BATTERY PARK CITY AUTHORITY

REQUEST FOR PROPOSALS

FOR

Phase 5 Pile Remediation & Cellular Sheet Pile Encasement Construction Management & Diving Inspection Services

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I. SUMMARY

Battery Park City Authority d/b/a Hugh L. Carey Battery Park City Authority ("BPCA") requests proposals (each individually, a "Proposal" or collectively, the "Proposals") from construction management firms (each individually, a "Proposer" or collectively, the "Proposers") to provide BPCA with construction management and diving inspection services for the Phase 5 Pile Remediation & Cellular Sheet Pile Encasement – Construction Management & Diving Inspection Services Project (the "Work" or "Project"). The Project is a component of a multi-year BPCA repair and remediation project for the piles supporting the Battery Park City platform structure, along with an encasement of cellular sheet piles located beneath the southern perimeter of the North Cove Marina, as more fully described in the Scope of Work attached hereto as <u>Exhibit A.</u>

Created in 1968, BPCA is a New York State public benefit corporation responsible for financing, developing, constructing, maintaining, and operating Battery Park City as a richly diversified mixed use community providing residential and commercial space, with related amenities such as parks, plazas, recreational areas, and a waterfront esplanade. A summary of BPCA's structure, mission, and history, as well as the Battery Park City project area, may be viewed at: <u>http://bpca.ny.gov/</u>. Public information regarding BPCA's finances, budget, internal controls, guidelines, and policies may be viewed at: <u>http://bpca.ny.gov/public-information/</u>. Information relating to the Battery Park City Parks Conservancy Corporation ("BPCPC"), BPCA's affiliate, may be viewed at: <u>http://bpcarks.org/</u>.

Minority-Owned Business Enterprises ("MBE"), Women-Owned Business Enterprises ("WBE") and Service-Disabled Veteran-Owned Business Enterprises ("SDVOB") are encouraged to submit Proposals.

II. GENERAL PROVISIONS

This request for proposals, including attachments, exhibits, and any amendments or addenda (collectively, the "RFP") is subject to the rights reserved by BPCA, including, but not limited to BPCA's right to:

- withdraw and/or cancel this RFP at any time before final award of the contract;
- request clarification and/or additional information from any or all Proposers;
- amend any term or requirement of this RFP at any time before award of a contract (Proposers may amend their Proposals, as directed by BPCA, if BPCA materially alters or amends the RFP after submission of Proposals);
- alter any key dates or deadlines related to this RFP;
- award the Work, in whole or in part, to one or more Proposers;
- reject any Proposal that does not strictly conform to the requirements of this RFP;
- conduct an interview with any or all of the Proposers to aid the evaluation process;
- negotiate potential contract terms with any Proposer;

BPCA is not liable or responsible in any way for any expenses incurred in the preparation of a Proposal in response to this RFP. All information submitted in response to this RFP is subject to the Freedom of Information Law, Article 6 of the New York State Public Officers Law ("FOIL"), which requires public access to certain documents possessed by BPCA, unless a specific exemption applies. Proposers are responsible for identifying any information in their respective Proposals considered to be confidential and exempt from FOIL.

III. TIMETABLE & DESIGNATED CONTACT

A. Key Dates

The following is a list of key dates, up to and including the date Proposals are due to be submitted, which is subject to change at BPCA's discretion:

- Request for Proposals issued: September 28, 2016
- Pre-proposal meeting: October 6, 2016 at 9:30 a.m. Meeting Location: BPCA Offices, 200 Liberty Street, 24th Floor, New York, NY 10281 (attendance is highly recommended).
- If desired, and upon coordinating approval, permissible time-frames, and mandatory waivers, as <u>Exhibit G</u>, with Michael Lamancusa, Proposers may perform an underwater inspection of the Project area on one of the following dates: October 7, 8, 11, 2016.
- Deadline to submit questions to BPCA October 12, 2016 by 5:00 p.m. (by email only).

All questions regarding this RFP should be submitted in writing via email to the "<u>Designated Contact</u>": Michael LaMancusa, Battery Park City Authority, at <u>michael.lamancusa@bpca.ny.gov</u>.

- BPCA's response to substantive questions: October 24, 2016. (by BPCA website)
- DUE DATE FOR RESPONSES TO RFP: November 2, 2016 by 5:00 p.m. (the "Due Date").
- Selection and notification of successful Proposer: To be determined.
- Contract start date: January 2017.

B. Anticipated Contract Term

The anticipated term of the contract awarded pursuant to this RFP (the "Contract") is eighteen (18) months (the "Term"), although it is anticipated that the construction duration required to complete the Work will be no more than ten (10) months. BPCA reserves the right to terminate the Contract at any time, with or without cause, in accordance with the terms of the Contract. BPCA's sample form of Contract is attached as <u>Exhibit C</u>.

IV. GENERAL REQUIREMENTS

A. Minimum Qualification Requirements

The following are the minimum qualification requirements for this RFP. Proposals that fail to comply with these requirements will be rejected.

- 1) The Proposer must be certified to practice engineering by the State of New York,
- 2) The Proposer must have at least five (5) years of experience in providing construction management services for urban marine/waterfront projects.
- 3) The Proposer must use a diver who is a certified professional engineer to perform underwater inspections.

B. MBE/WBE/SDVOB Participation, Joint Ventures and Sub-contracting Goals

Contractor requirements and procedures for business participation opportunities for New York State certified MBEs/WBEs/SDVOBs and equal employment opportunities for minority group members and women are attached as <u>Exhibit B</u>. For questions relating to MBE/WBE/SDVOB participation, joint ventures and sub-contracting goals <u>ONLY</u>, please contact "<u>MBE/WBE/SDVOB Designated Contact</u>" Mr. Anthony Peterson at anthony.peterson@bpca.ny.gov or 212.417.2337.

C. <u>Restricted Period</u>

State Finance Law sections 139-J and 139-K apply to this RFP, restricting Proposers' contacts with BPCA. Proposers are restricted from making any contact relating to this RFP with anyone other than the Designated Contact, as specified in Section III.A., or MBE/WBE/SDVOB Designated Contact, as specified in Section IV.B., from Proposer's receipt of notice of this RFP through approval of the Contract by BPCA (the "Restricted Period"). BPCA employees must record certain contacts during the Restricted Period, including, but not limited to, any oral or written communications that could reasonably be seen as intended to influence BPCA's conduct or award of this RFP. Upon notice of an improper contact, BPCA must make a determination regarding the Proposer's responsibility.

D. <u>Submission of Proposals</u>

Proposals are due no later than 5:00 p.m. on November 2, 2016.

Each Proposer must submit six (6) paper copies of its Proposal and a PDF version (via CD-ROM or flash drive) in a sealed package clearly marked "**Proposal Enclosed- Phase 5 Pile Remediation & Cellular Sheet Pile Encasement– Construction Management & Diving Inspection Services**" to the Designated Contact by messenger, overnight courier or certified mail to the following address:

Michael LaMancusa Battery Park City Authority 200 Liberty Street, 24th Floor New York, NY 10281

BPCA is not responsible for late Proposals, no matter the cause. Proposals <u>must</u> arrive at the time and place specified herein and be time stamped by BPCA by the Due Date. Please leave ample time for building security. Late Proposals will not be accepted. Proposals submitted by fax or electronic transmission will NOT be accepted. A Proposer may, after submitting a Proposal, amend its Proposal by submitting an amended Proposal, clearly labeled "Amended Proposal Enclosed – Phase 5 Pile Remediation & Cellular Sheet Pile Encasement–Construction Management & Diving Inspection Services" as long as the amended Proposal is submitted by the Due Date.

E. Mandatory Forms

Each Proposal must include a completed copy of all "Mandatory Forms" found at: http://bpca.ny.gov/wp-content/uploads/2015/03/Vendor-ResponsibilityQuestionnaire.pdf. The Mandatory Forms include the following:

- A) NYS Standard Vendor Responsibility Questionnaire, notarized and signed by the individual(s) authorized to contractually bind the Proposer, indicating the signer's title/position within the firm.*
- B) State Finance Law ("SFL") § 139 Form 1, signed by the individual(s) authorized to contractually bind the Proposer.*
- C) W-9 form.
- D) Statement of Non-Collusion.
- E) Diversity Forms.

*In addition to the copy that must be included in each bound Proposal, attach to the Proposal one (1) unbound, completed original, with ink signatures, of the NYS Standard Vendor Responsibility Questionnaire and SFL 139 Form 1.

V. PROPOSAL FORMAT AND CONTENTS

A. Proposal Format

The Proposal must be printed on either $8\frac{1}{2}$ " x 11" or $8\frac{1}{2}$ " x 14" paper, with sequentially numbered pages. The Proposal will be evaluated on the basis of its content, not length. BPCA reserves the right to disqualify Proposals that fail to comply with any of these instructions.

B. Proposal Content

A Proposal in response to this RFP must include the following sections in the order listed:

1) Cover Letter, as follows:

The Proposal must include a signed Cover Letter from a person who is authorized to bind the Proposer. Cover Letters must be signed. Proposals with unsigned Cover Letters will be rejected.

The Cover Letter must include a representation by the Proposer that, except as disclosed in the Proposal, no officer or employee of the Proposer is directly or indirectly a party to or in any other manner interested financially or otherwise in this RFP.

- 2) Executive Summary.
- 3) Proposer's Responses to the RFP Questions/Information Requested and RFP Additional Information Request, set forth below.
- 4) Proposer's Cost Proposal, including the Form of Technical Salaries, as described below.

C. <u>RFP Questions / Information Requested</u>

- 1. Describe your firm's background, services, size and history, as they may be relevant to the Work, with an emphasis on construction management and diving inspection services for marine pile repair and remediation projects in New York City.
- 2. Describe your firm's methodology for construction management services for marine pile repair and remediation projects, including but not limited to pre-construction coordination and oversight, schedule management, administrative management, project coordination, project reporting, quality control, regulatory compliance and safety oversight.
- 3. Describe your firm's methodology for diving inspection services for marine pile repair and remediation projects.
- 4. Within the past three years, have there been any significant developments in your firm, such as changes in ownership or restructuring? Do you anticipate any significant changes in the near future? If so, please describe.
- 5. Has your firm filed for bankruptcy or reorganization or had bankruptcy proceedings initiated against it within the last 5 years? If so, please describe the relevant facts.
- 6. Has your firm or have any of the firm's partners/employees been disciplined or censured by any regulatory body within the last 5 years? If so, please describe the relevant facts.

- 7. Within the last five years, has your firm, or a partner or employee in your firm, been involved in litigation or other legal proceedings relating to the provision of professional services? If so, please provide an explanation and the current status or disposition of the matter.
- 8. Are there any potential conflict of interest issues posed by your firm's performance of the Work on behalf of BPCA?
- 9. Are any of your employees or principals former employees of BPCA? If so, please list their names, current titles and dates of employment with BPCA.
- 10. List any professional or personal relationships your firm's employees may have with BPCA's Board and/or employees of BPCA. A current list of BPCA Board members and employees is attached to this RFP as <u>Exhibit H</u>.
- 11. Identify the person who will be the lead project manager (the "Lead PM") and primary contact in providing services to BPCA, and identify any other persons who will be listed as a "key person" in any contract with BPCA.
- 12. Describe your proposed team's experience (including both direct contract work and work performed under subcontracts) with similar work for other public entities, with an emphasis on New York State and City public entities. Include contract dates, the nature of the work performed, the contracting agency, the contract number (if known) and the supervisor for each.
- 13. Submit a discussion of your approach to the Work, which shall address your proposed procedures and plan for staffing, performance, sequencing and completion of the Work.
- 14. Itemize the portion of the Work you intend to perform with your firm's resources and/or workforce and the portion of the Work for which you propose to utilize sub-consultants.
- 15. Provide a list of all proposed sub-consultants for the completion of the Work and describe the services to be performed by each sub consultant.
- 16. Describe your firm's "backup plan" in the event that the Lead PM, or one or more of the key persons, assigned to the Work leaves your firm.
- 17. Identify any and all exceptions taken to BPCA's standard form of Contract attached hereto as <u>Exhibit C</u>, detailing the reasons for such exceptions. No exceptions to the Contract will be considered by BPCA after submission of the Proposals. BPCA maintains the right to reject Proposals based on non-conformance with the standard form of Contract.
- 18. In the past five years, have any clients terminated their working relationship with your firm? If so, please provide a brief statement of the reasons. Provide each such client's name, a contact person, address and telephone number.
- 19. Please provide any additional information which would distinguish your firm from other firms, and which you believe may be relevant to this RFP and your capability to perform the Work.

D. <u>RFP Additional Information Request</u>

1) Insurance:

A. <u>General Requirements</u>

The total cost of the required insurance listed in paragraphs B) and C) below, must be incorporated into the Cost Proposal. The additional insured protection afforded BPCA, BPCPC, and the State of New York must be on a primary and non-contributory basis. All policies must include a waiver of subrogation in favor of BPCA, BPCPC, and the State of New York, and no policies may contain any limitations / exclusions for New York Labor Law claims.

All of the carriers that provide the below required insurance must provide direct written notice of cancellation or non-renewal to BPCA, BPCPC, and the State of New York at least 30 days before such cancellation or non-renewal is effective, except for cancellations due to non-payment of premium, in which case 10 days written notice is acceptable.

B. Insurance Requirements for the Selected Proposer

The selected Proposer will be required to obtain and provide proof of the types and amounts of insurance listed below: (i) as a condition precedent to the award of the contract for the Project; and (ii) continuing throughout the entire Term. The insurance policies listed below must also conform to the applicable terms of the Contract, as shown in BPCA's sample form of Contract attached as <u>Exhibit C</u>.

- **Commercial General Liability Insurance**, written on ISO Form CG 00 01 or its equivalent and with no modification to the contractual liability coverage provided therein, shall be provided on an occurrence basis and limits shall not be less than:
 - \$1,000,000 per occurrence
 - \$2,000,000 general aggregate which must apply on a per location / per project basis
 - \$2,000,000 products / completed operations aggregate

BPCA, BPCPC, and the State of New York must be protected as additional insureds on ISO Form CG 2010 (11/85) or its equivalent on policies held by the selected Proposer and any of its subcontractors. Should the Proposer's work include construction activities of any kind then the Proposer must maintain Products / Completed Operations coverage for no less than three years after the construction work is completed, and continue to include Additional Insured protection for BPCA, BPCPC & The State of New York for the prescribed timeframe. When providing evidence of insurance the Proposer must include a completed Acord 855 NY form.

- Automobile Liability Insurance with a combined single limit of not less than \$1,000,000. Coverage must apply to the selected Proposer's owned, hired, and non-owned vehicles and protect BPCA, BPCPC, and the State of New York as additional insured.
- Workers' Compensation, Employer's Liability, and Disability Benefits shall not be less than statutory limits, and must include United States Longshore and Harbor Workers Act coverage.

- Umbrella Liability Insurance at a limit not less than \$5,000,000 per occurrence and in the aggregate. BPCA, BPCPC, and the State of New York must be protected as additional insureds on policies held by the selected Proposer and any of its subcontractors.
- **Professional Liability ("Errors & Omissions") Insurance** must be maintained at a limit of not less than \$5,000,000 each claim.

If the Construction Manager chooses to utilize a watercraft for the underwater inspection, then the below insurance is required.

- **Comprehensive Marine Liability Insurance** must be maintained at a limit of not less than \$1,000,000 per occurrence and include the following coverage:
 - Protection and Indemnity
 - General Liability
 - Pollution Liability

BPCA, BPCPC, and the State of New York must be protected as additional insureds on policies held by the selected Proposer and any of its subcontractors.

C. Insurance Requirements for all Subcontractors

Any subcontractor(s) utilized by the selected Proposer will be required to obtain the types and amounts of insurance listed below: (i) as a condition of commencing any Work; and (ii) continuing throughout the duration of the subcontractor's Work. The insurance policies listed below must also conform to the applicable terms of the Contract, as shown in BPCA's sample form of contract attached as <u>Exhibit C</u>.:

- **Commercial General Liability Insurance**, written on ISO Form CG 00 01 or its equivalent and with no modification to the contractual liability coverage provided therein, shall be provided on an occurrence basis and limits shall not be less than:
 - \$1,000,000 per occurrence
 - \$2,000,000 general aggregate which must apply on a per location / per project basis
 - \$2,000,000 products/completed operations aggregate

BPCA, BPCPC, and the State of New York must be protected as additional insureds on ISO Form CG 2010 (11/85) or its equivalent on policies held by all subcontractors. Should the subcontractor's work include construction activities of any kind then the subcontractor must maintain Products / Completed Operations coverage for no less than three years after the construction work is completed and continue to include Additional Insured protection for BPCA, BPCPC & The State of New York for the prescribed timeframe. When providing evidence of insurance the subcontractor must include a completed Acord 855 NY form.

- Automobile Liability Insurance with a combined single limit of not less than \$1,000,000. Coverage must apply to the subcontractor's owned, hired, and non-owned vehicles and protect BPCA, BPCPC, and the State of New York as additional insured.
- Workers' Compensation, Employer's Liability, and Disability Benefits shall not be less than statutory limits, including United States Longshore and Harbor Workers Act coverage as applicable to the operations of the subcontractor.

• Subcontractors will also be required to obtain all other insurances listed in Section (B) unless otherwise approved in writing by BPCA prior to commencement of any Subcontractor's work.

2) <u>References</u>:

Please provide at least three (3) governmental client references for whom your firm has performed similar work to that requested in this RFP. For each client, please provide the name, address and telephone number for the client's project manager.

3) Appendices:

- a. Include resumes for all key management personnel listed in your Proposal, including the staff that your firm is proposing to assign to this Project.
- b. Provide a copy of each addenda submitted by BPCA with regard to this Proposal (if applicable) and a signed acknowledgment of receipt of each addenda.

4) Financial Statements:

Provide a copy of your firm's most recent Audited Financial Statements (within the last year).

5) Sample Documents:

Provide a sample copy of a (i) weekly tracking report, (ii) weekly construction progress report, (iii) daily construction progress log, (iv) daily project management report and (v) monthly executive summary report.

E. Cost Proposal

The Cost Proposal must state a not-to-exceed amount for the completion of the Work, with an itemized Schedule of Values for all services contemplated to be provided. To submit a complete Cost Proposal, Proposer must complete each of the following:

- 1) Cost Proposal in the form attached hereto as Exhibit D ("Form of Cost Proposal"), and
- 2) Technical Salaries in the form attached hereto as Exhibit E ("Form of Technical Salaries").

The Cost Proposal, regardless of whether it is bound, must be submitted in its own separate sealed envelope within the sealed package containing all other Proposal documents. For the avoidance of doubt, the Cost Proposal must be submitted separately and unbound from the remainder of the Proposal documents.

VI. THE EVALUATION PROCESS

A. Objectives

The primary objective of the evaluation process is to select a firm that:

- Demonstrates a thorough understanding of the scope of the Work and the specific responsibilities it entails;
- Possesses adequate resources to handle assigned responsibilities and to handle unforeseen circumstances that may arise;
- Assigns highly skilled, experienced, diligent, responsible and professional personnel to perform the Work;
- Maintains high ethical standards and has an unblemished reputation; and

• Has no conflict of interest between its representation of BPCA and that of other clients.

The selection process will begin with the review and evaluation of each of the written Proposals. The purpose of this evaluation process is twofold: (1) to examine the responses for compliance with this RFP and (2) to identify the complying firms that have the highest probability of satisfactorily performing the Work. The evaluation process will be conducted in a comprehensive and impartial manner by a committee of BPCA's employees selected by BPCA (the "Committee"). **The Committee will evaluate the Proposals based upon the criteria for selection set forth below.**

BPCA reserves the right to reject and return unopened to the Proposer any Proposal received after the Due Date. All timely submitted Proposals will be reviewed to determine if they contain all required submittals specified herein. Incomplete Proposals may be rejected.

B. Interviews

BPCA reserves the right to determine whether interviews will be necessary for any or all of the Proposers. The purpose of the interview is to further document a Proposer's ability to perform the Work, and to impart to the Committee an understanding of how specific services will be furnished. The proposed Lead PM, as well all other key personnel proposed to provide the services must be present and participate in the interview. Each Proposer will be evaluated on the basis of its Proposal, whether the interview substantiates the characteristics and attributes claimed by the Proposer in its written response to this RFP, and any other information requested by the Committee prior to the interview.

C. Evaluation Criteria for Selection

Selection will be based upon the following criteria:

٠	Experience managing similar large scale marine construction and repair work	35%
	for waterfront facilities	
٠	Experience and expertise in diving inspection services for marine construction	20%
	and repair projects	
٠	Proposed staffing, approach to work and resources	25%
٠	Diversity Practices Questionnaire	10%
٠	Proposed M/WBE utilization plan and/or firm's M/WBE status	8%
٠	Proposed SDVOB utilization plan and/or firm's SDVOB status	2%

D. Basis for Contract Award

The Contract will be awarded to the highest rated Proposer whose Proposal is determined to be responsive and in the best interest of BPCA, subject to a determination that the Cost Proposal is fair, reasonable, and provides the best value to BPCA given the requirements of the Project.

VII. NON-COLLUSION

By submitting a Proposal, each Proposer warrants and represents that any ensuing Contract has not been solicited or secured directly or indirectly in a manner contrary to the laws of the State of New York, and that said laws have not been violated and shall not be violated as they relate to the procurement or the performance of the Contract by any conduct, including the paying or giving of any fee, commission, compensation, gift, or gratuity or consideration of any kind, directly or indirectly, to any member of the board of directors, employee, officer or official of BPCA.

VIII. <u>IRAN DIVESTMENT ACT</u>

By submitting a Proposal or by assuming the responsibility of any Contract awarded hereunder, Proposers hereby certify that they are not on the "Entities Determined To Be Non-Responsive Bidders/Offerers Pursuant to The New York State Iran Divestment Act of 2012" list ("Prohibited Entities List") posted on the New York State Office of General Services website at: http://www.ogs.ny.gov/about/regs/docs/ListofEntities.pdf and further certify that they will not utilize any subcontractor/consultant that is identified on the Prohibited Entities List on this Contract. The selected

Proposer agrees that should it seek to renew or extend any Contract awarded hereunder, it must provide the same certification at the time the Contract is renewed or extended. The selected Proposer also agrees that any proposed assignee of the Contract will be required to certify that it is not on the Prohibited Entities List before BPCA may approve a request for assignment of the Contract.

During the term of any Contract awarded hereunder, should BPCA receive information that a person (as defined in State Finance Law §165-a) is in violation of the above-referenced certifications, BPCA will review such information and offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment activity which is in violation of the New York State Iran Divestment Act of 2012 within 90 days after the determination of such violation, then BPCA shall take such action as may be appropriate and provided for by law, rule, or contract, including, but not limited to, seeking compliance, recovering damages, or declaring the selected Proposer in default of the awarded Contract.

BPCA reserves the right to reject any request for renewal, extension, or assignment for an entity that appears on the Prohibited Entities List prior to the renewal, extension, or assignment of the Contract, and to pursue a responsibility review with the selected Proposer should it appear on the Prohibited Entities List hereafter.

IX. ENCOURAGING USE OF NEW YORK STATE BUSINESSES IN CONTRACT PERFORMANCE

New York State businesses have a substantial presence in State contracts and strongly contribute to the economies of the state and the nation. In recognition of their economic activity and leadership in doing business in New York State, Proposers for this Contract for commodities, services or technology are strongly encouraged and expected to consider New York State businesses in the fulfillment of the requirements of the Contract. Such partnering may be as subcontractors, suppliers, protégés or other supporting roles.

Proposers need to be aware that all authorized users of this Contract will be strongly encouraged, to the maximum extent practical and consistent with legal requirements, to use responsible and responsive New York State businesses in purchasing commodities that are of equal quality and functionality and in utilizing services and technology. Furthermore, Proposers are reminded that they must continue to utilize small, minority and women owned businesses, consistent with current State law.

Utilizing New York State businesses in State contracts will help create more private sector jobs, rebuild New York's infrastructure, and maximize economic activity to the mutual benefit of the contractor and its New York State business partners. New York State businesses will promote the contractor's optimal performance under the Contract, thereby fully benefiting the public sector programs that are supported by associated procurements.

Public procurements can drive and improve the State's economic engine through promotion of the use of New York businesses by its contractors. The State therefore expects bidders/proposers to provide maximum assistance to New York businesses in their contracts. The potential participation by all kinds of New York businesses will deliver great value to the State and its taxpayers.

Proposers can demonstrate their commitment to the use of New York State businesses by responding to the question below:

Will New York State businesses be used in the performance of this Contract? _____Yes _____No If yes, identify New York State businesses that will be used and attach identifying information.

EXHIBIT A

SCOPE OF WORK

I. BACKGROUND AND GENERAL DESCRIPTION OF PROJECT

Located at Manhattan's southwestern tip, Battery Park City is a 92-acre land tract built in the 1970's by dredging organic river soils and filling in a portion of the Hudson River with hydraulic sand fill. This fill is laterally retained with a combination of cellular steel sheet piles, crushed quarry stone dike, granular filter materials, timber sheeting bulkhead and a relieving platform. The Battery Park City Pedestrian Esplanade (the "Esplanade") relieving platform is supported by approximately 3,100 20"x20" pre-stressed concrete piles. This Project will cover the encasement of certain cellular sheet piles located along the southern edge of the North Cove Marina and the remediation of approximately 334 piles, in two areas of Battery Park City, as more particularly described below.

a) Cellular Sheet Pile Encasement

The original section of Battery Park City fill, located along the southern edge of, and extending southward from, what is now the North Cove Marina (the "Marina"), is laterally retained by a series of cellular steel sheet piles . The Project includes the remedial encasement of certain of these cellular sheet piles (the "Sheet Piles"), including, but not limited to, approximately 434 linear feet of cellular steel sheet piles along the south side of the Marina and under a portion of the Esplanade in accordance with the applicable drawings and specifications attached to the RFP as Exhibit F (the "Construction Documents").

b) Pile Remediation

The Esplanade relieving platform (the "Platform") is generally 70-feet wide, but ranges from 43-feet to 50-feet in the North and South Cove areas as well as in the North Platform area adjacent to Stuyvesant High School. The Platform is a concrete deck composed of 7 ½ inch thick pre-cast, pre-stressed concrete planks integrated with 7½ inch thick reinforced cast-in-place concrete, spanning between cast-in-place concrete pile-supported bents located approximately 23 feet on center. The supporting piles are 20-inch pre-cast, pre-stressed concrete squares with a design axial capacity of 110 tons. The Platform's landside edge has a continuous cast-in-place reinforced concrete beam, 3-feet wide by 4 to 4½-feet high, supported by vertical and battered piles. Vertical timber sheeting lines the back (inboard) edge of the Platform perimeter. A pre-cast concrete seawall skirt along the western boundary protects the piles, Platform and bulkhead. The Platform is divided into sections, or 'bays,' which span between each pile bent. The Platform runs the entire water-side perimeter of Battery Park City and is approximately 7,500 linear feet in length.

Beginning in 2007, BPCA established a multi-year program of inspection, maintenance, repair and encapsulation of the concrete piles that support the Platform. The first four phases addressed the piles at the Esplanade by the ferry terminal on the north side of North Cove Marina, the Winter Garden, the North Cove Marina and the northern portions of the Esplanade.

Phase 5 of the pile remediation program (the "Phase 5 Pile Remediation") will include the encasement of approximately 334 piles under portions of the Esplanade south of North Cover Marina and in the area of South Cove, in accordance with the Construction Documents attached to the RFP as Exhibit F.

II. <u>SCHEDULE & SEQUENCING PARAMETERS</u>

The New York State Department of Environmental Compliance (the "DEC") has confirmed that the standard wintertime moratorium for in-water work in this area does not apply to the Sheet Pile encasement portion of the Project. It is anticipated that this work will commence in early January 2017 and be completed by March 31, 2017. This schedule will allow for access to the work site through the North Cove Marina while Marina operations are closed for the winter. Should this portion of the Work extend beyond March 31st, the contractor must complete any unfinished portion of the Sheet Pile encasement from a barge which shall be located in the Hudson River.

The Wildlife & Fisheries permits applicable to the Phase 5 Pile Remediation Work allows for in-water work from May 1st through October 31st (the In-Water Work Season"), with the possibility of a thirty (30) day extension to November 30th if certain conditions are met and approval is obtained. Phase 5 Pile Remediation Work must be performed during the 2017 In-Water Work Season. There may be up to a one-month period between the completion of the Sheet Pile work and the commencement of the Phase 5 Pile Remediation work.

III. SCOPE OF CONSTRUCTION MANAGEMENT SERVICES

For each Project phase described herein and in <u>Exhibit F</u>, the selected Proposer shall perform the construction management services specified below.

A. General

The selected Proposer shall:

- 1) Provide full construction management services including, but not limited to, management of the Project, office engineering and construction inspection services from award of the Contract through the close-out of construction for the Project.
- 2) Be responsible for Project coordination and the review/tracking of the construction contractor's Critical Path Method (CPM) schedule.
- 3) Be responsible for the financial aspects of the Project, including cost estimates and financial reporting for the Project, both of which must be issued to BPCA on a monthly basis along with a Project summary report detailing the prior month's construction progress and identifying any issues or concerns related to the Project.
- 4) Ensure that all work for the Project adheres to all relevant Local, City, State, and Federal codes, regulations and guidelines.
- 5) Work with a design consultant designated by BPCA to modify or adjust plans and specifications, if needed, to ensure the completion of all construction in the allowable time frame. Consideration must be given to all logistics of the Work including but not limited to phasing, weather factors, workforce requirements, multiple staging, etc.
- 6) Collect and review all information pertaining to the areas surrounding the work site and any land-based access points to the work site to become familiar with any existing utilities and/or structures which could interfere with or affect the performance or completion of construction.

B. <u>Pre-Construction</u>

The selected Proposer shall:

- Monitor the construction work and assist the construction contractor in efforts to perform the Work with <u>minimal</u> to <u>no disruption</u> to the finished and adjacent areas (public and private) and minimal to no impact on the community and general public.
- 2) Develop and submit for approval by BPCA, construction management procedures for managing the execution of the Project. This shall include, but not be limited to, general and special conditions, Project directory, submittal processing procedures, tracking logs (for all Project costs, submittals, plan & specification changes, change orders, etc.), daily field reports, meeting minutes, change order requests, requisitions, site access procedures, etc. All appropriate construction management procedures and forms shall be made available in electronic format. BPCA may elect to use alternate procedures or documents, and the selected Proposer may be required to utilize, update, and/or revise such alternate documents and adhere to such alternate procedures.
- 3) Communicate regularly with BPCA through its designated Project Manager and meet with BPCA when appropriate, or at BPCA's request, to allow BPCA to ascertain any concerns, limitations, restrictions, parameters or other guidance related to Proposer's performance of the Project and Proposer shall monitor or adjust the Project schedule to address these items.
- 4) Be responsible for working with the design/engineering consultant to BPCA, arranging meetings with various specialty contractors, equipment manufacturers and industry specialists in order to assist in the selection of technically viable solutions, determine the availability of material, justify the schedule, and develop and prepare associated cost estimates.
- 5) Provide cost estimating services, as requested by BPCA, to verify the construction budget or selected elements thereof.
- 6) Assist BPCA, if requested, with construction contractor's contract negotiations, including review and familiarization with relevant contract terms and provisions, and with the selection of any required specialty contractors.
- 7) Be responsible for monitoring any site access and Work performed during the pre-construction phase and for coordination of site access in accordance with BPCA's guidelines.
- 8) Coordinate in a reasonable fashion with the construction contractor with respect to office and storage space and changing areas for the selected Proposer's diving inspectors. The construction contractor shall be required to provide space for the selected Proposer within each of its furnished trailers, which shall be located on float stations or barges within the North Cove Marina on in the river. Furnishings to be supplied by the construction contractor shall include basic office furniture and shall not include computers, printers or other electronic equipment.

C. Construction & Close-out

The selected Proposer shall:

• Provide full-time waterside and underwater inspections. Underwater inspections shall be performed by a diver who is certified as a professional engineer (the "PE Diver"). The PE Diver shall be required to be in the water performing inspections in accordance with the construction schedule for the Project. The

underwater inspections shall be coordinated with the construction contractor's schedule. Each pile should be inspected up to 5 times after cleaning, jacketing, installation of grout/concrete material and after the pile is fully complete (i.e. placement of the epoxy top seal that transitions between the repair jacket and the bottom of the pile cap).

- Work with the construction contractor to establish acceptable site logistics and monitor construction activities to check for conformance with approved plans.
- If requested by BPCA, review all construction contractor requisitions for payment for compliance with the terms of the construction contractor's contract, and, once compliant, recommend approval of payment.
- Be responsible for reviewing and tracking the construction contractor's CPM schedule for conformance with contractual milestones. If the construction contractor changes the schedule, the selected Proposer shall review the proposed changes, recommend approval of the revised schedule if appropriate and continue to track the new schedule with the selected Proposer's construction inspection staff. The selected Proposer shall be prepared to review this document in detail at the construction kickoff meeting. The selected Proposer shall perform monthly reviews of the construction contractor's CPM schedule during the construction period.
- Administer a construction kick-off meeting with the Project construction contractor and all Project team members, including preparation and distribution of meeting minutes.
- Schedule and conduct all job progress meetings, including preparation and distribution of meeting minutes. Project meetings shall be weekly.
- Track the disposition of all construction contractor submittals, including general requirements (bonds, insurance, etc.), schedule, procedures, materials, shop drawings, subcontractor and supplier qualification submittals in accordance with the specifications for the Project. A weekly submittal tracking report shall be submitted to BPCA. The construction progress shall be tracked weekly with an updated printed display of completed pile activity at each Project meeting.
- Review and approve the construction contractor's trade payment breakdown and certified payroll reports.
- Review and monitor the work of the construction contractor in accordance with the plans and specifications to ensure the work is completed in accordance with the Project's parameters of cost, schedule and quality.
- Review and monitor the construction progress and schedule. Daily reporting responsibilities shall include but not be limited to daily logs of contractor hours on-site, weather, contractor man-power, deliveries, disposals, Work completed, special occurrences, photo documentation of the Work, pre-construction conditions, job progress, contractor equipment, material testing and Work completed. These logs shall be retained on-site and be readily available to BPCA.
- Submit daily Project Management reports and monthly executive summary reports to BPCA via email to BPCA's Director of Infrastructure, who is responsible for managing the Project. Such reports shall include a brief narrative of the Work status, outstanding issues, status reports, tracking reports, Project financial status and schedule.

- Review all requests for change orders, negotiate terms of such change orders with the construction contractor, and provide recommendations for acceptance or rejection to BPCA.
- Determine substantial completion of the Work and coordinate a punch list inspection.
- Conduct final inspections and approval of the Work and issue Work acceptance certificates.
- Be responsible for monitoring Project completion within the Contract schedule time.
- Provide Project close out services, including the submission of all Project records, inspection reports and a final Project summary report to BPCA at Project completion.

<u>EXHIBIT B</u>

CONTRACTOR REQUIREMENTS AND PROCEDURES FOR BUSINESS PARTICIPATION OPPORTUNITIES FOR NEW YORK STATE CERTIFIED MBEs/WBEs/SDVOBs AND EQUAL EMPLOYMENT OPPORTUNITIES FOR MINORITY GROUP MEMBERS AND WOMEN

Pursuant to New York State Executive Law Article 15-A and 5 NYCRR §§140-145, BPCA recognizes its obligation under the law to promote opportunities for maximum feasible participation of certified MBE/WBEs and the employment of minority group members and women in the performance of BPCA contracts. Pursuant to New York State Executive Law Article 17-B and 9 NYCRR §252, BPCA recognizes its obligation under the law to promote opportunities for maximum feasible participation of certified SDVOBs.

In 2006, the State of New York commissioned a disparity study to evaluate whether minority and women-owned business enterprises had a full and fair opportunity to participate in state contracting. The findings of the study were published on April 29, 2010, under the title "The State of Minority and Women-Owned Business Enterprises: Evidence from New York" (the "Disparity Study"). The report found evidence of statistically significant disparities between the level of participation of minority-and women-owned business enterprises in state procurement contracting versus the number of minority-and women-owned business enterprises that were ready, willing and able to participate in state procurements. As a result of these findings, the Disparity Study made recommendations concerning the implementation and operation of the statewide certified minority- and women-owned business enterprises for the enactment and the implementation of New York State Executive Law Article 15-A, which requires, among other things, that BPCA establish goals for maximum feasible participation of New York State certified MBEs/WBEs and the employment of minority groups members and women in the performance of New York State contracts.

Business Participation Opportunities for MBE/WBEs and minorities and women

For purposes of this solicitation, BPCA hereby establishes an overall goal of 30% for MBE/WBE participation, 15% for MBE participation and 15% for WBE participation (based on the current availability of qualified MBEs and WBEs). A contractor ("Contractor") on the Contract must document good faith efforts to provide meaningful participation by MBE/WBEs as subcontractors or suppliers in the performance of the Contract and Contractor agrees that BPCA may withhold payment pending receipt of the required MBE/WBE documentation. The directory of New York State Certified MBE/WBEs can be viewed at: https://ny.newnycontracts.com/FrontEnd/VendorSearchPublic.asp?TN=ny&XID=7562.

For guidance on how BPCA will determine a Contractor's "good faith efforts," refer to 5 NYCRR §142.8.

In accordance with 5 NYCRR §142.13, Contractor acknowledges that if it is found to have willfully and intentionally failed to comply with the MBE/WBE participation goals set forth in the Contract, such finding constitutes a breach of Contract and BPCA may withhold payment from the Contractor as liquidated damages.

Such liquidated damages shall be calculated as an amount equaling the difference between: (1) all sums identified for payment to MBE/WBEs had the Contractor achieved the contractual MBE/WBE goals; and (2) all sums actually paid to MBEs/WBEs for work performed or materials supplied under the Contract.

By submitting a bid or Proposal, a Proposer agrees to demonstrate its good faith efforts to achieve its goals for the utilization of MBEs/WBEs by submitting evidence thereof through the New York State Contract System (the "NYSCS"), which can be viewed at https://ny.newnycontracts.com, provided, however, that a Proposer may arrange to provide such evidence via a non-electronic method by contacting BPCA. Please note that the NYSCS is a one stop solution for all of your MBE/WBE and Article 15-A contract requirements. For additional information on the use of the NYSCS to meet the Proposer's MBE/WBE requirements please see the attached MBE/WBE guidance from the New York State Division of Minority and Women's Business Development, "Your MWBE Utilization and Reporting Responsibilities Under Article 15-A."

- A. Proposers are required to submit a Utilization Plan with their bid or Proposal as evidence of compliance with the foregoing. Any modifications or changes to the Utilization Plan after the Contract award and during the term of the Contract must be reported on a revised Utilization Plan and submitted to BPCA.
- B. BPCA will review the submitted Utilization Plan and advise the Proposer of BPCA's acceptance or issue a notice of deficiency within 30 days of receipt.
- C. If a notice of deficiency is issued, Proposer agrees that it shall respond to the notice of deficiency within seven (7) business days of receipt by submitting to BPCA, at the address specified in this RFP, or by facsimile at 212-417-2279 a written remedy in response to the notice of deficiency. If the written remedy that is submitted is not timely or is found by BPCA to be inadequate, BPCA shall notify the Proposer and direct the Proposer to submit, within five (5) business days, a request for a partial or total waiver of MBE/WBE participation goals. Failure to file the waiver form in a timely manner may be grounds for disqualification of the bid or Proposal.
- D. BPCA may disqualify a Proposer as being non-responsive under the following circumstances:
 - 1) If a Proposer fails to submit a Utilization Plan;
 - 2) If a Proposer fails to submit a written remedy to a notice of deficiency;
 - 3) If a Proposer fails to submit a request for waiver; or
 - 4) If BPCA determines that the Proposer has failed to document good faith efforts.

Contractors shall attempt to utilize, in good faith, any MBE/WBE identified within its Utilization Plan, during the performance of the Contract. Requests for a partial or total waiver of established goal requirements made subsequent to the Contract award may be made at any time during the Term of the Contract to BPCA, but must be made no later than prior to the submission of a request for final payment on the Contract.

Contractors are required to submit a Contractor's MBE/WBE Contractor Compliance & Payment Report to BPCA on a monthly basis over the Term of the Contract documenting the progress made toward achievement of the MBE/WBE goals of the Contract.

Business Participation Opportunities for SDVOBs

For purposes of this solicitation, BPCA hereby establishes an overall goal of 6% for SDVOB participation. A Contractor must document good faith efforts to provide meaningful participation by SDVOBs as subcontractors or suppliers in the performance of the Contract and Contractor agrees that BPCA may withhold payment pending receipt of the required SDVOB documentation. The directory of New York State Certified SDVOBs can be viewed at: http://www.ogs.ny.gov/Core/docs/CertifiedNYS_SDVOB.pdf. For guidance on how BPCA will determine a Contractor's "good faith efforts," refer to 9 NYCRR §252.2(f)(2).

In accordance with 9 NYCRR §252.2(s), Contractor acknowledges that if it is found to have willfully and intentionally failed to comply with the SDVOB participation goals set forth in the Contract, such finding constitutes a breach of Contract and Contractor shall be liable for damages as specified in the Contract.

Such damages shall be calculated based on the actual cost incurred by BPCA related to BPCA's expenses for personnel, supplies and overhead related to establishing, monitoring and reviewing certified SDVOB programmatic goals.

A. Additionally, a Proposer agrees to submit a Utilization Plan with their bid or Proposal as evidence of compliance with the foregoing. Any modifications or changes to the Utilization Plan after the Contract

award and during the term of the Contract must be reported on a revised Utilization Plan and submitted to BPCA.

- B. BPCA will review the submitted Utilization Plan and advise the Proposer of BPCA's acceptance or issue a notice of deficiency within 30 days of receipt.
- C. If a notice of deficiency is issued, Proposer agrees that it shall respond to the notice of deficiency within seven (7) business days of receipt by submitting to BPCA, at the address specified in this RFP, or by facsimile at 212-417-2279 a written remedy in response to the notice of deficiency. If the written remedy that is submitted is not timely or is found by BPCA to be inadequate, BPCA shall notify the Proposer and direct the Proposer to submit, within five (5) business days, a request for a partial or total waiver of SDVOB participation goals. Failure to file the waiver form in a timely manner may be grounds for disqualification of the bid or Proposal.
- D. BPCA may disqualify a Proposer as being non-responsive under the following circumstances:
 - 1) If a Proposer fails to submit a Utilization Plan;
 - 2) If a Proposer fails to submit a written remedy to a notice of deficiency;
 - 3) If a Proposer fails to submit a request for waiver; or
 - 4) If BPCA determines that the Proposer has failed to document good faith efforts.

Contractors shall attempt to utilize, in good faith, any SDVOB identified within its Utilization Plan, during the performance of the Contract. Requests for a partial or total waiver of established goal requirements made subsequent to the Contract award may be made at any time during the term of the Contract to BPCA, but must be made no later than prior to the submission of a request for final payment on the Contract.

Contractors are required to submit a Contractor's SDBVOB Contractor Compliance & Payment Report to BPCA on a monthly basis over the term of the Contract documenting the progress made toward achievement of the SDVOB goals of the Contract.

Equal Employment Opportunity Requirements

By submission of a bid or Proposal in response to this RFP, the Proposer/Contractor agrees with all of the terms and conditions of the attached M/WBE – Equal Employment Opportunity Policy Statement. The Contractor is required to ensure that it and any subcontractors awarded a subcontract over \$25,000 for the construction, demolition, replacement, major repair, renovation, planning or design of real property and improvements thereon (the "Work") except where the Work is for the beneficial use of the Contractor, shall undertake or continue programs to ensure that minority group members and women are afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status. For these purposes, equal opportunity shall apply in the areas of recruitment, employment, job assignment, promotion, upgrading, demotion, transfer, layoff, termination, and rates of pay or other forms of compensation. This requirement does not apply to: (i) work, goods, or services unrelated to the Contract or (ii) employment outside New York State.

The Proposer further agrees to submit a MBE/WBE and Equal Employment Opportunity Policy Statement, to BPCA with their Proposal.

Proposer further agrees to submit with the Proposal a staffing plan identifying the anticipated work force to be utilized on the Contract and if awarded a Contract, will submit to BPCA a workforce utilization report identifying the workforce actually utilized on the Contract. Contractor will be required to make good faith efforts to achieve a participation goal of 30% of the total number of employees required for the Work who are minority group members and a participation goal of 5% of the total number of employees required for the Work who are women to perform the Work.

Further, pursuant to Article 15 of the Executive Law (the "Human Rights Law"), all other New York State and Federal statutory and constitutional non-discrimination provisions, the Contractor and sub-contractors will not discriminate against any employee or applicant for employment because of race, creed (religion), color, sex, national origin, sexual orientation, military status, age, disability, predisposing genetic characteristic, marital status or domestic violence victim status, and shall also follow the requirements of the Human Rights Law with regard to non-discrimination on the basis of prior criminal conviction and prior arrest.

Please Note: Failure to comply with the foregoing requirements may result in a finding of non-responsiveness, non-responsibility and/or a breach of the Contract, leading to the withholding of funds, suspension or termination of the Contract or such other actions or enforcement proceedings as are allowed by the Contract.

For questions on MBE/WBE/SDVOB participation, joint ventures and sub-contracting goals ONLY, please contact Mr. Anthony Peterson at 212.417.2337.

Your MBE/WBE Utilization and Reporting Responsibilities Under Article 15-A

The New York State Contract System ("NYSCS") is your one stop tool for compliance with New York State's MBE/WBE Program. It is also the platform New York State uses to monitor state contracts and MBE/WBE participation.

GETTING STARTED

To please login access the system, or create a user name and password at https://ny.newnycontracts.com/FrontEnd/VendorSearchPublic.asp?TN=ny&XID=7562. If you are uncertain whether you already have an account set up or still need to register, please send an email to the customer service contact listed on the Contact Us & Support page, or reach out to your contract's project manager. For verification, in the email, include your business name and contact information.

VENDOR RESPONSIBILITIES

As a vendor conducting business with New York State, you have a responsibility to utilize minority- and/or womenowned businesses in the execution of your contracts, per the MBE/WBE percentage goals stated in your solicitation, incentive proposal or contract documents. NYSCS is the tool that New York State uses to monitor MBE/WBE participation in state contracting. Through the NYSCS you will submit utilization plans, request subcontractors, record payments to subcontractors, and communicate with your project manager throughout the life of your awarded contracts.

There are several reference materials available to assist you in this process, but to access them, you need to first be registered within the NYSCS. Once you log onto the website, click on the Help & Support >> link on the lower left hand corner of the Menu Bar to find recorded trainings and manuals on all features of the NYSCS. You may also click on the Help & Tools icon at the top right of your screen to find videos tailored to primes and subcontractors. There are also opportunities available to join live trainings, read up on the "Knowledge Base" through the Forum link, and submit feedback to help improve future enhancements to the system. Technical assistance is always available through the Contact Support link the NYSCS website Us & on (https://ny.newnycontracts.com/FrontEnd/VendorSearchPublic.asp?TN=ny&XID=7562).

For more information, contact your project manager.

MINORITY AND WOMEN-OWNED BUSINESS ENTERPRISES – EQUAL EMPLOYMENT OPPORTUNITY POLICY STATEMENT

MBE/WBE AND EEO POLICY STATEMENT

I, ______ (the "Contractor"), agree to adopt the following policies with respect to the project being developed at, or services rendered to, the Battery Park City Authority ("BPCA").

MBE/WBE This organization will and will cause its contractors and subcontractors to take good faith actions to achieve the MBE/WBE contract participations goals

set by the State for that area in which the State-funded project is located, by taking the following steps:

- (1) Actively and affirmatively soliciting bids for contracts and subcontracts from qualified State certified MBEs or WBEs, including solicitations to MBE/WBE contractor associations.
- (2) Requesting a list of State-certified MBEs/WBEs from BPCA and soliciting bids from these MBEs/WBEs directly.
- (3) Ensuring that plans, specifications, request for proposals and other documents used to secure bids will be made available in sufficient time for review by prospective MBEs/WBEs.
- (4) Where feasible, dividing the work into smaller portions to enhance participations by MBEs/WBEs and encourage the formation of joint venture and other partnerships among MBE/WBE contractors to enhance their participation.
- (5) Documenting and maintaining records of bid solicitation, including those to MBEs/WBEs and the results thereof. The Contractor will also maintain records of actions that its subcontractors have taken toward meeting MBE/WBE contract participation goals.
- (6) Ensuring that progress payments to MBEs/WBEs are made on a timely basis so that undue financial hardship is avoided, and that bonding and other credit requirements are waived or appropriate alternatives are developed to encourage MBE/WBE participation.

