

November 7, 2018

SUBJECT: REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT PROFESSIONAL GEOTECHNICAL AND ENVIRONMENTAL SUBSURFACE EXPLORATION ON WATER OR MARSH AS REQUESTED ON A “CALL-IN” BASIS DURING 2019 THROUGH 2022 (RFP #55135)

Dear Sir or Madam:

The Port Authority of New York and New Jersey (the “Authority”) is seeking Proposals in response to this Request for Proposals (“RFP”) for a Consultant to provide expert professional geotechnical and environmental subsurface exploration on water or marsh as requested on a “call-in” basis during 2019 through 2022.

The scope of services to be performed by you are set forth in Attachment A to the Authority’s standard agreement (the “Agreement”) included herewith. You should carefully review this Agreement as it is the form of agreement that the Authority intends that you sign in the event of acceptance of your Proposal and forms the basis for the submission of Proposals. At its discretion, the Authority may retain multiple firms for performance of the subject services.

I. PROPOSAL FORMAT REQUIREMENTS:

To respond to this RFP, the Proposer shall submit a concise Proposal in response to the following basic criteria:

- A. To be acceptable, this Proposal shall be no more than **24** single sided pages or **12** double sided pages, using 12 point or greater font size, not including resumes. Each resume shall be a maximum of two-pages single-sided or one-page double-sided, using 12 point or greater font size. The page limit pertains only to Letters G and H in Section II, below. The Proposal pages shall be numbered and bound, or in a 3-ring binder, with **Your Firm Name** and **RFP Number 55135** clearly indicated on the cover.
- B. Separate each section of the Proposal with a tab divider that is labeled in accordance with the letter of the requirements specified below in Section II.
- C. All proposals must be delivered in sealed envelopes and/or packages. Address the Proposal to: The Port Authority of New York and New Jersey, 4 World Trade Center, 21st Floor, New York, NY 10007, Attention: RFP Custodian. You are requested to submit one (1) reproducible original and four (4) compact disc (CD) copies of your Proposal for review. USB flash drives will not be accepted. In case of conflict, the reproducible original of the Proposal shall take precedence over material on the CD(s).
- D. In each submission to the Authority, including any return address label, information on the compact disc and information on the reproducible original and copies of the proposal, the Proposer shall use its **FULL LEGAL NAME WITHOUT ABBREVIATIONS**. Failure to comply with this requirement may lead to delays in contract award and contract payments, which shall be the responsibility of the Proposer.
- E. Your Proposal should be forwarded in sufficient time so that the Authority receives it **no later than 2:00 p.m. on December 3, 2018**.

- F. The outermost cover of your submittal must be labeled to include the RFP Number and title as indicated in the "Subject" above. The Authority assumes no responsibility for delays caused by any delivery services.

If your Proposal is to be hand-delivered, note that only individuals with proper identification (e.g. photo identification) will be permitted access to the Authority's offices. Individuals without proper identification will be turned away and their packages not accepted.

There is extensive security at the World Trade Center Site. You must present a valid government-issued photo ID to enter 4 WTC. Individuals without packages or carrying small packages, envelopes or boxes that can be conveyed by hand or on a hand truck may enter through the lobby. All packages, envelopes and boxes may be subject to additional security screening. There is no parking available at 4 WTC/150 Greenwich Street, and parking in the surrounding area is extremely limited. Express carrier deliveries by commercial vehicles will only be made via vendors approved by Silverstein Properties, the WTC Property Manager, through the Vehicle Security Center (VSC). Please note that use of the U.S. Mail does not guarantee delivery to Authority offices by the below listed due date for submittals. Proposers using the U.S. Mail are advised to allow sufficient delivery time to ensure timely receipt of their proposals. Presently, UPS is the only delivery vendor with approved recurring delivery times. UPS makes deliveries to 4 WTC around 9:30 a.m. each day. Please plan your submission accordingly. As additional express carriers may be approved by Silverstein Properties and scheduled for recurring delivery times with the VSC, this information may be updated. Under certain circumstances, a solicitation may allow for a commercial vehicle to be approved to make a delivery in accordance with the VSC procedures. If applicable, the specific solicitation document will include that information. The Port Authority assumes no responsibility for delays, including, but not limited to, delays caused by any delivery services, building access procedures, or security requirements.

II. SUBMISSION REQUIREMENTS:

To respond to this RFP, provide the following information:

- A. In the front of your Proposal, provide copy of Attachment B (Agreement on Terms of Discussion) signed by an officer of your company.
- B. A complete copy of Attachment C (Company Profile).
- C. Unit Prices, for the specific items of work and/or analyses as outlined in Attachment A and Exhibit I, "Compensation Schedule."
- D. Provide the "multiplier" referred to in the first line of subparagraph 9.A of the accompanying Standard Agreement, including a breakdown of said multiplier, indicating all of the multiplier's components (e.g. vacation, holiday, sick pay, workers' compensation, office rent, insurance, profit).
- E. Staff Qualifications and Experience

In this section, detail the experience of key individuals (including subconsultants, if any) to be responsible for the successful completion of the contemplated services. Prepare an organization chart for this project that identifies the key individuals, their titles, their firm

and office address, their function, task responsibility and reporting relationships. Attach a detailed resume for each key individual that includes their relevant experience and specific areas of expertise. The resumes should contain their education, professional credentials and clearly identify the years of experience in the field related to the tasks for which the individual will be responsible.

- F. Include the name(s), title(s) and hourly rate(s) that would be in effect at the start of the Agreement term (January 1, 2019 through December 31, 2019) for professional and technical personnel of the Prime Proposer who will be assigned to perform any services requested. Indicate billing rates for partners or principals and actual hourly rates for all other billable employees. Provide a company policy for compensation for premium pay (i.e. holidays, shift differentials, regular days, weekends and night work or union required payments must be included. **Please use the provided attachment labeled “Exhibit II - Salary Schedule” as a template.** Typical job titles may include, but are not limited to, the following:

1. Principal or Partner (Billing Rate)
2. Professional Personnel (Actual Hourly Rate)
3. Technical Personnel (Actual Hourly Rate)

- G. Firm Qualifications and Experience

Identify the experience of your firm in providing services similar to those contemplated herein. Identify comparable services performed during the last three (3) years, owners, contact information (for verification purposes), and indicate whether said projects were completed on schedule and within budget.

- H. Provide the Consultant’s proposed Management Approach to performing the required services, being responsive to the client’s needs, keeping the client apprised of the project status, and to ensuring the quality of the work product.
- I. Your attention is directed to Paragraph 21 of the Agreement in which the Authority has stated the Minority Business Enterprises (MBEs) and Women-owned Business Enterprises (WBE) goals for participation in this program. In order to facilitate the meeting of these goals, the Consultant shall use every good-faith effort to utilize subconsultants who are Authority-certified MBEs or WBEs to the maximum extent feasible. A listing of certified MBE/WBE firms is available at <http://www.panynj.gov/business-opportunities/sd-mini-profile.html>.

For each task order to perform work issued under this Agreement, the selected Consultant(s) shall submit to the Authority for review and approval prior to commencing any services, along with invoices, the Statement of Subcontractor Payments in the form of the MBE/WBE Participation Report (Form PA 3760C), which may be downloaded at <http://www.panynj.gov/business-opportunities/become-vendor.html>.

The MBE/WBE Plan submitted by the Consultant to the Authority shall contain, at a minimum, the following:

- Identification of MBE/WBEs: Provide the names and addresses of all MBE/WBEs included in the Plan. If none are identified, describe the process for selecting participant firms in order to achieve the good faith goals under this Agreement.

- **Level of Participation:** Indicate the percentage of MBE/WBE participation expected to be achieved with the arrangement described in the Plan.
- **Scope of Work:** Describe the specific scope of work the MBE/WBEs will perform.

All MBE/WBE subconsultants listed on the MBE/WBE Participation Plan must be certified by the Authority in order for the Consultant to receive credit toward the MBE/WBE goals set forth in this Agreement. Please go to <http://www.panynj.gov/business-opportunities/supplier-diversity.html> to search for MBE/WBEs by a particular commodity or service. The Authority makes no representation as to the financial responsibility of these firms or their ability to perform work under this Agreement.

Subsequent to Agreement award, all changes to the MBE/WBE Participation Plan must be submitted via a modified MBE/WBE Participation Plan to the Manager for review and approval by OBDCR. For submittal of modifications to the MBE/WBE Plan, Consultants are directed to use form PA3760D. The Consultant shall not make changes to its approved MBE/WBE Participation Plan or substitute MBE/WBE subconsultants or suppliers for those named in their approved plan without the Manager's prior written approval. Unauthorized changes or substitutions, including performance of work designated for a subconsultant by the Consultant's own forces, shall be deemed a violation of this section. Progress toward attainment of MBE/WBE participation goals set forth herein will be monitored by the Authority throughout the duration of the Agreement.

The Consultant shall also submit to the Project Manager, along with invoices, the Statement of Subcontractor Payments in the form of the MBE/WBE Participation Report, which may be downloaded at <http://www.panynj.gov/business-opportunities/become-vendor.html>. The Statement must include the name and business address of each MBE/WBE subconsultant and supplier actually involved in the Agreement, a description of the work performed and/or the product or service supplied by each such subcontractor/subconsultant or supplier, the date and amount of each expenditure, and such other information as it may assist the Project Manager in determining the Consultant's compliance with the foregoing provisions.

MBE/WBE Conditions of Participation

MBE/WBE participation will be counted toward meeting the MBE/WBE agreement goal, subject to all of the following conditions:

1. **Commercially Useful Function:** An MBE/WBE is considered to perform a commercially useful function when it is responsible for the execution of a distinct element of work on a contract and carries out its responsibilities by actually performing, managing, and supervising the work involved in accordance with normal industry practice. Regardless of whether an arrangement between the Consultant and the MBE/WBE represents standard industry practice, if the arrangement erodes the ownership, control or independence of the MBE/WBE or in any other way does not meet the commercially useful function requirement, that firm shall not be included in determining whether the MBE/WBE goal is met and shall not be included in MBE/WBE reports. If this occurs with respect to a firm identified as a MBE/WBE, the Consultant will receive no credit toward the MBE/WBE goal and may be required to backfill the participation. An MBE/WBE does not perform a

commercially useful function if its role is limited to that of an extra participant in a transaction or contract through which funds are passed in order to obtain the appearance of MBE/WBE participation. An MBE/WBE may rebut a determination by the Authority that the MBE/WBE is not performing a commercially useful function to the Authority.

2. Work Force: The MBE/WBE must employ a work force (including administrative and clerical staff) separate and apart from that employed by the Consultant, other subconsultants on the Agreement, or their affiliates. This does not preclude the employment by the MBE/WBE of an individual that has been previously employed by another firm involved in the Agreement, provided that the individual was independently recruited by the MBE/WBE in accordance with customary industry practice. The routine transfer of work crews from another employer to the MBE/WBE shall not be allowed.

3. Supervision: All work performed by the MBE/WBE must be controlled and supervised by the MBE/WBE without duplication of supervisory personnel from the Consultant, other subconsultants on the agreement, or their affiliates. This does not preclude routine communication between the supervisory personnel of the MBE/WBE and other supervisors necessary to coordinate the work.

Counting MBE/WBE Participation

The value of the work performed by an MBE/WBE, with its own equipment, with its own forces, and under its own supervision will be counted toward the goal, provided the utilization is a commercially useful function. An MBE/WBE prime contractor/consultant shall still provide opportunities for participation by other MBE/WBEs. Work performed by MBE/WBEs will be counted as set forth below. If the Authority determines that some or all of the MBE/WBEs work does not constitute a commercially useful function, only the portion of the work considered to be a commercially useful function will be credited toward the goal.

1. Subconsultants: One hundred percent (100%) of the value of the work to be performed by an MBE/WBE subconsultant will be counted toward the MBE/WBE goal. The value of such work includes the cost of materials and supplies purchased by the MBE/WBE, except the cost of supplies or equipment leased from the Consultant, other subconsultants or their affiliates will not be counted. When a MBE/WBE subcontracts part of the work of its contract to another firm, the value of the subconsultant work may be counted toward MBE/WBE goals only if the MBE/WBE subconsultant is itself a MBE/WBE. Work that a MBE/WBE subcontracts to a non-MBE/WBE firm does not count toward MBE/WBE goals.

2. Material Suppliers: Sixty percent (60%) of the expenditure to a MBE/WBE material supplier will be counted toward the MBE/WBE goal. Packagers, brokers, manufacturer's representatives, or other persons who arrange or expedite transactions are not material suppliers within the meaning of this paragraph.

3. Broker's/Manufacturer's Representatives: One hundred percent (100%) of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees for transportation charges for the delivery of materials or supplies provided by an MBE/WBE broker/manufacturer's representative will be counted toward the MBE/WBE goal, provided they are determined by the Authority to be reasonable and not excessive as

compared with fees or commissions customarily allowed for similar services. The costs of materials and supplies themselves will not be counted.

4. Services: One hundred percent (100%) of fees or commissions charged by an MBE/WBE for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of the work will be counted toward the MBE/WBE goal, provided the fee is reasonable and not excessive as compared with fees customarily allowed for similar services.

5. Joint Venture: Joint ventures between MBE/WBEs and non-MBE/WBEs may be counted toward the MBE/WBE goal in proportion to the total dollar value of the Agreement equal to the distinct, clearly defined portion of the work of the contract that the MBE/WBE performs with its own forces. Contact OBDCR at (201) 395-3958 for more information about requirements for such joint ventures.

J. Provide a complete list of your firm's affiliates.

K. If the Proposer or any employee, agent or subcontractor/subconsultant of the Proposer may have, or may give the appearance of a possible conflict of interest, the Proposer shall include in its proposal a statement indicating the nature of the conflict. The Authority reserves the right to disqualify the Proposer if, in its sole discretion, any interest disclosed from any source could create, or give the appearance of, a conflict of interest. The Authority's determination regarding any question(s) of conflict of interest shall be final.

Proposers are advised that, while not currently anticipated, nothing herein shall preclude the Authority from determining at a subsequent point in time during performance of the services contemplated hereunder gives rise to the existence of, or the appearance of, a conflict of interest, and thereby conclude that a firm(s) selected for performance of the subject services, is/are expressly precluded from participation in, or the performance of other procurement opportunities for any project on which the firm has provided such services. Proposers are directed to paragraph 34 of the attached Agreement. Proposers are further advised that under this Agreement, firms must provide, upon receipt of a Task Order issued by the Authority, written notice to the Port Authority of any existing or potential conflict of interest the firm(s) may have in the performance of services under this Agreement.

L. Code of Ethics for Port Authority Vendors

The Proposer's attention is directed to the Port Authority's "Code of Ethics for Port Authority Vendors." Vendors must certify in writing that they will comply with every aspect of this Code. The Proposer should submit an executed Compliance Certification with their Proposal. The Compliance Certification, once executed, will be a material and integral part of any Agreement resulting from this solicitation. The Code of Ethics and the Compliance Certification can be found on the Authority's website at <https://www.panynj.gov/business-opportunities/become-vendor.html>.

M. The selected Consultant(s) shall comply with the requirements of the Agreement. You should therefore not make any changes in this standard agreement, nor restate any of its provisions in your Proposal or supporting material.

III. SELECTION PROCESS:

The qualifications based selection shall take into consideration the following technical criteria, (listed in order of importance) and subsequently cost, as appropriate:

- A. Qualifications and experience of the staff proposed to perform services hereunder;
- B. Qualifications and experience of the firm, including the quality of similar services provided to others including the demonstrated ability to complete the services in accordance with the project schedule; and
- C. Management approach to the performance of the contemplated services.

After consideration of these factors, the Authority may enter into negotiations with the firms deemed best qualified in terms of the foregoing factors to perform the required services.

IV. ADDITIONAL INFORMATION:

The Port Authority embraces a workplace where the values of diversity and inclusion support varying perspectives and backgrounds to produce a richer environment.

The Port Authority expects all our consultants, contractors and vendors, to demonstrate a similar commitment, and undertake every effort to ensure their project teams represent the diverse makeup of the communities in and around the Port District.

If your firm is selected for performance of the subject services, the agreement you will be asked to sign will include clauses entitled "Certification of No Investigation (Criminal Or Civil Anti-Trust), Indictment, Conviction, Debarment, Suspension, Disqualification and Disclosure Of Other Information" And "Non-Collusive Proposing, And Code Of Ethics Certification; Certification Of No Solicitation Based On Commission, Percentage, Brokerage, Contingent Or Other Fees." By submitting a Proposal, the Consultant shall be deemed to have made the certifications contained therein unless said Consultant submits a statement with its proposal explaining why any such certification(s) cannot be made. Such a submission shall be submitted in a separate envelope along with your proposal clearly marked "CERTIFICATION STATEMENT."

It is Authority policy that its consultants, contractors and vendors comply with the legal requirements of the States of New York and New Jersey. Your attention is therefore called to New York State's requirements that certain consultants, contractors, affiliates, subcontractors/subconsultants and subcontractors/subconsultants' affiliates register with the New York State Department of Taxation and Finance for the purpose of collection and remittance of sales and use taxes. Similarly, New Jersey requires business organizations to obtain appropriate Business Registration Certificates from the Division of Revenue of the State's Department of the Treasury.

Proposers are also advised that additional vendor information, including but not limited to forms, documents and other related information, may be found on the Authority website at www.panynj.gov or <http://www.panynj.gov/business-opportunities/become-vendor.html>.

After a review of all proposals received, the Authority will forward two (2) copies of the Agreement and Attachment A thereto to the selected firm(s) who shall sign and return both copies. Signature shall be by a corporate officer. The return of one copy executed by the Authority will effectuate the Agreement.

Should you have any questions, please contact Courtney R. Eddington, Solicitation Manager, at ceddington@panynj.gov. All such correspondence must have your name, title, company, mailing address, telephone number, and state "RFP 55135" in the subject line. The Authority must receive all questions no later than 4:00 P.M. EST, seven (7) working days before the RFP due date. Neither Ms. Eddington, nor any other employee of the Authority is authorized to interpret the provisions of this RFP or accompanying documents or give additional information as to their requirements. If interpretation or additional information is required, it will be communicated by written addendum issued by the undersigned and such writing shall form a part of this RFP, or the accompanying documents, as appropriate. For RFP updates and Addenda, if any, Proposers are encouraged to access, and monitor, the Authority website at <http://www.panynj.gov/business-opportunities/bid-proposal-advertisements.html>. You should, therefore, monitor the advertisement on said website, as appropriate, to ensure you are aware of changes, if any.

Proposal preparation costs are not reimbursable by the Authority. The Authority shall have no obligation to a firm except under a duly authorized agreement executed by the Authority.

No rights accrue to any Proposer except under a duly authorized agreement for performance of the specified services.

The Authority reserves the right, in its sole and absolute discretion, to reject all Proposals, to undertake discussions and modifications with one or more Consultants, to waive defects in Proposals, and to proceed with that Proposal or modified Proposal, if any, which in its judgment will, under all the circumstances, best serve the public interest.

Sincerely,

David Gutiérrez
Assistant Director
Procurement Department

Attachments

ATTACHMENT A

PERFORMANCE OF EXPERT PROFESSIONAL GEOTECHNICAL AND ENVIRONMENTAL SUBSURFACE EXPLORATION ON WATER OR MARSH AS REQUESTED ON A “CALL-IN” BASIS DURING 2019 THROUGH 2022

I. BACKGROUND

For background with respect to The Port Authority of New York and New Jersey (the “Authority”) see www.panynj.gov. Additionally, the most recent electronic version of the Authority’s Annual Report is available at <http://corpinfo.panynj.gov/pages/annual-reports/>.

II. SCOPE OF WORK

The services of the Consultant shall include, but not be limited to, performing expert geotechnical and environmental subsurface soil sampling, rock coring, and installation of wells. The Consultant shall possess the necessary equipment, staff, and experience for the aforementioned tasks.

The Consultant shall advance borings, collect samples, install instrumentation and groundwater monitor wells, and perform any related, similar, or incidental work in connection with any activity of the Authority at or in the vicinity of Newark Liberty International Airport, Port Newark, Elizabeth-Port Authority Marine Terminal, Teterboro Airport, Stewart International Airport, John F. Kennedy International Airport, LaGuardia Airport, Brooklyn-Port Authority Marine Terminal, Erie Basin Marine Terminal, Lincoln Tunnel, Hoboken Port Authority Piers, Holland Tunnel, Bayonne Bridge, Goethals Bridge, Outerbridge Crossing, George Washington Bridge, Port Authority Bus Terminal, The World Trade Center, PATH Facilities, facilities of other Authority subsidiaries, and authorized sites, at any time up to and including the last effective date of this Agreement, and the Agreement shall continue in full force and effect until the completion of such Services. The amount of such work to be ordered being within the discretion of the Engineer.

As used herein, “Construction Site(s)” shall be deemed to refer to the Authority facilities listed above and any locations within the Port District. The Port District is defined as that geographical area within a 25-mile radius of the Statue of Liberty.

From time to time, the Authority may award a Work Order to more than one firm, one firm as the primary Consultant and additional firm(s) as backup.

