. USEPA has been notified that President Union LLC is the new owner of the Site. The site is also subject to Brownfield Cleanup Agreement Index No. C244221 for the President Street Properties BCP Site No. C224221. A 60-day notice was submitted to NYSDEC on 6 August 2019 notifying the agency of the change of ownership from President Carroll LLC to President Union LLC. The new owner President Union LLC will be implementing this Work Plan.

SITE DESCRIPTION AND BACKGROUND

The President Street Properties Site (Tax Block 438, Lot 1, 2, and 3 and Tax Block 445, Lot 8, 11), in the Gowanus neighborhood of Brooklyn, New York, is bounded by Bond Street on the west, 450 Union Street on the North, the Gowanus Canal on the east, and Carroll Street on the south; the former President Street bisects the site. The property, about 74,520 square feet (ft), fronts about 400 ft of the Gowanus Canal between Carroll Street and the 450 Union Street property (Tax Block 438, Lot 7). A site location map is attached as Figure 1.

The existing shoreline at the site consists of a timber crib wall. Existing grades along the shoreline ranges from about el 5 to 11 NAVD¹.

Historical Background

The site footprint was originally within Gowanus Creek and adjacent marsh, as can be seen on the 1849 Colton Map² with the relevant portion provided as Figure 2. The current shoreline was

¹ Elevations cited herein are referenced to North American Vertical Datum (NAVD).

² "1849 Map of The City of Brooklyn," prepared by J.H. Colton & Co., 1849.

created with the establishment of the Gowanus Canal. The Gowanus Canal was first constructed in the 1850s by filling in the native tidal meadows, constructing vertical timber sheet piling for bulkheads, and excavating the canal to provide about 5 ft of draft for barges. The canal was modified into its current configuration by the Gowanus Canal Improvement Commission between 1866 and 1870. The commission reportedly constructed the new bulkheads using stone-filled timber cribwork and dredged the canal to a depth of 12 ft below Mean Low Water in the area north of the Hamilton Avenue Bridge. The properties along the Gowanus Canal have historically been used for commercial and industrial activity.

The timber crib bulkheads were constructed of rough-hewn timbers forming square or rectangular cells with floors. The timber cribs could be floated to their intended location and sunk into place by filling the cribs with stone. As the loaded cells sank, additional timber cells were added to the top and, in turn, also filled with stone. These timber cribs were reportedly subject to decay above the mean low tide level and these decayed sections would have to be regularly replaced.

Proposed Environmental Remediation of the Canal

The USEPA placed the Gowanus Canal on its National Priorities List of hazardous waste sites in March 2010. The USEPA conducted a remedial investigation of the canal and issued a draft Remedial Investigation Report (RIR) in January 2011. They found that the canal's surface water is contaminated with benzene, toluene, ethylbenzene, and xylenes (BTEX) and polyaromatic hydrocarbons (PAH); the soft surface sediments were found to be contaminated with BTEX, PAHs, polychlorinated biphenyls (PCBs), and heavy metals. In some locations, the contamination was found to extend into the underlying native soils that were present before the canal was first dredged. Sediment cores taken in the canal adjacent to the site found non-aqueous phase liquid (NAPL) throughout the soft sediments.

In September 2013, the USEPA issued their Record of Decision for the cleanup for the canal. The USEPA's decision stated, among other directives, that all the soft sediments adjacent to the project site had to be dredged to the top of the native sand. After the soft sediments are removed, the sand is to be covered with a 3.5-ft-thick cap that is intended to prevent remaining contaminants from entering the canal waters.³ In March 2014, the USEPA directed the principal responsible parties to start designing the canal remedial dredge program. Dredging activities in the reach of the canal adjacent to the President Street property are expected to begin in 2020.

President Carroll LLC and President Union LLC have retained Langan to provide waterfront engineering services related to the design of a bulkhead replacement at the President Street

³ <https://cumulis.epa.gov/supercpad/SiteProfiles/index.cfm?fuseaction=second.scs&id=0206222>

Properties Site. The new bulkhead has been designed to accommodate future dredging in the canal.

PREVIOUS WORK PERFORMED

The following summarizes work that has been completed for the design of a new bulkhead adjacent to the President Street site.

