

August 5, 2014

SUBJECT: REQUEST FOR PROPOSALS FOR PERFORMANCE OF EXPERT PROFESSIONAL ENGINEERING SERVICES FOR PATH FIRE ALARM SYSTEM UPGRADE AND REPLACEMENT (RFP #38989)

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 perform expert professional engineering services for the PATH Fire Alarm System Upgrade and Replacement. The services of the selected consultant shall consist of preparing Final Design and Contract Documents (Stage III) and performing Post Award Services (Stage IV) for the subject services, as provided in Attachment A to the Authority’s standard 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.

Site visits, if any, will only be conducted with the selected consultant.

I. PROPOSER REQUIREMENTS:

The Authority will consider only those firms who are able to demonstrate compliance with the following qualification requirements:

- A. A minimum of five (5) years experience in the design of code compliant Fire Alarm Systems, including production of Final Contract Drawings for Railroad Transportation type projects having a minimum of fifty (50) different facilities such as maintenance, operational, and administration buildings, rail transit passenger stations, and electric power substations among others. The projects must have involved an overall size of at least one (1) million square feet and also included the specification of microprocessor based, supervised Fire Alarm Systems capable of reporting to a Central Monitoring Station.
- B. Demonstrated experience in the design of Internet Protocol (IP) based networks, Cisco based Synchronous Optical Network (SONET) System architecture, network topology, network integration and management, router configurations and industrial hardened communications networks.
- C. Demonstrated knowledge and experience working with governmental and transportation agencies, including expertise in standards for Fire Alarm designs used for Transportation Systems in the New York/ New Jersey metropolitan area within the last five (5) years.
- D. Demonstrated experience as the prime Consultant on a minimum of five (5) Fire Alarm System projects of similar complexity and scale within the past five (5) years, with minimum overall total project construction cost of \$500 million, and construction value for the Fire Alarm System portion of at least \$1 million.

- E. Demonstrated knowledge of environmental issues, in the New York/New Jersey metropolitan area within the last ten (10) years.
- F. The office(s) of the project design team must be located within the New York/New Jersey metropolitan area.
- G. Principal(s) shall be licensed to practice architecture and engineering services in the States of New York and New Jersey.

In the event that the prime consultant utilizes the services of a Fire Alarm System subconsultant, the Fire Alarm subconsultant shall also meet the above qualifications.

If proposing as a joint venture legal entity, the Proposer must meet all the above requirements. If proposing as a common law joint venture, at least one (1) of the members must meet requirements A, B and C above, and at least one member of the joint venture must meet the rest.

II. PROPOSAL FORMAT REQUIREMENTS

To respond to this RFP, the Proposer shall submit a concise Proposal complying with the following requirements:

- A. To be acceptable, the Proposal shall be no more than 100 pages-single-sided or 50 pages-double-sided, using 12 point or greater font size. The page limit pertains only to Letters F, H, and I in Section III below. Each resume shall be two-page maximum, single-sided or one-page double-sided, using 12 point or greater font size. The Proposal pages shall be numbered and bound, with “Your Firm Name,” and **RFP Number 38989** 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 III.
- 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, Two Montgomery Street, 3rd Floor, Jersey City, NJ 07302, **Attention: RFP Custodian**. Do not address your Proposal to any other name. You are required to submit one (1) reproducible original and seven (7) copies, along with eight (8) compact disc copies, of your Proposal for review. In case of conflict, the reproducible original of the Proposal shall take precedence over material on the compact disc.
- 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 September 3, 2014**. 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 delivered by messenger, please note that only individuals with proper identification (e.g. photo identification) will be permitted access to the Authority’s offices. Messengers without proper identification will be turned away and their packages not accepted.

III. SUBMISSION REQUIREMENTS:

To respond to this RFP, provide the following information:

- A. In the front of your Proposal, a copy of Attachment B (Agreement on Terms of Discussion) signed by an officer of your company. If proposing as a joint venture, each firm in the joint venture must sign a copy of Attachment B.
- B. Complete a copy of Attachment C (Company Profile).
- C. Demonstrate your compliance with the prequalification requirements listed in “Proposer Requirements” as noted in Section I above.

Include a statement indicating whether the Consultant is proposing as a single entity, or as a joint venture.

If a joint venture submits a proposal, all participants in the joint venture shall be bound jointly and severally and each participant shall execute the proposal. If a single entity proposer cannot demonstrate that it meets all of the referenced qualifications, then the single entity proposer may, with others, form a joint venture and request that the joint venture be deemed to be the Proposer (i.e. members of the joint venture may meet the qualification requirement collectively).

If the Proposer is a joint venture, the joint venture’s Proposal shall contain an executed teaming agreement, or alternatively, if the entities making up the joint venture proposer have not executed a teaming agreement, the joint venture’s proposal shall contain a summary of key terms of the anticipated agreement. If the joint venture proposer is a consortium, partnership or any other form of a joint venture, or an association that is not a legal entity, the proposal shall include a letter signed by each member indicating a willingness to accept joint and several liability until the point at which a corporation, limited liability company or other form of legal entity is formed for the purposes of undertaking the agreement.

- D. Reference Documents 1 and 2 listed in Section V.B. of Attachment A will only be made available to respondents of this RFP who have satisfactorily executed the Authority’s [Non-Disclosure Agreement and Confidentiality \(NDA\)](#) (Attachment D) and required acknowledgments.

Proposer(s) seeking copies of the available documents are required to submit:

- (1) The Non-Disclosure and Confidentiality Agreement (Attachment D) executed by a principal or officer of your firm on behalf of your firm;
- (2) An Exhibit A- (*Acknowledgment by a Related Party Individual*) executed by the same principal who executed the firm Non-Disclosure Agreement;
- (3) An Exhibit B- (*Acknowledgment by a Related Individual*) executed by each member of your firm requiring access to the documents;

A PDF copy(ies) of the NDA and acknowledgments may be provided via e-mail to Ms. Mary Lou Rivera at mlrivera@panynj.gov . The e-mail subject line should state the RFP number. The body of the e-mail should include your firm’s full name, address, contact name, and contact phone number. As stipulated in the NDA, by its review of the listed documents, the Proposer agrees that it will not use such information for any purpose other than in response to this RFP, and that it will not disseminate such information to any third party. Each recipient of the documents is required to destroy each and every copy of the documents listed in Section V.B. of Attachment A by December 31, 2014, or

upon notification that it has not been selected for performance of the subject services described in Attachment A, whichever shall occur earlier. The recipient shall send the Authority confirmation in writing that the drawings have been destroyed upon request.

Promptly after the e-mail request, the original, signed, NDA must be mailed to: The Port Authority of New York and New Jersey, 2 Montgomery Street, 3rd Floor, Jersey City, NJ 07302, Attention: Mary Lou Rivera, Solicitation Manager.

E. Qualifications and Experience of Staff.

List the name(s), title(s) and provide resumes of personnel (including subconsultants, if any) who will be assigned to perform the required services.

F. Firm Qualifications and Experience

Provide your firm's qualifications and experience in providing the services contemplated herein. For each project identified, indicate:

1. Description of services provided by your firm;
2. Start and end dates of services performed;
3. Contract value (total value of services performed by you);
4. Indicate whether said projects were completed on schedule and within budget;
5. Hiring entity and contact person (name, title, phone number, email address).

G. Provide a breakdown of the multiplier as indicated in the first line of subparagraph 9.A of the accompanying Agreement (and Attachment E – Staffing & Cost Analysis Sheet). Indicate all of its components (e.g.: vacation, holiday, sick pay, worker's compensation, office rent, insurance, profit).

If proposing the use of subconsultant(s), provide the terms and conditions for their compensation (including their multiplier, and/or billing rates as appropriate), and their Minority/Women-owned Business Enterprise (M/WBE) status.

H. A detailed description of the proposed technical approach to be taken for the performance of the required services for each task in Attachment A, and a schedule for completion of said tasks. Factors addressed in your technical approach shall include, but are not limited to, your proposed methodology and strategy for performing the services in Attachment A as well as any specific software or other technology you may employ in the performance of these services.

As part of your technical approach, prepare a staffing analysis for performance of each task in Attachment A, using the Excel spreadsheet in the following link: [Attachment E - \(Staffing & Cost Analysis Sheet\)](#). Include names and titles of the individuals proposed to perform each of the tasks identified as well as the number of hours required to complete each task.

I. A detailed description of the proposed management approach for performance of the required services. Factors addressed in your management approach shall include, but are not limited to: your proposed organizational structure for delivery of the contemplated services; your proposed approach to ensuring the quality and timeliness of the required work products; and your proposed approach to keeping the client apprised of the project status. If the various completion dates contained in Attachment A cannot be adhered to, you may submit revised dates. However, the fact that you were not able to adhere to the

original dates and the extent of the revised dates will be included among the factors that the Authority will consider in evaluating Proposals.

- J. Your attention is directed to Paragraph 22 of the Agreement in which the Authority has stated the M/WBE goals for participation in this project. Submit details on how you intend to meet these goals. A listing of certified MBE/WBE firms is available at <http://www.panynj.gov/business-opportunities/sd-mini-profile.html>.
- K. A complete list of your firm's affiliates.
- L. If the Proposer or any employee, agent or 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.
- M. The Proposer is expected to agree with the standard agreement and its terms and conditions. You should therefore not make any changes in this standard agreement, nor restate any of its provisions in your Proposal or supporting material. ***However, if the Proposer has any specific exceptions, such exceptions should be set forth in a separate letter included with its response to this RFP.*** The Authority is under no obligation to entertain or accept any such specific exceptions. Exceptions raised at a time subsequent to proposal submission will not be accepted. The scope of the tasks to be performed by you are set forth in Attachment A to the Authority's standard agreement.

IV. SELECTION PROCESS:

The qualifications-based selection shall take into consideration the following technical criteria listed in order of importance, and subsequently cost, as appropriate. After consideration of these factors, the Authority may enter into negotiations with the firm(s) deemed best qualified, in terms of the forgoing technical criteria, to perform the required services.

- A. qualifications and experience of the proposed staff;
- B. qualifications and experience of the firm, including the quality of similar services provided to others, and the demonstrated ability to complete the services in accordance with the project schedule;
- C. technical approach to performance of the contemplated services; and
- D. management approach for the performance of the contemplated services.

V. ORAL PRESENTATIONS:

After review of all Proposals, an oral presentation to the selection committee and others, as appropriate, may be requested. It should be noted that firms selected to make presentations may be given short advance notice. Presentations will be limited to 60 minutes, and should include material contained in your Proposal. The presentation will be followed by an approximately 60-minute question and answer session. Proposer's staff providing the presentation shall be led by the proposed Project Manager, who may be supported by no more than six (6) other senior staff members proposed to work on this project. Notification of presentation scheduling is made by email. Please provide the name, telephone number, and email address of the person who should be contacted for presentation scheduling as well as an alternate in the event that person is unavailable.

VI. ADDITIONAL INFORMATION:

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

If your firm is selected for performance of the subject services, the agreement you will be asked to sign, at that time, 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 his 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 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 contractors, affiliates, subcontractors and subcontractors' 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.

Following selection of a Consultant, the Authority will forward two (2) copies of the Agreement to the selected firm, which must sign and return both copies. The return to you of one copy executed by the Authority will effectuate the Agreement.

Should you have any questions, please contact Mary Lou Rivera, Solicitation Manager, by email at mlrivera@panynj.gov. All such correspondence must have your name, title, company, mailing address, telephone number and state "RFP 38989" in the subject line. The Authority must receive all questions no later than 2:00 P.M., seven (7) calendar days before the RFP due date. No 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. Addenda to the RFP, if any, will be posted at <http://www.panynj.gov/business-opportunities/bid-proposal-advertisements.html?tabnum=6>. 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, and 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
Manager, Construction Procurements
Procurement Department

Attachments

ATTACHMENT A

PERFORMANCE OF EXPERT PROFESSIONAL ENGINEERING SERVICES FOR PATH FIRE ALARM SYSTEM UPGRADE AND REPLACEMENT

I. BACKGROUND

The Port Authority of New York and New Jersey (the “Port Authority” or “Authority”) is a municipal corporate instrumentality and political subdivision of the States of New York and New Jersey, created and existing by virtue of the Compact of April 30, 1921, made by and between the two States, and thereafter consented to by the Congress of the United States. It is charged with providing transportation, terminal and other facilities of trade and commerce within the Port District. The Port District comprises an area of about 1,500 square miles in both States, centering about New York Harbor. The Port District includes the Cities of New York and Yonkers in New York State, and 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. The Authority manages and/or operates all of the region’s major commercial airports (Newark Liberty International, John F. Kennedy International, Teterboro, LaGuardia and Stewart International Airports), marine terminals in both New Jersey and New York (Port Newark and Elizabeth, Howland Hook and Brooklyn Piers), and its interstate tunnels and bridges (the Lincoln and Holland Tunnels; the George Washington, Bayonne, and Goethals Bridges; and the Outerbridge Crossing), which are vital “Gateways to the Nation.”

The Port Authority Trans-Hudson Corporation (PATH) is a wholly owned subsidiary of the Port Authority of New York and New Jersey (Authority). PATH is a heavy rail rapid transit system, operating 24 hours a day, 7 days a week, and serves as a critical link in the New York – New Jersey transportation network. The New York – New Jersey Metropolitan region ranks as the most mass transit-dependent region in the United States. With the close proximity of its stations and Terminal to desirable destination points, PATH also serves as a catalyst for regional economic development.

Project History

In 2014 the Authority prepared a Conceptual Design (Stage I) for upgrading and replacement of the PATH Fire Alarm System (FAS) that included performance of a Code Compliance Analysis; development of conceptual design criteria; and preparation of a Conceptual Design of the entire FAS (including fiber optic cables infrastructure) for all PATH facilities listed in Exhibit 1, included herewith and made a part hereof. The facilities are located in New York City and in New Jersey. The facilities include train stations, electrical power substations, lift bridges, compressor stations, maintenance shops and yards, tunnel ventilation buildings, and relay signal bungalows.

At its completion, the Stage I Report recommended replacement of the existing FAS (in the majority of the facilities) with new equipment capable of communicating with the new head-end system via an IP based network.

Existing Conditions Overview

The PATH Train Control Center (PTCC) is located in Waldo Yard, and operates as the proprietary supervising station for the PATH FAS. PTCC primarily monitors the PATH FAS.

The PTCC operates as the primary Proprietary Supervising Station control center while Hoban Control Center (HCC) operates as the secondary or backup control center. The signals from different systems report to PTCC via direct connections, leased telephone lines, and SCADA/Synchronous Optical Network (SONET) systems. PTCC is supervised 24 hours a day. Main fire alarm signals come to the Train Master desk. Signals from the electrical substations, electrical and communication rooms come to Power Director. Signals from the signal relay bungalows and relay rooms come to the Signal Control desk. Not all of the signals received at the PTCC identify exact location and nature of the alarm; therefore, maintenance crews are dispatched to the location to investigate and assess situation. The Train Master manually notifies appropriate authorities, such as police and/or fire departments to respond to the incident location. The Train Master can initiate voice evacuation system(s) to a specific facility or to all facilities. The main shortcomings of the proprietary supervising station at the PTCC are that not all of the signals from the different facilities are received, and that the signals do not provide detailed information indicating the exact location or device in alarm or trouble.

Most of the FAS in the facilities are at least 10 years old and were manufactured by different manufacturers. This makes it difficult to transmit required information to the proprietary supervising station at HCC. Some facilities have multiple Fire Alarm Control Panels (FACP) that do not communicate with each other. Most of the FACPs transmit only a general alarm to the central location, and do not identify exact device in the alarm. It appears that not all of the FACPs report to the PTCC.

Some of the train stations are equipped with an emergency voice evacuation system as part of the FAS. Such train stations can be operated from the PTCC.

PATH facilities have an emergency telephone communication system (not a part of the FAS) that provides two-way communication to PTCC, which is part of the FAS. The system appears to be in working condition and is not part of the fire alarm system upgrade and replacement project.

The signal bungalow includes area smoke detectors that are connected to the SCADA system not to the FAS. The alarm in a specific bungalow cannot be identified at the central location. The information transmitted to the PTCC only indicates that one of the bungalows is in alarm.

