

Chris Christie, Governor
Kim Guadagno, Lieutenant Governor
James S. Simpson, Board Chairman
James Weinstein, Executive Director

N TRANSIT
One Penn Plaza East
Newark, NJ 07105-2246
973.491.7000

August 14, 2013

To Whom It May Concern:

INVITATION FOR BID (IFB) NO. 13-094X HISTORIC RESTORATION OF HOBOKEN TERMINAL MAIN WAITING ROOM, RETAIL AREAS & REPLACEMENT OF SEWAGE PUMP STATIONS 4 & 5 PROJECT.

Notice is hereby given that this is an electronic bid submission. Electronic bids will be received via the Internet until **2:00 P.M. on Thursday, September 5, 2013**, by NJ TRANSIT for the Historic Restoration of Hoboken Terminal Main Waiting Room, Retail Areas & Replacement of Sewage Pump Stations 4 & 5 Project.

Bids for the project will be downloaded from the Bid Express website on the scheduled Bid Due Date (subject to change by Addenda) at 2:00:00 P.M., and publicly opened and read immediately thereafter at NJ TRANSIT's offices located at One Penn Plaza East, 6th floor Bid Room, Newark, NJ 07105. The Bidder must upload its bid prior to the hour named so that it is included in the project download. Late bids cannot be accepted. This is the only way to submit a bid for this project; paper bids will not be accepted.

The work under this Invitation for Bids generally consists of, but is not limited to cleaning and repairing the Hoboken Terminal Main Waiting Room finished wall surfaces, terrazzo floor, woodwork including the benches, window frames as shown on the drawings; Electrical work; South Concourse Retail Areas selective demolition and microbial remediation, cleaning, and reconstruction; Replacement of Sewage Ejector pumps for Stations #4 & #5 along with new controls, electric panels and circuits. All work must be in strict conformance with the drawings and specifications provided in the Bid Documents.

In order to obtain all pertinent Bid Documents, interested firms must register with BID EXPRESS at <https://www.bidexpress.com>. Contractors that are currently registered with BIDX to bid NJDOT or any other public construction project **will require an additional digital ID for this different website**. To subscribe, follow instructions on the website. Fees apply to bidding. The fee schedule is available on the Bid Express website and are directly payable to Bid Express. In order to submit a bid, NJ TRANSIT recommends that Contractors apply for a digital ID **at least seven business days prior** to the Bid Due Date.

A pre-bid conference has been scheduled for **Wednesday, August 21, 2013** at 11:00A.M., at New Jersey Transit's Hoboken Main Terminal located at One Hudson Place, Hoboken, New Jersey 07030. A site visit is scheduled immediately after the pre-bid meeting. **INTERESTED PARTIES ARE TO PROVIDE THEIR OWN TRANSPORTATION AND ARE ADVISED THAT SAFETY EQUIPMENT IS MANDATORY FOR THE SITE VISIT (I.E., HAT, GLASSES, TOED WORK SHOES, AND VEST)**. Attendees should assemble at the bottom of the Grand Staircase

IFB No. 13-094X

Repairs Hoboken Terminal Main Waiting Room and Replacement of Ejector Pumps

Notice to Contractors

August 13, 2013

Page 2 of 2

in the Main Waiting Room immediately prior to the scheduled start of the conference in order to be escorted up to the room in which the conference will be held. Bidders are advised that attendance at both the pre-bid conference and site visit is strongly recommended.

This project is subject to the requirements of the Public Works Contractor Registration Act (N.J.S.A. 34:56-48 et seq). Contractors and subcontractors are also required to comply with the State of New Jersey, Division of Revenue, Business Registration Certificate requirements (N.J.S.A. 52:32-44.).

Bidders are required to comply with the requirements of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27, regarding Equal Employment Opportunity Laws and Regulations. **Disadvantaged Business Enterprises, in accordance with the Department of Transportation (DOT) Regulations 49 CFR, Part 26, shall have the maximum opportunity to participate in the performance of this contract.** The DBE goal for this project has been set at Race Neutral.

All bids, proposals, contracts, laws and related documentation will be subject to the financial assistance contract between the project sponsor and the U.S. Department of Transportation, under the Federal Transit Act of 1964, as amended, based upon availability of funds.

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

Sincerely,



Robert Delitto

Managing Contract Specialist

Contracts/Division of Procurement E mail: RDELITTO@NJTRANSIT.COM Fax(973)491-7597

RD

List of Critical Dates:

Issuance of IFB, Tuesday, August 14, 2013;

Pre-bid Conference: 11:00AM, Wednesday, August 21, 2013;

Request for Information due by 4:00PM, Monday, August 26, 2013

Bid Opening Date 2:00PM, Thursday,, September 5, 2013.

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

Chris Christie, Governor
Kim Guadagno, Lieutenant Governor
James S. Simpson, Board Chairman
James Weinstein, Executive Director

NJ TRANSIT
One Penn Plaza East
Newark, NJ 07105-2246
973.491.7000

August 30, 2013

RE: INVITATION FOR BID NO.13-094X, HISTORIC RESTORATION OF HOBOKEN TERMINAL MAIN WAITING ROOM, RETAIL AREAS & REPLACEMENT OF SEWAGE PUMP STATIONS 4 & 5 PROJECT HOBOKEN, NEW JERSEY ADDENDUM NO. 3

To whom it may concern:

The following constitutes Addendum No. 3 and must be acknowledged by each Bidder acknowledging receipt of addendum with your e-bid submission. Failure to do so may render a bid as non-responsive.

ITEM#: Incorporate the following question/request for information along with NJ Transit's responses (underlined):

Question#1, Set 2 dated August 28, 2013 is from Frank Lemire, Senior Project Manager, John O'Hara Company, Inc.(JOCI),East Orange, NJ:

JOCI Question1) I know it is technically too late for a second round of RFI's but your answer to our RFI #15 is non-responsive. We will take the blame for not being clear in our question but the reality remains that since we are re-using the existing man holes & precast enclosures and not building a completely new system in parallel, we feel it is not possible to disconnect and remove the old pumps and install the new ones, including controls, in four and a half hours. We don't see how the switch can be made if all of the facilities toilets are in use. **NJT RESPONSE-The switchover work was envisioned to occur over a weekend. During this time, we expect that the bathrooms will be shut down from 10PM on a Friday to 5AM that following Monday. During that time, portable bathrooms will be provided by NJT. If to accomplish this task, two consecutive weekends are required, this will be acceptable as well.**

ADDENDUM 2 RESPONSE:

Question#15, Set 1, dated August 26,2013 from Frank Lemire, Senior Project Manager, John O'Hara Company, Inc.(JOCI),East Orange, NJ:

JOCI Question#15) The work required to switch out the ejector pumps cannot be completed within the time frame specified. Will the contractor be required to provide temporary toilets? If so we will need a specification as to number, type and maintenance requirements for them. **NJT RESPONSE: The ejector pump work has a contract complete duration of 110 days. NJT feels that this is adequate time to complete this work. Temporary toilets will not be required since the existing pumps will remain in service until the switchover to the new system takes place.**

This concludes Addendum No.3. Bidders must acknowledge receipt of this addendum on the acknowledgment of receipt of addendum with your e-bid submission.

Sincerely,



Robert Delitto
Managing Contract Specialist
Contracts/Division of Procurement E mail: RDELITTO@NJTRANSIT.COM
Fax(973)491-7597

CC: G. Bocchino/IFB File

August 28, 2013

RE: INVITATION FOR BID NO.13-094X, HISTORIC RESTORATION OF HOBOKEN TERMINAL MAIN WAITING ROOM, RETAIL AREAS & REPLACEMENT OF SEWAGE PUMP STATIONS 4 & 5 PROJECT HOBOKEN, NEW JERSEY ADDENDUM NO. 2

To whom it may concern:

The following constitutes Addendum No. 2 and must be acknowledged by each Bidder acknowledging receipt of addendum with your e-bid submission. Failure to do so may render a bid as non-responsive.

ITEM#I-The following is a list of attachments (drawings & technical Provisions) included as part of this Addendum:

- 1 **Drawing A2.03-Rev2(1 Page);**
- 2 **Drawings E02-1, E2.02, E4.01 and E4.02 (4 Pages);**
- 3 **Nystrom-Drawings PT S Series (2 Pages);**
- 4 **Nystrom Drawings NT Series (2 Pages);**
- 5 **Technical Provisions Microbial Remediation Guidance Document for South Concourse and NJT Spaces (3 Pages);**
- 6 **Technical Provisions Section 15413 - PUMPING EQUIPMENT (5 Pages).**

ITEM#II: Incorporate the following question/request for information along with NJ Transit's responses (underlined):

Question 1, Set 1, dated August 20, 2013 from Stan Youngblood, Yonkers Contracting Company, Inc. (YCCI), Yonkers, NY:

YCCI Question#1) With respect to the **South Concourse Retail Areas Scope of Work** described in Special Provisions SP4 paragraphs 1.18B, C & D.

We are missing the pertinent Technical Specification Sections relating to this work, such as the following Sections:

Hollow Metal Doors & Frames; Door Schedule; Door Hardware required at these Retail Area doors ;Ceramic Tile / Quarry Tile; Acoustical Ceilings; Resilient Flooring VCT & Base; Painting / Paint Schedule; Toilet Accessories; Architectural Woodwork for Retail casework, counters, shelving, etc..; Rough and Finish Plumbing, Electrical, etc.. for the Retail Areas

The above list is intended only to bring this to your attention and may not be a complete listing.

Thanks in advance for your attention to this matter. **NJT RESPONSE: Detailed Drawings and Technical Specifications will not be issued for the Retail areas. As discussed at the Pre-bid meeting, finish materials, casework, equipment and MEP systems shall be removed and replaced to match existing.**

Question 1, Set 2, dated August 22, 2013 from Julio Cordoba, Yonkers Contracting Company, Inc. (YCCI), Yonkers, NY:

YCCI Question#1) Please provide existing grade elevation at Ejector Pump 5. Elevation required to figure depth of underground pipe to be replaced. Reference drawing P2.01 and P4.01. **NJT RESPONSE: The grade elevation at the Plaza where Eject Pump 5 is located is approximately 6' (plus or minus 6"-8" in any direction) above mean sea level. However, there will be no**

excavation required as the 6" fiberglass sewer pipe that was to be replaced as per the drawings has already been replaced by NJT. This information was relayed in Addendum .

Question 1, Set 3, dated August 23, 2013 from Julio Cordoba, Yonkers Contracting Company, Inc. (YCCI), Yonkers, NY:

YCCI Question#1) Please elaborate & clarify the extent of the Ornamental Metal Restoration portion of this project.

The Plans show us restoring the bench reading lights, restoring the bench cast iron grilles, cleaning the shoe shine stand footrests, cleaning bronze corrosion on wall trim near Door D10. **NJT**

RESPONSE: CLARIFICATION OF THE ORNAMENTAL METAL RESTORATION WAS PROVIDED IN REVISED DRAWINGS AND TECHNICAL SPECIFICATIONS IN A ADDENDUM 1.

Questions 1-3, Set 4, dated August 23, 2013 from Julio Cordoba, Yonkers Contracting Company, Inc. (YCCI), Yonkers, NY:

Below please find questions submitted to YCC from our electrical Sub-contractor.

YCCI Question#1) Sheet E2.01 Note 3 requires Electrical contractor to run new wiring from power panel to PP1 control panel. It states to verify size with NJ Transit. Please provide this information (cable size and number) prior to bid so we fairly ascertain a price. **NJT RESPONSE: See revised Drawing E2.01 (attached), contained in this addendum for cable and conduit sizes.**

RESPONSE TO FOLLOW VIA ADDENDUM

YCCI Question#2) Feed for PP-4 from Panel boards is 6-2/0 + #1 grd on one side and 3-2/0 + #1 on the other side of the run. Which is correct? **NJT RESPONSE: Control Panel will be provided with two breakers and starters as per technical provisions specification section 15413. See revised specification section 15413 contained in this addendum.**

YCCI Question#3) Control Cable furnished and installed by others? **NJT RESPONSE: No, contractor to furnish and install, see revised Drawing E2.01 contained in this addendum for cable size and Notes 3 & 11.**

Questions 1-33, Set 1, dated August 26, 2013 are from Peter Egan, Vice President of Estimating and Purchasing, Hall Construction Company, Inc., (HCCI), Farmingdale, NJ:

HCCI Question 1) Notice to contractor's states the DBE goal for this project is "race neutral"; please advise the % goal for this project. **NJT RESPONSE: This IFB has a Race Neutral Goal, which means there is a non-numerical percentage; it's whatever you can bring to the table. DBE FORMS from the first and second low bids are due to the undersigned within 2 business days after the bid opening date. Please e-mail them to the address listed below.**

HCCI Question 2) Please advise anticipated notice of award and notice to proceed date(NTP). **NJT RESPONSE: The anticipated award is late September and the anticipated NTP is October, 1, 2013, contingent on funding.**

HCCI Question 3) Since this project has an aggressive completion date has NJ Transit specified off the shelf items (no long lead items) for the specialty equipment such as the radiators, ejector pumps, walkin coolers etc. **NJT RESPONSE: Regarding walk in coolers: items are not specified, but anticipated to be replaced with new similar size, performance, etc. products, THE RADIATORS ARE EXPECTED TO BE OFF THE SHELF ITEMS AND ONLY PUMPS FOR EJECTOR STATION 5 HAVE A 8 TO 12 WEEK LEAD TIME.**

HCCI Question 4) Please confirm all existing wood doors are to be cleaned only and no new wood doors are required. **NJT RESPONSE: Correct All existing wooden doors are to be cleaned and de-contaminated in place and protected during the Phase III cleaning.**

HCCI Question 5) Is this project covered by an OCIP insurance program? **NJT RESPONSE: This project is not covered by OCIP.**

HCCI Question 6) Please confirm Builders Risk Coverage is required. **NJT RESPONSE: Builder's Risk Coverage is required.**

HCCI Question 7) Please confirm Pollution Liability Coverage is required. **NJT RESPONSE: Pollution Liability Coverage is required.**

HCCI Question 8) Drawing E2.01 Electrical Installation Note 4 states to "connect new bench lighting fixtures with new wiring"; please confirm these are the existing lights to be reinstalled and no new lights are required. **NJT RESPONSE: Existing light fixtures are to be reinstalled and no new lights are required. Relamping is by contractor.**

HCCI Question 9) We are unable to locate Repair Legend notes S7, M2, M3, & W4 on the drawings; please advise. **NJT RESPONSE: S7 is covered under terrazzo notes and may be disregarded & S7 is in 090160.91 Terrazzo Floor Restoration. M2, applies to all bronze items and has been updated (in addendum specification scope) M3, applies to cast iron stringer at south stair revised sheet attached (A2.03REV3.PDF). M2 is in 05700 3.4 and M3 is in 05700 3.3 & W4 is in specification 060140.91 Section 3.2 B.**

HCCI Question 10) Please confirm that no casings or jambs will require removal for investigation or remediation in the main waiting room or tenant spaces as per comments by the remediation consultant at the pre-bid meeting. **NJT RESPONSE The existing door and window assemblies within the Main Waiting Room (including jambs, stops, frames and transoms) are to remain intact during the remediation efforts and not-disassembled for cleaning/remediation. Also, attached is a guidance document for remediation associated with the vendor spaces in this contract.**

HCCI Question 11) Please define the step by step remediation process required for the wood work including the testing that will be done. Comments made at the pre-bid meeting by the remediation consultant suggest less stringent requirements compared to what is listed in the specifications. **NJT RESPONSE The remediation process for the wooden historical elements within the Main Waiting Room area are detailed within Section 02 30 00 1.3 (C) (E) and (F). Post remediation clearance including Contractor Verification/Consultant Verification can be found within Section 02 30 00 1.3 (M) and will include:**

- a. **The work area be visibly clean.**
- b. **Wiping of remaining surfaces with a damp cloth does not reveal the presence of any visible particulate, dust, or debris on the surface of the cloth.**
- c. **Area moisture is controlled, visible water and water stains are not present within the work areas.**
- d. **Remaining building materials are dry, as demonstrated by moisture meter readings of materials inside the containment being within 5% of moisture meter readings from undamaged material outside of the containment.**
- e. **No final air test will be required for clearance.**

HCCI Question 12) Please confirm the deletion of the (AWI) “Premium Grade” quality standard section specified in section 060140.94-1/1.3A as discussed at the pre-bid meeting. **NJT RESPONSE not deleted – there are aspects (Dutchmen, for example) that will require conformance with the standards. The specification only applies to the waiting room.**

HCCI Question 13) Please confirm the interior of the news stand is not in this scope. **NJT RESPONSE: CONFIRMED: THE INTERIOR OF THE NEWS STAND IS NOT IN THE SCOPE, HOWEVER THE EXTERIOR OF THE NEWS STAND, WHICH IS INTERIOR TO THE WAITING ROOM IS. The scope of the remediation work is limited to the exterior façade, door assemblies and façade panel substrate/framing of the Hudson News Stand (no interior construction/surfaces).**

HCCI Question 14) Note #3 on drawing 16 of 25 states we are to remove the waiting room side doors of the news stand which will expose the interior of the news stand and potentially the temporary liquor store inside on the concourse side; is this acceptable? **NJT RESPONSE Our field notes indicate that there is a wall currently constructed inside the newsstand and the door is not visible from within.**

HCCI Question 15) During the pre-bid meeting regarding the architectural wood work it was mentioned several times that this is not a restoration project but only a remediation project. Restoration would be done at a later date. Please confirm if specification section 060140.94 “Architectural Woodwork Restoration” applies to this project and is limited to only the newsstand and all doors and windows as specified in this section. **NJT RESPONSE Section (updated by addendum 1) does apply to all waiting room items in this project: to the waiting room side of the newsstand, all doors, windows, information kiosks, shoeshine stand and benches**

HCCI Question 16) With regard to the Bakery, please confirm that none of the millwork/cabinetry or slat wall is being replaced. **NJT RESPONSE None of the millwork/cabinetry or slat wall is being replaced, per discussion at prebid meeting – this is the ‘vanilla box’ store.**

HCCI Question 17) With regard to the liquor store, please confirm that all the millwork elements are being replaced in kind by material type, shape, size and quantity and do not require flood resistant materials. **NJT RESPONSE: All the millwork elements are being replaced in kind by material type, shape, size and quantity and do not require flood resistant materials.**

HCCI Question 18) Please advise if we are required to remediate all the currently in place enclosure materials at all the millwork elements within the new negative enclosures as well as 6 mil plastic wrapping before being removed. **NJT RESPONSE Phase 1, General note # 1 describes NJT’s expectation for the removal and decontamination of the existing temporary enclosures. This can be found on drawing H.0.1**

HCCI Question 19) Please advise if we are required to provide an offset enclosure in front of the tenant spaces on the train concourse? Will it need to be under negative pressure along with the interior spaces? **NJT RESPONSE The remediation contractor is required to remediate all microbial contamination from within negative pressure enclosures. Entry and exit from the negative pressure enclosures is through attached airlocks and decontamination areas. The contractor is instructed to coordinate any temporary protection (offset enclosure) barriers with NJ Transit and the CM.**

HCCI Question 20) Please advise if shop drawings will be required for the liquor store millwork/casework. **NJT RESPONSE:**

Shop drawings will be required for:

Hollow Metal Doors & Frames

Door Schedule

Door Hardware required at these Retail Area doors

Ceramic Tile / Quarry Tile

Acoustical Ceilings

Resilient Flooring VCT & Base

Painting / Paint Schedule

Toilet Accessories

Architectural Woodwork for Retail casework, counters, shelving, etc..

Rough and Finish Plumbing, Electrical, etc.. for the Retail Areas

Metal studs

Dragon board

Access doors

HCCI Question 21) Please advise if access doors are required at the tenant spaces to facilitate future access. **NJT RESPONSE: Attached and included as part of this addendum are .pdf Drawings for the access panels (Nystrom-PT Stainless & Nystrom NT). These drawings provide The Details of the access doors that were added to the other vendor spaces and the approximate quantities.**

HCCI Question 22) Will the marble base at the newsstand require removal for remediation behind the wall? **NJT RESPONSE : The marble base at the newsstand is required to be removed and cleaned to facilitate and inspect the wooden elements associated with the newsstand façade.**

HCCI Question 23) Does the isolation barrier shown on the train concourse side of the waiting room doors need to be incorporated within the full negative enclosure to facilitate the door and frame remediation? **NJT RESPONSE : Only to the extent necessary to facilitate the entry door decontamination (both sides of the door assembly).**

HCCI Question 24) Please confirm the North Vestibule must be completed immediately after receipt of NTP so that an access tunnel can be erected from the Men's room. **NJT RESPONSE: YES THIS IS TO MINIMIZE THE AMOUNT OF TIME THAT THE REAR ENTRANCE TO THE MENS ROOM IS NEEDED The remediation contractor should coordinate with the construction manager and NJ Transit for the sequencing required to facilitate access to the men's and women's restroom. It is anticipated that because the east vestibule remediation has been completed prior to this contract that the temporary painted plywood partition can be erected to the women's room immediately and that subsequent to that, the north entry vestibule would be isolated, cleaned and decontaminated prior to any other Main Waiting Room remediation work.**

HCCI Question 25) Please advise if onsite parking will be allowed in a designated area of the plaza. **NJT RESPONSE: SPACE IS LIMITED AND NJT WILL MAKE EVERY EFFORT TO PROVIDE PARKING WHERE EVER POSSIBLE, BUT NONE IS GUARANTEED.**

HCCI Question 26) Please confirm all new and existing studs are to be coated with rust no more or equivalent product. **NJT RESPONSE: YES.**

HCCI Question 27) Please advise staging/laydown area. **NJT RESPONSE THE STAGING /LAYDOWN AREA WILL BE DETERMINED ON SITE WITH THE CONSTRUCTION MANAGER, BUT ALL EFFORTS WILL BE MADE TO MAKE AN AREA AVAILABLE TO THE**

HCCI Question 28) Specification Section 05700 – Ornamental Metal Restoration calls for the bronze clad windows at the ticket office to be disassembled and then the wood substructure to be replaced. Drawing H.0.1 Sheet 16 of 25 (see Legend Item #5) notes to carefully clean IN-PLACE existing metal ticket office windows and wooden frames. Please advise which is correct. **NJT RESPONSE: This was updated in addendum 1 document (revised specification). The bronze clad windows that will need to be restored are not at the ticket window, but are the two windows at the southeast corner of the waiting room which are exhibiting corrosion.**

HCCI Question 29) With regard to the Cast Iron Staircase Stringers, Specification Section 05700 Section 1.1 #9 states that the stair stringers are to be cleaned and repainted as noted on the Contract Drawings. This work is not identified on the drawings, please clarify. Also, are the associated cast iron railings included in this scope? **NJT RESPONSE: This was updated in addendum 1 document (revised specification). Cast iron should be cleaned to the height of the water-line (@5.5'). The railings only need to be cleaned and re-painted if there are signs of corrosion. I only remember seeing corrosion on the stringer.**

HCCI Question 30) At the isolation barrier area shown on Drawing H.0.1 of the train concourse side of the waiting room, does the glazed block wall need to be disinfected? **NJT RESPONSE: The scope of the remediation work for this area is limited to the door assemblies and interior wall surfaces only.**

HCCI Question 31) Will NJT be able to supply power for temporary panels since this is crucial as multiple trades will be working and numerous equipment running at the same time (vacuums, micro-traps, manometers, pressure washers, etc). **NJT RESPONSE NJT WILL MAKE TEMPORARY POWER AVAILABLE TO THE CONTRACTOR.**

HCCI Question 32) Is any work required at the public pay phone units (1 in North Vestibule, 1 in Main Waiting Room)? **NJT RESPONSE: This was updated in addendum 1 document – cleaning of brass and bronze is required. Please refer to Section 02 30 00 1.3 Phase III Note #2. Pay phone banks should be cleaned per specification 05700 Ornamental Metal Work.**

HCCI Question 33) The HVAC piping specification on the drawings calls for “K” copper piping with brass threaded fittings. These fittings are incompatible with the copper tubing as the tubing cannot be threaded. Please advise. **NJT RESPONSE: The copper pipe is not to be threaded. The copper pipe shall be soldered to the male and female brass fittings which are threaded for a quick disconnect.**

Questions#1-19, Set 1, dated August 26,2013 from Frank Lemire, Senior Project Manager, John O'Hara Company, Inc.(JOCI),East Orange, NJ:

JOCI Question#1) Is the terrazzo repair work in the waiting room required within 45 days? 60 days? Given proper safety measures, can the terrazzo patch work be done during the day? **NJT RESPONSE: The waiting room will remain closed for a minimum of 45 days. NJT expects all the work on the terrazzo to be completed within that time frame.**

JOCI Question#2) Is the masonry repair work in the waiting room area required within 45 days? 60 days? Given proper safety measures, can the masonry restoration work be done during the day?

NJT RESPONSE: Major masonry work must be completed prior to opening the waiting room. Final installation of stone replacement pieces and punch list masonry work, that can be contained within a localized enclosure, must be completed within the 60 day window and can occur during the day.

JOCI Question#3) The news-stand area is currently occupied. Is it going to be vacated for the microbial remediation work? **NJT RESPONSE: Specific to the microbial remediation work; the Main Waiting Room side will be under negative pressure and the interior newsstand (liquor store) area has a hard wall gypsum wall board partition constructed so there is no need to vacate during remediation..**

JOCI Question#4) The toilet room in the liquor store is not ADA compliant. To make it so would require either relocation of the 'Bally' cooler or reducing the size of the cooler. How do we address the bathroom? **NJT RESPONSE: The bathroom will remain non ADA compliant.**

JOCI Question#5) Is there any manufacturer specification on the big cooler at the back of the liquor store? Is it the intent to completely replace this unit as well? It is the only cooling unit not specifically detailed in the scope summary **NJT RESPONSE: The "cooler" is to be remediated in accordance with the guidance document with all shelving to be replaced in kind. The mechanical equipment is to remain.**

JOCI Question#6) Do all of the electrical panel boxes in the three store spaces have to be replaced? **NJT RESPONSE: The panel boxes are to be replaced.**

JOCI Question#7) Is all of the equipment, except for the liquor store ice machine, (ice machine, coolers, etc.) to be replaced even though some appear to be fully operational? **NJT RESPONSE: Yes.**

JOCI Question#8) The specification for the bakery/deli toilet room calls for fixtures to be "... removed, cleaned and replaced..." Does that mean the existing fixtures are to be reinstalled? **NJT RESPONSE: Yes provided they are not damaged when being removed.**

JOCI Question#9) There is a considerable amount of inventory in both the deli and the liquor store. Is this to be removed by others prior to demolition? Are we expected to move it, store it and then return it? Is it considered trash to be disposed of? **NJT RESPONSE: The inventory will be removed by the vendor prior to start of construction.**

JOCI Question#10) Is the safe in the back of the liquor store to be removed and replaced? **NJT RESPONSE: The safe belongs to the vendor and they are responsible for removing and replacing the unit.**

JOCI Question#11) Is the mezzanine in the back of the liquor store to remain or is it to be demolished and then rebuilt? **NJT RESPONSE: Existing to remain.**

JOCI Question#12) Should we include re-lamping and re-ballasting the light fixtures that are going to be reused? **NJT RESPONSE: Yes.**

JOCI Question#13) Is the addendum 1 specification set supposed to supplement or replace the original specification set? **NJT RESPONSE: The drawings and specification sections issued in addendum 1 are meant to replace those affected sections.**

JOCI Question#14) Depth of the new duct bank is listed as 'same as existing'. Does anyone know what that depth is? Can we be given a depth for the purposes of bidding? **NJT RESPONSE: Approximately 3 feet.**

JOCI Question#15) The work required to switch out the ejector pumps cannot be completed within the time frame specified. Will the contractor be required to provide temporary toilets? If so we will need a specification as to number, type and maintenance requirements for them. **NJT RESPONSE: The ejector pump work has a contract complete duration of 110 days. NJT feels that this is adequate time to complete this work. Temporary toilets will not be required since the existing pumps will remain in service until the switchover to the new system takes place.**

JOCI Question#16) Is the concrete sub floor in the bakery/deli space a structural slab on grade? **NJT RESPONSE: The subfloor is a steel and concrete structure supported by piles.**

JOCI Question#17) Does the finished floor 'ramping' in the bakery/ deli space need to be maintained? **NJT RESPONSE: Yes.**

JOCI Question#18) There are two different specs for cleaning the freestanding information kiosks – was the intent to treat them differently? **NJT RESPONSE: Section 02 30 00 details the scope of work required to remediate the microbial contamination associated with the historical wooden information kiosks.**

JOCI Question#19) Please clarify how we are to clean the staircase railings in the waiting room. **NJT RESPONSE: See NJT response to HCCI's, set 1, question # 29**

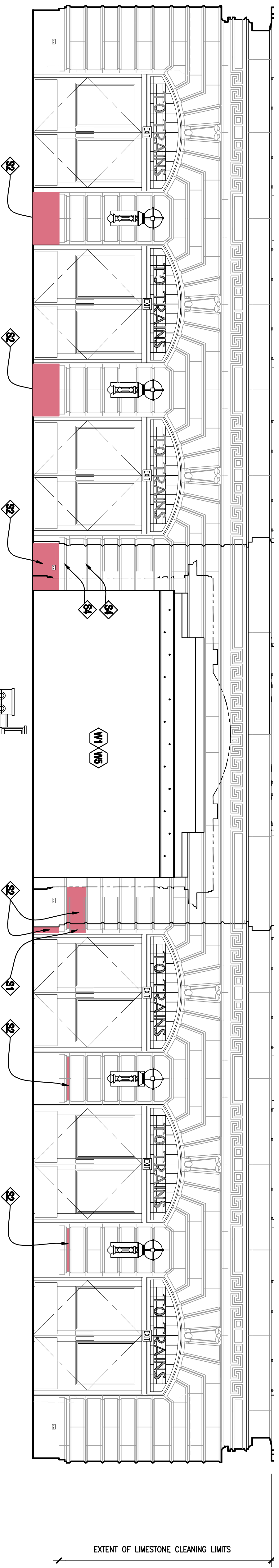
This concludes Addendum No.2. Bidders must acknowledge receipt of this addendum on the acknowledgment of receipt of addendum with your e-bid submission.

Sincerely,



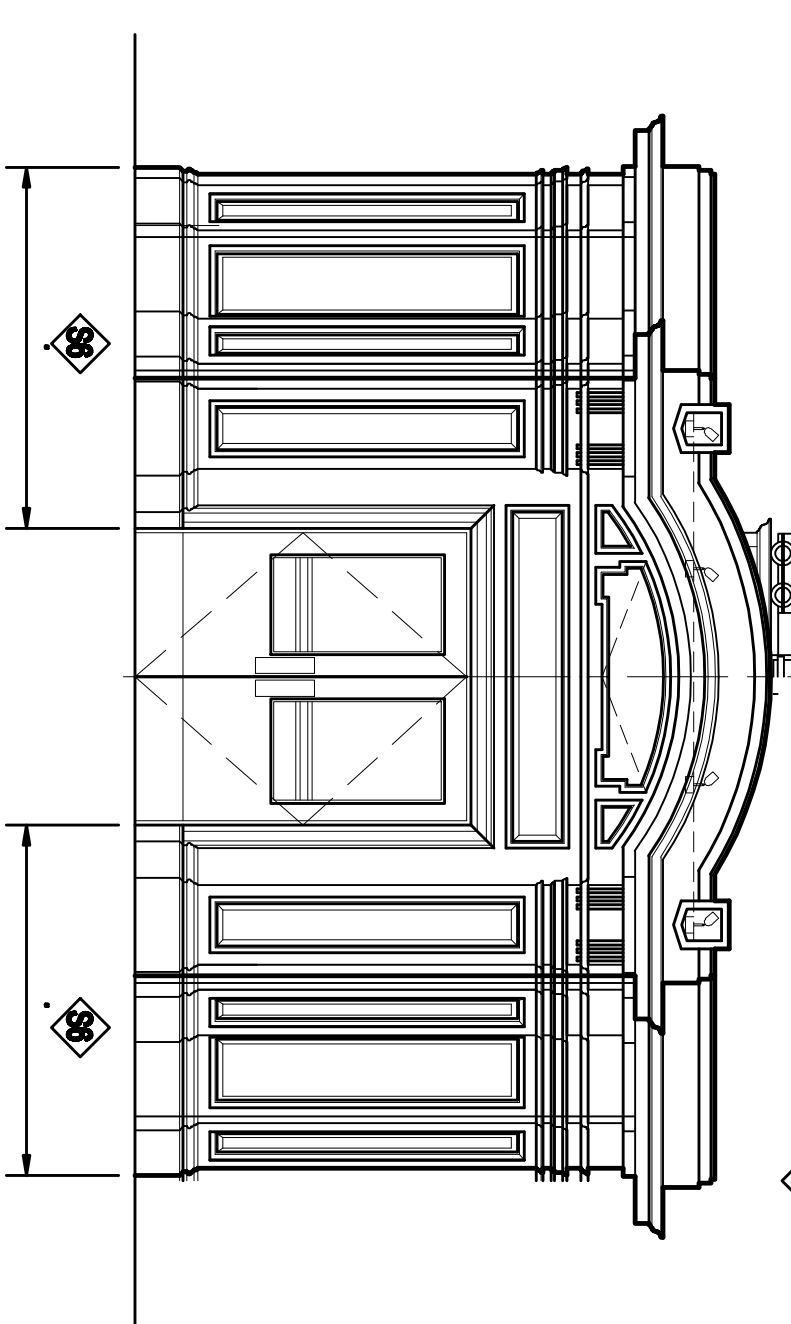
Robert Delitto
Managing Contract Specialist
Contracts/Division of Procurement E mail: RDELITTO@NJTRANSIT.COM
Fax(973)491-7597

CC: G. Bocchino/IFB File



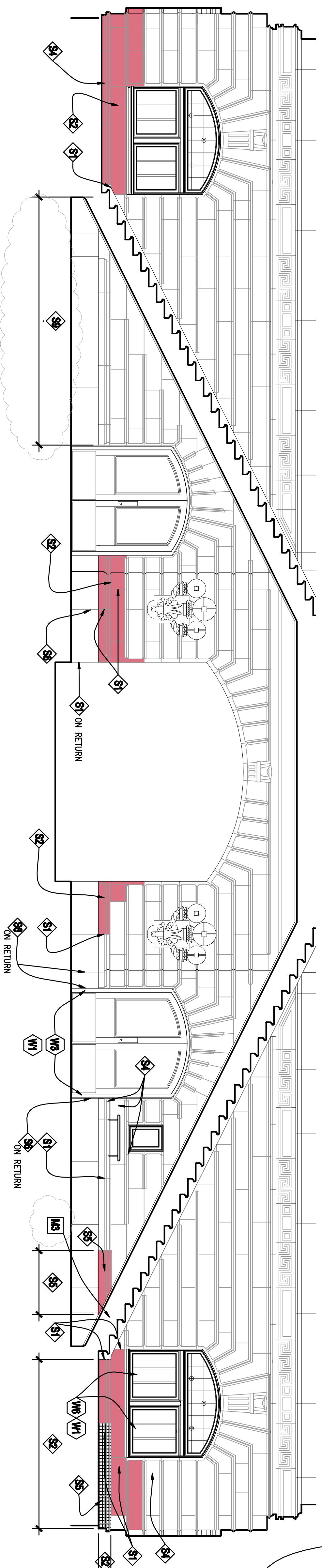
1 WEST ELEVATION

SCALE: 1/8"=1'-0"



2 NEWSSTAND WEST ELEVATION

SCALE: 1/8"=1'-0"



3 EAST ELEVATION

SCALE: 1/8"=1'-0"

- REPAIR LEGEND** SHADED AREAS & DIMENSION LINES NOTE EXTENT
- W WOOD NOTES**
 - 1. FILL ALL NAIL, STAPLE AND SCREW HOLES
 - 2. REPLACE TRIM AROUND WINDOW SASH
 - 3. INSTALL WOOD DUTCHMAN BOTTOM 4" OF FRAME
 - 4. GLUE SPLIT SECTIONS OF FRAME
 - 5. DISASSEMBLE TO CLEAN; REASSEMBLE
 - 6. REATTACH TRIM AROUND WINDOWS
 - 7. CLEAN IN PLACE
 - STONE NOTES**
 - 1. REPOINT LIMESTONE JOINT
 - 2. REMOVE EFFLORESCENCE
 - 3. REPLACE MARBLE TO NEAREST JOINT
 - 4. PATCH LIMESTONE
 - 5. INSTALL LIMESTONE DUTCHMAN
 - 6. REPOINT ALL MARBLE JOINTS
 - 7. RESTORE TERRAZZO
 - 8. REMOVE FERRUGINOUS STAINING
 - 9. HONE AND POLISH EXISTING MARBLE
 - METAL NOTES**
 - 1. CLEAN BRONZE CORROSION
 - 2. CLEAN AND REFINISH BRONZE
 - 3. CLEAN CAST IRON CORROSION
 - 4. REPAINT
 - P PLASTER NOTES**
 - 1. REMOVE LOOSE PLASTER AND REPLACE
 - 2. RESTORE DAMAGED PLASTER
 - 3. REPAINT
 - TERRAZZO NOTES**
 - 1. REMOVE CONC PATCH - REPLACE WITH TERRAZZO TO MATCH EXISTING
 - 2. REPAIR TERRAZZO AT DIVIDER JOINT
 - 3. SEE SHEET 14 FOR TERRAZZO TYPES

DESIGNED:		DESIGNED:	
DRAWN:		CHECKED:	
DATE:	8.20.13	APPROVED:	
REVISIONS:	PER NLT COMMENTS	No.	2
	PER NLT COMMENTS		1

VERONICA SEMINARA, AIA, P.P., NIAA, 10431

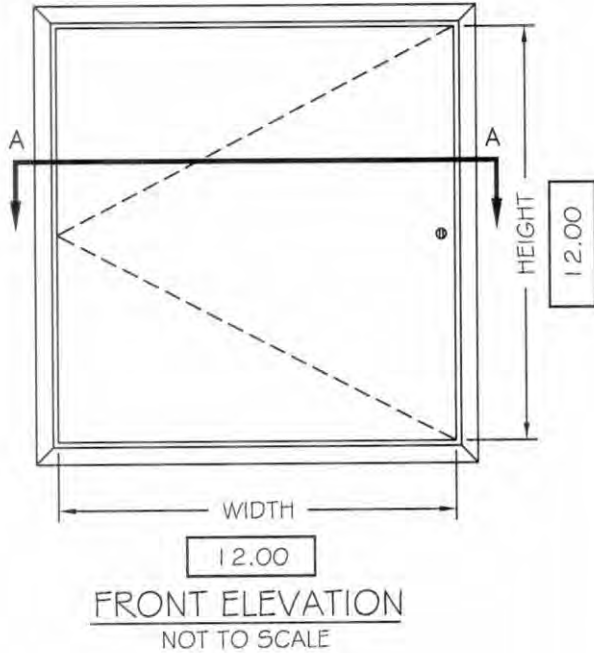
HOBOKEN
TERMINAL
FACILITY REPAIRS

EAST ELEVATION
NEWSSTAND ELEVATION
WEST ELEVATION

SCALE:	AS NOTED	CONTRACT No.	XXXXX
FILE NAME:	CDA208.DWG	ISSUE	
DRAWING No.:	A2.03	CONSTRUCTION	
DATE:	18 JUNE 2013	SHEET No.	6
		OF	25

NT SERIES

NON-RATED FLUSH ACCESS PANEL FOR ALL SURFACES

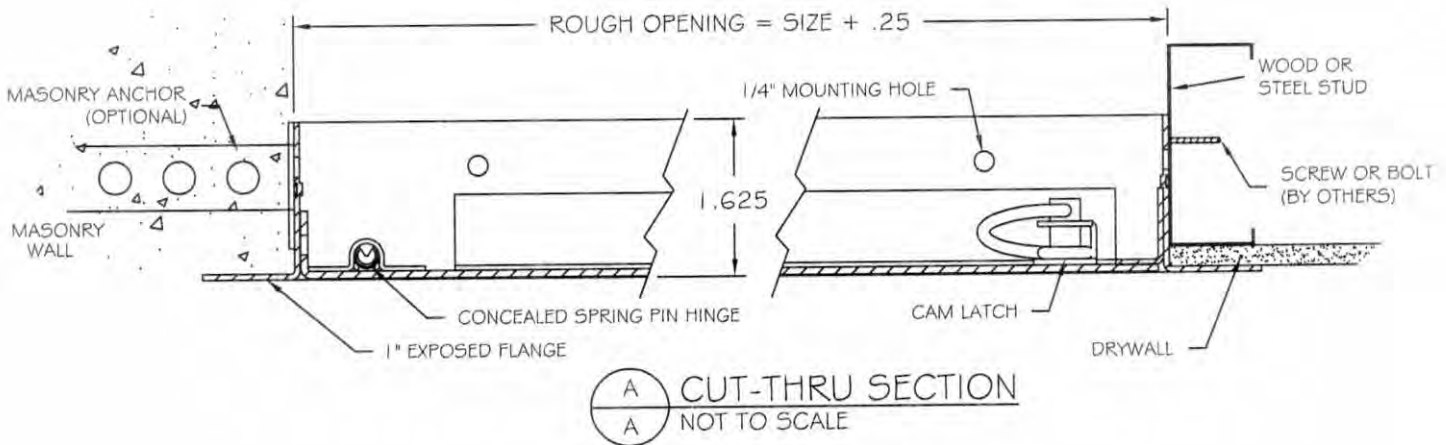


SPECIFICATIONS

- 16 GAUGE (1.520mm) COLD ROLLED STEEL FRAME
- 14 GAUGE (1.900mm) COLD ROLLED STEEL DOOR
- GRAY BAKED ON POWDER COAT FINISH
- SPRING PIN HINGE (CONCEALED)
- FRAMES ARE PROVIDED WITH .25" MOUNTING HOLES
- FLUSH SCREWDRIVER OPERATED CAM LATCH (ADDITIONAL CAMS PROVIDED ON PANELS 18" X 18" AND GREATER IN SIZE)

OPTIONS

- KEY OPERATED CAM LOCK
- PINNED ALLEN HEAD SECURITY CAM LATCHES
- PREPARATION FOR 1.125" MORTISE CYLINDER (CYLINDER PROVIDED BY OTHERS OR BY FACTORY)
- FLUSH CONTINUOUS HINGE (STANDARD ON PANELS GREATER THAN 24" x 36" IN SIZE & ALL STAINLESS STEEL PANELS)
- CONCEALED PIANO HINGE
- STAINLESS STEEL (TYPE 304) WITH A #4 SATIN POLISH FINISH
- GALVANIZED BONDERIZED STEEL
- MASONRY ANCHORS ATTACHED
- GASKET, 3 SIDES (CLOSED CELL)



Right to site.

Call: 800-547-2635 Fax: 800-317-8770
USA or Canada
Web: www.nystrom.com
E-mail: info@nystrom.com

PROJECT: _____
 CONTRACTOR: _____
 ARCHITECT: _____
 INITIALS: QTY: DATE: PART NUMBER:

NT SERIES

Standard Features:

Door:	14 gauge (1.90mm thick) cold rolled steel
Frame:	16 gauge (1.52mm thick) cold rolled steel with 1" Flange
Hinge:	Concealed spring pin hinge Optional: Continuous piano hinge
Latch:	Screwdriver operated cam latch(es) Optional: Key operated cam lock, pinned allen head security cam latch(es), mortise cylinder preparation (cylinder provided by factory or by others)
Finish:	Gray baked on powder coat Optional: galvanized bonderized or stainless steel with #4 satin polish finish

Specifications:

Frame shall be 16 gauge cold rolled steel with 1" flange. Door shall be fabricated from 14 gauge cold rolled steel. Hinge shall be concealed spring pin hinge that allows door to be removed (non-removeable flush continuous piano type on all stainless steel panels and those exceeding 24" wide and/or 36" high). Latch(es) shall be screwdriver operated cam type (optional: key operated cam lock, pinned allen head security cam latch, or preparation to receive 1/8" mortise cylinder - cylinder provided by factory or others). Finish shall be gray baked on powder coat (optional: galvanized bonderized steel or stainless steel with #4 satin polish finish).

Installation shall be in accordance with manufacturers instructions. Manufacturer shall guarantee against defects in material and workmanship for a period of one year.

Standard Sizes:

Std Sizes (in)	Std Sizes (mm)	Weight/Latches	Std Sizes (in)	Std Sizes (mm)	Weight/Latches
06x06	152x152	3/1	20x30	508x762	19/5
08x08	203x203	4/1	22x22	559x559	19/4
10x10	254x254	5/1	22x30	559x762	22/5
12x12	305x305	7/1	24x24	610x610	20/4
12x18	305x457	10/1	24x30	610x762	24/5
12x24	305x610	12/1	24x36	610x914	28/5
14x14	356x356	8/1	24x48	610x1219	33/6
16x16	406x406	11/1	30x30	762x762	26/5
16x20	406x508	12/2	32x32	813x813	29/5
18x18	457x457	12/2	36x36	914x914	36/5
18x24	457x610	18/2	36x48	914x1219	52/6

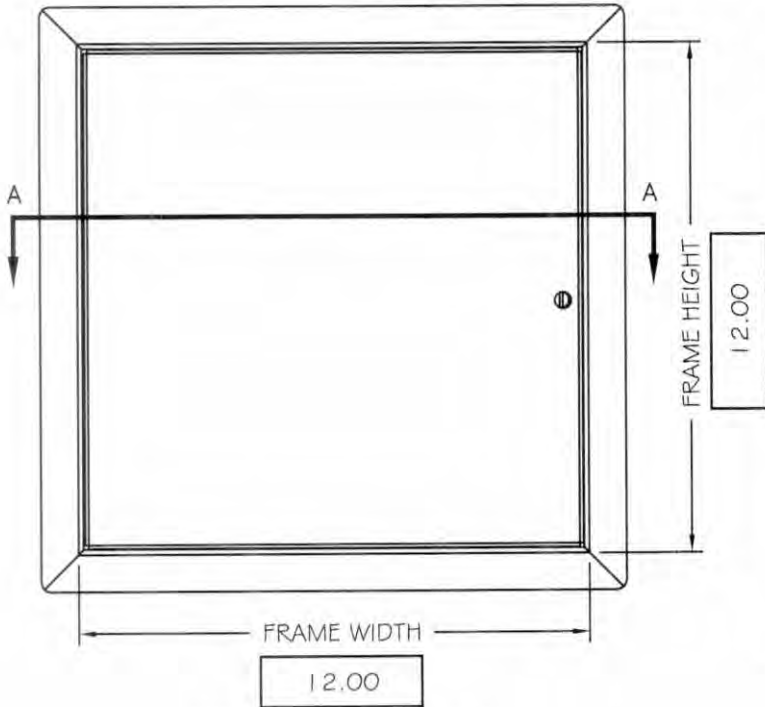
* Denotes non-removable continuous piano hinge - standard on all stainless steel panels.
All units are hinged on the second dimension (height). Rough opening is door size plus 1/4".



Right to site.

PT_S SERIES

NON-RATED FLUSH ACCESS PANEL FOR ALL SURFACES



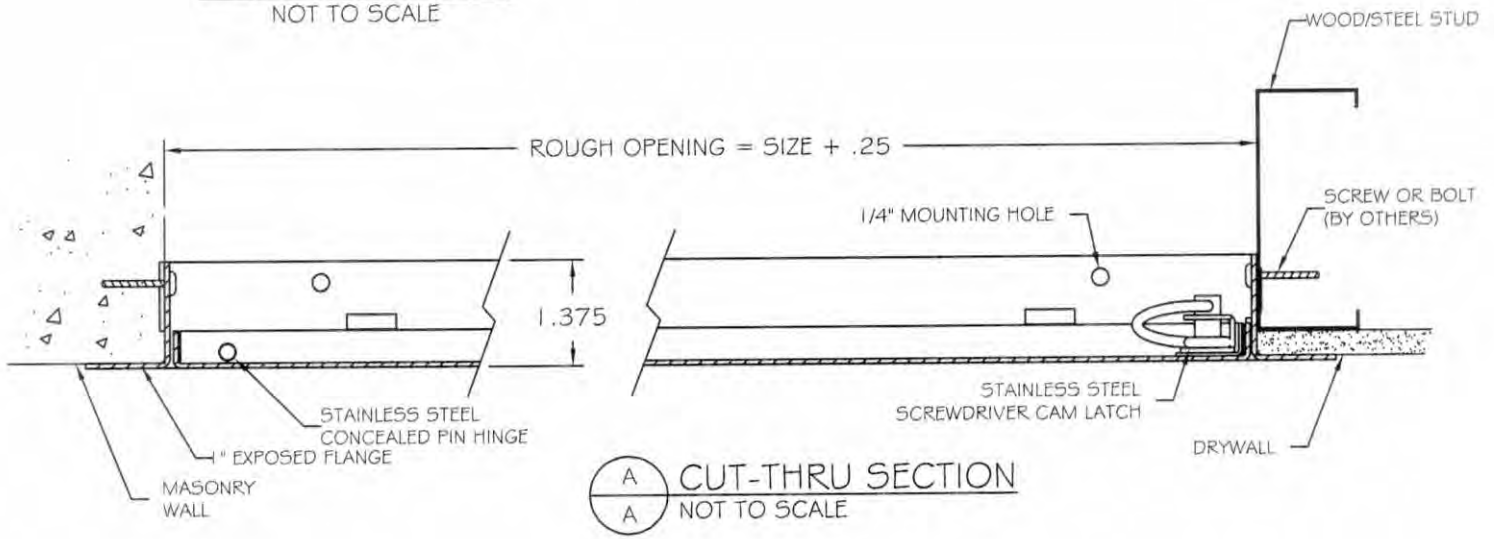
FRONT ELEVATION
NOT TO SCALE

SPECIFICATIONS

- 16 GAUGE 304 SST DOOR WITH RETURN FLANGE FOR ADDED STRENGTH
- 16 GAUGE 304 SST FRAME
- STAINLESS STEEL CONCEALED PIN HINGE
- #4 SATIN FINISH
- FRAMES ARE PROVIDED WITH 1/4" MOUNTING HOLES
- SST FLUSH SCREWDRIVER OPERATED CAM LATCHES (QUANTITY AS REQUIRED BY SIZE)
- PATENT PENDING LATCH ASSEMBLY FOR SPOT FREE FINISH ON DOOR FACE.

OPTIONS

- HEXHEAD OPERATED CAM LATCHES
- ALLEN HEAD SECURITY CAM LATCHES
- KEY OPERATED CAM LOCK
- PREPARATION FOR 1.125" MORTISE CYLINDER (CYLINDER PROVIDED BY FACTORY OR BY OTHERS)
- GASKET



CUT-THRU SECTION
NOT TO SCALE



Right to site.
Call: 800-547-2635 Fax: 800-317-8770
USA or Canada
Web: www.nystrom.com
E-mail: info@nystrom.com

PROJECT:

CONTRACTOR:

ARCHITECT:

INITIALS: QTY: DATE: PART NUMBER:

PT_S SERIES

Standard Features:

Door: 16 gauge 304 stainless steel
Frame: 16 gauge 304 stainless steel with 1" Flange
Hinge: Stainless steel concealed pin hinge
Latch: Stainless steel screwdriver operated cam latch(es)
Finish: #4 satin polish finish

Specifications:

Frame shall be 16 gauge 304 stainless steel with 1" flange. Door shall be fabricated from 16 gauge 304 stainless steel. Hinge shall be stainless steel concealed pin hinge. Latch(es) shall be stainless steel screwdriver operated cam type. Finish shall be #4 satin polish finish.

Installation shall be in accordance with manufacturers instructions. Manufacturer shall guarantee against defects in material and workmanship for a period of one year.

Standard Sizes:

Std Sizes (in)	Std Sizes (mm)	Weight	Latches
08x08	203x203	4	
12x12	305x305	7	
14x14	356x356	8	
16x16	406x406	11	
18x18	457x457	12	
24x24	610x610	18	

*Custom sizes available upon request.

All units are hinged on the second dimension (height). Rough opening is size plus 1/4".



Right to site.

Matrix New World Engineering, Inc.

26 Columbia Turnpike
 Florham Park, NJ 07932
 973-240-1800 Phone
 973-240-1818 Fax

Date: August 28, 2013
 Via E-Mail

To: Bruce Jabbonsky, RA Vice President/Project Manager	From: Gavin Gilmore, CMI
STV Incorporated 225 Park Avenue South New York, NY 10003	Re: NJ Transit Hoboken Terminal South Concourse Retail/NJ Transit Spaces Microbial Remediation Guidance Document

Matrix New World Engineering, Inc. (Matrix) has prepared this guidance document to specify the acceptable remediation procedures to be performed by the Contractor specific to individual work areas within NJ Transit’s Hoboken Terminal **South Concourse Retail and NJ Transit Renovation Spaces**. This Guidance Document is intended to represent the minimum anticipated procedures used during the remediation activities conducted within these areas.

Description of Work

As part of the on-going Super-storm Sandy Restoration Project, the existing NJ Transit Hoboken Terminal South Concourse Retail and NJ Transit Renovation Spaces are scheduled to receive interior restoration work associated with the 1st floor bakery/deli, liquor store, and NJ Transit lost and found spaces. The proposed project limits for this restoration work is specific and limited to areas necessary to restore these retail and facility spaces.

Contractor Submittals

- The Contractor shall describe in detail all materials to be used during the microbial restoration process including solutions intended to remove, clean, disinfect/sanitize, and neutralize (as needed) microbial contaminants from the scope of work limits of this project including total bacteroides, visible mold growth, sediment, and efflorescence.
- The Contractor shall describe in detail the demarcation of the regulated work areas, decontamination systems, HEPA localized air filtration devices, and methods to be used to control potential microbial contaminant release during surface area/building component microbial remediation.

Work Area Preparation

- **Regulated Area** –The Contractor shall erect the regulated remediation work areas (negative pressure enclosures) including the maintenance of negative pressure to control air pressure differential in relation to the exterior of the enclosures. Critical barriers made from two layers of fire-resistant 6-mil plastic sheeting must be placed over all airflow pathways into the work areas including existing door openings prior to interior demolition activities/decontamination. Appropriate airlocks and decontamination areas will be provided at the entrance/exit to the negative pressure enclosures. Warning signs indicating “Restricted Area, Authorized Personnel Only” must be posted at the entrance to the regulated remediation work areas.
- Air filtration devices (AFD) must be used to create appropriate air current differentials between negative pressure enclosures and adjacent areas. Use the ADFs to create a pressure differential in the work area of at least -5 Pascal’s (-0.02 inches of water) in relation to the adjacent areas and/or a minimum of 4 air changes per hour. The Contractor will provide the Consultant with a written

calculation that demonstrates that the number of AFDs utilized by the Contractor will provide the specified pressure differential and/or air changes per hour.

- The Contractor will utilize a micro-manometer to monitor the negative pressure within the negative pressure enclosure. The Contractor will provide the Consultant with daily reports from the micro-manometer. Failure to continuously maintain the specified negative pressure will be a non-conforming activity and will result in the Contractor correcting the condition, including HEPA vacuuming and wiping adjacent areas.

Execution

- De-energize and properly lock/tag-out all electrical and HVAC systems running through the work areas.
- Isolate the 1st floor interior work areas within negative pressure enclosures. Maintain a minimum -0.02 inches of water column at all times.
- Remove visible microbial growth from individual pieces (coolers, cabinets, toilets, sinks, doors, etc.) using a combination of HEPA vacuuming, damp wiping, and manual brushing. Use care so as to not damage fixtures to a degree which would prevent re-installation.
- Following satisfactory removal of visible contamination, apply an approved disinfectant/sanitizer to all surfaces/pieces scheduled for re-use according to the manufactures recommendations.
- HEPA vacuum and damp wipe each piece one additional time prior to removal from negative pressure enclosures. Fixtures that have been dis-assembled and/or removed from their substrate (including sinks, toilets, cabinets, and doors) are to be properly marked and stored for re-installation or disposal (as applicable). Coordinate disposal and/or storage with the Construction Manager (CM) NJ Transit.
- Remove and dispose of porous and semi-porous building materials including damaged plaster walls, gypsum wall board, plywood, cellulose ceiling tiles, dimensional lumber, fiberglass wall insulation, fiberglass pipe insulation, etc. from the 1st floor slab to 2nd floor slab height (**gypsum ceilings are to remain intact**). Remove and dispose all floor finishes excluding ceramic floor tiles which are securely adhered to the slab. Remove all elevated floor platforms including those covered with ceramic floor tile. Remove and dispose hollow core doors. Hollow core doors generally contain fiberglass insulation and wood or cardboard structural supports which cannot be cleaned in a cost effective manner. **Historical wooden doors are to be cleaned and protected in-place.**
- The Contractor will be responsible for removing potentially contaminated demolition materials from the work area without spreading the potential contamination outside of the containment. Such materials should be covered and/or double bagged appropriately to meet this performance requirement. Disposal of a potentially contaminated material away from the project site is the responsibility of the Contractor.
- HEPA vacuum and damp wipe **all remaining surfaces** and apply an approved disinfectant/sanitizer to remove settle mold and/or bacteria according to the manufactures instructions.
- At end of each day mop and/or HEPA vacuum floor to prevent accumulation of dust and debris.

Cleaning and Drying

- Initial Cleaning – Initial cleaning shall include use of pressure washers, scrub brushes, detergent solutions and water as necessary to remove settled debris from remaining building surfaces. Water from cleaning process shall be collected for proper disposal.
- Application of Sanitizer – Following initial cleaning and removal of debris a disinfectant/sanitizer solution shall be applied to exposed building surfaces. Application shall follow the manufacturer's directions regarding solution concentrations and minimum contact time.

- Final Cleaning Minimum cleaning procedures are:
 - HEPA vacuum surface
 - Damp wipe surface with water and mild detergent
 - Allow to dry
 - HEPA vacuum surface

Post-Remediation Verification (by Consultant)

The Contractor's remediation work is considered complete when:

- The work area is visibly clean.
- Wiping of remaining surfaces with a damp cloth does not reveal the presence of any visible particulate, dust, or debris on the surface of the cloth.
- Area moisture is controlled, visible water and water stains are not present within the work area.
- Remaining building materials are dry, as demonstrated by moisture meter readings of materials inside the containment being within 5% of moisture meter readings from undamaged material outside of the containment.
- Spore trap (Air-O-Cell) air samples collected within the containment areas exhibit spore counts that are less than or equal to, and present in the same genus as, spore counts collected from reference samples within the building and outdoors.
- Direct examination samples collected inside the containment must exhibit spore counts of "rare" or "trace".
- Bacteroides surface samples average less than 2,500 CEU per square foot.

**New Jersey Transit
Hoboken Terminal
Replacement of Pumps for Ejector Stations 4 and 5**

SECTION 15413 - PUMPING EQUIPMENT

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK:

- A. Provide all electrical motor-driven pumps and appurtenances as indicated on the Drawings and as specified herein.

1.2 SUBMITTALS:

- A. Manufacturer's installation and operation instructions, catalog sheets, specifications, and maintenance manuals for each item specified.
- B. Shop Drawings.
 - 1. Cuts of each pump, indicating parts and materials.
 - 2. Motor data.
 - 3. Cuts of each control panel and components
 - 4. Wiring Diagrams
 - 5. Cuts of each sewage ejector pumping system.
- C. Submit all the videotapes produced during the training. All tapes shall be labeled and turned over to the Owner within forty-eight (48) hours of training. Obtain receipt from the Owner that the tapes have been received.

1.3 QUALITY ASSURANCE:

- A. Pumping apparatus manufacturers
Minimum 5 years experience in the manufacture of products of type and quality specified.
- B. Each control panel must have UL label and panel wiring shall comply with the latest Electrical Code.

PART 2 - PRODUCTS

2.1 MOTORS:

- A. Provide motors and motor starters in accordance and in compliance of the requirements of the Motors, Control Equipment and Circuitry specifications for this project.

2.2 PUMPS-GENERAL:

- A. Pumps shall be of the type called for in this Specifications and the Drawings. Shop Drawings of pumps must be submitted for approval before installation.

**New Jersey Transit
Hoboken Terminal
Replacement of Pumps for Ejector Stations 4 and 5**

- B. The casing for pumps shall be of close-grained cast iron for bronze fitted pumps or bronze on all bronze pumps. The waterways must have large cross-section areas with smooth turns so that the water will pass through at a low velocity without shock. Suitable openings shall be provided for the suction gauge, discharge gauge, air vent and cock. Openings shall be tapped and plugged.
- C. Unless otherwise specified, the shaft shall be of the best grade of 18-8 stainless steel and of ample size to transmit safely the maximum amount of power required. Shaft shall be provided with ample keyway and key to accurately hold the impeller in place. The impeller shall be secured to the shaft using a nut and locking washer. The impeller shall be hydraulically balanced for all pressures and shall be of bronze, hand finished on the inside, machine turned and polished on the outside, dynamically balanced at all speeds, and with liberal keyway to fasten to shaft. Coupling shall be flanged and of the flexible type with pin and rubber bushing construction. That portion of the shaft passing through the pump casing and stuffing boxes shall be encased in a bronze sleeve, securely fastened to the shaft.
- D. A name-plate showing the serial number, discharge GPM and Head of each pump shall be attached to the respective pump. The necessary wiring and controlling devices will be furnished and installed complete under the Electrical Division, unless otherwise specified.
- E. Certified test curves of the pumps to be installed shall be provided for all pumps.

2.3 SLICER TYPE SEWAGE EJECTOR FOR DRY PIT INSTALLATION

- A. The impeller shall be multi-vane semi-open type capable of passing 2 1/2" solids, shall be constructed of cast iron, accurately machined to the proper diameter and be statically and dynamically balanced. Pump shall not require the use of wear rings to insure proper operation. There shall be a renewable rotating cutter bar, constructed from Heavy 440 stainless steel bar stock, securely attached to the inlet of the impeller with a stationary cutter bar attached to the pump inlet. These blades shall be hardened to a 58 Rockwell C hardness. Pump shall incorporate a mechanical seal system with faces of solid silicon carbide. The pump casing shall be constructed of ASTM A48-83, Class 30, close grained cast iron. The one piece volute shall consist of smooth contoured surfaces and fluid passages
- B. The submersible pump motors shall be suitable for normal operation in air or submerged in water. Pump motors shall have 25' of submersible power cord. Motors shall be housed in a NEMA-6, water tight cast iron shell with extended cooling rings and shall be of the air filled design for maximum efficiency. Windings shall have class F insulation. Each pump shall be meet all new US Government and California requirements prohibiting oil filled pump motors. Oil filled motors will not be acceptable. Motor and bell shall be designed as a terminal box and separated from the motor shell by a combination bearing support and inspection plate that shall permit viewing and access to the motor from the top side of the unit. Pumps shall be furnished with an upper and lower permanently lubricated double seal ball bearing having a L-10 rating. Motors using sleeve type bearings in either position will not be acceptable. Motors shall be of the design that are warranted without the need of moisture sensing electrodes, and shall be rated for use with C-20 overload heaters. The mating surfaces between the motor end bell, motor shell, and seal housing shall be sealed by means of Buna-N O-rings. Motor shaft shall be 300 series stainless steel with key way for positive positioning of the impeller. Pump shall incorporate a double mechanical seal system. The seal assembly shall be housed in a seal chamber filled with biodegradable food grade oil. The upper seal faces shall be carbon against Ni-Resist with the lower seal faces of solid silicon carbide.

**New Jersey Transit
Hoboken Terminal
Replacement of Pumps for Ejector Stations 4 and 5**

- C. Liquid level controller shall be designed for controlling a Duplex pumping system and shall be of the tethered design consisting of: (4) single pole differential float switches, each sealed in a corrosion resistant polypropylene float, (4) corrosion resistant switch brackets for attaching switches to suspension rod, (1) galvanized steel suspension rod, and a wall mounted suspension plate. Each switch shall be provided with a extended 200 foot long power cable. System utilizing a free hanging float suspended from the float power cords will not be acceptable. The entire unit switch mounting assembly shall be furnished by the pump manufacturer. Upon increasing liquid level in the wet well the LEAD PUMP ON level sensor will start the lead pump & will pump down until the PUMPS OFF level sensor is deactivated. If the water level continues to rise, for whatever reason, the LAG PUMP ON level sensor will start the lag pump and will pump together with the lead pump until the PUMPS OFF level sensor is deactivated. Pumps will be automatically alternated on every pumping cycle. The HIGH WATER ALARM level sensor shall activate the high water alarm circuit and can be placed below the LAG PUMP ON sensor to notify operating personnel of a LEAD PUMP failure.

There shall be furnished for remote mounting indoors, a submersible duplex pump control panel arranged for wall mounting and be furnished in a NEMA-6P submersible enclosure containing: 2-Motor circuit breakers, 2-magnetic starters with O.L. protection and resets, 2-test-off-auto selector switches, 2-red pump running lights, 2- auxiliary "pump running" status contacts, 1-control circuit transformer, 1- Electric lead lag alternator, (1) auxiliary high level alarm contact and a numbered and wired terminal strip.

Enclosure shall have no operators on the exterior and NPT tapings for (1) Main power supply, (2) Motor power cables, (4) float switch cables and (1) Auxiliary contact wiring for BMS connection.

2.4 GRINDER TYPE SUBMERSIBLE SEWAGE EJECTOR

- A. The pump shall include a grinder assembly located on the suction side of the pump impeller. The cutter shall be capable of grinding all materials normally found in domestic sewage. The cutter and shredding ring assembly macerates solids into a slurry and discharges to the pump impeller. The cutter and shredding ring shall be made form 17-4PH super hard corrosion resistant stainless steel This assembly shall leave no exposed shaft to permit packing of solids. The shredding ring shall be field reversible to provide new cutting edges to double the life. The impeller shall be multi vane, open type and shall be made of bronze and accurately machined to the proper diameter. All impellers are to be statically and dynamically balanced.
- B. Motors shall be airfilled, housed in a water tight cast iron shell with extended cooling rings and shall be of the air filled design for maximum efficiency. Windings shall have class F insulation. Each pump shall be meet all new US Government and California requirements prohibiting oil filled pump motors. Oil filled motors will not be acceptable. Motor end bell shall be designed as a terminal box and separated from the motor shell by a combination bearing support and inspection plate that shall permit viewing and access to the motor from the top side of the unit. Pumps shall be furnished with an upper and lower permanently lubricated double seal ball bearing having a L-10 rating. Motors using sleeve type bearings in either position will not be acceptable. Motors shall be of the design that are warranted without the need of moisture sensing electrodes, and shall be rated for use with C-20 overload heaters. The mating surfaces between the motor end bell, motor shell, and seal housing shall be sealed by means of Buna-N O-rings. Motor shaft shall be 300 series stainless steel with key way for positive positioning of the impeller. Pump shall incorporate a double mechanical seal system. The seal assembly shall be housed in a seal chamber filled with biodegradable food grade oil. The upper seal faces shall be carbon against Ni-Resist with the lower seal faces of solid silicon carbide.

**New Jersey Transit
Hoboken Terminal
Replacement of Pumps for Ejector Stations 4 and 5**

- C. Liquid level controller shall be designed for controlling a Duplex pumping system and shall be of the tethered design consisting of: (4) single pole differential float switches, each sealed in a corrosion resistant polypropylene float, (4) corrosion resistant switch brackets for attaching switches to suspension rod, (1) galvanized steel suspension rod, and a wall mounted suspension plate. Each switch shall be provided with a extended 200 foot long power cable. System utilizing a free hanging float suspended from the float power cords will not be acceptable. The entire unit switch mounting assembly shall be furnished by the pump manufacturer. Upon increasing liquid level in the wet well the LEAD PUMP ON level sensor will start the lead pump & will pump down until the PUMPS OFF level sensor is deactivated. If the water level continues to rise, for whatever reason, the LAG PUMP ON level sensor will start the lag pump and will pump together with the lead pump until the PUMPS OFF level sensor is deactivated. Pumps will be automatically alternated on every pumping cycle. The HIGH WATER ALARM level sensor shall activate the high water alarm circuit and can be placed below the LAG PUMP ON sensor to notify operating personnel of a LEAD PUMP failure.

There shall be furnished for remote mounting indoors, a submersible duplex pump control panel arranged for wall mounting and be furnished in a NEMA-6P submersible enclosure containing: 2- Motor circuit breakers, lockable in the off position, 2-magnetic starters with O.L. protection and resets, 2-test-off-auto selector switches, 2-red pump running lights, 2- auxiliary "pump running" status contacts, 1-control circuit transformer, 1- Electric lead lag alternator, (1) auxiliary high level alarm contact and a numbered and wired terminal strip.

Enclosure shall have no operators on the exterior and NPT tapings for (1) Main power supply, (2) Motor power cables, (4) float switch cables and (1) Auxiliary contact wiring for BMS connection.

2.4 SUBMERSIBLE SUMP PUMP

- A. The impeller shall be capable of passing 1/2" solids and shall be constructed of bronze and accurately machined to the proper diameter and be statically and dynamically balanced, and shall not require the use of wear rings to insure proper operation.
- B. Motor shall be housed in a water tight cast iron shell, air -filled, and hermetically sealed. Motor shaft shall be 300 series stainless steel with key way for positive positioning of the impeller.
- C. Pump shall be provided with Diaphragm level control switch Pump shall be wired to module with pump test button and green light indicates power to pump motor. All electrical equipment shall be furnished in NEMA-6P enclosure.

PART 3 - EXECUTION

3.1 INSTALLATION:

- A. Install all pumping apparatus as detailed on the Drawings, or as specified herein, or as recommended by the respective Manufacturer, to be completely operable for its intended use.
- B. The Contractor shall have the pump supplier verify the depth of the ejector so that proper length of shaft shall be supplied.

3.2 DEMONSTRATION:

- A. The service of a factory trained representative shall be made available on the job site for

**New Jersey Transit
Hoboken Terminal
Replacement of Pumps for Ejector Stations 4 and 5**

start-up and for instructing the Custodian (or building manager) and staff in the operation and maintenance of each system installation. A minimum of two visits is required.

PART 4 – MEASUREMENT AND PAYMENT

4.1 MEASUREMENT AND PAYMENT:

The work under this section will not be measured or paid for separately, but the cost hereof shall be included in the Division lump sum bid.

END OF SECTION

August 23, 2013

RE: INVITATION FOR BID NO.13-094X, HISTORIC RESTORATION OF HOBOKEN TERMINAL MAIN WAITING ROOM, RETAIL AREAS & REPLACEMENT OF SEWAGE PUMP STATIONS 4 & 5 PROJECT HOBOKEN, NEW JERSEY ADDENDUM NO. 1

To whom it may concern:

The following constitutes Addendum No. 1 and must be acknowledged by each Bidder acknowledging receipt of addendum with your e-bid submission. Failure to do so may render a bid as non-responsive.

ITEM#1: The Following is a list of Drawings, Technical Provisions included as part of this addendum:.

A. ADDENDA TO DRAWINGS:

ARCHITECTURAL

1. Drawing No. A1.01:
 - a. ALTER Repair Legend Note W5 to read: "DISASSEMBLE TO CLEAN; REASSEMBLE".
 - b. ADD Repair Legend Note W7 to read: "CLEAN IN PLACE".
 - c. ALTER Repair Legend Note S6 to read: "REPOINT ALL MARBLE JOINTS".
 - d. ADD Repair Legend Note S9 to read: "HONE AND POLISH EXISTING MARBLE".
2. Drawing No. A1.02:
 - a. See 1.a.b.c.d., above.
 - b. ADD clarification note on First Floor Plan indicating all bronze and brass items to be cleaned per specification
3. Drawing No. A2.01:
 - a. See 1.a.b.c.d., above.
4. Drawing No. A2.02:
 - a. See 1.a.b.c.d., above.
 - b. ADD Stone Note S9 to North of North Vestibule (Drawing 1)
 - c. ADD Stone Note S3 to East Elevation of North Vestibule (Drawing 2).
5. Drawing No. A2.03:
 - a. See 1.a.b.c.d., above.
 - b. ADD Stone Note S9 to East elevation under main stair adjacent to Women's Room entrance (Drawing 3)
6. Drawing No. A3.01:
 - a. ALTER General Note #2 to read: All Door Hardware (excepting hinges) is to be replaced with new – see Schedule.
 - b. ADD General Note #3 to read: All jambs, doors and frames are to be cleaned in place. W7
7. Drawing No. A3.02

- a. ADD General Note #2 to read: Clean all door & transom glass (both sides)
- b. ADD W7 Repair designation to all Details.

8. Drawing No. A3.03

- a. ADD General Note #2 to read: Clean all window glass
- b. ADD W7 designation to all Details.

9. Drawing No. A5.01:

- a. REPLACE General Note #3 to read: All terrazzo is to be cleaned/stripped as specified.

ENVIRONMENTAL

10. Drawing H.0.1:

- a. ADD General Notes for clarification. See Matrix memo for more information.

EJECTOR PUMPS

11. Drawing P2.01

- a. DELETE The existing 6-inch fiberglass sewer pipe has been replaced by NJ Transit and has been eliminated from the scope. This change is not shown on drawings.

B. ADDENDA TO TECHNICAL PROVISIONS SPECIFICATIONS SECTIONS:

- 1. ALTER Technical Provisions Sections 023000, 05700, 40140.92, 060140, 087100, 090120.91 and 090160.91, in this Addendum (64 Pages)
- 2. DELETE Section 08 80 00 "Glass and Glazing".

ITEM#II: Incorporate the following question/request for information along with NJ Transit's responses (underlined):

Question 1, Set 1, dated August 20, 2013 from Stan Youngblood, Yonkers Contracting Company, Inc. (YCCI), Yonkers, NY:

YCCI Question#1) With respect to the **South Concourse Retail Areas Scope of Work** described in Special Provisions SP4 paragraphs 1.18B, C & D.

We are missing the pertinent Technical Specification Sections relating to this work, such as the following Sections:

Hollow Metal Doors & Frames

Door Schedule

Door Hardware required at these Retail Area doors

Ceramic Tile / Quarry Tile

Acoustical Ceilings

Resilient Flooring VCT & Base

Painting / Paint Schedule

Toilet Accessories

Architectural Woodwork for Retail casework, counters, shelving, etc..

Rough and Finish Plumbing, Electrical, etc.. for the Retail Areas

The above list is intended only to bring this to your attention and may not be a complete listing.

Thanks in advance for your attention to this matter. **NJT RESPONSE: RESPONSE TO FOLLOW**

VIA ADDENDUM.

Question 1, Set 2, dated August 22, 2013 from Julio Cordoba, Yonkers Contracting Company, Inc. (YCCI), Yonkers, NY:

YCCI Question#1) Please provide existing grade elevation at Ejector Pump 5. Elevation required to figure depth of underground pipe to be replaced. Reference drawing P2.01 and P4.01. **NJT**

RESPONSE: RESPONSE TO FOLLOW VIA ADDENDUM.

Question 1, Set 3, dated August 23, 2013 from Julio Cordoba, Yonkers Contracting Company, Inc. (YCCI), Yonkers, NY:

YCCI Question#1) Please elaborate & clarify the extent of the Ornamental Metal Restoration portion of this project.

The Plans show us restoring the bench reading lights, restoring the bench cast iron grilles, cleaning the shoe shine stand footrests, cleaning bronze corrosion on wall trim near Door D10.

Please clarify if any other items such as wall sconce fixtures, telephone banks, ticket counter windows, wall handrails, door kick plates, door push/pull bars, stair railings, etc.. are included for Ornamental Metal Restoration. **NJT RESPONSE: RESPONSE TO FOLLOW VIA ADDENDUM.**

ITEM#III: The following General Information Qualifies for this Procurement:

A) A pre-bid conference was held on 11:00AM, August 21, 2013 at the Project Site. The meeting minutes were as follows:

Discussion included Item I-Bid Forms, Item II-Instructions to Bidders, Item III-Special Provisions, Item IV-General Provisions, Item V-Technical Provisions and Drawings, Item VI-A DBE race neutral goal has been set for this project. A site tour was held after the administrative portion of the meeting.

- 1) Critical dates for this Procurement include: All RFIs are due by 4:00PM, Monday, August 26, 2013; Bid Opening is 2:00PM, Thursday, September 5, 2013; First and second low bids must submit required Race Neutral DBE FORMS(See Special Provisions) within 2 business days after the bid due date.
- 2) All attendees were notified that no verbal communications qualified for this Procurement and that all communications must be submitted through the Contracting Officer Representative-Robert Delitto.
- 3) A copy of the pre-bid conference sign-in sheet is included as part of this addendum.
- 4) In order to obtain all pertinent Bid Documents, interested firms must register with BID EXPRESS at <https://www.bidexpress.com>. Contractors that are currently registered with BIDX to bid NJDOT or any other public construction project **will require an additional digital ID for this different website**. To subscribe, follow instructions on the website. Fees apply to bidding. The fee schedule is available on the Bid Express website and are directly payable to Bid Express. In order to submit a bid, NJ TRANSIT recommends that Contractors apply for a digital ID **at least seven business days prior** to the Bid Due Date.

B NJ TRANSIT e-mailed all Plan Holders of bidexpress formatting display revisions. The e-mails referenced "addendums for solicitation **13-094X**". These were administrative revisions only. The list of display revisions are as follows:

- 1 BUY AMERICA NOW ALLOWS DROP DOWN MENU CHOICE.
- 2 IRAN DISCLOSURE IS NOW A DROP DOWN MENU CHOICE INSTEAD OF SELECTION BOXES.
- 3 REFER TO NOTICE TO CONTRACTORS

This concludes Addendum No.1. Bidders must acknowledge receipt of this addendum on the acknowledgment of receipt of addendum with your e-bid submission.

Sincerely,

A handwritten signature in cursive script that reads "Robert Delitto".

Robert Delitto

Managing Contract Specialist

Contracts/Division of Procurement E mail: **RDELITTO@NJTRANSIT.COM** Fax(973)491-7597

CC: G. Bocchino/IFB File

NJ TRANSIT

Contract No. 13-094X

HISTORIC RESTORATION OF HOBOKEN TERMINAL MAIN WAITING ROOM, RETAIL AREAS
& REPLACEMENT OF SEWAGE PUMP STATIONS 4 & 5 PROJECT

11:00AM: Wednesday, August 21, 2013
Hoboken Terminal Main Waiting ROOM

PAGE 1 OF 1

PRE-CONSTRUCTION MEETING ATTENDANCE SHEET

NAME	COMPANY, ADDRESS & TELEPHONE
Rosant Del. Ho	NT Transit, 1 Penn Plaza East, Newark, NJ 973 491 7542
Erwan Boochera	" " " " " " " " 973 491-7359
John Worsler	HNTB/Cooney Ave / Newark NJ 347-266-3786
Peter Gentle	HNTB Penn Plaza East Newark 267-844-1825
Brian Durvan	YANCERS CONTRACTORS 914-965-1500 x743
Julio Gonzalez	" " " " " " " " 114711
STAN YOUNG, BLOOD	" " " " " " " " 179
STEPHANIE M. HAULAND	JBCI 40 W. 2 ND ST 1201 NY NJ 212-532-7775
Jacqueline Hensch	NST (BID) N Penn Plaza 973 491-7539
VIRGINIA SQUITIERI	HNTB ONE GATEWAY (973) 514-0627
Anthony Arujio	George Harris Const. 62 Yorkwood Rd. 732-958-4004
BRUCE JABLONSKI	STV 212-614-3457
VIRGINIA SEMINARA	DEBIASER-SEMINARA 732 748 0600
Mark Piccolo	Hall Construction 732-938-4255
Daniel J. J. J.	Hall Construction 732-938-4255
Patricia Valoy	STV Inc. 225 Park Ave South, NY, NY 10003 212-614-3342
James Pittman	John O'Hara 973 673 4676
FRANK CERRE	JOHN O'HARA 973-673-4676
JOHN O'HARA	JOHN O'HARA Co. "

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

**New Jersey Transit Corporation
Instructions To Bidders For Construction**

Table of Contents

A.	ABBREVIATIONS AND DEFINITIONS.....	1
A.1	ABBREVIATIONS	1
A.2	DEFINITIONS.....	1
B.	COMMUNICATIONS.....	1
B.1	OBTAINING BID DOCUMENTS	1
B.2	INQUIRIES AND REQUESTS FOR CLARIFICATION	1
B.3	ACKNOWLEDGMENT OF RECEIPT OF ADDENDA.....	2
B.4	IMPROPER COMMUNICATIONS	2
B.5	PRE-BID CONFERENCE	2
C.	REGISTRATIONS, PREQUALIFICATION AND DBE CERTIFICATION	2
C.1	CORPORATE REGISTRATION	2
C.2	PREQUALIFICATION OF BIDDERS	3
C.3.	DBE CERTIFICATION.....	4
C.4	DEPARTMENT OF LABOR REGISTRATION.....	4
C.5	OWNERSHIP DISCLOSURE	5
C.6	DISCLOSURE OF POLITICAL CONTRIBUTIONS (N.J.S.A. 19:44A-20.27)	5
C.7	BUSINESS REGISTRATION NOTICE	5
D.	ETHICAL REQUIREMENTS FOR BIDDERS	6
D.1	CODE OF ETHICS FOR BIDDERS	6
D.2	CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION – LOWER TIER COVERED TRANSACTION	6
D.3	STATE DEBARMENT AND SUSPENSION CERTIFICATION	8
D.4	LIMITATIONS ON LOBBYING	8
D.5	DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN	9

**New Jersey Transit Corporation
Instructions To Bidders For Construction**

Table of Contents

E.	<i>BID PREPARATION AND SUBMISSION PROCEDURES.....</i>	9
E.1	EXAMINATION OF CONTRACT DOCUMENTS	9
E.2	BID FORM QUANTITIES	10
E.3	PREPARATION OF THE BID.....	10
E.4	DBE FORMS AND CERTIFICATION.....	10
E.5	BID GUARANTEE	11
E.6	BID VALIDITY	12
E.7	WITHDRAWAL OF BIDS	12
E.8	SUBMISSION OF MULTIPLE BIDS.....	12
E.9	SUBMISSION OF BIDS	12
F.	<i>BID OPENING.....</i>	13
F.1	PUBLIC OPENING OF BIDS.....	13
F.2	UNOPENED BIDS	13
F.3	CONDITIONALLY ACCEPTED	13
G.	<i>IRREGULAR BIDS</i>	13
G.1	IRREGULARITIES AND NON-CONFORMANCES.....	13
G.2	RIGHT TO REJECT OR WAIVE	14
H.	<i>AWARD AND EXECUTION OF CONTRACT</i>	14
H.1	CALCULATION OF BIDS	14
H.2	SINGLE BIDS	14
H.3	DETERMINATION OF LOW BID.....	14
H.4	AWARD PROCESS.....	14
H.5	CANCELLATION OF AWARD.....	15
H.6	CONTRACT BONDS	15

**New Jersey Transit Corporation
Instructions To Bidders For Construction**

Table of Contents

H.7	EXECUTION OF CONTRACT	16
H.8	FAILURE TO EXECUTE CONTRACT	16
H.9	RELIEF OF BIDDERS	16
H.10	RELEASE OF BID GUARANTEES.....	17
I.	<i>PROTEST PROCEDURE</i>	17
I.1	PURPOSE	17
I.2	PROCEDURE	17

A. ABBREVIATIONS AND DEFINITIONS

A.1 ABBREVIATIONS

See Article 1.1.1 of the General Provisions for Construction.

A.2 DEFINITIONS

See Article 1.1.2 of the General Provisions for Construction.

B. COMMUNICATIONS

B.1 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.bidx.com. Registration and a subscription fee are required to access the Bid Documents. The Bidder shall download the bidding software. The Bidder shall not alter or in any way change the software.

The Bidder shall download all bid documents from NJ TRANSIT's electronic bidding website. NJ TRANSIT assumes no responsibility for errors or omissions in the downloaded documents except as specifically provided for in the Contract Documents. The Bidder shall address questions or problems with downloading or using the electronic files, not the requirements of the Contract, to:

NJ TRANSIT Bid Express Administrator

E-Mail: e-bidding@njtransit.com

or

Bid Express Customer Support

Tel: (352) 381-4888

Fax: (352) 381-4444

E-Mail: customer.support@bidx.com

B.2 INQUIRIES AND REQUESTS FOR CLARIFICATION

All inquiries and requests for clarifications regarding the Contract Documents shall be submitted by e-mail to the Contract Specialist identified in the Special Provisions. 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 Bids Items to be bid. No response may be made by NJ TRANSIT to inquiries received less than ten (10) days prior to the scheduled Bid opening.

B.3 ACKNOWLEDGMENT OF RECEIPT OF ADDENDA

Bidders are required to acknowledge receipt of all Addenda on the Bid Form in the space provided. Failure to acknowledge receipt of all Addenda may cause the rejection of the Bid as non-responsive.

