NEW JERSEY TRANSIT CORPORATION

NOTICE TO BIDDERS

INVITATION FOR BIDS NO. 22-010R

Purchase of Cable, Conduit and Pull Boxes

Notice is hereby given that this is an electronic bid submission. Electronic bids will be received via the Internet until 2:00 P.M. on **September 1, 2022** by NJ TRANSIT for the Purchase of Cable, Conduit and Pull Boxes.

Bids for the project will be downloaded from the Bid Express website by NJ TRANSIT on the scheduled Bid Due Date (subject to change by Addenda) at 2:00 P.M. on **Thursday, September 1, 2022**, and publicly opened and read immediately thereafter. The Bidder must upload its bid prior to the time specified so that it is included in the project download. Late bids cannot be accepted. This is the only way to submit a bid for this project; paper bids will not be accepted.

The work under this Invitation for Bid (IFB) generally consists of but is not limited to, manufacturing material to specifications, load, ship and deliver cable, conduit and pull boxes in one purchase order and to be delivered as material is available, the contract term will be awarded to a preferred vendor for each group for additional quantities as needed over the span of two (2) years with two additional single year options, for the quantities specified and for "additional quantities". All work must be in strict conformance with the specifications provided in the Bid Documents.

In order to obtain all pertinent Bid Documents, interested firms must register with BID EXPRESS at https://www.bidexpress.com. To subscribe, follow instructions on the website. The fee schedule is available on the website. In order to submit a bid, NJ TRANSIT recommends that Bidders apply for a digital ID at least seven (7) business days prior to the Bid Due Date. All fees are directly payable to Bid Express. General navigation (registering, setting up to bid electronically, and solicitation review) of www.bidexpress.com prior to actual selection of a solicitation for bidding is free.

A Pre-bid Conference has been scheduled for 10:00 A.M. Eastern Time on **Wednesday, August 3, 2022**. The Pre-bid Conference will be held utilizing a telephone and video conference via Microsoft Teams. For access information for the Pre-bid Conference, please contact Veronica Vivanco-Otero, by e-mailing VOtero@NJTransit.com. Bidders are advised that attendance at the Pre-bid Conference is strongly recommended.

Bidders will be required to download Microsoft Teams, located at https://teams.microsoft.com/, prior to the Pre-bid Conference, in order to access the web video conference and view the presentation. Upon confirmation of your firm's RSVP, NJ TRANSIT will forward an invitation for the video conference.

Contractors and subcontractors are also required to comply with the State of New Jersey, Division of Revenue and Enterprise Services Business Registration Certificate requirements (N.J.S.A. 52:32-44). Contractors or Subcontractors shall not engage in the performance of any work, unless the Contractor or Subcontractor is registered with the Department of Treasury Division of Revenue and Enterprise Services, as required.

Bidders are required to comply with the requirements of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27, regarding Equal Employment Opportunity Laws and Regulations. NJ TRANSIT requires bidders utilizing Disadvantaged Business Enterprise (DBE) subcontractors/vendors/suppliers to comply with all aspects of NJ TRANSIT's DBE Program in the use of DBE's. Group A - Cable; Group B - Conduit and Group C - Pull Boxes are **Race Neutral** projects.

In accordance with N.J.S.A. 27:25-11(b)(3) and N.J.A.C. 16:72-2.2, Bidders are notified that a bid bond in the amount of ten percent (10%) of the bid price is required with their Bid.

BID NO. 22-010R

Purchase of Cable, Conduit and Pull Boxes

SCOPE

This Invitation for Bids (IFB) is for the purchase of cable, conduit and pull boxes that will be installed on NJ TRANSIT's rail system by NJ TRANSIT's Signal Department.

APPLICABLE SPECIFICATIONS

See "Appendix A" for product specifications.

AWARD BASIS

This is a "By Group" bid. Bidders are not required to submit a bid for all groups in this procurement. However, all of the items in a given group must be bid. Each group as a whole will be awarded to the lowest responsive and responsible bidder. Lowest responsive and responsible Bidder shall be issued a Purchase Order for the one-time purchase of the bid items for the specified quantities at the fixed priced provided at bid-opening. The optional two (2) single year terms of the contract are for additional quantities as needed, which would be subject to Change Order procedures.

At its sole discretion, NJ TRANSIT shall have the right to extend this Contract for two (2) additional one (1) year periods from the expiration of the second Contract year under the same terms and conditions. NJ TRANSIT may exercise its first one (1) year option to extend the Contract no later than sixty (60) days before the expiration of the 24-month Contract period and the second one (1) year option to extend the Contract no later than (60) days before the expiration of the first one (1) year option by providing written notice to the Contractor. NJ TRANST is under no obligation to extend this Contract.

PRICING

1. Bidders are required to provide firm, fixed prices. All prices must remain valid for 180 calendar days from the date of the bid opening. The fixed price provided for each item shall apply to the quantity shown for that item only. NJ TRANSIT reserves the right, but is under no obligation, to purchase additional quantities of items included in this IFB within the Contract period. Any such purchase shall be made via NJ TRANSIT's Change Order process at which time NJ TRANSIT shall request a Price Quote for the item(s). The determination as to whether to purchase such items shall be made at NJ TRANSIT's sole option.
2. Products must be priced on a delivery "FOB: Destination" basis with freight prepaid and allowed to the delivery point. All freight charges shall be included in the product Unit Price.
3. Group A – Cable: Bidders shall submit a Unit Price for the unit of measure shown for each item times the quantity shown for each item.

4. Group B – Conduit: Bidders shall submit a Unit Price for the unit of measure shown for each item times the quantity shown for each item.
5. Group C – Pull Boxes: Bidders shall submit a Unit Price for the unit of measure shown for each item times the quantity shown for each item.

PRODUCTS TO BE SUPPLIED

Following are the three product groups included in this IFB:

Group A - Cable

1. Contractor shall provide signal and communications cable in strict conformance with the specifications included in “Appendix A”.
2. Material to be provided by Contractor includes single and multi-conductor shielded and unshielded specialty signal and communications cable.
3. Cable to be provided on number of reels and quantity per reel specified.
4. All cable provided shall be installed by NJ TRANSIT’s Signal Department.
5. All materials shall be truck delivered to location shown below under the heading “DELIVERY”.

Group B - Conduit

1. Contractor shall provide PVC conduit that meets all requirements specified including, but not limited to, size and length.
2. Conduit shall be of the size(s) and lengths specified.
3. Conduit shall be bundled in the number of pieces specified.
4. All conduit provided shall be installed by NJ TRANSIT’s Signal Department.
5. All materials shall be truck delivered to location shown below under the heading “DELIVERY”.

Group C - Pull Boxes

1. Contractor shall provide open bottom, fiber-reinforced polymer electrical pull boxes with covers and hardware that meet all requirements specified.
2. Pull boxes shall be of the size specified.
3. Covers shall include specified logo.
4. All pull boxes shall be installed by NJ TRANSIT’s Signal Department.
5. All materials shall be truck delivered to location shown below under the heading “DELIVERY”.

Products in Group A above are to be provided in strict conformance with specifications attached in “Appendix A”. If Bidder is not the manufacturer of the product(s) being provided in Group A, Bidder shall ensure that product manufacturer(s) will meet all manufacturer requirements included in specifications noted above prior to submission of bid.

QUALITY CONTROL/QUALITY ASSURANCE

The Contractor shall establish and maintain a formal and documented quality assurance program as follows:

Contractor who are involved with the design and/or development, production, installation, servicing, final inspection and testing of the product or service (to include manufacturers, manufacturer's participant or distributors) shall establish and maintain a formal documented quality assurance program in compliance with the latest revision of ANSI/ASQ/ISO 9001, AAR M-1003 or an approved equal quality assurance program.

The Contractor's quality assurance will be subject to NJ TRANSIT verification at any time. Verification will include but not be limited to audit of quality assurance programs; surveillance of operations to determine that practice methods and procedures of the program are being properly implemented; inspection to measure the quality of items offered for acceptance; and inspection of items prior to release for shipment to ensure compliance with requirements of the contract.

The Contractor's quality assurance program shall ensure compliance with the requirements of the contract and its documents and shall include provisions ensuring compliance by subcontractors (and suppliers, where applicable) should any portion of the work be subcontracted. The Contractor shall ensure the appropriate formal and documented quality program of its subcontractors. NJ TRANSIT reserves the right to audit the quality system of any subcontractors should the need arise.