Subsurface Exploration Program

Three subsurface exploration programs relevant to the design of the bulkhead were completed at the site from 2015 to 2019 and are described below. Findings and recommendations are summarized in a 30 August 2019 Waterfront Geotechnical Engineering Study memorandum prepared by Langan.

2015 Geosyntec Exploration

Geosyntec Consultants conducted a subsurface exploration program in the Gowanus Canal in support of the dredge and cap design for the USEPA proposed remediation of the canal. The program consisted of 34 borings drilled by Cascade Drilling to depths of about 20 to 46 ft below mudline and lab testing of soil samples. Boring SED-MC1250-A was drilled in the canal adjacent to the President Street site to a depth of 28 ft below mudline (corresponding to el -37) using sonic drilling methods in accordance with ASTM D6914.

2017 Langan Exploration

Langan conducted a subsurface exploration program for the upland portion of the President Street Properties site. The program consisted of five borings (identified as SB-20, SB-25, SB-29, SB-30, and SB-31) drilled by AARCO Environmental Services, Inc. The borings were drilled to depths of about 75 ft below ground surface (corresponding to about el -63 to -70).

2019 Langan Exploration

Our 2019 subsurface exploration consisted of two borings in the Gowanus Canal (identified as LWB-1 and LWB-2) drilled by Warren George, Inc. Borings were drilled over-water from a barge in the Gowanus Canal to a depth of 74 ft below the mudline (corresponding to about el -80).

Bulkhead Design

Langan has designed an anchored sheet pile bulkhead with deadman system. The new bulkhead was designed to accommodate future dredging activity as proposed by USEPA to remediate contamination within the canal. The anchored sheet pile bulkhead design is shown on the 30 August 2019 Construction Drawings prepared by Langan.

PROPOSED IMPROVEMENTS

The proposed improvements within and immediately adjacent to the Gowanus Canal for the President Street Properties Site include:

- Construction of a new anchored steel sheet pile bulkhead; and
- Demolition and removal of portions of the concrete cap and crib wall to allow construction of wales, tie rods, and deadman system.

TECHNICAL APPROACH

The following paragraphs briefly describe our technical approach to the proposed work adjacent to and within the Gowanus Canal at the President Street Properties Site for the new anchored bulkhead.

General

- 1) All work will be completed in accordance with the following:
 - a) President Street Properties Bulkhead Replacement drawings, prepared by Langan, dated 30 August 2019 (12 sheets identified as MA-000 through MA-502), pending USEPA approval (referred to hereafter as Construction Drawings);
 - b) This Bulkhead Replacement Work Plan, pending USEPA approval; and
 - c) All applicable federal, state, and local regulations.
- 2) Construction may take place from the land or from barges moored in the Gowanus Canal adjacent to the site. If used, barges will be staged inside a turbidity curtain. Care will be taken to prevent material from falling into the canal.
- 3) The contractor will protect from damage all existing structures adjacent to the work, including but not limited to the following:
 - a) buildings on the President Street Properties Site;
 - b) buildings and pavements on the 450 Union Street property;
 - c) Carroll Street Bridge; and
 - d) structures and pavements on Carroll Street.

- 4) All work is subject to full-time engineering observation by a Langan representative, who will document the progress and quality of the work via photographs, sketches, construction logs, test reports, and daily site observation reports. Weekly progress reports will be submitted to USEPA as the work progresses.

Health and Safety Plan

- 1) Langan has prepared a site specific Health and Safety Plan (HASP) for the proposed construction at the site. The contractor must prepare and submit a HASP for their work that is at least as protective as Langan's HASP. Our HASP is provided under separate cover.
- 2) All work will be conducted in accordance with the contractor's approved HASP. The selected contractor shall provide a site safety officer to oversee and enforce the requirements of their HASP.
- 3) Personnel performing work on site in areas where disturbance of impacted soil or sediment is performed will have Occupational Safety and Health Administration (OSHA) 40-hour Hazardous Waste Operations and Emergency Response (HAZWOPER) training, as required by 29 CFR 1910.120. They must have current 8-hour HAZWOPER refresher course, annual medical physical, and respirator fit testing.
- 4) Air monitoring within the work zone and site boundary areas will be performed during activities that disturb soil or sediments. Air monitoring will be conducted as designated in the HASP to assess requirements for worker PPE requirements and protect adjoining property receptors.

