

July 19, 2019

**THIS IS AN ELECTRONIC BID.
PAPER BID SUBMISSIONS WILL NOT BE ACCEPTED.**

**NEW JERSEY TRANSIT (NJ TRANSIT) will receive bids for: BID NO. (IFB) 19-041
Superstorm Sandy Signal Equipment and Material**

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. A free registration is required to access the Bid Documents. 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 SmartForms™ solicitation, not the requirements of the Contract, to:

NJ TRANSIT Bid Express Administrator
E-Mail: e-bidding@njtransit.com

or

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 also associated costs for obtaining bids. Please plan accordingly. 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.

A. This Invitation for Bid (IFB) electronic bidding file package contains the following Contract Documents available for download and fillable forms on NJ TRANSIT's electronic bidding website: www.bidexpress.com

Electronic Bidding File Contract Documents and Exhibits	
Instruction to Bidders	Available for download in the electronic bidding file.
Contract (General Provisions and Technical Specifications)	Available for download in the electronic bidding file.
Bid Price Form	Fillable form in the electronic bidding file.
Sample Bid Bond Form	Available for download in the electronic bidding file.
Non-Collusion Affidavit	Fillable form in the electronic bidding file.
Debarment, Suspension and Other Responsibility Matters	Fillable form in the electronic bidding file.
Contractor's Certification of Eligibility	Fillable form in the electronic bidding file.
Request for Change Form	Available for download in the electronic bidding file.
Mandatory Equal Employment Opportunity (EEO) Language	Available for download in the electronic bidding file.
NJ TRANSIT Corporation's Protest Procedure	Available for download in the electronic bidding file.
Buy America Certification	Fillable form in the electronic bidding file.
Certification for Contracts, Grants, Loans and Cooperative Agreements	Fillable form in the electronic bidding file.
Affidavit of Compliance/ NJ TRANSIT's Code of Ethics for Vendors	Fillable form in the electronic bidding file.
Prevention of Drug and Alcohol Abuse in Transit Operations Certification	Fillable form in the electronic bidding file.
Disclosure of Investment Activities in Iran	Fillable form in the electronic bidding file.
Ownership Disclosure Form	Fillable form in the electronic bidding file.
Source Disclosure Certification (For Service Procurements Only) NOT APPLICABLE TO THIS BID	Fillable form in the electronic bidding file.
NJ TRANSIT Corporation's DBE Requirements for Federal Procurement Activities and Forms	Available for download in the electronic bidding file.
Addenda Acknowledgement Form	Fillable form in the electronic bidding file.

B. FORMS TO BE SUBMITTED VIA NJ TRANSIT's ELECTRONIC BIDDING WEBSITE: WWW.BIDEXPRESS.COM

1. All Bidders shall submit the following with their Bid:
 - . Bid Price Form
 - . Bid Bond or another acceptable Bid Security
 - . Non-Collusion Affidavit
 - . Debarment, Suspension and Other Responsibility Matters
 - . Contractor's Certification of Eligibility
 - . Buy America Certification
 - . Certification for Contracts, Grants, Loans and Cooperative Agreements
 - . New Jersey Code of Ethics Affidavit of Compliance
 - . Prevention of Drug and Alcohol Abuse in Transit Operations Certification
 - . Disclosure of Investment Activities in Iran Form
 - . Ownership Disclosure Form
 - . Addenda Acknowledgement Form
 - Pre-Qualification Form(s)
2. Bids must be received by www.bidexpress.com no later than **2:00 pm on Tuesday, September 17, 2019.** NJ TRANSIT will not accept any bids received after that time. Bids will be publicly opened at the **NJ TRANSIT Headquarters located at One Penn Plaza East, Newark, NJ 07105 at the above time and date.**

All Bidders should submit the following with the Bid but shall submit it within the indicated number of days after Bid Opening:

 - DBE Forms (Within five (5) calendar** days of Bid Opening)
 - Source Disclosure Certification Form (For Service Procurements Only) (Within five (5) calendar** days of Bid Opening) (NOT APPLICABLE TO THIS BID)

****NOTE: If a form or notification submission required for this IFB is measured in calendar days and, if the last day is a Saturday, Sunday, or a legal holiday, the submission period continues to run until the end of the next day that is not a Saturday, Sunday, or legal holiday.**
3. Bids may be modified or withdrawn in writing up to the Bid opening time.
4. Pursuant to N.J.S.A. 27:25-11, Bidders shall include a **Bid Security** equal to ten percent (10%) of the total bid price. Bid security may be in the form of a bid bond, cashier's check, certified check, or letter of credit. Cash shall not be considered an acceptable form of bid security. If Bids are submitted for more than one group, the security shall be equal to ten percent (10%) of the maximum bid price submitted. The

Bidder shall ensure that the Bid Bond is properly completed and furnished by a corporation or corporations authorized to issue surety bonds in the State of New Jersey and listed in the current U.S. Treasury Department Circular 570 as of the date for the receipt of Bids and made payable to the New Jersey Transit Corporation.

Bidders may supply either an electronic bid bond or a paper bid bond.

Whenever the Bid Security accompanying the Bid is a Letter of Credit, it shall be issued by an "insured bank" within the meaning of the Act creating the Federal Deposit Insurance Corporation (12 U.S.C. 1811). When the Bid Security accompanying the Bid is a Cashier's Check or a Certified Check, it shall be drawn on an account with one of the banks identified in this paragraph.

Cashier's Checks, Certified Checks or Irrevocable Letters of Credit based on accounts with, or guaranteed by, persons, corporations or institutions other than those identified in the preceding paragraph shall not be considered acceptable Bid Security and the Bid shall be declared non-responsive.

All forms of Bid Security shall be valid for a minimum of one hundred and twenty calendar (120) days from the date of bid opening. If not, the Bid Security shall not be considered acceptable, and the Bid shall be declared non-responsive.

Electronic

If the Bid Security accompanying the Bid is an electronic Bid Bond, the Bidder shall choose one of two sureties available on the website. Bidder must complete the electronic bond form from the surety website and enter the electronic bid bond number in the Electronic Bid Bond section **in the space provided in the electronic bidding file.**

Paper

Whenever the Bid Security accompanying the Bid is a Bid Bond in non-electronic form, the Bidder shall ensure that the Bid Bond is properly completed and furnished by a corporation or corporations authorized to issue surety bonds in the State of New Jersey and listed in the current U.S. Treasury Department Circular 570 as of the date for the receipt of Bids and made payable to the New Jersey Transit Corporation.

Types of Paper Bid Bonds

The types of acceptable paper bid bonds are: Letter of credit, Cashier's Check, Certified Check, or Irrevocable letter of Credit. A sample Bid Bond is **available for download with the electronic bidding documents.**

Whenever the Bid Security accompanying the Bid is a Letter of Credit, it shall be issued by an "insured bank" within the meaning of the Act creating the Federal Deposit

Insurance Corporation (12 U.S.C. 1811). When the Bid Security accompanying the Bid is a Cashier's Check or a Certified Check, it shall be drawn on an account with one of the banks identified in this paragraph.

Cashier's Checks, Certified Checks or irrevocable Letters of Credit based on accounts with or guaranteed by persons, corporations or institutions other than those identified in the preceding paragraph shall not be considered acceptable Bid Security and the Bid shall be declared non-responsive.

Delivery of Paper Bid Bond

The Bid Bond shall be delivered to NJ TRANSIT's Bid Desk located at One Penn Plaza East, 6th Floor, Newark, New Jersey prior to the time and date set for the opening of bids. Failure to deliver such Bid Bond to NJ TRANSIT's Bid Desk prior to the time set for the opening of bids shall result in rejection of the bid as non-responsive.

5. In accordance with N.J.S.A. 52:32-44, all New Jersey and out of State business organizations must obtain a Business Registration Certificate (BRC) from the State of New Jersey, Department of Treasury, Division of Revenue, prior to the time a contract is awarded or authorized by NJ TRANSIT.

The Bidder must submit its BRC and that of any named Subcontractor prior to the time the Contract is awarded. No Contract will be awarded without proof of business registration with the Department of Treasury, Division of Revenue.

No contract with a Subcontractor shall be awarded by any Contractor unless the Subcontractor first provides proof of valid business registration.

Any questions in this regard can be directed to the Division of Revenue at (609) 292-1730. The business registration form (Form NJ-REG) can be found on-line at <http://www.state.nj.us/treasury/revenue/busregcert.shtml>.

6. Pursuant to N.J.S.A. 52:25-24.2, Bidders must submit an **"Ownership Disclosure Form"** prior to or with its Bid **in the space provided in the electronic bidding file**.
7. (For Services Procurement Only) In accordance with N.J.S.A. 52:34-13.2, Bidders must submit a **"Source Disclosure Certification Form"** for all service contracts **in the space provided in the electronic bidding file**. If the information is not submitted with the Bid, it shall be submitted within five (5) calendar days of Bid opening. (NOT APPLICABLE TO THIS BID.)

Failure to submit the Source Disclosure Certification Form shall preclude award of a Contract to the Bidder.

8. Pursuant to N.J.S.A. 52:32-55, a Bidder that, at the time of Bid opening, is identified on a list created pursuant to such law by the New Jersey Department of the Treasury

as a person or entity engaging in investment activities in Iran as described in such law, shall be ineligible to, and shall not, bid on or enter into a contract with NJ TRANSIT. As required by such law, the Bidder must complete the certification entitled **“Disclosure of Investment Activities in Iran”** with its Bid **in the space provided in the electronic bidding file** to attest under penalty of perjury, that neither the person or entity nor any of its parents, subsidiaries or affiliates is identified on the Department of Treasury’s Chapter 25 list as a person or entity engaging in investment activities in Iran. Failure to complete the certification will render the Bid non-responsive.

9. Disadvantaged Business Enterprise (DBE) Goal Assignment

As an aid in meeting the commitment of its Disadvantaged Business Enterprise (DBE) Program, NJ TRANSIT has assigned this project as a Race Neutral DBE project for purposes of the gross sum amount of the Bid or Contract for DBE subcontracting participation. All NJ Unified Certification Program (NJUCP) certified DBE firms, including suppliers, are eligible to participate in this Contract.

NJ TRANSIT's DBE Program is accorded the same priority as compliance with all other legal obligations required by the USDOT. Contractors shall comply with the DBE Program requirements in the award and administration of NJ TRANSIT contracts. Failure by the Contractor to carry out these requirements shall constitute a breach of the Contract, which may result in the termination of the Contract or other such remedy, as NJ TRANSIT deems appropriate.

10. DBE Disadvantaged Business Enterprise (DBE) Program Compliance Requirements

The Bidder/Contractor shall refer to the **“DBE Requirements for Federal Procurement Activities”** available for download with the electronic bidding documents for instructions, guidance, and explanations for DBE Program obligations for Construction Contracts and subcontracts. For this Contract, the apparent low Bidder and the second low Bidder shall identify all DBE and non-DBE subcontractors and suppliers proposed to participate in and those solicited for this Contract and shall complete and submit the mandatory DBE Form A – First Tier DBE Utilization, DBE Form A1 – Bidder Solicitation and Contractor Information, DBE Form A2 – Non-DBE Subcontractor Utilization, and DBE Form B – DBE Good Faith Effort Form. The apparent low Bidder and the second low Bidder must also submit NJ Unified Certification Program (NJUCP) certificate or letter for all potential DBE subcontractors. Additionally, the apparent low Bidder and the second low Bidder shall submit any applicable supplemental forms (AA, AA1, AA2, BB, and D). All DBE forms and NJUCP certificates or letters shall be submitted with the Bid or within five (5) calendar days of the Bid opening date. However, Bidders are strongly encouraged to submit all mandatory documents with the Bid to prevent delay of the Contract award. Bidders are requested 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 or supplier shall be completed

prior to the Bid opening date. **The mandatory DBE Forms are available for download with the electronic bidding documents.** Failure to submit any and all mandatory DBE documentation **within five (5) calendar days the Bid opening date** shall result in a rejection of a Bid as non-responsible.

Any questions regarding the DBE requirements or the mandatory required forms for this Contract should be directed to:

Faith Kalisa
Manager Business Development & Compliance Operations
973-491-8068
FKalisa@njtransit.com

11. The Bidder shall certify on the “**Contractor’s Certification of Eligibility**” in the space **provided in the electronic bidding file** that it is not included on the State of New Jersey, Department of Treasury, Consolidated Debarment Report or on the State of New Jersey, Department of Labor and Workforce Development, Division of Wage and Hour Compliance, Prevailing Wage Debarment List.

Bidders must have no exclusions with the System for Award Management (S.A.M). If the Bidder is included on any exclusion report, it may not be eligible for award of Contract.

12. EQUAL PAY ACT

Pursuant to N.J.S.A. 34:11-56.14, any employer, regardless of the location of the employer, who enters into a contract with a public body to perform qualifying services to the public body shall provide a report to the Commissioner of the New Jersey Department of Labor and Workforce Development, in a form promulgated by the Commissioner, of information regarding the compensation and hours worked by employees categorized by gender, race, ethnicity and job category. Information regarding the Diane B. Allen Equal Pay Act and its requirements may be obtained from the New Jersey Department of Labor and Workforce Development (LWD) web site at: <https://nj.gov/labor/equalpay/equalpay.html>

LWD forms may be obtained from the online web site at:

[https://nj.gov/labor/forms_pdfs/equalpayact/mw563\(6-18\)annualequalpay.pdf](https://nj.gov/labor/forms_pdfs/equalpayact/mw563(6-18)annualequalpay.pdf)

13. **Pre-Qualification Forms.** Prior to submitting a Bid, each prospective Bidder must be pre-qualified by NJ TRANSIT. In order to be considered for Pre-Qualification, each Bidder must complete the Bidders’ Pre-Qualification Form (Appendix B) contained in the IFB. These forms are due on or before **August 30, 2019 by 3:00 p.m.** Late Pre-Qualification Forms will not be accepted. **Please Note: Previous Pre-Qualifications for other NJ TRANSIT bids or projects are not valid for this bid.**

NJ TRANSIT will review the Pre-Qualification Form, which may include assessments of experience and financial conditions. Bids will not be accepted unless Pre-Qualification has been granted by NJ TRANSIT.

C. WHERE TO SUBMIT BIDS AND/OR REQUEST ADDITIONAL INFORMATION

1. Bids must be submitted via the internet at www.bidexpress.com. Manual bids will not be accepted.
2. All questions and requests for changes or additional information shall be addressed to:

NJ TRANSIT
Office of Procurement - 6th Floor
One Penn Plaza East
Newark, NJ 07105-2246
Attn: JoAnn Cudahy
JCudahy@NJTRANSIT.com

3. All Bidders are advised that communications with NJ TRANSIT that in any way relate to this procurement shall be conducted with or through the authorized representative of the Contracting Officer in NJ TRANSIT's Division of Procurement. All other contacts are strictly prohibited and are considered improper. Bidders are advised that violation of this prohibition may result in the removal of the firm from consideration for this Contract and possible suspension/debarment.
4. Bids may be withdrawn at any time prior to the time specified for the opening of Bids by filing a written withdrawal with NJ TRANSIT, duly executed by the Bidder or its authorized representative. The withdrawal of a Bid does not prejudice the right of the Bidder to file a new Bid. Withdrawals received after the time specified for the opening of Bids will not be considered nor may any Bid be withdrawn after that time.
5. Submission of more than one (1) Bid from an individual, firm, partnership, corporation or combination thereof under the same or different names shall be cause for disqualification of the Bids submitted by such entities. Reasonable grounds for believing that any individual, firm, partnership, corporation, or combination thereof, is interested as a principal in more than one Bid for the procurement contemplated may cause the rejection of all Bids submitted by such individual, firm, partnership, corporation, or combination thereof.

D. HOW TO REQUEST CHANGES IN THIS IFB

1. Wherever brand names may appear in this IFB, they are included for the purpose of establishing identification and a general description of the item. Wherever such names may appear, the term "or approved equal" is considered to follow. NJ TRANSIT will render the decision on the approved equal at its sole discretion.

2. 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 **Friday, August 23, 2019 at 2:00 p.m.** 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.

All questions and requests for changes or additional information shall be addressed to:

NJ TRANSIT
Office of Procurement - 6th Floor
One Penn Plaza East
Newark, NJ 07105-2246
Attn: JoAnn Cudahy
JCudahy@NJTRANSIT.com

3. NJ TRANSIT may respond in writing to all Bidders within a reasonable number of days before the Bid opening date, and the Bid opening may be rescheduled at NJ TRANSIT's option to allow a reasonable amount of time between the response and Bid opening. Any response that NJ TRANSIT may choose to make will be by a written Addendum to the IFB and sent to all listed holders of the solicitation. All Addenda will become part of any contract resulting from this IFB.
4. Bidders are required to acknowledge receipt of all Addenda on the **“Addenda Acknowledgement Form”** in the space provided in the **electronic bidding file**. Failure to acknowledge receipt of all Addenda may cause the rejection of the Bid as non-responsive.

E. QUANTITY

1. Bidders must bid a fixed price for the estimated quantity specified. NJ TRANSIT reserves the right to amend these quantities after Contract award.

F. PREPARATION OF THE BID

1. The Bidder shall ensure that all Addenda, including Amendments to the Bid Form, are applied to the Bid and properly acknowledged. The Bidder shall insert the price for each Bid Item in the appropriate box provided under the column designated “Unit Price”. The only entries permitted in the Bid Form will be the lump sum prices or unit prices for items that shall be bid. The software will perform all extensions of the unit prices and calculate the total bid amounts.
2. Prices shall be provided for all in a “Group” on the Bid Form. All bid prices must be quoted in numeric form. Where no figure is provided by the Bidder in the “Unit

Price" column for one or more contract Items, the Bid will be considered to be nonconforming and shall be rejected. If the Bidder is not bidding on a Group, then the Bidder shall insert a "0" in the box under "Unit Price." NJ TRANSIT is soliciting bids through a two-step Invitation for Bid (IFB) "by Group" – See Specifications document for further information. **The period of this agreement shall be two years from the date of contract issuance.**

3. Alternate bids for any item will not be considered unless specifically requested by NJ TRANSIT in these Specifications.
4. The Bidder shall check the Bid before submission using the Check Bid button.

G. CAUSES FOR REJECTION OF BIDS

1. Bids will be considered irregular and shall be rejected for the following reasons:
 - a. If the Bid materially fails to conform to the requirements of the Invitation for Bids.
 - b. If the Bid is not received by the specified date and time.
 - c. If the Bidder fails to furnish satisfactory Bid Security with the Bid.
 - d. If the Bidder takes material exception to any of the Bid requirements, specifications, or Contract Terms.
 - e. If Bid offer is valid for less than one hundred and twenty (120) calendar days for acceptance.
 - f. If Bid includes payment terms requiring payment in less than thirty (30) calendar days.
 - g. If Bid is not signed by the authorized representative of the Bidder.
 - h. If the Bidder fails to complete and deliver the Ownership Disclosure Form as required by N.J.S.A. 52:25-24.2 before receipt of the Bid or with the Bid.
 - i. If the Bidder fails to complete the Disclosure of Investment Activities in Iran certification.
 - j. If the Bidder fails to execute the "Buy America" Certification.
 - k. If the Bidder fails to comply with all mandatory DBE requirements.
2. Bids will be considered irregular and may be rejected for the following reasons:
 - a. If the Bidder fails to complete and submit the Source Disclosure certification (For Services Procurement Only). (NOT APPLICABLE TO THIS BID.)
 - b. If the Bid is not properly completed.
 - c. If all addenda are not properly acknowledged.
 - d. If the Bid contains prices that are materially unbalanced.
 - e. For other reasons, if NJ TRANSIT deems it advisable to do so in the public interest and in accordance with applicable law.
3. NJ TRANSIT, in its sole discretion, reserves the right to reject any and all Bids and to waive informalities and minor irregularities in Bids received, in accordance with applicable law, notwithstanding other provisions of the Contract Documents.