Services under this Agreement shall be performed upon notification, with confirmation by the Engineer in a Work Order. The Consultant shall do all things which the Engineer deems necessary or convenient for the services to be performed, in such manner and sequence as the Engineer deems best. The Consultant shall take all precautions against injuries to persons, property, or disruption of traffic, replacing at its own expense all services unsatisfactory to the Engineer, all in strict accordance with all documents made part of the Work Order, including but not limited to, the specifications, sketches or other drawings.

The Consultant shall provide communication facilities at its home office and shall arrange employee assignments as well as provide office services so that the Consultant can receive and

provide appropriate response to notifications from the Engineer twenty-four (24) hours a day, seven (7) days a week, including Saturdays, Sundays, and holidays.

The parties hereto expressly agree that the Authority cannot anticipate the number or type of Work Orders that may be issued by Engineer under this Agreement.

It is anticipated, but not guaranteed, that the Engineer will issue Work Orders, which will require services to be performed concurrently at multiple locations at the Construction Site.

Unless specifically directed otherwise in the notification from the Engineer, the Consultant shall be available at the Construction Site with sufficient and appropriate labor, equipment, and material to expeditiously perform the required services, within the time stipulated in each Work Order. The adequacy of the resources provided by the Consultant is in the sole judgment of the Engineer.

III. DESCRIPTION OF CONSULTANT'S TASKS

Tasks to be performed by the Consultant, may include, but not be limited to, those outlined in Section IV: Specifications, below.

No one will be permitted to enter Authority property to inspect the Construction Site(s) without the approval of the Engineer or other duly authorized representative of the Authority.

IV. SPECIFICATIONS

A. DIVISION 1 - GENERAL PROVISIONS

1. Work Required by the Specifications

These specifications require the performance of all things necessary, proper or incidental to the work hereinafter described in these specifications in their present form and shown in the Work Orders. All work shown in the Work Orders even though not expressly mentioned in these Specifications, all work mentioned in these Specifications even though not shown in the Work Orders, and all things not specified either in the Work Orders or in the Specifications but involved in carrying out their intent and in the complete and proper execution of the work, are required by these Specifications; and the Consultant shall perform the same as though they were specifically delineated, described, and mentioned.

In the event of conflict between the Work Orders and the specifications, the specifications shall prevail.

The Consultant's compensation for all work whatsoever referred to in the specifications and Work Orders in their present form, although the need for certain items of such work may be contingent upon future occurrences or determinations or upon other circumstances, shall be deemed to be included in the Unit Prices contained in Schedule I unless the specifications or Work Orders expressly state that compensation in addition to such price shall be payable for such items of work. The express statement in some cases to the effect that certain work shall be without additional cost to the Authority shall not impair the application of this paragraph in other cases.

Whenever the specifications refer to the work or its performance, "directed", "required", "permitted", "ordered", "designated", "prescribed", and words of similar import shall mean so by the Engineer or his/her designee; and "approved",

“acceptable”, “satisfactory”, and words of similar import shall mean approved by or acceptable or satisfactory to the Engineer; and “necessary”, “reasonable”, “proper”, “correct”, and words of similar import shall mean so at the judgment of the Engineer or his/her designee.

Subject to any limitations provided in the specifications and to any further limitations deemed advisable by the Engineer because of the operations of the Authority and others at and about the Construction Site, the Consultant shall have the use for the performance of the required services of the area necessary for the work.

In all cases the provisions of the first paragraph of this numbered clause shall prevail.

2. Materials Furnished by the Authority

The Authority will furnish to the selected Consultant for installation by it in the permanent construction the following materials, all in sufficient quantity to perform all the required operations under this Agreement:

- a. Slope Indicator casing and accessories,
- b. vibrating wire type piezometers,
- c. protective surface casing manholes (Morrison Bros catalog #519), and
- d. locking caps for wellpoints and monitoring wells.

It is presently expected but not guaranteed that the foregoing materials will be furnished to the Consultant by the times required for their installation.

Materials furnished to the Consultant shall be examined by the Consultant at the time of furnishing to the Consultant, and if there is any shortage, damage, or other defect, the Consultant shall at that time bring it specifically in writing to the attention of the Engineer. Any shortage, damage, or defect so brought to the Engineer’s attention and acknowledged by him will be corrected by the Authority.

If no shortage, damage, or other defect is so brought to the attention of and acknowledged by the Engineer at the time said materials are furnished to the Consultant, the materials shall thereafter conclusively be deemed to have been satisfactory in all respects, provided that if the Consultant demonstrates to the satisfaction of the Engineer that there was a shortage, damage, or defect at the time the materials were furnished to the Consultant and that such fact could not reasonably have been ascertained at that time, then the shortage, damage, or defect will be corrected by the Authority.

From the date the foregoing materials are furnished to the Consultant, it shall form part of the materials included in the risks assumed by the Consultant as provided in clause 25 of the attached Agreement relating to risks assumed by the Consultant.

All materials or portions thereof in excess of those actually required in the permanent construction and which in the opinion of the Engineer may be suitable for use by the Authority shall be returned to the Authority at a location at the Construction Site designated by the Engineer upon the completion of the required services or when there is no longer any need for this material, whichever may first occur.

The Consultant at its own expense shall furnish all materials required by the Work Orders with the exception of those materials expressly provided to be furnished to the Consultant by the Authority, in accordance with this numbered clause.

The foregoing materials will be delivered to the Construction Site by tailboard of truck and the Consultant shall unload the aforementioned and transport the materials to the point of installation.

3. Errors and Omissions

If the Consultant discovers any errors and/or omissions, it shall immediately notify the Engineer and the Engineer shall verify the same and issue instructions in connection therewith. If, with the knowledge of such error(s) or omission(s) and prior to the correction(s) thereof, the Consultant proceeds with any work affected thereby, it shall do so at its own risk and the work so done shall not be considered as work done under and in performance of the Agreement unless and until in written form by the Engineer.

4. Workmanship and Materials

All materials installed as part of the permanent construction shall be new materials, unless otherwise herein specifically provided. Workmanship, materials, processes of manufacture, and methods of construction shall be at all times and places subject to the inspection of, and shall be completed to, the satisfaction of the Engineer, acting personally or through its inspectors. The Engineer shall be the judge of the quality and suitability of the work, materials, processes of manufacture, and methods of construction for the purposes for which they are used and shall determine whether they comply with the requirements of this Agreement. Should they fail to meet the Engineer's approval they shall be forthwith reconstructed, made good, replaced, or corrected, as the case may be, by the Consultant at its own expense.

When, in the Work Orders or in the specifications, a particular brand and/or make of material and/or equipment is shown or specified, any other brand or make which, in the sole opinion of the Engineer is equal to that shown or specified may be substituted (except where specifically stated otherwise), but only after being submitted to and expressly approved by the Engineer.

The construction called for by the Work Orders and specifications may be adapted for a particular brand or make of material or equipment subject to the approval of the Engineer. Therefore, if any work not required by the Work Orders or specifications in their present form is necessary or desirable because of the use of another brand or make of material or equipment (even though such other brand or make is approved by the Engineer or is mentioned in the Work Orders or the specifications and stated to be acceptable), such work shall be performed by the Consultant at its expense and subject to the approval of the Engineer.

In the case of a discrepancy between a description or requirement in the Work Orders and specifications for any material or equipment and the catalog number or other designation for the same material or equipment (even though stated to be acceptable), the description or requirement in the Work Orders and specifications shall control.

The Consultant shall submit a list of all material(s) and equipment(s) which it proposes to use in the performance of the permanent construction in triplicate to the Engineer for its approval prior to ordering same. The list shall be submitted within twenty (20) calendar days after receipt of a fully executed copy of the Work Order and shall contain the following information:

- a. In the case of material or equipment listed in manufacturers' catalogs, the list shall contain the vendor's name, the manufacturer's name, brand name, style designation, catalog number, and, where the specifications require catalog cuts, the statement "see catalog cuts".
- b. In the case of material or equipment for which working drawings are not to be prepared and which are not listed in any catalog, the list shall contain a complete description of the material or equipment, which shall be in sufficient detail so as to describe completely the material or equipment and quality thereof.

Within ten (10) business days after receipt of said list, the Engineer will notify the Consultant of which items are approved and which are disapproved. Within two (2) business days thereafter, the Consultant shall resubmit a new list covering those items which were disapproved. After each such resubmission, the Engineer shall have the same period of ten (10) business days in which to approve or disapprove.

After the approval of said list, no substitutions will be permitted, except that a brand name or make named in the specifications may be submitted for approval in lieu of a brand or make on said list.

Should material or equipment be delivered to the Construction Site without having been placed on the aforementioned list and approved, it shall be immediately removed from the Construction Site by the Consultant at its own expense.

In various paragraphs of these specifications, references may be made to certain standard or tentative specifications or requirements of various organizations. Unless otherwise stated, these references are to be construed as referring to the specifications and requirements in effect on the date set for opening proposals upon the present Agreement.

5. Certification

Where materials and equipment are required to conform to certain standard or tentative specifications or requirements for any organizations including, but not limited to, the American Society for Testing and Materials, American National Standards Institute, , Federal Specifications, National Electrical Manufacturers Association, American Association of State Highway and Transportation Officials, American Water Works Association, and the International Municipal Signal Association, the Consultant shall furnish to the Engineer the manufacturer's written certification that each of the materials or equipment conforms to the foregoing standard or tentative specifications. The certification shall be delivered to the Engineer prior to installation of the materials to which it refers. Such certification shall not be binding or conclusive on the Authority and may be rejected by the Engineer at any time if incorrect, improper, or otherwise unsatisfactory in its opinion.

6. U.S. Coast Guard Security Requirements

The Consultant is advised that in conjunction with Port Security Provisions for the Port of New York and New Jersey a 25-yard security or exclusionary area has been established by the United States Coast Guard around all bridges, piers, and other facilities on the waterfront in the Greater New York/New Jersey area. No person or vessel may enter these security areas without the approval of the Coast Guard Captain

of the Port and Vessel Traffic Service Activities New York as well as the Commander, First Coast Guard District Bridge Branch.

All requests to enter into these security zones shall be made in writing to the Captain of the Port of New York not less than thirty (30) days prior to the intended date of entry into the zone. Requests must be submitted to the U.S. Coast Guard Waterways Oversight Branch at Commanding Officer, U.S. Coast Guard Activities New York (WOB), 212 Coast Guard Drive, Staten Island, NY 10305; (718) 354-4193 or 4355 and must contain a complete list of all personnel that are requesting entry into the security zones, complete vessel information and, if appropriate, a copy of Coast Guard Bridge Branch construction approval.

The following information is typically required to access work sites:

- a. Transportation Worker Identification Credential, also known as TWIC®
- b. Consultant's supervisor name and telephone number.
- c. Name, type, size of barge/vessel/boat.
- d. Project start and end dates, working hours and days.

After background checks of all personnel have been completed, Coast Guard Captain of the Port will issue a letter specifying the personnel and vessels authorized to enter the security zone.

After the initial written approval for entry has been received, the Consultant shall notify the Coast Guard (Vessel Traffic Service 718-354-4088) daily prior to entering and upon securing for the day or leaving the site.

If additional or changes in existing personnel are required, said information identified above shall be transmitted as listed above, as early as possible, but not less than 96 hours in advance of the expected change.

Failure to comply with the above Security Zone Requirements and Conditions is punishable under Federal Law by arrest, prosecution, and or civil penalties.

7. Approvals by Engineer

Any approval by the Engineer of anything done or proposed to be done by the Consultant shall be construed merely to mean that at that time the Engineer knows of no good reason for objecting thereto; no such approval shall relieve the Consultant from its full responsibility for the complete and accurate performance of the work in accordance herewith or from any duty, obligation, or liability imposed upon the Consultant by the Agreement or from responsibility for injuries to persons or damage to property.

8. Consultant's Representative

During the performance of any work at the site, the Consultant shall have a representative present who shall be authorized by the Consultant to receive and put into effect, promptly, all orders, directions, and instructions when such orders or directions are given by the Engineer. A confirmation in writing of such orders or directions will be given by the Engineer when so requested by the Consultant.

9. Safety and Sanitary Provisions

The bringing of intoxicating substances onto the Construction Site as well as the use and/or consumption of intoxicating substances at the Construction Site is prohibited. It shall be the responsibility of the Consultant to insure that all employees of the Consultant and of all subcontractors, materialmen, and any other persons under contract to or under the control of the Consultant shall comply with the provisions of this paragraph.

The Consultant shall perform a daily clean up all refuse, rubbish, scrap materials, and debris caused by its operations so that the risk of injury or damage therefrom shall be eliminated and so that the site shall present at all times a neat, orderly, and workmanlike appearance. Before final inspection of the work by the Engineer, the Consultant shall remove all surplus material and debris of every nature resulting from its operation.

The Consultant shall exercise every precaution and take every measure to prevent injury to persons and/or damage to property. The Consultant shall maintain neat and sanitary conditioned toilet facilities for those engaged in the work.

Should any vessel, equipment, plant, material, object, or debris of any kind used in connection with the Agreement and/or located at or in transit to or from the Construction Site be sunk, lost, dumped, or go adrift under any circumstances, whether or not in navigable water, which in the opinion of the Engineer may, at the time or potentially, be dangerous to or obstruct any navigation or interfere in any way with other work by or for the Authority or with the use of the Authority facilities, the Consultant shall recover and remove the item(s) immediately. The Consultant shall give immediate notice with the description and location of such items to the Engineer and, when required, shall mark or buoy such items until they are removed. The foregoing obligations under this numbered Section shall not be impaired by any right which the Consultant might otherwise have to abandon such vessel, equipment, plant, material, object, or debris of any kind without further obligation on its part, and the Consultant waives any such right.

10. Accidents and First Aid Provisions

The Consultant shall promptly report in writing to the Engineer and to the Authority Manager, Claims Administration all accidents whatsoever arising out of or in connection with the performance of the Agreement, whether on or adjacent to the Construction Site, which result in death, injuries, or property damage by giving full details and statements of witnesses. In addition, if death or serious injuries or serious damage is caused, the accident shall be reported immediately by telephone to both of the said representatives of the Authority.

The Consultant shall provide at the Construction Site such equipment and medical facilities as are necessary to supply first aid service, in case of accident, to any who may be injured in the performance of work under the Agreement. The Consultant shall have standing arrangements for the removal and hospital treatment of any person who may be injured while engaged in the performance of the Agreement.

If any claim is made by any third person against the Consultant or any subcontractor on account of any accident, the Consultant shall promptly report the fact in writing to the aforementioned representatives of the Authority, giving full details of the claim.

11. Identification

No person will be permitted on or about the site without a pass, permit, or identification badge approved by the Engineer. The Consultant shall provide such passes, permits, or identification badges for its employees, subcontractors, and materialmen. Identification badges shall be worn in a conspicuous and clearly visible position by all those engaged in the work whenever they are at the site.

12. Conditions and Precautions

a. Water Borings

- 1) Vessel movements and cargo handling operations will continue throughout the period that borings are being made, therefore each boring shall be so scheduled by the Consultant that there shall be a minimum of interference with such movements and operations. The locations of all borings and the time during which each boring is made, including their sequence, shall be at all times subject to the approval of the Engineer.
- 2) Should the Consultant be performing its operations on a partially completed boring when the location in which the Consultant is performing its operations is required for use by a vessel, and if the Engineer then specifically directs that the Consultant abandon the boring, then the Consultant will be compensated, at the unit price applicable, for the depth of boring already obtained at the time the Engineer directs that the Consultant abandon such boring. If the Consultant deems that it is entitled to payment in accordance with this paragraph, immediate notice shall be given to the Engineer at the time of receipt of such direction from the Engineer to abandon the boring and before carrying out such direction, so that the Engineer may take such action as it deems advisable. Failure to give such notice shall constitute a conclusive waiver by the Consultant of payment for such boring.
- 3) The Consultant shall obtain clearance from the Engineer for all employees, subcontractors, and materialmen who will require access to Authority facilities and before mooring any of its equipment at any of the piers, wharves, or boring sites.

b. General

- 1) No requirement with respect to the taking of precautions, nor any omission to require any precautions, under this Agreement shall be deemed to limit or impair any responsibilities or obligations assumed by the Consultant under or in connection with this Agreement, and the Consultant shall at all times maintain adequate protection to safeguard the public and all persons engaged in the work and shall take such precautions as will accomplish such end, without undue interference with the public or with the operations of the Authority.
- 2) During the time that the Consultant is performing the work, other persons will be engaged in other operations on or about each work site, including other construction as well as maintenance and operation of the affected Authority facilities. The Consultant shall, therefore, so plan and conduct its operations as to work in harmony with others engaged at the sites and to not delay, endanger

or interfere with the operations of others, all to the best interests of the Authority and the public and as may be directed by the Engineer.

c. Health and Safety Protocols

- 1) All drilling equipment shall be steam-cleaned before arriving at an Authority site, as well as in between boring locations and monitoring well installations, as directed by the Engineer, within that site at no additional cost to the Authority.
- 2) Work performed on a potentially hazardous waste site shall utilize a Photoionization Detector (PID) meter, which will be supplied and operated by the Engineer, to assess the type of health and safety protocol required.
- 3) The Consultant shall utilize protective gear and undertake other appropriate measures including, but not limited to, cleaning operations as specified by the Engineer if and when the Engineer decides such activities are necessary in light of the United States Environmental Protection Agency document entitled "Enforcement Considerations for Evaluations of Uncontrolled Hazardous Waste Disposal Sites by Consultants", dated April 1980.

13. Working Hours

Regular working hours shall be 7:00 A.M. to 3:30 P.M., Monday through Friday. No work shall be performed outside these hours or on a holiday observed by the Port Authority, unless permitted or directed by the Engineer. If the Consultant performs work as directed by the Engineer outside of the regular working hours of 7:00 A.M. to 3:30 P.M., Monday through Friday inclusive, or on a holiday observed by the Authority, for reasons not due to delay or to other fault on the part of the Consultant and if solely as a result thereof, any working man of the Consultant or subcontractors becomes entitled to and is actually paid wages at a higher rate than is applicable to the above regular working hours, then the Consultant will be reimbursed for the premium time portion of overtime wages actually paid to employees performing the necessary work at any of the work sites plus applicable taxes, union dues, fringe benefits and the assessments paid on the basis of such premium time, plus the net increase for liability insurance charged on the basis of such compensation. There shall be no labor compensation other than the above.

In the event that the Consultant deems that payment for any work should be made pursuant to this numbered clause, the Consultant shall give written notice to the Engineer within twenty-four (24) hours from the time such work commences stating the reasons why it believes such payment should be made and shall, moreover, in any case furnish to the Engineer at the end of each day a memorandum showing the name, payroll title, salary rate, and employer of each of the workmen claimed to have worked outside of regular working hours. Said notice and memorandum are for the purpose of enabling the Engineer to verify the Consultant's claims at the time and to determine the amount to be paid to the Consultant. Accordingly, notwithstanding any other provision hereof, the failure of the Consultant to furnish said notice and memorandum shall constitute a conclusive and binding determination on its part that the Consultant is not entitled to compensation as provided herein and shall constitute a waiver by the Consultant of all claims for such payment, such notice and memorandum being conditions precedent to payment under this numbered clause.

14. Surveys

The Engineer will locate all borings and will establish the tide gauges for water borings and ground elevations at marsh borings.

B. DIVISION 2 - SITE WORK - SECTION 2A

1. General

This Section specifies geotechnical investigation including, but not limited to, borings, sampling, testing, instrumentation, and monitor well installation.

2. Equipment, Instrumentation and Methods

2.01- Consultant's Equipment

- a. The Consultant shall at all times be prepared to furnish and transport to and from the work sites sufficient drill rigs, supplies, tools, and necessary accessory equipment for overburden drilling, sampling, core drilling, monitor well installations, and incidental work thereto, to work simultaneously at two (2) separate test boring locations at a time. For geotechnical investigations, rigs must be equipped with a 140-pound automatic pound hammers, which meet the requirements of ASTM D1586, Method A. Calibration records of the 30 ± 1.0 -inch drop are required. Also, measurement data of the energy that enters the penetrometer drill rod string during standard penetrometer testing (SPT) of soil as per ASTM D4633 must also be supplied.
- b. The drill rigs for performing the borings shall be similar and equal to the following, and shall have the capability of performing drilling operations with drilling mud:
 - 1) Central Mine Equipment (CME) "Model 55LC, 75 or 550X".
 - 2) CME "Skid Rig Model 45C".
 - 3) Sprague & Henwood, Inc. "Model 40C".
 - 4) Gardiner-Denver Co. "Mayhew 500".
 - 5) Mobile Drilling Co. "Model B-53 or B-57".
 - 6) Marsh Buggy
 - 7) Tripod capable of collecting split spoon samples and installing monitor wells
- c. A hollow stem auger rig with:
 - 1) Six (6) inch I.D. hollow steam auger flights to penetrate to a minimum depth of thirty-five (35) feet.
 - 2) Sufficient four (4) inch I.D. - H.W. Flush Joint Casing to penetrate up to depths of 200'.
 - 3) Equipment for sampling using a three (3) inch I.D. Split Spoon Sampler.
- d. The Consultant shall not be required to mobilize more than two (2) water rigs at any one time.
- e. Whenever water borings are being performed, the Consultant shall have a sufficiently sized powered motor boat approved by the Engineer with each water boring rig available at the site for use of the Engineer. The boat shall be operated by qualified personnel and the use of such boat by the Engineer shall take precedence over use thereof by the Consultant. The boat shall conform to all

government regulations for signal and safety equipment and shall be sufficiently powered to support Consultant activities.