Many electrical substations include clean agent fire protection systems (Halon, CO2, and FM200) which shall remain as configured. Some of the facilities have duct mounted smoke detectors and/or smoke (fire/smoke) dampers associated with the HVAC systems. Several facilities have elevators and escalators. Some facilities may also have an elevator recall system.

All facilities comprising the PATH system shall be Code compliant by installing a new state-of-the-art FAS capable of reporting to remote monitoring stations.

II. SCOPE OF WORK

The services of the Consultant shall consist of preparing and delivering to the Authority Final Design and Contract Documents (Stage III) and performing Post Award Duties (Stage IV) for the upgrade and replacement of the PATH FAS based upon the PATH "Fire Alarm System Upgrade and Replacement" Stage I Reports dated February 14, 2014 included herewith and made a part hereof as Exhibit 2, and as otherwise directed herein.

The Consultant shall design a code compliant dedicated FAS for the entire PATH system and Fire Alarm network over the PATH SONET to enable IP digital alarm communicator transmitter (DACT) communications between the Fire Alarm Panels at each Facility and the Proprietary Supervising Stations. The FAS shall be monitored from a designated external Central Monitoring Station (CMS) located outside the PATH premises and others monitoring stations located within the PATH facilities as described in the Stage I report in Exhibit 2.

The design shall be based on the approved design criteria as per Task D, survey of existing conditions of the FAS in each location, and shall include the overall PATH FAS and the FAS at each of the facilities listed in Exhibit 1.

Except as noted otherwise herein, the Consultant shall be responsible for all involved disciplines including, but not limited to electrical/electronics, architectural, structural, civil, mechanical (HVAC, plumbing and fire protection) and environmental.

III. DESCRIPTION OF THE CONSULTANTS TASKS

TASK A. SCHEDULE OF SERVICES

The Consultant shall submit a schedule (subject to the approval of the Authority) for performance of services consistent with the milestones contained in Section IV "Schedule of Submissions." Said schedule shall provide for completion of the Consultant's Tasks C through F within the duration specified in Section IV, and shall include a list of all facilities to be surveyed and inspected and the proposed visit dates. The schedule shall incorporate all tasks necessary to complete the intent of this agreement, including but not limited to site visits, prioritized phasing, identifying the deliverables, meetings, presentations, milestones for submittals, Authority review and subsequent incorporation of Authority comments.

TASK B. MEETINGS/PRESENTATIONS AND REVIEWS

Conduct meetings, presentations and reviews as required.

As appropriate, demonstrate available options and recommendations in the form of a matrix comparison chart. Meetings shall typically take place at Authority offices within the Port District. The Authority's Engineering offices are currently located at Two Gateway Center, Newark, NJ. After October 2014, the Authority's Engineering offices will move to the World Trade Center (WTC) in Manhattan, NY. PATH headquarters are located at Journal Square Transportation Center (JSTC) in Jersey City, NJ. (For estimating purposes, assume all meetings will last four [4] hours.). The Consultant's project manager and key project personnel shall attend the meetings and presentations, as appropriate. Meetings, presentations and reviews shall include but not limited to:

1. Schedule and attend:
 - a. a kick off meeting within two (2) weeks of receipt by you of an executed copy of this Agreement. Attendants shall include all key personnel of the Consultant. Present and discuss the schedule(s) for the performance of the services.
 - b. an Orientation Meeting at the beginning of the Design (Stage III) and Construction (Stage IV) phases with the Authority and all key personnel of the Consultant, as appropriate.

- c. review meetings with the Authority and parties associated with the project, to review performance, discuss staffing of project and plans for the project submissions as required in Section IV.
2. Pre-site assessment meeting, four (4) weeks prior to the first site visit, to review data and format relevant to the data gathering, and review Authority and PATH safety procedures for onsite personnel.
3. Attend bi-weekly meetings throughout the design and construction stages, which will include progress review, project schedule, discussions, conferences or presentations requested or required to complete the scope of work. Prepare an agenda for all the meetings, and submit the agenda to the Authority two (2) business days in advance of each meeting.
4. Attend all required meetings, discussions, conferences or presentations, such as internal Authority meetings such as Risk Assessment meetings required to complete the work.
5. Develop and prepare meeting summary minutes of all meetings held during all phases of the project. The meeting minutes should include any required follow-up actions. Submit draft meeting summary minutes of each meeting to the Authority within three (3) business days of the meeting. Incorporate the Authority comments as directed and distribute copies of the final meeting minutes as requested by the Authority.

6. Presentation Meetings:

Presentations shall be Power Point based and shall include but not be limited to all required material as prepared by the Consultant, to include, but not limited to: drawings, field survey data collection information, staging scheme(s), computations, recommendations, and backup information for tasks performed and/or to be performed, review and summary of results and/or findings and/or recommendations; and distribution of presentation materials and handouts that duplicate the presentation slides, all as appropriate. Actual presentations shall include:

- a. presenting the Final Design Package (FDP) to Authority staff and others as required by the Authority. Incorporate Authority comments as directed, and resubmit the FDP as final. Upon approval of the FDP and authorization by the Authority proceed with the performance of Task H, Post Award Services (Stage IV).
- b. conducting design presentations to the Authority as required upon 50% completion of the Stage III Design work, and upon 100% completion of the Stage III design work, and as otherwise required herein.
- c. a Draft Report (Documentation History) identifying items proposed by the Consultant that have been either approved, or disapproved, by the Authority. (This may be displayed in the form of a “Decision Tree” or other method as approved by the Authority.) The Authority will provide comments on the draft report as appropriate, for incorporation into the final report as required hereunder.

7. Design Review Meetings:

Initiate and conduct review meetings of the various design documents, specifications, cost estimates, schedules, etc., as required. This may include but not be limited to meetings for the review of design criteria, FAS design, standard detailing, environmental,

value engineering, specification formatting, correspondence and document control, Constructability Review and Staging Plan Meetings.

TASK C. REFERENCE DOCUMENTS AND OCCUPANCY CLASSIFICATION REVIEW

Review the referenced documents, as listed in Section V below, and meet with Authority staff and others as required to discuss your findings, prior to performance of services. Review and evaluate the occupancy classification of the spaces in each facility shown in Section V. Submit any recommended update to the occupancy classification of the spaces shown in Section V to the Authority for approval.

TASK D. DESIGN CRITERIA SUMMARY

Prepare and submit to the Authority for approval a detailed summary of all criteria to be used for the design including codes and assumptions. In the case of any applicable criteria not defined herein, the Consultant shall propose criteria for such FAS based upon the occupancy classification. In the case of conflict, the more stringent requirement shall be used. As determined by the Authority, the FAS shall be designed to meet the specific criteria stipulated in the following codes and standards, as well as all applicable codes and standards for which compliance is mandatory, whether listed herein, or not. For detailed information of the Design Criteria, refer to the Stage 1 report in Exhibit 2.

1. General Requirements for Local FAS

Every FACP/System that is to be replaced shall be a fully Intelligent device addressable, analog detecting, low voltage and modular with digital communication technique, multiplexed-type system with completely supervised circuits, in full compliance with all applicable codes and standards. The system shall be state-of-the-art microprocessor based and user friendly programmable software. The FACP will monitor status of all automatic alarm devices such as smoke detectors, heat detectors, duct mounted smoke detectors, manual pull stations, addressable monitoring modules for sprinkler system waterflow and tamper switches, preaction and chemical suppression panels, and addressable relay modules for elevator fire safety functions, air handling unit shutdown, fire/smoke damper activation, and escalator shutdown.

Pull stations shall be spaced per NFPA 72 and NFPA 130, and shall be mounted at elevations in compliance with NFPA 72 and the 2010 Standards for Accessible Design. Visual notification devices in public areas shall be provided to achieve a minimum visible of 0.0375 lumens per square foot and shall be synchronized.

Required smoke detectors and heat detectors shall be spaced per the requirements of NFPA 72. Special purpose detection devices shall be individually analyzed for placement.

The FAS shall also include:

- a. at least 50% spare capacity for future addressable initiating devices such as: area smoke and heat detectors, duct mounted smoke detectors, monitoring and control relay modules.
- b. at least 50% spare capacity for future notification appliances, including strobes, speakers and horns.

- c. microphone and necessary hardware for the fire alarm voice emergency evacuation system, where required.
- d. The FACP shall be located at the location accessible to the fire department and police personnel.
- e. FACP/System that is to remain shall be interfaced with the new FAS.
- f. The facilities with a new FAS will include an interface connection to the existing IP based SONET network to communicate to the PATH Control Centers and the interface connections to the external CMS.

The facilities where the existing FAS is to remain will include an interface connection to the existing IP based SONET network to the PATH Control Centers and the interface connections to the external CMS.

2. Supervising Stations

The Stage 1 report outlined the use of a Supervising Station system as required by NFPA 130 Fixed Guideway Transit and Passenger Rail Systems adopted by the Authority. The adopted codes by the State of New Jersey and New York City would allow the signals to be sent to a number of different supervising stations.

- a. Monitoring of the signals from the PATH facilities will be accomplished through an external CMS and the PATH Supervising Stations (PSS) at PTCC located at Waldo yard, and HCC located at JSTC. The external CMS will serve as the primary monitoring of the FAS while PTCC and the HCC will serve as the PSS and as the secondary or back-up locations for the external CMS. Each PSS will have a primary and backup Intranet Protocol Digital Alarm Communication Receiver (IP-DACR) which is capable of receiving signals over the POTS lines, as well as the Ethernet. The PSS will include an alarm (computer) server with automation software to manage and display the signals from the facilities on the operator's computer work station. The IP-DACT's and IP-DACR's must be configured to meet the Security Industrial Association (SIA) Revision 9 formatting for Contact-ID to transmit and display alarm information on a by-device basis.
- b. All FAS alarm, supervisory and trouble signals from all facilities will be transmitted to an external CMS along with transmitting the signals to the new main Supervising Station at the PTCC, HCC, and other locations as indicated in this document. The PTCC and the HCC will include the required signal receiving equipment, computer color graphic display monitor/workstation as part of the FAS. The computer workstation will be located at the Train Master's desk, who will be responsible for the alarm response and emergency operations. The computer graphic workstation will include several graphic display screens. The operator will be able to see the status of every facility, and will be able to scroll down to see the status of every device in every facility with new addressable FAS. All of the general, supervisory, and trouble alarms will be displayed on the computer graphic workstation identifying status and location of the alarm.

- c. Programming on the Fire Alarm servers at PTCC and HCC will redirect the signals over the existing SONET network to work stations located at the COM agent (PTCC and HCC), Watch Engineer (PTCC and Hoban), Security Operations Center (PTCC and HCC), PATH police at JSTC, Watch Engineer at HCMF and Way & Structures at JSTC.
- d. The fire alarm control panels in each of the PATH facilities will transmit the signals to the external CMS using a digital alarm communicator transmitter (DACT) and the PATH supervising stations through intranet protocol digital alarm communicator transmitter (IP-DACT).
- e. The DACT's in each facility shall be connected to the external CMS by two (2) telephone lines. One (1) dedicated (Verizon System) telephone line and one (1) PATH internal telephone line through the PATH SONET/PAWANET network.
- f. The IP-DACT's in each facility shall be connected to PTCC and HCC through the existing PATH existing SONET network.
 - 1) The signals from the IP-DACT's shall be received through a IP-DACR and displayed on the computer workstations in PTCC and HCC through a computer server.
 - 2) The facilities with new FAS shall transmit signals based on Point-ID protocol which shall transmit information from each device, where possible.
 - 3) The facilities where the FAS shall not be replaced will transmit general alarm, supervisory, and trouble signals.
- g. Once the signals are received at the CMS and the PATH Control Centers, the signals will be displayed in much of the same manner.

3. Passenger Stations - General

The Building Codes classify these types of facilities as Use Group A-3 and require automatic and manual FAS to be installed. Automatic detection is required in each mechanical equipment, electrical, transformer, telephone equipment or similar room, in elevator machine rooms and elevator lobbies. NFPA 130 requires automatic detection in all ancillary spaces. Based on the combined requirements, the FAS that are to be replaced will be designed in accordance with the following guidelines.

- a. Remove all of the components of the existing FAS being replaced.
- b. Provide new analog addressable fire alarm control panel located in the accessible location. The panel shall include emergency voice annunciation and emergency voice communication system.
- c. FACP in the enclosed stations shall have manual switches (or provisions for switches) and other hardware for automatic and manual operation of the smoke evacuation system.
- d. Provide a fire alarm annunciator at a readily accessible location, as required by NFPA 130
- e. Provide/replace area smoke detectors in the elevator lobby, elevator machine room and elevator shaft for elevator recall functions.

- f. Provide/replace heat detectors in the elevator machine room and elevator shaft protected by the sprinkler system to shut down power to the elevator controllers.
- g. Provide/replace heat detectors in the escalator machine room and escalator pit protected by the sprinkler system to shut down power to the escalator controllers
- h. Provide emergency voice evacuation system including speaker occupant notification appliances for fire alarm and emergency evacuation public address system installed throughout the station, including the platforms. The fire alarm audible notification system shall take priority over the stand alone public address system.
- i. Provide ADA compliant visual (strobe) occupant notification appliances in public access areas throughout the station, including platforms, and in all employee common areas.
- j. Provide an interface between the fire alarm emergency evacuation system and the public address (PA) system. The interface would interconnect the Train Master's microphone in the Control Centers (PTCC and HCC) to station's fire alarm emergency voice evacuation system through the PATH SCADA system. The emergency messages from the Control Centers would temporary disable operation of the PA system so that the emergency voice messages from the Train Master are re-directed to the fire alarm emergency evacuation system.
- k. The operation of the tunnel emergency ventilation system shall remain a part of the SCADA control system and not be integrated into the FAS.

4. Passenger Stations - Platform Areas

Provide/replace emergency alarm reporting device (telephone boxes or manual pull station) on passenger platforms so that the travel distance does not exceed 325 feet.

5. Passenger Stations - Ancillary Spaces

- a. Provide/replace area smoke detectors in the electrical, mechanical, communication, control rooms and electrical substations for general alarm.
- b. Provide/replace smoke detectors installed under the raised floor in the communication rooms.

6. Substations

The Building Codes classify these types of facilities as Use Group F-2 and do not require automatic FAS to be installed. NFPA 130 requires heat and smoke detectors to be installed in power traction substations and be connected to operation control station. Even though not all of the surveyed substations are “power traction substation”, we anticipate providing manual and automatic FAS in these facilities. The existing FAS that are identified as to remain will remain as currently configured.

The FAS in the substations that are to be replaced will be designed in accordance with the following guidelines.

- a. Remove all of the components of the existing FAS being replaced.
- b. Provide new analog addressable fire alarm control panel located in the accessible location in the "free-standing" substations, or utilize signaling line circuits and annunciation circuits from the facility's new FAS in the facilities where the substation is an integral part of the facility.

- c. Provide/replace area smoke and heat detectors in the substation room, associated electrical, mechanical, communication, and control rooms configured for general alarm.
- d. Provide/replace area smoke detectors installed under the raised floor in the communication rooms.
- e. Emergency voice evacuation system is not required for this facility type. Provide audible horn occupant notification appliances throughout the facility. The fire alarm audible notification system will take priority over the standalone PA system.
- f. Provide ADA compliant visual (strobe) occupant notification appliances throughout the facility

7. Shops and Yards (Maintenance Facilities)

The International Building Code, 2009 New Jersey Edition, classify these types of facilities as Use Group F-2 and do not require manual or automatic detection FAS to be installed. NFPA 130 requires a manual FAS and an automatic detection system (smoke and/or heat detectors) in equipment rooms. In addition, to comply with the New Jersey Rehabilitation Code, any areas currently protected by the manual and/or automatic FAS shall maintain the same or greater level of protection.

The existing FAS that are identified as to remain shall remain as currently configured.

The new FAS in the maintenance facilities that are to be replaced shall be designed in accordance with the following guidelines.