EEO (a) This organization will not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability or marital status, will undertake or continue existing diversity programs to ensure that minority group members are afforded equal employment opportunities without discrimination, and shall make and document its conscientious and active efforts to employ and utilize minority group members and women in its work force on State contracts.

(b)This organization shall state in all solicitation or advertisements for employees that in the performance of the State contract all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex disability or marital status.

(c) At the request of BPCA, this organization shall request that each employment agency, labor union, or authorized representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of this organization's obligations herein.

(d) The Contractor shall comply with the provisions of the Human Rights Law, all other State and Federal statutory and constitutional nondiscrimination provisions. The Contractor and subcontractors shall not discriminate against any employee or applicant for employment because of race, creed (religion), color, sex, national origin, sexual orientation, military status, age, disability, predisposing genetic characteristic, marital status or domestic violence victim status, and shall also follow the requirements of the Human Rights Law with regard to non-discrimination on the basis of prior criminal conviction and prior arrest.

(e) This organization will include the provisions of sections (a) through (d) of this agreement in every subcontract in such a manner that the requirements of the subdivisions will be binding upon each subcontractor as to work in connection with the State contract.

Agreed to this	day of	, 2015
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By _____

Print: ______ Title: ______

is designated as the Contractor's Minority Business Enterprise Liaison responsible for administering the Minority and Women-Owned Business Enterprises - Equal Employment Opportunity (MBE/WBE - EEO) program.

MBE/WBE Contract Goals

30% Minority and Women's Business Enterprise Participation

____% Minority Business Enterprise Participation

____% Women's Business Enterprise Participation

EEO Contract Goals (if applicable)

- ____% Minority Labor Force Participation
- ____% Female Labor Force Participation

(Authorized Representative)

Title: _____

Date: _____

Diversity Practices Questionnaire

I, _____, as _____(title) of ______firm or company (hereafter referred to as the company), swear and/or affirm under penalty of perjury that the answers submitted to the following questions are complete and accurate to the best of my knowledge:

1. Does your company have a Chief Diversity Officer or other individual who is tasked with supplier diversity initiatives? Yes or No

If yes, provide the name, title, description of duties, and evidence of initiatives performed by this individual or individuals.

2. What percentage of your company's gross revenues (from your prior fiscal year) was paid to New York State certified minority and/or women-owned business enterprises as subcontractors, suppliers, joint-venture's, partners or other similar arrangement for the provision of goods or services to your company's clients or customers?

3. What percentage of your company's overhead (i.e. those expenditures that are not directly related to the provision of goods or services to your company's clients or customers) or non-contract-related expenses (from your prior fiscal year) was paid to New York State certified minority- and women-owned business enterprises as suppliers/contractors?¹

4. Does your company provide technical training² to minority- and women-owned business enterprises? Yes or No

If yes, provide a description of such training which should include, but not be limited to, the date the program was initiated, the names and the number of minority- and women-owned business enterprises participating in such training, the number of years such training has been offered and the number of hours per year for which such training occurs.

5. Is your company participating in a government approved minority- and women-owned business enterprise mentor-protégé program?

If Yes, identify the governmental mentoring program in which your company participates and provide evidence demonstrating the extent of your company's commitment to the governmental mentoring program.

6. Does your company include specific quantitative goals for the utilization of minority- and women-owned business enterprises in its non-government procurements? Yes or No

If Yes, provide a description of such non-government procurements (including time period, goal, scope and dollar amount) and indicate the percentage of the goals that were attained.

7. Does your company have a formal minority- and women-owned business enterprise supplier diversity program? Yes or No

If Yes, provide documentation of program activities and a copy of policy or program materials.

¹ Do not include onsite project overhead.

² Technical training is the process of teaching employees how to more accurately and thoroughly perform the technical components of their jobs. Training can include technology applications, products, sales and service tactics, and more. Technical skills are job-specific as opposed to soft skills, which are transferable.

8. Does your company plan to enter into partnering or subcontracting agreements with New York State certified minority- and women-owned business enterprises if selected as the successful respondent? Yes or No

If Yes, complete the attached Utilization Plan

All information provided in connection with the questionnaire is subject to audit and any fraudulent statements are subject to criminal prosecution and debarment.

Signature of Owner/Official			
Printed Name of			
Signatory Title			
Name of Business			
Address			
City, State, Zip			

STATE OF		
COUNTY OF)	ss:

On the _____ day of _____, 201_, before me, the undersigned, a Notary Public in and for the State of ______, personally appeared ______, personally known to me or proved to me on the basis of satisfactory evidence to be the individual whose name is subscribed to this certification and said person executed this instrument.

Notary Public

EXHIBIT C

BPCA's Standard Form of Contract

(Attached)

CONSULTANT AGREEMENT

between

HUGH L. CAREY BATTERY PARK CITY AUTHORITY

and

[NAME OF COMPANY, INC. CORP, CO.]

Dated as of [DATE] Contract No. [xx-xxxx]

[(PROJECT NAME)]

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EXHIBITS

CONSULTANT AGREEMENT

AGREEMENT made as of [DATE] between HUGH L. CAREY BATTERY PARK CITY AUTHORITY, ("BPCA" or "Owner"), a body corporate and politic, constituting a public benefit corporation, having a place of business at One World Financial Center, New York, New York 10281, and [NAME OF COMPANY, incorporated in the State of ______, having an office at [Street, City, State, Zip Code] ("Consultant").

WITNESSETH:

WHEREAS, Owner has fee title to certain real property located in the City, County and State of New York, generally known as Battery Park City; and

WHEREAS, Owner is in the process of creating the staged development of Battery Park City, in individual parcels, with the goal of creating a richly diversified mixed use community providing residential and commercial space with related amenities such as parks, plazas, recreational areas and a waterfront esplanade; and

WHEREAS, Owner intends to retain the services of Consultant to perform [describe services to be performed] (the "Project"), and Consultant desires to perform such services for Owner;

NOW, THEREFORE, in consideration of the mutual promises herein contained, the parties hereby agree as follows:

1. <u>Scope of Work</u>

Consultant shall perform the services described in the Scope of Work attached hereto as <u>Exhibit A</u> (the "Work"). All Work shall be completed in accordance with the requirements furnished to Consultant by Owner, and shall be completed to Owner's satisfaction.

2. <u>Time for Performance</u>

Consultant shall perform the Work as expeditiously as is consistent with professional skill and the orderly progress of the Work, and in accordance with any schedule set forth in the attached Scope of Work. If a schedule approved by Owner is incorporated into this Agreement, said schedule shall not be exceeded by Consultant, except for reasonable cause. Consultant shall complete the Scope of Work on or before [DATE] (the "Term") unless: (1) this Agreement is otherwise terminated as hereinafter provided; or (2) the time for performance of the Work is extended by written agreement of Consultant and Owner.

3. <u>Compensation</u>

(a) Owner shall pay, and Consultant agrees to accept as full compensation for all Work performed under this Agreement, the Not to Exceed amount of [AMOUNT] ("Fee"), paid in

accordance with [EXHIBIT] hereto. The Fee [does/does not] include any and all reimbursable expenses to be incurred by Consultant in performing the Work.

[(b) The Fee includes payment for reimbursable expenses, in accordance with Owner's standard policies for reasonable expenses actually incurred by Consultant in connection with the performance of the Work. Consultant shall submit copies of receipts or other supporting documentation for any qualifying expenses incurred.

- or -

(b) The Fee does not include payment for reimbursable expenses. Owner's total reimbursement for Consultant's reimbursable expenses shall not exceed [AMOUNT]. Payment for reimbursable expenses set forth in [EXHIBIT] shall be made in accordance with Owner's standard policies for reasonable expenses actually incurred by Consultant in connection with the performance of the Work. Consultant shall submit copies of receipts or other supporting documentation for any qualifying expenses incurred.]

(c) Consultant shall submit one or more written requests for payment on or about the first (1st) day of the calendar month for Work actually performed and/or reimbursable expenses actually incurred prior to that date. All invoices for payment shall include the name, address, and telephone number of the Consultant and a description of services or goods provided, and be accompanied by appropriate Time Sheets, in the form annexed hereto as <u>Exhibit D</u>.

(d) Not later than the thirtieth (30th) day following Owner's receipt of each written request for payment, Owner shall pay Consultant so much of the amount requested as may be approved by Owner. Any item(s) of Work indicated in any Exhibit hereto as attributable to a specific phase of the Work which is not performed during the specified phase shall not be compensated by Owner, but payment for any such items of Work shall remain available to Consultant if, with Owner's advance approval, such Work is actually performed during a subsequent phase of the Work, subject to the provisions of this Article 3 and Owner's approval of any request for payment.

(e) All requests for payment should be addressed as follows:

Office of the Treasurer Hugh L. Carey Battery Park City Authority One World Financial Center, 24th Fl. New York, NY 10281-1097 Attn.: Accounts Payable

A duplicate copy is to be sent to the attention of [NAME OF BPCA CONTACT, TITLE].

4. <u>Increase and Decrease in the Scope of Consultant's Work</u>

Owner shall have the right to make changes or to increase or reduce the scope of the Work, or to extend the Term or any date set forth in the schedule referenced in Section 2 *supra*, at any time and for any reason, upon written notice to Consultant specifying the nature and

extent of such changes. If Consultant believes that any work it has been directed to perform by Owner is beyond the scope of Work set forth in this Agreement and constitutes extra work, Consultant shall so notify Owner within ten (10) business days. Owner shall determine whether or not such work is in fact beyond the scope of the Work and is considered extra work. If Owner determines that such work constitutes extra work to Consultant or any Subconsultant (as defined in Section 25 of this Agreement), Owner will pay Consultant any additional reimbursable expenses approved pursuant to Owner's policy for reimbursable expenses, and an additional fee computed in accordance with the hourly rate(s) set forth in Section 3(a) *supra*, or if no such rates are set forth, upon terms to be agreed.

5. <u>Consultant Cooperation</u>

(a) Consultant shall work with such firms or individuals as Owner shall designate from time to time in connection with the Work, and agrees to meet with such firms or individuals at such times as Owner may require in order to maintain an ongoing review process so as to expedite determinations and approvals required to be made in connection with the Work.

(b) Consultant shall render any assistance which Owner may require with respect to any claim or action arising from or in any way relating to Consultant's services during or subsequent to the Term of this Agreement, including but not limited to review of claims, preparation of technical reports and participation in negotiations, both before and after Consultant has completed performance of the Work under this Agreement and without any additional compensation therefor.

6. <u>Termination</u>

(a) *Termination for Convenience*. Owner, at any time, may terminate this Agreement in whole or in part. Any such termination shall be effected by mailing or delivering to Consultant a written notice of termination specifying the extent to which performance of the Work under this Agreement is terminated and the date upon which such termination becomes effective. Upon receipt of the notice of termination, Consultant shall act promptly to minimize any expenses resulting from said termination. Owner shall pay Consultant the costs actually incurred by Consultant, including any Fee for Work actually and satisfactorily performed up to the effective date of the termination of this Agreement. In the event of such a termination, Owner may take over the Work and prosecute same to completion by contract or otherwise, and may take possession of and utilize such work product, materials, appliances, and plant as may be on the site and necessary or useful to complete the Work. Except as otherwise provided herein, all of Owner's liability hereunder shall cease and terminate as of the effective date specified in such notice of termination.

(b) Termination for Cause. Owner may terminate this Agreement for cause if:

(i) Consultant shall fail to diligently, timely and expeditiously perform any of its obligations as set forth in the Agreement;

(ii) Any representation or warranty made or deemed to have been made under this

Agreement by Consultant shall prove to be untrue in any material respect;

(iii) Consultant shall make a general assignment for the benefit of its creditors, or a receiver or trustee shall have been appointed on account of Consultant's insolvency, or Consultant otherwise shall be or become insolvent, or an order for relief shall have been entered against Consultant under Chapter 7 or Chapter 11 of Title 11 of the United States Code;

(iv) a breach of any covenant or agreement contained in Section 16 of this Agreement or any other section of this Agreement shall occur; or

(v) Consultant otherwise shall be in default hereunder;

by serving written notice upon Consultant of Owner's intention to terminate this Agreement. Such notice shall state: (1) the reason(s) for Owner's intention to terminate the Agreement, and (2) the effective date of termination, to be not less than three (3) calendar days after the date of the notice of termination. If Consultant shall fail to cure the reason(s) for termination or make arrangements satisfactory to Owner on or before the effective date of termination, this Agreement shall terminate on the date specified by Owner in the notice of termination. In the event of any such termination, Owner may take over the Work and prosecute same to completion by contract or otherwise, for the account and at the expense of Consultant, and Consultant shall be liable to Owner for all costs incurred by Owner by reason of said termination. In the event of such termination, Owner may take possession of and utilize such work product, materials, appliances, and plant as may be on the site and necessary or useful to complete the Work. Upon Owner's completion of the Work following a termination for cause, Consultant shall be entitled to such amount of the Fee which has not theretofore been paid to Consultant and which shall compensate Consultant for all Work actually and satisfactorily performed by it up to the date of termination, provided, however, that Owner shall deduct from any amount all additional costs and expenses which Owner may incur over those which Owner would have incurred in connection with the Work if Owner had not so terminated this Agreement for cause. Nothing contained in this Agreement shall limit in any manner any and all rights or remedies otherwise available to Owner by reason of a default by Consultant under this Agreement, including, without limitation, the right to seek full reimbursement from Consultant for all costs and expenses incurred by Owner by reasons of Consultant's default hereunder and which Owner would not have otherwise incurred if Consultant had not defaulted hereunder.

(c) Upon any termination of this Agreement in accordance with the provisions of this Section 6, Consultant shall, with respect to the Work which is the subject of such termination:

(i) discontinue all its services from and after the date of the notice of termination, except to attempt to cure any reason(s) for termination or as may be required to complete any item or portion or services to a point where discontinuance will not cause unnecessary waste of duplicative work or cost;

(ii) cancel, or if so directed by Owner, transfer to Owner all commitments and agreements made by Consultant relating to the Work, to the extent same are cancelable or transferable by Consultant;

(iii) transfer to Owner in the manner, to the extent, and at the time directed by Owner, all work product, supplies, materials and other property produced as a part of, or acquired in the performance of the Work; and

(iv) take other actions as Owner may reasonably direct.

7. <u>Suspension</u>

Owner may, at any time and for any reason, order Consultant in writing to suspend, delay or interrupt performance of all or any part of the Work for a reasonable period of time as the Owner may determine. Upon receipt of a suspension order, consultant shall, as soon as practicable, cease performance of the Work as ordered and take immediate affirmative measures to protect such Work from loss or damage. Consultant specifically agrees that such suspension, delay or interruption of the performance of Work pursuant to this Section 8 shall not increase the cost of performance of the Work of this Agreement. Owner may extend the Term or any date set forth in schedule referenced in Section 2 *supra*, to compensate Consultant for lost time due to suspension, delay or interruption, and such time extension shall be Consultant's sole compensation for same. Consultant shall resume performance of such Work upon the date ordered by Owner.

8. <u>Assignment</u>

Consultant shall not assign the Agreement in whole or in part without Owner's prior written consent; however, Owner may assign the Agreement in whole or in part without Consultant's prior written consent.

9. <u>Ownership of Documents</u>

(a) All material specifically prepared for the Project and excluding any intellectual property already owned by Consultant which is furnished by Consultant or any Subconsultants (including but not limited to all film, video, or digital assets, Hypertext Markup Language ("HTML") files, JavaScript files, flash files, etc.) in connection with the Work shall be deemed Works Made for Hire and become the sole property of Owner. Consultant shall provide a tangible copy of the Work to Owner in any form(s) to be specified by Owner. Such materials may be used by Owner, in whole or in part, or in modified form, for any and all purposes Owner may deem desirable without further employment of, or payment of any additional compensation to Consultant. Consultant hereby acknowledges that whatever participation Consultant has, or will have, in connection with any copyrightable subject matter which is the subject of the Work is and shall be deemed Work Made for Hire on behalf of BPCA and that BPCA shall be the sole owner of the Work, and all underlying rights therein, worldwide and in perpetuity. In the event that the Work, or any portion thereof, does not qualify or is deemed not to be Work Made for Hire, Consultant hereby irrevocably transfers and assigns to BPCA all of Consultant's right, title and interest, throughout the world, in and to the Work, including, without limitation, all of Consultant's right, title and interest in the copyrights to the Work, including the unrestricted right to make modifications, adaptations and revisions to the Work and hereby waives any so-called "moral rights" with respect to the Work. Consultant grants to Owner a royalty free, worldwide

perpetual, irrevocable, nonexclusive license to reproduce, modify, and publicly display the Work.

(b) Any plans, drawings, or specifications prepared by or on behalf of Consultant for the Project shall become property of Owner, and Consultant may not use same for any purpose not relating to the Project without Owner's prior written consent. Consultant may retain such reproductions of plans, drawings or specifications as Consultant may reasonably require. Upon completion of the Work or the termination of this Agreement, Consultant shall promptly furnish Owner with a complete set of original record prints. All such original materials shall become property of Owner who may use them, without Consultant's permission, for any proper purpose including but not limited to additions or completion of the Project.

10. Insurance

(a) onsultant shall carry the following insurance:

(i) Workers' Compensation and New York State Disability Benefit Insurance covering all persons employed or retained by Consultant in connection with the Work, as required by New York State Law.

(ii) Professional Liability Insurance with limits of liability in amounts not less than [AMOUNT] for Consultant and not less than [AMOUNT] for each Subconsultant, insuring Consultant and any of its respective officers, directors, stockholders, partners and employees for liability arising out of the carrying out of Consultant's professional responsibilities for the Work. All such professional liability policies shall include coverage for contractual liability, including the matters set forth in Section 17 of this Agreement. All policies shall be subject to a deductible of not more than [AMOUNT] per claim. The maximum permitted self-insured retention shall be [AMOUNT], or an amount approved by Owner in writing.

(iii) Valuable Papers Insurance insuring, for the benefit of Consultant and Owner all plans, designs, drawings, specifications, and documents used under this Agreement by Consultant in a total amount of not less than [AMOUNT]. Consultant may furnish full coverage under one policy, or may submit separate policies from any Subconsultant(s) for their proportionate shares of such coverage.

(iv) Commercial General Liability Insurance with contractual, products and completed operations coverages issued to and covering the liability of Consultant for all the Work and operations relating thereto and all obligations assumed by Consultant under this Agreement, with a combined single limit for Bodily Injury, Personal Injury and Property Damage of at least [AMOUNT] per occurrence and aggregate. Said insurance shall, where applicable, be written on an occurrence basis. The limit may be provided through a combination of primary and umbrella/excess liability policies. The coverage shall provide and encompass at least the following:

(A) An endorsement naming Owner, Battery Park City Parks Conservancy Corporation, the State of New York, and such other entities as identified by Owner, as additional insureds ("Additional Insureds").

(B) The policy or policies must be endorsed to be primary as respects the coverage afforded the Additional Insureds and such policy or policies shall be primary to any other insurance maintained by Owner. Any other insurance maintained by Owner shall be excess of and shall not contribute with Consultant's insurance, regardless of the existence of any "other insurance" clause contained in Owner's own policy or policies of insurance.

(v) Automobile Liability and Property Damage Insurance covering the use in connection with the Work of all owned, leased, hired, and non-owned vehicles bearing, or under the circumstances under which such vehicles are used are required to bear license plates by the Motor Vehicle Laws of the State of New York, with a combined single limit for Bodily Injury and Property Damage of at least [AMOUNT] per occurrence.

(vi) Excess Liability Insurance with an aggregate limit of not less than [AMOUNT].

(vii) Comprehensive Crime/Employee Dishonesty Insurance in a reasonable amount or an amount which is customary in the applicable industry, trade or profession.

(viii) If the Work involves the removal, repair, installation or testing of underground petroleum storage tanks, or petroleum remediation operations, or the performance of work or services related to excavation, loading, transporting or unloading of hazardous or contaminated materials, Consultant shall provide Environmental Engineers and Consultants Professional Liability Insurance with a limit of [AMOUNT]. Coverage shall provide and encompass the following:

(A) Consultant's negligent acts, errors or omissions in rendering or failing to render services of an engineering or consulting nature arising out of their environmental engineering or consulting.

(B) Maximum self-insured retention of [AMOUNT], or an amount acceptable to Owner.

(b) All required insurance shall be maintained with responsible insurance carriers authorized to do business in the State of New York and rated at least B+ by A.M. Best and Company, or meet such other requirements as are acceptable to Owner, and shall be approved by Owner. Upon execution of this Agreement and before commencing any performance hereunder, Consultant shall deposit with Owner the original policies of insurance, or certificates therefor, bearing notations or accompanied by other evidence satisfactory to Owner of the payment of all premium payments thereunder. Such policies or certificates shall be delivered to [NAME] AND TITLE1 at Owner's place of business, immediately upon signing this Agreement. Thereafter, certification of all premium payments shall be deposited with Owner not less than ten (10) days before the expiration dates of the policies. In the case of Valuable Papers Insurance, original policies, not certificates, must be deposited. Submission of a policy or certificate of insurance with Owner shall constitute a warranty by Consultant that the insurance coverage

described is in effect for the policy term shown.

(c) iders providing substantially as follows shall be made a part of the insurance policies described in Subsection 10(a) hereof, as applicable:

(i) the policy shall not be canceled or terminated, or the coverage thereof materially reduced, until thirty (30) days after receipt of written notice thereof by certified or registered mail, return receipt requested addressed to Owner; and

(ii) violation of any of the terms of the policy, or any other policy issued by the Company, shall not by itself invalidate such policy.

(d) The insurance policies required by this Section 10 shall be kept in full force and effect for the periods specified hereunder:

(i) Workers' Compensation Insurance and New York State Disability Benefits Insurance shall be kept in force until receipt of final payment by Consultant hereunder. This Agreement shall be void and of no force or effect unless, in compliance with the Workers' Compensation Law, Consultant shall secure Workers' Compensation Insurance for the such of their respective employees engaged in the performance of the Work as are required to be insured under said law.

(ii) Professional Liability Insurance and, if applicable, Environmental Engineers and Consultants Professional Liability Insurance, shall be kept in force for the earlier of three (3) years after the completion of the performance of the Work hereunder or termination of this Agreement. If the insurance policy provided pursuant to Section 10(a)(ii) or 10(a)(viii) above shall be canceled or not renewed, Consultant shall purchase at its sole expense an extended discovery clause covering the period of three years after Work under this Agreement is completed.

(iii) Valuable Papers Insurance shall be kept in full force and effect until final delivery of all documents prepared by or on behalf of Consultant in connection with the Work.

(e) Should Consultant engage any Subconsultant(s), the same conditions as are applicable to Consultant under this Section 10 shall apply to each Subconsultant of every tier. However, Consultant shall keep Subconsultant's certificates of insurance on file, and shall produce same upon demand by Owner.

(f) Should Consultant fail to provide or maintain any insurance required by this Agreement, Owner may, after providing verbal notice to Consultant, purchase any insurance required under this Agreement and charge back such purchase to Consultant.

(g) At any time that the coverage provisions and limits on the insurance policies required under this Agreement do not meet the provisions and limits set forth above, Consultant shall immediately cease work on the Project. Consultant shall not resume work on the project until authorized to do so by Owner. Any delay or time lost as a result of Consultant not having the insurance required under this Section 10 shall not entitle Consultant to receive additional compensation or a time extension.

(h) Not withstanding any other provisions in this Section 10, Owner may require Consultant to provide, at Owner's expense, any other form or limit of insurance necessary to secure Owner's interests.

(i) Consultant shall secure, pay for, and maintain Property Insurance necessary for protection against the loss of owned, borrowed or rented equipment, tools and materials used in Consultant's performance of the Work. The requirement to secure and maintain such insurance is solely for the benefit of Consultant. Consultant's failure to secure such insurance or to maintain adequate levels of coverage shall not render Owner or any Additional Insureds, or their agents and employees, responsible for any such losses, and Owner, the Additional Insureds, and their agents and employees shall have no such liability.

(j) Neither the procurement nor the maintenance of any type of insurance by Owner and Consultant shall in any way be construed or deemed to limit, discharge, waive or release Consultant from any of the obligations and risks accepted by Consultant, or be a limitation on the nature or extent of said obligations and risks.

(k) Consultant shall not violate, or permit to be violated, any term or condition of its insurance policies, and shall at all times satisfy Owner's safety requirements and any requirements of the insurance companies issuing such policies. Consultant shall take every reasonable precaution against injuries to persons or damage to property, and for the safety of persons engaged in performing the Work or working in connection with the Project. Consultant shall establish and maintain safety procedures in connection with the Work as required by the New York labor law and regulations of the Occupational Safety and Health Act, as applicable.

11. <u>Authority of Owner</u>

The Work shall be subject to the general supervision, direction, control and approval of Owner or its authorized representative(s), whose decision shall be final and binding upon Consultant as to all matters arising in connection with or relating to this Agreement. Owner shall determine all matters relative to the fulfillment of this Agreement on the part of Consultant and such determination shall be final and binding on Consultant.

12. <u>Entire Agreement</u>

This Agreement, including all Exhibits hereto, constitutes the entire Agreement between Owner and Consultant, and any prior agreements or understandings between Owner and Consultant with respect to any portion of the Work are hereby merged into and with this Agreement.

13. Consultant as Independent Contractor

Notwithstanding any other provision of this Agreement, Consultant's status shall be that of an independent contractor and not that of a servant, agent or employee of Owner.

Accordingly, Consultant shall not hold itself out as, nor claim to be acting in the capacity of, an officer, agent, employee or servant of Owner.

14. Maintenance, Audit and Examination of Accounts

Consultant shall, until the earlier of six (6) years after completion of the performance of the Work or six (6) years after termination of this Agreement, maintain, and require all Subconsultants to maintain, complete and correct books and records relating to all aspects of Consultant's obligations hereunder, including without limitation, accurate cost and accounting records specifically identifying the costs incurred in performing their respective obligations, and shall make such books and records available to Owner or its authorized representatives for review and audit at all such reasonable times as Owner may request. In the event that Consultant and/or any Subconsultants shall fail to comply with the provisions of this Section 14, and as a result thereof shall be unable to provide reasonable evidence of such compliance, Owner shall not be required to pay any portion of the Fee and Reimbursable Expenses then due or next becoming due, as the case may be, with respect to such items, and if such compensation has already been paid, Owner may require Consultant to refund any such payment made. Any excessive audit costs incurred by Owner due to Consultant's or any Subconsultant's failure to maintain adequate records shall be borne by Consultant.

15. Acceptance of Final Payment: Release and Discharge

Final payment shall be made to Consultant upon satisfactory completion and acceptance by Owner of the Work required under this Agreement, or all Work performed prior to the termination of this Agreement if terminated pursuant to Section 6 hereof, and upon submission of a certification that all Subconsultants have been paid their full and agreed compensation. The acceptance by Consultant of the final payment under this Agreement, or any final payment due upon termination of this Agreement under Section 6 hereof, shall constitute a full and complete waiver and release of Owner from any and all claims, demands and causes of action whatsoever which Consultant, and/or it successors and assigns have, or may have, against Owner under the provisions of this Agreement, unless a detailed and verified statement of claim is served upon Owner prior to the date final payment is tendered by Owner. It is expressly understood and agreed that Owner's or Consultant's termination of this Agreement pursuant to Section 6 hereof shall not give rise to any claim against Owner for damages, compensation or otherwise as a result of such termination, and that under such circumstances Owner's liability to make payments to Consultant on account of any and all Work shall be limited to the payments set forth in Section 6 hereof.

16. <u>Covenants, Representations and Warranties</u>

(a) onsultant represents and warrants to Owner that:

(i) no public official is directly or indirectly interested in this Agreement, or in the supplies, materials, equipment, work, labor or services to which it relates or in any of the profits thereof;

(ii) except as set forth in this Agreement, Consultant has, and shall have, no

interest, direct or indirect, in the Project to which the Work relates; and

(iii) to the best of its knowledge, upon due inquiry, no officer, member, partner or employee of Consultant has, prior to the date of this Agreement, been called before a grand jury, head of a state agency, head of a city department or other city agency to testify in an investigation concerning any transaction or contract had with the State of New York, any political subdivision thereof, a public authority, or with any public department, agency or official of the State of New York of or any political subdivision thereof, and refused to sign a waiver of immunity against subsequent criminal prosecution or to answer any relevant question concerning such transaction or contract.

(b) Consultant covenants and agrees that:

(i) recognizing that time for completion of the Work is of the essence, Consultant shall perform all of its obligations hereunder in a prompt and workmanlike manner and in accordance with the time periods for the Work set forth herein;

(ii) the personnel assigned and any Subconsultant(s) used by Consultant in the performance of the Work hereunder shall be qualified in all respects for such assignment, employment and use;

(iii) Consultant, in the performance of the Work, shall utilize the most efficient available methodology and technology for the purpose of reducing the cost and time of such performance;

(iv) Consultant shall comply with the provisions of all Federal, State and local statutes, laws, rules, ordinances and regulations that are applicable to the performance of this Agreement;

(v) should any claim be made or any action be brought against the Owner which is in any way related to the Work, Consultant shall diligently render to Owner any and all assistance specified in Section 5 of this Agreement which may be required by Owner as a result thereof; and

(vi) Consultant shall not commit its personnel to, nor engage in, any other projects during the term of this Agreement to the extent that such projects may adversely affect the quality or efficiency of the Work or would otherwise be detrimental to the conduct and completion of the Work, and Consultant shall provide sufficient numbers of qualified personnel as shall be required to perform the Work in the time requested by Owner. Consultant shall comply with any reasonable request by Owner to remove and/or replace any of Consultant's personnel from the Project.

(c) The parties make mutual representations that to the best of their knowledge that any materials provided by either party for inclusion in the Work shall not infringe upon the copyright or trademark of any third party.

17. Indemnity

(a) Consultant shall be liable to, and shall indemnify Owner, each Member, officer, agent and employee of Owner for, and shall hold each of the foregoing harmless from and against, any and all claims, losses, damages, expense, penalties, costs or other liabilities, including, without limitation, attorneys' fees, costs, disbursements and interest, arising out of the performance of the Work or Consultant's breach of this Agreement, including but not limited to any of the provisions set forth in Section 16 hereof, and Consultant agrees that it shall defend any suit or action brought against Owner or any Member, officer, agent or employees of Owner which is based on any loss or liability or alleged loss or liability indemnified herein.

(b) Consultant shall be liable to, and shall indemnify Owner and each of the Members, officers, agents and employees of Owner for, and shall hold each of the foregoing harmless from and against, any and all claims made against any of the foregoing for infringement of any copyright, trademark or patent arising out of the use of any plans, designs and specifications furnished by Consultant in the performance of this Agreement.

18. <u>Confidentiality</u>

Consultant hereby agrees that data, recommendations, reports and other materials developed in the course of the Work are strictly confidential between Consultant and Owner and except as specifically provided herein, Consultant may not at any time reveal or disclose such data, recommendations or reports in whole or in part to any third party without first obtaining written approval from Owner.

19. Modification

No modification, amendment, change, termination or attempted waiver of any of the provisions of this Agreement shall be binding unless in writing and signed by the party to be bound.

20. <u>Waiver</u>

Except as otherwise provided in Section 15 of this Agreement, the parties may waive any of their rights hereunder without invalidating this Agreement or waiving any other rights hereunder, provided, however, that no waiver of, or failure to enforce or exercise any provision of this Agreement shall affect the right of any party thereafter to enforce such provisions or to exercise any right or remedy in the event of any other breach or default, whether or not similar.

21. <u>Severability</u>

If any term or provision of this Agreement or the application thereof to any person or entity, or circumstance shall, to any extent, be determined to be invalid or unenforceable, the remaining provisions of this Agreement, or the application of such terms or provisions to persons, entities or circumstances other than those as to which it is held to be invalid or unenforceable, shall in no way be affected thereby and each term or provision of this Agreement shall be valid and binding upon the parties, and enforced to the fullest extent permitted by law.

22. <u>New York Law/Forum Selection/Jurisdiction</u>

This Agreement shall be construed under, and be governed by, the laws of the State of New York. All actions or proceedings relating, directly or indirectly, to this Agreement shall be litigated only in courts located within the County of New York. Consultant, any guarantor of the performance of its obligations hereunder ("Guarantor") and their successors and assigns hereby subject themselves to the jurisdiction of any state or federal court located within such county, waive the personal service of any process upon them in any action or proceeding therein and consent that such process be served by certified or registered mail, return receipt requested, directed to the Consultant and any successor at Consultant's address hereinabove set forth, to Guarantor and any successor at the address set forth in the instrument of guaranty, and to any assignee at the address set forth in the instrument of assignment. Such service shall be deemed made two days after such process is so mailed.

23. **Provisions Required by Law**

Each and every provision of law and clause required by law to be included in this Agreement shall be deemed to be included herein, and this Agreement shall read and shall be enforced as though such provision(s) and/or clause(s) were so included.

24. <u>Notices</u>

Any notice, approval, consent, acceptance, request, bill, demand or statement required or permitted to be given hereunder (each, a "Notice") from either party to the other shall be in writing and shall be deemed given when received by overnight mail or when deposited with the United States Postal Service in a postage prepaid envelope, certified or registered mail, addressed to the other party at the addresses set forth above. If to Owner, Notices shall be sent to the attention of [BPCA PERSON, TITLE], with a copy to the General Counsel, and if to Consultant, Notices shall be sent to the attention of [CONSULTANT CONTACT]. Either party may at any time change such address or add additional parties to receive a Notice by mailing, as aforesaid, to the other party a Notice thereof.

25. Approval and Use of Subconsultants

(a) Except as specifically provided herein, Consultant shall not employ, contract with or use the services of any consultants, contractors or other third parties (collectively, "Subconsultants") in connection with the performance of its obligations hereunder without the prior written consent of Owner to the use of each such Subconsultant, and to the agreement to be entered into between Consultant and any such Subconsultant. Consultant shall inform Owner in writing of any interest it may have in a proposed Subconsultant. No such consent by Owner, or employment, contract, or use by Consultant, shall relieve Consultant of any of its obligations hereunder.

(b) Consultant shall be responsible for the performance of the Work of any Subconsultants engaged, including the maintenance of schedules, coordination of their Work and

resolutions of all differences between or among Consultant and any Subconsultants. It is expressly understood and agreed that any and all Subconsultants engaged by Consultant hereunder shall at all times be deemed engaged by Consultant and not by Owner.

(c) The fees of any Subconsultant retained by Consultant to perform any part of the Work required under this Agreement shall be deemed covered by the compensation stipulated in Section 3 above. Consultant shall pay its Subconsultants in full the amount due them from the proportionate share of each requisition for payment submitted by Consultant and paid by Owner. Consultant shall make payment to its Subconsultants no later than seven (7) calendar days after receipt of payment from Owner. Consultant shall indemnify, defend and hold Owner harmless with respect to any claims against Owner based upon Consultant's alleged failure to make payments to Subconsultants for Work under this Agreement.

(d) Upon the request of Owner, Consultant shall cause any Subconsultant employed by the Consultant in connection with this Agreement to execute a copy of this Agreement, wherein such Subconsultant shall acknowledge that it has read and is fully familiar with the terms and provisions hereof and agrees to be bound thereby as such terms and provisions are or may be applicable to such Subconsultants.

26. Employment and Diversity

26.1. <u>Definitions</u>

The following terms shall have the meanings set forth below for the purposes of this Article 26:

(a) "Certified Business." A business verified as a minority or women-owned business enterprise by the Division or such other New York State agency authorized to make such certification.

(b) "Diversity Program." The program by which Owner shall monitor Consultant's compliance with the requirements set forth in (i) the MBE/WBE Required Participation Plan and (ii) the Utilization Plan.

(c) "Division." The Division of Minority and Women's Business Development of the New York State Department of Economic Development.

(d) "Director." The Director or the Executive Director of the Division.

(e) "Directory." The directory of certified businesses prepared by the Director for use by Owner and consultants in complying with the provisions of the Executive Law of the State of New York, Article 15-A.

(f) "MBE/WBE Required Participation Plan." The plan previously submitted by a Consultant to Owner listing the certified MBEs and/or WBEs which the Consultant intends to use in the performance of this agreement in order to ensure that MBEs and WBEs are awarded a fair share of the total dollar value that is to be paid for the Work.

(g) "Minority Group Member." A United States citizen or permanent resident alien who is and can demonstrate membership in one of the following groups:

(1) Black persons having origins in any of the Black African racial groups;

(2) Hispanic persons of Mexican, Puerto Rican, Dominican, Cuban, Central or South American descent of either Indian or Hispanic origin, regardless of race;

(3) Native American or Alaskan native persons having origins in any of the original peoples of North America; or

(4) Asian and Pacific Islander persons having origins in any of the Far East countries, South East Asia, the Indian subcontinent or the Pacific Islands.

(h) "Minority-owned Business Enterprise" ("MBE"). A business enterprise, including a sole proprietorship, partnership or corporation that is:

(1) at least 51 percent owned by one or more Minority Group Members;

(2) an enterprise in which such minority ownership is real, substantial and continuing;

(3) an enterprise in which such minority ownership has and exercises the authority to control and operate, independently, the day-to-day business decisions of the enterprise; and

(4) an enterprise authorized to do business in the State of New York and is independently owned and operated.

(i) "Subcontract." An agreement providing for a total expenditure in excess of \$25,000 for the performance of any portion of the Work between Consultant and any individual or business enterprise, including a sole proprietorship, partnership, corporation, or not-for-profit corporation, in which a portion of a contractor's obligation is undertaken or assumed.

(j) "Utilization Plan." A plan previously submitted by Consultant to Owner which sets forth the proposed percentages of employees who are either Minority Group Members or women and who will be used by Consultant to perform the Work.

(k) "Women-owned Business Enterprise" ("WBE"). A business enterprise, including a sole proprietorship, partnership or corporation that is:

(1) at least 51 percent owned by one or more United States citizens or permanent resident aliens who are women;

(2) an enterprise in which the ownership interest of such women is real,

substantial and continuing;

(3) an enterprise in which such women ownership has and exercises the authority to control and operate, independently, the day-to-day business decisions of the enterprise; and

(4) an enterprise authorized to do business in the State of New York and which is independently owned and operated.

26.2. <u>Equal Employment Opportunities for Minority Group Members and</u> <u>Women</u>

(a) During the performance of the Work, Consultant agrees as follows:

(1) Consultant shall not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, disability or marital status; shall undertake or continue existing programs of diversity to ensure that Minority Group Members and women are afforded equal employment opportunities without discrimination; and shall make and document its good faith effort to achieve prompt and full utilization of Minority Group Members and women at all levels and in all segments of its work force where deficiencies exist.

(2) At the request of Owner, Consultant shall request each employment agency, labor union, or authorized representative of workers with which it has a collective bargaining or other agreement or understanding, to furnish a written statement that such employment agency, labor union, or representative will not discriminate on the basis of race, creed, color, national origin, sex, age, disability or marital status and that such union or representative will affirmatively cooperate in the implementation of Consultant's obligations herein.

(3) Consultant shall state in all solicitations or advertisements for employees that in the performance of the Work, all qualified applicants will be afforded equal employment opportunities without discrimination because of race, creed, color, national origin, sex, age, disability or marital status.

(4) Consultant and any Subconsultant shall be required to submit compliance reports in accordance with this Section 26 relating to their operations and the implementation of the Diversity Program in effect as of the date of execution of this Agreement.

(5) Contractor shall submit an EEO policy statement to Owner within seventy-two hours of notice from Owner of the awarding of this contract to Contractor. If Contractor does not have an existing EEO policy statement, Owner may provide to Contractor a model statement.

(6) For purposes of providing meaningful participation by MBE/WBE's for the Work and achieving the goals established herein, Consultant and its Subconsultants should reference the directory of New York State Certified MBE/WBE's found at the following internet address: http://www.esd.ny.gov/mwbe.html.

Additionally, Consultant and its Subconsultants are encouraged to contact the Division of Minority and Woman Business Development at (518) 292-5250, (212) 803-2414, or (716) 846-8200), to discuss additional methods of maximizing participation by MBE/WBE's on the Work.

(7) Where MBE/WBE goals have been established herein, Consultant must document "good faith efforts," pursuant to 5 NYCRR §142.8, to provide meaningful participation by MBE/WBE's as Subconsultants or suppliers in the performance of the Work.

(b) Consultant shall include the provisions of subdivision (a) of this section in every Subcontract in such a manner that the provisions will be binding upon each Subconsultant as to the Work in connection with this contract's execution.

(c) iscellaneous provisions:

(1) The provisions of this section shall not be binding upon Consultant or its Subconsultants in the performance of any other work or the providing of services, or any other activities that are unrelated, separate or distinct from this Agreement as expressed by its terms.

(2) The requirements of this section shall not apply to any employment outside New York State, or application for employment outside such state, or solicitations, or advertisements therefore, or any existing programs of diversity regarding employment outside New York State and the effect of contract provisions required by this section shall be so limited.

(d) Enforcement. The parties agree to be bound by provisions of Article 15-A of the Executive Law of the State of New York and by the regulations adopted pursuant thereunder.

26.3. <u>Workforce Participation</u>

(a) Consultant is required to make good faith efforts to achieve the participation of $\underline{[X]\%}$ Minority Group Members and/or women in the personnel utilized by Consultant in the Work as set forth in the Utilization Plan.

(b) To ensure compliance with this Section, Consultant shall submit a staffing plan to document the composition of the proposed workforce to be utilized in the performance of this contract by the specified categories listed, including ethnic background, gender, and Federal

occupational categories. Consultant shall complete the staffing plan form and submit it as part of their bid or proposal or within a reasonable time, but no later than the time of award of the contract.

(c) The participation for Minority Group Members and women employees must be substantially uniform throughout the work.

(d) Consultant shall not participate in the transfer of Minority Group Member employees or women employees from employer to employer or from project to project for the sole purpose of satisfying the participation goals above set forth.

(e) In achieving such participation, Consultant is required to make good faith efforts to find and employ qualified Minority Group Members and women supervisory personnel and staff.

(f) Consultant shall meet with Owner, and such other persons as Owner may invite, on a periodic basis as required by Owner to discuss issues relating to Minority Group Members and women workforce participation. At such meetings, Consultant shall report on the names of its Subconsultants then engaged on the Project to which the Work relates or which within 60 days are scheduled to be engaged on such Project, on the nature of the work and anticipated schedule of Consultant and Subconsultants, on the anticipated hiring needs of Consultant and Subconsultants, on the responsible supervisors directly employed by Consultant, and such information requested by Owner that will then promote the employment of Minority Group Members and women. Consultant shall use its best efforts to obtain the above information and shall, upon Owner's request, cause its Subconsultants to attend said meetings and provide the above information.

(g) Compliance reports with respect to the Utilization Plan ("Utilization Compliance Reports") which shall be submitted to Owner's Diversity officer on a monthly basis and shall be in accordance with the following:

(1) Owner may require that Consultant submit Utilization Compliance Reports for the duration of this contract to Owner regarding Consultant's operation and implementation of the Utilization Plan portion of the Diversity Program in effect as of the date of execution of this Agreement.

(2) The Utilization Compliance Reports shall include information on any Subconsultant involved in the performance of the contract with regard to the Subconsultant's compliance with the Diversity Program.

(3) The Utilization Compliance Reports shall include, but are not limited to the following:

(i) a breakdown of the Subconsultants by ethnic background, gender or such other categories as may be required by Owner;

(ii) the actions the Consultant and Subconsultants have taken to

meet the components of the Diversity Program;

(iii) how Consultant and Subconsultants intend to utilize participation of Minority Group Members and women in their workforce in connection with the performance of the Work and timetables therefor during the remainder of their performance of the Work.

(h) Any failure by Consultant to submit a required Utilization Compliance Report, including information on any of its Subconsultant's compliance, may be deemed a breach of contract with respect to this agreement.

(i) Consultant shall include the provisions of Section 26.3 in every Subcontract, and such provisions shall be binding upon each Subconsultant.

26.4. <u>Minority Business Enterprise (MBE) Participation</u> and Women's Business Enterprise (WBE) Participation

(a) Consultant shall make good faith efforts to attain the participation of [X%] MBEs and/or WBEs in the total dollar value of the Work.

(b) The total dollar value of the Work for purposes of determining compliance with the MBE/WBE Required Participation Plan shall be calculated as follows:

(1) if an MBE and WBE is not the Consultant -- the dollar value of the Work subcontracted to MBEs and WBEs; provided, however, that where materials are purchased from an MBE and WBE which acts merely as a conduit for goods manufactured or produced by a non-MBE and non-WBE, only that portion of the price paid for such materials which will accrue as profit to the MBE or WBE and/or the Fee received by the MBE and WBE shall be included;

(2) if Consultant is a joint venture including one or more MBEs and WBEs as joint venturers -- the Fee multiplied by the percentage of the joint venture's profits (or losses) which are to accrue to the MBE and WBE joint venture(s) under the joint venture agreement; and

(3) if an MBE and WBE is Consultant or where Consultant is a joint venture consisting entirely of MBEs and WBEs -- the Fee.

(c) Compliance reports with respect to the MBE/WBE Required Participation Plan ("MBE/WBE Compliance Reports") shall be required as follows:

(1) MBE/WBE Compliance Reports shall be submitted to Owner and shall include information with respect to:

(i) dividing the Work to be subcontracted into smaller portions, where economically and technically feasible;

(ii) actively and affirmatively making a good faith effort to solicit bids for subcontracts from qualified MBEs and WBEs identified in the directory of certified businesses available at the office of the Owner's Diversity Officer, including the circulation of solicitations to minority contractor associations. Consultant shall maintain records detailing the efforts made to provide for meaningful MBE and WBE participation in the Work, including the names and addresses of all MBEs and WBEs contacted and, if any such MBE or WBE is not selected as a joint venture or subcontractor, the reasons for such decision;

(iii) making plans and specifications for prospective work available to MBEs and WBEs in sufficient time for review;

(iv) utilizing the services and cooperating with those organizations providing technical assistance to Owner in connection with the participation of MBEs and WBEs in the project to which the Work relates;

(v) encouraging the formation of joint ventures, partnerships or other similar arrangements among subcontractors where appropriate;

(vi) ensuring that provision is made to provide progress payments to MBEs and WBEs on a timely basis; and

(vii) not requiring bonds from and/or providing bonds and insurance for MBEs and WBEs where appropriate, and/or assisting in obtaining bonds and insurance for MBEs and WBEs where feasible.

(2) MBE/WBE Compliance Reports which shall be submitted to the Diversity Department on the monthly basis.

(3) MBE/WBE Compliance Reports shall also include, but not be limited to, the following information:

(i) the name, address and telephone number of each certified MBE and WBE which Consultant is using or intends to use to comply with the MBE/WBE Required Participation Plan.

(ii) a brief description of the contract scope of work to be performed for the Consultant by each certified MBE and WBE and

the scheduled dates for performance;

(iii) a statement of whether Consultant has a written agreement with each certified MBE and WBE which Consultant is using or intends to use, and if requested, copies of such agreements;

(iv) the actual total cost of the contract scope of work to be performed by each certified MBE and WBE for this Agreement; and

(v) The actual amounts of any payments made by Consultant to each certified MBE and WBE as of the date the MBE/WBE Compliance Report was submitted.

(d) Consultant shall provide Owner with M/WBE and/or Workforce Monthly Utilization Reports, by the last calendar day of each month, in the form of [EXHIBIT] hereto. Failure to provide such reports shall be an event of default of contractor's obligations pursuant to this Section.

(e) Consultant shall provide proof of payment to all subcontractors and materialmen in the form of a waiver of lien or cancelled check, with each request for payment. Failure to provide such proof of payment shall be an event of default of contractor's obligations pursuant to this Section.

26.5 Failure to Comply

(a) In accordance with 5 NYCRR §142.13, Contractor acknowledges that if it is found to have willfully and intentionally failed to comply with the M/WBE participation goals set forth herein or any other requirements set forth in this Article 27, such finding constitutes a breach of contract and Owner may withhold payment from the Contractor as liquidated damages.

(b) Such liquidated damages shall be calculated based on the actual cost incurred by Owner related to Owner's expenses for personnel, supplies and overhead related to establishing, monitoring, and reviewing certified M/WBE programmatic goals and Diversity and Equal Opportunity compliance.

27. <u>Responsibility</u>

(a) Consultant shall at all times during the term of this Agreement remain responsible. Consultant agrees, if requested by Owner or Owner's designee, to present evidence of its continuing legal authority to do business in New York State, integrity, experience, ability, prior performance, and organizational and financial capacity.