Failure by the Contractor to promptly correct deficiencies discovered by either the Contractor or NJ TRANSIT may be cause for suspension of the contract until corrective action has been taken or until conformance of the work to prescribed criteria has been demonstrated to and approved by NJ TRANSIT. As result of such suspension, no adjustment will be made with respect to increases in the cost or time of performance of this contract. See specifications in "Appendix A" for additional requirements.

CONDITIONS

1. Contractors shall ship materials within the number of days shown below from date of Purchase Order issued by NJ TRANSIT's Procurement Department:
   - Group A – 180 calendar days
   - Group B – 90 calendar days
   - Group C – 90 calendar days
2. All products offered are subject to the approval of NJ TRANSIT prior to Contract award.
3. Cable length tolerance shall be -5% to +0%. Cable length will be determined at ties of release.
4. The weight of cable plus reel length shall be painted or weatherproof labeling shall be provided on each reel of cable. Cable shall be shipped on non-returnable reels. Separate reel charges are not acceptable.

5. Drawings submitted for approval (if required) are required 30 days after Purchase Order issuance and shall become the property of NJ TRANSIT for inclusion in its Rail Standards archive and for dissemination and use by NJ TRANSIT for future procurements involving identical or similar products.

DELIVERY

1. All products shall be delivered to the following location:
   NJ TRANSIT Rail
   Orange Signal Complex
   75 Lincoln Avenue
   Orange, NJ 07050
   Attn: Hazim Escheik
2. Contractor shall contact NJ TRANSIT's Hazim Escheik at (862) 849-9421 or Steve Johnston at (973) 414-6979 (Orange Freight House) with a minimum of 48 hours prior to delivery to confirm delivery location and receive instructions.
3. All products shall be truck delivered.
4. All cable must be shipped on flatbed trailers.

WARRANTY

The Contractor warrants to NJ TRANSIT that each product will be free from defects in material and workmanship and will meet the specified requirements for a minimum of one year or as per product specification or product specification reference, whichever is greater. See specifications in "Appendix A" for additional warranty information and requirements.

NJ TRANSIT reserves the right to inspect the product at destination. Where NJ TRANSIT has reasonably determined that shipments or partial shipments fail to meet the specifications, or are defective in any other way, these shipments or partial shipments shall be rejected and shall be removed and replaced in a timely manner by the Contractor or his representative at no cost to NJ TRANSIT.

Appendix A

<u>Group A</u>
Specifications

NEW JERSEY TRANSIT RAIL OPERATIONS

SPECIFICATION C-84

SPECIFICATION FOR MULTIPAIR COMMUNICATION CABLE

Issued 6/12/84

SPECIFICATION FOR MULTIPAIR COMMUNICATION CABLE

1. SCOPE

This specification covers multipair communication cable for underground installation in ducts or direct burial.

2. BASIC CONSTRUCTION

Multipair solid copper conductors shall be insulated with high-density polyethylene. Conductors shall be twisted into pairs with varying lays. A filling compound shall be applied over and under the core tape, followed by a 5 mil corrugated copper tape. The copper tape shall be covered by a high molecular weight black polyethylene jacket. A pull cord shall be inserted under the jacket to facilitate removal of the jacket.

This cable is designed for direct burial applications where security of service and long life are required, and is recommended for use where crush resistance, termite and rodent protection are considerations.

3. APPLICABLE INDUSTRY STANDARDS

REA specification PE-39 shall apply except that this specification's requirements shall govern where conflict occurs.

4. CONDUCTORS

Each conductor shall be a solid, round wire of annealed copper. The tensile strength of any section of a conductor including a factory joint shall be not less than 85 percent of the tensile strength of an adjacent section of the solid conductor of equal length without a factory joint.

5. INSULATION AND CHARACTERISTICS OF TWISTED PAIRS

The conductors shall have a resistance of 42.5 $\pm$3.5 ohms per mile at 20 C. Average resistive unbalance of conductors in a pair shall not exceed 1.5 percent and the individual maximum shall not exceed 4 percent. Mutual capacitance between conductors of a pair shall be 0.083 $\pm$0.004 mF per mile. Capacitance unbalance to ground shall be 800 pF per 1000 feet maximum and 200pF per 1000 feet average at 1000 Hz and 23 C. Pair-to-pair capacitance unbalance shall not exceed 25 pF per 1000 feet at 1000 Hz and 23 C. Crosstalk loss between any pair combination of a cable shall not be less than 63 dB per 1,000 feet at 150 KHz.

Conductors shall be insulated with high-density polyethylene which has a wall thickness as required to meet the capacitance specification. Insulation resistance shall be greater than 1,000 megohm-miles.

The cable shall be capable of withstanding any time after installation:

1. Conductor-to-Conductor voltage of 4200 Vdc or 1400 Vac RMS.
2. Conductor-to-shield voltage of 9000 Vdc or 3000 Vac RMS.

Each twisted pair shall be uniquely color coded.

6. ASSEMBLY

Conductors shall be twisted into pairs with varying lays. The average length of each lay shall not exceed 6 inches. Adjacent pairs shall have different lays so that the capacitance unbalance and cross-talk requirements are met.

7. COVERING

Core Tape

A nonhygroscopic polyester film shall be applied over the core assembly. The core assembly shall be filled with a filling compound and the outer surface of the core covering shall be coated with a flooding compound.

The filling and flooding compound shall provide a moisture barrier, shall be homogenous, shall be free of foreign matter, shall be nontoxic, and shall present no dermal hazards.

The filling and flooding compounds shall be applied to the cable in a manner to preclude degrading of the cable components.

Shield

The core tape shall be covered with a 5 mil corrugated copper tape, longitudinally applied with an overlap.

Outer Jacket

A black, high-molecular-weight, low-density polyethylene jacket shall be applied over the shield contacting at least 50 percent of the shield area. The jacket shall be free from holes, splits, blisters and other imperfections. Average jacket thickness shall be at least 75 mils. The minimum jacket thickness at any one point shall not be less than 60 mils. The tensile strength shall be at least 1400 pounds per square inch. The ultimate elongation shall be at least 230 percent.

A pull cord shall be included beneath the jacket to facilitate the removal of the jacket for terminating.

8. QUALIFICATIONS

The manufacturer shall have a minimum of fifteen (15) years reliable experience in supplying communication cables of the type specified with a minimum of 2,000,000 cable feet installed.

The manufacturer shall, if requested by the railroad, furnish within twenty (20) days after the close of bid date, sample specimens in four (4) foot lengths similar to that which the manufacturer proposes to furnish for each type cable specified herein. The sample specimens shall remain the property of the railroad.

To assure accountability and traceability in application of the quality assurance plan, the manufacturer shall formulate, prepare, and apply conductor insulating materials and cable outer coverings and shall perform conductor insulating and cable assembly and testing in his own plant or plants.

9. TESTING

The manufacturer shall furnish certification to the railroad that the following tests have been successfully performed:

(A) The shield of each reel length of cable has been tested for continuity.

(B) Each reel length of cable has been tested for shorts, opens and grounds. No cable will be accepted which has a ground, cross, short or open-circuit condition.

(C) The cable has passed the following tests of REA Specification No. PE-39:

1. Section 3: Conductor Insulation
   a. Melt Flow Rate
   b. Tensile Strength
   c. Ultimate Elongation
   d. Cold Bend
   e. Shrinkback
2. Section 12: Cable Jacket
   a. Melt Flow Test
   b. Tensile Strength and Ultimate Elongation
   c. Environmental Stress Cracking
   d. Shrinkback
   e. Impact

3. Section 20: Insulation Resistance

4. Section 21: High-Voltage (DC test voltage for 3 seconds 7,000 volts conductor-to-conductor, 15,000 volts conductor-to-shield)

5. Section 24: Cable Bending Test

6. Section 25: Water Penetration Test

7. Section 26: Compound Flow Test

(D) In addition, the following cable parameters shall be measured and certified to prove conformance with Specifications:

1. Mutual capacitance

2. Pair-to-pair capacitance unbalance

3. Pair-to-ground capacitance unbalance

4. Cross-talk

5. Conductor resistance

6. Resistance unbalance

7. The semi-conductor outer jacket resistivity

All specified tests and certification shall be included in the price quoted.

10. SHIPPING

Cable shall be furnished in lengths of approximately 1000 feet unless otherwise specified. All cable shall be shipped on reels, adequately protected from damage in shipment by heavy wrapping or wood lagging.