B.4 IMPROPER COMMUNICATIONS

In accordance with N.J.S.A. 52:34-10.1, Bidders are advised that communications with NJ TRANSIT that in any way relate to this Project shall only be conducted with the authorized representative of the Contracting Officer in NJ TRANSIT's Procurement Department. All other contacts, with the exception of contacting **NJ TRANSIT's Business Diversity** Office for matters related to SBE requirements, are strictly prohibited and are considered improper.

Bidders are advised that violation of this prohibition, as required under N.J.S.A. 52:34-10.1, may result in the removal of the Bidder from consideration for award of this Contract.

B.5 PRE-BID CONFERENCE

A pre-bid conference may be held with prospective Bidders to review Contract Documents and generally discuss the Project. The time and place will be specified in the Advertisement. Bidders are strongly urged to attend.

C. REGISTRATIONS, PREQUALIFICATION AND DBE CERTIFICATION

C.1 CORPORATE REGISTRATION

In accordance with N.J.S.A. 14A:13-3, all Out-of-State companies contracting to do business with NJ TRANSIT must have a certificate of authority to do business in the State of New Jersey. If you are not authorized to transact business in the State of New Jersey, **contact the Department of Treasury's Commercial Recording/Corporate Filing Unit at (609) 292-9292, or go to the State of New Jersey's Business Gateway Registry Services (NJBGS) website at www.state.nj.us/njbgs.** The relevant documents, contained in the New Jersey Complete Business Registration Package (NJ-REG), instructions and customer service assistance are available from the above locations. No contract will be entered into by NJ TRANSIT with a firm unless the firm has procured a certificate of authority from the Secretary of State to do business in New Jersey. In addition, all Out-Of State companies

must have a registered agent in the State of New Jersey upon whom process may be served.

C.2 PREQUALIFICATION OF BIDDERS

In accordance with N.J.A.C. 16:72-2.4, prospective Contractors, prior to bidding on capital improvement projects, must be prequalified as to the character and amount of work for which they are permitted to submit Bids. Prequalification shall be assigned Contractors based on all factors related to Contractors responsibility as set forth in N.J.A.C. 16:72-1.5, and any pertinent information relating to the qualification of Contractors. A Prequalification Classification and Rating shall be assigned Contractors based on information submitted by them in response to the Prequalification Questionnaire available through NJ TRANSIT's electronic bidding website. The Prequalification Classification and Rating shall be valid for thirty-six (36) months from the date of the Notice of Classification letter.

Please note that the Prequalification classification process will only be conducted for those firms **subscribing to NJ TRANSIT's electronic bidding service**, have downloaded Bid Documents from NJ TRANSIT's electronic bidding website www.bidx.com, are intending to bid as a prime contractor or as a member of a joint venture, and have submitted a completed Prequalification Questionnaire.

Prospective bidders are advised that a key consideration in the evaluation, classification and rating of the Contractor is past experience with work similar both in nature and in magnitude to the Prequalification classification and rating requested by the Contractor.

Failure, either in the Prequalification Questionnaire or in any subsequent information provided by the prospective bidder, to demonstrate responsible experience with work of the nature and magnitude of the classification and rating requested may result in NJ TRANSIT assigning a different classification, lower rating, or both, or a rejection of the Prequalification request pending the submission of evidence of prior responsible experience.

Fully completed Prequalification Questionnaires must be received by NJ TRANSIT no later than fourteen (14) calendar days prior to the due date for receipt of bids. Failure of a prospective Bidder to submit its fully completed Prequalification Questionnaire on a timely basis may result in a denial of Prequalification for this Bid.

Firms seeking to submit bids as Joint Ventures are advised that both firms must submit Prequalification Questionnaires independently, in addition to a Statement of Joint Venture form executed by both firms. A rating and classification shall be assigned to each firm and

a determination shall be made as to the Joint Venture's eligibility to submit a bid in response to this Bid only.

Two or more firms which maintain an ongoing Joint Venture relationship may request Prequalification as a single entity, provided they can demonstrate a past history of responsible performance as a single entity. In such event, the Classification and Rating assigned to the entity shall be valid for thirty six (36) months.

C.3. DBE CERTIFICATION

Disadvantaged Business Enterprises, in accordance with the Department of Transportation (DOT) Regulations 49 CFR, Part 26, shall have the maximum opportunity to participate in the performance of this contract. The DBE subcontracting goals are identified in the Special Provisions for this Project.

C.4 DEPARTMENT OF LABOR REGISTRATION

Pursuant to The Public Works Contractor Registration Act, N.J.S.A. 34:56-48 et seq., Bidders are advised that Contractors shall not bid on any contract for public work as defined in N.J.S.A. 34:56-48 unless the Contractor is registered pursuant to the act. Contractors shall not list a Subcontractor in a bid for the Contract unless the Subcontractor is registered at the time the bid is made. Contractors or Subcontractors, including a Subcontractor not listed in the bid, shall not engage in the performance of any public work subject to the Contract, unless the Contractor or Subcontractor is registered pursuant to the act.

The Bidder shall possess a valid Public Works Contractor Registration Certificate at time of bid submission. Bidder is requested to provide its Public Works Registration Certificate number with bid submission. If requested, proof of valid registration shall be submitted to NJ TRANSIT, in care of the Contract Specialist, within seven (7) business days of NJ TRANSIT's request.

Each Contractor shall, after the bid is made and prior to the awarding of the contract, submit to NJ TRANSIT the certificates of registration for all Subcontractors listed in the bid. Applications for registration from either the Contractor or any Subcontractor shall not be accepted as a substitute for a certificate of registration.

Registration forms, copies of the Act and other relevant information may be obtained by contacting:

New Jersey Department of Labor and Workforce Development
Division of Wage & Hour Compliance
P.O. Box 389
Trenton, New Jersey 08625-0389
Telephone: (609) 292-9464
Fax: (609) 633-8591

Companies not listed in the bid that quote successfully as Subcontractors at any tier will be required to submit evidence of registration with the Department of Labor as part of the post-award Subcontractor approval process.

C.5 OWNERSHIP DISCLOSURE

Pursuant to N.J.S.A. 52:25-24.2, in the event the Bidder is a corporation, partnership or sole proprietorship, the Bidder must complete a current, Ownership Disclosure Form prior to the receipt of the bid or accompanying the bid. Failure to submit the form will preclude the award of a contract.

C.6 DISCLOSURE OF POLITICAL CONTRIBUTIONS (N.J.S.A. 19:44A-20.27)

The Contractor is advised of its responsibility to file an annual disclosure statement on political contributions with the New Jersey Election Law Enforcement Commission (ELEC), pursuant to N.J.S.A. 19:44A-20.27, as amended, if the contractor receives contracts in **excess of \$50,000 from a public entity in a calendar year. It is the contractor's** responsibility to determine if filing is necessary. Failure to so file can result in the imposition of financial penalties by ELEC. Additional information about this requirement is available from ELEC at 888-313-3532 or at www.elec.state.nj.us.

C.7 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 the Treasury, Division of Revenue, prior to conducting business with NJ TRANSIT. Bidder is requested to provide its Business Registration Certificate number and Taxpayer Identification (FEIN) with bid submission. The Bidder shall possess a valid Business Registration Certificate prior to the time of contract award. The business registration form (Form NJ-REG) can be found online at <http://www.state.nj.us/treasury/revenue/gettingregistered.htm#busentity>.

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

Subcontractor approval process detailed in General Provision 1.9.2, the Contractor shall provide a copy of the Business Registration Certificate for each Subcontractor.

D. ETHICAL REQUIREMENTS FOR BIDDERS

D.1 CODE OF ETHICS FOR BIDDERS

Bidders are informed that it is NJ TRANSIT policy that Bidders who do or may do business with NJ TRANSIT must avoid all situations where proprietary or financial interest, or the opportunity for financial gain, could lead a NJ TRANSIT officer or employee to secure favored treatment for any organization or individual.

Bidders must also avoid circumstances and conduct which may not constitute actual wrongdoing, or conflict of interest, but might nevertheless appear questionable to the general public, thus compromising the integrity of NJ TRANSIT. All Bidders must comply with NJ TRANSIT's Code of Ethics as set forth in Article 10.4 of the General Provisions for Construction.

D.2 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION – LOWER TIER COVERED TRANSACTION (APPLICABLE FOR FEDERALLY FUNDED PROJECTS VALUED OVER \$25,000).

By signing and submitting this bid or proposal, the prospective lower tier participant, defined as a Contractor or Subcontractor, is providing the signed 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 prospective 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 prospective lower tier participant shall provide immediate written notice to NJ TRANSIT if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

The terms "covered transaction", "debarment", "suspended", "ineligible", "lower tier covered transaction", "participant", "persons", "principal", "proposal", and "voluntarily excluded", as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549 and Executive Order 12689

(2CFR Part 1200 and 2CFR Part 180)]. You may contact NJ TRANSIT for assistance in obtaining a copy of those regulations.

The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, 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 prospective lower tier participant further agrees by submitting this proposal 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 and in all solicitations for lower tier covered transactions.**

A participant in a covered transaction may rely upon a certification of a prospective 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. A participant may decide the method and frequency by which it determines the eligibility of its principals (as defined in 2 CFR 180.995). Each participant may, but is not required to, check the Nonprocurement List issued by U.S. General Service Administration.

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 Paragraph 5 of these instructions, 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.

EXCLUSION – LOWER TIER COVERED TRANSACTION

The prospective lower tier participant certifies by submission of this bid or proposal, that **neither it nor its "principals" [as defined at 2 CFR 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.

When the prospective lower tier participant is unable to certify to the statements in this certification, such prospective participant shall attach an explanation to this proposal.

Bidder shall also be currently registered and active with no exclusion on the consolidated U.S. Government, System for Award Management (SAM) database

D.3 STATE DEBARMENT AND SUSPENSION CERTIFICATION

The Bidder shall certify that neither it or its principals are included on the State of New Jersey, Department of the 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.

..

If the Bidder is included on such report, he may not be eligible for Award of Contract.

D.4 LIMITATIONS ON LOBBYING

(APPLICABLE FOR FEDERALLY FUNDED PROJECTS VALUED OVER \$100,000)

By signing and submitting this bid or proposal, the prospective lower tier participant, defined as a Contractor or Subcontractor, is providing the signed certification set out below.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file or amend a declaration required to be filed or amended under Section 1352, Title 31, U.S. Code shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Bidder certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to 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 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.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to 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 this Federal Contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) At the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any declaration previously filed in accordance with D.4.1 or D.4.2 above, Bidders shall file an updated certification or declaration, as appropriate, in accordance with 31 USC 1352.

(4) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

D.5 DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN

Pursuant to N.J.S.A. 52:32-55 et seq., 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 with its Bid 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.

E. BID PREPARATION AND SUBMISSION PROCEDURES

E.1 EXAMINATION OF CONTRACT DOCUMENTS

The Bidder shall examine carefully the Contract Documents, project site and conditions affecting the procurement. By submitting a Bid, the Bidder acknowledges that he has carefully examined the Contract Documents and project site, and has satisfied himself as to the conditions affecting the procurement. NJ TRANSIT assumes no responsibility for any conclusions or interpretations made by the Bidder on the basis of the information made available by NJ TRANSIT.

E.2 BID FORM QUANTITIES

- E.2.1 The quantities stipulated are approximate and are given only as a basis for the comparison of bids. NJ TRANSIT does not expressly, or by implication, represent that the actual amount of work will correspond to the estimated quantities stipulated in the Bid Form.

NJ TRANSIT reserves the right to increase or decrease the amount of any class or portion of the Work or omit portions of the Work.

- E.2.2 The Bid Form may include Pay Items that have been designated as Allowances. Such items may or may not be shown on the Contract Drawings. NJ TRANSIT, in its sole discretion, may or may not incorporate Allowances into the Project.

E.3 PREPARATION OF THE BID

- E.3.1 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 Pay 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.

- E.3.2 Prices shall be provided for all items called for on the Bid Form. All bid prices must be quoted in numeric form. When the Bidder intends to bid zero dollars (\$0.00) for a Pay Item, **the Bidder shall insert a "0" in the appropriate box under the "Unit Price" column.** 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.

- E.3.4 Alternate bids for any item will not be considered unless specifically requested in the Bid.

- E.3.4 The Bidder shall check the bid before submission using the software. The Bidder shall **select "tools" and then select "check bid"** and ensure there are no errors prior to submitting the electronic bid. **For bids submitted by Joint Ventures select "tools" from the software menu and mark the electronic bid as "Joint Bid."** The Bidder may print a completed Proposal Form for their records after completing the bid.

E.4 DBE FORMS AND CERTIFICATION

- E.4.1 The apparent low bidder and the second low bidder must submit DBE Forms A, A-1, A-2, B, C and D, if necessary, to NJ TRANSIT, in care of the Contract Specialist, within seven (7) business days of the date for receipt of bids. In addition, the apparent low bidder and

second low bidder are required to submit DBE Certificates, as issued by the certifying agency, for each firm listed on DBE Form A to NJ TRANSIT, in care of the Contract Specialist, within seven (7) business days of the date for receipt of bids. Bidders are requested to review Forms carefully and complete all Forms in their entirety.

E.5 BID GUARANTEE

E.5.1 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.

E.5.2 Whenever the Bid Security accompanying the Bid is a Bid Bond in electronic form, the Bidder shall complete the electronic bond 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.

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. 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.**

E.5.3 Whenever the Bid Security 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 also be drawn on an account with **an "insured bank" within the meaning of the Act creating the Federal Deposit Insurance Corporation (12 U.S.C. 1811).** The **Letter of Credit, Cashier's Check or Certified Check 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 Cashier's Check, Certified Check or irrevocable Letter of Credit 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.**

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.

E.5.4 The amount of the Bid Security shall equal ten percent (10%) of the total amount bid. A Bid shall be rejected as non-responsive if it is not accompanied by satisfactory Bid Security.

E.6 BID VALIDITY

NJ TRANSIT reserves the right to issue a Notice of Award to the successful Bidder, as determined by NJ TRANSIT, at any time for a period of ninety (90) days following the date of bid opening. If necessary, requests for extensions of the date for issuance of the notice of award may be made by NJ TRANSIT by written request to bidders. The bid shall remain valid through the date NJ TRANSIT fully executes the contract.

E.7 WITHDRAWAL OF BIDS

Bids may be withdrawn at any time prior to the time specified for the opening of Bids by **using the "Tools" feature of the software, selecting "View Submitted Bids" and then selecting "Withdraw Bid."** 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.

E.8 SUBMISSION OF MULTIPLE BIDS

Submission of more than one 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.

E.9 SUBMISSION OF BIDS

E.9.1 Once the Bidder has completed its bid, the Bidder shall submit the electronically signed bid via the Internet. The Bidder shall ensure delivery of its bid with all required components and attachments.

E.9.2 The Bidder is solely responsible for any and all errors and for timely submission of the bid, all components thereof, and all attachments thereto, through the electronic bidding system; NJ TRANSIT assumes no responsibility for any claim arising from the failure of any Bidder or

of the electronic delivery system to cause any bid, bid component, or attachment to not be delivered to NJ TRANSIT on or before the time set for bid opening.

F. BID OPENING

F.1 PUBLIC OPENING OF BIDS

Bids will be publicly opened and read aloud at the advertised time and place set for such Bid opening, unless NJ TRANSIT extends the time for opening of Bids. NJ TRANSIT reserves the right at its sole discretion to extend the time for opening of Bids at any time prior to the opening of the Bids. Their content will be made public for the information of Bidders and other interested parties.

F.2 UNOPENED BIDS

NJ TRANSIT may reject a bid and leave the bid unopened, if the Bidder has not been prequalified in accordance with Paragraph C.2, above, or for other material violations of NJ TRANSIT's bidding requirements.

F.3 CONDITIONALLY ACCEPTED

All Bids opened by NJ TRANSIT shall be considered conditionally accepted pending NJ TRANSIT's detailed review and examination of the Bids.

G. IRREGULAR BIDS

G.1 IRREGULARITIES AND NON-CONFORMANCES

- A. Bids will be considered irregular and shall be rejected for the following reasons:
1. If the Bid materially fails to conform to the requirements of the Invitation for Bids.
 2. If the Bid is received from a firm which is not adequately prequalified or is otherwise determined to be not responsible.
 3. If the Bid is not received by the specified date and time.
 4. If the Bidder fails to furnish Bid Security in accordance with Paragraph E.5.
 5. If the Bidder takes material exception to any of the Bid requirements.
 6. If the Bid is not digitally signed by the authorized representative of the Bidder.
 7. If the Bidder fails to deliver before receipt of the bid or with the bid, the Ownership Disclosure Form as required by N.J.S.A. 52:25-24.2.
 8. If the Bidder fails to complete the Disclosure of Investment Activities in Iran certification.
- B. Bids will be considered irregular and may be rejected for the following reasons:
1. If the Bidder fails to comply with all material EEO/DBE requirements.
 2. Subject to Paragraph G.2, if the Bid is not properly completed.

3. If all addenda are not properly acknowledged.
4. If the Bid contains prices that are materially unbalanced.
5. For other reasons, if NJ TRANSIT deems it advisable to do so in the public interest.

G.2 RIGHT TO REJECT OR WAIVE

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, notwithstanding other provisions of the Contract Documents.

H. AWARD AND EXECUTION OF CONTRACT

H.1 CALCULATION OF BIDS

H.1.1 After the Bids are opened and read, they will be compared on the basis of the correctly determined summation of the correctly determined products of all the quantities for Contract Items shown in the Bid multiplied by the unit prices bid. The results of such comparisons will be made available to the public. Award will be made on the basis of the correct total Contract price.

H.1.2 In the event an error is encountered with the software and a discrepancy exists between the unit price bid for any Contract Item and the extension shown for that item under the column of the Bid designated "Extension," the unit price shall govern.

H.2 SINGLE BIDS

If only one Bid is received in response to the Invitation for Bids, a detailed cost proposal may be requested of the single Bidder. A cost/price analysis and evaluation and/or audit may be performed of the cost proposal in order to determine if the price is fair and reasonable.

H.3 DETERMINATION OF LOW BID

The award of the firm-fixed-price Contract, if it is awarded, will be to that responsible Bidder whose bid, conforming to the Invitation for Bids, is lowest in price.

H.4 AWARD PROCESS

Contract Award is a process initiated by NJ TRANSIT when it issues the Notice of Award, includes the period when the Contractor executes and returns the Contract, and is completed when NJ TRANSIT executes the Contract.

H.5 CANCELLATION OF AWARD

NJ TRANSIT reserves the right to cancel the Award of any Contract before execution of the Contract by NJ TRANSIT, even if it has been executed by the Contractor, if NJ TRANSIT deems such cancellation to be in its best interests. In no event will NJ TRANSIT have any liability for the cancellation of such award. The Contractor assumes sole risk and responsibility for expenses prior to execution of the Contract and shall not commence work until receipt of the written Notice to Proceed.

H.6 CONTRACT BONDS

The Bidder to whom the Contract is awarded shall furnish the following bonds in a form substantially similar to that provided by NJ TRANSIT.

H.6.1 A Performance Bond equal to 100 percent of the Contract price to secure fulfillment of the Contractor's obligations specified in the Contract.

H.6.2 A Payment Bond equal to 100 percent of the Contract price to protect firms or persons supplying labor or materials to the Contractor for the performance of work provided for in the Contract.

H.6.3 Performance and Payment Bonds must be executed by surety companies licensed to do business in the State of New Jersey and listed in the U.S. Treasury Department Circular 570 as of the date for receipt of Bids.

H.6.4 Provisions of the Performance and Payment Bonds shall not limit any liability of the Contractor to NJ TRANSIT.

H.6.5 The Performance and Payment Bonds shall continue in full force and effect until receipt by NJ TRANSIT of Contractor affidavits of payments, debts, claims and until final Acceptance of the Work.

H.6.6 All alterations, extensions of time, extra and additional work, and other changes authorized by the Contract Documents may be made without securing the consent of the Surety or Sureties on the Performance Bond and Payment Bond.

H.6.7 The Performance and Payment Bonds will be paid for at the lump sum price bid therefore or at the actual cost of the Bonds to the Contractor, whichever price may be lower. Payment for the Bonds will be made only upon delivery to the Engineer of a receipted bill for the Bonds.

H.6.8 If any Surety upon any Bond furnished in connection with this Contract becomes unacceptable to NJ TRANSIT, the Contractor shall promptly furnish such additional security as may be required from time to time to protect the interests of NJ TRANSIT and of persons supplying labor or materials in the prosecution of the Work contemplated by the Contract.

H.7 EXECUTION OF CONTRACT

Within ten (10) business days of receipt of a Notice of Award, the Bidder to whom the Contract is awarded shall deliver to NJ TRANSIT the Bonds, specified certificates and policies of insurance, and other specified documents required herein by NJ TRANSIT and shall properly execute two (2) copies of the Contract by signing the Contract Execution Form, as shown in Appendix C of the General Provisions. NJ TRANSIT will execute both copies of the Contract and will return one (1) copy to the Contractor.

H.7.1 This contract is subject to 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), and in accordance with the rules and regulations promulgated pursuant thereto, the Bidder agrees to comply with the following:

At the time the signed contract is returned to NJ TRANSIT, the said Bidder (contractor) shall submit to NJ TRANSIT and the New Jersey Department of Treasury, Division of Public Contracts Equal Employment Opportunity Compliance an Initial Project Workforce Report (Form AA-201) consisting of forms provided by NJ TRANSIT and completed by the Bidder (contractor) in accordance with Subchapter 7 of the regulations promulgated by the Treasurer pursuant to P.L. 1975, c.127. **Bidders shall comply with NJ TRANSIT's General Provisions for Construction, Article 11.2 entitled "Equal Opportunity."**

H.8 FAILURE TO EXECUTE CONTRACT

Failure of a Bidder to whom the Contract is awarded to execute the Contract or to file acceptable bonds or certificates and policies of insurance, as provided herein, shall be just cause for the annulment of the award and the forfeiture of such Bidder's Bid Security.

H.9 RELIEF OF BIDDERS

No Bidder shall be relieved of his Bid, nor shall any change be made in his Bid, because of a mistake, except as provided under applicable New Jersey Statutes and Administrative Codes.

H.10 RELEASE OF BID GUARANTEES

Within thirty (30) working days of Bid opening, NJ TRANSIT will release or return, as appropriate, the Bid Security of all but the two lowest responsible Bidders. The Bid Security of the two lowest Bidders shall be released or returned upon execution and delivery of the Contract and Performance and Payment Bonds by the Bidder to whom the Contract has been awarded as required by H.6.

I. PROTEST PROCEDURE

I.1 PURPOSE

This section describes the policies and procedures governing the receipt and resolution of Bidder protests in connection with an Invitation for Bid (IFB).

I.2 PROCEDURE

I.2.1 Parties

Only an interested party may file a protest.

I.2.2 Types of Protests/Time Limits

- a. Protests based upon alleged restrictive specifications or alleged improprieties in NJ TRANSIT's procurement process must be filed no later than five (5) days prior to the bid opening date.
- b. Protests based upon alleged improprieties of a Bid shall be filed no later than five (5) days after the Protestor knows or should have known of the facts giving rise thereto.
- c. Protests based upon the award of a contract shall be filed no later than five (5) days after the notification to the unsuccessful firms of NJ TRANSIT's intent to award, or no later than five (5) days after an unsuccessful firm becomes aware of NJ TRANSIT's intent to award a contract, whichever comes first.
- d. All protests must be filed in writing. Oral protests will not be accepted.

I.2.3 Where To File

Protests must be filed directly with NJ TRANSIT's Contracting Officer at the address below and identifying the Invitation for Bid No.

Mr. James Schworn, Chief, Procurement and Support Services
NJ TRANSIT
One Penn Plaza East, Sixth Floor
Newark, NJ 07105

IFB NO.: _____

I.2.4 The Protest

- a. The protest must contain the following information:
 - (i) The name, address and telephone number of the protestor.
 - (ii) Identity of the IFB (by number and description).
 - (iii) A statement of the specific grounds for protest and any supporting documentation. Additional materials in support of the protest will only be considered if filed within the time limits set in Paragraph I.2.2.
 - (iv) An indication of the ruling or relief desired from NJ TRANSIT.
- b. If the protest is filed before contract award, the potential contractor will be advised by NJ TRANSIT of the pending protest.
- c. If deemed appropriate by NJ TRANSIT, an informal conference on the merits of the protest may be conducted with all interested parties allowed to attend.

I.2.5 Confidentiality of Protest

Material submitted by a protestor will not be withheld from any interested party, except to the extent that the withholding of information is permitted or required by law or regulation.

If the protestor considers that the protest contains proprietary material which should be withheld, a statement advising of this fact must be affixed to the front page of the protest documents and the alleged proprietary information must be so identified wherever it appears.

I.2.6 Response to the Protest

NJ TRANSIT's Contracting Officer, or designee, will respond to the protest within a reasonable time after receipt of the protest by NJ TRANSIT. NJ TRANSIT's response shall address only the issues raised originally by the protestor.

I.2.7 Rebuttal to NJ TRANSIT Response

The protestor may submit a written rebuttal to NJ TRANSIT's response, addressed to the Contracting Officer, but must do so within five (5) days after receipt of the original NJ TRANSIT response. New issues in the rebuttal will not be addressed by NJ TRANSIT. After receipt of the protestor's rebuttal, the Contracting Officer will review the protest and notify the protestor of his final decision.

I.2.8 Request for Additional Information

Failure of the protestor to comply expeditiously with a request for information as specified by NJ TRANSIT's Contracting Officer, or designee, may result in determination of the protest without consideration of the additional information. If any parties to the protest

request information from another party, the request shall be made to NJ TRANSIT's Contracting Officer, or designee, and shall be complied with by the other party within five (5) days if NJ TRANSIT so directs.

I.2.9 Request for Reconsideration

If data becomes available that were not previously known, or there has been an error of law, a protestor may submit a request for reconsideration of the protest. NJ TRANSIT's Contracting Officer will again review the protest considering all currently available information. The Contracting Officer's determination will be made within a reasonable period of time, and his decision will be considered final.

I.2.10 Procurement Process Status

Upon timely receipt of a protest, NJ TRANSIT will delay the opening of bids until after resolution of the protest for protests filed prior to the bid opening, or withhold award until after resolution of the protest for protests filed after bid opening. However, NJ TRANSIT may open bids or award a contract whenever NJ TRANSIT, at its sole discretion, determines that:

- a. The items or work to be procured are urgently required; or
- b. Delivery or performance will be unduly delayed by failure to make the award promptly or;

Failure to make prompt award will otherwise cause undue harm to NJ TRANSIT or the Federal Government.

I.2.11 Federal Transit Administration (FTA) Involvement

Where procurements are funded by the FTA, the protestor may protest to the FTA only where the protest alleges that NJ TRANSIT failed to have or to adhere to its protest procedures, failed to review a complaint or protest, or violated a Federal law or regulation. Any protest to the FTA must be filed in accordance with FTA Circular 4220.1F.

I.2.12 Definitions **Applicable to Instructions to Bidders, Section I, entitled "Protest Procedure"**

- a. "Days" means working days.
- b. "File or Submit" means date of receipt by NJ TRANSIT's Contracting Officer.
- c. "Federal Law or Regulation" means any valid requirement imposed by Federal statute or regulation governing contracts awarded pursuant to a grant agreement between NJ TRANSIT and the FTA. This includes the requirements as stated in FTA Circular 4220.1F.
- d. "Contracting Officer" means the Chief of Procurement & Support Services or his designee as indicated in the solicitation document.

- e. "Interested Party" means all bidders/offers. It may also include a Subcontractor or supplier provided they have a substantial economic interest in a portion of the IFB.
- f. "Potential Contractor" means the bidder that is in line for award of the contract in the event that the protest is denied.

**NEW JERSEY TRANSIT CORPORATION
SEALED BID NO.:13-094X
SPECIAL PROVISIONS
for the
HOBOKEN TERMINAL
Restoration of the Main Waiting Room
Restoration of Retail Areas
Replacement of Pumps at Ejector Stations 4 & 5**

TABLE OF CONTENTS

Contents

SP 1	Communication With NJ TRANSIT (B4)	3
SP 2	DBE Certification (C3)	3
SP 3	DBE Forms and Certification (E4.1)	3
SP4	Description of Work (1.18)	4
SP 5	Permits, Laws and Regulations (1.6)	8
SP 6	Assigning and Subcontracting Contract (1.9)	8
SP 7	Time Of Completion - Delay - Liquidated Damages (2.1)	9
SP 8	Asbestos and Lead Base Paint Requirements (3.7)	11
SP 9	Responsibility for Work (4.1)	11
SP 10	Use Of Premises (4.2)	13
SP 11	Protection of Public Utilities (4.7)	14
SP 12	Maintenance of Marine Traffic (4.10)	15
SP 13	Arts In Transit (4.13)	15
SP 14	Field Office and Sanitary Facilities (5.2)	15
SP 15	Construction Sign (5.3)	15
SP 16	Temporary Water, Light and Power (5.4, 5.5)	15
SP 17	Project Meetings (6.1)	15
SP 18	Construction Project Schedule (6.2)	15
SP 19	Contract Drawings and Specifications (6.3)	17
SP 20	General Requirements for Submittals (6.4)	17
SP 21	Shop and Working Drawing Submittals (6.5)	18
SP 22	Product and Equipment Submittals (6.7)	18

SP 23	Materials-Workmanship-Labor (7.2)	18
SP 24	Inspection of Work (7.3)	19
SP 25	Insurance/Indemnification (9.2)	19
SP 26	New Jersey Prevailing Wage Act (11.1)	20
SP 27	Utilization of Disadvantaged Business Enterprises (11.3)	20
SP 28	Measurement and Payment (12.1)	20
SP 29	Employee Protections-Construction Activities (14.1)	20

APPENDIX A-1 SPECIAL APPROVAL REQUIREMENTS FOR CONTRACTORS AND CONTRACTOR PERSONNEL PERFORMING HISTORICAL RESTORTION WORK

ATTACHMENT A THE STATE OF NEW JERSEY PREVAILING WAGE DETERMINATION FOR HUDSON COUNTY, NEW JERSEY (69 PAGES)

ATTACHMENT B DBE REQUIREMENTS FOR RACE NEUTRAL FEDERAL PROCUREMENT ACTIVITIES (29 PAGES)

ATTACHMENT C THE FEDERAL GENERAL WAGE DETERMINATION FOR HUDSON COUNTY, NEW JERSEY (9 PAGES)

SP 1 Communication With NJ TRANSIT (B4)

Supplement Article B.4 of NJTRANSIT's Instructions to Bidders for Construction by adding the following:

The Representative of the Contracting Officer shall be:

All questions must be directed to Robert Delitto, Managing Contract Specialist, NJ Transit Procurement Department at 973-491-7542 or rdelitto@njtransit.com.

SP 2 DBE Certification (C3)

Supplement Article C3 "DBE CERTIFICATION" of the Instructions to Bidders by adding the following:

As a aid in meeting its commitment to its Disadvantaged Business Enterprise (DBE) Program, NJ TRANSIT has assigned a DBE race neutral goal on this project.

NJ TRANSIT's DBE Program shall be accorded the same priority as compliance with all other legal obligations required by NJ TRANSIT and the USDOT. Bidders shall comply with and refer to New Jersey Transit Corporation, DBE Requirements for Race Neutral Federal Procurement Activities included in the Contract Documents in the award and administration of NJ TRANSIT contracts.

All NJ Unified Certification Program (NJUCP) certified DBE firms, including suppliers, are eligible to participate in this contract. Questions regarding a firms DBE certification should be directed to Ms. Jacqueline Hannah, Senior Business Development Specialist, of the Contract Compliance Unit of the Office of Business Development (OBD) at 973-491-7539 or by email at jhannah@njtransit.com or in writing at:

Ms. Jacqueline Hannah
Senior Business Development Specialist
NJ TRANSIT
Office of Business Development, Contract Compliance Unit
One Penn Plaza East
Newark, NJ 07105-2246

SP 3 DBE Forms and Certification (E4.1)

Supplement Article E4.1 of the Instructions to Bidders by adding the following:

Bidders are encouraged to submit these mandatory attached required DBE forms (A, A1, A2, B, D and DBE certificate) forms on the bid opening date to expedite the review of the Bidders proposed DBE Program and to prevent delay in the contract award. These applicable mandatory required DBE forms (**ATTACHMENT B-DBE REQUIREMENTS FOR RACE NEUTRAL FEDERAL PROCUREMENT ACTIVITIES**)

shall be completed in their entirety with no blank fields. Carrying out these requirements is a matter of Bidder responsibility and failure to do so may render the bidder non-responsible which may affect the award of the contract.

SP4 Description of Work (1.18)

Supplement Section 1 (General Requirements) of the General Provisions for Construction by adding the following as a new Article 1.18:

1.18 Description of Work

The Contract shall include all supervision, labor, material, equipment, tools, supplies, and incidentals required to complete the work as shown on the Drawings and detailed in the Technical Provisions.

1.18 A Main Waiting Room

The Main Waiting Room will be closed to allow the Contractor to perform the remediation of this space. Finished wall surfaces from the top of Limestone shelf to the floor will be cleaned and repaired as shown on the drawings. The terrazzo floor shall be cleaned and repaired. All woodwork including the benches, doors and door and window frames as shown on the drawings shall be remediated and cleaned. While the benches are removed the existing fan coil units will be removed and replaced with new cast iron radiators. All electrical devices (receptacles, switches) and junctions boxes subjected to flood waters shall have the devices and wiring removed back to the panel. Conduits will be flushed out, cleaned and dried. New wiring will be provided from the panels back to the devices.

During the closure of the Main Waiting Room the contractor will provide continuous access to the Men's and Women's Toilets. Access to the Men's toilet will be provided through a back entrance in Brick Alley. Access to the Women's toilet will be by way of an enclosed passageway to be constructed by the Contractor through the East Vestibule. See Contract Drawings for additional information. For the duration of this Project NJTRANSIT shall assume the responsibility for maintaining the rented Accessible Toilet Trailer located in Warrington Plaza.

1.18B South Concourse Retail Areas Remediation Scope of Work

I. General

Each space will require selective demolition and microbial remediation, cleaning, and reconstruction. Microbial remediation is to be performed in accordance with the separate written plan provided. See notes below for additional specific demolition and reconstruction required at each area. All work must be ADA and Code Compliant. All materials to be measured and paid for as a lump-sum item SOUTH CONCOURSE RETAIL AREAS REMEDIATION SCOPE OF WORK.

II. Bakery/Deli

- A. Nearly complete interior demolition and re-construction, ready for tenant fit-out. Removal of all existing wall finishes to expose the wall cavity at all areas. Provide all rough and finish plumbing, piping, fittings, electrical wiring, devices, plates, connections, and disconnections as required to facilitate and complete the work. Remove and dispose of, or properly cap, abandoned devices and equipment as directed or required.
- B. Raised Floor structure: The existing floor consists of wood sleepers over concrete; ramping exists at the front and rear doors. The floor structure is of wood with tongue and groove plank subfloor and underlayment. The finish floor is ceramic quarry tile. The entire system is to be removed and replaced in kind, utilizing water-resistant materials (such as concrete filled corrugated steel deck supported by pancake concrete masonry units or structural HDPE lumber and decking). Replacement must accommodate a live load of 100 psf and a concentrated load of 1000 pounds under the deflection limits of NJ-IBC 2009.
- C. Toilet room consists of a minimally accessible single-user facility with a floor mounted water closet and a wall hung lavatory. Remove, clean, and replace existing toilet, existing sink and existing fittings. The floor finish elsewhere continues into the toilet room. Provide grab bars, toilet paper & soap dispenser, paper towel holder and mirror.
- D. Existing 3-compartment sink is to be removed, cleaned and reinstalled.
- E. Retail equipment: Remove and replace existing soda refrigeration unit (approx. 13'-2" long x 2'-9" deep x 6'-6" high)
- F. Retail fixtures: All existing equipment, millwork and counters are to be removed and disposed of properly.
- G. Interior wall construction: Non load bearing wood studs to be replaced with metal studs similarly sized. Wood studs @ load bearing locations will require replacement with metal studs as well – engineering calculations to determine gauge and spacing must be provided.
- H. Exterior wall construction: Wood studs must remain in place, as they support the historic fabric at the exterior. Perform environmental cleaning and install rigid insulation (Green Guard Extruded polystyrene (xps) boards, 2" thick) in exposed exterior wall cavities. Dragonboard at exterior walls with xps shall run to underside of roof or floor deck above to provide thermal barrier as required by NJIBC 2009, Section 2603.4.
- I. Doors: Remove existing hollow metal doors, frames and hardware and replace with new.
- J. Drywall: all walls to receive 9/16" thick Dragonboard product installed in accordance with the manufacturer's details for a 2 hour fire rated assembly.
- K. Ceilings: All existing drywall ceiling and soffit areas may remain in place. Coordinate wall stud replacement therewith. All existing suspended acoustic tile ceiling panels and grid are to be removed and replaced. All existing

ceiling supply registers and return grilles are to be removed, carefully cleaned, and re-installed.

- L. Lighting: exit signs, emergency lighting, and lay in fluorescent fixtures are to be removed, stored and re-installed. Existing track lighting at drywall soffit is to remain in place. Contractor will be required to file permits for emergency lighting work.
- M. Finishes: Paint all walls and metals with primer and finish coats as required by substrate. Install new CT/QT floor throughout and CT to 4' high at toilet room walls.

1.18C III. Lackawanna Liquors

- A. Nearly complete interior demolition and re-construction in-kind. Removal of all existing wall finishes to expose the wall cavity at all areas. Provide all rough and finish plumbing, piping, fittings, electrical wiring, devices, plates, connections, and disconnections as required to facilitate and complete the work. Remove and dispose of, or properly cap, abandoned devices and equipment as directed or required. Coordinate all dimensions of equipment to be replaced with those that exist.
- B. Toilet room consists of a non-accessible single-user facility with a floor mounted water closet and a vanity lavatory. The floor finish is of quarry tile. Provide toilet paper & soap dispenser, paper towel holder and mirror.
- C. HVAC Equipment: Salvage existing unit: Clean, repair as required; test to assure operating condition.
- D. Retail equipment: Remove and replace existing rear walk-in cooler unit (Bally Engineered Structure with swinging glass display doors: approx. 14' long x 6'-6" deep). Remove and replace two existing 3 door cooler units at north wall (Custom Cool type).
- E. Retail fixtures: All existing equipment is to be removed and disposed of properly. All interior millwork, shelving and counters are to be removed and replaced in-kind. Coordinate electrical work with Tennant.
- F. Coordinate with tenant to provide temporary relocation of ice machine (to remain operational) during construction. Reinstall at completion of work.
- G. Interior wall construction: Non load bearing wood studs to be replaced with metal studs similarly sized. Wood studs @ load bearing locations will require replacement with metal studs as well – engineering calculations to determine gauge and spacing must be provided.
- H. Exposed masonry walls to be block-fill-primed and finish painted.
- I. Exterior wall construction: Wood studs must remain in place, as they support the historic fabric at the exterior. Perform environmental cleaning and install rigid insulation (Green Guard Extruded polystyrene (xps) boards, 2" thick) in exposed exterior wall cavities. Dragonboard at exterior walls with xps shall

run to underside of roof or floor deck above to provide thermal barrier as required by NJIBC 2009, Section 2603.4.

- J. Doors: Remove existing hollow metal doors, frames and hardware and replace with new. Replace existing wood toilet room door with new hollow metal door, frame, and privacy hardware.
- K. Drywall: all walls to receive 9/16" thick Dragonboard product installed in accordance with the manufacturer's details for a 2 hour fire rated assembly.
- L. Ceilings: All existing drywall ceiling and soffit areas may remain in place. All existing suspended acoustic tile ceiling panels and grid are to be removed and replaced. All existing ceiling supply registers and return grilles are to be removed, carefully cleaned, and re-installed.
- M. Lighting: exit signs, emergency lighting, and lay in fluorescent fixtures are to be removed, cleaned, stored and re-installed. Contractor will be required to file permits for emergency lighting work.
- N. Finishes: Paint all with appropriate primer and finish coats as required by substrate. Remove and replace existing VCT and cove base.

1.18D IV. NJT Lost and Found / Station Master:

This area has been partially demolished. The scope will encompass completion of demolition as well as:

- A. Interior wall construction: Non load bearing wood studs to be replaced with metal studs similarly sized. Wood studs @ load bearing locations will require replacement with metal studs as well – engineering calculations to determine gauge and spacing must be provided.
- B. Exterior wall construction: Wood studs must remain in place, as they support the historic fabric at the exterior. Perform environmental cleaning and install rigid insulation (Green Guard Extruded polystyrene (xps) boards, 2" thick) in exposed exterior wall cavities. Dragonboard at exterior walls with xps shall run to underside of roof or floor deck above to provide thermal barrier as required by NJIBC 2009, Section 2603.4.
- C. Patch existing concrete slab to provide smooth, even surface.
- D. Doors: Remove remaining existing interior doors, frames and hardware and replace all (existing and previously removed) with new hollow metal doors, frames and new hardware.
- E. Drywall: all walls to receive 9/16" thick Dragonboard product installed in accordance with the manufacturer's details for a 2 hour fire rated assembly.
- F. Ceilings: All existing drywall ceilings, soffit, and suspended acoustic tile ceiling panels and grid are to be removed and replaced. All existing ceiling supply registers and return grilles are to be removed, carefully cleaned, and re-installed.

- G. Lighting: exit signs, emergency lighting, and lay in fluorescent fixtures are to be removed, cleaned, stored and re-installed. Contractor will be required to file permits for emergency lighting work.
- H. Finishes: Paint all with appropriate primer and finish coats as required by substrate. Remove and replace existing VCT and cove base.

1.18E Ejector Stations #4 & #5

The scope of work for the Ejector Stations #4 and #5 includes the replacement of pumps, controls and new electric panels and circuits to power these ejector stations. Ejector Station #4 requires the repair of the steel vessel in which the pumps are housed. Ejector Station #5 is in Warrington Plaza and will require trenching to install the new control and power conduits for the new pumps. A new power and control panel will be installed within the Team concourse and accessed by a new raised steel platform. During hours when work is not being performed the trench in the plaza will be protected by steel plating.

SP 5 Permits, Laws and Regulations (1.6)

Delete the first paragraph of Sub-Article 1.6.3 and replace with the following:

The Contractor shall return, within two (2) calendar days of receipt of forms from NJ TRANSIT, signed and sealed permit application forms, along with the required fees, to NJ TRANSIT. NJ TRANSIT will forward the Contractor's applications and fee payment to the DCA. The Contractor will be reimbursed for direct costs for these fees from Item DCA Permit Fee allowance, without Mark-ups. The contractor will only be required to obtain DCA permits for the following work;

- Main Waiting Room – Mechanical and Electrical work
- Retail Areas - Mechanical and Electrical work and Emergency Lighting
- Ejector Stations 4 & 5 - Mechanical and Electrical work

The Contractor acknowledges that governmental agencies and bodies such as the DCA, DEP and SHPO require a significant amount of time to review, process and approve submittals, permits and applications. Consequently, the Contractor realizes that sizeable allowances in the Project Schedule may be required because of same, and even then, adjustments to the Contractor's work plans may be needed due to the aforementioned lead times. NJ TRANSIT has no authority or control over the DCA, DEP, SHPO or any other reviewing agency.

SP 6 Assigning and Subcontracting Contract (1.9)

Modify Sub-Article 1.9.2 of the General Provisions for Construction such that the first sentence reads as follows:

At the Preconstruction Meeting, the Contractor shall submit to the Construction Manager the Subcontractor Evaluation Data Forms (Appendix A) and the Special Qualification Forms for Contractors Performing Historical Restoration Work and For Contractor Personnel Performing Historical Restoration Work (Appendix A-1)

for all subcontractors to be used on the Project.

SP 7 Time Of Completion - Delay - Liquidated Damages (2.1)

Add the following to Sub-Article 2.1.1 of the General Provisions for Construction as follows:

The Contractor shall pay NJ TRANSIT the amount of \$4,000 (Four-Thousand Dollars) as liquidated damages for each calendar day that the Contractor delays completion of all the specified Work required for the Main Waiting Room and Vendor spaces as set forth under Sp4, save for "punch list work", as defined in the General provisions, beyond the number of days specified in Article 2.1.2 . Furthermore, the Contractor shall pay NJ TRANSIT the amount of \$3,000 (Three Thousand) as liquidated damages for each calendar day that the Contractor delays completion of the specified Work required for the New Ejector Pump installation, as set forth under Sp4, save for "punch list work", as defined in the General provisions, beyond the number of days specified in Article 2.1.2 . Payment of liquidated damages shall not be cumulative but shall be concurrent. In the event the Work required for completion of the Main Waiting Room and Vendor spaces is not completed beyond the days specified in Article 2.12 for completion of the New Ejector Pump installation, liquidated damages shall not exceed the amount of \$500,000 (Five-Hundred Thousand Dollars).

Add the following to Sub-Article 2.1.2 of the General Provisions for Construction as follows:

As to the Main Waiting Room and Vendor spaces the Contractor shall complete all such required Work within 60 calendar days from NTP. As to the New Ejector Pump installation as set forth under SP4, the Contractor shall complete all such required Work within 110 calendar days from NTP. Additionally NJ TRANSIT has established a Milestone as to early completion of Main Waiting Room Milestone only as further provided under 2.1.15 below (SP7).

Add the following to Sub-Article 2.1 of the General Provisions for Construction as follows:

2.1.14 An extension of time will not be granted for delay caused by a shortage of materials, unless the Contractor furnishes to NJ TRANSIT documentary proof that he has diligently made every effort to obtain such materials from all known sources. The Contractor shall also submit proof, in the form of the Project Schedule required by Article 6.2 of the General Provisions for Construction, showing that the inability to obtain such materials when originally planned did, in fact cause a delay in Substantial Completion of the Work that could not be compensated for by revising the sequence of his operations. Only the physical shortage of material will be considered under these provisions as a cause for extension of time. No consideration will be given to any claim that material could not be obtained at a reasonable, practical or economic cost.

2.1.15 NJ TRANSIT will make an Early Completion Incentive Payment in accordance with the table below. All work, including all NJDCA approvals, as required, must be completed as specified in the Contract Documents, subject to concurrence by the Construction Manager. If the permanent cast iron radiators are not installed, functioning and approved by DCA, temporary equivalent electric heaters, as approved by the construction manager shall be added, at the contractor's sole expense. No extension of Contract Time will be granted for any reason in order to achieve the Early Incentive.

Punch list work, as defined in the General Provisions, need not be completed in order to receive the Early Completion Incentive Payment as specified in the table below, so long as such remaining corrective work relating to Main Waiting Room Milestone, does not require the shutting down or closure of any major public portion of the Main Waiting Room, at any time, in order to properly perform such remaining corrective work, as determined within the sole discretion of the CM, and furthermore, that performance of such corrective work does not unreasonably interfere with the functionality of the Main Waiting Room or the ability of the public to utilize such public facility as intended.

Milestone – Main Waiting Room open to the public with heat, as specified in SP 5 subsection 1.18A.

45 calendar days from NTP	\$300,000.00
46-48 calendar days from NTP	\$250,000.00
49-55 calendar days from NTP	\$150,000.00
56-58 calendar days from NTP	\$50,000.00
More than 60 calendar days from NTP	\$0.00

2.1.16 Incentive Procedure – Should the Contractor complete the milestone work within this Contract within the durations described in this Special Provision, the Contractor must provide written notice to the Construction Manager within twenty four (24) hours of such event. The Construction Manager has two (2) business days to inspect and report back to the Contractor whether or not it concurs with the Contractor's notice of completion.

2.1.17 In the event that the Construction Manager does not concur with the Contractor's notice of completion, the Construction Manager will provide the Contractor with the specific milestone work that has not been completed.

In order for the Contractor to receive the Incentive Payment, it must complete the specific areas of work within the durations shown above and again provide twenty four (24) hour notice of cure to the Construction Manager.

In the event that the Construction Manager deems that the milestone work has been completed, the Incentive Payment shall only be effective from the actual date of the completed milestone work, provided the date is prior to the date set forth in this Special Provision.

Upon receiving concurrence from the Construction Manager stating that the Contractor has achieved Milestone date, NJ TRANSIT will issue a Change to the Contract adjusting the Contract Price by the amount corresponding with the milestone Incentive in accordance with Article 3 – CONTRACT CHANGES. Thereafter the Contractor may include the amount of the Early Completion Incentive in its next partial payment request.

The Contractor shall have no right to file any dispute relating to Early Completion Incentive decisions made by NJT.

If the Contractor fails to meet an Incentive date, it shall not be entitled to the associated Incentive Payment and it shall have no appeal from any determination that the Early Completion Incentive Payment is not due.

Incentive Payments are not to be considered as compensation for Work performed. Incentive Payments are conditioned upon the Contractor fully meeting the requirements set forth under the Contract Documents.

SP 8 Asbestos and Lead Base Paint Requirements (3.7)

Add the following Article 3.7:

Contractor shall assume that all existing coatings and walls do not have asbestos and lead based paints (LBP) and need not be tested by the Contractor prior to demolition work. If, in the performance of the work, the Contractor encounters materials that potentially are hazardous, the contractor shall proceed in compliance with all applicable regulations, laws and ordinances concerning removal, handling and protection against exposure to hazardous material. Any work to remediate and/or remove asbestos or LBP will be compensated under allowance bid Item ASBESTOS AND LEAD BASED PAINT REMOVAL to the extent required to perform the work, in accordance with applicable State and Federal regulations. If the Contractor suspects that asbestos or lead based paints are present in the work area, the Contractor shall contact the Construction Manager within 24 hours to receive direction on how to proceed.

HAZARDOUS MATERIALS

Hazardous materials may be encountered during demolition operations, including the presence of asbestos and lead based paint. The Contractor must comply with applicable regulations, laws, and ordinances concerning removal, handling, and protection against exposure to hazardous material. The Contractor must take special precaution when dealing with hazardous materials on this project because of the close proximity to the public, passengers, and employee

SP 9 Responsibility for Work (4.1)

Supplement Article 4.1.3 of the General Provisions for Construction by adding the following:

- 4.1.3.1 The Contractor shall, within 7 days of Notice to Proceed and before any work, present for review by the Construction Manager, a comprehensive Safety Plan. This Plan shall be specific to this Project and shall include subsections covering all key subcontract work, such as demolition, abatement, scaffolding and equipment. It shall have emergency phone numbers and 24-hour emergency contact information for Contractor and key subcontractor supervisory personnel. Work may not proceed until the Safety Plan has been accepted by NJ TRANSIT. The Safety Plan shall conform to Federal Workplace and Worker Safety Regulations that are applicable to construction workers and construction sites.
- 4.1.3.2 Contractor shall have a designated Safety Supervisor on site. This person shall be a competent person, responsible for assuring compliance with requirements of the Safety Plan and all other safety regulations. At a minimum, this person shall have taken the 30-hour OSHA safety course, within the last two years and have the authority to enforce the Safety Plan.
- 4.1.3.3 MSDS records will be maintained on site for all materials to which construction or NJ TRANSIT personnel may be exposed during the course of the work.
- 4.1.3.4 Contractor must have all temporary scaffolding systems designed by a Professional Engineer, licensed in New Jersey. Detailed plans and design calculations, signed/sealed by this PE, must be submitted for review by the Engineer prior to proceeding. Impact to the Terminal from the use of temporary systems shall be restored to its pre-existing condition, or better. Where any temporary system impacts NJ TRANSIT operations, its design is subject to modification, without additional cost, to mitigate that operational impact.
- 4.1.3.5 Contractor shall, with the applicable subcontractor, perform a detailed Job Safety Analysis (JSA) of the scaffold, cleaning / remediation and coating trades. The JSA will include a cooperative study by Contractor's Safety Supervisor, trade supervisor and Construction Manager of steps involved in performance of the work, identification of all potential hazards and establishment of a plan for mitigating those hazards. A pre-construction safety meeting will be held for these trades, and any others that Construction Manager or Contractor believes merit it. Contractor shall hold weekly "tool box" safety meetings for all on site trades, with an organized program, such as is provided by the BCA. Construction Manager may elect to attend.
- 4.1.3.6 The preservation of the building is of the highest importance. The Contractor is responsible for taking all necessary precautions to protect elements of the structure that are not scheduled to be disturbed as part of this Contract. The Contractor shall be responsible to remove, salvage and preserve any historic ornamental elements from the work areas prior to any demolition work as indicated on the Contract Drawings:

The Contractor shall be responsible to catalogue and preserve the removed salvaged historic elements. The Contractor shall store the preserved historic elements in the 2nd floor of the Ferry Terminal building as designated by the Construction Manager. NJ TRANSIT shall be responsible to remove the preserved historic elements from the site and permanently store them as approved by the SHPO. These salvaged historic elements will be returned to be reinstalled as necessary.

SP 10 Use Of Premises (4.2)

Supplement Article 4.2 of the General Provisions for Construction by adding the following:

- 4.2.1.1 The Contractor fully acknowledges that the Work is within the confines of a very active and congested Terminal Complex, vital to the operations of NJ TRANSIT, and that the Contractor's access to and use of the premises may be restricted by NJ TRANSIT, without advance notice, to insure continued operations or the security/safety of said Terminal Complex. Furthermore, the Contractor acknowledges the Work must be done to accommodate NJ TRANSIT's operations at all times and that all construction activities in all areas must be completed in such a manner to minimize or eliminate all disruptions, interferences or hindrances to NJ TRANSIT's operations. If the Contractor's access to or use of the Project site is severely restricted, the Contractor shall be given additional time only, in accordance with Article 2.2- No Damages for Delay of the General Provisions.

The Contractor shall be granted access to the following areas as specified below;

- Main Waiting Room and Retail Areas – The Main Waiting Room and Retail Areas will be **closed** for the duration of this project. In order to meet the project completion date for this Contract the Contractor is encouraged to work multiple shifts and will be granted 24 hour / 7 day access to the Main Waiting Room and Retail Areas.
 - Ejector Stations 4 and 5 – Access to Ejector Station #4 (Train Concourse) and Station #5 (Warrington Plaza) shall not be allowed during the hours of 7 – 10 AM and 3 – 6 PM on weekdays. On weekdays the Contractor shall be granted full access to non-public areas where contract work is required to be installed. Full access to Ejector Stations #4 and #5 will be granted to the Contractor during the weekend. The Contractor shall install steel plates over the excavated trench in Warrington Plaza when no work is being performed. Any shutdowns of the existing ejector system for the contractor to perform its work, is restricted to the hours of 1AM to 5AM daily.
- 4.2.1.2 The Construction Manager shall designate specific areas for parking of Contractor vehicles and loading and unloading of materials and equipment.

The Contractor shall not park or unload vehicles in any location other than the designated locations without written approval from the Construction Manager.

Construction staging and lay-down area shall be limited to area(s) approved by NJ TRANSIT. Contractor shall secure storage areas.

- 4.2.4.1 The Contractor shall provide safe separation of construction areas from areas in use by NJ TRANSIT and those accessible to the public. This work includes, but is not limited to:
- Temporary fencing (interlocking crowd control barricades, Landware heavy duty safety fence, or approved equal) shall be installed around all construction areas.
 - Debris nets shall be used around areas of jack hammering, if debris is found to be entering areas accessible to the public or onto trains.
- 4.2.5.1 The Contractor shall be allowed space to store materials, per Paragraph 4.2.1.2 above. The designated areas shall be coordinated with the Construction Manager during the Pre-Construction Meeting and presented for approval via the Logistics Plan. NJ TRANSIT cannot guarantee that additional storage space will be available when the Contractor needs or desires it, that such space will be sufficient to meet all its needs or that the size and location storage space will not change due to operational needs of NJ TRANSIT.
- 4.2.6.1 The Contractor shall comply with NJ TRANSIT security requirements, which are subject to change based on ongoing threat levels established by the Federal or State Homeland Security Director. These requirements include, but are not limited to:
- The Contractor shall provide 2 business Days advance notice to the Construction Manager of all vehicles and personnel scheduled to enter the construction area.
 - The Contractor shall issue everyone working on-site a specific ID card with unique employee number. The Contractor shall insure all workers present on-site display the Project ID card at all times. All ID information shall be maintained on a website-accessible database (Excel or equal) and updated on a daily basis. This Excel spreadsheet shall also include the rail safety training number and date for all workers who have been trained.

SP 11 Protection of Public Utilities (4.7)

Delete the last paragraph of Article 4.7.3 and add the following:

- 4.7.3.1 It is not anticipated that NJ TRANSIT will have to relocate active utilities away from the area of work for this project. However if relocation is required, in some cases, such as for power, telephone and data cable, relocation may be impractical and NJ TRANSIT may detach the utility from

the area of work and temporarily support it. In such cases, the Contractor shall protect the utility from construction damage and instruct workers in proper conduct. Scheduling and coordination between NJT Force Account and Contractor will be handled through the Construction Manager.

SP 12 Maintenance of Marine Traffic (4.10)

Delete these requirements in entirety

SP 13 Arts In Transit (4.13)

Delete General Provisions and APPENDIX E – AGREEMENT BETWEEN CONTRACTOR AND ARTIST

SP 14 Field Office and Sanitary Facilities (5.2)

Delete all requirements of Article 5.2 and replace with the following:

NJTRANSIT shall pay the costs of maintaining the Accessible Toilets located in Warrington Plaza for the duration of the Project.

SP 15 Construction Sign (5.3)

Delete the first sentence of Article 5.3 and replace with the following:

The Contractor shall construct and install one (1) State Project Sign (Type 7.1) and one (1) FTA Project Sign (Type 7.1A) as detailed in the NJ TRANSIT Signage Standards Manual.

SP 16 Temporary Water, Light and Power (5.4, 5.5)

Supplement Article 5.4 of the General Provisions for Construction by adding the following:

The Contractor is advised that NJ TRANSIT will supply temporary electric and water connections for use on work related to this project at locations convenient to NJ TRANSIT, but within the work area.

SP 17 Project Meetings (6.1)

Modify the first sentence of Sub-Article 6.1.3A to read:

A preconstruction meeting will be held 3 work days after the notice of award.

SP 18 Construction Project Schedule (6.2)

Modify the first sentence of Sub-Article 6.2.5 to read:

Within 3 business days of receipt of Contractor's DPS, the Construction Manager will review the schedule for conformance with the Contract and provide the Contractor with the Construction Manager's comments. The Contractor shall incorporate the Construction Manager's comments into the DPS and shall resubmit the DPS to the Construction Manager within three (3) work days of receipt of such comments. Contractor shall repeat this process (at its own expense) until the Construction Manager approves the DPS.

Modify Sub-Article 6.2.9 in entirety to read:

Each DPS submittal shall include a written narrative report explaining the schedule and the contractor's approach for meeting completion milestones, an explanation of any delays and schedule slippage and a description of any recovery, if required.

Modify Sub-Article 6.2.4 by inserting the following at the end of the first sentence:

Once the total Baseline Detailed Project Schedule (DPS) is approved, all payments will be processed with the consolidated DPS.

Supplement Sub-Article 6.2.4 by adding the following:

6.2.4.1 The Contractor's DPS shall be submitted without cost data.

Delete the first sentence of Article 6.2.7 and replace with the following:

The DPS shall be a CPM schedule prepared with the software "Primavera Project Planner" (P3), latest version, using the precedence diagram method, or scheduling software that is fully compatible with P3 as approved by the Construction Manager.

Add the following after the third sentence of Article 6.2.12:

The updated Project Schedule shall include the actual start date, percent complete, and remaining duration or actual finish date for each activity in progress, as well as any proposed Schedule revisions, such as the addition of new activities or changes to the logic and/or duration of the existing activities.

Add the following Article 6.2.12.1:

Failure to submit Project Schedules in accordance with this Sub-article or failure of the Contractor to attend and participate in scheduled update meetings shall be sufficient cause for NJ TRANSIT to withhold payment of any application in full until such failure is remedied to the satisfaction of the Construction Manager.

SP 19 Contract Drawings and Specifications (6.3)

Modify Article 6.3 of the General Provisions for Construction by adding the following:

- 6.3.1 Two (2) full size print copies will be provided of Conformed Drawings and any subsequent Bulletins, in lieu of six (6) print sets.
- 6.3.3 The Contractor acknowledges that it must give NJ TRANSIT two (2) business days to address requests for information or clarifications when same deal with apparent ambiguities, errors, or omissions in the Contract Documents which require the Engineer to provide supplemental technical information or drawings; or rewrite or modify the Specifications, and/or Contract Drawings.

SP 20 General Requirements for Submittals (6.4)

Modify Sub-Article 6.4.2 of the General Provisions for Construction to read:

- 6.4.2 No later than three (3) work days after the Notice to Proceed, and before any items are submitted for review, the Contractor shall submit to the Construction Manager two (2) copies of the schedule described *below*.

Supplement Sub-Article 6.4.3 of the General Provisions for Construction by adding

- 6.4.3.1 Submittal Schedule to show dates per the following guidelines:
1. Construction submittals such as Safety Plan, Logistics Plan, Project Schedule shall have the submittal due date as specified in the applicable GP or as modified by the SP
 2. All submittals as specified in the technical specification for the Mold Remediation work shall have a submittal due date as 3 work days after NTP and these submittals shall be presented at the Pre-Construction Meeting
 3. All submittals as specified in the technical specification for the Section 040140.92 Interior Masonry Restoration, Section 05700 Ornamental Metal Restoration, Section 090120.91 Plaster Repair and Replication and Section 0900160.91 Terrazzo Floor Restoration with the exception of Mock Ups shall have a submittal due date of 5 business days after NTP. Mock ups as specified in the previous listed specifications shall be completed as specified by 10 work days from NTP.
 4. All submittals as specified in the technical specifications for the Replacement of Pumps for Ejector Stations 4 and 5 have a submittals due date of 5 business days after NTP

Modify the last sentence of Article 6.4.12 to read as follows:

- 6.4.12 All submittals shall be made within the first thirty (30) days from NTP of the Project

Modify the first sentence of Article 6.4.13 to read as follows:

6.4.13 In scheduling, the Contractor shall allow two (2) business days from receipt for review.

SP 21 Shop and Working Drawing Submittals (6.5)

Modify the first sentence of Sub-Article 6.5.2.1 to read as follows:

6.5.2.1 The Engineer will review the shop and working drawings within three (3) business days.

SP 22 Product and Equipment Submittals (6.7)

Modify the first sentence of Sub-Article 6.7.1 to read as follows:

6.7.1 The Contractor shall, within 3 business days after Notice to Proceed date notify the Construction Manager in writing of the names of manufacturers, product and equipment.

SP 23 Materials-Workmanship-Labor (7.2)

Supplement Article 7.2 of the Contract's General Provisions for Construction by adding the following:

7.2.10 The Contractor assumes all the responsibility and liability associated with ensuring that all workers in its employment or that of its subcontractor's have the capacity to fully understand all verbal and written training, instructions and commands given to them by NJ TRANSIT safety, security and supervisory personnel. The Contractor shall immediately remove and replace all workmen who fail to strictly, completely and immediately comply with all NJ TRANSIT training, instructions and commands.

7.2.11 As a condition of the Contract award, the apparent low bidder shall submit to NJ TRANSIT, within two days of the bid opening, detailed resumes citing the name, training and experience of the Project Manager or Project Superintendent designated for assignment on this Contract.

The Project Manager or Project Superintendent shall be a highly competent, well experienced, cooperative and responsive individual(s) employed full time and will be present on the work site to direct and supervise the Work each and every workday that Work is being performed, from the start of the Work to the acceptance of the same. They shall be empowered by the Contractor to make binding decisions in

a timely manner. They shall be an individual(s) with a minimum of ten years of supervisory experience on construction projects of a similar type and complexity. A list of three (3) references from past (recent) projects shall be furnished. The proposed Project Manager or Project Superintendent must have a demonstrated record of successfully supervising and been cooperative and responsive (in the opinion of the client reference) on at least three (3) projects of similar type and complexity.

7.2.12 The Contractor shall not change the Project Manager or Project Superintendent until their replacement(s) are submitted and approved by NJ TRANSIT.

SP 24 Inspection of Work (7.3)

Supplement Article 7.3 of the Contract's General Provisions for Construction by adding the following:

7.3.8 The Contractor recognizes the necessity to schedule regulatory and code enforcement inspections well in advance and make all reasonable accommodations necessary to facilitate said inspections so as to avoid delay in progressing or completing the Work. Furthermore, the Contractor realizes that even scheduled inspections may be cancelled by the regulatory and code enforcement agencies without warning.

SP 25 Insurance/Indemnification (9.2)

Revise the first sentence of the first paragraph of Sub-Article 9.2.3 to read:

The Contractor shall procure and shall maintain for a period of two (2) years following Substantial Completion, Commercial General Liability Insurance with a minimum amount of \$10,000,000 combined single limit per occurrence, for damages arising out of bodily injuries or death and/or Property Damage.

Amend Sub-Article 9.2.3 in the first paragraph, second sentence to read:

The policy shall name NJ TRANSIT and the following consultants as Additional Insureds with such coverage as is afforded the additional insured hereunder, primary to any other insurance maintained by the additional insured. Additional insured endorsement should be the ISO CG2010 11/85 Edition or its equivalent.

STV, Inc.
De Biasse & Seminara
Jablonski Building Conservation
Matrix New World Engineering
HNTB Corporation

SP 26 New Jersey Prevailing Wage Act (11.1)

Supplement Sub Article 11.1.1 of the General Provisions for Construction by adding the following:

Attachment A: THE STATE OF NEW JERSEY PREVAILING WAGE DETERMINATION FOR HUDSON COUNTY, NEW JERSEY (68 PAGES)

SP 27 Utilization of Disadvantaged Business Enterprises (11.3)

Supplement Article 11.3 "Utilization of Disadvantages Business Enterprises" of the General Provisions for Construction by adding the following:

Contractor and Subcontractor questions regarding the DBE requirements or the mandatory required DBE forms for this Contract should be directed to Ms. Jacqueline Hannah, Senior Business Development Specialist of the Office of Business Development (OBD) at 973-491-7539, jhannah@njtransit.com

SP 28 Measurement and Payment (12.1)

Supplement Sub-article 12.1.4 of the General Provisions for Construction by adding the following:

Unless otherwise specified in the Special Provisions and bid price sheet, the costs for work to be paid by an **Allowance** shall be measured and paid in accordance with the order of priority of use set forth in Article 3.2.5 and the overhead and profit markups set forth in table 3.2.10 of the General Provisions.

SP 29 Employee Protections-Construction Activities (14.1)

Supplement Sub-Article 14.1.1 of the General Provisions for Construction by adding the following:

Attachment C: THE FEDERAL GENERAL WAGE DETERMINATION FOR HUDSON COUNTY, NEW JERSEY (9 pages)

END OF SECTION

**APPENDIX A-1 SPECIAL APPROVAL REQUIREMENTS FOR CONTRACTORS AND
CONTRACTOR PERSONNEL PERFORMING HISTORICAL RESTORTION WORK**

APPENDIX A-1

HOBOKEN TERMINAL Restoration of the Main Waiting Room Restoration of Retail Areas Replacement of Pumps at Ejector Stations 4 & 5 IFB NO. 13-094X

SPECIAL APPROVAL REQUIREMENTS FOR CONTRACTORS AND CONTRACTOR PERSONNEL PERFORMING HISTORICAL RESTORTION WORK

The Hoboken Terminal is listed on the both the New Jersey State and National Register of Historic places. All restoration work must conform to the Secretary of The Interiors Standards for Rehabilitation.

Due to the historic significance of the building, the contractor (if applicable) and selected subcontractors and their craftsmen will be subject to approval by NJ TRANSIT to assure that they have satisfactory previous experience and appropriate skills in the Restoration of Historic Structures.

The contractor, subcontractors and craftsmen selected to perform the work of the following specification sections must be approved for historic preservation skills by NJ TRANSIT.

Section 040140.92 - Interior Masonry Restoration
Section 05700 – Ornamental Metal Restoration
Section 090120.91- Plaster Repair and Replication
Section 090160.91 – Terrazzo Floor Restoration

Prospective subcontractors or general contractors intending to perform the work of these sections must submit:

1. Two completed Historic Preservation Qualification Forms listing two successfully completed projects demonstrating appropriate experience in the work of relevant specification sections. Two forms should be submitted for each specification section requiring Special Approval.
2. An appropriate number of completed Contractor Personnel Experience Qualification Forms for full time personnel to be employed on work of these sections, demonstrating appropriate experience in the work of relevant specification sections. No less than one complete contractor personnel forms should be submitted for each specification section requiring Special Approval.

SPECIAL CONTRACTOR APPROVAL REQUIREMENTS

Section 04140.92 Interior Masonry Restoration

The contractor and craftsmen for the work of this section shall have a minimum of 5 years documented experience in the restoration of interior masonry in historic buildings.

The contractor and all his craftsmen for the work of this section shall have successfully completed a minimum of 3 projects of comparable complexity and skill on Historic Buildings within the previous 5 years.

Section 05700 Ornamental Metal Restoration

The contractor and craftsmen for the work of this section must be regularly engaged in Architectural Metals Restoration, including cast iron restoration. The Contractor/Subcontractor must demonstrate that within the last 5 consecutive years, he or she has successfully performed and completed a minimum of 3 projects similar in scope and type to the required work involving Historic Buildings.

Section 090120.91 Plaster Repair and Restoration

The contractor and craftsmen of the work of this section shall have a minimum of 5 years documented experience working with historic plaster.

The contractor and all his craftsmen for the work of this section shall have successfully completed a minimum of 3 projects of comparable complexity and skill on Historic Buildings within the previous 5 years.

Section 090160.91 Terrazzo Floor Restoration

The contractor and craftsmen for the work of this section shall have a minimum of 5 years documented experience in the fabrication and repair of terrazzo.

The contractor and all his craftsmen for the work of this section shall have successfully completed a minimum of 3 projects of comparable complexity and skill on Historic Buildings within the previous 5 years.

HOBOKEN TERMINAL
Restoration of the Main Waiting Room
Restoration of Retail Areas
Replacement of Pumps at Ejector Stations 4 & 5
IFB NO. 13-094X

SPECIAL APPROVAL FORMS FOR CONTRACTORS PERFORMING HISTORICAL RESTORATION WORK

The form must be completed by all contractors or subcontractors who wish to be approved for work specified in Sections 040140.92, 05700, 090120.91 and 090160.91. The form must be entirely filled in and all requested information must be provided. **Complete one of these forms for each of three different projects. Use a separate page for each project listed.**

Specification
Section _____

Company
Name _____

- I. Listed project must have been completed within the last five years and be comparable in scale and type of work to be the proposed work at the Morristown Train Station.

Name of
Project _____

Project
location _____

Project Architect
(Name) _____

(Address) _____

(Phone #) _____

Project Owner
(Name) _____

(Address) _____

(Phone #) _____

Date of Project
Commencement _____

Date of Project
Completion _____

Value of Contract or
Subcontract _____

Brief Description of Work Your Firm
Completed _____

Labor Force Employed at Project by Name and
Title _____

HOBOKEN TERMINAL
Restoration of the Main Waiting Room
Restoration of Retail Areas
Replacement of Pumps at Ejector Stations 4 & 5
IFB NO. 13-094X

SPECIAL APPROVAL FORM
FOR CONTRACTOR PERSONNEL PERFORMING HISTORICAL RESTORATION
WORK

List the full time personnel who will be involved in the work of this section and their experience in the historic preservation work. **Use a separate page for each individual who will be assigned to the work of this section. Submit forms for at least three individuals.**

Specification
Section _____

Company
Name _____

Individual
Name _____

Years with
Organization _____
Job Title _____

Years of Experience Prior to Present
Organization _____

List Preservation Projects in Past Five Years:

1. Project Name and
Location: _____

Nature of work (Describe specific, specialized historic preservation skills required by Craftsman on this project.)

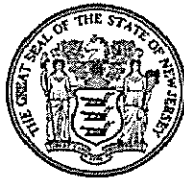
Time Period
Worked _____

2. Project Name and
Location: _____

Nature of work (Describe specific, specialized historic preservation skills required by
Craftsman on this project.)

Time Period
Worked _____

ATTACHMENT A THE STATE OF NEW JERSEY PREVAILING WAGE
DETERMINATION FOR HUDSON COUNTY, NEW JERSEY (68
PAGES)



STATE OF NEW JERSEY
Department of Labor and Workforce Development
Division of Wage and Hour Compliance - Public Contracts Section
PO Box 389
Trenton, NJ 08625-0389

PREVAILING WAGE RATE DETERMINATION

The New Jersey Prevailing Wage Act (N.J.S.A. 34:11-56.25 et seq.) requires that the Department of Labor and Workforce Development establish and enforce a prevailing wage level for workers engaged in public works in order to safeguard their efficiency and general well being and to protect them as well as their employers from the effects of serious and unfair competition.

Prevailing wage rates are wage and fringe benefit rates based on the collective bargaining agreements established for a particular craft or trade in the locality in which the public work is performed. In New Jersey, these rates vary by county and by the type of work performed.

Applicable prevailing wage rates are those wages and fringe benefits in effect on the date the contract is awarded. All pre-determined rate increases listed at the time the contract is awarded must also be paid, beginning on the dates specified. Rates that have expired will remain in effect until new rates are posted.

Prevailing Wage Rate

The prevailing wage rate for each craft will list the effective date of the rate and the following information:

W = Wage Rate per Hour

B = Fringe Benefit Rate per Hour*

T = Total Rate per Hour

- * Fringe benefits are an integral part of the prevailing wage rate. Employers not providing such benefits must pay the fringe benefit amount directly to the employee each payday. Employers providing benefits worth less than the fringe benefit amount must pay the balance directly to the employee each payday.

Unless otherwise stated in the Prevailing Wage Rate Determination, the fringe benefit rate for overtime hours remains at the straight time rate.

When the Overtime Notes in the Prevailing Wage Rate Determination state that the overtime rates are "inclusive of benefits," the benefit rate is increased by the same factor as the wage rate (i.e. multiplied by 1.5 for time and one-half, multiplied by 2 for double time, etc.).

Apprentice Rate Schedule

An "apprentice" is an individual who is registered with the United States Department of Labor - Office of Apprenticeship and enrolled in a certified apprenticeship program during the period in which they are working on the public works project.

The apprentice wage rate is a percentage of the journeyman wage rate, unless otherwise indicated. The apprentice benefit rate is the full journeyman benefit rate, unless otherwise indicated.

If there is no apprentice rate schedule listed, the individual must be paid at least the journeyman rate even if that individual is in a certified apprentice program for that trade.

If there is no ratio of apprentices to journeymen listed for a particular craft, then the ratio shall be one (1) apprentice to every four (4) journeymen.

Comments/Notes

For each craft listed there will be comments/notes that cover the definition of the regular workday, shift differentials, overtime, recognized holidays, and any other relevant information.

Public Works Contractor Registration

The Public Works Contractor Registration Act (N.J.S.A. 34:11-56.48, et seq.) requires that **all** contractors, subcontractors, or lower tier subcontractors who are working on or who bid on public works projects register with the Department of Labor and Workforce Development. Applications are available at www.nj.gov/labor (click on Wage & Hour and then go to Registration & Permits).

Pursuant to N.J.S.A. 34:11-56.51:

No contractor shall bid on any contract for public work as defined in section 2 of P.L.1963, c. 150 (C.34:11-56.26) unless the contractor is registered pursuant to this act. No contractor shall list a subcontractor in a bid proposal for the contract unless the subcontractor is registered pursuant to P.L.1999, c.238 (C.34:11-56.48 et seq.) at the time the bid is made. No contractor or subcontractor, including a subcontractor not listed in the bid proposal, shall engage in the performance of any public work subject to the contract, unless the contractor or subcontractor is registered pursuant to that act.

Snow Plowing

Snow plowing contracts are not subject to the New Jersey Prevailing Wage Act or the Public Works Contractor Registration Act.

THE PARTICULAR PREVAILING WAGE SCHEDULES
INCLUDED IN THIS CONTRACT ARE NOT REPRINTED HERE
DUE TO SIZE.

**ATTACHMENT B DBE REQUIREMENTS FOR RACE NEUTRAL FEDERAL
PROCUREMENT ACTIVITIES (29 pages)**

**NEW JERSEY TRANSIT CORPORATION
DBE REQUIREMENTS FOR
RACE-NEUTRAL GOAL PROGRAM
FEDERAL PROCUREMENT ACTIVITIES**

TABLE OF CONTENTS

TITLE OF ARTICLE	PAGE
1.1 POLICY.....	2
1.2 ASSURANCE.....	3
1.3 DBE GOAL FOR THIS PROJECT.....	3
1.4 GUIDANCE TO BIDDER/PROPOSERS/PRIMES.....	3
1.5 TRANSIT VEHICLE MANUFACTURERS (TVM).....	4
1.6 RESPONSIBLE BID/PROPOSAL CRITERIA.....	4
2.1 GUIDANCE ON A GOOD FAITH	4-5
2.2 A GOOD FAITH EFFORT.....	5-6
2.3 REQUIRED FORMS.....	6-7
2.4 SUPPLEMENTAL REQUIRED FORMS (IF APPLICABLE).....	7
2.5 INSTRUCTIONS FOR COMPLETING REQUIRED FORMS.....	7-10
2.6 INSTRUCTIONS FOR COMPLETING SUPPLEMENTAL REQUIRED FORMS.....	10-11
3.1 GUIDANCE ON COUNTING DBE PARTICIPATION	11
3.2 COUNTING DBE PARTICIPATION.....	11-12
3.3 DBE PRIME CONTRACTOR GUIDANCE.....	12
3.4 DBE TRUCKING FIRM GUIDANCE.....	12
3.5 LEASING TRUCKS.....	12-13
3.6 COUNTING MATERIALS AND SUPPLIES.....	13
4.1 TERMINATION OF DBE(s).....	14
4.2 ADDITION OF DBE(s).....	14
4.3 REPLACEMENT OR REMOVAL OF DBE(s).....	14-15
4.4 WITHDRAWN DBE(s).....	15
4.5 DECERTIFIED DBE(s).....	15-16
5.1 AWARD OBLIGATIONS.....	16
5.2 POST AWARD DELIVERABLES	16-17
5.3 PROMPT PAYMENT OF INVOICES TO SUBCONTRACTORS.....	17-18
5.4 SUBCONTRACT PAYMENT DISPUTE RESOLUTION.....	18
5.5 PROMPT PAYMENT OF SUBCONTRACTOR RETAINAGE.....	18-19
5.6 REMEDIES AND PENALITIES.....	19
5.7 LIQUIDATED DAMAGES.....	19-20
APPENDIX 1 (GLOSSARY).....	20-21

**NEW JERSEY TRANSIT CORPORATION
DBE REQUIREMENTS FOR
RACE-NEUTRAL GOAL PROGRAM
FEDERAL PROCUREMENT ACTIVITIES**

This project is a component of our Race Neutral Goal Program; therefore, a Race-Neutral (RN) Disadvantaged Business Enterprise (DBE) goal has been established. NJ TRANSIT will meet a portion of its overall agency goal by using Race-Neutral means of facilitating DBE participation. NJ TRANSIT encourages Contractors to award subcontracts to DBEs.

NJ TRANSIT will track and report the extent of your Race-Neutral and Race-Conscious business assistance efforts. For reporting purposes, Race-Neutral/DBE participation includes, but is not necessarily limited to, the following:

- 1) DBE participation through a prime contract, a DBE obtains through customary competitive procurement procedures,
- 2) DBE participation through a subcontract on a prime contract that does not carry a DBE goal; DBE participation on a prime contract exceeding a contract goal; and
- 3) DBE participation through a subcontract from a prime contractor that did not consider a firm's DBE status in making the award.

Pursuant to Federal Regulations 49 CFR Part 26, the following pages will provide bidders/proposers with information about the New Jersey Transit Corporation (NJ TRANSIT) DBE Program requirements, which is administered by the Office of Business Diversity (OBD) Office. Clarification of the DBE specifications along with assistance in completing the forms can be obtained by calling (973) 491-7593. Prospective bidders will also have an opportunity to ask questions regarding the directives contained in the DBE specifications at the pre-bid/pre-proposal conference(s).

A list of certified DBE firms may be found in the NJ Unified Certification Program (NJUCP) Directory at www.njucp.net.

Note: Use of this list does not relieve the Bidder/Proposer/Prime contractor/consultant of responsibility to seek DBE participation from other sources. The list is updated daily and must be checked periodically, as firms are certified and decertified daily.

These DBE specifications are a part of the Contract and shall be binding upon the successful Bidder/Proposer and Prime in the pre and post-award stages of NJT professional services, construction, and goods and services contracts. These specifications shall be binding upon sub-recipients and imposed on their contractors.

1.1 POLICY

As defined in the U.S. Department of Transportation (USDOT) Regulation 49 CFR Part 26, it is the policy of NJT that Disadvantaged Business Enterprises shall have the opportunity to compete for and participate in the performance of contracts financed in whole or in part with federal funds. Each subcontract a Prime signs with a

subcontractor/subconsultant must include the following assurance referenced in **article 1.2**.

1.2 ASSURANCE

- 1.2.1 The Prime contractor/consultant, or subcontractor/subconsultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Prime contractor/consultant shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor/consultant to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy, as the recipient deems appropriate (49 CFR 26.13).
- 1.2.2 **This language is included to comply with relevant Federal law and to ensure that all persons who enter into any direct or indirect form of contractual agreement with NJT are aware of their responsibilities and the commitment of NJT to see that NJT's DBE Policy is carried out in all instances.**

1.3 DBE GOAL FOR THIS PROJECT

As an aid in meeting the commitment of its DBE Program, NJT is setting a **race neutral** goal of the gross sum bid/proposal to certified NJUCP DBE firms. A **race-neutral measure** is one that is used to assist all small businesses, including DBEs. For the purposes of this part, **race-neutral** includes gender-neutrality.

1.4 GUIDANCE TO BIDDER/PROPOSERS/PRIMES

- 1.4.1 Failure by a Bidder/Proposer/Prime to comply with any of the requirements contained herein shall result in breach of contract and it shall be subject to the appropriate penalties, remedies, or liquidated damage(s). **Refer to articles 5.6-5.7**
- 1.4.2 All required forms, including the supplemental section (**see articles 2.3-2.4**) must be submitted in accordance with the requirements. **Firms must be certified under the NJUCP at the time of contract award in order to obtain DBE credit toward the goal.**
- 1.4.3 Price alone is not an acceptable basis for rejecting a DBE subcontractor/subconsultant's bid.
- 1.4.4 The Bidder/Proposer/Prime shall, at a minimum, seek DBEs in the same geographic area in which it generally seeks subcontractors/subconsultants. However, the Bidder/Proposer/Prime may be required to expand its search under specific circumstances as determined by OBD. **Refer to article 2.0**
- 1.4.5 Agreements between a Bidder/Proposer/Prime and a DBE in which the DBE promises not to provide subcontracting quotations to other Bidder/Proposers are prohibited.
- 1.4.6 The desire of a Bidder/Proposer/Prime to self-perform the work of a contract with its own organization is not an acceptable basis to not meet the goal or demonstrate a good faith effort to do so.
- 1.4.7 The Bidder/Proposer/Prime is responsible for verifying that the DBE is certified under the appropriate NAICS code for the scope of work identified. DBE credit shall be given only for work performed in the NAICS code(s) under which the DBE is certified.
- 1.4.8 A DBE firm listed on the First-Tier DBE Utilization Form (Form A) shall constitute a binding representation to NJT, by the Bidder/Proposer/Prime, that the DBE firm is qualified, available, and certified under the appropriate

and required NAICS code to perform the scope of work identified. **Refer to article 2.5a**

1.5 TRANSIT VEHICLE MANUFACTURERS (TVM)

1.5.1 As a transit vehicle manufacturer, you must establish and submit for FTA's approval an annual overall DBE percentage goal. A TVM must certify that it submitted the annual DBE goal required by 49 CFR 26.49 and FTA has approved it or not disapproved it.

(a) As a condition of being authorized to bid or propose on FTA assisted transit vehicle procurements, the Bidder/Proposer must complete and submit the TVM Certification form with the bid/proposal certifying that it has complied with the requirements of 49 CFR 26.49.

1.5.2 NJT may, with FTA approval, establish project-specific goals for DBE participation in the procurement of transit vehicles in lieu of complying with the procedures of this section.

1.6 RESPONSIBLE BID/PROPOSAL CRITERIA

1.6.1 As a matter of responsibility, the two lowest Bidders or two highest ranked Proposers must submit the required forms, including the supplemental section (if applicable), with the bid/proposal or within seven (7) days after the bid opening or proposal due date. *NJT may grant a formal written request to extend this 7-day requirement at its sole discretion on a case-by-case basis.*

1.6.2 Failure to satisfactorily complete or submit all required forms when due may result in determination by NJT that the Bidder/Proposer is non-responsible and may cause rejection of the bid or proposal.