H. AWARD PROCEDURES

1. NJ TRANSIT reserves the right to request additional information from any and all Bidders.
2. NJ TRANSIT reserves the right to conduct a pre-award responsibility survey to ensure the successful Bidder has adequate facilities, equipment and staff to perform the Contract within the time specified and provide warranty service.
3. NJ TRANSIT intends to award a Contract within sixty (60) calendar days of the Bid opening but reserves the right to award within one hundred and twenty (120) calendar days. Accordingly, all Bids must be valid for a minimum of one hundred and twenty (120) calendar days from the date of Bid opening.
4. Prompt payment discounts will not be considered in determining the low Bidder.
5. The award of a firm fixed price contract, if it is awarded, will be to the responsible Bidder whose Bid, conforming to the Invitation for Bid, is lowest in price for each item or for the total amount bid (as indicated in the specifications).
6. Prior to execution of a Contract, the successful Bidder will be required to:
 - Provide appropriate EEO/AA information or certificates as required by P.L. 1975, C.127 (N.J.A.C. 17:27), as described within this IFB in the **“Equal Employment Opportunity Requirements” (available for download with the electronic bidding documents)** and submit an Affirmative Action Employee Information Report (AA302).
 - Provide any required DBE forms **(available for download with the electronic bidding documents)** submitted with the Bid or within five calendar (5) days of the Bid Opening;
 - Provide its Business Registration Certificate from the State of New Jersey, Department of Treasury, Division of Revenue.
 - If an out of state corporation, provide a Certificate of Authority to do business in New Jersey in accordance with N.J.S.A. 14A:13-3 and appoint a New Jersey agent for service of process (only for out-of-state corporations).
 - Provide evidence of adequate levels of insurance as indicated in Section 32 of the General Provisions naming NJ TRANSIT as additional insured and providing for thirty (30) calendar days advance notice of cancellation.
 - (For Services Procurement only) In accordance with N.J.S.A. 52:34-13.2, submit a **“Source Disclosure Certification Form” in the space provided in the electronic bidding file** for all services contracts. If the information is not submitted with the

Bid, it shall be submitted within five (5) calendar days of NJ TRANSIT's request. (NOT APPLICABLE TO THIS BID.)

- If specifications so require, submit within ten (10) calendar days after notification of NJ TRANSIT's intent to award, performance and payment bonds in the amount indicated in the specifications. The surety must comply with all requirements of N.J.S.A. 2A:44-143 (P. L. 1995, c.384). (NOT APPLICABLE TO THIS BID.)

I. OTHER INFORMATION

1. If only one Bid is received, a cost proposal may be requested of the single Bidder. A cost/price analysis and/or audit may be performed by NJ TRANSIT in order to determine if the price is fair and reasonable.
2. NJ TRANSIT is a public agency and exempt from paying Sales and Federal Excise Taxes. Bidders shall not include these taxes in their bid price.
3. This Contract is funded in whole or in part by the United States Government and is subject to all Federal laws and regulations governing Federally funded projects. For Bid submissions over \$150,000 a signed **"Buy America Certification" in the space provided in the electronic bidding file** must be included with the Bid submission or the Bid will be deemed "non-responsive" and will be rejected. Bidders must only sign one of the available signature lines. Bidders who sign both signature lines, indicating both complying with and not complying with "Buy America", will have their Bids deemed non-responsive and the Bids will be rejected. Note that Buy America certificates cannot be changed after the Bid opening date except in very specific instances in which a clerical error has been identified as described in current Buy America Regulations, 49 C.F.R. Part 661. Questions regarding Buy America compliance requirements should be submitted in writing to the authorized representative of the Contracting Officer in NJ TRANSIT's Division of Procurement.
4. This Contract will be awarded subject to the availability of funds.
5. Summary of critical dates:

Date of Invitation for Bid:	Friday, July 19, 2019
Pre-bid Conference:	Friday, August 16, 2019 at 10:00 a.m.
Request for Changes Due:	Friday, August 23, 2019 by 2:00 p.m.
Request for Pre-qualification:	Friday, August 30, 2019 by 3:00 p.m.
Bid Opening:	Tuesday, September 17, 2019 at 2:00 p.m.

6. Notice of Executive Order 125 Requirement for Posting of Winning Proposal and Contract Documents

Pursuant to Executive Order No. 125, signed by Governor Christie on February 8, 2013, the Office of the State Comptroller (OSC) is required to make all approved State contracts for the allocation and expenditure of federal reconstruction resources available to the public by posting such contracts on an appropriate State website. Such contracts are posted on the New Jersey Sandy Transparency website located at: <http://nj.gov/comptroller/sandytransparency/contracts/sandy/>

The Contract resulting from this Request for Proposal is subject to the requirements of Executive Order No. 125. Accordingly, the OSC will post a copy of the Contract, including the Request for Proposal, the winning proposer's proposal and other related Contract documents for the above Contract on the Sandy Transparency website.

In submitting its special prequalification response, a prospective bidder may designate specific information as not subject to disclosure. However, such proposer must have a good faith legal and/ or factual basis to assert that such designated portions of its submission (i) are proprietary and confidential financial or commercial information or trade secrets or (ii) must not be disclosed to protect the personal privacy of an identified individual. The location in the submission of any such designation should be clearly stated in a cover letter, and a redacted copy of the submission should be provided.

The State reserves the right to make the determination as to what is proprietary or confidential and will advise the winning bidder accordingly. The State will not honor any attempt by a winning bidder to designate its entire pre-qualification or IFB submissions as proprietary, confidential and/or to claim copyright protection for entire submissions. In the event of any challenge to the winning bidder's assertion of confidentiality with which NJ TRANSIT does not concur, the bidder shall be solely responsible for defending its designation.

Sincerely,



JoAnn Cudahy
Senior Contracts Specialist
Purchasing & Materials Management
Procurement & Support Services

CONTRACT NO.

GENERAL PROVISIONS

THIS AGREEMENT (Contract) made as of _____ between New Jersey Transit Corporation, a public instrumentality of the State of New Jersey, hereinafter referred to as NJ TRANSIT, having its principal office at One Penn Plaza East, Newark, New Jersey 07105-2246 and _____ hereinafter referred to as the Contractor, includes four parts namely: a) General Provisions; b) Specifications; c) Exhibits; and d) all addenda issued prior to execution of the Contract.

THIS AGREEMENT (Contract) shall become binding upon the parties hereto when executed on behalf of NJ TRANSIT by the Contracting Officer or his/her designee. The Contractor shall commence work upon within five (5) calendar days upon receipt of a written Notice to Proceed to that effect which shall be issued on behalf of NJ TRANSIT by its Contracting Officer or his/her designee upon the execution of the Agreement by NJ TRANSIT. The term of this Agreement shall be for _____

1. **Goods/Materials/Services to be Provided**

The Contractor, for and in consideration of the payments hereinafter specified and agreed to be made by NJ TRANSIT, agrees to do and perform all work and labor required to furnish and deliver all goods, materials or services in conformity with the Specifications included hereinafter.

2. **Quantities and Unit Prices**

The Contractor agrees that the prices hereinafter set forth are firm for the period of this Contract. The Contractor also agrees that the quantities noted are approximate and subject to increases or decreases at the sole option of NJ TRANSIT. NJ TRANSIT is obligated to pay for only those goods, materials or services and quantities thereof ordered, delivered/provided and accepted in accordance with this Contract.

3. **Proper Payments**

The Contractor agrees to make timely payment of all proper charges for labor and materials required to provide NJ TRANSIT the aforementioned goods, materials or services.

4. **Non-restrictive Clause**

Wherever brand names may appear in this Contract, they are included for the purpose of establishing identification and a general description of the item. Wherever such names may appear, the term "or approved equal" is considered to follow. The decision on the approved of a proposed equal will be rendered by NJ TRANSIT at its sole discretion.

5. **Payment**

NJ TRANSIT agrees, subject to the availability of funds, to pay the Contractor upon submission of proper invoices for the quantities of goods, materials or services ordered, delivered and accepted by NJ TRANSIT, in accordance with the prices set forth in the Bid Price Form attached hereto in Attachment 1 of this Contract.

NJ TRANSIT shall order goods, materials or services by use of a NJ TRANSIT Purchase Order

referencing this Contract, and such Purchase Order shall be the only authorization the Contractor shall use to deliver goods, materials or services and invoice NJ TRANSIT.

6. Release of Claims

It is agreed that the Contractor's acceptance of final payment from NJ TRANSIT shall release in full all claims against NJ TRANSIT or any of its employees under this Contract.

7. Assignment

This Contract shall not be assigned by the Contractor without the prior written consent of NJ TRANSIT, which consent may be withheld in NJ TRANSIT's sole discretion.

8. Subcontracting

The Contractor shall not subcontract any portion of this Contract without the prior written consent of NJ TRANSIT, which consent may be withheld at NJ TRANSIT's sole discretion. Utilization of independent delivery services and other similar activities are acceptable.

A Subcontractor or Supplier shall look only to the Contractor for the payment of any claims of any nature whatsoever arising out of the said subcontract, and said Subcontractor agrees, as a condition of NJ TRANSIT's consent to the making of said subcontract, that it shall make no claim whatsoever against NJ TRANSIT, its officers, agents, servants or employees for any work performed or thing done by reason of said subcontract, or for any other cause whatsoever that may arise by reason of the relationship created between the Contractor and Subcontractor by the subcontract.

9. Prompt Payment

(a) The Contractor agrees to pay each Subcontractor and Supplier under this Contract for satisfactory performance of completed work under its subcontract no later than ten (10) calendar days from the receipt of each payment the Contractor receives from NJ TRANSIT. The Contractor shall ensure that all lower tier Subcontractors and suppliers are paid all invoiced amounts (less any retainage) that meet all applicable requirements within fifteen (15) calendar days from the time the Subcontractor receives payment from the Contractor.

(b) In accordance with N.J.S.A. 52.32-39.1, the Contractor shall certify, prior to the issuance of a progress payment by NJ TRANSIT, that all Subcontractors and Suppliers have been paid any amounts due from previous progress payments and shall be paid any amounts due from the current progress payment. Alternatively, the Contractor shall certify that there exists a valid basis under the terms of the Subcontractor's or Supplier's contract to withhold payment from the Subcontractor or Supplier and therefore payment is withheld.

(c) If the Contractor withholds payment from the Subcontractor or Supplier, the Contractor shall provide to the Subcontractor or Supplier written notice thereof. The notice shall detail the reason for withholding payment and state the amount of payment withheld. If a Performance/ Payment Bond has been provided under this Contract, the Contractor shall send a copy of the notice to the Surety providing the bond for the Contractor. A copy of the notice shall also be submitted to NJ TRANSIT with the certification that payments are being withheld.

(d) Should the Contractor provide notice and proceed to withhold payment from any Subcontractor or Supplier, NJ TRANSIT may elect, at its sole discretion, to help resolve the dispute. NJ TRANSIT's

efforts shall be limited to meeting with the Contractor and the Subcontractor or Supplier and reviewing the relevant facts with both parties. NJ TRANSIT will not act as a decider of fact nor will NJ TRANSIT direct a settlement to the dispute. Any NJ TRANSIT effort is solely intended to assist the parties in understanding their respective positions and to encourage a reasonable resolution of the dispute.

10. Taxes and Applicable Laws

The Contractor and any subcontractor agree that any taxes to be paid as a result of this Contract will be paid by the Contractor and any subcontractor and that NJ TRANSIT's obligation is limited to payment for the goods, materials or services in accordance with the unit prices stated herein. As a public agency, NJ TRANSIT is exempt from State use & sales taxes and Federal Excise Taxes. They must not be included in the Contractor's price quotations or invoices. The State of New Jersey's Federal Excise Tax Exemption Number is 22-75-0050K and the State of New Jersey's State Excise Tax Exemption Number is 21-60000928.

The Contractor shall comply with applicable laws, regulations, ordinances, and codes of the United States, the State of New Jersey and local governments within the State. If NJ TRANSIT determines that the Contractor has violated or failed to comply with applicable federal, state or local laws with respect to its performance under this Contract, NJ TRANSIT may withhold payments for such performance and take such other actions that it deems appropriate under the circumstances until compliance or remedial action has been accomplished by the Contractor to the satisfaction of NJ TRANSIT. This Contract shall be governed by and construed in accordance with the laws of the State of New Jersey.

11. Succession

This Contract is to be binding upon NJ TRANSIT, its successor or successors, and upon the Contractor, its successor or successors.

12. Changes

Any change in this Contract proposed by the Contractor shall be submitted to NJ TRANSIT for its prior approval, and, if approved, NJ TRANSIT will make the change by a written Contract modification. Oral change orders are not permitted. The Contractor shall be liable for all costs resulting from and/or for satisfactorily correcting any change not approved by written Contract modification to the Contract signed by the Contracting Officer.

NJ TRANSIT may, at any time, by a written order, and without notice to the sureties, make changes, within the general scope of this Contract. If any such change causes an increase or decrease in the cost of, or the time required for, the performance of any part of the work, whether changed or not changed by any such order, an equitable adjustment shall be made in the Contract price or delivery schedule, or both, and the Contract shall be modified in writing accordingly.

Within five (5) calendar days after receipt of the proposed written change order, the Contractor shall provide the Contracting Officer a detailed price and schedule proposal for the work to be performed. This proposal shall be accepted or modified by negotiations between the Contractor and the Contracting Officer. At that time, a Contract modification shall be executed in writing by both parties. Disagreements that cannot be resolved through negotiations shall be resolved in accordance with Section 19, "Disputes". Regardless of any disputes, the Contractor shall proceed with the work ordered.

If a price adjustment is indicated either upward or downward, it shall be negotiated between NJ TRANSIT and the Contractor for changes that are mandated as a result of legislation or regulation that are

promulgated and become effective between the date of bid opening and the date of performance. Such price adjustment may be audited by NJ TRANSIT.

13. Delays

If performance under the Contract should be unavoidably delayed, the Contracting Officer shall extend the time for completion of the Contract for the determined number of days of such delay. A delay is unavoidable only if the delay was not reasonably expected to occur in connection with or during the Contractor's performance, was not caused directly or substantially by acts, omissions, negligence, or mistakes of the Contractor, the Contractor's suppliers, or their agents, was substantial and in fact caused the Contractor to miss delivery dates, and could not adequately have been guarded against by contractual or legal means.

The Contractor shall notify the Contracting Officer as soon as the Contractor has, or should have, knowledge that an event has occurred which will delay performance. Within five (5) calendar days, the Contractor shall confirm such notice in writing furnishing as much detail as is available. Failure of the Contractor to so notify the Contracting Officer shall result in a waiver of any rights that the Contractor may have for an extension of time under this Contract.

The Contractor agrees to supply, as soon as such data are available, any reasonable proof that is required by the Contracting Officer to make a decision on any request for extension. The Contracting Officer shall examine the request and any documents supplied by the Contractor and shall determine if the Contractor is entitled to an extension and the duration of such extension. The Contracting Officer shall notify the Contractor of his decision in writing.

It is expressly understood and agreed that the Contractor shall not be entitled to damages or compensation, and shall not be reimbursed for losses on account of delays, resulting from any cause under this provision.

14. Labor Disputes

Whenever the Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this Contract, the Contractor shall immediately give notice thereof, including all relevant information to NJ TRANSIT.

15. Indemnification

The Contractor agrees to defend, indemnify, protect and save harmless the United States Department of Transportation, the FTA, the State of New Jersey, New Jersey Transit Corporation, its subsidiaries, and their agents, servants, directors, officers, and employees from and against any and all suits, claims, demands or damages of whatsoever kind or nature arising out of or related to the performance of this Contract by the Contractor or its directors, officers, agents, servants, or employees including but not limited to expenditures for and costs of investigations, hiring of expert witnesses, court costs, counsel fees, settlements, judgments or otherwise; provided, however, that the obligations of the Contractor hereunder shall not apply when the fault or negligence of an agent or employee of NJ TRANSIT is the sole cause. NJ TRANSIT shall, as soon as practicable, after a claim has been made against it, give written notice thereof to the Contractor along with full and complete particulars of the claim. If the suit is brought against NJ TRANSIT, NJ TRANSIT shall immediately forward to the Contractor every demand, complaint, notice, summons, pleading, or other process received by NJ TRANSIT or its representatives.

In the defense of any such claims, demands, suits, actions and proceedings, the Contractor shall not raise or introduce, without the express written permission in advance of the Attorney General of the State

of New Jersey, any defense involving in any way the immunity of NJ TRANSIT or the State of New Jersey, the jurisdiction of the tribunal over NJ TRANSIT or the State of New Jersey, or the provisions of any statute respecting suits against NJ TRANSIT or the State of New Jersey.

16. Environmental Indemnity Clause

The Contractor shall conduct all activities in compliance with all applicable federal, state and local laws, rules and regulations designed to prevent or control the discharge of substances into the land, water and air and to protect individual health and safety. The Contractor will indemnify, hold harmless and defend NJ TRANSIT, the State of New Jersey, their directors, officers, employees, agents and assigns from and against any and all suits, actions, proceedings, costs, fines, penalties and claims arising from or alleged to have arisen from its violation of any such environmental, health or safety laws, rules or regulations whenever such suits, actions, claims or proceedings shall be commenced, or whenever such costs are accrued, except for any violations, if any, at the NJ TRANSIT facility existing prior to the Contractor's activities. The Contractor shall take reasonable and necessary precautions to prevent the discharge of hazardous substances, including asbestos and petroleum products, onto NJ TRANSIT property or into the environment, including the air. Failure to comply will be considered grounds for default, and NJ TRANSIT may cancel the contract in accordance with Section 18, "Termination for Default". The indemnification obligations hereunder shall survive the completion or termination of this Contract.

17. Termination for Convenience

(a) NJ TRANSIT may terminate performance of work under this contract in whole or, from time to time, in part if the Contracting Officer determines that a termination is in NJ TRANSIT's interest. The Contracting Officer shall terminate by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

(b) After receipt of a Notice of Termination, and except as directed by the Contracting Officer, the Contractor shall immediately proceed with the following obligations, regardless of any delay in determining or adjusting any amounts due under this clause:

- (1) Stop work as specified in the notice.
- (2) Place no further subcontracts or orders (referred to as subcontracts in this clause) for materials, services, or facilities, except as necessary to complete the continued portion of the contract.
- (3) Terminate all subcontracts to the extent they relate to the work terminated.
- (4) Assign to NJ TRANSIT, as directed by the Contracting Officer, all right, title, and interest of the Contractor under the subcontracts terminated, in which case NJ TRANSIT shall have the right to settle or to pay any termination settlement proposal arising out of those terminations.
- (5) With approval or ratification to the extent required by the Contracting Officer, settle all outstanding liabilities and termination settlement proposals arising from the termination of subcontracts; the approval or ratification will be final for purposes of this clause.
- (6) As directed by the Contracting Officer, transfer title and deliver to NJ TRANSIT (i) the fabricated or unfabricated parts, work in process, completed work, supplies, and other material produced or acquired for the work terminated, and (ii) the completed or partially completed plans, drawings, information, and other property that, if the contract had been completed, would be required to be furnished to NJ TRANSIT.
- (7) Complete performance of the work not terminated.
- (8) Take any action that may be necessary, or that the Contracting Officer may direct, for the protection and preservation of the property related to this contract that is in the possession of the Contractor and in which NJ TRANSIT has or may acquire an interest.