Soil Erosion and Sediment Control Measures

- 1) Before starting any construction, the contractor shall install a turbidity curtain in the Gowanus Canal adjacent to the site. The contractor will maintain the turbidity curtain for the duration of the project.
- 2) Turbidity readings will be taken as described below:
 - a) Readings will be taken prior to the start of any work and prior to the removal of the turbidity curtain.
 - b) Turbidity readings will be taken with a portable turbidity meter meeting the requirements of USEPA 180.1 and the International Organization for Standardization (ISO) 7027. The meter will be capable of measuring turbidity in the range of 50 to

- 1,000 Nephelometric Turbidity Units (NTU). The unit will be calibrated in accordance with manufacturer's recommendations.
- c) Readings will be taken every 40 ft along the alignment of the turbidity curtain, both 2 ft inside and 5 ft outside the curtain. At each location, turbidity readings will be taken at depths of 6 and 18 inches below water.
 - d) The turbidity curtain will remain in place until turbidity measurements demonstrate that post-construction measurements meet one of the following criteria:
 - i. Measurements inside the curtain are less than the measurements obtained prior to the start of construction; or
 - ii. Measurements inside the curtain are no more than 10% above measurements outside the curtain.
 - e) The results of all turbidity readings will be recorded (by date, time and location) and included in the site observation reports.
 - f) Following bulkhead completion and removal of the turbidity curtain from the canal, a representative sample of the curtain material will be collected for analyses (listed below). The sample will be collected to determine required disposal procedure for the spent curtain. The analyses will be performed by a laboratory that is accredited by the New York State Department of Health Environmental Laboratory Approval Program.
 - i. Toxicity Characteristic Leaching Procedure Volatile Organic Compounds (VOCs), Semivolatile Organic Compounds (SVOCs), Pesticides, and Metals
 - ii. Target Compound List VOCs, Semivolatile Organic Compounds (SVOCs), Pesticides, Herbicides, Polychlorinated Biphenyls, and Target Analyte List Metals plus Cyanide
- 3) Prior to demolition or excavation on site, a silt fence will be installed around the outside of the limits of disturbance (areas of demolition and excavation). The silt fence placement may be modified throughout construction as needed to protect the areas being disturbed. The silt fence will be maintained for the duration of work and relocated as necessary to provide proper erosion protection and keep soils from migrating off site.
- 4) A stabilized construction pad will be installed and maintained by the Contractor, if needed, at the construction entrance to the site. A stabilized construction pad is not needed unless construction-related vehicular traffic is anticipated.

- 5) Prior to the start of construction, and for the duration of construction, oil adsorbent booms will be used along the limits of the work zone to contain releases during bulkhead construction work. The oil adsorbent boom must remain in place until construction in the canal is completed and oil sheens have been removed from the surface of the water.
- 6) Soil erosion and sediment control measures will be inspected weekly and after major storm events by a qualified State Pollutant Discharge Elimination System (SPDES) inspector. The contractor shall immediately correct any deficiencies noted by the inspector.

Spill/Release Contingency Procedures

- 1) The Contractor will be informed prior to start of construction that they will be working in and around contaminated sediment. They will acknowledge their understanding and acceptance of responsibility for preventing spills and conducting contingency procedures in the event of spills or releases during construction. If a spill or release is observed during the course of work the following will immediately occur:
 - a) The contractor will notify the Project Manager immediately via cell phone. The Project Manager will notify the National Response Center at 1-800-424-8802 if a reportable quantity of a hazardous substance or oil is released to the environment.
 - b) Once the safety of personnel is ensured, the contractor will then estimate to the best of their ability the approximate quantity of material released and/or size of the spill.
 - c) Containment will be performed to the extent practicable and as soon as possible within the turbidity curtain (primary boom) or using secondary oil absorbent booms and/or absorbent pads where needed, and will take precedence over normal site-related activities. Entry to the release area will be limited to personnel with proper training, PPE, and equipment necessary to perform the work. An emergency response contractor may be used depending on the size and extent of the release or spill.
 - d) The Project Manager will complete an Incident Report and notify USEPA personnel for a site meeting and determination of further actions. In consultation with the agencies, further actions may include testing in the spill area to determine the extent of the spill; mechanical removal methods such as skimming, separating and vacuuming; chemical dispersion; and removing all affected material. Depending on the quantity, these actions may not be necessary.
 - e) All affected material will be properly containerized and disposed of in accordance with applicable regulations.