(b) Owner or Owner's designee, in its sole discretion, reserves the right to suspend any or all activities under this Agreement, at any time, when it discovers information that calls into question Consultant's responsibility. In the event of such suspension, Consultant will be given written notice outlining the particulars of such suspension. Upon issuance of such notice, Consultant must comply with the terms of the suspension order. Activity under the Agreement may resume at such time as Owner or its designee issues a written notice authorizing a resumption of performance under the Agreement.

(c) Upon written notice to Consultant, and a reasonable opportunity to be heard with appropriate officials or staff of Owner, this Agreement may be terminated by Owner or Owner's designee at Consultant's expense where Consultant is determined by Owner or its designee to be non-responsible. In such event, Owner or its designee may complete the contractual requirements in any manner it deems advisable, and pursue available legal or equitable remedies for breach.

28. Interest of Others

Nothing in this Agreement shall be construed to give any person other than Owner and Consultant any legal or equitable right, remedy or claim. This Agreement shall be held to be for the sole and exclusive benefit of Owner and Consultant.

29. <u>Executory Contract</u>

It is understood by and between the parties hereto that this Agreement shall be deemed executory to the extent of the monies available to Owner and no liability on account thereof shall be incurred by Owner beyond monies available for the purpose thereof. In no event shall any claim be asserted under this Agreement by Consultant or any Subconsultant against any member, officer, employee, lessee, consultant or agent of Owner or the State of New York. By execution of this Agreement, Consultant agrees to look solely to Owner with respect to any claim which may arise.

30. <u>Participation in International Boycott Prohibited</u>

Consultant agrees, as a material condition of this Agreement, that neither Consultant nor any substantially owned or affiliated person, firm, partnership or corporation has participated or is participating or shall participate in an international boycott in violation of the provisions of the United States Export Administration Act of 1969, as amended, or the United States Export Administration Act of 1979, as amended, or the Regulations of the United States Department of Commerce promulgated thereunder. This Agreement shall be rendered forfeited and void by the Comptroller of the State of New York if, subsequent to execution, such person, firm, partnership or corporation has been convicted of a violation of the provisions of either of such federal acts or such Regulations or has been found upon the final determination of the United States Commerce Department or any other appropriate agency of the United States to have violated the provisions of either of such federal acts or such Regulations.

31. MacBride Fair Employment Principles

If the amount payable to Consultant under this Agreement is greater than \$15,000, Consultant hereby certifies that it and/or any individual or legal entity in which it holds a 10% or greater ownership interest, and any individual or legal entity that holds a 10% or greater ownership in it, either have no business operations in Northern Ireland, or shall take lawful steps

in good faith to conduct any business operations they have in Northern Ireland in accordance with the MacBride Fair Employment Principles relating to nondiscrimination in employment and freedom of workplace opportunity regarding such operations in Northern Ireland, as set forth in Section 165(5) of the New York State Finance Law, and shall permit independent monitoring of their compliance with such Principles.

32. <u>Termination for Failure to Disclose Under NYS Finance Law §139k</u>

The Hugh L. Carey Battery Park City Authority reserves the right to terminate this contract in the event it is found that the certification filed by Contractor/Consultant pursuant to New York State Finance Law §139-k was intentionally false or intentionally incomplete. Upon such finding, Hugh L. Carey Battery Park City Authority may exercise its termination right by providing written notification to the Contractor/Consultant in accordance with the written notification terms of this contract. If a contract is terminated in accordance with State Finance Law §139k(5), Hugh L. Carey Battery Park City Authority, its subsidiaries and affiliates, will include a statement in Hugh L. Carey Battery Park City Authority's procurement record describing the basis for any action taken under the termination provision.

33. <u>Comptroller's Approval</u>

If this contract is considered an eligible contract as defined by Title 2 of NYCRR Part 206, it is subject to the New York State Comptroller's approval, and therefore shall not be valid and enforceable until that approval has been obtained. A contract is considered "eligible" as defined by Title 2 of NYCRR Part 206, if it is not a specifically exempt contract, is executed by a state authority on or after March 1, 2010 where the aggregate consideration under the contract may reasonably be valued in excess of one million dollars, <u>AND</u> the contract is either (1) awarded on a single-source basis, sole-source basis or pursuant to any other method of procurement that is not a competitive procurement <u>OR</u> (2) supported in whole or part with funds appropriated from the Community Projects Fund (007).

34. Form of Agreement not an Offer

Notwithstanding anything herein to the contrary, the submission of this form of Agreement by the Authority to Consultant shall not constitute an offer, and execution hereof by Consultant shall not be considered acceptance of an offer. A binding contract between the parties shall exist only if and at such time as both parties have executed this document.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

HUGH L. CAREY BATTERY PARK CITY AUTHORITY

By: _____

Name: _____

Title: _____

[CONSULTANT COMPANY NAME]

By: _____

Name: _____

EXHIBIT D

COST PROPOSAL

(Proposer to submit executed Cost Proposal on its letterhead)

Date:

Battery Park City Authority 200 Liberty Street - 24th Floor New York, New York 10281

Attention: Mr. Michael LaMancusa, Contract Administrator

Dear Mr. LaMancusa:

The undersigned (the "Proposer") hereby proposes to provide all work necessary to perform the **Phase 5 Pile Remediation & Cellular Sheet Pile Encasement– Construction Management & Diving Inspection Services**. The Proposer agrees to commence the Work immediately upon execution of the Contract, in accordance with its terms, and complete the Project for the not-to-exceed sum written below.

A. <u>Cost Proposal</u>

A total not-to-exceed amount of \$_____ Dollars and _____ Cents) to perform all work described in, and associated with, Exhibit A ("Scope of Work") of the RFP,

B. <u>Reimbursable</u>

A total not-to-exceed amount of \$_____ Dollars and _____ Cents) to perform all work described in, and associated with, Exhibit A ("Scope of Work") of the RFP,

C. <u>Itemized Proposal and Technical Salaries</u>

1. Enclosed with its Cost Proposal, Proposer has submitted a completed Form of Technical Salaries, showing labor rates for all trades, including all costs except overhead and profit. Prices shown include base hourly rates, overtime rates, insurance and benefits.

Proposer:

By: _____

Title:

EXHIBIT E

Form of Technical Salaries

(Attached)

TECHNICAL SALARY RATES

Proposers shall provide all appropriate persons necessary to ensure the highest quality work. Proposers must furnish the names and resumes of all Project personnel. The rates listed below represent contract unit rates for the personnel as listed within the assigned categories. Invoicing will be based on actual hours worked multiplied by the unit rate. The unit rate is the actual salary times an auditable multiplier indicated below. The auditable multiplier shall be limited to the direct payroll burden itemized below, overhead (allowances as defined in list below) and a reasonable profit percentage as indicated below.

Itemization of Direct Payroll Burden

- 1. F.I.C.A
- Federal Unemployment Insurance 2.
- 3. State Unemployment Insurance
- 4. Worker's Compensation
- 5. Life Insurance
- 6. Accidental death and Disbursement
- NYS Disability Insurance 7.
- 8. PL and PD Insurance
- Group Hospitalization 9
- 10. Vacation time attributable to the Project
- 11. Major Medical Insurance
- 12. Pension and Profit Sharing Plan
- 13. 401K Program (company
- contribution)
- 14. Medicare
- 15. Long Term Disability Insurance
- 16. Company Automobile Expenses
- 17. Tuition and Seminar
 - Reimbursement
- 18. Company Training Program

- 19. Employee Bonuses- non-principals and non- shareholders
- 20. Travel and Meal Allowances overtime work only
- 21. Premium for Staff Overtimesupport or clerical work
- 22. Sick Time and Personal Days for employees

(Attach table(s) to the Proposal Form)

NAME	Title/Function	RATE Day / Hr (without Profit &Multiplier)	# OF DAYS / Hrs	TOTAL

SUBTOTAL TECHNICAL SALARIES (w/o Profit & multiplier) \$

- **PROJECT MULTIPLIER =**
 - PROFIT MARGIN = _____

%

TOTAL FEE = \$ _____

Proposer: </br>

<Name of Company>

_____ <Printed Name of Executing Officer> By:

Title:

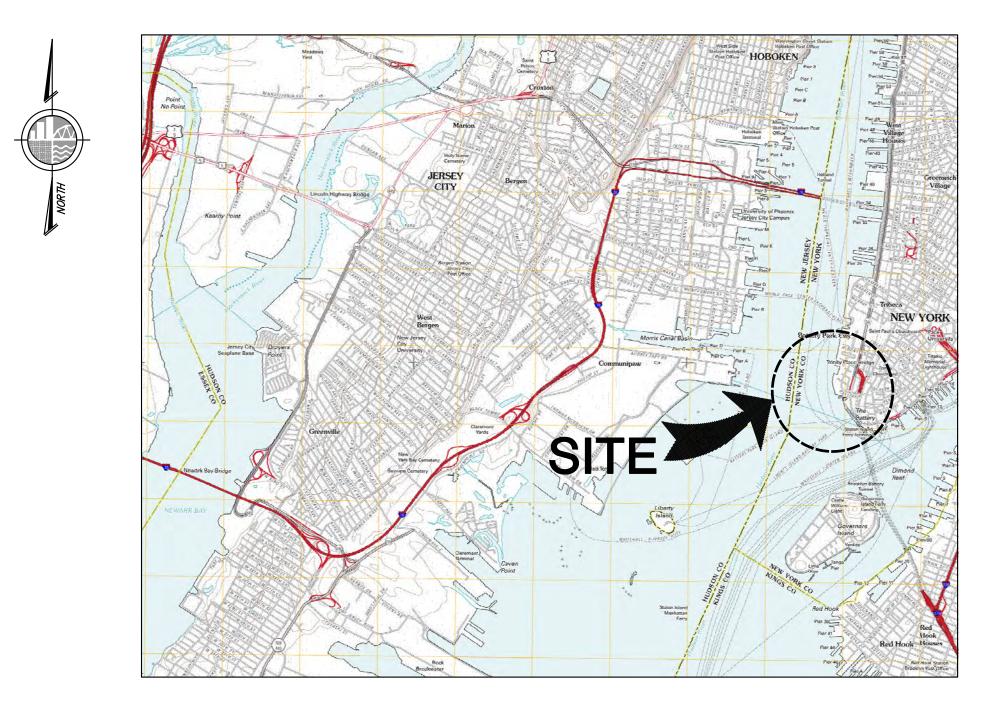
Signature: _____ Date__

EXHIBIT F

Drawings & Specifications

(Attached)

BATTERY PARK CITY AUTHORITY NORTH COVE CELLULAR SHEET PILE ENCASEMENT BATTERY PARK CITY ESPLANADE NEW YORK, NEW YORK SEPTEMBER, 2016



LOCATION PLAN

BID SET (NOT FOR CONSTRUCTION) SEPTEMBER 23, 2016 PREPARED BY:



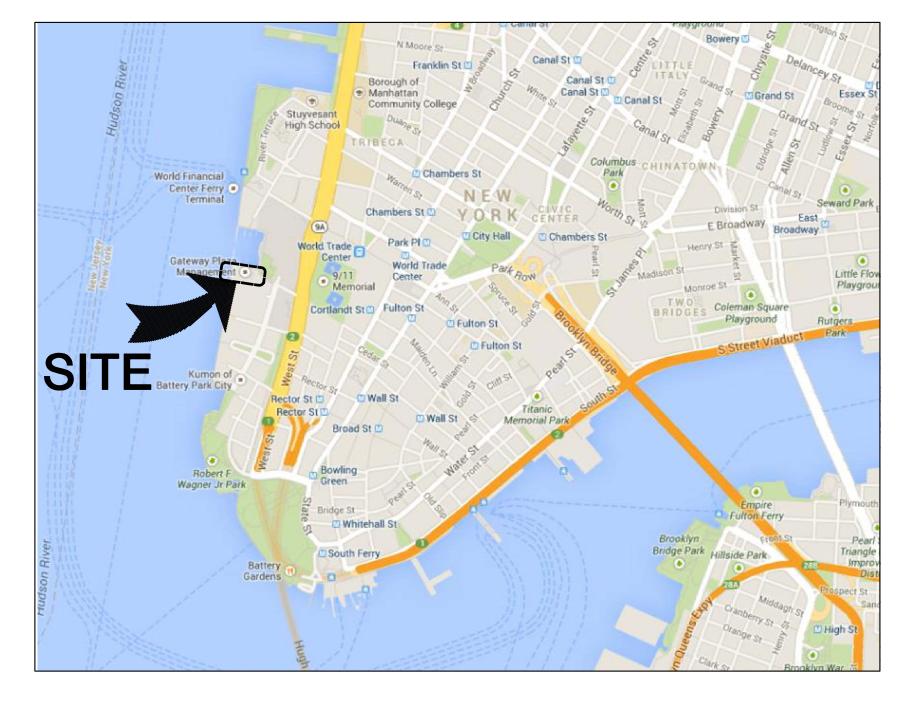
DRAWING LIST:

DRAWING NO.

SHEET TITLE

-110	COVER SHEET
-120	GENERAL NOTES
-131	FACILITY PLAN
-131A	SHEET PILE REMEDIATION PLAN
-132	REPAIR PLANS & DETAILS
-140	ESPLANADE TYPICAL SECTIONS
	& REPAIR SECTIONS





VICINITY MAP

GENERAL NOTES:

- 1. ALL WORK SHALL CONFORM WITH ALL FEDERAL, STATE, COUNTY OR LOCAL CODES HAVING JURISDICTION OVER SUCH WORK. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THAT PORTION OF THE WORK.
- 2. CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS, METHODS, AND SAFETY OF WORK.
- DIMENSIONS SHOWN ON THESE CONTRACT PLANS HAVE BEEN OBTAINED FROM LIMITED FIELD SURVEY AND MAY NOT ACCURATELY REFLECT ACTUAL FIELD CONDITIONS. ACCORDINGLY. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING FIELD MEASUREMENTS OF ALL EXISTING STRUCTURES IMPACTED BY THE NEW WORK TO ASSURE CONSISTENCY WITH THE PROPOSED CONSTRUCTION PLANS; THAT IS THE CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS, DIMENSIONS, CLEARANCES, ELEVATIONS, AND OTHER INFORMATION INDICATED IN THE DOCUMENTS PRIOR TO ORDERING ANY MATERIALS, COMMENCING ANY FABRICATIONS, OR PERFORMING ANY WORK. THE CONTRACTOR SHALL NOTIFY THE OWNERS REPRESENTATIVE OF ANY FIELD CONDITIONS WHICH MAY DIFFER FROM THAT REPRESENTED PRIOR TO COMMENCING WORK.
- 4. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL VISIT THE SITE AND SHALL NOTIFY THE OWNER'S REPRESENTATIVE OF ANY UTILITIES, STRUCTURES, OR ANY OTHER ELEMENTS WHICH MAY IMPEDE WORK. UTILITY AND/OR STRUCTURE RELOCATIONS, IF NECESSARY, SHALL BE COORDINATED THROUGH THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST.
- 5. PRIOR TO COMMENCING ANY WORK. THE CONTRACTOR SHALL SCHEDULE AND COORDINATE ALL WORK THROUGH THE OWNER'S REPRESENTATIVE AND ANY OTHER OCCUPYING TENANT WHO WILL BE AFFECTED BY REPAIR OPERATIONS. THE CONTRACTOR SHALL COORDINATE THE WORK SO AS TO MINIMIZE INTERRUPTIONS IN FACILITY OPERATIONS. (ACCESS AND EGRESS).
- 6. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE OSHA REGULATIONS AND SAFETY PROCEDURES TO ENSURE PERSONNEL HEALTH AND SAFETY. THE CONTRACTOR MUST MAINTAIN A SAFE AND CLEAN WORKING ENVIRONMENT AND SHALL ASSURE PROPER PERSONAL EQUIPMENT AT ALL TIMES. IN AREAS WHERE PEDESTRIAN AND/OR VEHICULAR TRAFFIC MAY BE AFFECTED BY THE WORK, THE CONTRACTOR SHALL CORDON OFF THE WORK AREA.
- 7. THE CONTRACTOR SHALL EXERCISE EXTREME CARE TO PREVENT DAMAGE TO EXISTING STRUCTURES BY OR AS A RESULT OF HIS OPERATIONS. ANY DAMAGE RESULTING FROM THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AS DIRECTED BY THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST.
- 8. ALL DEBRIS AS A RESULT OF, OR IN THE IMMEDIATE VICINITY OF THE CONTRACTOR AT NO ADDITIONAL COST.
- 9. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ANY CONSTRUCTION DEBRIS OR WASTE FROM FALLING INTO THE WATER. ANY DEBRIS FALLING INTO THE WATER SHALL BE RECOVERED AND PROPERLY DISPOSED OF.
- 10. CONTRACTOR'S STORAGE AREA: DUE TO THE SITE'S WATERFRONT LOCATION, ALL NECESSARY MEASURES SHALL BE TAKEN TO PREVENT BY ANY METHOD, OIL, CONSTRUCTION DEBRIS, STOCKPILED MATERIALS, AND OTHER MATERIALS ON THE SITE, FROM ENTERING THE WATERWAY. STAGING/LAYDOWN AREAS, AS APPROVED BY THE OWNER'S REPRESENTATIVE, SHALL BE RESTORED BY THE CONTRACTOR TO THE EXISTING CONDITION. IN ADDITION, THE CONTRACTOR SHALL REPLACE ALL DAMAGED MATERIALS AS A RESULT OF HIS OPERATIONS, TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- 11. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE PROPER SHOP DRAWINGS SIGNED AND SEALED FOR FALSEWORK, FORMWORK, STAGING, BRACING, SHEETING, SHORING, ETC. BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW YORK.
- 12. CONTRACTOR SHALL IMPLEMENT THOSE DIMENSIONS IDENTIFIED AS "MINIMUM" OR "MAXIMUM" AS INDICATED.
- 13. CONTRACTOR SHALL INSTALL FLOATING BOOM AND TURBIDITY CURTAINS DURING MARINE CONSTRUCTION TO CONTAIN OIL, DEBRIS AND OTHER RUNOFF.
- 14. ALL REFERENCES IN THESE NOTES TO "ENGINEER" INDICATE THE ENGINEER OF RECORD, MCLAREN ENGINEERING. ALL REFERENCES TO "OWNER" INDICATES THE HUGH L. CAREY BATTERY PARK CITY AUTHORITY.
- 15. IN CASE OF CONTRADICTION BETWEEN THE DRAWINGS, THE SPECIFICATIONS, AND THE CODES, OR IF ANY CHANGE IS REQUIRED, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY. NO CHANGE SHALL BE MADE BY CONTRACTOR WITHOUT WRITTEN APPROVAL OF THE ENGINEER. THE HIERARCHY OF GOVERNANCE IS AS FOLLOWS: BPCA CONTRACT, DRAWINGS & THEN SPECIFICATIONS. IN ALL CASES THE MORE STRINGENT REQUIREMENTS MUST BE APPLIED FOR BIDDING & CONSTRUCTION PURPOSES.

- THE WORK SHALL BE RECOVERED AND PROPERLY DISPOSED OF BY

PERMITTING/ACCESS:

- 1. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH THE TERMS AND CONDITIONS OF ALL PERMITS ISSUED BY ANY REGULATING AGENCY HAVING JURISDICTION OVER THE WORK OF THIS PROJECT INCLUDING BUT NOT LIMITED TO THE DEC, USACE, AND DSBS. THE CONTRACTOR MUST NOTIFY ALL REGULATING AGENCIES TWO WEEKS PRIOR TO COMMENCING WORK.
- NO WORK SHALL COMMENCE WITHOUT APPROVALS REQUIRED BY THE CITY OF NEW YORK, STATE OF NEW YORK, DEC, USACE, DSBS AND ALL OTHER APPLICABLE AGENCIES HAVING JURISDICTION WITHIN THE PROJECT SITE.
- 3. CONTRACTOR TO OBTAIN WORK PERMITS THROUGH NEW YORK CITY DEPARTMENT OF SMALL BUSINESS SERVICES (SBS). FEES ASSOCIATED WITH THE WORK PERMIT OR WORK PERMIT RENEWAL TO BE PAID BY CONTRACTOR.
- 4. ACTIVE INTAKE STRUCTURE AT BENTS 83-84 HAS TO BE SECURED AND SHUT DOWN FOR DIVER SAFETY. CONTRACTOR TO COORDINATE DIRECTLY WITH PANYNJ.

NEW YORK CITY FLOOD RESISTANT CONSTRUCTION:

- 1. THE PROPOSED WORK DOES NOT ENCROACH ON THE FLOODWAY, ALTER THE WATERCOURSE OR MODIFY A SAND DUNE IN A V-ZONE AND THEREFORE DOES NOT REQUIRE TECHNICAL CERTIFICATION ACCORDING TO SECTION G103 OF THE CODE.
- 2. THE PROPOSED WORK IS NOT LOCATED IN A REGULATORY FLOODWAY.
- 3. THE PROPOSED WORK DOES NOT INCLUDE ANY ENCLOSED STRUCTURES AND IS NOT SUBJECT TO THE CERTIFICATION **REQUIREMENTS OF CODE SECTION G104.5.**
- 4. FLOOD ZONE COMPLIANCE INSPECTION REQUIREMENT IS INDICATED UNDER THE INSPECTIONS SECTION OF THESE NOTES. ELEVATION AND FLOOD SHIELD INSPECTIONS ARE NOT APPLICABLE.
- 5. RETAINING WALLS AND FILL HAS BEEN DESIGNED AND SPECIFIED IN ACCORDANCE WITH SECTION G303.7 AND DOES NOT DIRECT WATER OR WAVES TOWARD ANY BUILDING.
- 6. THE PROPOSED WORK IS AN UNOCCUPIED ACCESSORY STRUCTURE, IS NOT REQUIRED FOR ANY BUILDING EGRESS AND IS NOT REQUIRED FOR SUPPORT OR FLOOD PROTECTION OF ANY BUILDING. THE REQUIREMENTS OF CODE SECTION G304 ARE NOT APPLICABLE. THE STRUCTURE HAS BEEN DESIGNED TO PREVENT FLOTATION. COLLAPSE AND LATERAL MOVEMENT RESULTING FROM HYDROSTATIC LOADS, INCLUDING THE EFFECTS OF BUOYANCY, DURING CONDITIONS OF FLOODING TO THE DESIGN FLOOD ELEVATION.
- 7. THE PROPOSED WORK HAS BEEN DESIGNED IN ACCORDANCE WITH ASCE 24-05 REQUIREMENTS FOR EROSION CONTROL STRUCTURES AND IS NOT ATTACHED TO THE FOUNDATION OR SUPERSTRUCTURE OF ANY STRUCTURE, WILL NOT FOCUS OR INCREASE THE FLOOD FORCES OR EROSION IMPACTS ON ANY ADJACENT STRUCTURE

SUBMITTALS:

THE CONTRACTOR SHALL SUPPLY ALL SUBMITTALS AS STATED IN THE PROJECT SPECIFICATIONS INCLUDING BUT NOT LIMITED TO:

- 1. SHOP DRAWINGS AND STRUCTURAL CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NEW YORK FOR THE METHOD OF SUPPORT, SPACING AND STABILIZATION OF FORMWORK FOR PILE ENCASEMENTS.
- 2. SUPPLIER'S TECHNICAL PRODUCT DATA, INCLUDING SPECIFICATIONS AND INSTALLATION INSTRUCTIONS FOR THE EPOXY GROUT TO BE PLACED, FRP FORMWORK, POINTS, STANDOFFS SEALS, JOINT EPOXY SCREWS & ALL TEMPORARY ITEMS FROM #1 ABOVE WHEN STRUCTURAL IN NATURE.
- 3. REFER TO THE SPECIFICATIONS FOR ADDITIONAL SUBMITTALS REQUIREMENTS AND PROCEDURES.

SHEET PILE ENCASEMENT

- 1. CLEAN STEEL SURFACE FREE OF ALL LOOSE DEBRIS, FOREIGN MATTER AND BUILD UP OF RUST BY PRESSURE WASHING AT 3000 PSI.
- 2. SET REINFORCEMENT CAGE. INSTALL J-BOLTS THROUGH SHEET PILES AT INTERLOCKS TO TIE REINFORCEMENT CAGE IN PLACE.
- 3. SECURE FORM WORK IN PLACE WITH BOTTOM SEAL. USE J-BOLTS TO SECURE FORMS. THE CONTRACTOR IS RESPONSIBLE FOR THE STABILITY OF THE FORM WORK DURING THE CONCRETE PLACEMENT.
- 4. FORMS SHALL BE RIGID, AND SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT THE FLUID PRESSURE OF THE CONCRETE MIX AND OF SUFFICIENT IMPERMEABILITY TO PREVENT SEAWATER FROM CONTAMINATING THE CONCRETE MIX DURING INSTALLATION.

BID SET (NOT FOR CONSTRUCTION) SEPTEMBER 23, 2016

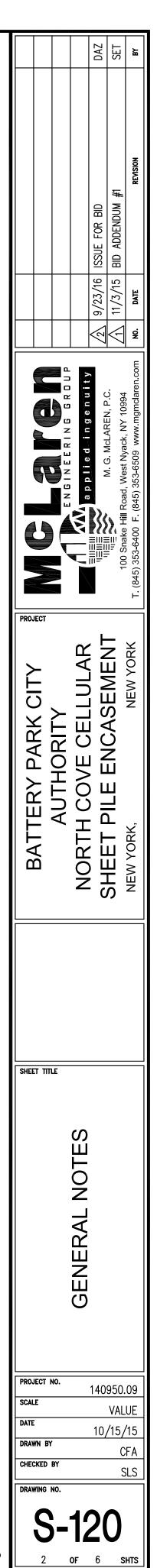
- 5. ALL FORMS SHALL REMAIN IN PLACE, BRACING AND SHORING & ARE TO BE REMOVED.
- 6. CONTRACTOR SHALL SUBMIT CALCULATIONS TO JUSTIFY AND CONFIRM METHOD OF CONCRETE MIX PLACEMENT. CALCULATIONS SHALL CONSIDER BENDING OF FORMS, HEIGHT OF LIFT TO BE PLACED, PUMP PRESSURES AND STRONGBACKS.
- 7. PROCEDURE:
- A. THE CONCRETE MIX SHALL BE INJECTED, AT EQUAL PRESSURES, INTO ONE OR MORE INJECTION PORTS INSTALLED AT THE BOTTOM OF THE FORMWORK. THE PORT(S) SHALL BE PLACED A MINIMUM OF 12" ABOVE THE BOTTOM.
- B. THE CONTRACTOR, AT HIS OPTION, MAY INSTALL MULTIPLE LEVELS OF CONCRETE MIX PORTS TO MINIMIZE THE PUMPING PRESSURES. IF THIS OPTION IS SELECTED, INJECT CONCRETE MIX FIRST AT THE LOWEST CONCRETE MIX PORT. AS THE CONCRETE MIX APPEARS AT THE NEXT HIGHER PORT LEVEL, AND IT HAS BEEN DETERMINED THAT THE SPACE BETWEEN THE CAISSON AND FORM WORK IS FILLED TO THAT LEVEL, CAP THE LOWER PORT AND CONTINUE INJECTING CONCRETE MIX THROUGH THE NEXT HIGHER OPEN PORT. REPEAT THIS PROCESS FROM PORT LEVEL TO PORT LEVEL UNTIL THE CONCRETE MIX REACHES THE TOP OF THE CAISSON.
- C. THE INJECTION PROCESS SHALL BE CONTINUOUS, EXCEPT WHEN BRIEFLY INTERRUPTED TO RELOCATE THE INJECTOR TO THE NEXT HIGHER PORT EXCEPT AS NOTED IN (D) BELOW. DURING CONCRETE MIX PLACEMENT, THE INJECTION FLOW RATE SHALL BE CONTROLLED TO PREVENT AIR AND/OR WATER ENTRAPMENT WITHIN THE FORM WORK CAVITY. THE NOZZLE MUST BE CONTINUOUSLY SUBMERGED IN THE CONCRETE MIX AS IT IS PUMPED, AND A TREMIE MUST BE MAINTAINED, I.E. CONCRETE MIX SHALL NOT BE ALLOWED TO DROP THROUGH THE WATER COLUMN AT ANY TIME.
- D. REMOVE ANY BRACING MATERIALS AFTER COMPLETION OF CONCRETE MIX INJECTION AND CLEAN FORM WORK EXTERIOR OF ANY EXCESS CONCRETE MIX OR OTHER EXTRANEOUS MATERIAL.
- E. MIXING AND PUMPING EQUIPMENT APPROVED BY THE ENGINEER SHALL BE USED IN PREPARATION AND HANDLING OF THE CONCRETE MIX. ALL OIL AND OTHER RUST INHIBITORS SHALL BE REMOVED FROM THE MIXING DRUMS, STIRRING MECHANISMS AND OTHER PORTIONS OF THE EQUIPMENT IN CONTACT WITH THE CONCRETE MIX BEFORE THE MIXERS ARE USED.
- F. ALL MATERIALS SHALL BE ACCURATELY BATCHED PER THE MANUFACTURERS INSTRUCTIONS. FOR CHANGES TO THE PROCEDURE FOR PUMPABILITY, THE MANUFACTURER MUST PROVIDE WRITTEN CONFIRMATION THAT THE PROCEDURES ARE ACCEPTABLE AND THAT THE QUALITY OF THE CONCRETE IS NOT DIMINISHED.
- G. ALTERNATE PUMPING METHODS SHALL BE SUBMITTED TO THE ENGINEER AND SHOULD HAVE THE MANUFACTURERS CONCURRENCE IN WRITING.
- 8. COMPLETION WINDOWS. ALL STEEL SHEETING SHOULD BE FORMED WITHIN 24 HRS OF CLEANING. FINAL CONCRETE MIX PUMPING AND HAND PACK SHALL NOT EXCEED 72 HOURS AFTER THE CLEANING.

MBD (FT)	TIDAL DATA FOR THE BATTERY	NAVD 88 (FT)	
+9.62	HIGHEST OBSERVED WATER LEVEL (10/30/2012)	+11.27	
+0.49	MEAN HIGHER HIGH WATER (MHHW)	+2.14	
+0.15	MEAN HIGH WATER (MHW)	+1.8	
0.00	BOROUGH PRESIDENT OF MANHATTAN (MBD)	+1.65	
-2.13	MEAN TIDE LEVEL (MTL)	-0.48	
-2.75	NATIONAL GEODETIC VERTICAL DATUM – 1929 (NGVD 29)	-1.1	
-4.41	MEAN LOW WATER (MLW)	-2.76	
-4.63	MEAN LOWER LOW WATER (MLLW)	-2.98	
-8.70	LOWEST OBSERVED WATER LEVEL (02/02/1976)	-7.05	

NOTE: ALL ELEVATIONS IN FEET.

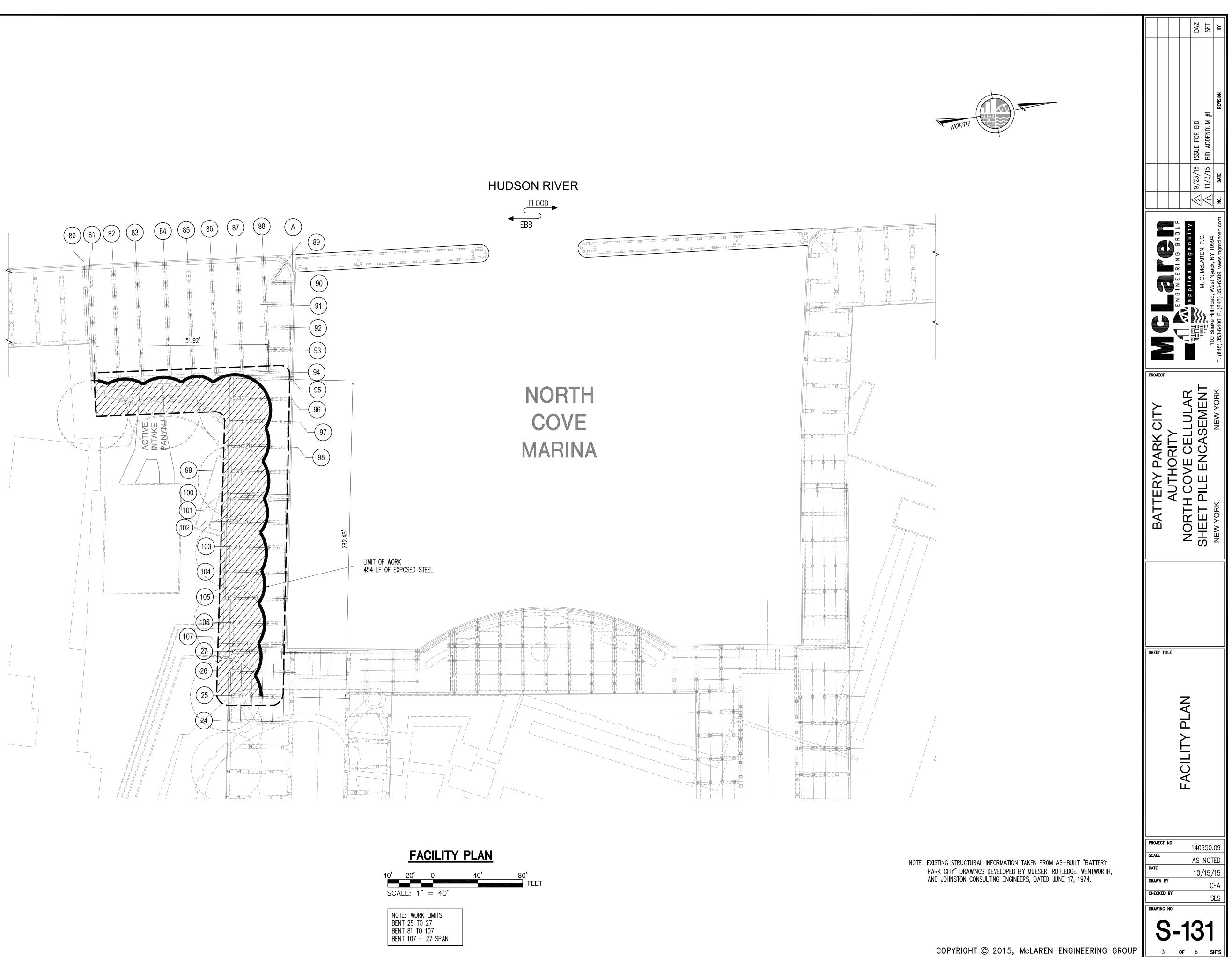
ELEVATIONS SHOWN HEREON REFER TO THE NAVD 88 VERTICAL DATUM WHICH IS 1.1 FT ABOVE NGVD 1929 (UNITED STATES COASTAL AND GEODETIC SURVEY, MEAN SEA LEVEL, SANDY HOOK NEW JERSEY).

PILE BENT	MUDLINE DESCRIPTION	MUDLINE PROBE DEPTH (in.)	PILECAP TO MUDLINE DISTANCE (in.)	CLEAR SPACE BETWEEN NEAREST PILE AND CELL WALL (in.)	AVERAGE STEEL THICKNESS IN SHEET PILES (in.)	NO. OF SHEETS BETWEEN	HOLES IN SHEET PILES
81	RIP RAP	0''	40''		0.255	N/A	
81 to 82	VARIES	UP TO 48''	N/A	N/A	0.209	18	12"H x 7" M 14"H x 8"M
82	RIP RAP	0''	97''	12"	0.298	N/A	0
82 to 83	VARIES	UP TO 48''	N/A	N/A		20	
83	VARIES	UP TO 48''	138''	10''	0.360	N/A	INTAKE STRUCTURE
83 to 84	SILT	>48''	N/A	N/A		17	INTAKE STRUCTURE
84	SILT	12"	156''	31"	0.345	N/A	INTAKE STRUCTURE
84 TO 85	VARIES	UP TO 36"	N/A	N/A		18	
85	SILT	>48''	126''	8"	0.356	N/A	
85 TO 86	VARIES	UP TO 48"	N/A	N/A		18	
86	RIP RAP	0''	48''	6"	0.372	N/A	
86 TO 87	RIP RAP	0''	N/A	N/A		20	1"H x 1" W 4"F x 1"W
87	RIP RAP	0''	36''	24"	0.221	N/A	24''H x 8''W
87 TO 96	RIP RAP	0''	N/A	N/A		25	
96	RIP RAP	0''	80''	46''	0.350	N/A	
96 TO 97	RIP RAP	0''	N/A	N/A		17	
97	RIP RAP	0''	68''	66''	0.345	N/A	
97 T O 98	RIP RAP	0''	N/A	N/A		17	
98	RIP RAP	0''	70''	72''	0.354	N/A	
98 TO 99	RIP RAP	0''	N/A	N/A		20	
99	RIP RAP	0''	80''	60''	0.343	N/A	
99 TO 100/101	VARIES	UP TO 48''	N/A	N/A		28	
100/101	RIP RAP	0''	92''	60''	0.373	N/A	
101 TO 102	RIP RAP	0''	N/A	N/A		18	
102	RIP RAP	0''	60''	54''	0.393	N/A	
102 TO 103		0''	N/A	N/A		20	
103		0''	80''	48''	0.252	N/A	
103 TO 104		0''	N/A	N/A		18	
104	RIP RAP	0''	68''	60''	0.360	N/A	
104 TO 105		0''	N/A	N/A		18	
105	RIP RAP	0''	78''	60''	0.343	N/A	
105 TO 106		0''	N/A	N/A		16	
106		0''	73''	28''	0.350	N/A	
106 TO 107/27	RIP RAP	0''	N/A	N/A		15	
27	RIP RAP	0''	48''	48''	0.392	N/A	
27 TO 26	RIP RAP	0''	N/A	N/A		12	
26	RIP RAP	0''	32"	57"	0.367	N/A	
26 TO 25	RIP RAP	0''	N/A	N/A		16	
25	RIP RAP	0''	36"	36''	0.376	N/A	
25 TO 24	RIP RAP	0''	N/A	N/A		16	-
24	RIP RAP	0''	43"	8''	0.357	N/A	

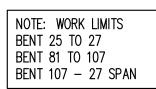


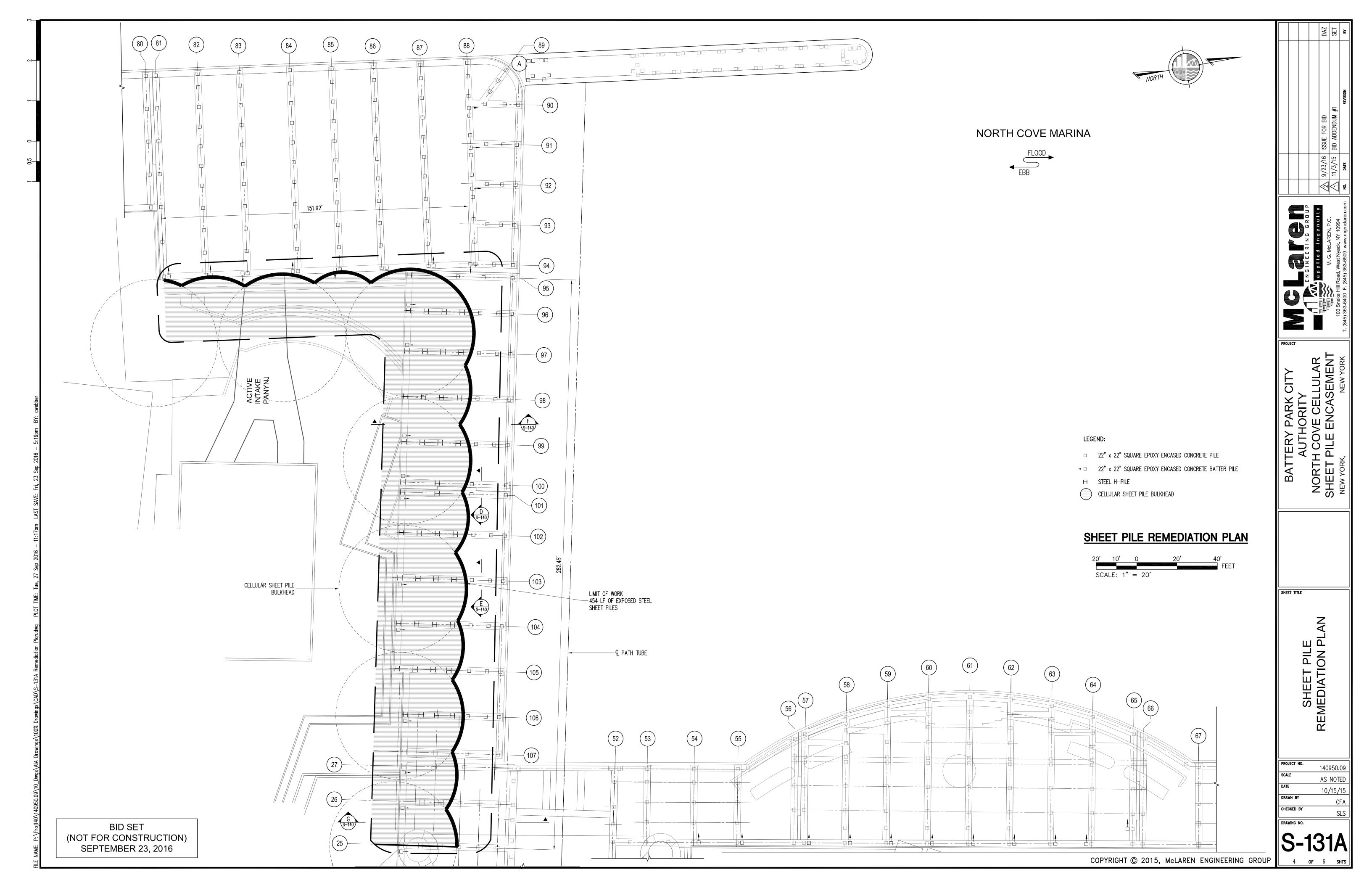
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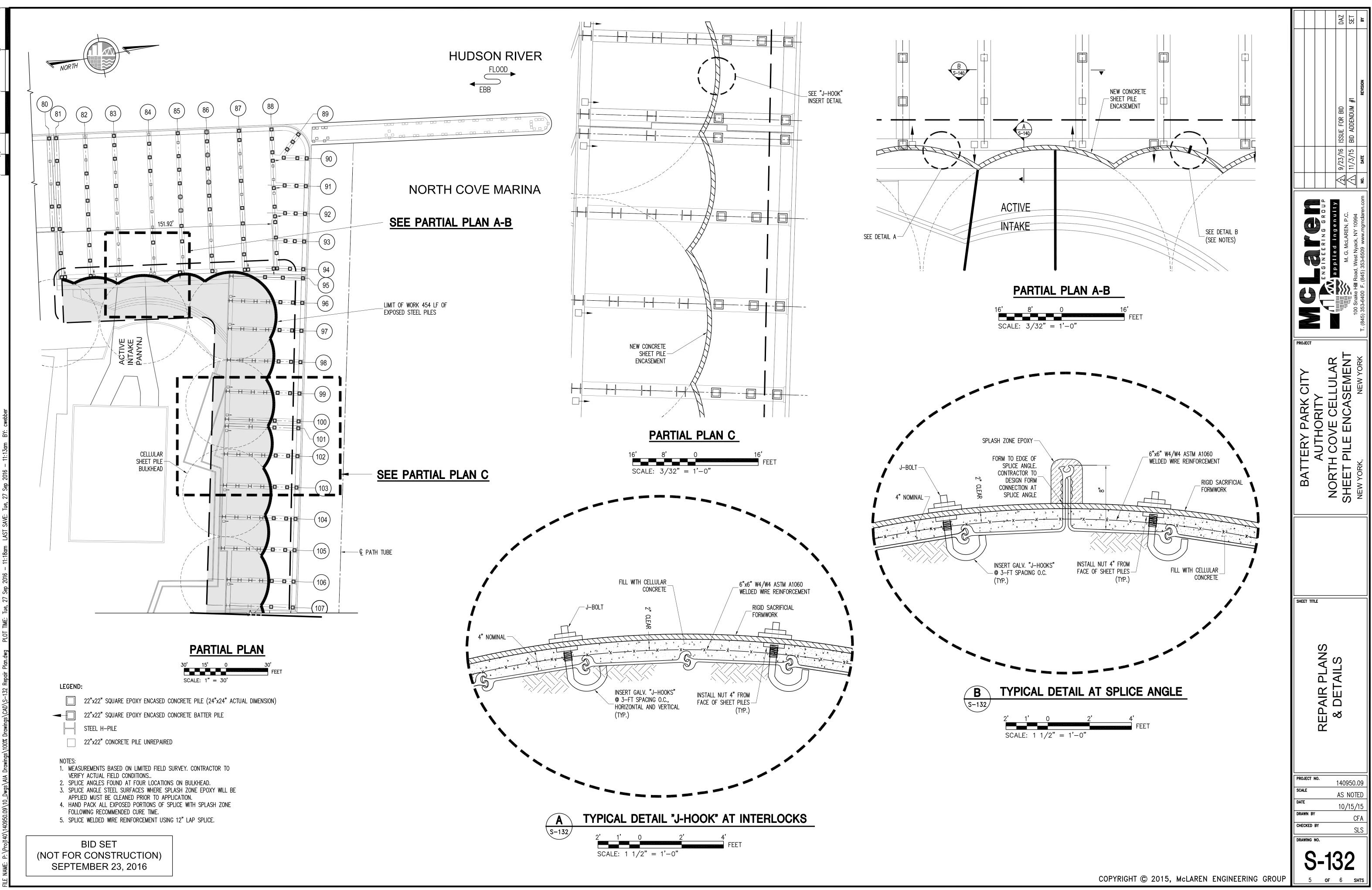
BID SET (NOT FOR CONSTRUCTION) SEPTEMBER 23, 2016

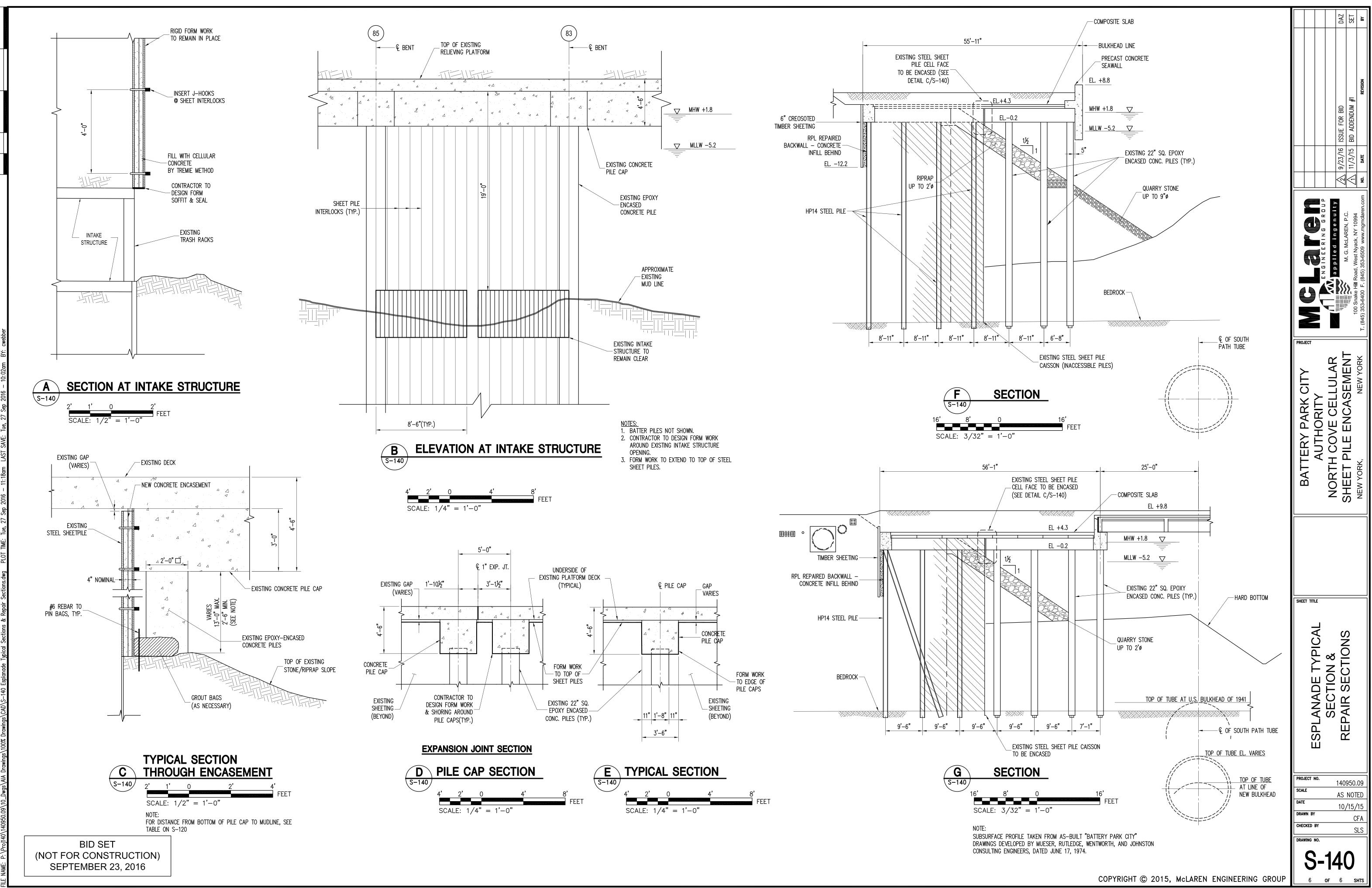












BATTERY PARK CITY AUTHORITY PHASE V PILE REMEDIATION ESPLANADE PLAZA AND SOUTH COVE BATTERY PARK CITY ESPLANADE NEW YORK, NEW YORK JUNE 2016