Reels shall be substantial to withstand reasonable handling and shall be so designed that the inner end of cable will be accessible but protected from injury. They shall be designated and constructed as non-returnable when drum size and cable weight and volume permit.

Cable shall be closely and tightly wound in each layer on the reels and both ends shall be sealed to prevent the entrance of moisture and securely fastened so that they will not become loose in transit.

11. IDENTIFICATION

Each length of cable shall be permanently identified as to the manufacturer and year of manufacture, at intervals not more than 1 foot, with a moisture resistant marker tape under the jacket and parallel to the longitudinal axis of the cable.

12. INSPECTIONS AND TEST

Purchaser's Inspection

The purchaser shall have the right to make such inspection and tests as necessary to determine if the cable meets the requirements of this specification. The inspector for the purchaser shall have the right to reject the cable which is defective in any respect.

Determination of Tests

Tests may be made at place of production or on samples submitted, or at destination as specified by the purchaser. The manufacturer shall notify the office of Director of Purchasing & Materials when they will have materials ready for inspection. Prior notification of desire to witness particular tests on specific cables shall be furnished the manufacturer.

Types of Tests

The manufacturer shall provide, at the point of production, apparatus and labor for making any or all of the following Tests under the supervision of the purchaser's inspector. Such tests include:

Conductor size and physical characteristics.
Insulation HV and IR tests.
Physical dimension tests.
Special tests on materials in coverings.
Final HV, IR and conductor resistance tests on shipping reels.

Certified Test Reports

Electrical and physical test reports shall be furnished to the purchaser for the finished cables when specified on the order.

Rejected Cable

Cable which does not meet the requirements of this specification and order, shall be rejected. Wire or cable which shows defects or non-compliance with the specification and order, after arrival at destination, may be rejected and the seller shall, on request, advise disposition of the wire or cable in question and pay all transportation charges on the rejected material.

13. QUALITY ASSURANCE APPROVAL

The Purchaser reserves the right to judge the adequacy of the manufacturer's Quality Assurance program and organization in relation to the degree of reliability expected of the cable. This judgment is to be made on the basis of plant visitations by Purchaser's management and/or engineering personnel.

14. SPLICING

The insulation together with materials supplied for splicing the cables shall be such as to make dependable moisture-proof splices able to withstand the underground or aerial environment comparable to the unspliced cable. Instruction for such splices shall be furnished by the manufacturer.

15. REEL MARKING

Reel and Cable Information

Each reel shall contain on the outside flange plainly legible and weather resistant, information to show the manufacturer's name, purchaser's requisition number, lengths of each section of cable, number of conductors, gauge of conductors, and the name and address of the consignee.

Reel Rolling Instructions

An arrow shall be painted on one head of each reel pointing the opposite direction from the outer end of the cable with the words "Roll This Way".

16. WARRANTY

The Seller shall expressly warrant that the insulated wire and cable furnished under this specification shall be free from defects in material and workmanship. The Seller shall be responsible for the cable for the life of the installation, except that obligation under this warranty shall not apply to any wire or cable which has been subject to misuse, negligence or accident after it has been accepted and shipped.

The Seller shall convenant and agree to indemnify the said railroad company against all claims, suits, actions, or proceedings, damages, costs, fees and expenses by reason of infringement or alleged infringement of patents, or for patent royalties involved in consequence of the purchase and the use of the material covered hereby.

17. MANUFACTURER

Cable shall be Okonite Type RTC-F or Engineer approved equal.

NEW JERSEY TRANSIT RAIL OPERATIONS

SPECIFICATION S-84

PART I

SPECIFICATION FOR MULTI-CONDUCTOR RAILROAD SIGNAL CABLE – 600 VOLT

Revised 3/9/20

SPECIFICATION FOR MULTI-CONDUCTOR RAILROAD SIGNAL CABLE
600 VOLT

1. SCOPE

This specification covers multi-conductor railroad signal cable for use in wet or dry locations in aerial and underground installations.

Aerial includes direct exposure to air and installation in above ground conduit. Underground includes direct burial in earth and installation in underground duct.

2. BASIC CONSTRUCTION

Aerial	Multi-conductor, solid copper conductors, insulated with AREMA Class B walls, insulated conductors assembled and covered with an overall thermoset chlorinated polyethylene (TS -CPE) jacket.
Underground Direct Burial	Multi-conductor solid copper conductor insulated with AREMA Class A walls. The insulated conductors shall be cabled together either helically or in a unilay process with suitable fillers, where necessary, and a helically applied fabric bedding tape shall be followed by either a 7 mil flat copper alloy armor tape or a 10 mil flat bronze armor tape. The armor tape shall be covered by a high molecular weight polyethylene jacket. A pull cord shall be inserted under the polyethylene jacket to afford a convenient method for removing the jacket.

3. APPLICABLE INDUSTRY STANDARDS

The following Industry Standards (latest editions) apply except this specification's requirements shall govern where conflicts occur:

AREMA C&S Manual Parts 10.3.16, 10.3.17, 10.3.19, 10.3.20, and 10.3.21
ASTM B3 bare copper, D-1248, D-470-75
ICEA S-95-658, S-73-532

4. CONDUCTOR

Conductors shall be solid soft or annealed copper, in accordance with ASTM B3 bare copper. No factory splices or brazes shall be made in solid conductors after final drawing.

5. INSULATION

The conductors shall be insulated with an ethylene propylene rubber compound which shall meet the electrical and physical characteristics shown in AREMA C&S Manual part 10.3.19.

The insulation shall be homogeneous in character, tough, elastic, and applied concentrically about the conductor. It shall fit tightly to the conductor but must also be clean and free stripping, leaving conductor unimpaired and ready for splicing or terminating.

TABLE I

AREMA Insulation Class	Conductor Size AWG	Minimum Average Insulation Wall Thickness, Mils
B	14 – 9	60
	8 – 2	80
A	14 – 9	80
	8 – 2	95

Class B walls shall be used for aerial cables.
Class A walls shall be used for underground cables.

The insulation thickness at the thinnest part of any cross-section of covered conductor shall not be less than 90% of the thickness specified in Table I. The average thickness shall be at least the value shown in Table I.

6. PRELIMINARY TESTING OF INDIVIDUAL CONDUCTORS

Each length of conductor, insulated with prime insulation, prior to application of any outer jacket and prior to cabling or twisting, will be randomly wound on spools and immersed in water and subjected to the following tests. The order of these tests is left to the manufacturer's discretion except that sufficient time must be allowed between the DC test and the IR test to prevent polarization from affecting the results.

Direct Current Test: A Direct Current Test shall be performed after a minimum of 12 hours immersion in water. Each coil or reel length of insulated conductor shall be subjected to the DC test voltage shown in Table II, without showing signs of puncture, overheating or self-healing of punctures. Voltage is to be applied between conductor and water (ground).

Alternating Current Test: An Alternating Current Test shall be performed after a minimum of 12 hours immersion in water. Each coil or reel length of insulated conductor shall be subjected to the AC test voltage shown in Table II, without showing signs of puncture, overheating or self-healing of punctures. Voltage is to be applied between conductor and water (ground).

Insulation Resistance Testing: While the conductor is submerged, an insulation-resistance test shall be performed on each length of conductor.

The insulation resistance constant "K" shall not be less than 25,000 megohms – 1000 ft. when corrected to 60°F. The apparatus and methods shall be in accordance with ICEA S-95-658. The following formula is used for calculations:

$$R = K \log_{10} D/d$$

R = Insulation resistance in megohms per 1000 ft. at 60°F
K = Constant for insulating material
D = Diameter over insulation
d = Diameter over conductor

TABLE II

AREMA Insulation Class	Conductor Size AWG	Minimum Average Insulation Wall 64th Of An Inch	Test Voltage KV 5 Min. AC	Test Voltage KV 5 Min. DC
B	14 – 8	4	8	24
	6	5	10	30
A	14 – 8	5	10	30
	6	6	11	33

7. ASSEMBLY

Individual conductors shall be helically cabled together with adjacent layers wound in opposite directions or in a unilay process with all layers wound in the same direction.

The length of lay of conductors in assembly shall be in accordance with Part 5 of ICEA S-95-658.

One conductor in each layer shall be suitably marked to serve as a tracer. In addition, each conductor shall have a printed number in accordance with ICEA Method 4. The assembly shall be capable of easy separation without damage to any of the other conductors or loss of tracer identification.

Suitable moisture resistant filler shall be used where necessary to produce a substantially round core.