- a. Remove all of the existing FAS components being replaced.
- b. Provide new analog addressable fire alarm control panel located in an accessible location.
- c. Provide/replace area smoke and heat detectors in the substation room, associated electrical, mechanical, communication, and control rooms configured for general alarm.
- d. Provide/replace area smoke detectors installed under the raised floor in the communication rooms.
- e. Provide/replace area smoke detectors in the elevator lobby, elevator machine room and elevator shaft for elevator recall functions.
- f. Provide/replace heat detectors in the elevator machine room and elevator shaft protected by the sprinkler system to shut down power to the elevator controllers.
- g. Emergency voice evacuation system is not required for this facility type. Provide audible horn occupant notification appliances throughout the facility. The fire alarm audible notification system will take priority over the stand alone PA system.
- h. Provide ADA compliant visual (strobe) occupant notification appliances throughout the facility.

8. Tunnel Ventilation Buildings

The Building Codes classify these types of facilities as Use Group U and do not require manual or automatic detection FAS to be installed. NFPA 130 requires a manual FAS and an automatic detection system (smoke and/or heat detectors) in equipment rooms. In addition, to comply with the New Jersey Rehabilitation Code, any areas currently protected by the manual and/or automatic FAS shall maintain the same or greater level of protection.

The new FAS in the tunnel ventilation buildings shall be designed in accordance with the following guidelines.

- a. Remove all of the existing FAS components being replaced.
- b. Provide new analog addressable fire alarm control panel located in an accessible location.
- c. Provide/replace area smoke and heat detectors configured for general alarm.
- d. Emergency voice evacuation system is not required for this facility type. Provide audible horn occupant notification appliances throughout the facility. The fire alarm audible notification system shall take priority over the standalone PA system.
- e. Provide ADA compliant visual (strobe) occupant notification appliances throughout the facility.
- f. The operation of the tunnel emergency ventilation system shall remain as part of the SCADA control system and not be integrated into the FAS.

9. Lift Bridge Buildings

The Building Codes classify these types of facilities as Use Group U and do not require manual or automatic detection FAS to be installed. NFPA 130 requires a manual FAS and an automatic detection system (smoke and/or heat detectors) in equipment rooms. In addition, to comply with the New Jersey Rehabilitation Code, any areas currently protected by the manual and/or automatic FAS shall maintain the same or greater level of protection.

The new FAS in the lift bridge buildings shall be designed in accordance with the following guidelines:

- a. Remove all of the existing FAS components being replaced.
- b. Provide new analog addressable fire alarm control panel located in an accessible location.
- c. Provide/replace area smoke and heat detectors configured for general alarm.
- d. Emergency voice evacuation system is not required for this facility type. Provide audible horn occupant notification appliances throughout the facility. The fire alarm audible notification system will take priority over the standalone PA system.
- e. Provide ADA compliant visual (strobe) occupant notification appliances throughout the facility.
- f. The operation of the tunnel emergency ventilation system shall remain as part of the SCADA control system and not be integrated into the FAS.

10. Signal Relay Rooms and Bungalows

The Building Codes classify these types of facilities as Use Group U and do not require an automatic FAS to be installed. NFPA 130 requires that heat and smoke detectors be installed at relay bungalows and shall be connected to an operation control station (not necessarily through the FAS). The FAS in the signal relay rooms and bungalows have been identified as to remain as currently configured. The Signal Relay and Bungalows are mostly located in or adjacent to other PATH facilities.

- a. The FAS in the Signal Relay Rooms that are located in a facility with an FAS shall be monitored by the facility's FAS.
 - 1) Provide addressable monitoring modules and notification appliances to monitor the Signal Relay Room's existing fire alarm/suppression system and notify the occupants of a fire event in the facility.
 - 2) Extend the facility's fire alarm circuits to the Signal Relay Room to interconnect with the addressable modules and notification appliances.
- b. The FAS in Signal Relay Rooms and Bungalows that are adjacent to other PATH facilities or are "free-standing" shall be configured to transmit alarm, supervisory and trouble signals to an external CMS, PTCC and HCC.
 - 1) Provide IP-DACT and interconnect the alarm, supervisory and trouble signals from the existing FAS to the IP-DACT to transmit the signals to PTCC and HCC.
 - 2) Provide DACT and interconnect the alarm, supervisory and trouble signals from the existing FAS to the DACT to transmit the signals to the external CMS.

11. Voice Evacuation System

Some of the passenger stations are equipped with an emergency voice evacuation system as part of the FAS, while other train stations are not equipped with emergency voice evacuation system as part of the FAS. The passenger stations that are equipped with emergency voice evacuation system as part of the FAS can be operated from PTCC and HCC. PATH has installed new PA systems to provide a better sound quality global system for all of the PATH stations controlled from PTCC or the HCC. Even though the PA systems provide better sound quality, they are not supervised and do not comply with emergency voice evacuation requirements of NFPA 72. Therefore, the PA systems cannot be used as an alternative to an approved emergency evacuation system. The new fire alarm emergency voice evacuation systems in all passenger stations shall be designed to comply with the requirements of NFPA 130 and NFPA 72.

NFPA 72 requires a UL Listed emergency voice evacuation system to be installed in the passenger stations. NFPA 130 requires the ability to initiate emergency voice messages from the Control Centers, but does not indicate whether the means to transmit these emergency messages are required to be UL Listed. Therefore, the SONET/SCADA system can be configured to interconnect to the UL Listed emergency voice evacuation system in the passenger stations and be used to transmit emergency voice messages from the Control Centers.

12. System Interfaces with HVAC Equipment

FAS interface with HVAC equipment consists of duct smoke detectors and associated shut down/closure of HVAC units, smoke dampers, exhaust fans, etc.

- a. Duct smoke detectors are located on either the supply and/or return ducts of HVAC units shall be individually controlled by addressable control/relay modules.
- b. Fire/smoke and smoke dampers have smoke detectors located within 5 feet of the damper and are individually controlled by addressable control/relay modules.
- c. All HVAC shutdown/closure interfaces are provided by either addressable control/relay or monitor modules connected to signaling line circuits (SLC) from the fire alarm control panel. The modules are located within 3 feet of the control point and shall be wired in a Class A configuration.
- d. Control of exhaust fans, HVAC units are accomplished through a direct connection interface with unit's control circuit or through the building automation system.

13. System Interfaces with Other Fire Protection Equipment

FAS interface with other fire protection equipment consists of fire sprinkler systems, standpipes, fire pumps, and other fire suppression systems such as Halon and FM-200.

- a. All fire protection equipment monitoring is provided by addressable monitor modules connected to signaling line circuits (SLC) from the fire alarm control panel. The modules are located within 3 feet of the control point and shall be wired in a Class A configuration.
- b. Addressable modules configured for alarm initiating (monitoring waterflow and alarm pressure switches, etc.) are programmed as a latching circuit that shall require the fire alarm panel to be reset once the condition is cleared.
- c. Addressable modules configured for supervisory initiating (monitoring valve tamper switches, etc.) are programmed as non-latching and shall return to normal (non-supervisory condition) once the supervisory condition is cleared.
- d. Fire sprinkler fire booster pump controllers are monitored in accordance with NFPA 20. All valve tamper switches associated with the fire booster pump including by-pass valves and test loop valves are monitored for a supervisory condition.
- e. Fire suppression system control panels are monitored for alarm, supervisory and trouble, at a minimum.

14. System Interfaces with Vertical Transportation Equipment

The vertical transportation equipment consists of elevators and escalators. The interconnection requirements to interface the FAS to vertical transportation equipment is defined and regulated by NFPA 72 *Fire Alarm and Signaling Code* and ASME A17.1 *Safety Code for Elevators and Escalators*. Escalators are interfaced with the FAS only when used as a means of egress as defined in NFPA 130. Escalators used for egress are presently interconnected to the existing FAS and this functionality shall be retained with any new FAS.

- a. All interface connections for elevator and escalator functions are provided by either addressable control/relay or monitor modules connected to signaling line circuits (SLC) from the fire alarm control panel. The modules are located within 3 feet of the control point and shall be wired in a Class A configuration.

- b. Escalator shut down is provided for all escalators with the capability of escalator shutdown upon fire alarm conditions reported to the fire alarm control panel. The escalator shutdown function within the escalator shall remain as currently configured.
- c. Elevator Firefighters' Emergency Operation functions shall include smoke and heat detection to initiate the fire safety functions.
 - 1) Smoke detectors to initiate elevator recall functions are located in each elevator lobby, in the elevator machine room, and at the top of the elevator shaft.
 - 2) Heat detectors to initiate elevator for power shutdown prior to sprinkler activation are located in the top of shaft and the elevator machine room. Power is shut down by means of a power shunt trip breaker.
 - 3) Elevators shall be recalled to the primary recall level (usually the level of egress) or a secondary recall level (New Jersey only) if the primary level smoke detection device is in alarm.
 - 4) The power source used to initiate elevator power shutdown function is monitored to ensure power source is present to initiate the elevator power shutdown function.

15. Branch Circuit Wiring to FAS

Branch circuits must comply with the National Electrical Code (NEC) as adopted and amended by the City of New York and the State of New Jersey. Article 760 of the NEC regulates FAS and outlines requirements over and above those required for normal branch circuits. Dedicated circuits are required for fire alarm equipment and shall be properly marked and access restricted so that they cannot be mistakenly shutdown or tampered with.

16. Fire Alarm Network

Each fire alarm panel (FAP) shall be equipped an Internet Protocol Digital Alarm Communicator-Transmitter (IP-DACT) which shall communicate, over the existing SONET IP network, to an Internet Protocol Digital Alarm Communicator-Receiver (IP-DACR) located at the PTCC and HCC. For locations where fire alarm panels are located within 300 feet of a SONET node, the panels shall be connected directly by Cat5E cables to the existing SONET Ethernet switch. For locations remote of a SONET node (e.g. Bungalows) the fire alarm panel shall be connected by fiber optic cables to the closest existing SONET Ethernet switch. At each FAP, the electrical signal shall be converted to an optical signal using fiber optic media converter (FMC). At each end, near the FAS and also at the PATH SONET cabinet, a media converter shall be installed. The existing Ethernet network that is established on the SONET system will be provisioned to carry the FAS signals.

17. Fiber Optic Infrastructure Approach:

There are three (3) fiber optic cable rings connecting the majority of PATH facilities. For each facility building that is on a ring, access to the fiber optic cable is obtained through a rack mounted fiber optic splice/patch panel (SP/PP-fiber optic node) located in the SONET cabinet (or a wall mounted patch panel).

In each facility building where the FAP is collocated with the SONET node the FAP interface point shall connect to the existing SONET Ethernet switch through a new CAT5E cable.

Any facility (building/structure) that is further than 300 feet from the existing SONET communication room shall require a separate fiber optic connectivity to that fire alarm panel.

Upon approval, by the Authority, of the Design Criteria Summary, the Consultant shall proceed with the performance of Task F Final Design and Contract Documents (Stage III).

TASK E. FIELD VERIFICATIONS AND INSPECTIONS

1. Prior to conducting the field inspections as required in this task, submit to the Authority for review and approval samples field inspection and verification forms that shall be used to collect and present the existing equipment data required to perform the Final Design of the FAS. A single form shall be used for each line of equipment containing the data particular for each type of equipment. Forms shall include but not limited to the following:
 - a. Survey date and approximate time of survey/data collection.
 - b. Survey personnel names.
 - c. Facility name.
 - d. Note any discrepancies between equipment identification names and facility drawings on the survey form.
2. Upon review and approval by the Authority of the Field Surveys and Inspections Schedule under Task A and the field inspection and verification forms described in item 1 above, proceed with performance of this task. Coordinate site surveys with all involved disciplines, as required.

Perform all site assessment, data gathering and site surveys to verify/identify existing conditions of the Fire Alarm equipment and systems at all PATH Facilities, including:

- a. taking all appropriate field measurements.
- b. photographing and identifying any areas of concern and/or system conflicts.
- c. identifying FACP initiating devices such as smoke detectors, duct detectors, input/output modules, manual pull stations, etc.
- d. identifying electronic systems and devices used for remote monitoring such as telephone lines, network system, etc.
- e. identifying existing tamper and flow switches.
- f. interfaces with other systems such as HVAC equipment, unlocking door mechanisms, Fire Protection systems, and remote monitoring devices. Survey mechanical equipment (HVAC, vertical transportation, fire dampers, plumbing and fire protection, tamper and flow switches) and associated mechanical and plumbing controls connected to the FAS.
- g. identifying electrical power source and requirements for new FAS components.

- h. Existing systems, to remain, should be evaluated to confirm that they are in good working order, providing sufficient functionality as required to communicate with the new systems to be installed.
 - i. Survey space dimensions and clearances for locations where new equipment is to be installed.
3. Provide probe, inspection, test pit locations, as required. Actual locations shall be as approved by the Authority, prior to proceeding with site investigation.
4. Submit copies of completed field findings on inspection reporting forms provided by the Consultant, as approved by the Authority, and meet with Authority staff to discuss those findings.
5. Conduct additional field inspections as required during the performance of services hereunder, and as approved in advance by the Authority.
6. Report to the Authority any environmental issues or hazardous conditions with potential to impact the construction phase.
7. The Authority will provide access and servicing equipment as appropriate at all probe and/or inspection locations as requested by the Consultant, including ceiling openings, PATH operational rooms and spaces, and providing temporary barricades.

TASK F. FINAL DESIGN AND CONTRACT DOCUMENTS (STAGE III)

Prior to the performance of this task you shall submit your specific Quality Control/Quality Assurance Program for the professional services to be performed in connection with the final design and the preparation of Contract Drawings and Specifications specified herein. Upon completion of the contract documents required hereunder, you shall submit a letter to the Engineer certifying that you have performed the Quality Control/Quality Assurance Program as defined by you at the start of this Task.

1. Contract Drawings
 - a. Prepare a final design and Contract Drawings for work to be performed by a Contractor based on the referenced documents, and the approved work products prepared in the forgoing tasks, as appropriate. For contract drawings, observe the following procedures:
 - 1) Calculations shall clearly distinguish between new and existing construction. Documents from which existing dimensions and existing member properties were obtained shall be referenced in the calculations.
 - 2) Design calculations for design review/audit shall be submitted at the 100% Authority Agency wide review.
 - 3) All technical software employed by the Consultant for analysis, design, or submission as a computer output/deliverable, used for assistance in making any of the project/technical decisions and/or demonstrating compliance with any applicable codes, regulations, specifications, and standards, including those provisions specifically requested by the Authority, shall have been validated by the Consultant and sub consultants (as appropriate) to ensure that the output results are acceptable, correct, and consistent with the input parameters and assumptions and that the software is suitable and sufficient for the specific types

of work encountered. This requirement for the validation of technical software applies to all commercial off-the-shelf or in-house developed software (e.g., Excel spreadsheets and MathCAD worksheets).

- 4) Submit with calculations, indexed and clearly identified input and output sheets including design constants, equations used, and all references.
 - 5) All engineering calculation sheets shall be numbered, dated, and indexed and shall include the names of their originator(s) and checker(s). The index sheets shall define the total number of sheets submitted and shall bear the seal and signature of an engineer holding a Professional Engineer's license in the State of New York who is familiar with and responsible for the design.
- b. The Contract Drawing package shall include General Contract Drawings such as Title sheet, Index of Drawings sheet, location map and site plan sheets, and General Notes sheet. The cover sheet shall have the appropriate places for signature by Authority staff. No other information shall appear on the Title sheet. The Title sheet will be the only Contract Drawing prepared by the Consultant that will be signed by Authority.

The Consultant shall produce Contract Drawings that comply with the **PA - Engineering/Architectural Design (EAD) CADD Standards**; and

PA - Contract unit Review Standards. The engineering drawings shall be prepared in both AutoCAD (DWG) and Design Web Format (DWF.)

The Authority has also prepared **PA - Standard Technical Specifications Index**, which shall be used to the maximum extent possible.

The Standards can be downloaded from the Authority's website, and which links are listed in Section VII - "Information And Materials Provided By The Authority."