2.02 - Marsh Borings

- a. Marsh borings shall be those borings that are performed in marshland. Marshland for purposes of this Agreement shall be a soft, unstable surface, over which it is not possible to move men and equipment in a four-wheel drive truck to the boring location.
- b. Borings shall be made from platforms as approved by the Engineer, by the wash-boring process or rotary drilling techniques, in a manner such that the elevation and position of sub-surface strata may be accurately determined by sampling as hereinafter specified.
- c. Borings shall be made in sequence as directed by the Engineer. The Engineer will establish the location of each boring in the field. The Consultant will not be permitted to change the location of borings unless specifically approved by the Engineer. At the start of each boring, the Consultant shall hand auger the top five (5) to seven (7) feet as a precaution to avoid the possibility of damaging underground utilities that may be present.
- d. If during the performance of the work unforeseen difficulties arise or are encountered in advancing the boring to the required depth, the Consultant shall give immediate notice thereof to the Engineer and shall make every effort necessary or proper to overcome such difficulties before requesting the abandonment of a boring at the location of said difficulties.
- e. Any borehole which is not carried down to the depth ordered will not be paid for, except where the Consultant is permitted to abandon a hole because of insurmountable obstructions after the Consultant has made, in the opinion of the Engineer, every reasonable effort to overcome such obstructions, and that the information which has been obtained therefrom is of value for the purposes for which the borings were made.
- f. In addition to any length through air and water, the top five (5) feet of each bore hole shall be cased. Thereafter, the boreholes shall be cased as required in the opinion of the Engineer to maintain the hole, or, at the request of the Consultant, subject to the approval of the Engineer; they shall be kept open by filling them during the operations with drilling mud circulated through the borings by use of pumps. Drilling mud, if used, shall be a mixture of natural soil, a commercial bentonite similar and equal to "Aquagel," and water. The use of "Revert" shall not be permitted.
- g. Type I borings shall have an internal diameter of not less than three and one-half inches and shall be oversized at the beginning of the boring as required so as to end with this minimum diameter.
- h. Type II borings shall have an internal diameter of not less than two and one-half inches and shall be oversized at the beginning of the boring as required so as to end with this minimum diameter.
- i. The level of the water or stabilizing fluid within the bore hole shall be maintained at all times at or above the ground water level. A continuous record shall be kept

of the number of blows per foot in the driving of the casing when casing is used. In general, the boring shall be advanced through the overburden by a series of operations which consist of sampling the materials, advancing the boring to a point where the next sample is to be obtained, cleaning out the hole to the bottom of the casing by various methods, sampling the material ahead of the casing, and repeating this sequence until the desired information is obtained. As the advancing of the boring proceeds, soil shall be removed from within it by washing, jetting, or cleanout auger, in such a manner so as not to disturb material to be sampled below. Chopping, roller bit, and jetting bits shall have only horizontal or upward jet openings. Split-spoon sampler shall not be used as chopping or jetting bit. Borings shall be advanced vertically through earth or other materials to such depth below the surface of the ground as is directed by the Engineer. In order that more reliable information may be obtained, the same weight of hammer and the same drop shall be used for driving all casings of the same size. The casing shall be driven with a drop hammer having a weight of not less than three hundred pounds falling freely through a distance of twenty-four inches. The hammer shall have the true weight stamped clearly thereon. Casings shall be driven vertically through earth or other materials to such depths below the surface of the ground or below mean low water as are directed by the Engineer. If augers are used, a retractable plug must be used in the bottom of the auger when advancing the boring.

- j. At intervals of two and one-half feet, to a depth of twenty-five feet, (from the existing ground surface in the case of marsh borings), and thereafter at intervals of five feet within a soil stratum, and whenever a change of soil stratum is detected by a change in the resistance of penetration of the wash pipe or by a change in the color of the wash water, or as directed by the Engineer, the advance of the hole shall be stopped, the hole shall be washed clean of loose materials and Type A or Type F samples, as specified in 2.04 below, shall be obtained. Type B samples, as hereinafter specified, shall be taken from Type I borings as directed by the Engineer. Under no condition shall the materials washed up from the casing be considered suitable for samples. Type C and D samples, as hereinafter specified, shall be taken when bedrock is encountered, as directed by the Engineer. Type E samples, as hereinafter specified, shall be taken when encountering obstructions in the overburden soil.

2.03 - Water Boring(s)

- a. Water borings shall be those that must be executed from either a floating spud barge or jack-up barge. The barge shall be self-powered or equipped with a tug boat both of which are capable of mobilizing the barge to the work site and moving it to the boring locations, as specified by the Engineer.
- b. The floating barge used for water borings shall be suitably and sufficiently sized, subject to the approval of the Engineer and shall conform to all Government regulations for signal and safety equipment. The floating barge shall be provided with a suitably sized shanty-type shelter for workers, samples, and equipment, including an appropriate cold weather heating device, all subject to the approval of the Engineer. Also, the barge shall have at least one portable restroom, in sanitary condition, equipped with a toilet, as per OSHA CFR 1926.51(c)(1).

- c. Water borings shall conform in all other respects to the requirements of item 2.02, sub-items D through J.

2.04 - Sampling

- a. Type A and Type F samples shall be dry samples and shall be taken from original and undisturbed ground by means of an approved type sampler, similar and equal to "Split Tube Sampler #22018", or "Split Tube Sampler #22022" as described in Acker Drill Company Catalog. This sampler is to be used without flap and shall be fitted with ball check valve. A supply of new driving shoes shall be on hand so as to assure the taking of the Type A or Type F sample with a sampler having a suitable sharp and true shoe.
- b. The sampler shall be driven into the soil in advance of the boring hole by an automatic or safety type hammer having a weight of one-hundred and forty pounds falling freely through a distance of thirty (30) inches. The number of blows required to drive the sampler each consecutive six (6) inches to a total penetration of eighteen (18) inches into the soil shall be recorded for each sample taken. All hammers shall have their true weight clearly marked.
- c. If the split tube sampler fails to recover a sample, the Consultant, upon approval by the Engineer, shall procure a satisfactory sample by the inclusion of a basket retainer within the Split Tube Sampler, by the use of an approved window-type or sand-pump sampler, or by other approved methods. Neither of these samplers shall be advanced below the elevation to which the split tube sampler has been driven.
- d. Upon removal of the sampler from the hole, the Consultant shall remove the sample, inspect it, identify it, and place a representative portion of it in a glass sample jar which shall be furnished by the Consultant.
- e. Sample jars for Type A and F samples shall be clear glass, sixteen-ounce capacity, approximately three and one-half inches in diameter, and three and three-quarter inches high. The jars shall have a mouth not less than three inches in diameter. Type A sample jars shall be closed by a gasketed metal screw cap preventing loss of moisture, Type F sample jars shall be closed by a Teflon lined screw cap preventing loss of moisture. Prior to the start of the work, the sample jars must be approved by the Engineer.
- f. Sample jars shall be legibly labeled (both on the jar itself and on the lid of the jar) and shall be delivered by the Consultant as hereinafter required. Samples from each boring shall be placed in boxes labeled in proper sequence.
- g. Type B samples shall be undisturbed samples. Before taking a Type B sample, a Type A sample shall be taken and the hole cleaned out to six inches below the last point reached by the Type A sampler by means of a "clean-out" auger or other approved method. A Type B sample shall then be obtained by forcing a thin-walled tube, formed from brass, into the soil with its bottom end drawn or spun to reduce the diameter by one-sixty-fourth of an inch and with the bottom edge sharpened for cutting, so designed that a sample not less than two and three-quarters inches in diameter will be obtained. The thin wall tube shall have a wall thickness not exceeding one-tenth of an inch. The sampler used for obtaining Type B samples shall be similar and equal to Stationary Piston

Sampler No. 22041-43 as described in Acker Drill Company. The Consultant may use a stainless steel tube in lieu of the brass tube, where, in its opinion, greater tube strength is required, but only upon the review and approval of the Engineer.

- h. In order to obtain a sample as undisturbed as possible, the sampler shall be forced down in advance of the casing in one rapid, continuous movement, without hammering. The rate of downward movement shall be approximately twenty-five feet per minute. After the sampler has been forced into the soil for the required depth, the sampler shall remain undisturbed for no less than ten minutes and for as long as determined necessary to obtain an acceptable sample as directed by the Engineer. The sampler shall be slowly withdrawn from the hole, and the tube containing the sample removed from the sampler after venting the piston to release the vacuum between the piston and the top of the soil sample. Movement of the soil sample in the tube upon removal from sampler-piston head shall be prevented. A Type A sample is to be taken immediately from the bottom depth penetrated by the Type B sample. Tubes shall be marked "TOP" and "BOTTOM" to show the position of the sample as it is taken.
- i. The top of the undisturbed soil sample shall be trimmed to a flat surface, removing all loose cuttings, and wiped clean inside the tube. The Engineer's representative shall then securely seal the top surface of the sample with an expanding packer provided by the Authority. One and one-half inches (1-1/2 in.) shall then carefully removed from the bottom of the soil sample within the tube, trimmed to a flat surface and wiped clean. This soil material shall be preserved in a glass sample jar. The Engineer's representative shall then securely seal the bottom surface of the sample with an expanding packer provided by the Authority. Tubes shall then be capped with brass, copper, or plastic caps and sealed with friction tape. Tubes and sample jars shall be identified and delivered as hereinafter required.
- j. Type C and D samples shall be cores taken by drilling into bedrock or boulders immediately above the bedrock. Cores shall be made by means of a rotary drill, using a diamond coring bit and a double-tube core barrel. Type C cores shall not be less than 1-3/8" in diameter and Type D cores shall be not less than 2-1/8" in diameter. The hole shall be cased to top of rock surface and seated into the rock before any rock coring commences, when directed by the Engineer.
- k. Type E samples shall be cores taken through overburden obstructions and shall be not less than 2-18" in diameter. A Type A sample shall be taken immediately upon the penetration of the overburden obstruction by Type E cores. The hole shall be cased to top of rock or obstruction surface and seated into the rock or obstruction before any coring commences, when directed by the Engineer.
- l. Length of drilling runs shall be determined by the Engineer.
- m. Care shall be taken to insure that as much as possible of each core shall be recovered. Core catching devices shall be employed by the Consultant for this purpose. Cores shall be carefully handled to insure their proper identification

and shall be placed immediately in suitable receptacles in the order of their removal from the ground.

- n. Should it be impracticable at any depth of rock to obtain a core, or should a seam of soft, disintegrated rock be encountered, particular care shall be taken by the Consultant to obtain the best samples possible of the material as well as the correct measurements of the depths for which no core is obtainable.
- o. The Consultant shall so conduct its operations that any marked loss or gain in the water in the borehole is immediately noted. As soon as such a loss or gain is apparent, the boring shall be stopped immediately and the Engineer notified. Such borings shall not be recommenced until expressly permitted by the Engineer.
- p. Coring will not be permitted until after refusal to penetration. For purposes of this Contract "refusal to penetration" shall be defined as the condition in which a minimum of 50 blows of a 300-pound hammer will not advance the sampler at least one inch. If at any time during coring operations less than 20% recovery of a sample is obtained, the Consultant shall be required to obtain spoon samples from within cored depth. The Consultant shall then continue the operations required for wash borings until a refusal to penetration situation again occurs, at which time the process outlined herein shall be repeated.
- q. Cores shall be placed immediately upon removal from core barrel in new, subdivided, sturdy, wooden boxes with handles so that the cores of each run of each boring may be kept separate. The minimum inside dimensions of each box shall be forty-eight (48) inches long, twelve (12) inches wide and two and one-half (2-1/2) inches high. Provision shall be made so that the cores will not shift or change relative positions within the core box. Core boxes, as described above, shall be supplied by the Consultant and shall be made to withstand abuse in shipment without damaging, shifting or changing the condition of the cores. Cores shall be delivered as hereinafter required.
- r. Upon completion of taking of samples as herein required, the Consultant shall at the end of each day of sampling, clearly, accurately and permanently label the sample containers to show the following:
 - 1) The Project Designation as furnished by the Engineer in each case.
 - 2) The number of the hole as designated by the Engineer, together with the sample number from that hole.
 - 3) The depth below the surface of the ground or starting platform from which each sample was obtained.
 - 4) The number of blows required for three consecutive six inches of penetration of the sample in case of Type A and Type F samples.
 - 5) The date on which the sample was taken.
 - 6) Any other information which may be helpful in identifying the sample and the character of the material from which the sample was obtained.
 - 7) Preparation of drawings by the Consultant shall not be required.

- s. Immediately upon the completion of each boring and the preservation of the samples as hereinbefore specified, (and prior to commencing the next boring), the sample containers shall be delivered in suitable boxes to the office of the Facility Resident Engineer, or another equally accessible location designated by the Engineer.

2.05 - Slope Indicator Casing Installation

- a. When directed by the Engineer, the Consultant shall install slope-indicator casings at the locations designated by the Engineer prior to start of installation. The slope-indicator casing and required casing accessories will be supplied and delivered to the Construction Site by the Authority. The Consultant shall supply all other materials for installing slope-indicator casing.
- b. The casing is supplied in ten-foot lengths, one end coupled, therefore requiring fastening each length as the casing is lowered into the pre-bored hole. The pre-bored hole shall be a minimum of 4-1/2 inches in diameter, and shall not be more than 6 inches in diameter through the entire length of the hole. The hole shall be maintained by casing or by the use of driller's mud as directed by the Engineer.
- c. When the bottom of the slope-indicator casing is required to be seated in bedrock, the bedrock shall first be cored in order to ascertain the identification and quality of the bedrock. The upper five feet of the cored hole shall then be reamed out to 4-1/2 inches in diameter.
- d. The alignment grooves in the slope-indicator casing shall be maintained in the required orientation. As the casing is being lowered into the hole, it shall be kept filled with clean water to prevent floating.
- e. When the required length of slope-indicator casing has been placed to the bottom of the bored hole and is being held in place, a 3/4 inch PVC tremie pipe shall be lowered next to the slope-indicator casing to the bottom of the hole.

A lean mix of Portland cement and drillers mud shall then be pumped through the tremie pipe, filling the annular space outside of the slope-indicator casing to the top of the bored hole.

The tremie pipe shall then be extracted from the bore hole, and the slope-indicator casing shall be capped. Any drive casing used to establish or maintain the bore hole may then be removed. Following the removal of the drive casing, any remaining annular space shall be completely back-filled with grout to the ground surface.

2.06 - Ground Water Observation

- a. The Consultant shall determine the ground water level at the site of each hole. During the overburden drilling, the first sign of ground water shall be noted and both the elevations of ground water and the bottom of the casing recorded. If water is being introduced into the drill hole, observations shall be made on the change in water level in the casing when the water supply is shut off. Boring operations shall be conducted in such a way that the casing will not be plugged with soil at the end of the day's work. The Consultant shall measure the

elevation of ground water prior to commencing drilling operations on the following working day.

- b. Observations shall be made and recorded if at any time during the drilling the water supply in the hole is lost. When the boring has been completed, an observation shall be made and recorded.

2.07 - Ground Water Monitor Wells (Temporary and Permanent)

- a. In addition to the ground water observations required in 2.06 above, the Consultant shall install a temporary ground water observation wellpoint at all marsh borings. Observation wellpoints shall consist of a length of 2" ID schedule 40 PVC pipe, machine slotted with 0.02 inch slots and a 2" ID schedule 40 PVC riser pipe as manufactured by Bedrock Enterprises, Inc., Forked River, New Jersey, with threaded joints or an approved equal. The tip elevation shall be approximately 5 feet below the suspected ground water elevation except that it shall not extend below the water-bearing layer unless otherwise directed by the Engineer. The slotted portion shall extend a minimum of 1 foot above the suspected ground water elevation unless otherwise directed by the Engineer. The top of the rise pipe shall extend a minimum of 1 foot above the ground surface, except that in public areas the riser shall be flush with the ground surface. The riser pipe shall be equipped with a vented cap.
- b. For borings obtained in cased drill holes, observation wellpoints shall be installed in the drill hole as the casing is being withdrawn from the ground.
- c. For borings where drilling mud is used to maintain an open drill hole, the observation wellpoint shall be installed in a separate hole, installed without drilling mud, and located within 10 feet of the test boring.
- d. Temporary observation wellpoints shall remain in place at least two consecutive working days, with ground water measurements taken and recorded each day.
- e. Permanent observation wellpoints, when requested, may require installation in a hole separate from any of the soil boring drill holes. This will be in exceptional cases as determined by and/or directed by the Engineer. Those observation wellpoints which are to be permanently installed shall be developed by surging and bailing. Surging shall be performed by using a surge block. Development shall continue until the water removed from the well is free of suspended solids.
- f. Permanent observation wellpoints that are installed with a solid riser PVC pipe extending above grade shall be protected with a steel casing and a locking cap. In public areas, the riser pipe shall be installed flush with existing ground. A flush-mounted manhole shall be installed to protect the permanent observation wellpoints.
- g. For permanent observation wellpoints the gravel-pack filling shall be "Jessie-Morie" No. 1 or No. 2, sterile well gravel or an Engineer approved equal. An Engineer approved high-grade sodium base, well sealant type granular bentonite shall be used for a 1-foot seal above the gravel pack. The bentonite shall be placed as a potable water slurry mix (1.5 pounds of bentonite to 1 gallon of water). Cement grout to be used above the bentonite seal for the balance of

the annulus shall consist of Portland Cement or an Engineer approved equivalent, mixed according to the API or Halliburton Cementing tables (5.2 gallons/94 lb. bag).

- h. The Consultant shall supply all materials for temporary and permanent observation wellpoints, excepting the locking cap, and the protective outer steel casing or manhole.

2.08 - Restoration of Existing Surfaces and Subsurface Stratum

- a. At the completion of a test boring or removal of a ground water monitor well, the Consultant shall refill each hole with clean earth fill or cement grout as directed by the Engineer. In all cases where a test boring or ground water monitor well has penetrated an impermeable soil layer separating two water-bearing soil layers, they shall be sealed with cement grout, neat cement, or a sterilized clay slurry weighing not less than 14 pounds per gallon. All of the above-mentioned sealing materials shall be introduced through a pipe discharging at the bottom of the space to be filled in order to prevent dilution of the sealing material. The Consultant shall remove all casings, refill each hole, and replace and restore all surfaces damaged or disturbed in its operation to at least the same condition as existed prior to the start of the required services. Disturbed landscaped areas shall be sodded or planted and maintained by the Consultant until any damaged plants, grass, or other growths are restored. The Consultant shall supply all materials and equipment necessary for sealing holes.
- b. The foregoing restoration will be subject to approval by the Engineer.

2.09 - Sample Preservation

Shelter shall be provided by the Consultant on the Construction Site for protection of samples from disturbance, temperature extremes, or other adverse conditions.

2.10 - Piezometer Installation

- a. When directed by the Engineer, the Consultant shall install piezometer at the locations designated by the Engineer. The piezometer will be supplied by the Authority and the Consultant shall supply all other materials for installing piezometers.
- b. A boring shall be advanced to the required elevation by the use of casing or drilling mud as directed by the Engineer.
- c. The piezometer shall be installed to the required depth and annular space around the piezometer will be filled using Ottawa sand to a depth of one foot above the tip. Bentonite ball shall be installed and tamped to form a six-inch-thick seal followed by a six-inch gravel layer, drive casing, if used, shall be removed to the top of the seal before the next layer of bentonite is added. This shall be repeated to form five layers of bentonite.
- d. Any drive casing used to establish or maintain the borehole may then be removed. Following the removal of the drive casing, any remaining annular space shall be grouted to the ground surface.

2.11 - Monitor Well Installation

- a. The Consultant shall furnish all materials other than protective steel casing, which will be provided by the Authority, and the Consultant shall install ground water monitor wells as directed by the Engineer.
- b. Materials
 - 1) The PVC riser pipe shall be 2-inch or 4-inch I.D., as directed by the Engineer, Schedule 40 PVC pipe as manufactured by Bedrock Enterprises, Inc., Forked River, New Jersey, or approved equal, with threaded joints and in lengths corresponding to the depths at which the PVC pipe will be installed. Pipe which is kinked or otherwise misshapen shall not be used.
 - 2) The PVC pipe shall have threaded couplings and shall be delivered to the jobsite in an “environmentally” clean condition as judged by the Authority Inspector.
 - 3) Well screens shall consist of slotted lengths of Schedule 40 PVC pipe with machine slots of 0.02 inches or as specified by the Engineer. The length will be specified by the Engineer.
 - 4) An approved high-grade sodium base, well sealant type, granular bentonite shall be used. The bentonite shall be mixed with potable water into a slurry. The slurry shall consist of 1.5 pounds of bentonite to one-gallon water.
 - 5) Cement grout shall consist of Portland Cement or an equivalent mixed according to the API or Halliburton Cementing tables (5.2 gals./94 lb. bag).
 - 6) Split spoon sampler shall be 3 inches I.D. 3-1/2” O.D. similar and equal to “Split Tube Sampler #22046-8,” as described in Acker Drill Company Catalog.
 - 7) The gravel-pack filling shall be “Jessie Morie” No. 1 or No. 2 sterile well gravel or other as specified by the Engineer.
 - 8) Top of PVC riser will be equipped with a PVC screw-type cap and will have a venting hole.
 - 9) The bottom of the slotted portion of the PVC pipe will be fitted with a screw-type cap.
 - 10) Steel protective casing with lockable cap or manholes (Morrison Bros. Catalog #519) will be provided by the Authority.
- c. Hollow Stem Auger

A 6-inch I.D. hollow stem auger shall be used for Type A ground water monitor well installations as specified in D herein or as directed by the Engineer.
- d. Installation of Type A Ground Water Monitor Wells
 - 1) The installation of Type A ground water monitor wells shall be as directed by the Engineer.
 - 2) The boring shall be advanced with a 6-inch I.D. hollow-stem auger with an end plug while obtaining continuous 3-inch I.D. split spoon samples. The

auger shall not penetrate more than 1-foot into any aquitard encountered in boring.