1.6.3 If the two lowest Bidders/highest ranked Proposers submit the DBE forms, but fail to meet the DBE goal, the OBD will consider the efforts made to determine if a Bidder/Proposer/Prime has in fact, demonstrated a good faith effort. **See article 2.0**

1.6.4 If it is determined that efforts were made to include DBE participation on the contract, however these efforts did not result in meeting the goal, NJT may request that additional efforts be made within 10 business days of the request. If at this time the Bidder/Proposer fails to demonstrate a good faith effort to achieve the goal, NJT shall consider awarding the contract to the next lowest bidder or highest ranked proposer who offers a reasonable price and meets the DBE goal or demonstrates a good faith effort and other bid requirements or requirements of 49 CFR Part 26.

2. GUIDANCE ON A GOOD FAITH EFFORT

2.1 To demonstrate a good faith effort to meet the DBE goal, a Bidder/Proposer/Prime shall provide written documentation in addition to Form D (article 2.3e), of the steps it has taken, prior to the bid opening/proposal due date, or during the life of the contract to obtain DBE participation. **The Bidder/Proposer/Prime can meet this requirement in either of two ways:**

(1) The Bidder/ Proposer/Prime can meet the goal.

(2) The Bidder/Proposer/Prime shall exhaust the available options referenced in **article 2.2** in making a continuous good faith effort to meet the assigned contract goal for the life of the contract.

(a) The efforts employed by the bidder should be those that one could reasonably expect a bidder to take if the

bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

- (b) In determining a good faith effort, the OBD will consider the **quality, quantity, and intensity** of the different kinds of efforts that the Bidder/Proposer/Prime has made. Mere *pro forma* efforts will not be considered as demonstration of good faith effort to meet the DBE contract requirements.
- (c) The Bidder/Proposer/Prime shall use good business judgment and consider a number of factors in negotiating with subcontractors/subconsultants, including DBE subcontractors/ subconsultants, and should take a firm's price and capabilities as well as contract goals into consideration. **The fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a Bidder's/Proposer's failure to meet the contract DBE goal, as long as such costs are reasonable as determined by NJT. Primes are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.**
- (d) The Bidder/Proposer/Prime's **ability or desire to perform the work of a contract with its own organization (self-performance) does not relieve the Bidder/Proposer/Prime of the responsibility to meet the goal or demonstrate a good faith effort.**
- (e) The Bidder/Proposer/Prime shall not reject DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The Bidder/Proposer/Prime's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example, union vs. non-union employee status) are not legitimate causes for the rejection or non-solicitation of bids in the Bidder/Proposer/Prime's efforts to meet the assigned project goal.
- (f) The OBD will support the Bidder/Proposer/Prime in indentifying ways to meet the assigned contract goal.

2.2 A GOOD FAITH EFFORT

The following is a list of actions that NJT will consider as evidence of a Bidder/Proposer/Prime's good faith effort to obtain DBE participation. While exhausting the available options in this list may count as a good faith effort, this list is not intended to be a mandatory checklist, nor is this list intended to be exclusive or exhaustive of all the efforts a Bidder/Proposer/Prime might make to achieve the assigned DBE goal. NJT may require a Bidder/Proposer/Prime to take action above and beyond those listed below to meet the assigned DBE goal.

- (a) The Bidder/Proposer/Prime shall solicit through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising and/or written notices) the interest of all certified DBEs who have the capacity to perform the work of the contract.
 - (1) The Bidder/Proposer/Prime must solicit this interest within sufficient time to allow the DBE to respond to the solicitation.
 - (2) The Bidder/Proposer/Prime must take appropriate steps to follow up on initial solicitations in order to determine with certainty if the DBE firms are interested.
- (b) The Bidder/Proposer/Prime shall select portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Prime might otherwise prefer to perform these work items with its own forces.
- (c) The Bidder/Proposer/Prime shall provide interested DBEs with adequate information about the plans,
DBE Requirements for Federal Procurement Activities

specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.

- (d) The Bidder/Proposer/Prime shall negotiate with a DBE(s) with the intent to enter into a contract. It is the Bidder/Proposer's responsibility to make a portion of the work available to DBE subcontractors/subconsultants and suppliers and to select those portions of the work or material needs consistent with the available DBE Primes and suppliers, so as to facilitate DBE participation.
 - (1) **Evidence of such negotiation includes:** the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.
- (e) The Bidder/Proposer/Prime shall make efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by NJT or the Prime contractor.
- (f) The Bidder/Proposer/Prime shall make efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
- (g) The Bidder/Proposer/Prime shall effectively use the services of available minority/women community organizations; minority/women Prime contractors groups; local, State and Federal minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs.

2.3 REQUIRED FORMS

- (a) **Form A - First Tier DBE Utilization:** Lists all First Tier DBE firms scheduled to participate on this contract.
- (b) **Form A1 - Bidder/Proposer Solicitation and Contractor Information:** Lists all DBE and Non-DBE sub contractor/subconsultants, including suppliers, solicited for, **and** participating on this contract.
- (c) **Form A2- Non-DBE Sub Utilization:** Lists all **DBE and Non-DBE** subcontractors/ subconsultants, including suppliers, participating on this contract.
- (d) **Form B - Intent to Perform as a DBE Sub:** Identifies the work the 1st Tier DBE intends to perform including scope of work, subcontract dollar value, etc.
- (e) **DBE Good Faith Effort Form (if applicable):** Identifies any DBE subcontractor invited to quote, but declined to do so for any reason.
- (f) **Trucking Commitment Agreement (if applicable):** Identifies all trucking firms (DBE and Non-DBE) participating on this contract, **at any tier.**
- (g) **NJ UCP DBE Certification & NAICS Code Verification:** Confirms the DBE status and NAICS code(s) of each First Tier DBE subcontractor/subconsultant.
- (h) ***Form E - Contractor's Monthly DBE Payment Report & Payment Certification Voucher (Post-Award):** Records monthly payments issued to each DBE subcontractor/subconsultant/supplier and monthly payments issued by NJ TRANSIT to the Prime. Certifies that DBE subs have been paid for previous month's invoices.
- (i) **Form E2 – DBE's Monthly Payment Report (Post-Award):** Records monthly invoices submitted by the DBE,

payments owed to the DBE on past due invoices and payments received from the prime by each DBE subcontractor/subconsultant.

- (j) **Form E1- DBE Prime's Monthly Payment Report (For DBE Prime Only):** Records monthly payments issued to each DBE Prime by NJ TRANSIT to.

**This form is due from the Prime in each month following the notice to proceed issued by NJ TRANSIT. Refer to article 5.2.4*

2.4 SUPPLEMENTAL REQUIRED FORMS (IF APPLICABLE)

- (a) **Form AA – Second Tier DBE Utilization:** Lists all Second Tier DBE firms scheduled to participate on the DBE sub-Prime's contract.
- (b) **Form AA1 – Second Tier Bidder/Proposer Solicitation and Contractor Information:** Lists all Second Tier DBE firms participating on this contract as indicated on Form AA and Form AA2.
- (c) **Form AA2- Second Tier Non-DBE Sub Utilization:** Lists all **DBE and Non-DBE firms** including suppliers participating on the DBE sub-Prime's contract.
- (d) **Form BB - Intent to Perform as a Second Tier DBE Sub:** Identifies the work the 2nd Tier DBE intends to perform including scope of work, subcontract dollar value, etc.
- (e) **NJ UCP DBE Certification & NAICS Code Verification:** Confirms the DBE status and NAICS code(s) of each Second Tier DBE subcontractor/subconsultant.

2.5 INSTRUCTIONS FOR COMPLETING REQUIRED FORMS (see glossary for definition of terms)

- (a) **Form A - First Tier DBE Utilization:**

Form A is a formal agreement between the Bidder/Proposer and the DBE(s). Replacement/removal of DBE subcontractors/subconsultants/supplier identified on Form A is prohibited after the bid or proposal is submitted to NJT. **Refer to article 4.3.** A DBE Bidder/Proposer, which lists itself on Form A, is committed to performing the work indicated with its own personnel.

DBEs performing as second tier sub(s) to a **non-DBE sub Prime** should be listed with the name of the non-DBE sub Prime's firm name in parenthesis next to the DBE sub's name. {*Ex: DBE Electric Co. (Prime Contractor, Inc.)*}

(1) A first Tier DBE is required to perform at least 51% of its subcontract value with its own forces. Bidders/Proposers/Primes will not receive any credit for DBEs performing less than 51% and therefore must not be listed on this form.

(2) **For DBE suppliers**, identify all manufacturers, regular dealers, and brokers. If a DBE supplier is a **manufacturer**, indicate the full value of its subcontract. If a DBE supplier is a **regular dealer**, show its total contract value multiplied by 60% (Ex. \$100K x 60%= \$60K). If a DBE supplier is **neither a manufacturer nor a dealer**, indicate the fee/commission only, not the cost of materials or supplies. See **article 3.0** for direction on determining credit toward the goal.

(3) A detailed scope of work must be provided; one-word descriptions are not acceptable. (Ex. Haul and dispose of approximately 192,000 tons of contaminated soil to a clean earth facility at \$34.00 a ton).

(b) **Form A1 - Bidder/Proposer/Prime Solicitation and Contractor Information:**

The Bidder/Proposer must complete and submit **page one** (1). The DBE and non-DBE subcontractors/subconsultants, including suppliers, solicited for, participating on, or expressed interest in this contract must complete **page two** (2).

(c) **Form A2- Non-DBE Sub Utilization:**

Bidders/Proposers are required to report and submit all dollars committed to non-DBE subcontractors/subconsultants/suppliers. The non-DBE portion of work is **not** counted toward the assigned DBE goal. **See article 3.0**

A detailed scope of work must be provided; one-word descriptions are not acceptable.

(Ex. Haul and dispose of approximately 192,000 tons of contaminated soil to a clean earth facility at \$34.00 a ton).

(d) **Form B - Intent to Perform as a First Tier DBE Sub:**

Each DBE subcontractor/subconsultant/supplier listed on Form A must complete and sign Form B. **Note: The Bidder/Proposer/Prime is prohibited from completing any portion of the form and from directing DBE(s) to sign a blank form.**

(1) The Bidder/Proposer/Prime must provide interested DBEs with a copy of appropriate plans, specifications, and requirements of the contract in a timely manner to allow the DBE to prepare an appropriate price quote and submit on time.

(2) First Tier DBEs must perform at least 51% of the total dollar value of its subcontract, with its own forces. The firm must indicate the percentage of the total portion of work to be subcontracted to DBE and non-DBE firms. The non-DBE percentage of work is not counted toward the assigned goal.

(3) The OBD encourages DBE-to-DBE subcontracting in order to preserve DBE participation credit. **See article 3.0**

(4) The DBE must provide a detailed scope of work; one-word descriptions are not acceptable. Descriptions should include: *type of services provided, total number of units, price per unit, total cost, etc.*

(e) **DBE Good Faith Effort: (If Applicable)**

Form D applies to any Bidder/Proposer/Prime who failed to meet the assigned DBE goal. This form will assist the Bidder/Proposer/Prime in demonstrating a good faith effort.

If the DBE(s) solicited declines to sign this form, the completed form should be submitted with the Bidder/Proposer's signature only and the OBD will verify the information provided with the firm. **Refer to articles 2.0-2.2** for guidance.

(f) Trucking Commitment Agreement: (If Applicable)

DBEs must provide information for all DBE and non-DBE trucking firms it will lease from or subcontract to. Subcontracting to a non-DBE trucker means that the non-DBE will perform a portion of the DBE firm's subcontract. **Refer to article 3.4**

The following documents must be attached for all trucks owned: copy of title(s)/finance agreement(s), registration card(s), insurance card(s), apportioned cab card(s) and/or hazardous material license(s) if applicable. A copy of the title or finance agreement is the only acceptable proof of ownership.

The following documents must be attached for all trucks leased: copy of lease agreement(s) established between both firms, title(s), registration card(s), insurance card(s), lease agreement(s), apportioned cab card(s) and/or hazardous material license(s) if applicable.

(g) NJ UCP DBE Certification and NAICS Code Verification:

All DBEs listed on Form A must be certified at the time of contract award. It is the Bidder/ Proposer's responsibility to ensure that DBEs are certified and that their NAICS code(s) match the scope of work to be performed on this contract. Credit will not be given for any work to be performed without the appropriate NAICS code. Status can be verified through www.njucp.net and www.census.gov/eos/www/naics/.

(h) Form E - Contractor's Monthly DBE Payment Report & Payment Certification Voucher:

Beginning the month following the contract's notice to proceed, the Prime must report monthly payment activity for each DBE subcontractor/subconsultant/supplier; certifies each DBE sub has been paid any amounts due from previous or current progress payments paid to the Prime. **(article 5.2.4)**

All invoices 30 days past due from NJT must be listed in the appropriate field.

This report is due even if there is no payment activity. This form must be completed and submitted to the OBD **by the 7th of each month** to the attention of the OBD's Manager of Contract Compliance.

(i) Form E1- DBE Prime's Monthly Payment Report (For DBE Prime Only)

Beginning the subsequent month following the contract's execution date, the DBE Prime must report its monthly payments received by NJT. **Refer to article 5.2.5.**

All invoices 30 days past due from NJT must be listed in the appropriate field.

This report is due even if there is no payment activity. This form must be completed and submitted to the OBD **by the 7th of each month** to the attention of the OBD's Manager of Contract Compliance.

(j) Form E2 – DBE's Monthly Payment Report:

The Prime must provide a copy of the Form E2 to each DBE subcontractor/subconsultant/ supplier(s).

Beginning the subsequent month following the DBE's execution date, the DBE firm must report its monthly

payment activity.

This report is due even if there is no payment activity. **This form must be completed and submitted by the DBE only** to the OBD **by the 7th of each month** to the attention of the OBD's Manager of Contract Compliance.

All invoices 30 days past due must be listed in the appropriate field. Identify concerns or issues in the comments section to be addressed by the OBD. (Refer to article 5.2.6)

2.6 INSTRUCTIONS FOR COMPLETING SUPPLEMENTAL REQUIRED FORMS:

- (a) **Form AA – Second Tier DBE Utilization:** The Second Tier DBE **must perform 100%** of its subcontract with its own forces. A formal request to waive this requirement may be granted, solely at the discretion of the OBD; however, approval is required.

A detailed scope of work must be provided; one-word descriptions are not acceptable.

(Ex. Haul and dispose of approximately 192,000 tons of contaminated soil to a clean earth facility at \$34.00 a ton).

- (b) **Form AA1 – Second Tier Bidder/Proposer Solicitation and Contractor Information:**

The DBE sub-Prime must submit and complete **page one** (1). Second Tier DBE(s) solicited for and participating on this contract must complete **page two** (2).

- (c) **Form AA2- Second Tier Non-DBE Subcontractor Utilization:**

DBE sub-Primes are required to report and submit all dollars committed to non-DBEs. The non-DBE portion of work is not counted toward DBE participation credit. **Refer to article 3.0**

A detailed scope of work must be provided; one-word descriptions are not acceptable.

(Ex. Haul and dispose of approximately 192,000 tons of contaminated soil to a clean earth facility at \$34.00 a ton).

- (d) **Form BB - Intent to Perform as a Second Tier DBE Subcontractor:**

Each DBE firm listed on Form AA, must complete, and sign. **Only Second Tier DBE(s) must complete and sign this form.**

The Second Tier DBE must provide a detailed scope of work; one-word descriptions are not acceptable. Descriptions should include: type of services provided, total number of units, price per unit, total cost, etc

- (e) **NJ UCP DBE Certification & NAICS Code Verification:**

All DBEs listed on Form AA must be certified at the time of contract award. It is the Bidder/Proposer/Prime's responsibility to ensure that DBEs are certified and that their NAICS code(s) match the scope of work to be performed on this contract. Credit will not be given for any work to be performed without the appropriate NAICS code. Status can be verified through www.njcup.net and www.census.gov/eos/www/naics/.

3.0 GUIDANCE ON COUNTING DBE PARTICIPATION

- 3.1 If a firm is not currently certified as a DBE in accordance with 49 CFR part 26 at the time of the execution of the DBE Requirements for Federal Procurement Activities

contract, the firm's participation will not count toward the DBE goal.

- 3.1.1 A DBE performing less than 51% of its subcontract will not count toward the assigned goal and should not be listed on any forms.
- 3.1.2 When a DBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted toward DBE goals only if the DBE's subcontractor/subconsultant is a DBE.
 - (a) Work that a DBE subcontracts to a non-DBE firm does not count toward the DBE contract goal.
 - (b) When a DBE performs as a participant in a **joint venture with a Non-DBE**, count the portion of the total dollar value of the contract equal to the distinct, clearly defined portion of the work of the contract that the DBE performs with its own forces toward DBE goals.
 - (c) A DBE performs a *commercially useful function* when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing and supervising the work involved.

A DBE does not perform a *commercially useful function* if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation.

3.2 COUNTING DBE PARTICIPATION

- 3.2.1 When a DBE participates in a contract, only the value of the work actually performed by the DBE is counted toward DBE goals.
 - (a) The entire amount of that portion of a contract that is performed by the DBE's own forces is counted. This includes the cost of supplies and materials obtained by the DBE for the work of the contract, as well as supplies purchased or equipment leased by the DBE (*except supplies and equipment the DBE subcontractor/subconsultant purchases or leases from the Prime contractor or its affiliate*).
- 3.2.2 The entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a contract, is counted toward DBE goals, provided the fee is reasonable and not excessive as compared with fees customarily allowed for similar services by a DBE.

3.3 DBE PRIME CONTRACTOR GUIDANCE

- 3.3.1 If a **DBE Prime**, expenditures are counted toward DBE goals only if the DBE is performing a commercially useful function on that contract.
- 3.3.2 A DBE Prime must perform or be responsible at least 30% of the total cost of its contract with its own workforce.
- 3.3.3 **If a DBE Prime does not perform or exercise responsibility for at least 30% of the total cost of its contract with its own workforce** or subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, NJT will consider that it is not performing a commercially useful function and the DBE Prime shall be in breach of the contract and subject to the appropriate remedies and penalties. **Refer to Articles 5.6-5.7**

3.4 DBE TRUCKING FIRMS GUIDANCE

- 3.4.1 A DBE trucking firm is performing a commercially useful function if:

- (a) The DBE is responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there is not a contrived arrangement for the purpose of meeting DBE goals.
- (b) The DBE itself owns and operates at least one fully licensed, insured, and operational truck to be used on the contract.

3.4.2 The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.

3.5 LEASING TRUCKS

3.5.1 Leased trucks must display the name and identification number of the DBE.

3.5.2 The DBE may lease trucks from another DBE firm, including an owner-operator that is certified as a DBE.

The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract.

3.5.3 The DBE may also lease trucks from a **non-DBE firm**, including an owner-operator.

- (a) **The DBE who leases trucks from a non-DBE is entitled to credit only for the fee or commission it receives as a result of the lease arrangement.**

3.5.4 For the purposes of this section (Leasing), a lease must indicate that the DBE has exclusive use of and control over the truck.

- (a) This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck.

3.6 COUNTING MATERIALS AND SUPPLIES

3.6.1 Expenditures with DBEs for materials or supplies are counted toward DBE goals as provided in the following:

- (a) If the materials or supplies are obtained from a **DBE manufacturer**, 100% of the cost of the materials or supplies are counted toward DBE goals.
 - (1) For purposes of this paragraph 3.6.1(a), a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the material, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
- (b) If the materials or supplies are purchased from a **DBE regular dealer**, sixty percent (60%) of the cost of the materials or supplies is counted toward DBE goals.
 - (1) For purposes of this paragraph 3.6.1(b), a regular dealer is a firm that owns, operates, maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
 - (2) The firm must be an established, regular business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products in question.
 - (3) A person may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone,

or asphalt without owning, operating, or maintaining a place of business as provided above if the person both owns and operates distribution equipment for the products. Any supplementing of regular dealers' own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.

- (4) Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions are not regular dealers within the meaning of this paragraph 3.6.1(b).
- (c) With respect to materials or supplies purchased from a **DBE, which is neither a manufacturer nor a regular dealer**, only the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site, is counted toward DBE goals, provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar service. **However, any portion of the cost of the materials and supplies themselves do not count toward DBE goals.**

4.0 TERMINATION OF DBE(s)

- 4.1 The Bidder/Proposer/Prime may not terminate for convenience, or any other reason, and then perform the work of the terminated subcontractor/subconsultant with its own forces or those of an affiliate without NJT's prior written consent. **Refer to Article 4.3.**

Submission of all REQUIRED FORMS is mandatory for the following Articles 4.2 through 4.5

4.2 ADDITION OF DBE(s)

- 4.2.1 Should the Bidder/Proposer/Prime wish to add a DBE not listed on Form A, a written request for the addition of a DBE(s) must be submitted by the Bidder/Proposer/Prime.
- 4.2.2 The Bidder/Proposer/Prime must receive written approval of the OBD **prior to** the addition of the DBE subcontractor/subconsultant in order for the addition to be credited toward the goal.

4.3 REPLACEMENT OR REMOVAL OF DBE(s)

- 4.3.1 When a Prime is considering replacing or removing a DBE due to performance issues, the OBD must be contacted as soon as possible.
- 4.3.2 Request for DBE replacement or removal may be made under the following conditions:
- 1) The DBE materially fails to successfully perform the contract tasks.
 - 2) Under unusual situations referenced in article 4.3.8.
- 4.3.3 A written request for replacement or removal of a DBE(s) listed on Form A, must be submitted by the Bidder/Proposer/Prime to the OBD with complete justification for the request. The process to follow such requests is as follows:
- (a) Written communications (over a period) from the Prime and/or NJT's PM/CM team to the DBE, notifying the DBE of its poor performance must be provided to the OBD.
 - (b) **The OBD will arrange a meeting with the DBE, the Prime, and a representative from Procurement and project management to discuss the specifics of the performance issue.**

- (c) The DBE must provide a written plan identifying the efforts it will make to correct the deficiencies.
 - (d) The Prime must provide the DBE with a minimum of 30 calendar days from acceptance of its plan to improve its performance. Throughout the 30-day window, the Prime and/or NJT PM/CM team must provide written communication to the DBE of any additional/continued performance issues, with a copy to the OBD.
- 4.3.4 The Bidder/Proposer/Prime must receive written approval of the OBD **prior to** replacement or removal of the DBE subcontractor/subconsultant can be made, regardless of the reason for the replacement or removal.
- 4.3.5 If the OBD issues written approval for the removal of a DBE(s), NJT will require a Bidder/Proposer/Prime to continue to demonstrate a good faith effort to replace the removed DBE to the extent needed to meet the contract goal established by NJT for the procurement.
- These good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the removed DBE.**
- 4.3.6 Failure to obtain approval from the OBD **prior to** replacing or removing a DBE shall result in the Bidder/Proposer/Prime being found in breach of the contract and subject to the appropriate remedies, audits and penalties. **Articles 5.6-5.7**
- 4.3.7 If NJT finds that the Bidder/Proposer/Prime upon submission of its bid/proposal committed itself to the goal in good faith, the Bidder/Proposer/Prime may, in "unusual situations", be permitted to substitute a DBE subcontractor(s)/subconsultant(s).
- 4.3.8 The term "unusual situations", includes, but is not limited to, the following circumstances:
- (a) Failure to qualify as a DBE, or maintain DBE certification status.
 - (b) Death or physical disability of a key individual.
 - (c) Dissolution, if a corporation or partnership.
 - (d) Bankruptcy of the subcontractor/subconsultant, subject to applicable bankruptcy law, and only in instances where the bankruptcy affects the subcontractor/subconsultant's ability to perform.
 - (e) Inability to obtain, or loss of, a license necessary for the performance of the particular category of work.
 - (f) Failure or inability to comply with a requirement of law applicable to Primes or, subcontractors/subconsultants.

4.4 WITHDRAWN DBE(s)

- 4.4.1 When a DBE is unable to complete a subcontract (withdraws), for any reason, NJT will require a Bidder/Proposer/Prime to make a good faith effort to replace a withdrawn DBE at least to the extent needed to ensure that the Prime contractor is able to meet the contract goal established by NJT for the procurement. **These good faith efforts shall be directed at finding another DBE to perform at least the same amount of work under the contract as the removed DBE.**
- 4.4.2 The Bidder/Proposer/Prime is required to make a good faith effort to seek other DBE subcontractors/subconsultants in substitution of the original DBE. The good faith efforts described in **article 2** are required in finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the contract goal established for the procurement.

4.5 DECERTIFIED DBE(S)

- 4.5.1 If the Prime has reason to doubt that a proposed DBE is still eligible due to change in ownership, management, or size, the Prime shall, within 10 days of learning this information, notify NJT of that fact in writing.
- 4.5.2 If the subcontract has not been executed before the DBE's ineligibility occurs, the Prime will not receive credit toward the contract goal for the ineligible DBE. The Prime may continue to use the ineligible DBE, however, DBE participation credit will not be granted.
- (a) To the extent necessary to meet the assigned contract goal, the Prime will make a good faith effort to replace the ineligible DBE within 10 days after notification by the OBD. The OBD will support the Prime in its efforts to replace with an eligible DBE firm in order to meet the contract goal.
- 4.5.3 If the contract has been executed before the firm has been notified of its ineligibility, the Prime may continue to use the firm on the contract and receive credit toward its DBE goal for the duration of that particular phase of or option in the contract. This may not apply to future phases or options, which will be handled on a case-by-case basis at the sole discretion of the OBD.
- 4.5.4 **Exception:** If the DBEs ineligibility is caused solely by its having exceeded the size standard during the performance of the contract the Prime may continue to count its participation on that contract only toward the contract goals. This may not apply to future phases or options and will be subject to determination by the OBD.

5.0 AWARD OBLIGATIONS

- 5.1 The Prime must designate a **DBE Liaison Officer**. The liaison officer will be responsible to NJT regarding DBE subcontract matters.
- 5.1.1 If at any point during the contract's life, the Prime's DBE participation falls below the assigned goal, the Prime must identify additional work or new work items for which it will subcontract to DBEs to the extent necessary to meet the assigned goal. Any new scope of work issued to the Prime shall still be subject to the assigned goal.
- 5.1.2 The OBD will support the Prime in identifying current/future opportunities in the contract to meet the assigned contract goal.
- 5.1.3 Should the Prime seek a change that addresses the DBE's performance, or affects the work scope and/or compensation, the OBD must be notified, prior to implementation, for its review and approval of the changes as soon as possible. No change will be allowed without prior review and approval by the OBD. Failure to notify the office and obtain approval prior to a change shall result in breach of the contract and may be subject to the appropriate remedies, audits, and penalties.
- 5.1.4 Whenever NJT issues project change orders the goal may still apply; the OBD will determine if increased DBE participation will be required.
- 5.1.5 To ensure that all obligations under subcontracts awarded to DBEs are met NJT shall review the Prime's DBE involvement efforts during the performance of the contract.

5.2 POST AWARD DELIVERABLES

- 5.2.1 After the execution of a contract with NJT, **signed copies** of subcontractor/subconsultant agreements between the Prime and DBE subcontractors must be submitted to the OBD no later than 10 business days after the Prime's contract execution date. The agreement between the Prime and DBE subcontractor shall remain firm for the duration of the contract.

- 5.2.2 The Prime shall provide a list of the anticipated job start date for all DBE subcontractors/subconsultants **no later than two days** after the initial pre-construction meeting.
- 5.2.3 **Certification of DBE(s) Payments** – submit monthly with the Form E to the Manager of the OBD and with its monthly invoice submittal to NJT project manager of this project. **Refer to article 5.3.2**
- (a) The Prime will certify, prior to the issuance of each progress payment by NJT, that all DBE subs have been paid any amounts due on past due invoices from previous or current progress payments.
- 5.2.4 **Form E (Contractor's Monthly DBE Payment Report & DBE Payment Certification Voucher)** - submit monthly to the Manager of the OBD. **Refer to articles 2.5h and 5.3.2.**

Failure to submit this report on a monthly basis may result in breach of the contract and be subject to the appropriate remedies, penalties or liquidated damages as indicated in articles 5.6-5.7.

- 5.2.5 **Form E1 (DBE Prime's Monthly Payment Report)** (*For DBE Prime Only*) - submit monthly to the Manager of the OBD.
- 5.2.6 **Form E2 (DBE's Monthly Payment Report)** – Refer to article 2.5j
- (a) Forms E/E1 and E2 will be reviewed monthly to determine compliance with the assigned DBE goal, the subcontractor prompt payment regulation, and the DBE Program.
- (b) Attainment of goals will be monitored and based upon actual payments received by the DBE.
- Failure to submit Form E/E1 may result in suspension of payments or such other remedies as provided in **article 5.6**. *If at any time, NJT has reason to believe that any person or firm has willfully and knowingly provided incorrect information or made false statements, it shall refer the matter to the USDOT for inquiry.*

5.3 PROMPT PAYMENT OF INVOICES TO SUBCONTRACTORS

- 5.3.1 The Prime must pay each subcontractor under this contract for satisfactory performance of its work **no later than ten (10) days** from the receipt of each payment the Prime receives from NJT for the subcontractor's work. Failure to comply with this requirement shall result in breach of the contract and shall be subject to the appropriate remedies as determined by OBD.
- 5.3.2 In accordance with 49 CFR 26.29, the Prime shall certify, prior to the issuance of a progress payment by NJT that all subcontractors have been paid any amounts due on past due invoices (greater than 30 days) from previous or current progress payments. **The Prime must submit the Certification of DBE(s) Payments with its monthly invoice submittals to NJT project manager, and with its Form E to the OBD.**
- 5.3.3 The Prime will not be reimbursed for work performed by subcontractors/subconsultants unless and until the Prime ensures that the subs are promptly paid for the work performed. Alternatively, the Prime shall certify that a valid basis exists under the terms of the subcontractor's/subconsultant's or supplier's contract to withhold payment from the subcontractor/subconsultant and therefore payment is withheld.
- 5.3.4 If the Prime withholds payment from the subcontractor/subconsultant, the Prime shall provide to the subcontractor/subconsultant or supplier written notice thereof. The notice shall detail the reason for withholding payment and state the amount of the payment withheld. If a performance/payment bond has been provided under this contract, the Prime shall send a copy of the notice to the surety providing the bond for the Prime. A

copy of the notice shall also be submitted to NJT with the certification that payments are being withheld.

5.3.5 If withholding payment is due to the Prime's failure to promptly pay the DBE in accordance with the prompt payment of invoices and/or retainage clauses, the OBD may request proof of payment to DBE(s) for delinquent invoices and/or retainage in order to issue release of payment to Prime.

5.3.6 Failure to comply with the above shall result in breach of the contract and may be subject to the appropriate penalties. **See article 5.6**

5.4 SUBCONTRACTOR PAYMENT DISPUTE RESOLUTION

5.4.1 The Prime is required to notify the OBD of its intention to withhold payment from a DBE as soon as possible and in advance of taking action. Should the Prime provide notice and proceed to withhold payment from any subcontractor/subconsultant or supplier due to a performance issue or unapproved work performed, an OBD representative shall make an effort to resolve the dispute.

- (a) OBD's efforts shall be limited to meeting with the Prime and the subcontractor/ subconsultant, and reviewing the relevant facts with both parties.
- (b) OBD will not act as a decider of fact nor will OBD direct a settlement to the dispute.
- (c) Any OBD effort is solely intended to assist the parties in understanding their respective positions and to encourage a reasonable resolution of the dispute. The Prime is required to send written notification of the above to the OBD immediately.

5.4.2 Should payments be withheld that are not related to the previous items mentioned, and/or a determination can be made that the withholding of payments violates the prompt payment clause, NJT may execute the appropriate remedies in accordance with article 5.6.

5.5 PROMPT PAYMENT OF SUBCONTRACTOR RETAINAGE (FOR CONSTRUCTION CONTRACTS ONLY)

5.5.1 **The Prime must include a contract clause in the subcontractor agreement obligating the Prime to pay all retainage owed to the subcontractor/subconsultant for satisfactory completion of the accepted scope of work no later than 15 days after the DBE subcontractor's/subconsultant's work is satisfactorily completed.**

5.5.2 Only subcontractors/subconsultants whose work has been 100% completed, including all punch list work or remaining work, and who have supplied closeout documents shall be eligible for release of retainage. *Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of NJT.*

5.5.3 NJT may agree to release an equivalent amount of Prime retainage provided that:

- (a) There is no offsetting claims from NJT (including, but not limited to, liquidated damages), other subcontractors/subconsultants, material men, or workers;
- (b) None of the other reasons to withhold payments specified under the Prime contract exists.

5.5.4 Prior to release of the Prime's retainage, the Prime shall provide to NJT executed copies of the following subcontractor closeout documents, (shown in Appendix A of the contract) as appropriate:

- (a) Consent of Surety to Final Payment to the Subcontractor

- (b) Certificate of Amounts Due and Owing to Subcontractor Employees
- (c) Subcontractor Release of Claims
- (d) Subcontractor Release of Liens and a Certificate of Final Acceptance of Subcontractor Work

5.5.5 Notwithstanding NJT's release or partial release of retainage, nothing in this clause shall be deemed to constitute NJT's partial or final acceptance of the work, or any portion thereof, unless either a Certificate of Partial Acceptance or a Certificate of Final Acceptance has been executed by NJT, in the form(s).

5.6 REMEDIES AND PENALTIES

5.6.1 Where a Prime is found to be in breach of the requirements of the DBE Program during the performance of the contract, and does not promptly take corrective action, the following sanctions may be instituted (singularly, in any combination, and in addition to any other contractual remedies or otherwise provided by law):

- (a) The Prime may be ordered to stop work without penalty to NJT.
- (b) The contract may be terminated for breach.
- (c) Suspension or debarment proceedings may be commenced in accordance with New Jersey law.
- (d) The relevant performance bond may be enforced.
- (e) NJT may withhold payment of specific invoices.

5.7 LIQUIDATED DAMAGES

5.7.1 Liquidated damages (LD) may be assessed when the Prime fails to meet the established DBE goal on the contract.

5.7.2 If the DBE goal is not met, and the Prime has not demonstrated a good faith effort to do so, NJT may elect to subtract from the Prime's payment, as liquidated damages and not a penalty, the following:

The amount equal to the difference (in dollars) between the total contract value multiplied by the assigned DBE goal percentage, (originally established or as subsequently modified) and the actual DBE participation percentage (total dollars paid to DBEs divided by total dollars paid to the Prime).

5.7.3 This may be withheld from a series of payments or from the Prime's final payment, depending on the size of the liquidated damage.

5.7.4 If the Prime's final payment is not sufficient to satisfy the LD in full, the balance shall be due and owing from the Prime and subject to repayment terms as determined by NJT. NJT shall waive liquidated damages where good cause is shown for the deficiency in DBE participation upon determination by the OBD.

APPENDIX I

GLOSSARY

A Good Faith Effort-the efforts employed by the bidder, which should be those that one could reasonably expect a bidder to take if the bidder were actively and aggressively trying to obtain DBE participation sufficient to meet the contract goal.

Certification - means the process by which a business is determined to be a bona fide DBE. Any business applying for DBE certification must complete the appropriate NJ Unified Certification Program Application. Certification Applications are available at the OBD.

Disadvantaged Business Enterprise or DBE - means a small business concern:

Which is at least 51 percent owned by one or more socially and economically disadvantaged individuals, or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more socially and economically disadvantaged individuals; and where one or more of the socially and economically disadvantaged owners controls management and daily business operations. A DBE shall not include a small business concern where that concern or a group of concerns controlled by the same socially and economically disadvantaged individual or individuals has annual average gross receipts in excess of **\$22,410,000** over the previous three fiscal years or is not otherwise eligible as a small business as defined by the Small Business Administration in 13 CFR Part 121.

DBE Goal - means numerically expressed objectives for DBE participation on federal contracts Prime contractors are required to make a good faith effort to achieve to the extent necessary to meet the assigned DBE goal.

DBE Sub-Prime - means any 1st Tier DBE subcontractor/subconsultant listed on the Form A that will subcontract any portion of its subcontract/scope of work to a DBE(s) and/or non-DBE(s) firm(s).

DBE Ineligibility – means a firm's DBE status changes or ceases due to change in ownership, management, or size, etc.

DBE Prime – means the successful Bidder is a DBE firm and has a direct contract with NJT.

DBE Trucking Firm – owns and operates at least one fully licensed, insured, and operational truck used on the contract. Is responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract.

First Tier DBE - refers to any DBE listed on the Bidder/Proposer/Prime's Form A and having a direct contract with the Prime.

Joint Venture—means an association of a DBE firm and one or more other firms to carry out a single, for-profit business enterprise, for which parties combine their property, capital, efforts, skills and knowledge, and in which the DBE is responsible for a distinct, clearly defined portion of the work of the contract and whose share in the capital contribution, control, management, risks, and profits of the joint venture are commensurate with its ownership interest.

Prime - means any contractor or consultant, including a DBE contractor/consultant, who enters into a direct contractual relationship with NJT.

Race-conscious Measure or Program - is one that is focused specifically on assisting only DBEs, including women-owned DBEs.

Race-neutral Measure or Program- is one that is focused specifically on assisting all small businesses equally, including DBEs. Such activities include bonding, insurance, and technical assistance. For the purposes of this part, race-neutral includes gender-neutrality.

Reasonable Bid Price - means a price that shall be considered reasonable if the Bidder/Proposer/Prime would have been awarded the contract had the firm submitted the only bid.

Regular Dealer - means a firm that owns, operates, or maintains an establishment in which the materials or supplies required for the performance of a contract are bought, kept in stock and regularly sold to the public in the usual course of business.

The firm must engage in, as its principal business, and in its own name, the purchase and sale of products in question. Bulk items such as steel, cement and petroleum products need not be stocked, if the dealer owns or operates distribution equipment.

Note: Brokers and packagers are not regarded as regular dealers.

Second Tier DBE - refers to any DBE listed on the DBE Sub-Prime's Form AA.

Subcontractor/ Subconsultant - means any contractor/consultant, including suppliers, who enters into a contract issued by a Prime contractor.

Transit Vehicle Manufacturer (TVM) - is a manufacturer of vehicles used by NJT for the primary program purpose of public mass transportation (e.g., buses, railcars, vans). The term does not apply to firms, which rehabilitate old vehicles, or to manufacturers of locomotives or ferryboats. The term refers to distributors of or dealers in transit vehicles with respect to the requirements of 49 CFR Section 26.49.

U.S. DOT – means the U.S. Department of Transportation, including the Office of the Secretary, the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), and the Federal Railroad Administration (FRA).

Withdrawn DBE – a DBE withdraws, or drops out of its contract, or fails to complete its work on the contract for any reason.

Bidders Checklist (for federal contracts)

Upon completion of the Required and/or Supplemental Forms packet(s), please be sure that the completed checklist and the forms listed below are included for each DBE subcontractor listed on the Form A and submitted to the Office of Business Development (OBD) for review.

Note: Failure to complete and submit the forms below will delay the OBD from issuing approval to move forward in the contract award process.

Required Forms

- Form A - First Tier DBE Utilization
- Form A1 - Bidder/Proposer Solicitation and Contractor Information
- Form A2 - Non-DBE Sub Utilization
- Form B - Intent to Perform as a DBE Sub
- Form D - DBE Good Faith Effort Form
- Trucking Commitment Agreement (if applicable)

Supplemental Forms (if applicable)

- Form AA - Second Tier DBE Utilization
- Form AA1 - Second Tier Bidder/Proposer Solicitation and Contractor Information
- Form AA2 - Second Tier Non-DBE Sub Utilization
- Form BB - Intent to Perform as a Second Tier DBE Sub
- Trucking Commitment Agreement (if applicable)

First Tier DBE UTILIZATION - FORM A

Project Name: _____

NJT Contract No: _____

Assigned DBE Goal %: _____ NJT Procurement Specialist: _____

Contract Value (\$): _____

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

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

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

Company Name: _____ Authorized Signature: _____

Company Address: _____ Print Name: _____

_____ Title: _____

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

Company Tel #: _____ Date Signed: _____

BIDDER SOLICITATION & CONTRACTOR INFORMATION - FORM A1

NJT Contract No: _____

Project Title: _____

Prime Contractor: _____

Telephone #: _____

Date: _____

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

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

BIDDER SOLICITATION & CONTRACTOR INFORMATION - FORM A1

NJT Contract No: _____

Project Title: _____

Prime Contractor: _____

Telephone #: _____

Date: _____

Complete the information below for "all" subcontractors/subconsultants solicited for or participating on this project.

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

NON-DBE SUBCONTRACTOR UTILIZATION - FORM A2
Directions: To be completed by any Bidder/Proposer/Prime for "all" subs including suppliers participating on this contract.

Bidder/Proposer Prime Name: _____ Project Title: _____

Date: _____ Prime Contract Value: _____

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

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

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

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

Name of Bidder/Proposer/Prime: _____

Name of DBE Firm: _____

Project/Contract Name: _____

IFB/RFP Contract Number: _____

Does the undersigned DBE (Answer Accordingly):

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

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

At what percent? _____%

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

At what percent? _____%

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

Dollar Value of DBE Subcontract: \$ _____

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

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

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

DBE Contract Start Date: _____ DBE Contract Completion Date _____

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

Signature of 1st Tier DBE _____ Date _____

Title _____

Print Name _____

Telephone #: _____

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

Form E - Prime Contractor's DBE Payment Certification

- 1. Have all DBE subcontractors with executed subcontracts been paid amounts due from previous progress payments?
 - If yes, skip the next section and go to number 3.
 - If no, please complete fields in box below: (Use additional paper, if needed)

DBE SubContractor Name	Amount Withheld From Invoice (\$)	Total of Invoice Amount (\$)	Invoice Number	Invoice Date	Specific Reason for Withholding

- 2. Have you notified the DBE subcontractor(s) that you are withholding payment and the reason(s) why?
 - If yes, provide a copy of written notification to the DBE subcontractor with this form, indicating the date of notification.
 - If no, lack of prior written notification to the DBE(s) that you are withholding payment violates the prompt payment clause guidelines. **Please contact the DBE immediately, and provide a copy of written notification to the subcontractor with this form.**
- 3. By signing this form, I certify that all of the above represent true and accurate information.

Note: CFO or equivalent Sr. Manager must complete and sign off on this form.

PROJECT DIRECTOR NAME (PRINT) _____ PROJECT DIRECTOR (SIGNATURE) _____ / ____ / ____ DATE

Additional Reasons/Comments for Withholding Payment:

THIS FORM IS DUE ON THE 7TH OF EACH MONTH Please forward to:
 Office of Civil Rights and Diversity Programs
 Business Development
 NJ TRANSIT
 One Penn Plaza East, 6th Fl
 Newark, New Jersey 07105-2246

DO NOT WRITE BELOW. DEPARTMENTAL USE ONLY.
 Approved
 Denied

DBE SUBCONTRACTOR Monthly Payment Report - Form E2

Name of DBE Firm: _____ Report for the Month of: _____
 DBE's FEIN#: _____ Contract Number: _____
 DBE Address: _____ Contract Name: _____
 DBE Telephone #: _____ DBE Contract Start Date: _____

Prime Contractor's Information:

Name of Prime: _____ Address: _____ Telephone #: _____

DBE PAYMENT INFO: *Itemize payments/invoices and dates if received/submitted more than one payment/invoice between the 1st and 31st of THIS Month.*

Work Task Performed	Original Subcontract Amount \$	Change Order Amount (+/-)	Invoice #(s) Submitted in this month	Dollar Amount of Each Invoice Submitted in this Month	Date of Invoice(s) Submitted this Month	Total Payments Received by DBE In this Month * (\$)	Date Payment(s) Received in this Month	Total Payments Received by DBE To Date (\$)	Total % Work To Date	Final Payment? Y or N
	\$	\$	TOTALS →	\$	TOTALS →	\$	TOTALS →	\$		

Is retainage held on your subcontract? Yes or No (circle one) If yes, how much? \$ _____. Did your final payment include retainage? Yes or No (circle one)

Past Due Invoice(s) Information: List any invoice more than 40 days past due from date submitted to prime at the time you complete this form.

Invoice #	Invoice Date	Invoice Amount (\$)	Number of Days Past Due	Comments: use additional paper if necessary

Note: CFO or equivalent Sr. Manager must complete and sign off on this form.

Name: _____ Signature: _____ Title: _____ Date: _____

THIS FORM IS DUE ON THE 7TH OF EACH MONTH IMMEDIATELY FOLLOWING DBE's SUBCONTRACT START DATE, EVEN IF PAYMENT NOT RECEIVED.

Please mail this form to:

NJ TRANSIT, Office of Business Development, One Penn Plaza East, 6th Fl, Newark, New Jersey 07105-2246

Do not alter this form in any way.

If you need assistance completing this form please call 973-491-7539, 8058, 8768, 8069, or 8941.

**ATTACHMENT C THE FEDERAL GENERAL WAGE DETERMINATION FOR
HUDSON COUNTY, NEW JERSEY (9 PAGES)**

NEW JERSEY TRANSIT CORPORATION
GENERAL PROVISIONS FOR CONSTRUCTION

Table of Contents

1.GENERAL REQUIREMENTS	1
1.1 ABBREVIATIONS AND DEFINITIONS	1
1.2 ORDER OF PRECEDENCE	7
1.3 REFERENCED STANDARDS	7
1.4 INTENTION	8
1.5 INTERPRETATION	9
1.6 PERMITS, LAWS, AND REGULATIONS	9
1.7 FEDERAL, STATE, AND LOCAL TAXES	11
1.8 INDEPENDENT CONTRACTOR	11
1.9 ASSIGNING AND SUBCONTRACTING CONTRACT	12
1.10 CONTRACTING OFFICER'S AUTHORITY	13
1.11 PROJECT MANAGER'S AUTHORITY	14
1.12 CONSTRUCTION MANAGER'S AUTHORITY	14
1.13 INSPECTOR'S AUTHORITY	14
1.14 NOTICE AND COMMUNICATION	14
1.15 DISPUTES	15
1.16 GOVERNING LAW; CONSENT TO JURISDICTION AND WAIVER OF TRIAL BY JURY	15
1.17 AUDIT AND INSPECTION OF RECORDS	16
2.CONTRACT TIME, SUSPENSION AND TERMINATION	16
2.1 TIME OF COMPLETION - DELAY - LIQUIDATED DAMAGES	16
2.2 NO DAMAGES FOR DELAY	20
2.3 SUSPENSION OF WORK	20
2.4 TERMINATION FOR CONVENIENCE	21
2.5 TERMINATION FOR CAUSE	24
3.CONTRACT CHANGES	26
3.1 CHANGE ORDERS	26
3.2 CHANGE ORDER PRICING	27
3.3 TIME AND MATERIAL (T&M) CHANGE ORDER RECORDS	34
3.4 CONTRACTOR INITIATED CHANGE ORDERS	35
3.5 AUDIT OF CHANGE ORDERS	37
3.6 SUPPLEMENTAL CONSTRUCTION COSTS	38
4.PROTECTION AND CONTROL OF PREMISES	38
4.1 RESPONSIBILITY FOR WORK	38
4.2 USE OF PREMISES	39
4.3 MAINTENANCE AND CLEANING OF PREMISES	41
4.4 FIRE PREVENTION ON PREMISES	42
4.5 PROTECTION AGAINST DAMAGE	42
4.6 PROTECTION OF PRIVATE PROPERTY	44
4.7 PROTECTION OF PUBLIC UTILITIES	44
4.8 PROTECTION OF EXISTING MONUMENTS	45
4.9 MAINTENANCE AND PROTECTION OF ROADWAY AND PEDESTRIAN TRAFFIC	45
4.10 MAINTENANCE OF MARINE TRAFFIC	47
4.11 MAINTENANCE OF RAILROAD TRAFFIC	47
4.12 WORK FURNISHED BY OTHERS	52
4.13 ARTS IN TRANSIT	53
5.MOBILIZATION AND TEMPORARY FACILITIES	54
5.1 MOBILIZATION	54
5.2 FIELD OFFICE AND SANITARY FACILITIES	55
5.3 CONSTRUCTION SIGN	58
5.4 TEMPORARY WATER	59
5.5 TEMPORARY LIGHT AND POWER	59

NEW JERSEY TRANSIT CORPORATION
GENERAL PROVISIONS FOR CONSTRUCTION

Table of Contents

5.6	TEMPORARY HEAT	60
5.7	TEMPORARY PARTITIONS, ENCLOSURES, GLAZING BREAKAGE AND CLEANING	61
5.8	TEMPORARY, INTERMEDIATE AND HIDDEN WORK	62
5.9	DEMobilIZATION	62
6.PROJECT ADMINISTRATION AND DOCUMENT CONTROL		62
6.1	PROJECT MEETINGS	62
6.2	CONSTRUCTION PROJECT SCHEDULE	64
6.3	CONTRACT DRAWINGS AND SPECIFICATIONS	69
6.4	GENERAL REQUIREMENTS FOR SUBMITTALS	69
6.5	SHOP AND WORKING DRAWING SUBMITTALS	72
6.6	SAMPLES SUBMITTALS	74
6.7	PRODUCT AND SUBMITTALS	75
6.8	VALUE ENGINEERING SUBMITTALS	78
6.9	PROGRESS PHOTOGRAPH SUBMITTALS	79
6.10	REPORTS, RECORDS AND DATA SUBMITTALS	79
6.11	AS-BUILT DRAWINGS AND QUANTITIES SUBMITTAL	80
7.QUALITY ASSURANCE AND QUALITY CONTROL		81
7.1	QUALITY ASSURANCE	81
7.2	MATERIAL - WORKMANSHIP - LABOR	81
7.3	INSPECTION OF WORK	83
7.4	PLANT INSPECTION	84
7.5	INSTALLED EQUIPMENT TESTING AND TRAINING	85
7.6	LABORATORY TESTING AND INSPECTION	86
7.7	CERTIFICATION OF COMPLIANCE	88
7.8	NON-CONFORMING WORK AND MATERIALS	89
7.9	WARRANTY AGAINST DEFECTIVE WORK	90
8.EXCAVATION AND DIFFERING SITE CONDITIONS		91
8.1	UNCLASSIFIED EXCAVATION	91
8.2	MEASUREMENT OF PAY LIMITS FOR EXCAVATION	91
8.3	SOIL BORINGS	92
8.4	DIFFERING, LATENT OR UNUSUAL SITE CONDITIONS	92
8.5	ARCHEOLOGICAL FINDINGS	93
9.INDEMNIFICATION AND LIABILITY		93
9.1	INDEMNIFICATION; RISKS ASSUMED BY THE CONTRACTOR	93
9.2	INSURANCE	95
9.2.5	AUTOMOBILE LIABILITY INSURANCE	96
9.3	LIMITATIONS OF LIABILITY	98
9.4	NO THIRD PARTY BENEFICIARIES	98
9.5	PERSONAL LIABILITY OF PUBLIC OFFICIALS	99
9.6	INTELLECTUAL PROPERTY	99
9.7	ENVIRONMENTAL COMPLIANCE AND LIABILITY	99
10.ETHICAL REQUIREMENTS		100
10.1	COVENANT AGAINST CONTINGENT FEES	100
10.2	OFFICIALS NOT TO BENEFIT	101
10.3	GRATUITIES	101
10.4	NJ TRANSIT CODE OF ETHICS	101
11. SOCIAL AND ECONOMIC REQUIREMENTS		103
11.1	NEW JERSEY PREVAILING WAGE ACT	103
11.2	EQUAL OPPORTUNITY	104

NEW JERSEY TRANSIT CORPORATION
GENERAL PROVISIONS FOR CONSTRUCTION

Table of Contents

11.3	UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES.....	111
12.	MEASUREMENT AND PAYMENT	112
12.1	SCOPE OF PAYMENT.....	112
12.2	QUANTITIES: MEASUREMENT AND PAYMENT.....	112
12.3	PARTIAL PAYMENTS.....	113
12.4	MATERIALS PAYMENTS.....	114
12.5	RETAINAGE.....	115
12.6	SUBCONTRACTOR PAYMENTS AND RETAINAGE.....	115
12.7	PAYMENTS WITHHELD.....	117
12.8	FINAL PAYMENT.....	117
12.9	SETTING OFF TAX ARREARS AGAINST SUMS OWED	119
13.	ACCEPTANCE AND COMPLETION	120
13.1	PARTIAL ACCEPTANCE.....	120
13.2	SUBSTANTIAL COMPLETION.....	120
13.3	COMPLETION AND FINAL ACCEPTANCE OF THE WORK.....	121
14.	FEDERAL PROVISIONS	122
14.1	EMPLOYEE PROTECTIONS-CONSTRUCTION ACTIVITIES.....	122
14.2	CLEAN WATER AND CLEAN AIR ACTS.....	130
14.3	BUY AMERICA.....	130
14.4	FLY AMERICA REQUIREMENTS.....	131
14.5	CARGO PREFERENCE - USE OF U.S. FLAG VESSELS.....	131
14.6	ENERGY CONSERVATION.....	132
14.7	CONTRACT WORK HOURS AND SAFETY STANDARDS.....	132
14.8	TITLE VI COMPLIANCE.....	132
14.9	PATENT RIGHTS.....	134
14.10	RCRA REQUIREMENTS: BUILDING INSULATION PRODUCTS AND FLY ASH IN CONCRETE.....	134
14.11	FEDERAL EEO PROVISIONS FOR CONSTRUCTION CONTRACTS.....	136
14.12	LIMITATIONS ON LOBBYING.....	145
14.13	SEISMIC SAFETY.....	146
14.14	EXCLUSIONARY OR DISCRIMINATORY SPECIFICATIONS.....	146
14.15	NO FEDERAL GOVERNMENT OBLIGATIONS TO THIRD PARTIES.....	147
14.16	FALSE OR FRAUDULENT STATEMENTS AND CLAIMS.....	147
14.17	FEDERAL AID, LAWS AND REGULATIONS.....	147

APPENDIX A – SUBCONTRACTOR EVALUATION DATA FORM

APPENDIX B – CLOSEOUT FORMS

APPENDIX C – CONTRACT EXECUTION FORM

APPENDIX D – GOVERNING RULES FOR WORKING WITHIN THE RAILROAD RIGHT OF WAY

APPENDIX E – AGREEMENT BETWEEN CONTRACTOR AND ARTIST

NEW JERSEY TRANSIT CORPORATION
GENERAL PROVISIONS FOR CONSTRUCTION

1. GENERAL REQUIREMENTS

1.1 ABBREVIATIONS AND DEFINITIONS

1.1.1 ABBREVIATIONS:

<u>AAR</u>	Association of American Railroads
<u>AASHTO</u>	American Association of State Highway and Transportation Officials
<u>AMTRAK</u>	National Railroad Passenger Corporation
<u>ANSI</u>	American National Standards Institute (Formerly USASI, United States of American Standards Institute, and ASA, American Standard Association)
<u>AREMA</u>	American Railway Engineering and Maintenance Association (Formerly AREA, American Railway Engineering Association)
<u>ASTM</u>	American Society for Testing and Materials
<u>CONRAIL</u>	Consolidated Rail Corporation
<u>CFR</u>	Code of Federal Regulations
<u>CPM</u>	Critical Path Method
<u>DCA</u>	New Jersey Department of Community Affairs
<u>FTA</u>	Federal Transit Administration
<u>MSDS</u>	Material Safety Data Sheet(s)
<u>NFPA</u>	National Fire Protection Association
<u>NJAC</u>	New Jersey Administrative Code
<u>NJDOT</u>	New Jersey Department of Transportation
<u>NJUFC</u>	New Jersey Uniform Fire Code
<u>NJ TRANSIT</u>	New Jersey Transit Corporation
<u>NJUCC</u>	New Jersey Uniform Construction Code
<u>NPC</u>	Notice of Proposed Change
<u>OSHA</u>	Occupational Safety and Health Administration, and Occupational Safety and Health Act of 1970, and amendments thereto; United States Department of Labor
<u>RFI</u>	Request for Information
<u>USDOT</u>	United States Department of Transportation

1.1.2 DEFINITIONS:

Acceptance of the Work: The act of the Contracting Officer, or the Contracting Officer's authorized representative, by which NJ TRANSIT accepts the work performed as partial or complete performance of the requirements of the Contract on the part of the Contractor.

Addenda: Written interpretations, clarifications, and revisions to any of the Contract Documents issued by NJ TRANSIT before the bid opening.

Advertisement: The public announcement, as required by law, inviting bids for work to be performed, materials to be furnished, or both.

Affiliate: Any entity that (1) directly, indirectly, or constructively controls another entity, (2) is directly, indirectly, or constructively controlled by another entity, or (3) is subject to the control of a common entity. An entity controls another entity if it owns, directly or individually, more than 50% of the ownership in that entity.

Allowance: An item included in the Bidder's Proposal for the exclusive use and benefit of NJ TRANSIT.

Approved Equal: A product which, in the opinion of the Engineer, complies with the technical specification requirements in form, fit, functionality, maintainability, useful life and quality of performance.

Approval: The written endorsement, sanction, or authorization by NJ TRANSIT of a proposal, plan, procedure, action, document, report, specification, design, or any part thereof, undertaken, promulgated, or developed by the Contractor in accordance with the indicated requirements of the Contract.

Architect: The term Architect shall be used interchangeably with Engineer and shall have the same meaning as Engineer.

Award: The approval by NJ TRANSIT of the bid and written notice of same to the tenderer of said bid.

Bid: The proposal or offer of the Bidder for the Work, when made out and submitted on the prescribed Bid Forms, properly signed, dated, and guaranteed, and which includes the schedule of Bid Items.

Bid Security: The bid bond, cashier's check, certified check or irrevocable letter of credit accompanying the bid submitted by the Bidder guaranteeing that the Bidder will enter into a Contract with NJ TRANSIT for the performance of the Work indicated and will provide acceptable bonds and insurance if the Contract is awarded to it.

Bidder: An individual, firm, partnership, corporation, joint venture or combination thereof submitting a proposal for the Work contemplated as a single business entity and acting directly or through a duly authorized representative.

Bidder's Proposal: The prescribed Bid Form which contains the schedule of Bid Items and the Bidder's declaration to perform the work for the prices bid.

Business Organization: An individual, partnership, association, joint stock company, trust, corporation, or other legal business entity or successor thereof.

Business Registration: A business registration certificate issued by the Department of the Treasury or such other form or verification that a Contractor or Subcontractor is registered with the Department of Treasury.

Calendar Day: Each and every day shown on the calendar.

Change Order: A written order issued by the Contracting Officer of NJ TRANSIT to the Contractor delineating changes in the Contract Documents in conjunction with one or more Notice(s) of Proposed Change and establishing, if appropriate, an equitable adjustment to the Contract Price or Contract Time for the work affected by the change(s).

Construction Equipment: All machinery and equipment, together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for the proper and acceptable completion of the Work.

Construction Manager: NJ TRANSIT's Assistant Executive Director (AED) of Capital Planning and Programs acting, directly or through the AED's authorized representatives at the Construction Site, within the scope of duties assigned to him or her.

Construction Site: The geographical area of the property at which the contract work is performed, as authorized and identified by NJ TRANSIT.

Consultant: A firm or individual contracting with and providing professional services to NJ TRANSIT.

Contract: The written agreement executed by the Contracting Officer of NJ TRANSIT and the Contractor which covers the performance of the Work, the furnishing of labor, materials, tools and equipment and the basis of payment, and which incorporates the various Contract Documents. The Contract represents the entire and integrated agreement between the parties and supersedes all prior negotiations, representations or agreements either written or oral.

Contract Documents: The Contract Documents include: The General Provisions for Construction, Special Provisions, Technical Provisions, Contract Drawings, Contract Forms, Documents referenced by these specifications, the Notice(s) to Proceed, Directive Letters, Change Orders, and Addenda.

Contract Drawings: The official plans, sections, elevations and details in the Contract Documents or amendments thereto and supplemental drawings approved by NJ TRANSIT which show the locations, character, dimensions and details of the Work to be performed.

Contract Item (Pay Item): A specifically described product or unit of work for which a price is listed in the Contract or the Bidder's Proposal.

Contractor Initiated Change Order Request (CICOR): A request submitted to NJ TRANSIT by the Contractor specifying a proposed addition, deduction, or change to the Contract Documents.

Contract Limit: The lines shown on the drawings beyond which no construction work shall be performed unless otherwise noted on the drawings or in the specifications.

Contract Time: The number of calendar days or specified date set forth in the Contract for substantial completion of the Work, including amendments authorized by Change Order thereto; also referred to as Time of Completion. Contract Time begins on the date of the Notice to Proceed which is day one (1) of the Contract Time.

Contracting Officer: NJ TRANSIT's Chief of Procurement & Support Services acting, directly or through the Chief of Procurement & Support Services authorized representative(s), within the scope of duties assigned to him or her.

Contractor: The individual, firm, partnerships, corporation, joint venture, or any combination thereof, who, as an independent contractor, has entered into a Contract with NJ TRANSIT, as party or parties of the second part and who is referred to throughout the Contract Documents by singular number and non-specific gender.

Days: Days as used in the Specifications shall be understood to mean calendar days unless otherwise designated.

Directive Letter: A letter issued by the Contracting Officer, or the Contracting Officer's duly authorized designee, directing the Contractor to proceed with added, deleted or changed work.

Drawings: See Contract Drawings.

Engineer: The authorized representative of NJ TRANSIT providing design and engineering services for the Project. This may be either internal NJ TRANSIT staff or an outside consultant.

Execution of the Contract: The signing of the Contract by the authorized representative of NJ TRANSIT and the authorized representative of the Contractor.

Executive Director: The chief executive officer of NJ TRANSIT appointed in accordance with N.J.S.A. 27:25-1 et seq. and NJ TRANSIT's by-laws, or his/her designee.

Extra Work: An item of work not provided for in the Contract as awarded but found essential to the acceptable completion of the Contract within its intended scope.

Failure: Inability of a component, equipment, or system to function or perform in accordance with the indicated requirements.

Federal Transit Administration: Formerly known as the Urban Mass Transportation Administration, an agency within the United States Department of Transportation.

Final Inspection: The inspection conducted by the Project Manager to determine if the Work, or any substantial portion thereof, declared by the Contractor to be completed, has been satisfactorily completed in accordance with the requirements of the Contract and Contract Documents, and properly conditioned for final acceptance by the Contracting Officer.

Form, Fit, and Function: The technical documentation describing the physical and functional characteristics of an item as an entity, but not including any characteristics of the elements making up the item.

General Provisions: The general conditions of the Contract set forth in the Contract Documents as the General Provisions for Construction.

Government: The Government of the United States of America.

Holidays: Specific days on which NJ TRANSIT is not open for business.

Inspector: The Construction Manager's authorized representative assigned to observe Contract performance and materials furnished by the Contractor.

Installed Equipment: Equipment incorporated into the Work under this Contract.

Installer: The Contractor or entity (person or firm) engaged by the Contractor or its subcontractor at any tier for the performance of a particular unit of work at the project site, including installation, erection, application and similar required operations.

Invitation for Bids: The set of documents issued by NJ TRANSIT's Procurement Department for the purpose of soliciting bids.

Joint Venture: A legal association of Contractors formed for the purpose of bidding and executing a Contract as a single business entity.

Logo: An abbreviation for logotype, trademark or symbol.

Materials: Substances specified for use in the Work and its appurtenances.

NJ TRANSIT: A public instrumentality of the State of New Jersey established by the New Jersey Public Transportation Act, N.J.S.A. 27:25-1 et seq. (L. 1979, c.150).

Notice of Proposed Change (NPC): A notice issued to the Contractor by NJ TRANSIT specifying a proposed addition, deduction or change to the Contract Documents. A Notice of Proposed Change is not an order to incorporate revisions into the Work.

Notice(s) to Proceed: The written directive from the Contracting Officer to the Contractor authorizing the Contractor to begin the prosecution of the Work in the initial Contract or for added, deleted or changed Work.

Owner: The New Jersey Transit Corporation (NJ TRANSIT).

Performance and Payment Bonds: The approved form of security furnished by the Contractor and its surety guaranteeing complete performance of the Contract in conformity with the Contract Documents and the payment of legal obligations pertaining to the construction of the Contract.

Project: The specific Work required to be performed by the Contractor as described in the Contract Documents.

Project Data: Illustrations, standard schedules, performance charts, instructions, brochures, diagrams, performance and test data, test procedures, existing drawings, operational manuals, maintenance manuals, spare parts lists and data, descriptive literature, catalogs, catalog cuts, and other information furnished by the Contractor to illustrate a material, product or equipment and to support its test, installation, operation or maintenance.

Project Manager: NJ TRANSIT's Assistant Executive Director (AED) of Capital Planning and Programs or Deputy General Manager (DGM) of Infrastructure Design acting, directly or through their authorized representative(s), within the scope of the particular duties assigned to him or her.

Proposal: See Bid.

Purchase Order: The written document generated by the Procurement Department and issued to the Contractor for billing purposes.

Quotation: The Contractor's written response to the Notice of Proposed Change.

Reliability: The probability that equipment or a system will perform its intended functions without failure and within design parameters under specified operating conditions for which designed and for a specific period of time.

Remaining Work: Any and all Work remaining to be performed after Substantial Completion, including but not limited to, punch list work, which in the opinion of the Engineer is necessary for full conformance to the Contract.

Samples: Physical examples which illustrate materials, equipment or workmanship and establish standards by which the acceptability of the Work will be judged.

Shop Drawings: Original drawings, submitted to the Construction Manager by or through the Contractor, subcontractor or any lower tier subcontractor pursuant to the Work, including, but not limited to: stress sheets, working drawings, diagrams, illustrations, schedules, performance charts, brochures, erection plans, falsework plans, framework plans, cofferdam plans, bending diagrams for reinforcing steel, reinforced concrete formwork drawings, or other supplementary plans or similar data which are prepared by the Contractor or a subcontractor, manufacturer, supplier or distributor, and which the Contractor is required to submit to the Construction Manager for review and approval by the Engineer.

Special Provisions: Special Provisions are supplementary specified clauses setting forth conditions or requirements peculiar to the Work taking precedence over the General Provisions.

Specifications: The directions, provisions, and requirements contained or referred to in the Contract Documents, together with all duly authorized written agreements and directives made or to be made pertaining to the manner of performing the Work, or to the quantities and qualities of materials to be furnished or the quantities and qualities of work to be performed under the Contract.

State: State of New Jersey.

Subcontractor: Any individual, partnership, firm or corporation who undertakes for the Contractor, with the prior approval of the Project Manager, the partial or total manufacture or installation, or both, of one or more items of work under the terms of the Contract, or who performs other services for the Contractor as required to fulfill the terms of this Contract, by virtue of an agreement with the Contractor.

Substantial Completion: The point at which the Project Manager determines that the performance of work or portion thereof under the Contract, except Remaining Work, has been completed: provided that the Project Manager has determined, in the Project Manager's sole discretion, that (1) the project is safe and convenient for use and occupancy by the public and NJ TRANSIT employees and visitors; and (2) the project and facilities resulting therefrom may be used for the purposes for which they were intended.

Substitution: A product which, in the opinion of the Engineer, does not comply in form, fit, functionality, maintainability, useful life and quality of performance, with the technical specification requirements yet is proposed by the Contractor for incorporation into the Work in lieu of a specified product.

Superintendent: The Contractor's designated representative at the Construction Site responsible for the supervision and coordination of the Work.

Supplier: Any individual, partnership, firm or corporation which provides materials or equipment but not labor or services to the Contractor in partial fulfillment of the Scope of the Work of the Contract and who is responsible to the Contractor by virtue of an agreement.

Surety: The corporate body authorized to issue surety bonds in New Jersey which is bound with and for the Contractor for the guarantee of its proposal and the satisfactory performance of the Work by the Contractor, and the prompt payment in full for materials, labor, equipment, rentals, utility services, and debts and obligations, as provided in the bonds.

Total Bid: The total monetary amount of the bidder's proposal in dollars for performance of the Work of the entire Contract.

Technical Data: Written, typed or printed material prepared by the Contractor, subcontractors, vendors and suppliers or others, whether or not copyrighted, and submitted by the Contractor in response to the requirements set forth in these specifications. Technical data include, but are not limited to, product data, shop drawings, pictorial representations, reports, schedules, studies, and assessments.

Technical Provisions: The Technical Provisions are specific requirements setting forth the materials and methods required to accomplish the Work.

U.S. Department of Transportation: The Secretary of the U.S. Department of Transportation, and other persons who may at the time be acting in the capacity of the Secretary, or an authorized representative or

other persons otherwise authorized to perform the functions to be performed by USDOT, including representatives of the Federal Transit Administration (FTA).

Work: Work shall mean the furnishing of labor, materials, equipment, and other incidentals necessary or convenient to the successful completion of the Project and the carrying out of the duties and obligations imposed by the Contract, including alterations, amendments or extensions.

1.2 ORDER OF PRECEDENCE

The sequence of precedence pertaining to the Contract Documents is as follows:

Contract Change Orders and Directive Letters

Addenda, if any

Special Provisions, if any

General Provisions

Technical Provisions

Details

Figured Dimensions

Scaled Dimensions

Drawings

Referenced Standards

1.3 REFERENCED STANDARDS

1.3.1 All materials, equipment and workmanship, specified by the number, symbol or title of a referenced standard shall comply with the latest edition or revision thereof and all amendments and supplements thereto in effect on the date of the opening bids, except where a particular issue is indicated in the reference. Where products or workmanship are specified by an association, trade or federal standard, Contractor shall comply with the requirements of that standard, except where exceeded by the requirements of the Contract plans and specifications or regulatory authorities. Where referenced standards are in conflict, the more stringent shall apply. In case of conflicting requirements between Referenced Standards and the Contract Documents, the Contract Documents shall govern.

1.3.2 Where the New Jersey Uniform Construction Code, its adopted subcodes and their referenced standards, and the other regulations described in Article 1.6 are silent regarding the construction requirements of the work specified herein, installation shall be in accordance with the most current versions of the following:

- 1.) National Fire Protection Association (NFPA) Standard 130 - Standard for Fixed Guideway Transit Systems;
- 2.) American Railway Engineering and Maintenance Association (AREMA) Manual of Railway Engineering;
- 3.) Industrial Risk Insurers (IRI) Standards;
- 4.) NJ TRANSIT Standards as identified in the Contract Documents;

- 5.) NJ TRANSIT Graphic Standards Manual; and
- 6.) NJDOT Standard Specification for Road Bridge Construction (except Section 100).

1.4 INTENTION

- 1.4.1 The Contract Documents are intended to provide for and comprise everything necessary to the proper and complete finishing of the work in every part notwithstanding that each and every item necessary may not be shown on drawings or mentioned in the specifications. The Contractor shall abide by and comply with the true intent and meaning of all the Contract Documents taken as a whole, and shall not avail itself of any apparent error or omission, should any exist.
- 1.4.2 The Contractor's execution of this Contract constitutes its certification that it satisfied itself, through personal inspection, as to the correctness of information given which may affect the quantity, size and quality of materials required for a satisfactorily completed Contract, whether or not such information is indicated on the Drawings or within the Specifications. The Contractor confirms that it checked and verified conditions outside of the Contract Limit Lines to determine whether or not any conflict exists between elevations or other data shown on the drawings and existing elevations or other data outside of the Contract Limit Lines.
- 1.4.3 Work that may be called for in the Specifications and not shown on the Drawings or shown on the Drawings and not called for in the Specifications, shall be executed and furnished by the Contractor as if described in both. Should work or materials be required which are necessary for the proper carrying out of the intent thereof, the Contractor shall understand same to be implied and required and it shall perform such work and furnish such materials as fully as if they were particularly delineated or described.
- 1.4.4 The Contractor shall not at any time after the execution of this Contract set up any claims whatsoever based upon insufficient data, patent ambiguities, inconsistencies or confusion in the Contract Documents or incorrectly assumed conditions, nor shall it claim any misunderstanding with regard to the nature, conditions or character of the work to be done under the Contract, except as provided for under Article 8.4- DIFFERING, LATENT OR UNUSUAL SITE CONDITIONS.
- 1.4.5 Should any error or discrepancy appear or should any doubt exist or any dispute arise as to the true intent and meaning of the Contract Documents, or should any portion of same be obscure or capable of more than one method of construction, the Contractor shall immediately apply in writing to the Construction Manager for the correction or explanation thereof and, in case of dispute, the Contracting Officer's decision shall be final.
- 1.4.6 Each and every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted herein and the Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise such provision is not inserted, or is not correctly inserted, then

upon the application of either party the Contract shall forthwith be physically amended to make such insertion or correction.

1.4.7 NJ TRANSIT may act directly through its own employees or may act indirectly through retained independent third party Contractors and consultants and their employees. The Contractor shall be advised by the Contracting Officer of those persons authorized to act on NJ TRANSIT's behalf.

1.4.8 A waiver on the part of NJ TRANSIT of any breach of any part of the Contract shall not be held to be a waiver of any other or subsequent breach.

1.5 INTERPRETATION

1.5.1 The headings of the articles herein are for convenience of reference only and shall have no bearing on their interpretation. Whenever in these Contract Documents the following terms are used, the intent and meaning shall be interpreted as defined herein. All of the terms used herein are treated throughout the Contract as if each were the singular number and non-specific gender.

1.5.2 Wherever in the Contract Documents the words "directed", "required", "ordered", "designated", "prescribed", or words of like import are used, it shall be understood that the "direction", "requirement", "order", "designation", or "prescription" of NJ TRANSIT is intended and similarly the words "approved", "acceptable", "satisfactory", or words of like import, shall mean "approved by", or "acceptable to", or "satisfactory to" NJ TRANSIT unless otherwise expressly stated. Where "as shown", "as indicated", "as detailed", or words of similar import are used, it shall be understood that the reference is made to the Specifications and Drawings accompanying the Contract unless stated otherwise.

1.5.3 References to all Articles or Sections include all Sub-articles or subsections under the Article referenced, and references to all Sub-articles include all sub-Sub-articles.

1.6 PERMITS, LAWS, AND REGULATIONS

1.6.1 NJ TRANSIT in entering into this Contract does not waive its sovereign immunity except as provided in the New Jersey Contractual Liability Act, N.J.S.A. 59:13-1 et seq. The terms and conditions of the Contract are not intended to, and shall not be deemed to, expand the waiver of sovereign immunity as set forth in that Act.

1.6.2 The work under this Contract is subject to Federal, State, and local laws, ordinances, codes, and regulations, including those of railroad companies and utility companies, for work on the Project. Except as otherwise provided in the Contract Documents, the Contractor shall obtain and pay for necessary permits and make necessary arrangements with the authorities having jurisdiction. Where the Contractor's compliance with Federal, State or local laws, ordinances, codes or regulations may or will

conflict with the Contract, the Contractor shall notify the Construction Manager in writing for appropriate action.

1.6.3 NJ TRANSIT will supply the Contractor with applications for construction permits, as required by the New Jersey Department of Community Affairs (DCA). The Contractor shall return within seven (7) calendar days permit applications signed and sealed to NJ TRANSIT. NJ TRANSIT will submit the Contractor's applications along with all fees required, to the DCA. The fees for all DCA applications shall be the responsibility of NJ TRANSIT.

- (a) Except as otherwise provided in the Contract Documents, all work shall be performed in accordance with the New Jersey Uniform Construction Code (NJUCC), N.J.A.C. 5:23-1 et seq., its adopted subcodes, and their referenced standards. Specific requirements of the NJUCC and its adopted subcodes shall supersede any conflicting requirements in other documents referenced herein.
- (b) The Contractor shall be responsible for assisting NJ TRANSIT in the preparation and submission of any new or revised plans and specifications required due to DCA requests for clarification, changes in scope of work, etc., necessary for obtaining amended or additional permits or approvals for work for which NJ TRANSIT has already secured construction permits.
- (c) The Contractor shall be responsible for requesting utility location markups and obtaining permits and approvals from utility authorities and other authorities having jurisdiction.

1.6.4 It shall be the responsibility of the Contractor to keep itself fully informed concerning all requirements of law, including but not limited to, all Federal, State, and local laws, ordinances, codes, and regulations which in any manner affect the Project, and of all such orders and decrees of bodies or tribunals having jurisdiction or authority over the same. The Contractor shall at all times observe, and shall cause its subcontractors, agents, and employees to observe, such requirements of law, and shall defend, indemnify, save, and hold harmless the State of New Jersey and NJ TRANSIT and all of their officers, agents, and employees against claims and liabilities arising from or based upon the violation of such requirement of law whether by the Contractor or its agents, subcontractors or employees.

1.6.5 Plumbing, drainage, and sewage disposal work shall conform with applicable Federal, State and all relevant utility regulator environmental laws and regulations.

1.6.6 Electrical and applicable mechanical materials and systems shall bear the label of the Underwriters' Laboratories (UL) and shall be listed in the publication issued by the UL. Other materials or systems bearing labels of other testing laboratories may be accepted upon written approval of the Engineer. Rules of the National Fire Protection Association shall be followed explicitly unless deviations are agreed to in writing by the Engineer or otherwise modified by these specifications.

1.6.7 Work shall be conducted in accordance with the State of New Jersey Department of Labor and Industry Construction Safety Code, as promulgated by the Commissioner of Labor and Industry under the authority of the Construction Safety Act, N.J.S.A. 34:5-166 to 34:5-181, and applicable provisions of the Occupational Safety and Health Administration (OSHA), 29 CFR 1910, Rules and Regulations. Where the Construction Safety Code refers to the designation of General Contractor for enforcing compliance with the Code, such designation shall be intended to refer to the Contractor.

1.6.8 Construction work shall be performed in accordance with the requirements of the New Jersey Uniform Fire Code (NJUFC), N.J.A.C. 5:71-1 et seq.

1.6.9 The Contractor shall immediately notify the Construction Manager should any review or inspection by any regulatory agency or official result in the issuance of a citation or notice of violation of any permit, regulation, statute or other governmental rule.

1.7 FEDERAL, STATE, AND LOCAL TAXES

Except as may be otherwise provided in the Contract, each Contract Item shall include all applicable taxes and duties. N.J.S.A. 54:32B-9 provides that any sale or service to NJ TRANSIT is not subject to the sales and use taxes imposed under the Sales and Use Tax Act. N.J.S.A. 54:32B-8.22 provides that sales made to Contractors or repairmen of materials, supplies or services for exclusive use in erecting structures, or building on, or otherwise improving, altering or repairing real property of NJ TRANSIT are exempt from the tax on retail sales imposed by the Sales and Use Tax Act. The exemption provided under N.J.S.A. 54:32B-8.22 is conditioned on the person seeking such exemption qualifying therefore pursuant to the rules and regulations and upon the forms prescribed by the New Jersey Division of Taxation. The required form, "Contractor's Exemption Purchase Certificate" (Form No. ST-13), can be obtained by writing or calling the New Jersey Division of Taxation, Tax Information Service (TIS), West State and Willow Streets, Trenton, New Jersey 08625.

NJ TRANSIT is exempt from Federal Excise Taxes. The State of New Jersey's Federal Excise Tax exemption number is 22-75-0050K.

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.

1.8 INDEPENDENT CONTRACTOR

The relationship of the Contractor to NJ TRANSIT is that of an independent Contractor, and said Contractor, in accordance with its status as an independent Contractor, covenants and

agrees that it will conduct itself consistent with such status, that it will neither conduct itself as nor claim to be an officer or employee of NJ TRANSIT or the State by reason thereof. The Contractor will not, by reason thereof, make any claim, demand or application to or for any right or privilege applicable to an officer or employee of NJ TRANSIT or the State, including, but not limited to, worker's compensation coverage, unemployment insurance benefits, social security coverage or retirement membership or credit.

1.9 ASSIGNING AND SUBCONTRACTING CONTRACT

1.9.1 The Contractor shall not transfer, assign or otherwise dispose of the Contract or Contract funds, due or to become due, or claims of any nature it has against NJ TRANSIT to any other party except upon the express written approval of NJ TRANSIT, which approval NJ TRANSIT shall not unreasonably withhold. Application for subcontracting any part or parts of the work shall be made by the Contractor and shall be addressed to NJ TRANSIT through the Construction Manager. The Contractor shall perform with its own organization and with the assistance of workmen under its immediate superintendence, work amounting to not less than 20 percent of the Contract Price, exclusive of Bid Items for Insurance, Performance/Payment Bonds, Mobilization and Allowances.

1.9.2 At the Preconstruction Meeting, the Contractor shall submit to the Construction Manager a list of, and Subcontractor Evaluation Data Forms (Appendix A) for, all subcontractors to be used on the Project within the first two months. The list shall identify the subcontractor's name, nature of work and value of work to be performed, and date work is to start. Thereafter, the Contractor shall provide the Construction Manager with at least 15 days notice before engaging additional or alternative subcontractors. Each proposed subcontractor shall submit a completed Subcontractor Evaluation Data Form. NJ TRANSIT reserves the right to reject any subcontractor with unsatisfactory qualifications, experience or record of performance. No Contract shall be entered into by the Contractor with a subcontractor before its name has been approved in writing by the Construction Manager.

All Subcontractors are required to comply with the Public Works Contractor Registration Act N.J.S.A. 34:56-48 et seq. as amended. Subcontractors shall not engage in the performance of any public work as defined in N.J.S.A. 34:11-56.26 unless the Subcontractor is registered pursuant to the Act. As part of the post award Subcontractor approval process detailed above, certificates of registration shall be submitted to NJ TRANSIT's Construction Manager for each Subcontractor.

In accordance with N.J.S.A. 52:32-44 all Subcontractors must obtain a Business Registration Certificate prior to performing work or providing goods and/or services on the contract. A Subcontractor shall provide a copy of its business registration to the Contractor who shall forward it to NJ TRANSIT. No contract with a Subcontractor shall be entered into by the Contractor unless the Subcontractor first provides proof of valid business registration.

The Contractor shall maintain a list of the names of all Subcontractors and their current addresses, updated as necessary during the course of the Contract performance. In conjunction with the Subcontractor approval process detailed above, the Contractor shall submit a complete and accurate list of the Subcontractors to NJ TRANSIT before for final payment is made.

1.9.3 The Contractor agrees that it is as fully responsible to NJ TRANSIT for the acts and omissions of its subcontractors and of persons either directly or indirectly employed by them as it is for the acts and omissions of persons directly employed by the Contractor. The Contractor hereby gives its assurance that, when minimum wage rates are specified, they shall apply to labor performed on all work subcontracted, assigned or otherwise disposed of in any way.

1.9.4 The Contractor agrees to bind every subcontractor to and have every subcontractor agree to be bound by the terms of the Contract Documents, as far as applicable to its work. Each Subcontractor Evaluation Data Form shall contain the subcontractor's certification that it has reviewed and is familiar with the Contract Documents in their entirety and that the subcontractor shall comply with all Contract requirements.

1.9.5 It is understood, however, that any consent of NJ TRANSIT for the subcontracting of any of the work of the Contract in no way relieves the Contractor from its full obligations under the Contract. Approval by NJ TRANSIT of a subcontractor, including a material supplier, does not relieve the Contractor or its subcontractor of the responsibility of complying with the Contract Documents. Further, the approval of a subcontractor does not imply approval of any material, installed equipment, substitution or additional approved equal.

1.9.6 When the Contractor proposes to subcontract a portion of an item which involves a breakdown of the unit of measurement of that item, it shall submit a breakdown of cost showing the value of the portion of the item to be subcontracted in relation to the value of the whole item, which shall be subject to the approval of NJ TRANSIT.

1.9.7 Nothing contained in the Contract Documents shall create any contractual relation between any subcontractor and NJ TRANSIT. The consent to subcontract any part of the work shall not be construed to be an approval of the said subcontract or of any of its terms, but shall operate only as an approval of the Contractor's request for the making of a subcontract between the Contractor and its chosen subcontractor.

1.10 CONTRACTING OFFICER'S AUTHORITY

The Contracting Officer is the final interpreter of the terms and conditions of the Contract and the judge of its performance. The Contracting Officer has the sole authority to execute the Contract; order additions, deductions and changes to the Work; render final decisions on disputes; suspend or terminate the Work, or portions thereof; and accept or reject Contractor performance.

1.11 PROJECT MANAGER'S AUTHORITY

In connection with the Work to be performed under the Contract, the Project Manager shall be the technical representative of the Contracting Officer. The Project Manager shall review and approve the Contractor's invoices, after certification by the Construction Manager, and the Project Manager shall authorize payments. When duly authorized in writing by the Contracting Officer, the Project Manager shall have the authority to give approval of and order changes in the Work. The limits of this authorization shall be specified in writing by the Contracting Officer and provided to the Contractor. The Project Manager shall monitor the performance of the Contract, shall determine Substantial Completion of the Work and recommend to the Contracting Officer its Final Acceptance.

1.12 CONSTRUCTION MANAGER'S AUTHORITY

The Construction Manager shall apply the Contract Documents, and shall judge the quantity, quality, fitness and acceptability of all parts of the work. In addition, the Construction Manager shall determine whether specific items of construction work, methods or materials are properly specified in the Contract Documents. In the event of a dispute, the Contractor shall proceed diligently with the performance of the work in accordance with the Construction Manager's determination, pending the decision of the Contracting Officer. The Construction Manager shall certify Contractor's invoices for work performed and materials delivered to the site, and shall be given access to the work for inspection at all times. The Construction Manager shall not have authority to give approval of nor order changes in work which alter the terms or conditions of the Contract, nor which involve additional cost or Contract Time unless duly authorized in writing by the Contracting Officer. The Construction Manager may, however, make recommendations to the Contracting Officer for such changes, whether or not costs are to be revised and the Contracting Officer may act, at the Contracting Officer's discretion, on the basis of the Construction Manager's recommendations. The Construction Manager has the authority to reject unsuitable material or suspend work that is being improperly performed.