- c. Sign and seal all drawings. In addition:
- 1) Any subconsultant shall sign and seal its own drawings. The Consultant's logo shall also appear on each drawing prepared by a subconsultant.
 - 2) All drawings prepared for New York contracts shall be signed and sealed by a Principal of the firm with a New York Professional Engineer or New York Registered Architect License.
 - 3) All drawings prepared for New Jersey Contracts shall be signed and sealed by a Principal of the firm with a New Jersey Professional Engineer's or New Jersey Registered Architect's License. The original tracing shall be backshaded with carbon paper in the area of the embossed seal so that the seal will print. In addition, following shall be placed below the seal:

ORIGINAL SEALED AND SIGNED BY:

N.J.P.E. # OR N.J.R.A. #

- 4) When work is to be performed in New York and New Jersey the drawings shall be signed and sealed by a Principal of the firm. Two seals shall be placed on the

drawings. A New York seal and a New Jersey seal (backshaded with carbon paper). The New Jersey seal shall have the following beneath the seal:

ORIGINAL SEALED AND SIGNED BY:

N.J.P.E. # OR N.J.R.A. #

- 5) The Contract Drawings shall be complete for all design items in sufficient detail and appropriate scale such that member and equipment layouts, material, size, location, geometry, notes and details are established and shown. Said drawings shall be clear and shall include all details and information required for the project such that shop drawings can readily be developed, and shall include, but not be limited to the following:
 - d. Document existing equipment, not in scope, for coordination purposes (for clearance, space requirements, etc).
 - e. Indicate all demolition and removals as part of the contract documents.
 - f. Develop FAS diagrams, show equipment layouts and staging plans for each location of the entire PATH system as described in Exhibit 1, including existing intermediate and new Stages describing how they relate to each other.
 - g. The contract drawings shall be prepared in accordance with the approved work products of the forgoing tasks, and as required herein. They shall provide and installation work, and shall include but not limited to:
 - 1) discipline's notes, legend, abbreviations, and list of manufacturers.
 - 2) plans and sections showing accurate equipment layouts and conduit routing drafted to scale.
 - 3) FAS sequence of operation notes and Fire Alarm matrix.
 - 4) riser and wiring diagrams showing all Fire Alarm components and interfaces with other systems such as HVAC, Vertical Transportation, Fire Protection, Plumbing, Network, etc.
 - 5) construction staging as required to avoid interruptions to the Facility's operations.
 - 6) equipment mounting details.
 - 7) equipment and power panel schedules.
 - 8) extent of Environmental removal: abatement and disposal of asbestos containing material, and spot removal of lead paint.
2. Technical Specifications: Prepare Specifications to include the work specified above in accordance with the following:
 - a. Division 1 - Provide the following information for the Authority Standard Division 1 Specifications, which will be prepared by the Authority:
 - 1) Information specifically related to Conditions and Precautions, Staging, Available Property, Temporary Structures, and other General Provision Requirements of the subject contract.

- 2) A list of the Contract Drawings.
 - 3) A list of unit price items, where appropriate, with description and estimated quantities for each item.
- b. Technical Specifications
- 1) Comply with the Authority's [Contract Unit Review Standards](#) and [Standard Technical Specifications Index](#) (Refer to Section VII – Information And Materials Provided By The Authority).
 - 2) The Authority has prepared certain standard technical specifications, which will be made available in hard copy as requested by the Consultant. These standard technical specifications must be used by the Consultant to the maximum possible extent and may not be altered or revised in any way by the Consultant. Since these standard Technical Specifications may contain materials and related procedures, which are not appropriate to the specific Contract being proposed, the contract drawings must clearly define the materials and scope of work. Division 1 of the Authority's specifications dealing with general provisions, includes the following language:

"In case of a conflict between a requirement of the Contract Drawings and a requirement in Division 1 of the Specifications, the requirement of Division 1 shall control. In case of a conflict between a requirement contained in other Divisions of the Specifications and a requirement of the Contract Drawings, the requirement of the Contract Drawings shall control."
 - 3) The Consultant shall prepare any technical specifications, which are not available from the Authority. Any technical specifications prepared by the Consultant shall be in the same format as the Authority standard technical specifications and the Consultant shall make any changes therein requested by the Authority throughout its various reviews. The Consultant shall prepare the Technical Specifications for the FAS and the Fire Alarm Network as required under this Contract.
 - 4) The Consultant shall comply with the "Instructions to Consultants for Preparation of Port Authority Construction Contract Documents" which will be made available upon commencement of work by the Consultant.
3. Sole Source Documentation
- a. Sole Source criteria and scope shall be provided in contract documents based on information provided by the Authority.
 - b. Provide Sole Source documentation for any equipment or services deemed necessary to be procured on a sole source basis. Sole source documents shall include vendor's formal quotation based on Final Contract Documents clearly identifying the scope of sole source procurement.
4. Contract Documents – Additional Information
- a. The Contract Documents shall be prepared as one (1) contract package organized and grouped to allow the construction to be executed in the following three-phase sequencer:
 - 1) Fire Alarm Network and Head-End Monitoring Stations

- 2) FAS in the Passenger Stations
 - 3) FAS in the other PATH Facilities
- b. The Contract Documents submissions shall consist of:

Contract Drawings shall be complete for all design items in sufficient detail and appropriate scale such that member and equipment layouts, material, size, location, geometry, notes and details are established and shown. Said drawings shall be clear and shall include all details and information required for the project such that shop drawings can readily be developed, and shall include, but not be limited to the following:

- 1) Document existing equipment, not in scope, for coordination purposes (for clearance, space requirements, etc).
- 2) Indicate all demolition and removals as part of the contract documents.
- 3) Develop FAS diagrams, show equipment layouts and staging plans for each location of the entire PATH system as described in Exhibit 1, including existing intermediate and new Stages describing how they relate to each other.
- 4) The Contract Drawings shall allow for the preparation of Shop Drawings during the construction stage.
- 5) The Contract Drawings provide clear removal and installation Work and shall include but not limited to the following:
 - a) Discipline's notes, legend, abbreviations, and list of manufacturers.
 - b) Plans and sections showing accurate equipment layouts and conduit routing drafted to scale.
 - c) FAS sequence of operation notes and Fire Alarm matrix.
 - d) Riser and wiring diagrams showing all Fire Alarm components and interfaces with other systems such as HVAC, Vertical Transportation, Fire Protection, Plumbing, Network, etc.
 - e) Construction staging as required to avoid interruptions to the Facility's operations.
 - f) Equipment mounting details.
 - g) Equipment and power panel schedules.
 - h) Extent of Environmental removal: abatement and disposal of asbestos containing material, and spot removal of lead paint.
 - i) Support documents such as sketches, calculations, equipment catalog cuts, etc. utilized in the development of the Contract Documents.
 - j) Construction Cost Estimate and Construction Schedule as specified in Task G.
 - k) List of required contractor submittals and anticipated long lead items.
 - l) Constructability Review - Evaluation of feasibility of design that may include narratives, drawings and/or reports. The Constructability review shall:

- i. evaluate the feasibility of the design and determine if there are built-in problems and design flaws that may impede construction by impacting to any stakeholder in terms of time, cost or quality.
 - ii. correct conflicts and clarify requirements before issuing the documents for bidding.
 - iii. be performed by experienced Construction Managers and shall be independently of the designer.
 - iv. be performed on the Contract Drawings, the technical specifications, the bid and the construction schedules.
 - m) Available Documents - Documents that contain information the Authority possesses that might be of use to a bidder.
 - n) Authority approved Sole source letters.
 - o) Support documents needed by the Authority to acquire Construction & Environmental Permits & Approvals. Provide environmental and other services related to permit application preparation, including identifying all required permits and approvals, providing supporting documentation, submittals and coordination with federal, state and local agencies responsible for issuing project approvals.
- 6) During the Bidding Process for Stage IV construction work, the Consultant shall:
 - 1) prepare responses to questions asked by the proposers during the bid period in the form of Requests for Information (RFIs);
 - 2) prepare contract addenda including engineering calculations, Contract Drawing and Technical Specification revisions, as necessary or as requested by the Chief Engineer, for Authority approval and issuance by the Authority; furnish signed and sealed originals for final printing;
 - 3) correct Contract Drawings to addenda when directed by the Chief Engineer after award of the Contract to produce a conformed electronic drawing set;
 - 4) review conformed technical specifications for conformance with the contract drawings;
 - 5) upon request, assist Authority staff in Items specified below. Authority staff will:
 - a) Prepare Information for Bidders, Form of Contract, Division 1 of the Specifications and the Analysis of Bid and Contract Progress Schedule.
 - b) Review with, and transmit comments from, various Authority Departments to the Consultant for incorporation into the Contract Documents.
 - c) Review addenda with and obtain approval of various Authority Departments.
- c. The 50% submission shall include, but not limited to:
 - 1) Complete Fire Alarm riser diagrams for all locations indicating addresses of each device including fire alarm control panels, annunciators, smoke detectors, duct

smoke detectors, heat detectors, strobe lights, speakers and/or combination of speaker/strobe lights, flow and tamper switches, monitoring modules, etc. The FAS riser diagram shall indicate interface with HVAC equipment, as appropriate, vertical transportation and fire suppression systems.

- 2) Fire detection system layout plans for all system locations. Verify room/area names to be consistent with addresses on riser diagrams.
 - 3) Network Schematic Diagram for the entire PATH system showing each location as per Exhibit 1.
 - 4) AC power connections for FAS components as required. Utilize emergency power source if available. Show panelboard schedules of affected power panels.
 - 5) Grounding for FAS components as required.
 - 6) List of all manufacturers and equipment.
 - 7) Construction staging/phasing plans and schedule.
 - 8) Preliminary Construction cost estimate.
 - 9) List of applicable standard technical specifications.
 - 10) Detailed custom technical specifications.
 - 11) Sole Source letters and justifications, as appropriate.
 - 12) Catalog cuts for all components.
- d. The 100% submission shall include:
- 1) Fully developed drawings and documents of those produced for the 50% submission and any additional drawings and documents identified during the 50% submission review.
 - 2) 100% submission shall incorporate the Authority's prior comments, and finalize required contract documents.
- e. The Law Submission
- The Law submission shall consist of the documents produced for the 100% submission revised to incorporate the Authority's prior comments provided for the 100% submission. The Law submission shall include:
- 1) Contract Drawings;
 - 2) Custom Specifications;
 - 3) Construction cost estimate; and
 - 4) Sole Source/Sole Brand letters.
- f. The format of the 50%, 100%, and Law submission documents shall consist of:
- 1) Contract Drawings: six (6) 22" x 34" full size and six 11" x 17" half size printed paper copies.
 - 2) Construction Cost Estimate: six (6) printed copies in letter size format.
 - 3) Non-standard Specifications: six (6) printed letter size copies.

- 4) Sole Source Letters: six (6) printed letter size copies.
- 5) All Contract Documents Submissions shall also be provided in electronic version in the form of computer compact disks (CD/DVD). The disks shall include the editable and the non-editable electronic files.
- g. The Final submission shall include drawings and documents produced for the 100% submission with all prior comments/drawings, etc. addressed and incorporated into this final submission. This submission shall include:
 - 1) Signed and sealed 22" x 34" full size Mylars.
 - 2) Scanned copies of the signed and sealed Contract Drawings. The scanned copies shall include six (6) 22" x 34" full size paper copies, thirty (30) 11" x 17" half size paper copies, and an electronic copy in Adobe "pdf" format. Each printed set shall be collated and stapled complete Contract Drawings set. The electronic copy shall include the DWG and DWF files and all other files used in the preparation of the Contract Drawings. The final DWF files shall be printed with the following Contract border information "ORIGINAL SIGNED BY" and the name of the person whose signature appears on the signed and sealed Mylars. The folder structure of the electronic files shall comply with the Authority's CAD standards.
 - 3) Approved Sole Source Letters. The final Sole Source signed letters shall be submitted six (6) scanned printed letter size copies and electronic copies of the scanned document in Adobe "pdf" format and the final Authority's Microsoft Word template file used to prepare the signed Sole Source Letter.
 - 4) Signed QA/QC letter confirming that the Quality Assurance and Quality Control program specified in Task F has been implemented. Submit signed letter with an electronic copy of the scanned document in Adobe "pdf" format.
 - 5) Signed Construction Cost Estimate and Construction Schedule. The original signed estimate shall be submitted with six (6) printed scanned copies in letter size format. The electronic submission shall include a copy of the scanned version in Adobe "pdf" format, a copy of the Authority's Excel template file and a copy of the Microsoft Project file used to prepare the final Estimate and Schedule documents.
 - 6) Final Non-standard Specifications. The final submission shall include six (6) printed letter size copies. The electronic submission shall include a copy in Adobe "pdf" format and a copy of the Authority's Microsoft Word template file used to prepare the final Specifications.

TASK G – CONSTRUCTION COST ESTIMATE AND CONSTRUCTION SCHEDULE

1. Construction Cost Estimate. Follow the Authority's guidelines and format, for each submittal in accordance with the Authority's "Construction Estimating Guide", a copy of which is available from the Authority. The Construction Cost Estimate shall comply with the following:
 - a. All estimates shall be coordinated with Authority Estimating Unit (AEU) prior to submission. The Consultant shall estimate five (5) calendar days for receipt of AEU comments, if any.

- b. The Construction Cost Estimates shall not include a design contingency.
 - c. The Construction Cost Estimates shall be accurate and complete to reflect the actual construction cost of the each part of the project.
 - d. The construction cost estimates shall also include itemized costs of all “Net Cost” and “Unit Cost” items. All net cost items should be reviewed and approved by the Authority prior to inclusion in the estimate.
 - e. Estimates for the Protection and Maintenance of existing landscape and hardscape features to remain during construction shall be estimated as a combination Unit Price/Lump Sum and Net Cost items, as appropriate.
2. Provide an estimate of the time required to complete construction, as well as an estimate of delivery time for all long lead items. Present the Construction Schedule in bar chart form using days, weeks or months as appropriate for the unit of time.
 - a. Provide an estimate of the time required to complete construction, incorporating staging and permits as well as estimated delivery times for all long lead-time items.
 - b. The construction schedule shall be prepared using Primavera P6 or industry software compatible with P6.

TASK H. POST AWARD SERVICES (STAGE IV)

The Consultant shall not proceed with performance of this task without express written direction from the Authority to proceed. The Consultant’s Post-Award services shall include but not be limited to:

1. Submit your specific Quality Control/Quality Assurance Program for the professional services to be performed in connection with the performance of your Post Award Duties specified hereunder.
2. Review and approve or disapprove all shop drawings, documents, catalog cuts and samples for conformance with the Specifications and Contract Drawings within ten (10) working days and twenty (20) days for calculations after receipt of said articles from the Contractor, for those articles for which you are Engineer of Record. Indicate any corrections and additions as required. Advise the Authority thereof, giving the reasons for your decisions. Make all required distributions through final approval. Six (6) copies of each working drawing shall be required. The Authority’s electronic submittal process will be discussed at the pre-construction meeting by an Authority Document Control Manager.
3. As the Engineer of Record, review and validate the design and details of all structures installed in or in the vicinity of public areas during the construction where the safety of the public may be affected by the structural integrity of such structures. Some of these structures may include, but are not limited to protective scaffolding, storage sheds, fences and barricades, temporary support, bracing and shoring system, temporary signage, lighting and utility supports, etc.
4. In addition to any on-site visits and observations required as the Engineer/Architect of Record to attend at the request of the Authority, two (2) pre-construction meetings and two (2) field meeting for each month of the construction period.