- 3) If the aquitard is penetrated, the auger shall be retracted from the aquitard and the penetration into the aquitard shall be back-filled with a bentonite pellet seal.
 - 4) Two 2-inch or 4-inch I.D. PVC slotted pipe shall be installed in the bore hole with a solid riser pipe extended to a minimum of 2 feet above existing grade, as directed by the Engineer.
 - 5) After installation of the ground water monitor well, the hollow stem auger flights shall be removed and the annular space of a minimum of 2-inches, between the inside edge of the bore hole and the outside edge of the PVC monitor well, from the bottom of the slotted section to a minimum of 1-foot above the slotted section of the well, shall be filled with "Jessie Morie" No. 1 or No. 2 sterile well gravel, or other well gravel as specified by the Engineer.
 - 6) A 1-foot bentonite seal shall be installed above the gravel pack.
 - 7) The remaining annulus shall be filled with cement grout.
 - 8) The PVC riser pipe extending above grade shall be protected with a steel protective casing equipped with a locking cap, except that in public areas the riser pipe shall be flush with existing ground. A flush mounted manhole or similar device shall be installed to protect the monitor well, as specified in 2.11, B.10.
 - 9) Ground water monitoring well shall be developed by surging and bailing. Surging shall be performed by using a surge block. Development shall continue until the water removed from the well is free of suspended solids.
 - 10) The remaining annulus shall be filled with cement grout. A brass tag bearing an identification number for the monitor well shall be securely fastened to each well.
 - 11) A concrete slab shall be installed at grade, adjacent to the protective casing.
- e. Installation of Type B Ground Water Monitor Wells
- 1) The installation of Type B ground water monitor wells shall be as directed by the Engineer.
 - 2) The boring shall be advanced by using a 10-inch steel casing with mud rotary technique, as directed by the Engineer, to the aquitard while obtaining continuous 3-inch I.D. split spoon samples. This top portion of the boring shall not penetrate more than 1-foot into the aquitard.
 - 3) The 10-inch casing shall be cleaned out and the boring advanced beyond the aquitard by "telescoping" 8-inch steel casing and/or using mud rotary technique, as directed by the Engineer. Continuous 3-inch I.D. split spoon samples shall be taken to the bottom of the bore hole.

- 4) 2-inch or 4-inch I.D. slotted pipe shall be installed in the bore hole with a solid riser pipe extended to a minimum of 2-feet above existing grade, as directed by the Engineer.
 - 5) After installation of the ground water monitor well, the flashpoint casing shall be extracted to an elevation 2-feet above slotted section and the annular space of a minimum of 2-inches between the inside edge of the bore hole and the outside edge of the PVC monitor well from the bottom of the slotted section to a minimum of 1-foot above the slotted section of the well shall be filled with "Jessie Morie" No. 1 or No. 2 sterile well gravel or approved equal.
 - 6) A 1-foot bentonite seal shall be installed above the gravel pack.
 - 7) The remaining annulus shall be filled with cement grout as the balance of the flush joint casing is extracted.
 - 8) The PVC riser pipe extending above grade shall be protected with a steel protective casing equipped with a locking cap, except that in public areas the riser pipe shall be flush with the existing ground. A flush mounted manhole or similar device shall be installed to protect the monitor well, as specified in 2.11, B.10.
 - 9) Ground water monitoring well shall be developed by surging and bailing. Surging shall be performed by using a surge block. Development shall continue until the water removed from the well is free of suspended solids.
 - 10) The remaining annulus shall be filled with cement grout. A brass tag bearing an identification number for the monitor well shall be securely fastened to each well.
 - 11) A concrete slab shall be installed at grade, adjacent to the protective casing.
- f. Installation of 3-inch PVC Casing for Cross-Hole Seismic Testing
- 1) The boring shall be advanced by using steel casing with mud rotary technique, as directed by the Engineer, to the required end depth while obtaining continuous 2-inch I.D. split spoon samples, Osterberg tubes or rock cores.
 - 2) Upon completion of sampling, the boring shall be reamed, cleaned to the end depth using a 4-7/8-inch roller-bit and cased to the bedrock with 5-inch steel casing.
 - 3) The installation of the solid 3-inch Schedule 40 PVC casing shall be as directed by the Engineer. The installation shall meet the requirements of ASTM D4428, Standard Test Methods for Crosshole Seismic Testing.
- g. Cleaning of Equipment
- 1) The hollow stem auger split spoon sampler and related equipment shall be steam cleaned prior to start of work on the site and between each installation as directed by the Engineer, at no added cost to the Authority.

- 2) The split spoon soil sampler shall be washed as a minimum with clean, fresh water between each new sampling operation or per the appropriate environmental protocol as directed by the Engineer.
- 3) The Engineer may prescribe additional cleaning requirements, if deemed necessary.

2.12 - Boring-Related Work

The Consultant shall provide a drill rig, including all necessary labor and equipment, as specified in 2.01 hereof, for performance of boring-related work such as, but not limited to, field permeability and CBR tests, piezometer installation, and slope inclinometer casing installations, as ordered by the Engineer.

V. CONDITIONS AND PRECAUTIONS

A. General

The Consultant shall immediately inform the Authority of any unsafe condition discovered at any time during the course of this work.

Vehicular traffic at the facility shall always have priority over any and all of the Consultant's operations.

B. Work Areas

The Consultant shall limit its inspection work to the areas necessary for the performance of such inspection and shall not interfere with the operation of the facility without first obtaining specific approval from the Chief Engineer.

During all periods of time when not performing operations at the work site, store all equipment being used for the inspection in areas designated by the Chief Engineer and provide all security required for the storing of such equipment.

Do not permit any objects or pieces of equipment to lie unattended on sidewalks, roadways or structures at any time.

C. Safe Vehicle Operation

Consultant shall perform services in compliance with all Federal Motor Carrier Safety Agency ("FMCSA") regulations. The Consultant shall have in place an overall safety program, a driver's training program, and vehicle maintenance program. Upon request of the Port Authority, the Consultant must provide a written description of the aforementioned safety, training, and maintenance programs, or any other information relating to safety, including but not limited to, results of inspections and actions taken to remedy safety issues and violations. In the event the Consultant is the subject of an investigation, compliance review, and/or enforcement action related to safety, the Consultant must fully disclose said investigation, compliance review, and/or enforcement action(s) in accordance with Sections 28 through 37 of the Standard Agreement.

D. Drugs and Alcohol Program

Effective June 12, 2017 (the "Effective Date,") the Consultant and its subconsultants, which perform regulated services (as defined in 49 CFR Part 219) for PATH, shall comply with the Federal Railroad Administration ("FRA") 49 CFR 219 "Control of Alcohol and Drug Use" ("Part 219.") For the purposes of compliance, the Consultant and its

subconsultants shall not be included in the Port Authority or PATH Part 219 Compliance Program and must therefore comply as otherwise set forth in Part 219. In order to perform Work covered by Part 219 after the Effective Date, Consultant and its subconsultants shall submit to PATH a written certification that the Consultant and its subconsultants are in compliance with all applicable parts of Part 219. This certification and any other documentation required by PATH or Part 219 must be provided prior to performing Work covered by Part 219 under the Agreement and at least every six (6) months during the duration of the Agreement, or at any other frequency determined by PATH or required by the FRA.

The Consultant's, or its subconsultants', failure to comply with any provision of this numbered clause may be deemed as a substantial breach of this Agreement."

* * *

P.A. AGREEMENT # *-19-*****

DATE

Lillian D. Valenti
Chief Procurement Officer

FIRM

ADDRESS

CITY, ST ZIP

Attention: CONTACT, TITLE

SUBJECT: PERFORMANCE OF EXPERT PROFESSIONAL GEOTECHNICAL AND ENVIRONMENTAL SUBSURFACE EXPLORATION ON WATER OR MARSH AS REQUESTED ON A "CALL-IN" BASIS DURING 2019 THROUGH 2022

Dear CONTACT:

1. The Port Authority of New York and New Jersey (the "Authority") hereby offers to retain FIRM NAME (the "Consultant" or "you") to provide expert professional services as more fully set forth in Attachment A, which is attached hereto and made a part hereof, on a "call-in" basis during 2019 through 2022.

The Authority does not guarantee the ordering of any services under this Agreement and specifically reserves the right, in its sole discretion, to use any person or firm to perform the type of services required hereunder.

This Agreement shall be signed by you and by the Authority's Chief Procurement Officer. As used herein, "Chief Engineer" shall mean the Chief Engineer, or the Deputy Chief Engineer of the Authority, or his duly authorized representatives.

For the purpose of administering this Agreement, the Chief Engineer has designated DAR NAME, Assistant Chief ***, to act as his duly authorized representative. The Project Manager for this project is NAME, tel. (***) ***-****, or e-mail address: ****@panynj.gov.

2. Time is of the essence. Your services shall be performed as expeditiously as possible and at the time or times required by the Chief Engineer.

3. In response to a request for specific services hereunder and prior to the performance of any such services, you shall submit, in writing, to the Chief Engineer for approval, an estimated cost and staffing analysis of such services. The Chief Engineer shall have the right to determine that specified services shall be performed on a Unit Price basis pursuant to Exhibit I. You shall begin performing services under this Agreement upon your receipt of the Chief Engineer's written (1) approval of such cost and (2) direction to proceed. At the point at which your expenditures for such services reach such approved estimated cost, you shall not continue to render any such services. Preparation of cost estimates and staffing analysis mentioned in this paragraph and in Paragraph 8 shall not be a compensable service hereunder.

4. In order to effectuate the policy of the Authority, the services provided by the Consultant shall comply with all provisions of federal, state, municipal, local and departmental laws, ordinances, rules, regulations, and orders which would affect or control said services as if the services were being performed for a private corporation, unless the Authority standard is more stringent, in which case the Authority standard shall be followed, or unless the Consultant shall receive a written notification to the contrary signed by the Chief Engineer, in which case the requirements of said notification shall apply.

5. The Consultant shall meet and consult with Authority staff as requested by the Chief Engineer in connection with any service to be performed herein. Any Contract Drawings, Technical Specifications and/or other items to be submitted or prepared by the Consultant hereunder shall be subject to the review of the Chief Engineer. The Chief Engineer may disapprove if, in his sole opinion, said items are not in accordance with the requirements of this Agreement, sound engineering principles or accepted professional standards or are impractical, uneconomical or unsuited in any way for the purpose for which the contemplated construction or services is intended. If any of the said items or any portion thereof are so disapproved, the Consultant shall forthwith revise them until they meet the approval of the Chief Engineer, but the Consultant will not be compensated under any provision of this Agreement for performance of such revisions. No approval or disapproval or omission to approve or disapprove, however, shall relieve the Consultant of its responsibility under this Agreement to furnish the requested services in accordance with an agreed upon schedule, a complete, practical, economical design and Contract Drawings and Technical Specifications (and corrections and changes thereto) which are best suited for the contemplated construction, or services, are done in accordance with sound engineering principles and are signed and sealed by a licensed Professional Engineer.

6. When services to be performed by the Consultant include the preparation of contract documents, or the performance of post award services, the Consultant shall submit its specific Quality Control/Assurance Program to the Chief Engineer prior to the performance of said services. Upon completion of specific services requested hereunder, the Consultant shall submit a letter to the Chief Engineer certifying the Consultant's conformance with the aforementioned Quality Control/Assurance Program.

7. When the services to be performed by the Consultant include the preparation of computer aided design and drafting (CADD) documents, said documents must be prepared using the latest available revision of Autodesk's "AUTOCAD" software or as directed by the Chief Engineer prior to the performance of specific services. All drawings shall be prepared in strict conformance to the Port Authority CAD Standards. All submissions of CAD drawings shall be submitted to the Authority on compact discs, USB drives, uploaded to the Project Website, or as otherwise required, in DWG and DWF format in accordance with the Port Authority CAD Standards.

8. You shall not continue to render services under this Agreement after the point at which the total amount to be paid to you hereunder (including reimbursable expenses) reaches the combined total of each of the approved estimated costs, unless you are specifically authorized in writing to so continue by the Chief Engineer. If no such authorization is issued, this Agreement shall be terminated without further obligation by either of the parties as to services not yet performed, but

you shall be compensated as hereinafter provided for services already completed. It is understood, however, that this limitation shall not be construed to entitle you to the above amount as a minimum compensation.

9. As full compensation for all your services and obligations in connection with this Agreement, the Authority will pay you the total of the amounts computed under subparagraphs A, B, C, D, E and F below, subject to the limits on compensation and provisions set forth in Paragraphs 3 and 8 above. Subject to the terms and conditions below, travel time is not reimbursable under subparagraphs A, B, and C hereunder.

A. The Consultant will be compensated at an amount equal to *.* times the actual salaries paid by you to professional and technical personnel (but not partners or principals) for time actually spent by them in the performance of services hereunder; plus an amount equal to the number of hours actually spent by partners and principals in the performance of services hereunder times the billing rate (no multiplier applied) described below but in each case excluding premium payments for overtime work or night work or for performing hazardous duty. Attached hereto is a schedule of actual salaries and titles of architects, engineers, technical staff or other permanent professional and technical personnel employed by you, as well as rates customarily billed for partners and principals on projects such as this. Said staffing analysis shall clearly indicate any of your employees, proposed by you to perform the requested services that are former Authority employees. For compensation purposes under this Agreement, no said salary or amount shall exceed the salary or amount received by said personnel or rate customarily billed for a partner or principal as of the effective date of this Agreement unless the Chief Engineer has been notified in advance, in writing, of the increased salary, rate or amount and approves the increase.

The Consultant shall verify that its employees, subconsultants, or subcontractors working under this Agreement are legally present and authorized to work in the United States, as per the federally required I-9 Program. Furthermore, upon request of the Authority, the Consultant shall furnish, or provide the Authority access to federal Form I-9 (Employment Eligibility Verification) for each individual hired by the Consultant, performing services hereunder. This includes citizens and noncitizens.

The Authority reserves the right of approval of all personnel, amounts, billing rates and salaries of said personnel performing services under this Agreement. When requesting salary or billing rate adjustments for one or more of its personnel, the Consultant shall submit his/her name, title, current direct hourly rate or billing rate, proposed new direct hourly salary or billing rate, resulting percentage increase, effective date and reason for the requested change, setting forth in detail any increased cost to the Consultant of providing the services under this Agreement which has given rise to the request for increased salary. For adjustments submitted after the effective date of this Agreement, the Authority will grant an increase only if the Consultant demonstrates compliance with all of the following conditions: that increases in salary, or partner's or principal's billing rate or amount, are a) in accordance with the program of periodic merit and cost of living increases normally administered by it, b) warranted by increased costs of providing services under this Agreement, c) based upon increases in salaries and billing rates which are generally applicable to all of Consultant's clients and d) in accordance with the Authority's salary rate increase policy for the current year for Authority employees possessing comparable skills and experience. If, during any calendar year, Authority limits are not available to the Consultant in a timely fashion, increases

falling within such limits may be approved retroactively, as appropriate. The amount of increase in salary or billing rate, if any, to be applicable under this Agreement will in all cases be finally determined by the Chief Engineer or his designee, in his sole and absolute discretion.

Notwithstanding the above, the multiplier set forth in this subparagraph shall be applied only in the case of personnel other than partners or principals who are permanent employees.

B. The Consultant will be compensated at an amount equal to the premium payments for overtime work or night work or for performing hazardous duty, actually paid to professional and technical employees, but not partners or principals, for time actually spent by them in the performance of services hereunder when such overtime or other premium payments have been demonstrated to be in accordance with the Consultant's normal business practice will be reimbursed by the Authority when they have been authorized in advance by the Chief Engineer in writing. The Project Manager for the Authority shall have the right to authorize and approve premium payments up to a total amount of one thousand dollars (\$1,000) per occasion. Payments above said total amount shall be subject to the prior written authorization of the Chief Engineer. Such premium payments to supervisory employees, who do not receive such payments in the Consultant's normal business practice will not be given under this Agreement.

C. When the method of compensation hereunder, as approved in advance by the Chief Engineer is on a Unit Price basis, said Unit Price shall include all labor, materials, profit and overhead or other expenses relative to the performance of the required services as indicated in Exhibit I, included herewith and made a part hereof.

D. The Consultant will be compensated at an amount equal to the amounts actually paid to subconsultants hereunder who have been retained after the written approval by the Chief Engineer of the subconsultant and the compensation to be paid the subconsultant. The Consultant shall submit a copy of the terms and conditions of the subconsultant's compensation (including multiplier, if applicable), as well as an estimate of the number of hours required by the subconsultant to perform his services, as part of any request for approval of the subconsultant.

E. The Consultant will be compensated at an amount equal to the out-of-pocket expenses, approved in advance by the Chief Engineer, necessarily and reasonably incurred and actually paid by you in the performance of your services hereunder. Out-of-pocket expenses are expenses that are unique to the performance of your services under this Agreement and generally contemplate the purchase of outside ancillary services, except that for the purpose of this Agreement, out-of-pocket expenses do include amounts for long distance telephone calls, rentals of equipment, travel and local transportation and meals and lodging on overnight trips.

The Authority will pay an amount approved in advance by the Chief Engineer and computed as follows for the reproduction of submittal drawings, specifications and reports:

1) If the Consultant uses its own facilities to reproduce such documents, an amount computed in accordance with the billing rates the Consultant customarily charges for reproduction of such documents under agreements such as this, or

2) If the Consultant uses an outside vendor for the reproduction of such documents, the actual, necessary and reasonable amounts for the reproduction of such documents.

The Authority will not pay for expenses that are usually and customarily included as part of the Consultant's overhead. For the purposes of this Agreement out-of-pocket expenses do not include amounts for typing, utilization of computer systems, computer aided design and drafting (CADD), cameras, recording or measuring devices, flashlights and other small, portable equipment, safety supplies, phones, telephone calls, electronic messaging including Fax, or expendable office supplies. Unless otherwise indicated, required insurance is not a reimbursable expense.

When the Consultant uses its personal vehicle to provide services within the Port District, the Consultant will be reimbursed for travel expenses beyond normal commuting costs at a rate not higher than the Annual Federal Mileage Reimbursement Rate (as determined by the United States General Services Administration (GSA) – <http://www.gsa.gov/portal/content/100715>) per mile traveled by auto.

When the Consultant is asked to provide services outside the Port District, the actual cost of transportation as well as the cost for hotel accommodations and meals will be reimbursable hereunder when approved in advanced in writing by the Chief Engineer. The cost for all meals and lodging on approved overnight trips is limited to the amounts established by the United States GSA for that locality. If the Consultant chooses to travel each day to an assignment, where it would be more economical to take a hotel room near the assignment, the maximum reimbursable travel expenses shall not exceed the daily cost for meals and lodging. Reimbursable travel as provided herein shall be limited to one round trip per week's service except when otherwise approved in advance and in writing by the Chief Engineer. The total number of reimbursable travel hours (for travel outside the Port District) will be calculated by reducing the actual travel time by three hours.

GSA Domestic Rates: <http://www.gsa.gov/portal/category/21287>

You shall obtain the Chief Engineer's written approval prior to making expenditures for out-of-pocket expenses in excess of one thousand dollars (\$1,000) per specific expenditure and for all overnight trips, which are reimbursable expenditures as set forth above. You shall substantiate all billings for out-of-pocket expenses in excess of twenty-five dollars (\$25) with receipted bills and shall provide said receipts with the appropriate billing.

F. As used herein:

"Port District" is a geographical area of about 1,500 square miles in the States of New York and New Jersey, centering about New York Harbor. The Port District includes the Cities of New York and Yonkers in New York State, the cities of Newark, Jersey City, Bayonne, Hoboken and Elizabeth in the State of New Jersey and over 200 other municipalities, including all or part of seventeen counties, in the two States.

"Salaries paid to employees" or words of similar import means salaries and amounts actually paid (excluding payments or factors for holidays, vacations, sick time, bonuses, profit participations and other similar payments) to architects, engineers, designers, drafters or other professional and technical employees of the Consultant for time actually spent directly in the performance of technical services hereunder and recorded on daily time records which have been approved by the employee's immediate supervisor, excluding the time of any employee of the Consultant to the extent that the time of such employee of the Consultant is devoted to typing/word processing, stenographic, clerical or administrative functions. Such functions shall be deemed to be included in the multiplier referred to in Subparagraph A above.