1.13 INSPECTOR'S AUTHORITY

Inspectors are authorized to inspect work done and materials furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication or manufacture of the materials to be used. Inspectors are not authorized to alter or waive the provisions of the Contract. Inspectors are not authorized to issue instructions contrary to the Contract Documents, or to act as foremen for the Contractor; however, they shall have the authority to reject work or materials until a question at issue can be referred to and decided by the Construction Manager.

1.14 NOTICE AND COMMUNICATION

1.14.1 Written notice shall be deemed to have been duly served and received by NJ TRANSIT and the Contractor if: **(A)** Delivered in person to the intended individual, to a member of the firm, an officer of the corporation or their authorized representative on the Work, or **(B)** Sent by certified mail, or other mail or courier service, with delivery receipt, to the last business address known to the individual who gives the notice, or **(C)** Sent

by telefacsimile or electronic mail, followed by a hard copy to the last business address known to the individual who gives the notice.

1.14.2 Communications to the Contractor shall be transmitted through and coordinated by the Contractor's authorized representative(s), as designated at the Pre-Construction Conference.

1.14.3 Communications to NJ TRANSIT shall be transmitted through and coordinated by the Construction Manager. Correspondence shall be addressed to the appropriate NJ TRANSIT authorized representative as set forth in the Contract Documents or as otherwise designated by NJ TRANSIT at the Pre-Construction Conference. Upon written notice to the Contractor, NJ TRANSIT may change its authorized designee(s) at any time.

1.14.4 All communications to NJ TRANSIT shall be clearly marked with NJ TRANSIT's Contract Number and Contract Title

1.15 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. Pending final decision of a dispute hereunder, the Contractor shall proceed diligently with performance of the Contract in accordance with the decision of the authorized representative of the Contracting Officer. 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.

1.16 GOVERNING LAW; CONSENT TO JURISDICTION AND WAIVER OF TRIAL BY JURY

1.16.1 This Contract shall be construed in accordance with and shall be governed by the Constitution and laws of the State of New Jersey.

1.16.2 Except as otherwise provided in this Contract, disputes and claims arising under this Contract which are not disposed of by mutual agreement shall be governed by the laws of the State of New Jersey as they may from time to time be in effect. The Contractor, by entering into this Contract, consents and submits to the exclusive jurisdiction of the Courts of the State of New Jersey over any action at law, suit in equity or other proceeding that may arise out of this Contract, and the Contractor agrees, during the period of performance and of Warranty, to maintain within the State of New Jersey an agent to accept service of legal process on its behalf. Notwithstanding the language of N.J.S.A. 59:13-4, the Contractor expressly waives trial by jury

on any and all disputes and claims arising out of this Contract whether by or against the Contractor, NJ TRANSIT or any other person or entity.

1.17 AUDIT AND INSPECTION OF RECORDS

The Contractor shall retain all Contract records and permit the authorized representatives of NJ TRANSIT, the State of New Jersey, the USDOT and the Comptroller General of the United States to inspect and audit all data and records of the Contractor relating to products, transactions or services provided under its performance and the performance of its subcontractors under this Contract from the date of the Contract and for five (5) years after final payment under this Contract has been made.

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 Department of Transportation and the Comptroller General of the United States or any of their duly authorized representatives shall, until the expiration of five (5) years after final payment under the subcontract, have access to and the right to examine any directly pertinent books, documents, papers, and records of such subcontractor, involving transactions related to the subcontractor. The term "subcontractor" as used in this clause excludes (1) purchase orders not exceeding \$10,000 and (2) subcontracts or purchase orders for public utility services at rates established for uniform applicability to the general public.

Pursuant to N.J.S.A. 52:15C-14(d), the Contractor shall maintain all documentation related to products, transactions or services under this contract for a period of five (5) years from the date of final payment. Such records shall be made available to the New Jersey Office of State Comptroller upon request.

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 the Comptroller General, USDOT, NJ TRANSIT 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.

2. **CONTRACT TIME, SUSPENSION AND TERMINATION**

2.1 TIME OF COMPLETION - DELAY - LIQUIDATED DAMAGES

2.1.1 The Contractor and NJ TRANSIT recognize that delay in completion of the project will result in damage to the State of New Jersey in terms of the effect of the delay in the use of the Project upon the public convenience and economic development of the State of New Jersey, and will also result in additional cost to NJ TRANSIT for engineering, inspection, and administration of the Contract. Because some of this damage is difficult or impossible to estimate, the parties agree that if the Contractor fails to substantially complete the project or any interim milestones within the time stated in the Contract, or within such further time as may have been granted in accordance with the provisions of the Contract, or fails to complete Remaining Work, other than Punch List Work (as described in Article 13.2- SUBSTANTIAL COMPLETION) within the period fixed by NJ TRANSIT, the Contractor shall pay NJ TRANSIT liquidated damages, in accordance with

the amount set forth in the Special Provisions for each day that it is in default on time to complete the work. The days in default shall be the number of calendar days in default when the time for completion of the Project is specified on the basis of calendar days or a fixed date; and shall be the number of working days in default when the time for completion is specified on the basis of working days. NJ TRANSIT shall recover said damages by deducting the amount thereof from monies due or that may become due the Contractor, and if said monies be insufficient to cover said damages, then the Contractor or its Surety shall pay the amount due. This clause is expressly limited in purpose and effect to damages to NJ TRANSIT and the State of New Jersey as a consequence of the Contractor's failure to complete the project on time. It is not intended, and shall not be construed, to apply to any other claim for damages or disputes arising from the Contractor's performance on the Project, nor shall it limit the Contractor's duty to indemnify NJ TRANSIT for claims made by third parties.

- 2.1.2 The work embraced in this Contract including work authorized under Article 3.1 shall commence as soon as possible but not later than ten (10) days after receipt of a Notice to Proceed unless otherwise specified by NJ TRANSIT.

The Contractor agrees that said work shall be prosecuted regularly, diligently, and without interruption at such rate of progress as will insure substantial completion thereof within the time specified. It is expressly understood and agreed, by and between the Contractor and NJ TRANSIT, that the time for the completion of the work herein is a reasonable time for the completion of the same. It is further agreed that float, or slack time, is not for the exclusive use or benefit of either the Contractor or NJ TRANSIT, as further described in Article 6.2- Construction Project Schedule.

- 2.1.3 It is further agreed that time is of the essence of each and every portion of this Contract and of the Specifications wherein a definite and certain length of time is fixed for the performance of any act whatsoever, and where under the Contract additional time is allowed for the completion of any work, the new time limit fixed by such extension shall be of the essence of this Contract. The Contractor shall not be charged with liquidated damages when the delay in the completion of the work arises from both: a.) causes beyond the reasonable control and without any fault or negligence of the Contractor, its officers, employees, agents, servants, subcontractors, and suppliers, including but not restricted to, acts of God, or of the public enemy, acts of another Contractor in the performance of a Contract with NJ TRANSIT, fires, floods, epidemics, quarantine restrictions, labor disputes not determined by final judicial or administrative adjudication to have been caused or provoked by the illegal acts of the Contractor or one of its subcontractors or agents, freight embargoes, and unusually severe weather and, b.) such causes arise after the award of the Contract and neither were nor could have been anticipated by the Contractor by reasonable investigation before such award. The basis to define unusually severe weather will be the data showing high and low temperatures, precipitation and wind conditions in the geographic area of the Work for the previous twenty (20) years, as compiled by the recording station of the U.S. National Weather Service located nearest to the Work.

- 2.1.4 Even though a cause of delay meets both conditions a.) and b.) above, an extension shall be granted only to the extent that (i) the completion of the affected work is actually and necessarily delayed, (ii) the effect of such cause could not be anticipated and avoided or mitigated by the exercise of all reasonable precautions, efforts and measures (including planning, scheduling and rescheduling) whether before or after the occurrence of the cause of delay, and (iii) the critical path of the project schedule is actually extended due to the delay beyond the required Contract completion date. Any reference in this Article to the Contractor shall be deemed to include materialmen, suppliers, and subcontractors, whether or not in privity of Contract with the Contractor, all of whom shall be considered as agents of the Contractor for the purposes of this Article. A delay resulting from a cause meeting all conditions in Sub-article 2.1.3 and this Sub-article 2.1.4 shall be deemed an Excusable Delay.
- 2.1.5 The period of any extension of time shall be only that which is necessary to make up the time actually lost as determined by NJ TRANSIT. NJ TRANSIT may defer all or part of its decision on an extension and any extension may be rescinded or shortened if it subsequently is found that the delay can or could have been overcome or reduced by the exercise of reasonable precautions, efforts and measures.
- 2.1.6 In case the Contractor shall be actually and necessarily delayed by reason of the failure of NJ TRANSIT to deliver to the Contractor access to the Project Site or any materials or facilities to be furnished by NJ TRANSIT which are actually needed for use in the work, or by any act or omission on the part of NJ TRANSIT, and such delay is recognized by NJ TRANSIT in writing, such delay shall also be deemed to be an Excusable Delay. The time for completion of the Project shall be extended by NJ TRANSIT by the amount of time of such delay as determined by NJ TRANSIT, but no allowance by way of damages of any kind or nature will be made for such failure.
- 2.1.7 As a condition precedent to the granting of an extension of time, the Contractor shall give written notice to NJ TRANSIT within five (5) days after the time when the Contractor knows or should know of any cause which might under reasonably foreseeable circumstances result in delay for which it may claim an extension of time (including those causes for which NJ TRANSIT itself is responsible or of which NJ TRANSIT has knowledge), specifically stating in such notice that an extension is or may be claimed, identifying such cause and describing, as fully as practicable at that time, the nature and expected duration of the delay, including justification, and its effect on the completion of that part of the work identified in the notice. Since the possible necessity for an extension of time may materially alter the scheduling plans, and other actions of NJ TRANSIT and since, with sufficient notice, NJ TRANSIT may, if it should so elect, attempt to mitigate the effect of the delay for which an extension of time might be claimed, and since mere oral notice may cause dispute as to the existence or substance thereof, the giving of written notice as above required shall be of the essence of the Contractor's obligations hereunder. Failure to give the written notice within the aforementioned five (5) day period shall deprive the Contractor of any right to an extension of time, except to the extent that NJ TRANSIT may determine otherwise in its sole discretion.

It shall in all cases be presumed that no extension, or further extension of time, is due unless the Contractor shall affirmatively demonstrate the extent thereof to the reasonable satisfaction of NJ TRANSIT. To this end, the Contractor shall maintain adequate records supporting any claim for an extension of time, and in the absence of such records, this presumption shall be deemed conclusive.

2.1.8 In regard to an injunction or interference of public authority which may delay or impact the Project, the Contractor shall give NJ TRANSIT a copy of the injunction or other orders and of the papers upon which the same shall have been granted.

2.1.9 Within a reasonable time after receipt of a written notice requesting an extension of time NJ TRANSIT will advise the Contractor if such notice is adequate, or if further information is required. Failure of NJ TRANSIT to furnish the Contractor with the foregoing advisement shall not, however, be deemed to waive NJ TRANSIT's right to deny an extension of time. Within a reasonable time after NJ TRANSIT, at its sole discretion, has determined that the Contractor has provided sufficient information for NJ TRANSIT to decide on a request for an extension of time, NJ TRANSIT shall issue a determination on that request. In the event that NJ TRANSIT was unable to decide on a request for an extension, NJ TRANSIT may issue at the completion of the Project, in conjunction with issuing its Final Certificate of Payment, a final determination on the Contractor's request or requests for an extension of time.

2.1.10 Only the actual delay or impact to the Contractor necessarily resulting from the causes above-mentioned, as determined by NJ TRANSIT, shall be considered for an extension of time. In case the Contractor shall be delayed or impacted at any time or for any period by two or more of the causes above-mentioned, the Contractor shall not be entitled to a separate extension for each one of the causes but only one period of extension shall be granted for the period of concurrent delay. In case the Contractor shall be actually and necessarily delayed by one or more of the causes above-mentioned in the performance of any portion of the Project, the extension of time to be granted to the Contractor shall be only for such portion of the Project. The Contractor shall not be entitled by reason of such delay to an extension of time for the completion of the remainder of the Project. If the Contractor shall be so delayed as to a portion of the Project, it shall nevertheless proceed continuously and diligently with the prosecution of the remainder of the Project. No demand by the Contractor that NJ TRANSIT determine any matter of extension of time for the completion of the Project or any part thereof will be of any effect whatsoever unless the same be made in writing and duly served upon NJ TRANSIT prior to the issuance of the Final Certificate of Payment as provided for in Article 12.8, FINAL PAYMENT.

2.1.11 Delay to or impacts upon the Contractor's performance arising out of any request of the Contractor to change the order of furnishing working drawings as provided elsewhere in this Contract or arising out of any changes made or requested by the Contractor in any matters shown or indicated on the Contract Drawings

will not be cause for an extension of time, and all additional costs to the Contractor, incidental to such request or change, shall be borne by the Contractor.

2.1.12 The permitting of the Contractor to go on and finish the Project or any part thereof after the time fixed for completion or after the date to which the time for completion may have been extended or the making of payments to the Contractor after any such period shall not operate as a waiver on the part of NJ TRANSIT of any rights under this Contract, including but not limited to declaring the Contractor in default.

2.1.13 The determination of NJ TRANSIT as to any matter of extension of time for completion of the Project or any part thereof shall be binding and conclusive upon the Contractor.

2.2 NO DAMAGES FOR DELAY

2.2.1 The Contractor expressly waives the right to make any claim against NJ TRANSIT for damages or additional compensation for any delay to or impact upon the performance of this Contract occasioned by any act or omission to act by NJ TRANSIT or its employees or any third parties for any reason whether or not enumerated in Article 2.1, and agrees that any such claim shall be fully compensated for by an extension of time to complete performance of the work as provided in Article 2.1.

2.2.2 Except as provided in Subarticle 2.2.4, the Contractor alone hereby specifically assumes the risk of all delays, obstruction, or interference of any kind, duration or cause whatsoever, whether or not within the contemplation of the parties or foreseeable.

2.2.3 The Contractor shall have no right to rescind or terminate this Contract, and Contractor shall have no cause of action under any theory of unjust enrichment, quasi-contract, quantum meruit or additional risk by reason of any delay, obstruction, or interference of any kind or duration whatsoever.

2.2.4 Nothing in these General Provisions is intended to limit Contractor's remedy for delayed performance caused by NJ TRANSIT's negligence, bad faith, active interference or other tortious conduct, to the extent such limitation is determined by a court of law to be void and unenforceable under N.J.S.A. 2A:58B-3.

2.3 SUSPENSION OF WORK

2.3.1 If the Contracting Officer deems it advisable, the Contracting Officer may notify the Contractor in writing to suspend work on one or more occasions on all or any part of the Project, for a period not to exceed 90 days in the aggregate. After notification(s) is delivered to the Contractor, the Contractor shall do no work where so suspended until it has received written notice from the Contracting Officer to resume work.

2.3.2 When work is suspended as provided above, payments for the completed parts of the work will be made as provided and a suitable extension of time for completing the suspended work will be granted where appropriate. Should any single suspension be for a period greater than 45 days and the Contractor incurs

unavoidable extended field overhead costs as a result of the suspension, the Contractor shall notify the Contracting Officer within 30 days of the completion of the suspension period and provide a detailed accounting of such extended field overhead costs. No profit markup will be allowed on extended field overhead costs. The Contracting Officer's determination as to the amount of compensation to be paid under this clause shall be final and conclusive. Under no circumstances shall any other compensation or allowance be made on account of such suspension. No payment will be made for work done by the Contractor on suspended work.

2.3.3 Within the period of ninety (90) days (or the lesser period specified) after a notice of suspension is delivered to the Contractor, or within any extension of that period to which the parties shall have agreed, NJ TRANSIT shall either: a.) cancel the notice of suspension, or b.) terminate the work covered by such suspension as provided in Article 2.4, TERMINATION FOR CONVENIENCE, or c.) negotiate reasonable compensation with the Contractor for a further period of suspension.

2.4 TERMINATION FOR CONVENIENCE

2.4.1 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 the work by delivering to the Contractor a Notice of Termination specifying the extent of termination and the effective date.

2.4.2 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:

- (a) Stop work as specified in the notice.
- (b) 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.
- (c) Terminate all subcontracts to the extent they relate to the work terminated.
- (d) Assign to NJ TRANSIT, as and if 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.
- (e) 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.
- (f) 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.

- (g) Complete performance of the work not terminated.
- (h) 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.
- (i) Use its best efforts to sell, as directed or authorized by the Contracting Officer, any property of the types referred to in Subparagraph (f) above; 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.

2.4.3 After expiration of the plant clearance period as defined in Subpart 45.6 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) 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) days from submission of the list, and shall correct the list, as necessary, before final settlement.

2.4.4 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 one (1) year from the effective date of termination, unless extended in writing by the Contracting Officer upon written request of the Contractor within this one (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 one (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.

2.4.5 Subject to Sub-article 2.4.4 above, the Contractor and the Contracting Officer may agree upon the whole or any part of the amount to be paid because of the termination. However, the agreed amount, whether under this Sub-article or Sub-article 2.4.6 below, exclusive of costs shown in Sub-article 2.4.6(b) below, may not exceed the total contract price as reduced by: (i) the amount of payments previously made and, (ii) the contract price of work not terminated. The Contract shall be amended, and the Contractor paid the agreed amount. Sub-article 2.4.6 below shall not limit, restrict, or affect the amount that may be agreed upon to be paid under this Paragraph.

2.4.6 If the Contractor and Contracting Officer fail to agree on the whole amount to be paid the Contractor because of the termination of work, the Contracting Officer shall pay the Contractor the amounts determined as follows, but without duplication of any amounts agreed upon under Sub-article 2.4.5 above:

- (a) For contract work performed before the effective date of termination, the total (without duplication of any items) of:
 - (i) The cost of this work;
 - (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 (i) above; and
 - (iii) A sum, as profit on (i) above, determined by the Contracting Officer 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.

- (b) 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.

2.4.7 Except for normal spoilage, and except to the extent that NJ TRANSIT expressly assumed the risk of loss, the Contracting Officer shall exclude from the amounts payable to the Contractor under Sub-article 2.4.6 above, 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.

2.4.8 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.

2.4.9 The Contractor shall have the right of appeal, under the Disputes clause, from any determination made by the Contracting Officer under Sub-article 2.4.4, 2.4.6, or 2.4.11, except that if the Contractor failed to submit the termination settlement proposal within the time provided in Sub-article 2.4.4 or 2.4.11, and failed to request a time extension, there is no right of appeal. If the Contracting Officer has made a determination of the amount due under Sub-article 2.4.4, 2.4.6, or 2.4.11, NJ TRANSIT shall pay the Contractor (i) the amount determined by the Contracting Officer if there is no right of appeal or if no timely appeal has been taken, or (ii) the amount finally determined on an appeal.

- 2.4.10 In arriving at the amount due the Contractor under this clause, there shall be deducted:
- (a) All unliquidated advance or other payments to the Contractor under the terminated portion of this contract;
 - (b) Any claim which NJ TRANSIT has against the Contractor under this contract; and
 - (c) 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.

2.4.11 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) days from the effective date of termination unless extended in writing by the Contracting Officer.

2.4.12 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. 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 USC 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) days after the date of the retention or disposition, or a later date determined by the Contracting Officer because of the circumstances.

2.4.13 Unless otherwise provided in this contract, or by statute, the Contractor shall maintain all records and documents relating to the terminated portion of this Contract for three (3) years after final settlement. This includes all books and other evidence bearing on the Contractor's costs and expenses under this contract. The Contractor shall make these records and documents available to NJ TRANSIT, at the Contractor's office, at all reasonable times, without any direct charge. If approved by the Contracting Officer, photographs, microphotographs, or other authentic reproductions may be maintained instead of original records and documents.

2.5 TERMINATION FOR CAUSE

2.5.1 In the event that any of the provisions of this Contract are violated by the Contractor, or any of its Subcontractors, the Contracting Officer may serve written notice upon the Contractor and Surety of NJ TRANSIT's intention to terminate the Contract for cause. The Notice of Intent to Terminate for Cause shall identify the causes for the proposed termination and demand the elimination of such causes.

- 2.5.2 If the Contractor or Surety, within a period of ten (10) days after such notice or within such additional time as may be granted by the Contracting Officer, does not proceed in accordance therewith to make satisfactory arrangements to eliminate the causes of the proposed termination, then the Contracting Officer may terminate the Contract for cause.
- 2.5.3 The Notice of Termination for Cause will terminate the Contractor's right to proceed with all items of work except as specified in the termination notice. The latter will include all work necessary to ensure the safety of the public, to properly secure existing work already constructed or partially constructed, and to secure the Job Site. The work specified in the notice shall be performed in accordance with the Contract Documents and may include items of work not in the original Contract. Unless otherwise specified in the notice, all insurance policies provided by the Contractor naming NJ TRANSIT and any other parties as additional insureds shall remain in full force and effect until issuance by NJ TRANSIT of a Final Certificate of Payment.
- 2.5.4 Payment for completed or partially completed items of Work shall be made in accordance with the Contract Documents. Payment for new items, if any, will be paid either at agreed prices or paid for by Time and Material methods described in Sub-article 3.2.7. No other costs or compensation will be allowed the Contractor.
- 2.5.5 When all work specified in the termination notice is completed to the satisfaction of NJ TRANSIT, the Contract shall terminate upon issuance by NJ TRANSIT of a Final Certificate of Payment.
- 2.5.6 Upon issuance of a Notice of Termination for Cause, the Surety shall have ten (10) days to advise NJ TRANSIT in writing that it intends to take over and complete the Project in accordance with the Contract terms and conditions, without any further conditions. If so notified, the Surety shall have 30 days from such notice to commence the work. Upon the Surety's failure to comply with either of the above, NJ TRANSIT may take over the work and prosecute the same to completion by contract with another contractor, or use whatever methods it deems necessary to complete the work, including completion of the Work by its own forces for the account and at the expense of the Contractor. NJ TRANSIT may take possession of and utilize in completing the work such materials, appliances and plants as may be on the site of the work and necessary therefor.
- 2.5.7 Whether the Contract Work is completed by NJ TRANSIT, either directly or through other contractors, or the Surety, the Contractor and its Surety shall be liable to NJ TRANSIT for excess costs incurred by NJ TRANSIT and other such damages arising out of the Termination for Cause including liquidated damages caused by the delay to the date of completion of the Project Work.
- 2.5.8 All such costs and damages incurred by NJ TRANSIT will be deducted from any monies due or that may become due the Contractor and Surety. If such costs and damages exceed the sum which is available,

then the Contractor and the Surety shall be liable and shall pay NJ TRANSIT within 30 days of the issuance of an invoice for the amount of such excess.

2.5.9 In terminating the Contract for cause NJ TRANSIT does not waive its right to sue the Contractor and/or Surety for any costs incurred or damages suffered by NJ TRANSIT as a result of the Contractor's default and termination.

2.5.10 If, after a Notice of Termination for Cause has been issued, it is determined for any reason that the provisions of the Contract were not violated by the Contractor, or any of its Subcontractors, or if the termination of the Contract for Cause pursuant to the provisions of this Article is found by a court to be legally improper, then the termination of the Contract for cause will be treated as if it had been a termination for convenience and such termination shall be compensated for in accordance with the provisions of Article 2.4.

3. CONTRACT CHANGES

3.1 CHANGE ORDERS

3.1.1 The Contracting Officer, at the Contracting Officer's sole discretion, may at any time during the progress of the work authorize additions, deductions, or changes to the Work as set forth below, and the Contract shall not be terminated or the surety released thereby. When changes in the work must be performed immediately, the Contracting Officer may issue a written directive to the Contractor detailing the changed work and the basis for determining compensation, and the Contractor will proceed immediately with the Work as directed, pending the execution of a formal Change Order.

If any such change causes an increase or decrease in the cost of the performance of any part of the Work or requires a change in the Contract Time, then a Change Order shall be issued incorporating the change. All Change Orders shall be priced in accordance with Article 3.2. The Change Order shall be a written order to the Contractor and shall describe the change with cost changes and changes to Contract Time. The Change Order shall be signed by the Contractor and returned to NJ TRANSIT. Upon receipt, the Change Order shall be countersigned by the Contracting Officer and shall then become a part of the Contract Documents.

In the event the Contractor and NJ TRANSIT cannot, for whatever reason, reach an agreement on cost changes or changes to Contract Time, the Contracting Officer shall issue a unilateral Change Order incorporating the change and the Contractor shall nonetheless proceed with the Work as directed therein. The unilateral Change Order shall then become a part of the Contract Documents.

3.1.2 The Construction Manager shall have the authority to order, in writing, minor changes in the work not involving an adjustment to the price of any items of work or an extension of time and not inconsistent with the intent of the Contract. Such changes shall be binding on NJ TRANSIT and the Contractor, and shall not

be the basis of increased compensation to the Contractor. Such work shall be executed under the conditions of the original Contract.

3.1.3 All additions, deductions or changes to the work as directed by Change Orders shall be executed under the conditions of the original Contract. The Change Order shall recite the additional time granted by NJ TRANSIT to perform the Work, if any. Except as specified in Sub-article 3.1.2 above, or in an emergency endangering life or property, no change shall be made unless pursuant to a written directive of the Contracting Officer or Change Order, and no claim for an addition to the Contract Price or time shall be valid unless so ordered.

3.1.4 Should the Contractor dispute the Construction Manager's interpretation of work specified in the Contract Documents and claim that work is Extra Work that will involve additional costs or Contract Time, the Contractor shall proceed with the work in accordance with the Construction Manager's interpretation. In such event, the Contractor shall follow the procedures and maintain the detailed cost records set forth in Article 3.3-T&M CHANGE ORDER RECORDS pending the resolution of the dispute. In all other cases, should the Contractor perform Extra Work without first obtaining a written directive or Change Order from the Contracting Officer's authorized representative, such action shall be construed by NJ TRANSIT as voluntary performance and as a waiver of any and all claims to extra payment and time therefor.

3.1.5 The time needed to perform Extra Work shall not be the basis of claims by the Contractor for extra costs of any nature whatsoever.

3.2 CHANGE ORDER PRICING

3.2.1 Proposed additions, deductions and changes shall be defined in a Notice of Proposed Change (NPC) and issued to the Contractor. The Contractor's proposal for all proposed additions, deductions and changes to the work involving cost or Contract Time shall be submitted by the Contractor to the Construction Manager with copies to the Contracting Officer and Project Manager within 15 days, or such other time as the Construction Manager may direct, after the issuance of the Notice of Proposed Change. The Contractor's cost proposal shall be structured in accordance with the format(s) set forth below and shall comply with the pricing specifications set forth in this Article 3.2. NJ TRANSIT shall review the Contractor's proposal and, if necessary, meet with the Contractor to negotiate the proposal. Should the Contracting Officer require additional information, the Contractor will provide the requested information. The Contractor's costs for preparing, submitting, and negotiating proposals will not be paid separately and shall not be included in the proposals, but shall be considered paid for in the Contract Price.

Table 3.2.1: Change Order Cost Proposal Format		
I	II	III
LABOR ¹	Cost Calculation	Summary of Costs
Name Each Trade Classification	(Manhours) x (Labor Costs) =	A

Table 3.2.1: Change Order Cost Proposal Format		
MATERIAL ²		
Name Each Major Type of Material	(Quantity) x (Unit Costs) =	B
EQUIPMENT ³		
Name Each Major Piece of Equipment	(Time) x (Unit Costs) =	C
SUBTOTAL	A + B + C =	D
OVERHEAD ⁴	(D) x (Overhead %) =	E
PROFIT ⁵	(D) x (Profit %) =	F
TOTAL	D + E + F =	G
Footnotes: ¹ Labor Costs as specified in Sub-article 3.2.9.1 ² Material Costs as specified in Sub-article 3.2.9.2 ³ Equipment Costs as specified in Sub-article 3.2.9.3 ⁴ Overhead Markups as specified in Article 3.2.9.4 ⁵ Profit Markups as specified in Article 3.2.9.6		

- 3.2.2 Requests for extension of time for proposed Change Order work shall be included in the Contractor's proposal. Extensions of time will not be granted unless requested in accordance with the provisions of Subarticle 3.2.1.
- 3.2.3 Full documentation supporting all estimated and actual costs shall be furnished to the Construction Manager or Contracting Officer if such is requested. Documentation may consist of records such as actual payroll records and receipted bills for rentals and materials. All Change Orders shall be subject to audit by the Contracting Officer or the Contracting Officer's authorized representative.
- 3.2.4 All proposed and incurred change order costs shall as a minimum be allowable, allocable and reasonable in accordance with the Contract cost principles and procedures in Part 31 of the Federal Acquisition Regulations in effect on the date of the Contract. The Contracting Officer's determination on the allowability, allocability and reasonableness of incurred costs shall be final and conclusive.
- 3.2.5 The value of any change in the Contract shall be determined in accordance with the following pricing bases, listed in the order of priority of use: a) Unit Price, b) Lump Sum and c) Time and Material (T&M). Unit Prices shall govern if contained in the Bidder's Proposal for the applicable work. If no Unit Prices apply, then a Lump Sum pricing approach shall be used. If a Lump Sum cannot be determined, or agreement cannot be reached, or the Contracting Officer determines that work must be performed immediately, then the Contracting Officer will direct the Contractor to proceed on a T & M basis. Whenever the terms "labor", "materials", "equipment", "overhead" and "profit" are used herein with regard to change order cost and price proposals, they are used as these cost and price elements are defined in this Article 3.2.

- 3.2.6 Unit Price Basis: Whenever unit prices govern, the Contractor's cost proposal shall identify the additional estimated quantities required for the work. The unit price included in the Contract, or subsequently agreed upon, shall be used to solely determine the increased or decreased cost of the work. The unit price shall be deemed to include all costs for labor, material, overhead and profit and the increase or decrease in the cost of the work shall be on a dollar for dollar basis.
- 3.2.7 Lump Sum Basis: When unit prices do not apply, the Contractor shall submit a detailed breakdown of labor, materials, and equipment. The Contractor shall add to this overhead and profit markups as specified in Sub-article 3.2.10. Cost proposals for labor and material shall be provided on the stationary of the parties that will be performing the work (subcontractors) and supplying material (suppliers).
- 3.2.8 Time and Material: The Contractor shall submit the same detailed breakdown of costs as set forth in Sub-article 3.2.7 for Lump Sum change orders. In addition, the Contractor shall submit a Guaranteed Maximum Price (GMP) which may be accepted or rejected by the Contracting Officer.
- 3.2.8.1 Time and Material with GMP: If the Guaranteed Maximum Price is accepted, the payment for such work shall not exceed the actual cost for labor, materials, and equipment. To this may be added overhead and profit mark-ups both as specified in Sub-article 3.2.10. However, in no event shall payment exceed the Guaranteed Maximum Price established by agreement between the Contractor and NJ TRANSIT.
- 3.2.8.2 Time and Material with Upset Price: If the Guaranteed Maximum Price submitted by the Contractor is rejected, NJ TRANSIT may direct the Contractor to proceed on a time and material basis with an Upset Price established by NJ TRANSIT. The Upset Price shall be the limit of authorization for performance of the Extra Work by the Contractor. At such time as the Contractor has expended eighty percent (80%) of the authorized limit, NJ TRANSIT may establish a new limit by revising the Upset Price. However, if NJ TRANSIT chooses not to establish a revised Upset Price, the Contractor shall cease the time and material work when the original Upset Price has been reached. The payment for such work shall include the actual cost for labor, materials and equipment. To this may be added overhead and profit mark-ups as specified in Sub-article 3.2.10.
- 3.2.8.3 Emergent Time and Material: Should the Contracting Officer determine that changed work must be performed immediately, and NJ TRANSIT determines that the Contractor has insufficient time to submit a detailed cost proposal in advance of performing the work, NJ TRANSIT may direct the Contractor to proceed on an emergent time and material basis with an Upset Price established by NJ TRANSIT. The terms of performance and payment shall be as set forth in Sub-article 3.2.8.2, except that profit markups shall be as specified in Sub-article 3.2.10.
- 3.2.9 NJ TRANSIT will consider for payment only the labor, material and equipment cost elements as specified herein in conjunction with any cost proposal submitted by the Contractor. These cost elements, individually

or together, shall serve as the cost basis upon which applicable markups for profit and overhead shall be applied, all as specified in Sub-article 3.2.10. These costs elements, together with the applicable markups for profit and overhead, shall constitute full compensation for all direct and indirect costs and shall be deemed to include all items of expense not specifically designated.

3.2.9.1 Labor Costs

- a) For necessary labor and foremen in direct charge of the specific operations, whether the employer is the Contractor, subcontractor or another, the Contractor shall receive the rate of wage (or scale) actually paid as shown in its certified payrolls for each and every hour that said labor and foremen are actually engaged in such work.
- b) The Contractor shall also receive the actual costs paid to, or in behalf of, workers by reason of health and welfare benefits, pension fund benefits or other benefits, when such amounts are required by collective bargaining agreements or other employment contracts, or the Contract prevailing wage determination, generally applicable to the classes of labor employed on the work.
- c) The Contractor shall receive the actual cost paid to applicable State and Federal agencies and insurance carriers for Worker's Compensation Insurance, Federal Insurance Compensation Act (FICA, Social Security), Unemployment Insurance and Contractor's General Liability and Worker's Disability.

3.2.9.2 Material Costs: Only materials furnished by the Contractor and necessarily used in the performance of the work will be paid for. The cost of such materials will be the cost to the purchaser, whether Contractor, subcontractor or other forces from the supplier thereof, together with transportation charges actually paid by the Contractor, except as the following are applicable.

- (a) If a cash or trade discount by the actual supplier is offered or available to the purchaser, it shall be credited to NJ TRANSIT notwithstanding the fact that such discount may not have been taken.
- (b) If materials are procured by the purchaser by any method which is not a direct purchase from and a direct billing by the actual supplier to such purchaser, the cost of such materials shall be deemed to be the price paid to the actual supplier as determined by NJ TRANSIT plus the actual costs, if any, incurred in the handling of such materials.
- (c) If the materials are obtained from a supply or source owned wholly or in part by the purchaser, the cost of such materials shall not exceed the price paid by the purchaser for similar materials furnished from said source on Contract Items or the current wholesale price for such materials delivered to the job site, whichever price is lower.
- (d) If the cost of such materials is, in the opinion of NJ TRANSIT, excessive, then the cost of such material shall be deemed to be the lowest current wholesale price at which such materials are available in the quantities concerned delivered to the job site, less any discounts as provided in Subparagraph (a) above.
- (e) If the Contractor does not furnish satisfactory evidence of the cost of such materials from the actual supplier thereof, the cost shall then be determined in accordance with Paragraph (d) above.

NJ TRANSIT reserves the right to furnish such materials as it deems advisable, and the Contractor shall have no claims for costs and markups on such materials.

3.2.9.3 Equipment and Plant Rental Costs:

- (a) Contractor Owned Equipment and Plant - The hourly rates for Contractor owned equipment and plant will be based on "Rental Rate Blue Book for Construction Equipment" or the "Rental Rate Blue Book for Older Construction Equipment" (both referred to hereafter as the "Blue Book"), published by Nielsen/DATAQUEST, Inc. of Palo Alto, California. The Blue Book shall be used in the following manner:
- (1) The hourly rate will be determined by dividing the "monthly" rate set out in the Blue Book by 176. The "weekly," "hourly," and "daily" rates listed in the Blue Book will not be used.
 - (2) The number of hours to be paid for shall be the number of hours that the equipment or plant is actually used on a specific activity.
 - (3) The "current revisions" to the Blue Book will be used in establishing rates. The "current revision" applicable to specific Change Order work will be the "current revision" as of the first day of work performed on that Change Order work and that rate will apply throughout the period the Change Order work is being performed.
 - (4) Area adjustments will not be made. Equipment life adjustments will be made in accordance with the rate adjustment tables.
 - (5) Overtime shall be charged at the same rate indicated in (1), above.
 - (6) The "estimated operating costs per hour" shall be used for each hour that the equipment or plant is in operation on the Change Order work. No such costs shall apply to idle time regardless of the cause of the idleness.
 - (7) Idle time for equipment will not be paid for, except where the equipment has been held on the Project site on a standby basis at the request of NJ TRANSIT and, but for this request, would have left the Project site. Such payment will be made at one half (1/2) the rate established in (1), above.
 - (8) The rates as established above shall be deemed to include the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs, overhaul, and maintenance of any kind, depreciation, storage, overhead, profits, insurance, costs of moving equipment or plant on to and away from the site, and incidentals (including labor and equipment).
 - (9) Operator costs shall be paid only as provided in Sub-article 3.2.9.1, "Labor," of this Article.

Equipment shall be in good operating condition and suitable for the work, in the opinion of the Construction Manager. Equipment used by the Contractor shall be specifically described and be of suitable size and capacity required for the work to be performed. In the event the Contractor elects to use equipment of a higher rental value than that suitable for the work, payment will be made at the rate applicable to the suitable equipment. The equipment actually used and the

suitable equipment paid for will be recorded as a part of the record for Change Order work. If there is a differential in the rate of pay of the operator of oversize or higher rate equipment, the rate paid for the operator will likewise be that for the suitable equipment.

In the event that a rate is not established in the Blue Book for a particular piece of equipment or plant, NJ TRANSIT shall establish a rate for that piece of equipment or plant that is consistent with its cost and use.

The provisions of this Subparagraph (a), "Contractor Owned Equipment and Plant" shall apply to the equipment and plant owned directly by the Contractor or by entities which are divisions, affiliates, subsidiaries or in any other way related to the Contractor or its parent company.

- (b) Rented Equipment and Plant - In the event that the Contractor does not own a specific type of equipment and must obtain it by rental, it shall be paid the actual rental for the equipment for the time that the equipment is actually used to accomplish the work, plus the cost of moving the equipment on, to, and away from the job. The Contractor shall provide a copy of the paid receipt for the rental expense incurred.

3.2.9.4 Overhead Costs: Overhead shall be defined to include any and all Contractor Field Office and Home Office overhead and operating expenses whatsoever. Overhead includes, as a minimum, the following categories of expense, regardless of whether or not the Contractor's accounting system allocates such expenses on a direct or indirect basis:

- (a) Salary and expenses of all Field Office employees, including project managers, supervising officers, supervising employees, superintendents, technical, scheduling or engineering employees, draft persons and clerical or stenographic employees;
- (b) Charges for minor equipment, small tools, and other miscellaneous supplies and expenses, including computers and telephones, personal protection equipment, shovels, picks, axes, saws, bars, sledges, lanterns, jacks, cables, pails, wrenches, etc.;
- (c) Charges for trailer rentals, utility and other temporary facility rental and maintenance charges, monthly utility charges, and all other costs to operate and maintain Contractor's Field Office unless otherwise provided as a direct charge elsewhere in the contract.
- (d) Salary and expenses of Home Office employees, including executive officers, managers, professional and administrative staff, and clerical and support staff;
- (e) Charges and expenses for drafting, Computer Assisted Design, scheduling, billing, financing, etc.
- (f) All other costs to operate and maintain the Contractor's Home Office.
- (g) Bond and insurance costs described in Sub-article 3.2.9.5.

The Contractor agrees that its overhead costs will be fully and fairly compensated by the fixed, non-negotiable overhead percentage markups set forth in Sub-article 3.2.10.

3.2.9.5 Bond and Insurance: Compensation for bond premiums and other insurance premiums not listed in Sub-article 3.2.9.1 shall be considered paid for under the overhead percentages added to the sum of the actual cost for labor, material and equipment and will not be considered or paid separately by NJ TRANSIT.

3.2.9.6 Profit: The Contractor's profit shall be negotiated as a percentage markup based on the type of work, the value of the change, the pricing basis and the amount of risk to the Contractor associated with the work to be performed. The Contractor agrees that the profit percentage markups are subject to negotiation on each change. However under no circumstances shall negotiated markups exceed the maximum allowable markup set forth in Sub-article 3.2.10.

3.2.10 Overhead and profit markups on each change shall be calculated in accordance with this Sub-article 3.2.10. Where work is performed by Subcontractors at any tier, the Contractor shall reach an agreement with such Subcontractors as to the distribution of payments, including overhead and profit markups made by NJ TRANSIT for such work. No additional payment therefor will be made by NJ TRANSIT by reason of the performance of the work of any Subcontractor.

3.2.10.1 When work is to be added or deleted on a Unit Price basis, the Unit Price shall govern and is deemed to include all markups for overhead and profit. No additional markups for overhead and profit will be allowed. When a complete Bid Item is deleted, it shall be treated as a Unit Price Bid item (regardless of whether it is a Lump Sum or Unit Price item) and the total bid price for that item shall be deducted from the Contract Price.

3.2.10.2 When work is to be added on a lump sum or time and material basis, markups for profit and overhead shall be as specified in Table 3.2.10.

3.2.10.3 When work is to be deleted on a lump sum or time and material basis, markups specified in Table 3.2.10, for overhead costs that will not be incurred and profit that would have been realized if the work had not been deleted, shall be included in the deductive cost proposal submitted by the Contractor. If the Contractor's deductive cost proposal does not include an amount for overhead and profit, the Contracting Officer will add the markups specified in Table 3.2.10 to the cost proposal. When work is to be deleted, the Contractor may include documented cancellation and restocking charges and subtract those charges from the cost basis of the deductive cost proposal.

3.2.10.4 When work is to be both added and deleted on a lump sum or time and material basis, the cost basis shall be determined first by calculating both the added and deleted labor, material and equipment costs. Overhead and profit markups specified in Table 3.2.10 shall be applied to:

- a) Net increase in cost basis, in which case Paragraph 3.2.10.2 shall govern;
- b) Net decrease in cost basis, in which case Paragraph 3.2.10.3 shall govern.

Should there be a net change in cost basis of zero, there will be no change in the Contract Price.

3.2.10.5 When there is a change only to the material being supplied and no additional labor cost will be incurred by the Contractor or subcontractors at any tier, markups for overhead and profit shall be as specified in Table 3.2.10.

3.2.10.6 When a change is authorized for standby time, markups for overhead and profit shall be as specified in Table 3.2.10. Any claim for standby time will be rejected unless documented by time sheets signed by the Inspector.

3.2.10.7 When a change is authorized for overtime and the work to be performed is an established item of work, markups for overhead and profit shall be as specified in Table 3.2.10 and shall be applied only to the premium portion of labor costs.

Table 3.2.10: Maximum Overhead and Profit Markups for Added Work				
Work Performed By	Change Order Pricing Basis	Cost Basis	Overhead Markup (as a % of Cost Basis)	Maximum Profit Markup (as a % of Cost Basis)
Contractor	Lump Sum or T&M with GMP	Contractor labor, material and equipment costs	10%	10%
Subcontractor (at any tier)	Lump Sum or T&M with GMP	Subcontractor labor, material and equipment costs	15% (to be shared between Contractor and Subcontractors)	15% (to be shared between Contractor and Subcontractors)
Contractor	T&M with NJT Upset Price	Contractor labor, material and equipment costs	10%	5%
Subcontractor (at any tier)	T&M with NJT Upset Price	Subcontractor labor, material and equipment	15% (to be shared between Contractor and Subcontractors)	7.5% (to be shared between Contractor and Subcontractors)
Contractor	Emergent T&M	Contractor labor, material and equipment costs	10%	7.5%
Subcontractor (at any tier)	Emergent T&M	Subcontractor labor, material and equipment costs	15% (to be shared between Contractor and Subcontractors)	10% (to be shared between Contractors and Subcontractors)
No Additional Labor	Lump Sum All T&M's	Only Material Costs	2.5%	2.5%
Standby Time	T&M Only	Labor Costs Only	5%	5%
Overtime	T&M Only	Premium Labor Costs Only	5%	5%

3.3 TIME AND MATERIAL (T&M) CHANGE ORDER RECORDS

3.3.1 The Contractor shall maintain its records in such a manner as to provide a clear distinction between the direct costs of T & M work and the costs of other Work.

From the above records, the Contractor shall furnish the Construction Manager completed daily work reports for each day's work to be paid for on a T & M basis. The daily T & M work reports shall be detailed as follows:

- (a) Name, classification, date, daily hours, total hours, rate, and extension for each laborer and foreman.
- (b) Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
- (c) Quantities of materials, prices, and extensions.
- (d) Transportation of materials.
- (e) Cost of property damage, liability, and worker's compensation insurance premiums, unemployment insurance contributions, bonds, and social security tax.

3.3.2 Material charges shall be substantiated by valid copies of vendor's invoices. Such invoices shall be submitted with the daily work reports, or if not available, they shall be submitted with subsequent daily T & M work reports. Should said vendor's invoices not be submitted within 60 days after the date of delivery of the material, NJ TRANSIT reserves the right to establish the cost of such materials at the lowest current wholesale prices at which said materials are available, in the quantities concerned delivered to the location of work less any discounts provided in Sub-article 3.2.9.2(a), above.

3.3.3 Said daily time and material work reports shall be signed by the Contractor or its authorized representative.

3.3.4 The Construction Manager will compare NJ TRANSIT's records with the completed daily time and material work reports furnished by the Contractor and make any necessary adjustments. Except when daily time and material work reports are submitted for the purpose of recording the cost of disputed items of work, as required under Sub-article 3.1.4, when daily time and material work reports are agreed upon and signed by both parties, said reports shall become the basis of payment for the work performed, but shall not preclude subsequent adjustment based on a later audit by NJ TRANSIT. In the case of disputed items of work, the signature of NJ TRANSIT's Construction Manager represents only the Construction Manager's concurrence with the costs allocated by the Contractor to the disputed work and shall not preclude the Contracting Officer from disputing such work.

3.4 CONTRACTOR INITIATED CHANGE ORDERS

3.4.1 The Contractor may request a change order for an increase in the cost of the performance of any part of the Work or a change in the Contract Time only when such costs or time impacts are attributable to the following:

- a.) Latent errors and omissions in the contract documents;

- b.) Additional costs or an extension of Contract time for which a change order is expressly permitted under any Article in this Contract.

The Contractor must give immediate notice to the Construction Manager when it becomes aware of the condition causing the initiation of a request for change.

3.4.2 Contractor Initiated Change Order Requests (CICOR's) will not be considered unless the Contractor has strictly complied with the notice requirements of the appropriate Articles of this Contract. The Contractor further understands and agrees that neither the procedure established under this Article nor the review of CICOR's by NJ TRANSIT pursuant hereto shall in any way affect the requirements of the filing of a Notice of Claim or the filing of a suit pursuant to the provisions of N.J.S.A. 59:13-1 et seq.

3.4.3 Within 15 days of notification by the Contractor of a condition causing the initiation of a request for change, the Contractor must submit the CICOR with sufficient detail to enable NJ TRANSIT to ascertain the basis and amount of said request. As a minimum, the following information must accompany each request submitted pursuant to the provisions of this Sub-article:

- (a) A detailed factual statement of the CICOR providing all necessary dates, locations and items of work affected by the CICOR;
- (b) the date on which facts arose which gave rise to the CICOR;
- (c) the name, function, and activity of each NJ TRANSIT individual, official or employee involved in or knowledgeable about such CICOR;
- (d) the specific provisions of the Contract which support or mitigate against the CICOR and a statement of the reasons why such provisions support or mitigate against the CICOR;
- (e) if the CICOR relates to a decision of NJ TRANSIT or the Construction Manager which the Contract leaves to NJ TRANSIT's or the Construction Manager's discretion or as to which the Contract provides that NJ TRANSIT's or the Construction Manager's decision is final, the Contractor shall set out in detail all facts supporting its contention that the decision of NJ TRANSIT or the Construction Manager was fraudulent or capricious or arbitrary or is not supported by substantial evidence;
- (f) the identification of documents and the substance of oral communications relating to such CICOR;
- (g) a statement as to whether the additional compensation or extension of time sought is based on the operation of the provisions of the Contract or an alleged breach of contract;
- (h) if an extension of time is sought, the specific days for which it is sought and the CPM schedule data providing a logical basis for such an extension;
- (i) if additional compensation is sought, the exact amount sought and a breakdown of that amount in accordance with the pricing specifications set forth in Article 3.2.

It will be the responsibility of the Contractor to furnish within a reasonable time such further information and details as may be required by NJ TRANSIT to determine the facts or contentions involved in the CICOR's, including but not limited to those items identified in Article 3.5.

3.5 AUDIT OF CHANGE ORDERS

3.5.1 The cost records of the Contractor and its Subcontractors pertaining to change orders shall be open to inspection or audit by representatives of NJ TRANSIT during the life of the Contract and for a period of not less than three years after the date of acceptance thereof, and the Contractor and its Subcontractors shall retain such records for that period. This audit provision shall apply whether or not such change orders are part of a suit pending in the courts of this State pursuant to the New Jersey Contractual Liability Act. The audit may be performed by employees of NJ TRANSIT or by an auditor under contract with NJ TRANSIT. The audit may begin on ten (10) days notice to the Contractor or its Subcontractor. The Contractor or Subcontractor shall provide adequate facilities, acceptable to NJ TRANSIT, for such audit during normal business hours. The Contractor or its subcontractor shall make a good faith effort to cooperate with the auditors.

3.5.2 If an audit is to be commenced more than 60 days after the acceptance date of the Contract, the Contractor will be given a reasonable notice of the time when such audit is to begin.

3.5.3 As a minimum, the Contractor shall maintain and the auditors shall have available to them the following documents:

- (a) daily time sheets and foreman's daily reports.
- (b) union agreements.
- (c) insurance, welfare and benefits records.
- (d) payroll registers.
- (e) earnings records.
- (f) payroll tax forms.
- (g) material invoices and/or requisitions.
- (h) material cost distribution worksheet.
- (i) equipment records (list of company equipment, rates, etc.)
- (j) vendors', rental agencies', and subcontractors' invoices.
- (k) subcontractors' payment certificates.
- (l) canceled checks (payroll and vendors).
- (m) job cost report.
- (n) job payroll ledger.
- (o) general ledger.
- (p) cash disbursements journal.
- (q) financial statements for all years reflecting the operations on this Project.
- (r) income tax returns for all years reflecting the operations on this Project.

- (s) depreciation records on all company equipment whether such records are maintained by the company involved, or its accountant, or others.
- (t) if a source other than depreciation records is used to develop costs for the Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents.
- (u) all documents which reflect the Contractor's actual profit and overhead during the years this Project was being performed and for each of the five years prior to the commencement of this Project.
- (v) all documents related to the preparation of the Contractor's bid including the final calculations on which the bid was based.
- (w) all documents which relate to each and every change order together with all documents which support the amount of claimed costs.
- (x) worksheets used to prepare the CICOR or cost proposal tracing the cost elements of the change order (including, but not limited to, labor, benefits and insurance, materials, equipment and subcontractors) to the primary records which establish the time periods, individuals, hours, rates, materials and equipment involved in the change order.

3.6 SUPPLEMENTAL CONSTRUCTION COSTS

Whenever the Bid Item "Supplemental Construction Costs" appears in the Bidder's Proposal, NJ TRANSIT has provided an allowance for additional or supplemental construction work that it has not yet defined. This allowance is provided for the sole convenience of NJ TRANSIT and can only be used for work authorized by NJ TRANSIT.

All additional or supplemental work authorized under this provision will be incorporated into the Contract by Change Order pursuant to Article 3.1. The Change Order will describe the additional or supplemental work with any associated cost changes and will reduce the Supplemental Construction Cost allowance in the amount specified in the Change Order. Residual amounts remaining in the Supplemental Construction Cost Allowance Bid Item at Final Completion will be deleted from the Contract Amount by NJ TRANSIT.

4. PROTECTION AND CONTROL OF PREMISES

4.1 RESPONSIBILITY FOR WORK

4.1.1 The Contractor shall be responsible for damages arising from its work on the Project, to any part of the Project work, both temporary and permanent, to adjoining property and to NJ TRANSIT property both within and outside the project limits. The Contractor shall, at its own expense, protect finished work susceptible to damage and keep the same protected until the Project is completed and accepted by NJ TRANSIT.

4.1.2 All Contractor and Sub-Contractor personnel are required to carry, and display when requested, a form of photo identification acceptable to NJ TRANSIT.

4.1.3 The Contractor shall make, use, and provide proper, necessary, and sufficient precautions, safeguards, and protection against the occurrence of accident, injury, damage or hurt to person or property during the progress of the work. The Contractor alone shall be responsible for the safety, efficiency, and adequacy of its plant, appliances, and methods, and for damage or injury which may result from its failure to act in a safe, careful, efficient, and workmanlike manner. Any action or direction by NJ TRANSIT or its representatives relating to the adequacy or implementation of the Contractor's precautions, safeguards, and protection shall in no manner relieve the Contractor of any of its obligations or responsibilities hereunder.

4.1.4 In case of an emergency which threatens persons or property, the Contractor shall act, without previous instructions from the Construction Manager, in a diligent and proper manner to remedy the situation. The Contractor shall notify the Construction Manager immediately. During non-standard work hours (See Sub-Article 4.2.9 for Standard Work Hours) the Rail or Bus Control Center, as appropriate, shall be notified. Claims for compensation by the Contractor for Extra Work arising from emergencies not caused by the Contractor shall be documented and promptly submitted for review and approval. Where the Contractor has notified the Construction Manager of such emergency but has not taken any action, it shall act as instructed or authorized by the Construction Manager.

4.2 USE OF PREMISES

4.2.1 Prior to the use of NJ TRANSIT premises, the Contractor shall obtain the approval of the Construction Manager for the Contractor's staging area(s), access and egress to the premises, parking area(s) for Contractor vehicles and equipment, elevator use, and any other use of NJ TRANSIT property, facilities, or on site utilities. The Contractor shall notify the Construction Manager no later than 72 hours in advance of any utility shutdowns that affect NJ TRANSIT facilities. All cut overs of existing mechanical and electrical services shall be done at a time convenient to NJ TRANSIT and any other private or public agency having jurisdiction, so as not to interfere with facility operations.

4.2.2 The Contractor shall comply with the rules and regulations of NJ TRANSIT. The Contractor shall confine its apparatus, the storage of materials and the operations of workmen to limits indicated by law, ordinances, permits, contract limit lines as established, or directions of the Construction Manager and shall not unreasonably encumber the premises with its materials. The Contractor shall maintain a reasonably clean job site free of debris and litter.

4.2.3 The Contractor shall be responsible for hoisting and distributing material and equipment throughout the Project for its work, and the work of its subcontractors. The Contractor shall handle materials in a controlled manner with as few handlings as possible. The Contractor shall not drop or throw materials from heights. The Contractor shall not load or permit any part of a structure to be so loaded as might endanger its safety or integrity.

The Contractor agrees to NJ TRANSIT's use and occupancy of a portion or unit of the Project after the portion or unit has been declared Substantially Complete by NJ TRANSIT.

- 4.2.4 The Contractor shall request of and obtain from NJ TRANSIT specific instructions, rules and regulations regarding the required conduct of the Contractor during the construction so that the security and safety of personnel and property, including both NJ TRANSIT's and the general public's, will not be endangered. NJ TRANSIT will not allow an increase in the Contract amount due to the Contractor's failure to determine the conditions under which it must perform its contractual obligations. The Contractor shall enforce the Construction Manager's instructions regarding but not limited to signs, advertisements, fires, smoking, alcohol, safety and cleanliness on the site.
- 4.2.5 Accessibility to the work area shall be determined by the Contractor and approved by the Construction Manager, unless otherwise indicated in the Contract Documents. It is the Contractor's responsibility to make arrangements for use of public and/or private properties required to execute and complete the work under this Contract.
- 4.2.6 Space that the Contractor may require for plant, equipment, storage or other purposes, in addition to that available therefor at the site of the Project, shall be procured by the Contractor and the cost thereof is considered to be included in the prices bid for the various items scheduled in the Bid. In event of default, NJ TRANSIT has the right to take over and occupy such space, or cause it to be occupied, for the purpose of completing the Project, at the Contractor's expense. If leased, the lease shall contain a provision that in event of default by the Contractor the lease may be assigned to NJ TRANSIT or its nominee. The Contractor agrees, in event of said default, that it will make such assignment. At the time of execution, a copy of all lease agreements shall be submitted to the Construction Manager.
- 4.2.7 The Contractor shall provide watchmen service, when necessary or when directed by the Construction Manager throughout the period of construction, to adequately protect the work, stored materials and temporary structures located on the premises, and to prevent unauthorized persons from entering upon the construction site.
- 4.2.8 The Contractor shall adequately insure, secure and protect its own tools, equipment, materials and supplies.
- 4.2.9 Regular working hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday. The Contractor shall obtain the written approval of the Construction Manager for performance of work other than during regular working hours or on weekends or Holidays. Standard NJ TRANSIT Holidays are as follows: New Year's Day, Martin Luther King Day, President's Day, Good Friday, Memorial Day (Monday observance), Independence Day, Labor Day, Thanksgiving Day and the day after, and Christmas Day. The Contractor shall advise the Construction Manager no less than seven (7) days in advance of work to be performed during such times. This shall not preclude taking prudent and necessary actions in an emergency situation.

4.3 MAINTENANCE AND CLEANING OF PREMISES

- 4.3.1 The Contractor shall maintain and clean the premises as necessary to ensure a safe, orderly and clutter-free working environment. The Contractor shall comply with the following cleaning requirements:
- 4.3.2 The Contractor shall retain all stored items in an orderly arrangement to allow maximum access, not impede drainage or traffic, eliminate fire hazards and provide proper protection of materials. Weekly, and more often if necessary, the Contractor shall inspect all material storage conditions on the site and restack, tidy, or otherwise service material storage conditions to maintain an orderly arrangement. Scrap, debris, waste materials, and other items not required for construction of the Work shall be regularly disposed of in accordance with the requirements set forth below. The Contractor shall wet down dry materials to minimize dust and prevent blowing dust. The Contractor shall maintain the site in a neat and orderly condition at all times.
- 4.3.3 The Contractor shall provide adequate storage for all items awaiting removal from the job site, observing all requirements for fire protection, health and protection of the environment. Combustible waste, scrap, rubbish, etc., shall be stored in properly sized metal containers (with metal covers where practical) pending removal from the premises. Pest control services shall be provided as necessary to control vermin, rodents and other pests. Daily, and more often as necessary, the Contractor shall inspect the site and move all scrap debris and waste material to the place designated for their storage. At least once a week and more often if necessary, the Contractor shall completely remove and legally dispose of all scrap, debris and waste material from the job site. Placement of waste containers and carting schedules shall be submitted to the Construction Manager for the Construction Manager's review and approval. If the Contractor fails to remove debris from the site within three days after it has been given written notice to do so by the Construction Manager, the Construction Manager will have the debris removed by others and the cost backcharged to the Contractor.
- 4.3.4 Weekly, and more often if necessary, the Contractor shall sweep all interior spaces clean. "Clean", for the purpose of this Subparagraph, shall be interpreted as meaning free from dust and other material capable of being removed by use of reasonable effort and a hand-held broom.
- 4.3.5 Preparatory to the installation of any succeeding materials, the Contractor shall clean all structures, or pertinent portions thereof, to the degree of cleanliness recommended by the manufacturer of the succeeding material, using all equipment and materials required to achieve the required cleanliness.
- 4.3.6 The Contractor shall schedule cleaning operations so that dust and other contaminants resulting from any cleaning process will not fall on wet, newly painted surfaces.

4.3.7 The Contractor shall schedule final cleaning, as approved by the Construction Manager, to enable NJ TRANSIT to accept a completely clean project. Prior to completion of Work, the Contractor shall remove from the job site all tools, surplus materials, equipment, scrap, debris and waste. The Contractor shall remove all traces of soil, waste material, mortar and paint droppings, grease and other foreign matter from all interior and exterior surfaces. All floor slabs shall receive a final steam cleaning.

4.4 FIRE PREVENTION ON PREMISES

4.4.1 Each Contractor shall perform its work on or about the premises in a careful manner with full consideration to fire prevention as required by the New Jersey Uniform Fire Code (NJUFC), N.J.A.C. 5:71-1 et seq., and its referenced standards. Fire resistant materials shall be used for temporary enclosures. Storage of flammable materials on the site shall be subject to limitations specified in the NJUFC and the approval of the Construction Manager, and shall be the Contractor's responsibility. Accessibility to fire hydrants shall be maintained at all times. On site open burning of rubbish, garbage, trade waste, leaves or plant life is strictly prohibited by New Jersey law.

4.4.2 Chemical extinguishers approved by the Construction Manager shall be provided by the Contractor during the progress of the work where specified by the NJUFC or required by Fire Officials from the DCA Bureau of Fire Safety or the local fire department. In addition, the Contractor shall be responsible for furnishing and maintaining his own extinguisher equipment in storage sheds, warehouses, Contractor's offices, and workmen's temporary buildings.

4.4.3 The Contractor shall maintain an active program of fire prevention to keep workers fire conscious during the entire Contract duration. It shall designate one member of its organization to execute and coordinate the fire control measures of its own organization, that of all subcontractors under its jurisdiction and that of all other personnel at the site. It shall report to the Construction Manager any lack of cooperation or refusal to participate on the part of any worker or subcontractor with regard to the fire prevention program. Failure of any worker or subcontractor to cooperate with the Contractor in carrying out the above program shall be grounds for barring that individual or firm from the Project.

4.4.4 Temporary heating systems provided under Article 5.6 shall conform to the requirements of the NJUFC where the building is fully or partially occupied.

4.4.5 Where required under the NJUFC, the Contractor shall be responsible for obtaining required permits from the DCA Bureau of Fire Safety for flammable or combustible gas or liquid storage, fumigation/fogging, blasting, welding, burning, cutting and torch-applied roofing or paint removal.

4.5 PROTECTION AGAINST DAMAGE

4.5.1 The Contractor shall protect existing property, structures, curbs, walks, drives, trees, shrubs, lawns, and landscape work on the site or affected by its activities from damage and shall provide such guards and covering

as necessary. Damaged items shall be repaired or replaced at the Contractor's expense to the satisfaction of NJ TRANSIT. No extension of time will be allowed for repair or replacement of damaged items. Should the Contractor not repair or replace such damaged items, NJ TRANSIT will take corrective measures and deduct the cost from the Contract Price.

- 4.5.2 It shall be the responsibility of the Contractor at all times to protect construction excavations, trenches up to 10 feet from structures, and the structures from water damage, including damage by rainwater, ground water, backing up of drains, downspouts, or sewers. The Contractor shall construct and maintain necessary drainage and do pumping required to keep the Project free from water, and shall perform pumping necessary for the full and proper execution of the construction work and protection of the Project including equipment installed therein.
- 4.5.3 Beyond a point 10 feet from facilities, it shall be the responsibility of the Contractor to protect the trenches by shoring or other methods and perform pumping required to dispose of the surface and subsurface water to permit the satisfactory performance of the work. Each Contractor shall provide its own pumping equipment of adequate capacity and shall be responsible for fuel, cost of operators, and supervision.
- 4.5.4 The Contractor shall protect equipment, such as electric switch gear and HVAC equipment, that is subject to damage by moisture during the period from installation of equipment to completion of the Project acceptance, and shall provide temporary waterproof enclosures and ceilings over such equipment. The interior of the enclosure shall be kept dry by whatever measures are necessary. Special openings shall be provided in the enclosures and ceilings in order to service the equipment during the protection period. The Contractor shall procure and maintain, during the protection period, insurance covering the subject equipment in the full amount of the value of the equipment. See Article 9.2- INSURANCE for submission of proof of carriage of insurance.
- 4.5.5 The Contractor shall remove snow and ice as may be required for the proper protection and prosecution of the Contract and to provide access to the Project Site.
- 4.5.6 In the event of temporary suspension of work, or during inclement weather, or whenever the Construction Manager shall direct, the Contractor shall protect, and shall cause its subcontractors to protect, carefully its and their work and materials against damage from the weather. If, in the opinion of the Construction Manager or NJ TRANSIT, work or materials have been damaged, such work or materials shall be removed and replaced at the expense of the Contractor.
- 4.5.7 Unless otherwise specified or shown in the Contract Documents, the Contractor shall provide protection of the entire construction area. It shall also install four foot high snow fence around trees that are to remain and that are located within the Contract Limit Line, at a distance equal to the branch spread of the tree.

4.6 PROTECTION OF PRIVATE PROPERTY

The Contractor shall not enter on or make use of private property in the prosecution of the Project unless written permission therefor is secured, in duplicate, from the owner of the property, one copy of which shall be filed with NJ TRANSIT. The Contractor shall promptly restore or repair, without cost to NJ TRANSIT and in a manner satisfactory to the owner of the property, property damaged or destroyed by its operations. Special attention shall be given to the protection of existing landscape features and natural vegetation.

4.7 PROTECTION OF PUBLIC UTILITIES

4.7.1 The terms public utility or public utilities used in this Contract shall be construed to include those publicly and privately owned. Within the site of the Project there may be public utility facilities, and notwithstanding any other clause or clauses of this Contract, the Contractor shall not proceed with its work until it has made diligent inquiry at the offices of the Construction Manager, the utility companies and municipal authorities, NJ TRANSIT or other owners to determine their exact location. The Contractor shall notify, in writing, the utility companies and municipalities or other owners involved of the nature and scope of the Project and of its operations that may affect their facilities or property. Two copies of such notices shall be sent to the Construction Manager.

The Contractor's attention is called to the fact that the exact locations of the various overhead and underground lines, utilities, and structures located throughout the Project are unknown, and the Contractor is advised to use extreme caution during construction. The plans showing the approximate locations of the various overhead and underground lines, utilities, and structures are to be used only as guidelines and are not guaranteed as to their accuracy or correctness.

4.7.2 The Contractor shall carry out its work carefully and skillfully and shall support and secure public utility facilities so as to avoid damage to them. Flow in drains and sewers shall be satisfactorily maintained. It shall not move any public utility facilities without the owner's written consent and, at the completion of the work, their condition shall be as safe and permanent as before. When public utility facilities are damaged by the Contractor, it shall notify their owner, who shall cause the damage to be repaired at the Contractor's expense. If the cost thereof is not paid by the Contractor within 30 days after repairs have been completed, the Contracting Officer shall deduct an amount sufficient to cover the cost from any monies due or that may become due the Contractor under this Contract. Service connections damaged by the Contractor shall be repaired by competent skilled mechanics.

4.7.3 During the normal course of construction the Contractor may find it necessary to temporarily relocate certain public utilities in order to proceed. The Contractor will be responsible for the coordination and scheduling of all such relocations with the utility owner. If the Bid Item "Protection of Public Utilities" appears in the Bidder's Proposal, NJ TRANSIT shall reimburse the Contractor for these relocation services upon receipt of an itemized invoice from the participating utility owner, and only for the amount of the invoices, to be submitted along with the Contractor's monthly invoice. If the Bid Item "Protection of Public Utilities" does not

appear in the Bidder's Proposal, the Contractor shall assume all costs associated with the temporary relocation of public utilities.

When facilities requiring relocation belong to NJ TRANSIT, the Contractor shall make requests for relocation by NJ TRANSIT personnel through the Construction Manager. The cost of such relocation shall be borne by NJ TRANSIT.

4.7.4 Under no circumstances shall the Contractor be entitled to damages of any kind arising from the need to relocate public utilities in order to complete the Work.

4.8 PROTECTION OF EXISTING MONUMENTS

Existing monuments and title stones which need not be removed shall be left in place and protected by the Contractor against damage and dislocation. When relocation or change in the grade of existing monuments is necessary, they shall be protected in their original position until their removal is approved by NJ TRANSIT, and shall be reset when directed and in conformance with the new lines and grades to be furnished by the Contractor. Monuments and title stones that are to be left in place or reset and are moved without approval of NJ TRANSIT shall be replaced at the Contractor's expense.

4.9 MAINTENANCE AND PROTECTION OF ROADWAY AND PEDESTRIAN TRAFFIC

4.9.1 The Contractor shall conduct its work with the least possible obstruction of traffic. The convenience of the public and of the residents adjacent to the Project, and the protection of persons and property, are of primary importance and shall be provided for by the Contractor in an adequate and satisfactory manner. When a detour will be established, the Contractor shall make arrangements for establishing, maintaining, and signing for it and provide safety measures as are necessary to provide traffic guidance and protection. The signage shall include safety, directional and informational signals and devices necessary to provide effective pedestrian and vehicular circulation. The number and location of the signals and devices shall be subject to the Construction Manager's approval.

4.9.2 The Contractor shall erect or place, and maintain in good condition, appropriate and adequate barricades, signs, lights, beacons, flares, approved red flasher units, rubber cones, drums and other warning and danger signals and devices at working sites, closed roads, intersections, open excavations, locations of material storage, standing equipment and other obstructions; at points where the usable traffic width of the road is reduced; at points where traffic is deflected from its normal course of lanes; and at other places of danger to vehicular or pedestrian traffic or to completed work. Flagmen will be used as necessary. The various traffic control and warning devices shall be in accordance with Part VI of the Manual on Uniform Traffic Control Devices of the USDOT and approved by NJ TRANSIT's Construction Manager.

4.9.3 The Contractor shall provide, maintain and remove when no longer required, temporary driveways, parking areas and walkways that may be necessary to allow access to all parts of the Project, to adjacent property,

and for handling of materials and equipment. Should the Contractor elect to place materials that will be incorporated into the permanent driveways, parking areas or walks, it shall not do so without having prepared the subgrade as may be elsewhere required by the Specifications nor will it be relieved from responsibility for providing additional materials or for reworking the subgrade, if required to make the improvements conform fully with the Specifications.

- 4.9.4 The Contractor shall obtain permission in writing from the Construction Manager before using existing driveways or parking areas for construction purposes. It shall maintain such driveways and areas in good condition during the construction period, and at the completion of the Project, shall leave them in the essentially equal or better condition as at the start of the work to the satisfaction of the Construction Manager.
- 4.9.5 The Contractor shall employ construction methods and means that will keep flying dust to the minimum. Trucks hauling materials shall have tight tail gates and shall be loaded with adequate freeboard of not less than three inches, without precarious cones or piles of material. It shall provide for the containment of dust on the Project, and on roads, streets and other areas immediately adjacent to the Project limits, wherever traffic or buildings that are occupied or in use are affected by such dust. The materials and methods used for dust control shall be subject to the approval of NJ TRANSIT.
- 4.9.6 When vehicular or pedestrian traffic, or both, is to be maintained on new or existing roadways and pedestrian paths of travel, the Contractor shall plan and carry out its work to provide for the convenient and safe passage of such traffic. The Contractor shall provide for prompt removal from such roadways and pedestrian paths of all dirt and other materials that have been spilled, washed, tracked or otherwise deposited thereon by its hauling or other operations. Roadways and pedestrian paths within the limits of the Project which are reserved for traffic shall be maintained by the Contractor free from obstructions and in a smooth traveling condition at all times.
- 4.9.7 The Contractor shall not perform construction work above vehicular or pedestrian traffic until it obtains explicit written permission from the Construction Manager. Subject to such permission, the Contractor shall provide the necessary devices and means to protect such traffic from falling construction materials and other objects and from painting operations, during the time that construction work is carried on above traffic.
- 4.9.8 The Contractor shall comply with local codes and ordinances affecting complete or partial roadway closings, detours and roadway and pedestrian protective measures. All costs associated with maintaining and protecting roadway and pedestrian traffic is at the Contractor's sole expense and is considered included in the Contract Price.

4.10 MAINTENANCE OF MARINE TRAFFIC

Work over, on or adjacent to navigable waters shall be so conducted that free navigation of the waterways will not be interfered with and the existing navigable depths will not be impaired except as allowed by permit issued by the U.S. Coast Guard and/or the U.S. Army Corps of Engineers, as applicable.

4.11 MAINTENANCE OF RAILROAD TRAFFIC

4.11.1 Where the Project includes work across, over, under or adjacent to railroad tracks or railroad right-of-way as specified in the Contract Documents, the Contractor shall safeguard the traffic, tracks and appurtenances, and other railroad property affected by its work. It shall comply with the regulations of NJ TRANSIT Rail Operations and those of any other operating railroad company relating to the work; shall keep the tracks clear of obstructions; shall provide barricades, warning signs, lights, flares, and other danger signals and means of protection; and shall arrange with the operating railroad company through NJ TRANSIT for the furnishing of watchmen and flagmen and other protective service that may be required by the railroad company. The Contractor's work activities shall be conducted in strict conformance with the governing rules of the specific railroad on whose track it is working as detailed in Appendix D to these General Provisions. The Contractor shall note that work around and adjacent to the railroad is severely restricted during the annual holiday moratorium on performance of work, which is defined as the period beginning 5 days prior to Thanksgiving and ending on January 2 of the following year. Track outages and fouling may not be permitted during this period.

4.11.2 Work done within NJ TRANSIT railroad right-of-way shall be subject to the approval of NJ TRANSIT in matters affecting railroad property and the safety and operation of its trains. The safety and continuity of railroad operation shall be of primary importance and shall be at all times protected and safeguarded. The Contractor, and any subcontractor, shall perform and arrange all pertaining construction work accordingly. Work shall be performed carefully and shall be regulated so as to avoid interruption of train movements and damage to the tracks and other facilities of the railroad. The Contractor agrees that delays in the performance of the Work attributable to the operations of the railroad shall not be the basis of claims for damages for delay or otherwise or for additional compensation. However, the Contractor may be entitled to an extension of time for completion of the Work, but only to the extent that the critical path of the work schedule is impacted by NJ TRANSIT railroad operations.

4.11.3 The maintenance and protection of railroad traffic will not be paid for under any specific scheduled item but the cost thereof, including the safeguarding of tracks, traffic and appurtenance of the railroad, watchmen, barricades, lights, signs, signals, warning, other protection and services is considered included in the Contract Price.

4.11.4 If work is done on or affecting the property of a railroad company other than NJ TRANSIT, the railroad company may assign inspectors or engineers during the time the Contractor is engaged in construction work on said railroad property for the general supervision of construction operations to insure adherence to Plans and

Specifications and to insure the use of approved construction methods pertaining to the safety and condition of the company's right-of-way. The salary and expense of said inspector and/or engineers and the cost of other engineering services furnished by the railroad company will be at no cost to the Contractor, unless otherwise specified in the Special Provisions. The same care taken to protect NJ TRANSIT railroad traffic as set forth above shall be exercised in the protection of railroad traffic on other affected railroads.

4.11.5 Detailed Protective Measures

A. General

1. Whenever in this Sub-article the term "Railroad" is used without further qualifications, it shall mean and be taken to mean NJ TRANSIT Rail Operations.
2. The Contractor should note that the proposed work involves construction operations on and over property owned or controlled by the Railroad and will be performed adjacent to the high speed main line electrified tracks of the Railroad in the vicinity of high voltage lines of the Railroad. In working near these lines great care must be exercised and the Railroad's rules detailing requirements for clearance to be maintained between equipment and energized wires and other instructions in regard to working in the vicinity of their electric operations and requirements must be strictly observed whenever the tracks, structures, or properties of the Railroad are involved or affected.
3. Prior to commencement of work on Railroad property, the Contractor will name a qualified safety representative to interface with the Railroad's supervision. The Contractor safety representative will be responsible for ensuring full compliance with the Railroad's safety policies and procedures as they relate to the project. All Contractor personnel working within fouling distance shall attend the Railroad's safety orientation class which will be provided by the Railroad at no cost to Contractor. The Contractor's personnel may be required to travel to offices in Newark at One Penn Plaza East, or some other location convenient to the Railroad and remote from the site, for administration of this class. Each trained employee shall be issued a safety sticker to be placed on the employee's hard hat. The employee must display the sticker when working in the Railroad's limits. Contractor shall comply with the Railroad's safety requirements throughout the entire construction period. All costs encountered by Contractor due to complying with Railroad's safety requirements shall be at the sole expense of Contractor.
4. If, during the carrying out of the Work, the tracks or other facilities of the Railroad are endangered, the Contractor shall immediately do such work as directed by the Railroad to restore safety, and upon failure of the Contractor to carry out such orders immediately, the Railroad may take whatever steps as are necessary to restore safe conditions. The cost and expense to the Railroad of restoring safe conditions or of any damage to the Railroad's trains, tracks or other facilities caused by the Contractor or Subcontractor's operations, shall be considered a charge against the Contractor and shall be paid for by the Contractor, or may be deducted from any monies due or that may become due to Contractor under this Contract. Final payment to Contractor shall be

contingent upon a showing by the Contractor that the bills of the Railroad for such services have been paid by the Contractor.

B. Rules and Regulations

1. Railroad traffic shall be maintained at all times with safety and continuity, and the Contractor shall conduct all of its operations on or over the Railroad's right-of-way fully within the rules, regulations, and requirements of the Railroad. The Contractor shall be responsible for acquainting itself with such requirements as the Railroad may demand. It is understood and agreed that the Contractor is cognizant of the limited ability of NJ TRANSIT to control the actions of the Railroad's operations and in its bid has made allowance for the fact that no additional compensation will be allowed for any delays, inconvenience or damages sustained by Contractor due to the actions, operations, inactions, or interference of the Railroad.
2. The Contractor shall obtain verification of the time and schedule of track occupancy from the Railroad before proceeding with any construction or demolition work over, under, within, or adjacent to the Railroad's right-of-way. The Contractor shall submit for the approval of the Railroad a detailed description of the method of procedure which will be followed for Work within these areas. The Work in the field shall not proceed until the plans and method of procedure have been approved by the Railroad.
3. All work to be done under or over the Railroad's right-of-way shall be performed by the Contractor in a manner satisfactory to the Railroad and shall be performed at such times and in such manner as not to interfere with the movement of trains or traffic upon the tracks of the Railroad. The Contractor shall use all necessary care and precaution in order to avoid accidents, damage, delay or interference with the Railroad's trains or other property.
4. The Contractor shall give written notice to NJ TRANSIT's Construction Manager and the Railroad at least thirty (30) days prior to the commencement of any Work, or any portion of the Work, by the Contractor or its Subcontractors on, over or adjacent to the Railroad's right-of-way, in order to protect Railroad traffic.
5. If deemed necessary by the Railroad, it may furnish or assign an inspector who will be placed on the site of the Work during the time the Contractor or any Subcontractor is performing work under the Contract on Railroad property. The cost and expense will be paid directly by NJ TRANSIT.
6. Before proceeding with any construction or demolition work on, over or adjacent to the Railroad's property, a pre-construction meeting shall be held, at which time the Contractor shall submit for approval of the Railroad plans, computations, and a detailed description of Contractor's method of procedure for accomplishing the Work required under this Contract, including methods of protecting railroad traffic; however, such approval shall not serve in any way to relieve the Contractor of its complete responsibility for the adequacy and safety of its methods or procedures.
7. During the demolition procedures the Contractor must provide an approved shield to prohibit all debris from falling onto Railroad's right-of-way. The shield must be designed to provide a solid barrier between the work area and the tracks below. This shield must span over all tracks plus an

additional 15 feet beyond the center line of each track. The Contractor is to submit details and calculations of the proposed shield for Railroad approval.

8. Whenever equipment or personnel are working closer than 15 feet from the nearest rail or 18 feet from the center line of track or over the top of track within this limitation, that track shall be considered fouled. Cranes, shovels, or any other equipment shall be considered to be fouling the track when located in such position that failure of same, with or without load, brings the equipment within the fouling limit. Operations within this fouling distance shall be conducted only with the permission of the Railroad and as directed by qualified railroad employees providing protection for track, signal, and catenary equipment. A power line is fouled and subject to hazard when any object is brought to a point less than 10 feet therefrom and a signal line or communication line shall be considered fouled and subject to hazard when any object is brought nearer than eight feet to any wire or cable.
9. The Contractor shall conduct its Work and handle its equipment and materials so that no part of any equipment shall foul an operated track or wire line without the written permission of the Railroad and NJ TRANSIT's Construction Manager. When the Contractor desires to foul an operated track, it must give the Railroad and NJ TRANSIT's Construction Manager written notice of its intentions thirty (30) days in advance, so that if approved, arrangements may be made for proper protection of the Railroad. Although the Railroad may shift or reroute traffic to accommodate Contractor, flagging protection shall still be provided when fouling a normal operating track as this track could be returned to operation on short notice as necessitated by demand. Contractor shall conform to working hours as determined by the Railroad with regard to fouled tracks and/or platform work. If railroad flagmen or protection is not available, construction work shall not be undertaken if this Work is to take place within the fouling limits. Should Contractor violate any of the conditions set forth herein, Railroad shall have the right to remedy the situation as appropriate, including suspending the Work, at the sole cost and expense of Contractor. The Contractor's employees and equipment will not be permitted to work near overhead wires or apparatus, except when protected by a Class A employee of the Railroad who will take necessary precautions for their safety before starting and during the progress of such Work. The Contractor must supply and install a grounding cable (4/0 copper or equivalent ACSR) for each piece of equipment working adjacent to any electrified lines. The ground must be an approved 'C' clamp type ground. When Contractor is working in existing electrified territory, it shall comply with the High Voltage Proximity Act, N.J.S.A. 34:6-47 et seq.
10. Equipment of the Contractor to be used adjacent to the tracks shall be in first-class condition so as to fully prevent failures of defective equipment that might cause delay in the operation of trains or damage to Railroad facilities. The Contractor's equipment shall not be placed or put into operation adjacent to tracks without first obtaining permission from the Railroad and NJ TRANSIT's Construction Manager. Under no circumstances shall any equipment or materials be placed or stored within eighteen (18) feet from the near rail of a track in operation.

11. Materials and equipment belonging to the Contractor shall not be stored on Railroad property without first having obtained permission from the Railroad NJ TRANSIT's Construction Manager and such permission will be on the condition that the Railroad and NJ TRANSIT will not be liable for damage to such materials and equipment from any cause. The Contractor shall keep tracks adjacent to the site clear of all refuse and debris that may accumulate from its operations, and shall leave the Railroad property in the condition existing before the start of its operations.
12. The Contractor shall consult the Railroad and NJ TRANSIT's Construction Manager in order to determine the type of protection required to insure safety and continuity of Railroad traffic incident to the particular methods of operation and equipment to be used on the Work. Any B & B Inspectors, track foremen or track watchmen, signalmen, electric traction linemen, or other employees deemed necessary for protective services by the Railroad, or its duly authorized representative, to insure the safety of trains, contingent upon the Contractor's operations, shall be obtained from the Railroad by the Contractor. The Contractor shall make all such requests through NJ TRANSIT's Construction Manager. The cost of same shall be paid by NJ TRANSIT.
13. The providing of such watchmen and other precautionary measures shall not, however, relieve the Contractor from liability for payment of damages caused by its operations.
14. The Railroad will require flagging and/or other protection of railroad traffic during all periods when the Contractor is working on or over the right-of-way of the Railroad, or as may be found necessary in the opinion of the Railroad Engineers. When protection is required the Contractor shall make the requests in writing to NJ TRANSIT's Construction Manager, who will forward same to the Railroad at least thirty (30) days before such protection is required. NJ TRANSIT shall be responsible for any compensation owing to the Railroad for such protection. Contractor shall not include the cost of such railroad protective services in its bid. However, the costs for safeguarding the tracks, barricades, lights, signs, signals warnings, other protections and services, including insurance shall be provided by the Contractor and shall be included in the bid price.
15. Prior to the beginning of Work, it must be determined whether the tracks near the work area must be taken out of service. The track must be taken out of service by a qualified Railroad employee when any of the following conditions exist:
 - a. Any construction machinery or equipment occupies the traffic envelope or is standing within 18 feet of the center line of an outside track.
 - b. Any unsecured construction materials are stored within 20 feet of the center line of any track.
 - c. Excavations will be performed under operating tracks or adjacent to where stability of tracks may be affected. Under no circumstances will excavations be permitted within the "track live load influence line". The live load influence occurs when an excavation nearest the adjacent track intersects a line from a point five feet horizontally from center line of adjacent track at the plane of the base or rail drawn on a slope of 1-1/2 foot horizontal to one foot vertical. If the excavation occurs within this perimeter, then temporary earth support plans, designed and sealed by a registered professional engineer, shall be

submitted for approval. In any event, the excavation shall be no less than 25 feet from adjacent track, unless otherwise approved by the Railroad. Excavations shall be fenced, lighted, and otherwise protected as directed by the Railroad.