5. Prepare and submit, at the first pre-construction meeting, an outline list of required Contractor's submittals to include but not be limited to, working drawings, catalog cuts, samples, certificates and test reports, including submittal requirement in contract document.
6. Upon completion of construction, modify the Contract Drawings to "as-built" conditions and using contractor provided mark ups certify the same. The Authority will furnish the "as-built" information to be verified and incorporated.
7. Evaluate alternative construction details and materials as requested by the Authority.
8. Review and respond to all Requests for Information (RFI) within the allotted time as specified by the Authority.
9. When requested by the Authority, make post-award contract changes (PACC) with detailed estimates and make site inspections as required for the changes. All drawings developed for the PACC shall conform to Authority CAD and/or BIM Standards.
10. Maintain clear, dated records of all pertinent documents including but not limited to transmittals, submittals, and responses, RFIs and responses, meeting minutes, shop drawings mark-ups, designs, calculations or drawings prepared during the construction phase. These documents shall be forwarded to the Authority in bound form for their files. Sketches submitted in response to RFIs shall be formatted using the Authority Stage IV sketch border(s) provided by the Authority. Border templates will be provided prior to the start of Stage IV services. All documents should be posted electronically on the project website.
11. Review and comment on Warrantees, Certifications and Operation & Maintenance Manual(s) as required by the contract documents.
12. Prepare Operation Manual for the entire FAS to be used by PATH operation personnel.
13. Submit a conformed set of drawings in the following formats:
 - a. One (1) copy of a reproducible set of standard size (22" x 34") engineering drawings showing all information and details, along with 5 full size (22" x 34") copies.
 - b. Electronic files uploaded to the project website of those drawings indicated in Item 14a above in both DWG and DWF format. Provide three (3) sets of CD's if requested by the Authority.
14. Approve all factory test procedures submitted by the Contractor for testing the FAS at the factory.
15. Review and approve all factory test results.
16. Witness all field tests performed by the Contractor and approve the field test certifying that the FAS at each location works as designed.
17. Assist in preparation of the maintenance agreement with FAS Vendor/distributor, as required.
18. Compensation for the evaluations indicated in items 7 and 17 and any changes indicated in item 9, shall be computed in accordance with the paragraphs of the Agreement relating to compensation and shall not be charged against the estimated cost, provided that none of these items results from non-compensable work.

IV. SCHEDULE OF SUBMISSIONS

Milestone submissions shall be made at 50%, 100%, and final completion of the design work. The Authority currently anticipates that construction will start approximately five (5) months thereafter, with construction completion anticipated 3-years thereafter.

All deliverables identified herein (including meeting minutes, technical memorandum, Contract Documents, etc.) shall be provided in hard copy and electronic format as specified below. Electronic submissions shall include an editable and non-editable (e.g. pdf and DWF file) as appropriate. The folder structure of the electronic files shall comply with the Authority's CAD standards.

Submit the work identified above for review by the Authority within the number of weeks as stipulated below after receiving the Notice To Proceed (NTP) from the Authority.

STAGE III - SCHEDULE OF SUBMISSIONS		
Item No.	Submission Description	Weeks after NTP
1	Detailed draft schedule as required under Section III, Task-A. Authority comments will be forwarded to you within five (5) calendar days thereafter. Incorporate Authority comments and submit the revised schedule within two (2) workdays thereafter.	2
2	Six (6) printed bound copies and 1-copy in Adobe "pdf" format of the Consultant's safety training and program prior to the performance of the Field Inspection and Verification services as required in Section VIII and AHER/EPA certifications required under Section III, Task E.	3
3	All required licensing.	4
4	Results of criminal background checks from the previous 7-years for each person performing the required services and as required under Section VIII, item C.	4
5	Six (6) copies of the sample field inspection and verification forms required under Section III, Task E. Comments will be forwarded to you within seven (7) calendar days after receipt of said submission.	6
6	Updated Occupancy Classification as per Section III, Task C, the Design Criteria Summary as per Section III, Task D and a specific Quality Control/Quality Assurance Program to be followed as specified in Section III, Task F. Submit six (6) letter-size printed copies and an electronic copy in Adobe "pdf" format. The Authority comments will be forwarded to you within five (5) calendar days after receipt thereof. Incorporate Authority comments and resubmit the revised Design Criteria and QC/QA program within five (5) workdays thereafter.	12

STAGE III - SCHEDULE OF SUBMISSIONS		
Item No.	Submission Description	Weeks after NTP
7	50% submission of the Contract Documents. The Authority comments will be forwarded to you within three (3) weeks after receipt thereof.	43
8	Prepare and distribute compiled 50% comments submission.	47
9	100% submission of the Contract Documents. The Authority comments will be forwarded to you within three (3) weeks thereafter.	65
10	Prepare and distribute compiled 100% comments submission.	69
11	The Law submission of the Contract Documents for Law review. The Authority comments will be forwarded to you within four (4) weeks.	76
12	Prepare and distribute compiled Law submission comments.	81
13	Final submission of the Contract Documents	84

V. APPLICABLE CODES AND STANDARDS

The PATH facilities in the scope of this analysis are located in the two states of New York and New Jersey. As such, various codes and standards apply to the design and installation of new FAS in these facilities. The facilities are located in two different jurisdictions; therefore, more than one building code applies to the project. Facilities and stations located in New York City and New Jersey shall be evaluated under the most stringent code requirements of the two jurisdictions – regardless of the facility or station location. The application of the most stringent fire alarm requirements throughout each facility provides an additional level of safety for occupants using the PATH system in both the New York and New Jersey locations.

New York City

- Twenty-two (22) of the one hundred thirteen (113) PATH facilities are located in New York City; six of which are passenger rail stations. New York City adopts a construction code applicable to both new construction and renovations in existing facilities. The following codes and standards are applicable to the Fire Alarm upgrade and replacement projects in New York City:
- 2008 New York City Building Code (based on 2003 International Building Code) (NYCBC)
- 1968 Building Code of the City of New York (BCCNY)
- 2008 New York City Mechanical Code (based on the 2003 International Mechanical Code) (2008 NYCMC)

- 2011 New York City Electrical Code (based on 2008 *National Electrical Code*) (2011 NYCEC)
- 2008 New York City Fire Code (based on 2003 International Fire Code) (2008 NYCFC)
- 2002 NFPA 72 *National Fire Alarm Code* (as adopted and amended by the 2008 NYCBC appendix Q)

New Jersey

Seventy-eight (78) of the one hundred thirteen (113) PATH facilities are located in New Jersey; seven (7) of which are passenger rail stations. New Jersey adopts a construction code applicable to new construction and an existing building code for renovations in existing facilities. The following codes and standards are applicable to the Fire Alarm upgrade and replacement projects in New Jersey:

- Building subcode: 2009 International Building Code, New Jersey edition (NJBC)
- Rehabilitation subcode (revised as of 2012)
- Mechanical subcode: 2009 International Mechanical Code, New Jersey edition (2009 NJMC)
- Electrical subcode: 2008 *National Electrical Code*, (as amended by Uniform Construction Code §5:23-3.16) (2008 NJEC)
- New Jersey Uniform Fire Code: 2006 International Fire Code, New Jersey edition (2006 NJFC)
- 2009 International Fire Code (where specifically referenced by the facility subcode) (2009 NJFC)
- 2007 NFPA 72 *National Fire Alarm Code* (as adopted by the facility subcode)

Occupancy Classifications

The occupancy classification of the spaces for each facility must be evaluated to determine the applicable fire alarm requirements for the facility. The PATH facilities include the following occupancy classifications:

Facility or Space Use	Occupancy Classification
Passenger platforms and circulation spaces, large meeting and conference spaces	A-3, Assembly
Office space, incidental meeting and conference spaces	B, Business
Train yards and repair facilities	F-1, Factory Industrial
Signal Bungalows	F-2, Factory Industrial
Low-hazard storage	S-2, Storage

Buildings with multiple occupancies must have each space individually classified in accordance with the occupancy classifications outlined above. Typically, buildings with multiple occupancies are designed to be either separated mixed-use or non-separated mixed-use buildings. The required fire rated separation between different occupancies could not be

confirmed; therefore, the PATH buildings (e.g., passenger stations, JSTC) are classified as nonseparated mixed-use occupancies.

Non-separated occupancies must have the most restrictive applicable fire protection systems provided throughout the entire building or portion thereof in accordance with Section 508.3.2.1 and 508.3.1 of the NYC and NJ Building Code.

Required Systems

PATH has elected to voluntarily provide FAS throughout significant portions of the system. Although these systems are voluntary, the systems must be provided and designed as required by the applicable codes and standards. As such, the provisions outlined in this section related to required systems are the requirements for the voluntary systems.

The requirement for an FAS is based on the occupancy classification. The intent of this section is to outline the required system for each occupancy classification. As stated above, each facility shall be evaluated for compliance with the current construction codes adopted by the local jurisdiction. In addition, all passenger stations and trainways shall be evaluated for compliance with NFPA 130.

The requirements for new FAS are outlined in 907.2 of the 2008 New York City Building Code and 2009 IBC New Jersey edition. The following tables outline the required systems based on occupancies throughout the facilities. Specific building code and NFPA 130 requirements for passenger stations are outlined separately:

The following devices and systems are required to be monitored, supervised, or controlled by the FAS:

- A. Manual fire alarm boxes located on platforms of Stations (NFPA 130-5.7.2.3)
- B. Smoke detectors installed in elevator lobbies, machine rooms, hoistways in NYC and sprinklered hoistways in NJ for elevator recall (ASME A17.1-2.27.3, 2.27.3.2.1, 3.27)
- C. Smoke detectors installed in return air systems with a capacity of 2,000 cfm or more in facilities protected throughout with an automatic sprinkler system designed to initiate occupant notification. Where full coverage smoke detection is provided, these detectors are not required. (MC-606.2.1)
- D. Smoke detectors installed in multiple air-handling and supply systems with a capacity of 2,000 cfm or more. (MC-606.2.2)
- E. Smoke detectors installed downstream of the air filter in supply air risers with a capacity of 2,000 cfm or more. (NYCMC-606.2.4)
- F. Smoke detectors installed in at each level in return air risers serving two or more stories with a capacity of 15,000 cfm or more (MC-606.2.3)
- G. Smoke control systems in Stations initiated by manual controls from the operations control center (NFPA 130-7.6)
- H. Smoke control systems, including exhaust and stair pressurization systems (NJBC NYCBC 909.12)
- I. Escalators used for egress in Stations (NFPA 130-5.5.2.1)
- J. Existing escalators serving as means of egress in New York City (BCCNY 27-378(b))
- K. Sprinkler systems, including monitoring and alarms (NJBC NYCBC 903.4)

- L. Alternative fire extinguishing systems and hood exhaust systems (BC-904.3.5)
- M. Manual activation of post-fire smoke purge systems (NYCBC-912.2.3)
- N. Smoke and heat vents of enclosed shafts (NYCBC-910.5.2)
- O. Elevator hoistway vents (NYCBC-3004.6, NJBC-3004.3)
- P. Smoke activated doors and shutters (NYCBC-715.3.7.3, NJBC-715.4.7.3)
- Q. Smoke and heat vents in storage and factory facilities (BC-910.2)
- R. Existing mechanical, electrical, telecommunication or similar spaces 75 ft² or greater in area in New York City (27-979(b))
- S. Fire pumps (NYCFC-913.4, NJBC-913.4)
- T. Fire department communication systems (NYCBC-907.2.12.3, NJBC-907.2.13.2)

VI. ADDITIONAL INFORMATION FOR THE PREPARATION OF CONTRACT DOCUMENTS

The preparation of the Contract Documents as described in Task F shall also comply with the following:

- A. The project shall be developed using Computer Aided Design (CAD) technology as described in the Authority's CAD Standards Manuals. The CAD Standards Manual ensure that the Authority will receive and produce data in a consistent electronic format. These standards maintain an efficient exchange of electronic data between different companies, engineering and architectural disciplines and the compatibility of each entity's drawings.
- B. Contract Drawings may be reduced to one half-size prints before distribution for bidding. Tracings shall be prepared in such manner as to produce clear, legible drawings after half size reduction.
- C. Meet with the Authority and incorporate Authority comments after submittals.
- D. Document Management:
 1. Maintain clear, dated records of all pertinent documents including but not limited to transmittals, submittals and responses, Consultant or Authority requests and responses, meeting journals and minutes, drawings, original marked shop drawings, engineering design, calculations and drawings prepared during each project Stage. These documents shall be made readily available for review by the Engineer upon request. Upon the completion of project at the request of the Authority, all these documents shall be listed, filed and submitted to the Authority.
 2. Submit proposed paper and electronic formats of all deliverables for Authority approval prior to first or draft submittal; include this process on the appropriate schedule. In every instance when information can be communicated in several ways, propose the clearest and least complex method: outlines are preferred over text, matrices are preferred over narrative, complete diagrams are preferred over incomplete detailed drawings, and sketches and photographic images are preferred over complex rendered images.

3. Develop an internal document control and version control system for documents in coordination with existing Authority system.
4. Submit all documents to the Authority in both hard copy and electronic version simultaneously as specified in Section IV.
5. Update software as required, in consultation with the Authority.

VII. INFORMATION AND MATERIALS PROVIDED BY THE AUTHORITY

The Authority will make available for the Consultant's information certain documents. The Authority makes no representation or guarantee as to, and shall not be responsible for, their accuracy, completeness or pertinence, and, in addition, shall not be responsible for the conclusions to be drawn there from. They are made available to the Consultant merely for the purpose of providing it with such information as is in the possession of the Authority, whether or not such information may be accurate, complete or pertinent, or of any value to the Consultant. The documents were prepared for the purpose of providing information for the Consultant upon the present work, or other purposes, and form part of this Agreement.

All documents, as well as Authority standards, Authority mylar tracings and examples of Authority specifications will be made available to the Consultant, as required. Documents will only be available if the Consultant meets the Authority's security requirements.

A. Engineering Available Documents

1. [Estimating Guidelines](http://www.panynj.gov/business-opportunities/pdf/engineering-consultants-estimating-guidelines.pdf)
<http://www.panynj.gov/business-opportunities/pdf/engineering-consultants-estimating-guidelines.pdf>
2. [PA – Engineering/Architectural Design \(EAD\) CADD Standards](http://www.panynj.gov/business-opportunities/pdf/engineering-consultants-ead-cad-standard.pdf)
<http://www.panynj.gov/business-opportunities/pdf/engineering-consultants-ead-cad-standard.pdf>
3. [Project Delivery – Roles and Responsibilities](http://www.panynj.gov/business-opportunities/pdf/engineering-consultants-revised-roles-responsibilities.pdf)
<http://www.panynj.gov/business-opportunities/pdf/engineering-consultants-revised-roles-responsibilities.pdf>
4. [PA – Standard Technical Specifications Index](http://www.panynj.gov/business-opportunities/pdf/engineering-consultants-standard-specifications-index.pdf)
<http://www.panynj.gov/business-opportunities/pdf/engineering-consultants-standard-specifications-index.pdf>
5. [PA – Contract Unit Review Standards](http://www.panynj.gov/business-opportunities/pdf/contracts-unit-review-standards.pdf)
<http://www.panynj.gov/business-opportunities/pdf/contracts-unit-review-standards.pdf>
6. [PA – Sustainable Buildings Guidelines](http://www.panynj.gov/business-opportunities/pdf/PANYNJ_sustainable_buildings_guidelines.pdf)
http://www.panynj.gov/business-opportunities/pdf/PANYNJ_sustainable_buildings_guidelines.pdf
7. [Design Guidelines Introduction](http://www.panynj.gov/business-opportunities/pdf/discipline-guidelines/design-guidelines-introduction.pdf)
<http://www.panynj.gov/business-opportunities/pdf/discipline-guidelines/design-guidelines-introduction.pdf>
 - a. [Architecture](http://www.panynj.gov/business-opportunities/pdf/discipline-guidelines/architecture.pdf)
<http://www.panynj.gov/business-opportunities/pdf/discipline-guidelines/architecture.pdf>

- b. [Electrical](http://www.panynj.gov/business-opportunities/pdf/discipline-guidelines/electrical.pdf)
<http://www.panynj.gov/business-opportunities/pdf/discipline-guidelines/electrical.pdf>
- c. [Environmental](http://www.panynj.gov/business-opportunities/pdf/discipline-guidelines/environmental.pdf)
<http://www.panynj.gov/business-opportunities/pdf/discipline-guidelines/environmental.pdf>
- d. [Mechanical](http://www.panynj.gov/business-opportunities/pdf/discipline-guidelines/mechanical.pdf)
<http://www.panynj.gov/business-opportunities/pdf/discipline-guidelines/mechanical.pdf>
- e. [Structural](http://www.panynj.gov/business-opportunities/pdf/discipline-guidelines/structural.pdf)
<http://www.panynj.gov/business-opportunities/pdf/discipline-guidelines/structural.pdf>

B. Reference Documents:

1. Exhibit 1 consists of the following five drawings:
 - a. SK01 - Facility List
 - b. SK02 - Location Plans (Sheet 1 of 4)
 - c. SK03 - Location Plans (Sheet 2 of 4)
 - d. SK04 - Location Plans (Sheet 3 of 4)
 - e. SK05 - Location Plans (Sheet 4 of 4)
2. Exhibit 2 consists of the following three reports dated February 14, 2014:
 - a. PATH - Fire Alarm System Upgrade And Replacement Report - Stage I Design (Book 1 of 3)
 - b. PATH - Fire Alarm System Upgrade And Replacement Report - Stage I Design (Book 2 of 3)
 - c. PATH - Fire Alarm System Upgrade And Replacement Report - Stage I Design (Book 3 of 3)

VIII. CONDITIONS AND PRECAUTIONS

A. GENERAL

Immediately inform the Authority of any unsafe condition discovered at any time during the course of this work.