PREPARED BY:



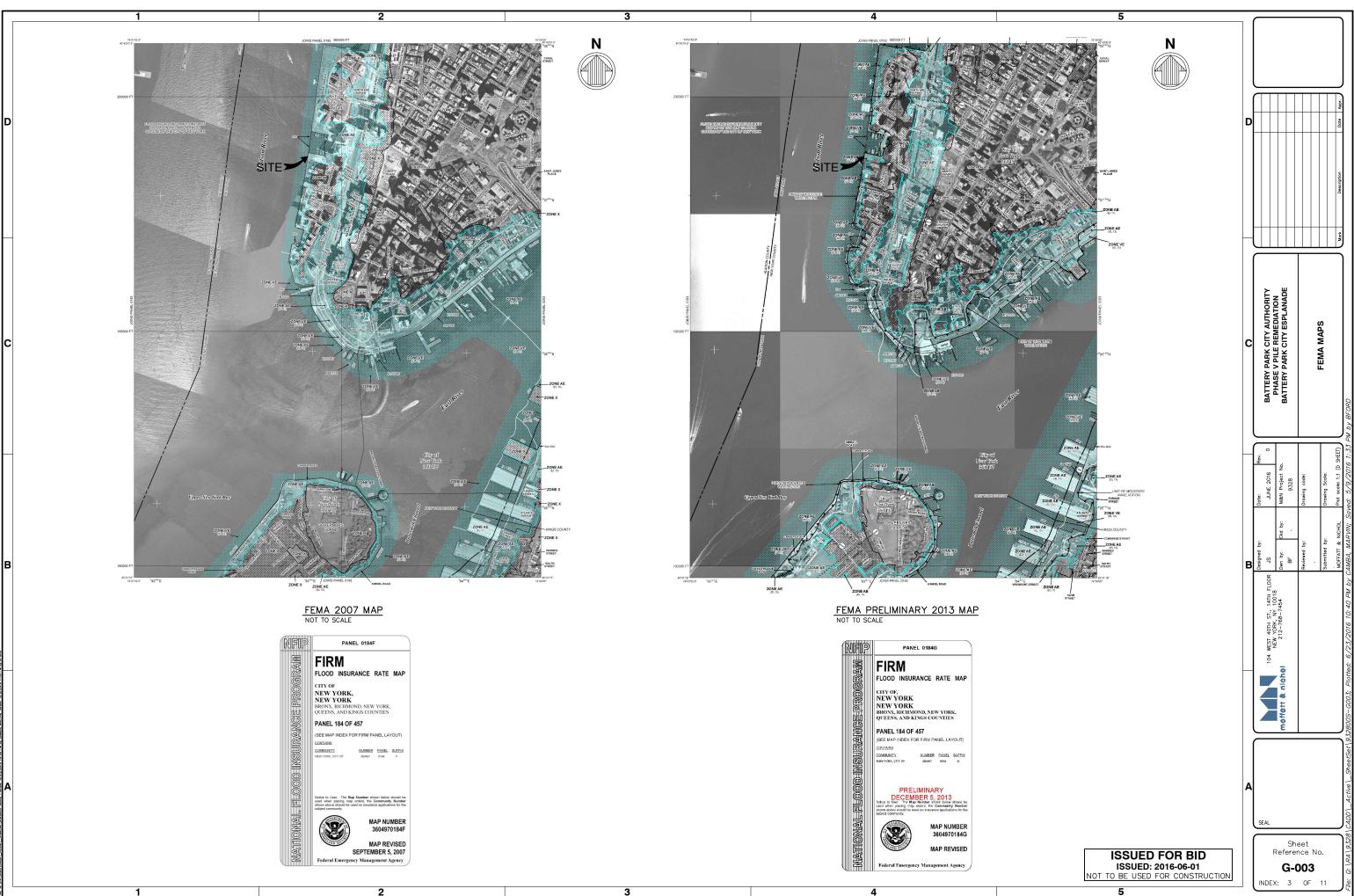
INDEX TO DRAWINGS				
INDEX NO	. SHEET NO.	SHEET TITLE		
1	G-001	TITLE SHEET		
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3	G-003	FEMA MAPS		
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9	S-601	PILE REPAIR SCHEDULE - SHEET 1 OF 2		
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DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING



DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CONTRACT DRAWINGS AND SPECIFICATIONS. IN CASE OF DISCREPANCIES, THE CONTRACT DRAWINGS SHALL GOVERN.
- 2 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PERFORMANCE OF ALL WORK ON THE CONTRACT FULL COMPLIANCE WITH CODES, RULES AND REGULATIONS GOVERNING SAID WORK.
- THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL MEANS AND METHODS OF THE WORK AND FOR THE SAFETY OF THE SITE.
- 4. CONTRACTOR SHALL VERIFY ALL INDICATED CONDITIONS AND DIMENSIONS IN THE FIELD BEFORE COMMENCING ANY FABRICATION, ORDERING OF MATERIAL, OR PERFORMING ANY WORK. CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE, IN WRITING, OF ANY DISCREPANCIES IN CONDITIONS AND/OR DIMENSIONS FOUND IN THE FIELD AND IN THE CONTRACT DOCUMENTS. CONTRACTOR SHALL ALSO NOTIFY THE OWNERS REPRESENTATIVE OF ANY CONDITIONS THAT MAY HAMPER THE PERFORMANCE OF THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- 5. THROUGHOUT THE CONTRACT DRAWINGS, SPECIFICATIONS AND THESE GENERAL NOTES THE TERM "OWNER" IS USED. THIS TERM REFERENCES THE BATTERY PARK CITY AUTHORITY (BPCA).
- UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REMOVE ALL DEBRIS, EQUIPMENT AND UNUSED MATERIAL FROM THE SITE.
- ALL DEMOLISHED MATERIAL, EXCEPT ITEMS DIRECTED BY THE OWNER TO BE SALVAGED, SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF THE CONSTRUCTION SITE AND THE AREAS OF WORK WHILE PERFORMING THE WORK UNDER THIS CONTRACT. CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE CONSTRUCTION SITE ON A DAILY BASIS. NO BURNING OF DEBRIS SHALL BE PERMITTED
- DURING ALL PHASES OF THE WORK, ALL PRECAUTIONS SHALL BE TAKEN AS NECESSARY OR MAY BE REQUIRED TO PERMANENTLY PREVENT CONTAMINATED WATER, GASOLINE, CONSTRUCTION DEBRIS AND ANY OTHER CONTAMINANT FROM ENTERING THE WATERWAY. THIS INCLUDES MATERIAL BEING PUMPED INTO PILE FORMS.
- 10. CONTRACTOR SHALL INSTALL A FLOATING BOOM AND TURBIDITY CURTAIN DURING ALL PHASES OF MARINE CONSTRUCTION
- 11. DISPOSAL OF HAZARDOUS OR CONTAMINATED MATERIALS, GROUNDWATER OR SOIL ENCOUNTERED SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS.
- 12. CONTRACTOR SHALL EXERCISE CARE TO PREVENT DAMAGE TO ANY MATERIALS OR STRUCTURES THAT ARE TO REMAIN IN PLACE. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO THESE MATERIALS AT NO ADDITIONAL COST TO THE OWNER. THE RESTORATION WORK SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE.
- 13. ALL AREAS OUTSIDE OF THE 'LIMITS OF WORK' SHOWN ON THE CONTRACT DRAWINGS, WHICH ARE DAMAGED BY THE WORK, SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL CONTINUE DUTING STALL BE RESIDRED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER. THE RESTORATION WORK SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE
- 14. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS
- 15. THE CONTRACTOR SHALL SCHEDULE AND COORDINATE ALL WORK AND DELIVERIES OF CONSTRUCTION MATERIALS ON SITE WITH THE CONSTRUCTION MANAGER ALL EGRESS AND EXITS TO AND FROM THE PIER AND CONSTRUCTION SITE SHALL BE KEPT READILY ACCESSIBLE AND CLEAR AT ALL TIMES. CONSTRUCTION EQUIPMENT WILL NOT BE PERMITTED TO OBSTRUCT ROADWAYS AND OR PASSAGEWAYS.
- 16. THE CONTRACTOR SHALL PREPARE, LAYOUT AND INSTALL WORK IN SUCH A MANNER AS NOT TO DELAY OR INTERFERE WITH THE CARRYING FORWARD OF THE WORK UNDER THIS CONTRACT AND/OR ANY OTHER WORK BEING PERFORMED ON THE SITE CONTRACTS SHALL SUBMIT A LOGISTICS PLAN THAT DEMONSTRATES HOW THE PROJECT WILL BE STAGED AND WORK PERFORMED. THIS PLAN SHALL INCLUDE POSITIONING OF EQUIPMENT DURING ALL PHASES OF WORK. THIS PLAN SHALL BE SUBMITTED BY THE CONTRACTOR FOR REVIEW BY THE OWNER'S REPRESENTATIVE. NO WORK ON THIS SITE SHALL BE PERMITTING TO COMMENCE PRIOR TO THE REVIEW OF THIS DOCUMENT.
- 17. CONTRACTOR SHALL SEEK APPROVAL OF OWNER'S REPRESENTATIVE PRIOR TO MOVING AND/OR STORING ANY CONSTRUCTION MATERIALS ON THE SITE. IN ADDITION, THE CONTRACTOR SHALL SUBMIT TO THE OWNER'S REPRESENTATIVE FOR REVIEW THE GROSS VEHICLE WEIGHT AND AXLE ALIGNMENT OF ANY HEAVY MACHINERY THAT WILL BE DRIVEN ON THE SITE. NO HEAVY CONSTRUCTION MACHINERY WILL BE PERMITTED ON PIER UNTIL THIS REVIEW HAS BEEN COMPLETED.
- 18. THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR HIS USE OF THE PHASE 5 SITE.
- 19. CONTRACTOR SHALL ALLOW AND MAKE ANY NECESSARY ACCOMMODATIONS FOR THE INSPECTION OF WORK BY OWNER'S REPRESENTATIVE AT ANY TIME DURING THE INSTALLATION OF WORK GOVERNED BY THE CONTRACT DOCUMENTS.
- 20. UNLESS NOTED OTHERWISE ON THE CONTRACT DRAWINGS OR IN THE CONTRACT OR SPECIFICATIONS, ALL LABOR, EQUIPMENT, MATERIALS ETC. SHALL BE INCLUDED IN THE CONTRACTOR'S LUMP SUM PRICE TO COMPLETE THE WORK. ADDITIONAL UNIT PRICES MAY ALSO BE REQUESTED IN THE BID DOCUMENTS.
- 21. THE LOCATIONS OF EXISTING CONCRETE PILES AND OTHER STRUCTURAL ELEMENTS SHOWN ON THE CONTRACT DRAWINGS ARE BASED ON AVAILABLE INFORMATION AND ARE SCHEMATIC CONTRACTORS BID SHOULD TAKE THIS INTO CONSIDERATION AND SHOULD BE BASED ON FIELD VERIFICATION OF EXISTING CONDITIONS.
- 22. CONCRETE PILES MAY NOT BE PERFECTLY PLUMB IN THEIR EXISTING CONDITION. CONTRACTOR SHALL TAKE THIS CONDITION INTO ACCOUNT IN THE BASE BID FOR THIS WORK.

PERMITTING

- ALL WORK PERFORMED BY THE CONTRACTOR SHALL BE IN COMPLIANCE WITH PERMITS AND PERMIT MODIFICATIONS ISSUED BY ANY REGULATING AGENCY HAVING JURISDICTION OVER THE WORK INCLUDING BUT NOT LIMITED TO UNITED STATES ARMY CORPS OF ENGINEERS (USACOF). NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYDEC), AND THE NEW YORK DEPARTMENT OF SMALL BUSINESS SERVICES (NYDSBS).
- 2. THE CONTRACTOR SHALL PERFORM NO WORK ON THE SITE WITHOUT WRITTEN APPROVALS FORM THE USACOE, NYDEC AND THE NY DSBS AND ALL OTHER APPLICABLE AGENCIES HAVING JURISDICTION OVER THE SITE.
- 3. CONTRACTOR IS REQUIRED TO OBTAIN THE REQUIRED WORK PERMITS VIA THE NYDSBS. FEES ASSOCIATED WITH THESE PERMITS ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 4. THE PROPOSED REPAIR IS NOT OF A SUBSTANTIALLY DAMAGED EXISTING STRUCTURE NOR IS THE WORK A SUBSTANTIAL IMPROVEMENT OF AN EXISTING STRUCTURE AND IS THEREFORE NOT SUBJECT TO THE REQUIREMENTS OF TITLE 28 APPENDIX G OR ASCE 24-05.

EPOXY MORTAR AND CEMENTITIOUS GROUT ENCASEMENTS

- CONTRACTOR SHALL SUBMIT ALL PROPOSED METHODS AND MATERIALS FOR THE ENCASEMENTS FOR APPROVAL PRIOR TO STARTING THE WORK.
- 2. CONTRACTOR SHALL REMOVE ONE OF THE TWO INSTALLED CEMENTITIOUS GROUT ENCASEMENT FORMS AS DIRECTED BY OWNER'S REPRESENTATIVE. IF DEFECTS ARE NOTED ON THE ENCASEMENT WITH STRIPPED FORM, THE SECOND FORM SHALL BE STRIPPED. IF DEFECTS ARE NOTED ON THIS SECOND SINGLED FORM, THE SECOND STRIPPED, A CORING AND TESTING PROGRAM WILL BE REQUIRE REMOVAL AND DEFINITION OF DEFECTS, QUANTITY OF ADDITIONAL FORMS THAT MAY REQUIRE REMOVAL AND SPECIFICS ON CORING AND TESTING PROGRAM SEE PROJECT SPECIFICATIONS SECTION 03364. ALL OF THIS WORK IF NECESSARY SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
- 3. CONTRACTOR SHALL CLEAN AND PREPARE ALL SURFACES TO BE ENCASED IN CONCRETE IN ACCORDANCE WITH THE SPECIFICATIONS AND AS APPROVED BY THE OWNER'S REPRESENTATIVE.
- 4. THE EPOXY MORTAR OR CEMENTITIOUS GROUT FOR THE ENCASEMENTS SHALL BE PLACED INSIDE THE FORMWORK WITHIN 72 HOURS OF THE CLEANING OF THE PILE, UNLESS OTHERWISE APPROVED BY THE OWNER'S REPRESENTATIVE. JUST PRIOR TO PLACEMENT OF THE CONCRETE, THE EXISTING PILE AND ENCASEMENT SHALL UNDERGO A FINAL CLEANING TO REMOVE ANY MARINE GROWTH OR DEBRIS THAT MAY HAVE ENTERED THE FORMWORK AFTER THE INITIAL CLEANING AND SHALL BE THOROUGHLY RINSED WITH FRESH WATER.
- 5. NO CONSTRUCTION OR EXPANSION JOINTS SHALL BE PERMITTED OTHER THAN BOTTOM PLUGS DESCRIBED IN THE PROJECT SCHEDULE SECTION OF THIS SHEET. EACH ENCASEMENT SHALL BE PLACED IN A CONTINUOUS MANNER FROM START TO FINISH. HORIZONTAL CONSTRUCTION JOINTS ARE PROHIBITED.
- 6. INSTALLED WORK FOUND TO HAVE VOIDS, NON-EVENLY DISTRIBUTED MATERIAL WILL BE REJECTED. REJECTED WORK SHALL BE REMOVED BY THE CONTRACTOR AND REPLACED WITH THE REPAIR SHOWN ON THE REPAIR SCHEDULE AS DIRECTED BY THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST TO THE OWNER.

MATERIALS

2

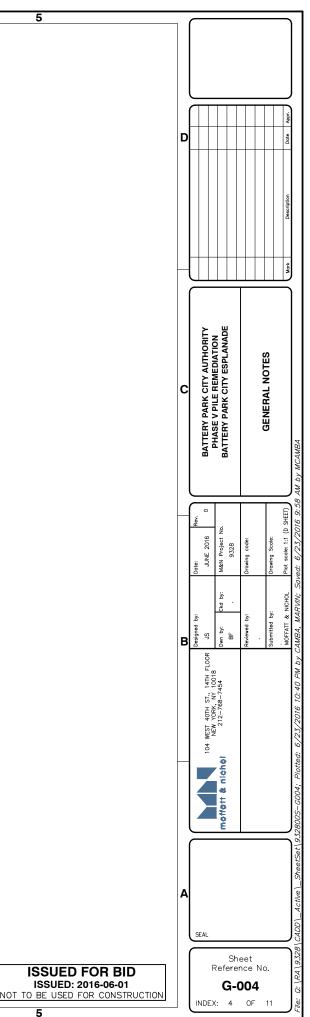
- 1. EPOXY MORTAR/CEMENTITIOUS GROUT
 - A. EPOXY MORTAR AND CEMENTITIOUS GROUT SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (F'C) OF 6000 PSI AND 5000 PSI RESPECTIVELY.
 - B. EPOXY MORTAR, CEMENTITIOUS GROUT AND FORWORK SHALL BE SUITABLE FOR PLACEMENT IN THE MARINE ENVIRONMENT (FULL IMMERSION IN SALT WATER) VIA PUMPING, AND SHALL BE MANUFACTURED BY ONE OF THE FOLLOWING COMPANIES OR AN APPROVED SUBSTITUTION:
 - a. BASF BUILDING SYSTEMS OF SHAKOPEE, MN
 - b. FIVE STAR PRODUCTS OF SHELTON, CT C SIKA CORPORATION OF LYNDHURST N.I.
 - SIMPSON STRONG TIE OF PLEASANTON, CA
 - e. DENSO NORTH AMERICA OF HOUSTON. TX
- 2. CEMENTITIOUS HAND PACK SHALL BE SPEEDCRETE BLUE LINE MANUFACTURED BY EUCLID CHEMICAL OF CLEVELAND, OH OR APPROVED EQUAL
- 3. FORMWORK SHALL BE A MINIMUM OF 1/8TH INCH THICK TRANSLUCENT RIGID FIBERGLASS REINFORCED PLASTIC (FRP) FORMS SHALL HAVE SUFFICIENT STRENGTH TO WITHSTAND THE PRESSURE RESULTING FROM ALL ENVRONMENTAL FORCES PRIOR TO THE PLACEMENT OF CONCRETE AS WELL AS FORCES EXERTED DURING THE PLACEMENT OF CONCRETE AND SHALL HAVE SUFFICIENT RIGIDITY TO MAINTAIN SPECIFIED TOLERANCES.

PROJECT DATUM

- 1. VERTICAL DATUM FOR THIS PROJECT IS NAVD88. ALL ELEVATIONS SHOWN ON DRAWINGS ARE IN THIS DATUM SYSTEM.
- 2. MBD REFERENCES THE MANHATTAN BOROUGH DATUM.

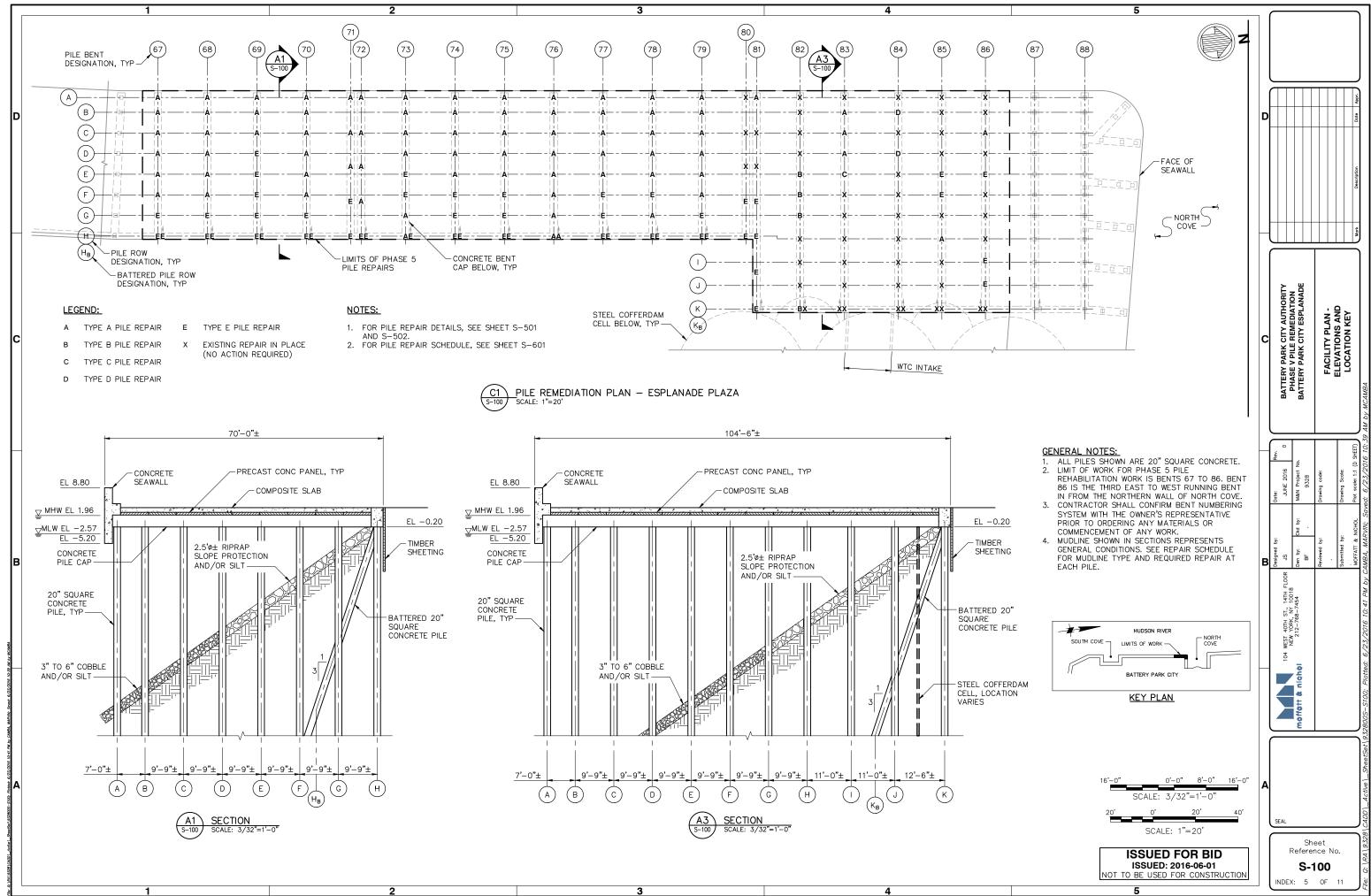
DATUMS (FT)	MLLW	NAVD88	MBD
HIGHEST OBSERVED WATER LEVEL (10/30/2012)	14.04	11.26	9.61
MEAN HIGHER HIGH WATER (MHHW)	5.05	2.28	0.63
MEAN HIGH WATER (MHW)	4.73	1.96	0.31
BOROUGH PRESIDENT OF MANHATTAN (MBD)	4.43	1.65	0.00
NAVD88	2.77	0.00	-1.65
MEAN SEA LEVEL (MSL)	2.57	-0.21	-1.86
MEAN TIDE LEVEL (MTL)	2.47	-0.31	-1.96
MEAN LOW WATER (MLW)	0.21	-2.57	-4.22
MEAN LOWER LOW WATER (MLLW)	0.00	-2.77	-4.43
LOWEST OBSERVED WATER LEVEL (2/2/1976)	-4.29	-7.06	-8.71

3. NOAA STATION ID 8518750 (THE BATTERY) WAS UTILIZED IN DATUM CONVERSION CALCULATIONS

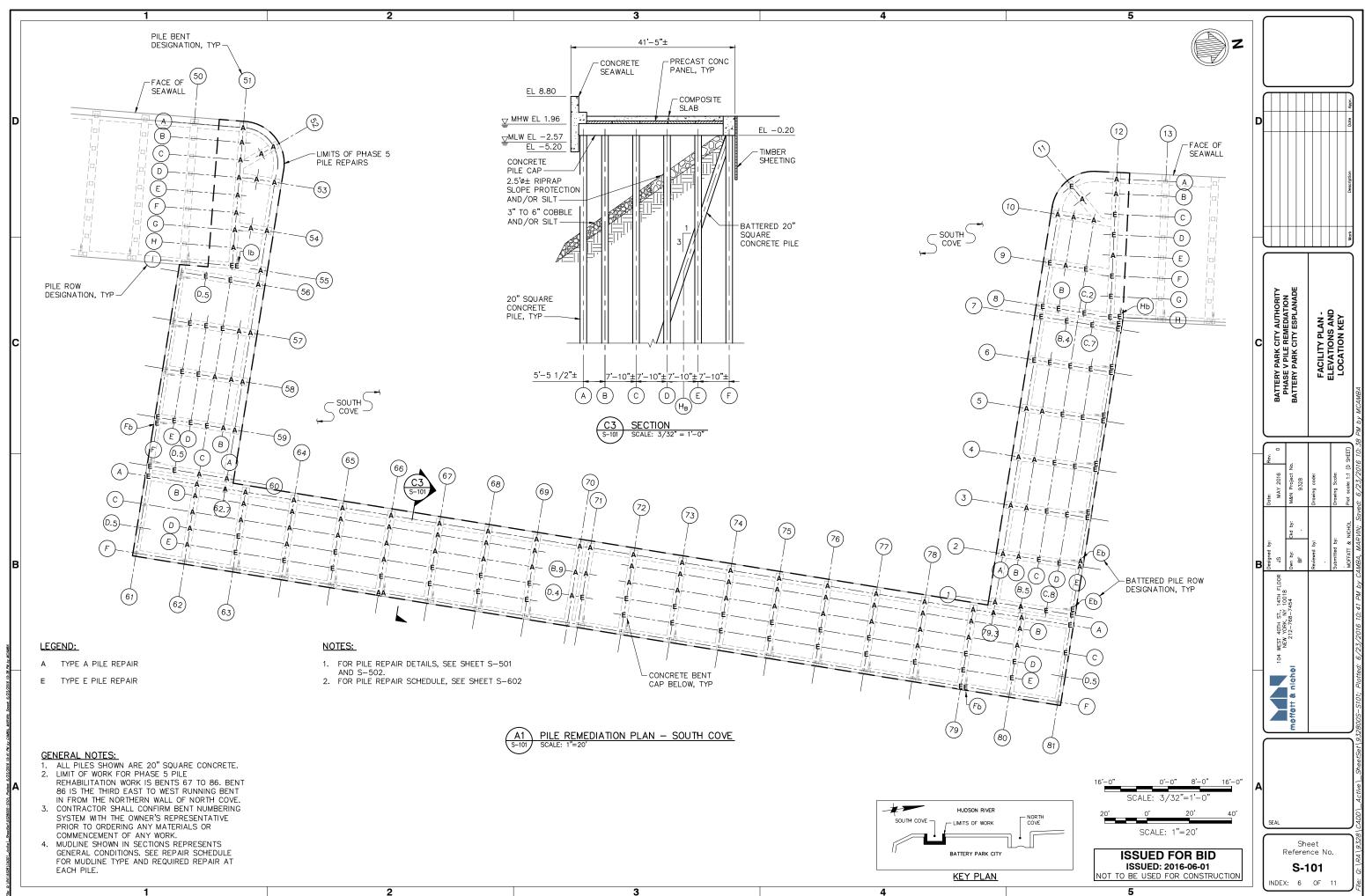


DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

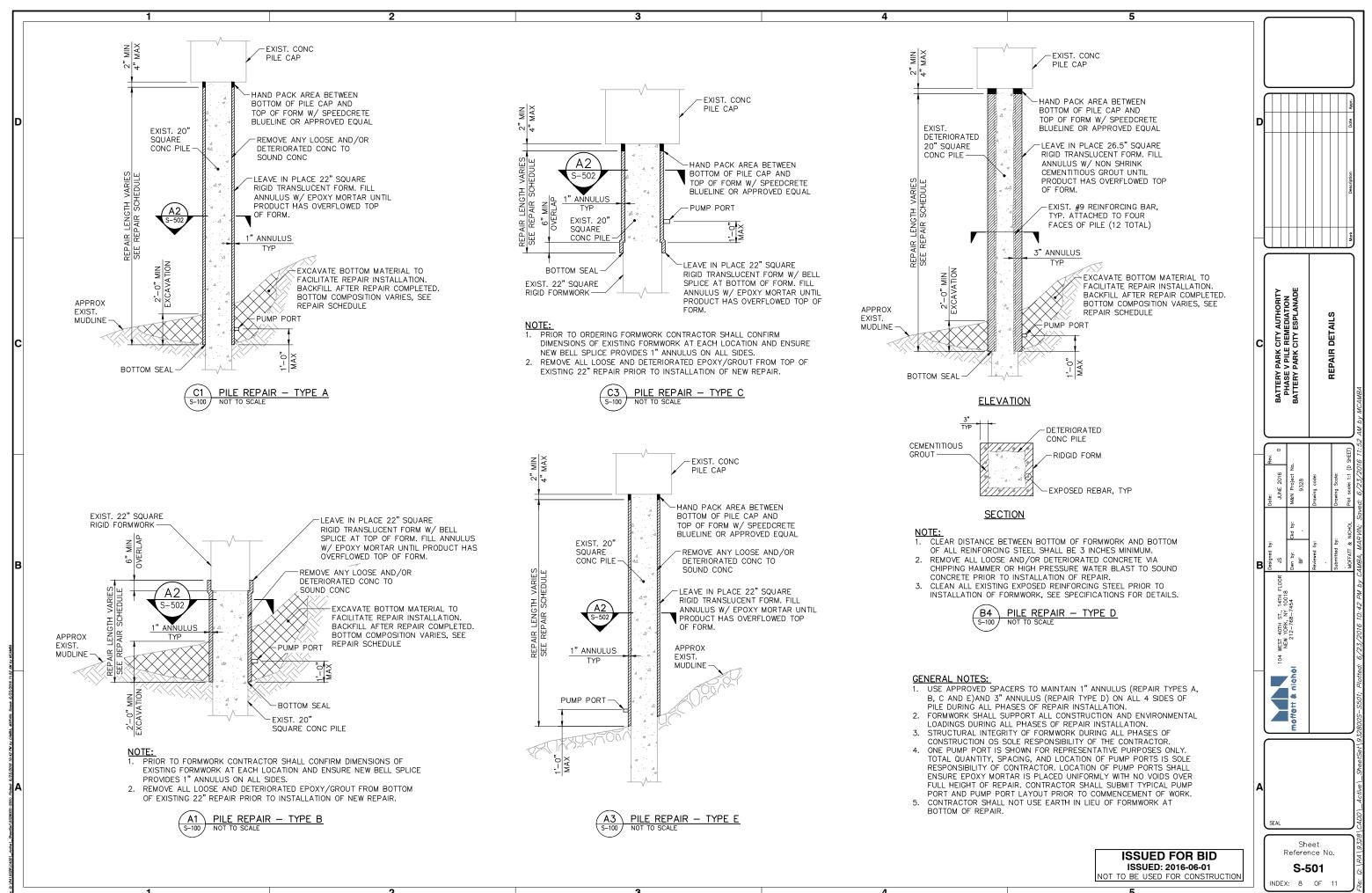
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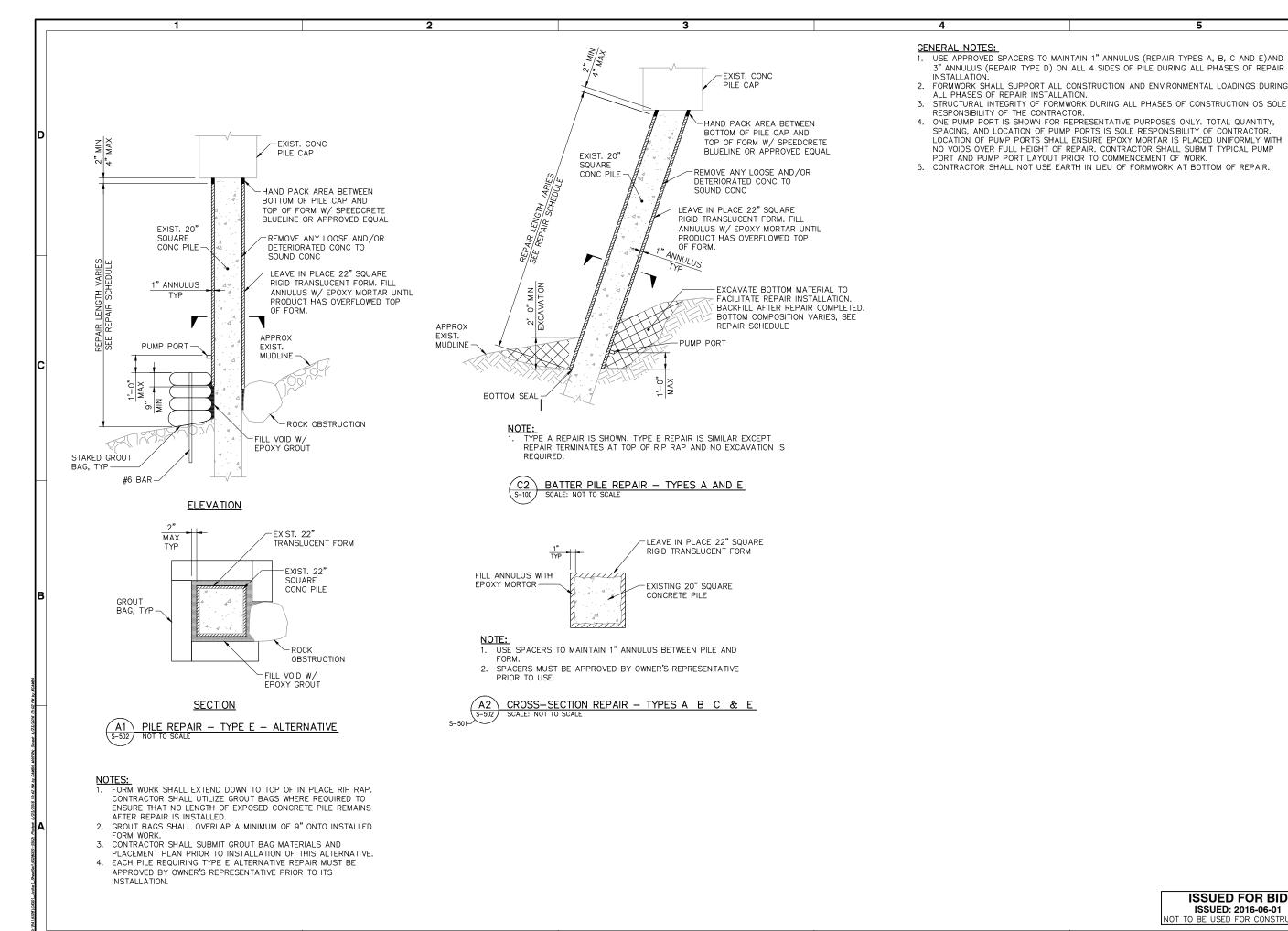
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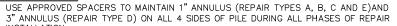


DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING



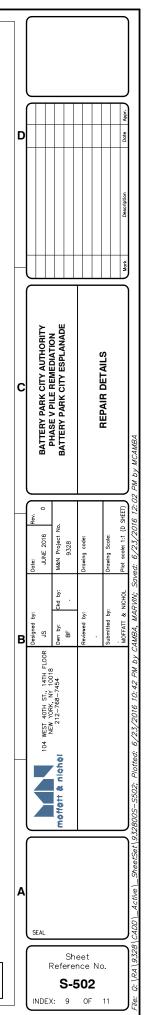
DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING





INSTALLATION. FORMWORK SHALL SUPPORT ALL CONSTRUCTION AND ENVIRONMENTAL LOADINGS DURING ALL PHASES OF REPAIR INSTALLATION.

ONE PUMP PORT IS SHOWN FOR REPRESENTATIVE PURPOSES ONLY. TOTAL QUANTITY, SPACING, AND LOCATION OF PUMP PORTS IS SOLE RESPONSIBILITY OF CONTRACTOR. LOCATION OF PUMP PORTS SHALL ENSURE EPOXY MORTAR IS PLACED UNIFORMLY WITH NO VOIDS OVER FULL HEIGHT OF REPAIR. CONTRACTOR SHALL SUBMIT TYPICAL PUMP

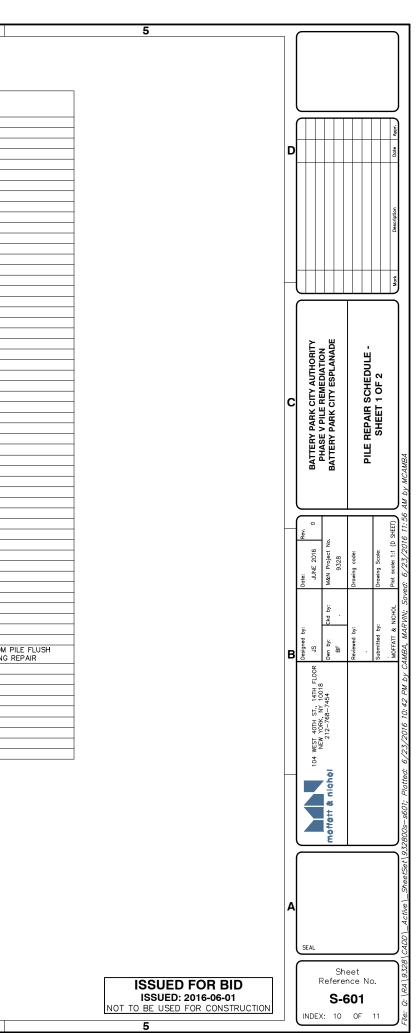


ISSUED FOR BID ISSUED: 2016-06-01

NOT TO BE USED FOR CONSTRUCTION

BENT NO.	PILE NO.	REPAIR LENGTH (FT)	REPAIR TYPE	MUDLINE CONDITION	TYPICAL ROCK SIZE (IN. DIAM.)	NOTES	BENT NO.	PILE NO.	REPAIR LENGTH (FT)	REPAIR TYPE	MUDLINE CONDITION	TYPICAL ROCK SIZE (IN. DIAM.)	NOT
67	A	34.0	A	SILT			76	A	37.0	A	SILT		
67	В	31.5	A	SILT			76	В	35.0	А	SILT		
67	C	25.5	A	SILT			76	С	35.0	A	SILT		
67 67	D E	19.5 15.5	A	SILT			76	DE	28.5 23.0	A A	SILT		
67	F	10.5	A	COBBLE			76	F	18.5	A	COBBLE		
67	G	5.0	E	ROCK	12		76	G	13.0	A	COBBLE		
67	н	3.0	E	ROCK	24		76	н	5.0	А	COBBLE		
67	Hb	3.0	E	ROCK	24		76	Hb	5.0	A	COBBLE		
68 68	B	33.0 29.5	A	COBBLE COBBLE			77	A B	34.0 34.0	A	SILT		
68	C	29.5	A	SILT			77	C	28.0	A	SILT		
68	D	18.5	A	SILT			77	D	33.5	A	COBBLE		
68	E	13.5	A	SILT			77	E	18.0	А	COBBLE		
68	F	10.5	A	COBBLE			77	F	11.5	E	ROCK	24	
68	G	5.0	E	ROCK	24		77	G	6.0	E	ROCK	24	
68 68	H Hb	3.0 3.0	E	ROCK ROCK	24 24		77	Н	2.0 4.5	E	ROCK ROCK	24 24	
69	A	33.0	A	COBBLE	24		77	A	38.5	A	SILT	24	
69	В	29.0	A	COBBLE			78	В	34.5	A	SILT		
69	C	23.0	A	COBBLE			78	С	28.5	А	SILT		
69	D	17.5	E	ROCK	12		78	D	21.0	А	SILT		
69	E	13.0	E	ROCK	12		78	E	17.5	A	SILT	40	
69 69	F G	10.5 4.5	E	ROCK ROCK	12 24		78	F	11.5 8.0	<u>Е</u> А	ROCK COBBLE	18	
69	н	3.5	E	ROCK	24		78	н	4.0	E	ROCK	36	
69	Hb	3.5	E	ROCK	24		78	НЬ	4.0	E	ROCK	12	
70	A	35.5	Α	SILT/COBBLE			79	А	38.5	А	SILT		
70	В	32.0	А	SILT/COBBLE			79	В	35.0	А	SILT		
70	С	27.0	Α	SILT/COBBLE			79	C	34.0	A	SILT		
70	D	21.0	A	SILT/COBBLE			79	D	28.5 23.5	A	SILT/COBBLE		
70	E F	15.5 12.0	A	SILT/COBBLE COBBLE			79	F	19.0	A	COBBLE		
70	G	6.5	E	ROCK	30		79	G	12.0	E	ROCK	36	
70	Н	3.5	E	ROCK	24		79	н	4.5	E	ROCK	24	
70	Hb	4.0	E	ROCK	24		79	Hb	5.0	E	ROCK	24	
71	A	36.0	А	SILT			80	F.3 H	9.5 4.5	E	ROCK ROCK	36 24	
71	C	27.0	A	SILT			81	A	38.5	A	SILT	24	
71	D.7 F.3	18.0 9.5	A E	SILT ROCK	24		81	F.3	10.5	E	ROCK	36	
71	н	5.0	E	ROCK	24		81	Н	5.5	E	ROCK	24	
72	А	36.0	А	SILT			81	1.4	4.5	E	ROCK	24	
72	С	27.5	Α	SILT			81	K E	4.5 3.0	E B	ROCK ROCK	24	
72	D.7	18.5 10.5	A E	SILT ROCK	24		82	F	3.0	B	ROCK	24	
72	F.3 H	5.0	E	ROCK	24 24		82	G	3.0	В	ROCK	24	
72	НЬ	5.0	E	ROCK	24		82	к	3.0	В	ROCK	18	
73	A	37.0	A	COBBLE			83	В	35.5	Α	SILT		
73	В	33.0	А	COBBLE			83	C	29.0	A .	SILT		
73	С	28.5	A	COBBLE			83	D	23.5	A	SILT		CUT STEEL BOLTS PROTRUE
73	D E	23.5 16.0	A E	COBBLE ROCK	12		83	E	10.0	С	N/A		WITH PILE FACE PRIOR TO
73	F	16.0	E	ROCK	24		84	В	33.0	D	ROCK	12	
73	G	7.5	A	SILT/COBBLE			84	D	23.0	D	SILT	10	
73	Н	5.5	А	COBBLE			85	F	11.0 11.0	E	ROCK ROCK	12	
73	Hb	4.5	E	ROCK	12		85	F H	13.0	A	SILT/COBBLE	12	
74	A	35.0	A	COBBLE			86	С	22.0	A	SILT	1	
74	BC	33.0 28.0	A	COBBLE SILT	<u> </u>		86	E	15.0	E	ROCK	24	
74	D	28.0	A	SILT			86	1	2.5	E	ROCK	36	
74	E	16.0	A	SILT				J	3.5	E	ROCK	36	
74	F	14.0	E	ROCK	24								
74	G	7.5	E	ROCK	24								
74	Н	3.5	E	ROCK	24								
74	Hb	3.5 36.5	E A	ROCK SILT	24								
75	B	36.5	A	SILT									
75	C	28.0	A	SILT									
75	D	23.0	A	SILT		· · · · · · · · · · · · · · · · · · ·							
75	E	18.0	A	SILT									
75	F	11.5	E	ROCK	24								
75	G H	6.0 4.0	E	ROCK ROCK	30 24								
75	Hb	4.0	E	ROCK	24 24								

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			NOTES	ROCK DIAM.)	TYPICAL F SIZE (IN. D	MUDLINE	REPAIR TYPE	EPAIR GTH (FT)	D. LEN	PILE NO.	BENT NO.	NOTES	TYPICAL ROCK SIZE (IN. DIAM.)	MUDLINE	REPAIR TYPE	REPAIR ENGTH (FT)	NO.	PILE NO	BENT NO.	NOTES	TYPICAL ROCK SIZE (IN. DIAM.)	MUDLINE	REPAIR TYPE	REPAIR LENGTH (FT)	PILE NO.	NT NO.
					24	ROCK	E	3.5		E	67			SILT/COBBLE	A	16.0		н	51			SILT	A	11.5	A	1
		-				SILT	A	15 15		A B	68 68		24 24	ROCK	E	14.5 16.5		IB	51		18	SILT ROCK	A E	10.5 7.0	B.5 C.8	
		- I,				SILT/COBBLE	A	13		c	68		27	SILT/COBBLE	A	37.0		A	52		18	ROCK	E	3.0	E	
					30	ROCK	E	9.5		D	68			SILT/COBBLE	А	33.0	3	В	52		18	ROCK	E	3.0	EB	
		_			30	ROCK	E	5		E	68			SILT	A	29.0		A	53			SILT	A	17.5	A	
		_				SILT	A	14.5 14.5		A B	69 69			SILT SILT/COBBLE	A	30.0 24.0		B A	53 54		12	SILT ROCK	A E	16.5 11	BC	
						SILT	A	12.5		C C	69			SILT/COBBLE	A	20.0		В	54		12	ROCK	E	7	D	
					30	ROCK	E	9.0		D	69			SILT	А	21.0	\	A	55			Х	A	3.5	E	
					30	ROCK	E	4.5		E	69			SILT	А	21.0		A	56			Х	A	3.5	EB	
						SILT	A	13.5	_	A	70		18 24	ROCK	E	15.5		C	56			SILT	A	17.5	AB	
					30	SILT	A	12.0 8.0		B.9 D.4	70		24	ROCK SILT	E A	7.0		D.5 A	56 57		12	ROCK	A E	11.0	C	
	H	<u> </u>				SILT	A	13.5		A	70			SILT	A	18		В	57		18	ROCK	E	6.0	D	
						SILT	A	12.0		B.9	71		18	ROCK	E	13.5		С	57		24	ROCK	E	3.0	E	
					30	ROCK	E	6.5		D.4	71		24	ROCK	E	8.5		D	57		24	ROCK	E	3.0	EB	
		-				SILT	A	14 13.5		A B	72		24	ROCK	E A	4		E A	57 58			SILT	A	12.0	AB	
	L L R	\neg				SILT	A	12		C	72			SILT	A	16.0		В	58		12	ROCK	E	11.0	C	
	H P P				18	ROCK	E	8		D	72			SILT	А	13.0		С	58		24	ROCK	E	6.5	D	
ESP					30	ROCK	E	4		E	72		24	ROCK	E	10.5		D	58		24	ROCK	E	2.5	E	
BATTERY PARK CITY AUTHORITY PHASE V PILE REMEDIATION BATTERY PARK CITY ESPLANADE	C F	-				SILT	A	13.5 13.5		A B	73		24	ROCK	E A	4.0		E A	58 59		24	ROCK SILT	E	2.5 19.5	EB	
Ž – C						SILT	A	11.5		C	73			SILT	A	13.5		В	59			SILT/COBBLE	A	18.0	В	
PAF	L PAI				18	ROCK	E	7.0		D	73		12	ROCK	E	12		c	59		18	ROCK	E	10.5	С	
ERY	L RY				18	ROCK	E	3.0		E	73		30	ROCK	E	9		D	59		36	ROCK	E	6.5	D	
		-				SILT	A	13.5 13		A B	74		30 30	ROCK	E	3 4		E F	59 59		18	ROCK ROCK	E	3.5 3.5	E EB	
		-				SILT	A	11.5		С	74		30	ROCK	E	4		FB	59		18	ROCK	E	20.0	EB A	
					18	ROCK	E	8		D	74			SILT	A	13.5		A	60		24	ROCK	E	14.5	В	
					18	ROCK	E	4		E	74			SILT	А	12.5	;	с	60		24	ROCK	E	8.5	С	
0	, °					SILT	A	13.5		A	75		24	ROCK	E	8.0		D.5	60		24	ROCK	E	7.0	D	
;	Rev	-				SILT	A	13.0 11.5		B C	75		30 30	ROCK	E	4.0		F	60 61		24	ROCK	E	3.0	E EB	
2016 	016	\neg			18	ROCK	E	8.0	_	D	75			SILT	A	11.0		A	62		12	ROCK	E	22.0	A	
MAY 21 kN Proj 932 wing co	e: MAY 2				24	ROCK	E	3.0		E	75			SILT	A	10.0		В	62		12	ROCK	E	16.0	B.4	
Dra M8	Dat					SILT	A	11		A	76			SILT	A	9.0		c	62		24	ROCK	E	9.5	C.7	
×		-				SILT SILT/COBBLE	A	10 8		B	76			SILT	A	8.0		D	62 62		24	ROCK	E	6.0 6.0	EB	
· P					18	ROCK	E	4.5		D	76			SILT	A	13.0		A	62.7		12	ROCK	E	22.0	A	
i pài	d by:				24	ROCK	E	1		E	76			SILT	А	13.5	۱ I	A	63		12	ROCK	E	16.0	В	
JS wn by BF eviewe	B Signe	I				SILT/COBBLE	А	13.5		A	77			SILT	А	11.5		В	63		18	ROCK	E	10.0	C.2	
R 	- но - но					SILT/COBBLE	A	12.5 10.5		B C	77		24	SILT ROCK	A E	10.5 7		C D	63 63		24	ROCK SILT/COBBLE	E	22.0	AB	
18 18	H FLO	-			24	ROCK	E	8.0		D	77		24 20	ROCK	E	4		E	63		12	ROCK	E	14.0	С	
14TH 1001 7454	14T				30	ROCK	E	4.0		E	77			SILT	A	13.5		A	64			SILT/COBBLE	A	26.0	A	
4 ST. K, NY 768-7	ST.					SILT/COBBLE	A	13.5		A	78			SILT	Α	12.5		В	64			SILT/COBBLE	A	22.5	В	
40TH YORK	40TH	-				SILT/COBBLE	A	12.5		B	78			SILT	A	12.5 9.5		C D	64 64		12	SILT/COBBLE ROCK	A E	20.5 33.5	C A	
NEW NEW 2	WEST	-				SILT/COBBLE SILT/COBBLE	A	11.5 9.5		D	78		30	ROCK	E	9.5 4.0		E	64		12	SILT/COBBLE	A	33.5	B	
104	104	\neg			24	ROCK	E	4		E	78			SILT	A	13.0		A	65			SILT/COBBLE	A	33.5	A	
ie Per		그ㅏ				SILT	A	11.5		A	79			SILT	А	12.5		В	65			SILT/COBBLE	A	30.0	В	
						SILT	A	11.0		В	79			SILT	A	10.5		C	65		12	ROCK	E	24.5	C	
t t		-			24	SILT/COBBLE ROCK	A E	10.0 8.0		C D	79		24 24	ROCK	E	6.0 4.5		D E	65 65		12	ROCK SILT/COBBLE	E	22.0	D E	
		-			18	ROCK	E	4.5		E	79		27	SILT	A	14.5		A	66		24	ROCK	E	14.5	F	
Ě					24	ROCK	E	3.0		F	79			SILT	A	14.5		В	66		24	ROCK	E	8.5	G	
					24	ROCK	E	3.0		FB	79			SILT	A	13.5		С	66		24	ROCK	E	4.5	Н	
		-				SILT SILT/COBBLE	A	11 10.0		A	79.3 80		24	SILT ROCK	A E	10.5 4.5		D	66 66		24	ROCK SILT/COBBLE	E	4.5 38.0	HB	
		-				SILT/COBBLE	A	9.5		B	80		24	X	A	1.5		F	66			SILT/COBBLE	A	35.0	B	
	A					SILT/COBBLE	A	8.5		C	80			X	A	1.5		FB	66			SILT/COBBLE	A	30.0	C	
					18	ROCK	E	7.0		D	80			SILT	А	15.0		A	67			SILT/COBBLE	A	26.0	D	
					24	ROCK	E	5.0		E	80			SILT	A .	14.5		B	67			SILT/COBBLE	A	22.0	E	
AL	SEAL	-			18 30	ROCK ROCK	E	4.0		A C	81		30	SILT/COBBLE ROCK	A E	12.5 9.0		C D	67 67			SILT/COBBLE SILT/COBBLE	A	19.0 17.0	F	

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5 DRAWING SCALES SHOWN BASED ON 22"x34" DRAWING

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BATTERY PARK CITY AUTHORITY PHASE V PILE REMEDIATION NEW YORK, NEW YORK

INDEX OF SPECIFICAITONS

00005	-	General Conditions
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- 01110 Summary of Work
- 01140 Work Restrictions
- 01310 Project Management and Coordination
- 01320 Construction Progress Documentation
- 01330 Submittal Procedures
- 01450 Quality Assurance
- 01575 Temporary Environmental Controls
- 01700 Execution Requirements
- 01710 Cleaning
- 01770 Closeout Procedures
- 02100 Site Work General Provisions
- 02270 Erosion and Sediment Control
- 03310 Epoxy Mortar and Cementitious Grout Pile Jacketing

AIA Document A201 – General Conditions of the Contract for Construction shall be referenced if not stated otherwise in Section 00710 or in the Contract Documents.

