THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY
TWO MONTGOMERY STREET - 1st FLOOR
JERSEY CITY, NJ 07302

October 1, 2021

ADDENDUM NO. 8

TO PROSPECTIVE BIDDERS ON CONTRACT **PN-654.001** – PORT NEWARK – PORT STREET CORRIDOR IMPROVEMENTS AND CONTRACT **PN-654.001M** – PORT NEWARK – PORT STREET CORRIDOR IMPROVEMENTS – AGREEMENT TO PERFORM LANDSCAPE MAINTENANCE

The following changes are hereby made in the Contract Documents for the subject Contract.

This communication should be physically annexed to back cover of the book and initialled by each bidder before submitting his bid.

In case any bidder fails to conform to these instructions, his Bid will nevertheless be construed as though this communication had been so physically annexed and initialled.

CHANGES IN THE CONTRACT BOOKLET FOR CONTRACT PN-654.001

Page 193	Delete the entire page and substitute therefor new pages 193 and 193A which are attached hereto and made a part hereof.
Pages 734 – through 737	Delete these pages in their entireties and substitute therefor new pages 734 through 737A (five pages) which are attached hereto and made a part hereof.

CHANGES IN REFERENCE DOCUMENTS

Page 5 of Reference Document entitled – "Excavated Material and Groundwater Management Plan for the Proposed Replacement of Corbin Street Ramp a Proposed Replacement of Portions of the Port Street Bridge, and Proposed Realignment and Re-Profiling of a Portion of the FAPS Lead Track"	Delete the entire page and substitute therefor new page 5 which is attached hereto and made a part hereof.

REVISED CONTRACT DRAWINGS

Drawings C501, C503, C504, C808, S001, S045, S139 and S157 have been revised as of 09/27/21. A copy of these drawings is forwarded herewith electronically (via email or downloaded). Destroy the drawings of these numbers now in your possession and substitute therefor the revised drawings.

ADDED REFERENCE DRAWINGS

A copy of drawing Sheet 186 is forwarded herewith electronically (via e-mail or downloaded) and is to be included in the set of Reference Drawings.

THE PORT AUTHORITY OF NEW YORK AND NEW JERSEY

James Starace, P.E.
Chief Engineer/Director

INITIALLED BY THE BIDDER:

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Q. Drawing entitled "PORT ST. – NEWARK – UNDERGROUND SYSTEM P.S.E.&G. CO.-7A" originally dated 7-30-52.

R. Drawing entitled "PORT STREET – NEWARK – UNDERGROUND SYSTEM P.S.E.&G. CO.-11A" originally dated 3-10-54.

S. Document entitled "PSE&G – GENERAL SPECIFICATION No. 2016-5065 FOR TRENCH, MANHOLE, AND CONDUIT INSTALLATION", dated 9/15/2016 (17 pages including cover).

T. Drawing entitled "NEW JERSEY TURNPIKE AUTHORITY - NEW JERSEY TURNPIKE - 1969 WIDENING - SECTION NO. 6B - MILE 101 TO MILE 105 - BEAM DETAILS - CONTRACT NO. W-1303 - SHEET NO. 186" as-built dated 11-23-70.

An indication on the Reference Drawings of the existence, nature or location of any utilities, structures, obstructions, conditions or materials does not constitute a representation as to the conclusions to be drawn there from nor a representation that no others exist in addition to those shown, even in the same location; nor does the absence of any indication on said drawings of the existence, nature or location of any utilities, structures, obstructions, conditions or materials constitute a representation that none exist.

116. SHOP DRAWINGS, CATALOG CUTS AND SAMPLES

The Contractor shall specifically prepare for this Contract all Shop Drawings which may be required in addition to the Contract Drawings or in addition to any other drawings which the Engineer may issue in supplementing the Contract Drawings.

The specific requirements elsewhere set forth in the Specifications for furnishing Shop Drawings, Catalog Cuts and samples for any particular portion of the Contract shall not limit the obligation of the Contractor to furnish Shop Drawings, Catalog Cuts and samples for any other portion when so required by the Engineer.