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

B. WORK AREAS

Limit inspection work to the areas necessary for the performance of such inspection and do not interfere with the operation of the facility without first obtaining specific approval from the Authority.

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 Authority and provide all security required for such equipment.

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

C. WORK HOURS

Perform inspection work at the existing Substation 2/2A between the hours of 8:00 A.M. and 4:00 P.M., Monday through Friday, unless otherwise directed by the Authority.

Perform inspection work at the existing Tunnels E and F between the hours of 12:00 A.M. and 6:00 A.M., Monday through Friday, unless otherwise directed by the Authority.

In any case, no work shall be performed at the site on a legal holiday of either the State of New York or the State of New Jersey.

D. FIELD SERVICES

The Consultant performing field services hereunder shall, at a minimum:

1. be qualified as per NFPA-70E;
2. have up-to-date training in electrical safety and shall apply and utilize their own Personal Protective Equipment (PPE) for electrical shock hazards and arc flash hazards;
3. wear a minimum of #2 PPE rated 8 cal/cm^2 with a Category 2 protective shield and hearing protection at all times when exposed to energized electrical equipment;
4. wear safety shoes, hardhat, safety glasses and a reflective vest.
5. PATH personnel will escort the Consultant in the performance of its field services.

E. PATH ON-TRACK SAFETY PROGRAM, CONSULTANT TRAINING OF WORKERS:

The Authority requires that all Consultant personnel who may enter the track area at any time be certified by successfully completing the "PATH ON-TRACK SAFETY PROGRAM" in compliance with the Rules and Regulations set forth in Federal Railroad Administration (FRA) Regulation 49 CFR, Part 214, Subpart C, entitled "RAILROAD WORKERS PROTECTION". Consultant personnel not certified under this program will not be permitted to enter the PATH track area. On a monthly basis, PATH will provide a four- (4) hour certification class at a PATH location in Jersey City, which includes a certification test to supervisory staff representing the Consultant. The Consultant's supervisory staff will then be required to train and certify all additional Consultant personnel that may be performing Work of the Contract. A letter certifying that the listed Consultant personnel have been trained on the "PATH ON-TRACK SAFETY PROGRAM" and, that they fully understand and will comply with all requirements of FRA rules, shall be filed with PATH's Safety Supervisor at One PATH Plaza, Jersey City, NJ 07306, 10th Floor within 48 hours of such training. Only persons specified in such letter will be permitted to enter the track area. Certificates will be forwarded to Consultant seven days after grading of test. To schedule a class call 201-216-6260.

The Consultant shall take steps necessary to ensure the safety of its staff and conduct its activities to not interfere with operations of PATH.

IX.COMMERCIAL GENERAL LIABILITY INSURANCE AND WORKERS' COMPENSATION INSURANCE PROCURED BY CONSULTANT

A. Commercial Liability Insurance:

1. The Consultant shall take out and maintain at his own expense Commercial General Liability Insurance including but not limited to Premises-Operations, Completed Operations and Independent Contractor coverages in limits of not less than \$10,000,000 combined single limit per occurrence for Bodily Injury Liability and Property Damage Liability. And if vehicles are to be used to carry out the performance of this contract, then the Consultant 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 \$10,000,000 combined single limit per accident for bodily injury and property damage. Any/all activities performed airside must, at all times, be performed while under escort as approved in advance, and in writing by the Project Manager. If at any time, the Consultant is directed to perform services airside in the absence of an approved escort, the Commercial General Liability Insurance and Automobile Liability Insurance provided by the Consultant must contain limits of not less than \$25,000,000 combined single limit per occurrence as provided in item 2) (a) below. In addition, the liability policies (other than Professional Liability) shall include the "Port Authority of NY & NJ and its wholly owned entities" as additional insured and shall contain an endorsement that the policies may not be canceled, terminated or modified without thirty (30) days written advance notice to the Project Manager as noted below. Moreover, the Commercial General Liability policy shall not contain any provisions (other than a Professional Liability exclusion, if any) for exclusions from liability other than provisions or exclusions from liability forming part of the most up to date ISO form or its equivalent, unendorsed Commercial General Liability Policy. 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. Furthermore, the Contractor's insurance shall be primary insurance as respects to the above additional insured(s), its representatives, officials, and employees. Any insurance or self-insurance maintained by the above additional insured(s) shall not contribute to any loss or claim. These insurance requirements shall be in effect for the duration of the contract to include any warrantee/guarantee period.

Further, the certificate of insurance and the liability policy(ies) shall be specifically endorsed that *"The insurance carrier(s) shall not, without obtaining the express advance 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. Additional Coverage: The Consultant shall have the policy endorsed when required by the Engineer for specific services hereunder and include the additional premium cost thereof as an out-of-pocket expense:
 - a. If the services of the Consultant, 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 underground property, explosion and collapse hazards
- c. Endorsement to eliminate any exclusions on account of ownership, maintenance, operation, use, loading or unloading of watercraft
- d. Coverage for work within 50 feet of railroad

B. Workers' Compensation Insurance:

1. The Consultant shall take out and maintain Workers' Compensation Insurance in accordance with the requirements of law and Employer's Liability Insurance with limits of not less than \$1,000,000 each accident. A waiver of subrogation in favor of the Authority and its wholly owned entities, as allowed by law, shall be included.
2. Additional Coverage: The Consultant shall have the policy endorsed when required by the 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

C. Professional Liability Insurance:

Not less than \$10 million each occurrence, covering acts, errors, mistakes, and omissions arising out of the work or services performed by Consultant, or any person employed by Consultant. All endorsements and exclusions shall be evidenced on the certificate of insurance. The coverage shall be written on an occurrence form or may be written on a claims-made basis with a minimum of a three-year reporting/discovery period.

D. Compliance:

Prior to commencement of work at the site, the Consultant shall deliver a certificate from its insurer evidencing policies of the above insurance stating the title of this Agreement, the P. A. Agreement number and containing a separate express statement of compliance with each of the requirements above set forth, via e-mail to the Project Manager.

1. Renewal certificates of insurance or policies shall be delivered to the Facility Contractor Administrator, Port Authority at least fifteen (15) days prior to the expiration date of each expiring policy. The General Manager, Risk Management 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 Port Authority, the Consultant shall promptly obtain a new and satisfactory certificate and policy.
2. 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, if the Manager shall so direct, the Consultant shall suspend performance of the contract at the

premises. If the contract is so suspended, no extension of time shall be due on account thereof. If the contract is not suspended (whether or not because of omission of the Manager to order suspension), then the Authority may, at its option, obtain insurance affording coverage equal to the above required, the cost of such insurance to be payable by the Consultant to the Authority.

3. Upon request of the General Manager, Risk Management/Treasury, the Consultant shall furnish to the Authority a certified copy of each policy itself, including the provisions establishing premiums.
4. The requirements for insurance procured by the Consultant shall not in any way be construed as a limitation on the nature or extent of the contractual obligations assumed by the Consultant under this contract. 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.

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

* * *

P.A. Agreement #415--*****

DATE

FIRM

ADDRESS

CITY, ST ZIP

Attention: CONTACT, TITLE

SUBJECT: PERFORMANCE OF EXPERT PROFESSIONAL ENGINEERING SERVICES FOR PATH FIRE ALARM SYSTEM UPGRADE AND REPLACEMENT

Dear CONTACT:

1. The Port Authority of New York and New Jersey (hereinafter, the "Authority") hereby offers to retain FIRM NAME (hereinafter, "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.

2. This Agreement shall be signed by you and the Authority's Chief Procurement Officer. As used herein "Chief Engineer" shall mean the Chief Engineer, or the Deputy Chief Engineer of the Authority, acting either personally or through their duly authorized representatives acting within the scope of the particular authority vested in them unless specifically stated to mean acting personally.

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

3. Your services shall be performed as expeditiously as possible and at the time or times required by the Chief Engineer. Time is of the essence in the performance of all your services under this Agreement.

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 personally, 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 the services to be performed herein. Any Contract Drawings and

Technical Specifications and 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 shall 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 his responsibility under this Agreement to furnish in accordance with an agreed upon schedule, a complete, practical, economical design and Contract Drawings and Technical Specifications, and corrections and changes therein 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 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 amount of \$*** 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 and D below, subject to the limits on compensation and the provisions set forth in paragraph 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, or subconsultants, 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 access to the Authority, 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 costs 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 it is the intention of the Authority to grant an increase 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 in a) accordance with the program of periodic merit and cost of living increases normally administered by it, b) are warranted by increased costs of providing services under this Agreement, c) are based upon increases in salaries and billing rates which are generally applicable to all of Consultant's clients, and d) are 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 therefore in all cases be finally determined by the Chief Engineer or their designee, in their sole and absolute discretion.

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

B. An amount equal to the premium payments for overtime work or night work or for performing hazardous duty, actually paid to partners, principals, project/program management or other professional and technical employees 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 and 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, shall not be given under this Agreement.

C. 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.

D. 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.

Notwithstanding the above 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 on 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 expenses do not include amounts 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, Telex and telegrams, or expendable office supplies. Unless otherwise indicated, required insurance is not a reimbursable expense.

When the Consultant uses his personal vehicle to provide services within the Port District the Consultant shall 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 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 advance in writing by the Chief Engineer. The cost for all meals and lodging on approved overnight trips are limited to the amounts established by the GSA for that locality.

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 provide said receipts with the appropriate billing.

E. As used herein:

"Port District" is an area comprised 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, and 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 rates referred to in subparagraph A above.

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 provisions of this Agreement, failure to do so shall be 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 one year 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. You shall not issue or permit to be issued any press release, advertisement, or literature of any kind, which refers to the Authority or the services performed in connection with this Agreement, unless you first obtain the written approval of the Chief Engineer. Such approval may be withheld, if for any reason the Chief Engineer believes that the publication of such information would be harmful to the public interest or is in any way undesirable.

14. Under no circumstances shall you or your subconsultants communicate in any way with any 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.

15. Any services performed for the benefit of the Authority at any time by you or on your behalf, even though 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.

16. 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.

17. 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 in which it 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.

18. 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, his 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.

19. 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, 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 any ideas or methods represented by them for any purpose and at any time without other compensation than that specifically provided for herein. You agree to contract with your employees for the benefit of the Authority to insure 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.

20. You shall promptly and fully inform the Chief Engineer in writing of any intellectual property disputes, as well as patents or patent 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.

21. 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 or to impose any obligation on the Authority to such subconsultant or give the subconsultant any rights against the Authority.

22. The Authority has a long-standing practice of encouraging Minority Business Enterprises (MBEs) and Women Business Enterprises (WBEs) to seek business opportunities with it, either directly or as subconsultants or subcontractors. "Minority-owned business" or "MBE" means a business entity which is at least fifty-one percent (51%) owned by one (1) or more members of one 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" or "WBE" means a business which is at least fifty-one percent (51%) owned by one 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 twelve (12%) percent participation by qualified and certified MBEs and 5 percent to qualified and certified WBEs on technical service projects.

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

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

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 Office of Business Diversity and Civil Rights for certification the names of MBE/WBE firms it proposes to use who are not on the list of certified MBE/WBE firms.

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, and to sensitive security sites and facilities (including rental spaces) to any person that declines to abide by Authority security procedures and protocols, and to any person with a criminal record with respect to certain crimes or who may otherwise poses 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, and to 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, you shall have your employees, subconsultants and their employees execute Authority approved non-disclosure agreements.

- Consultant/Subconsultant identity checks and background screening

The Consultant may be required to have its staff, and any subconsultant's staff, 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 subconsultant may also be required to use an organization designated by the Authority to perform the background checks.

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 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.

As of January 29, 2007, 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 the Transportation Worker Identification Credential for personnel performing in secure areas at Maritime facilities). Information about S.W.A.C., instructions, corporate enrollment, online applications, and location of processing centers is located at <http://www.secureworker.com>, or S.W.A.C. can be contacted directly at (877) 522-7922 for more information and the latest pricing. If approved by the Project Manager, the cost for said background checks for staff that pass and are granted a credential shall be reimbursable to the Consultant (and its subconsultants) as an out-of-pocket expense as provided herein. 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 non-public areas of the Authority's 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 Consultant to immediately report to the Authority the loss of any staff member's or subconsultant's individual facility-specific identification credential. The Consultant will be billed for the cost of the replacement identification credential. Staff shall display Identification badges in a conspicuous and clearly visible manner, when entering, working at, or leaving an Authority construction site or facility.

Staff may be required to produce not less than two forms of valid/current government issued identification having an official photograph and an original, non-laminated social security card for identify and SSN verification.

- 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 the 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 work, the Consultant shall request a description from the Project Manager of the Secure Areas, which will be in effect on the commencement date. 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 sites or facilities (including rental spaces) access control, inspection and monitoring by Port Authority Police or Authority retained consultant security guards. However, this provision shall not relieve the Consultant of its responsibility to secure its equipment and work and that of its subconsultant's and service suppliers at the Authority construction sites or facilities (including rental spaces). In addition, the Consultant, subconsultant 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 the Authority construction sites or facilities (including rental spaces), except when necessary to perform the Work under this Agreement, without prior written permission from the Authority. Upon request, any photograph, digital images, video recording or sketches made of the Authority construction sites or facilities 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

The Agreement may require access to Port Authority information considered Protected Information ("PI") as defined in the Port Authority Information Security Handbook ("Handbook"), dated October, 2008, corrected as of November 14, 2013, 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 Port Authority or when released by the Port Authority to outside entities. The Handbook can be obtained upon request or 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 and the Handbook in order to assess the extent of compliance with security requirements, PI procedures, protocols and practices, which may include, but which are not necessarily 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. The Consultant assumes the following distinct and several risks to the extent arising from the negligent or willful intentional acts or omissions of the Consultant or its subconsultants 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 or loss or damage to any property of the Consultant or its subconsultants 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 or 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 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 or the Authority for the payment of workers' compensation, whether such claims are made and whether such injuries, damage and 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 it in the defense, settlement or satisfaction thereof, including expenses of attorneys. If so directed, 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 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 he 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 he 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.

25. 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 agreement for failure to meet standards related to the integrity of the Consultant;
- C. had an agreement terminated by any governmental agency for breach of agreement or for any cause based in whole or in part on an indictment or conviction;
- D. ever used a name, trade name or abbreviated name, or an Employer Identification Number different from those inserted in the Proposal;
- E. 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 \$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;
- F. had any sanction imposed as a result of a judicial or administrative proceeding related to fraud, extortion, bribery, proposal rigging, embezzlement, misrepresentation or anti-trust regardless of the dollar amount of the sanctions or the date of their imposition; and
- G. 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.

26. 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 April 11, 1996 (a copy of which is available upon request to the Authority), 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 "26G.", 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, up to the time of award of this Agreement. 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-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 on this Agreement or any extension of such period, or during the term of this Agreement, of any change of circumstances which might under this clause make it unable to make the foregoing certifications 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 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, Consultants are 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 a 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 this Agreement award 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 shall 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

27. CONSULTANT ELIGIBILITY FOR AWARD OF AGREEMENTS - DETERMINATION BY AN AGENCY OF THE STATE OF NEW YORK OR 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 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 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.