FIRM NAME

- PAGE 6 -

DATE

10. You shall keep, and shall cause any subconsultants under this Agreement to keep, daily records of the time spent in the performance of services hereunder by all persons whose salaries or amounts paid thereto will be the basis for compensation under this Agreement as well as records of the amounts of such salaries and amounts actually paid for the performance of such services and records and receipts of reimbursable expenditures hereunder and, notwithstanding any other provision of this Agreement, failure to do so shall constitute a conclusive waiver of any right to compensation for such services or expenses as are otherwise compensable hereunder. The Authority will have the right to audit all such records.

The Authority will have the right to inspect your records, and those of your subconsultants, pertaining to any compensation to be paid hereunder, such records to be maintained by you and your subconsultants for a period of three years after completion of services to be performed under this Agreement.

11. On or about the fifteenth (15th) day of each month, you shall render a bill for services performed and reimbursable out-of-pocket expenses incurred in the prior month, accompanied by such records and receipts as required, to the Project Manager. Each invoice shall bear your taxpayer number and the purchase order number provided by the Chief Engineer. Upon receipt of the foregoing, the Chief Engineer will estimate and certify to the Authority the approximate amount of compensation earned by you up to that time. As an aid to you, the Authority will, within fifteen (15) days after receipt of such certification by the Chief Engineer advance to you by check the sum certified minus all prior payments to you for your account.

12. The Authority may at any time for cause terminate this Agreement as to any services not yet rendered, and may terminate this Agreement in whole or in part without cause upon three (3) days' notice to you. You shall have no right of termination as to any services under this Agreement without just cause. Termination by either party shall be by certified letter addressed to the other at its address hereinbefore set forth. Should this Agreement be terminated in whole or in part by either party as above provided, you shall receive no compensation for any services not yet performed; but if termination is without fault on your part, the Authority will pay you as the full compensation to which you shall be entitled in connection with this Agreement the amounts computed as above set forth for services completed to the satisfaction of the Chief Engineer through the date of termination, minus all prior payments to you.

13. Under no circumstances shall you or your subconsultants communicate in any way with any consultant, contractor, department, board, agency, commission or other organization or any person, whether governmental or private in connection with the services to be performed hereunder except upon prior written approval and instructions of the Chief Engineer, provided, however that data from manufacturers and suppliers of material shall be obtained by you when you find such data necessary, unless otherwise instructed by the Chief Engineer

14. Any services performed for the benefit of the Authority at any time by you or on your behalf, even services in addition to those described herein, even if expressly and duly authorized by the Authority, shall be deemed to be rendered under and subject to this Agreement (unless referable to another express written, duly executed agreement by the same parties), whether such additional

services are performed prior to, during or subsequent to the services described herein, and no rights or obligations shall arise out of such additional services.

15. No certificate, payment (final or otherwise), acceptance of any work nor any other act or omission of the Authority or the Chief Engineer shall operate to release you from any obligations under or upon this Agreement, or to estop the Authority from showing at any time that such certificate, payment, acceptance, act or omission was incorrect or to preclude the Authority from recovering any money paid in excess of that lawfully due, whether under mistake of law or fact or to prevent the recovery of any damages sustained by the Authority.

16. Mylars of the contract drawings, originals of technical specifications, estimates, reports, records, data, charts, documents, renderings, computations, computer tapes or disks, and other papers of any type whatsoever, whether in the form of writing, figures or delineations, which are prepared or compiled in connection with this Agreement, shall become the property of the Authority, and the Authority will have the right to use or permit the use of them and of any ideas or methods represented by them for any purpose and at any time without compensation other than that specifically provided herein. The Consultant hereby warrants and represents that the Authority will have at all times the ownership and rights provided for in the immediately preceding sentence free and clear of all claims of third persons whether presently existing or arising in the future and whether presently known to either of the parties to this Agreement or not. This Agreement shall not be construed, however, to require the Consultant to obtain for the Consultant and the Authority the right to use any idea, design, method, material, equipment or other matter which is the subject of a valid patent, unless owned by the Consultant, or subconsultant, or an employee of either. Whether or not your Proposal is accepted by the Authority, it is agreed that all information of any nature whatsoever which is in any way connected with the services performed in connection with this Agreement, regardless of the form of which has been or may be given by you or on your behalf, whether prior or subsequent to the execution of this Agreement, to the Authority, its Commissioners, officers, agents or employees, is not given in confidence and may be used or disclosed by or on behalf of the Authority without liability of any kind, except as may arise under valid existing or pending patents, if any.

17. If research or development is furnished in connection with the performance of this Agreement and if in the course of such research or development patentable subject matter is produced by the Consultant, its officers, agents, employees, or subconsultants, the Authority will have, without cost or expense to it, an irrevocable, non-exclusive royalty-free license to make, have made and use, either itself or by anyone on its behalf, such subject matter in connection with any activity now or hereafter engaged in or permitted by the Authority. Promptly upon request by the Authority, the Consultant shall furnish or obtain from the appropriate person a form of license satisfactory to the Authority, but it is expressly understood and agreed that, as between the Authority and the Consultant the license herein provided for shall nevertheless arise for the benefit of the Authority immediately upon the production of said subject matter, and shall not await formal exemplification in a written license agreement as provided for above. Such license agreement may be transferred by the Authority to its successors, immediate or otherwise, in the operation or ownership of any real or personal property now or hereafter owned or operated by the Authority but such license shall not be otherwise transferable.

18. Notwithstanding anything to the contrary herein, the work product of the Consultant, its officers, agents, employees, or sub-consultants which is produced in accordance with the Agreement, whether it consists of computer programming or documentation thereof, including source code, and on any media whatsoever, shall be deemed to belong exclusively to the Authority, and the Authority will have the exclusive right to obtain and to hold in its own name any and all copyrights, patents, trade secrets and/or other proprietary rights and protection as may be produced as part of this work product, including the right to extensions or renewals, where appropriate. The work product shall not be destroyed or released to anyone outside of the Engineering Department without express written authorization of the Chief Engineer. The Authority will have the exclusive right to use or permit the use of them and of any ideas or methods represented by them for any purpose and at any time without compensation other than that specifically provided for herein. You agree to contract with your employees for the benefit of the Authority to ensure that the Authority has such rights and to give to the Authority or any party designated by the Authority all assistance reasonably required to perfect the rights herein above stated. You shall indemnify and hold harmless the Authority against any claims of proprietary rights infringement arising out of such use of your work product.

19. You shall promptly and fully inform the Chief Engineer in writing of any patents or patent disputes, or intellectual property disputes, whether existing or potential, of which you have knowledge, relating to any idea, design, method, material, equipment or other matter related to the subject matter of this Agreement or coming to your attention in connection with this Agreement.

20. This Agreement being based upon your special qualifications for the services herein contemplated, any assignment, subletting or other transfer of this Agreement or any part hereof or of any moneys due or to become due hereunder without the express consent in writing of the Authority shall be void and of no effect as to the Authority, provided, however, that you may sublet services to subconsultants with the express consent in writing of the Chief Engineer. All persons to whom you sublet services, however, shall be deemed to be your agents and no subletting or approval thereof shall be deemed to release you from your obligations under this Agreement, to impose any obligation on the Authority to such subconsultant or give the subconsultant any rights against the Authority.

21. The Authority has a long-standing practice of encouraging Minority Business Enterprises (MBEs) and Women-owned Business Enterprises (WBEs) to seek business opportunities with it, either directly or as subconsultants or subcontractors. "Minority business enterprise" or "MBE" means a business entity which is at least fifty-one percent (51%) owned by one (1) or more members of one (1) or more minority groups, or, in the case of a publicly held corporation, at least fifty-one percent (51%) of the stock of which is owned by one (1) or more members of one (1) or more minority groups; and whose management and daily business operations are controlled by one (1) or more such individuals who are citizens or permanent resident aliens. "Women-owned business enterprise" or "WBE" means a business which is at least fifty-one percent (51%) owned by one (1) or more women; or, in the case of a publicly held corporation, fifty-one percent (51%) of the stock of which is owned by one (1) or more women: and whose management and daily business operations are controlled by one (1) or more women who are citizens or permanent resident aliens.

"Minority group" means any of the following racial or ethnic groups:

A. Black persons having origins in any of the Black African racial groups not of Hispanic origin;

B. Hispanic persons of Puerto Rican, Mexican, Dominican, Cuban, Central or South American culture or origin, regardless of race;

C. Asian and Pacific Islander persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian subcontinent or the Pacific Islands;

D. American Indian or Alaskan Native persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification.

The Authority has set a goal of twenty percent (20%) participation by qualified and Authority certified MBEs and ten percent (10%) for qualified and Authority certified WBEs on technical service projects.

MBE/WBE participation goals may be subject to change during the duration of this Agreement and any options or extensions thereof. Any new participation goals determined by the Authority shall be applicable to and considered a part of this Agreement. The current participation goals will be posted on the Authority's website at <https://www.panynj.gov/business-opportunities/become-vendor.html> as PA Form 4250, "MBE/WBE Participation-Professional Services Call-In". You must consult PA 4250 prior to proposing on any Task Orders issued under this Agreement.

To be "certified" a firm must be certified by the Authority's Office of Business Diversity and Civil Rights (OBDCR).

In order to facilitate the meeting of this goal, the Consultant shall use every good-faith effort to utilize subconsultants who are Authority certified MBEs or WBEs to the maximum extent feasible.

Good faith efforts to include and facilitate participation by MBE/WBEs shall include, but not be limited to the following:

A. Dividing the services and materials to be procured into smaller portions, where feasible.

B. Giving reasonable advance notice of specific contracting, subcontracting and purchasing opportunities to such MBE/WBEs as may be appropriate.

C. Soliciting services and materials from Authority certified MBE/WBE firms. To access the Authority's Directory of MBE/WBE certified firms, go to <http://www.panynj.gov/business-opportunities/sd-mwsdbe-profile.html>.

D. Ensuring that provision is made to provide progress payments to MBE/WBEs in accordance with prompt payment provisions of the Agreement under which services are being provided, if applicable.

E. Observance of reasonable commercial standards of fair dealing in the respective trade or business.

The Authority has a list of certified MBE/WBE service firms which is available to you at <http://www.panynj.gov/business-opportunities/supplier-diversity.html>. The Consultant will be

required to submit to the Authority's OBDCCR for certification the names of MBE/WBE firms it proposes to use who are not on the list of certified MBE/WBE firms.

The Consultant shall include their MBE/WBE Participation Plans (Form PA 3760C) with their task order proposals, to be reviewed and approved by the Authority's OBDCCR.

The Consultant must submit an MBE/WBE Participation Plan for each MBE/WBE subconsultant. Each Participation Plan shall contain, at a minimum, the following:

- Identification of the MBE/WBE: Provide the name and address of the MBE/WBE. If no MBE/WBEs are identified, describe the process for selecting participant firms in order to achieve the good faith goals under this Agreement.
- Level of Participation: Indicate the dollar value and percentage of MBE/WBE participation expected to be achieved.
- Scope of Work: Describe the specific scope of work the MBE/WBEs will perform.

The MBE/WBE subconsultant listed on each of the MBE/WBE Participation Plans must be certified by the Authority in order for the Consultant to receive credit toward the MBE/WBE goals set forth in this Agreement. Please go to <http://www.panynj.gov/business-opportunities/sd-mwsdbe-profile.html> to search for MBE/WBEs by a particular commodity or service. The Authority makes no representation as to the financial responsibility of these firms or their ability to perform work under this Agreement.

Subsequent to Agreement award, all changes to any of the MBE/WBE Participation Plans must be submitted via a Modified MBE/WBE Participation Plan to the Manager for review and approval by OBDCCR. For submittal of modifications to the MBE/WBE Plan, Consultants are directed to use form PA3760D. The Consultant shall not make changes to any of its approved MBE/WBE Participation Plans or substitute MBE/WBE subconsultants or suppliers for those named in their approved plans without the Manager's prior written approval. Unauthorized changes or substitutions, including performing the work designated for a subconsultant with the Consultant's own forces, shall be a violation of this section. Progress toward attainment of MBE/WBE participation goals set forth herein will be monitored throughout the duration of the Agreement.

The Consultant shall also submit to the Project Manager, along with invoices, the Statement of Subcontractor Payments, which may be downloaded at <http://www.panynj.gov/business-opportunities/become-vendor.html>. The Statement must include the name and business address of each MBE/WBE subconsultant and supplier actually involved in the Agreement, a description of the work performed and/or product or service supplied by each such subcontractor/subconsultant or supplier, the date and amount of each expenditure, and such other information that may assist the Project Manager in determining the Consultant's compliance with the foregoing provisions.

MBE/WBE Conditions of Participation

MBE/WBE participation will be counted toward meeting the MBE/WBE agreement goal, subject to all of the following conditions:

1. Commercially Useful Function: An MBE/WBE is considered to perform a commercially useful function when it is responsible for the execution of a distinct element of work on a contract and carries out its responsibilities by actually performing, managing, and supervising the work

involved in accordance with normal industry practice. Regardless of whether an arrangement between the Consultant and the MBE/WBE represent standard industry practice, if the arrangement erodes the ownership, control or independence of the MBE/WBE or in any other way does not meet the commercially useful function requirement, that firm shall not be included in determining whether the MBE/WBE goal is met and shall not be included in MBE/WBE reports. If this occurs with respect to a firm identified as an MBE/WBE, the Consultant shall receive no credit toward the MBE/WBE goal and may be required to backfill the participation. An MBE/WBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction or contract through which funds are passed in order to obtain the appearance of MBE/WBE participation. An MBE/WBE may rebut a determination by the Authority that the MBE/WBE is not performing a commercially useful function to the Authority.

2. Work Force: The MBE/WBE must employ a work force (including administrative and clerical staff) separate and apart from that employed by the Consultant, other subcontractors/subconsultants on the Agreement, or their affiliates. This does not preclude the employment by the MBE/WBE of an individual that has been previously employed by another firm involved in the Agreement, provided that the individual was independently recruited by the MBE/WBE in accordance with customary industry practice. The routine transfer of work crews from another employer to the MBE/WBE shall not be allowed.

3. Supervision: All work performed by the MBE/WBE must be controlled and supervised by the MBE/WBE without duplication of supervisory personnel from the Consultant, other subconsultants on the Agreement, or their affiliates. This does not preclude routine communication between the supervisory personnel of the MBE/WBE and other supervisors necessary to coordinate the work.

Counting MBE/WBE Participation

The value of the work performed by an MBE/WBE, with its own equipment, with its own forces, and under its own supervision will be counted toward the goal, provided the utilization is a commercially useful function. An MBE/WBE prime contractor/consultant shall still provide opportunities for participation by other MBE/WBEs. Work performed by MBE/WBEs will be counted as set forth below. If the Authority determines that some or all of the MBE/WBEs work does not constitute a commercially useful function, only the portion of the work considered to be a commercially useful function will be credited toward the goal.

1. Subconsultants: One hundred percent (100%) of the value of the work to be performed by an MBE/WBE subconsultant will be counted toward the MBE/WBE goal. The value of such work includes the cost of materials and supplies purchased by the MBE/WBE, except the cost of supplies or equipment leased from the Consultant, other subconsultants or their affiliates will not be counted. When an MBE/WBE subcontracts part of the work of its contract to another firm, the value of the subconsultant work may be counted toward MBE/WBE goals only if the MBE/WBE subconsultant is itself an MBE/WBE. Work that an MBE/WBE subconsults to a non-MBE/WBE firm does not count toward MBE/WBE goals.

2. Material Suppliers: Sixty percent (60%) of the expenditure to an MBE/WBE material supplier will be counted toward the MBE/WBE goal. Packagers, brokers, manufacturer's

representatives, or other persons who arrange or expedite transactions are not material suppliers within the meaning of this paragraph.

3. Broker's/Manufacturer's Representatives: One hundred percent (100%) of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees for transportation charges for the delivery of materials or supplies provided by an MBE/WBE broker/manufacturer's representative will be counted toward the MBE/WBE goal, provided they are determined by the Authority to be reasonable and not excessive as compared with fees customarily allowed for similar services. The cost of the materials and supplies themselves will not be counted.

4. Services: One hundred percent (100%) of fees or commissions charged by an MBE/WBE for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of the work will be counted toward the MBE/WBE goal, provided the fee is reasonable and not excessive as compared with fees customarily allowed for similar services.

5. Joint Venture: Joint ventures between MBE/WBEs and non-MBE/WBEs may be counted toward the MBE/WBE goal in proportion to the total dollar value of the Agreement equal to the distinct, clearly defined portion of the work of the Agreement that the MBE/WBE performs with its own forces. Contact OBDCR at (201) 395-3958 for more information about requirements for such joint ventures.

22. NON-DISCRIMINATION REQUIREMENTS

The Consultant shall take all necessary and reasonable steps to ensure non-discrimination in the performance and administration of all aspects of this Agreement.

A. Consultant hereby agrees that no person on the ground of race, color, national origin, creed/religion, sex, age or handicap/disability shall be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the furnishing of goods or services or in the selection and retention of subconsultants and/or vendors under this Agreement. Consultant shall also ascertain and comply with all applicable federal, state and local laws, ordinances, rules, regulations, and orders that pertain to equal employment opportunity, affirmative action, and non-discrimination in employment.

B. Consultant agrees that these "Non-Discrimination Requirements" are a binding part of this Agreement. Without limiting the generality of any other term or provision of this Agreement, in the event the Authority, or a state or federal agency finds that the Consultant or any of its subconsultants or vendors has not complied with these "Non-Discrimination Requirements", the Authority may cancel, terminate or suspend this Agreement in accordance with Section 12 of this Agreement.

C. Consultant agrees to cooperate fully with the Authority's investigation of allegations of discrimination. Cooperation includes, but is not limited to, allowing the Authority to question employees during the investigation of allegations of discrimination, and complying with directives that the Authority or the State or Federal government deem essential to ensure compliance with these "Non-Discrimination Requirements."

23. NOTIFICATION OF SECURITY REQUIREMENTS

The Authority has the responsibility of ensuring safe, reliable and secure transportation facilities, systems and projects to maintain the well-being and economic competitiveness of the region. Therefore, the Authority reserves the right to deny access to certain documents, sensitive security sites and facilities (including rental spaces) to any person who declines to abide by Authority security procedures and protocols, any person with a criminal record with respect to certain crimes or who may otherwise pose a threat to the construction site or facility security. The Authority reserves the right to impose multiple layers of security requirements on the Consultant, its staff and subconsultants and their staffs, depending upon the level of security required, or make any amendments with respect to such requirements as determined by the Authority.

These security requirements may include but are not limited to the following:

- Execution of Non-Disclosure and Confidentiality Agreements and Acknowledgments

At the direction of the Authority, the Consultant shall be required to have its principals, staff and/or subconsultant(s) and their staff, execute Authority approved non-disclosure and confidentiality agreements.

- Consultant/Subconsultant identity checks and background screening

The Authority's designated background screening provider may require inspection of not less than two forms of valid/current government issued identification (at least one having an official photograph) to verify staff's name and residence; screening of federal, state, and/or local criminal justice agency information databases and files; screening of any terrorist identification files; access identification, to include some form of biometric security methodology such as fingerprint, facial or iris scanning.

The Consultant may be required to have its staff, and any subconsultant's staff, material-men, visitors or others over whom the Consultant/subconsultant has control, authorize the Authority or its designee to perform background checks, and a personal identity verification check. Such authorization shall be in a form acceptable to the Authority. The Consultant and subconsultants may also be required to use an organization designated by the Authority to perform the background checks.

In accordance with the Authority's Information Security Handbook, background screening is required when a person has an established need to know or has access to any one of the following types of information or physical locations:

- 1) Confidential Privileged Information
- 2) Confidential Information related to a security project and/or task
- 3) Secure Area of an Authority or PATH facility
- 4) Mission critical system

The Consultant shall perform background checks through the Authority's personnel assurance program provider. The Secure Worker Access Consortium (S.W.A.C.) is the only Authority approved provider to be used to conduct background screening and personal identity verification, except as otherwise required by federal law and/or regulation (such

as Security Identification Display Area (SIDA), the federal regulatory requirements for personnel performing work at aviation facilities.). Information about S.W.A.C., instructions, corporate enrollment, online applications, and location of processing centers can be found at <http://www.secureworker.com>, or S.W.A.C. may be contacted directly at (877) 522-7922 for more information and the latest pricing. The cost for said background checks for staff that pass and are granted a credential may be reimbursable to the Consultant (and its subconsultants) as an out-of-pocket expense as provided herein. Costs for background checks for staff that are rejected for a credential for any reason are not reimbursable.

- Issuance of Photo Identification Credential

No person shall be permitted on or about the Authority construction sites or facilities (including rental spaces) without a facility-specific photo identification credential approved by the Authority. If the Authority requires facility-specific identification credentials for the Consultant and the subconsultant's staff, the Authority will supply such identification at no cost to the Consultant or its subconsultants. Such facility-specific identification credential shall remain the property of the Authority and shall be returned to the Authority at the completion or upon request prior to completion of the individual's assignment at the specific facility. It is the responsibility of the appropriate Consultant or subconsultant to immediately report to the Authority the loss of any staff member's individual facility-specific identification credential. The Consultant or subconsultant will be billed for the cost of the replacement identification credential. Consultant's and subconsultant's staff shall display Identification badges in a conspicuous and clearly visible manner, when entering, working or leaving an Authority construction site or facility.

Employees may be required to produce not less than two forms of valid/current government issued identification having an official photograph and an original, unlaminated social security card for identity and SSN verification.