8. AERIAL COVERING

Thermoset Chlorinated Polyethylene Jacket – A rubber-filled binder tape or an extruded belt of flame and moisture resistant elastomeric material shall be applied over the assembled conductors. The outer covering shall be tough flame and oil resistant black thermoset chlorinated polyethylene (TS – CPE) compound in accordance with AREMA C&S Manual Part 10.3.20. Jacket wall thickness shall comply with Table III.

TABLE III

Diameter of Cable Core (Inches)	Minimum Average Jacket Thickness (Mils)
0 – 0.425	60
0.426 – 0.700	80
0.701 – 1.050	95
1.051 – 1.500	110
1.501 – 2.000	140
2.001 – 3.000	155
3.001 & over	190

The minimum thickness of the jacket at any one point shall not be less than 80% of the minimum average thickness of the jacket specified in Table III.

9. UNDERGROUND COVERING

Cushioning Tape

The assembled core shall be covered with a 8 mil minimum thickness, helically applied compound filled fabric tape having a minimum overlap of 12.5%. The tape shall be compatible with the conductor insulation.

Armor Layer

The cushioning tape shall be covered with a 10 mil bronze tape applied helically with a 20% minimum overlap or a 7 mil copper alloy C19400 per ASTM B-694 tape applied helically with a 20% lap.

Outer Jacket

The overall jacket shall be made of extruded black low density, high molecular weight polyethylene conforming to AREMA C&S Manual Part 10.3.21. The average jacket thickness shall be in accordance with Table IV.

TABLE IV

Diameter of Cable Core (Inches)	Minimum Average Jacket Thickness (Mils)
0 – 0.425	60
0.426 – 0.700	80
0.701 – 1.050	95
1.051 – 1.500	110
1.501 – 2.000	140
2.001 – 3.000	155
3.001 & Over	190

The minimum thickness at any one point shall not be less than 80% of the specified average value. The average thickness must not be less than specified.

A pull cord shall be included beneath the jacket to facilitate the removal of the jacket for splicing or terminating.

10. FINAL TEST

Each length of finished cable, while on master reels, shall be subjected to an AC 60 Hertz test voltage equal to twice the voltages shown in Table II for one minute between adjacent insulated conductors and between adjacent layers of insulated conductors in the cable, using a mid-tap grounded transformer. The metallic shield, or bronze tape, if present, shall be connected to ground.

Each length of completed multi-conductor cable, following the one minute AC test, shall be tested to ensure an insulation resistance not less than specified for preliminary tests.

The DC resistance of each conductor of each length of completed cable shall be measured and recorded.

Each length of completed shielded cable shall be tested for shield continuity.

11. QUALIFICATIONS

The manufacturer shall have a minimum of fifteen (15) years reliable experience in supplying vital circuit signal cables of the type specified on at least six (6) Class 1 railroads with a minimum of 2,000,000 cable feet installed.

The manufacturer shall, if requested by the Purchaser, furnish within twenty (20) days after the close of bid date, sample specimens in four (4) foot lengths similar to that which the manufacturer proposes to furnish for each type cable specified herein. The sample specimens shall remain the property of the Purchaser.

To ensure accountability and traceability in application of the quality assurance plan, the manufacturer shall formulate, prepare, and apply conductor insulating materials and cable outer coverings and shall perform conductor insulating and cable assembly and testing in his own plant or plants.

12. QUALIFICATION TESTS

Moisture Resistance

A single conductor conforming to the requirements of Table II, shall have at least 10 feet immersed in water suitably grounded and at room temperature. The insulated conductor without any coverings over the insulation shall be continuously energized. One of the following stresses shall be applied to the sample:

Test Voltage 60 Hz AC Volts/Mil		Test Time Duration
325	for	2 months, or
280	for	3 months, or
240	for	4 months, or
200	for	6 months.

No insulation failure shall occur during the test.

Voltage Aging

The dielectric strength stability shall be demonstrated by voltage aging a minimum of ten feet between terminals of a single conductor conforming to the requirements of Table II, suitably shielded with the shield grounded.
The cable shall be tested in free air with the ends appropriately terminated. One of the following stresses shall be applied to voltage-age the sample:

Test Voltage 60Hz AC Volts/Mil		Aging Time Duration
490	for	6 months, or
315	for	1 year, or
225	for	2 years, or
180	for	3 years, or
135	for	5 years.

No insulation failure shall occur during the test.

Upon successful completion of the voltage aging test, the same sample (excluding any 490 vpm-6mo. samples) shall be subjected to a 60 Hz step-voltage test starting at the voltage-aging stress voltage and increasing in 5KV-5 minute steps until breakdown. The sample shall withstand a minimum 60 Hz step-test stress of 350 volts/mil.

13. SHIPPING

Cable shall be furnished in lengths of approximately 1000 feet unless otherwise specified. All cable shall be shipped on reels, adequately protected from damage in shipment by heavy wrapping or wood lagging.

Reels shall be substantial to withstand reasonable handling and shall be so designed that the inner end of cable will be accessible but protected from injury. They shall be designated and constructed as non-returnable when drum size and cable weight and volume permit.

Cable shall be closely and tightly wound in each layer on the reels and both ends shall be sealed to prevent the entrance of moisture and securely fastened so that they will not become loose in transit.

14. IDENTIFICATION

Each length of cable shall be permanently identified as to the manufacturer and year of manufacture, at intervals not more than 1 foot, with a moisture resistant marker tape under the jacket and parallel to the longitudinal axis of the cable.

15. INSPECTIONS AND TESTS

Purchaser's Inspection

The purchaser shall have the right to make such inspection and tests as necessary to determine if the cable meets the requirements of this specification. The inspector for the purchaser shall have the right to reject the cable, which is defective in any respect.

Determination of Tests

Test may be made at place of production or on samples submitted, or at destination as specified by the purchaser. The manufacturer shall notify the office of Director of Purchasing when they will have materials ready for inspection. Prior notification of desire to witness particular tests on specific cables shall be furnished to the manufacturer.

Types of Tests

The manufacturer shall provide, at the point of production, apparatus and labor for making any or all of the following tests under the supervision of the purchaser's inspector.

Such tests include:

Conductor size and physical characteristics.

Insulation HV and IR tests.
Physical dimension tests.
Special tests on materials in coverings.
Final HV, IR and conductor resistance tests on shipping reels.

Certified Test Reports

Electrical and physical test reports shall be furnished to the purchaser for the finished single conductor and multiple conductor cables when specified on the order.

Rejected Cable

Cable which does not meet the requirements of this specification and order, shall be rejected. Wire or cable which shows defects or non-compliance with the specification and order, after arrival at destination, may be rejected and the seller shall, on request, advise disposition of the wire or cable in question and pay all transportation charges on the rejected material.

16. QUALITY ASSURANCE APPROVAL

The Purchaser reserves the right to judge the adequacy of the manufacturer's Quality Assurance program and organization in relation to the degree of reliability expected of the cable. This judgment is to be made on the basis of plant visitations by Purchaser's management and/or engineering personnel.

17. SPLICING

The insulation together with materials supplied for splicing the cables shall be such as to make dependable moisture-proof splices able to withstand the underground or aerial environment comparable to the un-spliced cable. Instruction for such splices shall be furnished by the manufacturer.

18. REEL MARKING

Reel and Cable Information

Each reel shall contain on the outside flange plainly legible and weather resistant, information to show the manufacturer's name, purchaser's requisition number, lengths of each section of cable, number of conductors, gauge of conductors, and the name and address of the consignee.

Reel Rolling Instructions

An arrow shall be painted on one head of each reel pointing the opposite direction from the outer end of the cable with the words "Roll This Way".

19. WARRANTY

The Seller shall expressly warrant that the insulated wire and cable furnished under this specification shall be free from defects in material and workmanship. The Seller shall be responsible for the cable for the life of the installation, except that obligation under this warranty shall not apply to any wire or cable which has been subject to misuse, negligence or accident after it has been accepted and shipped.

The Seller shall covenant and agree to indemnify the Purchaser against all claims, suits, actions, or proceedings, damages, costs, fees and expenses by reason of infringement or alleged infringement of patents, or for patent royalties involved in consequence of the purchase and the use of the material covered hereby.

NJ TRANSIT
RAIL OPERATIONS

Specification C-85

Specification For Shielded Multipair Communication Cable

A. All cable to be supplied shall conform to NJTRO Specification C-84 (Specification for Multipair Communication Cable), where the requirements of specification C-84 do not conflict with this specification.