28. CONSULTANT RESPONSIBILITY, SUSPENSION OF WORK AND TERMINATION

During the term of this Agreement, the Consultant shall 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 shall 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 where 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 may pursue available legal or equitable remedies for breach, including recovery of costs from Consultant associated with such termination.

29. 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.

In the event that the Consultant becomes aware of the occurrence of any conduct that is prohibited by this section entitled "No Gifts, Gratuities, Offers of Employment, Etc.", it shall report such occurrence 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 reporting information to the Office of Inspector General). Failing to report such conduct shall be grounds for a finding of non-responsibility.

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 April 11, 1996 (a copy of which is available upon request to the Office of the Secretary of the Authority). Without the express written approval of the Chief Engineer, you shall keep confidential, and shall require your employees, your subconsultants, and your subconsultant's employees to keep confidential, a) all information disclosed by the Authority or its consultants to you or b) developed by you or your subconsultants in the performance of services hereunder. Disclosure of any such information shall constitute a material breach of the Agreement.

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

30. 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 any other 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 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 Engineer in writing of such situation giving the full details thereof. Unless the Consultant receives the specific written approval of the Chief Engineer, 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 Engineer 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 Engineer to be no longer appropriate because of such preclusion, then the Chief Engineer 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, which result, directly or indirectly, from the services provided by the Consultant hereunder. The Authority's determination regarding any conflict of interest shall be final.

31. DEFINITIONS

As used in sections 25 to 30 above, 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 and others.

Investigation - Any inquiries made by any federal, state or local criminal prosecuting 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.

32. 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 his duly authorized representative, provided, however, that termination in the manner hereinbefore expressly provided shall be effective as so provided.

33. 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.

FIRM

- PAGE 20 -

DATE

34. 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
Procurement Department

Date _____

ACCEPTED:

FIRM NAME

By: _____

Title: _____

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 "34" to "35" and insert a new Paragraph "34" as follows:

34. 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 PROPOSAL FOR PERFORMANCE OF EXPERT ENGINEERING
SERVICES FOR PATH FIRE ALARM SYSTEM UPGRADE AND REPLACEMENT
(RFP #38989)**

AGREEMENT ON TERMS OF DISCUSSION

The Port Authority's receipt or discussion of any information (including information contained in any proposal, vendor qualification, 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. The foregoing applies to any information, whether or not given at the invitation of the Authority.

Notwithstanding the above, and without assuming any legal obligation, the Port Authority will employ reasonable efforts, subject to the provisions of the Port Authority Freedom of Information Code and Procedure adopted by the Port Authority's Board of Commissioners on March 29, 2012, which may be found on the Port Authority website at: <http://www.panynj.gov/corporate-information/pdf/foi-code.pdf>, not to disclose to any competitor of the undersigned, information submitted which are trade secrets or is maintained for the regulation or supervision of commercial enterprise which, if disclosed, would cause injury to the competitive position of the enterprise, and which information is identified by the Proposer as proprietary, as more fully set forth in the FOI Code, which may be disclosed by the undersigned to the Port Authority as part of or in connection with the submission of a proposal.

(Company)

(Signature)

(Title)

(Date)

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

ATTACHMENT C
COMPANY PROFILE

**REQUEST FOR PROPOSAL FOR PERFORMANCE OF EXPERT ENGINEERING
SERVICES FOR PATH FIRE ALARM SYSTEM UPGRADE AND REPLACEMENT
(RFP #38989)**

1. Company 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 (M/W/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 M/WBE 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.

**NON-DISCLOSURE AND CONFIDENTIALITY AGREEMENT
BETWEEN**

[1]

AND

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

THIS NON-DISCLOSURE AND CONFIDENTIALITY AGREEMENT (this “**Agreement**”) is made as of this [2] day of [3], [4], by and between **THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY** (the “**Port Authority**”) a body corporate and politic created by Compact between the States of New York and New Jersey, with the consent of the Congress of the United States, and having an office and place of business at 225 Park Avenue South, New York, New York, 10003, and [5] having an office and place of business at [6] (“**Recipient**”).

WHEREAS, the Port Authority desires, subject to the terms and conditions set forth below, to disclose to Recipient Protected Information (as defined below) in connection with [7] (collectively, the “**Project(s)**”, or “**Proposed Project(s)**”); and

WHEREAS, the Recipient acknowledges that the Port Authority, in furtherance of its performance of essential and critical governmental functions relating to the Project, has existing and significant interests and obligations in establishing, maintaining and protecting the security and safety of the Project site and surrounding areas and related public welfare matters; and

WHEREAS, in furtherance of critical governmental interests regarding public welfare, safety and security at the Project site, the Port Authority has collected information and undertaken the development of certain plans and recommendations regarding the security, safety and protection of the Project site, including the physical construction and current and future operations; and

WHEREAS, the Port Authority and Recipient (collectively, the “**Parties**”) acknowledge that in order for Recipient to undertake its duties and/or obligations with regard to its involvement in the Project, the Port Authority may provide Recipient or certain of its Related Parties (as defined below) certain information in the possession of the Port Authority, which may contain or include protected, confidential, privileged, classified, commercial, proprietary or sensitive information, documents and plans, relating to the Project or its occupants or other matters, the unauthorized disclosure of which could result in significant public safety, financial and other damage to the Port Authority, the Project, its occupants, and the surrounding communities; and

WHEREAS, Recipient recognizes and acknowledges that providing unauthorized access to, or disclosing such information to third parties in violation of the terms of this Agreement could compromise or undermine the existing or future guidelines, techniques and procedures implemented for the protection against terrorist acts or for law enforcement, investigation and

prosecutorial purposes, and accordingly could result in significant irreparable harm and injury; and

WHEREAS, in order to protect and preserve the privilege attaching to and the confidentiality of the aforementioned information as well as to limit access to such information to a strict need to know basis, the Port Authority requires, as a condition of its sharing or providing access to such protected, confidential, privileged, classified, commercial, proprietary or sensitive information, documents and plans, that the Recipient enter into this Agreement and that its Related Parties thereafter acknowledge and agree that they will be required to treat as strictly confidential and/or privileged any of such information so provided, as well as the work product and conclusions of any assessments and evaluations or any recommendations relating thereto, and to also fully comply with applicable federal rules and regulations with respect thereto; and

WHEREAS, as a condition to the provision of such information to Recipient and certain Related Parties, the Recipient has agreed to enter into this Agreement with respect to the handling and use of such information and to cause Related Parties to join in and be bound by the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the provision by Port Authority of Information for Project Purposes (as each such term is defined below) and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the Recipient and each Related Party that receives such Information, the Recipient and each such Related Party agrees, as follows:

1. **Defined Terms.** In addition to the terms defined in the Recitals above, the following terms shall have the meanings set forth below:

(a) **“Authorized Disclosure”** means the disclosure of Protected Information strictly in accordance with the Confidentiality Control Procedures applicable thereto: (i) as to all Protected Information, only to a Related Party that has a need to know such Protected Information strictly for Project Purposes and that has agreed in writing to be bound by the terms of this Agreement by executing a form of Acknowledgment as set forth in Exhibit A or Exhibit B, as applicable; and (ii) as to Confidential Privileged Information, only to the extent expressly approved in writing and in advance by the Port Authority, and then only the particular Confidential Privileged Information that is required to accomplish an essential element of the Project.

(b) **“Information”** means, collectively, all information, documents, data, reports, notes, studies, projections, records, manuals, graphs, electronic files, computer generated data or information, drawings, charts, tables, diagrams, photographs, and other media or renderings containing or otherwise incorporating information that may be provided or made accessible at any time, whether in writing, orally, visually, photographically, electronically or in any other form or medium, including, without limitation, any and all copies, duplicates or extracts of the foregoing.

(c) **“Protected Information”** means and includes collectively, Confidential Information, Confidential Privileged Information, Sensitive Security Information (SSI), Critical Infrastructure Information (CII) or Health Insurance Portability and Accountability Act (HIPPA) Information and Information that is labeled, marked or otherwise identified by or on behalf of the Port Authority so as to reasonably connote that such information is confidential, privileged, sensitive or proprietary in nature. The term Protected 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 Recipient, the Port Authority or others, or when the Port Authority receives such information from others and agrees to treat such information as Protected. The following Information shall not constitute Protected Information for the purpose of this Agreement:

- (i) Particular Information, other than Confidential Privileged Information, that is provided to the Recipient by a source other than the Port Authority, provided that such source is not subject to a confidentiality agreement, or similar obligation, or understanding with or for the benefit of the Port Authority, with respect to such Information and that the identity of such source is not itself part of such Protected Information.
- (ii) Information that is or becomes generally available to the public other than as a result of a disclosure by the Recipient or a Related Party in violation of this Agreement.
- (iii) Information that is known to or was in the possession of the Recipient or a Related Party on a non-confidential basis prior to the disclosure of such Information by the Port Authority.

(d) **“Confidential Information”** means and includes collectively, any and all Information, documents and materials entitled to protection as a public interest privilege under New York State law and as may be deemed to be afforded or entitled to the protection of any other privilege recognized under New York and/or New Jersey state laws or Federal laws. It also includes information that contains sensitive financial, commercial or other proprietary business information concerning or relating to the Port Authority, its projects, operations or facilities that would be exempt from release under the Port Authority Freedom of Information Code.

(e) **“Confidential Privileged Information”** means and includes collectively, (i) Information that reveals security risks, threats, vulnerabilities, documentation that identifies specific physical security vulnerabilities or revealing specific security vulnerabilities details related to emergency response protocols, egress plans, flow paths, egress capacities, (diagrams, codes, standards) etc., which is not publicly available.” and any and all Information, documents and materials entitled to protection as a public interest privilege under New York State law and as may be deemed to be afforded or entitled to the protection of any other privilege recognized under New York and/or New Jersey state laws or Federal laws, and (ii) certain Critical Infrastructure Information.

(f) **“Confidentiality Control Procedures”** means procedures, safeguards and requirements for the identification, processing, protection, handling, care, tracking and storage of

Protected Information that are required under applicable federal or state law, the Port Authority Handbook, or by the terms of this Agreement.

(g) **"Critical Infrastructure Information"** (CII) has the meaning set forth in the Homeland Security Act of 2002, under the subtitle Critical Infrastructure Information Act of 2002 (6 U.S.C. §131-134), and any rules or regulations enacted pursuant thereto, including, without limitation, the Office of the Secretary, Department of Homeland Security Rules and Regulations, 6 C.F.R. Part 29 and any amendments thereto. CII may also be referred to as "Protected Critical Infrastructure Information" or "PCII", as provided for in the referenced rules and regulations and any amendments thereto.

(h) **"Sensitive Security Information"** (SSI) has the definition and requirements set forth in the Transportation Security Administrative Rules & Regulations, 49 CFR 1520, (49 U.S.C. §114) and in the Office of the Secretary of Transportation Rules & Regulations, 49 CFR 15, (49 U.S.C. §40119).

(i) **"Health Insurance Portability and Accountability Act"** (HIPAA) Information Employees, associates or other contract personnel who have access to Protected Health Information (PHI) must refer to, and comply with, the Privacy Policies and Procedures to Protect Personal Health Information. Privacy regulations issued under the Health Insurance Portability and Accountability Act of 1996 ("HIPAA" or "Privacy Laws") place restrictions on the Group Health Plans of the Port Authority and PATH (the "Plans") ability to use and disclose Protected Health Information ("PHI").

(j) **"Port Authority Handbook"** means The Port Authority of New York and New Jersey. Information Security Handbook, as may be amended by the Port Authority, from time to time.

(k) **"Project Purposes"** means the use of Protected Information strictly and only for purposes related to Recipient's and its Related Parties' participation and involvement in the Project, and only for such period of time during which Recipient and its Related Parties are involved in Project related activities.

(l) **"Related Party"** and **"Related Parties"** means the directors, employees, officers, partners or members of the Recipient, as applicable, and the Recipient's outside consultants, attorneys, advisors, accountants, architects, engineers or subcontractors or sub-consultants (and their respective directors, employees, officers, partners or members) to whom any Protected Information is disclosed or made available.

2. **Use of Protected Information.** All Protected Information shall be used by the Recipient in accordance with the following requirements:

(a) All Protected Information shall be held in confidence and shall be processed, treated, disclosed and used by the Recipient and its Related Parties only for Project Purposes and in accordance with the Confidentiality Control Procedures established pursuant to Paragraph 2(c), below, including, without limitation, the Port Authority Handbook, receipt of which is acknowledged by Recipient and shall be acknowledged in writing by each Related Party by signing the Acknowledgment attached hereto as Exhibit A or Exhibit B, as applicable, and

applicable legal requirements. Protected Information may be disclosed, only if and to the extent that such disclosure is an Authorized Disclosure.

(b) Recipient and each Related Party acknowledges and agrees that (i) any violation by the Recipient or any of its Related Parties of the terms, conditions or restrictions of this Agreement relating to Protected Information may result in penalties and other enforcement or corrective action as set forth in such statutes and regulations, including, without limitation, the issuance of orders requiring retrieval of Sensitive Security Information and Critical Infrastructure Information to remedy unauthorized disclosure and to cease future unauthorized disclosure and (ii) pursuant to the aforementioned Federal Regulations, including, without limitation, 49 C.F.R. §§ 15.17 and 1520.17, any such violation thereof or mishandling of information therein defined may constitute grounds for a civil penalty and other enforcement or corrective action by the United States Department of Transportation and the United States Department of Homeland Security, and appropriate personnel actions for Federal employees.

(c) Recipient and each Related Party covenants to the Port Authority that it has established, promulgated and implemented Confidentiality Control Procedures for identification, handling, receipt, care, and storage of Protected Information to control and safeguard against any violation of the requirements of this Agreement and against any unauthorized access, disclosure, modification, loss or misuse of Protected Information. Recipient and each Related Party shall undertake reasonable steps consistent with such Confidentiality Control Procedures to assure that disclosure of Protected Information is compartmentalized, such that all Protected Information shall be disclosed only to those persons and entities authorized to receive such Information as an Authorized Disclosure under this Agreement and applicable Confidentiality Control Procedures. The Confidentiality Control Procedures shall, at a minimum, adhere to, and shall not be inconsistent with, the procedures and practices established in the Port Authority Handbook.

(d) The Port Authority reserves the right to audit Recipient's Confidentiality Control Procedures, and those of each Related Party, as applicable, to ensure that it is in compliance with the terms of this Agreement.

(e) The Port Authority may request in writing that the Recipient or any Related Parties apply different or more stringent controls on the handling, care, storage and disclosure of particular items of Protected Information as a precondition for its disclosure. The Port Authority may decline any request by the Recipient or any of its Related Parties to provide such item of Protected Information if the Recipient or any of the Related Parties do not agree in writing to apply such controls.

(f) Nothing in this Agreement shall require the Port Authority to tender or provide access to or possession of any Protected Information to the Recipient or its Related Parties, whether or not the requirements of this Agreement are otherwise satisfied. However, if such Protected Information is provided and accepted, the Recipient and its Related Parties shall abide by the terms, conditions and requirements of this Agreement.

(g) The Recipient and each Related Party agrees to be responsible for enforcing the provisions of this Agreement with respect to its Related Parties, in accordance with the Confidentiality Control Procedures. Except as required by law pursuant to written advice of

competent legal counsel, or with the Port Authority's prior written consent, neither the Recipient, nor any of the Related Parties shall disclose to any third party, person or entity: (i) any Protected Information under circumstances where the Recipient is not fully satisfied that the person or entity to whom such disclosure is about to be made shall act in accordance with the Confidentiality Control Procedures whether or not such person or entity has agreed in writing to be bound by the terms of this Agreement or any "Acknowledgement" of its terms or (ii) the fact that Protected Information has been made available to the Recipient or such Related Parties, or the content or import of such Protected Information. The Recipient is responsible for collecting and managing the Acknowledgments signed by Related Parties pursuant to this Agreement. Recipient shall, at the Port Authority's request, provide the Port Authority a list of all Related Parties who have signed an Acknowledgment, and copies of such Acknowledgments.

(h) As to all Protected Information provided by or on behalf of the Port Authority, nothing in this Agreement shall constitute or be construed as a waiver of any public interest privilege or other protections established under applicable state or federal law.