(9) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in subparagraph (b)(6) of this clause; provided, however, that the Contractor (i) is not required to extend credit to any purchaser and (ii) may acquire the property under the conditions prescribed by, and at prices approved by, the Contracting Officer. The proceeds of any transfer or disposition will be applied to reduce any payments to be made by NJ TRANSIT under this contract, credited to the price or cost of the work, or paid in any other manner directed by the Contracting Officer.

(c) The Contractor shall submit complete termination inventory schedules no later than 120 calendar days from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 120-day period.

(d) After expiration of the plant clearance period as defined in subpart 49.001 of the Federal Acquisition Regulation, the Contractor may submit to the Contracting Officer a list, certified as to quantity and quality, of termination inventory not previously disposed of, excluding items authorized for disposition by the Contracting Officer. The Contractor may request NJ TRANSIT to remove those items or enter into an agreement for their storage. Within fifteen (15) calendar days, NJ TRANSIT will accept title to those items and remove them or enter into a storage agreement. The Contracting Officer may verify the list upon removal of the items, or if stored, within forty-five (45) calendar days from submission of the list, and shall correct the list, as necessary, before final settlement.

(e) After termination, the Contractor shall submit a final termination settlement proposal to the Contracting Officer in the form and with the certification prescribed by the Contracting Officer. The Contractor shall submit the proposal promptly, but no later than 1 year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this 1-year period. However, if the Contracting Officer determines that the facts justify it, a termination settlement proposal may be received and acted on after 1 year or any extension. If the Contractor fails to submit the proposal within the time allowed, the Contracting Officer may determine, on the basis of information available, the amount, if any, due the Contractor because of the termination and shall pay the amount determined.

(f) Subject to paragraph (e) of this clause, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid or remaining to be paid because of the termination. The amount may include a reasonable allowance for profit on work done. However, the agreed amount, whether under this paragraph (f) or paragraph (g) of this clause, exclusive of costs shown in subparagraph (g)(3) of this clause, may not exceed the total contract price as reduced by (1) the amount of payments previously made and (2) the contract price of work not terminated. The contract shall be modified, and the Contractor paid the agreed amount. Paragraph (g) of this clause shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this paragraph.

(g) If the Contractor and the Contracting Officer fail to agree on the whole amount to be paid because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined by the Contracting Officer as follows, but without duplication of any amounts agreed on under paragraph (f) of this clause:

(1) The contract price for completed supplies or services accepted by NJ TRANSIT (or sold or acquired under subparagraph (b)(9) of this clause) not previously paid for, adjusted for any saving of freight and other charges.

(2) The total of --

(i) The costs incurred in the performance of the work terminated, including initial costs and preparatory expense allocable thereto, but excluding any costs attributable to supplies or services paid or to be paid

under subparagraph (g)(1) of this clause;

(ii) The cost of settling and paying termination settlement proposals under terminated subcontracts that are properly chargeable to the terminated portion of the contract if not included in subdivision (g)(2)(i) of this clause; and

(iii) A sum, as profit on subdivision (g)(2)(i) of this clause, determined by the Contracting Officer under 49.202 of the Federal Acquisition Regulation, in effect on the date of this contract, to be fair and reasonable; however, if it appears that the Contractor would have sustained a loss on the entire contract had it been completed, the Contracting Officer shall allow no profit under this subdivision (iii) and shall reduce the settlement to reflect the indicated rate of loss.

(3) The reasonable costs of settlement of the work terminated, including --

(i) Accounting, legal, clerical, and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;

(ii) The termination and settlement of subcontracts (excluding the amounts of such settlements); and

(iii) Storage, transportation, and other costs incurred, reasonably necessary for the preservation, protection, or disposition of the termination inventory.

(h) Except for normal spoilage, and except to the extent that NJ TRANSIT expressly assumed the risk of loss, the Contracting Officer will exclude from the amounts payable to the Contractor under paragraph

(g) of this clause, the fair value as determined by the Contracting Officer, of property that is destroyed, lost stolen, or damaged so as to become undeliverable to NJ TRANSIT or to a buyer.

(i) The cost principles and procedures of part 31 of the Federal Acquisition Regulation, in effect on the date of this contract, shall govern all costs claimed, agreed to, or determined under this clause.

(j) The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under paragraph (e), (g), or (l) of this clause, except that if the Contractor failed to submit the termination settlement proposal or request for equitable adjustment within the time provided in paragraph (e) or (l), respectively, and failed to request a time extension, there is no right of appeal.

(k) In arriving at the amount due the Contractor under this clause, there shall be deducted --

(1) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;

(2) Any claim which NJ TRANSIT has against the Contractor under this contract; and

(3) The agreed price for, or the proceeds of sale of, materials, supplies, or other things acquired by the Contractor or sold under the provisions of this clause and not recovered by or credited to NJ TRANSIT.

(l) If the termination is partial, the Contractor may file a proposal with the Contracting Officer for an equitable adjustment of the price(s) of the continued portion of the contract. The Contracting Officer shall make any equitable adjustment agreed upon. Any proposal by the Contractor for an equitable adjustment under this clause shall be requested within ninety (90) calendar days from the effective date of termination unless extended in writing by the Contracting Officer.

(m) (1) NJ TRANSIT may, under the terms and conditions it prescribes, make partial payments and payments against costs incurred by the Contractor for the terminated portion of the contract, if the Contracting Officer believes the total of these payments will not exceed the amount to which the Contractor will be entitled.

(2) If the total payments exceed the amount finally determined to be due, the Contractor shall repay the excess to NJ TRANSIT upon demand, together with interest computed at the rate established by the Secretary of the Treasury under 50 U.S.C. App. 1215(b)(2). Interest shall be computed for the period from the date the excess payment is received by the Contractor to the date the excess is repaid. Interest shall not be charged on any excess payment due to a reduction in the Contractor's termination settlement proposal because of retention or other disposition of termination inventory until ten (10) calendar days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

18. Termination for Default

NJ TRANSIT may, by written notice of default to the Contractor, terminate the whole or any part of this Contract if the Contractor fails to make delivery of the goods or materials or to perform the services within the time specified herein or any extension thereof; or if the Contractor fails to perform any of the other provisions of the Contract, so as to endanger performance of this Contract in accordance with its terms, and in either of these two circumstances does not cure such failure within a period of ten (10) calendar days (or such longer period as the Contracting Officer may authorize in writing) after receipt of notice from the Contracting Officer specifying such failure.

If the Contract is terminated in whole or in part for default, NJ TRANSIT may procure, upon such terms and in such manner as the Contracting Officer may deem appropriate, items similar to those so terminated. The Contractor shall be liable to NJ TRANSIT for any excess costs for such similar goods, materials or services and shall continue the performance of this Contract to the extent not terminated under the provisions of this clause.

Except for the default of Subcontractors, the Contractor shall not be liable for any excess costs if the failure to perform the Contract arises out of causes beyond the control and without the fault or negligence of the Contractor. If the failure to perform is caused by the default of a Subcontractor, and if such default arises out of causes beyond the control of both the Contractor and Subcontractor, and without the fault or negligence of either of them, the Contractor shall not be liable for any excess costs for failure to perform, unless the goods, materials or services to be furnished by the Subcontractor were obtainable from other sources in sufficient time to permit the Contractor to meet the required delivery schedule.

If, after notice of termination of this Contract under the provisions of this clause, it is determined for any reason that the Contractor was not in default under the provisions of this clause, or the default was excusable under provisions of this clause, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Section 17, "Termination for Convenience".

The rights and remedies of NJ TRANSIT provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Contract.

19. Disputes

Disputes arising in the performance of this Contract which are not resolved by agreement of the parties shall be decided in writing by the authorized representative of the Contracting Officer. This decision shall be final and conclusive unless within ten (10) calendar days from the date of receipt of its copy, the Contractor mails or otherwise furnishes a written appeal to the Contracting Officer. In connection with any such appeal, the Contractor shall be afforded an opportunity to be heard and to offer evidence in support of its position. The decision of the Contracting Officer shall be binding upon the Contractor and the Contractor shall abide by the decision. The New Jersey Contractual Liability Act, N.J.S.A. 59:13-1 et seq., shall govern

any action which may be brought by the Contractor as a result of NJ TRANSIT's decision.

20. No Third Party Beneficiaries

It is specifically agreed between the parties executing this Contract that it is not intended by any of the provisions of any part of the Contract to create the public or any member thereof a third party beneficiary hereunder, or to authorize anyone not a party to the Contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the Contract.

It is the further intent of NJ TRANSIT and the Contractor in executing this Contract that no individual, firm, corporation or any combination thereof, which supplies materials, labor, services or equipment to the Contractor for the performance of the Work becomes thereby a third party beneficiary of this Contract. NJ TRANSIT and the Contractor understand that such individual, firm, corporation or combination thereof, has no right to bring an action in the courts of this State against the State or NJ TRANSIT, by virtue of this lack of standing and also by virtue of the provisions of the New Jersey Contractual Liability Act, N.J.S.A. 59:13-1, et seq.

21. Personal Liability of Public Officials

In carrying out the provisions of the Contract, or in exercising power or authority granted to them by or within the scope of the Contract, there shall be no liability upon any NJ TRANSIT employee, either personally or as officials of the State, as in all such matters they act solely as agents and representatives of the State.

22. NJ TRANSIT Representatives

The individuals authorized by NJ TRANSIT to order goods, materials or services in the Specification and to act for NJ TRANSIT are the Contracting Officer, and his designee.

The Chief of Procurement and Support Services, or his designee, shall be the Contracting Officer.

23. Contractor Representatives

The individual(s) authorized by the Contractor to act on its behalf are:

Name _____
Title _____
Address _____
Phone _____

24. Communications

Communications shall be in writing and shall be sent personally, or by telex, telegram, or by regular, registered, or certified mail addressed to the representatives of NJ TRANSIT and of the Contractor designated to receive such communications. Telephone calls may be used to expedite communications but shall not be official communications unless confirmed in writing.

Communications shall be considered received at the time actually received by the addressee or designated agent.

25. Equal Employment Opportunity

The parties to this Contract do hereby agree that the provisions of N.J.S.A. 10:2-1 through 10:2-4 and N.J.S.A. 10:5-31 et seq. (P.L. 1975, c.127) as amended and supplemented and the rules and regulations promulgated pursuant thereto, and the provisions set forth in the Mandatory Equal Employment Opportunity Language for Goods, Professional Service and General Service Contracts attached hereto in Attachment 1, are hereby made a part of this Contract.

In accordance with N.J.S.A. 10:2-1 through 10:2-4 as amended and supplemented and the rules and regulations promulgated pursuant thereto, the Contractor agrees that:

a. In the hiring of persons for the performance of work under this contract or any subcontract hereunder, or for the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under this contract, no contractor, nor any person acting on behalf of such contractor or subcontractor, shall, by reason of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex, discriminate against any person who is qualified and available to perform the work to which the employment relates;

b. No contractor, subcontractor, nor any person on his behalf shall, in any manner, discriminate against or intimidate any employee engaged in the performance of work under this contract or any subcontract hereunder, or engaged in the procurement, manufacture, assembling or furnishing of any such materials, equipment, supplies or services to be acquired under such contract, on account of race, creed, color, national origin, ancestry, marital status, gender identity or expression, affectional or sexual orientation or sex;

c. There may be deducted from the amount payable to the contractor by the contracting public agency, under this contract, a penalty of \$50.00 for each person for each calendar day during which such person is discriminated against or intimidated in violation of the provisions of the contract; and

d. This contract may be canceled or terminated by the contracting public agency and all money due or to become due hereunder may be forfeited, for any violation of this section of the contract occurring after notice to the contractor from the contracting public agency of any prior violation of this section of the contract.

26. Equal Opportunity For Individuals with Disabilities

The Contractor and NJ TRANSIT agree that the provisions of Title II of the Americans With Disabilities Act of 1990 (the "Act") (42 U.S.C. § 12101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs, and activities provided or made available by public entities, and the rules and regulations promulgated thereto, are made a part of this Contract. In providing any aid, benefit, or service on behalf of NJ TRANSIT pursuant to this Contract, the Contractor agrees that the performance shall be in strict compliance with the Act. In the event that the Contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this Contract, the Contractor shall defend NJ TRANSIT and the State of New Jersey in any action or administrative proceeding commenced pursuant to this Act. The Contractor shall indemnify, protect, and save harmless NJ TRANSIT and the State, their agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The Contractor shall, at its own expense, appear, defend, and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the owner's grievance procedure, the Consultant agrees to abide by any decision of the owner

which is rendered pursuant to such said grievance procedure. If any action or administrative proceeding results in an award of damages against NJ TRANSIT or the State or if NJ TRANSIT or the State incur any expense to cure a violation of the Act which has been brought pursuant to its grievance procedure, the Contractor shall satisfy and discharge the same at its own expense.

NJ TRANSIT shall, as soon as practicable after a claim has been made against it, give written notice thereof to the Contractor along with full and complete particulars of the claim. If any action or administrative proceeding is brought against NJ TRANSIT or any of its agents, servants, and employees, NJ TRANSIT shall expeditiously forward or have forwarded to the Contractor every demand, complaint, notice, summons, pleading or other process received by it or its representatives.

It is expressly agreed and understood that any approval by NJ TRANSIT of the services provided by the Contractor pursuant to this Contract will not relieve the Contractor of the obligation to comply with the Act and to defend, indemnify, protect, and save harmless NJ TRANSIT pursuant to this paragraph.

The Contractor expressly understands and agrees that the provisions of this indemnification clause shall in no way limit the Contractor's obligations assumed in this Contract, nor shall they be construed to relieve the Contractor from any liability, nor preclude NJ TRANSIT from taking any other actions available to it under any other provisions of this Contract or otherwise at law.

27. Utilization of Disadvantaged Business Enterprises

As an aid in meeting the commitment of its Disadvantaged Business Enterprise Program, NJ TRANSIT has assigned a **XX% Race Conscious DBE** goal on the gross sum amount of the bid or contract for DBE subcontracting participation. All NJ Unified Certification Program (NJUCP) certified DBE firms, including suppliers, are eligible to participate in this contract. NJ TRANSIT's DBE Program is accorded the same priority as compliance with all other legal obligations required by the USDOT. Contractors shall comply with the DBE Program requirements in the award and administration of NJ TRANSIT contracts, annexed hereto as Attachment 2, annexed hereto. Failure by the Contractor to carry out these requirements shall constitute a breach of the Contract, which may result in the termination of the Contract or other such remedy, as NJ TRANSIT deems appropriate.

The term "disadvantaged business enterprise," means a business enterprise that is owned and controlled by one or more socially or economically disadvantaged persons. Such disadvantage may arise from cultural, racial, chronic economic circumstances or background or other similar cause. Such persons would include, but not be limited to, Blacks (not of Hispanic origin); Hispanics; Asians or Pacific Islanders; American Indians or Alaskan Natives; and women, regardless of race or ethnicity.

28. Covenant Against Contingent Fees

The Contractor warrants, in accordance with the Non Collusion Affidavit attached hereto in Attachment 1, that no person or selling agency has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the Contractor for the purpose of securing business. For breach or violation of this warranty NJ TRANSIT shall have the right to annul this Contract without liability or at its discretion, to deduct from the Contract price or consideration, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.

29. Audit, Inspection and Record Retention

Pursuant to N.J.S.A. 52:15C-14(d) the Contractor and all subcontractors and suppliers shall maintain and retain all records, data, documents, reports, and materials relating to the Contract and contract work and shall permit authorized representatives of NJ TRANSIT, the Comptroller General of the United States, the U.S. Department of Transportation, the FTA, the State of New Jersey and the Office of the State Comptroller and their duly authorized representatives, upon request to inspect, audit and photocopy all project work, materials, payroll, and all data and records of the Contractor relating to products, transactions or services provided under its performance and its subcontracts and assignees, if any, under this Contract from the effective date hereof through and until the expiration of five (5) years after completion of and final payment for the Contract Work.

NJ TRANSIT, the State of New Jersey, the USDOT, the FTA and the Comptroller General of the United States and their duly authorized representatives also shall have the right to examine all aspects of the products, transactions and services and specifically the right to conduct interviews, on-site visits, surveillance, field activities and head counts and to perform financial audits and operational reviews as deemed necessary to prevent, remediate or mitigate fraud, waste and abuse. Any inspection, audit or review or lack thereof shall not relieve the Contractor of responsibility for satisfactory performance of the Scope of Services. Contractor shall maintain a true and correct set of records for all financial and operational data in sufficient detail to permit reasonable verification or correction of charges and performance in accordance with this Contract.

The Contractor further agrees to include in all its subcontracts hereunder a provision to the effect that the subcontractor agrees that it will keep all Contract records and that NJ TRANSIT, the Comptroller General of the United States, the U.S. Department of Transportation, the FTA the State of New Jersey and the Office of the State Comptroller, or any of their duly authorized representatives, shall, until the expiration of five (5) years after payment under the subcontract, have access to and the right to examine any books, documents, and other records related to the subcontractor's performance under the subcontract.

The periods of access and examination described above, for records which relate to (1) appeals under the "Disputes" clause of the Contract, (2) litigation or the settlement of claims arising out of the performance of this Contract, or (3) costs and expenses of this Contract as to which exception has been taken by NJ TRANSIT the Comptroller General of the United States, the U.S. Department of Transportation or the State of New Jersey or any of their duly authorized representatives, shall continue until such appeals, litigation, claims, or exceptions have been disposed of.

30. Interest of Members of Congress

No member of, or delegate to, the Congress of the United States shall be admitted to any share or part of this Contract or to any benefit arising therefrom.

31. Prohibited Interest

No member, officer, or employee of NJ TRANSIT or its subsidiaries shall have any interest, direct or indirect, in this Contract or the proceeds thereof. No former member, officer or employee of NJ TRANSIT or its subsidiaries who, during his or her tenure, had a direct, substantial involvement with matters that are closely related to this Contract, shall have any interest, direct or indirect, in this Contract or the proceeds thereof.

32. Insurance

The Contractor shall maintain the following levels of insurance:

Comprehensive General Liability	\$5,000,000 per occurrence for bodily injury and property damage.
Comprehensive Automobile Liability	\$5,000,000 per occurrence for bodily injury and property damage
Workers Compensation	As required by law.

Prior to execution of this Contract by NJ TRANSIT and before commencing any performance here under, the Contractor shall provide NJ TRANSIT with the required proof(s) of insurance naming NJ TRANSIT as an additional insured party. The policies evidencing required insurance shall contain an endorsement to the effect that cancellation or any material change in the policies adversely affecting the interests of NJ TRANSIT in such insurance shall not be effective for less than thirty (30) calendar days after written notice thereof to NJ TRANSIT.

33. **Business Registration Notice**

In accordance with N.J.S.A. 52:32-44, all New Jersey and out of State business organizations must obtain a Business Registration Certificate (BRC) from the Department of Treasury, Division of Revenue, prior to a contract being awarded or authorized by NJ TRANSIT.

The Contractor shall maintain a list of the names of any subcontractors and their current addresses, updated as necessary during the course of the contract performance. The Contractor shall submit a complete and accurate list to NJ TRANSIT before final payment is made for goods or services rendered under the Contract. The Contractor shall not enter into any contract with a Subcontractor unless the Subcontractor first provides proof of valid business registration.