Archeological Field Documentation

- 1) Archeological field documentation of the existing bulkhead shall be completed after soil erosion and sediment control measures and the steel sheet pile bulkhead have been installed, and before demolition of the gravity wall and installation of the tie rods.
- 2) Excavation will be scheduled during the excavation work required for construction and will begin 3 to 4 hours before low tide to allow for documentation efforts. Field documentation work will be done under the full-time observation of an archeologist.
- 3) Excavation will be conducted using a small backhoe or by hand behind the gravity wall at the back and inside of the timber cribs. Test pits will be excavated to a depth of about 7 to 10 ft below the ground surface, or to the top of the timber crib structure. Wood cribbing may be rinsed off with hand sprayers to better determine cribbing construction and improve documentation.
- 4) The excavations will be recorded on sketches. All excavations, bulkhead walls and cribbing will be photographed using a digital camera. Close-ups of construction details, if found, will be included in the photo documentation.
- 5) The archeologist conducting the field documentation will determine the type of bulkhead construction observed, based on the bulkhead types identified in the 2010 *Gowanus Canal Preliminary Bulkhead Study* by McVarish (McVarish 2010).⁴
- 6) The excavation will be turned over to the construction contractor upon completion of the field documentation work.

Bulkhead Replacement

- 1) Control, working and monitoring points will be established by a Professional Land Surveyor licensed in the State of New York. The control points will be used to layout the remainder of the work.
- 2) A temporary template may be installed along the proposed bulkhead and deadman alignments to ensure proper layout of the sheet piles during installation. The template may consist of a steel beam supported on steel H-Piles. After the sheet piles have been installed, the template (if used) will be removed, decontaminated, and disposed in accordance with all appropriate regulations. Other methods of controlling alignment (e.g., using the face of the

⁴ Douglas C. McVarish, *Gowanus Canal Preliminary Bulkhead Study, Brooklyn, Kings County, New York*, by John Milner Associates, prepared for HDR, Inc. and the United States Environmental Protection Agency, dated 2010

existing bulkhead wall to align the new bulkhead sheet piles), may be used, at the discretion of the Contractor. Contractor shall submit a statement to the Owner's Engineer documenting their proposed means and methods of ensuring proper alignment.

- 3) Construction materials may be delivered by truck or barge and may be stockpiled on-site or on a barge moored adjacent to the site in the Gowanus Canal.
- 4) Sheet piles will be installed using a crane or excavator either from land or from a barge in the canal. Sheet piles may be installed individually or in pairs.
 - a) A vibratory or impact hammer will be used to drive the sheet piles into the ground along the proposed alignment to the specified minimum tip elevation, as shown on the Construction Drawings.
 - b) Sheet piles within 75 feet of the Carrol Street Bridge will be installed using the press-in method. Use of vibratory hammers is not permitted within 75 feet of the Carrol Street Bridge.
- 5) If obstructions are encountered below the surface during installation of sheet piling, the contractor may attempt to drive through the obstruction by spudding, remove the obstruction by excavation, or pre-drill through the obstruction.
 - a. Spudding involves driving a heavy H-pile or pipe pile in the location of an obstruction to push the obstruction out of the way, or break through the obstruction. The spud pile would be driven using an impact or vibratory hammer. If spudding is unsuccessful, the obstruction may be removed by excavation or pre-drilling. Spudding is not allowed within 75 ft of Carroll Street Bridge.
 - b. The contractor may remove an obstruction by excavation from the surface. Excavation may be done using an excavator or clam shell from land or from a barge moored in the canal adjacent to the site. Any such excavation will take place inside the turbidity curtain. The purpose of the excavation is to remove the obstruction, not remove sediments from the canal. Any obstructions unearthed by excavation will be removed and disposed off-site as described below.
 - c. Alternatively, the contractor may elect to pre-drill sheet pile locations to penetrate obstructions. Pre-drilling may be accomplished via continuous flight auger, mud-rotary drilling, or down-the-hole-hammer. Spoils from drilling will be contained within the turbidity curtain.
- 6) The sheet pile on the north end of the site will tie into the sheet piles at 450 Union Street.