Notwithstanding anything in these specifications and drawings to the contrary, all provisions in the Battery Park City Authority contract hereforth shall supersede any conflicting provisions in these documents. All other provisions of the Contract Documents shall remain in full force and effect. References to the "Authority" in these Conditions shall be deemed to mean "Owner/Owner's Representative" and vice versa

1.01 INTRODUCTION

- A. If, during the performance of the Work, the Contractor finds a conflict, error, or discrepancy in the Contract Documents, the Contractor shall report to the Construction Manager in writing immediately. Before proceeding with the Work affected thereby, the Contractor shall obtain a written interpretation or clarification from the Owner's Representative which shall be provided within 24 hours of notification from the Owner. Any work done before the Owner's Representative renders his/her decision is at the Contractor's sole risk and may be forced to remove / modify said work at no additional cost to the Owner.
- B. In the event of discrepancies in the Contract Documents, interpretations will be based upon the following priorities, in descending order of precedence:
 - 1. The Scope of Work, as defined in the Request for Proposal.
 - 2. The Agreement including Regulatory Authorizations, and any properly executed Change-Orders thereto.
 - 3. The Drawings and Specifications.
 - 4. AIA Document A201-General Conditions of the Contract for Construction.

The Agreement, the provisions in the Contract and other Contract documents are intended to supplement and complement each other and shall, where possible, be thus interpreted. If, however, any provision of the Agreement irreconcilably conflicts with a provision of the Contract and the other Contract Documents, the provision imposing the greater duty or obligation on the Contractor shall govern. In the event of any dispute over the meaning or application, it shall be interpreted fairly and reasonably and neither more strongly for nor against either party to it.

In case of inconsistency between Drawings and Specifications, or within either document no clarified by Addendum, the better quality or greater quantity of work shall be provided in accordance with the Owner's interpretation.

- C. The Specification covers the rehabilitation of Esplanade Repairs at Battery Park City, Manhattan, NY, also referred to herein as the Project Site and is shown in the Contract Drawings.
- D. The Contractor guarantees that in the performance of work, he and every person in his direct or indirect employment (i.e. subcontractors) shall abide by and comply with all federal, state, and local laws including the Occupational Safety and Health Act and waterfront MARSEC USCG requirements.
- E. The term Owner, as used throughout the Contract Documents, designates Battery Park City Authority (BPCA) as the Owner, or its duly authorized representative.

- F. The term Owner's Representative, as used throughout these Specifications, indicates the Owner's authorized representative for a particular activity. The term includes Construction Manager, Engineer-Of-Record, and/or Special Inspector.
- G. It is the responsibility of the Construction Manager to delegate responsibility for particular activities.
- H. The term Engineer-Of-Record or Engineer as used throughout the Contract Documents, designates M&N Engineering P.C.
- I. The term Special Inspector, as used throughout the Contract Documents, refers to the party responsible for on-site construction review of the Work to confirm accordance with the Contract Drawings and applicable sections of the New York City Building Code. The Special Inspector shall be selected by the Construction Manager at the discretion of the Owner.
- J. All correspondence between the Contractor and Engineer of Record and/or Special Inspector shall be directed through the Construction Manager.
- K. The Work shall commence in accordance with the Contractor's accepted schedule. If, in the opinion of the Owner, the Contractor has not mobilized sufficient plant or material and/or if the Contractor does not demonstrate that sufficient work is underway according to the accepted schedule, the Owner reserves the right to terminate the Contract.
- L. In the event of termination of the Contract pursuant to the conditions set forth herein, such termination shall not act so as to relieve the Contractor from liability for any damages sustained by the Owner as a result of any breach by the Contractor of the terms of the Contract.
- M. At the completion of each work day the area around the project site must be clear of all construction equipment, materials and debris. The Contractor shall coordinate with the Construction Manager regarding allowable equipment and material lay down area.
- N. Definitions
 - 1. Work: Material, equipment, labor, and services required for Contractor to fulfill his/her obligations of project or the part of the project considered.
 - 2. Project Site: North Cove Marina, Battery Park City, New York, NY 10280.
 - 3. Provide: Furnish and install; provide in place.
 - 4. Furnish: Furnish only, not including installation.
 - 5. Install: Furnish and Install in place materials or structures. (Installation of materials furnished by others will be specifically identified).
 - 6. Shall: Mandatory requirement (understood to be applicable whether or not "shall" is used in the sentence structure): omission of "shall" does not make the Specification or Contract Drawing non-mandatory.

- 7. Contract Sum: This shall be read as the Total Lump Sum Bid by the contractor and accepted by the Owner.
- 8. Day: Contract "day" shall be as defined in the BPCA master contract.

1.02 DESCRIPTION OF WORK

The Work shall include, but not be limited to:

This Agreement covers the complete scope for the type of work included herein, including all incidental work not necessarily indicated or described in the "scope" documents. This Agreement is let on the basis of such documents with the understanding that the Proposer is to furnish all items required for proper completion of the work without adjustment to the Contract Price. It is intended that the Work be of sound and quality installation and the Proposer shall be solely responsible for the inclusion of adequate amounts to cover installation of all items indicated, described or implied.

- A. Mobilization to and demobilization from the site.
- B. Furnish, installation and maintenance of environmental controls and safety measures.
- C. Furnish, installation and maintenance of temporary works.
- D. Coordination of Work with adjacent vessel traffic and usage of the Project Site by others.
- E. Demolition and authorized disposal of components associated with repairs.
- F. All repairs shown in the Contract Drawings.
- G. Providing coordination with the Construction Manager for securing testing services and test results confirming accordance with Contract Documents for Engineer of Record approval.
- H. Providing submittals.
- I. Attendance of authorized representative at project meetings.
- J. Coordination with Construction Manager and/or Engineer of Record for review of Work.
- K. Providing bi-weekly schedule of anticipated work.
- L. Providing daily construction reports.
- M. Providing detailed outline of Proposer's QA/QC protocol.

1.03 GENERAL SCOPE OF WORK

A. Schedule

Unless otherwise stated in Section 01330, the following submittal schedule of all shop drawings, etc., for review by the Construction Manager and Engineer of Record shall be as follows:

1. Contractor's Submittal

Certain critical items are to be submitted by the Contractor within time frames listed in these Specifications. Unless specifically noted as such, the Contractor shall be responsible for the timely submittal of all required items, taking into account the Owner's Representative's review period as outlined herein, in order to maintain satisfactory progress of the Work.

Proposer shall submit within two (2) weeks after receipt of Contract or Notice to Proceed a detailed schedule to the Owner's Representative conforming with the project milestone installation dates in their submitted proposal.

Contractor shall be responsible to meet all project milestone dates. If the contractor does not meet the milestone dates or is progressing behind schedule, the contractor will be directed by the Owner/Construction Manager to work additional shifts, hours and weekends at no additional cost to the Owner, in order to ensure substantial completion no later than project closeout date. The project milestone dates are as follows:

- a. Contractor to complete Shop Drawings: One week after Start Date
- b. Completion of all in water work that affects the mudline: October 31 2016

Contractor shall be required to submit an original certificate of insurance to the Construction Manager one week prior to commencement of contracted work in accordance with the Owner's contract.

2. Owner's Representative Review and Comments

Within five (5) days after receipt of Contractor's submittal.

The Work shall be performed in a general sequence developed by the Contractor and submitted to the Construction Manager for review, in accordance with the requirements of the Contract. The Contractor is solely responsible for the means and methods of construction and for the sequences and procedures to be used.

The Contractor shall furnish and coordinate all plant, labor, supervision, materials, equipment and appliances for all demolition and/or construction work in connection with the demolition and/or construction of the marine facilities.

The Contractor acknowledges and is aware that the area is occupied by others and that the site will not be fully closed from public access. All material delivery and operations associated with the Work shall be coordinated with other activities at the site in such a manner as to minimize the impedance on the site's tenants and the public, while maximizing the cost effectiveness and time of the Work. Coordination of equipment mobilization, construction, deliveries, etc. must be made with the Construction Manager.

The Contractor is being made aware of the strong currents and heavy vessel traffic at this site, along the Hudson River and in the North Cove. The Contractor shall include any fee to perform work in this environment in their lump sum bid. The Contractor is responsible for securing waterborne

equipment at his own risk. Approval from the Construction Manager is required for the location and means of securing such equipment. The Contractor shall provide proper notification to USCG and others as required (i.e. Notice to Mariners).

1.04 EXAMINATION OF EXISTING CONDITIONS

Before submitting a proposal, it is a requirement of this Contract that each proposer visit the site to determine the conditions under which the Work is to be done. Such examination shall include, but not be limited to:

- A. Structural detail of the existing structures and related facilities.
- B. Various on-site utilities and structures not within the Scope of this Contract, but that may impact the execution of the Work. These will remain fully operational throughout the construction period.
- C. The layout and structural condition of the existing structures and water depths.
- D. Access space, possible work areas, and load restrictions.

1.05 PERMITS

The Owner is in the process of securing certain permit amendments and extensions required by federal and state authorities for the proposed activities. Copies of the existing permits are provided as part of the contract documents. Copies of the permit extension applications will be provided to the selected contractor. It is the responsibility of the Contractor to perform the Work in accordance with the terms and conditions of the permits. The Contractor shall post copies of the permits at the site throughout the course of the Work. The Contractor is responsible to obtain all permits associated with the legal disposal of construction debris. The Contractor shall secure all required local authorizations and permits, as well as Notification to Mariners.

1.06 CONTRACTOR-FURNISHED MATERIALS

- A. The Contractor shall furnish all materials for installation in the completed Work as specified hereinafter.
- B. The Contractor shall handle these materials as they are delivered to the site or offsite work areas, and shall store them in a designated storage area by the Construction Manager. If sufficient room is not available, the Contractor shall store materials at his own cost.
- C. The Contractor-furnished material is subject to review by the Owner or Owner's Representative at the plant of manufacture at the Owner's option. Review by the Owner or Owner's Representative is not to be construed as technical in nature and in no way shall be deemed to relieve the Contractor from his/her obligation herein to insure the quality and integrity of the materials supplied by the Contractor for this project.
- D. Project material furnished by the Contractor shall conform to the requirements of the Specifications stated hereinafter. The Contractor shall, as part of the Contract fee, also furnish all consumable materials necessary to complete the Work, such as, but not limited to, welding electrodes, safety equipment, etc.

1.07 LAYOUT

- A. The Contractor shall be solely responsible for the accuracy of all locations, dimensions, and levels and no plea as to instructions or order received from any other sources other than information contained on Contract Drawings, Specifications or in written orders of the Owner or Construction Manager shall justify departure from the dimensions and elevations required by the Contract Drawings.
- B. The Contractor shall take his own measurements at the site, verifying same with the Contract Drawings and existing facilities, and will be held responsible for the proper fit and alignment of completed work in position.

1.08 GUARANTEE

- A. The Contractor shall guarantee to the Owner all materials and workmanship against original defects, or against injury from proper and usual wear when used for the purpose intended, for twelve (12) months after date of final payment certifications, and shall maintain all items in perfect condition during the period of guarantee.
- B. Defects appearing during the period of guarantee shall be made good by the Contractor at his expense upon written demand of the Owner, it being required that all work shall be in perfect condition when the period of guarantee shall have elapsed. In the event of default by the Contractor, the Company shall have the right to make good any and all defects and bill the Contractor as per the contract for administration fees. The Owner shall provide notice of correction along with time frame for correction prior to taking action regarding guarantee bonds or penalties.
- C. The Proposer shall follow any and all anti-terrorism security procedures, guidelines, instructions, and regulations with respect to ingress into and egress from the work site, transportation and disposition of material that might be considered contraband as well as any emergency procedures. It is the Proposer's responsibility to make contingencies for the effect upon the scheduling and performance of their work of any and all such regulations and procedures. The cost of such contingencies shall be included in the Contract Price.
- D. Access will be granted only through the North Cove Marina and adjacent Esplanade. The overall objective will be to perform the work with <u>minimal</u> to <u>no</u> <u>disruption</u> to the daily operation of the esplanade area. Contractor shall submit a staging and work plan to the Owner within two weeks of project award. No work shall commence on the site until contractor receives written acceptance of this plan.

1.09 PARKING, STORAGE AND ACCESS TO WORK AREA

- A. The Contractor shall coordinate with the Construction Manager for available parking, storage and access to the work area. In no event shall these areas interrupt or disturb the Owner's operations. The Contractor shall protect the stored equipment and material from the elements in such a manner as to be satisfactory to the manufacturer of the equipment or material and the Owner.
- B. Should questions of labor jurisdiction arise, this Proposer will immediately take steps to settle such disputes and will use such labor as may be determined to have jurisdiction, at no additional cost to the Owner. Should it fail to take expeditious

action, it will be responsible for any time lost because of delays arising from such disputes.

- C. The Contract includes the cost of all standby trades and Owner Representative fees should Proposer work prior to or later than normal working hours and on Saturdays, Sundays and Holidays, if Proposer desires to work outside of normal working hours. That includes the additional cost for inspections by the engineer. Contractor shall also obtain any required permits to work outside of normal business hours.
- D. As a State Agency, Proposer shall be aware, that all BPCA projects require the employment of labor at prevailing wage rates. Outside State and Federal Agencies will closely monitor all projects.
- E. Contractor shall be responsible for providing all equipment required for unloading, installation, clean-up and hauling of debris. Contractor is to be aware that due to the spacing limitations of the surrounding area of work there is to be no staging of equipment on site, unless approved in the Contractor's Staging Plan.
- F. The contractor is responsible for coordination of their work between the Engineer and the Dockmaster. In keeping with the project philosophy of "Zero Impact" on Marina operations, Contractor shall keep the interruption of quay services and access to moored vessels, their crews and passengers to a minimum.
- G. Contractor shall not use the site for staging of construction materials or equipment, unless approved in the Contractor's Staging Plan. The barges shall be subject to the applicable federal, state and local ordinances in addition to the marina regulations.
- H. Proposer shall not store any material or equipment on site unless directed by the Owner/Owner's Representative. The Proposer shall provide storage space for inspection dive equipment and provide access and material support for the inspection crews.
- I. Proposer shall not use the site for staging of installation materials or equipment except as approved by the Owner.

1.10 SUBCONTRACTORS

- A. A list of Subcontractors, pre-qualified by the Contractor, shall be submitted to the Owner by the Contractor with his proposal. The Owner has the ultimate right to accept or reject any one or more of the subcontractors, and must do so in writing after receipt of said list from the Contractor. No deviations shall be allowed from this list without written approval of the Owner. Valid insurance certificates for subcontractors shall be submitted by the Contractor to the Owner with his proposal.
- B. The Owner shall receive, upon completion of this Contract in full from the Contractor, any reduction in the Subcontractor's price, which may result from a reduced scope of the Contractor's work.

1.11 SITE CONDITIONS

A. At the Contractor's expense, the Contractor's working areas shall be cleaned by him on a day-to-day basis, with all rubbish removed from the site and all work areas cleaned at the end of each day. At final completion of all work, the Contractor shall leave the entire premises, within the site of his operations, clean and free from the rubbish resulting from his construction operations.

- B. Each Proposer is responsible for progress cleaning of its own areas on a daily basis. All Proposers are responsible for consolidating any debris caused by their work. The proposer for General Construction shall be responsible for cleanup of the entire site which includes removal of debris for ALL proposers on site on a daily basis. The proposer for General Construction shall legally dispose consolidated debris off-site. Each Proposer is advised that failure to comply with cleaning requirements will result in back charges and /or reductions in payments.
- C. Contractor shall perform site cleanup and removal of debris on a daily basis and broom clean all installation areas at completion of the day. Surplus equipment, parts & installation materials are to be removed by contractor upon completion of installation unless it is mutually agreed, in writing, from Owner or the Construction Manager that this material can remain on site.
- D. Contractor shall be responsible for ice, snow and frost removal at site during construction in order to accommodate performance of work.
- E. The Proposer shall take special care to provide for temporary damage protection for any and all existing conditions to remain in proximity to the work area. The protection shall remain in place while performing the work shown or described herein or elsewhere in the Contract Documents. Any damage to existing conditions to remain as a result of work by the Proposer shall be repaired or replaced to the satisfaction of the Owner and at no cost to the Owner.

1.12 COMPENSATION

- A. Compensation shall be based upon the Owner-accepted Schedule of Values and authorized Change Orders thereto.
- B. Contractor shall provide interim as-built documents in PDF format and a hard copy with each application for payment. These will be incorporated into the final as-built documentation.
- C. Requisitions for this project shall be due to the Construction Manager by the 5th of every month as a "pencil copy". The final signed and sealed requisition is then due to the owner by the 15th of every month in the format specified in the Owner's contract.

1.13 UTILITIES

The Contractor is responsible to provide and maintain any and all utilities he deems necessary to affect the Work. Should existing site utilities be made available for the Contractor's use by the Owner, it is the responsibility of the Proposer to verify the suitability of existing site utilities for their needs. The Contractor may use such provided utilities at his own risk. Damages shall be the sole responsibility of the Contractor and repairs shall be made immediately at no additional cost to the Owner.

1.14 FIRE PROTECTION

The Contractor shall provide and maintain at his expense all required fire protection systems and devices as necessary to safely perform the Work in accord with the

applicable regulations. They shall be operational throughout the period of construction. The Contractor shall also maintain sufficient means for fire and emergency rescue vehicles to access the site.

1.15 COMPLIANCE WITH CONTRACT

The Owner shall have the right to withhold without penalty any payment described above, or sections referenced herein, for completed work should the Contractor fail to meet any obligations or requirements of the Contract, cause damage to the existing site, structures or facilities, or violate a condition of the Permits. Any withheld payment shall be promptly made upon the Contractor's full compliance with the Contract, or resolution of impending fines or damage claims.

1.16 ENVIRONMENTAL PROTECTION

The Contractor shall comply with all local, state, and federal requirements for protection of:

- A. The environment during the Work. No later than fifteen (15) days following award of contract and at least ten (10) days prior to mobilization to the site, Contractor shall submit a comprehensive plan describing the means and methods to be employed for protection, containment, and clean up. Contractor shall ensure that personnel are properly trained and that sufficient equipment and materials are readily available for use if required. Contractor shall abide by state and federal spill-reporting requirements. Clean-up required as a result of Contractor negligence shall be the sole responsibility of the Contractor at no additional cost to the Owner.
- B. During execution of the Work, the Contractor is required to install and maintain any and all required sedimentation and erosion control measures to protect adjacent waterways, streets, and properties. Measures include but are not limited to temporary berms, hay bales, silt fences, containment booms, and turbidity curtains. In accordance with the NYSDEC, NYCDEP and local regulations. Temporary materials and equipment shall conform to requirements for Temporary Work.
- C. The work by the Contractor shall conform to the applicable section of the New York City Noise Code regarding the sound level standards and the time and duration of construction activities.

1.17 TEMPORARY WORK

Labor, equipment, materials, and services required to perform the Work that, upon completion, are not a part of the Work, shall be furnished, installed, and subsequently removed from the site by the Contractor.

1.18 SAFETY PLAN

No later than ten (10) days following award of Contract and at least ten (10) days prior to mobilization to the site, Contractor shall submit two (2) copies of his project-specific Safety Plan to the Owner.

1.19 MATERIAL SAFETY DATA SHEETS

No later than ten (10) days following award of contract and at least ten (10) days prior to mobilization to the site, Contractor shall submit two (2) three-ring bound sets of all Material Safety Data Sheets (MSDS) for materials anticipated for use in execution of the Work. As

the Work progresses and new materials are used on the project, Contractor shall submit two (2) copies of the corresponding MSDS's for these new materials no later than the time of arrival of the materials on site. ALL MSDS sheets regarding materials used in the execution of the Work shall be up-to-date and stored in the Contractor's onsite job trailer or office.

1.20 WORK SCHEDULE REQUIREMENTS

Access to the site and acceptable working hours are limited between 0700 and 1730 unless approved otherwise by the Owner. Owner shall be notified of any work request outside of these hours a minimum of two weeks prior to the date work will take place. Work shall be in compliance with local noise restriction ordinances. It is understood that Work hours may need adjustment in order to accommodate tidal cycles at the North Cove; which will remain in operation during the course of construction.

1.21 ENGINEERING SERVICES CHARGEABLE TO THE CONTRACTOR

The Owner reserves the right to charge the Contractor for additional engineering and inspection services if required including, but not limited to, Contractor's actions or inactions, delays, quality assurance failures, re-work, etc.

1.22 CONTRACTOR'S REPRESENTATIVE

The Contractor shall assign an individual to be the single point of contact for all jobrelated correspondence and issues. This individual shall be assigned to the project from start to finish, and shall not be replaced without permission from the Owner whose permission should not be unreasonably withheld. This individual shall be responsible to disseminate information to other members of the Contractor's staff and to applicable subcontractors as necessary. This individual shall be the Contractor's designated representative at the site, and shall be authorized to conclude all matters, financial and otherwise, on the Contractor's behalf. The Contractor's Representative shall attend all project meetings and shall be on site at all times while the Contractor or his Subcontractors are present on site.

1.23 MEANS AND METHODS

The structures have been designed to be self-supporting and stable after construction is complete. The stability of the structures prior to completion is solely the responsibility of the Contractor. This responsibility extends to related aspects of the construction activity including, but not limited to, erection methods, erection sequence, connections, temporary bracing, forms, shoring, use of equipment, and similar construction procedures. Review of construction by the Engineer of Record is for general conformance with the Contract Documents only. Lack of comment by the Owner and Owner's Representative with regard to construction procedures shall not be interpreted as approval or acceptance of any such procedures.

1.24 PRECEDENCE

It is expressly understood and agreed that failure by the Owner or Owner's Representative to exercise his authority or prerogative to order the Contractor for any duly authorized purpose shall not be considered to set a precedent for any other activities.

1.25 SAFETY OF PERSONS AND PROPERTY

The Contractor is solely responsible for the safety of his operations. The Contractor shall take precautions for the safety of, and shall provide protection to prevent damage, injury or loss to:

- A. Persons employed by the Contractor in performance of the Work, and persons nearby that may be affected by the Contractor's operations or the Work;
- B. The Work, including all equipment and materials which will be incorporated in the Work;
- C. Other properties and structures at the site, or on adjacent properties.

1.26 UNCOVERING WORK

The Contractor shall notify the Construction Manager prior to covering any Work. The Contractor shall not proceed to cover the Work until formal approval from the Construction Manager is provided in writing. If any Work is covered prior to acceptance by the Owner or Construction Manager, the Work shall, if requested by the Owner, be uncovered for the Owner's observation and then be re-covered at the Contractor's sole cost and expense.

1.27 DAILY CONSTRUCTION REPORTS

For each day that Work is performed at the site, the Contractor shall prepare and submit a Daily Construction Report to the Construction Manager. Contractor shall include the following information in the report, as a minimum:

- A. Project name
- B. Contractor name
- C. Date
- D. Hours worked
- E. Weather conditions
- F. Subcontractors working on site
- G. Material deliveries (material, quantity, and vendor)
- H. Trades working on site (trade and number of workers per trade)
- I. Equipment on site (manufacturer and model number, with notation of whether the equipment was idle or was used in the Work)
- J. Specific work performed, location and type of work
- K. Visitors to the site
- L. Materials or equipment leaving the site (including debris removal)
- M. Incident descriptions
- N. Weekly tidal predictions
- O. Contractor shall submit reports no later than 12:00 hours for the previous day's work.

1.28 MONITORING OF EXISTING STRUCTURES DURING CONSTRUCTION

The Owner reserves the right to establish an independent monitoring program in order to evaluate the effect of the Work on the existing structures to remain on site. Such monitoring may include, but is not necessarily limited to, settlement gauges, tilt plates, and crack gauges.

The Owner reserves the right to suspend the Contractor's operations at any time based upon the monitoring data.

1.29 EXCAVATED MATERIAL

Contractor shall leave excavated material a safe distance from the base of the pile where the excavation was performed. Upon completion of the repair, Contractor shall backfill the excavation with the excavated material.

1.30 ENGINEERING REVIEW AND SPECIAL INSPECTION

At key stages throughout the Work, engineering inspections are required to ensure the Work is being performed in accordance with the Contract Documents. These inspections will be performed by a Special Inspector, as selected by the Construction Manager at the discretion of the Owner. The final acceptance of the Work will be performed by the Engineer of Record. Each pile repair location must be inspected by the special inspector prior to the formwork being placed on the pile. If a pile is encapsulated without this inspection, Owner may request that the installed work be removed and reinstalled at no additional cost to the Owner. In addition the formwork of one of the two Type D repairs will be required to be removed so that the underlying cementitious grout can be inspected. Additional pre and post inspection criteria may be required at the discretion of the Special Inspector, Engineer of Record or Construction Manager.

1.31 EQUIPMENT

Proposers shall use ultra-low sulfur diesel fuel or compressed natural gas (CNG) for all construction vehicles with a carrying capacity in excess of 5 tons and for all portable generators, consistent with Local Law 77 for Lower Manhattan. All diesel engines of greater than 50 horsepower must use ultra-low sulfur diesel fuel with a sulfur content no greater than 15 ppm. Equip the above vehicles with high performance engines and diesel oxidation catalyst (DOC) filters or another previously demonstrated advanced retrofit technology, consistent with NYC Local Law 77 for Lower Manhattan. On-road vehicles used in construction may not idle for more than five consecutive minutes except under practical considerations such as during vehicle maintenance, while stopped in traffic, and in cold weather conditions below 25 degrees F.

END OF SECTION

PART 1.0 - GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

Please see Exhibit A

1.02 EXAMINATION OF DOCUMENTS AND SITE OF WORK

The Proposer acknowledges the following:

- A. The Proposer has reviewed and examined the Proposal Documents to the degree which he is satisfied that the Proposal submitted includes the cost to perform the Work as set forth in the proposed Contract Documents.
- B. The Proposer has informed himself of the existing conditions and limitations under which the Work is to be performed and that the Proposal submitted includes the cost to account for these existing conditions and limitations.
- C. The Proposer acknowledges that the substructure and subsurface condition information provided with the Proposal Documents is for information only.
- D. The Proposer is permitted to perform his own investigation solely for purposes of development of a Proposal. Any site investigation that the Proposer performs, including subsurface, hydrographic, above or below water, or any other non-destructive or destructive testing, shall be documented by the Proposer at the time of the investigation. Results of any investigation performed by the Proposer, which is not representative in the Proposal Documents, and which impact the Proposal, shall be submitted with the Proposal. This information shall be kept confidential during the Contractor selection process.
- E. Proposers are permitted to perform investigations at the site by appointment prior to submitting a proposal. Appointment requests shall be in writing and shall be made through the Owner's Representative at least seventy-two hours prior to the intended time of visit. The Proposer shall provide all required insurance and forms to the Owner's Representative and receive authorization prior to performing any investigation.

1.03 PROOF OF COMPETENCY OF PROPOSER

A proposer may be required to furnish evidence satisfactory to the Owner that he and his proposed subcontractors have sufficient means and experience in the types of work called for to assure completion of the Contract in a satisfactory manner. Such evidence includes representative project information, similar to the scope and magnitude of this project, consisting of references, contract value, and other pertinent information.

1.04 EXECUTION OF AGREEMENT

- A. Certificates of Insurance shall be approved by the Owner before the successful Proposer may proceed with the Work. Failure or refusal to provide Certificates of Insurance in a form satisfactory to the Owner shall subject the successful Proposer to loss of time from the allowable construction period equal to the time of delay in furnishing the required material.
- B. Certificates of Insurance shall name, at a minimum, the Owner, Owner's Representative and Consulting Engineer as additional insured parties.

1.05 INTERPRETATION OF CONTRACT DOCUMENTS PRIOR TO PROPOSING

- A. If any person contemplating submitting a Proposal for construction of the Work is in doubt as to the true meaning of any part of the proposed Contract Documents, or finds discrepancies in or omissions from any part of the proposed Contract Documents, he must submit to the Owner's Representative, with copy to the Owner, a written request for interpretation thereof by not later than seven (7) days prior to the Proposal due date. The person submitting the request shall be responsible for its prompt delivery.
- B. Interpretation or correction of Contract Documents will be made only by Addendum and will be mailed or delivered to each Proposer of Record. The Owner and Owner's Representative will not be responsible for any other explanations or interpretations of the Contract Documents.

1.06 PRE-PROPOSAL CONFERENCE AND JOB SITE WALKTHROUGH

A Pre-Proposal Conference will be held at the site for the purpose of considering questions posed by Proposers and for the purpose of holding a walkthrough of the project site.

Proposers are expected to provide written confirmation of attendance to the Owner's Representative at least two (2) days prior to the Pre-Proposal Conference.

Clarifications, corrections, and changes, made as a result of the Pre-Proposal Conference, shall be made by Addendum only. The Proposer shall not construe statements made during the Pre-Proposal Conference, by the Owner, the Owner's Representative (Engineer), as a change of terms or conditions of the Proposal Documents.

1.07 CONSTRUCTION TIME

The Contractor shall commence and perform the Work expeditiously in accordance with the Contractor's construction schedule with adequate, trained forces and shall achieve substantial completion and final completion within the times stated within the schedule.

Within the Form of Proposal, provide the total number of days which the Proposer proposes to complete the Work. The schedule is to commence with issuance of the Owner's Executed Contract and be 100 percent completed, including all final inspections, by February 28, 2016.

1.08 BASE BID

Base Bid provided shall be complete, including all mark-up, and shall include all appropriate overheads, profit, and cost of labor, materials, equipment, required permits to perform the Work and costs associated with services necessary to complete the substructure rehabilitation work in accordance with the Contract Documents. This bid shall be a lump sum bid. Additional unit cost rates for any additional work that may be required or may be requested in the bid sheets. These rates will be used for any additional work required.

1.09 The lump sum price for the **Mobilization/Demobilization** shall consist of obtaining all required permits; preparatory work and operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; preparation of a construction schedule; furnishing and erecting field offices, laboratory, batch plants, and other facilities necessary for work on the project; badging and training of flaggers, escorts, gate guards and other employees as specified herein; and all other work which must be

performed or cost incurred prior to beginning work on the various contract items at the project site. Mobilization shall include the following principal items:

- 1. Permits for this project, including DSBS, After Hours Permits, and BPCPC Access Permits.
- 2. The schedule of costs breakdown of the Bid.
- 3. The Contractor's approved Baseline Construction Schedule.
- 4. Contractor's Operation and Storage Yard (Staging Area), including the complete installation of all field offices with utilities, fencing and gates, and supplies.
- 5. Installation of floating plants and pump stations, with all appurtenances necessary for fully functional facilities of adequate combined capacity to meet project production needs.
- 6. Moving onto the Site all equipment and materials required for the first thirty (30) days of construction.
- 7. Submittals of Shop and Coordination Drawings and Job Mixes for the first thirty (30) days of construction.
- 8. Posting all required OSHA notices and establishing on-site safety programs.
- 9. Demobilization shall include removal of construction facilities, including all utilities, and equipment off the Site and final cleanup of the Site after completion of the Project.
- B. The lump sum price for **General Conditions** shall consist of the following principal items:
 - 1. Project management and project supervision including the following:
 - a. Superintendent(s)
 - b. Safety Manager
 - c. CPM Scheduler
 - d. Quality Assurance / Quality Control
 - e. Project Manager(s)
 - f. Project Executive
 - g. Field Office Engineer
 - h. Field Office Support Staff
 - i. Project Expeditor
 - j. Assistant Superintendent(s)
 - 2. Insurance
 - 3. Profit
 - 4. Front Office Overhead
 - 5. Safety and Environmental Controls/Protection Site Conditions:
 - a. Temporary Power Consumption (Offices)
 - b. Temporary Power Consumption (General Site Use)

- c. Temporary Water and Sewer Consumption
- d. Temporary Water Hookup, Distribution & Meters
- e. Temporary Electrical Hookup, Distribution & Meters
- f. Temporary Fire Protection
- g. Temporary Heating & Cooling
- h. Temporary Fencing
- i. SWPPP Measures
- j. Temporary Entries and Truck Washes
- k. Street Cleaning (by G.C.)
- I. Traffic Control Measures
- m. Traffic Control Maintenance
- n. Temporary Barricades & Signage
- o. Temporary Lighting
- p. Temporary Partitions & Covered Floor Openings
- q. Temporary Toilets/Sanitary Measures
- r. Temporary Laydown (prep and restoration)
- s. Security System/Watchman (contractor's option)
- t. Pre-construction Photo Documentation
- u. Progress Photos
- v. Temporary Protection (in-place work/adjacent structures)
- C. The Lump Sum price for the **Performance and Payment Bonds** shall consist of obtaining all required bonds including execution and acceptance by the Owner.
- D. The Lump Sum Price for the **Protective Pile Encasements** shall include costs associated with all details provided in the Contract Drawings for this repair. The cost shall include, but is not limited to:
 - 1. Removal of all debris on or attached to the pile, removing any floating dock chains, cleaning the piles to remove marine growth/fouling, sediment buildup, loose concrete over the full excavated height of the exposed pile, and anything else that will interfere with the installation of an FRP form. Remove all loose and deteriorated concrete located within the extents of the repair.
 - a. Excavation and backfilling of the soft bottom repair locations (repair types A, B and D).
 - b. Removal of all debris on or around the pile at the mudline, including anything connected to the pile at the mudline. Chains for the floating docks shall be relocated to an adjacent pile.

Excavation of the mudline, sand or other soft materials to the deeper of: Two (2) feet below the current mudline, or, to a point at which stone exceeding 6 inches in diameter is encountered or, a large obstruction prevents further excavation in a specific area.

- c. Items (a) and (b) are to be verified via inspection by the Owner's Representative.
- 2. Stability of the excavation for diver safety.
- 3. Retaining materials for backfill after the pile protective encasement is finished
- 4. Backfill the pile completely to ensure that there is 2 ft of the pile embedded in the mudline. Use the existing materials removed and retained for the backfill.
- 5. Design and Installation of FRP stay-in-place formwork over the full height of the 4-sided repair including all standoffs, bottom seals, T&G form seals, pump ports, and other appurtenances/requirements in the Contract Documents
- 6. Filling forms by pumping of an approved underwater epoxy mortar or cementitious grout, per the Contract Drawings and these Specifications, to the top of the forms as required. The top shall be hand packed with an approved product. The forms shall have a plug installed at the bottom and allowed to cure before the remainder of the pile is filled.
- 7. Cleaning and prepping of the top sections of any installed pile plugs.
- 8. Removal of all temporary items including but not limited to all ratchet straps, strongbacks, banding, exterior ports etc... The FRP forms shall remain in place.
- E. The **Repair Type E Alternate, Placement of Grout Bags on hard bottom** shall be bid using a unit price will be based on a unit cost per grout bag placement. The unit price shall include costs associated with all details provided in the Contract Drawings for when Repair Type E Alternate is utilized. This repair type shall only be used when the installed formwork will not sit flush with the hard bottom and sections of the concrete pile are exposed. This repair type requires written permission from the Owner's Representative at each location it is proposed for.
 - 1. Backfilling to the greatest extent possible, using the natural and existing materials around the pile without compromising the embedment of the adjacent pile repairs.
 - 2. Stacking grout bags around the base of the pile over the backfill so that the entire pile has an embedment of at least 2.5 ft in materials. The bags shall be placed such that a minimum of voids are present.
 - 3. Pumping of epoxy mortar into the voids between the grout bags and the pile.

1.10 SPECIAL CONDITIONS

The Proposer acknowledges and shall include the cost for the following in the Proposal:

- A. Some piles may have existing items/debris and chains that shall be removed completely prior to performing the work associated with each repair. The chains are for the floating docks and are to be relocated to an adjacent pile while performing work, and then moved back to complete repairs on the adjacent pile. If the chains cannot be removed without cutting, notify the Owner's representative immediately.
- B. Provide means to maintain and collect debris, including boom around work area and boat on premises capable of retrieving floatable debris that leaves the immediate work area. The Contractor shall also readily provide the following for the Owner's Representative throughout the duration of the project:
 - 1. Means, via work float or skiff, to access areas for review during site visits.

- 2. Safe means, such as a ladder or gangway, to access floating work platform from the wharf.
- 3. A changing station, storage area with heating and cooling for the Owner's divers.

1.11 ENGINEERING REVIEW AND SPECIAL INSPECTION

At key stages on each pile, engineering inspections are required to ensure the Work is being performed in accordance with the Contract Documents. These inspections will be performed by a Special Inspector, as selected by the Construction Manager at the discretion of the Owner. The final acceptance of the Work will be performed by the Engineer of Record. The key stages of these required inspections are outlined below. The items listed may not be all inclusive. Additional pre and post inspection criteria may be required at the discretion of the Special Inspector, Engineer of Record or Construction Manager.

Each Pile shall be inspected at the following points:

- A. After cleaning (hard bottom locations) after cleaning and bottom excavation (soft bottoms)
- B. After top of pile plug has been cleaned and prepped to receive the top section pile repair.
- C. After finished product is fully installed
 - 1. Pile plugs (all pile plugs shall be inspected prior to the installation of the upper section repair.
 - 2. Upper sections of pile repair

During all epoxy grout mixing, injection and pump events, the Special Inspector shall be onsite to ensure quality control of the materials and adherence to the Contract Documents. In addition, on the first pump event of epoxy grout, the Engineer of Record as well as the material manufacturer's representative must be onsite in addition to the Special Inspector. Contractor is responsible for notifying the Special inspector in writing one week prior to any pumping operations.

The Contractor shall coordinate with the Construction Manager to maximize inspection sequencing and timing against the production of the divers. At a minimum, and subject to the Construction Manager's procedures, the contractor shall provide the construction manager with daily reports of the piles ready for inspections, in groupings, by the pumping location. It is the responsibility of the Contractor to adequately inform the Special inspector when piles are ready to be inspected. Any work completed without approval is at the Contractors risk.

The contractor shall notify the Special Inspector a minimum of one week in advance of the pile locations ready for inspection. This notification shall be in the form of a written list that identifies the pile location and its current stage in the repair process.

Any exceptions noted during the Special Inspectors dive inspection shall be submitted to the Contractor within 16 hours of the inspection. All exceptions and re-work will be submitted to the Construction Manager within 48 hours of the initial inspection, or before the cleaning window expires, whichever is soonest. The Special Inspector must generate field reports for all inspections. The field reports shall be submitted to the Construction Manager and Engineer of Record for review.

1.12 GENERAL CONDITIONS

The Contractor shall commence and perform the Work expeditiously in accordance with the Contractor's construction schedule with adequate, trained forces and shall achieve substantial completion and final completion within the times stated within the schedule.

Within the Form of Proposal, provide the total number of days which the Proposer proposes to complete the Work. The schedule is to commence with issuance of the Owner's Purchase Order.

1.13 EXISTING WORK

- A. Remove or alter existing work in such a manner as to prevent injury or damage to any portions of the existing work that remains.
- B. Repair or replace portions of existing work which have been altered during construction operations to match existing or adjoining work, as approved by the Owner. At the completion of operations, existing work shall be in a condition equal to or better than that which existed before new work started.

1.14 LOCATION OF UNDERGROUND FACILITIES

- A. Coordinate with the Owner on the location of underground utilities and which utilities are to remain and be protected, and which are to be removed.
- B. Notify the Owner at least 24 hours prior to starting excavation work.

1.15 QUALITY ASSURANCE

- A. Use adequate number of skilled work personnel who are thoroughly trained and experienced in the necessary trades, and familiar with the specified requirements and methods required for proper performance of the work outlined in this specification.
- B. The Contractor shall coordinate the work to insure no conflicts occur to compromise the timely completion of all work specified.

1.16 WORKING CONDITIONS

- A. The Contractor is responsible for any precautions and scheduling necessary in order to maintain this status. Work may begin only after a schedule representing an acceptable plan is approved by the Owner.
- B. The Contractor shall coordinate day-to-day activities with the Owner. All conflicts will be resolved by the Owner's representative.
- C. The Owner shall be notified a minimum of three days prior, when any floats are required to be moved within the North Cove.

1.17 WORKING HOURS

The Contractor is permitted to perform construction work between the hours of 7:00 AM and 4:30 PM Mondays through Fridays, excluding Saturdays, Sundays, and Federal Holidays. Work performed at any other time other than these periods will only be allowed pending approval of the Owner, following a 48 hour advanced request (72 hour for Sundays and Holidays) and a DSBS after hours work permit.

1.18 AVAILABILITY OF UTILITIES

- A. Electrical: The Contractor shall provide its own electrical power and equipment. OSHA requirements will govern the use of such utility.
- B. Water: The Contractor will be responsible for supplying its own water and equipment, including all hoses, adapters and backflow preventer as required.
- C. Sanitary Facilities: The Contractor shall be responsible for furnishing and maintaining temporary toilet facilities for their employees, and for the Owner's Engineer/Diver's.
- D. The Contractor is responsible for the cost of all utilities.

1.19 EQUIPMENT

The Contractor shall supply all equipment necessary to perform all work, including but not limited to cleaning materials, ladders, etc.

1.20 RECEIPT OF MATERIALS

Shipments of equipment, materials, and supplies shall be addressed to the Contractor, not the Owner. The Contractor shall provide all equipment, materials and labor for off-loading. The Owner will not accept shipments for the Contractor.

1.21 STORAGE OF MATERIALS

Contractor's materials may be stored on site at a location that is approved by the Owner.

1.22 EXISTING MATERIALS

The Owner shall have the opportunity to salvage all materials removed prior to disposal by Contractor.

1.23 SITE OFFICE FACILITIES AND STORAGE SHED

- A. The Contractor shall be required to provide at his own cost and expense one enclosure in the South East corner of North Cove Marina. Install and connect all utility services to said enclosure within five (5) days of start of work.
- B. The enclosure shall be for the express use of the Resident Engineer.
- C. Temporary Electrical Services:
 - 1. Electrical work required for the enclosure will be furnished and maintained under this contract.
 - 2. The Contractor shall furnish, install and maintain a temporary electric feeder to the Resident Engineer's enclosure immediately upon its placement at the job site.
 - 3. The temporary electric feeder shall be at least 3 No. 6 THW wire and shall be protected by a 60 ampere fused safety switch, complying with codes and utility requirements having jurisdiction.
 - 4. Make all arrangements and pay all costs to provide electric service.
 - 5. Pay all costs for current consumed and for maintaining system in operating condition, including furnishing of necessary bulb replacements, lamps, etc., for thirty (30) days after date of substantial completion acceptance.

- 6. Disposition of electric work: Upon expiration date in sub-paragraph c, the temporary feeder, safety switch, etc., shall be removed and disposed of as directed.
- 7. All repair work due to these removals shall be the responsibility of the Contractor.
- D. Maintenance:
 - 1. The Contractor shall provide and pay all costs for heat and fuel, and regular daily janitor service. Furnish toilet paper, cloth towels, soap, and maintain the field office in first-class condition, including all repairs, until 30 days after the date of substantial completion acceptance.
 - 2. Upon final acceptance of all work under the contract, unless sooner directed, the Contractor shall have all services disconnected and capped to the satisfaction of the Resident Engineer.
- E. Permits

The Contractor shall make the necessary arrangements for, and obtain all permits required for this work.

F. The Contractor shall provide his own storage. No equipment or materials storage will be provided by the Owner.

1.24 POWER OUTAGE

Needed power outages shall be arranged only with prior approval from the Owner, with duration and affected areas held to a minimum.