If the Contractor fails to provide a copy of a business registration as required pursuant to N.J.S.A. 52:32-44 or that provides false information of business registration under the requirements of that section, pursuant to N.J.S.A. 54:49-4.1 it shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000 for each business registration copy not properly provided to NJ TRANSIT.

The Contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall, during the term of the contract, collect and remit to the Director of the Division of Taxation in the Department of the Treasury the use tax due pursuant to the "Sales and Use Tax Act", P.L. 1966, c. 30 (N.J.S.A. 54:32B-1 et seq.) on all their sales of tangible personal property delivered into the State.

34. **Out-of-State Corporations**

If the Contractor is a corporation organized under laws of a state other than New Jersey, the Contractor shall have a certificate of authority to do business in New Jersey in accordance with N.J.S.A. 14A:13-3. In addition, pursuant to N.J.S.A. 14A: 4-1 et seq., the Contractor shall maintain a registered agent having a business office in New Jersey and shall file with the Secretary of State the name of said agent and address of said office and provide a copy thereof to NJ TRANSIT.

Inquiries should be directed to:

State of New Jersey
Department of State
Division of Commercial Recording
CN-308
Trenton, NJ 08625
www.state.nj.us/njbgs

35. Restriction of Gifts

The Contractor, its officers, representatives, agents, Subcontractors and employees agree not to give any present nor make any gift of money or any other gift or gratuity in any form whatsoever to any director, officer, or employee of NJ TRANSIT, his or her relatives or agents.

36. Source Disclosure Requirements (For Services Procurement Only) (NOT APPLICABLE TO THIS PROCUREMENT.)

Under N.J.S.A. 52:34-13.2, all contracts primarily for services awarded by NJ TRANSIT shall be performed within the United States, except when the Contracting Officer certifies in writing a finding that a required service cannot be provided by a Contractor or Subcontractor within the United States and the certification is approved by the Executive Director of NJ TRANSIT.

All Contractors seeking a contract primarily for services with NJ TRANSIT must disclose the location, by country, where services under the contract, including subcontracted services, will be performed.

If any of the services cannot be performed within the United States, the Contractor shall state with specificity the reasons why the services cannot be so performed. NJ TRANSIT's Contracting Officer shall determine whether sufficient justification has been provided by the Contractor to form the basis of his certification that the services cannot be performed in the United States and whether to seek the approval of the Executive Director.

If, during the term of the Contract, the Contractor or Subcontractor, who had on contract award declared that services would be performed in the United States, proceeds to shift the performance of the services outside the United States, the Contractor shall be deemed to be in breach of its Contract, which Contract shall be subject to termination for default pursuant to Section 18, unless previously approved by the Contracting Officer and the Executive Director. During the contract term, the Contractor shall submit a subsequent Source Disclosure Certification within five (5) calendar days of NJ TRANSIT's request.

37. Disclosure of Investment Activities in Iran

Pursuant to N.J.S.A. 52:32-55., any person or entity that submits a proposal or otherwise proposes to enter into or renew a contract must complete the certification to attest, under penalty of perjury, that neither the person or entity, nor any of its parents, subsidiaries, or affiliates, is identified on the Department of Treasury's Chapter 25 list as a person or entity engaging in investment activities in Iran. The Chapter 25 list is found on the Division's website at <http://www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf>. Contractors must review this list prior to completing the Disclosure of Investment Activities In Iran Certification attached hereto in Attachment 1. If NJ TRANSIT finds a person or entity to be in violation of law, NJ TRANSIT shall take action as may be appropriate and provided by law, rule or contract,

including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

38. NJ TRANSIT's Code of Ethics For Vendors

- a) No vendor may employ any NJ TRANSIT officer or employee in the business of the vendor or in professional activity in which the vendor is involved with the NJ TRANSIT officer or employee.

No vendor may offer or provide any interest, financial or otherwise, direct or indirect, to any NJ TRANSIT officer or employee, in the business of the vendor or professional activity in which the vendor is involved with the NJ TRANSIT officer or employee.

No vendor may cause or influence, or attempt to cause or influence, any NJ TRANSIT officer or employee in his or her official capacity in any manner which might tend to impair the objectivity or independence of judgment of that NJ TRANSIT officer or employee.

No vendor may cause or influence, or attempt to cause or influence, any NJ TRANSIT officer or employee to use or attempt to use his or her official position to secure any unwarranted privileges or advantages for that vendor or for any other person.

No vendor may offer any NJ TRANSIT officer or employee any gift, favor, service or other thing of value under circumstances from which it might be reasonably inferred that such gift, service or other thing of value was given or offered for the purpose of influencing the recipient in the discharge of his or her official duties. In addition, employees or officers of NJ TRANSIT will not be permitted to accept breakfasts, lunches, dinners, alcoholic beverages, tickets to entertainment and/or sporting events, or any other item which would be construed as having more than nominal value.

NOTE: NJ TRANSIT employees and officers may accept food or refreshments of relatively low monetary value provided during the course of a meeting, conference or other occasion where the employee is properly in attendance (for example, coffee, tea, danish or soda served during a conference break). Acceptance of unsolicited advertising or promotional materials of nominal value (such as inexpensive pens, pencils, or calendars) is also permitted.

- b) In accordance with N.J.A.C. 16:72-4.1, the Contractor may be suspended and/or debarred for any of the following causes:
1. Any offer or agreement by a vendor to pay or to make payment of, either directly or indirectly, any fee, commission, compensation, gift, gratuity, or other thing of value of any kind to any State office or employee or special State officer or employee as defined by N.J.S.A. 52:13D-13b and e, in the Department of the Treasury or any other agency with which such vendor transacts or offers or proposes to transact business, or to any member of the immediate family, as defined by N.J.S.A. 52:13D-13i, of any such officer or employee, or any partnership, firm, or corporation with which they are employed or associated, or in which such officer or employee has an interest within the meaning of N.J.S.A. 52:13D-13g;
 2. Failure by a vendor to report to the Attorney General and to the State Ethics Commission in writing forthwith the solicitation of any fee, commission, compensation, gift, gratuity, or other thing of value by any State officer or employee or special State officer or

employee;

3. The undertaking, directly or indirectly, of any private business, commercial or entrepreneurial relationship with, whether or not pursuant to employment, contract or other agreement, express or implied, or sale, directly or indirectly of any interest in such vendor to, any State officer or employee or special State officer or employee or special State officer or employee having any duties or responsibilities in connection with the purchase, acquisition, or sale of any property or services by or to any State agency or any instrumentality thereof, or with any person, firm or entity with which he is employed or associated or in which he has an interest within the meaning of N.J.S.A. 52:13D-13g. Any relationship subject to this provision shall be reported in writing forthwith to the State Ethics Commission, which may grant a waiver of this restriction upon application of the State officer or employee or special State officer or employee upon a finding that the present or proposed relationship does not present the potential, actuality, or appearance of a conflict of interest;
4. Influence or attempt to influence or cause to be influenced, any State officer or employee or special State officer or employee in his or her official capacity in any manner which might tend to impair the objectivity or independence of judgment of said officer or employee; or
5. Cause or influence or attempt to cause or influence, any State officer or employee or special State officer or employee to use, or attempt to use, his or her official position to secure unwarranted privileges or advantages for the vendor or any other person.

39. Setting Off Tax Arrears Against Sums Owed

Whenever a taxpayer under contract with the State of Jersey is indebted for any State Tax in accordance with N.J.S.A. 54:49-19 the State of New Jersey shall seek to set off the indebtedness as follows:

Whenever any taxpayer under contract to provide goods or services to the State of New Jersey or its agencies or instrumentalities, and including the legislative and judicial branches of State government, is entitled to payment for the goods or services or on that construction project and at the same time the taxpayer is indebted for any State tax, the Director of the Division of Taxation shall seek to set off so much of that payment as may be necessary to satisfy the indebtedness. The Director, in consultation with the Director of the Division of Budget and Accounting in the Department of the Treasury, shall establish procedures and methods to effect a set-off. The Director shall give notice of the set-off to the taxpayer, the provider of goods or services or the contractor or subcontractor of construction, and provide an opportunity for a hearing within thirty (30) calendar days of such notice under the procedures for protests established under N.J.S.A. 54:49-18, but no request for conference, protest, or subsequent appeal to the Tax Court from any protest under this section shall stay the collection of the indebtedness. No payment shall be made to the taxpayer, the provider of goods or services or the contractor or subcontractor of construction projects pending resolution of the indebtedness. Interest that may be payable by the State pursuant to N.J.S.A. 52:32-32 et seq., to the taxpayer, the provider of goods and services or the contractor or subcontractor of construction projects shall be stayed.

40. Contractor's Certification of Eligibility

The Contractor certifies that it is not listed on the State of New Jersey, Department of Labor and Workforce Development, Division of Wage and Hour Compliance, Prevailing Wage Debarment List or on the State of New Jersey, Department of Treasury, Consolidated Debarment Report.

The Contractor also certifies that it has no exclusions on the consolidated U.S. Government, System for Award Management (SAM) database.

41. Air Pollution

The Contractor and its suppliers must comply with all governing air pollution criteria required by the Federal Transit Administration.

42. Buy America

Pursuant to Section 165 of the Surface Transportation Assistance Act of 1982 (P.L. 97-424) and the regulations found at 49 C.F.R. Part 661, the Contractor agrees that all steel, iron and manufactured products purchased or used as a result of this Contract must be domestic manufacture or origin unless a waiver of these provisions is granted by the FTA.

There are four exemptions to this otherwise universal mandate:

- a. That their application would be inconsistent with the public interest;
- b. That such materials and products are not produced in the United States in sufficient and reasonable available quantities and of a satisfactory quality;
- c. In the case of the procurement of bus and other rolling stock (including train control, communication and traction power equipment) under the Federal Transit Act of 1964, that (A) the cost of components and subcomponents which are produced in the United States is more than 60 percent of the cost of all components of the vehicle or equipment described in this paragraph, and (B) final assembly of the vehicle or equipment described in this paragraph has taken place in the United States;
- d. That inclusion of domestic material will increase the cost of the overall project/contract by more than twenty-five percent (25%).

43. Fly America Requirements

The Contractor agrees to comply with 49 U.S.C. 40118 (the "Fly America" Act) in accordance with the General Services Administration's regulations at 41 C.F.R. Part 301-10, which provide that recipients and subrecipients of Federal funds and their contractors are required to use U.S. Flag air carriers for U.S. Government-financed international air travel and transportation of their personal effects or property, to the extent such service is available, unless travel by foreign air carrier is a matter of necessity, as defined by the Fly America Act. The Contractor shall submit, if a foreign air carrier was used, an appropriate certification or memorandum adequately explaining why service by a U.S. flag air carrier was not available or why it was necessary to use a foreign air carrier and shall, in any event, provide a certificate of compliance with the Fly America requirements. The Contractor agrees to include the requirements of this section in all subcontracts that may involve international air transportation.

44. Cargo Preference-Use of U.S. Flag Vessel

The Contractor agrees to utilize privately owned United States-flag commercial vessels to ship at least fifty percent (50%) of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, materials, or commodities pursuant to 46 C.F.R. Part 381, to the extent such vessels are available at fair and reasonable rates for United States-flag

commercial vessels.

The Contractor further agrees to furnish within twenty (20) working days following the date of loading for shipments originating within the United States, or within thirty (30) working days following the date of loading for shipment originating outside the United States, a legible copy of a rated "on-board" commercial ocean bill-of-lading in English for each shipment of cargo described in the Paragraph above to NJ TRANSIT (through the prime Contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, D.C. 20590, marked with appropriate identification of the Project.

The Contractor further agrees to insert the substance of the provisions of this clause in all subcontracts issued pursuant to this Contract.

45. Clean Water and Clean Air Acts

45.1 The Contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1251 et seq.:

(a) With the notification of violating facilities provisions of Executive Order No. 11738; "Administration of the Clean Air Act and the Federal Water Pollution Control Act with Respect to Federal Contracts, Grants, or Loans", 42 U.S.C. S 7606. The Contractor agrees to report each violation to NJ TRANSIT and understands and agrees that NJ TRANSIT will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

(b) With the provisions of the Safe Drinking Water Act of 1974, as amended, 42 U.S.C. § 300h et seq.

45.2 The Contractor agrees to comply with all applicable, standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. The Contractor agrees to report each violation to NJ TRANSIT and understands and agrees that NJ TRANSIT will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office.

45.3 The Contractor agrees to include both the Clean Water and Clean Air requirements in each subcontract exceeding \$150,000. The \$150,000 limit includes indefinite quantities where the amount is expected to exceed \$150,000 in any year.

46. Energy Conservation

The Contractor shall comply with mandatory standards and policies relating to energy efficiency contained in applicable State of New Jersey Energy Conservation Plans issued in compliance with the Energy Policy and Conservation Act (42 USC § 6321 et seq.).

47. Civil Rights

During the performance of this Contract, the Contractor, for itself, its assignees and successors in interest and its subcontractor at every tier (hereinafter referred to as the "Contractor") agrees as follows:

(a) Compliance with Regulations

The Contractor shall comply with the Regulations relative to nondiscrimination in federally-assisted programs of the United States Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this Contract.

(b) Nondiscrimination

In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of 1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, religion, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

(c) Equal Employment Opportunity

The following equal employment opportunity requirements apply to the underlying contract:

(1) Race, Color, Religion, National Origin, Sex

In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 et seq., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, national origin, sex, sexual orientation, gender identity, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(2) Age

In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § 623 and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(3) Disabilities

In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the Contractor agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons with disabilities. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

(d) The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

(e) Information and Reports

The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or NJ TRANSIT or the FTA to be pertinent to ascertain compliance with such Regulations, orders and instruction. Where any information is required or a Contractor is in the exclusive possession of another who fails or refuses to furnish this information, the Contractor shall so certify to NJ TRANSIT, or the FTA, as appropriate, and shall set forth what efforts it

has made to obtain the information.

(f) Sanctions for Noncompliance

In the event of the Contractor's noncompliance with the nondiscrimination provisions of this Contract, NJ TRANSIT shall impose such contract sanctions as it or the FTA may determine to be appropriate, including but not limited to:

(1) Withholding of payments to the Contractor under the Contract until the Contractor complies; and/or

(2) Cancellation, termination or suspension of the Contract, in whole or in part.

48. Contract Cost Principles and Procedures

Part 31 of the Federal Acquisition Regulations entitled "Contract Cost Principles and Procedures" is incorporated by reference in this Contract.

49. Certifications Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transaction

By signing this agreement, the lower tier participant, defined as the Contractor and its subcontractors, is providing the certification set out below.

The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, NJ TRANSIT may pursue available remedies, including suspension and/or debarment.

The lower tier participant shall provide immediate written notice to NJ TRANSIT if at any time the lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

Certain terms used in this clause have the meanings set out in 2 C.F.R. Part 1200 and 2 C.F.R. Part 180.

The lower tier participant agrees by signing this agreement that it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized in writing by NJ TRANSIT.

The lower tier participant further agrees by signing this agreement that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – Lower Tier Covered Transaction", without modification, in all lower tier covered transactions (valued at \$25,000 or more) and in all solicitations for lower tier covered transactions.

A participant in a covered transaction may rely upon a certification of a participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. Each participant shall check the U.S. Government System for Award Management (SAM) database.

Nothing contained in the foregoing shall be construed to require establishment of a system of

records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

Except for transactions authorized under the fifth paragraph above, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to all remedies available to the Federal Government, NJ TRANSIT may pursue available remedies including suspension and/or debarment.

The lower tier participant certifies by signing this agreement that neither it nor its "principals" (as defined 2 C.F.R. 180.995) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. A participant may decide the method and frequency by which it determines the eligibility of its principals.

When the lower tier participant is unable to certify to the statements in this certification, such participant shall submit a written explanation.

The lower tier participant shall also have no exclusions on the U.S. Government System for Award Management (SAM) database.

50. Limitations on Lobbying

The Contractor and its subcontractors shall comply with 31 USC 1352, entitled "Limitation on use of appropriated funds to influence certain Federal contracting and financial transactions".

a.) No appropriated funds may be expended by the recipient of a Federal contract, grant, loan or cooperative agreement to pay any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress or an employee of a Member of Congress in connection with any of the following covered Federal actions: the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan or cooperative agreement.

b.) Any Contractor and any subcontractor at any tier who requests or receives a Federally-assisted contract or subcontract in excess of \$100,000 from NJ TRANSIT shall file with NJ TRANSIT the certification attached to this Agreement and entitled "Certification for Contracts, Grants, Loans and Cooperative Agreements" which certifies that the Contractor or subcontractor, as applicable, has not made, and will not make, any payment prohibited by paragraph A.) of this Article.

c.) Any Contractor and any subcontractor who has made or has agreed to make any payment using nonappropriated funds (to include profits from any covered Federal action) which would be prohibited under paragraph A.) of this Article if paid for with appropriated funds, shall file with NJ TRANSIT a disclosure form entitled "Disclosure of Lobbying Activities", which is available from NJ TRANSIT.

d.) Any certification or disclosure form filed under paragraphs B.) and C.) of this Article shall be forwarded from tier to tier until received by NJ TRANSIT. Any certification or disclosure form shall be treated as a material representation of fact upon which all receiving tiers shall rely. All liability arising from an erroneous representation shall be borne solely by the tier filing that representation and shall not be shared by any tier to which the erroneous representation is forwarded.

e.) The prohibition on the use of appropriated funds does not apply in the case of a payment of reasonable compensation to an officer or employee of a Contractor or subcontractor if the payment is for agency and legislative liaison activities not directly related to a covered Federal action.

f.) The prohibition on the use of appropriated funds does not apply in the case of any reasonable payment to an officer or employee of a Contractor or subcontractor or to a person, other than an officer or employee of a Contractor or subcontractor, if the payment is for professional or technical services rendered directly in the preparation, submission or negotiation of any bid, proposal or application for a Federal contract, grant, loan or cooperative agreement.

51. Contract Work Hours and Safety Standards

1. Nonconstruction Contracts

The following requirements are applicable to any Contract subject to the overtime provisions of the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 C.F.R. Paragraph 5.1. The Contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the Contract for all laborers and mechanics, including guards and watchmen, working on the Contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. The records to be maintained under this clause shall be made available by the Contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the FTA, the U.S. DOT, or the Department of Labor, and the Contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

a. Overtime Requirements. No Contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any work week in which he or she is employed on such work to work in excess of forty hours in such work week unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such work week.

b. Violation: Liability For Unpaid Wages: Liquidated Damages. In the event of any violation of the requirements of 29 C.F.R. 5.5(b)(1), the Contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a Territory, to such district or to such Territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of 29 C.F.R. 5.5(b)(1) in the sum of \$25 for each calendar day on which such individual was required or permitted to work in excess of the standard work week of forty hours without payment of the overtime wages required by 29 C.F.R. Paragraph 5.5(b)(1).

c. Withholding For Unpaid Wages And Liquidated Damages. The FTA or NJ TRANSIT shall upon its own action or upon written request of any authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the Contractor or Subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or Subcontractor for unpaid wages and liquidated damages as provided in the clause set forth at 29 C.F.R. 5.5(b)(2).

2. Nonconstruction Subcontracts.

The Contractor or Subcontractor shall insert in any subcontracts the clauses set forth in Section 51, "Labor Provisions for Nonconstruction Contracts" 1(a) through 1 and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in Section 51.