- 7) Return-wall sheet piles will be installed at the north end of the bulkhead using the same methods as bulkhead sheet pile installation.
- 8) A concrete plug will be placed between the bulkhead sheet pile and the existing abutment at the south end of the bulkhead.
- 9) Trenches may be excavated to allow for installation of the steel wales and toe rods that will be installed behind the bulkhead as shown on the Construction Drawings. Alternatively, mass excavation may be performed to allow for wale and tie rod installation. Excavated soils will be stockpiled as described in the Excavations and Temporary Support section below.
- 10) The space between the existing bulkhead and the back of the installed sheet piling will be backfilled with AASHTO #57 crushed stone up to the elevation shown on the Construction Drawings. A cast-in-place concrete plug will be used in place of crushed stone at the southern end of the bulkhead. The material may be delivered by truck, or by barge. The crushed stone will be placed using an excavator, after the bulkhead sheet piles have been installed. Care will be taken to prevent spillage of the crushed stone into the canal; all backfill and concrete will be kept behind the new sheet piles.
- 11) Backfill above el 3 will be well-graded clean granular fill in accordance with the Construction Drawings. Excavated soils may be reused as backfill provided that the soil is not grossly impacted.
- 12) Upon completion of bulkhead construction, any equipment and materials that have come in contact with the sediments in the canal shall be decontaminated as described below.

Excavation and Temporary Support

- 1) All excavation work shall be performed in accordance with OSHA requirements.
- 2) All excavation shall be conducted in full consideration of the condition of existing structures and shall be completed in such a way to protect existing structures from damage. Hand excavation shall be used within 3 ft of existing buildings, bridges, bulkheads, retaining walls, utility lines, catch basins, manholes, and other structures to remain.
- 3) Temporary excavation side slopes shall be no steeper than 1 vertical to 1 horizontal, or as required by soil conditions as determined by a competent person on site. Where sloping an excavation would undermine or damage an existing structure, contractor shall use a trench box, or sheeting and shoring to maintain the sidewalls of the excavation and protect adjacent structures.

- a. If a trench box is used, contractor shall submit manufacturer's documentation that the trench box has been designed for the appropriate depth of excavation and construction surcharge loads.
 - b. If sheeting and shoring are used, the contractor shall submit design calculations and drawings, signed and sealed by the contractor's Professional Engineer registered in the State of New York.
- 4) Excavated soils may be stockpiled on-site for reuse as backfill, or disposed off-site in accordance with applicable regulations. Stockpiled soils shall be placed on top of and covered with plastic sheets.

Demolition and Removals

- 1) Prior to demolition work the contractor will submit a disposal plan meeting the requirements of the Construction Drawings. Proposed facilities for disposal of waste must be reviewed by the USEPA, Owner and Langan prior to disposal.
- 2) Portions of the existing crib wall will be demolished to allow for installation of the new sheet pile bulkhead. Demolition will be limited to what is necessary for construction.
- 3) Demolition work shall start after the bulkhead sheet piles have been installed to minimize the risk of demolition debris falling into the canal, unless installation of the sheet piles is obstructed. If obstructions are encountered during installation, limited demolition may be required to allow installation to continue.
- 4) Obstructions (e.g., riprap, timbers, metal, concrete) unearthed during sheet pile installation and any debris (e.g., demolished concrete, cribbing, pieces of steel) that falls into the canal during construction will be handled and disposed off-site in the following manner.
 - a. Each piece of debris will be lifted out of the canal, held over the surface of the water within the limits of the turbidity curtain, and cleaned of sediment with a high pressure water spray. All runoff and wash water will be retained within the turbidity curtain.
 - b. Debris will be stockpiled on-site. Staging areas will be designated for each type of waste material generated during construction. Debris cleaned of sediment will be placed in its designated waste staging area.
 - c. Stockpiles of debris within the staging areas will be covered until the material is disposed.

- d. We anticipate that all debris will be disposed as C & D solid waste at a NYSDEC registered facility, in accordance with applicable regulations.
 - e. All material removed from the canal shall be sent to an approved facility in accordance with applicable regulations. Manifests or Bills of Lading for each shipment of debris and Certificates of Recycling for each metal and concrete component are required.
 - f. Upon completion of waste removal and disposal activities, a Final Report will be provided to the USEPA including the following: waste management documentation, Certificates of Recycling, data validation report, turbidity testing results, and photographic documentation.
- 5) Upon completion of the demolition and removals, all equipment will be decontaminated as described below.