- d. Any other conditions, circumstances, or situation that may present a danger to the safe movement of trains.
- 16. It shall be expressly understood that this Contract includes no work for which the Railroad is to be billed by the Contractor, and it shall be further understood that the Contractor is not to bill the Railroad for any work which the Contractor may perform.
- 17. Upon completion of the work and as a condition of Final Acceptance, the Contractor shall remove from within the limits of the Railroad's right-of-way, all machinery, equipment, surplus materials, false work, rubbish and temporary buildings and other property of the Contractor, or Subcontractor, and shall leave the right-of-way in a condition satisfactory to the Railroad and NJ TRANSIT's Construction Manager.
- 18. Contractor notices for assignment of Railroad personnel and other written requests shall be directed to the Railroad through NJ TRANSIT's Construction Manager.
- 19. Crossing of tracks at-grade by equipment and personnel is prohibited except by prior arrangement with the Railroad.
- 20. All tunneling, jacking and boring operations within the railroad track influence lines shall be performed on a 24 hour/day basis to minimize the Railroad's exposure to construction hazards.
- 21. No Work across, over, under or adjacent to the Railroad shall commence until the Contractor's written notice is received and approved by the Railroad and all required personnel have attended the Railroad's safety class. Thereafter, rail protective personnel will be assigned, as required, for the Work.

4.12 WORK FURNISHED BY OTHERS

4.12.1 NJ TRANSIT may, and reserves the right to, enter upon the work site, or areas adjacent thereto, at any and all times during the progress of the work, or cause others to do so, for the purpose of performing work not included in these Contract Documents.

4.12.2 When such additional work is to be performed, the Contractor shall conduct its work so as not to interfere with or hinder the progress or completion of the work being performed by others. Moreover, the Contractor assumes the positive obligation of cooperating with such others and coordinating its activities with theirs. If there is a difference of opinion as to the respective rights of the Contractor and others doing work within the limits of or adjacent to the Project, NJ TRANSIT will decide as to the respective rights of the various parties involved in order to secure the completion of NJ TRANSIT's work in general harmony and in a satisfactory manner. NJ TRANSIT's decision shall be final and binding on, and shall not be cause for claims by the Contractor for additional compensation.

4.12.3 The Contractor shall assume all liability, financial or otherwise, in connection with this Contract and hereby waives any and all claims against NJ TRANSIT for additional compensation that may arise because of inconvenience, delay, or loss experienced by the Contractor because of the presence and operations of others working within the limits of or adjacent to the Project.

4.12.4 The Contractor will not be held responsible for damage or loss to work performed on the Contract or on other contracts within or adjacent to the site of the Project that may be caused by or on account of the work of others. The Contractor will be held responsible for any damage or loss done or caused by its work or forces to the work performed by other contractors within or adjacent to the site of the Project and it shall repair or make good any such damage or loss in a manner satisfactory and without cost to NJ TRANSIT.

4.12.5 The Contractor shall examine work or materials not included in this Contract, the installation of which will affect the work in this Contract, and should the same be imperfect, incorrect or insecure, it shall notify the Construction Manager immediately in order that the same may be rectified. The Contractor shall arrange its work and shall place and dispose of the materials being used so as not to interfere with the operation of others within the limits of the Project or adjacent thereto. The Contractor shall join its work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

4.13 ARTS IN TRANSIT

4.13.1 Art is included in NJ TRANSIT's capital program to enhance the appearance of NJ TRANSIT's buildings and infrastructure. As such, this Contract may incorporate art as designated by NJ TRANSIT.

NJ TRANSIT will be responsible for the selection of the Artist(s) and the Contractor shall enter into and abide by the Artist Agreement contained in Appendix E, Agreement between Contractor and Artist. The Contractor shall place no other contract requirements or conditions upon the Artist(s). The Contractor shall submit a copy of the executed agreement to the Construction Manager within fifteen calendar days after its execution. NJ TRANSIT retains the right to direct the Contractor to amend the Artist Agreement under the terms of Article 3.1, Change Orders.

4.13.2 The Contractor shall prosecute its Work so that installation of Artwork shall proceed in the manner and within the scheduled times directed by NJ TRANSIT and as incorporated in the Artist Agreement. The installation of the Artwork shall be included in the Contractor's Construction Progress Schedule.

Should the subject Artwork not be deemed substantially complete by NJ TRANSIT within the specified time allotted in the Artist Agreement, except for causes beyond the Contractor's and Artist's control, NJ TRANSIT may deduct from the amount due the Contractor \$100.00 per calendar day of delay as Artwork Liquidated Damages. The Artwork Liquidated Damages are to be separate from the Contract liquidated damages set forth in Article 2.1, TIME OF COMPLETION, DELAY, LIQUIDATED DAMAGES.

The Contractor shall not be charged with the Contract liquidated damages when the delay in substantial completion of the Work is solely due to late completion of the Artwork, unless the delay is attributable to acts or omissions of the Contractor. In that event, only the Artwork Liquidated Damages shall apply.

4.13.3 Upon completion and installation of the Artwork, NJ TRANSIT shall inspect the Artwork and installation and shall either accept or reject the Artwork. Upon NJ TRANSIT's acceptance of the Project and as part of the Contract close-out process, the Contractor shall assign the Agreement with the Artist(s) and all rights to the Artwork to NJ TRANSIT.

4.13.4 Payment for the above work and services shall be made from the Allowance identified in the Bidder's Proposal under the Item entitled: "Artwork Allowance". The Contractor shall pay the Artist in accordance with Attachment A, "Fees, Material and Payment Schedule" in the Artist Agreement. The Contractor is entitled to a markup of 5% overhead and 5% profit on the Artist's contract amount identified in the Artist Agreement as "Attachment D".

5. MOBILIZATION AND TEMPORARY FACILITIES

5.1 MOBILIZATION

5.1.1 When the item Mobilization and General Requirements (Mobilization) is included as a Contract Item it shall consist of initiating the Contract, and shall include such portions of the following as are required at the beginning of the Project: setting up the Contractor's general plant, offices, shops, storage areas, sanitary and other facilities as required by the Specifications, by Federal, State, or local law or by regulation; providing access to the Project site; obtaining necessary permits, grants and licenses, and payment of fees; protecting existing utilities; lighting work areas; providing shop drawings; sampling and testing of materials; providing required insurance and bonds other than the Performance Bond and Payment Bond, unless Insurance Bid Items are included in the Bidder's Proposal. Mobilization shall also be deemed to include the Contractor's cost of ongoing maintenance and protection of the work premises, demobilization and remobilization as necessary to accommodate sequencing the work, and all costs associated with the provision and maintenance of temporary facilities, unless a specific Bid Item has been provided in the Bidder's Proposal for a specific element of work (e.g. Field Offices).

5.1.2 Payment for Mobilization as hereinbefore specified will be made for the lump sum price bid therefore, regardless of the fact that the Contractor may have, for any reason, shut down its work on the Project or moved equipment away from the Project and back again.

5.1.3 Except where a specific Bid Item has been provided in the Bidder's Proposal for a specific element of work, the provisions for payment of the Contract Item Mobilization supersede any provisions elsewhere in the Contract for including the costs of these initial and ongoing services and facilities in the prices bid for the various Contract Items in the Proposal.

- 5.1.4 Payment to the Contractor for the item Mobilization will be made in accordance with the following schedule:
- (a) When five (5) percent of the work is completed - 25 percent of the amount bid for mobilization or two and one half (2 1/2) percent of the total Contract Price, whichever is less, will be paid.
 - (b) When ten (10) percent of the work is completed an additional 25 percent of the amount bid for mobilization or five (5) percent of the total Contract Price, whichever is less, will be paid.
 - (c) When 25 percent of the work is completed an additional 25 percent of the amount bid for mobilization or six (6) percent of the total Contract Price, whichever is less, will be paid.
 - (d) When 50 percent of the work is completed – an additional 25 percent of the amount bid for mobilization or ten (10) percent of the total Contract Price, whichever is less, will be paid.
 - (e) The percentage of work completed shall be the total of payments earned, exclusive of the amount paid for this item, as shown on the monthly certificates of the approximate quantities of work done.
 - (f) Upon completion of all work on the Project, payment for any amount bid for mobilization in excess of ten (10) percent of the total Contract Price will be paid.

5.1.5 When the item Mobilization is not a Contract Item, no specific payment will be made for the work included in this Article. All costs thereof shall be included in the prices bid for the various scheduled Contract Items.

5.2 FIELD OFFICE AND SANITARY FACILITIES

5.2.1 The Contractor shall provide a field office on or as convenient to the job site as possible, subject to the approval of the Construction Manager and sufficient to accommodate NJ TRANSIT representatives assigned to the Project. Such space, together with necessary furnishings, equipment, supplies, etc., and all utilities shall be as required by this Article.

5.2.2 Within thirty calendar days of the Notice to Proceed, the Contractor shall provide and maintain the mobile trailer units described herein with parking facilities for five vehicles. The Field Office and the parking facilities will be for the use of the Construction Manager, Engineer/Architect, and their staff.

5.2.3 The Field Office shall be a new or like new NJDCA approved weatherproof mobile trailer with a 7-foot minimum ceiling height, weatherproof windows (screened), doors each equipped with adequate locking devices, and a burglar and fire alarm system to be connected to a local 24-hour security service. The Field Office shall total at least 576 square feet and shall be divided into three rooms, one with a floor area of not less than 288 square feet and two with floor areas of not less than 144 square feet. All walls shall be paneled. The Field Office location shall be approved by the Construction Manager. The trailer shall be adequately tied down to resist high winds. The Contractor shall level the Field Office trailer and provide entrance steps, landing platforms, handrails, and under trailer enclosures as directed by the Construction Manager. The Contractor shall obtain required DCA permits and approvals for the Field Office as well as any subsequent permit renewals.

5.2.4 All Field Office windows are to be protected by expanded metal grilles with angle frames which are to be through bolted top 2" x 2" x 1/4" plates. All external doors are to be heavy duty construction with cylinder locks and with two 2" x 2" x 1/4" angle bars which can be placed across the closed door and padlocked in place. Padlocks to be placed through eye bolts which are to be through-bolted to 2" x 2" x 1/4" plates. Contractor shall supply the padlocks and all keys (original and copies) to the Construction Manager.

5.2.5 The Contractor shall maintain and service the Field Office trailer as specified in this Article. Upon project completion, and only after receipt of written authorization from the Construction Manager, the Contractor shall remove the Field Office from the job site.

5.2.6 Any relocation of the Field Office trailer and utilities during the entire project duration shall be the Contractor's responsibility.

5.2.7 The Contractor shall provision the Field Office as follows:

1. Provide adequate lighting, electrical receptacles, and ground fault circuit interruptions as required by OSHA.
2. Provide lighting to furnish a minimum of 100 foot-candles at desk height uniformly in all areas.
3. Provide heating and cooling equipment and any necessary fuel to maintain an ambient air temperature of 70 degrees F +/- 5 degrees F.
4. Provide and maintain a source of hot and cold potable water for use in a flushing water closet, and for hand washing. The Contractor shall be responsible for plumbing hook-up to a sanitary line or for provision of a storage tank.
5. Provide five separate phone lines; three lines to be equipped for voice; one for fax and one with modem capabilities. Provide and install the phone system with three new touch-tone phones with answering machine, speaker and hunting capabilities. All equipment shall be approved by the Construction Manager prior to installation.
6. Provide OSHA required fire extinguisher.
7. Furnish the CM Field Office with the following new equipment and furniture as approved by the Construction Manager:

Table 5.2.7.7: Field Office Equipment	
Description	Quantity
Desk (60" x 30") with three lockable draws and rolling armchair	3
Drafting table (60" x 36") with drawer and 54" straightedge and stool	1
Reference table (54" x 30")	1
Conference table (36" x 96")	1
Metal folding chairs with saddle seat and steel back	10
Storage cabinet (36" x 18" x 6') with lock and two keys	1
Two file cabinets, four (4) drawers (legal size) with lock and key.	2

Table 5.2.7.7: Field Office Equipment	
Two file cabinets, fireproof, four (4) drawers (legal size) with lock and key.	2
Greensteel marker board (36" x 48"), mounted, and supply of markers including replacements as required	1
Copier, using 8-1/2" x 11", 8-1/2" x 14", and 11" x 17" paper	1
Two cubic feet refrigerator/freezer	1
Wall clock (battery operated) 12" diameter face	1
Plain paper laser and facsimile machine capable of 8½ x 11 and 8½ x 14" paper	1
Automatic Drip Coffee machine (10 cup)	1
Fully stocked first-aid cabinet in compliance with OSHA regulations	1
Microwave	1
Bookcase (36 x 42) with four shelves	1

5.2.8 The Contractor shall maintain and service the Field Office in accordance with the following requirements. The Contractor shall:

1. Repair and clean the Field Office, including complete janitorial services, including cleaning and emptying of any temporary sanitary system, and trash removal, at a minimum frequency of once per week to the level approved by the Construction Manager.
2. Repair, clean, and adjust equipment specified under Sub-article 5.2.7 and provide repair/maintenance service with 24 hour response/repair time for proper operation of all copiers, typewriters, computers, and any other office equipment whether supplied by the Contractor or supplied by others.
3. During other than normal working hours, provide security measures and area protection adequate to insure the safety and integrity of the project site.
4. Provide all necessary paper, including sanitary paper, and other office supplies as required by the Construction Manager.
5. Provide adequate bottled water and paper cups inside the Field Office.
6. Provide coffee, filters, plastic stirrers, sugar, cups, napkins, and non-dairy creamer.
7. Maintain and restock the first-aid cabinet as required.

5.2.9 Payment for the Field Office materials and services identified in this Article shall be as follows:

- A. Included and to be paid for under the Bid Item "Mobilization and General Requirements" shall be the costs for the following:
 1. Trailer site preparation and trailer delivery.
 2. Trailer utility and sanitary hookups.
 3. Trailer set-up, including: skirting, tying down, securing and making the trailer weatherproof; wooden stair and platform construction (including handrails); installation of burglar alarm system; and other miscellaneous efforts required to provide safe and orderly access to the trailer. Further,

any and all labor and materials required for repair and maintenance to the above for the duration of the project.

4. Obtaining and paying for any and all permits required for hauling, building and making utility connections for the trailer.
 5. Any costs associated with the location and/or relocation, for any reason, of the Field Office and utilities.
 6. All Field Office equipment and furnishings identified in this Article.
 7. Trailer demobilization and removal at the completion of the project, including utility disconnections, temporary construction and disposal fees.
 8. Any and all other costs associated with mobilizing, erecting, maintaining, repairing, demobilizing and removing the Field Office trailer and associated temporary improvements/structures.
 9. All costs associated with Sub-article 5.2.8 Items 1, 2 and 3.
- B. Included and to be paid for under the Bid Item Allowance "Field Office" shall be the costs for the following:
1. Monthly rental of the Field Office trailer.
 2. NJ TRANSIT telephone usage.
 3. NJ TRANSIT electrical power usage.
 4. NJ TRANSIT heating fuel expenses.
 5. Office supply account covering all costs associated with Sub-article 5.2.8 Items 4, 5, 6 and 7.

The Contractor shall submit copies of invoices from the trailer rental and utility companies and receipts for office supply expenses along with the monthly applications for payment. The Contractor shall be reimbursed for the items listed in this Sub-article 5.2.9.B as a direct expense without any additional markups for overhead or profit.

All items purchased by the Contractor under Article 5.2 shall become the property of the Contractor for his use or disposition upon removal of the Field Office.

5.3 CONSTRUCTION SIGN

The Contractor shall construct and install construction sign(s) as indicated in the Contract Documents. Lettering shall be as shown in the Contract Documents and shall include the names of the Contractors engaged on the Project and such other persons or entities as directed. The sign(s) shall be securely installed to remain rigid and plumb, shall be maintained in good condition throughout the construction period, and shall be removed when directed by the Construction Manager. If the Contractor desires to install a sign other than those specified in the Contract Documents it shall first obtain the approval of the Construction Manager.

5.4 TEMPORARY WATER

5.4.1 The Contractor shall provide, protect and maintain an adequate water supply for use on the Project during the period of construction, either by means of the permanent water supply line, or by the installation of a temporary water supply line. This water supply line shall be made available within 15 days after written authorization to proceed with the Project. If the source of water supply is a well, provisions covering the supply of water will include the installation of necessary power driven pumping facilities by the Contractor, as well as protection of well from contamination. The water supply shall be tested periodically by the Contractor and, if necessary, shall be chlorinated and filtered.

5.4.2 The Contractor will be required to install a valved temporary water supply connection at a point approximately 10 feet from the building or buildings and provide a meter, if required; the actual location of the point to which the water is brought shall be determined by the Contractor.

5.4.3 If there is a charge for water, said charges shall be paid by the Contractor. When temporary water lines are no longer required they shall be removed by the Contractor and any part, or parts, of the grounds or building disturbed or damaged shall be restored to the original condition by the Contractor. The Contractor shall install its permanent water lines to the boiler room and heating equipment in sufficient time to be available for supplying water for testing and operation of the heating system when needed to supply heat on the Project.

5.5 TEMPORARY LIGHT AND POWER

5.5.1 The Contractor shall extend electrical service to the building or buildings at locations approved by the Construction Manager; temporary electrical service shall be independent of the existing permanent service. Initial temporary service shall be three phase or single phase depending upon which phase is nearest to the Project site. This service shall be installed within 15 days after written Notice to Proceed with the Project. When the Contract calls for three phase permanent service, the Contractor shall install same within a reasonable time to permit use by all the trades.

5.5.2 The Contractor shall extend the service into the building and shall provide such receptacles and lighting as required for the proper conduct of the work.

5.5.3 The Contractor shall pay for cost of all electric energy used, and it shall also maintain and service any electrical equipment installed and necessary for maintaining heat after same is required in the building.

5.5.4 When the temporary electrical lines are no longer required they shall be removed by the Contractor and it shall restore to their original condition any part, or parts, of the grounds or building disturbed or damaged.

5.5.5 Any Contractor who fails to carry out its responsibility in the supplying of uninterrupted light and power to expedite the Project, as set forth in this Contract, shall be held responsible for such failure and the

Contracting Officer shall have the right to take such action as the Contracting Officer deems proper for the protection and conduct of the work and shall deduct the costs involved from the amount due the Contractor.

5.6 TEMPORARY HEAT

5.6.1 The Contractor shall provide, protect and maintain, at its own expense, sufficient heat to the Project during the entire period of construction either by using an NJ TRANSIT approved method of temporary heat or, when operational, the permanent heating system.

5.6.2 Prior to any building being enclosed by walls and roof, if the outside temperature shall fall below 40 degrees F., at any time during the day or night, and the work in progress requires heat for execution and protection, the Contractor shall furnish acceptable means to provide sufficient heat to maintain a temperature of 40 degrees F., for that portion of the work which requires same.

5.6.3 Heating of field office, storage spaces, concrete and masonry materials and working area heating required prior to enclosure, as specified herein, shall be provided by the Contractor as specified in the Contract Documents.

5.6.4 As soon as the building, or a major unit thereof, is generally enclosed by walls and roof, as determined by the Construction Manager, the responsibility for supplying working area heat shall rest with the Contractor. When the outside temperature falls below 40 degrees F., at any time during the day or night, the Contractor shall furnish sufficient heat, by the use and maintenance of LP gas heaters or other system approved by the Construction Manager, to maintain a temperature of 45 degrees F. within the enclosed area of the building at all times and shall remove same when no longer required. The Contractor shall provide or arrange at its own expense supervision of the LP gas heaters at all times prior to start of the permanent heating system. The Contractor shall furnish and pay for all fuel required for the above temporary installation during the term of this contract.

5.6.5 The Contractor will be held responsible for freeze ups following enclosure of the building. The Contractor shall remove soot, smudges, and other deposits from walls, ceilings, and exposed surfaces which are the result of the use of heating equipment including the permanent heating system during the period of its use for supplying heat. The Contractor shall not do any finish work until the areas are properly cleaned.

5.6.6 A building, or major unit thereof, shall be considered "enclosed" when: (1) the exterior walls have been erected; (2) temporary roof or permanent roof is installed and in watertight condition; and (3) temporary or permanent doors are hung and window openings are closed with either permanent or temporary weather tight enclosures (cardboard, muslin and light canvas materials are not acceptable; any impervious transparent material is acceptable). A major unit of building as referred to herein shall be: (1) an entire separate structure; (2) a fully enclosed wing which shall have a floor area equal to at least 50 percent of the

total floor area of the Project; or (3) a section which shall have a floor area equal to at least 50 percent of the total floor area of the Project.

5.6.7 60 calendar days after the building, or major unit thereof, is enclosed and the Engineer has determined that heat is required for the proper execution of the construction work, the permanent heating system shall provide the heat. Regardless of whether the boiler room is within the confines of the major unit or not, it shall be enclosed and the floor installed at the time the permanent heating system shall supply heat. The boiler room floor area shall not be considered in determining the area comprising the major unit. The 60 day period shall apply only to the enclosed portion of this building.

5.6.8 The Contractor shall continue to provide acceptable means of temporary heat until the permanent heating system is operational. If the permanent heating system is not acceptable to the Construction Manager for providing sufficient heat, the Contractor shall continue to provide temporary heat as described above and as ordered by the Construction Manager or NJ TRANSIT.

5.6.9 When the heating system provided by the Contractor is designed for tie-in to existing steam lines for source of heat, NJ TRANSIT will provide steam for temporary heat through the Project's permanent heating system at no additional cost to the Contractor. The Contractor shall arrange, at its own cost, for connections.

5.6.10 Valves, traps and other parts of the heating system which are permanently installed by the Contractor and used for supplying heat during the construction period need not be replaced, provided the system was in acceptable condition prior to its use, and further, that the system is properly cleaned and adjusted to operate after the permanent system is in use to the satisfaction of the Construction Manager. Seven (7) days prior to acceptance by NJ TRANSIT of the heating system as substantially complete, the Contractor shall replace disposable filters or turn over spare sets of filters to NJ TRANSIT.

5.7 TEMPORARY PARTITIONS, ENCLOSURES, GLAZING BREAKAGE AND CLEANING

5.7.1 Whenever necessary, in order to maintain proper temperatures for the prosecution of the work, or for the protection thereof, the Contractor shall furnish and maintain temporary enclosures and partitions. All openings in exterior walls not enclosed with finishing materials shall be closed temporarily. Window sashes may be installed and glazed. Temporary wood doors shall be provided at door openings. Temporary partitions shall be securely anchored, stable, well-constructed and maintained, and fit for the purpose intended, ie. Work area separation, protection of the public, delineation of pedestrian pathways, etc.

5.7.2 The Contractor shall be responsible for all breakage of glazing after same has been installed, no matter by whom or what caused, and shall replace all broken, scratched or otherwise damaged glazing before the completion and acceptance of the work. The Contractor shall wash all glazing on both sides at completion, or when directed, removing all paint spots, stains, plaster, etc.

5.7.3 The Contractor shall provide and maintain necessary temporary dustproof partitions around areas of work in any existing building.

5.8 TEMPORARY, INTERMEDIATE AND HIDDEN WORK

5.8.1 The Contractor shall be responsible for temporary, intermediate and hidden work, including the furnishing and setting of sleeves, built in items, anchors, inserts, and chases for its work. The Contractor shall build these items into the construction. The Contractor shall build recesses, channels, chases, openings, and flues, and leave or create holes where shown on Drawings or where directed for steam, water or other piping, electrical conduits, switch boxes, panel boards, flues and ducts, or other features of the heating and ventilating work. Subcontractors requiring such recesses, channels, chases, openings, and flues shall furnish to the Contractor complete details and drawings of such as required in connection with the work. Such information shall be furnished in complete form and in ample time to allow the construction work to proceed without interruption or delay. These details and drawings shall be furnished in accordance with Article 6.5- SHOP AND WORKING DRAWING SUBMITTALS to the Construction Manager for review and approval prior to installation.

5.8.2 The Contractor shall close, build in, and finish around or over openings, chases, channels, pockets, and sleeves after installation has been completed.

5.8.3 Positive instructions in writing shall be obtained from the Engineer before cutting or boring floor beams, floor constructions, or supporting members.

5.9 DEMOBILIZATION

At the completion of the Work and prior to final payment, the Contractor shall remove temporary facilities entirely from the site including, but not limited to the following: Field offices, trailers, shanties, sheds, temporary electric services, temporary water hydrants, temporary fences, project sign, job telephone, temporary roads, temporary toilets, temporary enclosures, dust barriers, and other temporary protection devices. The Contractor shall conduct final cleaning activities and restore all disturbed landscaping, street and sidewalk surfaces, subsurfaces and overhead structures, if any. Should the Contractor fail to remove such temporary facilities and restore disturbed conditions, NJ TRANSIT shall perform such activities as necessary and deduct the cost from the Contractor's final payment.

6. PROJECT ADMINISTRATION AND DOCUMENT CONTROL

6.1 PROJECT MEETINGS

6.1.1 The Contractor, subcontractor, supplier or vendor whose presence is necessary, unless excused in writing by the Construction Manager, shall attend project meetings when called by the Construction Manager for the purpose of discussing the execution of the Work. The initial pre-construction meeting will generally be held prior to commencement of the work at a time, date and location to be set by the Contracting Officer.

6.1.2 General Requirements for Project Meetings:

- A. One of the persons designated by the Contractor to attend and participate in the project meetings shall have all required authority to commit the Contractor to solutions agreed upon in the project meetings.
- B. To the maximum extent practicable, advise the Construction Manager at least 24 hours in advance of project meetings regarding all items to be added to the agenda.
- C. The Construction Manager will compile the official minutes of each project meeting and will furnish three (3) copies to the Contractor.
- D. Except as noted below for the Pre-Construction Meeting, Project Meetings will be held once every two weeks. The Contractor and Construction Manager shall coordinate as necessary to establish a mutually acceptable schedule for meetings.

6.1.3 Pre-Construction Meeting:

- A. A pre-construction meeting will be scheduled by NJ TRANSIT. The Contractor shall provide attendance by an authorized representative and authorized representatives of all major subcontractors. The Construction Manager will advise other interested parties and request their attendance. The Construction Manager and the Contractor will arrange to review details of construction, and if appropriate, to walk the project with the Contract Drawings in hand and carefully observe all pertinent conditions relating to the construction of the Work, including the status of right-of-way, existing structures and obstructions to be removed, altered or changed.
- B. Minimum Pre-Construction Agenda: The Contractor shall be prepared to discuss:
 - (1) Organizational arrangement of Contractor's forces and personnel, and those of subcontractors, materials suppliers, Engineer and Construction Manager.
 - (2) Established channels and procedures for communications as approved by NJ TRANSIT.
 - (3) Construction schedule, including sequence of critical work as described in Article 6.2- CONSTRUCTION PROJECT SCHEDULE.
 - (4) Contract Documents, including distribution of required copies of original documents and revisions.
 - (5) Processing of shop drawings and other data submitted to the Construction Manager for review.
 - (6) Processing of field decisions and contract change orders.
 - (7) Rules and regulations governing performance of the Work.
 - (8) Procedures for safety and first aid, security, quality control, housekeeping, and other related matters.
 - (9) Existing conditions.
 - (10) Equal employment regulations.
 - (11) DBE requirements.

- (12) Quality assurance.
- (13) MSDS submittal requirements as set forth in Article 9.7- ENVIRONMENTAL COMPLIANCE AND LIABILITY.
- (14) Subcontractor submittals and approvals as set forth in Article 1.9- ASSIGNING AND SUBCONTRACTING CONTRACT. The Contractor shall provide the initial submittals noted therein.
- (15) Contract Completion and liquidated damages.

6.1.4 Project Meetings:

- A. Attendance: To the maximum extent practicable, assign the same person or persons to represent the Contractor and major Subcontractors, as requested by NJ TRANSIT, at project meetings throughout progress of the Work. If requested by NJ TRANSIT, subcontractors, material suppliers, and others shall attend those project meetings in which their aspects of the Work are involved.
- B. Minimum Agenda for Project Meetings:
 - (1) Review, revise as necessary, and approve minutes of previous meeting.
 - (2) Questions and issues unresolved at the previous Project Meeting.
 - (3) Engineer's, Construction Manager's and/or Contractor's unsatisfied request for information.
 - (4) Work accomplished since the previous Project Meeting, off-site fabrication problems, product delivery problems, proposed changes, and other circumstances which might delay progress of the Work.
 - (5) Corrective measures and procedures developed to regain planned and scheduled progress.
 - (6) Field observations, problems, Engineer's or Construction Manager's decisions, work quality, and employee work standards.
 - (7) Plan of the following month's Work.
 - (8) Status of DBE subcontractors.
 - (9) NPC and Change Order statuses.
 - (10) CPM status.
 - (11) Submittal schedule.
 - (12) Safety.
 - (13) Others, as required.

6.2 CONSTRUCTION PROJECT SCHEDULE

- 6.2.1 The Contractor shall be responsible for preparing and furnishing, at the pre-construction meeting, an initial draft of a coordinated combined project schedule that incorporates the project schedules of the Contractor and its subcontractors activities for the prosecution of the work. The schedule shall be a CPM (Critical Path Method) schedule in sufficient detail satisfactory to the Construction Manager.

- 6.2.2 Float, or slack time, in the schedule is defined as the amount of time between the early start date and late start date or the early finish and late finish date of any activity. The definition of float or slack time also includes the amount of time between the late finish date of the Contractor's schedule and the time for completion specified in the Contract Documents, if the Contractor's scheduled late finish date is earlier than the Contract Time. Float or slack time is not for the exclusive use or benefit of either the Contractor or NJ TRANSIT, but for the overall benefit of the project as determined by NJ TRANSIT. Extensions of time for performance under any and all of the provisions of this Contract will be granted only to the extent that such equitable time adjustments for the activity or activities affected exceed the total float along the paths involved at the time the delay occurred or notification was issued for the change. The Contractor shall not sequester shared float through such strategies as excessively extending durations, artificially constraining resources, or introducing faulty logical relationships between schedule activities.
- 6.2.3 The Contractor shall prepare and maintain the Contract Schedule by the use of skilled and experienced scheduling personnel; each with at least five years experience or the equivalent thereof in detailed scheduling. Such personnel shall be directly involved in the planning, scheduling, evaluating, and progress reporting of the work. The Contractor shall submit the qualifications of the scheduler/scheduling consultant for approval at the Pre-Construction Meeting. Should the scheduler/scheduling consultant's qualifications prove unacceptable to NJ TRANSIT, the Contractor shall submit the qualifications of a substitute scheduler/scheduling consultant within seven (7) days of NJ TRANSIT's rejection of the originally proposed personnel.
- 6.2.4 No later than 10 days after the Notice to Proceed, Contractor shall submit to the Construction Manager a Detailed Project Schedule (DPS). This DPS shall outline all activities and sequences of operations, as needed, for the orderly performance and timely completion of all work in accordance with the Contract, commencing with the Notice to Proceed and concluding with the Contract completion. The schedule should take into account mandatory sequencing, phasing, and restrictions of access to the Project Area, if any. The DPS is required to ensure adequate planning and scheduling of the work by Contractor and to enable the Construction Manager to evaluate work progress and to make progress payments. No progress payments (excluding payments for mobilization) will be made until a DPS is approved by the Construction Manager.
- 6.2.5 Within 14 days of receipt of Contractor's DPS, the Construction Manager will review the schedule for conformance with the Contract and provide the Contractor with the Construction Manager's comments. The Contractor shall incorporate the Construction Manager's comments into the DPS and shall resubmit the DPS to the Construction Manager within seven days of receipt of such comments. Contractor shall repeat this process (at its own expense) until the Construction Manager approves the DPS.

6.2.6 Upon approval by the Construction Manager, the Contractor's DPS shall become the Baseline Schedule for the work. This schedule shall be used by Contractor for planning, scheduling and executing the work, for monitoring and reporting progress to the Construction Manager, and as a basis for progress payments. Progress shall be shown in terms of remaining duration, actual dates and percent complete for each activity. During the life of this Contract, Contractor shall make monthly progress updates to the DPS. The updated DPS reflecting progress through the end of the month, as determined by NJ TRANSIT during the schedule meetings, shall be submitted by the fifth work day of the following month. Under no circumstances at any time during the project shall the Contractor make any changes to the NJ TRANSIT-approved Baseline Schedule logic, durations and construction sequencing without first receiving the written approval of the Construction Manager.

6.2.7 The DPS shall be a CPM schedule prepared with the software "Primavera", latest version, using the precedence diagram method. The DPS shall show a clear and definable critical path for the work. All imposed or constrained dates shall be clearly identified. The DPS shall include all contractual milestones and activities for the complete scope of the work including interface activities with the Railroad and other parties such as utility companies and outside agencies. Contractor's activities shall delineate the individual components of the work such as design efforts, submittals, procurement activities, fabrication, deliveries, construction operations, application and receipt of permits, track usage requirements, and testing. For each activity in the DPS, Contractor shall include:

1. Description, which shall clearly describe the operation and the location where it is occurring.
2. Durations, which shall be expressed in workdays. Durations shall not exceed 20 workdays except in the case of non-construction activities such as a procurement of materials, fabrication and delivery of equipment or other such activities. Durations shall include allowances for lost time and inefficiencies. Activities that have started shall show the remaining duration.
3. Activity code, which will be utilized to allow for breakdown of the total schedule by work area, phase of work, activity type, etc. A responsibility code (as part of the activity code), shall individually and singularly denote Contractor, each subcontractor, the Railroad, outside agencies, utilities, and any other parties performing the activity.
4. The number of person-hours required performing the activity. The number of person-hours shall be shown as a resource using integers.
5. The percent complete using integers, which represents the activity's progress as of the status date.
6. The actual start and finish dates.

6.2.8 Every DPS Submittal shall include a 3-1/2 inch diskette containing the Contract schedule and all related files generated by the "Primavera" back up utility and shall include five hard copies of the following graphical and tabular reports:

1. Graphical:
 - a. Activity Bar Chart (ABC), on 8-1/2 inch by 11 inch or 11 inch by 17 inch paper with activities grouped by work areas and sorted by early start.
2. Tabular:
 - a. Activity Listing Report (ALR), sorted by activity identifier and including predecessor activities, successor activities, resources, and allocated dollar amount. Show constraint dates on a separate line.
 - b. Total Float Report (TFR), sorted by total float with a secondary sort by early start and including predecessor activities and successor activities.
 - c. Early Start Report (ESR), sorted by early start with a secondary sort by total float.
 - d. Cost Control Activity Report (CCAR), sorted by activity identifier and including the dollar amount earned to date for each activity (to be used as invoice back up).
 - e. Predecessor-Successor Report (PSR), sorted by activity number.

6.2.9 Every DPS Submittal shall include a written Narrative Report explaining the CPM schedule and the Contractor's approach for meeting the interim and completion milestones. This report will include an analysis and summary of the contents of the computer reports and will address, as a minimum, the following:

1. Description of the project status.
2. Critical path analysis which takes into account construction sequencing, major procurement items that may influence the critical path, activities that influence interim contract milestones, and NJ TRANSIT approved constraint dates.
3. Total float
4. Schedule slippage, including a comparison to the previous month's status.
5. List of activities that may become critical within the next 30 day period.
6. Logic revisions/other changes as approved by NJ TRANSIT.
6. If the project falls behind, the measures the Contractor will take to get the project back on schedule.

6.2.10 In the event that it is necessary for Contractor to revise the durations, construction sequencing or logic of the DPS, the revised DPS shall be submitted to the Construction Manager for approval, at no additional cost to NJ TRANSIT. Minor changes to the DPS, such as re-sequencing of activities, may be approved at a Project or Schedule Meeting; a minor change is not considered a revision in the context of this Paragraph. However, a revision shall incorporate all previously made changes, major or minor, to reflect current as-built and as-planned conditions. Reasons for revisions may include, but are not limited to, the incorporation of an approved change order or changes required to recover lost time if the Construction Manager determines that work is not progressing in accordance with the Baseline Schedule. In the case of minor changes or revisions that were made to improve Contractor's work progress and are not part of a change order, the

monetary value of the activities in the revised portion of the schedule shall be identical, in aggregate value, to the value of that same work as reflected in the initial Baseline Schedule.

- 6.2.11 NJ TRANSIT will conduct Schedule Meetings as necessary with the Contractor to review and discuss the schedule. Schedule Meetings will generally be held as part of a progress meeting. If necessary, they shall be held as separate meetings. All Schedule Meetings shall be attended by the Contractor's Project Manager or a designee, who shall have the authority to make decisions on behalf of, and commit the resources of, the Contractor. The Contractor's superintendent and appropriate scheduling staff shall also attend the meetings. At these meetings, NJ TRANSIT will examine and comment on the Contractor's DPS. Schedule slippages will be analyzed and corrective actions will be discussed and agreed upon.
- 6.2.12 The Construction Manager will plan the Schedule Meetings so that, regardless of frequency, there will always be a Schedule Meeting taking place on or about the 25th day of the month. During this "monthly" Schedule Meeting, in addition to the in-depth review of the DPS, the Project progress (i.e., completed activities and percent complete of partially completed activities) shall be presented by the Contractor and reviewed by NJ TRANSIT. NJ TRANSIT shall determine the percent of work complete and advise the Contractor accordingly. Subsequent to this meeting, the DPS shall be updated with the progress, as determined by NJ TRANSIT, and the Contractor shall submit the monthly Narrative Report and the revised DPS to the Construction Manager as part of its Payment Application. NJ TRANSIT's review of the DPS and Narrative Report shall not constitute NJ TRANSIT's approval of any Contractor changes to the logic, durations and construction sequencing of the previously approved Baseline Schedule unless NJ TRANSIT specifically confirms in writing its acceptance of such changes.
- 6.2.13 In the event of a change order, the Contractor must clearly demonstrate how it proposes to incorporate the change order into the schedule. The Contractor shall provide, as part of its change order documentation and prior to change order negotiations, a schedule that clearly identifies the newly introduced change order work activities, the CPM path(s) affected and a narrative explaining the schedule impact of the change order to the DPS. If Contractor fails to notify the Construction Manager of the schedule changes associated with a change order, it will be deemed an acknowledgment by Contractor that the change order has no impact on the schedule.
- 6.2.14 All change order work activities shown in the schedule are considered to be tentative unless a Directive Letter or Change Order has been issued incorporating the changed Work into the Contract. Acceptance of a schedule containing change order work activities will not be construed to be approval of the value of the change, the duration of the work or constraints concerning the changed activities. The applicable Directive Letter or Change Order shall govern the monetary value and Contract Time impact of the changed work.
- 6.2.15 The Contractor shall furnish sufficient labor, plant and equipment to insure the prosecution of the work in accordance with the approved Project Schedule. If, in the opinion of the Construction Manager, the

Contractor falls behind in the prosecution of the Work as indicated in the Project Schedule, the Contractor shall take such steps as may be necessary to improve its progress. The Construction Manager may require the Contractor to increase the number of shifts, days of work, and/or the amount of plant and equipment, all without additional cost to NJ TRANSIT.

6.3 CONTRACT DRAWINGS AND SPECIFICATIONS

6.3.1 Unless otherwise provided in the Contract Documents, NJ TRANSIT will furnish to the Contractor, free of charge, a maximum of six (6) full size copies of conformed Drawings and Specifications for the execution of the work. The Contractor shall at all times keep one copy of all Contract Documents up to date and in good order, available to the Engineer and to the Engineer's representatives. The Contractor shall keep its prints of the Contract Drawings up to date at all times by marking on them the final location of any changes in the Work. Prior to final payment the Contractor shall submit a copy of the marked-up drawings of all Contract Drawings whether altered or not to the Construction Manager. These marked up As-Built Drawings shall become the property of NJ TRANSIT.

6.3.2 The Engineer or NJ TRANSIT may furnish additional detail instructions to the Contractor through the Construction Manager, by means of supplemental drawings or otherwise, necessary for the proper execution of the work. Such drawings and instructions shall be consistent with the Contract Documents and reasonably inferable therefrom. The work shall be executed in conformity therewith and the Contractor shall do no work without proper drawings and instructions.

6.3.3 When the Contractor requests clarifications of Contract Drawings and Specifications it must give written notice to the Construction Manager with at least 14 calendar days lead time for the Construction Manager and Engineer to provide timely instruction or interpretation.

6.3.4 All Drawings referred to, together with such supplementary details as may be furnished or approved from time to time as the work progresses, are understood as being included in and a part of the Contract.

6.3.5 Dimensioned and full size drawings shall take precedence over scaled dimensions. Where the work is shown in complete detail on only half or a portion of a drawing or there is an indication of continuation, the remainder being shown in outline, the work drawn out in detail shall be understood to apply to other like portions of the Project.

6.4 GENERAL REQUIREMENTS FOR SUBMITTALS

6.4.1 The Contractor shall make all submittals required by the Contract Documents, and revise and resubmit as necessary to establish compliance with the specified requirements. Individual requirements for submittals are described in the Technical Provisions of these Specifications. Prior to each submittal, the Contractor shall carefully review and coordinate all aspects of each item being submitted and verify that each item and

the submittal for it conforms in all respects with the requirements of the Contract Documents. By affixing the Contractor's signature to each submittal, the Contractor certifies that this coordination has been performed.

- 6.4.2 No later than thirty-five (35) days after the Notice to Proceed, and before any items are submitted for review, the Contractor shall submit to the Construction Manager two (2) copies of the schedule described below.
- 6.4.3 The Contractor shall compile a complete and comprehensive schedule of all submittals anticipated to be made during progress of the Work which shall include a list of each type of item for which Contractor's drawings, shop drawings, Certificates of Compliance, material samples, guarantees, or other types of submittals are required. Upon review and approval of the Submittal Schedule by the Construction Manager, the Contractor will be required to adhere to the schedule except when specifically otherwise permitted in writing by the Construction Manager. The submittal schedule shall be incorporated into the Construction Project Schedule specified in Article 6.2.
- 6.4.4 The Contractor shall coordinate the submittal schedule with all necessary subcontractors and materials suppliers to ensure their understanding of the importance of adhering to the approved submittal schedule and their ability to so adhere. The Contractor shall coordinate as required to ensure the grouping of submittals as described in Sub-article 6.4.11 herein.
- 6.4.5 The Contractor shall, on a monthly basis, revise, update and submit the submittal schedule to the Construction Manager reflecting the actual conditions and sequences highlighting any changes from the previously approved schedule.
- 6.4.6 The Contractor shall submit documentation such as certificates, reports, test results, delivery tickets, manufacturers literature, etc., as specified in the Technical Provisions to the Construction Manager for NJ TRANSIT's use and approval. Where contents of submitted literature from manufacturers or other submittals includes data not pertinent to the submittal, the Contractor shall clearly indicate which portion of the contents is being submitted for review. The Contractor shall submit six (6) copies of each of the various items required to the Construction Manager, except that only one (1) copy of delivery ticket will be required. Three (3) copies will be returned to the Contractor.
- 6.4.7 The Contractor shall consecutively number all submittals and accompany each submittal with a letter of transmittal containing all pertinent information required for identification and checking of submittals to the satisfaction of the Construction Manager. The Contractor shall on at least the first page of each copy of each submittal, and elsewhere as required for positive identification, clearly indicate the submittal number in which the item was included.
- 6.4.8 When material is resubmitted for any reason, the Contractor shall transmit under a new letter of transmittal. All resubmittals shall carry the same submittal number as the original submittal except that an appendage

".01", ".02", ".03", etc. shall be added to indicate that the material is a first, second, third, etc. resubmission. For example, submission 177.01 would indicate the first resubmission; 177.02, would indicate a second resubmission; and 177.03, would indicate a third resubmission, etc.

- 6.4.9 The Contractor shall maintain an accurate submittal log for the duration of the Contract, showing current status of all submittals at all times and make the submittal log available for the Construction Manager's review upon request.
- 6.4.10 The Contractor shall, prior to submittal, use all means necessary to fully coordinate all material including, but not necessarily limited to:
- (a) Determining and verifying all interface conditions, catalog numbers, and similar data.
 - (b) Coordinating with other trades as required.
 - (c) Clearly indicating all deviations from requirements of the Contract Documents.
- 6.4.11 Unless otherwise specified, the Contractor shall make all submittals in groups containing all associated items to ensure that information is available for checking each item when unit is received. Partial submittals may be rejected by the Construction Manager as not complying with the provisions of the Contract Documents and the Contractor shall be strictly liable for all delays by such non-compliance.
- 6.4.12 The Contractor shall make all submittals in advance of schedule dates for installation to provide sufficient time required for reviews, for securing necessary approvals, for possible revisions and resubmittals, and for placing orders and securing delivery. All submittals shall be made within the first six (6) months of the Project.
- 6.4.13 In scheduling, the Contractor shall allow at least thirty (30) calendar days from receipt of the submittal for review. The Construction Manager will stamp all submittals "Received", and the date so stamped shall be the official receipt date. Delays caused by tardiness in receipt by the Construction Manager of submittals will not be an acceptable basis for extension of the Contract Time.
- 6.4.14 The Engineer's review of submittals will be general, but should not be construed:
- (a) As permitting any departure from the Contract requirements.
 - (b) As offering relief from the responsibility for any errors, omissions or negligence in the preparation by the Contractor of details, dimensions, materials, etc.
 - (c) As approving departures from details furnished by the Engineer, except as otherwise provided herein.

6.4.15 The Contractor shall take responsibility for and bear all cost of damages which may result from the ordering of any material or from proceeding with any part of the work prior to the final review by the Engineer of necessary submittals, including Shop and Working Drawings and all other required submittals.

6.4.16 Full compensation for furnishing all submittals shall be considered as included in the payments for the Contract Items to which such submittals relate and no additional compensation will be allowed therefor.

6.4.17 The provisions of Article 6.4 apply to all submittals.

6.5 SHOP AND WORKING DRAWING SUBMITTALS

6.5.1 The Contractor shall submit, with such promptness as to cause no delay in the work, a reproducible and five (5) legible copies and one sepia of all completed and detailed shop, setting or working drawings, details and schedules as are necessary to adequately perform the Work to the Construction Manager for review as to conformance to the design. By approving and submitting shop drawings, the Contractor thereby represents that it has determined and verified field measurements, field construction criteria, materials, catalog numbers, and similar data, or will do so, and that it has checked and coordinated each shop drawing with the requirements of the Work and of the Contract Documents. Drawings submitted by the Contractor on behalf of subcontractors shall have been checked by the Contractor before being submitted.

6.5.2.1 The Engineer will review the shop and working drawings within 30 days. The sepia and three (3) copies will be returned to the Contractor reviewed and with comments. The Contractor shall make corrections if required by the Engineer and resubmit a reproducible and five (5) copies for approval. After final approval of the Drawings has been received, the Contractor shall immediately send the Engineer a minimum of three (3) prints of the finally approved drawings, plus the required number of approved prints each to every other affected Contractor. The Contractor shall prepare all work and shop drawings on sheets measuring 24 inches by 36 inches unless otherwise approved by the Construction Manager. The Contractor shall make all shop drawings and working drawings accurately to a scale sufficiently large to show all pertinent aspects of the item and its method of connection to the Work. The Contractor shall provide each drawing with a blank area 5 inches by 5 inches, located adjacent to the title block, and labeled as shown in the following Table. Failure to comply with these instructions will be sufficient reason to return such drawings to the Contractor without any action being taken. The title block shall display the following:

Table 6.5.2 Shop Drawing Labeling
Contract Number and Name
Number and Title of the Drawings
Date of Drawing and Revision Number
Name of Contractor and Subcontractor submitting Drawing
Clear identification of contents and location or work
Specification Article Number
Name; New Jersey State Registration Number and seal of professional Engineer certifying the drawings if engineering computations are involved or if original design work is depicted
Submittal Number

- 6.5.3 The Contractor's shop drawings shall show the general arrangement and such details as are necessary to provide a comprehensive description of the work to be performed. Shop Drawings shall consist of, but are not limited to, fabrication and erection drawings, schedule drawings, manufacturer's scale drawings, wiring and control diagrams, cuts of entire catalogs, pamphlets, descriptive literature, performance and test data.
- 6.5.4 Shop drawings for steel structures shall consist of shop, erection, and other drawings, showing details, dimensions, sizes, and other information necessary for the complete fabrication and erection of the metal work. Shop drawings for concrete structures shall consist of such additional detailed drawings as may be required for the prosecution of the work and may include drawings of falsework, bracing, centering, formwork, and masonry layout diagrams. The Contractor shall check completely the rod lists and details of reinforcement steel shown on the plans and shall submit complete shop drawings for the reinforcement steel to the Construction Manager for the Engineer's review. Material specification designations for the various components of the structures shall be noted on the drawings. If structural steel is scheduled for payment on the basis of weight, shop drawings for steel structures shall include a shop bill of material on each individual drawing showing pertinent information including weights of items together with the total weight of steel for that shop drawing.
- 6.5.5 Working Drawings shall consist of, but are not limited to, plans for temporary structures such as decking, temporary bulkheads, support of excavation, support of utilities, groundwater control systems and forming and falsework; for underpinning; and for such other work as may be required for construction but which does not become an integral part of the completed project. They shall be accompanied by calculations or other sufficient information to completely explain the structure or system described and its intended manner of use. The Contractor shall coordinate drawings for work on utilities, streets and other facilities which are constructed for owners other than NJ TRANSIT so that the information required by these other owners is included on the Working Drawings.
- 6.5.6 At the time of submission the Contractor shall inform the Engineer in writing of any deviation in the shop drawings from the requirements of the Contract Documents. If drawings show variations from the Contract requirements because of standard shop practice or for other reasons, the Contractor shall describe such variations in the letter of transmittal.

Failure to describe such variation to the Construction Manager, and the Engineer's review of shop drawings, shall not relieve the Contractor of responsibility for deviation from the requirements of the Contract Documents unless the Contractor has informed the Engineer in writing of such deviation at the time of submission and the Engineer has given written acceptance of the specific deviation. Neither shall the Engineer's review relieve the Contractor from responsibility for errors or omissions in the shop drawings nor relieve the Contractor from the responsibility for executing the work in accordance with the Contract.

6.5.7 Drawings Not In Conformance:

- (1) If corrections to the drawings are required, each print will be marked "REJECTED" or "FURNISH AS CORRECTED" or "REVISE AND RESUBMIT" and in each case the required corrections will be shown.
- (2) Each resubmittal will be handled in the same manner and review timeframe as the first submittal.
- (3) The Contractor shall direct specific attention, in writing or on the resubmitted drawings to revisions other than the corrections requested by the Engineer or Construction Manager on previous submittals.
- (4) If any corrections indicated on the drawings constitutes a change of the Contract requirements, the Contractor shall give direct and specific notice to the Construction Manager.
- (5) Work indicated on drawings marked "CONFORMS AS NOTED" or "FURNISH AS CORRECTED" may be carried out without resubmission if progressed "As Noted" or "As Corrected".

6.5.8 Drawings In Conformance:

- (1) Each copy of the drawings will be identified as conforming by being stamped, "REVIEWED", and dated by the Engineer.
- (2) When Shop and Working Drawings have been completed and stamped "REVIEWED," the Contractor shall carry out the construction in accordance therewith and make no further changes therein except upon written instructions from the Construction Manager.

6.6 SAMPLES SUBMITTALS

6.6.1 The Contractor shall furnish samples as required by the Contract Documents and as directed by the Construction Manager for review and acceptance. The work shall be in accordance with accepted samples. Such samples shall be submitted promptly to the Construction Manager, at the beginning of the work, so as to give the Construction Manager ample time to obtain approval from the Engineer. A list of samples required by the Construction Manager is for NJ TRANSIT's convenience only, and shall not be construed as limiting the number or type of samples which the Contractor shall furnish.

6.6.2 Procedure for Submittal of Samples:

- A. The samples submitted by the Contractor shall be of the precise article, product or material proposed to be furnished.
- B. The Contractor shall submit all samples in the quantity identified.
- C. The Contractor shall prepay all shipping charges on samples.
- D. The Contractor shall label each sample indicating the following:
 - (1) Name of Project and Contract Number;
 - (2) Name of Contractor and Subcontractor;

- (3) Material or equipment represented;
- (4) Source;
- (5) Name of producer and brand (if any);
- (6) Specification Section, article or paragraph;
- (7) Location in Project; and
- (8) Submittal Number.

6.7 PRODUCT AND SUBMITTALS

- 6.7.1 The Contractor shall, within 30 days after the notice to proceed date, notify the Construction Manager in writing of the names of manufacturers, products, and equipment. The Construction Manager may reject products or installed equipment not in conformance with the specifications. The Contractor shall properly submit complete identifying information, note whether the item is included in the Specifications and state Specifications Section and Paragraph. Requests for approval of alternate products and equipment (approved equals or substitutions) shall comply with the provisions of Sub-articles 6.7.3 or 6.7.4, as applicable.
- 6.7.2 Where a particular brand or manufactured product is specified, it is to be regarded as a standard. Another brand or make which meets or exceeds the specifications, in the sole discretion of the Project Manager, may be accepted, in accordance with Article 6.7.3.
- 6.7.2.1 The designs in the Contract are based on the named manufacturer's product(s) in each Section of the Technical Provisions. Where the Contractor proposes to use a product other than the named product(s), the Contractor shall pay all costs for modifications of the design, including all re-engineering costs and any additional construction costs associated with the use of that product. Written approval shall be obtained from the Engineer through the Construction Manager prior to any use of a product other than the named.
- 6.7.2.2 Where a performance is specified and no manufacturer is listed, the Contractor shall submit in accordance with Sub-article 6.7.1 the name of the manufacturer, the product proposed, and detailed information showing its characteristics.
- 6.7.2.3 Where a choice of color, pattern, or texture is available for a specified product, the Engineer will make a selection from the manufacturer's highest and best standards.
- 6.7.2.4 Where the Contractor requests that a manufacturer's product be added to the named list it shall follow the procedure set forth in Sub-article 6.7.3 below. Any NJ TRANSIT approval of an additional approved equal is subject to the conditions of Sub-article 6.7.2.1 above.
- 6.7.2.5 Where the Contractor requests that an alternate product be substituted for that specified the terms of Sub-article 6.7.4. below shall apply.

6.7.3 Request for Approved Equal: Should the Contractor desire to use a product other than the named manufacturer(s) product, it shall first make application to the Engineer through the Construction Manager in writing, otherwise it will be held to what is specified. The application shall clearly identify that it is a "Request for Approved Equal".

6.7.3.1 The procedure for submitting a request for an approved equal will be as follows: The Contractor shall submit five (5) copies of the request and data. The Contractor shall amend and update data when changes concerning information on products become known. The Contractor shall include the following information:

- a. Complete data substantiating compliance of proposed approved equal with requirements of the Specifications and Contract Drawings.
- b. For products:
 - (1) Product identification, including manufacturer's name and address, model number and options.
 - (2) Installation characteristics, installation drawings, manufacturer's literature including product description, performance and test data, and reference standards if pertinent.
 - (3) Name and address of project(s) on which product was used under similar circumstances, and date of installation.
- c. For construction methods:
 - (1) Detailed description of proposed method.
 - (2) Drawings illustrating methods.
- d. Itemized comparison of proposed manufacturer's product with first-named product specified. Include differences in estimated life, estimated maintenance, availability of spare parts and repair services, energy consumption, performance capacity, salvageability, manufacturer's warranties, and other material differences. The Contractor may be required, at its own expense, to perform tests to demonstrate proof of equality.
- e. Data relating to changes in Construction Schedule.
- f. In making a request for an approved equal, Contractor is certifying:
 - (1) That it personally investigated the proposed product and method; that it believes, to the best of its knowledge and information, that product and method is either equivalent or superior to the product and method specified; and that it will update information as new or different data becomes known to the Contractor.
 - (2) That it will furnish the same guarantee as it would for the product and method specified.
 - (3) That it will coordinate installation of proposed product and method into the Work, and will make those changes required for the Work to be complete in all respects, all at no additional expense to NJ TRANSIT.

- (4) That it waives all claims for additional costs and entitlement to any extension of Contract Time as a result of requesting approval of an approved equal, whether such approval is granted by NJ TRANSIT or not.

6.7.3.2 NJ TRANSIT reserves the right, at its sole discretion, to deny requests for approved equals should it deem the number of such requests to be excessive.

6.7.4 Requirements for Substitutions: The Contractor agrees that NJ TRANSIT is under no obligation to consider substitutions of any kind and may direct the Contractor to proceed with the work as specified. NJ TRANSIT shall not be liable for any costs or delays in action upon or for failure to act upon a proposed request for substitution. Requests for substitutions will not be considered if, in the opinion of the Project Manager, the substitutions are excessively broad in scope, require substantial revision of the Contract Drawings or Specifications, require substantial administrative effort and expense to review or are otherwise not in NJ TRANSIT's best interest.

Substitutions merely indicated or implied on shop drawings or product data submittals will not be considered if no formal request for substitution has been submitted in accordance with this Article. NJ TRANSIT's approval of such a shop drawing or data submittal shall not constitute approval of a substitution and the Contractor shall be liable for all costs for corrective work to provide products in conformance with the Contract Documents.

When making a request for substitution, the Contractor shall follow the same procedural and data submission requirements as set forth in Sub-article 6.7.3 above, except that any such submission shall be clearly identified as a "Request for Substitution". The Contractor shall include the following additional information:

- a) A detailed cost breakdown of the proposed product in comparison to the product specified, naming the difference in cost in each case. The cost breakdown shall be submitted in the format specified in Article 3.2.
- b) A description of the benefit that will accrue to NJ TRANSIT should approval of the proposed substitution be granted.

If a substitute item is approved and the substitute item changes the scope of work under this or other contracts from the original specifications, then the Contractor offering the substitute item shall be responsible for all added costs and additional Contract Time involved by reason of the change in its work and the work of other contracts, including redesign. Any reduction in costs involved by reason of the change in its work shall be deducted from the Contract Price by Change Order. No change involving cost shall be made without the written consent of the Contracting Officer.

6.8 VALUE ENGINEERING SUBMITTALS

6.8.1 Value Engineering is defined as cost reduction proposals initiated and developed by the Contractor for changing the materials or other requirements of the Contract. This clause does not apply to such proposal unless it is identified by the Contractor at the time of submission to the Construction Manager or NJ TRANSIT as a proposal submitted pursuant to this clause. The cost reduction proposals contemplated are those that:

- (a) Would result in less costly items or components of items than those specified herein without impairing any of the items' essential functions and characteristics such as service life, reliability, economy of operation, ease of maintenance, and necessary standardized features; and
- (b) Would require, in order to be applied to this Contract, a Change Order to the Contract.

6.8.2 Cost reduction proposals as defined herein will be processed expeditiously and in the same manner as prescribed for any other proposal which would likewise necessitate issuance of a Change Order. As a minimum, the following information shall be submitted by the Contractor with each proposal:

- (a) A description of the difference between the existing Contract requirements and the proposed change, and the comparative advantages and disadvantages of each;
- (b) An itemization of the requirement of the Contract which must be changed if the proposal is adopted and suggested wording for revisions required;
- (c) An estimate of the reduction in performance costs that will result from adoption of the proposal taking into account the costs of implementation by the Contractor and the basis for the estimate;
- (d) A prediction of the effects the proposed change would have on other costs to NJ TRANSIT such as NJ TRANSIT furnished property costs, costs of related items, and costs of maintenance and operation;
- (e) A statement of the time by which a Change Order adopting the Proposal must be issued so as to obtain the maximum cost reduction during the remainder of the Contract, noting any effect on maintaining the Contract delivery schedule.

6.8.3 NJ TRANSIT shall not be liable for delays in action upon or for failure to act upon a proposal submitted pursuant to this clause. The decision of the Contracting Officer as to the acceptance or rejection of such proposal under this Contract shall be final and shall not be subject to the "Disputes" clause of this Contract. Unless and until a Change Order adding such proposal to the Contract is issued, the Contractor shall remain obligated to perform in accordance with the existing terms of the Contract. NJ TRANSIT may accept in whole or in part a cost reduction proposal submitted pursuant to this clause by issuing a Change Order which will identify the cost reduction on which it is based.

6.8.4 If a cost reduction proposal submitted pursuant to this clause is accepted under this Contract, an equitable adjustment in the Contract Price and in other affected provisions of this Contract shall be made in accordance with this clause. If the equitable adjustment involves a reduction in the Contract Price, it shall

be established by determining the amount of the total estimated decrease in the Contractor's cost of performance resulting from the adoption of the cost reduction proposal, taking into account the cost of implementing the change by the Contractor, and reducing the Contract Price by 50 percent of such decrease.

6.9 PROGRESS PHOTOGRAPH SUBMITTALS

6.9.1 Prior to construction beginning and after construction operations have been started at the site, the Contractor shall have twenty (20) different color photographs taken each month, by a professional photographer, until completion of the Work. The Construction Manager will designate the location of views to be taken each month. The Contractor shall submit three (3) sets of prints of each photograph to the Construction Manager within ten (10) days after taking.

6.9.2 The prints shall be standard commercial quality, 8 x 10 inches, single weight glossy paper. Each print shall have an information box, stamped on the back, 1-1/2 x 3-1/2 inches, and arranged as follows:

Table 6.9.2 Photo Labeling
NJ TRANSIT
Contract Name
Contract Number
Contractor
Photograph Number
Date
Submittal Number
Information regarding view such as location, direction or site and significant points of interest

6.9.3 The Contractor shall enclose the three (3) sets of photographs back-to-back in a double-faced plastic sleeve punched and bound in separate standard three-ring binders.

6.9.4 Negatives: The Contractor shall submit the negatives with the photos to the Construction Manager.

6.10 REPORTS, RECORDS AND DATA SUBMITTALS

The Contractor shall submit to the Construction Manager such schedules of quantities and costs, progress schedules, certified payrolls, reports, estimates, records and other data as NJ TRANSIT may request concerning work performed or to be performed under this Contract. The cost of submitting all such data shall not be paid separately and is considered paid for under the various items contained in the Bidder's Proposal.

6.11 AS-BUILT DRAWINGS AND QUANTITIES SUBMITTAL

- 6.11.1 The Contractor shall keep its prints of the Contract Drawings up to date at all times by marking on them the final location of any changes in the Work. These drawings shall be identified as the "Marked-Up Drawings". The data shall be transferred regularly by the Contractor to transparencies furnished by the Construction Manager at the expense of the Contractor.
- 6.11.2 Prior to final payment the Contractor shall submit a copy of the Marked-Up Drawings of all Contract Drawings whether altered or not to the Construction Manager with the Contractor's certifications as to the accuracy of the information. As built drawings shall be entitled "AS-BUILT" above the Title Block and dated. This information shall be reviewed by the Construction Manager; such review by the Construction Manager is for content only and not for accuracy and does not relieve the Contractor of its certification. The Contractor shall pay for the cost of reproduction. Upon completion of the Work and prior to release of final payment the Contractor shall transfer all as-built data to 24" x 36" transparencies (sepia mylar or mylars) at the expense of the Contractor. These Marked-Up Drawings and As-Built Drawings shall be submitted to and become the property of NJ TRANSIT.
- 6.11.3 Following acceptance of the Project, the Construction Manager will proceed with the preparation of as-built quantities for all Contract Items and Extra Work which has been authorized and incorporated into the Project. When such as-built quantities are completed, they will be incorporated into a proposed Final Certificate of Payment. The Contractor assumes the positive obligation of assisting the Construction Manager wherever possible in the preparation of such as-built quantities.
- 6.11.4 The Construction Manager may from time to time, prior to acceptance, prepare as-built quantities and incorporate these quantities into monthly estimate certificates through an appropriate field order or change order. Such interim as-built quantities shall be subject to recalculation following acceptance of the Project. However, nothing contained in these specifications shall be construed to place on the Construction Manager the obligation of providing the Contractor with as-built quantities for the work performed prior to the issuance of a Final Certificate of Payment, nor to provide more than rough, approximate quantities of the work done for use in the preparation of monthly estimates.
- 6.11.5 Should it appear to the Construction Manager at the time the Project is accepted that the calculation of as-built quantities might result in the Contractor being obliged to return money to NJ TRANSIT, NJ TRANSIT may, in its sole discretion, refuse to release retainages pending completion of the proposed Final Certificate of Payment. Where the estimate reveals that an overpayment has been made, the Contractor shall immediately return the amount of the overpayment. If the Contractor fails to remit the overpayment, NJ TRANSIT shall avail itself of other funds held on other projects with the same Contractor or against the retainages, and then if necessary proceed against the Contractor or its Surety. Where the proposed Final Certificate of Payment reveals that no overpayment has been made, the Contractor shall be entitled to payment thereunder and the release of retainages, but the Contractor shall have no claim of any kind for

additional compensation as a result of NJ TRANSIT's decision to withhold retainages or other monies pending issuance of the proposed Final Certificate.

7. QUALITY ASSURANCE AND QUALITY CONTROL

7.1 QUALITY ASSURANCE

7.1.1 General: The Contractor shall establish and maintain a quality assurance program in accordance with ANSI/ASQC Q9001-1994. The program shall ensure compliance with the requirements of the Contract Documents and shall include provisions ensuring compliance by subcontractors should any portion of the Work be subcontracted.

7.1.2 Six copies of the Contractor's quality assurance program shall be submitted to the Construction Manager at the pre-construction meeting for review and approval by the Construction Manager. Work undertaken by the Contractor before the Construction Manager's formal approval of the Contractor's program will be at the Contractor's sole risk and expense. A quality assurance audit of the Contractor's quality assurance program may be conducted by NJ TRANSIT at any time.

7.1.3 The Contractor's designated quality assurance program shall not be changed without the written concurrence of NJ TRANSIT. Work undertaken by the Contractor before receipt of written concurrence from NJ TRANSIT concerning such changes of the Contractor's quality assurance program will be at the Contractor's sole risk and expense.

7.1.4 The Contractor's quality assurance operations may be subject to NJ TRANSIT verification at any time. Verification shall include, but not be limited to: Audit of the quality assurance program; surveillance of the operations to determine that practices, 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 Documents.

7.1.5 Failure by the Contractor to promptly correct deficiencies discovered by the Contractor or of which the Contractor is notified by 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 a result of such suspension, no adjustment will be made with respect to increases in the cost or time.

7.2 MATERIAL - WORKMANSHIP - LABOR

7.2.1 Only approved materials shall be used, and the work shall be carefully carried out in strict accordance with the general and detail drawings. The Construction Manager shall have full power at any time to reject such work or material which does not, in the Construction Manager's opinion, conform to the true intent and meaning of the Contract Documents.

- 7.2.2 Work when completed in a substantial and workmanlike manner, to the satisfaction of the Construction Manager, shall be accepted by NJ TRANSIT in writing. Unless otherwise specified all materials used shall be new.
- 7.2.3 The Contractor shall furnish and pay for necessary transportation, scaffolding, centering, forms, water, labor, tools, light, power, and mechanical appliances, permits for the installation and construction of work, and all other means, materials, and supplies for properly prosecuting its work under the Contract, unless expressly specified otherwise. The Contractors and all subcontractors shall rely on their own measurements for the performance of their work.
- 7.2.4 The Contractor shall furnish necessary and approved materials in ample quantities and as frequently as required to avoid delay in the progress of the work, and shall so store them as to prevent interference with work not under this Contract.
- 7.2.5 The Contractor shall employ qualified and competent personnel in their respective lines of work. Should the Construction Manager deem any employee incompetent or negligent or for any cause unfit for the employee's duties, the Contractor shall dismiss that person, and that individual shall not again be employed on the work. No Contractor will be required to employ for any work any person against whom it has a reasonable objection.
- 7.2.6 The Contractor shall employ a full-time superintendent assigned solely to this Project who shall have full authority to act for the Contractor. It is understood that such representative shall be acceptable to the Construction Manager and shall be one who is to be continued in that capacity for the particular job involved unless that individual ceases to be on the Contractor's payroll.

The various subcontractors shall have competent foremen in charge of their respective part of the work at all times. They are not to employ on the work an unfit person or anyone not skilled in the work assigned to that person.

The Contractor shall give the work its special supervision, lay out its own work, do the necessary leveling and measuring or employ a competent New Jersey licensed engineer or land surveyor satisfactory to the Construction Manager to do so. If, due to trade agreement, additional standby personnel are required to supervise equipment or temporary services used by other trades, the Contractor shall provide such standby services.

The superintendence and the number of workmen shall be sufficient to insure the completion of the Project within the time stipulated therefore.

- 7.2.7 No materials or supplies for the work shall be purchased by the Contractor or by any subcontractor which are subject to a lien or other encumbrance or an agreement by which an interest is retained by the seller. The Contractor and all subcontractors warrant that they have good title to materials and supplies used by them in the work, free from liens, claims or encumbrances.
- 7.2.8 Manufacturer's Instructions: Where installations include manufactured products, the Contractor shall comply with the manufacturer's applicable instructions and recommendations for installation to the extent that these instructions and recommendations are more explicit or more stringent than the requirements indicated in the Contract Documents.
- 7.2.9 Where the specifications or the manufacturer's instructions or warranty require that the site be visited and inspected by a representative of the manufacturer prior to the commencement of a particular item of work, the Contractor shall ensure that said visit or inspection occurs and that the Construction Manager be given no less than 24 hours notice of arrival of the manufacturer's representative.
- 7.3 INSPECTION OF WORK
- 7.3.1 NJ TRANSIT shall at all times have access to the work whether it is in preparation or in progress and the Contractor shall provide proper facilities for such access and for inspection and testing. NJ TRANSIT reserves the right, at its option, to employ the services of professional consultants for any phase of the work as it may deem to be in the best interest of NJ TRANSIT. The Contractor shall cooperate with NJ TRANSIT and these consultants and shall provide access to the work and facilities for inspection and testing.
- 7.3.2 If the Specifications, the Engineer's or Construction Manager's instructions, laws, ordinances or public or private authority require work to be specifically tested or approved, the Contractor so affected shall give the Construction Manager three days notice in writing of its readiness for inspection, and if the inspection is by an authority other than the Construction Manager, of the date fixed for such inspection. Inspections by the Construction Manager will be promptly made. If such work should be covered up or otherwise concealed from view without approval or consent of the Construction Manager, it must, if required by the Construction Manager, be uncovered for examination and recovered after the examination at the Contractor's expense. There will be no extension of time to the Contract for uncovering or recovering work.
- 7.3.3 Except as otherwise provided herein, materials and installed equipment used in the construction of the Project shall be adequately tested according to standards of the trade, industry or as required by NJ TRANSIT, at the expense of the Contractor.
- 7.3.4 Whenever, in the Construction Manager's opinion, the Construction Manager considers it necessary or advisable to insure the proper implementation of the intent of the Contract Documents, the Construction Manager will have authority to require special inspection or testing of the work in addition to that required elsewhere in the Contract Documents, whether or not such work be then fabricated, installed or completed.

However, neither the Construction Manager's authority to act under this Subsection, nor any decision made by the Construction Manager either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the Construction Manager to the Contractor, subcontractor, their agents or employees, or any other person performing part of the work.

7.3.5 If after commencement of the Work the Construction Manager determines that some portion of the Work requires special inspection, testing or approval not provided for elsewhere in the Contract Documents, the Construction Manager will proceed with such inspection, testing or approval under contract with a third party for such services, or instruct the Contractor to order such special inspection, testing or approval. If such special inspection or testing reveals a failure of the Work to comply (1) with the requirements of the Contract Documents or (2) with respect to the performance of the Work, with laws, ordinances, rules, regulations or orders of public authority having jurisdiction, the Contractor shall bear all costs thereof, including the Construction Manager's additional services made necessary by such failure; otherwise NJ TRANSIT shall bear such costs, and an appropriate change order will be issued.

7.3.6 The Contractor shall cooperate fully with the Construction Manager and any testing company and supply materials for testing as required.

7.3.7 All construction subcode inspections shall be performed by the DCA Bureau of Code Services. The Contractor shall be responsible for requesting subcode inspections, as necessary, by contacting the DCA directly. The Contractor shall abide by all DCA instructions regarding subcode inspection procedures. The Contractor is responsible for notifying the Construction Manager of the time and date.

7.4 PLANT INSPECTION

NJ TRANSIT may undertake the inspection of materials at the source. Manufacturing plants may be inspected periodically for compliance with specified manufacturing methods. Material samples may be obtained for laboratory testing for compliance with materials quality requirements. This may be the basis for acceptance of manufactured lots as to quality.

In the event plant inspection is undertaken the following conditions shall be met:

- (a) NJ TRANSIT shall have the cooperation and assistance of the Contractor and the producer with whom it contracted for the provision of materials and equipment.
- (b) NJ TRANSIT shall have full entry at all times to such parts of the plant as may concern the manufacture or production of the materials being furnished.
- (c) If required by NJ TRANSIT, the Contractor shall arrange for approved office space for the use of the inspector; such space to be located conveniently in or near the plant.
- (d) Adequate safety measures shall be provided and maintained.

It is understood that NJ TRANSIT reserves the right to retest materials which have been tested and accepted at the source of supply after the same have been delivered and to reject materials which, when retested, do not meet the requirements of the Contract Documents. The cost of retesting in case of rejection shall be borne by the Contractor.

7.5 INSTALLED EQUIPMENT TESTING AND TRAINING

7.5.1 When mechanical, electrical or other equipment is installed it shall be the responsibility of the Contractor to operate it for a satisfactory period of time as required by the Contract Documents for proper testing of the equipment and instructing NJ TRANSIT operating personnel. Fuel, power, and other items or services required for proper testing of equipment and for the period of instruction shall be provided at the expense of the Contractor furnishing such equipment. The Contractor shall provide the Construction Manager with a minimum of three (3) days prior written notice of the performance of a test. Tests shall be conducted in the presence of NJ TRANSIT. Test results shall be submitted and approved by NJ TRANSIT prior to acceptance of the installation.

7.5.2 The Contractor shall furnish six (6) copies of each "Operating and Maintenance Booklet" which shall contain not less than the following (as applicable to each trade):

1. Manufacturer's service manuals and equipment parts list of all functional components of the system including control diagrams, wiring diagrams of controllers, and explanation and description of each system;
2. A complete typewritten list of all items of pertinent equipment including compressors, pumps, fans, motors, coils, etc. with nameplate date, capacities, model numbers, lubrication charts and preventive maintenance schedule;
3. Trouble shooting guides and testing instructions;
4. Manufacturer's parts list and ordering requirements;
5. Names, addresses and telephone numbers of all manufacturers agents, Subcontractors, supply houses, etc. from which replacement parts, service and operating information can be obtained;
6. The manuals shall be divided into indexed sections with tabs dividing sections, for A) Mechanical/HVAC, B) Electrical/Lighting, C) Finish Schedules.

7.5.3 The Contractor shall instruct NJ TRANSIT designated personnel as to the proper operation of all equipment and apparatus, and each of the various systems specified. No later than two weeks prior to conducting training sessions, the Contractor shall submit a Training Plan for the Construction Manager's approval. The Training Plan shall include the instructor's qualifications, the proposed training schedule and an outline of the instructor's lesson plan. Training session topics shall include, as a minimum, a detailed review of operating and maintenance procedures, spare parts, tool requirements, prescribed lubricants and fuels, hazards and warranties. The Contractor shall be responsible for providing all visual aids and training materials. Training sessions shall be conducted at a time and place convenient to NJ TRANSIT personnel.

The Contractor, after issuing complete instructions and direction to the NJ TRANSIT designated personnel, shall secure from such persons a signed acknowledgment in duplicate stating that complete and comprehensive instructions have been received and understood. The Contractor shall then forward the two copies of the signed acknowledgment to the Construction Manager for record purposes.

7.6 LABORATORY TESTING AND INSPECTION

7.6.1 General Requirements:

NJ TRANSIT will reimburse the Contractor for the services of an independent Testing Laboratory to perform structural steel, reinforced concrete, soils and any other testing services required by NJ TRANSIT. The Contractor shall cooperate with the laboratory to facilitate the execution of its required services. Employment of the laboratory shall in no way relieve the Contractor of its obligations to either perform any other testing and inspection work as required by the Contract Documents or to perform any other item of Work.

7.6.2 Related Requirements:

- A. Laboratory Selection: The Contractor shall submit the name and qualifications of three independent testing laboratories for approval to the Construction Manager. The Contractor shall solicit pricing from each prospective testing and inspection laboratory for the services requested by NJ TRANSIT. The pricing information shall be submitted with the qualification submissions listed in Sub-article 7.6.3. The Construction Manager shall determine the best qualified laboratory.
- B. Payment: Payment for the services described herein shall be made only for work which is actually performed and approved by NJ TRANSIT. Payment shall be at the rates quoted for the services listed in the Special Provisions and shall be in effect from the Notice to Proceed date and for a two year period thereafter.

Rates and fees are to be based on work performed between 8:30 a.m. and 4:30 p.m.; overtime rate of 1-1/2 times the corresponding hourly rates may be applied for work performed after 4:30 p.m. and before 8:30 a.m. The overtime rate shall also be applicable for weekends and holidays.

Travel expenses for inspection and testing services rendered outside the 50 mile radius of Newark, New Jersey shall be completely documented to the satisfaction of NJ TRANSIT. Any out of town travel expenses shall be pre-approved via an estimate submitted by the laboratory.

NJ TRANSIT shall reimburse the Contractor for laboratory testing and inspection costs upon receipt of itemized invoices from the approved laboratory.

NJ TRANSIT shall pay only the amounts of the laboratory invoices, under the allowance amount included by NJ TRANSIT as a Bid Item in the Bidder's Proposal. The allowance may be adjusted upward or downward at NJ TRANSIT's sole discretion, to reflect actual costs. NJ TRANSIT shall

pay for the initial testing only. Should any material fail to satisfy the test requirements, the Contractor shall be responsible for any additional costs and delays to retest or test replacement material.

7.6.3 Qualification of Laboratory:

To be qualified the laboratory shall:

- A. Meet "Recommended Requirements for Independent Laboratory Qualification", published by American Council of Independent Laboratories.
- B. Meet basic requirements of ASTM E329, "Standards of Recommended Practice for Inspection and Testing Agencies for Concrete and Steel as Used in Construction."
- C. Be authorized to operate in the State of New Jersey.
- D. Submit copy of report inspection of facilities made by Materials Reference Laboratory of National Bureau of Standards during the most recent tour of inspection, with memorandum of remedies of any deficiencies reported by inspection.
- E. Have testing equipment:
 - 1. Calibrated at reasonable intervals by devices of accuracy traceable to either:
 - a. National Bureau of Standards; or
 - b. Accepted value of natural physical constants.

7.6.4 Laboratory Duties:

The laboratory shall promptly submit three (3) copies of a written report of each test and inspection to the Construction Manager for distribution. Each report shall include:

- 1. Date issued;
- 2. Project title and number;
- 3. Testing laboratory name, address and telephone number;
- 4. Name and signature of laboratory inspector;
- 5. Date and time of sampling or inspection;
- 6. Record of temperature and weather conditions;
- 7. Date of test;
- 8. Identification of product and specification section;
- 9. Location of inspection or test;
- 11. Results of tests and compliance with Contract Documents; and
- 12. Interpretation of test results, when requested by the Construction Manager.

7.6.5 Limitation of Authority of Testing Laboratory:

Laboratory is not authorized to:

1. Release, revoke, alter or enlarge on requirements of Contract Documents;
2. Approve or accept any portion of the Work; or
3. Perform any duties of the Contractor.

7.6.6 Contractor's Responsibilities:

- A. Cooperate with laboratory personnel, provide access to work, and to manufacturer's operations.
- B. Secure and deliver to the laboratory adequate quantities or representational samples of materials proposed to be used and which require testing.
- C. Provide to the laboratory the preliminary design mix proposed to be used for concrete, and other materials mixes which require control by the testing laboratory.
- D. Furnish copies of products test reports as required.
- E. Furnish incidental labor and facilities:
 1. To provide access to work to be tested;
 2. To obtain and handle samples at the Project Site or at the sources of the product to be tested;
 3. To facilitate inspections and tests; and
 4. For storage and curing of test samples.
- F. Notify laboratory sufficiently in advance of operations to allow for laboratory assignment of personnel and scheduling of tests. NJ TRANSIT reserves the right to have materials that were not properly tested, removed and replaced at no additional cost to NJ TRANSIT. When test or inspections cannot be performed after such notice, reimburse laboratory for laboratory personnel and travel expenses incurred due to Contractor's negligence.
- G. The Contractor shall have the laboratory perform additional tests as required by NJ TRANSIT

7.7 CERTIFICATION OF COMPLIANCE

Certain materials as specified elsewhere will be accepted on the basis of Certificates of Compliance stating that such materials or assemblies fully comply with the requirement of the Contract. The form of the Certificates of Compliance shall be approved by the Construction Manager.

Materials or assemblies used on the basis of Certificates of Compliance may be sampled and tested at any time and if found not to be in conformity with the Contract requirements, will be subject to rejection whether in place or not. The Contractor shall require the manufacturer or supplier to furnish three copies of Certificates of Compliance with each delivery of materials, components, and manufactured items that are acceptable by certification. Two copies shall be furnished to the Construction Manager and one copy shall be retained by the Contractor.

Certificates of Compliance shall contain the following information:

- (a) Project to which the material is consigned.
- (b) Name of the Contractor to which the material is supplied.
- (c) Kind of material supplied.
- (d) Quantity of material represented by the certificate.
- (e) Means of identifying the consignment, such as label marking, seal number, manufacturer or supplier, and such additional information as required to make positive identification.
- (f) Date and method of shipment.
- (g) A statement that the material has been tested and found in conformity with the pertinent Contract requirements stated in the certificate and that test results pertaining to the material are either on file with the producer and available upon request or attached to the certificate.
- (h) Signature of a person having legal authority to bind the supplier.
- (i) Signature attested to by a Notary Public.

No payments relative to materials specified to be accepted on the basis of Certificates of Compliance shall be made until the Construction Manager is in possession of an acceptable Certificate of Compliance.

A Certificate of Compliance shall not be construed as a waiver of NJ TRANSIT's right to test the material or assemblies supplied.

7.8 NON-CONFORMING WORK AND MATERIALS

7.8.1 Materials or work found to be defective, or not in strict conformity with the requirements of the Contract Documents, or defaced or damaged through the acts or omissions of a Contractor or its subcontractors, or through action of fire, weather, vandalism or other causes, shall be removed immediately and new materials or work substituted therefor to the satisfaction of the Construction Manager without delays by the Contractor involved and at its sole cost and expense. Under no circumstances shall the Contractor be entitled to an extension of time for correcting defective work.

7.8.2 Should the Construction Manager determine that work, including work of an administrative nature, is not in conformance with the requirements of the Contract Documents, the Construction Manager shall issue a Non-Conformance Notice (NCN). The NCN shall state the work or material which is non-conforming and establish a reasonable time period for correcting the non-conforming work or material. Should the Contractor fail to correct, repair or replace the non-conforming work or material in a timely manner, NJ TRANSIT may take such actions as NJ TRANSIT deems necessary to protect NJ TRANSIT's and the public's interest, including but not limited to, withholding payments, suspending all or a portion of the Work, terminating the Contract for Default, denying future prequalification or subcontractor approvals, and/or suspending or debaring the Contractor from bidding on future NJ TRANSIT contracts.

7.8.3 No previous inspection or certification shall be held as an acceptance of defective work or materials or to relieve the Contractor from the obligation to furnish sound materials and to perform good satisfactory work. The Engineer shall be the final judge of the materials and work furnished.

7.8.4 The Contractor shall be given every opportunity to correct defective or damaged work; however, if the Contracting Officer deems it inexpedient to have the Contractor correct work damaged or done not in accordance with the Contract, the difference in value between such work and that specified, as determined by the Contracting Officer, together with the cost and expense of correcting the work, shall be deducted from the Contract Price.

7.9 WARRANTY AGAINST DEFECTIVE WORK

7.9.1 In addition to other warranties set out elsewhere in this Contract, the Contractor warrants that work performed under this Contract conforms to the Contract requirements and is free of defect of equipment, material or design furnished, or workmanship performed by the Contractor or its subcontractors or suppliers at any tier. Such warranty shall continue for a period of one year from the date of Acceptance of the Work. Under this warranty, the Contractor shall remedy at its own expense any such failure to conform or any such defect. In addition, the Contractor shall remedy at its own expense damage to NJ TRANSIT owned or controlled real or personal property, when that damage is the result of the failure of the Contractor or its subcontractors or suppliers at any tier to conform to contract requirements or any such defect of equipment, material, workmanship, or design. The Contractor shall also restore work damaged in fulfilling the terms of this clause. The Contractor's warranty with respect to work repaired or replaced hereunder will run for one year from the date of the acceptance by NJ TRANSIT of such repair or replacement.

7.9.2 NJ TRANSIT shall notify the Contractor in writing within a reasonable time after the discovery of failure, defect, or damage. Should the Contractor fail to remedy failure, defect or damage described in the first paragraph of this Article within a reasonable time after receipt of notice thereof, NJ TRANSIT shall have the right to replace, repair, or otherwise remedy such failure, defect, or damage at the Contractor's expense.

7.9.3 In addition to the other rights and remedies provided by this clause, subcontractor's, manufacturers', and suppliers' warranties, expressed or implied, respecting work and materials shall, at the direction of the Contracting Officer, be enforced by the Contractor for the benefit of NJ TRANSIT. In such case if the Contractor's warranty under the first paragraph of this Article has expired, a suit directed by NJ TRANSIT to enforce a subcontractor's, manufacturer's or supplier's warranty shall be at the expense of NJ TRANSIT. The Contractor shall obtain warranties which the subcontractors, manufacturers, or suppliers would give in normal commercial practice.

If directed by the Contracting Officer, the Contractor shall require any such warranties to be executed in writing to NJ TRANSIT.