52. **New Jersey Prevailing Wage Act (For Construction Procurements Only)**

If applicable, the Contractor and each subcontractor shall comply with the New Jersey Prevailing Wage Act, N.J.S.A. 34:11-56.25 et seq., and this Act is hereby made a part of this Contract. All workers shall be paid not less than the prevailing wage rate as designated by the Commissioner of Labor and Industry or the Commissioner's duly authorized deputy or representative.

In the event it is found that any worker has been paid a rate of wages less than the prevailing wage required to be paid by this Contract, the Contracting Officer may terminate the Contractor's or Subcontractor's right to proceed with the work, or such part of the work as to which there has been a failure to pay required wages, and take such action the Contracting Officer deems necessary, including prosecuting the work to completion to the account of the Contractor.

NJ TRANSIT shall furnish as part of the Contract a copy of the prevailing minimum wage rates which shall be paid to the workers employed in the performance of the Contract.

Nothing contained in the Prevailing Wage Act shall prohibit the payment of more than the prevailing wage rate to any worker employed on the project.

The Contractor and each Subcontractor performing work for NJ TRANSIT who is subject to the provisions of the Prevailing Wage Act shall post the prevailing wage rates for each craft and classification involved, including the effective date of any changes thereof, in prominent and easily accessible places at the site of the work or at such place or places as are used by them to pay workers their wages.

The Contractor's signature on the proposal is its guarantee that neither it nor any Subcontractor it intends to contract with is currently listed by or on record with the Commissioner of Labor and Industry as one who failed to pay the prevailing wages according to the Prevailing Wage Act.

The Contractor and all of its Subcontractors performing work at the site must prepare their bids as to labor costs in accordance with the prevailing wage (valid for the date the bids are to be submitted) for the geographical area of the project site.

53. **Employee Protections-Construction Activities (For Construction Procurements Only)**

If applicable, the Contractor agrees to comply, and assures the compliance by each subcontractor at any tier, with the following employee protection requirements for construction employees:

1. Davis-Bacon Act, as amended, 49 U.S.C. § 5333(a), the Davis-Bacon Act, 40 U.S.C. §§ 276a-276a(7), and U.S. DOL regulations, "Labor Standards Provisions Applicable to Contracts Governing Federally Financed and Assisted Construction", 29 C.F.R. Part 5, and 29 C.F.R. Parts 1 & 3.

2. Contract Work Hours and Safety Standards Act, as amended, in particular with the requirements of section 102 of the Act, 40 U.S.C. §§ 327-332; and U.S. DOL regulations, "Labor Standards Provisions

Applicable to Contracts Governing Federally Financed and Assisted Construction”, 29 C.F.R. Part 5; and with section 107 of the Act, 40 U.S.C. S 333, and U.S. DOL regulations, “Safety and Health Regulations for Construction”, 29 C.F.R. Part 1926;

3. Copeland “Anti-Kickback” Act, as amended, 18 U.S.C. § 874 and 40 U.S.C. S 276c, and U.S. DOL regulations, “Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in part by Loans or Grants from the United States“, 29 C.F.R. Part 3.

54. Incorporation of Federal Transit Administration (FTA) Terms

This Contract is funded in whole or in part by the United States Government and is subject to all Federal laws and regulations governing Federally-financed projects.

(a) Changes to Federal Requirements

The Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between NJ TRANSIT and the FTA, as they may be amended or promulgated from time to time during the term of this Agreement. Contractor’s failure to so comply shall constitute a material breach of this Agreement unless the FTA determines otherwise.

(b) Incorporation of FTA Terms

These General Provisions include, in part, certain standard terms and conditions required by USDOT, whether or not expressly set forth in this Agreement. All Contractual provisions required by USDOT, as set forth in FTA circular 4220.1F, are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any NJ TRANSIT requests which would cause NJ TRANSIT to be in violation of the FTA Master Agreement between NJ TRANSIT and the FTA.

55. Exclusionary or Discriminatory Specifications

Except where otherwise required by Federal statute or regulations, the Contractor agrees that it will comply with the requirements of 49 USC 5323(h)(3) by refraining from using exclusionary or discriminatory specifications in the performance of the work.

56. No Federal Government Obligations to Third Parties

The Contractor agrees that, absent the Federal Government's express written consent, the Federal Government shall not be subject to any obligations or liabilities to the Contractor in connection with the performance of the Project. Notwithstanding any concurrence provided by the Federal Government in or approval of the Contract, the Federal Government continues to have no obligations or liabilities to the Contractor. The Contractor further agrees to include this clause in each subcontract financed in whole or in part with Federal assistance provided by the FTA.

57. False or Fraudulent Statements and Claims

The Contractor recognizes that the requirements of the Program Fraud Civil Remedies Act of 1986, as amended, 31 USC 3801 et seq. and USDOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to the Project. Accordingly, by signing the Contract, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, or it may make

pertaining to the Contract. In addition to other penalties that may be applicable, the Contractor also acknowledges that if it makes a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986, as amended, on the Contractor to the extent the Federal Government deems appropriate.

The Contractor also acknowledges that if it makes a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government in connection with an urbanized area formula project financed with Federal assistance authorized by 49 USC chapter 53., the Government reserves the right to impose on the Contractor the penalties of 18 USC 1001 and 49 USC 5307(n)(1), to the extent the Federal Government deems appropriate. The Contractor further agrees to include this clause in each subcontract financed in whole or in part with Federal assistance provided by the FTA.

58. Prevention of Drug and Alcohol Abuse in Transit

If the Contractor is supporting NJ TRANSIT Bus Operations equipment maintenance, including engine, revenue vehicle, and parts rebuilding and overhaul, it shall establish and implement a drug and alcohol misuse prevention program in compliance with 49 C.F.R. parts 653 and 655

The Contractor shall certify its compliance by completing the Prevention of Drug and Alcohol Abuse in Transit Operations Certification attached hereto in Attachment 1.

59. Transition

In the event that a new Contract has not been awarded prior to the expiration date of this Contract, including any extensions exercised, and the Contracting Officer elects to exercise this Contract transition, the Contractor shall continue the Contract under the same terms, conditions, and pricing until a new Contract can be completely operational. At no time shall this transition period extend more than 365 calendar days beyond the expiration date of this Contract, including any extensions exercised.

60. Extension

If, in the opinion of the Contracting Officer, it is in the best interest of NJ TRANSIT to extend the Contract, the Contractor shall be so notified of the Contracting Officer's intent at least thirty (30) calendar days prior to the expiration date of the existing Contract. The Contractor shall have fifteen (15) calendar days to respond to the Contractor Officer's request to extend the term and period of performance of the Contract. If the Contractor agrees to the extension, all terms and conditions including pricing of the original Contract shall apply unless more favorable terms for NJ TRANSIT have been negotiated.

61. Use of Recovered Materials

The Contractor agrees to provide a preference for those products and services that conserve natural resources, protect the environment, and are energy efficient by complying with and facilitating compliance with Section 6002 of the Resource Conservation and Recovery Act, as amended, 42 U.S.C. § 6962, and U.S. Environmental Protection Agency (U.S. EPA), "Comprehensive Procurement Guideline for Products Containing Recovered Materials," 40 C.F.R. part 247.

62. Attachments and/or Exhibits

The following Attachments and/or Exhibits are incorporated into this Contract:

Attachment 1:

- Bid Price Form
- Non-Collusion Affidavit
- Certification Regarding Debarment, Suspension and Other Responsibility Matters
- Contractors Certification of Eligibility
- Mandatory Equal Employment Opportunity (EEO) Language
- Buy America Certification
- Certification for Contracts, Grants, Loans and Cooperative Agreements
- Affidavit of Compliance/ NJ TRANSIT's Code of Ethics for Vendors
- Prevention of Drug and Alcohol Abuse in Transit Operations Certification
- Ownership Disclosure Form
- Source Disclosure Certification Form (For Service Procurements Only)
(NOT APPLICABLE TO THIS PROCUREMENT)
- Disclosure of Investment Activities in Iran
- Addenda Acknowledgement Form

Attachment 2: NJ TRANSIT Corporations DBE Requirements and Forms

IN WITNESS WHEREOF, the parties have caused this Contract to be executed effective the date set forth above. The representative signing on behalf of the Contractor shall have the authority to contractually bind the Contractor.

CONTRACTOR

ATTEST:

Signature

By: _____
Signature

Typed Name

Typed Name

Typed Title

Typed Title

NEW JERSEY TRANSIT CORPORATION

ATTEST:

Signature

By: _____
Signature

This Contract has been reviewed and approved as to form by the Office of the Attorney General of New Jersey.

Gurbir S. Grewal
Attorney General of New Jersey

By: _____
Deputy Attorney General

IN WITNESS WHEREOF, the parties have caused this Contract to be executed effective the date set forth above. The representative signing on behalf of the Contractor shall have the authority to contractually bind the Contractor.

CONTRACTOR

ATTEST:

Signature

By: _____
Signature

Typed Name

Typed Name

Typed Title

Typed Title

NEW JERSEY TRANSIT CORPORATION

ATTEST:

Signature

By: _____
Signature

This Contract has been reviewed and approved as to form by the Office of the Attorney General of New Jersey.

Gurbir S. Grewal
Attorney General of New Jersey

By: _____
Deputy Attorney General

Appendix “B”

BIDDER PREQUALIFICATION FORM
IFB NO. 19-041
Sandy Signal Equipment and Material

I. Introduction

All firms submitting proposals for IFB No. 19-041 must satisfactorily complete this Prequalification Form. The information in the form will be evaluated to determine if the Bidder meets the basic qualifications to enable them to be qualified as an eligible respondent to the IFB. All sections must be completed. Failure to supply the required information will invalidate the entire form as unresponsive and the Bidder will be disqualified. Any false information supplied on this form will result in immediate and unconditional disqualification from this procurement.

Firm Name _____
Address _____

Contact: _____
Phone Number: _____

II. Financial Status

A Statement of Ownership shall be attached.

Please provide a valid DUNS No. _____

If a Bidder has any significant financial issues pending or in the recent past, that must be noted on a separate page. Significant issues could be, but are not limited to:

- Bankruptcies
- Pending lawsuits with damage potential over \$5 million dollars
- Impending merger or downsizing plans

Information presented in this section will be held in the strictest confidence and will not be disclosed to anyone not directly involved in the evaluation of this information.

III. Experience – Check the box for the Group(s) for which you are submitting a bid.

☐ **Group A:**

The Bidder shall certify that it possesses a minimum of fifteen (15) years reliable experience in supplying a minimum total of 300 impedance bonds and 300 foundations of the type specified.

☐ **Group B:**

The Bidder shall certify that it possesses a minimum of ten (10) years reliable experience in supplying a minimum total of 300 remanufactured switch machines of the type specified.

☐ **Group C:**

The Bidder shall certify that it possesses a minimum of fifteen (15) years reliable experience in supplying a minimum total of 300 houses and cases of the type specified for railway signal systems.

☐ **Group D:**

The Bidder shall certify that it possesses 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.

VI. Certification

The undersigned certifies that the foregoing information is correct and accurate.

Bidder Name

By _____
Signature

Typed Name & Title

Date

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

September 16, 2019

**Re: NJ TRANSIT Invitation for Bid No. 19-041
Superstorm Sandy Signal Equipment and Material
Addendum No. 5**

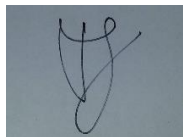
To Whom It May Concern:

The following constitutes Addendum No. 5 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:

The Bid Opening date and time has been changed from Tuesday, September 17, 2019 at 2:00 p.m. to Thursday, September 19, 2019 at 2:00 p.m.

This concludes Addendum No. 5. An authorized representative of your organization shall acknowledge receipt of this Addendum in the Exhibit provided with its bid. Failure to acknowledge receipt of all Addenda may cause the rejection of the Bid as non-responsive.

Sincerely,



JoAnn Cudahy
Senior Contract Specialist
Procurement Department

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 29, 2019

**Re: NJ TRANSIT Invitation for Bid No. 19-041
Superstorm Sandy Signal Equipment and Material
Addendum No. 4**

To Whom It May Concern:

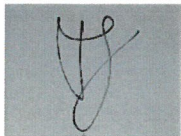
The following constitutes Addendum No.4 and must be acknowledged with each Bid. Prospective Bidders are advised of the following clarifications, additions and/or revisions to the above referenced Invitation for Bid:

1. Questions submitted by prospective Bidders by the deadline and NJ TRANSIT's responses are attached hereto as Attachment A to this Addendum No. 4.

As a reminder, all Pre-Qualification forms are due Friday, August 30, 2019 by 3 p.m.

This concludes Addendum No. 4. An authorized representative of your organization shall acknowledge receipt of this Addendum in the Exhibit provided with its bid. Failure to acknowledge receipt of all Addenda may cause the rejection of the Bid as non-responsive.

Sincerely,



JoAnn Cudahy
Senior Contract Specialist
Procurement Department

Attachment A

Invitation for Bid No. 19-041
SUPERSTORM SANDY SIGNAL EQUIPMENT AND MATERIAL

NJ TRANSIT RFP No. 19-041
Bidders' Questions and NJ TRANSIT Responses

ATTACHMENT A

Question No.	RFP Section	Question	NJ TRANSIT Response
1	Pre-Qualification form	"Do you happen to know when we will know if we are Approved to bid this IFB?"	<p><u>Bidders will be notified if they are "pre-qualified" within fifteen (15) business days of the submission date of the Pre-Qualification form, as noted above, i.e., within fifteen (15) business days of August 30, 2019.</u></p> <ul style="list-style-type: none"> • <u>Step One (1)</u> will involve a pre-qualification process. Bidders must be "pre-qualified" by NJ TRANSIT in order to submit bids for this procurement. All Bidders shall complete the Pre-qualification Form(s) included in "Appendix B" of this IFB and shall submit the same on or before Friday, August 30, 2019 by 3:00 p.m. <u>Bidders found to be acceptable at the completion of Step One (1) shall be deemed "pre-qualified" within fifteen (15) business days of the submission date noted above</u> and will be invited to participate in Step Two (2) of the procurement process. • <u>Step Two (2)</u> will involve the submission of bid prices from each pre-qualified Contractor.
2	Instructions to Bidders, Section B, 6.	Pre-Qual form: Under Section II. Entitled Financial Status, it states that a Statement of Ownership shall be attached. What do you require for this? Do you have an example?	The "Ownership Disclosure Form" will suffice for that requirement. See Addendum No. 3 for the form. Please submit this form with your Pre-qualification information.
3		"Do you have another copy of the Specifications that includes the Pre-Qualification Form? The attached copy we received does not include an Appendix B.	Please go to BidExpress.com. There you can download any forms you may need.

Philip D. Murphy, Governor
Sheila Y. Oliver, Lieutenant Governor
Diane Gutierrez-Scaccetti, Commissioner
Kevin S. Corbett, Executive Director

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

August 23, 2019

**Re: NJ TRANSIT Invitation for Bid No. 19-041
Superstorm Sandy Signal Equipment and Material
Addendum No. 3 – Pre-Qualifications / Statement of Ownership =
Ownership Disclosure form**

To Whom It May Concern:

The following constitutes Addendum No.3 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. Attachment A - As a reminder, all Pre-Qualification forms are due Friday, August 30, 2019, by 3 p.m.
2. Attachment B – Enclosed for Bidders information is the Ownership Disclosure form.

This concludes Addendum No. 3. An authorized representative of your organization shall acknowledge receipt of this Addendum in the Exhibit provided with its bid. Failure to acknowledge receipt of all Addenda may cause the rejection of the Bid as non-responsive.

Sincerely,



JoAnn Cudahy
Senior Contract Specialist
Procurement Department

Attachment A

Invitation for Bid No. 19-041 SUPERSTORM SANDY SIGNAL EQUIPMENT AND MATERIAL

Please note that the Bidder Prequalification Form, Section III, "Financial Status," states, "A Statement of Ownership shall be attached."

To clarify, submission of the attached "Ownership Disclosure form" will suffice for that requirement. This form is a fillable form available in the electronic bidding file.

As a reminder, all Pre-Qualification forms are due Friday, August 30, 2019, by 3 p.m.

**INVITATION FOR BID (IFB) NO. 19-041
SUPERSTORM SANDY SIGNAL EQUIPMENT AND MATERIAL**

Attachment B

Invitation for Bid No. 19-041
Superstorm Sandy Signal Equipment and Material

Ownership Disclosure Form (See attached.)



STATE OF NEW JERSEY
DEPARTMENT OF THE TREASURY
DIVISION OF PURCHASE AND PROPERTY

33 WEST STATE STREET, P.O. BOX 230
TRENTON, NEW JERSEY 08625-0230

OWNERSHIP DISCLOSURE FORM

BID SOLICITATION #: _____ VENDOR {BIDDER}: _____

PART 1

PLEASE COMPLETE THE QUESTIONS BELOW BY CHECKING EITHER THE "YES" OR THE "NO" BOX. ALL PARTIES ENTERING INTO A CONTRACT WITH THE STATE ARE REQUIRED TO COMPLETE THIS FORM PURSUANT TO N.J.S.A. 52:25-24.2

PLEASE NOTE THAT IF THE VENDOR/BIDDER IS A NON-PROFIT ENTITY, THIS FORM IS NOT REQUIRED.

- | | YES | NO |
|---|--------------------------|--------------------------|
| 1. Are there any individuals, corporations, partnerships, or limited liability companies owning a 10% or greater interest in the Vendor {Bidder}? | <input type="checkbox"/> | <input type="checkbox"/> |
| IF THE ANSWER TO QUESTION 1 IS "NO", PLEASE SIGN AND DATE THE FORM.
IF THE ANSWER TO QUESTION 1 IS "YES", PLEASE ANSWER QUESTIONS 2 – 4 BELOW. | | |
| 2. Of those parties owning a 10% or greater interest in the Vendor {Bidder}, are any of those parties individuals? | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Of those parties owning a 10% or greater interest in the Vendor {Bidder}, are any of those parties corporations, partnerships, or limited liability companies ? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. If your answer to Question 3 is "YES", are there any parties owning a 10% or greater interest in the corporation, partnership, or limited liability company referenced in Question 3? | <input type="checkbox"/> | <input type="checkbox"/> |

IF ANY OF THE ANSWERS TO QUESTIONS 2 - 4 ARE "YES", PLEASE PROVIDE THE REQUESTED INFORMATION IN PART 2 BELOW.

PART 2

PLEASE PROVIDE FURTHER INFORMATION RELATED TO QUESTIONS 2 – 4 ANSWERED AS "YES".

If you answered "YES" for questions 2, 3, or 4, you must disclose identifying information related to the individuals, corporations, partnerships, and/or limited liability companies owning a 10% or greater interest in the Vendor {Bidder}. Further, if one or more of these entities is itself a corporation, partnership, or limited liability company, you must also disclose all parties that own a 10% or greater interest in that corporation, partnership, or limited liability company. This information is required by statute.

INDIVIDUALS

NAME	_____		
ADDRESS 1	_____		
ADDRESS 2	_____		
CITY	STATE	ZIP	

NAME	_____		
ADDRESS 1	_____		
ADDRESS 2	_____		
CITY	STATE	ZIP	

NAME	_____		
ADDRESS 1	_____		
ADDRESS 2	_____		
CITY	STATE	ZIP	

Attach Additional Sheets If Necessary.