B. In addition to the requirements of NJTRO Specification C-84, the cable shall be assembled with an electrical shield and an outer conductive jacket.

The electrical shield, which shall be placed over the jacket specified in specification C-84 shall have a minimum conductivity equivalent to 2/0 AWG of copper. The construction of the shield shall incorporate hard drawn copper wires, No.14 AWG or 12 AWG, that shall be spiraled over 5-mil-thick copper tape which shall have a minimum of 12.5% overlap.

The 5 mil copper shield specified in specification C-84 shall not be applied.

The minimum bending radius of the shielded cable shall not exceed the minimum bending radius of an identical unshielded cable. The shield shall be constructed so that it will not separate, crack or become damaged in any other way during installation so long as the cable is not bent into a radius which is less than the minimum bending radius.

The outer conductive jacket shall be placed over the electrical shield specified above. The outer jacket shall be a black, high-molecular-weight, low density polyethylene which shall be applied over the shield and which shall contact at least 50 percent of the shield area. The jacket shall be free from holes, splits, blisters, and other imperfections. The jacket thickness shall be at least 80 mils. The jacket shall have a resistivity not exceeding 5,000 ohm centimeters at 20°C. A moisture barrier shall not be placed between the outer jacket, specified above, and the shield.

The design of the shield and the outer jacket, together, shall permit the flow of electromagnetically induced current from the electrical shield to the surrounding ground (earth) along the length of the cable without corrosion of the copper electrical shield nor the deterioration of the outer jacket.

6/13/84

95 Orange St., P.O. Box 720, Newark, NJ 07101 (201) 648-7400

NJ TRANSIT
RAIL OPERATIONS

Specification S-85

Specification For Shielded Multi-Conductor Railroad Signal Cable - 600 Volt

A. All cable to be supplied shall conform to NJTRO Specification S-84 Part I (Specification For Multi-Conductor Railroad Signal Cable - 600 Volt), where the requirements of specification S-84 do not conflict with this specification.

B. In addition to the requirements of NJTRO Specification S-84, the cable shall be assembled with an electrical shield and an outer conductive jacket.

The electrical shield, which shall be placed over the jacket specified in specification S-84, shall have a minimum conductivity equivalent to 4/0 AWG of copper. The construction of the shield shall incorporate hard drawn copper wires, No.14 AWG or 12 AWG, that shall be spiraled over 5-mil-thick copper tape which shall have a minimum of ¼-inch overlap.

The 10 mil bronze tape armor layer specified in specification S-84 shall not be applied.

The minimum bending radius of the shielded cable shall not exceed the minimum bending radius of an identical unshielded cable. The shield shall be constructed so that it will not separate, crack or become damaged in any other way during installation so long as the cable is not bent into a radius which is less than the minimum bending radius.

The outer conductive jacket shall be placed over the electrical shield specified above. The outer jacket shall be a black, high-molecular-weight, low density polyethylene which shall be applied over the shield and which shall contact at least 50 percent of the shield area. The jacket shall be free from holes, splits, blisters, and other imperfections. The jacket thickness shall be at least 80 mils. The jacket shall have a resistivity not exceeding 5,000 ohm centimeters at 20°C. A moisture barrier shall not be placed between the outer jacket, specified above, and the the shield.

The design of the shield and the outer jacket, together, shall permit the flow of electromagnetically induced current from the electrical shield to the surrounding ground (earth) along the length of the cable without corrosion of the copper electrical shield nor the deterioration of the outer jacket.

12/07/83
Rev. 6/12/84

95 Orange St., P.O. Box 720, Newark, NJ 07101 (201) 648-7400

NJTRO Specification S-103018

October 30, 2018

Specification for Single-Conductor Railroad Signal Cable-600 Volt

1. SCOPE

This specification covers single-conductor railroad signal cable for use in wet or dry locations in aerial and underground installations.

Aerial includes direct exposure to air and installation in above ground conduit. Underground include direct burial in earth and installation in underground duct.

2. BASIC CONSTRUCTION

Stranded uncoated copper conductors insulated with an ethylene-propylene rubber compound and covered with a chlorinated polyethylene thermoset compound.

3. APPLICABLE INDUSTRY STANDARDS

The following Industry standards shall apply:

ASTM B-3, B-8, B-496
ICEA S-95-658
NEMA WC-70
UL Standards 44 and 854
UL Type RHH or RHW-2

4. CONDUCTORS

Conductors shall be uncoated stranded soft copper in accordance with ASTM B-3, B-8 and B-496. The stranding shall conform to Table 1.

5. INSULATION

The conductor shall be insulated with an ethylene-propylene rubber compound which shall meet or exceed all requirements of ICEA S-95-658, NEMA WC-70 and UL standards 44 and 854. The insulation thickness shall conform to Table 1. The composite insulation thickness (insulation plus jacket) at the thinnest part of any cross-section of covered conductor shall not be less than 90% of the thickness specified in Table 1. The average thickness shall be at least the value shown in Table 1.

6. OUTER JACKET

The insulated conductor shall be jacketed with an extruded black chlorinated polyethylene thermoset compound. The jacket thickness shall conform to Table 1.

7. VOLTAGE AND TEMPERATURE RATINGS

The cable shall be suitable for use in 600 volt circuits and shall have a continuous temperature rating of 90°C, wet or dry, a 130°C emergency overload rating and a 250°C short circuit rating.

Table 1

Conductor Size AWG kcmil	Number of Strands	Insulation Thickness-mils	Jacket Thickness-mils	Composite Insulation Thickness-mils	Approximate O.D. Inches	75°C Wet(1) NEC Ampacity
14	1	30	15	45	0.16	15
14	7	30	15	45	0.17	15
12	1	30	15	45	0.18	20
12	7	30	15	45	0.19	20
10	1	30	15	45	0.20	30
10	7	30	15	45	0.21	30
9	19	30	15	45	0.23	30
8	7	45	15	60	0.27	50
6	7	45	30	75	0.33	65
4	7	45	30	75	0.38	85
2	7	45	30	75	0.43	115
1	19	55	45	100	0.52	130
1\0	19	55	45	100	0.56	150
2\0	19	55	45	100	0.60	175
3\0	19	55	45	100	0.64	200
4\0	19	55	45	100	0.70	230
250	37	65	65	130	0.80	255
350	37	65	65	130	0.89	310
500	37	65	65	130	1.01	380
750	61	80	65	145	1.21	475
1000	61	80	65	145	1.36	545

8. WARRANTY

The Seller warrants Buyer that the product will be free from defects in material and workmanship for seven (7) years and meets the specifications for products in paragraphs 1-7 above.

NJ TRANSIT reserves the right to inspect the product at destination. Where NJ TRANSIT has reasonably determined that shipments or partial shipments fail to meet the specifications in paragraphs 1-7 above, these shipments or partial shipments shall be rejected and same shall be removed and replaced by the Seller or his representative at no cost to NJ TRANSIT.

9. DELIVERY

The length of cable on each reel shall not exceed 1,000 feet unless otherwise specified.

The Seller shall notify Fred Scoleri by telephone at (973)673-5708 forty-eight (48) hours prior to delivery.

The cable shall be shipped to:

NJ TRANSIT Rail
Orange Signal Complex
75 Lincoln Avenue
Orange, NJ 07050

Attn: Fred Scoleri

Philip D. Murphy, Governor
Sheila Y. Oliver, Lieutenant Governor
Diane Gutierrez-Scaccetti, Commissioner
Kevin S. Corbett, President & CEO

NJ TRANSIT
One Penn Plaza East
Newark, NJ 07105-2246
973-491-7000

August 4, 2022

Addendum No. 1

Re: NJ TRANSIT Invitation for Bid No. 22-010R
Purchase of Cable, Conduit And Pull Boxes

To Whom it May Concern:

The following constitutes Addendum No. 1 and must be acknowledged with each bid. Prospective bidders are advised of the following clarifications, additions and/or revisions to the above referenced Invitation for Bid:

1. IFB PRE-BID CONFERENCE PRESENTATION

The Pre-Bid Presentation summarizing information discussed at the Pre-Bid Conference held on Wednesday, August 3, 2022 is enclosed as Attachment A.

2. IFB PRE-BID CONFERENCE ATTENDANCE LIST

The Attendance Sheet from the Pre-Bid Conference held on Wednesday, August 3, 2022 is included as Attachment B.