Decontamination

- 1) Recoverable equipment and materials that have been in contact with the sediment within the Gowanus Canal will be decontaminated prior to removal from the site. As used herein "recoverable" means all items which are non-absorptive in nature and which can be successfully decontaminated.
- 2) Each piece of equipment will be cleaned of sediment with a high pressure water spray. All runoff and wash water will be retained within the turbidity curtain.
- 3) If necessary, biodegradable cleaning solution will be used to clean the interior and exterior surfaces of the equipment after residual sediment has been removed. (Solutions containing chlorinated solvents or volatile organic compounds will not be accepted).
- 4) Decontamination procedures for equipment and materials shall conform to the requirements of applicable USEPA and NYSDEC regulations.

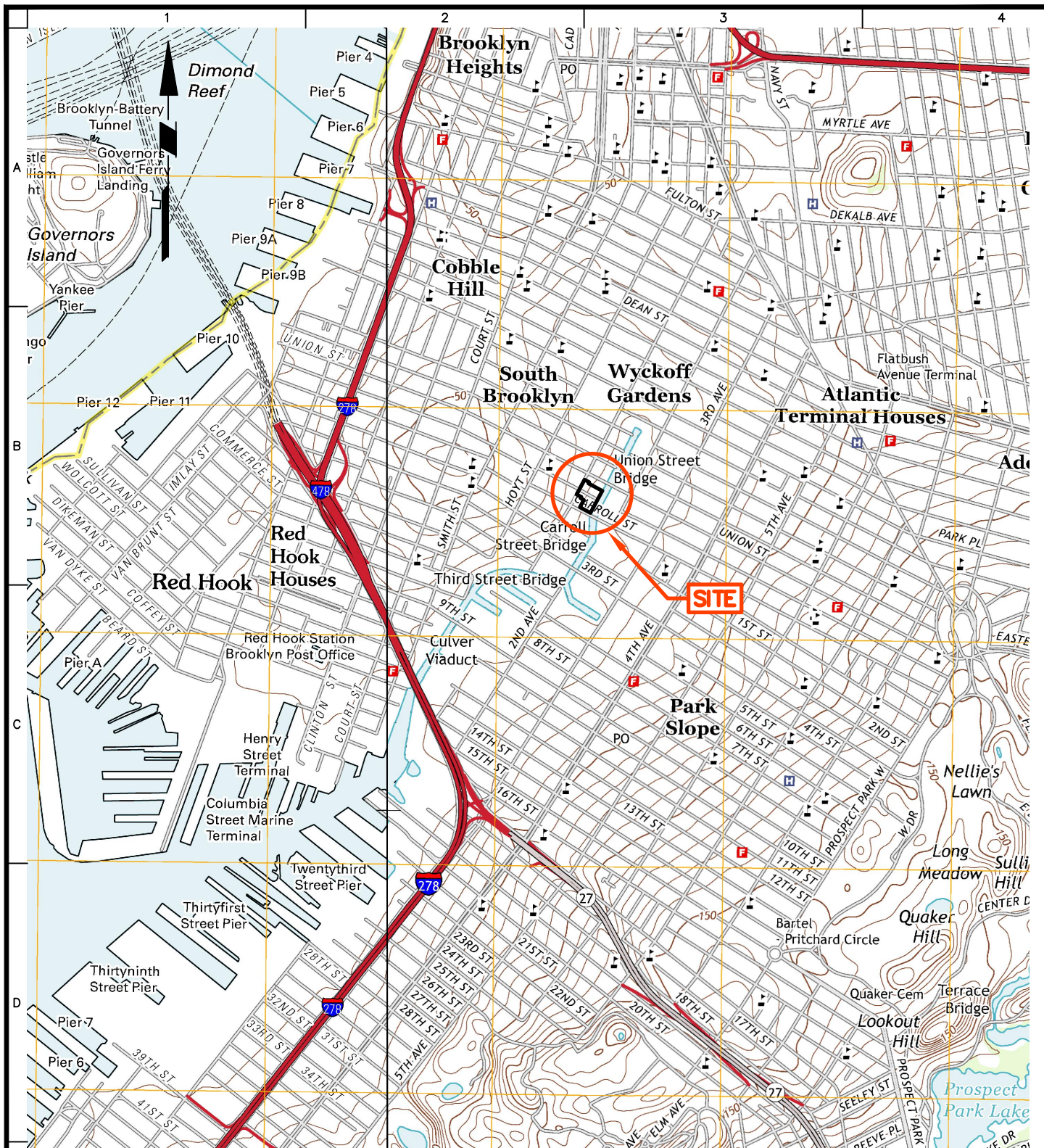
REPORTING

The following reports will be prepared and submitted to the USEPA, in accordance with the requirements of the Consent Order between Gemini Arts Initiative, Inc. and USEPA:

- 1) Weekly Progress Reports – Weekly progress reports will be prepared summarizing the work performed, any deficiencies observed, and corrective actions taken. Representative photographs and sketches will be included in the reports. Progress reports will be submitted weekly to the USEPA Project Coordinator.

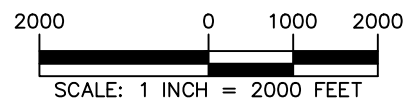
- 2) Archaeological Field Investigation Report – Upon completion of the field documentation, an Archaeological Field Investigation report will be prepared to summarize the field work and present findings. The report will contain photographs, scaled sketches, and comparative drawings or photographs from other sources to better illustrate the existing bulkhead wall and cribbing construction.
- 3) Final Report – A final report will be prepared and submitted to USEPA within 30 days of completion of the work described herein. The final report will include the following:
 - a. A synopsis of all work performed;
 - b. A detailed description of all USEPA-approved modifications to the work plan or drawings that occurred during performance of the work;