Where applicable, for sensitive security construction sites or facilities, successful completion of the application, screening and identity verification for all employees of the Consultant and subconsultant shall be completed prior to being provided a Photo Identification credential by the personnel assurance program provider.

If any questions should arise as to when a Personnel Assurance Program background check is required, the Authority Manager or contract administrator should be contacted for assistance.

- Designated Secure Areas

Services under the Agreement may be required in designated secure areas, as the same may be designated by the Authority ("Secure Areas"). The Authority will require the observance of certain security procedures with respect to Secure Areas, which may include the escort to, at, and/or from said high security areas by security personnel. All personnel that require access to designated Secure Areas who are not under escort by an authorized individual will be required to undergo background screening and personal identity verification.

Forty-eight (48) hours prior to the proposed performance of any work in a Secure Area, the Consultant shall notify the Project Manager. The Consultant shall conform to procedures as

may be established by the Project Manager from time to time and at any time for access to Secure Areas and the escorting of personnel hereunder. Prior to the start of any work, the Consultant shall request a description from the Project Manager of the Secure Areas that will be in effect on the commencement date(s) of the request services. The description of Secure Areas may be changed from time to time and at any time by the Project Manager during the term of the Agreement.

- Access control, inspection, and monitoring by security guards

The Authority may provide for Authority construction site or facility (including rental spaces) access control, inspection and monitoring by Port Authority Police or Authority retained contractor security guards. However, this provision shall not relieve the Consultant of its responsibility to secure its equipment and work and that of its subconsultant/subcontractor's and service suppliers at the Authority sites or facilities (including rental spaces). In addition, the Consultant, subconsultant, subcontractor or service provider is not permitted to take photographs, digital images, electronic copying and/or electronic transmission or video recordings or to make sketches on any other medium at any Authority sites or facilities (including any rental spaces), except when necessary to perform the work under this Agreement, without prior written permission from the Authority. Upon request, any photograph, digital image, video recording or sketch made of any Authority sites or facility shall be submitted to the Authority to determine compliance with this paragraph, which submission shall be conclusive and binding on the submitting entity.

- Compliance with the Port Authority Information Security Handbook

This Agreement may require access to Authority information considered Protected Information ("PI") as defined in the Port Authority Information Security Handbook ("Handbook"), dated October 15, 2008, revised as of April 2, 2018, and as may be further amended. The Handbook and its requirements are hereby incorporated into this Agreement and will govern the possession, distribution and use of PI if at any point during the lifecycle of the project or solicitation it becomes necessary for the Consultant to have access to PI. Protecting sensitive information requires the application of uniform safeguarding measures to prevent unauthorized disclosure and to control any authorized disclosure of this information within the Authority or when released by the Authority to outside entities. The Handbook can be obtained at: <http://www.panynj.gov/business-opportunities/pdf/Corporate-Information-Security-Handbook.pdf>.

- Audits for Compliance with Security Requirements

The Authority may conduct random or scheduled examinations of business practices under this section entitled "NOTIFICATION OF SECURITY REQUIREMENTS" and the Handbook in order to assess the extent of compliance with security requirements, PI procedures, protocols and practices, which may include, but not be limited to, verification of background check status, confirmation of completion of specified training, and/or a site visit to view material storage locations and protocols.

24. CONFIDENTIAL INFORMATION/NON-PUBLICATION

A. As used herein, confidential information shall mean all information disclosed to the Consultant or the personnel provided by the Consultant hereunder which relates to the Authority's and/or the Port Authority Trans Hudson (PATH) Corporation's past, present, and future research, development and business activities including, but not limited to, software and documentation licensed to the Authority or proprietary to the Authority and/or PATH and all associated software, source code procedures and documentation. Confidential information shall also mean any other tangible or intangible information or materials including but not limited to computer identification numbers, access codes, passwords, and reports obtained and/or used during the performance of the Consultant's services under this Agreement.

B. Protected Information shall mean and include collectively, as per *The Port Authority of New York & New Jersey Information Security Handbook (October 15, 2008, revised as of April 2, 2018, and as may be further amended)*, Confidential Information, Confidential Proprietary Information, Confidential Privileged Information and information that is labeled, marked or otherwise identified by or on behalf of the Authority so as to reasonably connote that such information is confidential, privileged, sensitive or proprietary in nature. Confidential Information shall also include all work product that contains or is derived from any of the foregoing, whether in whole or in part, regardless of whether prepared by the Authority or a third-party or when the Authority receives such information from others and agrees to treat such information as Confidential.

C. The Consultant shall hold all such Protected Information in trust and confidence for the Authority, and agrees that the Consultant and the personnel provided by the Consultant hereunder shall not, during or after the termination or expiration of this Agreement, disclose to any person, firm or corporation, nor use for its own business or benefit, any information obtained by it under or in connection with the supplying of services contemplated by this Agreement. The Consultant and the personnel provided by the Consultant hereunder shall not violate in any manner any patent, copyright, trade secret or other proprietary right of the Authority or third persons in connection with their services hereunder, either before or after termination or expiration of this Agreement. The Consultant and the personnel provided by the Consultant hereunder shall not willfully or otherwise perform any dishonest or fraudulent acts, breach any security procedures, or damage or destroy any hardware, software or documentation, proprietary or otherwise, in connection with their services hereunder. The Consultant shall promptly and fully inform the Chief Engineer in writing of any patent, copyright, trade secret or other intellectual property rights or disputes, whether existing or potential, of which the Consultant has knowledge, relating to any idea, design, method, material, equipment or other matter related to this Agreement or coming to the Consultant's attention in connection with this Agreement.

D. The Consultant shall not issue nor permit to be issued any press release, advertisement, or literature of any kind, which refers to the Authority or to the fact that goods have been, are being or will be provided to it and/or that services have been, are being or will be performed for it in connection with this Agreement, unless the Consultant first obtains the written approval of the Authority. Such approval may be withheld if for any reason the Authority believes that the publication of such information would be harmful to the public interest or is in any way undesirable.

25. The Consultant assumes the following distinct and several risks to the extent they may arise from the negligent or willful intentional acts or omissions of the Consultant or its subconsultants/subcontractors in the performance of services hereunder:

A. The risk of loss or damage to Authority property arising out of or in connection with the performance of services hereunder;

B. The risk of loss or damage to any property of the Consultant or its subconsultants/subcontractors arising out of or in connection with the performance of services hereunder;

C. The risk of claims, arising out of or in connection with the performance of services hereunder, whether made against the Consultant or its subconsultants/subcontractors or against the Authority, for loss or damage to any property of the Consultant's agents, employees, subcontractors, subconsultants, materialmen or others performing services hereunder;

D. The risk of claims, just or unjust, by third persons made against the Consultant or its subconsultants/subcontractors or the Authority on account of injuries (including wrongful death), loss or damage of any kind whatsoever arising in connection with the performance of services hereunder, including claims against the Consultant or its subconsultants/subcontractors or against the Authority for the payment of workers' compensation, whether such claims are made and whether such injuries, damage or loss are sustained at any time both before and after the completion of services hereunder.

The Consultant shall indemnify the Authority against all claims described in subparagraphs A through D above and for all expense incurred by the Authority in the defense, settlement or satisfaction thereof, including expenses of attorneys. If so directed by the Authority, the Consultant shall defend against any claim described in subparagraphs B, C and D above, in which event the Consultant shall not without obtaining express advance permission from the General Counsel of the Authority raise any defense involving in any way the jurisdiction of the tribunal, immunity of the Authority, governmental nature of the Authority or the provisions of any statutes respecting suits against the Authority, such defense to be at the Consultant's cost.

The provisions of this clause shall also be for the benefit of the Commissioners, officers, agents and employees of the Authority, so that they shall have all the rights which they would have under this clause if they were named at each place above at which the Authority is named, including a direct right of action against the Consultant to enforce the foregoing indemnity, except, however, that the Authority may at any time in its sole discretion and without liability on its part, cancel the benefit conferred on any of them by this clause, whether or not the occasion for invoking such benefit has already arisen at the time of such cancellation.

Neither the completion of services hereunder nor the making of payment (final or otherwise) shall release the Consultant from his obligations under this clause. Moreover, neither the enumeration in this clause or the enumeration elsewhere in this Agreement of particular risks assumed by the Consultant or of particular claims for which he is responsible shall be deemed (a) to limit the effect of the provisions of this clause or of any other clause of this Agreement relating to such risks or claims, (b) to imply that the Consultant assumes or is responsible for risks or claims only of the type enumerated in this clause or in any other clause of this Agreement, or (c) to limit the risks

which the Consultant would assume or the claims for which he would be responsible in the absence of such enumerations.

No third party rights are created by the Agreement, except to the extent that the Agreement specifically provides otherwise by use of the words "benefit" or "direct right of action".

Inasmuch as the Authority has agreed to indemnify the Cities of New York and Newark against claims of the types described in subparagraph D above made against said cities, the Consultant's obligation under subparagraph D above shall include claims by said cities against the Authority for such indemnification.

26. LIABILITY INSURANCE AND WORKERS' COMPENSATION INSURANCE

A. Commercial Liability Insurance:

1) The Consultant(s), and all of its/their Sub-consultants shall take out, maintain, and pay the premiums on **Commercial General Liability Insurance** for the life of the Agreement and such Insurance and shall be written on an ISO occurrence form CG 00 01 0413 or its equivalent covering the obligations assumed by the Consultant(s) under this Agreement, including, but not limited to, Premises-Operations, Products and Completed Operations, and Independent Contractor's coverages, with contractual liability language covering the obligations assumed by the Consultant(s) with insurance covering against claims for injuries to persons or damages to property which may arise from or in connection with products and materials supplied to the Agency in limits of not less than **\$5,000,000** combined single limit per occurrence and in the annual aggregate. If vehicles are to be used to carry out the performance of this Agreement, then the Consultant(s) shall also take out, maintain and pay the premiums on **Automobile Liability Insurance** covering all owned, non-owned and hired autos in not less than **\$5,000,000** combined single limit per accident for bodily injury and property damage.

The insurance shall be written on an occurrence basis, as distinguished from a "claims made" basis, and shall not include any exclusions for "action over claims" (insured vs. insured) and minimally arranged to provide and encompass at least the following coverages:

- Contractual Liability to cover liability assumed under the Agreement;
- Independent Contractor's Coverage;
- Premises-Operations, Products and Completed Operations Liability Insurance;
- The insurance coverage (including primary, excess and/or umbrella) hereinafter afforded by the Consultant(s) and Sub-consultant(s) shall be primary insurance and non-contributory with respect to the additional insureds;
- Excess/umbrella policies shall "follow form" to the underlying policies;
- Excess/umbrella policies shall have a liberalization clause with drop down provision;
- To the extent any coverage the Consultant(s) and Sub-consultant(s) obtains and/or maintains under this Agreement contains "Other Insurance" language or provisions shall not be applicable to the additional insureds or to any insurance coverage maintained by the additional insureds;

FIRM NAME

- PAGE 19 -

DATE

- All insurance policies shall include a waiver of subrogation, as allowed by law, in favor of the additional insureds;
- Defense costs must be outside of policy limits. Eroding limits policies are not permitted;
- In the event the Consultant(s) and/or its Sub-consultant(s) obtains and/or maintains broader coverage and/or insurance in an amount greater than the minimum limits required under this Agreement, then the full limits of that insurance coverage will be available to respond to any claims asserted against the additional insureds that arises out of or is in any way connected with this Agreement;
- Additional insureds coverage shall not be restricted to vicarious liability unless required by controlling law.

In addition, the liability policy(ies) shall be written on a form at least as broad as ISO Form CG 20 10 10 01 (for ongoing operations work) together with ISO Form CG 20 37 10 01 (for completed operations work) or their equivalent and endorses to name “The Port Authority of New York and New Jersey, and its related entities, their Commissioners, Directors, Superintendents, officers, partners, employees, agents, their affiliates, successors or assigns”, in addition to: The City of New York, for all operations at John F. Kennedy and LaGuardia Airports; Port Authority Trans-Hudson Corporation, for operations at PATH; AFCO AvPorts Management LLC, for operations at Teterboro Airport; AFCO AvPorts Management LLC and NY State Dept. of Transportation, for operations at Stewart Int’l Airport, Trends Urban Renewal for operations at PATC and Silverstein Properties Inc.; The Port Authority of New York and New Jersey; Silverstein 2/3/4 WTC Redevelopment LLC; WTC Redevelopment LLC; World Trade Center Properties LLC; 4 World Trade Center LLC; Net Lessees 'Association of the World Trade Center; WTC Management and Development LLC; Silverstein WTC Mgmt. Co. LLC. Silverstein WTC Mgmt. Co II LLC; Silverstein WTC Properties LLC; Silverstein WTC Management and Development LLC; Silverstein WTC LLC.; WTC Investors LLC.; 4 WTC Holdings LLC; WTC Investors Management and Development LLC; World Trade Center Holdco LLC; 4 WTC Mezz LLC. for operations at the World Trade Center Site as “Insured” (as defined in the policy or in an additional insured endorsement amending the policy’s “Who Is An Insured” language as the particular policy may provide) on its liabilities policies with respect to liability arising out of work or operations performed by or on behalf of the Consultant(s) including, but not limited to, materials, parts or equipment furnished in connection with such work or operations. The “Insured” shall be afforded coverage and defense as broad as if they are the first named insured and regardless of whether they are otherwise identified as additional insureds under the liability policies, including but not limited to premises-operations, products-completed operations of the Commercial General Liability Policy. Such additional insureds status shall be provided regardless of privity of contract between parties. The liability policy(ies) and certificate of insurance shall contain cross-liability language providing severability of interests so that coverage will respond as if separate policies were in force for each insured. An act or omission of one of the insureds shall not reduce or void coverage to the other insureds. The Consultant(s) is/are responsible for all deductibles or losses not covered by commercially procured insurance. Any portion of the coverage to be provided under a Self-Insured Retention (SIR) of the Consultant(s) is/are subject to the review and approval of the General Manager, Risk Finance. Furthermore, any insurance or self-insurance maintained by the above additional insureds shall not contribute to any loss or claim.

Any self-insured retention shall cover any liability imposed upon the Consultant(s) and any and all subsidiaries with respect to all operations and obligations assumed by the Consultant(s) and any and all subsidiaries. The undersigned represents that such program provides the Additional Insureds (as defined in the Agreement) with all rights, immunities and protections that would be provided by traditional independent insurance required under the Agreement, including, but not limited to, the defense obligations that insurers are required to undertake in liability policies pursuant to the terms of the Agreement.

If any of the work is to be done on or at Port Authority facilities by the Sub-consultants and, if the Consultant(s) requires its Sub-consultant(s) to procure and maintain such insurance in the name of the Consultant(s), then such insurance as is required herein shall include and cover the additional insureds and it must have insurance limits not lower than those set forth by the Port Authority herein, along with all the insurance requirements in this "Insurance" section.

Further, it is the Consultant's responsibility to maintain, enforce and ensure that the type of coverages and all limits maintained by it and any of all Sub-consultants are accurate, adequate and in compliance with the Port Authority requirement. All certificates of insurance shall be turned over to the Port Authority prior to the start of work, and upon completion of the Agreement.

"The Consultant, its Sub-consultant(s) and its insurer(s) shall not, without obtaining the express advance written permission from the General Counsel of the Port Authority, raise any defense involving in any way the jurisdiction of the Tribunal over the person of the Port Authority, the immunity of the Port Authority, its Commissioners, officers, agents or employees, the governmental nature of the Port Authority, or the provisions of any statutes respecting suits against the Port Authority."

2) Workers' Compensation Insurance:

The Consultant(s) and its/their Sub-consultant(s) shall take out, maintain and pay premiums on Workers' Compensation Insurance in accordance with the requirements of law in the state(s) where work will take place, and Employer's Liability Insurance with limits of not less than **\$1,000,000** each accident. Such policy shall include a waiver of subrogation endorsement in the benefit of the additional insureds.

3) Additional Coverages: The Consultant(s) shall have the policy endorsed when required by the Chief Engineer for specific services hereunder and include the additional premium cost thereof as an out-of-pocket expense:

- a) Any/all activities performed airside must, at all times, be performed while under security escort as approved in advance, and in writing by the Project Manager. If the services of the Consultant(s), as directed by the Authority, require the performance of services airside, the Commercial General Liability and Automobile Liability coverage limits stipulated in subparagraph 1, above, shall be increased to an amount not less than \$25,000,000 per occurrence as provided herein.
- b) Endorsement to eliminate any exclusions applying to the explosion, collapse, and underground property damage (XCU) hazards.
- c) Endorsement to eliminate any exclusions on account of ownership, maintenance, operation, use, loading or unloading of watercraft.

d) Coverage for work within fifty (50) feet of railroad.

4) Additional Coverages: The Consultant(s) shall have the policy endorsed when required by the Chief Engineer for specific services hereunder and include the additional premium cost thereof as an out-of-pocket expense:

- a) United States Longshoremen's and Harbor Workers' Compensation Act Endorsement.
- b) Coverage B Endorsement - Maritime (Masters or Members of the Crew of Vessels), in limits of not less than \$1,000,000 per occurrence.
- c) Amendments to Coverage B, Federal Employers' Liability Act in limits of not less than \$1,000,000 per occurrence.

5) Professional Liability Insurance: The Consultant(s) shall take out, maintain and pay premiums on Professional Liability Insurance in limits of not less than **\$5,000,000** each occurrence, covering acts, errors, mistakes, and omissions arising out of the work or services performed by Consultant(s), or any person employed by Consultant(s). All endorsements and exclusions shall be evidenced on the certificate of insurance. The coverage shall be written on an occurrence basis or may be written on a claims made basis with a minimum of a three-year reporting/discovery period.

Each policy above shall contain an endorsement that the policy may not be canceled, terminated or modified without thirty (30) days' prior written notice to the Project Manager, at the location where the work will take place with a copy to the General Manager, Risk Financing.

The Authority may, at any time during the term of this Agreement, change or modify the limits and coverages of insurance. Should the modification or change result in an additional premium, the General Manager, Risk Financing for the Port Authority may consider such cost as an out-of-pocket expense.

Within five (5) days after award of this Agreement and prior to the start of work at the site, the Consultant(s) must submit an original certificate of insurance, to the Project Manager and Exigis' email: certificates-portauthority@riskworks.com at the location where the work will take place. This certificate of insurance MUST show evidence of the above insurance policy(ies), including, but not limited to, the title of this Agreement, the P. A. Agreement number, the notice of cancellation provisions, prior to the start of work. The Consultant(s) is/are also responsible for maintaining and conforming to all insurance requirements from the additional insureds and their successors and assigns. The General Manager, Risk Financing must approve the certificate(s) of insurance before any work can begin. Upon request of the General Manager, Risk Financing/Treasury, the Consultant shall furnish to the Authority a certified copy of each policy itself, including the provisions establishing premiums.

Renewal certificates of insurance or policies shall be delivered to the Authority's Project Manager, and upon request from the additional insureds, their successors or assigns at least fifteen (15) days prior to the expiration date of each expiring policy. The General Manager, Risk Financing must approve the renewal certificate(s) of insurance before work can resume on the facility. If at any time any of the certificates or policies shall become unsatisfactory to the Authority, the

Consultant(s) shall promptly obtain a new and satisfactory certificate and policy and provide same to the Authority.

If at any time the above liability insurance should be canceled, terminated, or modified so that the insurance is not in effect as above required, then, the Consultant(s) and all Sub-consultants shall suspend performance of the Agreement at the premises until a satisfactory insurance policy(ies) and certificate of insurance is provided to and approved by Risk Financing, unless the Facility or Project Manager directs the Consultant(s), in writing, to continue to performing work under the Agreement. If the Agreement is so suspended, no extension of time shall be due on account thereof.

Failure by the Consultant(s) to meet any of the insurance requirements, including the requirement that the Authority be afforded the full extent of the insurance obtained under this Agreement without limitation, shall be deemed a material breach of Agreement and may be a basis for termination of this Agreement by the Authority.

The requirements for insurance procured by the Consultant(s) shall not in any way be construed as a limitation on the nature or extent of the contractual obligations assumed by the Consultant(s) under this Agreement. The insurance requirements are not a representation by the Authority as to the adequacy of the insurance to protect the Consultant against the obligations imposed on them by law or by this or any other Agreement.

All insurance coverage shall be provided by the Consultant(s) and/or by or for any of its/their Sub-consultant(s) at no additional expense to the Authority and its related entities. A copy of this "Insurance" section shall be given to your insurance agent and Sub-consultant(s) and shall form a part of the covered Agreement for insurance purposes in furtherance of the insurance requirements of this Agreement.

27. Pursuant to the Code of Ethics for Port Authority Vendors ("Code"), Consultants must execute a Compliance Certification, and provide it to the Authority, prior to beginning work under this Agreement. This Compliance Certification, once executed, is a material and integral part of the Agreement. A copy of the Compliance Certification must be retained by the Consultant, unless and until the Authority indicates that the Certifications may be disposed of. Violations of the law or of the Code may subject a Vendor or a Vendor's Employees to civil or criminal penalties. In addition, in the case of violation of any provision of the law or the Code, the Authority may pursue any available remedy, including, but not limited to, determining that a Vendor is in material breach of its contract and/or that, in the future, the Authority will have no further commercial dealings with the Vendor. The Code and the Compliance Certification (PA Form 4254) can be found at <https://www.panynj.gov/business-opportunities/become-vendor.html>.