1.25 FINAL INSPECTION

Final Inspection will not be made until all work under the contract is complete. The Contractor shall notify the Owner in writing a minimum of one week prior to the date on which the project will be ready for final inspection.

1.26 MATERIAL DISPOSAL

- A. All discarded material shall be removed from the Owner's property and disposed of in an approved site complying with Local, State, and Federal regulations. Certified weight tickets shall be supplied to the Owner within 15 days of the date of the weight ticket for all trash and construction debris disposed. All dumpsters/containers shall be supplied by the Contractor. The contractor shall provide appropriate signs or covers to prevent use by Tenants.
- B. No material shall be washed or swept out of equipment or vehicles (including concrete from chutes of trucks, loose debris, etc.) onto Owner property or in the water. Any material spilled from Contractor furnished dumpsters/containers shall be immediately cleaned up by the Contractor.

1.27 RECYCLABLES

The Contractor shall recycle or reuse all material designated as recyclable or prohibited from landfilling. Definitions for recyclables and landfill prohibited material can be obtained from the contracted trash hauler. Certified weight tickets shall be supplied to the Owner within 15 days of the date of removal from the facility for all material recycled or reused, and for landfill prohibited materials.

1.28 AS-BUILT DRAWINGS

- A. The Owner will furnish one complete set of black and white prints of all drawings which shall be used to indicate any changes from the contract set. Each sheet shall be marked "AS-BUILT DRAWINGS" in red pencil, and all changes or modifications shall be noted thereon by the Contractor.
- B. Changes shall be noted during the construction process for all trades.
- C. Keep "AS-BUILT DRAWINGS" current. Do not permanently conceal any work until the required information has been accurately recorded.
- D. Use colored pencils or pens for graphic work conforming to the following color code: Red - Architectural and Structural Work

Green - Electrical Work

Use blue pen for written work

Submit a complete set of "AS-BUILT DRAWINGS" to the Owner when all work has been completed, or as directed.

1.29 PART II - PRODUCTS

Not used.

1.30 PART III - EXECUTION

Not used.

END OF SECTION

PART 1.0 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to this section.

1.02 USE OF PREMISES

- A. Use of Site: Limit use of premises to work in areas indicated. Do not disturb portions of site beyond areas in which the Limit of Work is indicated.
 - 1. Limit of Work: Confine construction operations to those areas delineated as included in the Construction Documents.
 - 2. Owner Occupancy: Allow for Owner occupancy of portions of the site and for use by the public at any and all times during the life of the contract. The Owner reserves the right to maintain and provide full public access to completed portions of the Battery Park City Esplanade within the contract limits at any time during the entire life of the contract. Contractor will be responsible for securing and maintaining temporary construction fencing as necessary to achieve and maintain this access.
 - 3. Contractor shall, throughout the life of the contract, maintain clear access to all areas of the Esplanade to personnel of Battery Park City Authority (Owner) for maintenance and repair operations. Specifically, the Owner and/or its agents shall be unencumbered from performing all required watering, planting, and maintenance operations for all areas adjacent to and within the contract limits.
 - 4. Construction Gates / Entrances: Keep all construction gates / entrances serving the premises clean, clear and available to the Owner, Owner's employees, emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of construction gates and entrances.
 - b. Schedule deliveries to coordinate with other contractor's gaining access to the site.
 - c. Provide flag-person services for all deliveries into and out of the site so as to protect the public.
 - d. Secure all construction entrances and gates to the site at all times.
 - e. Provide durable signage limiting public access to the construction site at all construction gate / entrances as directed by the Construction Manager.
 - f. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.
 - 5. Use of Existing Site: Maintain existing site throughout the construction period. Repair damage caused by construction operations.

1.03 OCCUPANCY REQUIREMENTS

A. Partial Owner Occupancy: Owner may occupy portions of the site during the construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's operations.

PART 2.0 - PRODUCTS

Not used.

PART 3.0 - EXECUTION

Not used.

END OF SECTION

PART 1.0 - GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to this section.

1.02 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General project coordination procedures.
 - 2. Conservation.
 - 3. Coordination Drawings.
 - 4. Administrative and supervisory personnel.
 - 5. Project meetings.
- B. Each contractor shall participate in coordination requirements. Certain areas of responsibility will be assigned to a specific contractor.
- C. Related Sections: The following Sections contain requirements that relate to this Section:
 - 1. Division 1 Section "Construction Progress Documentation" for preparing and submitting the Contractor's Construction Schedule.
 - Division 1 Section "Execution Requirements" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.
 - 3. Division 1 Section "Closeout Procedures" for coordinating Contract closeout.

1.03 COORDINATION

- A. Coordination: Each contractor shall coordinate its construction operations with those of other contractors and entities to ensure efficient and orderly installation of each part of the Work. Each contractor shall coordinate its operations with operations, included in different Sections that depend on each other for proper installation, connection, and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
 - 4. Provide detailed written construction work plans within 5 days of award in a format and containing information as requested by the Construction Manager.

- B. Where necessary, prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - 1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.
- C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's Construction Schedule.
 - 2. Preparation of the Schedule of Values for payment to completed work.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.
 - 6. Pre-installation conferences.
 - 7. Project closeout activities.
- D. Conservation: Coordinate construction activities to ensure that operations are carried out with consideration given to conservation of energy, water, and materials.
 - 1. Salvage materials and equipment involved in performance of, but not actually incorporated into, the Work.

1.04 SUBMITTALS

- A. Coordination Drawings / Work Plans: Prepare Coordination Drawings and/or detailed work plans where careful coordination is needed for installation of products and materials fabricated by separate entities and/or as requested by the Construction Manager. Prepare coordination drawings and/or work plans where limited space availability necessitates utilization of space for efficient installation of different components.
 - 1. Indicate relationship of components shown on separate Shop Drawings and/or work plans.
 - 2. Indicate required installation sequences.
- B. Staff Names: Within 5 days of award, submit a list of principal staff assignments, including superintendent and other personnel in attendance at Project site. Identify individuals and their duties and responsibilities; list addresses and telephone numbers, including home cell and office telephone numbers. Provide names, addresses, and telephone numbers of individuals assigned as standbys in the absence of individuals assigned to Project. Post copies of list in Project meeting room, in temporary field office, and by each temporary telephone.

1.05 ADMINISTRATIVE AND SUPERVISORY PERSONNEL

A. General: In addition to Project superintendent, provide other administrative and supervisory personnel as required for proper performance of the Work.

- 1. Project Manager: Submit resume confirming a minimum of 15 years of underwater construction experience.
- 2. Project superintendent: Submit resume confirming a minimum of 10 years of underwater construction experience.
- 3. Office Engineer: Submit resume confirming a minimum of 5 years of marine construction experience.
- 4. Dive Superintendent: Submit resume confirming a minimum of 10 years of underwater construction experience.
- 5. Include special personnel required for coordination of operations with other contractors.
- 6. Site Safety Representative: Submit resume confirming a minimum of 5 years of underwater construction site safety experience.

1.06 PROJECT MEETINGS

- A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.
 - 1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner, and Construction Manager of scheduled meeting dates and times.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner, Construction Manager, and the Engineer, within 5 days of the meeting.
- B. Pre-construction Conference: Schedule a pre-construction conference before starting construction, at a time convenient to Owner, Construction Manager and the Engineer, but no later than 5 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
 - 1. Attendees: Authorized representatives of Owner, Construction Manager, Engineer, and their consultants; Contractor and its superintendents; major subcontractors; manufacturers; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Discuss items of significance that could affect progress, including the following:
 - a. Tentative construction schedule.
 - b. Phasing.
 - c. Critical work sequencing.
 - d. Designation of responsible personnel.
 - e. Procedures for processing field decisions and Change Orders.

- f. Procedures for processing Applications for Payment.
- g. Distribution of the Contract Documents.
- h. Submittal procedures.
- i. Preparation of Record Documents.
- j. Use of the premises.
- k. Responsibility for temporary facilities and controls.
- I. Parking availability.
- m. Office, work, and storage areas.
- n. Equipment deliveries and priorities.
- o. Testing and inspection requirements.
- p. Required performance results.
- q. Protection of construction personnel.
- r. First aid.
- s. Security.
- t. Progress cleaning.
- u. Working hours.
- v. MBE/WBE compliance reporting requirements.
- 3. Record significant conference discussions, agreements, and disagreements.
- 4. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.
- C. Progress Meetings: Conduct progress meetings at biweekly intervals. Coordinate dates of meetings with preparation of payment requests.
 - 1. Attendees: In addition to representatives of Owner, Construction Manager, and Engineer, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule

revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

- b. Review present and future needs of each entity present, including the following:
 - (i) Interface requirements.
 - (ii) Sequence of operations.
 - (iii) Status of submittals.
 - (iv) Deliveries.
 - (v) Off-site fabrication.
 - (vi) Access.
 - (vii) Site utilization.
 - (viii) Temporary facilities and controls.
 - (ix) Work hours.
 - (x) Hazards and risks.
 - (xi) Progress cleaning.
 - (xii) Quality and work standards.
 - (xiii) Change Orders.
 - (xiv) Documentation of information for payment requests.
- 3. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present. Include a brief summary, in narrative form, of progress since the previous meeting and report.
 - a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.
- D. Coordination Meetings: Conduct Project coordination meetings as needed. Project coordination meetings are in addition to specific meetings held for other purposes, such as progress meetings and pre-installation conferences.
 - 1. Attendees: In addition to representatives of Owner, Construction Manager, and Engineer, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of previous coordination meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Combined Contractor's Construction Schedule: Review progress since the last coordination meeting. Determine whether each contract is on time, ahead of schedule, or behind schedule, in relation to Combined Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract time.

- b. Schedule Updating: Revise Combined Contractor's Construction Schedule after each coordination meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with report for each meeting.
- c. Review present and future needs of each contractor present, including the following:
 - (i) Interface requirements.
 - (ii) Sequence of operations.
 - (iii) Status of submittals.
 - (iv) Deliveries.
 - (v) Off-site fabrication.
 - (vi) Access.
 - (vii) Site utilization.
 - (viii) Temporary facilities and controls.
 - (ix) Work hours.
 - (x) Hazards and risks.
 - (xi) Progress cleaning.
 - (xii) Quality and work standards.
 - (xiii) Change Orders.
- 3. Reporting: Record meeting results and distribute copies within two (2) days to everyone in attendance and to others affected by decisions or actions resulting from each meeting.

PART 2.0 - PRODUCTS Not used.

PART 3.0 - EXECUTION Not used.

END OF SECTION

PART 1.0 - GENERAL

1.01 SUBMITTALS

Submit the following in accordance with Section entitled "Submittal Procedures."

- A. Schedules
 - 1. Construction schedule (Owner)
 - 2. Material delivery schedule (Owner)

1.02 CONSTRUCTION SCHEDULE

Within 5 days after receipt of the Notice of Award, prepare and submit to the Owner's representative for approval a Critical Path Method (CPM) Schedule.

1.03 MATERIAL DELIVERY SCHEDULE

A. Initial Schedule

Within 10 calendar days after approval of the proposed construction schedule, submit for Owner's representative approval a schedule showing procurement plans for materials and equipment. Submit in the format and content as prescribed by the Owner's representative, and include as a minimum the following information:

- 1. Description.
- 2. Date of the purchase order.
- 3. Promised shipping date.
- 4. Name of the manufacturer or supplier.
- 5. Date delivery is expected.
- 6. Date the material or equipment is required, according to the current construction schedule.

1.04 NETWORK ANALYSIS SYSTEM (NAS)

- A. As an alternative to the critical path method (CPM) schedule, the Contractor may use, subject to the approval of the Owner's Representative, some other computer generated network analysis system affording similar and equal information and control to that provided by the CPM.
- B. The schedule shall have a minimum of 25 activities and a maximum of 200 activities. The schedule shall identify as a minimum:
 - 1. Construction time for all major systems and components;
 - 2. Manpower requirements for each activity;
 - 3. Major submittals and submittal processing time; and
 - 4. Major material and equipment lead time.
 - 5. Bent sequence for inspection purposes.
- C. CPM Submittals and Procedures

Submit all network analysis and updates electronically via e-mail. The network analysis system shall be submitted in Microsoft Project 2010. The network analysis system shall be kept current, with changes made to reflect the actual progress and status of the construction.

1.05 UPDATED SCHEDULES

Update the construction schedule and material delivery schedule at bi-weekly intervals to correspond to payment applications or when schedule has been revised. Reflect any changes occurring since the last update. Submit copies of the purchase orders and confirmation of the delivery dates as directed by the Owner's representative.

PART 2.0 - PRODUCTS

Not used.

PART 3.0 - EXECUTION

Not used.

PART 1.0 - GENERAL

1.01 DEFINITIONS

- A. Submittal: Submittals requirements are specified in the respective specification sections.
- B. Types of Submittals (SD)
 - 1. SD-01 Preconstruction Submittals
 - a. Certificates of Insurance,
 - b. List of Proposed Subcontractors,
 - c. List of Proposed Products,
 - d. Construction Progress Schedule,
 - e. Submittal Register,
 - f. Schedule of Prices,
 - g. Health and Safety Plan,
 - h. Work Plan,
 - i. Quality Control Plan,
 - j. Environmental Protection Plan,
 - k. Site Utilization Plan.
 - 2. SD-02 Shop Drawings
 - a. Shop drawings of each pile repair type are required.
 - b. Shop drawings shall not be copies of the design drawings with notation.
 - c. Drawings, diagrams and schedules specifically prepared to illustrate some portion of the work.
 - (i) Bottom seal
 - (ii) Pump ports
 - d. Diagrams and instructions from a manufacturer or fabricator for use in producing the product and acts as aids to the Contractor for integrating the product or system into the project.
 - e. Drawings prepared by or for the Contractor to show how multiple systems and interdisciplinary work will be coordinated. An attachment shall be provided with the Shop Drawings which clearly define the methodology for each repair type.
 - f. Approval of shop drawings shall not relieve the Contractor of the responsibility for any errors or for furnishing materials of the proper size.
 - 3. SD-03 Product Data.

Product data includes but is not limited to the following:

- a. FRP formwork
- b. Epoxy mortar
- c. Hand Pack Material

- d. Cementitious grout
- e. Bottom Seal
- f. Standoffs
- g. Engineered Products for Form System
- h. Grout Bags
- i. Samples of warranty language when the contract requires extended product warranties.
- 4. SD-04 Samples
- 5. SD-05 Design Data
 - a. Epoxy Mortar mix
 - b. Cementitious grout mix
 - c. FRP form calculations
 - d. Product pumping calculations
- 6. SD-06 Test Reports
 - Report signed by authorized official of testing laboratory that a material, product or system identical to the material, product or system to be provided has been tested in accord with specified requirements. (Testing must have been within three (3) years of date of contract award for the project.)
 - b. Report which includes findings of a test required to be performed by the Contractor on an actual portion of the work or prototype prepared for the project before shipment to job site.
 - c. Report which includes finding of a test made at the job site or on sample taken from the job site, on portion of work during or after installation.
 - d. The New York City Department of Small Business Services (DSBS) Permit shall be satisfied under the direction of the Construction Manager. This includes but is not limited to the concrete testing agency and concrete supplier, TR2 and TR3 filings, and the Contractor's PW2 filing.
- 7. SD-07 Certificates
 - a. Statements signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements. Must be dated after award of project contract and clearly name the project.
 - (i) Epoxy Mortar
 - (ii) Cementitious Grout
 - (iii) FRP form
- 8. SD-08 Manufacturer's Instructions
 - a. Preprinted material describing installation of a product, system or material, including special notices and Material Safety Data sheets concerning impedances, hazards and safety precautions.

- 9. SD-09 Closeout Submittals
 - a. The Construction Manager is responsible for providing the following to the Engineer of Record for review prior to the project close out:
 - (i) Field Reports
 - Upon completion of the work, and prior to the final project closeout, the Construction Manager shall submit to the Engineer of Record all Field Reports from the engineering review site visits. These include, but are not limited to:
 - (ii) Certification by the Special Inspector that all piles have been repaired as per the contract documents.
 - (iii) Certification by the Special Inspector that all test results have meet or exceeded the minimum requirements laid out in the Contract Documents.
 - (iv) Field reports from the Special Inspector confirming that all epoxy mortar and cementitious grout pumping operations and all the material placed were performed in accordance with the Contract Documents.
 - (ii) As-Built Drawings:
 - (i) Contractor shall submit six (6) sets of drawings, marked "As-Built" within four (4) weeks upon Contractor demobilization. These drawings shall be submitted to the Construction Manager, who shall forward to the Engineer of Record. Approval from the Engineer of Record is required for the final project closeout.
 - (iii) Test Reports:
 - (i) Upon completion of the work, and prior to the final project closeout, the Construction Manager shall submit to the Engineer of Record all Test Reports from the required materials and products testing as laid in the Contract Documents. Test reports must confirm that all materials and products placed during the Work have met or exceeded the minimum requirements of the Contract Documents in order for the Engineer of Record's approval. All Test Reports must be approved by the Engineer of Record for the final project closeout.
 - (iv) Photographs
 - (i) The Construction Manager shall submit to the Engineer of Record a typical photograph illustrating each type of repair in its Pre-Inspection and Post-Inspection completeness.
 - (v) The items required for final review by the Engineer of Record are not limited to those listed above.
- 10. For this project, the requirements under SD-03 and SD-08 shall be combined under one submittal for "Product Data". Product data will be submitted for all repairs identified in the contract drawings. The product data submittal may be combined with a number of submittals which reference one particular repair.
- C. Approving Authority: Person authorized to approve submittal. The Engineer of Record shall review submittals in regard to materials, methodology, shop drawings and other components involved in the quality assurance of the work. The Construction Manager shall review submittals in regard to but not limited to site

utilization, disposal, coordination, environmental controls, schedule, safety and health requirements, etc.

D. Work: As used in this section, on- and off-site construction required by contract documents, including labor necessary to produce submittals, construction, materials, products, equipment, and systems incorporated or to be incorporated in such construction.

PART 2.0 - PRODUCTS

Not used

PART 3.0 - EXECUTION

3.01 SUBMITTAL REGISTER

- A. Within 5 calendar days after receipt of Notice to Proceed, Contractor shall provide submittal register listing all submittals required by the contract. Contractor shall maintain at the site, an up-to-date submittal register showing the status of all submittals as the work progresses. The submittal register format is subject to review and approval by the Construction Manager and Engineer of Record. The Contractor shall indicate critical submittals and critical dates for approval. The register shall also include the following at a minimum:
 - 1. Activity Number: Activity number from the project schedule.
 - 2. Transmittal Number: Contractor assigned list of consecutive numbers.
 - 3. Contractor Submittal Date: Scheduled date for approving authority to receive submittals.
 - 4. Contractor Approval Date: Date Contractor needs approval of submittal.
 - 5. Contractor Material Date: Date that Contractor needs material delivered to Contractor control.
- B. The Construction Manager or Engineer of Record will not review submittals until the register has been submitted in accordance with the previous paragraph and approved. Should a submittal register be generated by the Engineer of Record, it can be used as a guideline by the Contractor but does not relieve him of submissions required by the Contract Documents that may have been omitted.
- C. Items may be added or removed from the Submittal Register throughout the duration of the Work, as desired by the Construction Manager or Engineer of Record. Additional submittals that are not listed in the Submittal Register may be required as per the Construction Manager's contract.

3.02 PROCEDURES FOR SUBMITTALS

- A. Contractor shall make submittals required by the Contract Documents, and revise and resubmit as necessary to establish compliance with the specified requirements. Submittals that are not required will not be reviewed by the Construction Manager.
 - 1. Constraints
 - a. Submittals listed or specified in this contract shall conform to provisions of this section, unless explicitly stated otherwise.

- b. Submittals shall be complete for each definable feature of work; components of definable feature interrelated as a system shall be submitted at same time.
- c. When acceptability of a submittal is dependent on conditions, items, or materials included in separate subsequent submittals, submittal will be returned without review.
- d. Approval of a separate material, product, or component does not imply approval of assembly in which item functions.
- 2. Scheduling
 - a. Coordinate scheduling, sequencing, preparing and processing of submittals with performance of work so that work will not be delayed by submittal processing. Allow for potential requirements to resubmit.
 - b. Except as specified otherwise, allow for review period, beginning with receipt by approving authority, which includes at least 5 working days for submittals. Period of review for each re-submittal is the same as for initial submittal.

3.03 VARIATIONS

- A. Variations from contract requirements require the Engineer of Record approval. Do not substitute materials, equipment, or methods unless such substitution has been specifically accepted in writing by the Construction Manager.
 - 1. Considering Variations: Discussion with the Construction Manager prior to submission will help ensure functional and quality requirements are met and minimize rejections and re-submittals. When contemplating a variation which results in lower cost, consider submission of the variation as a Value Engineering Change Proposal (VECP).
 - 2. Proposing Variations: When proposing a variation, deliver written request to the Construction Manager, with documentation of the nature and features of the variation and why the variation is desirable and beneficial to the Owner. If lower cost is a benefit, also include an estimate of the cost-savings. In addition to documentation required for variation, include the submittals required for the item. Clearly mark the proposed variation in all documentation, identify variations from the contract requirements and changes in other work or products.
 - 3. Warranting That Variations Are Compatible: When delivering a variation for approval, Contractor warrants that this contract has been reviewed to establish that the variation, if incorporated, will be compatible with other elements of work. In submitting a substitution or variation, the Contractor represents that he will coordinate the installation of accepted substitutions or variation, and additional costs or delays caused by the substitution or variation will not constitute grounds for adjustments to the contract.
 - 4. Review Schedule Is Modified: In addition to normal submittal review period, a minimum period of five (5) and maximum period of 14 working days will be allowed for consideration by the Owner of submittals with variations.

3.04 CONTRACTOR'S RESPONSIBILTIES

A. Determine and verify field measurements, materials, field construction criteria; review each submittal; and check and coordinate each submittal with requirements of the work and contract documents.

Transmit submittals to Construction Manager in accordance with schedule on approved Submittal Register, and to prevent delays in the work, delays to the Owner, or delays to separate Contractors.

- B. Advise Construction Manager as required by paragraph entitled: "Variations."
- C. Correct and resubmit submittal as directed by approving authority. When resubmitting disapproved transmittals or transmittals noted for re-submittal, the Contractor shall provide copy of that previously submitted transmittal including all reviewer comments for use by approving authority. Direct specific attention in writing or on resubmitted submittal, to revisions not requested by approving authority on previous submissions.
- D. Submittals are to be done electronically, via email to the team determined by the owner, in PDF format.
- E. Furnish hard copies of submittal when requested by the Construction Manager, to a limit of 6 copies per submittal.
- F. Complete work which must be accomplished as basis of a submittal in time to allow submittal to occur as scheduled.
- G. Ensure no work has begun until submittals for that work have been reviewed and returned stamped by the Engineer of Record, as explained in Paragraph 3.08 D or this Section, except to the extent that a portion of work must be accomplished as basis of submittal.

3.05 DELIVERY OF SUBMITTALS

- A. Transmittal Form: Transmit each submittal, except sample installations and sample panels, to office of approving authority. Transmit submittals electronically with transmittal form prescribed by Construction Manager and standard for project. The transmittal form shall identify Contractor, indicate date of submittal, and include information prescribed by transmittal form and required in paragraph entitled "Identifying Submittals." Process transmittal forms to record actions regarding sample panels and sample installations. All submittals must be sent to the Construction Manager, who shall forward submittals on to the Engineer of Record, if required, for approval.
- B. Identifying Submittals: Identify submittals, except sample panel and sample installation, with the following information permanently adhered to or noted on each separate component of each submittal and noted on transmittal form. Mark each copy of each submittal identically, with the following:
 - 1. Construction contract number.
 - 2. Section number of the specification section by which submittal is required.
 - 3. Submittal description (SD) number of each component of submittal.
 - 4. When a resubmission, add alphabetic suffix on submittal description, for example, SD-10A, to indicate resubmission.

- 5. Name, address, and telephone number of subcontractor, supplier, manufacturer, and any other second tier Contractor associated with submittal.
- 6. Product identification and location in project.

3.06 FORMAT OF SUBMITTALS

- A. Format for SD-02 Shop Drawings
 - 1. Shop drawings shall not be less than 8½ by 11 inches nor more than 22 by 34 inches. Submit in the form of blueline or blackline prints of each sheet. Blue prints will not be accepted.
 - 2. Present 8½ by 11 inch sized shop drawings as part of the bound volume for submittals required by section. Present larger drawings in sets.
 - 3. Include on each drawing the drawing title, number, date, and revision numbers and dates, in addition to information required in paragraph entitled "Identifying Submittals."
 - 4. Dimension drawings, except diagrams and schematic drawings; prepare drawings demonstrating interface with other trades to scale. Shop drawing dimensions shall be the same unit of measure as indicated on the contract drawings. Identify materials and products for work shown.
 - 5. Shop Drawings shall not be direct reproductions of contract design drawings.
- B. Format of SD-03 Product Data and SD-08 Manufacturer's Instruction's
 - 1. Present product data submittals for each section as a complete, bound volume. Include table of contents, listing page and catalog item numbers for product data.
 - 2. Indicate, by prominent notation, each product which is being submitted; indicate specification section number and paragraph number to which it pertains
 - 3. Supplement product data with material prepared for project to satisfy submittal requirements for which product data does not exist. Identify this material as developed specifically for project.
- C. Format of SD-04 Samples
 - 1. Furnish samples in sizes below, unless otherwise specified or unless the manufacturer has prepackaged samples of approximately the same size as specified:
 - a. Sample of Equipment or Device: Full size.
 - b. Sample of Materials Less Than 2 by 3 inches: Built up to 8½ by 11 inches.
 - c. Sample of Materials Exceeding 8½ by 11 inches: Cut down to 8½ by 11 inches and adequate to indicate color, texture, and material variations.
 - d. Sample of Linear Devices or Materials: 10 inch length or length to be supplied, if less than 10 inches. Examples of linear devices or materials are conduit and handrails.
 - e. Sample of Non-Solid Materials: Pint. Examples of non-solid materials are sand and paint.

- f. Color Selection Samples: 2 by 4 inches.
- g. Sample Panel: 4 by 4 feet.
- h. Sample Installation: 100 square feet.
- D. Format of SD-05 Design Data and SD-07 Certificates
 - 1. Provide design data and certificates on 8½ by 11 inches paper. Provide a bound volume for submittals containing numerous pages.
- E. Format of SD-06 Test Reports
 - 1. Provide reports on 8½ by 11 inch paper in a complete bound volume.
 - 2. Indicate by prominent notation, each report in the submittal. Indicate specification number and paragraph number to which it pertains.
- F. Format of SD-01 Preconstruction Submittals and SD-09 Closeout Submittals
 - 1. When submittal includes a document which is to be used in project or become part of project record, other than as a submittal, do not apply Contractor's approval stamp to document, but to a separate sheet accompanying document.
 - 2. As-Built drawings sets shall be full sized (24" x 32") and represent the installed condition of the Work. The drawings shall clearly mark out where the installed condition differs from the Contract Documents. In addition to the hard copies, the As-Built drawings shall be submitted electronically in both AutoCAD format (.dwg) version 2007 or newer and Portable Document Format (.pdf).
 - 3. Photographs shall be submitted electronically in JPEG-format (.jpg) as well as Portable Document Format (.pdf). Photographs shall be in color and shall be a minimum of 3 megapixels in size. The location, photo directions, elevation, and date/time taken shall be submitted in conjunction with the PDF submission.

3.07 QUANTITY OF SUBMITTALS

- A. Unless otherwise noted, all submittals should be in PDF format and transmitted electronically. If hard copies are requested:
 - 1. Number of copies of SD-02 Shop Drawings
 - a. The Owner and/or Construction Manager may designate that all submittals shall be "paperless" and the contractor may transmit submittals via electronic file.
 - b. Submit four (4) copies of submittals of Shop Drawings. One (1) print with the Construction Manager's review comments will be returned to the Contractor. The Contractor may make and distribute such copies as desired.
 - 2. Number of Copies of SD-03 Product Data and SD-08 Manufacturer's Instructions
 - a. Submit in compliance with quantity requirements specified for shop drawings.
 - 3. SD-04 Number of Samples

- a. Submit two (2) samples, or two (2) sets of samples showing range of variation, of each required item. One (1) approved sample or set of samples will be retained by approving authority and one (1) will be returned to Contractor.
- b. Submit one (1) sample panel. Include components listed in technical section or as directed.
- c. Submit one (1) sample installation, where directed.
- d. Submit one (1) sample of non-solid materials.
- 4. Number of Copies SD-05 Design Data and SD-07 Certificates
 - a. Submit in compliance with quantity requirements specified for shop drawings.
- 5. Number of Copies SD-06 Test Reports
 - a. Submit in compliance with quantity requirements specified for shop drawings.
- 6. Number of Copies of SD-01 Preconstruction Submittals and SD-09 Closeout Submittals.
 - a. Unless otherwise specified, submit administrative submittals compliance with quantity requirements specified for shop drawings. Submit six (6) copies of all Closeout Submittals.

3.08 REVIEW BY OWNER'S REPRESENTATIVE

- A. Review by the Construction Manager and Engineer of Record does not relieve the Contractor from responsibility for errors or omissions which may exist in the submitted data.
- B. Revisions:
 - 1. Make revisions required by the Construction Manager and Engineer of Record.
 - 2. If the Contractor considers any required revision to be a change, he shall so notify the Construction Manager, in writing, in accordance with the specifications.
 - 3. Make only those revisions directed or accepted by the Construction Manager and Engineer of Record.
- C. Reimbursement of Owner's Representative's Costs:
 - 1. In the event substitutions are proposed to the Construction Manager after the Contract has been awarded, the Construction Manager will record all time used by him and by his consultants in evaluation of each such proposed substitution.

Whether or not the Construction Manager and/or Engineer of Record accepts a proposed substitution, the Contractor may be responsible for the costs of the Construction Manager and/or Engineer of Record and consultants for all time spent by them in evaluating the proposed substitution, plus administrative fees. The costs will be deducted from outstanding pay requests due to the Contractor by way of a Change Order.

- D. Engineer of Record Review Stamp:
 - 1. The Engineer of Record will use the following approval statement when returning submittals to the Contractor as "Fabrication May Proceed" or "Do Not Fabricate":
 - a. "Submission has been checked for general conformance with design concept of the project. Comments made on [type of submittal] do not relieve the Contractor from compliance with requirements of the Contract Documents. Contractor is responsible for dimensions to be confirmed and correlated at the job site; for information that pertains solely to the fabrication processes or to techniques of construction; and for coordination of the work of all trades."

Fabrication May Proceed:	Do Not Fabricate:	

By:	Date:
-	

Note:		

Actions Possible

- b. The Engineer of Record review stamp will indicate the status of the submittal, and corresponding action to be taken by the Contractor as follows:
 - (i) Submission is in general conformance with design concept: When the Engineer of Record marks the submittal "Submission is in general conformance with design concept", the Work covered by the submittal may proceed, provided it complies with the requirements of the Contract Documents. Final payment depends on that compliance.
 - Submission is in general conformance with design concept, except as noted: When the Engineer of Record marks the submittal "Submission is in general conformance with design concept, except as noted", the Work covered by the submittal may proceed provided it complies with the notations on the submittal and requirements of the Contract Documents. Final payment depends on that compliance.
 - (iii) Revise and Resubmit: When the Engineer of Record marks the submittal "Revise and Resubmit", the Work covered by the submittal may not proceed. The submittal must be revised to comply with the notations on the submittal and requirements of the Contract Documents, and must then resubmit to the Engineer of Record prior to the commencement of the work described in the submittal. Final payment depends on that compliance.
 - (iv) Submission is rejected for non-conformance with design concept: When the Engineer of Record marks the submittal "Submission is rejected for non-conformance with design concept", do not proceed with the Work covered by the submittal, including purchasing, fabrication, delivery, or other activity. Revise and prepare a new submittal according to the notations, resubmit without delay. Repeat if necessary to obtain a different action mark.
 - (v) Do not use, or allow others to use submittals marked "Submission is rejected for non-conformance with design concept" at the Project Site or elsewhere where Work is in progress.

PART 4.0 - MEASUREMENT AND PAYMENT

Include within the Contract prices the amount sufficient to cover all costs for work of this section. No separate payment will be made for work completed under this section. A Schedule of Values shall be submitted to and approved by the Owner's Representative.

PART 1.0 - GENERAL

1.01 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

- A. AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)
 - ASTM A880 Criteria for Use in Evaluation of Testing Laboratories and Organization for Examination and Inspection of Steel, Stainless Steel, and Related Alloys
 - ASTM C1077 Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation
 - ASTM C31 Standard Method of Making and Curing Concrete Compressive and Flexural Test Specimens in the Field.
 - ASTM C39 Standard method of Test for Compressive Strength of Cylindrical Concrete Specimens.
 - ASTM C94 Standard Specification for Ready-Mix Concrete.
 - ASTM C138 Standard Method of Test for Unit Weight, Yield, and Air Content of Concrete.
 - ASTM C172 Standard Method of Sampling Fresh Concrete.
 - ASTM C192 Standard Method of Making and Curing Concrete Test Specimens in the Laboratory.
 - ASTM C214 Recommended Practice for Evaluation of Compression Test Results of Field Concrete.
 - ASTM D3740 (Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
 - ASTM E329 Agencies Engaged in the Testing and/or Inspection of Materials Used on Construction
 - ASTM E543 Evaluating Agencies that Perform Nondestructive Testing

1.02 SUBMITTALS

Submit the following in accordance with Section 01330 entitled "Submittal Procedures."

A. Contractor Production Report.

1.03 TESTING

Except as stated otherwise in the specification sections, perform sampling and testing required under this Contract.

A. Provide an independent testing laboratory qualified to perform sampling and tests required by this Contract. When the proposed testing laboratory is not accredited by an acceptable "Qualified National Authority" listed in the paragraph entitled "Qualified National Authority," submit to the Contracting Officer for approval, certified statements, signed by an official of the testing laboratory attesting that the proposed laboratory, meets or conforms to the following requirements:

- 1. Laboratories engaged in testing of construction materials shall meet the requirements of ASTM E329.
- 2. Laboratories engaged in testing of concrete and concrete aggregates shall meet the requirements of ASTM C1077.
- 3. Laboratories engaged in testing of soil and rock, as used in engineering design and construction, shall meet the requirements of ASTM D3740.
- 4. Laboratories engaged in inspection and testing of steel, stainless steel, and related alloys will be evaluated according to ASTM A880.
- 5. Laboratories engaged in nondestructive testing (NDT) shall meet the requirements of ASTM E543.
- 6. Laboratories engaged in Hazardous Materials Testing shall meet the requirements of OSHA and EPA.
- B. Qualified National Authorities are the National Voluntary Laboratory Accreditation Program (NVLAP) administered by the National Institute of Standards and Technology, the American Association of State Highway and Transportation Officials (AASHTO) program, and the American Association for Laboratory Accreditation (A2LA) program. Furnish to the Owner, a copy of the Certificate of Accreditation and Scope of Accreditation. The scope of the laboratory's accreditation shall include the test methods required by the Contract.
- C. Prior to approval of non-accredited laboratories, the proposed testing laboratory facilities and records may be subject to inspection by the Engineer. Records subject to inspection include equipment inventory, equipment calibration dates and procedures, library of test procedures, audit and inspection reports by agencies conducting laboratory evaluations and certifications, testing and management personnel qualifications, test report forms, and the internal QC procedures.
- D. The Owner retains the right to check laboratory equipment in the proposed laboratory and the laboratory technician's testing procedures, techniques, and other items pertinent to testing, for compliance with the standards set forth in this Contract.

Cite applicable Contract requirements, tests or analytical procedures used when reporting test results. Provide actual results and include a statement that the item tested or analyzed conforms or fails to conform to specified requirements. If the item fails to conform, notify Owner immediately. Conspicuously stamp the cover sheet for each report in large red letters "CONFORMS" or "DOES NOT CONFORM" to the specification requirements, whichever is applicable. Test results shall be signed by a testing laboratory representative authorized to sign certified test reports. Furnish the signed reports, certifications, and other documentation to the Owner. Furnish a summary report of field tests at the end of each month.

E. The Contractor shall furnish the signed reports, certifications, and a summary report of field tests at the end of each month to the Owner.

1.04 COMPLETION INSPECTIONS

A. Near the completion of all work or any increment thereof established by a completion time stated elsewhere in the specifications, the Contractor shall conduct an inspection of the work and develop a "punch list" of items which do not conform to the approved drawings and specifications. Include in the punch list any remaining items on the "Rework Items List" which were not corrected prior to the Punch-Out

Inspection. The punch list shall include the estimated date by which the deficiencies will be corrected. A copy of the punch list shall be provided to the Owner. The Contractor or staff shall make follow-on inspections to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Owner that the facility is ready for the Owner "Pre-Final Inspection."

- B. The Owner will perform a pre-final inspection to verify that the facility is complete and ready to be occupied. An Owner "Pre-Final Punch List" may be developed as a result of this inspection. The Contractor shall ensure that all items on this list are corrected prior to notifying the Owner that a "Final" inspection can be scheduled. Any items noted on the "Pre-Final" inspection shall be corrected in timely manner and shall be accomplished within the time slated for completion of the entire work, or any particular increment thereof if the project is divided into increments by separate completion dates.
- C. The Contractor's Project Manager, the superintendent or other primary contractor management personnel, and the Owner's Representative will be in attendance at the Final Acceptance Inspection. Additional Owner personnel may be in attendance. The final acceptance inspection will be formally scheduled by the Engineer based upon results of the "Pre-Final" inspection. Notice shall be given to the Owner at least 14 days prior to the final inspection stating that all specific items previously identified to the Contractor as being unacceptable, along with all the remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection.

1.05 DOCUMENTATION

- A. Maintain current and complete records of on-site and off-site QC program operations and activities.
- B. Contractor Production Reports are required for each day that work is performed. Account for each calendar day throughout the life of the Contract. The reporting of work shall be identified by terminology consistent with the construction schedule. Contractor Production Reports are to be prepared, signed and dated by the project superintendent and shall contain the following information:
 - 1. Date of report, report number, name of contractor, Contract number, title and location of Contract and superintendent present.
 - 2. Weather conditions in the morning and in the afternoon including maximum and minimum temperatures.
 - 3. Identify work performed by corresponding Scheduled Activity No., Modification No., etc.
 - 4. A list of Contractor and subcontractor personnel on the work site, their trades, employer, work location, description of work performed, hours worked by trade, daily total work hours on work site, and total work hours from start of construction.
 - 5. A list of job safety actions taken and safety inspections conducted. Indicate that safety requirements have been met including the results on the following:
 - a. Was a job safety meeting held? (If YES, attach a copy of the meeting minutes.)

- b. Were there any lost time accidents? (If YES, attach a copy of the completed OSHA report.)
- c. Was crane/trenching/scaffold/high voltage electrical/high work done? (If YES, attach a statement or checklist showing inspection performed.)
- d. Was hazardous material/waste released into the environment? (If YES, attach a description of meetings held and accidents that happened.)
- e. List safety actions taken today and safety inspections conducted.
- 6. A list of equipment/material received each day that is incorporated into the job.
- 7. A list of construction equipment on the work site including the number of hours used, idle and down for repair.
- 8. Include a "remarks" section in this report which will contain pertinent information including directions received, problems encountered during construction, work progress and delays, conflicts or errors in the drawings or specifications, field changes, safety hazards encountered, instructions given and corrective actions taken, delays encountered and a record of visitors to the work site.

1.06 NOTIFICATION ON NON-COMPLIANCE

A. The Owner will notify the Contractor of any detected non-compliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Owner may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time for excess costs or damages by the Contractor.

PART 2.0 - PRODUCTS

Not used.

PART 3.0 - EXECUTION

Not used.

PART 1.0 - GENERAL

1.01 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

- A. CODE OF FEDERAL REGULATIONS (CFR)
 - 29 CFR 1910 Occupational Safety and Health Standards
 - 40 CFR 261 Identification and Listing of Hazardous Waste
 - 40 CFR 262 Generators of Hazardous Waste
 - 40 CFR 263 Transporters of Hazardous Waste
 - 40 CFR 264 Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
 - 40 CFR 265 Interim Status Standard for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities
 - 40 CFR 300 National Oil and Hazardous Substances Pollution Contingency Plan
 - 49 CFR 171 General Information, Regulations, and Definitions
 - 49 CFR 172 Hazardous Materials, Tables, and Hazardous Materials Communications Regulations
 - 49 CFR 178 Shipping Container Specification
- B. ENVIRONMENTAL PROTECTION AGENCY (EPA) EPA 832-R-92-005 Storm Water Management for Construction Activities

1.02 CONTRACTOR LIABILITIES FOR ENVIRONMENTAL PROTECTION

Contractors shall complete and provide environmental training documentation for training required by Federal, State, and local regulations.

1.03 DEFINITIONS

- A. Sediment Soil and other debris that has eroded and been transported by runoff water or wind.
- B. Solid Waste Rubbish, debris, garbage, and other discarded solid materials, except hazardous waste as defined in paragraph entitled "Hazardous Waste," resulting from industrial, commercial, and agricultural operations and from community activities.
- C. Sanitary Wastes Wastes characterized as domestic sanitary sewage.
- D. Rubbish Combustible and noncombustible wastes such as paper, boxes, glass, crockery, metal, lumber, cans, and bones.
- E. Debris

Combustible and noncombustible wastes such as ashes and waste materials resulting from construction or maintenance and repair work, leaves, and tree trimmings.

F. Chemical Wastes This includes salts, acids, alkalies, herbicides, pesticides, and organic chemicals.

- G. Garbage
 Refuse and scraps resulting from preparation, cooking, dispensing, and consumption of food.
- Hazardous Waste
 Hazardous substances as defined in 40 CFR 261 or as defined by applicable State and local regulations.
- I. Hazardous Materials Hazardous materials as defined in 49 CFR 171 and listed in 49 CFR 172.
- J. Landscape Features Trees, plants, shrubs, and ground cover.
- K. Oily Waste Petroleum products and bituminous materials.

1.04 SUBMITTALS

Submit the following in accordance with Section entitled "Submittal Procedures."

- A. Pre-construction survey report.
- B. Submit a copy of an approved laboratory analysis of materials collected as a result from abrasive blasting operations before disposing of waste materials.
- C. Submit copies of any State and local permits or licenses for the solid waste disposal facility.
- D. Submit a copy of the applicable EPA and State permits, manifests, or licenses for transportation, treatment, storage, and disposal of hazardous waste by permitted facilities.
- E. Submit one copy of the EPA or State permit license, or regulation for the transporter who will ship the hazardous waste to the permitted Treatment, Storage, and Disposal (TSD) facility.
- F. Submit written certification that hazardous waste turned in for disposal was generated on the Owner's property and is identified, packaged, and labeled in accordance with 40 CFR 261, 40 CFR 262, and 40 CFR 263.

1.05 ENVIRONMENTAL PROTECTION REGULATORY REQUIREMENTS

A. Provide and maintain, during the life of the contract, environmental protection as defined in this Section. Plan for and provide environmental protective measures to control pollution that develops during normal construction practice. Plan for and provide environmental protective measures required to correct conditions that develop during the construction of permanent or temporary environmental features associated with the project. Comply with Federal, State, and local regulations pertaining to the environment, including but not limited to water, air, solid waste, and noise pollution.

1.06 ENVIRONMENTAL PROTECTION PLAN

A. Contents of Environmental Protection Plan

- 1. Include any hazardous materials (HM) planned for use on the job. Submit a list (including quantities) of HM to be brought to the site and copies of the corresponding material safety data sheets (MSDS). Submit this list to the Owner. At project completion, remove any hazardous material brought onto the site. Account for the quantity of HM brought to the site, the quantity used or expended during the job, and the left over quantity which (1) may have additional useful life as a HM and shall be removed by the Contractor, or (2) may be a hazardous waste, which shall then be removed as specified herein.
- 2. The Environmental Protection Plan shall list and quantify any Hazardous Waste (HW) to be generated during the project.
- 3. Store HW near the point of generation up to a total quantity of 55 gallons of hazardous waste. Move any volume exceeding these quantities to a HW permitted area within 3 days. Properly label all hazardous waste to be stored in accordance with applicable regulations. Contact Owner for conditions in the area of the project which may be subject to special environmental procedures. Include this information in the Preconstruction Survey. Describe in the Environmental Protection Plan any permits required prior to working the area, and contingency plans in case an unexpected environmental condition is discovered.
- 4. Obtain permits for handling HW, and deliver completed documents to Engineer for review. File the documents with the appropriate agency, and complete disposal with the approval of Owner. Deliver correspondence with the State concerning the environmental permits and completed permits to Owner.
- B. Environmental Protection Plan Format The Environmental Protection Plan shall conform to the following format:

1.07 ENVIRONMENTAL PROTECTION PLAN

- A. Contractor Organization Address and Phone Numbers
 - 1. Methods to be used to prevent soil erosion
 - 2. Methods to be used to contain spills of oily waste or debris
 - 3. Methods to be used to control dust
 - 4. Methods to be used for solid waste disposal
 - 5. Hazardous materials to be brought onto the site
 - 6. MSDS package
 - 7. Employee training documentation
 - 8. HW storage plan
 - 9. HW to be generated
 - 10. Pre-construction survey results
 - 11. Permitting requirements identified
- B. Perform a pre-construction survey of the project site with the Engineer, and document existing environmental conditions in and adjacent to the site.

PART 2.0 - PRODUCTS

Not used.

PART 3.0 - EXECUTION

3.01 PROTECTION OF NATURAL RESOURCES

- A. Preserve the natural resources within the project boundaries and outside the limits of work. Restore to an equivalent or improved condition upon completion of work. Confine construction activities to within the limits of the work indicated or specified. Conform to the national and state permitting requirements of the Clean Water Act.
- B. Prevent oily or other hazardous substances from entering the ground, drainage areas, or local bodies of water. Surround all temporary fuel oil or petroleum storage tanks with a temporary earth berm of sufficient size and strength to contain the contents of the tanks in the event of leakage or spillage.
- C. Prevent oily substances or other debris from entering the water. Provide a temporary protective floating boom system, complete with associated hardware and anchors, to prevent debris from escaping from the work area. The boom shall totally enclose any active work or storage area. Booms shall have a minimum of 6 inches of freeboard, 12 inches draft, 11 pounds per foot buoyancy and a fabric strength of 13,000 pounds.
- D. Do not disturb fish and wildlife. Do not alter water flows or otherwise significantly disturb the native habitat adjacent to the project and critical to the survival of fish and wildlife, except as indicated or specified.
- 3.02 NOISE
 - A. Make the maximum use of low-noise emission products, as certified by the EPA. Blasting or use of explosives will not be permitted without written permission from the Owner, and then only during designated times. Confine pile-driving operations to the period between 7 a.m. and 4 p.m., Monday through Friday, exclusive of holidays, unless otherwise directed.

3.03 EROSION AND SEDIMENT CONTROL MEASURES

- A. Burn-off of the ground cover is not permitted.
- B. Temporary Protection of Erodible Soils Use the following methods to prevent erosion and control sedimentation:
 - 1. Mechanically retard and control the rate of runoff from the construction site. This includes construction of diversion ditches, benches, berms, and use of silt fences and straw bales to retard and divert runoff to protected drainage courses.
 - 2. Provide temporary protection on sides and back slopes as soon as rough grading is completed or sufficient soil is exposed to require erosion protection. Protect slopes by accelerated growth of temporary vegetation, mulching, netting or other methods approved by the Engineer.

3.04 CONTROL AND DISPOSAL OF SOLID WASTES

A. Pick up solid wastes on a daily basis, and place in covered containers that are regularly emptied. Do not prepare or cook food on the project site. Prevent contamination of the site or other areas when handling and disposing of wastes. At

project completion, leave the areas clean. Dispose of solid waste generated at locations as directed.

- B. Remove rubbish and debris from Owner property and dispose at a licensed disposal facility off-site.
- C. Place garbage in approved containers, and move to a pickup point or disposal area, where directed.

3.05 CONTROL AND DISPOSAL OF HAZARDOUS WASTE

- A. Handle generated hazardous waste in accordance with 40 CFR 262.
- B. Dispose of hazardous waste in accordance with Federal, State, and local regulations, especially 40 CFR 263, 40 CFR 264, and 40 CFR 265. Removal of hazardous waste from project site shall not occur without prior notification and coordination with the Owner. Transport hazardous waste by a permitted, licensed, or registered hazardous waste transported to a TSD facility. Hazardous waste shall be properly identified, packaged, and labeled in accordance with 49 CFR 172. Provide completed manifest for hazardous waste disposed of off-site to the Engineer within 7 days of disposal. Hazardous waste shall not be brought onto the site.
- C. Store hazardous waste in containers in accordance with 49 CFR 178. Identify hazardous waste in accordance with 40 CFR 261 and 40 CFR 262. Identify hazardous waste generated within the confines of the site by the site's EPA generator identification number.
- D. Take precautions to prevent spills of oil and hazardous material. In the event of a spill, immediately notify the Owner. Spill response shall be in accordance with 40 CFR 300 and applicable State regulations.
- E. Protect against spills and evaporation during fueling and lubrication of equipment and motor vehicles. Dispose of lubricants and excess oil in accordance with Federal, State, local regulations per 3.05B.