3. **Disclosures and Discovery Requests.** If a subpoena, discovery request, Court Order, Freedom of Information Request, or any other request or demand authorized by law seeking disclosure of the Protected Information is received by the Recipient or any Related Party, Recipient shall notify the Port Authority thereof, to the extent permitted by law, with sufficient promptness so as to enable the Port Authority to investigate the circumstances, prepare any appropriate documentation and seek to quash the subpoena, to seek a protective order, or to take such other action regarding the request as it deems appropriate. In the absence of a protective order, disclosure shall be made, in consultation with the Port Authority, of only that part of the Protected Information as is legally required to be disclosed. If at any time Protected Information is disclosed in violation of this Agreement, the Recipient shall immediately give the Port Authority written notice of that fact and a detailed account of the circumstances regarding such disclosure to the Port Authority.

4. **Retention Limitations; Return of Protected Information.** Upon the earlier occurrence of either the Port Authority's written request or completion of Recipient's need for any or all Protected Information, such Protected Information, all writings and material describing, analyzing or containing any part of such Protected Information, including any and all portions of Protected Information that may be stored, depicted or contained in electronic or other media and all copies of the foregoing shall be promptly delivered to the Port Authority at Recipient's expense. In addition, as to Protected Information that may be stored in electronic or similar form, such Protected Information shall be deleted and completely removed so that such Protected Information is incapable of being recovered from all computer databases of the Recipient and all Related Parties. The Recipient may request in writing that the Port Authority consent to destruction of Protected Information, writings and materials in lieu of delivery thereof to the Port Authority. The Port Authority shall not unreasonably withhold its consent to such request. If the Port Authority consents to such destruction, the Recipient and each Related Party shall deliver to the Port Authority a written certification by Recipient and such Related Party that such Protected Information, writings and materials have been so destroyed within such period as may be imposed by the Port Authority. Notwithstanding the foregoing, to the extent required for legal or compliance purposes, the Recipient may retain copies of Protected Information (in any format), provided that (a) the Port Authority is notified in writing of such retention, and (b) Recipient

continues to abide by the requirements of this Agreement with respect to the protection of such Protected Information.

5. **Duration and Survival of Confidentiality Obligations.** The obligations under this Agreement shall be perpetual (unless otherwise provided in this Agreement) or until such time as the Protected Information is no longer considered protected, confidential and/or privileged by the Port Authority.

6. **Severability.** Each provision of this Agreement is severable and if a court should find any provision of this Agreement to be unenforceable, all other provisions of this Agreement shall remain in full force and effect.

7. **Injunctive and Other Relief.** Recipient and each Related Party acknowledges that the unauthorized disclosure and handling of Protected Information is likely to have a material adverse and detrimental impact on public safety and security and could significantly endanger the Port Authority, its facilities (including, without limitation, the Project site), its patrons and the general public and that damages at law are an inadequate remedy for any breach, or threatened breach, of this Agreement by Recipient or its Related Parties. The Port Authority shall be entitled, in addition to all other rights or remedies, to seek such restraining orders and injunctions as it may deem appropriate for any breach of this Agreement, without being required to show any actual damage or to post any bond or other security.

8. **Governing Law.** 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. The Port Authority (subject to the terms of the Port Authority Legislation (as defined below)) and the Recipient specifically and irrevocably consent to the exclusive jurisdiction of any federal or state court in the County of New York and State of New York with respect to all matters concerning this Agreement and its enforcement. The Port Authority (subject to the terms of the Port Authority Legislation (as defined below)) and the Recipient agree that the execution and performance of this Agreement shall have a New York situs and, accordingly, they each consent (and solely with respect to the Port Authority, subject to the terms of the Port Authority Legislation (as defined below)) to personal jurisdiction in the State of New York for all purposes and proceedings arising from this Agreement. “**Port Authority Legislation**” shall mean the concurrent legislation of the State of New York and State of New Jersey set forth at Chapter 301 of the Laws of New York of 1950, as amended by Chapter 938 of the Laws of New York of 1974 (McKinney’s Unconsolidated Laws §§7101-7112) and Chapter 204 of the Laws of New Jersey of 1951 (N.J.S.A. 32:1-157 to 32:1-168).

9. **Notices.** Any notice, demand or other communication (each, a “**notice**”) that is given or rendered pursuant to this Agreement by either party to the other party, shall be: (i) given or rendered, in writing, (ii) addressed to the other party at its required address(es) for notices delivered to it as set forth below, and (iii) delivered by either (x) hand delivery, or (y) nationally recognized courier service (e.g., Federal Express, Express Mail). Any such notice shall be deemed given or rendered, and effective for purposes of this Agreement, as of the date actually delivered to the other party at such address(es) (whether or not the same is then received by other party due to a change of address of which no notice was given, or any rejection or refusal to accept delivery). Notices from either party (to the other) may be given by its counsel.

The required address(es) of each party for notices delivered to it is (are) as set forth below. Each party, however, may, from time to time, designate an additional or substitute required address(es) for notices delivered to it, provided that such designation must be made by notice given in accordance with this Paragraph 9.

Original to the Port Authority: [8a]
The Port Authority of New York and New Jersey
[8b]
[8c]

with a copy to: The Port Authority of New York and New Jersey
225 Park Avenue South - 14th Floor
New York, NY 10003
Attn: General Counsel's Office c/o Caroline Ioannou, Law
DISO

If to the Recipient: _____

with a copy to: _____

10. **Entire Agreement.** This Agreement contains the complete statement of all the agreements among the parties hereto with respect to the subject matter thereof, and all prior agreements among the parties hereto respecting the subject matter hereof, whether written or oral, are merged herein and shall be of no further force or effect. This Agreement may not be changed, modified, discharged, or terminated, except by an instrument in writing signed by all of the parties hereto.

11. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which shall be one and the same document.

12. **Parties Bound.** This Agreement shall be binding upon the Recipient and its respective successors. The foregoing shall not be affected by the failure of any Related Party to join in this Agreement or to execute and deliver an Acknowledgement hereof.

13. **Authority.** The undersigned individual(s) executing this Agreement on behalf of the Recipient below represent(s) that they are authorized to execute this Agreement on behalf of the Recipient and to legally bind such party.

14. **Disclosure of Ownership Rights or License.** Nothing contained herein shall be construed as the granting or conferring by the Port Authority of any rights by ownership, license or otherwise in any Information.

15. **No Liability.** Neither the Commissioners of the Port Authority, nor any of them, nor any officer, agent or employee thereof, shall be charged personally by the Recipient with any liability, or held liable to the Recipient under any term or provision of this Agreement, or because of its execution or attempted execution or because of any breach, or attempted or alleged breach thereof.

16. **Construction.** This Agreement is the joint product of the parties hereto and each provision of this Agreement has been subject to the mutual consultation, negotiation, and agreement of the parties hereto, and shall not be construed for or against any party hereto. The captions of the various sections in this Agreement are for convenience only and do not, and shall not be deemed to, define, limit or construe the contents of such Sections.

RECIPIENT:

Signature: _____

Print Name: [9]

Title: [10]

Date: [11]

EXHIBIT A

ACKNOWLEDGMENT BY RELATED PARTY INDIVIDUAL

I, [1] (“**Related Party**”), am employed as a(n) [2] by [3]. I have been provided with and have read the Non Disclosure and Confidentiality Agreement between [4] (the “**Recipient**”) and The Port Authority of New York and New Jersey (the “**Port Authority**”) dated [5a] [5b], [5c] (hereinafter the “**Agreement**”), and the Port Authority Handbook attached to the Agreement. I understand that because of my employer’s relationship with [6], both my employer and I may be provided with access to, and/or copies of, sensitive security materials, protected or confidential information. If it is required for me to review or receive Protected Information, as it is defined in the aforementioned Agreement, I acknowledge that I will be bound by each and every term and provision contained therein, and that failure to do so may include, but is not limited to, the imposition of disciplinary action and sanctions, and/or the institution of legal action seeking injunctive relief, monetary and/or criminal penalties for violation of law and/or Port Authority policies and procedures, as well as for violation of federal and/or state regulations.

To the extent that I am currently in the possession of, or have previously come into contact with, marked information as it relates to the aforementioned Agreement, I agree to conform my handling procedures for Protected Information to the practices and procedures set forth and defined herein, or risk loss of access to said Information, removal from said Project and/or subjecting myself to the aforementioned disciplinary actions and/or civil and criminal penalties.

Signature: _____

Print Name: [7]

Date: [8]

EXHIBIT B

ACKNOWLEDGMENT BY RELATED PARTY ENTITY

The undersigned, [1], is the [2] of [3], a [4] (“**Related Party**”), located at [5], and is duly authorized to execute this Acknowledgment on behalf of the above Related Party. The above Related Party is involved with the functions of [6] in connection with [7] for The Port Authority of New York and New Jersey (the “**Port Authority**”). I acknowledge and confirm that the above named Related Party has been provided with a copy of and shall be bound and shall abide by all of the terms, requirements and conditions set forth in the Non Disclosure and Confidentiality Agreement dated [8a] [8b], [8c], between [9] (the “**Recipient**”) and the Port Authority (hereinafter the “**Agreement**”), and by the Port Authority Handbook described in the Agreement. Appropriate and responsible officers and employees of the Related Party have carefully read and understand the terms and conditions of the Agreement. The Related Party has notice and acknowledges that any breach or violation of such terms, requirements and conditions may result in the imposition of remedies or sanctions as set forth or otherwise described therein against such Related Party.

Signature: _____

Print Name: [10]

Date: [11]

Port Authority Non-Disclosure and Confidentiality Agreement (NDA) Instructions:

Please fill in the NDA as described below. All original NDA's must be forwarded to the Port Authority contact with a copy to the Port Authority Law Department (as described on Page 8 of the NDA).

Field Form Number	Description of Data to be Entered
[1]	Insert Name of Your Company (All caps)
[2]	Insert Calendar Date
[3]	Insert Month
[4]	Insert Year
[5]	Insert Name of Your Company (All caps)
[6]	Insert Company's full street address (no P.O. boxes) – city, state, and zip code
[7]	Insert Agreement No. or Awarded Contract, Duration of Agreement or Contract, and Official Title of Agreement or Project.
[10]	Print Your Name (Signatory must be a Principal of the Company)
[11]	Print Your Title – (Signatory must be a Principal of the Company)
[12]	Insert Date Signed

The NDA signor must also sign an Exhibit A Acknowledgment. All Prime employees that will come in contact with information must sign an Exhibit A Acknowledgment.

EXHIBIT A

Port Authority Acknowledgment by Related Party Individual Instructions:

Please fill in the Related Party Individual Acknowledgment as described below. All original Related Party Individual Acknowledgments must be forwarded to the Port Authority contact with a copy to the Port Authority Law Department.

Field Form Number	Description of Data to be Entered
[1]	Insert Your Name
[2]	Insert Your Working Title (i.e. Project Manager, Field Inspector, Civil Engineer, etc.)
[3]	Insert Name of Your Company
[4]	Insert Name of Your Company OR if employed by for Sub-consultant/Sub-contractor insert the <u>Prime Company's Name</u> . (All caps)
[5a], [5b] & [5c]	Insert Month, Date, and Year of the <u>Prime's Company NDA (page1)</u> ,
[6]	Insert "Port Authority" OR if you are an employee of Sub-Consultant/Sub-Contractor, insert the <u>Prime's Company Name</u> .
[7]	Print Your Name
[8]	Insert Date Signed

EXHIBIT B

Port Authority Acknowledgment by Related Party Entity Instructions
(For use by Sub-Consultants or Sub-Contractors ONLY)

Please fill in the Related Party Entity Acknowledgment as described below. All original Related Party Entity Acknowledgments must be forwarded to the Port Authority contact with a copy to the Port Authority Law Department.

Field Form Number	Description of Data to be Entered
[1]	Insert Your Name – (Signatory must be a Principal of the Company)
[2]	Insert Your Title
[3]	Insert Name of Entity (Company Name)
[4]	Insert Type of Entity (Corp., LLC, etc.) and Jurisdiction of Formation (State)
[5]	Insert Full Address of Entity (Company Address)
[6]	Describe Scope of Work of Related Party (Work performing for Prime)
[7]	Describe Project (include Prime’s Agreement Number or Awarded Contract Number and Official Title)
[8a], [8b] & [8c]	Enter Month, Date and Year of the <u>Prime’s Company NDA</u> (page 1).
[9]	Insert Name of Prime Company
[10]	Print Your Name – (Signatory must be a Principal of the Company)
[11]	Insert Date Signed

Sub-Consultant or Sub-contractor that signs Exhibit B must also sign an Exhibit A Acknowledgment. All Sub-Consultant or Sub-contractor employees must sign Exhibit A Acknowledgment.

ATTACHMENT E

STAFFING & COST ANALYSIS SHEET

**PERFORMANCE OF EXPERT PROFESSIONAL ENGINEERING SERVICES FOR
PATH FIRE ALARM SYSTEM UPGRADE AND REPLACEMENT**

(RFP #38989)

<INSERT PROPOSER/FIRM NAME>

Task A - Schedule of Services (Insert additional lines as required)							
PROPOSED STAFF		FIRM	HOURS	MULT*	HOURLY PAY RATE*	BILLING RATE**	COST
STAFF (NAME)	TITLE						
							\$0
							\$0
							\$0
SUB-TOTALS:			0				\$0

Task B - Meetings/Presentations and Reviews (Insert additional lines as required)							
PROPOSED STAFF		FIRM	HOURS	MULT*	HOURLY PAY RATE*	BILLING RATE**	COST
STAFF (NAME)	TITLE						
							\$0
							\$0
							\$0
SUB-TOTALS:			0				\$0

Task C - Reference Documents & Occupancy Classification Review (Insert additional lines as required)							
PROPOSED STAFF		FIRM	HOURS	MULT*	HOURLY PAY RATE*	BILLING RATE**	COST
STAFF (NAME)	TITLE						
							\$0
							\$0
							\$0
SUB-TOTALS:			0				\$0

Task D - Design Criteria Summary (Insert additional lines as required)

PROPOSED STAFF		FIRM	HOURS	MULT*	HOURLY PAY RATE*	BILLING RATE**	COST
STAFF (NAME)	TITLE						
							\$0
							\$0
							\$0
SUB-TOTALS:			0				\$0

Task E - Field Verifications and Inspections (Insert additional lines as required)

PROPOSED STAFF		FIRM	HOURS	MULT*	HOURLY PAY RATE*	BILLING RATE**	COST
STAFF (NAME)	TITLE						
							\$0
							\$0
							\$0
SUB-TOTALS:			0				\$0

Task F - Final Design and Contract Documents (Insert additional lines as required)

PROPOSED STAFF		FIRM	HOURS	MULT*	HOURLY PAY RATE*	BILLING RATE**	COST
STAFF (NAME)	TITLE						
							\$0
							\$0
							\$0
SUB-TOTALS:			0				\$0

Task G - Construction Cost Estimate & Construction Schedule (Insert additional lines as required)

PROPOSED STAFF		FIRM	HOURS	MULT*	HOURLY PAY RATE*	BILLING RATE**	COST
STAFF (NAME)	TITLE						
							\$0
							\$0
							\$0
SUB-TOTALS:			0				\$0

Task H - Post Award Services (Insert additional lines as required)

PROPOSED STAFF		FIRM	HOURS	MULT*	HOURLY PAY RATE*	BILLING RATE**	COST
STAFF (NAME)	TITLE						
							\$0
							\$0
							\$0
SUB-TOTALS:			0				\$0

TASK TOTALS:			0				\$0
---------------------	--	--	----------	--	--	--	------------

OUT-OF-POCKET (DIRECT) EXPENSES

DESCRIPTION	COST
	\$ -
	\$ -
	\$ -
TOTAL:	\$ -

* MULTIPLIER APPLIED TO OTHER THAN PARTNERS AND/OR PRINCIPALS

** APPLIES TO BOTH PARTNERS AND/OR PRINCIPALS, AND OTHERS

SUMMARY

TOTAL STAFF HOURS:	0
TOTAL STAFF COSTS:	\$0
TOTAL DIRECT EXPENSES:	<u>\$0</u>
TOTAL PROJECT COSTS:	\$0