 - c. A listing of materials removed from or handled on the property, including quantities and type of material, removal and disposal options considered, and the ultimate destination of those materials;
 - d. Analytical results of all sampling and analysis performed, including data, chain of custody records, and validation reports;
 - e. Accompanying appendices containing relevant documentation generated during the removal and disposal work (e.g., manifests, bills of lading, invoices, bills, contracts, certificates of destruction/recycling, and permits);
 - f. Accompanying appendices containing relevant documentation of the construction (e.g., engineer's records of construction, construction logs, engineering test reports, and as-built drawings);
 - g. An accounting of expenses incurred by the Owner in performing this work; and
 - h. A signed statement of certification, in the format required by the Consent Order.

FIGURES



NOTE: ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

SOURCE: "JERSEY CITY AND BROOKLYN QUADRANGLE MAP, NEW JERSEY – NEW YORK 7.5-MINUTE SERIES", U.S. GEOLOGICAL SURVEY, 2011



LANGAN
 Langan Engineering, Environmental, Surveying,
 Landscape Architecture and Geology, D.P.C.
 21 Penn Plaza, 360 West 31st Street, 8th Floor
 New York, NY 10001

T: 212.479.5400 F: 212.479.5444 www.langan.com

Project
**PRESIDENT STREET
 PROPERTIES**
 BLOCK No. 438; 445, LOT No.1,
 2, & 3; 8, 11, 20, & 50

KINGS BROOKLYN NEW YORK

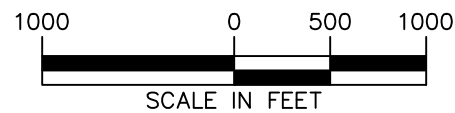
Drawing Title
**SITE LOCATION
 MAP**

Project No.
 170364001
 Date
 08-16-2019
 Drawn By
 JLY
 Checked By
 SJO

Drawing No.
1
 Sheet 1 of 2



REFERENCE: J.H. COLTON 1849 MAP OF THE CITY OF BROOKLYN.



LANGAN Langan Engineering, Environmental, Surveying, Landscape Architecture and Geology, D.P.C. 21 Penn Plaza, 360 West 31st Street, 8th Floor New York, NY 10001 T: 212.479.5400 F: 212.479.5444 www.langan.com	Project	Drawing Title	Project No.	Drawing No.
	PRESIDENT STREET PROPERTIES	COLTON MAP (1849)	170364001	2
	BLOCK No. 438; 445, LOT No.1, 2, & 3; 8, 11, 20, & 50		Date 08-16-2019	
	KINGS BROOKLYN NEW YORK		Drawn By JLY	
			Checked By JM	Sheet 2 of 2