PART 2 continued
PARTNERSHIPS/CORPORATIONS/LIMITED LIABILITY COMPANIES

ENTITY NAME			
PARTNER NAME			
ADDRESS 1			
ADDRESS 2			
CITY	STATE	ZIP	

ENTITY NAME			
PARTNER NAME			
ADDRESS 1			
ADDRESS 2			
CITY	STATE	ZIP	

ENTITY NAME			
PARTNER NAME			
ADDRESS 1			
ADDRESS 2			
CITY	STATE	ZIP	

ENTITY NAME			
PARTNER NAME			
ADDRESS 1			
ADDRESS 2			
CITY	STATE	ZIP	

Attach Additional Sheets If Necessary.

In the alternative, to comply with the ownership disclosure requirement, a Vendor {Bidder} with any direct or indirect parent entity which is publicly traded may submit the name and address of each publicly traded entity and the name and address of each person that holds a 10 percent or greater beneficial interest in the publicly traded entity as of the last annual filing with the federal Securities and Exchange Commission or the foreign equivalent, and, if there is any person that holds a 10 percent or greater beneficial interest, also shall submit links to the websites containing the last annual filings with the federal Securities and Exchange Commission or the foreign equivalent and the relevant page numbers of the filings that contain the information on each person that holds a 10 percent or greater beneficial interest. N.J.S.A. 52:25-24.2.

CERTIFICATION

I, the undersigned, certify that I am authorized to execute this certification on behalf of the Vendor {Bidder}, that the foregoing information and any attachments hereto, to the best of my knowledge are true and complete. I acknowledge that the State of New Jersey is relying on the information contained herein, and that the Vendor {Bidder} is under a continuing obligation from the date of this certification through the completion of any contract(s) with the State to notify the State in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I will be subject to criminal prosecution under the law, and it will constitute a material breach of my agreement(s) with the State, permitting the State to declare any contract(s) resulting from this certification void and unenforceable.

Signature (Do not enter vendor ID as a signature)

Date

Print Name and Title

FEIN/SSN

Philip D. Murphy, Governor
Sheila Y. Oliver, Lieutenant Governor
Diane Gutierrez-Scaccetti, Commissioner
Kevin S. Corbett, Executive Director

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

August 21, 2019

**Re: NJ TRANSIT Invitation for Bid No. 19-041
Superstorm Sandy Signal Equipment and Material
Addendum No. 2 – Pre-Bid Conference held August 16, 2019**

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:

1. Attachment A - Enclosed for Bidders information is a Pre-Bid Data Sheet summarizing information discussed at the Pre-Bid Conference.
2. Attachment B – Enclosed for Bidders information is the Attendance Sheet from the Pre-Bid Conference.

This concludes Addendum No. 2. An authorized representative of your organization shall acknowledge receipt of this Addendum in the Exhibit provided with its bid. Failure to acknowledge receipt of all Addenda may cause the rejection of the Bid as non-responsive.

Sincerely,



JoAnn Cudahy
Senior Contract Specialist
Procurement Department

Attachment A

Invitation for Bid No. 19-041 SUPERSTORM SANDY SIGNAL EQUIPMENT AND MATERIAL

**INVITATION FOR BID (IFB) NO. 19-041
SUPERSTORM SANDY SIGNAL EQUIPMENT AND MATERIAL**

PRE-BID CONFERENCE AGENDA

August 16, 2019

Agenda

- | | |
|---------------------------------|--|
| I. Introduction | JoAnn Cudahy, Senior Contract Specialist |
| II. Proposal Process | JoAnn Cudahy, Senior Contract Specialist |
| III. DBE Goal and Requirements | Adonis Abreu – Compliance Specialist |
| IV. Project Overview | Glenn Zuber, Project Manager |
| V. Questions and Answer Session | |

I. Introduction

Attendance Sheet

Project Dates:	Invitation to Bid Date:	Friday, July 19, 2019 (10:00 am)
	Pre-Bid Conference	Friday, August 16, 2019, (10:00 am)
	Pre-Qualifications Due:	Friday, August 30, 2019 (3:00 pm)
	Request for Changes/Questions Due:	Friday, August 23, 2019 (2:00 pm)
	Bid Opening:	Tuesday, September 17, 2019 (2:00 pm)

II. Proposal Requirements and Process

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: www.bidexpress.com. Registration and a subscription fee are required to access the Bid Documents. 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 electronic files, not requirements of the Contract, to:

NJ TRANSIT Bid Express Administrator
E-Mail: e-bidding@njtransit.com

Or

Bid Express Customer Support
Tel: (888) 352-2439
Fax: (888) 971-4191

E-Mail: support@bidexpress.com

Obtaining a

Digital ID:

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.

Communications:

Communications regarding this Invitation for Bid are to be conducted through NJ TRANSIT's Procurement Department. All other contacts are considered improper and are prohibited. Violation of this prohibition may be cause for removal of a Bidder from consideration for award of this Contract.

Bidders are also advised that any discussions held regarding this project are considered informal and are not binding. The only means for modifying the Invitation for Bid is through a formal written Addendum. Therefore, any inquiries or requests for clarification must be submitted in writing. Inquiries and requests for clarification may be e-mailed to JoAnn Cudahy at JCudahy@NJTRANSIT.com. Any response NJ TRANSIT elects to make will be made by a written Addendum to the Bid and issued to all plan holders.

Pre-qualification:

Bidders must be pre-qualified with NJ TRANSIT prior to submitting a Bid. Bids received that are not pre-qualified or are pre-qualified with a rating insufficient to support its bid will be rejected. Pre-qualification questionnaires are available for download from the Bid Express website www.bidexpress.com. Completed Pre-qualification forms **MUST** be submitted to by **Friday, August 30, 2019 (3:00 pm)**. **They may be emailed to JCudahy@NJTRANSIT.com**

Late submissions of Pre-qualification questionnaires or submission of incomplete Pre-Qualifications may result in Bidders not being pre-qualified to bid.

Pre-qualification questionnaires are available through the Bid Express website.

The New Jersey Transit Corporation (NJ TRANSIT) is soliciting Bids through a two-step IFB procurement process generally described below:

- Step One (1) will involve a pre-qualification process. Bidders must be "pre-qualified" by NJ TRANSIT in order to submit bids for this procurement. All Bidders shall complete the Pre-qualification Form(s) included in "Appendix B" of this IFB and shall submit the same on or before Friday, August 30, 2019 by 3:00 p.m. Bidders found to be acceptable at the completion of Step One (1) shall be

deemed "pre-qualified" within fifteen (15) business days of the submission date noted above and will be invited to participate in Step Two (2) of the procurement process.

- Step Two (2) will involve the submission of bid prices from each pre-qualified Contractor.

**Inquiries/Questions
and
Requests for
Clarification/
Changes:**

All inquiries and requests for clarifications regarding the contract documents shall be submitted by e-mail to the Contracting Officer identified in the Instructions to Bidders. Such requests shall state the Bid number and name of Project. Any response that NJ TRANSIT may choose to make will be by a written Addendum to the Bid. NJ TRANSIT will not be bound by any informal explanation, clarification, or interpretation, oral or written, by whomsoever made, that is not incorporated into an Addendum to the Bid. All such Addenda will be posted on the electronic bidding website prior to the opening of Bids.

It is the obligation of the Bidder to check the website for Addenda. Certain Addenda will contain Amendments. The Bidder shall ensure that the Schedule of Bid Items to be bid contains all applicable Amendments. NJ TRANSIT has the right to reject Bids that do not contain all applicable Amendments to the Schedule of Bid Items to be bid.

All inquiries and requests for Changes/ Questions and/or clarifications can be e-mailed to JCudahy@NJTRANSIT.com and are due by **Friday, August 23, 2019 (2:00 pm)**.

Receipt of Bids: Bidders who have been pre-qualified will be authorized to submit a bid.

The Bids for this project are due on or before 2:00 pm, Tuesday, September 17, 2019. Bids are to be submitted electronically via Bid Express to NJ TRANSIT. Late bids will not be accepted.

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 submitted prior to the Bid Opening.

When submitting a hard copy Bid Security, please send to NJ TRANSIT's Bid Desk, One Penn Plaza East, Sixth Floor, Newark, NJ 07105. Bid Security must be received by **2:00 pm, DAY BEFORE BID OPENING, which is TUESDAY, SEPTEMBER 17, 2019.**

Please make sure to include the following information on the front of your envelope:

IFB No. 19-041
SUPERSTORM SANDY SIGNAL EQUIPMENT AND MATERIAL
Bid Bond

Award: Award of Contract (by Group), if any, will be to that Bidder who is deemed to be the lowest responsive and responsible Bidder. (See Groups A,B, C, D.)

Time of Completion: Vendors shall ship materials within 90 days after receipt of a Purchase Order.

Buy America: This procurement must comply with the FTA's Buy America requirements (49 U.S.C. § 5323(j); 49 C.F.R. Part 661). Bids submitted that do not comply with the Buy America provisions will be rejected.

Bonding Requirements: Bidders shall include a Bid Security equal to ten percent (10%) of the total Bid price. Bid security may be in the form of a Bid Bond, cashiers' check, certified check, or letter of credit. Cash shall not be considered an acceptable form of Bid security. If Bid are submitted for more than one Group, the security shall be equal to ten percent (10%) of the maximum Bid price submitted. Bidder shall ensure that the Bid Bod is properly completed and furnished by a corporation or corporations authorized to issue surety bonds in the State of New Jersey and listed in the current U.S. Treasury Department Circular 570 as of the date for the receipt of Bids and made payable to the New Jersey Transit Corporation.

III. Disadvantaged Business Enterprise (DBE) Goal and Requirements

Any questions regarding the DBE requirements or the mandatory required forms for this Contract should be directed to:

Adonis Abreu
OBD COMPLIANCE OFFICER
973-491-8575
AAbreu@NJTRANSIT.com
(Please note this change in Contact information.)

IV. Project Overview

V. Question and Answer Session

Attachment B

Invitation for Bid No. 19-041 Superstorm Sandy Signal Equipment and Material


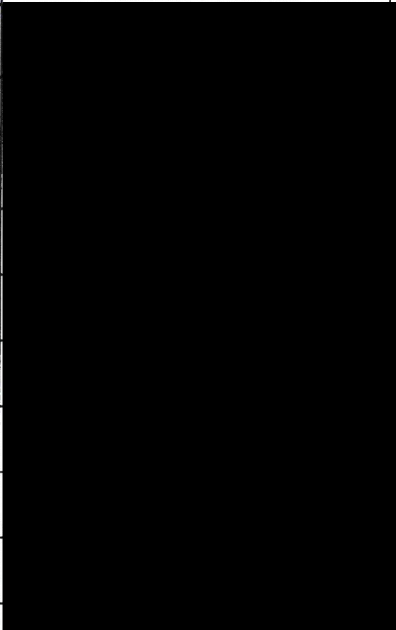
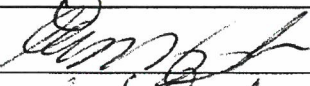
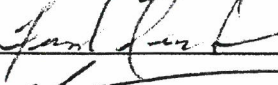
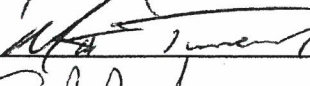
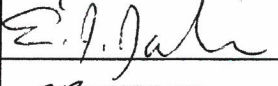
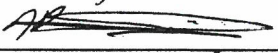
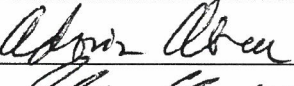
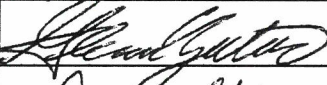

NJ TRANSIT IFB 19-041

SUPERSTORM SANDY SIGNAL EQUIPMENT AND MATERIAL

PRE-BID CONFERENCE

August 16, 2019

SIGN-IN SHEET

PRINT NAME	SIGNATURE	COMPANY NAME	Phone / Email
JoAnn Cudahy		NJ TRANSIT	
Henry Bolanco		Dai done Electric	
Fred Scaleri		NJ T.	
Mat Trimmerman		The Okonite Company	
E. J. JOCelyn		NJ TRANSIT	
Hazim Escheik		N.J transit	
Adonis Abreu		NJ Transit	
Glean Zuber		NJ TRANSIT	
Janet Ellenbacher		NJ Transit	

Philip D. Murphy, Governor
Sheila Y. Oliver, Lieutenant Governor
Diane Gutierrez-Scaccetti, Commissioner
Kevin S. Corbett, Executive Director

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

August 6, 2019

ADDENDUM NO. 1

To Whom It May Concern:

**Re: NJ TRANSIT INVITATION FOR BIDS (IFB) No. 19-041
SUPERSTORM SANDY SIGNAL EQUIPMENT AND MATERIAL**

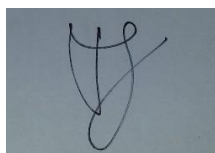
Prospective Bidders are hereby advised of the following changes to NJ TRANSIT Invitation for Bid (IFB) No. **19-041** entitled "**SUPERSTORM SANDY EQUIPMENT AND MATERIAL**" for which bids must be received on or before 2:00 P.M., Tuesday, September 17, 2019.

1. The Pre-Bid Conference is scheduled for Friday, August 16, 2019 at 10:00 AM at NJ TRANSIT Headquarters located at One Penn Plaza East, Newark, New Jersey.

Addendum No. 1 Acknowledgement:

In accordance with NJ TRANSIT's Instructions to Bidders - Article D.4, Bidders are required to acknowledge receipt of all Addenda in the Addenda Acknowledgment Box. Failure to acknowledge receipt of all Addenda may cause the rejection of the Bid as non-responsive.

Sincerely,



JoAnn Cudahy
Senior Contract Specialist
Contracts Unit

BID NO. 19-041

SANDY SIGNAL EQUIPMENT AND MATERIAL

SCOPE

This Invitation for Bid (IFB) is for the purchase of equipment and material to be installed on NJ TRANSIT's rail system that generally includes, but is not limited to, impedance bonds, foundations, remanufactured switch machines, equipment houses, and signal cables.

The New Jersey Transit Corporation (NJ TRANSIT) is soliciting bids through a two-step IFB procurement process generally described below:

- Step One (1) will involve a prequalification process. Bidders must be deemed "prequalified" by NJ TRANSIT in order to submit bids for this procurement. All Bidders shall complete the Prequalification Form(s) included in "Appendix B" of this IFB and shall submit same on or before **Friday, August 30, 2019 by 3:00 p.m.** Bidders found to be acceptable at the completion of Step One (1) shall be deemed "prequalified" within fifteen (15) business days of the submission date noted above and will be invited to participate in Step Two (2) of the procurement process.
- Step Two (2) will involve the submission of bid prices from each pre-qualified Contractor.

Late Prequalification Forms will not be accepted. Bids will not be accepted from a Bidder unless prequalification has been granted to them by NJ TRANSIT. Prequalification granted for another NJ TRANSIT bid or project is not valid for this procurement.

APPLICABLE SPECIFICATIONS AND DRAWINGS

See "Appendix A" for product specifications and drawings.

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. The actual purchases made during this period may be more than the estimated quantities. NJ TRANSIT is not bound to purchase any minimum quantity. Prices shall remain firm for

a period of 24 months from the date of Purchase Order issuance unless otherwise specified herein.

PRICING

1. Bidders are required to provide firm, fixed prices. All prices shall remain firm for the Contract period.
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. For signal cables, Bidders shall submit a Unit Price per foot and shall indicate the copper weight in pounds per thousand feet of each cable. The Extended Price shall represent the Unit Price times the quantity of foot per cable. For the purpose of developing bid prices, bidders shall assume the base price of copper to be \$3.00 per pound. Bid prices for copper cable shall be subject to escalation/de-escalation based upon the current month's settle price for copper as listed in the New York Mercantile Commodity Exchange (COMEX or CMX) as published on date of Purchase Order issuance. The escalation/de-escalation of this copper index price will be the only allowable criteria by which the seller may alter the Unit Price of cable to be charged to NJ TRANSIT. The period of this agreement shall be two years from the date of Contract issuance.
4. NJ TRANSIT reserves the right to increase quantities by up to twenty percent (20%) with no increase in price. The determination as to whether to increase quantities shall be made at NJ TRANSIT's sole option. In the event of a quantity increase, the Bidder will be provided with sufficient notice to allow for delivery by desired date.

PRODUCTS TO BE SUPPLIED

Following are the four product groups included in this IFB:

Group A – Impedance Bonds and Foundations

ITEM CODE	DESCRIPTION	QTY	UNITS
02064631	Bond, Impedance, Concrete & Wood Ties Mini-Style, 300 Amps, As Per Specification S-012219	38	EA
02322004	Pier, Instrument Case Foundation, As Per Specification S-120518	18	EA
02322012	Pier, Triangle Instrument Case Foundation, As Per Specification S-120418	28	EA

Group B – Remanufactured Switch Machines

ITEM CODE	DESCRIPTION	QTY	UNITS
5F-RH	Remanufactured Model 5F Dual Control RH Switch Machine, 110 Volt DC, As Per Specification S-121715	4	EA
5F-LH	Remanufactured Model 5F Dual Control LH Switch Machine, 110 Volt DC, As Per Specification S-121715	2	EA

Group C – Equipment Houses

ITEM CODE	DESCRIPTION	QTY	UNITS
02108676	Case, Equipment, High Single, Aluminum, As Per Specification S-042098 and Drawing SK-042894	9	EA
02108851	Case, Equipment, High Double , Aluminum, As Per Specification S-042098 and Drawing SK-010886	2	EA
02247003	House, Equipment, 6'X6' Aluminum, As Per Specification S-042098 and Drawing SK-060885	2	EA
02247005	House, Equipment, 8'X8' Aluminum, As Per Specification S-042098 and Drawing SK-100886	11	EA
02247063	House, Equipment, 8'X10' Aluminum, As Per Specification S-042098 and Drawing SK-010888	5	EA
02247007	House, Equipment, 8'X20' Aluminum, As Per Specification S-042098 and Drawing SK-031489	1	EA
02247009	House, Equipment, 8'X22' Aluminum, As Per Specification S-042098 and Drawing SK-042794	2	EA
02247009	House, Equipment, 8'X24' Aluminum, As Per Specification S-042098 and Drawing SK-010689	2	EA

Group D – Signal Cable

ITEM CODE	DESCRIPTION	QTY	UNITS
02090862	Cable, 15 Cond, Composite, Burial in Earth, 3 Cond, No. 8 AWG and 12 Cond, No. 14 AWG, Power Switches, As Per Specification S-84 Part I	3,000	FT
02098758	Cable, Burial in Earth, 12 Cond, No. 14 AWG, Electric Lock, As Per Specification S-84 Part I	3,000	FT
02099521	Cable, Burial in Earth, 19 Cond, No. 14 AWG, Solid Cable, Express, As Per Specification S-84 Part I	12,000	FT
02096257	Cable, Burial in Earth, 5 Cond, No. 9 AWG, Color Light Signals, As Per Specification S-84 Part I	45,000	FT
02090292	Cable, Burial in Earth, Two Single Cond, No. 6 AWG, As Per Specification S-84 Part II	33,000	FT
02099105	Cable, Burial in Earth, 6 PR, No. 14 AWG, Shielded, As Per Specification S-86	2,000	FT
02099103	Cable, 18 Cond, Composite, Burial in Earth, with 2 Cond, No. 6 AWG and 2 Cond, No. 9 AWG in Core and with 7 Cond, No. 9 AWG and 7 Cond, No. 14 AWG, Alternating, S-84 Part I	1,000	FT
02090417	Cable, 1/0, 250MCM, As Per Specification S-103018	12,000	FT
02090415	Cable, 1/C, 2/0, As Per Specification S-110918	2,000	FT
02090397	Cable, Shielded, Burial in Earth, 37 Cond, No.14 AWG, Solid Cable, Express, As Per Specification S-85	1,000	FT

Products in each group above are to be provided in strict conformance with specifications and drawings identified in each product description. Item Codes for all groups, except Group B, are NJ TRANSIT Standard Item Numbers. See "Appendix A" for specifications and drawings referenced above.