FOR PROSPECTIVE BIDDERS ONLY

In accordance with NJ TRANSIT's Instructions to Bidders - Article D.4, an authorized representative of your organization shall electronically acknowledge receipt of this Addendum on the Bid Form in the space provided with its bid. Failure to acknowledge receipt of all Addenda may cause the rejection of the Bid as non-responsive.

Sincerely,

Veronica Vivanco-Otero
Senior Contract Specialist
Procurement Department

ATTACHMENT A

INVITATION FOR BID (IFB) NO. 22-010R

Purchase of Cables, Conduit and Pull Boxes

IFB PRE-BID CONFERENCE PRESENTATION

NJ TRANSIT IFB No. 22-010R
Purchase of Cable, Conduit and Pull Boxes

August 3, 2022
Pre-Bid Conference

Veronica Vivanco-Otero
Senior Contract Specialist

Pre-Bid Conference Agenda

- Introduction
- Bidders Process & Requirements
- DBE Goal Assignment and DBE Program Compliance Requirements
- Project Overview & Technical Requirements
- Question and Answer Session

Key Dates

Wednesday, July 20, 2022	**IFB formally advertised**
10:00 am, Wednesday, August 3, 2022	**Pre-Bid Conference**
5:00 pm, Wednesday, August 10, 2022	Request for Changes Due
2:00 pm, Thursday, September 1, 2022	**Bid Opening**

Communications

- Communications regarding this Invitation for Bid are solely to be conducted through NJ TRANSIT's Procurement Department.

- All other contacts are considered improper and are prohibited. Violation of this prohibition may cause for removal of a proposer from consideration for award of this contract.

Communications (continued)

- Proposers are also advised that any discussions held during this meeting are considered informal and are not binding. The only means for modifying this bid is through a formal written Addendum. Therefore, any inquiries or requests for clarification must be submitted in writing.
- Any response NJ TRANSIT elects to make will be made by a written Addendum and sent to all listed plan holders.
- **Request for Changes by Bidders** must submit requests for approved equals, contract modifications, and clarifications on the "Request for Change Form" (available for download with the electronic bidding documents). Each question or request shall be on a separate sheet. NJ TRANSIT must receive requests in writing, **by Wednesday, August 10, 2022**. Any requests for approved equals must be supported by technical data, test results, or other pertinent information that indicates that the substitute offered is equal to or better than that specified.

Obtaining Bid Documents

- This Project is being bid by use of an electronic bidding process. Electronic bidding information is available on NJ TRANSIT's electronic bidding website: https://bidexpress.com. Registration and a subscription fee are required to access the Bid Documents. The Bidder shall download the bidding software. The Bidder shall not alter or in any way change the software.
- **Bidders need to apply for a Digital ID at least seven (7) business days prior to a letting if they want to submit a bid through Bid Express.**

Bid Security

- Bids shall be accompanied by Bid Security in the form of a Bid Bond, Cashier's Check, Certified Check or irrevocable Letter of Credit. Cash is not considered an acceptable form of security.
- The amount of the Bid Security shall equal to ten percent (10%) of the total bid amount. A Bid shall be rejected as non-responsive if it is not accompanied by satisfactory Bid Security.
- **Please Note**: Your Bid Security can be obtained electronically via Bid Express or you may submit a hard copy from your bonding company. However, the hard copy of your bid security must be uploaded in Bid Express and received by the Bid Desk prior to 2:00 pm for the Bid opening.

Bid Opening

- Consistent with Governor Murphy's Executive Orders 103, 104 and 107 on COVID 19, NJ TRANSIT is committed to continue procurement operations to the maximum extent practicable.

- Accordingly, in consideration of the health, safety, and welfare of the agency employees and the bidding community alike, the public bid opening for 22-010R PURCHASE OF CABLE, CONDUIT AND PULL BOXES, which is scheduled for September 1, 2022, at 2:00 PM will be by CONFERENCE CALL ONLY. The bids will be read aloud on the conference call. Conference call details are as follows:

Join Microsoft Teams Meeting

- Dial-in Number: 1-862-294-4371
- Conference ID: 771 881 178#

Bid Opening (continued)

- For any bidder who wishes to participate, conference call access will be open five (5) minutes prior to the Bid Opening and remain open until all bids have been read.
- The apparent bid results will be made available for viewing electronically on Bid Express (www.bidexpress.com) and on NJ TRANSIT's Procurement Calendar https://www.njtransit.com.
- Late bids cannot be accepted.

OFFICE OF BUSINESS DEVELOPMENT

Disadvantaged Business Enterprise (DBE) Assigned Goal and DBE Program Compliance Requirements

Melisa Campusano
Senior Business Development Specialist
973-491-8614
MCampusano@NJTransit.com

Role of Office of Business Development (OBD)

- Administer NJ TRANSIT's DBE and SBE program in accordance with the State and Federal requirements.
- Provide guidance and direction to potential Bidders/Proposers, NJ TRANSIT's project team, and DBE and SBE firms.
- Answer questions, issues, or concerns regarding DBE and SBE requirements of the contract and meeting the assigned contract goal.
- Conduct DBE and SBE Program compliance review of bid/proposal submission. OBD shall contact each subcontractor firm you listed to ensure they were contacted them, and they know they will perform on this project.

DBE Goal Assignment

As an aid in meeting the commitment of its Disadvantaged Business Enterprise(DBE) Program, NJ TRANSIT has deemed this Project for **Group A, B and C – as a Race Neutral (RN)** on the gross sum amount of the proposal or contract for DBE subcontracting participation. All NJ Unified Certification Program (NJUCP) certified DBE firms, including suppliers, are eligible to participate in this contract.

- **Group A – Race Neutral**
- **Group B – Race Neutral**
- **Group C – Race Neutral**

DBE Program Compliance Requirements

- **All mandatory DBE forms and NJUCP certificates or letters shall be submitted by the Bidder with their bid or within five (5) calendar days of the Bid due date.** Bidders are to review carefully and complete the forms entirely, with no blank fields.
- Notwithstanding the date of submission of the mandatory DBE forms, all negotiations between a Bidder and any potential DBE subcontractor, subconsultant, or supplier shall be completed prior to the Bid due date. All DBE forms are available for download in the electronic bidding file.
- Failure to submit any and all mandatory DBE documentation **within five (5) calendar days after the Bid due date** shall result in a rejection of a Bid as non-responsible.

DBE Program Compliance Requirements (Cont'd)

- The Bidder must also submit a NJ Unified Certification Program (NJUCP) certificate or letter for all potential DBE subcontractors.
- A firm must be certified in the NJUCP by the cost proposal due date to receive DBE credit toward the contract's assigned DBE goal. Firms pending NJUCP DBE certification will not count toward meeting the assigned goal.
- Refer to https://njucp.dbesystem.com/, which is a search engine of firms certified by the New Jersey Department of Transportation, the New Jersey Transit Corporation and the Port Authority of New York and New Jersey as Disadvantaged Business Enterprises.

MANDATORY FORM FOR BIDDER/PROPOSER/PRIME: COMPLETE ENTIRELY

FORM A (Fed)

First Tier DBE UTILIZATION - FORM A

Project Name: _____ NJT Contract No: _____

Assigned DBE Goal %:_____ NJT Procurement Specialist: _____ Contract Value ($):_____

First Tier DBE must perform at least 51% of its subcontract value if subcontracting to a Second -Tier DBE or Non-DBE. Do not count Non-DBE portion toward the goal.

Name, Address and Telephone # of DBE Subcontractor/Subconsultant	Provide Detailed Scope of Work to be Performed (Identify all suppliers)	Dollar Value of Subcontract/Sub-consultant Work ($) Awarded	Percentage of Subcontract Work (%)
			%
			%
			%
			%
			%
For DBE suppliers, show original subcontract value multiplied by 60% ($2,000*60%=$1200). For DBE portion of work, subtract Non-DBE portion of work from original subcontract value.	TOTALS	$	%

The undersigned will enter into a formal agreement with the DBE(s) listed in this schedule conditioned upon execution of a contract with NJ TRANSIT for the above referenced project. The undersigned understands that removal/replacement of the DBE(s) listed is NOT PERMISSIBLE for any reason (pre or post-award), without submitting a written request to the Office of Business Development and receiving WRITTEN APPROVAL from the Office of Business Development. Failure to obtain written approval shall result in the breach of contract and subject to corrective action to be determined by NJ TRANSIT.