**28. CERTIFICATION OF NO INVESTIGATION (CRIMINAL OR CIVIL ANTI-TRUST),
INDICTMENT, CONVICTION, DEBARMENT, SUSPENSION, DISQUALIFICATION
AND DISCLOSURE OF OTHER INFORMATION**

By proposing on this Agreement, each Consultant and each person signing on behalf of any Consultant certifies, and in the case of a joint proposal each party thereto certifies as to its own organization, that the Consultant and each parent and/or affiliate of the Consultant has not:

- A. been indicted or convicted in any jurisdiction;
- B. been suspended, debarred, found not responsible or otherwise disqualified from entering into any agreement with any governmental agency or been denied a government contract for failure to meet standards related to the integrity of the Consultant;
- C. received a less than satisfactory rating on a public or government contract;
- D. had an agreement terminated by any governmental agency for breach of contract or for any cause based in whole or in part on an indictment or conviction;
- E. ever used a name, trade name or abbreviated name, or an Employer Identification Number different from those inserted in the Proposal;
- F. had any business or professional license suspended or revoked or, within the five years prior to proposal opening, had any sanction imposed in excess of fifty thousand dollars (\$50,000) as a result of any judicial or administrative proceeding with respect to any license held or with respect to any violation of a federal, state or local environmental law, rule or regulation;
- G. had any sanction imposed as a result of a judicial or administrative proceeding related to fraud, extortion, bribery, bid rigging, proposal rigging, embezzlement, misrepresentation or anti-trust, regardless of the dollar amount of the sanctions or the date of their imposition; and
- H. been, and is not currently, the subject of a criminal investigation by any federal, state or local prosecuting or investigative agency and/or a civil anti-trust investigation by any federal, state or local prosecuting or investigative agency, including an inspector general of a governmental agency or public authority.

29. NON-COLLUSIVE PROPOSING, AND CODE OF ETHICS CERTIFICATION, CERTIFICATION OF NO SOLICITATION BASED ON COMMISSION, PERCENTAGE, BROKERAGE, CONTINGENT OR OTHER FEES

By proposing on this Agreement, each Consultant and each person signing on behalf of any consultant certifies, and in the case of a joint proposal, each party thereto certifies as to its own organization, that:

- A. the prices in its proposal have been arrived at independently without collusion, consultation, communication or agreement for the purpose of restricting competition, as to any matter relating to such prices with any other consultant or with any competitor;
- B. the prices quoted in its proposal have not been and will not be knowingly disclosed directly or indirectly by the Consultant prior to the official opening of such proposal to any other consultant or to any competitor;
- C. no attempt has been made and none will be made by the Consultant to induce any other person, partnership or corporation to submit or not to submit a proposal for the purpose of restricting competition;
- D. this organization has not made any offers or agreements or taken any other action with respect to any Authority employee or former employee or immediate family member of either which would constitute a breach of ethical standards under the Code of Ethics dated March 11, 2014, or as may be revised, (a copy of which is available upon request), nor does this organization

have any knowledge of any act on the part of an Authority employee or former Authority employee relating either directly or indirectly to this organization which constitutes a breach of the ethical standards set forth in said Code;

E. no person or selling agency other than a bona fide employee or bona fide established commercial or selling agency maintained by the Consultant for the purpose of securing business, has been employed or retained by the Consultant to solicit or secure this Agreement on the understanding that a commission, percentage, brokerage, contingent, or other fee would be paid to such person or selling agency;

F. the Consultant has not offered, promised or given, demanded or accepted, any undue advantage, directly or indirectly, to or from a public official or employee, political candidate, party or party official, or any private sector employee (including a person who directs or works for a private sector enterprise in any capacity), in order to obtain, retain, or direct business or to secure any other improper advantage in connection with this Agreement; and

G. no person or organization has been retained, employed or designated on behalf of the Consultant to impact any Authority determination with respect to (i) the solicitation, evaluation or award of this Agreement; or (ii) the preparation of specifications or request for submissions in connection with this Agreement.

The certifications in this Section and the Section entitled "Certification of No Investigation (Criminal or Civil Anti-trust), Indictment, Conviction, Debarment Suspension, Disqualification and Disclosure of Other Information" shall be deemed to be made by the Consultant as follows:

- * if the Consultant is a corporation, such certification shall be deemed to have been made not only with respect to the Consultant itself, but also with respect to each parent, affiliate, director, and officer of the Consultant, as well as, to the best of the certifier's knowledge and belief, each stockholder of the Consultant with an ownership interest in excess of 10%;

- * if the Consultant is a partnership, such certification shall be deemed to have been made not only with respect to the Consultant itself, but also with respect to each partner.

Moreover, the certifications in this Section and the Section entitled "Certification of No Investigation (Criminal or Civil Anti-trust), Indictment, Conviction, Debarment Suspension, Disqualification and Disclosure of Other Information", if made by a corporate Consultant, shall be deemed to have been authorized by the Board of Directors of the Consultant, and such authorization shall be deemed to include the signing and submission of the proposal and the inclusion therein of such certification as the act and deed of the corporation.

In any case where the Consultant cannot make the certifications in this Section and the Section entitled "Certification of No Investigation (Criminal or Civil Anti-trust), Indictment, Conviction, Debarment Suspension, Disqualification and Disclosure of Other Information", the Consultant shall so state and shall furnish with the signed proposal a signed statement which sets forth in detail the reasons therefor. If the Consultant is uncertain as to whether it can make the foregoing certifications, it shall so indicate in a signed statement furnished with its proposal, setting forth in such statement the reasons for its uncertainty. With respect to the foregoing certification in paragraph "29G.", if the Consultant cannot make the certification, it shall provide, in writing, with the signed proposal: (i) a list of the name(s), address(es), telephone number(s), and place(s) of

principal employment of each such individual or organization; and (ii) a statement as to whether such individual or organization has a “financial interest” in this Agreement, as described in the Procurement Disclosure Policy of the Authority (a copy of which is available upon request to the Chief Procurement Officer of the Authority). Such disclosure is to be updated, as necessary. As a result of such disclosure, the Authority shall take appropriate action up to and including a finding of non-responsibility.

Failure to make the required disclosures shall lead to administrative actions up to and including a finding of non-responsiveness or non-responsibility.

Notwithstanding that the Consultant may be able to make the certifications in this Section and the Section entitled “Certification of No Investigation (Criminal or Civil Anti-trust), Indictment, Conviction, Debarment Suspension, Disqualification and Disclosure of Other Information” at the time the proposal is submitted, the Consultant shall immediately notify the Authority in writing during the period of irrevocability of proposals and the term of the Agreement or any extension of such period, if Consultant is awarded the Agreement, of any change of circumstances which might under this clause make it unable to make the foregoing certifications, might render any portion of the certifications previously made invalid, or require disclosure. The foregoing certifications or signed statement shall be deemed to have been made by the Consultant with full knowledge that they would become a part of the records of the Authority and that the Authority will rely on their truth and accuracy in awarding this Agreement. In the event that the Authority should determine at any time prior or subsequent to the award of this Agreement that the Consultant has falsely certified as to any material item in the foregoing certifications, has failed to immediately notify the Authority of any change in circumstances which might make it unable to make the foregoing certifications, might render any portion of the certifications previously made invalid, or require disclosure, or has willfully or fraudulently furnished a signed statement which is false in any material respect, or has not fully and accurately represented any circumstance with respect to any item in the foregoing certifications required to be disclosed, the Authority may determine that the Consultant is not a responsible Consultant with respect to its proposal on the Agreement or with respect to future proposals on Authority agreements and may exercise such other remedies as are provided to it by the Agreement with respect to these matters. In addition, Consultant is advised that knowingly providing a false certification or statement pursuant hereto may be the basis for prosecution for offering a false instrument for filing (see, e.g., New York Penal Law, Section 175.30 et seq.). Consultants are also advised that the inability to make such certification will not in and of itself disqualify the Consultant and that in each instance the Authority will evaluate the reasons therefor provided by the Consultant.

Under certain circumstances the Consultant may be required as a condition of award of this Agreement to enter into a Monitoring Agreement under which it will be required to take certain specified actions, including compensating an independent Monitor to be selected by the Authority, said Monitor to be charged with, among other things, auditing the actions of the Consultant to determine whether its business practices and relationships indicate a level of integrity sufficient to permit it to continue business with the Authority.

30. CONSULTANT ELIGIBILITY FOR AWARD OF AGREEMENTS - DETERMINATION BY AN AGENCY OF THE STATE OF NEW YORK OR THE STATE OF NEW JERSEY CONCERNING ELIGIBILITY TO RECEIVE PUBLIC AGREEMENTS

Consultants are advised that the Authority has adopted a policy to the effect that in awarding its agreements it will honor any determination by an agency of the State of New York or of the State of New Jersey that a Consultant is not eligible to propose on or be awarded public agreements because the Consultant has been determined to have engaged in illegal or dishonest conduct or to have violated prevailing rate of wage legislation.

The policy permits a Consultant whose ineligibility has been so determined by an agency of the State of New York or of the State of New Jersey to submit a proposal on an Authority agreement and then to establish that it is eligible to be awarded an agreement on which it has proposed because (i) the state agency determination relied upon does not apply to the Consultant, or (ii) the state agency determination relied upon was made without affording the Consultant the notice and hearing to which the Consultant was entitled by the requirements of due process of law, or (iii) the state agency determination was clearly erroneous or (iv) the state agency determination relied upon was not based on a finding of conduct demonstrating a lack of integrity or violation of a prevailing rate of wage law.

The full text of the resolution adopting the policy may be found in the Minutes of the Authority's Board of Commissioners meeting of September 9, 1993.

31. CONSULTANT RESPONSIBILITY, SUSPENSION OF WORK AND TERMINATION

During the term of this Agreement, the Consultant shall at all times during the Agreement term remain responsible. The Consultant agrees, if requested by the Authority, to present evidence of its continuing legal authority to do business in the States of New Jersey or New York, integrity, experience, ability, prior performance, and organizational and financial capacity.

The Authority, 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 the responsibility of the Consultant. In the event of such suspension, the Consultant will be given written notice outlining the particulars of such suspension. Upon issuance of such notice, the Consultant must comply with the terms of the suspension order. Agreement activity may resume at such time as the Authority issues a written notice authorizing a resumption of performance under the Agreement.

Upon written notice to the Consultant, and an opportunity to be heard with appropriate Authority officials or staff, the Agreement may be terminated by the Authority at the Consultant's expense when the Consultant is determined by the Authority to be non-responsible. In such event, the Authority or its designee may complete the contractual requirements in any manner he or she may deem advisable and pursue available legal or equitable remedies for breach, including recovery of costs from Consultant associated with such termination.

32. NO GIFTS, GRATUITIES, OFFERS OF EMPLOYMENT, ETC.

At all times, the Consultant shall not offer, give or agree to give anything of value either to an Authority employee, agent, job shopper, consultant, construction manager or other person or firm representing the Authority, or to a member of the immediate family (i.e., a spouse, child, parent,

brother or sister) of any of the foregoing, in connection with the performance by such employee, agent, job shopper, consultant, construction manager or other person or firm representing the Authority of duties involving transactions with the Consultant on behalf of the Authority, whether or not such duties are related to this Agreement or to any other Authority agreement or matter. Any such conduct shall be deemed a material breach of this Agreement.

As used herein “anything of value” shall include but not be limited to any (a) favors, such as meals, entertainment, transportation (other than that contemplated by the Agreement or any other Authority agreement), etc., which might tend to obligate the Authority employee to the Consultant and (b) gift, gratuity, money, goods, equipment, services, lodging, discounts not available to the general public, offers or promises of employment, loans or the cancellation thereof, preferential treatment or business opportunity. Such term shall not include compensation contemplated by this Agreement or any other Authority agreement. Where used herein, the term “Port Authority” or “Authority” shall be deemed to include all subsidiaries of the Authority.

The Consultant shall ensure that no gratuities of any kind or nature whatsoever shall be solicited or accepted by it or by its personnel for any reason whatsoever from the passengers, tenants, customers or other persons using the Facility and shall so instruct its personnel. The Consultant shall include the provisions of this clause in each subcontract entered into under this Agreement.

33. OBLIGATION TO REPORT

In the event that the Consultant becomes aware of the occurrence of any conduct that is prohibited by the section entitled “No Gifts, Gratuities, Offers of Employment, Etc.”, or if the Consultant knows or should reasonably know that a principal, employee, or agent of the Consultant or of its subconsultants or subcontractors has committed a violation of federal, New York or New Jersey law addressing or governing anti-trust, public contracting, false claims, fraud, extortion, bribery, bid rigging, embezzlement, prevailing wage or minority, woman, small or disadvantaged business enterprises, it shall report such information to the Authority’s Office of Inspector General within three (3) business days of obtaining such knowledge. (See “<http://www.panynj.gov/inspector-general>” for information about how to report information to the Office of Inspector General). Failing to report such conduct may be grounds for finding of non-responsibility. The Consultant shall not take any Retaliatory Action against any of its employees for reporting such conduct.

In addition, during the term of this Agreement, the Consultant shall not make an offer of employment or use confidential information in a manner proscribed by the Code of Ethics and Financial Disclosure dated March 11, 2014, or as may be revised, (a copy of which is available upon request to the Office of the Secretary of the Authority).

The Consultant shall include the provisions of this clause in each subcontract entered into under this Agreement.

34. CONFLICT OF INTEREST

During the term of this Agreement, the Consultant shall not participate in any way in the preparation, negotiation or award of any agreement (other than an agreement for its own services to the Authority) to which it is contemplated the Authority may become a party, or participate in any way in the review or resolution of a claim in connection with such an agreement if the

Consultant has a substantial financial interest in the Consultant or potential consultant of the Authority or if the Consultant has an arrangement for future employment or for another business relationship with said Consultant or potential consultant nor shall the Consultant at any time take any other action which might be viewed as or give the appearance of conflict of interest on its part. If the possibility of such an arrangement for future employment or for another business arrangement has been or is the subject of a previous or current discussion, or if the Consultant has reason to believe such an arrangement may be the subject of future discussion, or if the Consultant has any financial interest, substantial or not, in a consultant or potential consultant of the Authority, and if the Consultant's participation in the preparation, negotiation or award of any agreement with such a consultant or the review or resolution of a claim in connection with such an agreement is contemplated or if the Consultant has reason to believe that any other situation exists which might be viewed as or give the appearance of a conflict of interest, the Consultant shall immediately inform the Chief Procurement Officer in writing of such situation giving the full details thereof. Unless the Consultant receives the specific written approval of the Chief Procurement Officer, the Consultant shall not take the contemplated action which might be viewed as or give the appearance of a conflict of interest. The Chief Procurement Officer may require the Consultant to submit a mitigation plan addressing and mitigating any disclosed or undisclosed conflict, which is subject to the approval of the Chief Procurement Officer and shall become a requirement as though fully set forth in this Agreement. In the event the Chief Procurement Officer shall determine that the performance by the Consultant of a portion of its services under this Agreement is precluded by the provisions of this numbered paragraph, or a portion of the Consultant's said services is determined by the Chief Procurement Officer to be no longer appropriate because of such preclusion, then the Chief Procurement Officer shall have full authority on behalf of both parties to order that such portion of the Consultant's services not be performed by the Consultant, reserving the right, however, to have the services performed by others; and any lump sum compensation payable hereunder which is applicable to the deleted work shall be equitably adjusted by the parties. The Consultant's execution of this document shall constitute a representation by the Consultant that at the time of such execution the Consultant knows of no circumstances, present or anticipated, which come within the provisions of this paragraph or which might otherwise be viewed as or give the appearance of a conflict of interest on the Consultant's part. The Consultant acknowledges that the Authority may preclude it from involvement in certain disposition/privatization initiatives or transactions that result from the findings of its evaluations hereunder or from participation in any agreements that result, directly or indirectly, from the services provided by the Consultant hereunder. The Authority's determination regarding any questions of conflict of interest shall be final.

35. INTEGRITY MONITOR

In the event that the Authority hires an Integrity Monitor in connection with the work under this Agreement, the Consultant and any subcontractors/subconsultants shall cooperate fully with the Monitor and the Authority, which includes, but is not limited to, providing complete access to all personnel and records in any way related to the work performed pursuant to this Agreement. Any failure to cooperate may result in the termination of this Agreement. The Consultant shall include the provisions of this clause in each subcontract entered into under this Agreement.

36. RIGHT TO AUDIT

Notwithstanding anything to the contrary, the Authority, including its Inspector General, Audit Department and Integrity Monitor, or its designee(s) each shall have the right to audit all of the records of the Consultant with respect to the work and the Agreement, including, without limitation, records pertaining to any compensation paid, payable, or to be paid under the Agreement. The Consultant shall not be entitled to any reimbursement or other compensation for costs associated with such audit, investigation, or certification. The Consultant shall include the provisions of this clause in each subcontract entered into under this Agreement.

The Consultant agrees to pay for the cost of any audit or investigation conducted by the Authority, in which any criminal activity, ethics violations, or professional misconduct by the Consultant or any of its employees, or subconsultants or any of its employees, are discovered. The Consultant shall further agree that should it fail or refuse to pay for any such audit or investigation, the Authority is authorized to deduct from any sum owing the Consultant an amount equal to the cost of such audit and the damages resulting therefrom. The determination of the value of any such costs and decision to withhold any such payments are at the sole discretion of the Authority (including its Inspector General).

37. DEFINITIONS

As used in sections 28 to 36, the following terms shall mean:

Affiliate - Two or more firms are affiliates if a parent owns more than fifty percent of the voting stock of each of the firms, or a common shareholder or group of shareholders owns more than fifty percent of the voting stock of each of the firms, or if the firms have a common proprietor or general partner.

Agency or Governmental Agency - Any federal, state, city or other local agency, including departments, offices, public authorities and corporations, boards of education and higher education, public development corporations, local development corporations, the Port Authority of New York and New Jersey and its wholly owned subsidiaries and others.

Investigation - Any inquiries made by any federal, state or local criminal prosecuting and/or law enforcement agency and any inquiries concerning civil anti-trust investigations made by any federal, state or local governmental agency. Except for inquiries concerning civil anti-trust investigations, the term does not include inquiries made by any civil government agency concerning compliance with any regulation the nature of which does not carry criminal penalties, nor does it include any background investigations for employment, or federal, state and local inquiries into tax returns.

Officer - Any individual who serves as chief executive officer, chief financial officer or chief operating officer of the Consultant by whatever titles known.

Parent - An individual, partnership, joint venture or corporation which owns more than 50% of the voting stock of the Consultant.

Retaliatory Action - Any adverse action taken by, or at the direction of, the Consultant, against any of its employees for reporting any information as set forth in the clause entitled "Obligation to Report," above.

FIRM NAME

- PAGE 30 -

DATE

38. The entire agreement between the parties is contained herein and no change in or modification, termination or discharge of this Agreement in any form whatsoever shall be valid or enforceable unless it is in writing and signed by the party to be charged therewith, or by his duly authorized representative, provided, however, that termination in the manner hereinbefore expressly provided shall be effective as so provided.

39. No Commissioner, officer, agent or employee of the Authority shall be charged personally by you with any liability or held liable to you under any term or provision of this Agreement, or because of its execution or attempted execution or because of any breach hereof.

40. References herein to the Authority shall and shall be deemed to mean equally the Port Authority Trans Hudson Corporation (PATH).

41. Nothing in this Agreement is intended to constitute the creation of an agency relationship between the Authority and the Consultant or any other right for the Consultant to act as the representative of the Authority for any purpose whatsoever except as may be specifically provided in this Agreement. It is hereby specifically acknowledged and understood that the Consultant, in performing its services hereunder, is and shall be at all times an independent contractor and the officers, agents and employees of the Consultant shall not be or be deemed to be agents, servants, or employees or "special employees" of the Authority.

FIRM NAME

- PAGE 31 -

DATE

42. If the foregoing meets with your approval, please indicate your acceptance by signing the original and the additional enclosed copy in the lower left-hand corner and returning them to the Authority.

Sincerely,

THE PORT AUTHORITY OF
NEW YORK AND NEW JERSEY

Lillian D. Valenti
Chief Procurement Officer

Date _____

The execution of this Agreement by the Consultant's duly authorized representative shall serve as a certification that no alterations have been made to this Agreement, and if any changes or alterations to this Agreement have been made by the Consultant without the Authority's prior written consent, such changes shall be void, non-binding and of no effect.

ACCEPTED:

FIRM NAME

By: _____

Print Name: _____

Title: _____

Date: _____

FIRM NAME

- PAGE 32 -

DATE

INSTRUCTIONS

If the selected Consultant firm is not located in the States of New York or New Jersey, change the number of the last Paragraph of this Agreement from "42" to "43" and insert a new Paragraph "42" as follows:

42. This Agreement shall be governed by and construed in accordance with the Laws of the State of New York without regard to conflict of laws principles.