QUALITY CONTROL / QUALITY ASSURANCE

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

Bidders 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 bidder'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 bidders 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 bidder 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 bidder to promptly correct deficiencies discovered by either the bidder 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. Vendors shall ship materials within 90 days after receipt of a Purchase Order. All Purchase Orders will be issued by the NJ TRANSIT Procurement Department only.
2. Bidders shall identify the manufacturer of products offered.

3. All products offered are subject to the approval of NJ TRANSIT prior to Contract award.
4. Cable length tolerance shall be -5% to +0%. Cable length will be determined at times of release.
5. 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.
6. 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 in Group A, Group B and Group D shall be delivered to the following location:

NJ TRANSIT Rail
Orange Signal Complex
75 Lincoln Avenue
Orange, NJ 07050
Attn: Fred Scoleri

2. All products in Group C shall be delivered to the following location:

NJ TRANSIT Rail
Signal Relay Shop
58 Passaic Street Bldg. 58, Gate 4
Wood-Ridge, NJ 07075
Attn: Fred Scoleri

3. Seller shall contact NJ TRANSIT's Fred Scoleri at (973) 673-5708 a minimum of 48 hours prior to delivery to confirm delivery location and receive instructions.
4. All products shall be truck delivered.
5. All cable must be shipped on flatbed trailers.

WARRANTY

The Seller warrants to buyer 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.

ORDER OF PRECEDENCE

In the event of any inconsistency between provisions of this solicitation, the inconsistency shall be resolved by giving precedence in the following order:

- Change Orders
- General Provisions
- Contract terms and conditions
- Solicitation instructions and conditions
- Other provisions of the Contract, whether incorporated by reference or otherwise
- Specifications
- Drawings
- Referenced Standards

Appendix “A”

Group A

Specifications

January 22, 2019

Specification for Impedance Bond

1. Scope

This specification covers impedance bonds for use in track circuits with alternating current propulsion circuits.

2. Basic Construction

Coils constructed from copper bars, encased in a magnetic circuit of air-gapped ferrous cores. This assembly shall be sealed in a protective varnish and enclosed in a housing of steel and cast iron for mounting between the crossties of a railroad track.

3. Applicable Industry Standards

The following industry standards (latest edition) shall apply except this specification's requirements shall govern where conflicts occur:

AREMA C&S Manual, Part 8.4.5, Recommended Design Criteria for Low Frequency Untuned Impedance Bonds

AREMA C&S Manual, Part 8.4.6, Recommended Developmental Criteria for Impedance Bond Compound

4. Detailed Requirements

Tuning: Untuned

Propulsion Current Per Rail:

300 Amperes Continuously

600 Amperes for 0.5 hours

1,000 Amperes for 1 minute

Impedance:

0.5 Ohms at 25 HZ

1.0 Ohms at 60 HZ

1.6 Ohms at 100 HZ

3.2 Ohms at 200 HZ

7.5 Ohms at 500 HZ

Inductance, Rail-to-Rail: 1.5 mH

Resistance, Ohms-to-Rail: 0.000489 Ohms

Air Gap: .010 Inches

Dimensions:

Length: 31.0 Inches

Width: 13.5 Inches

Depth 7.13 Inches

The impedance bond shall be equipped with three copper terminal pads. Each terminal pad shall have two holes 9/16 inch in diameter and spaced 1-3/4 inches on centers to accommodate the connection of cable lugs. The cables and lugs will be furnished by others.

5. Warranty

The seller warrants Buyer that the product will be free from defects in material and workmanship for seven years and meets the specifications for products in paragraphs 1-4 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 1-4 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.

6. Delivery

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

The impedance bond shall be shipped to:

NJ TRANSIT Rail
Orange Signal Complex
75 Lincoln Avenue
Orange, NJ 07050
Attn: Fred Scoleri

NJTRO Specification S-120518
December 5, 2018
Specification for Galvanized Steel
Foundation for Instrument Case

1. Scope

This specification covers galvanized steel foundations for instrument case.

2. Basic Construction

Welded structural steel shapes, hot dipped galvanized.

3. Applicable Industry Standards

The following industry standards (latest edition) shall apply except this specification's requirements shall govern where conflicts occur:

AREMA C&S Manual, Parts 14.4.23 and 15.3.1
ASTM International Standard A36/A36M-08
ASTM International Standard A123/A123M-12
ASTM International Standard F2329-05

4. Steel

The foundation shall conform to the AREMA C&S Manual, Part 14.4.23, Recommended Design Criteria for Galvanized Steel Foundations, Assemblies for Instrument Case, Height 48 inches. The foundation shall also conform to ASTM International Standard A36/A36M-08, Standard Specification for Carbon Structural Steel.

5. Galvanizing

The foundation shall be galvanized after fabrication. The galvanizing shall conform to ASTM International Standard A123/A123M-12, Standard Specification for Zinc (hot dipped galvanized) Coatings on Iron and Steel Products.

6. Hardware

Bolts, Nuts and Washers shall be galvanized, conforming to the AREMA C&S Manual, Part 15.3.1, Recommended Developmental Criteria for Metallic Coating of Metals, and also conforming to ASTM International Standard F2329-05, Standard Specification for Zinc Coating, Hot-Dip Requirements for Application to Carbon and Alloy Steel Bolts, Screws, Washers, Nuts and Special Threaded Fasteners.

7. 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 1-6 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 1-6 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.

8. Delivery

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

The foundations shall be shipped to:

NJ TRANSIT Rail
Orange Signal Complex
75 Lincoln Avenue
Orange, NJ 07050
Attn: Fred Scoleri

NJTRO Specification S-120418
December 4, 2018
Specification for Galvanized Steel
Foundation for Instrument House

1. Scope

This specification covers galvanized steel foundations for instrument house.

2. Basic Construction

Welded structural steel shapes, hot dipped galvanized.

3. Applicable Industry Standards

The following industry standards (latest edition) shall apply except this specification's requirements shall govern where conflicts occur:

AREMA C&S Manual, Parts 14.4.21 and 15.3.1
ASTM International Standard A36/A36M-08
ASTM International Standard A123/A123M-12
ASTM International Standard F2329-05

4. Steel

The foundation shall conform to the AREMA C&S Manual, Part 14.4.21, Recommended Design Criteria for Galvanized Steel Foundations, Assemblies for Instrument House, Option 1, Height 48 inches. The foundation shall also conform to ASTM International Standard A36/A36M-08, Standard Specification for Carbon Structural Steel.

5. Galvanizing

The foundation shall be galvanized after fabrication. The galvanizing shall conform to ASTM International Standard A123/A123M-12, Standard Specification for Zinc (hot dipped galvanized) Coatings on Iron and Steel Products.

6. Hardware

Bolts, nuts and washers shall be galvanized, conforming to the AREMA C&S Manual, Part 15.3.1, Recommended Developmental Criteria for Metallic Coating of Metals, and also conforming to ASTM International Standard F2329-05, Standard Specification for Zinc Coating, Hot-dip Requirements for Application to Carbon and Alloy Steel Bolts, Screws, Washers, Nuts and Special Threaded Fasteners.

7. 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 1-6 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 1-6 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.

8. Delivery

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

The foundations shall be shipped to:

NJ TRANSIT Rail
Orange Signal Complex
75 Lincoln Avenue
Orange, NJ 07050
Attn: Fred Scoleri

Group B

Specifications

**NJTRO SPECIFICATION S-121715
DECEMBER 17, 2015
REBUILDING OF ALSTOM SWITCH MACHINES, MODELS 5E, 5F, 5G, 5H**

*** AMENDMENT TO SPECIFICATION S-121715 - DECEMBER 17, 2015**

FOR REBUILDING ALSTOM SWITCH MACHINES, MODELS - SE, SF, SG, AND SH.

**All switch machines cores and parts will be provided by the vendor for this requisition, As we have no cores at this time to submit.
Please see attached specification S-121715 all sheets for additional instruction.**

1. PROCESS

Each switch machine shall be completely disassembled and inspected, using OEM specifications, to identify all worn, damaged, and defective components.

Each switch machine shall be inspected to determine if removable wear plates, manufacturer's part numbers P85-0864 and P85-0865, are present. If these are not present, the frame castings shall be machined to accept these wear plates. New wear plates shall be installed.

All components of each switch machine shall be degreased, sand or media blasted, or otherwise cleaned in accordance with procedures suitable to each type of component.

Each Model 5H switch machine shall be remanufactured as a Model 5F switch machine.

Switch machine components shall be remanufactured as follows:

- A. Motor – Armature and field coils shall be tested for continuity and grounds and repaired to OEM specifications. Commutator shall be turned and undercut. New bearings, brushes, and lead wires of coils shall be installed.
- B. Gears shall be inspected for wear and other defects, and shall be remanufactured or replaced if defects are found. Cracked or fractured gears shall be replaced.
- C. Controller shall be completely disassembled, cleaned, repaired, reassembled, and tested to OEM specifications.
- D. Point Detector – The internal point detector rod shall be remanufactured to OEM specifications and shall include new hardware.

- E. Lock Rod – The internal lock rod shall be remanufactured to OEM specifications and shall include new hardware. Lock rod arms (clips), if worn or otherwise defective, shall be replaced with new OEM arms.
- F. Hand throw assembly, if equipped, shall be completely disassembled and inspected. Bearing and other components shall be replaced if necessary.
- G. Wiring harness shall be replaced with new wire and tags conforming to OEM specifications.
- H. Friction clutch shall be disassembled completely, cleaned, and inspected. All worn components shall be replaced. Disks shall be replaced.

All components of each switch machine shall receive a primer and urethane topcoat prior to reassembly.

Each switch machine shall be reassembled, lubricated, adjusted, and tested in conformance with OEM specifications.

Each switch machine shall be identified by a remanufacturing serial number located near the footprint mounting holes.

An inspection report shall be provided with each switch machine.

NJTRO Specification S-121715**Page 3**

Each switch machine shall include the following new components:

<u>OEM Part Number</u>	<u>Description</u>	<u>Quantity</u>
P85-0864	Wear plates	2
P85-0865	Wear plates	2
45557-019-00	Clutch disks	6
P85-0344	Bearings	2
06714-271-00	Bushing	2
08942-052-00	Bushing	1
149-37-003-00	Tub complete	1
51197-003-00	Spring	12
51199-005-00	Finger only	3
51153-000-01	Arm complete	4
51195-018-01	Arm complete	4
00786-353-00	Spring for D block	2
35470-004-00	Stop for spring	12
01601-080-00	Washer for adjuster	4
29967-001-00	Adjuster for finger	4
51198-005-01	Terminal post com	4
49536-091-00	Ball bearing	2
35780-009-00	Motor brush	2
34232-067-01	Fitting	1
34232-064-02	Fitting	1
55291-006-00	Resistor	1
52557-009-00	Extension handle	1
42760-174-04	Connector 110v	1
42760-199-01	Connector 24v	1
29174-010-00	Replaced w/Rectifier	1
54728-083-01	Rectifier comp	1
04811-002-00	Dowel for frame	2
04811-003-00	Dowel for frame	6
04811-004-00	Dowel for frame	2
06714-335-00	Bushing for levers	1
49536-027-00	Roller bearing	1
00590-041-00	Washer for nut	1
51114-004-00	Guard throw bar	1
51114-013-00	Guard field side	1
51190-000-01	Guard lock/pd	2

<u>OEM Part Number (cont.)</u>	<u>Description</u>	<u>Quantity</u>
New wires on motor coils		4
New wiring harness		1
All new hardware	Kit	1

2. 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 product in item 1 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 for item 1 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.

3. DELIVERY

Each switch machine shall be packed in a shipping crate.

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

Equipment shall be shipped to:

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

Attn: Fred Scoleri

Group C

Specifications and Drawings

NJTRO SPECIFICATION S-042098

APRIL 20, 1998

Revised May 24, 2004

INSTRUMENT HOUSINGS

1. EQUIPMENT HOUSES AND EQUIPMENT CASES

New Apparatus

All instrument housings, which shall include equipment houses and equipment cases, furnished under this Contract shall be new and unused. The furnishing of reconditioned or previously-used equipment, apparatus, or material is not permitted.

Drawings

Instrument housings shall conform to the following NJTRO drawings:

SK-042894		High Single Case
SK-042994		Low Single Case
SK-010886		High Double Case
SK-030486		High Quadruple Case
SK-060885	Rev. 4-7-97	6' x 6' House
SK-100886	Rev. 5-11-94	8' x 8' House
SK-010888	Rev. 1-14-91	8' x 10' House
SK-021894		8' x 12' House
SK-051704		8' x 14' House
SK-011491		8' x 18' House
SK-031489	Rev. 1-14-91	8' x 20' House
SK-042794		8' x 22' House
SK-010689	Rev. 1-14-91	8' x 24' House
SK-031689	Rev. 1-14-91	8' x 28' House
SK-043094		10' x 48' House
SK-081001		8' x 30' House

Basic Construction

All instrument housings shall have exterior surfaces of .100 inch aluminum sheets, alloy 5052-H32. Floor panels shall be constructed of .125 inch (or thicker) aluminum sheets, alloy 5052-H32. The framing shall be of aluminum alloy 6061-T6 or 6063-T5.

Door and Locks

Each instrument housing door shall be equipped with an approved three-point vandal resistant locking arrangement, which shall ensure that the door cannot be locked until it is completely closed. The hasps and handles shall be reinforced to prevent breakage. Door handles and hasps shall have ½ inch holes to accept padlocks. Door hinges (3 per door) shall be designed to prevent corrosion and shall be equipped with grease fittings. Door hooks and clips shall be furnished to hold the doors open at 90 degrees. Doors shall be removable when open. The proposed locking and hinge arrangement shall be subject to approval by the Engineer.

Ventilators

Each instrument housing shall be fitted with screened adjustable ventilator openings, protected by caps which will prevent the entrance of moisture. The quantity, size and placement of the ventilator openings shall be as shown in the drawings.

Structural Strength

Each instrument housing shall have sufficient structural strength to permit lifting without additional bracing by overhead crane for loading, unloading, and placement on foundation.

Lifting and Securing

Each instrument housing shall include hooks, rings, or other suitable provisions to permit lifting by overhead crane. Each instrument housing shall be equipped with tie-down brackets, designed for their intended purpose for secure transportation.

Insulation

The interior of each instrument housing shall be lined with a two-inch thick insulating material, polyisocyanurate foam faced with fibrous glass (Thermax Quik-r Wall Insulation) or Engineer-approved equal.

Electrolysis

To prevent electrolysis, instrument housings shall be constructed without contact between dissimilar metals, except that fasteners shall be stainless steel.

Single Unit

Each instrument housing shall be shipped from the factory as a single assembled unit so that no field assembly is required.

Terminal Boards

Each instrument housing shall be equipped with $\frac{3}{4}$ inch American Plywood Association A-B exterior-grade plywood terminal boards, painted with fire retardant paint after fabrication, for terminating external signal and communication cables. Bolts which secure terminal boards to the interior aluminum frame shall be located no closer than $\frac{1}{2}$ inch to the edges of the plywood. The plywood shall not be splintered at edges nor at bolt holes.

Grounding

An unmounted grounding buss shall be provided with each instrument housing. The grounding buss shall consist of a copper plate, shall measure $\frac{1}{8}$ inch x 6 inches x 6 inches minimum, shall be arranged for mounting on a plywood terminal board, and shall be equipped with connectors for 12 No. 14 AWG and 4 No. 6 AWG wires. An unmounted ground terminal, which shall not extend to the exterior surface of the housing, shall be provided for connection to the housing frame.

Relay Support

Each housing shall be equipped with aluminum relay racks for mounting of Alstom Signaling, Inc. Type B plugboards as shown in the drawings. The Seller shall submit detailed rack drawings for approval by the Engineer.

Wiring Duct

Plastic wiring duct for the routing of wiring shall be mounted on the rear of each relay rack. Duct shall be Panduct Type E, light gray in color. Duct for each horizontal row of relays shall be 2 inches wide and 3 inches high. Ducts installed vertically on edge of relay racks shall be 2 inches wide and 3 inches high. Where two racks are adjacent, ducts shall be installed vertically between racks and shall be 4 inches wide and 3 inches high. Ducts shall be bolted or riveted to supporting structures on maximum hole centers of 6 inches and shall meet squarely and evenly. Sharp edges of fasteners shall not extend into the duct interior.

Finish

The interior surfaces of all instrument housings and parts thereof, excepting aluminum surfaces, shall be finished with a fire retardant gray paint, Albie Cote 107A, or Engineer approved equal. All surfaces that are to be joined, sealed or painted shall first be thoroughly cleaned with solvent. All seams and joints that are not continuously welded shall be continuously sealed by caulking to prevent the entrance of water. Exterior surfaces shall not be painted. The finish of all materials furnished shall conform to the requirements of the AREMA Communications and Signals Manual of Recommended Practices, where the AREMA requirements do not conflict with this specification. The finish shall be warranted against corrosion and weathering defects for a period of ten years after delivery of the housing.

2. **EQUIPMENT HOUSES**

Door

Each equipment house shall have two hinged access doors, one at each end. One access door shall be secured from the outside; the other door shall be secured from the inside only. Doors shall be gasketed to provide a dustproof and weatherproof seal. Door handles shall be shielded to deter vandalism. Each door shall be equipped with a filtered ventilator that can be closed during the winter.

Terminal Racks

Cable terminal boards shall be securely fastened to an aluminum rack, of sufficient depth to permit cables that enter the house to be contained within the confines of the rack. Terminal racks shall not exceed a height of 7.1 feet, and shall contain tie bars to support the cables. The terminal racks shall be equipped with a full complement of terminal boards.

Equipment Racks

Equipment racks, including terminal racks, shall be installed as shown on the drawings. Swing-out racks will not be permitted. Equipment racks shall be 24 inches wide, except code racks (furnished by others), which shall be 19 inches wide.

Cable Entrance

A stainless steel cable trough extending two feet below the house floor shall be provided within each terminal rack for the entrance of underground cables. The troughs shall be 4 inches wide and 20 inches long, and shall have no sharp edges. The bottom edge shall have a one inch return bend.

Apparatus Boards

Each equipment house shall contain an apparatus board of $\frac{3}{4}$ inch American Plywood Association A-B exterior grade plywood, painted with fire retardant paint after fabrication, along one wall as shown on the drawings.

Wire Chases

Ladder-type aluminum wire chases of adequate gauge which are closed on two sides, open at the top, at least 40 percent open at the bottom and free of all rough surfaces and sharp edges shall be provided overhead to permit the routing of wires between apparatus mounted on the walls, shelves, racks, terminal boards, apparatus boards, and battery racks. The wire chase arrangement shall be subject to the Engineer's approval.

Floor and Roof

The house floor shall support a minimum of 500 lbs. per square foot with not more than 1/4 inch deflection. The roof shall support a minimum of 30 lbs. per square foot.