Company Name: _____ Authorized Signature: _____

Company Address: _____ Print Name: _____

_____ Title: _____

Federal Tax ID #: _____ Prime Contractor's DBE Liaison Officer: _____

Company Tel #: _____ Date Signed: _____

To Add Subs Use Additional Forms

MANDATORY FORM: COMPLETE ENTIRELY

Form A1 (Fed)

BIDDER SOLICITATION & CONTRACTOR INFORMATION - FORM A1

Project Title:_____ Date: _____

Prime Contractor/Consultant:_____ Telephone #: _____

Complete the information below for Bidder/Proposer/Prime(s) working on this project. Use Page 2 for all subcontractors/subconsultants

	Bidder/Proposer/Prime	Bidder/Proposer/Prime	Bidder/Proposer/Prime
Company's Full Name			
Address			
City and State			
Zip			
County			
Phone			
Fax			
E-mail			
Owner			
Date Established			
Date Certified			
Ethnicity			
Gender			
Certification Status: **DBE or Non-DBE**			
Federal Tax ID # / SSN #			
Annual Gross Receipts: A – Less than $500K B - $500K to $1M C - $1M to $2M D - $2M to $5M E - $5M and over **indicate the letter that applies**			
Primary NAICS Code:			

To Add Subs Use Additional Forms

MANDATORY FORM: COMPLETE ENTIRELY

Form A1 (Fed)

BIDDER SOLICITATION & CONTRACTOR INFORMATION - FORM A1

Project Title: _____ Date: _____

Prime Contractor/Consultant: _____ Telephone #: _____

COMPLETE THE INFORMATION BELOW FOR "ALL" FIRMS INCLUDING SUPPLIERS SOLICITED; INCLUDING THOSE THAT WILL WORK ON THIS PROJECT.

	Subcontractor/Subconsultant	Subcontractor/Subconsultant	Subcontractor/Subconsultant
Company's Full Name			
Address			
City and State			
Zip			
County			
Phone			
Fax			
E-mail			
Owner			
Date Established			
Date Certified			
Ethnicity			
Gender			
Certification Status: **DBE or Non-DBE**			
Federal Tax ID # / SSN #			
Annual Gross Receipts: A – Less than $500K B - $500K to $1M C - $1M to $2M D - $2M to $5M E - $5M and over **indicate the letter that applies**			
Primary NAICS Code:			

To Add Subs Use Additional Forms

MANDATORY FORM FOR BIDDER/PROPOSER/PRIME: COMPLETE ENTIRELY

FORM A2 (Fed)

NON-DBE SUBCONTRACTOR UTILIZATION - FORM A2

Directions: To be completed by any Bidder/Proposer/Prime for "all" subs including suppliers participating on this contract.

Bidder/Proposer Prime Name: _____ Project Title: _____

Date: _____ Prime Contract Value: _____

Name, Address and Telephone # of all Subcontractor/Subconsultants	FEIN #	Provide Detailed Scope of Work to be Performed	Dollar Amount of Subcontractor/Sub-consultant Work ($) Awarded	Percentage of Subcontractor Work (%)
			$	%
			$	%
			$	%
			$	%
			$	%
Must provide a detailed scope of work; one-word descriptions are not acceptable.		TOTALS	$	%

To Add Subs Use Additional Forms

NJT Fed Form A2 effect 10.1.09 rev Sept 2010

MANDATORY FORM FOR 1st TIER DBE: COMPLETE ENTIRELY FORM B (Fed)

INTENT TO PERFORM AS A 1ST TIER DBE - FORM B

The Bidder/Proposer/Prime is prohibited from completing any portion of this form and directing the DBE to sign a blank form.

DIRECTIONS: DBE(s) listed on the Form A must complete all information on this form.

Name of Bidder/Proposer/Prime: _____ **Name of DBE Firm:** _____

Project/Contract Name: _____ IFB/RFP Contract Number: _____

Does the undersigned DBE (Answer Accordingly):

Intend to perform subcontract work in connection with the above-mentioned project as a Joint Venture? Circle one. **(Yes or No)**

Intend to subcontract any portion of its scope of work to a DBE(s)? Circle one. **(Yes or No)**
If yes, DBE Sub-Primes must complete and submit Form AA. **At what percent? _____%**

Intend to subcontract any portion of its scope of work to a **Non-DBE(s)**? Circle one. **(Yes or No)**
If yes, must complete and submit Form AA2. **At what percent? _____%**

The undersigned will perform the following described work on the above-referenced project: (*Provide a detailed description of the type of work you will perform on your subcontract. Attach a copy of quote approved and signed by Bidder (optional)).*

_____

_____

Dollar Value of DBE Subcontract: $_____

Total Quantity/Units (if applicable): _____ **Per Unit Cost (if applicable): $_____**

The undersigned based the above scope of work and subcontract value on detailed project specs received from the Bidder contractor named above. Circle one. **(Yes or No)**

The Prime Contractor *projected* the following commencement and completion date for such work as follows:

DBE Contract Start Date: _____ DBE Contract Completion Date _____

The undersigned DBE will enter into a formal agreement for the above work with the Prime Contractor conditioned upon execution of a contract with NJ TRANSIT. As a DBE subcontractor, I will cooperate with the certification, compliance and monitoring process set forth by NJ TRANSIT. I attest that I will perform at least 51% of my subcontract with my own workforce for the referenced project.

Signature of 1st Tier DBE **Date** _____ **Title** _____

Print Name _____ **Telephone #:** _____

Failure to adhere to these instructions or the falsification of any information on this form shall result in breach of contract and subject to the appropriate penalties to be determined by NJ TRANSIT.

MANDATORY FORM FOR 1st TIER DBE: COMPLETE ENTIRELY NJT Fed Form B – rev Sept 2010

Understanding the Form B

- The Bidder is not permitted to pre-fill **any** portion of the Form B on behalf of their DBE team. (*A pre-filled Form B shall be deemed as **fraud***)
- The DBE firm must be doing a minimum of 51% of their work to be serving a Commercial Useful Function on the contract.
- Only the DBE firm is permitted to complete a Form B and they must complete the document in their own words.
- Should a DBE require to sublet work to another firm, then it's recommended to seek out an additional DBE firm to preserve the Proposer's DBE utilization credit.
- The Form B must be signed and dated by an authorized member of the DBE firm.

New Jersey Unified Certification Program

Vendor Certification

Search our database of DBE/ACDBE certified vendors

Search for Certified Firms

System Training

Learn how to fully utilize our system with a live trainer

Training and Events

About the System

Welcome to the New Jersey State Unified Certification Program Certification Portal! The NJUCP is responsible for DBE certification in the state of New Jersey and provides firms with "one-stop" shopping.

Get DBE Certified or Manage your DBE Certification

Click on a partner logo to apply or manage (e.g. request code expansion, submit annual affidavit) your certification. If your firm is applying for the first time, you may apply with any of the certifying partners listed below. Previous applicants must submit to the partner you originally applied with.

NJTRANSIT The Way To Go.

THE PORT AUTHORITY OF NY & NJ

DEPARTMENT OF TRANSPORTATION

NJUCP Directory (cont'd)

Search Certified Directory

Search results may be downloaded to Excel, by clicking the "Download Results to Excel" button after your search results are displayed. To download the full Certification Directory do not enter search criteria, scroll to the bottom of the page and click the "Download Entire Directory to Excel" button.

NOTE: This online directory lists firms that are DBE certified by the NJDOT, NJ Transit or The Port Authority of NY/NJ on behalf of the New Jersey Unified Certification Program (NJUCP). Firms that appear in the directory are currently certified and approved to be utilized toward meeting established contract goals in their displayed certification type(s). Firms that are noted as suspended cannot be utilized for-credit in new contracts until the suspension is removed. For additional details please reference the US DOT Regulations or contact the firm's certifying agency: NJDOT at DOT.DBE_ESBEPrograms@dot.nj.gov. NJ Transit at OBDP@njtransit.com; or The Port Authority of NY/NJ at certhelp@panynj.gov

Search by Certification Type

CERTIFICATIONS

- [x] Disadvantaged Business Enterprise (DBE)
- [ ] Disadvantaged Business Enterprise (FAA Only) (DBE (FAA Only))
- [ ] Airport Concessionaire Disadvantaged Business Enterprise (ACDBE)

Search by Business Name or DBA

BUSINESS NAME/DBA

Tip: Try just a few letters of the firm's name.

Search by Business Description

BUSINESS DESCRIPTION

Tip: Try just a few letters of a keyword.