3.06 DUST CONTROL

- A. Keep dust down at all times, including nonworking periods. Sprinkle or treat, with dust suppressants, the soil at the site, haul roads, and other areas disturbed by operations. Dry power brooming will not be permitted. Instead, use vacuuming, wet mopping, wet sweeping, or wet power brooming. Air blowing will be permitted only for cleaning non-particulate debris such as steel reinforcing bars. Only wet cutting will be permitted for cutting concrete blocks, concrete, and bituminous concrete. Do not shake bags of cement, concrete mortar, or plaster unnecessarily.
- B. Abrasive Blasting
 - 1. The use of high pressure water blasting, in accordance with Society for Protective Coatings (SSPC) guidelines, in lieu of abrasive blasting is preferred method of substrate cleaning.
 - 2. The use of silica sand is prohibited in abrasive blasting.
 - 3. Provide tarpaulin drop cloths and windscreens to enclose abrasive blasting operations to confine and collect dust, abrasive agent, paint chips, and other. Perform work involving removal of hazardous material in accordance with 29 CFR 1910.

4. Collect dust, abrasive, paint, and other debris resulting from abrasive blasting operations on painted surfaces and store in 55 gallon drums with watertight lids. Take a representative sample of this material, and test for EP toxicity with respect to lead, chromium, and cadmium content. The sampling and testing shall be performed in accordance with 40 CFR 261. Handle debris resulting from the abrasive blasting operations as a hazardous material, and dispose of in accordance with 40 CFR 263, 40 CFR 264, and 40 CFR 265. Transport hazardous material by a transporter licensed and permitted for transportation of hazardous materials. Dispose of hazardous material in an EPA-approved and permitted facility specifically designated for hazardous waste disposal.

PART 1.0 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work specified in this section.
- 1.02 SUMMARY
 - A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction Layout.
 - 2. Field engineering and surveying.
 - 3. General installation of products.
 - 4. Progress cleaning.
 - 5. Starting and adjusting.
 - 6. Protection of installed construction.
 - 7. Correction of the Work.
 - B. Related Sections include the following:
 - 1. Division 1, Section "Project Management and Coordination" for procedures to coordinate field engineering with other construction activities.
 - 2. Division 1, Section "Submittal Procedures" for submitting surveys.
 - 3. Division 1, Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

1.03 SUBMITTALS

- A. Qualification Data: For land surveyor to demonstrate their capabilities and experience. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- B. Certificates: Submit certificate signed by land surveyor certifying that locations and elevation of improvements comply with requirements.
- C. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.
- D. Certified Surveys: Submit 5 copies signed by land surveyor.
- E. Final Property Survey: Submit 10 copies showing the Work performed and record survey data.
- 1.04 QUALITY ASSURANCE
 - A. Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who has minimum of 5 years experience in providing land- surveying services of the kind indicated.

PART 2.0 - PRODUCTS

Not Used.

PART 3.0 - EXECUTION

- 3.01 IDENTIFICATION
 - A. Verify layout information shown on the Drawings, in relation to the property survey and existing benchmarks, before proceeding to lay out the Work. Locate and protect existing benchmarks and control points. Preserve permanent reference points during construction.
 - 1. Do not change or relocate benchmarks or control points without prior written approval. Promptly report lost or destroyed reference points or requirements to relocate reference points due to necessary changes in grades or locations.
 - 2. Promptly replace lost or destroyed Project control points. Base replacements on the original survey control points.
 - B. Establish and maintain a minimum of 2 permanent benchmarks on the site (if required to lay out work shown on contract drawings); referenced to data established by survey control points.
 - C. Establish and maintain the Layout Baseline with the stationing indicated on the Contract Drawings.

3.02 EXAMINATION

Existing Conditions: The existence and location of previously installed site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of all site utility systems and other construction affecting the Work.

- A. Before construction, verify the location and connection points of utility services.
- B. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning site work, investigate and verify the existence and location of all underground utilities and other construction affecting the Work.
 - 1. Before construction, verify the location and invert elevation at connection points of sanitary sewer, storm sewer, gas, telecom, water-service piping, irrigation, and underground electrical services.
 - 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.

3.03 PREPARATION

- A. Existing Utility Information: Furnish information to Owner's Representative that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Existing Utility Interruptions: Do not interrupt utilities services serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

- 1. Notify the Owner's Representative not less than 2 days in advance of proposed utility interruptions.
- 2. Do not proceed with utility interruptions without Owner's Representative's written permission.
- C. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- D. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
 Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to the Owner's Representative. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

3.04 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Contract Documents in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Owner's Representative immediately.
- B. General: Engage a land surveyor to lay out the Work using accepted surveying practices.
 - 1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
 - 2. Establish dimensions with tolerances indicated. Do not scale Drawings to obtain required dimensions.
 - 3. Inform installers of lines and levels to which they must comply.
 - 4. Check the location, level and plumb, of every major element as the Work progresses.
 - 5. Notify Owner's Representative when deviations from required lines and levels exceed allowable tolerances.
 - 6. Close site surveys with an error of closure less than or equal to the standard established by authorities having jurisdiction.
- C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.
- D. Building Lines and Levels: Locate and lay out control lines and levels for structures, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level structures from two or more locations.
- E. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by the Engineer.

3.05 FIELD ENGINEERING

- A. Identification: Contractor will identify existing benchmarks, control points, and property corners.
- B. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
 - 1. Do not change or relocate existing benchmarks or control points without prior written approval of the Owner's Representative. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to the Owner's Representative before proceeding.
 - 2. Replace lost or destroyed permanent benchmarks or control points promptly. Base replacements on the original survey control points.
 - 3. Any required re-calculation and layout plan for an offset baseline shall be provided by the Contractor at no additional cost to the Owner.
- C. Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.
 - 1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.
 - 2. Where the actual location or elevation of layout points cannot be marked, provide temporary reference points sufficient to locate the Work.
 - 3. Remove temporary reference points when no longer needed. Restore marked construction to its original condition.

3.06 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- F. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.

- 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by the Owner's Representative.
- 2. Allow for structure movement, including thermal expansion and contraction.
- G. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- H. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.07 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements of NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80°F (27°C).
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
- B. Site: Maintain Project site free of waste materials and debris and ensure that no materials enter the adjacent waterway.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed areas.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Cutting and Patching: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty, and similar materials.
 - 1. Thoroughly clean piping, conduit, and similar features before applying paint or other finishing materials. Restore damaged pipe covering to its original condition.
- H. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.

- I. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage, adverse weather conditions or deterioration at Substantial Completion.
- J. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- K. Limiting Exposures: Supervise construction operations to ensure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.08 STARTING AND ADJUSTING

- A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Manufacturer's Field Service: If a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Division 1, Section "Quality Control".

3.09 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

3.10 CORRECTION OF THE WORK

- A. Repair or remove, and replace defective construction. Restore damaged substrates and finishes. Comply with requirements of original construction or installation of Work.
 - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.
- B. Restore permanent facilities used during construction to their specified condition.
- C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
- D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
- E. Remove and replace chipped, scratched, and broken materials.

PART 1.0 - GENERAL

1.01 DESCRIPTION

- A. Throughout the construction period, maintain the worksites in a standard of cleanliness as described in this Section.
- B. In addition to standards described in this Section, comply with all requirements for cleaning as described in various other Sections of these Specifications.
- C. Maintain premises and public properties free from accumulations of waste, debris, and rubbish caused by operations.
- D. At completion of Work, remove and lawfully dispose of waste materials, rubbish, tools, equipment, machinery, and surplus materials, and clean all sight-exposed surfaces; leave project clean and ready for occupancy.

1.02 QUALITY ASSURANCE

- A. Conduct daily inspections, and more often if necessary, to verify that requirements of cleanliness are being met.
- B. In addition to the standards described in this Section, comply with all pertinent requirements of governmental agencies having jurisdiction.

1.03 SAFETY REQUIREMENTS

- A. Hazards Control
 - 1. Store volatile wastes in covered metal containers, and remove from premises daily.
 - 2. Prevent accumulation of wastes that create hazardous conditions.
 - 3. Provide adequate ventilation during use of volatile or noxious substances.
- B. Conduct cleaning and disposal operations to comply with all applicable ordinances and anti- pollution laws.

PART 2.0 - PRODUCTS

Provide all required personnel, equipment, and materials needed to maintain the specified standard of cleanliness.

Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3.0 - EXECUTION

3.01 PROGRESS CLEANING

- A. General
 - 1. Retain all stored items in an orderly arrangement allowing maximum access, not impeding drainage or traffic, and providing the required protection of materials.
 - 2. Do not allow the accumulation of scrap, debris, waste material, and other items not required for construction of this Work.
 - 3. Wet down dry materials and rubbish to lay dust and prevent blowing dust.

- 4. At least once a week and more often if necessary, completely remove all scrap, debris and waste material from the job site.
- 5. Provide adequate storage for all items awaiting removal from the job site, observing all requirements for fire protection and protection of the environment.
- 6. Combustible waste, scrap, rubbish, etc., shall be stored in adequately sized metal containers (with metal covers) where practical, pending removal from the premises.
- B. Worksites
 - 1. Daily, and more often if necessary, inspect each site and move all scrap, debris and waste material to a place designated for their storage.
 - 2. Weekly, and more often if necessary, inspect all arrangements of materials stored on each site; restack, tidy, or otherwise service all arrangements to meet the above requirements.
 - 3. Maintain each site in a neat and orderly condition at all times.
- C. Structures
 - 1. Weekly, and more often if necessary, inspect the new structures and move all scrap, debris, and waste material to designated storage area.
 - 2. As required preparatory to installation of succeeding materials, clean the structures or pertinent portions thereof to the degree of cleanliness recommended by the manufacturer of materials required to achieve the required cleanliness.
 - 3. Handle materials in a controlled manner. Do not drop or throw materials from heights.
 - 4. Schedule cleaning operations so that dust and other contaminants resulting from cleaning process will not fall on wet, newly finished surfaces.

3.02 FINAL CLEANING

- A. Prior to completion of the work, remove from the job site all tools, surplus materials, equipment, scrap, debris and waste.
- B. Employ experienced workmen, or professional cleaners, for final cleaning.
- C. In preparation for substantial completion or occupancy, conduct a final inspection of sight- exposed exterior surfaces, and of any concealed spaces.
- D. Structures
 - 1. Visually inspect all surfaces and remove all traces of soil, waste material, smudges and other foreign matter. Remove all traces of splashed materials from adjacent surfaces. Remove all paint droppings, spots, stains, and dirt from finished surfaces. Use only the specified cleaning materials and equipment.
 - 2. Besides the general broom cleaning, the Contractor shall do the following special cleaning for all trades at the completion of the work and before final acceptance:

- a. Remove all marks, stains, and other soil or dirt from all newly finished surfaces.
- b. Remove all stains and clean exposed concrete floors.
- c. Clean and polish all hardware for all trades; this shall include removal of all stains, dust, dirt, paint, etc., upon completion.
- d. Clean all new fixtures and equipment installed as part of this Contract, removing all stains, paint, dirt and dust.
- e. Repair and patch marred surfaces to specified finish to match adjacent surfaces.
- E. Final Cleaning: Schedule final cleaning as approved by the Engineer to enable the Owner to accept a completely clean project.

PART 1.0 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and Division-1 Specification sections, apply to work specified in this section.
- 1.02 SUMMARY
 - A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Project Record Documents.
 - 3. Operation and Maintenance manuals.
 - 4. Warranties.
 - 5. Instruction of Owner's personnel.
 - 6. SD-09 Closeout Submittals.
 - 7. Final cleaning.
 - B. Related Sections include the following:
 - 1. Division 1, Section "Construction Progress Documentation" for submitting final documentation.
 - 2. Division 1, Section "Execution Requirements" for progress cleaning of Project site.
 - 3. Divisions 2 through 16, Sections for specific closeout and special cleaning requirements for products of those Sections.

1.03 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspections for determining date of Substantial Completion, complete the following (List items below that are incomplete in request):
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to the services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, final property surveys, and similar final record information.
 - 6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.

- 7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
- 8. Complete startup testing of systems.
- 9. Submit test/adjust/balance records.
- 10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
- 11. Advise Owner of changeover in all utilities.
- 12. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
- 13. Complete final cleaning requirements, including touchup painting.
- 14. Touchup and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Engineer and/or Owner's Representative will either proceed with inspection or notify Contractor of unfilled requirements. The Owner's Representative will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by the Owner's Representative that must be completed or corrected before certificate will be issued.
 - 1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for Final Completion.

1.04 FINAL COMPLETION

- A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:
 - 1. Submit a final Application for Payment according to payment procedure.
 - 2. Submit certified copy of Owner's Representative's endorsed and dated Substantial Completion inspection list of items to be completed or corrected (punch list). The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - 4. Submit pest-control final inspection report and warranty.
 - 5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems. Submit demonstration and training videotapes.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Engineer and/or Owner's Representative will either proceed with inspection or notify Contractor of unfilled requirements. The Owner's Representative will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.05 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

- A. Preparation: Submit three (3) copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction. Use CSI Form 14.1A.
 - 1. Organize list of areas in phases to match construction schedule, starting with the northern areas first and proceeding south.
 - 2. Organize items applying to each phase of work by major element, including categories for earthwork, utility systems, paving, structures, irrigation, water supply, lighting, planting soils and mixes, and site furnishings.
 - 3. Include the following information at the top of each page:
 - a. Project Name.
 - b. Date.
 - c. Name of Engineer and Owner's Representative.
 - d. Name of Contractor.
 - e. Page number.

1.06 WARRANTIES

- A. Submittal Time: Submit written warranties on request of Owner's Representative for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
- B. Partial Occupancy: Submit properly executed warranties within 15 days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- C. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2" x 11" paper.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
 - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES", Project name, and name of Contractor.
- D. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2.0 - PRODUCTS

- 2.01 MATERIALS
 - A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3.0 - EXECUTION

3.01 FINAL CLEANING

- A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances, and Federal and local environmental and anti-pollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Rake grounds that are neither planted nor paved to a smooth, eventextured surface.
 - d. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - e. Remove snow and ice to provide safe access along walkways.
 - f. Clean exposed hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces.
 - g. Remove debris from limited access spaces, including trenches, equipment vaults, manholes, and similar spaces.
 - h. Remove labels that are not permanent.
 - i. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - (i) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
 - j. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.

- k. Replace parts subject to unusual operating conditions.
- I. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective fixtures.
- m. Leave Project clean and ready for occupancy.
- C. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects, and other pests. Prepare a report.
- D. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems or waterways. Remove waste materials from Project site and dispose of lawfully.

PART 1.0 - GENERAL

- 1.01 SUMMARY OF WORK
 - A. Under the applicable Division-2 sections referred to herein, the Contractor shall provide all labor, materials and equipment necessary to perform all site work that is indicated or covered by the Contract Documents.
 - B. Site work shall be shown on the site improvement plans, or as specified herein, or as directed by the Owner's Representative. Work shall include, but not be limited to, the following:
 - 1. Earthwork
 - 2. Shoring and Bracing Earthwork
 - 3. Pile Remediation
 - 4. Temporary Environmental Controls
 - C. The drawings and General Conditions of the Contract, including General and Supplementary Conditions, apply to work specified in the Division-2 sections indicated herein. The site improvement plans consisting of the following shall be referred to herein as the Site Plan.
 - 1. Facility Plan Elevation and Location Key
 - D. Site work shall be accomplished in accordance with the requirements and regulations of the City of New York.
 - E. The Contractor shall provide continuous access to the site and shall coordinate work with all other contractors and subcontractors working on the site, adjacent roadway systems, or adjacent properties. The Contractor shall not obstruct access to and from the adjacent properties from the adjacent roadways and driveways.
 - F. The Contractor shall provide a safe construction site at all times, and the public shall be protected from unreasonable hazards. Applicable local and/or State requirements shall be observed and necessary permits acquired by the Contractor. The Contractor shall take immediate steps to rectify any hazardous or unsafe condition determined so by the Consultant or the municipal agency having jurisdiction. The Contractor shall conform to the requirements of the municipal agency having jurisdiction; and Industrial Code Rule 23, Protection in Construction, Demolition and Excavation, Operations, of the Rules and Regulations of the State of New York and of Subsection 107-05 "Safety and Health Requirements" of the NYSDOT Standard Specifications.
 - G. Throughout the specifications contained herein, reference is made to the requirements of the City of New York and the requirements of the utility having jurisdiction (water, sewer, electric, gas and telephone). When there is a conflict between the referenced specifications, requirements, details, and specifications contained herein, the more stringent requirements shall control, as determined by the Consultant or representative of agency having jurisdiction, as appropriate, shall be final.
 - H. The Contractor shall obtain and observe the applicable sections of the following specifications, details and requirements herein referenced. In utilizing referenced Standard Details and Specifications, the Contractor shall conform to requirements governing the work, materials, or project and not the general provisions and other

provisions relating to measurement and payment. Standard Specifications, Details, Codes, Requirements, etc., specified herein by reference shall be as binding as if copied verbatim and specified directly herein.

- 1. The specifications, details and requirements of the City of New York.
- 2. "Standard Specifications Construction and Materials, and Details", of the New York State Department of Transportation.
- 3. Title 29 Code of Federal Regulations, Part 1926, Safety and Health Regulations for Construction, (OSHA).
- 4. Industrial Code Rules of the New York State Department of Labor, Board of Standards and Appeals.
- I. Minimum Standard Reminder: Codes and Standard Specifications listed are minimum standards, and will not relieve the Contractor from carrying out all site work operations in a safe and prudent manner, or from providing a higher quality of material and workmanship. Workmen, the public, and adjacent property shall be protected from unreasonable hazard, and, the work shall be satisfactorily completed without causing damage to adjacent ground and structures.
- J. Conformance to the requirements herein does not relieve the Contractor from implementing additional measures or providing additional materials, work, equipment, personnel, etc., necessary to ensure a safe construction site and protection of existing facilities. The Contractor is placed on notice that safety during construction is considered as important as the construction itself. The Contractor shall, therefore, at all times conduct his operations in a manner to ensure that conditions on the site are adequate and effective for safety; and, to insure the convenience of abutting property, Owners and their safety as well as the safety of his own employees.
- K. Emergency Contact Person: The Contractor shall designate someone to be available to respond to emergency calls. The name of the person and the telephone number at which he/she can be reached at any time shall be given to the Consultant, Owner and all police agencies in the area. Such person shall have full authority and capability to mobilize forces promptly as required to respond to an emergency and protect the public.
- L. The work barges must be moored independently of the pier structures either by mooring piles (spuds) or anchors which must conform to USCG requirements.

1.02 PERMITS AND BONDS

A. Permits and Bonds: Purchase and submit copies of permits and bonds necessary in connection with the performance of the Work specified in this section. At the job site, post notices and copies of permits necessary for the proper and lawful performance of the work, in accordance with such permits.

END OF SECTION

PART 1.0 - GENERAL

1.01 DESCRIPTION

A. Work of this Section includes all labor, materials, equipment and services necessary to complete the temporary erosion control measures as shown on the Drawings or as ordered by the Engineer and/or Construction Manager or Engineer during the life of the Contract. The Contractor shall provide and maintain temporary vegetation of all areas

The Contractor shall provide and maintain temporary vegetation of all areas disturbed by construction.

- B. Vegetative Measures
 - 1. Topsoil
 - 2. Mulching
- C. Temporary Structural Measures
 - 1. Earth Dike
 - 2. Temporary Swale
 - 3. Perimeter Dike/Swale
 - 4. Temporary Storm Drain Diversion
 - 5. Pipe Slope Drain
 - 6. Straw Bale Dike
 - 7. Silt Fence
 - 8. Storm Drain Inlet Protection
 - 9. Sediment Trap
 - 10. Portable Sediment Tank
 - 11. Sediment Basin
 - 12. Stabilized Construction Entrance
 - 13. Construction Road Stabilization
 - 14. Dust Control
 - 15. Sump Pit

1.02 RELATED WORK

- A. Temporary Environmental Controls Section 01575
- B. Cleaning Section 01710
- C. Site Work General Provisions Section 02100
- D. Concrete Pile Jacketing & Grouting Section 03310
- 1.03 QUALITY ASSURANCE
 - A. The Contractor shall perform all operations in accordance with the rules, regulations and ordinances of those governing bodies having jurisdiction.
 - B. NYSDEC General Permit GP-02-01

- The project will be subject to the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit for Stormwater Discharges from Construction Activity, Permit No. GP-02-01. The Owner will file a Notice of Intent (NOI) with the NYSDEC in accordance with the General Permit.
- 2. A Storm Water Pollution Prevention Plan has been prepared in accordance with the SPDES General Permit. The SWPPP is a part of the Contract Documents and the Contractor shall conform to the Chapter on Soil Erosion and Sediment Control in addition to the requirements of this Specification.
- 3. The Contractor(s) and Subcontractor(s) will be responsible for implementing all sediment control measures during construction. All contractors and subcontractors that will be performing excavations on the site must sign a copy of the certification statement before undertaking any construction or activity at the site. The certification must include the name and title of the person providing the signature; the name, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification was made. Certification Statement

"I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Storm Water Pollution Prevention Plan (SWPPP) for the construction site identified in such SWPPP as a condition of authorization to discharge stormwater. I also understand that the operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards."

4. In the event of conflict between the requirements of these Project Specifications and the pollution control laws, rules or regulations of Federal, State or Local agencies, the more restrictive laws, rules or regulations shall govern.

In accordance with the NYSDEC General Permit, the project is limited to a maximum disturbed area of 5.0 acres. The Contractor may alter the construction sequence only with prior approval by the Engineer. Areas covered with gravel, building sub-base material or temporary emulsion or stabilization shall be considered as stabilized.

- 5. Temporary stabilization must be maintained at all times. The Contractor is responsible for maintaining records to insure the 5 acre disturbance limit is met.
- 6. Providing and maintaining all temporary stabilization to meet the NYSDEC requirements shall be included in the Contract price. The Contractor shall maintain throughout the entire construction contract.

1.04 SUBMITTALS

- A. Submit shop drawings in accordance with Section 01330-Submittals.
- B. Manufacturers specifications and other data required to demonstrate compliance with specific requirements of this Section.

1.05 JOB CONDITIONS

- A. The Contractor shall provide all necessary safeguards as may be required to prevent damage to property beyond the Work area or adjacent property.
- B. Area of Work
 - 1. In accordance with the NYSDEC General Permit, the project is limited to a maximum disturbed area of 5.0 acres. The Contractor may alter the construction sequence only with prior approval by the engineer. Areas covered with gravel, building sub-base material or temporary emulsion or stabilization shall be considered as stabilized.
 - 2. The Construction Manager or Engineer shall have the authority to increase or decrease the surface area of erodible earth material exposed by clearing and grubbing, and/or excavation and fill operations, and to direct the Contractor to provide immediate permanent or temporary pollution control measures to prevent contamination of adjacent streams or other watercourses, lakes, ponds or other areas of water impoundment.
- C. Temporary Erosion Control Measures
 - 1. Temporary erosion control measures shall be used to correct conditions that develop during construction that are needed prior to installation of permanent control features, or that are temporarily needed to control erosion that develops during normal construction practices, but which are not associated with permanent control features on the Project. All slopes and stockpile areas that will remain undisturbed and/or not top-soiled and seeded for a period of fourteen (14) days shall be temporarily seeded as specified on Drawings.
- D. Permanent Erosion Control Measures
 - 1. The Contractor shall incorporate all permanent erosion control features into the Project at the earliest practical time as outlined in the Project Schedule.

PART 2.0 - PRODUCTS

- 2.01 GENERAL
 - A. All materials shall be in accordance with the items specified on the Drawings and/or contained in the "New York Guidelines for Urban Erosion and Sediment Control", August 2005.
- 2.02 SILT FENCE
 - A. Fence post shall be at least 36 inches long. Wood posts shall be of hardwood with a minimum cross section area of 4 inches. Steel posts shall be standard "T" or "U" sections and should weigh no less than one (1) pound per linear foot.
 - B. Additional support shall be provided by a woven wire fence. Woven wire fence shall be at least 14-gauge with 2" x 4" openings. Plastic netting may be used in lieu of woven wire fence. The plastic netting shall be sewn on top of the geotextile filter fabric. Plastic netting shall have the following minimum properties.

Minimum
Acceptable Value
185
11

C. The geotextile filter fabric shall have the following minimum material properties.

Geotextile Property	Minimum	Test Method
	Acceptable Value	
Grab Tensile Strength (lbs)	90	ASTM D1682
Elongation at Failure (%)	50	ASTM D1682
Mullen Burst Strength (psi)	190	ASTM D3786
Puncture Strength (lbs)	40	ASTM D751(mod)
Slurry Flow Rate	0.3	
(gal/min/sf)		
Apparent Opening Size	40-80	US Std Sieve CW-02215
(AOS)		
Ultraviolet Radiation	90	ASTM G26
Stability		

2.03 STABILIZED CONSTRUCTION ENTRANCE

A. <u>The geotextile filter fabric shall have the following minimum material properties.</u>

Geotextile Property	Minimum	Test Method
	Acceptable Value	
Grab Tensile Strength (lbs)	200	ASTM D1682
Elongation at Failure (%)	50	ASTM D1682
Mullen Burst Strength (psi)	190	ASTM D3786
Puncture Strength (lbs)	40	ASTM D751(mod)
Apparent Opening Size (AOS)	40-80	US Std Sieve CW-02215

B. Stone size shall be a minimum of two (2) inches conforming to AASHTO M-43, Size no. 1.

2.04 DUST CONTROL

A. Spray adhesives for use on mineral soils shall be as specified in the Table below.

Material	Water Dilution	Type of Nozzle	Apply Gallons/Acre
Acrylic Polymer	7:1	Course Spray	500
Latex Emulsion	12.5:1	Fine Spray	235
Resin in Water	4:1	Fine Spray	300
Polyacrylamide	Apply according to		
(PAM) Spray on or	manufacturer's		
Dry Spread	instructions.		
Acidulated soy	None	Course Spray	1200
bean soap stick			

- B. Tillage- to roughen surface and bring clods to the surface. This is a temporary emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, and spring-toothed harrows are examples of equipment which may produce the desired effect.
- C. Sprinkling site is sprinkled until the surface is wet.
- D. Barriers solid board fences, snow fences, burlap fences, crate walls, bales of hay, and similar material can be used to control air currents and soil blowing.
- E. Calcium chloride- shall be in the form of loose, dry granules or flakes fine enough to feed through commonly used spreaders at a rate that will keep surface moist but not

cause pollution or plant damage. If used on steeper slopes, then use other practices to prevent washing into streams, or accumulation around plants.

F. Stone – shall be crushed stone or coarse gravel conforming to AASHTO M-43, Size no. 57.

2.05 MULCH

A. Mulch Materials

Material	Quality Standard	Application Rate per	Depth of application
	, , , , , , , , , , , , , , , , , , ,	1,000 s.f.	
Small Grain Straw	Air dried; free of	90 to 100 lbs.	Cover about 90% of
	undesirable seeds		surface
	and coarse material		
Wood chips or	Green or air dried;	500 to 900 lbs	
Shavings	free of objectionable		
-	coarse material		
Jute Twisted Yarn	Undyed,	48" x 50 yards	
	unbleached plain	48" x 75 yards	
	weave. Warp 78		
	ends per yd. Weft		
	41 ends per yd. 60-		
	90 lbs/roll		
Gravel, crushed	Washed:	9 cubic yards	Use Size no. 3
stone or slag	AASHTO M-43,	,	where subject to
	Size no. 2. AASHTO		traffic
	M-43, Size no. 3.		

- 1. Alternate mulch materials as described in the "New York Guidelines for Urban Erosion and Sediment Control", August 2005 may be utilized with prior written approval of the Engineer.
- B. Mulch Anchoring
 - 1. Mulch anchoring should be accomplished immediately after placement to minimize loss by wind or water. Anchoring may be done by one of the following methods, depending upon the size of the area, steepness of slopes, and costs.
 - 2. Peg and Twine Drive 8 to 10 inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before or after applying mulch. Secure mulch to soil surface by stretching twine between pegs in a criss- cross and a square pattern. Secure twine around each peg with two or more round turns.
 - 3. Mulch Nettings Staple the light weight paper, jute, cotton, or plastic nettings to the soil surface. Mulch netting shall be biodegradable.
 - 4. Crimper (mulch anchoring tool) A tractor-drawn implement, somewhat like a disc- harrow especially designed to push or cut some of the broadcast long fiber mulch 3 to 4 inches into the soil so as to anchor it and leave part standing upright. This technique is limited to areas traversable by a tractor, which must operate on the contour of slopes. Straw mulch rate must be 3 tons per acre. No tackifying or adhesive agent is required.
 - 5. Liquid Mulch-Binders May be used to anchor salt hay or straw mulches.

- a. Applications should be heavier at edges where wind catches the mulch, in valleys, and at crests or banks. Remainder of area should be uniform in appearance.
- b. Use one of the following:
 - Emulsified asphalt (SS-I, CSS-I, CMS-2, MS-2, RS-I, RS-2, CRS-I, and CRS-2). Apply 0.04 gallons per sq. yd. or 194 gallons per acre on flat slopes less than 8 feet high. On slopes 8 feet high or more use 0.075 gallons per sq. yd. or 363 gallons per acre.
 - (ii) Cutback asphalt rapid curing (RC-70, RC-250, and RC-800) or medium curing (MC-250 or MC-800). Apply 0.04 gallons per sq. yd. or 194 gallons per acre on flat areas and on slopes less than 8 feet high. On slopes 8 feet or more high, use 0.075 gallons per sq. yd. or 363 gallons per acre.
 - (iii) Synthetic or Organic binders binders such as Curasol, DCA-70, Petro-set and Terra-Tack, or equal, may be used at rates recommended by the manufacturer to anchor mulch materials.

PART 3.0 - EXECUTION

- 3.01 INSPECTION
 - A. The Owner will retain an engineer to conduct on-site inspections every 7 days and within 24 hours of 0.5 inches or greater of rainfall for general compliance with the SWPPP and the General Permit. Inspection reports will be provided to the Owner and Contractor within 24 hours of the field inspection. Any problem areas of areas in need of additional stabilization will require immediate attention and correction by the Contractor.
 - B. Examine the areas and conditions where Erosion Control Measures are to be installed and notify the Construction Manager or Engineer of conditions detrimental to the proper and timely completion of the Work. Do not proceed with the Work until unsatisfactory conditions have been corrected by the Contractor in a manner acceptable to the Construction Manager or Engineer.

3.02 GENERAL REQUIREMENTS

- A. The Contractor shall conduct his operations to minimize erosion of soils and to prevent silting and muddying of streams, rivers, irrigation systems, impoundments (lakes, reservoirs, etc.) and lands adjacent to or affected by the Work, in accordance with the approved Sequence of Construction, Drawings and these Project Specifications.
- B. Construction of drainage facilities and performance of other Work that will contribute to the control of erosion and sedimentation shall be carried out in conjunction with earthwork operations or as soon thereafter as practical.
- C. Where erosion is likely to be a problem, clearing and grubbing operations shall be scheduled so that grading operations and permanent erosion control features can follow immediately thereafter, if the Project conditions permit; otherwise, temporary erosion control measures may be required between successive construction stages. The area of bare soil exposed at any one time by construction operations shall be kept to a minimum.
- D. Throughout all operations covered by this Section, the Contractor shall provide all necessary measures to control dust through the use of water, calcium chloride or

other material in accordance with the approval of the Construction Manager or Engineer, at such locations and during such periods as he may direct, or as may be required by Local Ordinance or Authorities.

3.03 TEMPORARY EROSION CONTROL MEASURES

- A. Temporary erosion control measures shall be used to correct conditions that develop during construction that are needed prior to installation of permanent control features, or that are temporarily needed to control erosion that develops during normal construction practices, but which are not associated with permanent control features on the Project.
- B. The Contractor shall install all temporary sediment and erosion control measures in accordance with the Details and as described herein.

3.04 DUST CONTROL

- A. Throughout all operations covered by this Section of the Project Specifications, the Contractor shall provide all necessary measures to control dust through the use of water, resin-in-water emulsion or other material in accordance with the approval of the Construction Manager or Engineer, at such locations and during such periods as he may direct, or as may be required by Local Ordinance or Authorities.
- B. Any disturbed areas that are left exposed more than 14 days, and are not subject to construction traffic, will immediately receive a temporary seeding. If the season prevents the establishment of a temporary cover, the disturbed areas will be mulched with straw or equivalent material.
- C. Application of spray-on adhesive (resin-in-water emulsion) shall be applied at a rate of 300 gallons per acre. The resin-in-water emulsion shall be diluted at a ratio of 4:1 and shall be applied with a fine spray nozzle. The treated soil shall not be used for travel.
- D. Watering equipment shall consist of pipelines, tanks, tank trucks or other approved devices capable of applying a uniform spread of water over the surface. A suitable device for regulating the flow and positive shut-off of the water shall be provided for positive control by the operator.
- E. The Construction Manager or Engineer will advise the Contractor of any unsatisfactory procedures for dust control. If the unsatisfactory procedures are not corrected promptly, the Construction Manager or Engineer may suspend the performance of any or all construction until the condition has been corrected.

3.05 TEMPORARY SEEDING

- A. Fertilizer shall be applied at the rate of 14 lbs. per 1000 square foot or 600 lbs. per acre, using 5-10-10 or equivalent.
- B. Annual ryegrass shall be applied at the rate of 30 lbs. per acre, or other select mixture described in the standards.
- C. Small grain straw mulch shall be applied at a rate of 90 lbs. per 1000 square foot or 2 tons per acre, to be applied and anchored according to the standards.
- D. All slopes and stockpile areas that will remain undisturbed and/or not topsoiled and seeded for a period of fourteen (14) days shall be temporarily seeded as specified on Drawings.

3.06 SEDIMENTS AND POLLUTANTS

- A. Water from operations containing sediment shall be treated by filtration, settling basins or other approved means sufficient to reduce the sediment content to no more than that of the stream into which it is discharged.
- B. Pollutants such as fuels, lubricants, bitumens, raw sewage and other harmful materials shall not be discharged into or near rivers, streams, and impoundments or into natural or manmade channels leading thereto. Wash water or waste from concrete mixing operations shall not be allowed to enter live streams.

3.07 PERMANENT EROSION CONTROL MEASURES

- A. The Contractor shall incorporate permanent erosion control features into the Project at the earliest practical time as outlined in his accepted schedule.
- B. No area shall receive permanent seeding prior to approval by the Construction Manager or Engineer.

3.08 CONCRETE WASTE

A. Discharge of excess or waste concrete and/or wash water from Concrete Ready-Mix Trucks will be allowed on the construction site, but only in specifically designated diked areas that have been prepared to prevent contact between the concrete and/or wash water and storm water that will be discharged from the site or in locations where waste concrete can be placed into forms to make riprap or other useful concrete products. The cured residue from the concrete washout diked areas shall be disposed in accordance with applicable state and federal regulations. The Contractor is responsible for assuring that these procedures are followed.

3.09 TEMPORARY FUEL TANKS

A. Temporary on-site fuel tanks for construction vehicles shall meet all state and federal regulations. Tanks shall have approved spill containment with the capacity required by the applicable regulations. The tank shall be in sound condition free of rust or other damage that might compromise containment. Hoses, valves, fittings, caps, filler nozzles, and associated hardware shall be maintained in proper working condition at all times.

END OF SECTION

PART 1.0 - GENERAL CONDITIONS

1.01 SCOPE

The work covered by this document consists of furnishing all materials and performing all operations required for pile repair/encapsulation using epoxy mortar or cementitious grout in conjunction with fiberglass jackets as formwork.

- A. Contractor shall provide all labor, materials tools and equipment required for the completion of the following work, as shown on the contract documents and specified herein:
 - 1. Prepare existing areas as defined by these specifications and associated contract drawings designated to receive epoxy mortar or cementitious grout encasement.
 - 2. Furnish, transport, place and install all epoxy mortar or cementitious grout .
 - 3. Design, furnish, fabricate, install and remove, when called for, all formwork shores and bracing.
 - 4. Prepare fabrication and placement shop drawings listed below.
 - 5. Prepare design drawings and calculations for formwork, shores, and bracing as specified herein.
 - 6. Furnish all submittals required by this Section of the Specifications.
 - 7. Coordinate all work with other trades on site.

1.02 QUALITY ASSURANCE

- A. The manufacturer shall have a minimum 10 year history in the manufacture of epoxy and cementitious grout systems. The manufacturer shall provide on-site technical service at no cost to the engineer or contractor when sufficient advance notice is provided.
- B. The Contractor shall be responsible for the quality of the epoxy and cementitious grout and pile encasement construction. Quality of concrete will be evaluated by the Engineer, based on conformance with the requirements of this Section.
- C. The Contractor shall provide labor and means for obtaining all samples of concrete required for tests and for curing and protecting grout cubes at the construction site.

1.03 SUBMITTALS

- A. Comply with pertinent provisions of Section 01330 of these Specifications.
- B. Details shall be carried out in accordance with the New York City Building Code, and where no requirements are set forth in the Code, with the Standard ACI requirements, and as shown on plans.
- C. Product Data:
 - 1. Description of epoxy and cementitious grout.
 - 2. Sieve and quality analysis of sand used to make epoxy grout.

- 3. Description of any proposed admixtures including anti-washout and corrosion inhibitors.
- 4. Quick connection adaptor for end of pumping hose and ports so that no product leaks from hose or form as hose is being transferred from one port to the next.
- 5. Cementitious Hand Pack for sealing the tops of the pile encasements.
- 6. Formwork catalog cuts; submit at least 21 days prior to ordering any material or assembling any formwork.
- D. Shop Drawings:
 - 1. Formwork with pumping port construction and elevations, spacers, and sealing details.
- E. Design Data:
 - 1. Cementitious or epoxy grout mix proportions: indicating strength, brand and type of product, amounts of any admixtures and proportions and size of aggregates.
 - 2. Pumping Plan indicate equipment and methods that will be used to place concrete within forms, including maximum time between mixing and placement of concrete.
- F. Quality Assurance Documents:
 - 1. Proposed method of sealing and resealing of hose and pump ports.
 - 2. Cold and/or hot weather epoxy or cementitious grouting procedures.

1.04 DELIVERY, STORAGE AND HANDLING

- A. All materials shall be delivered to the jobsite in their original, unopened packages, clearly labeled with the product identification, printed instructions and batch code.
- B. Store and condition all epoxy components (resin, hardener and aggregate) between 60°F and 85°F (16°C and 29°C) for at least 24 hours prior to use. Refer to the product data sheet for more information. Store and condition other specified products in accordance with manufacturer's recommendations.
- C. Damaged or contaminated materials shall be removed from the site and replaced at no additional cost to the owner.

1.05 PROJECT / SITE CONDITIONS

- A. Refer to Part C PREPARATION, ENVIRONMENTAL CONDITIONS, or contact the manufacturer directly for any physical or environmental limitations required by the product.
- B. Contractor shall install epoxy or cementitious grout material only when environmental conditions match those recommended by manufacturer for specific product being used.
- C. Contractor shall submit both hot and cold weather installation procedures to Owner's Representative a minimum of 2 weeks prior to installing product under

these operating conditions. No product shall be placed under these conditions without written approval from owner's Representative.

D. Do not install material if ambient surface or water temperature drops below minimum temperature allowed by manufacturer without written approval from Owner's Representative.

PART 2.0 - MATERIAL SPECIFICATIONS

2.01 MATERIALS

A. Epoxy Grout (mortar)

a.

- 1. The pile encapsulation epoxy grout material shall be a 100% solids, premeasured, pre-packaged epoxy system containing thermosetting epoxy resins and inert fillers. The material shall be suitable for placement underwater via pouring or pumping. The manufacturer shall offer technical services and provide a representative at the job site for product training prior to product installation with reasonable advance notice.
- 2. The pile repair/encapsulation material shall meet the following performance criteria at 70°F:

		• -
	1 Day	2,000 psi
	28 Days	9,500 psi
b.	Tensile Strength, ASTM C 307	2,000 psi
C.	Bond to Concrete, ASTM C 882	2,200 psi
d.	Linear Shrinkage, ASTM C 531	0.0%
e.	Water Absorption, ASTM C 413	0.0%
f.	Working Time	90 minutes

Compressive Strength, ASTM C579 B

- 3. Acceptable manufactures of products are:
 - BASF Building Systems of Shakopee, MN a.
 - b. Five Star Products of Fairfield, CT
 - Sika Corporation of Lyndhurst, NJ C.
 - d. Simpson Strong Tie of Pleasanton, CA
 - Denso North America of Houston, TX e.
 - f. Approved Equal
- 4. Any proposed substitution of manufacturers listed above shall contain certified test data verifying conformance with this specification. Three references of successfully completed projects of similar nature and scope of the work detailed in this specification shall be provided, as well as a minimum ten year

history of use in the industry. The testing laboratory shall certify to any modifications made to tests performed and provide details of modifications.

- B. Cementitious Grout
 - 1. Cementitious grout shall be a saltwater resistant, pre-packaged, cementbased grout requiring only the addition of potable water. The grout shall be formulated for exposure to fresh or saltwater environments. The manufacturer shall have at least 10 years of experience in the manufacture of precision cement-based grouts. The manufacturer shall offer technical services and provide a representative at the jobsite for product training prior to product installation upon five days advance notice.
 - 2. The grout material shall meet all the following typical performance criteria when cured at 73°F (23°C):
 - a. Grout shall not contain metallic aggregate, expansive cement, or gas generating additives such as aluminum powder.
 - b. Grout shall contain an air release aggregate to generate positive expansion.
 - c. Early Height Change, ASTM C 827 0.0 to 4.0%
 - d. Hardened height Change, ASTM C 1090 0.0 to 0.3 %
 - e. Compressive Strength, ASTM C 109 28 days 6000 psi
 - f. Bond Strength, ASTM C882

28 Days 2000 psi

- g. Working time 30 minutes minimum
- h. Meets performance requirements of ASTM C 1107
- 3. Acceptable manufactures of products are:
 - a. BASF Building Systems of Shakopee, MN
 - b. Five Star Products of Fairfield, CT
 - c. Sika Corporation of Lyndhurst, NJ
 - d. Simpson Strong Tie of Pleasanton, CA
 - e. Denso North America of Houston, TX
 - f. Approved Equal
- 4. Any proposed substitution of manufacturers listed above shall contain certified test data verifying conformance with this specification. Three references of successfully completed projects of similar nature and scope of the work detailed in this specification shall be provided, as well as a minimum ten year history of use in the industry. The testing laboratory shall certify to any modifications made to tests performed and provide details of modifications.

- C. Aggregate
 - 1. Utilize quality and quantity of aggregate as directed by manufacturer.
- D. Water
 - 1. Water shall comply with the requirements of ASTM C 94 and the chloride and sulfate limits in accordance with ASTM D 512 and ASTM D 516. Mixing water shall not contain more than 500 parts per million of chlorides as Cl and not more than 100 parts per million of sulfates as SO4. Water shall be free from injurious amounts of oils, acids, alkalis, salts, and organic materials. Where water from reprocessed concrete is proposed for use in the work, submit results of tests to verify that the treatment has negated adverse effects of deleterious materials.
- E. Forms
 - 1. General
 - a. Formwork shall conform to the recommendations of ACI 347R. Forms shall be a minimum 1/8 in. thick translucent rigid fiberglass reinforced plastic (FRP) designed to confine the concrete and shape it to the required dimensions. Forms shall have sufficient strength to withstand the pressure resulting from all environmental forces prior to the placement of concrete as well as forces exerted during the placement of product and shall have sufficient rigidity to maintain specified tolerances. Earth cuts shall not be used as forms for vertical surfaces unless indicated on the Contract Documents.
 - b. Shop drawings of all formwork shall be submitted. These submittals shall include: material type and strength of formwork, method of sealing formwork in order to prevent leakage of concrete, type and locations of all pumping ports and vents, all supports and the location of shoring and reshoring, and structural computations relating test strength of concrete at the various stages to the strength requirements for the proposed forming and shoring system and the anticipated loads.
 - c. All spacers, straps, and ties shall be non-metallic and non-corrosive. Spacers shall be secured so as not to move out of position during the placement of concrete.
 - d. Shop drawings and computations shall be certified by, and bear the seal of, a Professional Engineer experienced in the design of formwork and licensed in the State in which the Work is to be performed.
 - 2. Design and Installation
 - a. Design, engineering, and construction of formwork shall be the responsibility of Contractor. Approval of formwork shop drawings by Owner is for overall conception only, and shall not relieve Contractor from its responsibility for final safety and conformance with specified requirements
 - b. Contract drawings of formwork show one pump port placed near the bottom of the form. This is for visual representation only. The final

design, overall number of pump ports and elevation of these pump ports is the sole responsibility of the contractor.

- c. All pump ports shall have a watertight method of closure so that after the hose is removed from the port no water shall enter the port.
- d. Forms shall be a rigid translucent material so that the product level inside the form is visible when looking at the outside face of the form. Form facing materials shall be nonreactive with product and shall be selected to produce, or facilitate, the required surface finish. The maximum deflection of facing materials reflected in product surfaces to be exposed to view in the finished work shall be 1/240 of the span between structural members.
- e. Forms shall be sufficiently tight to prevent the loss of any material during the pumping and curing processes. The means and methods of maintaining the intended form shape and seal shall be the sole responsibility of the contractor.
- f. Positive means of adjustment (strapping) shall be provided and all settlement shall be taken up during concrete placement operations. Forms shall be securely braced against lateral deflections.
- g. Formwork shall be so anchored to shores or other supporting surfaces or members so that upward or lateral movement of any part of the formwork system, during product placement, will be prevented.
- 3. Tolerances

Formwork shall be constructed so that product surfaces will conform to the tolerance limits recommended in ACI 347R.

- a. Flexural Strength ASTM D 790 34,000 psi (234 MPa)
- b. Flexural Modulus ASTM D 790 1.9 x 106 psi (13,100 MPa)
- c. Ultimate Tensile Strength ASTM D 638 23,000 psi (158 MPa)
- d. Tensile Modulus ASTM D 638 1.7 x 106 psi (11,724 MPa)
- e. Water Absorption ASTM D 570 0.09%
- f. Barcol Hardness 50
- g. UV Resistance ASTM G 153 No chipping, flaking or peeling at 500 hours
- 4. Preparation of Form Surfaces
 - a. All surfaces of forms and embedded materials shall be cleaned of any debris and of all other foreign material, before concrete is placed.
- 5. Removal of Forms
 - a. Formwork shall remain in place. However formwork from one of the installed cementitious grout encasements shall be fully removed in order to facilitate an inspection of the underlying encasement. Forms may be removed after 28 days or when cube breaks of the product batch used

during the installation of that encasement show the product has reached the required design strength. If significant defects are noted on the encasements with removed forms, the Owner's Engineer shall direct the Contractor to remove the additional cementitious grout encasement at no additional cost to the Owner. Significant defects shall include but not be limited to:

- (i) Soft grout: grout is soft and allows penetration with a hand held hammer.
- (ii) Voids: grout is missing form intended location and reinforcing steel is exposed.
- (iii) Shallow Coverage: Reinforcing steel (including tie wires) is visible on the outside of or protruding from the outside face of the grout encasement.
- (iv) Geometry of Encasement: Encasement geometry does not meet the placement tolerances established in this section of the specifications.
- (v) Horizontal Construction Joints: grout was not placed in a continuous manner creating a horizontal joint in the encasement.
- Removal of forms shall be in a manner to insure complete safety of the structure, shall be in accordance with the applicable requirements of ACI 318 and this Section of the Specification, and shall be subject to the approval of Owner.
- c. When repair of surface defects or finishing is required at an early age, as specified herein or as directed by Owner, forms shall be removed as soon as the concrete has hardened sufficiently to resist damage from removal operations.
- 6. Embedded Items
 - a. All embedded items including pile standoffs shall be nonmetallic.