7.9.4 Notwithstanding other provisions of this Article, unless such a defect is caused by the negligence of the Contractor or its subcontractors or suppliers at any tier, the Contractor shall not be liable for the repair of defects of material or design furnished by NJ TRANSIT nor for the repair of damage which results from any such defect in NJ TRANSIT furnished material or design.

7.9.5 The warranty specified herein shall not limit NJ TRANSIT's rights under Article 13.3, COMPLETION AND FINAL ACCEPTANCE.

8. EXCAVATION AND DIFFERING SITE CONDITIONS

8.1 UNCLASSIFIED EXCAVATION

Unless otherwise provided elsewhere in this Contract, excavation work shall be considered unclassified excavation and shall consist of the removal of earth, rock, abandoned utilities, foundations and all other materials encountered of whatever nature.

8.2 MEASUREMENT OF PAY LIMITS FOR EXCAVATION

The method of measurement and establishment of pay limits for additions or deductions for excavation shall be as follows:

Basement Excavations: Pay limit for excavation shall be in accordance with cross sections limited by vertical parallel planes extending 24 inches outside of foundation walls shown on Contract Drawings, and horizontal plane along bottom of basement concrete slab or footings.

Pipelines and Encased Utilities: Pay limit for trench excavation shall be limited to width of 36 inches or the largest diameter of pipe barrel plus 24 inches, whichever is greatest and depth at bottom of pipe barrel. When rock is encountered, the Contractor shall excavate to six inches below bottom of pipe barrel. A compacted granular fill bid for the pipe shall be provided by the Contractor. No additional payment will be made for this addition of six inches and granular fill.

Encased Electrical Conduit, Steam Transmission Lines, Unformed Foundation Footings: Width and depth of trench shall be limited to same width and elevations of structure shown on Contract Drawings.

Where unsuitable foundation material is encountered, the Contractor shall excavate to elevations as directed by the Construction Manager. Unit prices for additional excavation and replacement with approved compacted granular fill, if stated in the proposal form, shall be used as a basis for additional payment by NJ TRANSIT.

8.3 SOIL BORINGS

Where data pertaining to test pits, test borings, or any like information are given, by drawings or in writing, they are for general information only and shall not relieve the Contractor from the responsibility for making such investigations as may have been necessary to insure that its bid was based on actual conditions.

8.4 DIFFERING, LATENT OR UNUSUAL SITE CONDITIONS

8.4.1 The Contractor shall not proceed with the work at the site until it has satisfied itself that the topographic data in the Contract Documents are correct.

8.4.2 Should the Contractor encounter subsurface and latent conditions at the site materially differing from those shown on the plans or indicated in the Specifications (Type I), it shall immediately give notice to the Construction Manager of such conditions before they are disturbed. NJ TRANSIT will thereupon promptly investigate the conditions, and if it finds that they materially differ from those shown on the plans or indicated in the Specifications, it will promptly make such changes in the plans and/or Specifications as it may find necessary. Any increase or decrease of cost and time of completion resulting from such change shall be adjusted in the manner provided in Article 3.1, Contract Changes.

8.4.3 The Contractor shall promptly, and before such conditions are disturbed, notify the Construction Manager in writing of any other unknown physical conditions at the site, (Type II) of an unusual nature, differing materially from those ordinarily encountered and generally recognized as belonging in work of the character provided for in this Contract. NJ TRANSIT shall promptly investigate the conditions, and if it finds that such conditions do materially so differ that they could not have been discovered by the Contractor through employing the high standard of care required in the Contractor's pre-bid investigations and that they cause an increase or decrease in the Contractor's cost of, or the time required for, performance of any part of the Work under this Contract, an equitable adjustment shall be made in accordance with Article 3.2.

8.4.4 No claim of the Contractor under this Article shall be allowed unless the Contractor has given the written notice required above.

8.4.5 No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after substantial completion under this Contract.

8.4.6 The Contractor waives its right of claim if it disturbs the condition prior to submitting notice to the Construction Manager and before the Contracting Officer acts thereon.

8.5 ARCHEOLOGICAL FINDINGS

When the Contractor's excavating operations encounter prehistoric remains or artifacts of historical or archeological significance, the operations shall be temporarily discontinued in that area. NJ TRANSIT will consult archeological authorities and determine the disposition of the remains or artifacts. The discontinuance of the work shall be governed by Article 2.3, SUSPENSION OF WORK.

9. INDEMNIFICATION AND LIABILITY

9.1 INDEMNIFICATION; RISKS ASSUMED BY THE CONTRACTOR

9.1.1 The Contractor shall defend, indemnify and save harmless the State of New Jersey, NJ TRANSIT, USDOT (if the Contract is in whole or part federally funded) and their officers, employees, servants and agents from all suits, actions, or claims of any character including, but not limited to, expenditures and costs of investigations, hiring of witnesses, court costs, counsel fees, settlements, judgments or otherwise, brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of said Contractor or its subcontractors in the performance of the work specified in this Contract; or on account of or in consequence of any neglect in safeguarding the work as specified in this Contract; or because of any act or omission, neglect, or misconduct of said Contractor or its subcontractors in the performance of the work specified in this Contract; or from any claims or amounts arising or recovered under the Worker's Compensation Act, or any other law, ordinance, order, or decree. So much of the money due the said Contractor under and by virtue of this Contract as may be considered necessary by NJ TRANSIT for such purpose may be retained for the use of NJ TRANSIT; except that money due to the Contractor will not be withheld when the Contractor produces satisfactory evidence that it is adequately protected by public liability and property damage insurance. 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 claim, demand, complaint, notice, summons, pleading or other process received by NJ TRANSIT or its representatives. NJ TRANSIT shall have the right, but not the obligation, to participate, to the extent it deems appropriate, in the defense of the matter and must concur in the terms of any settlement or other voluntary disposition of the matter. 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 statutes respecting suits against NJ TRANSIT or the State of New Jersey.

9.1.2 The Contractor assumes the following distinct and several risks, whether they arise from acts or omissions whether negligent or not of the Contractor, its subcontractors, suppliers, employees, agents, and others working for the Contractor on the Project, of NJ TRANSIT or of third persons, or from any other cause, and whether such risks are within or beyond the control of the Contractor, excepting only risks which arise from

solely affirmative acts performed by NJ TRANSIT subsequent to the execution of the Contract with actual and willful intent to cause the loss, damage, and injuries described in Paragraphs (a) and (b) below:

- (a) Risks of Loss or Damage to the Construction: Until completion of all work and the acceptance of the Project by NJ TRANSIT, the Contractor shall have the charge and care of the work and of the materials to be used therein, whether permanent or temporary, including materials for which it has received partial payment and shall take every precaution against injury or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the nonexecution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before acceptance and shall bear the expense thereof. However, the Contractor shall not assume the risk for damage to the work due to acts of war.

Where necessary to protect the work or materials from damage the Contractor shall in furtherance of the above Paragraph, but not by way of limitation, at its expense, provide suitable drainage for the Project and erect such temporary structures as are necessary to protect the work or materials from damage. The risks for failure to take such actions are assumed by the Contractor.

In case of suspension of work from any cause whatever, the Contractor shall continue to be responsible for the Project as provided above and shall take such precautions as may be necessary to prevent damage to the Project, shall provide for drainage and shall erect necessary temporary structures, signs or other facilities. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition living material in newly established plantings, seedings, and soddings furnished under this Contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury. If ordered by NJ TRANSIT, the Contractor shall properly store during such suspension of work materials which have been partially paid for by NJ TRANSIT or which have been furnished by NJ TRANSIT. Such storage by the Contractor shall be on behalf of NJ TRANSIT. NJ TRANSIT shall at all times be entitled to the possession of such materials, and the Contractor shall promptly return the same to the site of the work when requested. The Contractor shall not dispose of any of the materials so stored except on written authorization from NJ TRANSIT. The Contractor shall be solely responsible for the loss of or damage to such materials.

- (b) Risk of Loss to Property in Performing the Work: The risk of loss or damage to any property of the Contractor, and of claims made against the Contractor or NJ TRANSIT for loss or damage to any property of subcontractors, supplier, workmen, and others performing the work, and to lessors, occurring at any time prior to completion of removal of such property from the construction site or NJ TRANSIT's premises, or the vicinity thereof shall be borne by the Contractor.

9.1.3 Neither the acceptance of the Project by NJ TRANSIT nor the making of final payment shall release the Contractor from its obligations under this Article. Moreover, neither the enumeration in this Subparagraph nor the enumeration elsewhere in this Contract of particular risks assumed by the Contractor or of particular claims for which it is responsible shall be deemed: (a) to limit the effect of the provisions of this Article or of any other provision of this Contract relating to such risks or claims; (b) to imply that it assumes or is responsible for risks or claims only of the type enumerated in this Article or in any other provision of this Contract; or (c) to limit the risks which it would assume or the claims for which it would be responsible in the absence of such enumerations.

9.1.4 The Contractor expressly understands and agrees that insurance protection required by the Contract, or otherwise provided by the Contractor, shall in no way limit the Contractor's responsibility to defend, indemnify, and save harmless NJ TRANSIT and the State as herein provided.

9.2 INSURANCE

The Contractor shall and shall require its subcontractor(s) to procure and maintain until the issuance of the Final Certificate of Payment, the types of insurance specified below:

9.2.1 Fire Insurance and Extended Coverage (Builder's Risk):

The Contractor shall effect and maintain "All Risk" Builder's Risk insurance coverage, including terrorism coverage, for 100% of the Construction value upon the facility or facilities on which the work is to be executed or which is to be constructed, and shall also cover materials, equipment, and supplies of all kinds incident to the construction of said facility or facilities, in temporary structures, or on vehicles, or in the open.

9.2.2 Workers' Compensation Insurance:

The Contractor shall procure and shall maintain during the life of this Contract, Workers' Compensation Insurance, as required by applicable State law, for all of its employees to be engaged in work at the site of the Project under this Contract and, in case any such work is sublet, the Contractor shall require the subcontractor similarly to provide Workers' Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the Contractor's Workers Compensation Insurance. In case any class of employees on the Project under this Contract is not protected under the Workers' Compensation Statute, the Contractor shall provide and shall cause each subcontractor to provide employer's liability insurance for the protection of such of its employees as are not otherwise protected. Limits of Employer Liability are as follows:

Employer's Liability

Bodily Injury by Accident	\$1,000,000 each accident
Bodily Injury by Disease	\$1,000,000 each employee
Bodily Injury by Disease	\$1,000,000 policy limit

9.2.3 Commercial General Liability Insurance:

The Contractor shall and shall require its subcontractor(s) to procure and maintain during the life of this Contract, Commercial General Liability Insurance using ISO Occurrence Form CG0001 10/93 or equivalent. The policy shall provide a minimum amount of \$2,000,000 each occurrence, \$2,000,000 personal and advertising injury, \$4,000,000 general aggregate and \$4,000,000 products completed operations aggregate.

Coverage provided under this liability policy shall be on an occurrence basis and shall include, but not be limited to, bodily injury and property damage coverage including products liability/completed operations coverage, premises operations liability, blanket contractual liability, personal injury liability, independent contractors liability, mobile equipment, damage from explosion, collapse and underground hazards, and cross liability and severability of interests clause. Additional insured endorsement CG2026 11/85, CG 2010 11/85 or CG 2010 10/93 (but only if modified to include both ongoing and completed operations) naming NJ TRANSIT and the Indemnified Parties and coverage must apply on a primary and non-contributory basis. The policy shall allow the Contractor to waive its and its insurer's rights of subrogation. There shall be no coverage exceptions for property containing or adjacent to railroad facilities or other transportation facilities..

The Contractor shall furnish completed operations insurance written to the limits stipulated herein for Commercial General Liability Insurance. Coverage shall be required and maintained in force for a minimum of three years following acceptance of the overall Contract, regardless of any beneficial occupancy by NJ TRANSIT during the Contract term.

9.2.4 Umbrella Liability Insurance

The Contractor shall and shall require its subcontractors to procure and maintain umbrella liability insurance with a minimum limit of \$8,000,000 per occurrence and in the aggregate; coverage must follow form above underlying Commercial General Liability, Business Automobile Liability and Employer's Liability policies.

9.2.5 Automobile Liability Insurance

The Contractor shall and shall require its subcontractor(s) to procure and maintain during the life of the Contract, Automobile Liability Insurance applicable to all owned, non-owned, hired or leased vehicles with a minimum of \$1,000,000 combined single limit per accident for bodily injury and property damage liability. This policy shall name NJ TRANSIT as an additional insured.

9.2.6 Asbestos Abatement Liability – If applicable, the Contractor {or whomever is performing the removal of any Asbestos Containing Material {ACM} shall maintain throughout the entire period of their performance under this Contract Asbestos Abatement Liability Insurance in the amount of

\$2,000,000 per loss and \$2,000,000 in the aggregate. The Contractor {or whomever is responsible for transporting and disposing of the {ACM} shall maintain throughout the entire period of their performance under this Contract Transportation Pollution Coverage {Form MCS90} in the amount of \$2,000,000 or statutory minimum whichever is greater.

9.2.7 Contractor's Pollution Liability Insurance

The Contractor and any subcontractor performing construction and/or environmental remediation work must procure and maintain through the life of the Contract, Contractor's Pollution Liability Insurance, including lead abatement if required, covering the liability arising out of any sudden and non-sudden pollution or impairment of the environment, including bodily injury, property damage, clean-up costs and defense that arise from the work performed by the Contractor or its Sub-Contractor(s). Coverage under this policy shall have limits of liability with a minimum of \$5,000,000 per occurrence and shall be on an occurrence basis. The policy shall name NJ TRANSIT as an additional insured. Transport of any hazardous waste generated under this Contract shall require Hazardous Waste Haulers Insurance (MCS90) in an amount of \$5,000,000 per occurrence or statutory minimum, whichever is greater.

9.2.8 The Contractor and its subcontractor(s) shall, at its own expense, carry all insurance which may be required to provide the necessary protection against loss or damage to any property of the Contractor or to any property of subcontractors, suppliers, workmen, and others performing the work and to lessors, which insurance shall contain a waiver of any right of subrogation against NJ TRANSIT.

9.2.9 The insurance required herein shall provide adequate protection for the Contractor and its subcontractors, respectively, against damage claims which may arise from operations under this Contract, whether such operations be by the insured or by anyone directly or indirectly employed by the Contractor and, also against any of the special hazards which may be encountered in the performance of this Contract.

9.2.10 The insurance policies are to be written by good and solvent insurance companies authorized to do business in New Jersey with an A.M. BEST Insurance Rating of "A-" or better or by such other companies acceptable to NJ TRANSIT in its sole discretion.

9.2.11 The Contractor shall furnish NJ TRANSIT with two copies of all Certificates showing the types, amount, class of operations covered, effective dates, and dates of expiration of policies. 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) days after written notice thereof to NJ TRANSIT. Evidence of such endorsement must be contained in the certificate of insurance. If requested by NJ TRANSIT, the Contractor shall also

provide copies of the insurance policies covered by the certificate. The Contractor shall not commence work under this Contract until it has obtained the insurance required under this Paragraph and such insurance has been approved by the Contracting Officer, nor shall the Contractor allow any subcontractor to commence work on its subcontract until the insurance required of the subcontractor has been so obtained and approved.

If the insurance provided by the Contractor or any of its subcontractor(s) fails to comply with the requirements listed herein, or if the Contractor or its subcontractor(s) fails to maintain such insurance, then NJ TRANSIT maintains the right to stop work until proper evidence is provided.

9.2.12 The cost of providing the required insurance shall be included under the Bid Item "Mobilization" whenever such a bid item is listed in the Bidder's Proposal. If no such item is listed then the cost shall be considered included under the total lump sum bid or allocated within the unit prices that sum to the total bid price.

9.2.13 Railroad Protective Comprehensive General Liability Insurance:
Should it be required, NJ TRANSIT will provide Railroad Protective Comprehensive General Liability Insurance coverage for this Contract.

9.3 LIMITATIONS OF LIABILITY

In no event, whether under the provisions of this Contract, as a result of breach of Contract, tort (including negligence) or otherwise, shall NJ TRANSIT, the State, or USDOT, be liable to the Contractor for special, consequential, incidental or penal damages including, but not limited to, loss of profit or revenues, loss of rental value for Contractor owned equipment, damages to associated equipment, additional risk, cost of capital or interest of any nature (whether characterized as damages for the retention of money, an increase in the cost of performance, a penalty, or otherwise).

9.4 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.

9.5 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, it being understood that in all such matters they act solely as agents and representatives of the State.

9.6 INTELLECTUAL PROPERTY

If the Contractor uses any design, device or materials covered by letters, patent or copyright, it shall provide for such use by suitable agreement with the owner of such patented or copyrighted design, device or material. It is mutually agreed and understood that, without exception, the Contract Price shall include all royalties or costs arising from the use of such design, device or materials in any way involved in the Work. The Contractor shall defend, indemnify and save harmless the State, USDOT, NJ TRANSIT, and their officers, agents, servants, and employees from any and all claims for infringement by reason of the use of such patented or copyrighted design, device or materials or any trademark or copyright in connection with Work agreed to be performed under this Contract, and shall defend and indemnify the State, USDOT, NJ TRANSIT, and their officers, agents, servants, and employees, for any cost, expense or damage which it or they may be obliged to pay by reason of such infringement at any time during the prosecution of the Work or after completion of the Work.

9.7 ENVIRONMENTAL COMPLIANCE AND LIABILITY

9.7.1 The Contractor shall conduct all activities in compliance with all applicable federal, state and local laws, rules, regulations and permits 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, regulations or permits 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 terminate the Contract in accordance with Article 2.5, TERMINATION FOR CAUSE. The indemnification obligations hereunder shall survive the completion or termination of this Contract.

9.7.2 No later than two weeks after the Notice to Proceed for this project, the Contractor shall supply to NJ TRANSIT a set of MSDS for any and all chemicals, materials or substances intended for use in the completion of the project that are covered by reference or definition by the OSHA Hazard Communication Standard (hereinafter HCS) and/or the New Jersey Worker and Community Right-to-Know Act, N.J.S.A. 34:5A-1 et seq. The chemical name and Chemical Abstract Service (hereinafter CAS) number must be provided for all hazardous substances and for the five most predominant ingredients. If this information is not available on the MSDS, the information must be provided under separate cover when the MSDS is submitted. The Contractor shall also supply to NJ TRANSIT a copy of its written hazard communication program as defined by the OSHA-HCS and the New Jersey Worker and Community Right-to-Know Act, N.J.S.A. 34:5A-1 et seq.

9.7.3 In addition to supplying NJ TRANSIT with the MSDS, the Contractor shall obtain the expressed written approval of NJ TRANSIT to use any chemicals with a flammability or reactivity hazard classification of 2, 3, or 4 as defined by the National Fire Protection Association Standard NFPA704.

9.7.4 During the performance of this contract, the Contractor shall take any and all necessary precautions to ensure that personnel and property of NJ TRANSIT, the Contractor, third parties, and the general public are not exposed to physical or health hazards from any of the aforementioned chemicals, materials and substances. In addition, the aforementioned chemicals, materials and substances shall be labeled with the chemical name and CAS number of all hazardous substances including the five most predominant ingredients in accordance with the requirements of OSHA-HCS and the New Jersey Worker and Community Right-to-Know Act.

9.7.5 In the event the Contractor obtains any new information pertaining to the aforementioned chemicals, materials and substances during the performance of the work on this contract, the Contractor shall immediately make that information available to NJ TRANSIT.

9.7.6 The Contractor's format shall meet the requirements of OSHA-HCS. Alternative formats may be accepted provided they meet the requirements of the OSHA-HCS and New Jersey Worker and Community Right-to-Know Act.

10. ETHICAL REQUIREMENTS

10.1 COVENANT AGAINST CONTINGENT FEES

The Contractor warrants 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, except 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 and in its discretion to deduct from the Contract Price, or otherwise recover, the full amount of such commission, percentage, brokerage or contingent fee.

10.2 OFFICIALS NOT TO BENEFIT

10.2.1 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.

10.2.2 Interest of Public Officials: No member, officer or employee of NJ TRANSIT or the State shall have any interest, direct or indirect, in this Contract or the proceeds thereof. No former member, officer or employee of NJ TRANSIT who, during that person's tenure, had a direct, substantial involvement with matters that are related to this Contract, shall have any interest, direct or indirect, in this Contract or the proceeds thereof.

10.3 GRATUITIES

10.3.1 The Contracting Officer may, by written notice to the Contractor, terminate the right of the Contractor to proceed under the Contract if it is found, after notice and hearing, that gratuities (in the form of entertainment, gifts or otherwise) were offered or given by the Contractor, or any agent or representative of the Contractor, to any officer, agent or employee of NJ TRANSIT with a view toward securing a contract or securing favorable treatment with respect to the performance of such Contract; provided that the existence of the facts upon which NJ TRANSIT makes its findings shall be in issue and may be reviewed in any competent court.

10.3.2 In the event this Contract is terminated as provided in the preceding Paragraph, NJ TRANSIT shall be entitled to pursue the same remedies against the Contractor as it could pursue in the event of a breach of the Contract by the Contractor.

10.4 NJ TRANSIT CODE OF ETHICS

10.4.1 It is NJ TRANSIT policy that Contractors must avoid all situations where proprietary or financial interest, or the opportunity for financial gain, could lead an officer or employee of NJ TRANSIT to secure favored treatment for any organization or individual. Contractors must also avoid circumstances and conduct which may not constitute actual wrongdoing, or conflict of interest, but might nevertheless appear questionable to the general public, thus compromising the integrity of NJ TRANSIT. For the purposes of this Article only, NJ TRANSIT shall be deemed to include any person contracting with NJ TRANSIT to perform services on the Project. All Contractors must comply with NJ TRANSIT's Code of Ethics contained in this Article.

10.4.2 The Contractor shall not employ any NJ TRANSIT officer or employee in the business of the Contractor or in professional activity in which the Contractor is involved with the NJ TRANSIT officer or employee.

- 10.4.3 The Contractor shall not offer or provide any interest, financial or otherwise, direct or indirect, to any NJ TRANSIT officer or employee, in the business of the Contractor or in professional activity in which the Contractor is involved with the NJ TRANSIT officer or employee. The Contractor shall not cause or influence, or attempt to cause or influence, any NJ TRANSIT officer or employee to act 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.
- 10.4.4 The Contractor shall not 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 Contractor or any other person.
- 10.4.5 The Contractor shall not 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 could be construed as having more than nominal value.
- 10.4.6 In accordance with N.J.A.C. 16:72-4.1, the Contractor may be suspended and/or debarred if the Contractor:
- A. Makes any offer or agreement 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 NJ TRANSIT Board member, officer, or employee or to any member of the immediate family of such Board member, officer, or employee, or any partnership, firm, or corporation with which they are employed or associated, or in which such Board member, officer, or employee has an interest within the meaning of N.J.S.A. 52:13D-13g;
 - B. Fails to report to the Attorney General and to the Executive Commission on Ethical Standards in writing forthwith the solicitation of any fee, commission, compensation, gift, gratuity or other thing of value by any NJ TRANSIT Board member, officer, or employee;
 - C. Undertakes, directly or indirectly, 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 Contractor to, any NJ TRANSIT Board member, officer, or employee having any duties or responsibilities in connection with the purchase, acquisition, or sale of any property or services by or to NJ TRANSIT, or with any person, firm, or entity with 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 Executive Commission on Ethical Standards, which may grant a waiver of this restriction upon application of the NJ TRANSIT Board member, 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;

- D. Influence or attempts to influence or causes to be influenced, any NJ TRANSIT Board member, officer, or employee in his official capacity in any manner which might tend to impair the objectivity or independence of judgment of such Board member, officer, or employee; or
- E. Causes or influences or attempts to cause or influence, any NJ TRANSIT Board member, officer, or employee to use, or attempt to use, his official position to secure unwarranted privileges or advantages for the contractor or any other person.

11. SOCIAL AND ECONOMIC REQUIREMENTS

11.1 NEW JERSEY PREVAILING WAGE ACT

11.1.1 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 it deems necessary or prosecute the work to completion.

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.

- 11.1.2 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.
- 11.1.3 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.
- 11.1.4 The bidder'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.
- 11.1.5 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.

11.1.6 After the completion of all construction work and before the proposed Final Certificate of Payment will be issued, the Contractor and subcontractors shall furnish the Construction Manager with written statements in form satisfactory to NJ TRANSIT certifying to the amounts then due and owing from the Contractor and subcontractors filing such statement to any and all workers for wages due on account of the Contract, setting forth therein the names of the persons whose wages are unpaid and the amount due to each respectively, which statement shall be verified by the oath of the Contractor or subcontractor, as the case may be, that it has read such statement subscribed by the Contractor or subcontractor, knows the contents thereof, and that the same is true of its own knowledge, provided, however, that nothing herein shall impair the right of the Contractor to receive Final Payment because of failure of any subcontractor to comply with provisions of this Article.

11.2 EQUAL OPPORTUNITY

11.2.1 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 are hereby made a part of this Contract and are binding upon them.

The Contractor agrees that at the time the signed contract is returned to NJ TRANSIT, Contractor shall submit to NJ TRANSIT and the New Jersey Department of Treasury, Division of Public Contracts Equal Employment Opportunity Compliance an Initial Project Workforce Report (Form AA-201) consisting of forms provided by NJ TRANSIT and completed by Contractor in accordance with Subchapter 7 of the regulations promulgated by the Treasurer pursuant to P.L. 1975, c.127.

11.2.2 In accordance with N.J.S.A. 10:2-1 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.

11.2.3 Executive Order 151 Mandatory EEO and Affirmative Action Requirements

It is the policy of the NJ TRANSIT that its contracts should create a workforce that reflects the diversity of the State of New Jersey. Therefore, contractors engaged by NJ TRANSIT to perform under a construction contract shall put forth a good faith effort to engage in recruitment and employment practices that further the goal of fostering equal opportunities to minorities and women.

The Contractor must demonstrate to the NJ TRANSIT's satisfaction that a good faith effort was made to ensure that minorities and women have been afforded equal opportunity to gain employment under the NJ TRANSIT's contract with the Contractor. Payment may be withheld from a contractor's contract for failure to comply with these provisions.

Evidence of a "good faith effort" includes, but is not limited to:

- A. The Contractor shall recruit prospective employees through the State Job bank website, managed by the Department of Labor and Workforce Development, available online at <http://NJ.gov/JobCentralNJ>.
- B. The Contractor shall keep specific records of its efforts, including records of all individuals interviewed and hired, including the specific numbers of minorities and women.
- C. The Contractor shall actively solicit and shall provide NJ TRANSIT with proof of solicitations for employment, including but not limited to advertisements in general circulation media, professional service publications and electronic media.
- D. The Contractor shall provide evidence of efforts described at 2 above to NJ TRANSIT no less frequently than once every 12 months.
- E. The Contractor shall comply with the requirements set forth at N.J.A.C. 17:27.

11.2.4 SUBCONTRACTS; EQUAL EMPLOYMENT GOALS

The contractor agrees to incorporate these State of New Jersey EEO Provisions for Construction Contracts in its construction subcontracts.

The New Jersey Department of Treasury, Division of Public Contracts Equal Employment Opportunity Compliance (hereinafter "Division") shall individually establish the targeted minority and women employment goals for determining good faith equal employment opportunity efforts by each construction contractor and subcontractor for each trade on each contract. The Division shall review the trades to be utilized during the completion of the work as reported on the Initial Project Workforce Report and determine the targeted employment goals based upon the number of qualified minorities and women available as reported by the

New Jersey Department of Labor, Division of Planning and Research in its report, EEO Tabulations—Detailed Occupations by Race/Hispanic Groups.

In accordance with N.J.A.C. 17:27, Contractors and subcontractors are required to make a good faith effort to provide equal employment opportunity for minorities and women. Failure to make good faith efforts to provide equal employment opportunity for minorities and women may result in sanctions including fines/penalties, withholding of payment, termination of the contract, suspension/debarment or such other action as provided by law.

The contractor shall obtain the targeted employment goals from the Division's website at www.state.nj.us/treasury/contract_compliance or request the employment goals from the Division of Public Contracts Equal Employment Opportunity Compliance after submitting the initial project workforce report to the Division of Public Contracts Equal Employment Opportunity Compliance.

The contractor shall then be responsible for the completion and submittal of a Monthly Project Workforce Report (Form AA-202) for the duration of this contract.

(NOTE: FOR THE PURPOSE OF THIS CONTRACT THE "PUBLIC AGENCY COMPLIANCE OFFICER" REFERENCED BELOW IS NJ TRANSIT'S VP CIVIL RIGHTS & DIVERSITY PROGRAMS AND THE "PUBLIC AGENCY" IS NJ TRANSIT.)

11.2.5 MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE FOR CONSTRUCTION CONTRACTS

During the performance of this contract, the Contractor agrees as follows:

The Contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the Contractor will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such action shall include, but not be limited to the following: employment, up-grading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The Contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry,

marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The Contractor or subcontractor, where applicable, will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the Contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The Contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer, pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

When hiring or scheduling workers in each construction trade, the Contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the applicable employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Department of Labor and Workforce Development (LWD), Construction EEO Monitoring Program may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, A, B and C, as long as the Dept.of LWD, Construction EEO Monitoring Program is satisfied that the Contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Dept. of LWD, Construction EEO Monitoring Program, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2.

The Contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

- (A) If the Contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the Contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the Contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as supplemented and amended from time to time, and the Americans with Disabilities Act. If the Contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the Contractor or subcontractor agrees to afford equal employment opportunities to minority and women workers directly, consistent with this chapter. . If the Contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided

said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, , the Contractor or subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (B) below; and the Contractor or subcontractor further agrees to take said action immediately if it determines or is so notified by the Division that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.

- (B) If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (A) above, or if the Contractor does not have a referral agreement or arrangement with a union for a construction trade, the Contractor or subcontractor agrees to take the following actions:
- (1) To notify the public agency compliance officer, the Dept. of LWD, Construction EEO Monitoring Program, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;
 - (2) To notify any minority and women workers who have been listed with it as awaiting available vacancies;
 - (3) Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the Contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;
 - (4) To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the Contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;
 - (5) If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and non-discrimination standards set forth in this regulation, as well as with Federal and State court decisions:
 - (6) To adhere to the following procedure when minority and women workers apply or are referred to the Contractor or subcontractor:
 - (i) The Contractor or subcontractor shall interview the referred minority or woman worker.
 - (ii) If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in order to perform the work of the construction trade, the Contractor or subcontractor shall in good faith determine the qualifications of such individuals. The Contractor or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification

standards in conformity with the equal employment opportunity and non-discrimination principles set forth in this chapter. However, a contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Dept. of LWD, Construction EEO Monitoring Program. . If necessary, the Contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below.

- (iii) The name of any interested women or minority individual shall be maintained on a waiting list and shall be considered for employment as described in (i) above, whenever vacancies occur. At the request of the Dept. of LWD, Construction EEO Monitoring Program, the contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.
- (iv) If, for any reason, said Contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the Contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the public agency compliance officer and to the Dept. Of LWD, Construction EEO Monitoring Program.

- (7) To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Dept. of LWD, EEO Monitoring Program and submitted promptly to the Dept. of LWD, Construction EEO Monitoring Program upon request.

- (C) The Contractor or subcontractor agrees that nothing contained in (B) above shall preclude the Contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the Contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the Contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the

absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the Contractor or subcontractor agrees that, in implementing the procedures of (B) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

After notification of award, but prior to signing a construction contract, the Contractor shall submit to the public agency compliance officer and the Dept. of LWD, Construction EEO Monitoring Program an initial project workforce report (Form AA 201) electronically provided to the public agency by the Dept. of LWD, Construction EEO Monitoring Program through its website, for distribution to and completion by the Contractor, in accordance with N.J.A.C. 17:27-7. The Contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of this contract to the Dept. of LWD, Construction EEO Monitoring Program and to the public agency compliance officer.

The Contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the-job programs for outreach and training of minorities and women.

- (D) The Contractor and its subcontractors shall furnish such reports or other documents to the Dept. of LWD, Construction EEO Monitoring Program as may be requested by the Dept. of LWD, Construction EEO Monitoring Program from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Dept. Of LWD, Construction EEO Monitoring Program for conducting a compliance investigation pursuant to Subchapter 10 of the Administrative Code (NJAC 17:27).

11.2.6 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 USC §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. 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, 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 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.

11.3 UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES

In connection with the performance of this Contract, the Contractor shall cooperate with NJ TRANSIT in meeting its commitments and goals with regard to the maximum utilization of disadvantaged business enterprises and will use its best efforts to insure that disadvantaged business enterprises shall have the maximum practicable opportunity to compete for subcontract work under this Contract.

The term "disadvantaged business enterprise" means a for-profit small business concern that is owned and controlled by one or more socially and economically disadvantaged persons, as defined by 49 CFR, Part 26. 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, Black Americans (not of Hispanic origin); Hispanic Americans; Native Americans; Asian-Pacific Americans; Subcontinent Asian Americans; and Women, regardless of race or ethnicity.

The Contractor shall fully comply with the requirements and provisions set forth in the New Jersey Transit Corporation DBE Requirements for Procurement Activities.

12. MEASUREMENT AND PAYMENT

12.1 SCOPE OF PAYMENT

12.1.1 The Contractor shall receive and accept compensation provided for in the Contract as full payment for furnishing materials and for performing work under the Contract in a complete and acceptable manner and for risk, loss, damage or expense of whatever character arising out of the nature of the work or the prosecution thereof.

12.1.2 If the specifications relating to a unit price in the Proposal require that the said unit price cover and be considered compensation for certain work or material essential to the item, this same work or material will not also be measured or paid for under any other item which may appear elsewhere in the Contract.

12.1.3 If the specifications include Work for which no specific method of payment is provided, no separate payment will be made for that Work and the cost thereof shall be considered as included in the prices paid for the various scheduled Contract Items.

12.1.4 Except as specifically provided otherwise, no separate payment will be made for any of the requirements of the General and Special Provisions, and the cost thereof shall be considered as included in the various scheduled Contract Items.

12.1.5 Notwithstanding any other provision of this Contract, for a period of three years after acceptance, all estimates and payments (including the Final Certificate of Payment and payments made pursuant to the Final Certificate of Payment) shall be subject to correction and adjustment for clerical or other errors in the calculations involved in the determination of quantities and payments. The Contractor and NJ TRANSIT agree to pay to the other any sum due under the provisions of this Article.

12.2 QUANTITIES: MEASUREMENT AND PAYMENT

12.2.1 Work completed under the Contract will be measured by the Construction Manager according to United States standard measure. The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the Contract will be those methods generally recognized as conforming to good engineering practice.

12.2.2 Wherever the estimated quantities of work to be done and materials to be furnished under the Contract are shown in the documents including the proposal, they are given for use in comparing bids and the right is especially reserved, except as herein otherwise specifically limited, to increase or diminish them as may be deemed reasonably necessary or desirable by NJ TRANSIT to complete the work contemplated by this Contract, and such increase or diminution shall in no way abrogate this Contract, nor shall such increase or diminution give cause for claims or liability for damages.

12.2.3 When the Bidder's Proposal contains itemized quantities which are to be paid on a Unit Price basis, those quantities are designated as the Pay Quantities. When the estimated quantities for a specific portion of the work are designated as the Pay Quantities in the Contract, and if the work is actually performed as specified, they shall be the final quantities for which payment for such specific portion of the work will be made, unless the dimensions of said portions of the work shown on the plans are revised, or unless errors in the quantities are discovered. If revised dimensions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the amount represented by the authorized changes in the dimensions.

12.2.4 Wherever the actual quantity of work performed varies more than twenty-five percent (25%) above or below an estimated quantity shown in the Bidder's Proposal, an equitable adjustment to the contract shall be made upon demand of either NJ TRANSIT or the Contractor. The equitable adjustment shall be based upon an increase or decrease in costs due solely to the twenty-five percent (25%) variation above or below the estimated quantity.

12.3 PARTIAL PAYMENTS

12.3.1 Monthly estimates will be made of the approximate quantities of work satisfactorily performed in accordance with the Contract Documents during the preceding month. Partial payments on account of such monthly estimate will be made based on the prices bid in the Proposal or as provided by change order. The Contractor will also be paid under the monthly estimates for materials delivered in accordance with Article 12.4, MATERIALS PAYMENTS and Article 8.2, MEASUREMENT OF PAY LIMITS FOR EXCAVATIONS.

For each lump sum bid item excluding Performance/Payment Bond, Mobilization and Allowances, the Contractor shall submit for the Construction Manager's review and approval a "Schedule of Values" (a detailed price breakdown of all individual items of work that are contained in said bid items) within ten (10) days of the Notice to Proceed. The approved Schedule of Values shall be incorporated into each Application for Payment and shall be used by NJ TRANSIT as the basis for partial payment and, if it so elects, as a basis for determining values of work it wishes to modify or delete.

12.3.2 No such estimate or payment shall be required to be made, in the judgment of NJ TRANSIT, when the work is not proceeding in accordance with the Contract Documents or following NJ TRANSIT giving the Contractor or surety notice of delay, neglect or default.

12.3.3 No such estimate or payment shall be construed to be an acceptance of any defective work or improper materials. NJ TRANSIT upon determining that any payment under a previous monthly estimate was improper or unwarranted for any reason may deduct the amount of such payment from the subsequent monthly estimate and partial payments made to the Contractor.

12.3.4 Material and work covered by partial payments made shall thereupon become the sole property of NJ TRANSIT but this provision shall not be construed as relieving the Contractor from the sole responsibility for care and protection of materials and work upon which payments have been made or restoration of any damaged work, or as a waiver of the right of NJ TRANSIT to require fulfillment of terms of the Contract.

12.3.5 NJ TRANSIT shall deduct from any monthly estimate and payment and the final payment such amounts as are required to be deducted pursuant to provisions of the Contract Documents.

12.3.6 In accordance with N.J.S.A. 52:32-40 and 52:32-41, prior to the issuance of a partial payment by NJ TRANSIT to the Contractor, the Contractor shall certify that a Subcontractor or Supplier has been paid any amount due from any previous partial payment and shall be paid any amount due from the current partial payment, or that a valid basis for withholding payment exists and the Contractor has complied with the applicable notice provisions.

12.4 MATERIALS PAYMENTS

12.4.1 The monthly estimates and payments made on account thereof will also include, when allowed by the Project Manager, an amount equal to the actual cost of materials furnished but not incorporated into the work, provided, however, that such amount shall not exceed 85 percent of the Contractor's bid price for the Contract Item into which the material will be incorporated, and the quantity allowed does not exceed the corresponding quantity estimated in the Contract.

12.4.2 Before including payments for such materials in an estimate, the Construction Manager must be satisfied that:

- (a) The materials have been properly stored and protected by the Contractor or have been stored at locations owned or leased by NJ TRANSIT,
- (b) The materials have been inspected and appear to be acceptable,
- (c) The Contractor has provided NJ TRANSIT an invoice or bill of sale sufficient to show the price paid for the materials and proof that title, if applicable, has been transferred to NJ TRANSIT,
- (d) The materials, if stored on property not belonging to NJ TRANSIT, are fenced in with access limited to NJ TRANSIT and the Contractor or their authorized agents and the fenced in materials are clearly identified in large letters as being without encumbrances and for use solely on this Project, and
- (e) When such materials are stored in a leased area, the lease is made out to the Contractor and provides that it shall be cancelled only with the written permission of NJ TRANSIT.

12.4.3 The Contractor assumes full responsibility for the safe storage and protection of the materials and nothing in this Paragraph shall alter the provisions of Article 9.1, INDEMNIFICATION; RISKS ASSUMED BY THE CONTRACTOR. If materials paid for under this Article are damaged, stolen or prove to be unacceptable, the payment made therefor shall be deducted from subsequent estimates and payment.

12.4.4 Payment for materials as provided in this Article shall not be deemed to be an acceptance of such materials, and the Contractor shall be responsible for and must deliver to the site and properly incorporate in the work only those materials that comply with the Contract.

12.4.5 No payment for living or perishable plant materials will be made until they are accepted by NJ TRANSIT.

12.4.6 The Contractor shall pay all costs of handling and delivering materials to and from the place of storage to the site of the work, as well as storage rental. Taxes levied by any government against the materials shall be borne by the Contractor.

12.5 RETAINAGE

12.5.1 In making partial payments for work, there will be retained by NJ TRANSIT five percent of the estimated amount until completion and final acceptance of all work covered by the Contract and issuance of a Final Certificate of Payment.

12.5.2 The Contractor shall defend, indemnify and save NJ TRANSIT harmless from claims arising out of the demands of Subcontractors, laborers, workmen, mechanics, Suppliers, and furnishers of machinery and parts thereof, equipment, power tools, and supplies, including commissary, incurred in the furtherance of the performance of this Contract. The Contractor shall, at NJ TRANSIT's request, furnish satisfactory evidence that all obligations of the nature herein above designated have been paid, discharged or waived. The retainage specified herein shall not be paid to the Contractor until such obligations have been paid, discharged or waived. Recourse may also be made, if necessary, to the payment bond.

12.6 SUBCONTRACTOR PAYMENTS AND RETAINAGE

12.6.1 A Subcontractor 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.

12.6.2 The Contractor agrees to pay each Subcontractor and Supplier under this Contract for satisfactory performance of its contract no later than ten (10) 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 retainage) that meet all applicable requirements within 15 days from the receipt the Subcontractor receives from the Contractor.

12.6.3 In accordance with N.J.S.A. 52:32-40 and 52.32-41, 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.

- 12.6.4 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.
- 12.6.5 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.
- 12.6.6 The Contractor agrees to make retainage payments to each Subcontractor or Supplier within 15 days after the Subcontractor's or Supplier's work is completed. Only Subcontractors whose work has been 100% completed, including all Punchlist Work and any other Remaining Work, and who have supplied closeout documents shall be eligible for release of retainage. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of NJ TRANSIT.
- 12.6.7 NJ TRANSIT agrees to release an equivalent amount of Contractor retainage provided that a) there are no offsetting claims from NJ TRANSIT (including, but not limited to, liquidated damages), other Subcontractors, Suppliers, materialmen or workers, and b) none of the other reasons to withhold payments specified under Article 12.7 exists. Prior to release of the Contractor's retainage, the Contractor shall provide to NJ TRANSIT executed copies of the following Subcontractor Closeout Documents, as appropriate: Consent of Surety to Final Payment to the Subcontractor, Subcontractor's Certificate of Amounts Due Workers For Wages, a Subcontractor Affidavit of Payment of Debts and Claims, a Subcontractor Affidavit of Release of Liens and a Certificate of Final Acceptance of Subcontractor Work, all in the form shown in Appendix B to the Contract.
- 12.6.8 Notwithstanding NJ TRANSIT's release or partial release of retainage, nothing in this Article shall be deemed to constitute NJ TRANSIT's partial or final acceptance of the Work, or any portion thereof, unless either a Certificate of Partial Acceptance or a Certificate of Final Acceptance has been executed by NJ TRANSIT, in the form(s) shown in Appendix B to the Contract.

12.7 PAYMENTS WITHHELD

12.7.1 NJ TRANSIT may withhold or, on account of subsequently discovered evidence, nullify the whole or a part of a certificate for payment to such extent as may be necessary to protect NJ TRANSIT from loss on account of:

- (1) Defective work not remedied;
- (2) Claims filed, or reasonable evidence indicating probable filing of claims;
- (3) Failure of the Contractor to make payments promptly to Subcontractors or Suppliers for material or labor;
- (4) A reasonable doubt that the Contract can be completed for the balance then unpaid;
- (5) Damage to another contractor;
- (6) Lack of updated and approved CPM schedule;
- (7) Submission of incomplete payment invoice;
- (8) Liquidated damages;
- (9) Previous overpayments; and
- (10) Lack of compliance with Contract terms.

12.7.2 When the above grounds are removed, certificates of payment will be issued for amounts withheld because of them, less appropriate adjustments.

12.8 FINAL PAYMENT

12.8.1 Submissions required from the Contractor as a condition of final payment, include, but are not limited to, the following items:

- (1) Completed Operations Insurance Certificate,
- (2) Affidavit of Payment of Debts and Claims,
- (3) Affidavit of Release of Liens,
- (4) Consent of Surety to Final Payment,
- (5) Certificate of amounts due workers for wages on the work pursuant to N.J.S.A. 34:11-56.25 et seq.,
- (6) The one year and special written guarantees for periods of time in excess of the one year general guarantee,
- (7) Operating instructions and maintenance manuals for equipment as required under Article 7.5.3. The maintenance and operating information shall be organized into suitable sets. Where applicable, these include: Operating and emergency instructions, replacement parts listing, maintenance contracts, warranties, guarantees, wiring diagrams, recommended "turn around" cycles, inspection procedures, shop drawings, product data, and similar applicable information for each type of equipment. Each set should be bound in a plastic covered binder. Identification

should be printed clearly on both front and spine of each binder, and a complete typewritten index of contents should be provided. These shall be submitted to the Construction Manager for review by the Engineer. Corrections as required shall be made and then five (5) copies submitted in final form to NJ TRANSIT,

- (8) Markup Drawings, as required under Article 6.11,
- (9) Certificate of Final Acceptance,
- (10) Final payment request based on 100 percent completion of the work with all releases, certificates, consents, guarantees, warranties, and other documents, attached as required, including "Consent of Surety", and
- (11) Final Contractor Monthly DBE Payment Report.

12.8.2 The Proposed Final Certificate of Payment will show the total amount payable to the Contractor, including therein an itemization of said amount segregated as to Contract Item quantities, Extra Work and other basis for payment, and shall also show therein all deductions made or to be made for prior payments and as required pursuant to the provisions of the Contract Documents. All prior estimates and payments shall be subject to correction in the Proposed Final Certificate of Payment. Within 30 days after said Proposed Final Certificate of Payment has been issued to the Contractor, the Contractor shall submit to the Construction Manager its written approval of said Final Certificate of Payment or a written statement of all outstanding Contractor Initiated Change Order Requests (CICOR's) it has arising under or by virtue of the Contract or any action by any NJ TRANSIT employee, agent or officer in the prosecution of the Contract. CICOR's will not be considered unless the Contractor has strictly complied with the requirements of Article 3.4 - CONTRACTOR INITIATED CHANGE ORDERS.

12.8.3 On the Contractor's approval, or if it files no statement of outstanding CICOR's within said period of 30 days, the Contracting Officer will issue a Final Certificate of Payment in writing in accordance with the proposed Final Certificate of Payment submitted to the Contractor and within 30 days thereafter, NJ TRANSIT will pay the entire sum due thereunder. Such Final Certificate of Payment and acceptance by the Contractor of the Final Payment based thereon shall operate as a release by the Contractor of the State and NJ TRANSIT, their agents, officers and employees, from all claims and liability of whatsoever nature for anything done or furnished or in any manner growing out of the performance of the Contract.

12.8.4 If the Contractor within said period of 30 days files a statement of outstanding CICOR's, the Contracting Officer will issue a Conditional Final Certificate of Payment in accordance with the proposed Final Certificate of Payment. Within 30 days thereafter, NJ TRANSIT will pay the sum due there under, provided the Contractor has in good faith provided the detailed CICOR cost information required by Article 3.4. The Contractor may request up to an additional 30 days within which to provide the required information.

12.8.5 Failure to submit such detailed cost information as to any CICOR within the 60 days provided from the date of the issuance of the proposed Final Certificate of Payment shall operate as a waiver of those CICOR's as

to which such information is not provided and a release by the Contractor in favor of the State and NJ TRANSIT as to such CICOR. NJ TRANSIT will then issue a Conditional Final Payment based on the Conditional Final Certificate. Acceptance by the Contractor of this Conditional Final Payment shall constitute a release by the Contractor of the State and NJ TRANSIT, their agents, officers and employees, from all claims and liability of whatsoever nature for anything done or furnished or in any manner growing out of the performance of the Contract except those CICOR's filed in response to the proposed Final Certificate and not waived as herein provided for failure to provide information and details.

12.8.6 The Contracting Officer's decision on outstanding CICOR's will be rendered in accordance with Article 1.15-DISPUTES.

12.8.7 Upon final resolution of the outstanding CICOR's, the Contracting Officer shall then make and issue a Final Certificate of Payment, and within 30 days thereafter, NJ TRANSIT will pay the entire sum, if any, found due thereon. Such Final Payment, if it resolves any of the CICOR's reserved under the Conditional Final Payment, will operate as a release in favor of the State, and NJ TRANSIT, their agents, officers and employees as to such claims.

12.8.8 No payment, however, final or otherwise, shall operate to release the Contractor or its Sureties from any obligations under this Contract or the Performance and Payment Bond.

12.9 SETTING OFF TAX ARREARS AGAINST SUMS OWED

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, or under contract for construction projects of 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 shall 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 projects and provide an opportunity for a hearing within 30 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.C.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.

13. ACCEPTANCE AND COMPLETION

13.1 PARTIAL ACCEPTANCE

If at any time during the prosecution of the Project the Contractor completes a unit or portion of the Project, such as a structure or a section of right-of-way, it may request that NJ TRANSIT make a final inspection of that unit. NJ TRANSIT reserves the right to reject the request made by the Contractor if NJ TRANSIT, in its sole discretion, determines that the unit or portion of the project should not be the subject of a Partial Acceptance.

If NJ TRANSIT determines that Partial Acceptance of the unit or portion of the Project is appropriate and finds upon inspection that the unit or portion is satisfactorily completed in compliance with the Contract, the Project Manager may accept that unit as being completed and the Contractor may be relieved of the responsibility of doing further work on or maintaining that unit or portion of the Project.

Such Partial Acceptance shall in no way void or alter the terms of the Contract, including Articles 9.1- INDEMNIFICATION; RISKS ASSUMED BY THE CONTRACTOR and 9.2- INSURANCE, nor shall it be construed as relieving the Contractor of full responsibility for making good defective work or materials found at any time before Final Acceptance pursuant to Article 13.3- COMPLETION AND FINAL ACCEPTANCE OF THE WORK.

13.2 SUBSTANTIAL COMPLETION

13.2.1 The Work shall be deemed substantially complete when, in the opinion of the Project Manager (whose judgment shall be conclusive), so much thereof has been completed in accordance with the terms of the Contract Documents that NJ TRANSIT may occupy the site of the work and use the work and the facilities resulting therefrom for the purposes for which they are intended. Unless the Project Manager determines that temporary pavement is sufficient, substantial completion will not be deemed to have occurred prior to the backfilling and restoration of street surfaces (if any) and the restoration of other surfaces, subsurfaces and overhead structures. Upon such substantial completion the Project Manager shall issue a Certificate of Substantial Completion. The issuance of this Certificate shall not relieve the Contractor from its obligation hereunder to finally complete all of the work of the Contract.

13.2.2 The work remaining to be completed after substantial completion in order for the Contractor to fulfill its obligations to fully complete the Work in accordance with the Contract shall be known as the "Remaining Work". The Remaining Work shall generally be limited to minor defects or omissions (also known as "Punch List Work"). However, NJ TRANSIT may include as part of Remaining Work, work which would ordinarily be required for substantial completion. Such other Remaining Work includes, but is not limited to, work not done because of seasonal factors or work which cannot be done until third persons perform other work which is not the Contractor's responsibility under the Contract. Nothing herein, however, shall diminish the right of NJ TRANSIT to determine what is necessary for substantial completion in accordance with Sub-article 13.2.1 above.

13.2.3 NJ TRANSIT shall advise the Contractor of the time required to complete Punch List Work and the time required to complete all other Remaining Work. Failure to complete in a timely manner all Remaining Work, other than Punch List Work, will result in the Contractor being liable for liquidated damages as set forth in Article 2.1, TIME OF COMPLETION - DELAY - LIQUIDATED DAMAGES. As an additional remedy for such failure, and not in lieu of liquidated damages, NJ TRANSIT may complete the Remaining Work including Punch List Work, either by its own forces or by other contractors. The Contractor shall be entitled to payment according to the Contract Price upon such completion, subject however to NJ TRANSIT's right to reimbursement for its costs of completion. NJ TRANSIT may deduct such costs from any payment or payments due to the Contractor, and if such costs exceed the amount due the Contractor, the Contractor shall promptly pay such excess to NJ TRANSIT. NJ TRANSIT's entitlement to such reimbursement shall in no respect relieve the Contractor of its obligation to timely complete the Remaining Work.

13.2.4 Before final inspection, completion and acceptance of the Project, borrow and local material sources and areas occupied by the Contractor in connection with the work shall be cleaned of rubbish, excess materials, temporary structures and equipment, and the work shall be left in an acceptable condition. The final inspection and acceptance will not be made by NJ TRANSIT until the Project has been completed, including all work identified as "Remaining Work" (Punch List Work).

13.3 COMPLETION AND FINAL ACCEPTANCE OF THE WORK

13.3.1 When the Contractor believes that the Project has been fully completed, the Contractor shall provide written notification to the Construction Manager that the Project is ready for final inspection by NJ TRANSIT.

If the Project Manager finds the Work to be in compliance with the Contract, it will notify the Contracting Officer establishing completion as of the date of notification from the Contractor. If the Contracting Officer concurs, the Contractor will be issued a Certificate of Final Acceptance.

If the Project Manager's inspection discloses that the Work is not in conformance with the Contract, the Construction Manager will advise the Contractor as to the particular defects to be remedied. Upon correction of the defects, the Contractor shall provide written notification to the Construction Manager and another inspection shall be made. This procedure shall be repeated until the Project Manager finds the work to be in compliance with the Contract.

Payments made to the Contractor before the final acceptance do not commit NJ TRANSIT to acceptance of the Project.

13.3.2 NJ TRANSIT shall not be precluded or estopped, by any measurement, estimate or certificate made either before or after the completion and final acceptance of the Project and payment therefor if such measurement, estimate or certificate is found to be in error or untrue, from showing the true amount and

character of the work performed and materials furnished by the Contractor, or from showing that any such measurement, estimate or certificate is incorrectly made or untrue, or that the work or materials do not conform in fact to the requirements of the Contract. NJ TRANSIT shall not be precluded or estopped, notwithstanding any such measurement, estimate or certificate, and payment made in accordance therewith, from recovering from the Contractor and its Surety such damages as it may sustain by reason of the Contractor's failure to comply or to have complied with the terms of the Contract.

13.3.3 The Contractor, without prejudice to the terms of the Contract, shall be liable to NJ TRANSIT at any time both before and after acceptance for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards NJ TRANSIT's rights under any warranty or guarantee.

14. FEDERAL PROVISIONS

14.1 EMPLOYEE PROTECTIONS-CONSTRUCTION ACTIVITIES

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 CFR Part 5, and 29 CFR 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 CFR Part 3.

14.1.1 MINIMUM WAGES

The Contractor shall comply with the following labor provisions. Should wage rates determined in accordance with the following conflict with those determined in accordance with Article 11.1, New Jersey Prevailing Wage Act, the greater of the two rates apply.

- (a) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the Construction or Development of the Project), will be paid unconditionally and not less often than once a week, and without

subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act, 29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at the time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs that cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided at 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed 29 CFR 5.5(a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- (b) 1. The Contracting Officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the Contract shall be classified in conformance with the wage determination. The Contracting Officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (a) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
 - (b) The classification is utilized in the area by the construction industry; and
 - (c) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
2. If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Contracting Officer agree on the classification

and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the Contracting Officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

3. In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting Officer or will notify the Contracting Officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to 29CFR5.5 shall be paid to all workers performing work in the classification under this Contract from the first day on which work is performed in the classification.

(c) Whenever the minimum wage rate prescribed in the Contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as a hourly rate, the Contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(d) If the Contractor does not make payments to a trustee or other third person, the Contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

14.1.2 WITHHOLDING

FTA shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the Contractor under this Contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime Contractor, so much of the accrued payments or

advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the Contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the Construction or Development of the Project), all or part of the wages required by the contract, FTA may, after written notice to the Contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

14.1.3 PAYROLLS AND BASIC RECORDS

- (a) Payrolls and basic records relating thereto shall be maintained by the Contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the Construction or Development of the Project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the Contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
- (b) 1. The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the FTA if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the FTA. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from

the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the FTA if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to NJ TRANSIT for transmission to the FTA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of 29 CFR 5.5(a)(3) for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

2. Each payroll submitted shall be accompanied by "Statement of Compliance", signed by the Contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the Contract and shall certify the following:
 - (a) That the payroll for the payroll period contains the information required to be provided under 29 CFR 5.5 (a)(3)(ii), the appropriate information is being maintained under 29 CFR 5.5 (a)(3)(i) and that such information is correct and complete;
 - (b) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the Contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth at 29 CFR Part 3;
 - (c) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
3. The weekly submission of a properly executed certification set forth on the reverse side of optional form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by 29 CFR 5.5(a)(3)(ii)(b).
4. The falsification of any of the above certifications may subject the Contractor or subcontractor to civil or criminal prosecution under 18 U.S.C., Section 1001 and 31 U.S.C., Section 231.

- (c) The Contractor or subcontractor shall make the records required under 29 CFR 5.5(a)(3)(i) available for inspection, copying, or transcription by authorized representatives of FTA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or make them available, FTA may, after written notice to the Contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

14.1.4 APPRENTICES AND TRAINEES

- (a) Apprentices - Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a Contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State apprenticeship agency recognized by the Office, withdraws approval of an apprenticeship program, the Contractor will no longer be permitted to utilize apprentices at less

than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) Trainees - Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the Contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) Equal Employment Opportunity - The utilization of apprentices, trainees, and journeymen under 29 CFR Part 5 shall be in conformity with the Equal Employment Opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

14.1.5 COMPLIANCE WITH COPELAND ACT REQUIREMENTS

The Contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated herein by reference.

14.1.6 CONTRACT TERMINATION: DEBARMENT

A breach of the Contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a Contractor and a subcontractor as provided in 29 CFR 5.12.

14.1.7 COMPLIANCE WITH DAVIS-BACON AND RELATED ACT REQUIREMENTS

All rulings and interpretations of the Davis-Bacon and related acts contained in 29 CFR Parts 1, 3, and 5 are incorporated herein by reference.

14.1.8 DISPUTES CONCERNING LABOR STANDARDS

Disputes arising out of the labor standards provisions of this Contract shall not be subject to the general disputes clause of this Contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and NJ TRANSIT, the U.S. Department of Labor, or the employees or their representatives.

14.1.9 CERTIFICATION OF ELIGIBILITY

(a) By entering into this Contract, the Contractor certifies that neither it (nor he nor she) nor any person or firm that has an interest in the Contractor's firm is a person or firm ineligible to be awarded government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(b) No part of this Contract shall be subcontracted to any person or firm ineligible for award of a government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

14.1.10 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.

14.1.11 VIOLATION; LIABILITY FOR UNPAID WAGES; LIQUIDATED DAMAGES

In the event of any violation of the requirements of 29 CFR Part 5.5(b)(1), the Contractor and any subcontractor responsible therefor 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 CFR 5.5(b)(1) in the sum of \$10 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 CFR 5.5(b)(1).

14.1.12 WITHHOLDING FOR UNPAID WAGES AND LIQUIDATED DAMAGES

FTA or NJ TRANSIT shall upon its own action or upon written request of an 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 CFR 5.5(b)(2).

14.1.13 SUBCONTRACTS

The Contractor or subcontractor shall insert in any subcontracts the clauses set forth in this Article 14.1 and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in this Article 14.1.

14.2 CLEAN WATER AND CLEAN AIR ACTS

14.2.1 The Contractor shall 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.; among other things:

- (a) With the provisions of the Safe Drinking Water Act of 1974, as amended, 42 U.S.C. § 300h et seq.
- (b) 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 note. The Contractor agrees to report violations to NJ TRANSIT, FTA and to the USEPA Assistant Administrator or Enforcement.

14.2.2 The Contractor agrees to comply with all applicable regulations, standards, or orders implementing the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. The Contractor agrees to report violations to NJ TRANSIT, FTA and to the USEPA Assistant Administrator for Enforcement.

14.2.3 Both the Clean Water and Clean Air requirements flow down to all subcontracts which exceed \$100,000. The \$100,000 limit includes indefinite quantities where the amount is expected to exceed this limit in any year.

14.3 BUY AMERICA

Pursuant to 49 U.S.C. 5323(j) (P.L. 106-274), and the regulation found at 49 CFR Part 661, the Contractor agrees that all iron, steel and manufactured products purchased or used as a result of this Contract shall be of domestic manufacture or origin unless a waiver of these provisions is granted by the U.S. Secretary of Transportation.

There are four exceptions to this requirement:

- (a) That its application would be inconsistent with the public interest.
- (b) That such materials or products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality.
- (c) With respect to rolling stock only, but including train control, communications, traction power equipment, 40 percent may be non-domestic manufacture, but final assembly of such products must take place in the United States.
- (d) That inclusion of domestic material will increase the cost of the overall project contract by more than 25 percent.

14.4 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 CFR 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.

14.5 CARGO PREFERENCE - USE OF U.S. FLAG VESSELS

The Contractor agrees to utilize privately owned United States-flag commercial vessels to ship at least 50 percent 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 CFR 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 20 working days following the date of loading for shipments originating within the United States, or within 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.

14.6 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.).

14.7 CONTRACT WORK HOURS AND SAFETY STANDARDS

Each Contractor shall be required to compute the wages of every mechanic and laborer on the basis of a standard work day of eight (8) hours and a standard work week of forty (40) hours. Work in excess of a work day or work week is permissible provided that the worker is compensated at a rate of not less than one and one half (1½) times the basic rate of pay for all hours worked in excess of eight (8) hours of any calendar day or forty (40) hours in the work week. No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous to his/her health and safety. The foregoing provisions are to be in compliance with Section 103 and 107 of the Contract Work Hours and Safety Standards Act (40 USC 327-330) as supplemented by Department of Labor Regulations (29 CFR, Part 5).

14.8 TITLE VI COMPLIANCE

During the performance of this Contract, the Contractor, for itself, its assignees and successors in interest and its subcontractors 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, creed, 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, Creed, 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 construction 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, creed, national origin, sex, 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.

14.9 PATENT RIGHTS

If any invention, improvement, or discovery of the Contractor is conceived or first actually reduced to practice in the course of or under this Contract, which invention, improvement or discovery may be patentable under the laws of the United States of America or any foreign country, the Contractor shall immediately notify NJ TRANSIT and provide a detailed report for transmission to FTA.

The rights and responsibilities of NJ TRANSIT, the Contractor and FTA with respect to such invention, improvement, or discovery will be determined in accordance with applicable Federal laws, regulations, policies and any waiver thereof.

14.10 RCRA REQUIREMENTS: BUILDING INSULATION PRODUCTS AND FLY ASH IN CONCRETE

The contractor agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 USC 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

14.10.1 Building Insulation Products

NJ TRANSIT has adopted minimum recovered material content standards for the following types of insulating material:

Material Type	Percent By Weight
Cellulose Loose Fill and Spray-On	75 percent post-consumer recovered paper

Perlite Composite Board	23 percent post-consumer recovered paper
<u>Plastic Rigid Foam,</u> <u>Polyisocyanurate/Polyurethane</u>	
Rigid Foam:	9 percent recovered material
Foam-in-place:	5 percent recovered material
Glass Fiber Reinforced:	6 percent recovered material
Phenolic Rigid Foam	5 percent recovered material
Rock Wool	50 percent recovered material

Note: The minimum content standards are based on the weight of material (not volume) in the insulating core.

The Contractor agrees to certify, prior to delivery, that building insulation products listed above which are to be supplied under the Contract shall meet or exceed the applicable minimum content standard.

Where NJ TRANSIT has specified building insulation products for which no minimum content standard has been established, the Contractor agrees to certify, prior to delivery, the minimum percentage of recovered materials that such products shall contain.

Also, the Contractor agrees to provide, at the time of installation, an estimate of the actual total percentage of recovered material contained in the building insulation product and an estimate of the product's cost.

The Contractor shall also obtain from the original manufacturer documentation that verifies the recovered material content of the building insulation products supplied. Such documentation should include manufacturer records identifying batch numbers and total percentage and type of recovered materials contained in the product. If specific batch data is unavailable, the average of recovered materials used by the manufacturer in a specific insulation product over a one-month period may be used.

The requirement to supply building insulation products containing recovered materials to the maximum extent practicable is subject to the following limitations:

- (1) Unsatisfactory level of competition;
- (2) Unavailability within a reasonable period of time;
- (3) Inability to meet the performance standards in the applicable specifications;
- (4) Unavailability at a reasonable price.

Should the Contractor claim that one or more of the four limitations identified above applies to any building insulation products to be delivered or installed under this Contract, the Contractor shall so notify the Construction Manager in writing.

NJ TRANSIT reserves the right to reject any claims where the Contractor has failed to provide adequate evidence that one or more of the four limitations applies.

Failure to deliver or install building insulation products in accordance with these requirements shall be considered a material breach of the Contract.

14.10.2 Fly Ash In Concrete

Portland cement, Type II, which has been pre-blended with a maximum of 15 percent fly ash, by weight, and conforming to ASTM C 595 may be used. When blended portland cement is used, no additional fly ash shall be added.

Fly ash for portland cement concrete shall conform to ASTM C 618, Class C or Class F except that the loss on ignition shall be not more than 3 percent. When Class C fly ash is used, the magnesium oxide shall not exceed 2.5 percent. Before each source of fly ash is approved, certified results of test conducted by a testing agency shall be submitted to and verified by the Department. Accompanying the certification shall be a statement from the supplier listing the source and type of coal, the methods used to burn, collect, and store the fly ash, and the quality control measures employed.

Conformance to the requirements for loss on ignition and fineness shall be determined by the supplier for each truck load of fly ash delivered to the mixing site. The test values determined shall be included on the delivery ticket. The Engineer may require that the fly ash not be used until the Department has performed tests for loss on ignition and fineness.

Fly ash for other uses shall conform to ASTM C 593 except that the loss on ignition shall be not more than 10 percent and the combined content of silica and aluminum oxide shall be a minimum of 50 percent.

14.11 FEDERAL EEO PROVISIONS FOR CONSTRUCTION CONTRACTS

The Contractor, in addition to complying with Article 11.2, shall comply with the following Federal EEO Provisions for Construction Contracts:

14.11.1 EQUAL EMPLOYMENT OPPORTUNITY

During the performance of this contract, the Contractor agrees as follows:

- a.) In connection with the execution of this Contract, the Contractor shall not discriminate against any employee or applicant for employment because of race, color, religion, sex or national origin. The Contractor shall take affirmative action to ensure that applicants are employed, and that employees are treated during their employment without regard to their race, color, religion, sex or national origin. 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. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- b.) The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.
- c.) The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representative of the Contractor's commitments under this Article, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- d.) The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, as amended by Executive Order 11375, and of the rules, regulations and relevant orders of the Secretary of Labor.
- e.) The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor or pursuant thereto, and will permit access to his books, records and accounts by the Federal Transit Administration (FTA) and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- f.) In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations or orders, this contract may be cancelled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions as may be imposed and remedies invoked as provided in the said Executive Order or by rule, regulation or order of the Secretary of Labor, or as otherwise provided by law.
- g.) The Contractor will include the provisions of paragraphs (a) through (g) in every subcontract or purchase order unless exempted by rules, regulations or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as FTA may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event a

Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by FTA, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

14.11.2 NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

- a.) The Contractor's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.
- b.) The goals and timetables for minority and female participation expressed in percentage terms for the Contractor's aggregate work force in each trade on all construction work in the covered area, are as follows:

GOALS FOR MINORITY PARTICIPATION (Timetable Until Further Notice)

<u>County</u>	<u>Goal Percent</u>
Atlantic	18.2
Bergen	22.6
Burlington	17.3
Camden	17.3
Cape May	14.5
Cumberland	16.0
Essex	17.3
Gloucester	17.3
Hudson	12.8
Hunterdon	17.0
Mercer	16.4
Middlesex	5.8
Monmouth	9.5
Morris	17.3
Ocean	17.0
Passaic	12.9
Salem	12.3
Somerset	17.3
Sussex	17.0
Union	17.3
Warren	1.6

GOALS FOR FEMALE PARTICIPATION (Timetable Until Further Notice)

<u>County</u>	<u>Goal Percent</u>
All	6.9

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Employment Opportunity Clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established for the geographical area where the contract resulting from this solicitation is to be performed. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract and in each trade, and the Contractor shall make a good faith effort to employ minorities and women on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

- c.) The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within ten (10) working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor; employer identification number; estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the contract is to be performed.
- d.) As used in this notice, and in the contract resulting from this solicitation, the "covered area" is the State of New Jersey.

14.11.3 STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)

- 1. As used in these specifications:
 - (a) "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - (b) "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - (c) "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U.S. Treasury Department Form 941.

- (d) "Minority" includes:
- (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).

2. Whenever the Contractor, or any subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation and which is set forth in the solicitations from which this contract resulted.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U.S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors or subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or subcontractor's failure to make good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7(a) through (p) of this Article. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. The Contractor is expected to make substantially uniform progress toward its goals in each craft during the period specified.

5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U.S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - (a) Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, will assign two or more women to each construction project. The Contractor shall specifically ensure that all foremen, superintendents, and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites or in such facilities.
 - (b) Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - (c) Maintain a current file of the names, addresses and telephone numbers of each minority and female off-the-street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union, or, if referred, not employed by the Contractor, this shall be documented in the file with the reason therefor, along with whatever additional actions the Contractor may have taken.

- (d) Provide immediate written notification to the Director and the Contract Compliance Officer of NJ TRANSIT when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or a woman sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
- (e) Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs, especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7(b) above.
- (f) Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting his EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper, annual report, etc.; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
- (g) Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination or other employment decisions including specific review of these items with on-site supervisory personnel such as Superintendents, General Foremen, etc., prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed, and disposition of the subject matter.
- (h) Disseminate the Contractor's EEO policy externally by including it in any advertising in the news media, specifically including minority and female news media, and providing written notification to and discussing the Contractor's EEO policy with other contractors and subcontractors with whom the Contractor does or anticipates doing business.

- (i) Direct its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and female recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by any recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures, and tests to be used in the selection process.
- (j) Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of a Contractor's work force.
- (k) Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- (l) Conduct, at least annually, an inventory and evaluation at least of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for, through appropriate training, etc., such opportunities.
- (m) Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
- (n) Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractors' associations and other business associations.
- (o) Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.

8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7 (a) through (p)). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7(a) through (p) of this Article, provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female work force participation, makes a good faith effort to meet its individual goals and timetables, and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
9. A single goal for minorities and a separate goal for women have been established. The Contractor, however is required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female, and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner (for example, even though the Contractor has achieved its goals for women generally, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized).
10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, or national origin.
11. The Contractor shall not enter into any subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246, as amended.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and of the Equal Employment Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations, by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.

13. The Contractor, in fulfilling its obligations under this Article, shall implement specific affirmative action steps, at least as extensive as those standards prescribed in Paragraph 7 of these specifications, so as to achieve maximum results from its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or this Article, the Director shall proceed in accordance with 41 CFR 60-4.8. In connection with the foregoing, NJ TRANSIT or its Contract Compliance Officer may utilize any remedies that may be available.
14. The Contractor shall designate a responsible official to monitor all employment related activity to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions herein as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, Contractors shall not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

14.12 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".

- 1.) 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.
- 2.) 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 Contract and entitled "Certification for Contracts, Grants, Loans and

Cooperative Agreements", that the Contractor or subcontractor, as applicable, has not made, and will not make, any payment prohibited by Paragraph 1.) of this Article.

- 3.) 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 1.) of this Article if paid for with appropriated funds, shall file with NJ TRANSIT a disclosure form, which may be obtained from the Contracting Officer, entitled "Disclosure of Lobbying Activities".
- 4.) Any certification or disclosure form filed under Paragraphs 2.) and 3.) 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.
- 5.) 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.
- 6.) 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.

14.13 SEISMIC SAFETY

The Contractor agrees that any new building or addition to an existing building will be designed and constructed in accordance with the standards for Seismic Safety required in USDOT Seismic Safety Regulations, 49 CFR Part 41, and will certify to compliance to the extent required by the regulation. The Contractor also agrees to ensure that all work performed under this Contract including work performed by a subcontractor is in compliance with the standards required by the Seismic Safety Regulations and the certification of compliance issues on the project.

14.14 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)(2) by refraining from using exclusionary or discriminatory specifications in the performance of the Work.

14.15 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.

14.16 FALSE OR FRAUDULENT STATEMENTS AND CLAIMS

14.16.1 The Contractor recognizes that the requirements of the Program Fraud Civil Remedies Act of 1986, as amended, 49 USC §§ 3801 et seq. and USDOT regulations, "Program Fraud Civil Remedies," 49 CFR 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.

14.16.2 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 § 5307, 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.

14.17 FEDERAL AID, LAWS AND REGULATIONS

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. The Contractor acknowledges that Federal requirements may change and the changed requirements will apply to the project as required, unless the Federal Government determines otherwise.

All Contractual provisions required by DOT, as set forth in FTA circular 4220.1E, dated April 15, 1996, 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 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 Terms and conditions.

STATE OF NEW JERSEY
EEO PROVISIONS FOR CONSTRUCTION CONTRACTS

I. BID REQUIREMENTS

This contract is subject to 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), and in accordance with the rules and regulations promulgated pursuant thereto, the bidder agrees to comply with the following:

At the time the signed contract is returned to NJ TRANSIT, the said bidder (contractor) shall submit to NJ TRANSIT and the New Jersey Department of Treasury, Division of Public Contracts Equal Employment Opportunity Compliance an Initial Project Workforce Report (Form AA-201) consisting of forms provided by NJ TRANSIT and completed by the bidder (contractor) in accordance with Subchapter 7 of the regulations promulgated by the Treasurer pursuant to P.L. 1975, c.127.

II. EXECUTIVE ORDER 151 MANDATORY EEO AND AFFIRMATIVE ACTION REQUIREMENTS

It is the policy of the New Jersey Transit Corporation that its contracts should create a workforce that reflects the diversity of the State of New Jersey. Therefore, contractors engaged by the New Jersey Transit Corporation to perform under a construction contract shall put forth a good faith effort to engage in recruitment and employment practices that further the goal of fostering equal opportunities to minorities and women.

The contractor must demonstrate to the New Jersey Transit Corporation's satisfaction that a good faith effort was made to ensure that minorities and women have been afforded equal opportunity to gain employment under the New Jersey Transit Corporation's contract with the contractor. Payment may be withheld from a contractor's contract for failure to comply with these provisions.

Evidence of a "good faith effort" includes, but is not limited to:

1. The Contractor shall recruit prospective employees through the State Job bank website, managed by the Department of Labor and Workforce Development, available online at <http://NJ.gov/JobCentralNJ>.
2. The Contractor shall keep specific records of its efforts, including records of all individuals interviewed and hired, including the specific numbers of minorities and women.
3. The Contractor shall actively solicit and shall provide the New Jersey Transit Corporation with proof of solicitations for employment, including but not limited to advertisements in general circulation media, professional service publications and electronic media.
4. The Contractor shall provide evidence of efforts described at 2 above to the New Jersey Transit Corporation no less frequently than once every 12 months.
5. The Contractor shall comply with the requirements set forth at N.J.A.C. 17:27.

III. SUBCONTRACTS; EQUAL EMPLOYMENT GOALS

The contractor agrees to incorporate these State of New Jersey EEO Provisions for Construction Contracts in its construction subcontracts.

The New Jersey Department of Treasury, Division of Public Contracts Equal Employment Opportunity Compliance (hereinafter "Division") shall individually establish the targeted minority and women employment goals for determining good faith equal employment opportunity efforts by each construction

contractor and subcontractor for each trade on each contract. The Division shall review the trades to be utilized during the completion of the work as reported on the Initial Project Workforce Report and determine the targeted employment goals based upon the number of qualified minorities and women available as reported by the New Jersey Department of Labor, Division of Planning and Research in its report, EEO Tabulations—Detailed Occupations by Race/Hispanic Groups.

In accordance with N.J.A.C. 17:27, Contractors and subcontractors are required to make a good faith effort to provide equal employment opportunity for minorities and women. Failure to make good faith efforts to provide equal employment opportunity for minorities and women may result in sanctions including fines/penalties, withholding of payment, termination of the contract, suspension/debarment or such other action as provided by law.

The contractor shall obtain the targeted employment goals from the Division's website at www.state.nj.us/treasury/contract_compliance or request the employment goals from the Division of Public Contracts Equal Employment Opportunity Compliance after submitting the initial project workforce report to the Division of Public Contracts Equal Employment Opportunity Compliance.

The contractor shall then be responsible for the completion and submittal of a Monthly Project Workforce Report (Form AA-202) for the duration of this contract.

(NOTE: FOR THE PURPOSE OF THIS CONTRACT THE "PUBLIC AGENCY COMPLIANCE OFFICER" REFERENCED BELOW IS NJ TRANSIT'S VICE PRESIDENT OF DIVERSITY PROGRAMS AND THE "PUBLIC AGENCY" IS NJ TRANSIT.)

IV. MANDATORY CONTRACT LANGUAGE

N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27 MANDATORY AFFIRMATIVE ACTION LANGUAGE FOR CONSTRUCTION CONTRACTS

During the performance of this contract, the contractor agrees as follows:

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity 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. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

The contractor or subcontractor, where applicable, will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Division may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, A, B and C, as long as the Division is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Division, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2.

The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

(A). If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et seq., as supplemented and amended from time to time, and the Americans with Disabilities Act. If the contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the contractor or subcontractor agrees to afford equal employment opportunities to minority and women workers directly, consistent with this chapter. If the contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the contractor or subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines or is so notified by the Division that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.

(B). If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (A) above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor agrees to take the following actions:

(1). To notify the public agency compliance officer, the Division, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;

(2). To notify any minority and women workers who have been listed with it as awaiting available vacancies;

(3). Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;

(4). To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;

(5). If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and non-discrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions;

(6). To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:

(i) If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in order to perform the work of the construction trade, the contractor or subcontractor shall in good faith determine the qualifications of such individuals. The contractor or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification standards in conformity with the equal employment opportunity and non-discrimination principles set forth in this chapter. However, a contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Division. If necessary, the contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below.

(ii). The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in paragraph (i) above, whenever vacancies occur. At the request of the Division, the contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.

(iii). If, for any reason, said contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the public agency compliance officer and to the Division.

(7). To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Division and submitted promptly to the Division upon request.

(C). The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that, in implementing the procedures of (B) above it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Division an initial project workforce report (Form AA 201) provided to the public agency by the Division for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of this contract to the Division and to the public agency compliance officer.

The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the-job programs for outreach and training of minorities and women.

(D). The contractor and its subcontractors shall furnish such reports or other documents to the Division of Public Contracts Equal Employment Opportunity Compliance as may be requested by the Division from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Public Contracts Equal Employment Opportunity Compliance for conducting a compliance investigation pursuant to Subchapter 10 of the Administrative Code at N.J.A.C. 17:27.

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____

_____ as PRINCIPAL, and _____

_____ a corporation organized and existing under the laws of the State of _____

and duly authorized to do business in the State of New Jersey, as SURETY, are held and firmly bound unto the New Jersey Transit Corporation in the penal sum of ten percent (10%) of the amount bid for the project(s) listed below, for the payment of which well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed, sealed, and dated this _____ day of _____ two thousand and ____

_____.

The condition of the above obligation is such that whereas the principal is herewith submitting a proposal for:

SEALED BID NO. _

NOW, THEREFORE, THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that if the said principal shall execute a contract and give bond for the faithful performance thereof within ten (10) state business days after being notified in writing of the award of such contract to principal, or if the principal or surety shall pay the obligee the sum, not exceeding the penalty hereof, by which the amount of the contract, covering the said proposal, properly and lawfully executed by and between the obligee and some third party, may exceed the amount bid by principal, then this obligation shall be void; otherwise it shall remain in full force and effect.

Witness or Attest:

(Principal)

Witness or Attest:

(Surety)

Certification to the Authority of the attorney in fact to commit the surety company must accompany this Bond, and true and correct statement of the financial condition of said surety company.

APPENDIX A

SUBCONTRACTOR EVALUATION DATA FORM

(PROJECT)

(SUBCONTRACTOR)

(DATE)

SUBCONTRACTOR EVALUATION DATA FORM

1. Proposed Project: _____
2. Proposed work or trade: _____ Division Nos.: _____
3. Approximate Contract Amount: _____
4. Company Name: _____
_____ Corp. _____ Partnership _____ Individual _____ Joint Venture
5. Principal Office Location: _____
Phone: _____ Person in Charge: _____
6. Name and Title of Principals:

7. Branch Office Locations:

Phone: _____

Phone: _____
8. Office which would be directly responsible for work at this project.

9. Subcontractor Information Data Form as required by Federal Regulation, submitted herewith.
10. Contractor has confirmed that the listed Subcontractor 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 Department of Treasury, Consolidated Debarment Report and Contractor has also confirmed that the listed Subcontractor is currently registered and active with no exclusion on the consolidated U.S. Government, System for Award Management (SAM) database.
11. Number of years organization has been under present name:

12. List all other names under which the company has done business and for how many years.

13. State Licensed or Certified to do business in:

14. Certificate of registration pursuant to P.L.1999, C.238, "THE PUBLIC WORKS CONTRACTOR REGISTRATION ACT": (Copy attached) Yes: _____ No: _____
15. Business Registration Certificate (P.L. 2004, c.57): (Copy attached) Yes: _____ No: _____

16. Have you ever failed to complete any work awarded to you? If so, note When, Where, And Why:

17. List Name, address, type of work and person in charge for any sub-sub, 3rd tier subcontractors, or major suppliers to whom portions of this sub-contract will be left:

Name: _____ Phone: _____ Attn: _____
Address: _____ Work: _____ Value: _____
Name: _____ Phone: _____ Attn: _____
Address: _____ Work: _____ Value: _____
Name: _____ Phone: _____ Attn: _____
Address: _____ Work: _____ Value: _____

18. Do you qualify as a DBE/SBE/ESBE on this project: _____

19. Surety company that normally handles bonding: _____

Company Name: _____ No. of Years: _____

Agent: _____ Phone: _____

Address: _____

Bond Limits: _____

20. Project references: (List four projects where you performed similar work to this project):

<u>NAME</u>	<u>ADDRESS</u>	<u>PHONE</u>	<u>CONTACT</u>
-------------	----------------	--------------	----------------

_____	_____	_____	_____
_____	_____	_____	_____

21. Are you listed in Dunn & Bradstreet: _____ What City? _____

22. List all projects that you are participating in litigation against the owner:

23. Annual Billings: _____

24. The undersigned certifies that it is aware of the terms, conditions, specifications and other Contract requirements of the Prime Contract.

25. The undersigned certifies the truth and correctness of all statements and of all answers to questions made herein.

COMPANY: _____
BY: _____
TITLE: _____

NJ TRANSIT
SUBCONTRACTOR INFORMATION
DATA FORM

PURPOSE:

Federal Regulations require that NJ TRANSIT obtain information on an ongoing basis from all companies seeking to do business with NJ TRANSIT as prime contractors or subcontractors. As part of the subcontractor evaluation process, prime contractors shall provide the required information for all subcontractors performing work under the contract.

Information may be completed on-line by visiting the following website:

<http://www.tcgionline.com/njtransitbidresponse.asp>

Prime contractors will need to create a company profile and password by clicking on the "Add or Update Bidder Profile" link.

Once the company profile and password are created, prime contractors may add bid and subcontractor information by clicking on appropriate links.

Include the printed form with the Subcontractor Evaluation Data Form.*

Completion and submission of this form will:

1. Place the firm in NJ TRANSIT'S database for use in developing bidder's lists;
2. Assist NJ TRANSIT in establishing appropriate small and disadvantaged business enterprise goals; and,
3. Alert NJ TRANSIT of any changes in the goods and services provided.

Important Notice about DBE/SBE/ESBE Certification:

Submission of this form does not certify a firm as a Disadvantaged Business with either NJ TRANSIT or the State of New Jersey. Contact NJ TRANSIT'S Office of Business of Diversity (973) 491-8060 for clarification of this form and for information regarding certification. For questions regarding the bid package, contact the contract specialist.

NEW JERSEY TRANSIT CORPORATION SUBCONTRACTOR INFORMATION DATA FORM

(MANDATORY FORM TO BE FILLED OUT ENTIRELY)

NJT Contract No: _____ **Project Name:** _____

Prime Contractor Name: _____

Address: _____

Complete the information below for **ALL SUBCONTRACTORS**

	SUBCONTRACTOR
<i>Company's Full Name</i>	
<i>Address</i>	
<i>City</i>	
<i>Zip</i>	
<i>County</i>	
<i>Phone</i>	
<i>Fax</i>	
<i>E-mail</i>	
<i>Owner</i>	
<i>Date Established</i>	
<i>Date Certified</i>	
<i>Ethnicity</i>	
<i>Gender</i>	
<i>Certification Status: Non SBE or SBE I, SBE II, SBE III, SBE IV or SBE V (please indicate all that apply)</i>	
<i>Federal Tax ID # / SSN #</i>	
<i>Annual Gross Receipts:</i> A – Less than \$500K B - \$500K to \$1M C - \$1M to \$2M D - \$2M to \$5M E - \$5M and over <i>*indicate the letter that applies</i>	
<i>Primary Industry Operation Code:</i>	

APPENDIX B- CLOSEOUT FORMS

Affidavit of Payment of Debts and Claims

Affidavit of Release of Liens

Consent of Surety to Final Payment

Certificate of amounts due workers for wages on the work pursuant
to N.J.S.A. 34:11-56.25 et seq.