Search by Commodity Code

COMMODITY CODES

Click to Lookup Commodity Codes

NJUCP VENDOR INFORMATION PAGE
DBE BUSINESS PROFILE

Business & Contact Information

BUSINESS NAME	[redacted] & Associates
OWNER	Ms. [redacted]
ADDRESS	[redacted] Map This Address Pelham, NY 10803
PHONE	[redacted]
FAX	[redacted]
EMAIL	[redacted]
WEBSITE	[redacted]

Certification Information

CERTIFYING AGENCY	New Jersey Transit
CERTIFICATION TYPE	DBE - Disadvantaged Business Enterprise
CERTIFIED BUSINESS DESCRIPTION	Historical preservation; environmental consulting; and cultural resource assessment.

Commodity Codes

Code	Description
NAICS 541340	Drafting services
NAICS 541620	Environmental consulting services
NAICS 541690	Other Scientific and Technical Consulting Services
NAICS 541720	Research and Development in the Social Sciences and Humanities
NAICS 541990	All Other Professional, Scientific, and Technical Services

Sample – Valid DBE Certificate

State of New Jersey
DEPARTMENT OF TRANSPORTATION
P.O. Box 600
Trenton, New Jersey 08625-0600

PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

DIANE GUTIERREZ-SCACCETTI
Commissioner

December 7, 2018

RE: DBE Certification Approval

Dear

We are pleased to inform you that we have completed review of your application and determined that your firm qualifies for certification as a Disadvantaged Business Enterprise (DBE). The New Jersey Department of Transportation conducted the review on behalf of the New Jersey Unified Certification Program (NJ UCP).

Your certification will remain in effect provided that your firm continues to meet the eligibility criteria established by Federal Regulation Title 49 CFR 26. You must provide an affidavit and supporting documentation on an annual basis affirming that there have been no changes within your firm that would affect your current eligibility as a DBE. It is your responsibility to notify this office in writing within 30 days of any changes. Failure to do so will effectuate a process which may result in your firm's decertification.

The following table lists the North America Industry Classification System (NAICS) Code(s) and description(s) that have been assigned to your company in accordance with the service(s) your firm render(s):

"IMPROVING LIVES BY IMPROVING TRANSPORTATION"
New Jersey Is An Equal Opportunity Employer • Printed on Recycled and Recyclable Paper

Sample – Valid DBE Certificate

NAICS CODE	DESCRIPTION
541330	Engineering Services
541360	Geophysical Surveying and Mapping Services
541380	Testing Laboratories
541620	Environmental Consulting Services
562211	Hazardous Waste Treatment (Except Disposal)
562219	Other Nonhazardous Waste Treatment (Except Disposal)
562910	Remediation Services (Except Disposal)

Your firm has been added to the NJ UCP Directory. The Directory can be accessed online at https://njucp.dbesystem.com/Default.asp.

On behalf of the NJ UCP partners, the New Jersey Department of Transportation welcomes you as a member of our DBE family. If you have any questions or concerns regarding the NJ UCP or certification issues, please contact our office at (609) 530-3882. Congratulations!

Sincerely,

Lydia Harper, Manager, DBE/ESBE Programs
Division of Civil Rights & Affirmative Action

Project Overview & Technical Requirements

Glenn A. Zuber
Program Manager

Project Overview & Technical Requirements

- Group A – Cable
  - Specifications
  - Linear Footage Required Per Reel
  - Delivery
- Group B – Conduit
  - Conduit Lengths and Pieces Per Bundle
  - Delivery
- Group C – Pull Boxes
  - Pull Box Cover Logo
  - Delivery

Questions?

ATTACHMENT B

INVITATION FOR BID (IFB) NO. 22-010R

Purchase of Cables, Conduit and Pull Boxes

IFB PRE-BID CONFERENCE ATTENDANCE LIST

Meeting Summary	
Total Number of Participants	12
Meeting Title	22-010R CABLE, CONDUIT AND PULL BOXES - Pre-Proposal Co
Meeting Start Time	8/3/2022, 9:47:22 AM
Meeting End Time	8/3/2022, 10:44:12 AM
Meeting Id	5bea458e-a38a-4e78-82e2-6a31bc56748d

Full Name	Join Time	Leave Time	Duration	Email
Gazaleh, Rich	8/3/2022, 9:47:22 AM	8/3/2022, 10:44:01 AM	56m 39s	[redacted]
Bill Pickel CurrentMaster Electric	8/3/2022, 9:51:34 AM	8/3/2022, 9:56:03 AM	4m 28s	
Lynn Fan CurrentMaster Electric	8/3/2022, 9:54:52 AM	8/3/2022, 10:36:00 AM	41m 7s	
Brion Martin	8/3/2022, 9:54:57 AM	8/3/2022, 10:44:01 AM	49m 3s	
Z., Glenn A.	8/3/2022, 9:55:10 AM	8/3/2022, 10:44:03 AM	48m 52s	
O., Veronica	8/3/2022, 9:55:30 AM	8/3/2022, 10:44:12 AM	48m 41s	VOtero@njtransit.com
E., Jansy P.	8/3/2022, 9:57:42 AM	8/3/2022, 10:42:35 AM	44m 53s	
Rob Galeano (Guest)	8/3/2022, 9:59:13 AM	8/3/2022, 10:44:01 AM	44m 47s	
A., Adonis	8/3/2022, 10:00:09 AM	8/3/2022, 10:44:04 AM	43m 54s	
J., Ed J.	8/3/2022, 10:00:29 AM	8/3/2022, 10:40:55 AM	40m 26s	
E., Hazim N.	8/3/2022, 10:01:14 AM	8/3/2022, 10:44:07 AM	42m 53s	
S., Maggie A.	8/3/2022, 10:07:52 AM	8/3/2022, 10:08:02 AM	10s	

Philip D. Murphy, Governor
Sheila Y. Oliver, Lieutenant Governor
Diane Gutierrez-Scaccetti, Commissioner
Kevin S. Corbett, President & CEO

NJ TRANSIT
One Penn Plaza East
Newark, NJ 07105-2246
973-491-7000

August 18, 2022

Addendum No. 2

Re: NJ TRANSIT Invitation for Bid No. 22-010R
Purchase of Cable, Conduit And Pull Boxes

To Whom it May Concern:

The following constitutes Addendum No. 2 and must be acknowledged with each bid. Prospective bidders are advised of the following clarifications, additions and/or revisions to the above referenced Invitation for Bid:

Revise Item B.1 of the NJ TRANSIT Instruction to Bidders for Construction to read as follows:

This Project is being bid by use of an electronic bidding process. Electronic bidding information is available on NJ TRANSIT's electronic bidding website: www.bidexpress.com. General navigation (registering, setting up to bid electronically, and solicitation review) of www.bidexpress.com prior to actual selection of a solicitation for bidding is free. The Bidder shall download all bid documents from the website. NJ TRANSIT assumes no responsibility for errors or omissions in the downloaded documents except as specifically provided for in the Contract Documents. The Bidder shall address questions or problems with downloading or using the electronic bidding files, not the requirements of the Contract, to:

Bid Express Customer Support
Tel: (888) 352-2439
FAX: (888)971-4191
E-Mail: support@bidexpress.com

To be able to bid online users must have a digital ID. Bidder digital IDs can take up to seven (7) calendar days to obtain. ***There are no costs for submitting a bid***. You may submit bids as early as possible as bids are held at BidExpress.com until the bid opening. You may resubmit bids as many times as you need to, however only your latest bid is valid.

Responses to questions received are provided below:

1. The Electrical Pull Boxes are requested to be shipped within 90 days. I have been informed by the manufacturer that presently the shipping schedule is 200 days.

   NJ TRANSIT Response: Bidders shall make every attempt to ship pull boxes within the specified 90-day timeframe. However, due to supply chain issues, shipping within 200 days will be acceptable.

2. In regard to the Group B section of the bid for pull boxes and conduit. Is there a particular manufacturer that you prefer? As there appears to be a part number associated with it.

   NJ TRANSIT Response: The "Group B – Conduit" section of the bid does not include a manufacturer's part number. There is no preferred manufacturer for conduit.

FOR PROSPECTIVE BIDDERS ONLY

In accordance with NJ TRANSIT's Instructions to Bidders - Article D.4, an authorized representative of your organization shall electronically acknowledge receipt of this Addendum on the Bid Form in the space provided with its bid. Failure to acknowledge receipt of all Addenda may cause the rejection of the Bid as non-responsive.

Sincerely,

Veronica Vivanco-Otero
Senior Contract Specialist
Procurement Department