ATTACHMENT B
REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT
PROFESSIONAL GEOTECHNICAL AND ENVIRONMENTAL SUBSURFACE
EXPLORATION ON WATER OR MARSH AS REQUESTED ON A “CALL-IN” BASIS
DURING 2019 THROUGH 2022
(RFP #55135)

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority’s receipt or discussion of any information (including information contained in any proposal, vendor qualification(s), ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) shall not impose any obligations whatsoever on the Port Authority or entitle us to any compensation therefor (except to the extent specifically provided in such written agreement, if any, as may be entered into between the Port Authority and us). Any such information given to the Port Authority before, with or after this Agreement on Terms of Discussion (“Agreement”), either orally or in writing, is not given in confidence. Such information may be used, or disclosed to others, for any purpose at any time without obligation or compensation and without liability of any kind whatsoever. Any statement which is inconsistent with this Agreement, whether made as part of or in connection with this Agreement, shall be void and of no effect. This Agreement is not intended, however, to grant to the Port Authority rights to any matter, which is the subject of valid existing or potential letters patent.

Any information (including information contained in any proposal, vendor qualification(s), ideas, models, drawings, or other material communicated or exhibited by us or on our behalf) provided in connection with this procurement is subject to the provisions of the Port Authority Public Records Access Policy adopted by the Port Authority’s Board of Commissioners, which may be found on the Port Authority website at: <http://corpinfo.panynj.gov/documents/Access-to-Port-Authority-Public-Records/>. The foregoing applies to any information, whether or not given at the invitation of the Authority.

(Company)

(Signature)

(Title)

(Date)

ORIGINAL AND PHOTOCOPIES OF THIS PAGE ONLY.
DO NOT RETYPE.

ATTACHMENT C
COMPANY PROFILE

**REQUEST FOR PROPOSALS FOR THE PERFORMANCE OF EXPERT
PROFESSIONAL GEOTECHNICAL AND ENVIRONMENTAL SUBSURFACE
EXPLORATION ON WATER OR MARSH AS REQUESTED ON A “CALL-IN” BASIS
DURING 2019 THROUGH 2022
(RFP #55135)**

1. Company Legal Name (print or type):

2. Business Address (to receive mail for this RFP):

3. Business Telephone Number: _____

4. Business Fax Number: _____

5. Firm website: _____

6. Federal Employer Identification Number (EIN): _____

7. Date (MM/DD/YYYY) Firm was Established: ____/____/____

8. Name, Address and EIN of Affiliates or Subsidiaries (use a separate sheet if necessary):

9. Officer or Principal of Firm and Title:

10. Name, telephone number, and email address of contact for questions:

11. Is your firm certified by the Authority as a Minority-owned, Woman-owned or Small Business Enterprise (MBE/WBE/SBE)? ☐ Yes ☐ No

If yes, please attach a copy of your **Port Authority** certification as a part of this profile.

If your firm is an MBE/WBE/SBE not currently certified by the Authority, see the Authority's web site – <http://www.panynj.gov/business-opportunities/supplier-diversity.html>, to receive information and apply for certification.

EXHIBIT I - COMPENSATION SCHEDULE

PERFORMANCE OF EXPERT PROFESSIONAL GEOTECHNICAL AND ENVIRONMENTAL SUBSURFACE EXPLORATION ON WATER OR MARSH AS REQUESTED ON A “CALL-IN” BASIS DURING 2019 THROUGH 2022 (RFP #55135)

1. GENERAL

Subject only to the provisions of Section 9 of the Agreement attached, the Consultant shall accept and the Port Authority (the “Port Authority” or “Authority”) shall pay in full consideration for the performance of all the Consultant’s obligations under this Agreement a compensation determined from the work performed on the basis of the Items of Work, units of measurement, and prices specified in the following Schedule of Unit Prices and such compensation only. “Work” shall mean the items of work set forth in the Schedule of Unit Prices contained herein, and shall include any work hereafter required which is of the same general character as that set forth in any said items. In determining what is of the same general character, there shall be taken into consideration the provisions for measurement for payment appearing in this numbered clause hereof.

The following Schedule of Unit Prices does not constitute an outline of the Work required by the Specifications in their present form or Work Orders, but merely sets forth a list of all the items of work to be used in computing the Consultant’s compensation. It contains all such items. The compensation computed therefrom is full compensation for all Work whatsoever required by the Agreement Specifications in their present form or by Work Orders to be issued in the future.

In the case of each item of work, the work performed will be measured and the Consultant’s compensation will be computed as hereinafter provided in this numbered clause. In the case of a discrepancy between the prices quoted in writing and those quoted in figures, the writing shall control.

The Estimated Total Agreement Price is solely for the purpose of facilitating the comparison of Proposals and of computing damages in the event of a default by the successful proposer in the agreement created by the acceptance of his Proposal. The estimated quantities are given solely as a basis for the computation of the Estimated Total Agreement Price. The Authority makes no representation as to what the actual quantities will be and shall not be held responsible even though the estimated quantities are not even approximately correct. Insofar as the Consultant’s compensation is based upon items of work in the Schedule of Unit Prices, it will be computed from actual quantities of work performed, whether greater or less than the estimated quantities.

SCHEDULE OF UNIT PRICES

| Item No. | Estimated Quantities | Items of Classified Work with Unit Prices | Unit Prices | Amounts |
|-----------------|-----------------------------|--|--------------------|----------------|
| 1A | 5 EA | MOBILIZATION – SPUD BARGE, PER EACH _____DOLLARS _____CENTS | | |
| 1B | 2 EA | MOBILIZATION – JACK-UP BARGE, PER EACH _____DOLLARS _____CENTS | | |
| 1C | 1 EA | MOBILIZATION – DOUBLE PONTOON MARSH BUGGY, PER EACH _____DOLLARS _____CENTS | | |
| 1D | 2 EA | MOBILIZATION – TRIPOD MARSH, PER EACH _____DOLLARS _____CENTS | | |
| 1E | 1 EA | MOBILIZATION – TRACK MARSH, PER EACH _____DOLLARS _____CENTS | | |
| 2A | 200 LF | TYPE I WATER BORINGS ‘A’ – 0 TO 100 LINEAR FEET, PER LINEAR FOOT _____DOLLARS _____CENTS | | |
| 2B | 100 LF | TYPE I WATER BORINGS ‘B’ – 100 TO 200 LINEAR FEET, PER LINEAR FOOT _____DOLLARS _____CENTS | | |

| SCHEDULE OF UNIT PRICES | | | | |
|-------------------------|----------------------|--|-------------|---------|
| Item No. | Estimated Quantities | Items of Classified Work with Unit Prices | Unit Prices | Amounts |
| 2C | 10 LF | TYPE I WATER BORINGS 'C' – 200 TO 300 LINEAR FEET, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |
| 3A | 1000 LF | TYPE II WATER BORINGS 'A' – 0 TO 100 LINEAR FEET, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |
| 3B | 200 LF | TYPE II WATER BORINGS 'B' – 100 TO 200 LINEAR FEET, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |
| 3C | 50 LF | TYPE II WATER BORINGS 'C' – 200 TO 300 LINEAR FEET, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |
| 4A | 200 LF | TYPE I MARSH BORINGS 'A' – 0 TO 100 LINEAR FEET, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |
| 4B | 40 LF | TYPE I MARSH BORINGS 'B' – 100 TO 200 LINEAR FEET, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |
| 4C | 20 LF | TYPE I MARSH BORINGS 'C' – 200 TO 300 LINEAR FEET, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |
| 5A | 400 LF | TYPE II MARSH BORINGS 'A' – 0 TO 100 LINEAR FEET, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |

| SCHEDULE OF UNIT PRICES | | | | |
|-------------------------|----------------------|---|-------------|---------|
| Item No. | Estimated Quantities | Items of Classified Work with Unit Prices | Unit Prices | Amounts |
| 5B | 200 LF | TYPE II MARSH BORINGS 'B' – 100 TO 200 LINEAR FEET, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |
| 5C | 10 LF | TYPE II MARSH BORINGS 'C' – 200 TO 300 LINEAR FEET, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |
| 6A | 400 EA | TYPE A SAMPLES ON WATER, PER EACH _____ DOLLARS _____ CENTS | | |
| 6B | 100 EA | TYPE A SAMPLES ON MARSH, PER EACH _____ DOLLARS _____ CENTS | | |
| 7A | 60 EA | TYPE B SAMPLES ON WATER, PER EACH _____ DOLLARS _____ CENTS | | |
| 7B | 20 EA | TYPE B SAMPLES ON MARSH, PER EACH _____ DOLLARS _____ CENTS | | |
| 8A | 400 LF | DRILLING FOR TYPE D 2-1/8" DIAMETER SAMPLES ON WATER, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |
| 8B | 50 LF | DRILLING FOR TYPE D 2-1/8" DIAMETER SAMPLES ON MARSH, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |

| SCHEDULE OF UNIT PRICES | | | | |
|-------------------------|----------------------|---|-------------|---------|
| Item No. | Estimated Quantities | Items of Classified Work with Unit Prices | Unit Prices | Amounts |
| 9A | 50 LF | DRILLING FOR TYPE E 2-1/8" DIAMETER SAMPLES OVERBURDEN ON WATER, PER LINEAR FOOT <div>_____ DOLLARS</div> <div>_____ CENTS</div> | | |
| 9B | 25 LF | DRILLING FOR TYPE E 2-1/8" DIAMETER SAMPLES OVERBURDEN ON MARSH, PER LINEAR FOOT <div>_____ DOLLARS</div> <div>_____ CENTS</div> | | |
| 10A | 10 DAYS | RIG-WATER, PER DAY <div>_____ DOLLARS</div> <div>_____ CENTS</div> | | |
| 10B | 5 DAYS | RIG-MARSH TRIPOD, PER DAY <div>_____ DOLLARS</div> <div>_____ CENTS</div> | | |
| 10C | 2 DAYS | RIG-MARSH BUGGY, PER DAY <div>_____ DOLLARS</div> <div>_____ CENTS</div> | | |
| 10D | 2 DAYS | RIG—MARSH TRACK RIG, PER DAY <div>_____ DOLLARS</div> <div>_____ CENTS</div> | | |
| 11A | 400 LF | TYPE A MONITOR WELL, PER LINEAR FOOT <div>_____ DOLLARS</div> <div>_____ CENTS</div> | | |

SCHEDULE OF UNIT PRICES

| Item No. | Estimated Quantities | Items of Classified Work with Unit Prices | Unit Prices | Amounts |
|-----------------|-----------------------------|---|--------------------|----------------|
| 11B | 50 LF | TYPE B MONITOR WELL, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |
| 12 | 200 EA | TYPE F SAMPLES, PER EACH _____ DOLLARS _____ CENTS | | |
| 13A | 5 DAYS. | IDLED DRILL RIG-WATER, PER DAY _____ DOLLARS _____ CENTS | | |
| 13B | 2 DAYS. | IDLED DRILL RIG-MARSH TRIPOD, PER DAY _____ DOLLARS _____ CENTS | | |
| 13C | 2 DAYS. | IDLED DRILL RIG-MARSH BUGGY, PER DAY _____ DOLLARS _____ CENTS | | |
| 13D | 1 DAYS. | IDLED DRILL RIG-TRACK RIG, PER DAY _____ DOLLARS _____ CENTS | | |
| 14 | 50 LF | PERMANENT GROUNDWATER OBSERVATION WELLPOINTS, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |
| 15 | 100 HOURS | HAND AUGERING, PER HOUR _____ DOLLARS _____ CENTS | | |
| 16 | 25 EA | WELL PERMITS, PER EACH _____ DOLLARS _____ CENTS | | |

| SCHEDULE OF UNIT PRICES | | | | |
|-------------------------|----------------------|--|-------------|---------|
| Item No. | Estimated Quantities | Items of Classified Work with Unit Prices | Unit Prices | Amounts |
| 17 | 500 LF | CONE PENETROMETER TESTS (CPT) 0 TO 75 LINEAR FEET WITH A PORTABLE CPT RIG, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |
| 18 | 5 DAYS | CONE PENETROMETER TESTS (CPT) WITH A PORTABLE CPT RIG, PER DAY _____ DOLLARS _____ CENTS | | |
| 19 | 50 EA | 55-GALLON STEEL DRUM _____ DOLLARS _____ CENTS | | |
| 20 | 500 LF | 3-INCH CASED CROSSHOLE BORING, 0 TO 100 LINEAR FEET, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |
| 21 | 100 LF | 3-INCH CASED CROSSHOLE BORING, 100 TO 200 LINEAR FEET, PER LINEAR FOOT _____ DOLLARS _____ CENTS | | |

* The amount for each item shall be computed by multiplying the estimated quantity of that item by the unit price for the item.

** The Estimated Total Contract Price shall be computed by totaling the amounts inserted in the "Amounts" column.

The following provisions are applicable to the Schedule of Unit Prices. The quantity for payment described in the following provisions shall be the quantity of Classified Work furnished, installed, performed and/or placed in accordance with the Specifications, as shown on the Work Orders and where ordered by the Engineer.

No quantity of work will be included under more than one item of Classified Work.

In the case of Item Nos. 1A through 1D (Mobilizations) the quantity for payment will be the number of times a drill rig with all personnel, equipment, and supplies necessary to perform the required water, or marsh borings and boring related work, as the case may be, are completely mobilized at the approximate location of the borings to be performed in a work area as ordered by the Engineer. A move from one location to another within a single work area, without occasion to remove the drill rig and equipment from such work area, except temporarily in the course of such move, shall not be considered as an additional mobilization for payment or as

cause for any other separate payment. As used herein “Work Area” shall mean that area specified by the Engineer in his respective orders to mobilize.

In the case of Items 2A, 3A, 4A, and 5A (Type I and II Water Borings, and Type I and II Marsh Borings, ‘A’ - 0 to 100 Lin. Ft.), the quantity for payment will be the number of linear feet of boring actually driven between 0’ and 100’, inclusive, measured from ground elevation in the case of marsh borings and from mean low water (Elevation 295) in the case of water borings to the bottom of the hole or to the top of rock, as the case may be.

In the case of Items 2B, 3B, 4B, and 5B (Type I and II Water Borings, and Type I and II Marsh Borings, ‘B’ - 100 to 200 Lin. Ft.), the quantity for payment will be the number of linear feet of boring actually driven between 100’ and 200’, inclusive, measured from ground elevation in the case of marsh borings and from mean low water (Elevation 295) in the case of water borings to the bottom of the hole or to the top of rock, as the case may be.

In the case of Items 2C, 3C, 4C, and 5C (Type I and II Water Borings, and Type I and II Marsh Borings, ‘C’ - 200 to 300 Lin. Ft.), the quantity for payment will be the number of linear feet of boring actually driven between 200’ and 300’, inclusive, measured from ground elevation in the case of marsh borings and from mean low water (Elevation 295) in the case of water borings to the bottom of the hole or to the top of rock, as the case may be.

In the case of the above Items 2A through 5C inclusive, however, there shall be excluded from the length for payment the length of any hand augering paid under Item 15 and the length of any boring through overburden obstruction included in the length for payment under Items 9A or 9B. The length for payment for these items shall include the length of any partially-completed water borings abandoned through no fault of the Consultant.

In the case of Items 6A through 7B (Type A and B Samples), the quantity for payment will be the number of Type A and Type B samples, respectively, taken and delivered to the Authority. Type A samples are collected with a split spoon / standard penetration test (SPT) sampler. Type B samples are collected with an Osterberg hydraulic piston sampler. Only brass tubes may be used.

In the case of Items 8A and 8B (Drilling for Type D 2-1/8” Samples), the quantity for payment will be the number of linear feet actually drilled in rock, measured from the top of rock to the bottom of the hole in rock. As used herein, “rock” shall mean solid ledge rock and boulders immediately overlying solid ledge rock.

In the case of Items 9A and 9B (Drilling for Type E 2-1/8” Samples), the quantity for payment will be the number of linear feet actually drilled through obstructions and boulders in the soil overburden.

In the case of Item 10A, 10B, 10C, and 10D (Rig-Water, Rig-Tripod, Rig-Marsh Buggy, and Track Rig) the quantity for payment will be the number of 8-hour working days for which a drill rig, including all necessary labor and equipment, is employed at the construction site performing boring-related work on land, marsh or in the water, as the case may be, as specified in 2.12 of Section 2A of the Specifications. If the rig is used for more than eight hours or less than eight hours on any one working day, payment will be made on a pro-rata basis for the period of actual operation of the rig. Use of drilling rigs or tripod rigs for any of the other items in the Schedule of Unit Prices will not be compensated for under these Items Nos. 9 and 10. Mobilization for boring-related work will be compensated for under Items Nos. 1A through 1D, as applicable.

In the case of Item Nos. 11A and 11B (Type A and Type B Monitor Well), the quantity for payment will be the number of linear feet of Type A and Type B Monitor Wells, respectively, furnished and installed in accordance with the requirements of 2.11 of Section 2A of the Specifications entitled “Monitor Well Installation”, measured from the ground surface elevation.

In the case of Item 12 (Type F Samples), the quantity for payment will be the number of samples taken with the 3 inch I.D. split spoon sampler in accordance with the requirements of 2.11 of Section 2A of the Specifications entitled “Monitor Well Installed” and delivered to the Authority.

In the case of Item Nos. 13A, 13B, 13C, and 13D (Idled Drill Rig-Water, Idled Drill Rig-Tripod, Idled Drill Rig-Marsh Buggy, Idled Drill Rig-Track Rig), the quantity for payment will be the number of 8 hour working days for which a drill rig including one driller and one helper, as the case may be, is kept idle and wholly unoccupied at a site on which they would normally be engaged in the performance of work but for causes due solely to acts or omissions of the Authority, and if such idleness is not due to any cause within the control of the Consultant, or any of his subcontractors, or materialmen, or his or their employees. If the drill rig or tripod rig is kept idle for more or less than eight hours on any one working day, payment will be made on a pro-rata basis for the period of time the rig was idled.

In the case of Item 14 (Permanent Groundwater Observation Wellpoints), the quantity for payment will be the number of linear feet of Permanent Groundwater Observation Wellpoints furnished and installed in accordance with the requirements of Section 2.08 of the Specifications entitled “Ground Water Observations Wellpoints (Temporary or Permanent)”, measured from the ground surface elevation.

In the case of Item 15 (Hand Augering), the quantity for payment will be the number of working hours expended in the hand augering operation in accordance with the requirements of 2.02, part D of Section 2A of the Specifications entitled “Land and Marsh Borings”.

In the case of Item 16 (Well Permits), the quantity for payment will be the number of well permits for Permanent Observation Wellpoints and Monitor Wells obtained from the State of New Jersey. Cost shall include the cost of permit and any handling fee.

In the case of Item 17 (Cone Penetrometer Tests (CPT)), the quantity for payment will be the linear feet of CPT advancement, measured from the ground surface elevation.

In the case of Item 18 (Cone Penetrometer Tests (CPT)), the quantity for payment will be the number of 8-hour working days for which a 25-ton CPT Truck, including all necessary labor and equipment, is employed at the construction site, as directed by the engineer

In the case of Items 20 and 21 (3-Inch Cased Crosshole Boring), the quantity for payment will be the number of linear feet of 3-inch cased crosshole boring, furnished and installed in accordance with the requirements of 2.11 of Section F of the Specifications entitled “Installation of 3-inch PVC Casing for Cross-Hole Seismic Testing”, measured from the ground surface elevation.

* * *

“EXHIBIT II – Salary Schedule”

COMPANY LETTERHEAD

NAME

TITLE

**ACTUAL
HOURLY RATE**

**Please include a copy of your firm’s salary schedule
with your Proposal.**

**NO OTHER INFORMATION SHOULD APPEAR
ON THE SALARY SCHEDULE OTHER THAN WHAT IS BEING
REQUESTED.**

- **Indicate the Names, Titles, and Actual Hourly Rates that would be in effect at the start of the Agreement term (January 1, 2019 through December 31, 2019)**
- **Rates indicated should be for the Prime Consultant only, not subconsultants.**
- **Not Acceptable: Names left blank / “TBD”/Administrative Staff**

Thank you.

CODE OF ETHICS FOR PORT AUTHORITY VENDORS: COMPLIANCE CERTIFICATION

_____ (the "Vendor") has reviewed the Code of Ethics for
(Legal Business Name of Entity)
Port Authority Vendors (the "Code").

Vendor understands that the Vendor and Vendor's Employees must comply with the requirements of this Code in connection with any work being performed on behalf of the Port Authority and whenever they are on property, used, owned or controlled by the Port Authority.

The Vendor understands that violations of the law or of this Code may subject a Vendor or a Vendor's Employees to civil or criminal penalties. In addition, in the case of violation of any provision of the law or this Code, the Port Authority may pursue any available remedy, including, but not limited to, determining that a Vendor is in material breach of its contract and/or that, in the future, the Port Authority will have no further commercial dealings with the Vendor.

This Compliance Certification must be submitted to the Port Authority in accordance with the instructions in any solicitation, or as otherwise requested.

This Compliance Certification must be executed, and provided to the Port Authority, before Vendor begins work on a Port Authority project and before Vendor can receive payment in connection with a Port Authority project. This Compliance Certification, once executed, will be a material and integral part of the contract between the Vendor and the Port Authority. If this Compliance Certification was submitted in response to a solicitation, it will become a material and integral part of any contract between the Vendor and the Port Authority resulting from that solicitation.

A copy of this Compliance Certification must be retained by the Vendor, unless and until the Port Authority indicates that the Certifications may be disposed of.

Number/Name of Solicitation/Contract/Agreement

By signing below, I represent that I am authorized to execute this Compliance Certification on behalf of Vendor.

Signature _____ Date _____

Print Name _____

Title _____