The Contractor shall submit an initial "Submittal Schedule", coordinated with the Progress Schedule, for the Engineer's review and approval listing the planned transmittal date and estimated number in each specification section category of Shop Drawings, Catalog Cuts, pages of calculations and samples within 30 days after receipt by the Contractor of the acceptance of his Bid. A more detailed schedule shall be submitted no less than 30 calendar days prior to the actual date of any submittal.

The initial monthly payment will not be certified by the Engineer and released to the Contractor until the Submittal Schedule is received and accepted by the Engineer. Subsequent payments will be released upon receipt of an updated Submittal Schedule, with prior month's comments, if any, addressed.

After checking and verifying all field measurements and after complying with applicable procedures specified hereunder, the Contractor shall submit to the Engineer for review and approval, in accordance with the approved schedule of Shop Drawing submissions, or for other action if so indicated by the Engineer, one printed copy and an electronically submitted copy, unless otherwise requested, of all Shop Drawings. Each copy shall bear a specific written indication that the Contractor has reviewed the submission for conformance to the requirements of the Contract Drawings and Specifications.

The Authority uses Oracle Primavera Contract Management (formerly known as Expedition) software to track the status of submittals provided by the Contractor. In order to facilitate this electronic tracking, the Contractor shall use the transmittal form that is provided at the pre-construction meeting, and shall forward it to the Engineer via a MAPI compliant e-mail system (e.g., Microsoft Outlook, CC mail, Lotus notes, etc.).

The Contractor's transmittals of submittal data shall fully comply with the Authority's numbering and naming conventions and other procedures, including procedures for electronic submission of submittal data, which will be provided by the Engineer to the Contractor at the pre-construction meeting.

DIVISION 26

SECTION 260544

UNDERGROUND AHCW CONDUIT SYSTEMS

PART 1. GENERAL

1.01 SUMMARY

A. This Section specifies requirements for conduits and duct bank systems that include conduit, concrete encased duct banks, electrical manholes and hand holes and associated appurtenances.

B. Contractor shall develop detailed Work/Installation procedures for all Work items pertaining to installation of items specified in this section. Contractor shall conduct a survey to confirm location of all existing utilities, drainage systems, and any other items that may interfere with or be impacted by installation of cable, conduit, and duct banks.

1.02 REFERENCES

A. The following is a listing of the publications referred to in this Section:

American National Standards Institute (ANSI)

ANSI C80.1 – Electric Rigid Steel Conduit

ANSI/SCTE 77 2017 – Specification for Underground Enclosure Integrity

American Concrete International (ACI)

ACI 318 – Building Code Requirements for Structural Concrete

American Railway Engineering Association (AREMA)

AREMA Communications & Signals Manual

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO M198 - Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets

AASHTO M199 – Standard Specification for Precast Reinforced Concrete Manhole Sections

ASTM International (ASTM)

ASTM A123 – Specification for Zin (Hot-Dip Galvanized) Coatings and Iron and Steel Products

National Electrical Manufacturers Association (NEMA)

NEMA TC 14.BG – Belowground Reinforced Thermosetting Resin Conduit and Fitting Series

1.03 QUALITY ASSURANCE

A. Workmanship shall conform to the best modern practices for a rugged, long lived,

safe installation required for an Automatic Highway Crossing Warning (AHCW) system. Materials to be installed shall be provided new and of the highest commercial grade as specified.

1.04 SUBMITTALS

A. See Appendix "A" for submittal requirements.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Materials shall be protected from damage throughout delivery, storage and handling. Comply fully with the requirements of the Contract Drawings and Specifications.

PART 2. PRODUCTS

2.01 ELECTRICAL MANHOLES AND HOLES

A. Cast-in-place concrete manhole structures shall conform to the latest requirements of the AREMA signal manual.

B. Backfill material shall conform to the requirements of SECTION 312323, EXCAVATION, BACKFILLING AND FILLING.

C. Furnish and install concrete manholes complete with duct openings, sleeves and end bells, formwork, reinforcing steel, pulling irons, manhole frames and covers, concrete work, cable racks and associated items as specified herein and as shown in the Contract Drawings and Specifications

2.02 PRECAST UNITS

A. Precast units shall be the product of a manufacturer regularly engaged in the manufacture of precast concrete products, including precast electrical manholes. Precast units shall conform to the following requirements:

1. Concrete for precast work shall have an ultimate 28-day compressive strength of not less than 5,000 pounds per square inch. Manholes may be precast monolithically and placed as a unit; or, they may be of assembled sections, designed and produced by the manufacturer in accordance with the requirements specified. All structures shall be identified with the manufacturer's name embedded in, or otherwise permanently attached to, an interior wall face.