Lighting and Ventilation

Each equipment house shall be wired by the Seller with 120 volt AC circuits and apparatus for lighting and ventilation. All such wiring shall be enclosed by EMT conduit. The conduit shall terminate in a 6 inch by 6 inch by 4 inch junction box mounted on wire chase above the rear side of the apparatus board. A thermostatically-controlled exhaust fan or fans mounted in roof vents shall be provided. The thermostat shall be non-adjustable and shall provide contact closure when the interior temperature is above 80°F. The exhaust fan(s) shall be capable of exhausting the entire volume of air in the house within five minutes and shall operate on 60 HZ and 100 HZ power supply. One screened adjustable floor vent shall be provided in each corner of the house. Duplex convenience outlets, of the ground fault interrupter type, grounded in accordance with the National Electrical Code shall be provided. An outlet and lighting switch shall be provided adjacent to each door, four feet above the floor. For equipment houses longer than 13 feet, duplex outlets shall also be provided in the line with the lighting conduits at approximate 6-foot intervals, and shall be secured to the wire chases in a manner to avoid interference with other wires.

Fluorescent lighting fixtures of 2 feet and/or 4 feet lengths shall be provided in front of and behind the equipment racks. Fixtures shall be equipped with electronic ballasts that shall operate satisfactorily through a temperature range of 0°F to 140°F. Fixtures and lamps shall operate from both 60 HZ and 100 HZ power sources. Minimum illumination shall be 2.0 watts per square foot of floor area. Lamps shall be equipped with protective tubes and anti-vibration locks. Lighting fixtures shall be located to avoid interference with the installation of wire in wire chases.

Door Switches

A magnetic or spring return switch whose contacts are closed when the door is closed shall be provided on the inside door frame of each door of each equipment house that is larger than 8 feet by 8 feet.

Desk

Each equipment house that is longer than 12 feet shall be equipped with a wall supported single drawer aluminum desk, mounted 30 inches above the floor, with drawer interior dimensions 30 inches wide by 19 inches deep by 4 inches high.

AREMA Requirements

Equipment houses shall be provided with heavy rubber floor mats throughout, shall be suitable for mounting on Dixie Precast pier DPP-3, shall meet the applicable specifications and requisites of the AREMA Communications and Signals Manual of Recommended Practices, and shall be as manufactured by Safetran Systems Corporation, or Alstom Signaling, Inc., or Engineer-approved equal.

3. **EQUIPMENT CASES**

Doors

Each case shall have hinged doors on both sides. Doors shall be gasketed to provide a dustproof and weatherproof seal. Doors shall be equipped with filtered ventilators.

Terminal Boards

Each case shall contain a false back of ¾ inch American Plywood Association A-B exterior grade plywood painted with a fire retardant paint after fabrication which shall serve as a cable terminal board and for the mounting of other apparatus.

Lighting

Each case shall be provided with 120 volt porcelain lighting fixtures, front and rear, consisting of an incandescent pull chain lampholder combined with a grounding-type convenience outlet, as shown in the drawings.

Cable Entrance

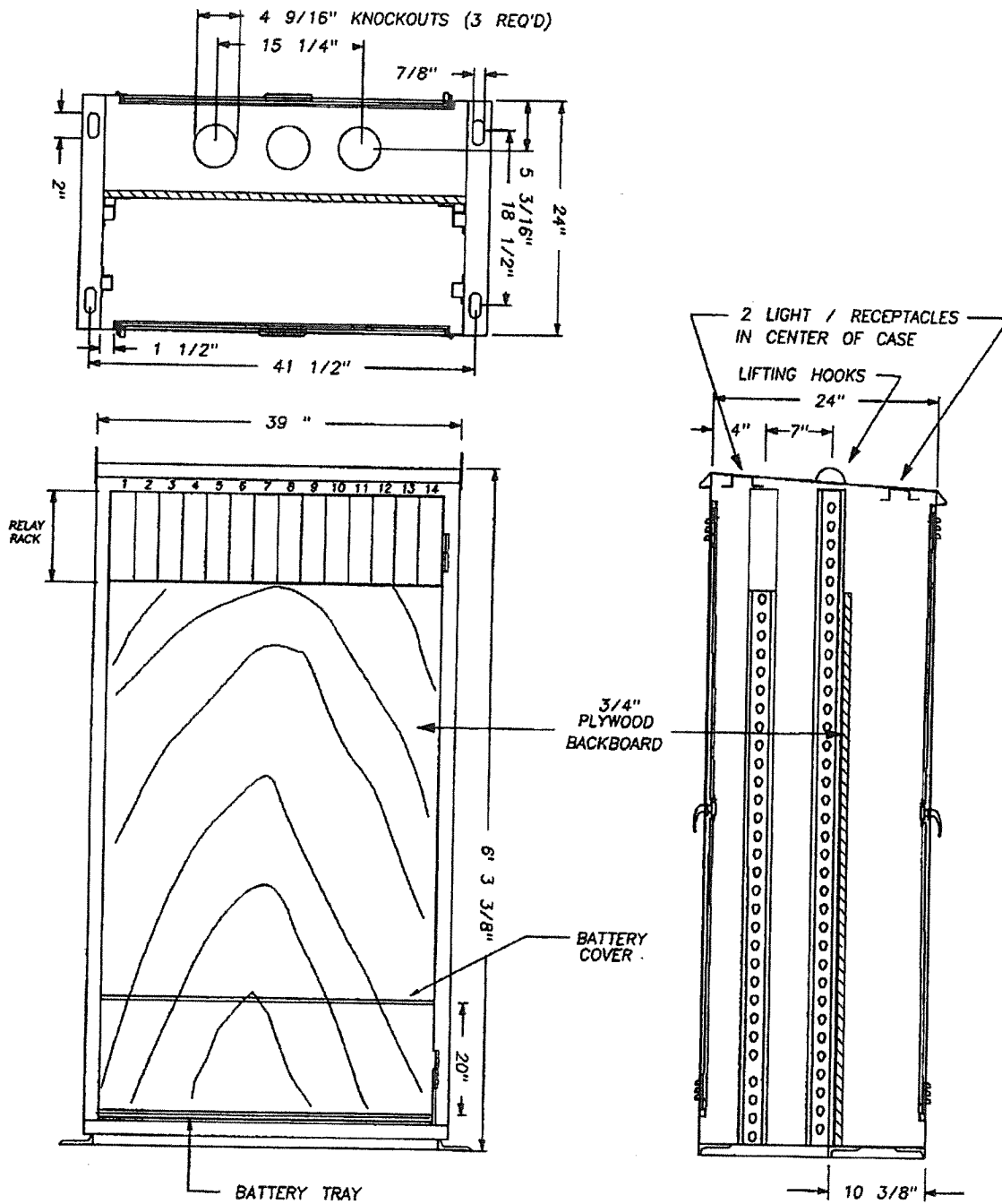
Each case shall contain knockout provisions for underground cable entrance behind the false back. Knockouts for 4 inch conduits shall be provided for all underground cables, as shown in the drawings. Soil pipes will be furnished by others. No openings or knockouts for aerial cable entrance shall be provided.

Battery Trays

Each equipment case shall be equipped with one or two floor-mounted battery trays, coated with alkali resistant paint and covered with a rubber floor mat. Each high single case shall be equipped with a battery tray suitable for a battery 34 inches long and 8 inches wide. Each high double case and each high quadruple case shall be equipped with a battery tray suitable for a battery 34 inches long and 8 inches wide and also a battery tray suitable for a battery 15 inches long and 8 inches wide.

AREMA Requirements

Equipment cases shall meet the applicable specifications and requisites of the AREMA Communications and Signals Manual of Recommended Practices, and shall be as manufactured by Safetran Systems Corporation, or Alstom Signaling, Inc., or Engineer-approved equal.



FRONT ELEVATION
W/DOORS REMOVED

TRANSIT
RAIL OPERATIONS

HIGH SINGLE EQUIPMENT CASE

SK042894

TECHNICAL DRAWINGS FOR THIS PROJECT ARE NOT REPRINTED HERE
DUE TO SIZE

Group D

Specifications

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.

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

NJTRO Specification S-110918

November 9, 2018

Specification for Single-Conductor Rope Lay

Railroad Signal Cable-2000 Volt

1. SCOPE

This specification covers single-conductor rope lay 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 coated copper conductors insulated with an ethylene-propylene based compound and covered with a chlorinated polyethylene thermoset compound.

3. APPLICABLE INDUSTRY STANDARDS

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

AREMA Recommended Practice, Section M, RP-588, as applicable
ICEA S-95-658
UL Type RHH or RHW-2

4. CONDUCTORS

Conductors shall be coated stranded soft copper in accordance with AREMA Recommended Practice, Section M, RP-588, as applicable, and ICEA S-95-658. The stranding shall conform to Table 1.

5. INSULATION

The conductor shall be insulated with an ethylene-propylene based compound which shall meet or exceed all requirements of AREMA Recommended Practice, Section M, RP-588, as applicable, and ICEA S-95-658. The insulation thickness shall conform to Table 1. 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 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 which shall meet or exceed all requirements of AREMA Recommended Practice, Section M, RP-588, as applicable, and ICEA S-95-658. The jacket thickness shall conform to Table 1.

Table 1

Conductor Size AWG	Number of Strands	Insulation Thickness, inches	Jacket Thickness, inches	Ampacity, AC or DC 1/C in Air
2/0	133	5/64	3/64	298
4/0	133	5/64	3/64	400

7. VOLTAGE AND TEMPERATURE RATINGS

The cable shall be suitable for use in 2000 volt circuits and shall have a continuous temperature rating of 90°C, a 110°C hot spot rating, a 130°C emergency overload rating and a 300°C short circuit rating.

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.

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**

NEW JERSEY TRANSIT RAIL OPERATIONS

SPECIFICATION S-84

PART I

SPECIFICATION FOR MULTI-CONDUCTOR
RAILROAD SIGNAL CABLE – 600 VOLT

Revised 12/11/06

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 neoprene or hypalon jacket.
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Underground Direct Burial	Multi-conductor solid copper conductor insulated with AREMA Class A walls. The insulated conductors cabled together either helically or in a unilay process with suitable fillers, where necessary, and a helically applied fabric bedding tape followed by either a 7 mil flat copper alloy armor tape or a 10 mil flat bronze armor tape. The bronze tape is 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.
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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 10.3.17, 10.3.19 and
10.3.21
ASTM B-33, B-189, D-1248, D-470-75
ICEA S-95-658, S-19-81

4. CONDUCTOR

Conductors shall be solid soft or annealed copper, in accordance with ASTM B-33 or B-189. 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 Tables 10319-1, 10319-2 and 10319-3.

SPECIFICATION FOR MULTI-CONDUCTOR RAILROAD SIGNAL CABLE
600 VOLT

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 64 th Of An Inch
B	14 - 8	4
	6	5
A	14 - 8	5
	6	6

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.

The installation 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).

SPECIFICATION FOR MULTI-CONDUCTOR RAILROAD SIGNAL CABLE
600 VOLT

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:

$$R = K \log \frac{D}{d}$$

R = Insulation resistance in megohms - 1000 ft. at 60°F K
= 25,000 megohms-1000 ft. constant

D = Diameter over insulation

d = Diameter over conductor

TABLE II

AREMA Insulation Class	Conductor Size AWG	Minimum Average Insulation Wall 64 th 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. 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

Neoprene or Hypalon 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 neoprene or hypalon compound in accordance with

SPECIFICATION FOR MULTI-CONDUCTOR RAILROAD SIGNAL CABLE
600 VOLT

AREMA C&S Manual Table 10320-2. Jacket wall thickness shall comply with Table III.

TABLE III

<u>Diameter Over Cable Core</u>	<u>Minimum Average Insulation Wall 64th Of An Inch</u>
0 - 0.425	4
0.426 - 0.700	5
0.701 - 1.050	6
1.051 - 1.500	7
1.501 - 2.000	8
2.001 - 3.000	9
3.001 & over	10

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 10 mil minimum helically applied compound filled fabric 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-465 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.

SPECIFICATION FOR MULTI-CONDUCTOR RAILROAD SIGNAL CABLE
600 VOLT

TABLE IV

<u>Diameter Over Cushion Layer Inches</u>	<u>Average Jacket-Thickness 64th Of An Inch</u>
0 - 0.425	3
0.426 - 0.700	4
0.701 - 1.050	5
1.051 - 1.500	6
1.501 - 2.000	7
2.001 - Greater	8

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 ON SHIPPING REEL

Each length of finished cable, while on the shipping reel, 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.

SPECIFICATION FOR MULTI-CONDUCTOR RAILROAD SIGNAL CABLE
600 VOLT

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.

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:

<u>Test Voltage</u> 60 Hz AC Volts/Mil		<u>Test Time</u> 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 voltage-age the sample.

<u>Test Voltage</u> 60Hz AC Volts/Mil		<u>Aging</u> 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

SPECIFICATION FOR MULTI-CONDUCTOR RAILROAD SIGNAL CABLE
600 VOLT

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 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.

SPECIFICATION FOR MULTI-CONDUCTOR RAILROAD SIGNAL CABLE
600 VOLT

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.

SPECIFICATION FOR MULTI-CONDUCTOR RAILROAD SIGNAL CABLE
600 VOLT

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.

NEW JERSEY TRANSIT RAIL OPERATIONS

SPECIFICATION S-84

PART II

SPECIFICATION FOR TRACK WIRE

Revised 10/15/06

SPECIFICATION FOR 600 VOLT TRACK WIRE

1. SCOPE

This specification covers track wire rated 600 Volt.

2. BASIC CONSTRUCTION

Single conductor solid copper, insulated with thermosetting rubber insulation and jacketed with a polyethylene material. Track wire will be supplied as a twisted duplex.

3. APPLICABLE INDUSTRY STANDARDS

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

ASTM B-8, B-3, D-1248, D-470-75
AREMA C&S Manual Parts 10.3.16 10.3.19
and 10.3.21
ICEA S-95-658, S-19-81

4. CONDUCTOR

The conductor shall be solid #6 AWG bare copper in accordance with ASTM B-3. 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 Tables 10319-1, 10319-2 and 10319-3.

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. The thickness shall be as specified in Table I.

SPECIFICATION FOR 600 VOLT TRACK WIRE

TABLE I

AREMA Insulation Class	Condr. Size AWG	Minimum Average Insulation Wall 64 th Inch	Test Voltage KV 5 Min. AC	Test Voltage KV 5 Min. DC
A	6	6	11	33

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 I, 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 I, 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:

$$R = K \log \frac{D}{10}$$

R = Insulation resistance in megohms - 1000 ft. at 60°F K = 25,000 megohms-1000 ft. constant

D = Diameter over insulation

7. JACKET

The insulated conductors shall be jacketed with an extruded low density, high molecular weight polyethylene conforming to AREMA C&S Manual Part 10.3.21. The jacket thickness shall have a minimum average of 4/64th of an inch. The

SPECIFICATION FOR 600 VOLT TRACK WIRE

minimum thickness of the jacket at any one point shall not be less than 80% of the minimum average.

8. ASSEMBLY FOR DUPLEXED CONSTRUCTIONS

Two insulated and jacketed conductors, one black and one red, shall be twisted together with one twist per foot.

9. TESTS

Each length of completed cable shall be subjected to the following electrical tests. Test procedures shall be in accordance with ICEA S-95-658.

a. Conductor Resistance - Conductor DC resistance shall meet the requirements of ICEA S-95-658.

b. Insulated Resistance Testing - An insulation resistance test shall be performed in 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:

$$R = K \log \frac{D}{d}$$

R = Insulation resistance in megohms-1000 ft. at 60°F

K = 25,000 megohms-1000 ft. constant

D = Diameter over insulation

d = Diameter over conductor

10. 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 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.

SPECIFICATION FOR 600 VOLT TRACK WIRE

11. QUALIFICATION TESTS Moisture

Resistance

A single conductor No. 6 AWG with 6/64 inch insulation wall, 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:

<u>Test Voltage</u> 60 Hz AC Volts/Mil		<u>Test Time</u> 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 No.6 AWG with 6/64-inch insulation, suitably shielded with the shield grounded. The cable shall be tested in free air with the ends appropriately terminated. One of the following shall be applied voltage-age the sample.

<u>Test Voltage</u> 60Hz AC Volts/Mil		<u>Aging</u> 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 350 volts/mil.

12. SHIPPING

SPECIFICATION FOR 600 VOLT TRACK WIRE

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.

13. 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 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 FOR 600 VOLT TRACK WIRE

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.

14. 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.

15. 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.

16. 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.

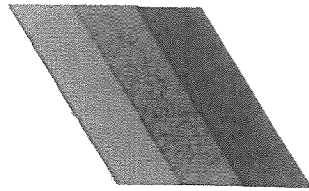
Reel Rolling Instructions

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".

17. 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.



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 $\frac{1}{4}$ -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.

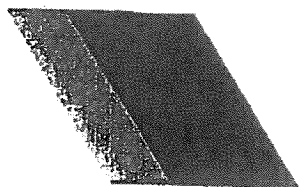
The outer conductive jacket shall be placed over the electrical shield specified above. The outer jacket shall be a black, high-molecular-weight, low density polyethylene which shall be applied over the shield and which shall contact at least 50 percent of the shield area. The jacket shall be free from 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



Specification S-86



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

- A. All cable to be supplied shall conform to NJTRO Specification S-84 (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 Specification S-84, the conductors shall be assembled as twisted pairs, with each pair individually shielded.

The conductors of each pair shall be twisted together with a maximum 7 inch lay. A bare copper No.16 AWG drain wire shall be laid in the interstices of the twisted conductors of each pair.

Each pair with drain wire shall be covered with a 1.7 mil copper/Mylar shield tape. The Mylar shall be 1 mil thick and the copper shall be 0.7 mil thick. The copper side of the tape shall be adjacent to the covered pair and drain wire. A 1 mil Mylar tape shall be applied to cover the shield tape.

The shielded pairs shall be cabled together with flame and moisture resistant fillers as necessary to provide a substantially round core. A 2 mil Mylar tape shall be applied to cover the assembled pairs.

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.

6/12/84

Appendix “B”

BIDDER PREQUALIFICATION FORM
IFB NO. 19-041
Sandy Signal Equipment and Material

I. Introduction

All firms submitting proposals for IFB No. 19-041 must satisfactorily complete this Prequalification Form. The information in the form will be evaluated to determine if the Bidder meets the basic qualifications to enable them to be qualified as an eligible respondent to the IFB. All sections must be completed. Failure to supply the required information will invalidate the entire form as unresponsive and the Bidder will be disqualified. Any false information supplied on this form will result in immediate and unconditional disqualification from this procurement.

Firm Name _____

Address _____

Contact: _____

Phone Number: _____

II. Financial Status

A Statement of Ownership shall be attached.

Please provide a valid DUNS No. _____

If a Bidder has any significant financial issues pending or in the recent past, that must be noted on a separate page. Significant issues could be, but are not limited to:

- Bankruptcies
- Pending lawsuits with damage potential over \$5 million dollars
- Impending merger or downsizing plans

Information presented in this section will be held in the strictest confidence and will not be disclosed to anyone not directly involved in the evaluation of this information.

III. Experience – Check the box for the Group(s) for which you are submitting a bid.

☐ **Group A:**

The Bidder shall certify that it possesses a minimum of fifteen (15) years reliable experience in supplying a minimum total of 300 impedance bonds and 300 foundations of the type specified.

☐ **Group B:**

The Bidder shall certify that it possesses a minimum of ten (10) years reliable experience in supplying a minimum total of 300 remanufactured switch machines of the type specified.

☐ **Group C:**

The Bidder shall certify that it possesses a minimum of fifteen (15) years reliable experience in supplying a minimum total of 300 houses and cases of the type specified for railway signal systems.

☐ **Group D:**

The Bidder shall certify that it possesses 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.

VI. Certification

The undersigned certifies that the foregoing information is correct and accurate.

Bidder Name

By _____
Signature

Typed Name & Title

Date