2.02 EXISTING CONCRETE SURFACES

- A. Completely remove all loose, delaminated and weak concrete, oil, grease, laitance, marine growth and other contaminants. Prepare concrete using high pressure water blasting or other suitable mechanical means to obtain sound, clean and roughened surfaces. Contractor shall take precautions in order not to remove intact concrete section from the existing piles during preparation activities
- B. The permissible elapsed time between the cleaning of a pile and the installation of the encasement on that pile shall not exceed 72 hours. If this time frame is exceeded contractor shall re-clean the pile prior to placement of grout.
- C. All cracks shall be brought to the attention of the engineer and a determination made of whether the cracks are subject to movement. The cracks shall be repaired as directed prior to installation of fiberglass jacket and epoxy grout.

2.03 REINFORCEMENT

A. All exposed reinforcing steel that has lost bond with the concrete or has more than one-half of its circumference exposed should be undercut by at least 1/2 inch.

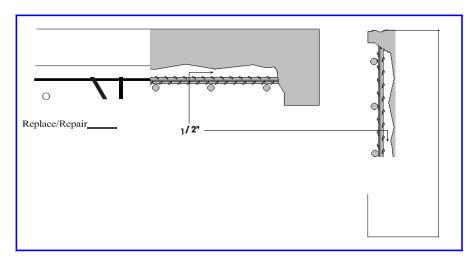


Diagram D: Reinforcement Profile Example

- B. If more than 25% of the diameter of a reinforcing bar has been deteriorated, the bar may require replacement or need to be spliced as directed by the engineer.
- C. All reinforcement shall be rigidly secured and supported.
- D. All exposed reinforcing steel shall be free of all loose scale, rust, oxidation and other contaminants. Blast steel to an SSPC SP6 commercial finish or better. Exposed reinforcing steel may be sealed or primed if a delay occurs between surface preparation and epoxy grout placement.

2.04 JACKET PLACEMENT

- A. Fiberglass jackets may be one or two piece and should include standoffs that maintain specified annular space. Spacers/standoffs may be pre-molded into jackets or applied at job site.
- B. For pumping applications, secure suitable pump ports to jacket. Lowest port shall be maximum of 12 inches from the bottom of the formwork. Next highest port shall be 180° opposite the first port. If additional ports are needed alternate the placement 180° from the previous port.
- C. Use a suitable sealing compound to fill the groove side of the jacket opening.
- D. Wooden braces, battens or strong backs, should be placed on the outside of the jacket to prevent bulging. When the jacket is in position and the straps tight use stainless steel self-drilling/tapping screws to secure the tongue and groove joint. Locate screws so they go through both sides of the groove and the tongue. Use screws that are long enough to penetrate the jacket but not long enough to extend to the pile itself.

2.05 JACKET SEALING

The choice of bottom seal should be determined by environmental restrictions, owner preference or contractor experience. Typical bottom seals include closed foam strips, oakum and resin, nylon retainers and epoxy packing. Earth may not be used in lieu of bottom seal.

2.06 MIXING

- A. Mix epoxy parts, water and aggregate according to manufacturer's recommendation.
- B. Mix cementitious grout water and aggregate according to manufacturer's recommendation.
- C. Provide an adequate number of mixers in good operating condition for uninterrupted placement. Do not exceed one-half the maximum capacity of the mixer. A concrete mixer (spinning barrel mixer) is not acceptable for mixing epoxy grout.
- D. Do not mix more material than can be placed within the working time of the grout.
- E. Place grout immediately after mixing.

PART 3.0 - APPLICATION

3.01 APPLICATION

- A. Pumping
 - 1. Grout shall be placed using the direct pumping method and shall not be permitted to fall through the water column. Pumping at each elevation shall continue until the concrete has reached the level of the next highest pumping port.
 - 2. A diver shall monitor the connection of the tube to the pump port for the duration of pumping operations. The mouth of the tube shall, at all times, remain securely connected to the pump port so as to exert the necessary resistance on the pump to prevent vacuum build-up from causing blockage in the pipe line.
 - 3. Each grout encasement shall be placed in a continuous manner from start to finish over its full height. Horizontal construction joints are not permitted, except when a grout plug is to be provided at the bottom of the encasement. Grout placement shall begin through the pump port at the lowest elevation.
 - 4. During transition of the tube from one pump port to another, no water shall be permitted to enter the tube and no concrete shall leak from the pump ports.
 - 5. If a blockage or loss of seal occurs, grout placement shall cease immediately; the tube shall be detached from pump port, the blockage cleared, the tube recharged and reattached to pump port. If it is feasible to clear the blockage without removing the tube, that maybe permitted if approved by the Engineer.
 - 6. Additional tempering of mixed grout (i.e. the addition of water, plasticizers or other admixtures) is not be permitted without written approval from the Engineer.
 - 7. A peristaltic type pump is recommended for pumping epoxy grout. Contractor shall utilize adequate pumping equipment to ensure smooth continuous pumping operations.
 - 8. Prime pump and lines with a suitable primer that will not contaminate grout. Ensure material used for priming is discarded and not used for jacket filling.

9. Allow grout to overtop form until all water and laitance has been removed from the inside of the form.

3.02 TESTING

- A. General
 - 1. Testing agencies shall conform to the requirements of ASTM E329.
 - 2. Construction operations will be tested and inspected as the Work progresses. Failure to detect any defective Work or materials shall not in any way prevent later rejection when such defect is discovered, nor shall it obligate Owner for final acceptance.
 - 3. Contractor shall cooperate with Owner by providing access to the Work for any testing and inspection as required by Owner.
 - 4. Testing services, required to be provided by Contractor, shall be performed by a testing agency approved by Owner. Test reports, including results and interpretation of results, and certification of conformance with specified requirements, shall be transmitted directly from testing agency to Owner.
- B. Strength Testing
 - 1. Samples used in testing procedures shall be taken from the end of the hose that will be attached directly to the pumping ports of the form.
 - 2. Strength test of cementitious and epoxy grout shall be in conformance with ASTM C109 C579 B respectively.

END OF SECTION

EXHIBIT G

Permits

(Attached)

Assumption of Risk, Waiver of Liability and Release ("Waiver and Release")

PLEASE READ THIS DOCUMENT CAREFULLY - IT AFFECTS YOUR RIGHTS

The undersigned desires to perform an underwater inspection of the conditions attendant to the work contemplated in the Phase 5 Pile Remediation & Cellular Sheet Pile Encasement Construction Management & Diving Inspection Services RFP (the "RFP"), issued by the Battery Park City Authority d/b/a Hugh L. Carey Battery Park City Authority (the "Authority") on or about October 7, 8, 11, 2016. The RFP contemplates certain work to be performed to encase cellular sheet piles located under segments of the relieving platform along the southern edge of the North Cove Marina, the piles located under Esplanade Plaza just south of the North Cove Marina and the piles located in the South Cove area. (the "Project Site") in Battery Park City. The undersigned has been advised and understands that the inspection of the Project Site, including areas located under water, can be dangerous and involve numerous risks, including death or serious bodily injury. As an inducement to the Authority, the Battery Park City Parks Conservancy (the "Conservancy"), the City of New York, the State of New York, Brookfield Properties and all firms and persons related to, or involved in, the design, construction and development of the Project Site in Battery Park City (the "Project Team") to allow the undersigned to visit the Project Site and observe existing conditions underwater, the undersigned, for himself/herself/itself and his/her/its successors, heirs, assigns, and legal representatives, does hereby expressly agree and acknowledge the following:

- 1. The undersigned hereby voluntarily assumes any and all risks involved in, or in any way related to, the undersigned's visit (including the visit of any of its employees, agents or representatives) to the Project Site and observation of existing conditions underwater, including, but not limited to, the risk of death, bodily injury or property damage resulting from such visit or observation, including the unavailability of emergency medical care or the negligent or deliberate acts of other persons.
- 2. The undersigned releases and forever discharges any and all members of the Project Team, together with their members, directors, managers, officers, employees, agents, affiliates, successors, heirs and assigns, from, and agrees not to sue them on account of or in connection with, any liabilities, claims, causes of action, suits, obligations, injuries, damages, judgments, costs, or expenses, including attorney's fees and disbursements, arising out of the undersigned's visit (including the visit of any of its employees, agents or representatives) to the Project Site and observation of existing underwater conditions, including, not limited to, those based on death, bodily injury, or property damage, except when caused solely by the gross negligence of any member of the Project Team. THE FORGOING RELEASE IS INTENDED TO BE THE MAXIMUM AND BROADEST RELEASE PERMITTED BY LAW.
- 3. The undersigned waives the protection afforded by any statute or law in any jurisdiction whose purpose, substance and/or effect is to provide that a general release does not extend to claims which the person giving the release does not know or suspect to exist at the time of executing the release.
- 4. The undersigned agrees to indemnify and hold harmless any and all members of the Project Team and their members, directors, managers, officers, employees, agents, affiliates, successors, heirs and assigns, to the fullest extent permitted by law, from and against any and all liabilities, claims, causes of action, suits, obligations, injuries, damages, judgments, costs or expenses, including reasonable attorney's fees and disbursements, which arise in any way from the undersigned's

conduct (including the conduct of any of its employees, agents or representatives) at the Project Site and any and all damages to property on such Project Site, injury to any other person at such Project Site, including areas located underwater, caused, directly or indirectly, by the undersigned, whether by inadvertence, negligence, willful misconduct or otherwise.

- 5. The undersigned acknowledges and agrees that he/she/it is familiar with and understands industry standard safety procedures and rules for conducting an underwater inspection of the Project Site and for observing conditions at the Project Site. The undersigned agrees to strictly abide by all safety and other rules and expressly agrees not to participate in any events at the Project Site under the influence of alcohol and/or any drugs.
- 6. The undersigned acknowledges and agrees that he/she/it has been advised of the following nonexclusive list of potentially dangerous conditions: (1) the inherent risks associated with the nature of the inspection activity itself; (2) potential general structural instability; and (3) the inherent risks associated with property undergoing condition inspection work.
- 7. The undersigned represents and warrants that he/she/it (a) assumes full responsibility for his/her/its own safety and health and for all known and unknown risks and damages in visiting the Project Site, and (b) has not relied on information given or not given to him/her/it by the Project Team regarding the risks or dangers present at the Project Site.
- 8. The undersigned acknowledges and agrees that he/she/it has been advised of, and understands, the rules for visiting the Project Site, including, but not limited to, complying fully with the Pre-Proposal Inspection Requirements, attached hereto and made a part hereof.
- 9. The undersigned further agrees not to disclose or divulge to any person in any manner, without the prior written approval of the Authority, any information concerning the Project for any purpose whatsoever, except as may be necessary to prepare and submit a proposal in response to the RFPs.
- 10. The undersigned agrees that in the event of any accident which may require immediate medical, dental or other emergency care, transportation and emergency medical services, in which no next of kin can be notified in a reasonable amount of time through reasonable means, the Authority is hereby authorized, but not required, to take all necessary actions as relates to immediate medical, dental or other emergency care, transportation and emergency medical services as warranted in the course of care of the undersigned. The undersigned agrees that he/she/it shall be responsible for all fees and expenses as they relate to this paragraph.

The undersigned has read this Waiver and Release, understands that by making this Waiver and Release, he/she/it surrenders valuable rights and does do so freely and voluntarily. The undersigned understands that the terms contained herein are contractual and not a mere recital; and has signed this Waiver and Release as his/her/its own free act.

This Waiver and Release shall be governed by, and construed in accordance with, the laws of the State of New York, without reference to its conflicts of laws rules.

Invalidity of any provision of this Waiver and Release shall not affect other provisions.

Signature

Printed Name (and title, if applicable)

Name of Organization (if applicable)

Emergency Contact Name and Number

Date: _____

Pre-proposal Inspection Requirements

In accordance with the terms of the relevant Request for Proposals and any addenda thereto, the Battery Park City Authority d/b/a Hugh L. Carey Battery Park City Authority (the "Authority") invites all prospective bidders ("Contractors") to inspect the existing Project Site conditions associated with the North Cove Cellular Steel Sheet Pile Project prior to submitting a proposal. All such Contractors shall comply with, or cause compliance with, the protocols set forth in this Pre-Proposal Inspection Requirements form and indicate their acknowledgment of and agreement to so act by signing in the space provided below. In addition, the documentation requested herein must be submitted to the Authority prior to the performance of a pre-proposal inspection. The Contractor shall:

- 1. Comply with all applicable OSHA and ADCI regulations and safety procedures to ensure personnel health and safety. The Contractor must maintain a safe and clean working environment and shall ensure proper personal protective equipment at all times. In areas where pedestrian and/or vehicular traffic may be affected by the work, the Contractor shall cordon off the work area.
- 2. Exercise extreme care to prevent damage to existing structures by, or as a result of, his/her/its operations. Any damage resulting from the Contractor's operations shall be repaired as directed by the Authority's representative at no additional cost.
- 3. Submit a copy of its standard dive safety manual with a brief narrative of site specific considerations for review by the Authority's representative. Site specific considerations shall include the following: directions to local emergency rooms and dive trauma centers, diver access locations, and injured diver evacuation procedures.
- 4. Provide a certificate of insurance meeting or exceeding the following minimum coverage levels:

Commercial General Liability Insurance, written on ISO Form CG 00 01 or its equivalent and with no modification to the contractual liability coverage provided therein, shall be provided on an occurrence basis and limits shall not be less than:

- a. \$1,000,000 per occurrence
- b. \$2,000,000 General Aggregate
- c. \$2,000,000 Products / Completed Operations Aggregate

The Authority, Battery Park City Parks Conservancy ("BPCPC"), and the State of New York must be protected as additional insured on ISO Form CG 2010 (11/85) or its equivalent.

Automobile Liability Insurance with a Combined Single Limit of not less than \$1,000,000. Coverage must apply to the Proposer's owned, hired, and non-owned vehicles and protect the Authority, BPCPC, and the State of New York as additional insured.

Workers' Compensation, Employer's Liability, and Disability Benefits shall not be less than statutory limits, including United States Longshore and Harbor Workers Act coverage as applicable to the operations of the Proposer.

Umbrella Liability Insurance at a limit not less than \$1,000,000 per occurrence and in the aggregate. The Authority, BPCPC, and the State of New York must be protected as additional insured

If watercraft will be utilized as part of the inspection then **Comprehensive Marine Liability Insurance** must be maintained or caused to be maintained at a limit of not less than \$1,000,000 per occurrence and include the following coverage:

- Protection and Indemnity
- General Liability
- Pollution Liability

The Authority, BPCPC, and the State of New York must be protected as additional insured.

The additional insured protection afforded the Authority, BPCPC, and the State of New York on the above liability policies must be on a primary and non-contributory basis. All policies must include a waiver of subrogation in favor of the Authority, BPCPC, and the State of New York, and no policies may contain any limitations / exclusions for New York Labor Law claims. When providing evidence of insurance the Proposer must include a completed Acord 855 NY form

- 5. Conduct all in water and under water inspection work using ADCI certified commercial divers using surface supplied air commercial diving equipment and procedures. Divers are required to have a secondary air source in readiness at all times. A secondary dive station shall be in readiness at all times for immediate response to an emergency situation.
- 6. Be responsible for coordinating dive activities with the New York Police Department, Harbor Patrol and the U.S. Coast Guard, as required.
- 7. Prepare a brief narrative of the Contractor's inspection plan including diver access/egress procedures associated with the entry locations specified by the Authority, dive station locations and space requirements, requested inspection locations and inspection procedures. Any inspection shall be non-destructive, and done using hand tools only. The use of video recording devices is prohibited. Inspections must be performed during regular construction hours of 7am to 3:30pm Monday through Friday.

Signature

Date

New York State Department of Environmental Conservation

Division of Environmental Permits, Region 2 47-40 21ST Street, Long Island City, NY 11101-5407 Phone: (718) 482-4997 \$ FAX: (718) 482-4975 Website: www.dec.state.ny.us



April 17, 2014

Mr. Matthew Daniels M. G. McLaren, P. C. 100 Snake Hill Road West Nyack, NY 10994

Re: NYSDEC Permit application #2-6299-00027/00026 Battery Park City Esplanade – Pile Remediation Program 2014 Facility: BATTERY PARK CITY ECL Article 25 - Tidal Wetlands ECL Article 15 - Protection of Waters 6 NYCRR 608 - Water Quality Certification NOTICE OF PERMIT ISSUANCE

Dear Mr. Daniels:

Enclosed is your permit for the above referenced project. It is effective beginning April 17, 2014 and expires on December 31, 2017.

Please read all permit conditions carefully. All permit documents must be available upon request by Department staff and must be distributed to and understood by personnel responsible for the proper operation of the project and compliance with the permit requirements. Any violation of these permit conditions constitutes a violation of the Environmental Conservation Law.

Any questions concerning this matter should be directed to Sandra Reyes-Guerra in the Division of Environmental Permits at (718) 482-4969.

Very truly yours,

Jandra Reyes - Suerra

Sandra Reyes-Guerra Environmental Analyst 2



Permittee and Facility Information

Permit Issued To: BATTERY PARK CITY AUTHORITY 24TH FL

Facility: BATTERY PARK CITY WEST ST - W SIDE - CHAMBERS ST TO BATTERY PL NEW YORK, NY

1 WORLD FINANCIAL CTR NEW YORK, NY 10281 (212) 417-2000

Facility Location: in NEW YORK COUNTYVillage:MANHATTANFacility Principal Reference Point:NYTM-E:583.006NYTM-N:4506.765Latitude:40°42'27.4"Longitude:74°01'02.5"

Project Location: W of BPC btwn Liberty&Vesey & btwn Murray & Chambers, under esplanade **Authorized Activity:** Phase 2 Pile Remediation consists of applying protective and structural wraps to 654 piles at the location referenced above.

Permit Authorizations

Excavation & Fill in Navigable Waters - Under Article 15, Title 5Permit ID 2-6299-00027/00024Expiration Date: 12/31/2017New PermitEffective Date: 4/17/2014Expiration Date: 12/31/2017Water Quality Certification - Under Section 401 - Clean Water ActPermit ID 2-6299-00027/00025New PermitEffective Date: 4/17/2014Expiration Date: 12/31/2017Tidal Wetlands - Under Article 25Permit ID 2-6299-00027/00026Expiration Date: 12/31/2017New PermitEffective Date: 4/17/2014Expiration Date: 12/31/2017

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator	: JOHN F CR	YAN, Reg	ional Permit Adn	ninistrator	
Address:			IEADQUARTE		
	47-40 21ST				
	LONG ISLA	ND CITY,	NY 11101 -540	7	
Authorized Signature	10	J.(man		Date 34/17 / ZOIH age 1 of 6

Permit Components

NATURAL RESOURCE PERMIT CONDITIONS

WATER QUALITY CERTIFICATION SPECIFIC CONDITION

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

NATURAL RESOURCE PERMIT CONDITIONS - Apply to the Following Permits: EXCAVATION & FILL IN NAVIGABLE WATERS; WATER QUALITY CERTIFICATION; TIDAL WETLANDS

1. Conformance With Plans All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or applicant's agent as part of the permit application. Such approved plans were prepared by As cited in Natural Resources Special Condition 2...

2. Conformance with Plans - Addenda In addition to plans referenced in the Condition titled "Conformance with Plans," the activities authorized by this permit must be in strict conformance with the following approved plans and/or submissions made as part of the permit application:

A. Plans prepared by M.G. McLaren P.C., entitled "Battery Park City Esplanade Pile Remediation Program 2014," Sheets 1-9 of 9, dated 4 March 2014, and received by NYSDEC on 11 March 2014.

3. Notice of Intent to Commence Work At least five (5) days prior to the start of work. Permittee must complete and submit the attached "Notice of Intent to Commence Work" form to the NYSDEC Bureau of Marine Resources, 47-40 21st Street, Long Island City, New York 11101 (Attention: Christina Batoh; cdbatoh@gw.dec.state.ny.us).

4. Posting of NYSDEC Permit Sign The attached NYSDEC permit sign shall be posted, protected from the weather, in a conspicuous outdoor location at the project site. This sign is to be posted for the duration of work authorized by this permit.

5. Best Management Practices Best management practices will be employed to prevent the loss of construction materials, debris, and sediment from entering the waterways. Such practices may include, but are not limited to silt fencing, hay bales, and floating booms.

6. Minimize Adverse Impacts to Wetlands, Wildlife, Water All work must be performed in a manner which minimizes adverse impacts to wetlands, wildlife, water quality and natural resources.

7. No In-Water Work Between November 1st and April 30th In-water work is prohibited between November 1st and April 30th of any given year.



8. Concrete or Leachate Must Not Escape During construction, concrete or leachate will not escape or be discharged, nor will washings from transit mix trucks, mixers, or other devices enter tidal wetlands and or protected buffer areas.

9. Removal of Debris and Excess Material Any debris or excess material from construction of this project will be completely removed from the adjacent area (upland) and removed to an approved upland area for disposal. No debris is permitted in tidal wetlands or tidal wetlands adjacent area or protected buffer areas.

10. Demolition and Construction Debris Should any demolition or construction debris fall into the waterway or enter the tidal wetlands, it must be removed immediately.

11. Disposal of Demolition and Construction Debris All demolition and construction debris must be properly disposed of at a licensed facility.

12. Prior Approval of Changes If the Permittee desires to make any changes in construction techniques, species to be planted, the site plan, any mitigation plan, scheduling or staging of construction, or any other aspect of this project, the Permittee shall submit a written request to the Regional Permit Administrator to make such proposed changes and shall not make such changes unless authorized in writing by the Department.

13. Failure to Meet Permit Conditions Failure of the permittee to meet all the conditions of this permit is a violation of this permit and grounds for an order to immediately cease the permitted activity at the project site.

14. No Interference With Navigation There shall be no unreasonable interference with navigation by the work herein authorized.

15. Precautions Against Contamination of Waters All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.

WATER QUALITY CERTIFICATION SPECIFIC CONDITIONS

1. Water Quality Certification The NYS Department of Environmental Conservation hereby certifies that the subject project will not contravene effluent limitations or other limitations or standards under Sections 301, 302, 303, 306 and 307 of the Clean Water Act of 1977 (PL 95-217) provided that all of the conditions listed herein are met.

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. Facility Inspection by The Department The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71-0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

2. Relationship of this Permit to Other Department Orders and Determinations Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. Applications For Permit Renewals, Modifications or Transfers The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator NYSDEC REGION 2 HEADQUARTERS 47-40 21ST ST LONG ISLAND CITY, NY11101 -5407

4. Submission of Renewal Application The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Excavation & Fill in Navigable Waters, Water Quality Certification, Tidal Wetlands.



5. Permit Modifications, Suspensions and Revocations by the Department The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

- a. materially false or inaccurate statements in the permit application or supporting papers;
- b. failure by the permittee to comply with any terms or conditions of the permit;
- c. exceeding the scope of the project as described in the permit application;
- d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;
- e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

6. **Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-ofway that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

95-20-1 (8/87)-9d

Department of Environmental Conservation New York State



The Department of Environmental Conservation (DEC) has issued permit(s) pursuant to the Environmental Conservation Law for work being conducted at this site. For further information regarding the nature and extent of work approved and any Departmental conditions on it, contact the Regional Permit Administrator listed below. Please refer to the permit number shown when contacting the DEC.

Expiration Date 12/31/2017	John F. Cryan 47-40 21 st Street
	LIC, NY 11101

strator

NON

Date:

NYSDEC Marine Resources Attn. Marine Resources Supervisor N.Y.S.D.E.C Region 2 Office 47-40 21st Street Long Island City, N.Y. 11101

Re: NYSDEC Permit No. 2-6299-00027/00024 BATTERY PARK CITY WEST ST – W SIDE – CHAMBERS ST TO BATTERY PLACE BETWEEN LIBERTY & VESEY ST AND BETWEEN MURRAY & CHAMBERS ST, UNDER ESPLANADE, MANHATTAN NEW YORK, NY 10021

Dear Marine Resources Supervisor:

In accordance with Natural Resource Condition 3 of the referenced permit, I hereby serve notice to commence work on ______, 20____.

This is also to certify that, having read this entire permit, I am fully aware of and understand the general and natural resource conditions therein, and agree to comply with all such conditions further understand that prior to undertaking any modification to the subject work, I must seek and receive written approval of the NYSDEC Regional Permit Administrator.

Signature of Permittee

Name of Permittee (please print)

Signature of Contractor

Name of Contractor (please print)

Street Address of Contractor

City, State, & Zip Code of Contractor

Telephone Number of Contractor

WARNING

The permittee and his contractor (if any) are required to follow all permit conditions. Violations of the permit may lead to legal action, including the imposition of substantial monetary fines and corrective work.

cc: Environmental Permits



DEPARTMENT OF THE ARMY NEW YORK DISTRICT, CORPS OF ENGINEERS JACOB K. JAVITS FEDERAL BUILDING NEW YORK, N.Y. 10278-0090

REPLY TO ATTENTION OF

REGULATORY BRANCH

APR 1 1 2014

SUBJECT: Permit File Number NAN-2014-00122 By Hugh L. Carey Battery Park City Authority To Maintenance / Repair / Rehabilitate Existing Shoreline Structures in the Hudson River at Battery Park City, New York City, Borough of Manhattan, New York County, New York

1. PERMITTEE: Hugh L. Carey Battery Park City Authority Attn: Gwen Dawson 200 Liberty Street, 24th floor New York, NY 10281 (212) 417-2000

2. On 12 March 2014, the New York District of the US Army Corps of Engineers received the subject request for Department of the Army authorization for your agency to perform maintenance activities associated with the repair and rehabilitation of existing pilings supporting approximately 10,000 linear feet of the existing waterfront esplanade's relieving platform structures and bulkheading. Work would include wrapping deteriorated pilings with a fiberglass jacket and epoxy grout; repairing damaged concrete and replacing lost stone and rock riprap. The site is in the Hudson River at Battery Park City, New York City, Borough of Manhattan, New York County, New York.

3. The specific applicant-provided details are as shown on the enclosed seven (7) dated permit drawings.

4. This determination covers only the work described in the submitted material. Any major changes in the project may require additional authorizations from the New York District of the US Army Corps of Engineers.

5. Based on information submitted to this office and accomplishment of any required notification in accordance with the applicable federal requirements, our review of the subject work indicates that an individual Department of the Army permit is not required. It appears that the activities within the jurisdiction of this office could be accomplished under Department of the Army Nationwide General Permit Number 3, MAINTENANCE. The nationwide permits are prescribed at <u>Reissuance of Nationwide Permits</u> in the Federal Register dated February 21, 2012 (77 FR 10184). The subject work may be performed without further authorization from this office provided it complies with the permit conditions listed in Section B, Number 3, MAINTENANCE, Section C; any applicable New York District regional conditions; the following Special Conditions listed

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below; and any applicable regional conditions added by the State of New York.

6. Other than the work-specific Special Conditions listed below, the 2012 nationwide general permits in the State of New York, including their final regional conditions, water quality certifications, and coastal zone concurrence statements are available at:

http://www.nan.usace.army.mil/Portals/37/docs/regulatory/geninfo/natp/NWP_PN_30M AY12.pdf

If you require a specific paper copy, please contact our Regulator-of-the-Day at 917-790-8511 to request one be mailed to you. Please be sure to have the above twelve-character file number readily available when you call.

7. Work-specific Special Conditions:

(A) The permittee, and their agents, shall take actions to prevent construction materials, including debris, from entering any waterway to become drift or pollution hazards.

(B) The permittee shall contact the appropriate state and local government officials to ensure that the subject work is performed in compliance with their requirements.

(C) The permittee shall within 30 days of the completion of the regulated activity authorized by this permit and any mitigation work required by Special Condition, sign and submit the enclosed compliance certification form to this office.

8. Please note that this nationwide general permit (NWGP) verification is based on a preliminary jurisdictional determination (JD). A preliminary jurisdictional determination (JD) is not appealable. If you wish, prior to commencement of the authorized work you may request an approved jurisdictional determination (JD), which may be appealed, by contacting the New York District, US Army Corps of Engineers for further instructions. To assist you in this decision and address any questions you may have on the differences between preliminary and approved jurisdictional determinations, please review US Army Corps of Engineers Regulatory Guidance Letter Number 08-02, at:

http://www.usace.army.mil/Portals/2/docs/civilworks/RGLS/rgl08-02.pdf

9. This verification is valid until <u>March 17, 2017</u>, unless the nationwide general permits are modified, reissued, or revoked before then. This verification will remain valid until <u>March 17, 2017</u>, if the subject work activity complies with the terms of any subsequent modifications of the nationwide general permits. If the nationwide general permits are suspended, revoked, or modified in such a way that the subject activity would no longer

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comply with the terms and conditions of a nationwide general permit, and the proposed work activity has commenced, or is under contract to commence, the permittee will have twelve (12) months from the date of such permit action to complete the regulated work.

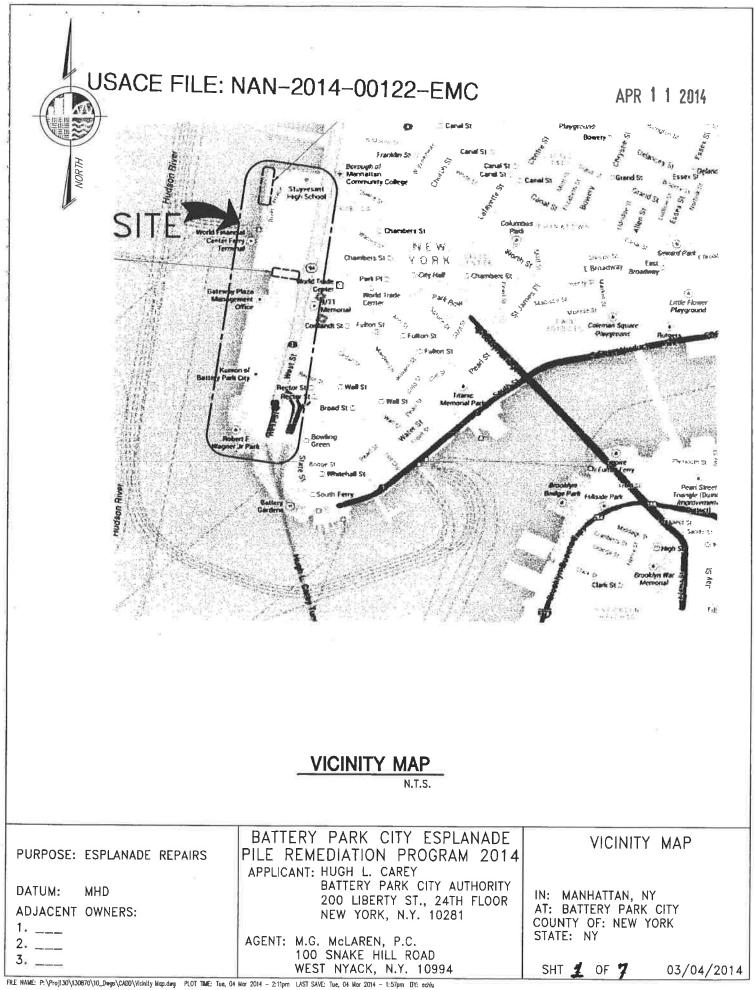
10. Any inquires should be directed to our Regulator-of-the-Day at 917-790-8511. Please be sure to have the above twelve-character file number readily available when you call.

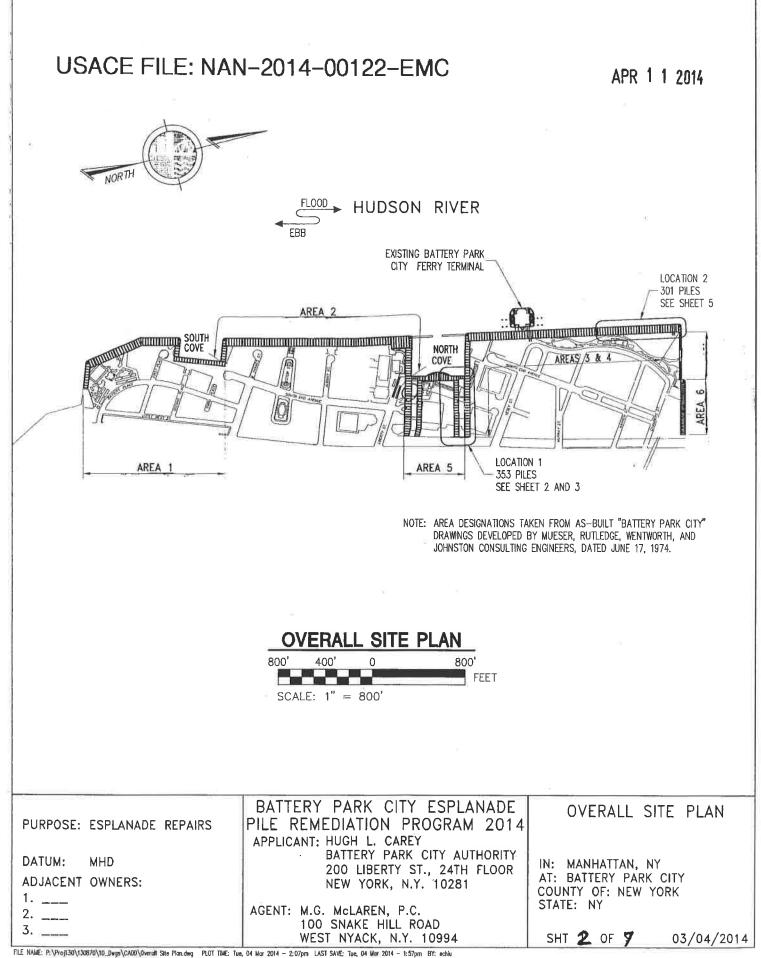
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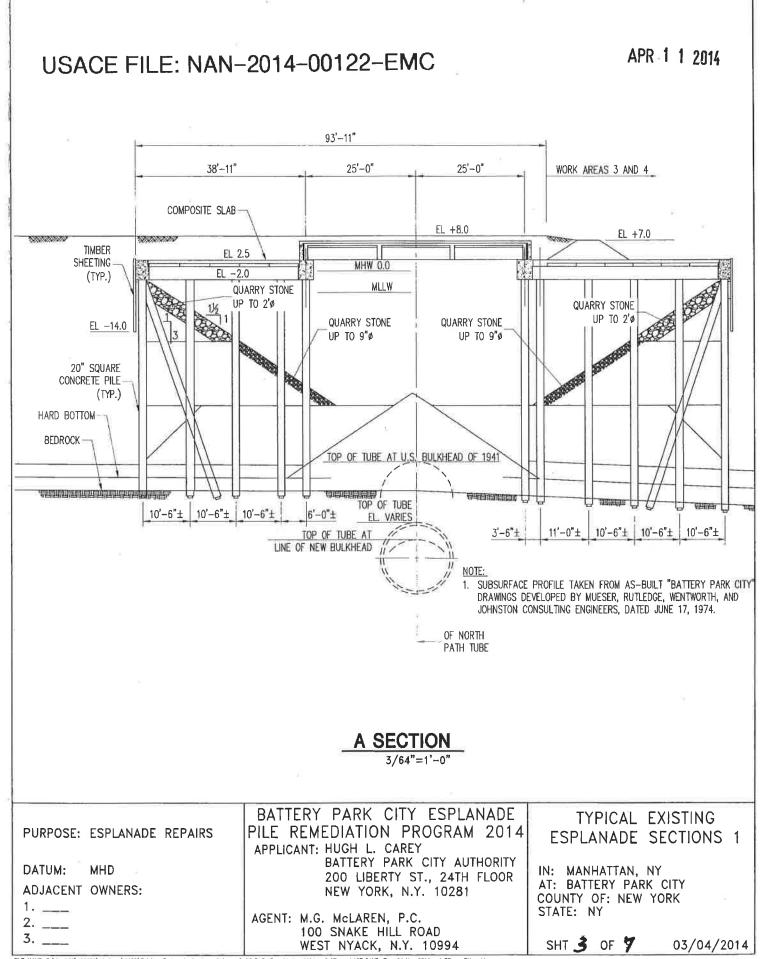
JO Chief, Regulatory Branch

Encl as

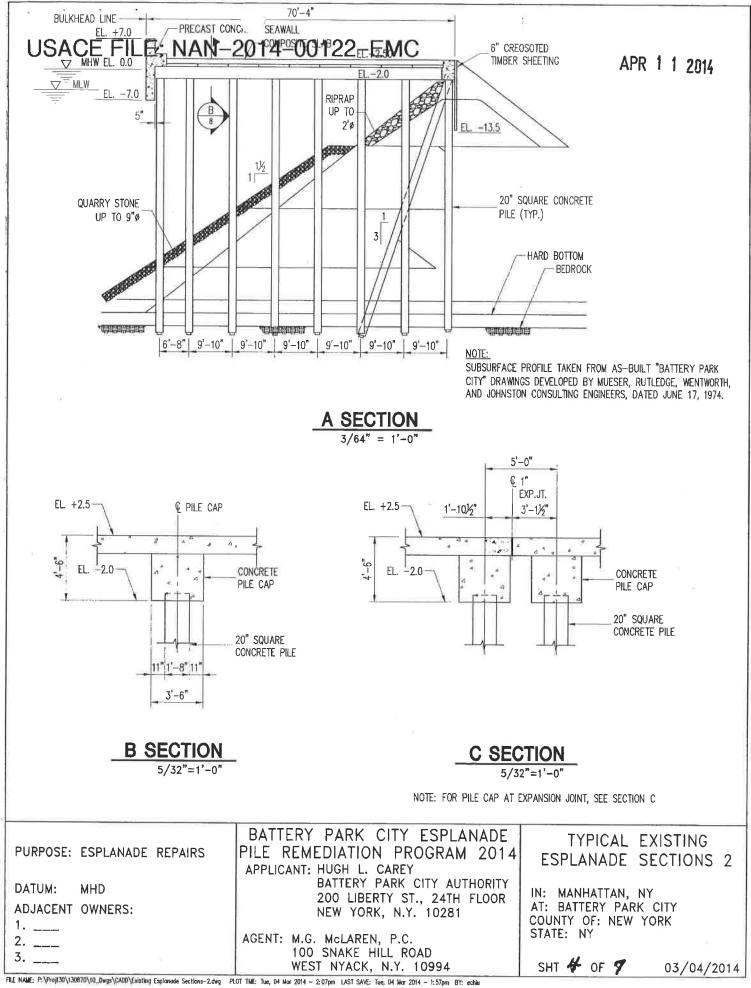
CF w/ encls: M.G. McLaren Engineering (M. J. Daniels) Urban Engineers, Inc (R. E. Denmark, Jr.)

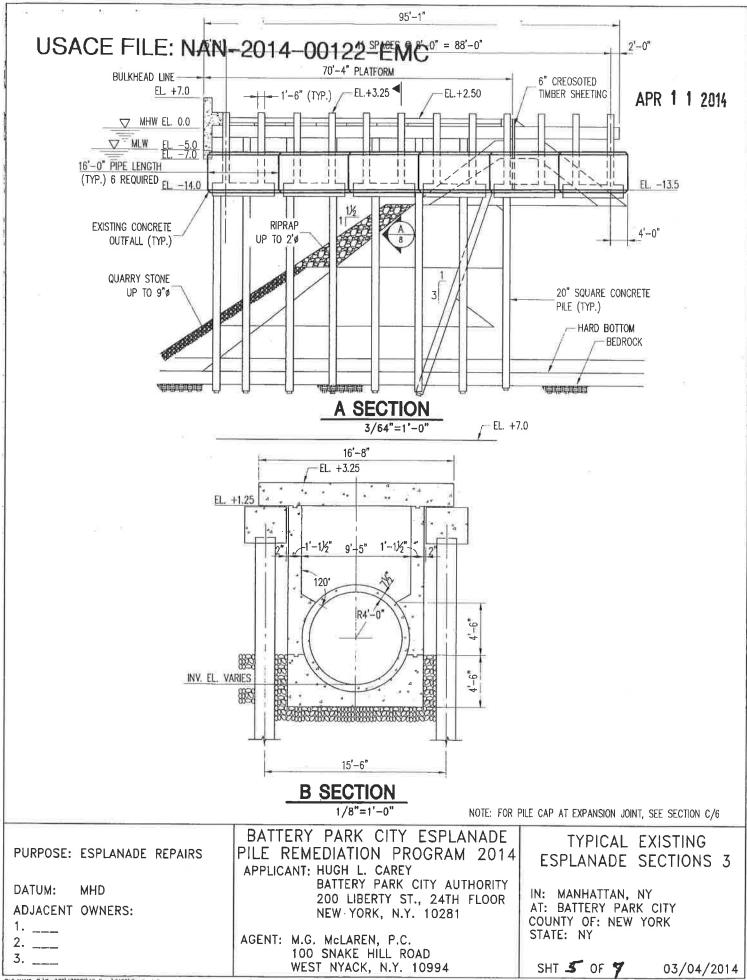




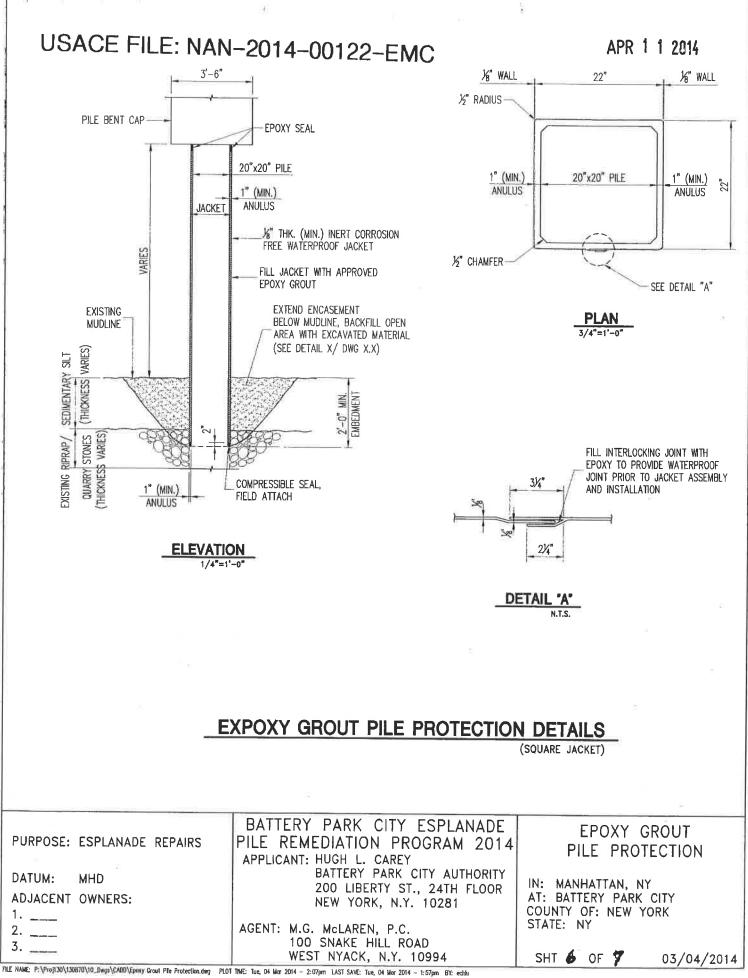


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FILE NAME: P. /Proj/301/308701/10_Dwgs/CAD01/1/1/ Exist Esplanade Sections.dwg PLOT TWE: Tue, 04 Mar 2014 - 2:07pm LAST SAVE: Tue, 04 Mar 2014 - 1:57pm BY: echiu



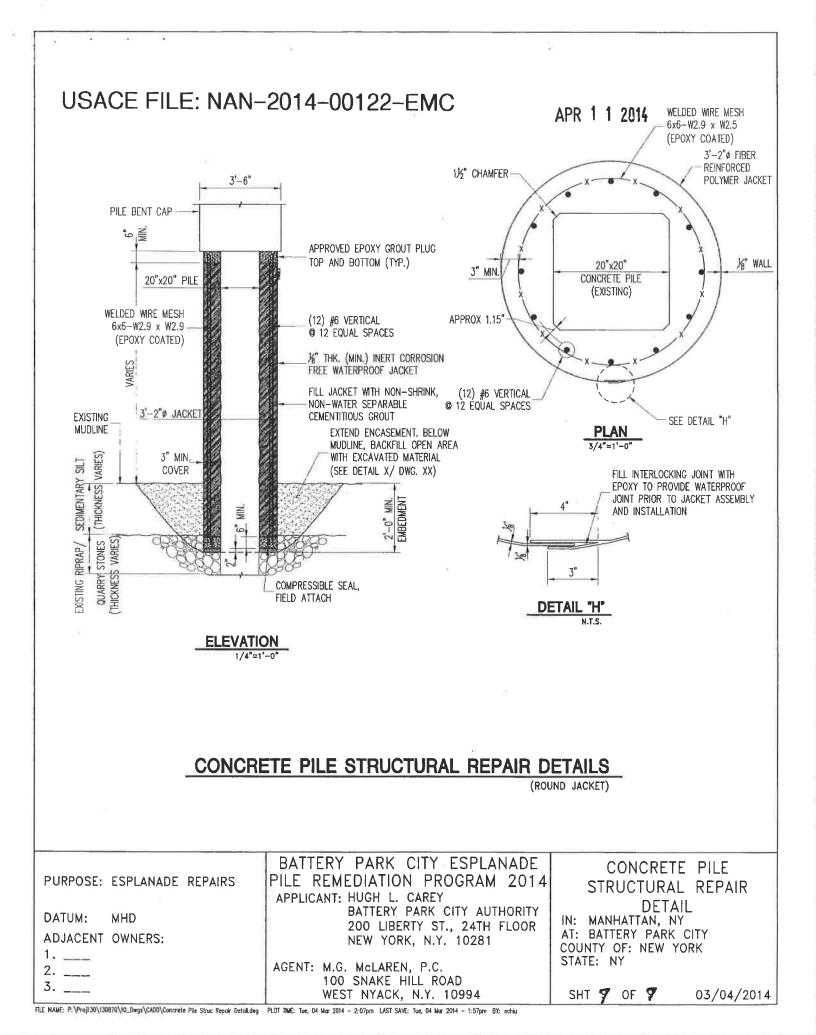


EXHIBIT H

LIST OF BPCA & BPCPC BOARD MEMBERS AND EMPLOYEES

LIST OF BOARD MEMBERS

Dennis Mehiel

Donald Coppocia

Martha Gallo

Lester Petracca

Hector Batista

Employee

Curtis Afzal Elsa Alvarez Dana Anders Anthony Andriano Stephen Arciold Kathleen Bailey Marie Baptiste Freddy Belliard Scott Birdseye Nidia Blake-Reeder Granderson Brown Lauren Brugess Nancy Buivid Anthony Buquicchio Monica Centeno Betty Chin Adam Choper Carlton Chotalal **Deshay Crabb Gwendolyn Dawson** Henri delaVega **Gilbert Depadua** Paul Diaz-Larui **Tonasia Dopson** Abigail Ehrlich Maria Ellison **Richard Faraino** Anitra Fauntelroy Eric T. Fleisher **Robin Forst** Joseph Ganci Julissa Garcia Luis Garcia Abigail Goldenberg Lenron Goode Neresa Gordon Ned Greenberg Patrick Greene **Evelyn Gregg** Kelly Grogan Robert Hansen

Nicole Heater Sankar Heerah Sonia Henry Hector Herrera Craig Hudon Shari Hyman Kendall Jinwright Amy Jogie Benjamin Jones Kadia Kane Roland Kemp Susie Kim AnaMariah Knox Karl Koenig Betzayda Laboy Leandro Lafuente Michael LaMancusa Della Lee Triny Lima Rene Lopcy Luis Lopez Robert Maggi Evelin Maisonet Evonne Marche Philip Mason Kevin McCabe Brenda McIntyre Princess McNeill Shinay McNeill Vanessa Mesine Ronnie Mohammed Bertha Narcisse **Robert Nesmith** Siu NG Yoshihiro Nishida Kevin O'Toole Hector Oyola Willem Paillant Gladys Pearlman Dahlia Pena **Churman Persaud** Anthony Peterson Bruno Pomponio

Katherine Powell Sandra Power Alix Pustilnik Robert Quon Jason Rachnowitz Madelin Ramirez Manuel Rivera Anthony Robinson Andrea Rodriguez **Nelson Rogers** Jose Rosada Holly Ross **Carlos Santiago** Jean Schwartz Lindsey Senn Robert Serpico Rekha Sewraj-Kumar Sean Simon Kemnarine Singh Seema Singh Timothy Skipper Sarah Smedley Linda Soriero Nicole Stallworth-Roper Kareem Starks Jerome Sturiano John Tam Alexis Torres Ryan Torres Douglas VanHorn Noe Velasquez Evangelio Villalobos Sharon Wade David Wallace Peter Wheelwright Eric White Angela Whitehead Dwight Williams Kenneth Windman Al Wright Jouli Yohannes Julian Zapata Bingxin Zheng