2. Assembled units shall be designed in accordance with ACI-318 and AREMA and shall be based on the following properties:

a. Concrete for precast work shall have an ultimate 28-day compressive strength of not less than 5,000 pounds per square inch. Manholes may be precast monolithically and placed as a unit; or, they may be of assembled sections, designed and produced by the manufacturer in accordance with the requirements specified. All structures shall be identified with the manufacturer's name embedded in, or otherwise permanently attached to, an interior wall face.

b. Structural design shall include lateral earth and hydrostatic pressures plus live load (Cooper E-80, Railroad live load on wall) adjacent to or directly over the structure. Design shall also take into consideration stresses induced in handling units. Lifting devices shall be provided for properly handling units.

c. Mating edges of precast components shall be provided with tongue-and-grooved

joints. Joints shall be designed to firmly interlock adjoining components and to provide water-proof junctions. Joints shall be sealed watertight using preformed plastic strip conforming to AASHTO M198, Type B. Sealing material shall be installed in strict accordance with the sealant manufacturer's printed instructions.

2.03 MISCELLANEOUS ITEMS

A. Pull eyes shall be steel eye bolts, set in the manhole walls. They shall be located opposite the duct bank or conduit structure.

B. Sump wells shall be provided in all hand holes and shall be 12 inches square and 4 inches deep.

C. Manhole sections shall conform to AASHTO M199 specification, except as modified herein.

D. Reinforcement steel shall conform to the requirements in the Contract Drawings and Specifications.

E. Manhole frames and covers shall be heavy-duty cast iron, suitable for H-20 wheel loading. Covers shall be vented for atmospheric testing as shown in the Contract Drawings and Specifications. Each manhole cover shall be casted with the logo as indicated in the Contract Drawings and Specifications.

F. All manhole ferrous hardware shall be hot-dipped galvanized after fabrication in accordance with ASTM Specification A123.

G. Cable support hardware shall be provided in each manhole. Support hardware shall consist of hot-dipped galvanized steel cable racks, porcelain cable saddles, hooks, clips and associated items. Cable support hardware shall be manufactured by Cooper Industries, Monroe, NJ; Joslyn Mfg. Co., Macedonia, OH.; Hubbell Power Systems, Centralia, MO.; or Engineer approved equal.

H. Grounding arrangement shall be as shown in the Contract Drawings and Specifications.

2.04 HAND-HOLES

A. Hand-hole structures shall be made from high density polymer concrete, with a minimum depth of 12 inches. Oldcastle Synertech (Model S1730B12FA), Hubbell (Model PG1730BA12), or approved equal.

B. Electrical hand holes shall be furnished complete with conduit sleeves, reinforcing steel, frames and covers, drain sumps and other associated items as specified herein and as shown in the Contract Drawings and Specifications.

C. Precast units shall be the product of a manufacturer regularly engaged in the manufacture of precast concrete products.

1. Hand holes may be precast monolithically and placed as a unit; or, they may be of assembled sections, designed and produced by the manufacturer in accordance with the requirements specified herein. All structures shall be identified with the manufacturer's name embedded in, or otherwise permanently attached to, an interior wall face.

2. Design for assembled units: Precast structures shall be designed in accordance with ACI-318 and shall be based on the following properties:

a. Angle of internal friction equals 30 degrees. Unit weight of soil equals 110 pounds per square foot.

b. Lateral at rest earth-pressure coefficient equals 0.50 above water-table, equals 0.90 below water-table.

D. Sump wells shall be provided in all hand holes and shall be 12 inches square and 4 inches deep.

E. Hand-hole sections shall conform to AASHTO M199 specification, except as modified herein.

F. Hand-hole frames and covers shall be high density polymer concrete, suitable for Tier 22 loading. Covers shall be vented for atmospheric testing as shown in the Contract Drawings and Specifications. Each cover shall be casted with the logo as indicated in the Contract Drawings and Specifications.