Certificate of Substantial Completion

Certificate of Partial Acceptance

Certificate of Final Acceptance

Proposed Final Certificate of Payment

Final Certificate of Payment

Subcontractor Affidavit of Payment of Debts and Claims

Subcontractor Affidavit of Release of Liens

Consent of Surety to Final Payment to the Subcontractor

Subcontractor's Certificate of amounts due workers for wages on the work pursuant
to N.J.S.A. 34:11-56.25 et seq.

Certificate of Final Acceptance of Subcontractor's Work

**AFFIDAVIT OF PAYMENT
OF DEBTS AND CLAIMS**

**TO: New Jersey Transit Corporation
One Penn Plaza East
Newark, New Jersey 07105-2246**

CONTRACT NO.:

CONTRACTOR:

PROJECT:

CONTRACT DATE:

STATE OF:

COUNTY OF:

The undersigned, pursuant to Sub-article 12.8.1 of the Contract's General Provisions for Construction, hereby certifies that, except as listed below he has paid in full or has otherwise satisfied all obligations for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the CONTRACTOR for damages arising in any manner in connection with the performance of the Contract referenced above for which the NEW JERSEY TRANSIT CORPORATION or its property might in any way be held responsible.

EXCEPTIONS: *(If none, write "NONE". The CONTRACTOR shall furnish bond satisfactory to the NEW JERSEY TRANSIT CORPORATION for each exception.)*

**SIGNED,
CONTRACTOR**

*Subscribed and sworn to before me this
_____ day of _____, 20_____*

Notary Public of

My commission expires _____, 20_____

By: _____

Title: _____

(SEAL)

AFFIDAVIT OF RELEASE OF LIENS

TO: New Jersey Transit Corporation
One Penn Plaza East
Newark, New Jersey 07105-2246

CONTRACT NO.:

CONTRACTOR:

PROJECT:

CONTRACT DATE:

STATE OF:

COUNTY OF:

The undersigned, pursuant to Sub-article 12.8.1 of the Contract's General Provisions for Construction, hereby certifies that to the best of his knowledge, information and belief, except as listed below, there are no liens filed against any property of the NEW JERSEY TRANSIT CORPORATION by the CONTRACTOR, or any subcontractors, suppliers of materials and equipment, or performers of work, labor or services arising from the performance of the Contract referenced above.

EXCEPTIONS: (If none, write "NONE". The CONTRACTOR shall furnish bond satisfactory to the NEW JERSEY TRANSIT CORPORATION for each exception.)

SIGNED,
CONTRACTOR

Subscribed and sworn to before me this
_____ day of _____, 20_____

Notary Public of

My commission expires _____, 20_____

By: _____

Title: _____

(SEAL)

**CONSENT OF SURETY
TO FINAL PAYMENT**

Bond No.

**TO: New Jersey Transit Corporation
One Penn Plaza East
Newark, New Jersey 07105-2246**

CONTRACT NO.:

CONTRACTOR:

PROJECT:

CONTRACT DATE:

In accordance with the General Provisions for Construction, Sub-article 12.8.1 of the Contract between the NEW JERSEY TRANSIT CORPORATION and the CONTRACTOR as indicated above, the

, SURETY COMPANY

on bond of

, CONTRACTOR

hereby approves to the final payment to the CONTRACTOR, and agrees that final payment to the CONTRACTOR shall not relieve the SURETY COMPANY of any of its obligations to

**NEW JERSEY TRANSIT CORPORATION
One Penn Plaza East
Newark, New Jersey 07105-2246**

, OWNER

as set forth in said Surety Company's bond.

IN WITNESS WHEREOF, the SURETY COMPANY has hereunto set its hand this ____ day of _____, 20__.

Surety Company

Attest: _____

Signature of Authorized Representative

(Seal):

Title

CERTIFICATE OF AMOUNTS DUE
WORKERS FOR WAGES

TO: New Jersey Transit Corporation
One Penn Plaza East
Newark, New Jersey 07105-2246

CONTRACT NO.:

CONTRACTOR:

PROJECT:

CONTRACT DATE:

The undersigned CONTRACTOR, pursuant to Sub-articles 11.1.6 and 12.8.1 of the Contract's General Provisions for Construction, hereby certifies that, except as listed below he has paid in full all wages earned on the work to all laborers, mechanics, apprentices, trainees, watchmen, guards, and workers in general employed by him or by any subcontractor performing work under the Contract on the Project. It is further certified that all laborers, mechanics, apprentices, trainees, watchmen, guards, and workers in general have been paid wages at rates not less than those required by the Contract provisions and pursuant to N.J.S.A. 34:11-56.25 et seq., and that the work performed by each such laborer, mechanic, apprentice, trainee, watchman, guard, and worker in general conformed to the classifications set forth in the Contract or training program provisions applicable to the wage rate paid.

EXCEPTIONS: (If none, write "NONE"; for each exception, the CONTRACTOR shall provide complete and detailed explanation.)

SIGNED,
CONTRACTOR

Subscribed and sworn to before me this
_____ day of _____, 20____

Notary Public of
My commission expires _____, 20____

(SEAL)

By: _____

Title: _____

Date: _____

CERTIFICATE OF SUBSTANTIAL COMPLETION

TO: New Jersey Transit Corporation
One Penn Plaza East
Newark, New Jersey 07105-2246

CONTRACT NO.:

CONTRACTOR:

PROJECT:

CONTRACT DATE:

The undersigned Project Manager hereby certifies that a field inspection performed on _____, 20__ at the above captioned Project revealed that the CONTRACTOR has substantially completed his base contract and all authorized additional work for the following items of work:

All Contract Bid Items

Bid Item(s) No.

Other

It is further certified that the items of work above enumerated have been satisfactorily completed in accordance with the Contract Documents, and that as of the aforementioned date the NEW JERSEY TRANSIT CORPORATION may take beneficial occupancy of the subject work.

The Remaining Work to be completed in order to achieve one hundred percent (100%) completion is hereby listed in the Punch List Work attached hereto.

SIGNED,

ACCEPTED,

NJ TRANSIT

CONTRACTOR

By: _____

By: _____

Title: _____

Title: _____

Date: _____

Date: _____

CERTIFICATE OF PARTIAL ACCEPTANCE

TO: New Jersey Transit Corporation
One Penn Plaza East
Newark, New Jersey 07105-2246

CONTRACT NO.:

CONTRACTOR:

PROJECT:

CONTRACT DATE:

The undersigned Project Manager hereby certifies that a field inspection performed on _____, 20__ at the above captioned Project revealed that the CONTRACTOR has completed one hundred percent (100%) of the work described below within its base contract and all authorized additional work for the following items of work:

Bid Item(s) No.

Other

It is further certified that the items of work above enumerated have been satisfactorily completed in accordance with the Contract Documents, and that as of the aforementioned date the NEW JERSEY TRANSIT CORPORATION may take beneficial occupancy of the subject work, subject to the terms of general provision Sub-Article 13.1.

SIGNED,

ACCEPTED,

NJ TRANSIT

CONTRACTOR

By: _____

By: _____

Title: _____

Title: _____

Date: _____

Date: _____

CERTIFICATE OF FINAL ACCEPTANCE

**TO: New Jersey Transit Corporation
One Penn Plaza East
Newark, New Jersey 07105-2246**

CONTRACT NO.:

CONTRACTOR:

PROJECT:

CONTRACT DATE:

In accordance with Sub-article 12.8.1.9 and 13.3.1 of the Contract's General Provisions for Construction, the undersigned CONTRACTOR hereby notifies that as of _____, 20__ the base contract and all authorized additional work has been 100% completed, including but not limited to the Remaining Work (Punch List Work) listed on the attached Certificate(s) of Substantial Completion.

SIGNED,

CONTRACTOR

By: _____

Title: _____

The undersigned Project Manager hereby certifies that on _____, 20__ a final field inspection was performed on the Project and all base and authorized additional work found to be 100% complete in accordance with the Contract Documents.

In testimony thereof, this Certificate of Final Acceptance is signed on this ____ day of _____, 20__.

SIGNED,

CONCURRENCE,

Project Manager

Contracting Officer

Title

Title

PROPOSED FINAL CERTIFICATE OF PAYMENT

TO: New Jersey Transit Corporation
One Penn Plaza East
Newark, New Jersey 07105-2246

CONTRACT NO.:

CONTRACTOR:

PROJECT:

CONTRACT DATE:

The undersigned Project Manager, considering that

, CONTRACTOR

on the above referenced Contract has completed one hundred percent (100%) of the base contract and all authorized additional work, and fulfilled all his contractual obligations including those enumerated in Sub-article 12.8.1 of the Contract's General Provisions for Construction, hereby proposes that a Final Payment in the amount of _____ be issued to said CONTRACTOR in compensation for the unpaid balance of his work under this Contract.

Table with 2 columns: Description and Amount. Rows include Original Contract Value, Total Contract Changes Value, Changed Contract Value, Less: Payments to Date, Balance Due Contractor, Less: Deductions, and Total Final Payment Amount.

(1) Deductions Explanations:

It is further understood that this Final Payment includes all direct and indirect costs attributable to this Contract, and that the CONTRACTOR will not seek further compensation for any other costs related to this Contract.

SIGNED,

ACCEPTED CONTRACTOR,

Title: _____
Date: _____

Title: _____
Date: _____

FINAL CERTIFICATE OF PAYMENT
(Attach to Final Payment Request)

TO: New Jersey Transit Corporation
One Penn Plaza East
Newark, New Jersey 07105-2246

CONTRACT NO.:

CONTRACTOR:

PROJECT:

CONTRACT DATE:

The undersigned Contracting Officer, considering that

, CONTRACTOR

on the above referenced Contract has completed one hundred percent (100%) of the base contract and all authorized additional work, and fulfilled all his contractual obligations including those enumerated in Sub-article 12.8.1 of the Contract's General Provisions for Construction, hereby proposes that a Final Payment in the amount of _____ be issued to said CONTRACTOR in compensation for the unpaid balance of his work under this Contract.

Original Contract Value:	\$	
Total Contract Changes Value		_____
Changed Contract Value:	\$	_____
Less: Payments to Date:		_____
Balance Due Contractor:	\$	_____
Less: Deductions:		_____ (1)
Total Final Payment Amount:	\$	<u>_____</u>

(1) Deductions Explanations:

It is further understood that this Final Payment includes all direct and indirect costs attributable to this Contract, and that the CONTRACTOR will not seek further compensation for any other costs related to this Contract.

SIGNED,

ACCEPTED CONTRACTOR,

Title: _____

Title: _____

Date: _____

Date: _____

SUBCONTRACTOR AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS

**TO: New Jersey Transit Corporation
One Penn Plaza East
Newark, New Jersey 07105-2246**

CONTRACT NO.:

CONTRACTOR:

PROJECT:

SUBCONTRACTOR:

CONTRACT DATE:

STATE OF:

COUNTY OF:

The undersigned, pursuant to Sub-article 12.6.7 of the Contract's General Provisions for Construction, hereby certifies that, except as listed below, he has paid in full or has otherwise satisfied all obligations for all materials and equipment furnished for all work, labor, and services performed, and for all known indebtedness and claims against the SUBCONTRACTOR for damages arising in any manner in connection with the performance of the Contract referenced above for which the NEW JERSEY TRANSIT CORPORATION or its property might in any way be held responsible.

EXCEPTIONS: *(If none, write "NONE". The CONTRACTOR shall furnish bond satisfactory to the NEW JERSEY TRANSIT CORPORATION for each exception.)*

**SIGNED,
SUBCONTRACTOR**

*Subscribed and sworn to before me this
_____ day of _____, 20_____*

Notary Public of

My commission expires _____, 20_____

By: _____

Title: _____

(SEAL)

**SIGNED,
CONTRACTOR**

*Subscribed and sworn to before me this
_____ day of _____, 20_____*

Notary Public of

My commission expires _____, 20_____

By: _____

Title: _____

(SEAL)

SUBCONTRACTOR AFFIDAVIT OF
RELEASE OF LIENS

**TO: New Jersey Transit Corporation
One Penn Plaza East
Newark, New Jersey 07105-2246**

CONTRACT NO.:

CONTRACTOR:

PROJECT:

SUBCONTRACTOR:

CONTRACT DATE:

STATE OF:

COUNTY OF:

The undersigned, pursuant to Sub-article 12.6.7 of the Contract's General Provisions for Construction, hereby certifies that to the best of his knowledge, information and belief, except as listed below, there are no liens filed against any property or Contract funds of the NEW JERSEY TRANSIT CORPORATION by the SUBCONTRACTOR, or its suppliers of materials and equipment, or performers of work, labor or services arising from the performance of the Contract referenced above.

EXCEPTIONS: *(If none, write "NONE". The CONTRACTOR shall furnish bond satisfactory to the NEW JERSEY TRANSIT CORPORATION for each exception.)*

SIGNED,

Subscribed and sworn to before me this

SUBCONTRACTOR

_____ day of _____, 20_____

Notary Public of

My commission expires _____, 20_____

By: _____

(SEAL)

Title: _____

SIGNED,

Subscribed and sworn to before me this

CONTRACTOR

_____ day of _____, 20_____

Notary Public of

My commission expires _____, 20_____

By: _____

(SEAL)

Title: _____

**CONSENT OF SURETY
PAYMENT TO THE SUBCONTRACTOR**

Bond No.

**TO: New Jersey Transit Corporation
One Penn Plaza East
Newark, New Jersey 07105-2246**

CONTRACT NO.:

CONTRACTOR:

PROJECT:

SUBCONTRACTOR:

CONTRACT DATE:

In accordance with the General Provisions for Construction, Sub-article 12.6.7, of the Contract between the NEW JERSEY TRANSIT CORPORATION and the CONTRACTOR as indicated above, the

, SURETY COMPANY

on bond of

, CONTRACTOR

hereby consents to the final payment to the SUBCONTRACTOR, and agrees that final payment to the SUBCONTRACTOR shall not relieve the SURETY COMPANY of any of its obligations to

**NEW JERSEY TRANSIT CORPORATION
One Penn Plaza East
Newark, New Jersey 07105-2246**

, OWNER

as set forth in said Surety Company's bond.

IN WITNESS WHEREOF, the SURETY COMPANY has hereunto set its hand this ____ day of _____, 20__.

Attest: _____

Surety Company

(Seal):

Signature of Authorized Representative

Title

SUBCONTRACTOR'S CERTIFICATE OF AMOUNTS DUE WORKERS FOR WAGES

**TO: New Jersey Transit Corporation
One Penn Plaza East
Newark, New Jersey 07105-2246**

CONTRACT NO.:

CONTRACTOR:

PROJECT:

SUBCONTRACTOR:

CONTRACT DATE:

The undersigned SUBCONTRACTOR, pursuant to Sub-articles 11.1.6 and 12.6.7 of the Contract's General Provisions for Construction, hereby certifies that, except as listed below, he has paid in full all wages earned on the work to all laborers, mechanics, apprentices, trainees, watchmen, guards, and workers in general employed by him. It is further certified that all laborers, mechanics, apprentices, trainees, watchmen, guards, and workers in general have been paid wages at rates not less than those required by the Contract provisions and pursuant to N.J.S.A. 34:11-56.25 et seq., and that the work performed by each such laborer, mechanic, apprentice, trainee, watchman, guard, and worker in general conformed to the classifications set forth in the Contract or training program provisions applicable to the wage rate paid.

EXCEPTIONS: (If none, write "NONE"; for each exception, the SUBCONTRACTOR shall provide complete and detailed explanation.)

SIGNED,

Subscribed and sworn to before me this

SUBCONTRACTOR

_____ day of _____, 20_____

Notary Public of

By: _____

My commission expires _____, 20_____

Title: _____

(SEAL)

Date: _____

SIGNED,

Subscribed and sworn to before me this

CONTRACTOR

_____ day of _____, 20_____

Notary Public of

By: _____

My commission expires _____, 20_____

Title: _____

(SEAL)

Date: _____

**CERTIFICATE OF FINAL ACCEPTANCE
OF SUBCONTRACTOR'S WORK**

**TO: New Jersey Transit Corporation
One Penn Plaza East
Newark, New Jersey 07105-2246**

CONTRACT NO.:

CONTRACTOR:

PROJECT:

SUBCONTRACTOR:

CONTRACT DATE:

In accordance with Sub-article 12.6.7 of the Contract's General Provisions for Construction, the undersigned SUBCONTRACTOR hereby notifies the NJ TRANSIT Corporation that as of _____, 20__ its Subcontract work and all authorized additional work has been 100% completed, including but not limited to the Remaining Work (Punch List Work) listed on the attached Certificate(s) of Substantial Completion.

**SIGNED,
SUBCONTRACTOR**

**SIGNED,
CONTRACTOR**

By: _____

By: _____

Title: _____

Title: _____

The undersigned Project Manager hereby certifies that on _____, 20__ a final field inspection was performed on the Subcontractor's work and all Subcontract work and authorized additional work found to be 100% complete in accordance with the Contract Documents.

This Certificate of Final Acceptance of Subcontractor's work is signed on this ____ day of _____, 20__.

SIGNED,

CONCURRENCE,

Project Manager

Contracting Officer

Title

Title

**APPENDIX C
CONTRACT EXECUTION FORM**

CONTRACT NO.

This Agreement made this _____ day of _____ 200____, between the New Jersey Transit Corporation, hereinafter referred to as NJ TRANSIT, and _____ hereinafter referred to as the Contractor.

WITNESSETH:

Whereas, the said Contractor, for and in consideration of the payments hereinafter specified and agreed to be made by NJ TRANSIT, hereby covenants and agrees to furnish and deliver all materials and to do and perform all work and labor required to complete the _____ within _____ consecutive calendar days from the issuance of the official notice to proceed, in strict and entire conformity with the specifications for the project, which said specifications are as follows and are hereby made a part of this Contract as fully and with the same effect as if the same had been set forth at length in the body of this Contract:

Bidders Proposal
Performance / Payment Bond
Non-Collusion Affidavit
New Jersey Prevailing Wage Determination
Federal Prevailing Wage Determination
Prevailing Wage Affidavit
Ineligible Contractors Certificate
Affidavit of Compliance
Federal EEO Provisions for Construction Contracts
State EEO Provisions for Construction Contracts
Certification for Contracts, Grants, Loans and
Cooperative Agreements
Buy America Certificate
DBE Provisions
General Provisions
Special Provisions
Technical Provisions
Addendum: _____

The Contractor agrees to make payment of all proper charges for labor and materials required in the aforementioned work.

It is also agreed and understood that the acceptance by the Contractor of the final payment by NJ TRANSIT shall be considered as a release in full of all claims against the Executive Director and NJ TRANSIT out of, or by reason of, the work done and materials furnished under this Contract.

In consideration of the premises, NJ TRANSIT hereby agrees to pay to the Contractor for the said work when completed in accordance with the said specifications, the sum of \$_____. It is understood that payments shall be the total of the unit prices written in this Contract for the work actually done.

In Witness Whereof, the Contracting Officer of NJ TRANSIT has signed this instrument and caused it to be attested, and the Contractor has caused this instrument to be signed by its _____ and attested by its _____ the day and year first written.

ATTEST:

NEW JERSEY TRANSIT CORPORATION

By: _____
Contracting Officer

ATTEST:

CONTRACTOR

Name:
Title:

By: _____
Name:
Title:

The above Contract has been reviewed and approved as to form only.

**JOHN JAY HOFFMAN
ACTING ATTORNEY GENERAL OF NEW
JERSEY**

By: _____
Deputy Attorney General

APPENDIX D

GOVERNING RULES FOR WORKING WITHIN THE RAILROAD RIGHT OF WAY

A. GENERAL REQUIREMENTS FOR WORKING WITHIN NJ TRANSIT'S RIGHT OF WAY

Contractors shall cooperate at all times with officials of NJ TRANSIT and use all reasonable care and diligence in their work to avoid accidents, damage or unnecessary delay to, or interference with, passenger trains and other property of NJ TRANSIT. Contractors are to be advised that a pre-construction meeting will be required prior to any work commencing on NJ TRANSIT property (within the Right-of-Way). In advance of any work on the property, a two-hour "NJTRO Contractor Safety Program" is to be administered by the NJTRO Safety Department for the sponsor agency resident Engineer and Contractor's Safety Coordinator and Crane Groundmen. The Contractor's Construction Superintendent should contact Mr. Joseph Codella at (973) 491-7887 to arrange for the scheduling of this program.

Contractors are to be advised that all construction operations within and over the limits of NJ TRANSIT's Right-of-Way shall be accomplished by methods which will in no way cause damage to the tracks, facilities, aerial or underground lines, embankments or drainage systems. It shall be the Contractor's responsibility to provide for protection of the tracks and embankments as shown on approved plans or as field approved in a safe and satisfactory manner, to install and maintain such shoring, sheeting and bracing as may be required, and to remove and dispose of such protective facilities upon completion of the work. Blasting will not be permitted on or along the right-of-way without prior written approval of NJ TRANSIT. All damage to NJ TRANSIT property caused by the Contractor's operations shall be repaired by the Contractor, or at his cost by NJ TRANSIT at the discretion of NJTRO. Work shall not continue until such damage is repaired and the railroad is back in service.

Whenever, in the judgement of NJTRO, work within or above the railroad's right-of-way may affect or involve the safe movement of its trains, the time and method of doing such work shall first be submitted in writing and approved by NJTRO. This approval shall not be considered as releasing the Contractor from responsibility or liability for any damage which NJTRO may suffer, or for which it may be held liable, by the action or omissions of the Contractor or those of his Sub-Contractors, or his or their employees.

Contractors shall provide written notice not less than ten (10) business days in advance of any work to be performed within or above the right-of-way, or other work which may affect railroad safety to: Mr. Eli Charchar, Engineer of Projects, R.O.W., Engineering, NJ TRANSIT Rail Operations, One Penn Plaza East, Newark, NJ 07105.

NJTRO will require protective personnel to be on duty to protect its operations when the Contractor is working within the property right-of-way. Flag protection will be required when the contractor is on, above or below, or immediately adjacent to NJTRO property or having the capability of obstructing an adjacent track. The specific responsibilities of the NJTRO Flagman are to provide enforcement of NJTRO Safety and Operating rules and other items as provided in these General Requirements as discussed in the "Contractor Safety Program", and is not provided for Engineering related matters.

Where such work is in proximity (15 feet or less) or has the potential to come in contact with overhead electrical wires or facilities, before any work proceeds, an on-site safety meeting must be conducted to determine the identity of such wires or facilities and appropriate steps to be taken. If owned by NJTRO, a qualified Class A employee(s) will be assigned who will take the necessary precautions in accordance with the NJTRO-3 Electrical Operating Instructions. All cranes and hoisting equipment used in this application must be properly grounded in accordance with NJTRO Specification MW-252.

When Crane Operators' visibility is impaired during any hoisting operation; Spotters or qualified Groundmen shall be utilized to guide the Operator. Universal hand signals shall be utilized and their meaning clearly understood between Operator and Spotter. When visual contact between the Operator and Spotter is impaired, two-way radio contact must be utilized.

If a temporary crossing of railroad tracks is necessary, Contractors shall apply to NJ TRANSIT in writing for such a crossing, and, if required, NJTRO shall execute its regular form of private grade crossing agreement covering the crossing desired and providing for the Contractor to pay all construction, maintenance, removal, protection, and other costs and affording contractual liability insurance in the amounts required.

The minimum hours per day for employees engaged in flagging or protection purposes will be eight (8) hours, plus appropriate travel time. For all time over eight (8) hours, the overtime rate will be charged. Personnel used in flagging service will be paid deadhead (traveling) time to and from headquarters each day, plus transportation from headquarters to the site of the work if required [in accordance with the current collective bargaining agreement]. It will be the responsibility of the Contractor to provide transportation for the Flagmen from and to the nearest NJTRO train station, as necessary.

NJTRO will assign Inspectors an/or Engineers during the time the Contractor is engaged in construction work on railroad property to provide general coordination of construction operations, to insure adherence to plans and specifications, and to insure the use of approved construction methods. It is to be understood that the providing of Inspectors, Engineers, Operators, Conductors, Flagmen or other forces, and the taking of any other precautions deemed necessary by NJTRO shall not relieve the Contractor

or his Sub-Contractor from liability for payment of damages caused by their respective operations.

All of NJTRO's costs shall be at the prevailing rates of pay in accordance with railroad accounts, and shall include overtime burden, [if overtime pay is warranted], and Workmen's Compensation Insurance, Public Liability Insurance, Property Damage Insurance, Railroad Unemployment Insurance, Railroad Retirement, Excise Tax, Vacation allowance, and other standard and legal costs, including overhead for supervision and accounting. In general, a recommendation is made that final payment to Contractors, not be made until NJTRO has been reimbursed in full for all of the costs.

Typically, use of NJ TRANSIT property will be restricted as follows, unless specifically authorized by the on-site NJTRO qualified employee (Flagman):

- (a) All workers must maintain a distance of no less than eighteen (18) feet from the track.
- (b) Any tools and equipment being utilized must not extend closer than eighteen (18) feet from the track.
- (c) When a train is approaching, all workers must cease work, stand clear of the track, and face the approaching train.
- (d) No worker is permitted to cross the railroad tracks at any area other than designated grade crossings.
- (e) No tools or working materials are permitted to be left along the NJTRO right-of-way.
- (f) In no event shall equipment or material be transported across a track or tracks without special permission and appropriate flagging protection.
- (g) All personnel, equipment and materials to be used during the construction shall be kept at all times at least fifteen (15) feet from all electrical, signal and communication systems unless protected by an Electrical, Signal or Communication's Department representative. The Contractor is responsible for damage to NJTRO property and any utilities located thereon, whether above or below ground.
- (h) All personnel, equipment and materials to be used during the construction in electrified territory shall also be kept at all times at least fifteen (15) feet from overhead trolley, messenger, static and transmission lines unless clearance and protection is provided by a qualified Electric Traction Department Class A High Tension Lineman.

- (i) All lifting operations shall be reviewed in meeting a standard requirement for a positive block to be installed on the hoisting equipment. This positive block is required to avoid contact with facilities or interfere with safe train operations.
- (j) When construction activity involves any type of hoisting procedure adjacent to aerial lines, the Contractor shall furnish NJTRO with sufficient florescent orange rubber goods, as determined by NJTRO, to be installed as an aid for equipment Operators and Groundmen in visually locating the aerial lines, and as additional protection against damage.

**ENGINEERING DATA REQUIRED FOR ERECTION, DEMOLITION
OR OTHER HOISTING OPERATIONS PROPOSED**

1. A detailed plan must be submitted and approved by NJTRO, showing locations of cranes or hoisting devices (both horizontally and vertically), operating radii, positive stops and delivery or disposal locations. The location of all tracks and other railroad facilities should also be clearly shown on the submission (with distance and dimension information).
2. Crane rating sheets are to be provided showing cranes to be adequate for 150% of the lift. Crane and boom nomenclature is to be indicated.
3. Plans and computations are to be included with the submission showing weight of pick, safety factors and what work is being performed over NJTRO. Plans must also show a positive stop attachment and general plans of the existing and proposed facilities, showing complete and sufficient details with supporting data for the demolition or erection of the structure.
4. A location plan showing all physical limitations, restrictions or obstructions such as wires, poles, adjacent structures, etc., showing that the proposed swings are possible. In the event of any hoisting operation proposed to be adjacent to aerial lines, the Contractor shall furnish NJTRO with sufficient florescent orange rubber goods, as determined by NJTRO, to be installed as an aid in visually locating the aerial lines and as additional protection.
5. A data sheet shall be prepared listing the type, size and arrangements of slings, shackles, or other connecting equipment. Include copies of a catalog or information sheets of specialized equipment being used.
6. A complete lifting procedure is to be included, indicating the order of lifts and any repositioning of crane or cranes including reattachment of positive stop.
7. Temporary support of any components or intermediate stages is to be shown.

8. A time schedule of various stages must be provided as well as a schedule for the entire lifting procedure.
9. All bridge erection or demolition procedures submitted will be signed and sealed by a registered professional Engineer licensed in the State of New Jersey.
10. At least six (6) copies of the plan should be sent to Mr. Eli Charchar, NJ TRANSIT, R.O.W. Engineering, One Penn Plaza East, Newark, NJ 07105.
11. The Contractor is to be advised that they can expect a minimum thirty (30) day review period for this and any other shop drawing submissions.

MINIMUM STANDARDS FOR GEO-TECHNICAL INVESTIGATIONS ALONG THE RIGHT-OF-WAY

Subsurface investigations made on or adjacent to the right-of-way should meet the minimum recommended practices as provided in Chapter 1, Volume 1, of the current American Railway Engineering association Manual for Railway Engineering. Additionally, the following requirements must be met:

- Borings shall be advanced using casing or mud rotary techniques. Use of hollow stem augers below the water table is prohibited.
- All borings shall be tremie grouted with non-shrink cement grout from the bottom to the top of the bore hole at completion. Subsequent minor surface settlement shall be back-filled with tamped earth, asphalt or finished concrete, as appropriate.
- No observation or monitoring wells shall be installed on railroad property without the prior express authorization of the Environmental Services Unit.
- No sampling of any kind shall be done on railroad property without the prior express authorization of the Environmental Services Unit.
- No work shall be done that interferes with operation and/or maintenance of the railroad unless specifically approved in the Temporary Access Permit.
- The crossing of tracks or use of tracks for or by personnel, equipment of material shall only be done under the protection of a qualified NJTRO representative.
- The presence of buried railroad or foreign utilities may or may not be known and any damage resulting from the investigation will be repaired as required,

and all charges resulting from such damage shall be paid promptly by the Permittee in accordance with the terms of the Temporary Access Permit.

- In advance of the authorized investigation, the locations of proposed pits, boring location, or monitoring well location shall be marked out in the field to review the site for possible location of buried utilities or conflict with operating systems.

A reproducible location plan of proposed boring layout, test pits' locations, or monitoring well locations will be submitted with the technical specification for the work for review and approvals prior to start of work. Detail of the plan shall be sufficient to permit review and comment by the Engineering and Environmental Services Departments. These plans and specifications shall be accompanied by a brief narrative of how the work will be carried out.

The location plan should provide from a licensed Land Surveyor the proposed State plane coordinates and approximate ground surface elevations of the work, and reference centerline alignment and profile of near tracks, support poles and guy anchors, existing foundations and overhead or undergrade wire, conduit, pipelines or structures. NJ TRANSIT uses State coordinate systems for horizontal control as appropriate and vertical datum based on Mean Sea Level equal to 0.0 feet in plan and nearest 0.1 feet in elevation.

Property information should be coordinated with the applicable Right-of-Way and Track Maps or Valuation Sheets. Copies of these maps can be obtained from the NJTRO Real Estate Department. These maps should be used to locate the work with respect to railroad stationing, structure number and mile post.

A draft summary Engineering Report shall be prepared signed and sealed by the licensed professional Engineer in charge of the work. Upon review and comment by NJTRO, three copies of the final report shall be submitted for record.

ADDITIONAL REQUIREMENTS FOR PIPELINE OCCUPANCIES

The Contractor shall be responsible for compliance with all provisions of NJTRO Specification EP-2 and shall comply with all reasonable requests from NJTRO.

The Contractor shall be responsible to furnish all labor, materials and equipment necessary to install the casing and carrier pipes as referred to in the executed Occupancy Agreement and as shown on the approved contract documents. The Contractor shall be responsible for notification to the appropriate utility companies for surface markout and NJTRO shall be responsible for markout of its own facilities potentially affected by the installation.

If the jacking pit/boring equipment is constructed such that verbal communications are limited, universal hand signals shall be utilized and their meaning clearly understood between all employees. When visual contact between key operators and support Groundmen cannot be adequately maintained, two-way radio contact must be utilized.

The Contractor must provide material certifications for all material to be installed and must prepare and submit for review (allowing 30 days) detailed drawings and supporting calculations (all signed and sealed by a licensed professional Engineer) showing the proposed methods of crossing; including jacking pit details, shoring, bracing, dewatering methods, pushing backstops, receiving pits, grade and alignment controls, catalog cuts on jacking equipment, and narrative methods for installing casing and carrier pipe. The Contractors must be prepared to work continuously and complete the jacking operation below the tracks once the live load influence line has been entered by the auger/casing.

The use of water or other liquids to facilitate conventional casing emplacement and soil removal is prohibited. If during installation, an obstruction is encountered which prevents installation of the pipe in accordance with the approved plans,, the pipe shall be abandoned in place and immediately filled with grout. A revised installation plan must be submitted for approval.

When water is known or expected to be encountered, a designed dewatering system with pumps of sufficient capacity shall be utilized to handle the flow in such a fashion which does not allow groundwater to affect the installation. When dewatering, close observation shall be maintained to detect any settlement or displacement of the embankments, tracks and facilities.

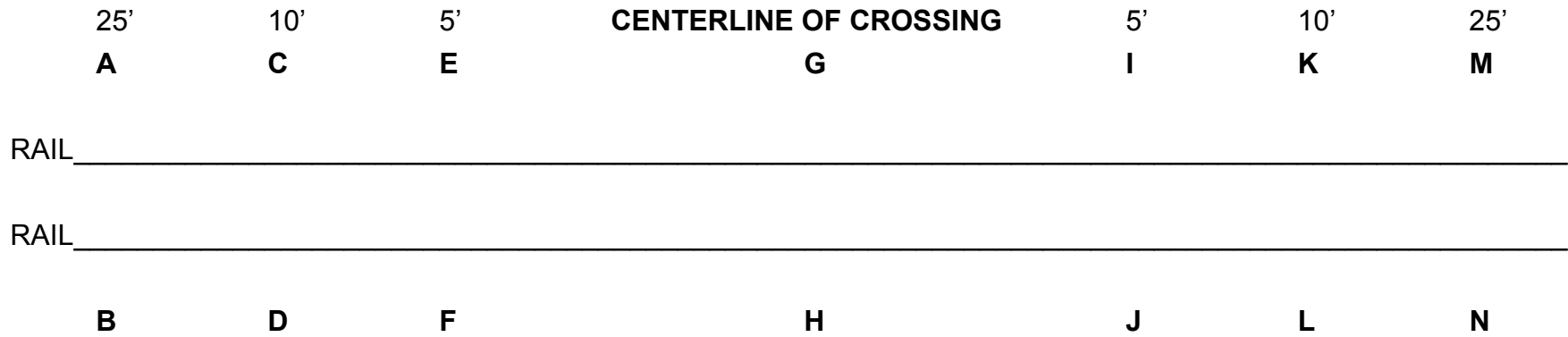
As part of the jacking operation, the Contractor shall be responsible for the completion of Survey Control Monitoring to verify track movement prior to, during, and at a point after completion. The survey monitoring procedure and location layout can be site-specific modified, but, must generally follow those as shown on the attached. The survey monitoring procedure must be completed and signed by a Licensed Land Surveyor.

NJ TRANSIT SURVEY MONITORING PROCEDURES FOR PIPELINE OCCUPANCIES

<u>ACTIVITY</u>	<u>LOCATION OF SETTLEMENT POINTS</u>	<u>FREQUENCY</u>
Prior to installation and disturbance of the property.	The top of each rail at the centerline of crossing, 5', 10' and 25' on each side of the crossing or as directed by the Manager of Right-of-Way Engineering or his designee. When temporary track supports have been installed, only the running rails shall be monitored.	Take three (3) sets of reading with at least one (1) train passing the area between readings for a base level measurement. All readings to be measured to the nearest 0.001 ft.
Installation of the casing, grouting operation, and, or during dewatering operation.	All points noted above and as required by NJTRO on the Contractors approved dewatering plans.	Immediately prior to start and trains continuously during jacking, and week all dewatering activities for the first activities for the first seven (7) days and then twice weekly.
At completion of jacking, as, necessary,	All points noted above.	After one (1) train, after five (5) after one (1) day, after one (1) after one (1) month or as directed by the Manager, Right-of-Way Engineering or his designee

Should the total changes in rail elevations for any pair of adjacent points exceed the established base elevations by 0.02 ft., the Surveyor shall immediately notify the Manager, Right-of-Way, Engineering or his designee. All readings shall be transmitted directly to the NJ TRANSIT Resident Engineer within twenty-four (24) hours of taking the measurement. Elevations shall be referenced to a U.S.G.S. benchmark and survey runs shall be reported with the proper closure errors. Readings and elevations shall be certified by a licensed Land Surveyor. Copies of the field data shall be maintained on-site by the permittee's Engineer. Review of the survey data by NJ TRANSIT will be made at the end of the first month following the jacking operation to determine the need for additional elevation measurements.

TRACK SURVEY MONITORING POINTS (TYPICAL FOR ALL TRACKS)



NOTE: All field markouts shall be accomplished using a paint or keel marker, chisel cuts are prohibited on the rail.

B. SPECIFICATIONS REGARDING SAFETY AND PROTECTION OF RAILROAD TRAFFIC AND PROPERTY WHEN WORKING WITHIN THE NATIONAL RAILROAD PASSENGER CORPORATION (RAILROAD) RIGHT OF WAY

In the following Specifications “Chief Engineer” shall, mean Railroad’s Vice President, Chief Engineer, “Railroad” shall mean the National Railroad Passenger Corporation, ‘and/or his/her duly authorized representative.

(1) **Pre-Entry Meeting:** Before entry of Permittee and/or Contractors onto Railroad’s property, a pre-entry meeting shall be held at which time Permittee and/or Contractors shall submit for written approval of the Chief Engineer, plans, computations and a detailed description of proposed methods for accomplishing the work, including methods for protecting Railroad’s traffic. Any such written approval shall not relieve Permittee and/or Contractor of their complete responsibility for the adequacy and safety of their operations.

(2) **Rules, Regulations and Requirements:** Railroad traffic shall be maintained at all times with safety and continuity, and Permittee and/or Contractors shall conduct their operations in compliance with all rules, regulations, and requirements of Railroad (including these Specifications) with respect to any work performed on, over, under, within or adjacent to Railroad’s property. Permittee and/or Contractors shall be responsible for acquainting themselves with such rules, regulations and requirements. Any violation of Railroad’s safety rules, regulations, or requirements shall be grounds for the immediate suspension of the Permittee and/or Contractor work, and the retraining of all personnel, at the Permittee’s expense.

(3) **Maintenance of Safe Conditions:** If tracks or other property of Railroad are endangered during the work, Permittee and/or Contractor shall immediately take such steps as may be directed by Railroad to restore safe conditions, and upon failure of Permittee and/or Contractor to immediately carry out such direction, Railroad may take whatever steps are reasonably necessary to restore safe conditions. All costs and expenses of restoring safe conditions, and of repairing any damage to Railroad’s trains, tracks, right-of-way or other property caused by the operations of Permittee and/or Contractors, shall be paid by Permittee.

(4) **Protection in General:** Permittee and/or Contractors shall consult with the Chief Engineer to determine the type and extent of protection required to insure safety and continuity of railroad traffic. Any Inspectors, Track Foremen, Track Watchmen, Flagmen, Signalmen, Electric Traction Linemen, or other employees deemed necessary by Railroad, at its sole discretion, for protective services shall be obtained from Railroad by Permittee and/or Contractors. The cost of same shall be paid directly to Railroad by Permittee. The provision of such employees by Railroad, and any other precautionary measures taken by Railroad, shall not relieve Permittee and/or Contractors from their complete responsibility for the adequacy and safety of their operations.

(5) **Protection for Work Near Electrified Track or Wire:** Whenever work is performed in the vicinity of electrified tracks and/or high voltage wires, particular care must be exercised, and Railroad's requirements regarding clearance to be maintained between equipment and tracks and/or energized wires, and otherwise regarding work in the vicinity of electrified tracks, must be strictly observed. No employees or equipment will be permitted to work near overhead wires, except when protected by a Class A employee of Railroad. **Permittee and/or Contractors must supply an adequate length of grounding cable (4/0 copper with approved clamps) for each piece of equipment working near or adjacent to any overhead wire.**

(6) **Fouling of Track or Wire:** No work will be permitted within twenty-five (25) feet of the centerline of track or the energized wire or have potential of getting within twenty-five (25) feet of track wire without the approval of the Chief Engineer's representative. Permittee and/or Contractors shall conduct their work so that no part of any equipment or material shall foul an active track or overhead wire without the written permission of the Chief Engineer's representative. **When Permittee and/or Contractors desire to foul an active track, they must provide the Chief Engineer's representative with their site-specific work plan a minimum of twenty-one (21) working days in advance, so that, if approved, arrangements may be made for proper protection of Railroad.** Any equipment shall be considered to be fouling a track or overhead wire when located (a) within fifteen (15) feet from the centerline of the track or within fifteen (15) feet from the wire, or (b) in such a position that failure of same, with or without a load, would bring it within fifteen (15) feet from the centerline of the track or within fifteen (15) feet from the wire and requires the presence of the proper Railroad protection personnel.

If acceptable to the Chief Engineer's representative, a safety barrier (approved temporary fence or barricade) may be installed at fifteen (15) feet from centerline of track or overhead wire to afford the Permittee and/or Contractor with a work area that is not considered fouling. Nevertheless, protection personnel may be required at the discretion of the Chief Engineer's representative.

(7) **Track Outages:** Permittee and/or Contractors shall verify the time and schedule of track outages from Railroad before scheduling any of their work on, over, under, within, or adjacent to Railroad's right-of-way. Railroad does not guarantee the availability of any track outage at any particular time. Permittee and/or Contractors shall schedule all work to be performed in such a manner as not to interfere with Railroad operations. Permittee and/or Contractors shall use all necessary care and precaution to avoid accidents, delay or interference with Railroad's trains or other property.

(8) **Demolition:** During any demolition, the Contractor must provide horizontal and vertical shields, designed by a Professional Engineer registered in the state in which the work takes place. These shields shall be designed in accordance with the Railroad's specifications and approved by the Railroad, so as to prevent any debris from falling onto the Railroad's right-of-way or other property. A grounded temporary vertical protective barrier must be provided if an existing vertical protective barrier is removed during demolition. In addition, if any openings are left in an existing bridge deck, a protective fence must be erected at both ends of the bridge to prohibit unauthorized persons from entering onto the bridge.

(9) **Equipment Condition:** All equipment to be used in the vicinity of operating tracks shall be in “certified” first-class condition so as to prevent failures that might cause delay to trains or damage to Railroad’s property. No equipment shall be placed or put into operation near or adjacent to operating tracks without first obtaining permission from the Chief Engineer’s representative. **Under no circumstances shall any equipment or materials be placed or stored within twenty-five (25) feet from the centerline of an outside track, except as approved by the Site Specific Safety Work Plan.** To insure compliance with this requirement, Permittee and/or Contractors **must establish a twenty-five (25) foot foul line prior to the start of work** by either driving stakes, taping off or erecting a temporary fence, or providing an alternate method as approved by the Chief Engineer’s representative. Permittee and/or Contractors will be issued warning stickers which must be placed in the operating cabs of all equipment as a constant reminder of the twenty-five (25) foot clearance envelope.

(10) **Storage of Materials and Equipment:** No material or equipment shall be stored on Railroad’s property without first having obtained permission from the Chief Engineer. Any such storage will be on the condition that Railroad will not be liable for loss of or damage to such materials or equipment from any cause.

(11) **Condition of Railroad’s Property:** Permittee and/or Contractors shall keep Railroad’s property clear of all refuse and debris from its operations. Upon completion of the work, Permittee and/or Contractors shall remove from Railroad’s property all machinery, equipment, surplus materials, falsework, rubbish, temporary structures, and other property of the Permittee and/or Contractors and shall leave Railroad’s property in a condition satisfactory to the Chief Engineer.

(12) **Safety Training:** **All individuals, including representatives and employees of the Permittee and/or Contractors, before entering onto Railroad’s property or coming within twenty-five (25) feet of the centerline of the track or energized wire shall first attend Railroad’s Safety Contractor/Leasee Employee Training Class.** The Safety Orientation Class will be provided by Railroad’s Safety Representative at Permittee’s expense. A photo I.D. will be issued and must be worn/displayed while on Railroad property. All costs of complying with Railroad’s safety training shall be at the sole expense of Permittee. Permittee and/or Contractors shall appoint a qualified person as their Safety Representative. He/she shall continuously assure that all individuals comply with Railroad’s safety requirements. All safety training records shall be maintained with site specific work plan.

(13) **No Charges to Railroad:** It is expressly understood that neither these Specifications, nor any document to which they are attached, include any work for which Railroad is to be billed by Permittee and/or Contractors, unless Railroad gives a written request that such work be performed at Railroad’s expense.

C. SPECIFIC REQUIREMENTS OF CONSOLIDATED RAIL CORPORATION FOR WORK ON ITS RIGHT OF WAY

SCOPE

It must be clearly understood that Conrail owns and uses its right of way for the primary purpose of operating a railroad. All work shall therefore be done in a manner such that the rail operations and facilities are not interfered with, interrupted or endangered. In addition, any facilities that are a result of the proposed work shall be located to minimize encumbrance to the right of way so that Conrail will have unrestricted use of its property for current and future operations.

The sponsor of the project shall be ultimately responsible for assuring that its agents, consultants, contractors and sub-contractors fully comply with the specifications contained herein. The term 'sponsor' used throughout these specifications shall mean the sponsor, its employees, its agents, consultants, contractors, sub-contractors, etc. The following terms and conditions shall apply to any project which requires performance of work on the right of way or other property of Conrail.

RIGHT OF ENTRY ON CONRAIL PROPERTY

No entry upon Conrail property shall be permitted without the proper authorization by Conrail to the sponsor in the form of an agreement or a proper permit-to-enter prepared by Conrail. The applicant shall pay the associated fees and execute the permit-to-enter prior to entering Conrail property. The location and design of that portion of the access route to the project site that is on Conrail property shall be shown clearly on any plans for the project and approved by Conrail.

It is to be clearly understood that the issuance of a permit-to-enter does not constitute authority to proceed with any construction work. Construction cannot begin until a formal agreement between Conrail and the sponsor is executed, and the sponsor receives permission from Conrail's representative to proceed with the work.

INSURANCE

In addition to any other forms of insurance or bonds required under the terms of any contract or specifications and except to the extent that any of the requirements of this section are expressly waived or revised in writing by Conrail, prior to the commencement of any work, contractor, at his own cost and expense, shall maintain insurance of the following kinds and amounts and deliver to Conrail satisfactory evidence of such insurance as indicated herein:

1. Public Liability Insurance

Public Liability Insurance, including contractual liability insurance of not less than \$5,000,000 combined single limit for bodily injury and/or property damage for damages arising out of bodily injuries to or death of all persons in any one occurrence and for damage to or destruction of

property, including the loss of use thereof, in any one occurrence. Conrail shall be named as an additional insured under this insurance.

2. **Automobile Liability Insurance**

Automobile Liability Insurance with a limit of not less than \$5,000,000 combined single limit for bodily injury and/or property damage per occurrence. Conrail shall be named as an additional insured under this insurance.

3. **Workers' Compensation / Employers' Liability Insurance**

Employers' Liability and Occupational Disease Insurance with limits of \$1,000,000 each accident, \$1,000,000 policy limit and \$1,000,000 each employee. Such policy shall include a waiver of subrogation in favor of Conrail.

4. **General Contractor's Pollution Legal Liability Insurance**

General Contractor's Pollution Liability Insurance with limits of not less than \$5,000,000 per occurrence/ \$5,000,000 aggregate bodily injury, property damage and cleanup expenses resulting from pollution conditions. Conrail shall be named as an additional insured under this insurance.

5. **Railroad Protective Liability Insurance**

Should it be required, NJ TRANSIT will provide Railroad Protective Liability Insurance Coverage for this Contract.

CHANGES IN RAILROAD FACILITIES

Temporary and permanent changes of signal, communication, power transmission lines, trailers, drainage and other railroad facilities required in connection with the project to clear temporary and/or permanent work of the sponsor as shown on the approved construction plans, shall be made or caused to be made by Conrail at the sole cost and expense of the sponsor in accordance with Conrail's force account estimate. Any other changes made or services furnished by Conrail at the request of the sponsor shall be the sole cost and expense of the sponsor.

PROTECTION OF RAILROAD OPERATIONS

The sponsor shall conduct the work in such a manner as to safeguard the operations, facilities, right-of-way and property of Conrail. All work affecting the above items shall be subject to the approval of Conrail. The sponsor's operations adjacent to, over or under Conrail's tracks, facilities, right-of-way, and property shall be governed by Conrail's standards and by such other requirements as specified by Conrail's representative so as to insure the safe operation of

trains, prevent delay to trains and insure the safety of all concerned, including the sponsor's forces.

An operating track shall be considered obstructed or fouled when any object is brought closer than fifteen (15) feet (4.6 m) horizontally from the centerline of track and projects above the top of tie or as determined by Conrail's representative. A power line shall be considered fouled when any object is brought to a point less than eight (8) feet (2.5 m) therefrom. A signal line shall be considered fouled when any object is brought nearer than six (6) feet (1.8 m) to any wire or cable. Cranes, trucks and other equipment shall be considered as fouling the track, power line or signal line when failure of equipment, whether working or idle, with or without load, will obstruct the track or other Conrail facilities.

Equipment used by the sponsor shall be in first-class condition to preclude any failure that would cause interference with the operation of Conrail trains or damage to its facilities. The sponsor's equipment shall not be placed or put in operation adjacent to the tracks or facilities of Conrail without obtaining clearance from Conrail's representative. All such equipment shall be operated by the sponsor in a manner satisfactory to Conrail. No equipment or material shall be stored on Conrail property.

In general, a hazard occurs and a flagman is necessary in the following circumstances: (1) the driving of sheeting or piles within twenty five (25) feet (7.6 m) of the tracks, (2) the removal or demolition of all or part of an overhead or adjacent structure, (3) the erection of any structural material, or (4) the performance of any other operation that could obstruct or foul (as described above) the tracks or other facilities of Conrail as determined by Conrail's representative.

Minimum overhead and lateral clearances as specified by Conrail, shall be maintained during the performance of all work. Existing overhead and lateral clearances shall be maintained during construction unless a temporary reduction in clearance for construction purposes is approved, in writing, by Conrail. The sponsor shall erect a highly visible construction fence no closer than fifteen (15) feet (4.6 m) from the centerline of the track through the work area to insure that the lateral clearance requirement is being met.

All wire and attachments shall be treated as live unless notified by Conrail's representative that same have been grounded and de-energized. Particular attention shall be given to the use of hand lines containing metal strands which cannot be used when working near or above exposed live wires. When working over wires, tools and materials not in use shall be stored in a manner to prevent them from falling. Tools or materials shall not be thrown to or by men working over the wires. The sponsor shall be responsible for locating and protecting all underground facilities.

Painting and paint removal procedures shall be approved by the Conrail and inspected by Conrail's representative prior to beginning the work over railroad right of way. The sponsor shall protect the track structure and railroad property from any material used in conjunction with performing the work. A flagman shall be required whenever the above described work fouls or is likely to foul the track, as previously defined.

The sponsor shall give notice to Conrail's representative at least fourteen (14) days in advance of the time work is to be commenced. Conrail shall assign, at the sole cost and expense of the

sponsor, conductors and/or flagmen, or other similar qualified employees to protect Conrail's trains and facilities when in the opinion of its representative, the construction work will cause or may cause a hazard to Conrail facilities and the safe operation of trains. No operations of the sponsor shall be carried out without all the necessary protection to properly safeguard the work. The minimum hours per day for railroad employees engaged in flagging service shall be eight (8) hours. The overtime rate will be charged for all time in excess of eight (8) hours. Flagmen are paid from the time they leave headquarters until they arrive back at headquarters. The travel time to and from project site is known as "deadheading" and is paid at full rate of pay, plus travel expenses. No conductor or flagman may remain on duty longer than twelve (12) hours in any twenty-four (24) hour period.

The providing of flagmen or inspectors or the taking of other precautionary measures, shall not, however, relieve the sponsor from liability for payment of damages caused by their operations. The sponsor must obtain permission from the flagman before fouling or obstructing any track.

The sponsor shall be responsible for damage to Conrail facilities or property arising out of the execution of its work. Conrail shall undertake any necessary repair work at the sole cost and expense of the sponsor. Billing for the work shall be in accordance with Conrail's standard billing procedures.

Conrail labor shall be charged to sponsor at actual rate plus amount paid for insurance, railroad retirement, excise tax, vacation allowance, holidays, health and welfare benefits, small tools, 401k payment and overhead in accordance with Conrail's standard billing procedures. Materials shall be charged to the sponsor at actual cost to Conrail plus transportation costs, handling expense and applicable taxes.

RAILROAD ENGINEERING AND INSPECTION

Conrail, at its sole discretion, may assign an engineer or inspector for the general protection of railroad property and operations during the construction of the project. This inspection service shall be supplied at the sole cost and expense of the sponsor.

PAYMENT OF RAILROAD SERVICES

It is a requirement that the sponsor shall reimburse Conrail in full for work undertaken by Conrail in accordance with any provision of these special requirements. Final contract payment shall not be made by the sponsor to its contractor, sub-contractor, consultant or agent, until Conrail certifies that all railroad bills against them, if any, have been paid in full.

TEMPORARY GRADE CROSSING

Under most circumstances, a grade crossing of our track will not be permitted. Should the sponsor demonstrate a necessity for a temporary grade crossing of Conrail's tracks, the sponsor shall be required to apply for and execute the standard private grade crossing agreement for

each crossing required. Application for the crossing shall be made to Conrail at least twelve (12) weeks before the crossing is required and addressed to:

**Consolidated Rail Corporation
3501 Island Ave.
Philadelphia, PA 19153
Attention: Robert J. Dempsey
Manager, Real Estate Services
Telephone: (215) 937-7562**

A letter size plan showing the location, size, construction details, and access to the requested crossing should accompany the letter of application. The plan shall be fully detailed and dimensioned with all Conrail facilities shown and referenced. The sponsor shall state the purpose for which the crossing is needed and the expected life of the crossing. All application fees, construction, maintenance, protection and removal costs shall be at the sole cost and expense of the sponsor. The roadbed and all other Conrail facilities will be restored to the original condition subject to the approval of Conrail's designated representative.

SHEETING AND SHORING REQUIREMENTS

The following items are to be included in the design and construction procedures for all permanent and temporary facilities adjacent to Conrail tracks:

- 1) Footings for all piers, columns, walls or other facilities shall be located and designed so that any temporary sheeting and shoring for support of adjacent track or tracks during construction shall not be closer than ten (10) feet (3.0 m) from the centerline of the nearest track.
- 2) When excavation for construction of the above mentioned facilities is within the theoretical railroad embankment line (see Conrail Drawing SK-1, attached), interlocking steel sheet piling, driven prior to excavation, must be used to protect track stability. The use of trench boxes or similar devices is not acceptable. Soldier piling and lagging will be considered for supporting adjacent track(s) only when its use is approved by Conrail. Consideration for the use of soldier piling and lagging shall be made if the required penetration of steel sheet piling cannot be obtained and when dry, non-running, stable material will be encountered.
- 3) The sheeting shall be designed to support all lateral forces caused by the earth, railroad and other surcharge loads. The railroad loading to be applied is an E-80 loading. This loading consists of 80 Kip (356 KN) axles spaced five (5) feet (1.5 m) on centers. The lateral forces acting on the sheeting shall be computed as follows:
 - (a) The Rankine Theory shall be used to compute the active earth pressure due to the weight of the soil.

- (b) The Boussinesq analysis shall be used to determine the lateral pressure caused by the railroad loading. The load on the track shall be taken as a strip load with a width equal to the length of the ties (8'-6" or 2.6 m). The vertical surcharge, q (psf), caused by each axle, shall be uniform and equal to the axle weight divided by the tie length and the axle spacing (5'-0" or 1.5 m). For an E-80 loading, this results in: $q = 80,000 / (8.5 \times 5) = 1882$ psf (90.1 KPa).
 - (c) The horizontal pressure due to the live load surcharge at any point on the sheet piling wall is P_h and can be calculated by the following: $P_h = (2q/\pi)(B \sin B \cos 2 \theta)$ (see Conrail Drawing SK-2, attached).
- 4) Deflection design criteria is as follows:
 - (a) 1/2" (1.27 cm) maximum deflection for sheet piling ten (10) feet (3.0 m) from centerline of the nearest track.
 - (b) 1" (2.54 cm) maximum deflection for sheet piling greater than ten (10) (3.0m) feet from centerline of the nearest track.
 - (c) Use K (at-rest earth pressure) for design of all braced and tie-back excavations.
 - 5) The allowable stresses for the sheet piling and other steel members (wales, struts, etc.) shall be in accordance with AREA Chapter 15, Part 1. These allowable stresses may be increased ten percent (10%) due to the temporary nature of the installations. A factor of safety of at least 1.5 must be used on temporary sheeting for the embedment length (i.e. multiply calculated embedment depth by 1.5).
 - 6) Where soil or rock anchors are used, all anchors must be tested. Testing shall be in accordance with industry standards with ten percent (10%) of the anchors "Performance Tested" and all others "Proof Tested". All tie-back anchor stresses are to be in accordance with AREA Chapter 8, Part 20.5.7.
 - 7) Exploratory trenches, three (3) feet (0.9 m) deep and fifteen (15) inches (0.4 m) wide in the form of an "H" with outside dimensions matching the outside of sheeting dimensions are to be hand dug, prior to placing and driving steel sheeting, in areas where railroad underground installations are known to exist. These trenches are for exploratory purposes only and are to be backfilled with the backfill compacted immediately. This work must be done in the presence of Conrail's representative.
 - 8) Absolute use of track is required while driving sheeting within fifteen (15) feet (4.6 m) from centerline of a live track. The procedure for arranging the use of track shall be as outlined on pages Three and Four.
 - 9) Cavities adjacent to the sheet piling, created by the driving of sheet piling, shall be filled with sand and any disturbed ballast must be restored and tamped immediately.

- 10) Sheet piling shall be cut off at the top of tie during construction. After construction and backfilling has been completed, piling within ten (10) feet (3.0 m) from centerline of track, or when bottom of excavation is below a line extending a 1:1 slope from end of tie to point of intersection with sheeting, shall be cut off eighteen (18) inches (0.5 m) below existing ground line and left in place.
- 11) Any excavation adjacent to track shall be covered and ramped and provided with barricades as required by Conrail. A lighted walkway with a handrail must be provided adjacent to the track for any excavation within ten (10) feet (3.0 m) of the centerline.
- 12) Final backfilling of excavation shall be as required by project specifications.
- 13) The sponsor is to advise Conrail of the time schedule of each operation and obtain approval of Conrail for all work to be performed adjacent to Conrail tracks so that it may be properly supervised by railroad personnel.
- 14) All drawings for temporary sheeting and shoring shall be prepared and stamped by a Registered Professional Engineer and shall be accompanied by complete design computations when submitted for approval.
- 15) Where physical conditions of design impose insurmountable restrictions requiring the placing of sheeting closer than specified above, the matter must be submitted to Conrail for approval of any modifications.
- 16) Five (5) copies of the submission are to be sent to Conrail's Area Engineer. The sponsor is advised to expect a minimum thirty (30) day review period from the day the submission is received by the Area Engineer.
- 17) Conrail's representative must be present at the site during the entire sheeting and shoring procedure period. The sponsor must notify the railroad representative at least seventy-two (72) hours in advance of the work. No changes will be accepted after that time.

ERECTION, HOISTING AND DEMOLITION REQUIREMENTS

- 1) A plan showing the locations of cranes, horizontally and vertically, operating radii, with delivery or disposal locations shown. The location of all tracks and other railroad facilities should also be shown.
- 2) Crane rating sheets showing cranes to be adequate for 150% of the actual weight of the pick. A complete set of crane charts, including crane, counterweight, and boom nomenclature is to be submitted.
- 3) Plans and computations showing weight of picks must be submitted. Where beams are being removed over Conrail facilities, the weight shall include the weight of concrete or other material that will be included in each pick. Calculations shall be made from plans of

the existing and/or proposed structure showing complete and sufficient details with supporting data for the demolition or erection of the structure.

- 4) If the sponsor can prove to Conrail that plans do not exist and weights must be calculated from field measurements, the field measurements are to be made under the supervision of the Registered Professional Engineer submitting the procedure and he shall include sketches and estimated weight calculations with his procedure. If possible, field measurements shall be taken with a Conrail representative present. Weights shall include the weight of concrete, or other material, that will be included in the lifts.
- 5) If the procedure involves either the cutting of steel or the bolting of joints which would affect Conrail operations, a detailed staging plan with estimated durations will be required.
- 6) A location plan showing all obstructions such as wires, poles, adjacent structures, etc., must be provided to show that the proposed lifts are clear of these obstructions.
- 7) A data sheet shall be prepared listing the type, size and arrangements of slings, shackles, or other connecting equipment. Include copies of a catalog or information sheets for specialized equipment.
- 8) A complete procedure is to be included, indicating the order of lifts and any repositioning or rehitching of the crane or cranes.
- 9) Demolition shield submittals must include a plan showing the details of the shield, a written installation and removal procedure and design calculations verifying the capacity of the shield. The shield should be designed for a minimum load of fifty (50) pounds/sq.ft (245 kgs/sq.m) plus the weight of the equipment, debris and any other load to be carried.
- 10) Temporary support of any components (overhead or undergrade) or intermediate stages is to be shown and detailed. A guardrail (railroad) will be required to be installed in a track where a temporary bent is located within twelve (12) feet (3.7 m) from the centerline of that track.
- 11) A time schedule of the various stages must be shown as well as a schedule for the entire lifting procedure.
- 12) All bridge erection or demolition procedures submitted will be prepared, signed and sealed by a Registered Professional Engineer.
- 13) Five (5) copies of the lifting procedures are to be sent to Conrail's Area Engineer. The sponsor is to expect a minimum thirty (30) day review period from the day the submission is received by The Area Engineer.
- 14) Conrail's representative must be present at the site during the entire demolition and erection procedure period. The sponsor must notify the railroad representative at least

seventy-two (72) hours in advance of the work. No changes will be accepted after that time.

- 15) The name and experience of the employee supervising the operation must be supplied to Conrail.

OVERGRADE BRIDGE REQUIREMENTS

CLEARANCES

- 1) The minimum vertical clearance above the top of the higher rail shall be twenty three (23) feet (7 m) at all times. In areas where the railroad has been electrified with a catenary wire, and areas which are likely to be electrified, the minimum vertical clearance must be twenty four (24) feet, six (6) inches (7.5 m) above the top of the higher rail.
- 2) The minimum horizontal clearance measured from the centerline of track to the near face of the obstruction must be twenty (20) feet (6.1 m) for tangent track and twenty one (21) feet (6.4 m) for curves. See Conrail Standard Plan 48754-B, attached.
- 3) Whenever practicable, bridge structures must have the piers and abutments located outside of the railroad right of way. All piers located less than twenty five (25) feet (7.6 m) from the centerline of track require a crash wall designed in accordance with specifications outlined in the current AREA manual.
- 4) All piers should be located so that they do not interfere with ditches. Where special conditions make this impossible, an explanation of these conditions must be submitted with the drainage plans for review by Conrail.
- 5) The permanent clearances should be correlated with the methods of construction so that temporary construction clearances will not be less than the minimum allowed.
- 6) Bridge structures shall provide sufficient lateral and vertical clearance for anticipated future tracks, changes in track centers and raising of tracks for maintenance purposes. The locations of these tracks shall be determined by inquiry to Conrail.
- 7) The profile of the top of rail should be examined to determine if the track is in a sag at the location of the bridge. If the track is in a sag, the vertical clearance from the track to the bridge should be increased sufficiently to allow raising the track to remove the sag.
- 8) Plans for bridges must show dimensioned locations of all utilities which might be located on the railroad right of way.
- 9) Vertical and horizontal clearances must be adjusted so that the sight distance to railroad signals is not reduced from what is existing.

- 10) All proposed temporary clearances which are less than those listed above must be submitted to Conrail for review and must be approved by Conrail prior to construction.
- 11) Clearances are subject to the requirements of the state in which the construction takes place and must be approved by the State and Conrail if less than those prescribed by law.

DRAINAGE

- 1) Maintaining the existing drainage and providing for future drainage improvements is of the utmost importance. Conrail will give special attention to reviewing drainage details.
- 2) Drainage plans must be included with the general plans submitted to Conrail for approval. These plans must include hydrologic and hydraulic studies and computations showing the frequency and duration of the design storm used, as well as the method of analysis such as Soil Conservation Service or the Rational method. Conrail uses storms with a 100-year recurrence interval as the minimum design storm.
- 3) Lateral clearances must provide sufficient space for construction of the required track ditch parallel to the standard roadbed section. If the ditch cannot be provided, or the pier will interfere with the ditch, then a culvert of sufficient size must be provided. See Conrail Standard Plans 48754-B and 48747, attached.
- 4) Ditches and culverts must be sized to accommodate all increased run-off due to the construction and the increased size must continue to the natural outlet of the ditch. Ditches must be designed in accordance with good drainage engineering practices and must meet all local codes and ordinances.
- 5) No scuppers or other deck drains, roadway drainage, catch basins, inlets or outlets are permitted to drain onto Conrail property. Any variation of this policy must have the prior approval of Conrail. If an exception is ultimately granted, maintenance of such should not be Conrail's. Drainage from scuppers and deck drains must be conveyed through pipes, preferably to a point which is off Conrail property. If the drainage must be conveyed into a railroad ditch, calculations must be provided to Conrail which indicate the ability of the ditch to carry the additional runoff.
- 6) Additional drainage may require the installation of a pipe or pipes, new ditch or reprofiling of the existing ditch.

EROSION CONTROL

- 1) Embankment slopes on Conrail property adjacent to the track must have a slope of 2:1 or less and be paved for a minimum of two (2) feet (0.6 m) beyond the outside edge of the bridge foundation structure. The purpose of the pavement is to minimize erosion of the embankment material and to reduce deterioration of the sub-grade material by drainage

water. The pavement shall consist of a prepared sub-base and/or filter fabric with grouted rip-rap on the surface.

- 2) The general plans for the bridge should indicate the proposed methods of erosion control during construction and must specifically address means to prevent silt accumulation in ditches and culverts and to prevent fouling the track ballast and sub-ballast. If the plans do not show erosion control, the contractor must submit a proposed method of erosion control and must have this method approved by Conrail prior to beginning any grading on the site.
- 3) Existing track ditches must be maintained at all times throughout the construction period. After the construction has been completed, all erosion and siltation must be removed and the ditches must be restored.
- 4) Conrail's approval of drainage and erosion control plans will not relieve the sponsor submitting these plans from ultimate responsibility for a satisfactory plan.

REFERENCES

- 1) In areas where underground utilities may be affected, Conrail's C.E. 8, "Specifications for Pipeline Occupancy" will govern.
- 2) In areas where power or communication lines will be affected, Conrail's C.E. 4, "Specifications for Wire, Conduit and Cable Occupations" will govern.

APPENDIX E

AGREEMENT BETWEEN CONTRACTOR AND ARTIST

This Agreement made the day of _____ 2005,
between _____ (hereinafter referred to as
"Contractor") having its principal office at _____ and
_____ (hereinafter referred to as
the "Artist").

WITNESSETH:

WHEREAS, pursuant to N.J.S.A. 52:16A:29 et seq., NJ TRANSIT is desirous of incorporating fine arts in the following project:

Name of Project:

Location of Project:

WHEREAS, the Artist has submitted a proposal to design such Artwork, under the terms and conditions set forth herein and in accordance with the following Attachments which are hereby made a part of this Agreement:

Appendix "1" - Federal Contract Requirements

Attachment "A" - Fees, Materials and Payment Schedule

Attachment "B" - Progress Schedule

Attachment "C" - Scope of Work

Attachment "D" - Artist Proposal for Artwork

The proposal to design and deliver the Artwork shall be incorporated in this Agreement as Attachment "D". To the extent that this contract contains requirements different from the proposal, the contract shall control.

NOW, THEREFORE, in consideration of the mutual promises and undertakings contained herein, the parties covenant and agree as follows:

1. The Artist shall provide all design, engineering, project coordination and project management services which are necessary in the performance of work required by this Agreement. The Artist is responsible for all of the Artist's travel and transportation expenses associated with the performance of this Agreement.

2. The Artist is responsible for the provision of the Artwork design, documents and submittals which include engineering drawings and lighting design, physical layout, complete fabrication, transportation, installation and documentation of the Artwork. The Artist shall ensure that all structural elements of the Artwork and mounting devices are designed and certified by an engineer licensed in the State of New Jersey. The Artist agrees to provide all necessary lighting fixtures and fixture-ready attachments including cords and plug connections, bulbs and mounting bracket/tracks. The Artist shall consult with the project architect prior to procurement of lighting equipment for review and approval of manufacturer, type and number of fixtures, and to ensure proper interface with electrical source(s) in the building.

3. It shall be Contractor's responsibility to prepare and make available the site for preparation, modification, or other necessary work by the Artist and Contractors performing services relevant to the Artwork.

4. Contractor and NJ TRANSIT, through their authorized representative or representatives, may at reasonable times and on reasonable notice, set up mutually convenient times to review the Artwork while in the process of being designed, completed and installed. Such visits shall be preceded by a telephone communication to the Artist with verbal confirmation by the Artist.

5. The Artist will complete the Artwork in accordance with the Progress Schedule contained herein in Attachment B.

In the event the installation is not properly completed by the agreed-upon date, except for causes beyond the Artist's control (such as, but not limited to fire, theft, strikes,

lock-outs, materials shortages, illness and acts of God) and as liquidated damages (not as a penalty), Contractor may deduct from the amount due Artist \$_____ for each day's delay encountered until installation is properly completed, or the Agreement terminated. The Artist may request Contractor, not later than 10 days before the installation date set forth in this contract, for an extension of that installation date. Such extension, if granted, must be in writing. If the site is not available to receive the Artwork when the Artist has completed on schedule, Contractor will pay for all excess costs of storage and transportation. Contractor may at its own expense take possession of the Artwork and store same at its own site. In that event, Contractor shall bear risk of loss. Subsequent delivery and installation shall be in accordance with the terms stated herein.

6. The Artist shall regularly confer with Contractor's Project Management staff and attend required meetings in order to verify and insure that the Artwork will be incorporated into the project at the proper time. Meetings shall be held at a time which is mutually convenient for Contractor and the Artist.

7. The Artist must take all reasonable precautions to protect the property of NJ TRANSIT and all others at and adjacent to the installation site of the work. The Contractor will be responsible for adequate protection of the public during installation.

8. To the extent possible, NJ TRANSIT will not intentionally remove, alter, modify or change the Artwork unless it is necessary for the preservation, safety, repair, destruction or renovation of the premises in which the Artwork is installed as determined by NJ TRANSIT at its sole discretion. NJ TRANSIT shall not otherwise remove, alter, modify, destroy or change the Artwork without the agreement of the Artist. Such agreement shall be governed by the applicable provisions of 17 U.S.C.A. §113. The Artist further waives any rights he may have against and agrees not to institute suit against NJ TRANSIT for any removal, alterations, modifications, damage, destruction or changes that may occur to the Artwork in the event that the premises are no longer under the ownership, supervision, or control of NJ TRANSIT. The Artist hereby agrees to provide a suggested maintenance

schedule for the Artwork to NJ TRANSIT at the time of completion of the project. These obligations and waivers shall survive the termination of this Agreement.

9. The Artist agrees that for one year following the installation and acceptance of the Artwork, he shall correct, without charge, any defects in the Artwork which require repair or correction.

10. A plaque containing the title of the Artwork, name of the Artist, and recognition of NJ TRANSIT shall be publicly displayed and identified with the Artwork. Such plaque shall be provided by the Artist upon completion of the work. The design and content of the plaque is subject to approval in writing by NJ TRANSIT.

11. The Artist agrees to register the completed Artwork for copyright immediately upon acceptance by NJ TRANSIT. Copyright notice shall appear on the work and project plaque. The Artist grants to NJ TRANSIT and the NJSCA the non-exclusive right to photograph the Artwork and otherwise reproduce it in film, tape, digital format, or any other reproductive media, and publish the same with proper identification of copyright, including identification of Artist. With the exception of the above listed parties, Artist reserves to himself all copyrights in the work, the preliminary design, and any incidental works, made in the creation of the work.

The Artist further agrees that the Artwork completed under this Agreement is a unique work and that copies or editions of the Artwork will not be created and installed at any other location worldwide.

NJ TRANSIT will consult with the Artist prior to the production of any commercially marketable items which depict the Artwork and are intended to be offered for sale to the general public.

12. The Artist agrees to supply NJ TRANSIT and the NJSCA with full archival documentation of the completed Artwork including, but not limited to 35mm slides, black and white and color photographs, original presentation maquette, original drawings and a written physical description. Such documentation is to be placed in the archives of the NJSCA. The submitted material shall not be offered for sale at any time.

This documentation is to be supplied by the Artist not later than 30 days after installation of the Artwork and must comply with the NJSCA documentation format for visual artwork.

13. NJ TRANSIT may elect to publicly dedicate/unveil the Artwork and the Artist will attend said dedication/unveiling, upon adequate written notice from NJ TRANSIT, unless excused by NJ TRANSIT.

14: Contractor/NJ TRANSIT may terminate this Agreement for convenience by giving written notice to the ARTIST of such termination sent to the ARTIST at the address set forth in paragraph 34. In that event the ARTIST shall be paid for all reasonable costs of work properly completed on the date of termination including all reasonable costs of materials and equipment purchased and/or rented to date, and any penalties due on leased space and subcontracts for fabrication of the ARTWORK.

15: Contractor/NJ TRANSIT may terminate this Agreement for cause at any time if the ARTIST has materially failed to comply with terms of the Agreement. In the event of such failure, NJ TRANSIT shall promptly give written notification to the ARTIST of its intent to terminate and the reasons thereof. The ARTIST shall have ten (10) days, or such additional time as NJ TRANSIT may grant, after receipt of notice to cure its failure. If the failure is not cured to the satisfaction of NJ TRANSIT, the ARTIST shall be held in breach of contract and the contract terminated (in whole or in part) effective immediately.

After receipt of notice of termination, the ARTIST shall not incur any new obligations without the approval of NJ TRANSIT and shall cancel as many outstanding obligations as possible. NJ TRANSIT will evaluate each obligation deemed non-cancellable by the ARTIST in order to determine its eligibility for inclusion in compensable costs. Compensation shall be made for work properly completed and approved by NJ TRANSIT prior to the date of termination.

If this Agreement or any part thereof is terminated for cause, NJ TRANSIT may procure services similar to those so terminated. The ARTIST shall be liable to NJ TRANSIT for any reasonable excess costs incurred for such similar services.

No damages of any nature shall be claimed against NJ TRANSIT in the event it exercises this right of termination. The rights and remedies available to in this section shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Agreement.

If, after notice of termination of this Agreement under the provisions of this section, it is determined for any reason that the ARTIST was not in default under the provisions of this section, or that the default was excusable under the provisions of this section, the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Section 14.

16. Ownership of all materials, designs and drawings related to the Artwork, originated and prepared for NJ TRANSIT after the date of signing of this Agreement, shall rest with NJ TRANSIT, and shall be submitted by the Artist to the project archives of the NJSCA. The Artist shall provide NJ TRANSIT and the NJSCA with copies of all pertinent maintenance information and structural design information in accordance with the requirements of this Agreement.

17. a. With the execution of this Agreement, Contractor will ensure that the Artist will receive a full review and discussion of plans to date and complete background information relevant to all considerations affecting the Artist's responsibility to fulfill its obligations. In particular, Contractor shall make available to the Artist all necessary background and orientation materials, adequate notice of scheduled presentations, meetings dealing with matters affecting the Artist's participation in construction schedules, deadlines and plans affecting the Artist's installation of his/her work, and shall invite the Artist and afford the Artist full participation at all such presentations and meetings.

b. The quality of the finishes of the completed Artwork shall be as described by the Artist in his Design Development Plans unless Contractor and NJ TRANSIT

have authorized necessary changes. NJ TRANSIT reserves the right to reject the completed Artwork if it does not meet the stated specifications of the Design Development Plans.

18. The Contracting Officer for this Agreement shall be: _____, (NAME OF CONTRACTING OFFICER). Wherever this Agreement requires any notice to be given to or by Contractor, or any determination to be made by Contractor, the Contracting Officer or his Designee shall represent and act for the Contractor.

19. The Artist shall schedule any on-site activities with Contractor, and will provide notice of on-site activities to Contractor and NJ TRANSIT.

20. The Artist's status shall be that of an independent contractor and not as agent or employee of Contractor or NJ TRANSIT.

21. The Artist agrees not to assign this Agreement in whole or in part, or any moneys hereunder, without the prior written approval of NJ TRANSIT. Following installation of the artwork and its acceptance by NJ TRANSIT, and acceptance of the overall project, the Contractor will assign this Agreement and all its rights hereunder to NJ TRANSIT.

22. The Artist agrees that in the performance of this Agreement he will obey, abide and comply with applicable Federal, State, County and Municipal laws and regulations.

23. If incorporated in a state other than the State of New Jersey, the Artist shall promptly file with the Secretary of State an application for a Certificate of Authority to do business in the State of New Jersey and shall comply with the provisions of the laws of the State of New Jersey in that regard.

24. This Agreement shall be governed by and construed and the rights and obligations of the parties hereto shall be determined in accordance with the laws of the State of New Jersey. The courts of New Jersey Shall have sole jurisdiction over any suits brought concerning this Agreement.

25. The Artist hereby covenants and agrees to take, use, provide and make all proper and necessary and sufficient precautions, safeguards and protections against the occurrence or happening of any accident, injuries, damages or hurt to any person or property during the progress of the work herein covered and to indemnify, defend, and save harmless

the Contractor and NJ TRANSIT, its officers, agents, servants and employees for the payment of all sums of money by reason of all, or any, such accidents, injuries, damages or hurt that may occur upon or about such work and all fines, penalties and loss incurred for or by reason of the violation of any ordinance, regulation, or statute, while the said work is in progress.

26. The risk of loss to the Artwork shall remain on the Artist at all times until the Artwork is delivered to Contractor. The Artist shall ensure that All Risk insurance on the Artwork, which shall protect the Artist's, Contractor and NJ TRANSIT's interests, is carried by the Artist or the Artist's fabricators and other subcontractors during the period of fabrication.

27. The Artist will carry Comprehensive General Liability insurance in the amount of \$5,000,000 Combined Single Limit for each occurrence. Such insurance shall name NJ TRANSIT, Contractor, (LIST OTHER INSURED) as additional insureds. This insurance to provide coverage during the period of fabrication and installation and until the installation is accepted in writing by Contractor.

The certificate of such insurance shall be submitted to the Contractor and NJ TRANSIT upon signing of this Agreement and shall be kept current through acceptance of the artwork.

28. The parties to this contract do hereby agree that the provisions of N.J.S.A. 10:2-1 through 10:2-4, dealing with discrimination in employment on public contracts, and the rules and regulations promulgated pursuant thereunto, are hereby made a part of this contract and are binding upon them. The Artist further agrees to comply with the requirements of N.J.S.A. 10:5-31, et seq., and all rules and regulations promulgated thereunder.

For the purpose of this Agreement the "Public Agency Compliance Officer" referenced below is NJ TRANSIT's Director of Records Management & Procurement Compliance, the "Public Agency" is NJ TRANSIT and the contractor is the Artist.

During the performance of this contract, the contractor agrees as follows: The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation. The contractor will take affirmative action

to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation. 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. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this non-discrimination clause;

The contractor or subcontractor, where applicable, will in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation;

The contractor or subcontractor, where applicable, will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to P.L. 1975, c.127, as amended and supplemented from time to time and the Americans with Disabilities Act.

The contractor or subcontractor agrees to attempt in good faith to employ minority and female workers consistent with the applicable county employment goals prescribed by N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to P.L. 1975, c.127, as amended and supplemented from time to time or in accordance with a binding determination of the applicable county employment goals determined by the Affirmative Action Office pursuant to N.J.A.C. 17:27-5.2 promulgated by the Treasurer pursuant to P.L. 1975, c.127, as amended and supplemented from time to time.

The contractor or subcontractor agrees to inform in writing appropriate recruitment agencies in the area, including employment agencies, placement bureaus, colleges, universities, labor unions, that it does not discriminate on the basis of age, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation and that it will discontinue the use of any recruitment agency which engages in direct or indirect discriminatory practices.

The contractor or subcontractor agrees to revise any of its testing procedures, if necessary, to assure that all personnel testing conforms with the principles of job-related testing, as established by the statutes and court decisions of the State of New Jersey and as established by applicable Federal law and applicable Federal court decisions.

The contractor or subcontractor agrees to review all procedures relating to transfer, upgrading, downgrading and layoff to ensure that all such actions are taken without regard to age, creed, color, national origin, ancestry, marital status, sex, affectional or sexual orientation and conform with the applicable employment goals, consistent with the statutes and court decisions of the State of New Jersey, and applicable Federal law and applicable Federal court decisions.

The contractor and its subcontractors shall furnish such reports or other documents to the Affirmative Action Office as may be requested by the office from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Affirmative Action Office for conducting a compliance investigation pursuant to Subchapter 10 of the Administrative Code (N.J.A.C. 17:27).

29. The New Jersey prevailing wage laws are hereby made a part of this contract. The Artist's signature on the proposal and on this Agreement is his guarantee that neither he nor any subcontractors he might employ to perform work are listed by or are recorded in the New Jersey Department of Labor as one who has failed to pay prevailing wages in accordance with the provisions of the Prevailing Wage Act.

30. The Artist does hereby warrant and represent that this Agreement has not been solicited or secured, directly or indirectly, in a manner contrary to the laws of the State of

New Jersey or of the United States and that said laws have not been violated as they relate to the procurement or the performance of this Agreement by any conduct, including the paying or giving of any fee, commission, compensation, gift, gratuity or consideration of any kind, directly or indirectly, to any NJ TRANSIT Contractor, or State of New Jersey employee, officer or official.

31. The Artist warrants and represents that no person has been employed to solicit or secure this contract in violation of any other laws and further represents that all applicable laws and regulations shall be complied with in the performance of this contract.

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

33. Release of Claims: It is agreed the Artist acceptance of final payment from Contractor/NJ TRANSIT shall release in full all claims and liability of whatsoever nature against Contractor and NJ TRANSIT for anything done or furnished or in any manner growing out of the performance of this Contract except such claims as may specifically excepted in writing by the Artist from the operation of such release.

34. All notices should be sent certified mail, return receipt requested, to the parties at the addresses listed below:

(Name and Address of Contractor)

and;

(Name and Address of Artist)

35. All changes to this Agreement shall be in writing and signed by the Contractor and the Artist.

36. Project Close-Out: Submissions required prior to final payment, include, but are not limited to, the following items:

- (1) Certificate of Final Acceptance,
- (2) Final Release of Claims,
- (3) Affidavit of Payment of Debts and Claims,
- (4) Affidavit of Release of Liens,
- (5) Final Certificate of Payment

IN WITNESS WHEREOF, Contractor and the Artist have executed this Agreement the day and year above written.

ARTIST

Witness

By _____
Artist

CONTRACTOR

Witness

By: _____
Title

APPENDIX 1

FEDERAL CONTRACT REQUIREMENTS

1. NO FEDERAL GOVERNMENT OBLIGATIONS TO THIRD PARTIES: The Artist agrees that, absent the Federal Government's express written consent, the Federal Government shall not be subject to any obligations or liabilities to any subrecipient, any third party contractor, or any other person not a party to the contract in connection with the performance of the project. Notwithstanding any concurrence provided by the Federal Government in or approval of any solicitation, subagreement, or third party contract, the Federal Government continues to have no obligations or liabilities to any party, including the subrecipient and third party contractor.

2. FALSE OR FRAUDULENT STATEMENTS AND CLAIMS:

A.) The Artist recognizes that the requirements of the Program Fraud Civil Remedies Act of 1986, as amended, 49 USC § 3801 et seq. and USDOT regulations, "Program Fraud Civil Remedies," 49 CFR Part 31, apply to its actions pertaining to the project. Accordingly, by signing the Agreement, the Artist certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, or it may make pertaining to the Agreement. In addition to other penalties that may be applicable, the Artist 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 Artist to the extent the Federal Government deems appropriate.

B.) The Artist 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 §5307, the Government reserves the right to impose on the Artist the penalties of 18 USC § 1001 and 49 USC §5307(n)(1), to the extent the Federal Government deems appropriate.

3. EXCLUSIONARY OR DISCRIMINATORY SPECIFICATIONS: Apart from inconsistent requirements imposed by Federal statute or regulations, the Artist agrees that it will comply with the requirements of 49 USC § 5323(h)(2) by refraining from using any Federal Assistance awarded by FTA to support procurements using exclusionary or discriminatory specifications.