2.05 CONDUIT

A. Conduits and fittings shall be free, within commercial tolerances, of objectionable lines, bubbles, chipped ends, and other manufacturing defects, that would impair the service of the conduit. The bore of the conduit shall be straight and circular in cross section with smooth interior surfaces free from obstructions and rough and flaky areas. The conduit and fittings shall be free from all substances that may injuriously affect any wire or cable covering. The numbers and sizes of the conduits shall be as shown in the Contract Drawings and Specifications. At locations where conduits are required, the various types of conduits shall be furnished are specified below. Fittings shall be of the manufacturer's standard for the various types of conduits. Expansion joints shall be installed in accordance with the Manufacture's installation instructions.

2.06 RIGID METAL CONDUIT

A. Rigid metal conduit shall be used at locations as specified within the Contract Drawings and Specifications. The types of rigid metal conduit to be used for the various applications shall be as follows:

1. Galvanized Rigid Steel (GRS) Conduit:

a. Steel conduit and fittings shall be made of the best grade standard weight steel pipe protected inside and outside by a coat of hot-dip galvanizing. Where sweeps are used, they shall be the long radius type. Steel conduits shall be protected in shipping and handling by approved thread protectors.

b. Galvanize Touch-Up. Where galvanizing is removed by welding or other assembly procedures, touch-up abraded areas with two coats of zinc-rich chromate paint designed for repair of galvanizing.

c. All conduit, couplings, elbows, and nipples shall be UL approved and meets requirements of ANSI C80.1.

2.07 RIGID NONMETALLIC CONDUIT

A. Fiberglass Reinforced Epoxy (FRE) Conduit:

1. Fiberglass reinforced epoxy conduit and fittings shall be made of the best standard grade rated for 130 degrees C, UL listed, and shall be approved by the Engineer.

2. All material shall comply with ANSI/NEMA Specification TC 14.BG (Inside

Diameter). Conduits shall be furnished in twenty-foot lengths. Where sweeps are used, they shall be the long radius type.

3. Fiberglass conduit used in concrete encased duct application for trade sizes up to 4 inches in diameter inclusive shall be standard wall. Fiberglass conduit used in concrete encased duct bank application for trade sizes 5 inches and larger shall be heavy wall. Fiberglass conduit used in direct burial application shall be heavy wall.

   a. Fiberglass conduit and fittings shall be manufactured by FRE Composites, Inc., Pueblo, CO; Champion Fiberglass, Inc., Spring, TX; United Fiberglass, Co., Springfield, OH; or approved equal.

- Description of the Work
- Hazard Assessment
- Summary of Training Requirements
- Description of Monitoring Equipment
- Directions to Hospital
- Air Monitoring Program
- Personnel Protective Equipment
- Decontamination Procedures
- Contingency Procedures

Air monitoring will be conducted by the Port Authority's Contractor's designated Site Safety Officer (SSO) to evaluate exposure to organic vapors, hydrogen sulfide and potentially explosive atmospheres. See Appendix D for required provisions of the air monitoring program. The HASP will include Action Levels and related actions should onsite monitoring warrant. Daily tailgate safety meetings shall be performed before the start of each work day to address specific health and safety concerns. A list of the key environmental health and safety contacts for this project shall be included with the HASP and shall be provided to Conrail. In addition to the HASP requirements described above, all workers must complete and maintain on an annual basis the Conrail Railroad Safety Training and, where applicable, Federal Railroad Administration (FRA) training while doing Work on Conrail Property. The HASP shall be provided to Conrail for review and approval forty-five (45) days before any component of the Work on Conrail Property begins.

5.0 MATERIALS MANAGEMENT

Proper handling of investigation derived waste (IDW) and details of how materials generated during the Work will be managed are further described below. All items in this Section are included as part of the scope of Contract PN-654.001. The Port Authority shall be responsible for all costs associated with the Work, including Materials Management under Section 5.0 generally and Disposal under Section 5.4 in particular.

5.1 Management of Investigation Derived Waste (IDW)

During any construction investigations as described in **Section 3.1,** all soil cuttings generated from soil borings and soil collected by vacuum extractions will be containerized in 55-gallon drums and staged in an area designated by Conrail's Project Engineer until disposed by the Port Authority. Any unsuitable excavated material from test pits will be placed directly into the appropriate containers or temporarily stockpiled on two layers of 6-mil plastic at a