4. INTERESTS OF MEMBERS OF OR DELEGATES TO CONGRESS: No member of or delegate to the Congress of the United States shall be admitted to any share or part of this Agreement or to any benefit arising therefrom.

5. CERTIFICATION OF DEBARMENT AND SUSPENSION: During the performance of this Agreement, the Artist must be in compliance with the requirements of the United States Department of Transportation, 49 CFR Part 29, and FTA Circular 2015.1. The attached Exhibit sets forth detailed requirements and is hereby made a part of this Agreement.

6. TITLE VI COMPLIANCE: During the performance of this Agreement, the Artist, for itself, its assignees and successors in interest (hereinafter referred to as the "Artist") agrees as follows:

A.) Compliance with Regulations: The Artist shall comply with the Regulations relative to nondiscrimination in federally-assisted programs of the Department of Transportation (hereinafter, "DOT") 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 Agreement.

B.) Nondiscrimination: The Artist, with regard to the work performed by it during the Agreement, shall not discriminate on the grounds of race, religion, color, sex, age, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The Artist shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when contract covers a program set forth in Appendix B of the Regulations.

C.) Solicitations for Subcontracts Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the Artist for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Artist of the Artist's obligations under this Agreement and the Regulations relative to nondiscrimination on the grounds of race, religion, color, sex, age, or national origin.

D.) Information and Reports: The Artist 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 NJ TRANSIT or the FTA to be pertinent to ascertain compliance with such Regulations, orders and instruction. Where any information is required or an Artist is in the exclusive possession of another who fails or refuses to furnish this information, the Artist shall so certify to NJ TRANSIT, or the FTA, as appropriate, and shall set forth what efforts it has made to obtain the information.

E.) Sanctions for Noncompliance: In the event of the Artist's noncompliance with the nondiscrimination provisions of this Agreement, 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 Artist under the Agreement until the Artist complies; and/or
- 2.) Cancellation, termination or suspension of the Agreement, in whole or in part.

F.) Incorporation of Provisions: The Artist shall include the provisions of Paragraphs A through F of this Section in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The Artist shall take such action with respect to any subcontract or procurement as NJ TRANSIT or the FTA may direct as a means of enforcing such provisions including sanctions for noncompliance: provided, however, that, in the event an Artist becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Artist may request NJ TRANSIT to enter into such litigation to protect the interests of NJ TRANSIT and, in addition, the Artist may request NJ TRANSIT to enter into such litigation to protect the interest of the United States.

7. CONTRACT WORK HOURS AND SAFETY STANDARDS: During the performance of this Agreement, the Artist, for itself, its assignees and successors in interest (hereinafter referred to as the "Artist") agrees as follows:

A.) Overtime Requirements: No Artist 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 eight hours in any calendar day or in excess of forty hours in such work week unless such laborer or mechanic receives compensation at rate not less than one and one-half times the basic rate of pay for all hours worked in excess of eight hours in any calendar day or in excess of forty hours in such work week, whichever is greater.

B.) Violation; Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in subparagraph (b)(1) of 29 CFR Section 5.5, the Artist and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such Artist and subcontractor shall be liable to the United States (in case the 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 the clause set forth in subparagraph (b)(1) of 29 CFR Section 5.5 in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of eight hours or in excess of the standard work week of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (b)(1) of 29 CFR Section 5.5.

C.) Withholding for Unpaid Wages and Liquidated Damages: The Contractor, on behalf of DOT or NJ TRANSIT, shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any monies payable on account of work performed by the Artist or subcontractor under any such contract or any other Federal contract with the same Artist, or any other Federally-assigned contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same Artist, such sums as may be determined to be necessary to satisfy any liabilities of such Artist or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (B)(2) of 29 CFR Section 5.5.

D.) Nonconstruction Grants: The Artist or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three (3) years from the completion of the Agreement for all laborers and mechanics, including guards and watchmen, working on the Agreement. 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. These records shall be made available by the Artist or subcontractor for inspection, copying, or transcription by authorized representatives of NJ TRANSIT, the FTA and the Department of Labor, and the Artist or subcontractor will permit such representatives to interview employees during working hours on the job.

E.) Subcontracts: The Artist or subcontractor shall insert in any subcontracts the clauses set forth in Paragraphs A through E of this Section and also a clause requiring the subcontractors to

include these clauses in any lower tier subcontracts. The Artist shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in Paragraphs A through E of this Section.

8. LIMITATIONS ON LOBBYING: The Artist 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 Artist 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 Artist or subcontractor, as applicable, has not made, and will not make, any payment prohibited by paragraph A.) of this Article.

C.) Any Artist who has made or has agreed to make any payment using non appropriated 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 the Artist 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 the Artist or to a person, other than an officer or employee of the Artist, 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.

9. AUDIT AND INSPECTION OF RECORDS: The Artist shall retain all Agreement records and permit the authorized representatives of the State of New Jersey, NJ TRANSIT, U.S. Department of Transportation (USDOT) and the Comptroller General of the United States, upon request, to inspect and audit all data and records of the Artist relating to its performance and that of its subcontractors and

assignees, if any, under this Agreement from the effective date hereof through and until the expiration of three (3) years after completion of and final payment for the Project Services. The Artist further agrees to include in all its subcontracts hereunder a provision to the effect that the subcontractor agrees that it will keep all Agreement records and that the State of New Jersey, NJ TRANSIT, the USDOT, and the Comptroller General of the United States and any of their duly authorized representatives shall, until the expiration of three years after final 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.

Documents of every nature prepared pursuant to this Agreement shall be available to and become the property of NJ TRANSIT, and basic notes and other pertinent data shall be made available to NJ TRANSIT upon request without restriction as to their future use.

At least until the expiration of three (3) years after the completion of, and final payment by, NJ TRANSIT for the Project Services, the Artist shall keep and maintain complete financial records showing actual time devoted and cost incurred in connection with services rendered under this Agreement, and it shall make same subject to inspection and audit by NJ TRANSIT, should NJ TRANSIT desire. Following passage of three (3) years from the date of completion of and final payment by NJ TRANSIT for the Project Services, the Artist may request from NJ TRANSIT permission to dispose of the various records. NJ TRANSIT may either order the records be destroyed or surrendered to NJ TRANSIT.

10. BUY AMERICA

Pursuant to Section 165 of the Surface Transportation Assistance Act of 1982 (P.L. 97-424), and the regulation found at 49 CFR Part 661, the Artist agrees that all iron, steel and manufactured products purchased or used as a result of this Agreement shall be of domestic manufacture or origin unless a waiver of these provisions is granted by the U.S. Secretary of Transportation.

There are four exceptions to this requirement:

- (a) That its application would be inconsistent with the public interest.
- (b) That such materials or products are not produced in the United States in sufficient and reasonably available quantities and of a satisfactory quality.
- (c) With respect to rolling stock only, but including train control, communications, traction power equipment, 40 percent may be non-domestic manufacture, but final assembly of such products must take place in the United States.
- (d) That inclusion of domestic material will increase the cost of the overall project contract by more than 25 percent.

11. CLEAN WATER AND CLEAN AIR ACTS

If this Agreement shall be in an amount greater than \$100,000, the Artist shall comply with Section 306 of the Clean Air Act (42 USC 1857(h)), Section 508 of the Clean Water Act (33 USC 1368), Executive Order 11738, Environmental Protection Agency Regulations (40 CFR Part 15), and any other applicable standard, order or requirement issued pursuant to Federal statute or regulation. The Artist shall report violations to NJ TRANSIT, FTA and to the USEPA Assistant Administrator for Enforcement.

12. FEDERAL AID, LAWS AND REGULATIONS

This Agreement 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. The Artist acknowledges that Federal requirements may change and the changed requirements will apply to the project as required, unless the Federal Government determines otherwise.

ATTACHMENT A

FEES, MATERIALS AND PAYMENT SCHEDULE

1. The Contract Amount totals \$_____. This amount represents all costs, whether identified as a specific item or not, to provide the completed and installed artwork as described in the Artist's proposal, and as such, it includes any and all items and in terms as described in the NJSCA publication "Procedures for Artists in the Performance of Arts Inclusion Contracts" which are necessary to complete this project and shall be made part of this contract.
2. As payment for the Artwork, including all fees, supplies, design and transportation of same, Contractor will pay the Artist the total sum of (\$000,000.00) as follows:***
 - a. \$00,000.00 upon consultation, acceptance of proposal, establishment of project timeline, acceptance of a date for submission of Design Development Plans and signing of contract.
 - b. \$00,000.00 upon acceptance of Design Development Plans (including installation plan) for Artwork.
 - c. \$00,000.00 upon receipt and approval of all signed and sealed shop drawings for the Artwork.
 - d. \$00,000.00 upon delivery of materials to the Artist, presentation of receipts or certifications of ownership for said materials, and start of construction.
 - e. \$00,000.00 upon 50% completion of the Artwork.
 - f. \$00,000.00 upon 100 installation of the Artwork.
 - g. \$00,000.00 upon 100% project completion including receipt of archival documentation, copyright application to NJSCA; acceptance of the Artwork by Contractor and NJ TRANSIT; submission of final invoice and close-out documents.

Payment Notes

Artist shall submit an invoice for each milestone to Contractor at the address identified under Article 34 of the contract.

Payment to the Artist shall be made not later than ten (10) calendar days after Terminal receives payment from NJ TRANSIT.

NJ TRANSIT is exempt from sales tax; please provide sales tax exemption certificates to supplier.)

ATTACHMENT B
PROGRESS SCHEDULE

15 Days After Signing of the Agreement (Design and Development Plans) to NJ TRANSIT for Approval	The Artist submits complete Plans and Drawings
10 Work Days After Receipt of the Design and Development Plans	Design Development and Installation Plan approved by Contractor and NJ TRANSIT.
10 Work Days After Receipt of materials.	The Artist begins creation of Artwork.
To Be Determined	Meetings at the Artist's studio and/or fabricator to review and approve progress of Artwork. Pictural Documentation may be substituted
To Be Determined	Artwork ready for delivery and installation.
To Be Determined	Installation completed.
30 Days After Installation of the Artwork	Final approval by Contractor and completion of Agreement. The Artist submits all required project close-out documents.

ATTACHMENT C
SCOPE OF WORK AND BUDGET

1. Purpose

The purpose of this Agreement is to provide the Artwork design, engineering design, construction documents, construction management, complete fabrication, complete transportation and complete installation for Artwork to be installed in the (NAME OF PROJECT).

2. Project Budget

The total contract for the Artwork is \$000,000 including all costs.

3. Schedule

The Artwork must be completed and ready for installation by MONTH, DAY, YEAR. Installation of the Artwork must be completed by MONTH, DAY, YEAR. All close-out submissions must be completed and submitted to NJ TRANSIT within 30 days after completion of installation.

4. Site Location

The Artwork will be installed in the (LOCATION) of the (NAME OF PROJECT). The exact location(s) for the Artwork(s) shall be proposed by the Artist in the Design Development Plans and approved by the project architect in writing.

5. Artwork Description

The Artist will design, fabricate, and deliver the following work of art:

- a. An Artwork which shall consist of (DETAILED DESCRIPTION OF ARTWORK (S)). The surface textures and color of the Artwork shall remain in accordance with the Artist's Design Development Plans as reviewed and accepted by Contractor and NJ TRANSIT.

The Artist shall execute and complete fabrication, transportation and installation of the Artwork upon consultation and coordination with Contractor. All dimensions for the Artwork shall be formally documented as a part of the Design Development Plans. Any structural plans shall be reviewed and approved by engineers who hold license in the State of New Jersey. The Artist will coordinate and produce pertinent plans, engineering and technical data and shall promptly submit such information in accordance with the project schedule as determined by Contractor.

The artist shall be responsible for the structural integrity and proper installation of the Artwork. The installation plans shall be submitted and approved by NJ TRANSIT prior to installation of the artwork. Close contact shall be maintained with NJ TRANSIT project management staff to properly schedule installation activities.

- b. Project Control Specifications: The following are control specifications which address specific issues of the ARTIST's proposal are hereby incorporated into this Agreement.

1. There shall be no reduction in the scale of the elements which comprise the Artwork.

2. The Artist must provide clean connection devices for the mounting of the Artwork to ensure access for potential service needs/ease of maintenance/or removal of same.

3. The elements comprising the Artwork, must be absolutely secure in their mounting methods as called for in engineering calculations sealed by a New Jersey licensed engineer.

4. The Artist shall control the overall weight and structural integrity of each of the elements of the Artwork ensuring that they will not exceed live load design criteria as called for in engineering calculations sealed by a New Jersey licensed engineer and approved by Contractor's project architect/engineer (**NAME OF ENGINEER**).

5. The Artist shall use paints which ensure maximum color fading protection for the Artwork from exposure to UV rays.

6. The Artist shall provide all lighting equipment and fixtures (brackets and plugs) necessary for installation.

c. The Artist shall provide complete construction management services for the Artwork, which shall include, but not be limited to the following:

1. Schedule all work to be performed on the Artwork by both on and off site suppliers, fabricators or workers.

2. Provide all necessary engineering information and supervision for layout of the proper installation devices to insure that the eventual installation of the Artwork will properly interface with the structure.

d. The Artist shall provide the following upon completion of the Artwork.

1. Install, a plaque containing the title of the Artwork, Artist's name, credits and other information as per NJSCA guidelines. The plaque shall be publicly displayed at a size to be mutually agreed upon by NJ TRANSIT, and the Artist.

2. Delivery of complete archival documentation of the finished Artwork to the **NJSCA**:

a. All original designs, original drawings, and original presentation maquette.

b. 35mm slides, color and black and white photographs

c. A written physical description and statement of intent.

Such documentation shall be placed in the archives of the NJSCA and is to be supplied by the Artist not later than 30 days after the installation of the Artwork. Materials submitted must comply with the NJSCA documentation format for visual artwork. All such materials will remain joint property of NJ TRANSIT and the NJSCA.

ATTACHMENT D

CONTRACT DELIVERABLES

The following is a listing of contract deliverables that are required at the completion of each phase of this project. The detailed requirements of each deliverable item are specified in the NJSCA publication entitled "Procedures for Artists," a copy of which is attached hereto as part of this attachment.

Design Development Phase

<u>Ref.</u>	<u>Deliverable</u>
1.1.0	Art Design and Installation Plan
1.3.0	Time Schedule
1.4.0	Comprehensive Site Plan/Elevations, Details
1.7.0	Site Inspection

Construction/Project Phase

<u>Ref.</u>	<u>Deliverable</u>
2.1.0	Schedule and Progress Reports
2.2.0	Meetings
2.3.0	Correspondence
2.4.0	Pre-Construction/Project Meeting
2.5.0	Review and Approve Project Schedule
2.6.0	Coordinate with Project Management
2.7.0	Coordinate and Maintain Documentation
2.8.0	Certification of Insurance
2.9.0	Site Inspection/Field Observation Reports

Project Close-Out Phase

<u>Ref.</u>	<u>Deliverable</u>
3.1.0	Responsibilities
3.2.0	Commencement
3.3.0	<u>Project Close-Out Requirements</u>
3.3.1	Complete Photo
3.3.2	Project Plaque
3.3.3	Submission of Copyright Form VA
3.3.4	Maintenance Schedule
3.3.5	Publicity Agreement with NJSCA
3.3.6	Final Cost Analysis
3.3.7	Final Payment

ATTACHMENT D
ARTIST PROPOSAL FOR ARTWORK

Section 02 30 00 - Microbial Remediation Project Specification

Part 1 – General

1.1 Project Description

- A. The work addressed in the following specification refers to individual work areas within NJ Transit's Hoboken Terminal's **Main Waiting Room**. This specification represents the procedures used during the remediation activities conducted in these areas and is based on procedures contained within the following references:
- ANSI/ICC S500 - *Standard and Reference Guide for Professional Water Restoration*
 - ANSI/ICC S520 – *Standard and Reference Guide for Professional Mold Remediation*.
 - Federal Emergency Management Agency (FEMA) – *Initial Restoration for Flooded Buildings*, Nov 2005.
 - The American Industrial Hygiene Association (AIHA) - *Bioaerosols, Assessment and Control*.
 - United States Environmental Protection Agency (US EPA) - *Mold Remediation in Schools and Commercial Buildings*.
 - New York City Department of Health and Mental Hygiene's (NYC DOHMH) *Guidelines on Assessment and Remediation of Fungi in Indoor Environments*.

1.2 Background

- A. The NJ Transit Hoboken Terminal was impacted by Category 3 flood water during Superstorm Sandy. This resulted in approximately 5 to 6 feet of Category 3 water entering the ground floor areas throughout the entire building. Category 3 water (Black Water) is defined as being grossly contaminated and can contain pathogenic, toxigenic, or other harmful agents.
- B. All first floor areas are considered Condition 3 Areas (indoor environments contaminated with the presence of actual mold and bacterial growth. Actual growth includes growth that is active or dormant, visible or hidden) and Condition 2 Areas (an indoor environment which is primarily contaminated with settled spores that were dispersed directly or indirectly from a Condition 3 area, and which may have traces of actual growth).
- C. This specification focuses on water restoration and microbial remediation of existing furnishing/fixtures (benches, information kiosks, shoe-shine stand, news stand façade panels, door units, window units, etc.) and other historical elements inside the Main Waiting Room, as well as the masonry surfaces (walls & floor) within the Main Waiting Room. The purpose of this specification is to return furnishings/fixtures to Condition 1 (normal microbial ecology) status: an indoor environment that may have settled microbial growth, microbial fragments or traces of actual growth whose identity, location and quantities are reflective of a normal microbial ecology in a similar indoor environment.

1.3 Minimum Scope of Work

- A. The following minimum scope of work is to be completed. Additions or deletions from this scope of work may be made by written change order based up on conditions encountered during rehabilitation.

1. Wooden furnishing/fixtures & other historical elements – Isolate the wooden historical elements within negative pressure enclosures. Conduct gross surface decontamination, then carefully dismantle existing benches, information kiosks, shoe-shine stand, and news stand façade panels (as necessary) to facilitate access to surface areas in need of microbial remediation (exposed and concealed) in order to fully clean, sanitize, disinfect and dry them.

Please Note: Dis-assembly of the historical wood components associated with this project is intended to facilitate access to the surface areas in need of microbial remediation and is not associated with historical wood restoration. The Remediation Contractor is instructed to remove wooden elements associated with the existing bench assemblies, information kiosks, shoe shine platform/seating, and news stand facade panels to the degree necessary to allow for full surface area (inner and outer) decontamination and subsequent protection/storage. Re-installation of the historical wooden elements (post area clearance) is the responsibility of General Contractor (GC) and will be completed at a later date.

2. In-Place Surfaces – clean and decontaminate to remove settled microbial growth and mitigate impacts of salt water intrusion including terrazzo floor and stone, wooden door and window assemblies and miscellaneous metal stair and wall features up to and including the first (mid) stone cornice ledge.

B. Staffing

1. Remediation Contractor(s): To be determined
2. NJ Transit Project Manager:
3. Consultant – Matrix New World Engineering: Gavin Gilmore, Project Manager

C. General Work Procedures

Phase I

1. Erect and establish the temporary painted plywood partitions required to facilitate access to the existing Men's Restroom via the Main Waiting Room Entry and North Vestibule areas; and access to the existing Women's Restroom via the East Entry Vestibule as shown on Mold Remediation Drawing H.0.1. **The Remediation Contractor is to submit a construction detail for the proposed plywood partition construction to the GC and NJ Transit for review and approval prior to mobilization.**
2. Isolate the restroom access areas (tunnels) within negative pressure enclosures as detailed on the remediation drawing. Prepare, dis-assemble (as-needed), remediate, and clean these areas **prior to** all other Main Waiting Room remediation efforts in accordance with the Phase II and Phase III protocols described herein. Upon completion, post-remediation verification and satisfactory release criteria, these areas shall be isolated and maintained by the Remediation Contractor throughout the project and shall be dedicated for NJ Transit passenger's usage.

Phase II

1. Isolate the bench assemblies within a negative pressure enclosure as detailed on the remediation drawing. The existing temporary enclosure panels and framing shall be visually examined prior to disposal for visible mold growth and/or staining.
2. The existing bench assemblies are to be carefully dismantled to the extent necessary to allow for full surface area access, cleaned of all contaminant and disinfected in accordance with the project specifications. The Remediation Contractor is to coordinate the dismantling and protection of all historical bench components during the Phase III remediation.
3. Dismantle (to the extent necessary to access and clean contaminated surface areas) the existing historical bench assemblies in coordination with the other trades (carpentry, electrical, mechanical, etc.). All dismantling/decontamination procedures are to employ wet pre-cleaning methods, HEPA air filtration spore/dust capture and proper worker PPE.
4. Remove and dispose of porous and semi-porous building materials including fiberglass (high density) panel insulation and fiberglass pipe insulation associated with the bench convection heating units.
5. The existing convection heating units have been inspected and characterized as items that will not be salvaged and/or restored as part of this project. The Remediation Contractor is instructed to properly remove and dispose of each heating unit as construction debris. Coordinate all disconnect location and methods with the GC, NJ Transit and Mechanical Contractor (as applicable) for this project.
6. The remaining circulatory metal piping shall be wiped clean of all visible dirt, sediment and/or dust to remove any remnant contamination.
7. Isolate the remaining wooden historical components including existing information kiosks, news stand façade panels, shoeshine stand, doors, and window units within negative pressure enclosures as detailed on the remediation drawing. The existing temporary enclosure panels and framing shall be visually examined prior to disposal for visible mold growth and/or staining.
8. The remaining wooden historical **information kiosks, news stand façade panels, and shoeshine stand (only)** components are to be carefully dismantled to the extent necessary to allow for full surface area access, cleaned of all contaminant and disinfected in accordance with the project specifications. The Remediation Contractor is to coordinate the dismantling and protection of all wooden historical components during the Phase III remediation.
9. Prior to negative pressure enclosure clearance and break-down; carefully clean and decontaminate historical wooden door, door frame/jamb/transom, window sash, and window frame/transom assemblies **in-place**. Permit disinfecting solution adequate dwell time to air dry prior to subsequent component protection.
10. Inspect the work areas upon completion and prior to final cleaning.
11. After inspection, proceed with final cleaning inside the containment/work areas. Final cleaning shall be in accordance with the project specifications.

Phase III

1. Upon completion and clearance of the Main Waiting Room wooden historical fabric decontamination areas and in accordance with the project schedule and specifications, the Remediation Contractor is to coordinate with the GC and NJ Transit the full extent and limits of the mold/bacteria remediation. Decontamination of the existing stone elevations is to extend from the wall to floor joint up to and including the first cornice ledge. The Remediation Contractor is to clean, decontaminate and protect all existing communication cable. **Remediation efforts associated with the Phase III wall decontamination portion of this contract is to occur within the previously utilized negative pressure enclosure work areas while maintaining a negative pressure differential to the outside air.**
2. Additional architectural elements that are to remain intact are to be cleaned and decontaminated in-place in accordance with the project specifications. These elements include but may not be limited to existing sconce light fixtures, door and window transoms, ticket counter window/frames, telephone bank, and stair treads/risers, and railing.
3. Inspect the work areas upon completion and prior to final cleaning.
4. After inspection, proceed with final cleaning. Final cleaning shall be in accordance with the project specifications.
5. Subsequent to the completion of the negative pressure enclosure(s) break-down; clean and disinfect the entire floor area within the Main Waiting Room. Permit disinfecting solution adequate dwell time to air dry. **The Remediation Contractor is to employ general area filtration (scrubbing) during floor cleaning efforts.**

Storage Note

1. Upon completion of the historical wood component(s) decontamination and prior to removal from the negative pressure enclosures, the Remediation Contractor is instructed to wrap and properly label all historical components with one layer minimum 6-mil poly for storage/protection.

D. Additional Work Area Preparation

1. Erection of the regulated remediation work areas and negative pressure enclosures including the maintenance of negative pressure to control air pressure in relation to the exterior of the containment. Critical barriers made from two layers of fire-resistant 6-mil plastic sheeting must be placed over all airflow pathways into the Main Waiting Room area including existing window and door openings prior to component removal. Appropriate airlocks and decontamination areas will be provided at the entrance/exit to the negative pressure enclosures. Warning signs indicating "Restricted Area, Authorized Personnel Only" must be posted at the entrance to the regulated remediation work areas.
2. Provide personnel decontamination area in accordance with 29 Code of Federal Regulations (CFR) 1926.65 (k).

3. Air filtration devices (AFD) must be used to create appropriate air current differentials between negative pressure enclosures and adjacent areas. Use the AFDs to create a pressure differential in the work area of at least -5 Pascal's (-0.02 inches of water) in relation to the adjacent areas and/or a minimum of 4 air changes per hour. The Remediation Contractor will provide the Consultant with a written calculation that demonstrates that the number of AFDs utilized by the Remediation Contractor will provide the specified pressure differential and/or air changes per hour. In addition, AFDs are to be installed and maintained outside the negative pressure enclosures in order to filter (scrub) the outside air adjacent to the historical component dis-assembly and general area clean.
4. The Remediation Contractor will utilize a micro-manometer to monitor the negative pressure within the negative pressure enclosures. The Remediation Contractor will provide the Consultant with daily reports from the micro-manometers. Failure to continuously maintain the specified negative pressure will be a non-conforming activity and will result in the Remediation Contractor correcting the condition, including HEPA vacuuming and wiping adjacent areas. The Remediation Contractor will be responsible for such cleaning as their sole expense.

E. Disassembly - Furnishing/Fixtures & Other Historical Elements

1. Surface clean with damp cloth and/or HEPA vacuum.
2. Working in teams of two or more proceed with the minimal disassembly required to fully access surface areas in need of microbial remediation. During disassembly light mist and HEPA vacuum exposed surfaces to minimize release of bioaerosols and dust.

F. Detailed Cleaning Procedures - Furnishing/Fixtures & Other Historical Elements

1. All work to be done inside the negative pressure enclosures.
2. As appropriate, remove visible microbial growth from individual pieces using a combination of HEPA vacuuming, damp wiping, manual brushing and/or use of sanding equipment fitted with HEPA filtered exhausts. Use care so as to not damage wood to a degree which would prevent future historical restoration or re-installation.
3. Following satisfactory removal of visible contamination, apply an approved disinfectant/sanitizer to all surfaces according to the manufactures recommendations. **Remediation Contractor to submit proposed disinfectant/sanitizer to Consultant for review and approval prior to initial use.**
4. HEPA vacuum and damp wipe each piece one additional time prior to removal from the negative pressure enclosure.
5. At end of each day mop and/or HEPA vacuum floor to prevent accumulation of dust and debris.

G. Detailed Cleaning Procedures – In-Place Stone/Metal/Wood Surfaces

1. HEPA Vacuum and damp wipe surfaces and apply an approved disinfectant/sanitizer to remove settle mold and/or bacteria according to the

manufactures instructions. **Remediation Contractor to utilize the previously tested Safe N' Easy Limestone Cleaner (manufactured by Dumond Chemicals, Inc.) or submit an alternate proposed disinfectant/sanitizer to Consultant for review and approval prior to initial use.**

2. Properly pre-clean then protect/seal all openings in stone to metal joints prior to wet cleaning activities that may permit water/cleaning solution to infiltrate behind the electrical lighting sconce fixtures.
3. Clean stone elements to remove corrosive elements left behind due to salt water intrusion. Apply and remove selected product according to manufacturer's instructions. **Remediation Contractor to utilize the previously tested Safe N' East Efflorescence Remover (manufactured by Dumond Chemical, Inc.) or submit alternate proposed products and methods to GC for review and approval prior to initial use.**

Note: prior to initial application of disinfectant/sanitizer and salt/corrosion cleaner a test shall be conducted in a small area to ensure the materials are compatible with existing building elements and will not discolor or mar the finishes.

H. Removal and Disposal of Contaminated Items

1. The Remediation Contractor will be responsible for removing potentially contaminated materials from the work areas without spreading the potential contamination outside of the containments. Such materials should be covered and/or double bagged appropriately to meet this performance requirement. Disposal of potentially contaminated materials away from the project site is the responsibility of the Remediation Contractor.

I. Personal Protective Equipment (PPE)

1. Gloves - All workers who are employed in the mixing, preparation, and/or application of detergents will wear gloves that are chemically compatible with the detergent material. Workers participating in activities that present laceration hazards (i.e., component dis-assembly) must wear cut-resistant gloves. For all other work activities, workers will wear disposable fluid-resistant gloves.
2. Eye Protection - Eye protection must be worn at all times in the work areas. The selected eyewear must be capable of protecting workers from flying solid objects and liquid splashes, and the use of eyewear must comply with 29 CFR 1910.133, Eye and Face Protection, and ANSI Z87.1 - 1989.
3. Protective Suit - All workers in the work areas must wear disposable full body coveralls, head covers, and boot covers; or approved equivalent disposable protective suits, during active cleaning. The suits must be supplied in sizes to properly fit each individual worker. The wrists, ankles and other openings in the disposable suit must be secured utilizing duct tape or other suitable means. Protective suits do not need to be worn during the set-up and final cleaning phases. If necessary, the Remediation Contractor will provide protective suits to the Project Manager, Consultant and Visitors.
4. Respirators - All workers and individuals entering the work areas during dis-assembly/cleaning activities must be provided with full-face or half-face air purifying respiratory protection in accordance with 29 CFR 1910.134. All persons entering the work area during remediation must be medically cleared to wear a

respirator, fit-tested and trained on the proper use of the selected respiratory protection. P100 filters will be used for protection from potential exposure to microbes; respirators with combination P100/Acid Gas/Organic Vapor cartridges will be used if needed for protection during the spraying of bleach, sodium hypochlorite, or other cleaning detergents.

- J. Removal and Disposal of PPE and Contaminated Equipment
1. Prior to leaving the containments, workers will HEPA vacuum PPE and shoes.
 2. Gloves and protective suits must be removed before the worker leaves the containments via the airlocks. These disposable items must be placed in sealed plastic bags and disposed of by the Remediation Contractor in accordance with federal and local regulations.
 3. Protective eyewear and respirators should be removed outside the work areas and shall be immediately washed with a detergent solution and thoroughly dried.
 4. At the conclusion of the remediation any equipment used in the remediation process (utility knives, saws, negative air machines, crowbars, etc.) shall be washed with detergent immediately after leaving the work areas.
 5. Filters from HEPA vacuums, scouring pads, sponges, negative air machine filters, negative air machine pre-filters and the other items that cannot be decontaminated shall be assumed to be contaminated and shall be disposed.
- K. Cleaning and Drying of Remaining Surfaces Prior to Disassembly of Negative Pressure Enclosure
1. Initial Cleaning – Initial cleaning shall include use of pressure washers, scrub brushes, detergent solutions and water as necessary to remove settled debris from remaining building surfaces. Water from cleaning process shall be collected for proper disposal. **Remediation Contractor to submit proposed detergent to Consultant for review and approval prior to initial use.**
 2. Application of Sanitizer – Following initial cleaning and removal of debris a disinfectant/sanitizer solution shall be applied to exposed building surfaces. Application shall follow all manufacturers' directions regarding solution concentrations and minimum contact time. **Remediation Contractor to submit proposed disinfectant/sanitizer to Consultant for review and approval prior to initial use.**
 3. Final Cleaning Minimum cleaning procedures are:
 - ✓ HEPA vacuum surface
 - ✓ Damp wipe surface with water and mild detergent
 - ✓ Allow to dry
 - ✓ HEPA vacuum surface
- L. In addition to the AFDs used to create work area depressurization, a minimum of two additional AFDs (re-circulating AFD) shall be used in the work areas to “scrub” work area air to remove residual airborne bioaerosols. The re-circulating AFDs will operate for 24 hours after completion of work

M. Post-Remediation Evaluation (by Remediation Contractor)

1. Post-remediation evaluation will be conducted by the Remediation Contractor to determine whether or not remediation has been completed. This evaluation involves implementing internal quality control procedures. It can include visual inspection, olfactory evaluation, laser particle counting and moisture measurements. Remediated structures and systems can be considered clean when contamination, un-restorable contaminated materials and debris have been removed, and surfaces are visibly free of dust. The term "visibly" can include direct and indirect observation (e.g., using a white or black towel to wipe a surface to observe for cleanliness). Also, remediated areas should be free of malodors associated with microorganisms. At that point, it is probable that structural components and systems have been returned to Condition 1. The evaluation can also include moisture measurements and the use of a laser particle counter. If visible mold, dust or debris has not been removed, malodors are present or initial cleaning is questionable, repeating the cleaning process may be warranted.

2. Post-Remediation Verification (by Consultant)

A combination of air and surface samples may be collected and analyzed. In addition a visual inspection and moisture evaluation of the work area will be conducted.

Release Criteria

The Remediation Contractor's remediation work is considered complete when:

- a. The work area is visibly clean.
- b. Wiping of remaining surfaces with a damp cloth does not reveal the presence of any visible particulate, dust, or debris on the surface of the cloth.
- c. Area moisture is controlled, visible water and water stains are not present within the work areas.
- d. Remaining building materials are dry, as demonstrated by moisture meter readings of materials inside the containment being within 5% of moisture meter readings from undamaged material outside of the containment.
- e. Particle counts inside each work areas are equal to or less than particle counts in the surrounding non-work areas.

If the conditions are not met, then the decontamination is incomplete and re-cleaning is necessary. The Remediation Contractor will also be responsible for all costs associated with collection of a second or subsequent round(s) cleaning.

A CHLOR*TEST™, or equivalent test, will be performed on stone surfaces. Cleaning will be considered complete when test results from previously submerged surfaces as equal to results from similar areas which were not submerged.

3. Worker Training

All workers must be trained in accordance with applicable sections of Title 29, Parts 1910 and 1926 of the Occupational Safety and Health Administration's Code of Federal Regulations. Training must include awareness of microbial hazards, use personal protective equipment, and proper personal hygiene practices. ***The Remediation Contractor will provide the Consultant with documentation supporting applicable training for their employees.***

4. Confidentiality and Non-Disclosure

The Remediation Contractor hereby acknowledges that it shall maintain the information set forth herein and any information pertaining to the work being conducted as confidential information and that it shall maintain such confidential information in strict confidence, not to disclose same to any other party or entity or use same in any manner except for purposes of performing its obligations under this Work Plan.

Except as required by Governmental Authorities or Governmental Requirements, Remediation Contractor shall not disclose any information related to their work or this Work Plan to any third party without obtaining the prior written consent of GC.

5. Acknowledgement

Signatures below indicate that the above information has been reviewed and accepted by all parties.

Company	Printed Name	Signature	Date
NJ Transit			
Remediation Contractor – (To be Determined)			
Consultant – Matrix New World Engineering, Inc.			

SECTION 040140.92 INTERIOR MASONRY RESTORATION

PART 1 - GENERAL

1.1 SECTION INCLUDES:

- A. The Contractor shall furnish all labor, materials and equipment and perform all operations necessary for the restoration of the limestone and marble in the Waiting Room of the Hoboken Terminal as indicated in the Contract Drawings or specified herein as directed by the Architect.
- B. The work of this Section consists of but is not limited to:
 - 1. Removal of any efflorescence that remains or has reappeared on the surface of the stone after initial cleaning.
 - 2. Removal of deteriorated limestone and replacement with Dutchmen units. Larger Dutchman will require fabrication and pinning of units. New masonry is to match historic material in color, texture, finish and profile.
 - 3. Removal and replacement of cracked or spalled marble.
 - 4. Honing and polishing of rough marble surfaces.
 - 5. Patching of cracks in limestone.
 - 6. Remove damaged limestone patches and replace with new patches that match the surrounding masonry in color, texture, and finish.
 - 7. Repoint open joints in limestone with mortar that matches existing in color, texture and profile.
 - 8. Re-grout all open joints in marble with grout that matches existing in color, texture and profile

1.2 REFERENCED SECTIONS:

- A. Section 005700 Ornamental Metal Restoration
- B. Section 060140.91 Architectural Woodwork Restoration
- C. Section 090120.91 Plaster Repair and Restoration
- D. Section 090160.91 Terrazzo Floor Restoration

1.3 REFERENCES:

- A. Materials and methods shall conform to the "Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings," 1995.
- B. ASTM - American Society of Testing and Materials
- C. ILIA – Indiana Limestone Institute of America

- D. Portland Cement Association
- E. ANSI A41.1 Building Code Requirements for Masonry (ANSI)
- F. Manufacturer's printed recommendations

1.4 JOB CONDITIONS:

- A. Protect masonry materials during storage and construction from wetting by rain, snow, seepage or ground water and from soilage or interior-mixture with earth or other materials.
- B. Protect all adjacent areas from damage during the work of this Section using approved means of physical protection.

1.5 QUALITY CONTROL:

- A. All masonry restoration shall be done by a qualified Restoration Contractor (heretofore referred to as "Contractor") with experience working with historic masonry. The Contractor must have a minimum of five (5) years' experience working with historic masonry. The Contractor must demonstrate three (3) projects similar in scope and type to the required work in the New York / New Jersey region involving facilities designated as Landmarks by Local government, or buildings listed on the National or State Register of Historic Places.
- B. Contractor shall maintain a steady work crew consisting of skilled mechanics who are experienced with the materials and methods specified, and are familiar with the design requirements. Contractor shall maintain a full-time Forman who fluently speaks, reads and writes English. Contractor shall confirm that all workers understand the job's requirements. Mechanics shall be fully supervised to ensure that the work is accomplished to meet or exceed the highest standards of the trade.
- C. Architect shall be given regular access to the Contractor's scaffolding or work site so that he/she may inspect work being performed.
- D. Contractor shall replace at no additional expense to the Owner all broken, lost or damaged materials during the masonry restoration.
- E. Work is to be performed on a daily basis without interruption unless directed otherwise by the Architect.
- F. Obtain materials for masonry restoration from a single source for each type of material required to ensure match in quality, color, texture and pattern.
- G. In acceptance or rejection of the work of this Section, no allowances shall be made for lack of skill on the part of the mechanics.
- H. All procedures shall be done in accordance with regulations, safety standards and requirements of all federal, state and local authorities having jurisdiction over the work including, but not limited to, the applicable standards for protecting the public and control of pollutants and debris, and O.S.H.A. regulations for the protection of all workers and the public.
- I. Materials shall be used only at the manufacturer's recommended temperature tolerances.

1.6 SUBMITTALS:

- A. Submit qualification data and references for firms and persons specified in Section 1.5 "Quality Assurance" to demonstrate their capabilities and experience.
- B. Contractor shall submit a work plan including detailed description of how the work of this Section will be accomplished. This should include products to be used, methods and equipment for masonry restoration, etc. In addition, a quality control program shall be submitted which will include provisions for supervising performance when cutting horizontal joints with a mechanical grinder and preventing damage due to worker fatigue.
- C. Provide written descriptions, drawings and diagrams outlining proposed methods and procedures for protection of personnel, the public and the existing construction during the work of this Section.
- D. Contractor shall submit copies of the manufacturer's technical data for each product indicated or proposed for use, including recommendations for their application and use. Include test reports and certificates that verify the product's compliance with the specification's requirements. One complete set of product literature and MSDS shall be placed in a 3-ring, loose-leaf binder and shall be present on the job site at all times for the reference of the Architect.
- E. Shop Drawing:
 - 1. **Submit complete shop drawings** of all cut stone work, including those for the large limestone Dutchmen. These drawings when viewed together shall show all details of bedding, bonding, jointing, anchoring and other essential aspects of the work. In addition the finish, dimensions and setting number of each piece of stone shall be shown.
 - 2. The Contractor shall be responsible for all field measurements in the preparation of setting drawings fully defining the conditions for the installation of all stone masonry and Dutchmen repairs.
 - 3. The cut stone fabricator shall prepare all shop drawings, fully defining the conditions for fabrication, finishing and fastening all cut stone and Dutchmen.
 - 4. Show intended application method and configuration of limestone and marble patching, including dimensions, profiles and tooling.
- F. Samples:
 - 1. Submit three (3) samples of Indiana Limestone to be used for Dutchmen. New material must match existing in color, texture, finish and profile.
 - 2. Submit three (3) samples of marble to be used for replacement. New marble must match existing in color, texture, vein pattern, finish and profile.
 - 3. Submit three (3) composite patching samples matching the existing limestone and marble. Sample size shall be a minimum of 2" X 2". Such sample must be approved by the Architect after proper curing and finishing prior to the start of composite patch repairs. All work shall conform to the approved samples
 - 4. All masonry pins and anchoring devices.

5. Repointing mortar for limestone
 - a. Provide cured samples of mortar in the form of 6 inch long by 1/2 inch long wide sample strips of mortar set in aluminum or plastic channels.
 6. Grout for marble:
 - a. Provide cured samples of grout in the form of 6 inch long by 1/2 inch long wide sample strips of grout set in aluminum or plastic channels.
 7. Provide a sample (Minimum 50 grams) of each aggregate to be used in each mortar and grout.
- G. If alternate methods and materials to those specified are proposed for any phase of the work, provide written description. Provide evidence of successful use on comparable projects and demonstrate its effectiveness for use on this project.
- H. Mock-ups:
1. Prior to executing work, provide in-place mock-ups for the Architect's approval. Resubmit panels until the Architect is fully satisfied. Mock-ups shall be prepared by the Contractor using the same workmen, methods and materials that will be employed for the remainder of the work. Upon approval, the mock-ups will remain the standards of work throughout the job. The approved mock-ups shall be retained, undisturbed and suitably marked, throughout construction. Mock-ups may be incorporated into the finished work, when so approved by the Architect.
 2. No mock-ups shall be made until the methods and locations are approved by the Architect.
 3. Architect will be present during the creation of all mock-ups. Do not proceed with the work unless the Architect is present. Notify the Architect not less than forty-eight (48) hours in advance of masonry restoration mock-ups.
 4. Provide protection for adjacent surfaces during the mock-up phase.
 5. Mock-ups of repair work shall match the original in all respects, including color, texture, finish, dimensions, coursing, evenness of surface, quality of work, achievement of desired sheen/appearance, bond type, etc.
 6. The mock-ups are as follows:
 - a. Removal of deteriorated limestone to sound stone.
 - b. Installation of limestone Dutchman requiring pins
 - c. Removal of damaged limestone patch
 - d. Installation of new limestone patch
 - e. Removal of damaged marble unit at base
 - f. Installation of new marble unit at base
 - g. Grinding smooth and polishing of one marble unit.
 - h. Repair of three (3) linear feet of crack on the walls
 - i. Pointing sample, including raking and re-pointing six (6) linear feet.
 - j. Grouting sample, including raking and re-grouting six (6) linear feet.
 - k. Efflorescent removal four (4) square feet (if required).

1.7 COORDINATION:

- A. Prior to commencing the work of this Section, a meeting must be scheduled at the jobsite to discuss conformance with the requirements of specifications and job site conditions. Representatives of the Contractor, Architect and other parties involved in the scope of this work shall attend the meeting.
- B. The Contractor shall coordinate his or her work with that of all other trades related to the successful completion of the work of this section.
- C. The work of this Section is not to commence until the cleaning of the waiting room has been completed.

1.8 DELIVERY, STORAGE AND HANDLING

- A. All materials shall be delivered to the job site in factory-sealed containers clearly labeled as to product, manufacturer, color, and other pertinent characteristics.
- B. All materials for use in the work of this Section shall be stored under environmental conditions recommended by the manufacturer. Materials should be kept dry (includes protection from liquid moisture and water vapor), well-ventilated and free of foreign matter.
- C. Arrangement shall be made with the Owner's representative to store equipment and materials in designated areas. The Owner or Architect shall not be responsible for damaged or stolen materials or equipment left on the premises by the Contractor.

PART 2 - PRODUCTS

2.1 TOOLS:

- A. Contractor shall furnish all materials and equipment necessary to accomplish all aspects of the work in this Section.
- B. Hand tools shall be used for removal of deteriorated stone and squaring off of openings for Dutchmen and patches.
- C. Scaling back of limestone may be accomplished using an electric hand sander with diamond abrasive sanding pads.
- D. Drill, grinder or orbital sander and required pads/accessories for honing and polishing of the marble.
- E. Use of other power saws, power chisels, or any other power tools will not be permitted without prior written approval of tool types and locations by the Architect.

2.2 MATERIALS:

- A. New Limestone:
 - 1. New limestone is to match historic materials in color, texture, finish and profile.
- B. New Marble:
 - 1. New marble is to match existing in color, veining pattern, finish and profile.

C. Dutchmen

1. Dutchmen shall be made from replacement stone approved by the Architect. The stone shall match the existing material to be repaired.
2. All new stone shall be of standard grade, free of cracks, seams, or starts which may impair its structural integrity or function. Inherent color variations characteristic of the quarry from which it is obtained may be acceptable if consistent with the existing stone which is being matched. The Architect shall determine the acceptability of this variation. Texture and finish shall be approved by the Architect as shown on the samples against the stone to be matched.
3. Stone replication elements shall be fabricated to match existing stone in appearance including color, texture, profile and surface finish.
4. Dutchmen shall be appropriately sized to fit the openings they will fill. Joints should measure no more than 3/8".
5. Prior to the installation of any Dutchmen, the Architect will review them for soundness and sizing.
6. Holes for anchors shall be diamond cored.

D. Dutchmen Anchors and Accessories

1. Provide anchors of type and size required to support Dutchmen. Anchors shall be stainless steel, AISI Type 302 or 304.
2. Provide hardwood or plastic shims, non-staining to stone, sized to suit joint thickness and bed depths of Dutchmen.
3. Rods/Pins: Stainless steel threaded rods sized for each type of repair for Dutchmen and reattachment of pieces where necessary. Anchors and pins shall be AISI type 302 or 304 stainless steel. Pins shall meet ASTM A167, a minimum of 1/4 inch in diameter and in lengths as required.

E. Adhesives

1. Akepox 5000, epoxy based stone adhesive, UV stable, knife grade by Akemi.
2. Sikadur 31, Hi-Mod Gel and manufactured by Sika.
3. Flexi-weld 520T Epoxy Adhesive" as manufactured by Edison Coatings, Inc. Plainville, CT.
4. Pre-approved equal.

F. Limestone Patching Mix and Components

1. Use custom patching mix that is tinted to match the existing limestone.
2. Jahn M70 Limestone/Sandstone/Brownstone Repair Mortar as manufactured by Cathedral Stone.

- a. Only installers with certification from Cathedral Stone can purchase or install Jahn Repair Mortars.
3. Pre-approved Equal.
- G. Marble Patching Mix and Components:
 1. Use patching mix that is tinted to match existing marble.
 2. Marble Filler 1000 S Neutral manufactured by AKEMI.
 3. Akemi Colouring Paste manufactured by AKEMI.
 4. Pre-approved equal patching composite patching mix.
- H. Masonry Crack Repairs
 1. For hairline cracks up to 1/8 inch in width, acceptable products include:
 - a. PumpX53iL Pumpable injection grout manufactured by Edison Coatings, Inc., Plainville, CT.
 - b. Injection Grout 101G as manufactured by U.S. Heritage Group, Chicago, IL.
 - c. Jahn M30 #32 Micro Injection Grout as manufactured by Cathedral Stone.
 - d. Equal when approved in advance by the Architect.
 2. For cracks greater than or equal to 1/8 inch in width, acceptable products include:
 - a. Jahn M40 Crack and Void Injection Grout as manufactured by Cathedral Stone.
 - b. Injection Grout 101G as manufactured by U.S. Heritage Group, Chicago, IL.
 - c. PumpX53iL Pumpable injection grout manufactured by Edison Coatings, Inc., Plainville, CT.
 - d. Equal when approved in advance by the Architect.
 3. **If Jahn patching material is used, all installers must be certified Jahn installers.**
 4. Injection shall be by disposable syringe, acceptable products include:
 - a. Monoject Non-Sterile Disposable Syringe without needle #79-4215 Supplied by PGC Scientifics (www.pgcsci.com)
 - b. Air-Tite Brand 30cc Luer Lock Syringe #3 supplied by Air-Tite Products Co., Inc. (www.air-tite-shop.com).
 - c. Pre-approved equal.
 5. Syringe needles shall be used as necessary for injecting grout into cracks. Needles shall be lengths as required and shall be supplied by a veterinary supply company such as:
 - a. Air-Tite Products Co., Inc. (www.air-tite-shop.com)
 - b. Pre-approved equal.
 6. Ports and cracks shall be sealed during injection grouting using a non-staining, water based clay.
 7. Capping Mortars shall be custom colored to match the limestone or marble. Approved products include:

- a. Jahn M125 Thin Set Mortar as manufactured by Jahn International and supplied by Cathedral Stone.
 - b. Equivalent product when approved in advance by the Architect.
- I. Pointing and Bedding Mortars
1. Mortar for pointing stone units shall be custom colored, lime based mortar. Acceptable pointing mortars include:
 - a. Jahn M110 Historic Pointing Mortar as manufactured by Jahn International and supplied by Cathedral Stone products.
 - b. High Lime Hydrate Mortar – Restoration Mortar as manufactured by U.S. Heritage Group.
 - c. Pre-approved equal.
- J. Grout
1. Provide a cement acrylic grout with color added to match the color of the original marble grout.
- K. Efflorescence Removal
1. Poultice of inert clay materials Fuller's earth, kaolin or Stand Off Poultice Powder (as manufactured by ProSoCo) and Water.
 2. Safe N' Easy Efflorescence Remover as manufactured by Dumond.
 3. Ef-Fortless, as manufactured by Eaco Chem.
 4. Pre-approved equal.
 5. Natural stiff bristle brushes.

PART 3 - EXECUTION

3.1 INSPECTION:

- A. The Contractor shall examine substrates and conditions under which this work is to be performed and notify the Architect in writing of conditions detrimental to the proper completion of the work. Do not proceed until unsatisfactory conditions are corrected. Commencement of work indicates that Contractor accepts substrate and conditions.
- B. Review the amount and extent of work to be accomplished and review areas with the Architect prior to the execution of Work.
- C. Correct any conditions that are detrimental to the successful completion of the work. Sequencing of work should be scheduled to ensure that completed work will match existing.

3.2 EFFLORESCENCE REMOVAL (WHERE REQUIRED):

- A. For light areas of efflorescent salts that re-appear after abrasive cleaning of the Waiting Room, remove with a dry brush or vacuum.
- B. For heavier areas of efflorescent, use poultice or chemical agent. Pre-soak to saturate the wall, apply chemical agent according to the manufacturer's direction, then thoroughly rinse. Test the cleaned area with pH strips until the area rinsed has a pH equal to the rinse water.

- C. For Poultice application:
1. Mix water and dry clay powder together. Add clay and water until a wet paste consistency is achieved. The poultice must be as wet as possible, but still able to cling to a vertical surface without slumping.
 2. Apply the clay poultice to the affected masonry using a brush, spatula, trowel, or low-pressure spray equipment to a thickness of at least ¼-inch.
 3. Cover the poultice with plastic for at least 12 hours. Secure the edges of the plastic with tape to prevent the poultice from prematurely drying out.
 4. After 12 hours, remove the plastic and allow the poultice to completely dry.
 5. Remove the dry poultice using plastic or wooden scrapers, taking care not to scratch the masonry surface. Rinse the residual clay material using low-pressurized water and soft-bristled brushes. The pressure washer must be equipped with a fan-tipped nozzle and water pressures must not to exceed 250psi.
 6. Reapply if necessary.

3.3 DUTCHMEN REPAIRS:

- A. Dutchman repairs can vary in overall size, but shall not under any circumstance be less than two (2) inches thick. Replacement stone shall be carefully cut and selected to be sound and in good condition, free of defects, cracks, breaks, or other observable defects. The surface of the replacement stone shall be dressed to resemble the appearance, tooling and texture of the adjoining stone by an approved method. All surface dressing of Dutchman repair shall be done before the Dutchman is set.
- B. Dutchmen shall be fastened with stainless pins and anchors as necessary, designed to facilitate mechanical locking and to prevent possible slippage of the stone. The fasteners shall be positioned without weakening the stone in any way.
- C. Preparation:
1. Using hand held tools or if approved, power tools, remove unsound or damaged stone taking great care not to abrade or mar adjacent masonry surfaces or edges
 2. Square-up voids, leaving a sound and level bed on which to place Dutchman.
 3. Remaining masonry surface shall be cleaned and all loose material shall be rinsed with water to remove all dust and debris.
- D. Pinning Dutchmen: Large Dutchman units should be repaired and reattached using stainless steel pins and epoxy adhesive. Where possible, blind pinning should be employed.
1. Pre-drill pin holes into the Dutchmen units to be re-set and into the limestone substrate. The pin holes shall be no greater than 1/8 inch larger than the diameter of the pins. Recess the pins a minimum of ¾ inch beneath the surface of the stone.
 2. Coat the inside of each hole and the surface of each pin with the specified epoxy.

3. Insert epoxy-coated pin into hole and counter sink pin a minimum of 1/2 inch beneath the surface of the stone.
 4. After the pin has been set and the epoxy has cured, fill the pin holes with the specified composite patching mortar. The patch area shall exactly replicate the color, texture, reflectance and original profile of the stone.
- E. Setting Dutchmen:
1. Rinse Dutchman before setting, do not install dirty or dusty stone. Dampen joint and surrounding stone surfaces prior to placing mortar.
 2. Use water soaked hardwood or plastic shims to stabilize stone Dutchmen in proper alignment while mortar is setting. Make sure that sufficient shim material is placed to avoid point loading the stone as this may squeeze freshly applied mortar out of joints.
 3. Set stone Dutchman to existing masonry with approved epoxy accurately and in accordance with the approved setting drawings. A thin layer of epoxy shall be applied to stone to within 1/4 inch of its edges. Do not allow epoxy to spread out over exposed edges.
 4. The thickness of joints in all masonry will be uniform and shall match those in the adjacent work in which the unit replacement or Dutchman is being installed. In no case shall the joint exceed 1/4 inch.
 5. Patching of defects in the Dutchman shall not be permitted. Chips and stains on surfaces shall be redressed, cleaned or replaced with new stone. No acid leaching agent shall be permitted.
 6. Fill joints between units, pacing mortar tightly. Verify proper horizontal and vertical alignment before bedding mortar sets.
 7. Remove shims only after mortar has set. Do not disrupt bond.
 8. Tool final layer of mortar to match pre-approved joint profile.
- F. Protect all adjacent materials during Dutchman repairs. Once epoxy materials have set remove any epoxy, grout or patching material accidentally splashed onto adjacent surfaces. Remove set epoxy adhesive with acetone. Any damage to stone or materials to remain resulting from Dutchman repairs shall be restored to the full satisfaction of the Architect at no additional cost.
- G. The face of all Dutchman repairs shall be cleaned following the completion of all setting work. Clean patch material splashes, smears, etc. by vigorously brushing with stiff natural-bristle brushes and potable water. If necessary, clean white sand may be added to the water.
- H. Any work judged to be defective by the Architect shall be removed and reset at no cost.

3.4 MARBLE REPLACEMENT OR RESTORATION

- A. By hand, carefully remove damaged marble units as outlined on Contract Drawings.

- B. Provide new units to match adjoining units as intended and install with fresh grout, pointed to eliminate evidence of replacement.
- C. At North Vestibule and East Elevation locations:
 - 1. Hone or grind the surface of the marble until an even surface has been achieved. This will require the removal of more of the marble surface at the top of the slabs than the damaged bottom.
 - a. Avoid creating an uneven surface with valleys and hills.
 - 2. Using finer and finer grits, polish the marble slab until the sheen is identical to the historic finish found on undamaged marble units.

3.5 MASONRY COMPOSITE PATCHING MATERIAL

- A. Preparing void: Where required remove existing composite patch and all unsound stone. Existing patches shall be removed using hand tools and chisels or other approved method that will not damage, abrade or break the stone, its edges or surrounding elements.
- B. Using a toothed chisel, even up the sides and back of the void, creating a minimum depth of ¼ inch below the surface where possible. Dovetail walls of void to form key for patching. Do not install patch repairs that have a feathered edge. Incorrect installation will cause repairs to fail prematurely.
- C. Surfaces to receive patching material must be sound and free of all dust, dirt, grease, laitance and/or any other coating or foreign substance which may prevent property adhesion. Remove all loose particles with water and brush from void. If necessary, use a vacuum cleaner to produce a dust-free surface.
- D. If using Jahn patching materials, follow the manufacturer's instructions for application, tooling, moistening and curing. If Jahn patching material is used, all installers must be certified Jahn installers.
- E. Moisten the substrate using clean water; do not allow water to pool in voids. Jahn Mortar or approved equal should be applied to a glistening wet surface on vertical applications and a well dampened surface, with no pooling water on horizontal applications. If the surface is allowed to dry out before applying the product, this step must be repeated.
- F. Jahn mortar should be mixed with water to the consistency of wet putty. Apply the Jahn mortar to the glistening web substrate approximately 1/8 inch thick.
- G. Patching materials are to be applied as per manufacturer's instructions. Deeper voids are to be filled in lifts. Follow manufacturer's instructions for curing, moistening and tooling.
- H. The restored areas shall match the original contours and detail of the limestone units.
- I. Unacceptable patches will be removed and replaced as directed by the Architect. Unacceptable conditions include, but are not limited to:
 - 1. Separation of the patch from the sound stone at the edges of the patch.
 - 2. Hairline cracking of the patch.
 - 3. Feathered patches.

4. White hazing or other discoloration of the patch.
- J. Additional Mechanical Bond for Patches at Arrises:
1. If the composite patch is located at an arris of the masonry unit, drill pin holes into the masonry unit to be patched. The pin holes shall be no greater than 1/16 inch larger than the diameter of the pin. Recess the pins a minimum of 3/4 inch beneath the surface of the stone.
 2. Coat the inside of each hold and the surface of each pin with the specified epoxy.
 3. Insert epoxy-coated pin into hole and insert pin a minimum of 1/2 inch beneath the surface of the stone.
 4. After the pin has been set and the epoxy has cured apply patching mortar. Anchor must be covered with a minimum of 3/4 inch of patching material.

3.6 MASONRY CRACK REPAIR

- A. Cracks narrower than 1/8 inch shall be filled with injectable grout.
1. Preparation:
 - a. Lateral cracks shall have a series of injection ports, which shall measure 1/4 inch in diameter and shall be spaced as required. Injection pots shall be drilled in a downward direction along the length of the crack.
 - b. Moisten the interior of the crack immediately prior to injection by flushing with water. Repeat this step if the surface becomes dry before grout is injected.
 2. Mixing:
 - a. Precautions should be taken while mixing grouting materials. Safety goggles, dust mask and gloves should be worn.
 - b. No more material than can be used in 30 minutes shall be mixed at any one time. Material that has exceeded its pot life shall be discarded.
 - c. Follow manufacturer's product literature for proportions of injection grout and water. Mix for a minimum of three (3) minutes.
 3. Injection Procedure:
 - a. Seal ports and lower portions of crack using non-staining, water-based clay. Add new clay prior to grout being injected into higher injection ports.
 - b. Lateral cracks shall be filled from the lowest injection port continuing until it flows freely from this port. Where necessary, insert stainless steel rods after some grout has been injected. Tap to remove voids or air pockets. Inject grout into the next highest port and proceed in the same fashion. Clean up overflow immediately.
 - c. When the grout has set and is thoroughly dried, the entry ports and crack surfaces shall be patched with composite patch material matching the color, texture and reflectance of the surrounding sandstone. The patching material shall be level with the adjacent masonry.
- B. Cracks equal to or wider than 1/8 inch shall be routed and filled with grout and subsequently patched with approved composite patching material to match the color, texture and level of the surrounding clean masonry.

1. Routing and Filling of Cracks:
 - a. Cracks and fractures of masonry surfaces shall be filled with grout mortar. The crack shall be cut to a depth of 3/4 inch and a width of 1/8 inch. The crack shall be thoroughly cleaned, brushed with mortar slurry coat and filled with a grout mortar. The surface shall be finished with the approved composite patching material matching the profile, color and texture of the adjacent cleaned masonry
- C. All repaired cracks shall be flush with the face of the masonry. All entry ports and crack surfaces shall be subsequently patched with approved composite patching mortar to match the color, texture and level of surrounding clean masonry
- D. **If using Jahn grouting materials, follow the manufacturer's instructions for application, tooling, moistening, and curing. If Jahn patching material is used, all installers must be certified Jahn installers.**

3.7 JOINT RAKING AND PREPRATION

- A. Carefully document original joint profiles and widths prior to all raking activities.
- B. Rake out mortar and grout from joints to depths equal to 2 ½ times their widths, but not less than ½ inch to expose sound, un-deteriorated mortar or grout. Remove mortar or grout to provide reveals with square backs and to expose masonry for contact with pointing materials. Brush, vacuum or flush joints to remove all dirt and loose debris.
- C. Cut out old mortar or grout by hand with chisel and mallet. Power operated, rotary hand-held saws and grinders will be permitted with the approval of the Architect, for use on the horizontal joints if the Contractor can demonstrate the ability of the operators to use tools without damaging the masonry. If masonry damage is caused by power tools, only chisels and mallets will be permitted for the remainder of the project.
- D. Do not break or mar edges of masonry units or widen joints. Replace in kind all masonry units which become damaged.

3.8 POINTING LIMESTONE

- A. Rinse limestone joint surfaces with fresh water to remove all dust and loose mortar particles. Time application of rinsing so that at time of pointing excess water has evaporated or run off, and joint surfaces are damp, but free of standing water.
- B. Apply first layer of pointing mortar to areas where existing mortar was removed to depths greater than surrounding areas. Apply in layers not greater than 3/8 inch. Compact each layer thoroughly and allow to become thumbprint-hard before applying next layer.
- C. After joints have been filled to a uniform depth, place pointing material in three steps. Each of the first and second steps should fill approximately 2/5 of joint depth and the third step the remaining 1/5th. Fully compact mortar at each step and allow to become thumbprint-hard before applying next step. Take care not to spread mortar over edges onto exposed masonry surfaces or to feather edge the mortar.

- D. When mortar is thumbprint-hard, tool joints to match original appearance of joints and approved mock-ups. Remove excess mortar from edges of joints by brushing.
- E. Cure mortar by maintaining a damp condition for not less than 72 hours.
- F. After mortar has fully hardened, thoroughly clean exposed masonry surfaces of excess mortar and foreign matter using stiff nylon or Tampico bristle brushes and clean water. The use of metal scrapers or brushes will not be permitted.

3.9 GROUTING MARBLE

- A. Cleanse the marble with clean water and rinse thoroughly.
- B. Remove excess rinse water.
- C. Hand-apply grout, using a float held at a 30-45 degree angle. Fill all voids completely.
- D. Hold the float at a 60 degree angle and run it back over the area to remove the excess grout from the marble surface.
- E. Allow the grout to dry for about 15 minutes, then wash excess grout from the surface of the marble using a damp sponge. Using a circular motion will help loosen any grout that has dried on the marble base.
- F. Let grout sit overnight. When the grout is dry, polish the marble base with a clean, dry cotton rag.

3.10 CLEAN UP

- A. Remove protective materials from adjacent surfaces.
- B. Upon completion of work, clean all surfaces of any debris, mortar droppings, construction materials, etc.

PART 4 - COMPENSATION

4.1 PAYMENT

- A. Payment for "Interior Masonry Restoration" covered by this section shall be included in the Division lump sum item for "Interior Masonry Restoration in Division 4".

4.2 MEASUREMENT

- A. All work required to complete the specific tasks in this section shall not be measured.

END OF SECTION

SECTION 05700 – ORNAMENTAL METAL RESTORATION

PART 1 - GENERAL

1.1 SECTION INCLUDES:

- A. Work of this section shall include but is not limited to the protection and restoration of the bronze-clad windows, cast iron, brass, and bronze ornament as noted on the Contract Drawings.
- B. Restoration of the metals may include but is not limited to:
 - 1. Replacement of missing or damaged fasteners for all metals.
 - 2. Coating removal from cast iron elements.
 - 3. Corrosion removal from all metals.
 - 4. Cleaning and refinishing of ALL brass and bronze (windows, rails, frames, telephones, hardware, decorative items, fountains and signage) in the Contract Limits.
 - 5. Cleaning and repainting cast iron at stair stringers as noted on Contract Drawings.

1.2 REFERENCED SECTIONS:

- A. Section 040140.92 Interior Masonry Restoration
- B. Section 060140.91 Architectural Woodwork Restoration

1.3 REFERENCES:

- A. Materials and work shall conform to the latest editions of reference specifications listed below, specified herein and to all applicable codes and requirements of local authorities having jurisdiction, whichever is more stringent.
 - 1. The National Association of Architectural Metal Manufacturers (NAAMM).
 - 2. American Society for Testing and Materials (ASTM).
 - 3. SSPC-PA 1 "Painting Application Specification," Steel Structures Painting Council – "Shop, Field and Maintenance Painting, Steel Structures Painting Manual," Vol. 2.
 - 4. National Park Service Preservation Briefs: "The Maintenance and Repair of Architectural Cast Iron," Preservation Brief #27, Preservation Assistance Division, NPS, 1991.
 - 5. *Metals in America's Historic Buildings: Uses and Preservation Treatments* published by the U.S. Department of the Interior, National Park Service, Preservation Assistance Division.
 - 6. Materials shall conform to governing regulations regarding the content of volatile organic compounds.

1.4 JOB CONDITIONS:

- A. All chemical materials shall be safe in use and shall not violate City, State or Federal environmental safety regulations.
- B. Perform all work of this Section in accordance with all City, State and Federal regulations regarding the transportation, storing, handling, application, removal and disposal of the products involved.
- C. Confirm surface temperature of iron surfaces prior to painting or installation of filler compounds. Do not paint or use filler compounds if surface temperature falls below or rises above that recommended by the painting manufacturer.
- D. Materials shall only be used at the manufacturer's recommended temperature allowances as outlined in the manufacturer's product data sheets.

1.5 QUALITY CONTROL:

- A. Ornamental Metals Restoration Specialist: The Contractor or Subcontractor who shall perform the work specified in this section must be regularly engaged in Architectural Metals Restoration, including cast iron restoration. The Contractor/Subcontractor must demonstrate that, within the last five (5) consecutive years, he or she has successfully performed and completed in a timely fashion at least three (3) projects similar in scope and type to the required work, involving facilities designated as landmarks. For actual metal work, use only skilled metal workers who are completely familiar with the requirements for this work.
- B. The Contractor or Subcontractor shall maintain a steady work crew consisting of skilled craftspeople who are experienced with the materials and methods specified and familiar with the design requirements, and a foreman who has acceptable experience in metal restoration. The Contractor or Subcontractor shall confirm that all workers under his/her direction fully understand the requirements of the job. The Contractor/Subcontractor shall allow for inspection of all work areas by Resident Engineer following completion of the work.
- C. The Architect reserves the right to visit the facilities of the Subcontractor at any time when the work is in progress. All shop and field materials and workmanship shall be subject to inspection by the Architect and his representatives at all times. Such inspections do not relieve the Contractor from obligations to provide materials conforming to all requirements of the Contract Documents.
- D. Contractor shall replace all broken, lost, stolen and damaged cast iron and associated metal work resulting from repair, removal, transportation, cleaning or storing at no expense to the Owner.
- E. In acceptance or rejection of this work, no account shall be taken for incompetence on the part of the contractor.
- F. Confirm specified dry mil thickness of applied primer with standard equipment recognized by the industry for determining the thickness of painted coatings.

1.6 SUBMITTALS:

- A. Product Data: Submit all Manufacturers' technical data for all products to be used in this project. Submittal shall include instructions for use, application and all MSDSs.

- B. Restoration Program. Submit a written program for each phase of the restoration process including protection of the surrounding materials on the building and the site during operations. Describe in detail materials, methods and equipment to be used for each phase of the restoration work.
- C. If alternate methods and materials to those specified are proposed for any phase of the metal restoration work, provide a written description. Provide evidence of successful use on comparable projects and demonstrate its effectiveness for use on this project.
- D. Shop Drawings
 - 1. Shop Drawings shall be complete submissions for approval.
 - 2. Where applicable, verify field dimensions and include them on shop drawings showing exact locations of bronze or brass elements as well as shapes and dimensions for pieces requiring replacement.
 - 3. Provide reproducible copies of approved shop drawings for owner's use.
 - 4. Shop drawings required within two weeks for review by Architect.
- E. Containment and disposal plans for coating removal in accordance with all applicable codes for lead abatement, if required.
- F. Coating removal plan for any abrasive media blasting on cast iron, including:
 - 1. Detailed work plan describing abrasive coating removal equipment, proposed blasting media, proposed psi, method of containment, and collection.
 - 2. Work Samples of proposed blasting media.
 - 3. Manufacturer's data on blasting equipment and blasting media.
- G. Mock-ups
 - 1. Complete one (1) mock-up of the corrosion removal and cleaning for bronze. The mock-up if approved can be incorporated into the finished work. If the mock-up is not approved, a new mock-up will be produced until it is approved by the Architect or Architect's Representative.
 - 2. Complete one (1) mock-up of the corrosion removal and cleaning for brass. The mock-up if approved can be incorporated into the finished work. If the mock-up is not approved, a new mock-up will be produced until it is approved by the Architect or Architect's Representative.
 - 3. Complete one (1) cast iron coating removal test consisting of 2-3 paint removal products and methods to determine the most successful product or method for removal of painted coating. Products and methods may consist of chemical paint removers or abrasive cleaners. Submit list of products and methods to Architect prior to testing.
 - 4. Complete one (1) mock-up of the coating and corrosion removal for cast-iron. The mock-up, if approved can be incorporated into the finished work. If the mock-up is

- not approved, a new mock-up will be produced until it is approved by the Architect or Architect's Representative.
5. Produce a mock-up of the wax finish over the antiqued bronze finish. The mock-up if approved can be incorporated into the finished work. If the mock-up is not approved, a new mock-up will be produced until it is approved by the Architect or Architect's Representative.
 6. No test panels shall be made until the methods and locations are approved by the Architect or the Architect's Representative.
 7. The Architect or the Architect's Representative will be present during the creation of all test panels and mock-ups. Do not proceed with the work unless the Architect or Representative is present. Notify the Architect not less than forty-eight (48) hours in advance.
 8. All procedures, dwell times, and materials are subject to modification by the Architect or the Architect's Representative during the testing process. The Architect or the Architect's Representative shall choose products to be used for cleaning based on the results of the test panels. Modifications of sequence, chemical dilution, substitute reagents, and equivalent procedures shall be executed at no additional cost to the Owner or impact to the schedule.
 9. Repeat demonstrations and testing procedures until the Architect's or the Architect's Representative's requirements are satisfied.
 10. Allow waiting period of duration indicated, but not less than seven (7) calendar days, after completion of sample cleaning to permit study of sample panels for negative reactions.
 11. After the completion of the testing phase, and before general cleaning begins, prepare mock-up panels in the station, as indicated, where directed by the Architect or the Architect's Representative. Obtain the Architect's or the Architect's Representative's written acceptance of visual qualities before proceeding with the work.

1.7 SAMPLES:

- A. Submit bronze coupon with proposed restoration bronze finish. Bronze in bronze coupon submitted is to match the existing bronze.
- B. Submit samples of replacement bronze hardware, anchors and fasteners. Profile of fasteners must match original. No ferrous metals are to be used.
- C. Submit samples and color cards of cast iron finish color matching existing finish.
- D. Tagging: Samples shall be tagged with the name of the project and referenced specification.
- E. Two weeks from date received shall be allowed for thorough examination of the samples by the Architect.
- F. Not returnable: Samples are not returnable, nor included in quantities listed for a project.

PART 2 - PRODUCTS

2.1 PRODUCT QUALITY:

- A. All materials, accessories, and other related fixture parts shall be new and free from defects which in any manner may impair their character, appearance, strength, durability or function. They shall be effectively protected from any damage or injury from the time of fabrication to the time of delivery and until final acceptance of work.
- B. All products used in the Work of this Section shall be the highest available quality.

2.2 CLEANING PRODUCTS:

- A. Solvents: Use the lowest toxicity solvent possible.
 - 1. Denatured Alcohol: E.Z. Alcohol, Pure 180 proof denatured alcohol, as manufactured by E.E. Zimmerman Co., Pittsburgh, PA 15238, or approved equal.
 - 2. Mineral Spirits: As manufactured by Ashland Chemical, Inc., Carteret, NJ. Or approved equal.
 - 3. Paint Thinner: 100% petroleum distillate, mineral spirits, Recordsol Paint Thinner, as manufactured by Recochem Inc., Montreal, Quebec, or approved equal.
 - 4. Turpentine: Pure gum spirits of turpentine meeting requirements of ASTM D-13.
- B. Coating Removal:
 - 1. Dumond Peel Away 7
 - 2. Dumond SmartStrip Pro
 - 3. Prosoco SafStrip
 - 4. Prosoco SafStrip 8
 - 5. Cathedral Stone MasonRE S-301
 - 6. Pre-approved equal.
- C. Detergent: pH neutral detergent such as Orvus WA Paste, or approved equal.
- D. Water for cleaning shall be clean, potable, and free of oils, acids, alkalis, salts and other organic matter.
- E. Wax: microcrystalline wax.
- F. Surface pH meter or pH testing strips available from Talas Online (www.talasonline.com), or approved equal.

2.3 TOOLS:

- A. Wood scrapers.
- B. Felt pads.

- C. Super Fine bronze steel wool, #0000
- D. Soft natural-bristle brushes.
- E. Clean, soft lint free cloths.
- F. Vacuum with HEPA filter.

2.4 ABRASIVE CLEANING EQUIPMENT:

- A. Cast iron corrosion removal equipment
 - 1. Sandblasting machine capable of achieving and maintaining a constant pressure. Pressures used shall be those approved during the mock-up phase.
 - 2. Abrasive necessary to achieve the approved sandblasted finish.

2.5 PAINT

- A. Primer: At minimum, an alkyd rust-inhibitive primer, Tnemec Series 10 or approved equal should be used. Two coats must be applied. A high performance zinc rich primer could also be used but it requires a cleaner surface.
- B. Finish Coat: Alkyd enamel, urethane or approved equal. The Contractor shall provide color to match existing finish color as per approved color samples.

PART 3 - EXECUTION

3.1 GENERAL:

- A. A thorough and careful inspection must be made of the bronze before the work is started. Any defects or anomalies must be brought to the attention of the Architect and Owner prior to the commencement of the work.
- B. Provide products as indicated.
- C. Ensure substrates are in suitable condition to receive the Work of this Section. Protect adjacent materials and surfaces from damage during the Work of this Section.

3.2 CHEMICAL PAINT REMOVAL PROCEDURES

- A. General:
 - 1. Comply with all Federal, state, and local VOC regulations.
 - 2. Where any manufacturer listed makes more than one grade of each material specified, use the highest grade of each type whether or not the material is mentioned by trade name in these specifications.

3. Follow manufacturer's instructions regarding preparation of surfaces, mixing, applying, drying, etc. In case of conflict with this specification, the manufacturer's specifications govern.
- B. Apply paint remover in accordance with manufacturer's directions. Use application methods best suited for the type of material being applied: gel, paste or liquid.
- C. Apply gel, paste, semi-paste or liquid to dry surfaces 1/8" to 1/4" thick, using a corrosion resistant, plastic trowels or non-metallic brushes. Work paint remover well into crevices. Ensure that the paint remover is applied in an even coat.
- D. Allow remover to remain on the surface for time specified by manufacturer or until all paint is dissolved; whichever is the least amount of time. Do not leave surfaces until it dries. If surfaces are left unattended, prevent pedestrians from contact with the remover.
- E. If remover dries on the surface, mist the surface with water and allow chemical to remain on the surface another 15 minutes until softened. If leaving on the surface for several hours, a light polyethylene film or other moisture resistant material can be used to cover the remover on the surfaces. Press the polyethylene film against the remover so that it adheres. Tape or seal the edges of the polyethylene film.
- F. Carefully remove the chemical remover and dissolved paint coatings by lifting, making sure the substrate is not scraped or gouged. A plastic scraper must be used. Corrosion resistant tools can only be used for this removal. No metal is to be used. Remove as much residue from surfaces as possible.
- G. If small amounts of residue or paint remain, reapply chemical following the manufacturer's instructions.
- H. Multiple applications of the paint remover may be required to remove all of the paint coatings.
- I. Allow treated surfaces to thoroughly dry. Before applying any new surface coating, check cleaned surfaces again with pH strips that have a range from 1-14. to ensure that surfaces are neutral.
- J. The Architect must certify that the surfaces treated as the work of this section have been adequately cleaned and neutralized, prior to final acceptance of this work.
- K. Waste Disposal:
 1. Solid, liquid or semi-solid wastes generated through the use of a paint remover or stripper may be defined for Federal Standards under EPA's Resource Conservation and Recovery Act (RCRA) of 1976 as "solid waste". The waste is classified "hazardous" if it is determined to be corrosive, toxic, or both. All current Federal, state, and local regulations must be stringently followed regarding containment, transportation, and disposal of hazardous waste.
 2. Contractor shall obtain and maintain all applicable permits for this job.

3.3 ABRASIVE PAINT AND CORROSION REMOVAL PROCEDURES

- A. General:

1. Operate machinery in accordance with manufacturer's recommendations and approved mock-up.
 2. Provide suitable containment to protect pedestrians as well as adjacent materials from blasting media and paint.
- B. Following abrasive cleaning, remove all residual loose paint, corrosion, and scale from ironwork to remain in place with wire brushes. Sand smooth using vacuums on the sanders to contain paint dust. Take all other necessary precautions to avoid releasing lead dust into the air.

3.4 BRONZE AND BRASS CLEANING:

- A. Clean all bronze and brass surfaces using pH neutral detergent, felt pads and super-fine steel wool, and clean water to remove all corrosion product and residues from the surface of the bronze. Surface should have uniform, smooth appearance free from abrasions or discoloration in accordance with approved Mockups.
- B. Dry surfaces using clean cloths and protect surfaces to maintain dry conditions until surfaces can be finished with protective wax coating. Surface must be clean and dry prior to application of wax coating.

3.5 REPLACEMENT OF MISSING OR DAMAGED ELEMENTS:

- A. Fabricated elements must match the existing elements in size, shape, and finish.
- B. Remove damaged elements taking care not to damage adjacent materials.
- C. Cut new elements or trim to fit.
- D. Attach new elements securely with approved anchors or fasteners.

3.6 REPAIR OF DAMAGED BRONZE-CLAD WINDOWS

- A. For severely deteriorated or missing elements, replace the deteriorated metal with new metal to match the original profile.
1. If the wooden substrate is significantly deteriorated, replace the wooden element with seasoned lumber, matching the dimensions of the original.
 2. If portions of the wooden substrate are slightly to moderately deteriorated, remove areas of damaged or spongy wood and replace with a Dutchman in accordance with specification 060140.91 Architectural Woodwork Restoration.
 3. Affix the new sheet metal to the wooden substrate, replicating the original joints and seams.

3.7 APPLICATION OF HOT-WAX COATING:

- A. Hot wax all bronze and brass surfaces with a microcrystalline wax for a protective coating. Thoroughly coat surface until the coating is even and well-adhered. Gently buff surface, dry coat, and re-buff.

3.8 FIELD PAINTING

- A. General:
 - 1. No painting shall be done when the air is dust-laden or when weather and temperature conditions are unsuitable. Exterior painting shall not be done in damp or rainy weather, nor when the temperature is below 50° F or above 80° F.
 - 2. All work shall be done in a workmanlike manner and by skilled mechanics. All paint shall be evenly spread, smoothly flowed on, and shall be free from defects. No paint shall be applied until preceding coat is thoroughly dry and hard. Finish surfaces shall be uniform.
 - 3. In general and unless otherwise specified, exterior oil paints shall be allowed to dry at least 72 hours between coats.
 - 4. Paint and finish materials shall be free from skins, lumps and foreign matter when used, and pigmented fillers and other materials shall be kept well stirred while materials are being applied.
- B. Surface Preparation: Thoroughly clean and dry all metal surfaces before applying primer. Prepare metal surfaces as follows:
 - 1. Abrasive blast all metal to SSPC SP-6 "Commercial Blast Cleaning" Standard. Remove all dust and grease and prime immediately.
 - 2. In areas where abrasive blasting is not practical, the Contractor may use power tool cleaning with precautions taken to ensure that no lead dust is released into public spaces. The Contractor is to notify the Architect and the Architect's approval prior to proceeding
 - a. Prepare metal for painting to SSPC SP-11 "Hand Tool Cleaning" standard, remove all dust and prime immediately.
- C. Finish coatings: All primer coatings must be dry and clean prior to application of finish coatings.
- D. Remove all corrosion and touch up with two coats of primer prior to applying two coats of paint.

3.9 SITE CLEAN UP

- A. Keep the site clean and remove all debris to ensure clean painted surfaces.
- B. As needed, use natural bristle brush with water. Use of muriatic acid or any acid-based masonry cleaners is prohibited.

PART 4 - COMPENSATION

4.1 PAYMENT

- A. Payment for "Ornamental Metal Restoration" covered by this section shall be included in the Division lump sum item for "Ornamental Metal Restoration in Division 5".

4.2 MEASUREMENT

- A. All work required to complete the specific tasks in this section shall not be measured.

END OF SECTION

New Jersey Transit
Hoboken Terminal
Main Waiting Room Restoration

SECTION 060140.94 – ARCHITECTURAL WOODWORK RESTORATION

PART 1 - GENERAL

1.1 SECTION INCLUDES:

- A. Work of this section shall include but is not limited to the protection and limited restoration of the wood benches as noted on the Conditions Drawings, and limited restoration of wood at the former newsstand, and at all doors and windows, as indicated.
- B. Limited restoration of the woodwork may include but is not limited to Dutchman repairs, crack repairs, and material replication and replacement, as noted on Contract Drawings.

1.2 RELATED SECTIONS:

- A. Section 08 71 00 - Finishing Hardware

1.3 CITED STANDARDS:

- A. The Quality Standards, latest edition of the Architectural Woodwork Institute (AWI) shall apply to the work of this section. Except as otherwise indicated, provide "Premium Grade" work as defined in the above-referenced standard for all Architectural woodwork.
- B. All work shall comply with the United States Secretary of the Interior Standards for Rehabilitation and guidelines for Rehabilitating Historic Buildings, unless otherwise stated.

1.4 QUALITY CONTROL:

- A. Restoration Specialist: The Contractor who will perform the work specified in this section must, within the last five (5) consecutive years, have successfully completed in a timely fashion at least three (3) projects similar in scope and type to the required work, involving facilities determined by the Architect to be of landmark quality and/or historically significant.
- B. Materials shall conform to the latest edition of reference specifications applicable and specified herein and to applicable codes and requirements of local authorities having jurisdiction.
 - 1. Materials shall conform to governing regulations regarding the content of volatile organic compounds (VOC).
 - 2. Finishing materials and work shall conform to the Painting and Decorating Contractors of America (PDCA).
 - 3. The Contractor shall comply with relevant ASTM Standards for all materials.
 - 4. All wood restoration procedures shall be done in accordance with regulations, safety standards and in requirements of all federal, state and local authorities having jurisdiction over the work including but not limited to the applicable standards for protecting the public and control of pollutants and OSHA regulations for the protection of workers and the public.
- C. Mechanics: Contractor shall maintain a steady work crew consisting of skilled craftspeople that are experienced with the materials and methods specified. The Contractor shall confirm that all workers understand the job's requirements.

New Jersey Transit
Hoboken Terminal
Main Waiting Room Restoration

- D. Foreperson shall be present on site daily, and whenever work is being performed.

1.5 SUBMITTALS:

- A. Qualification Data: Submit qualification data, specified in "Quality Assurance" Article, that demonstrate the firm's and individual's capabilities and experience. Include a list of at least three (3) wood restoration projects completed in a timely fashion in landmark quality buildings. List project names, addresses, names of Owner's Representative and Owner, and telephone number of contact person for each project. Submit this information with the bid. Bidders shall visit the site and make themselves familiar with job conditions.
- B. Product Literature: Submit three (3) copies of manufacturer's latest published technical data including, installation instructions and general recommendations for each specified material and fabricated product. Include test reports and certificates substantiating the product's compliance with the specified requirements. Obtain approval before materials are delivered to the site.
- C. Methods of Protection: Prior to commencing the protection and restoration, the Contractor shall submit a written description of proposed materials and methods of protection for preventing damage to any adjacent material or finish during the protection, removal, restoration and installation of the woodwork.
- D. Method of Restoration: The Contractor shall submit a written description of proposed method for restoring each area of woodwork.
- E. Submit three (3) samples of new wood for repairs

1.6 MATERIAL DELIVERY, STORAGE AND PROTECTION:

- A. All materials salvaged from the Site shall be stored to insure protection from loss, theft, or damage by the elements.
- B. Salvaged, repaired woodwork shall not be delivered to the site until ready to be installed.
- C. No kiln-dried materials shall be placed in the building unless the building is sufficiently dry.
- D. Deliver packaged material in original unbroken packages with the manufacturer's name, brand and material standard indicated plainly thereon.
- E. Store and handle all material in a manner as to prevent damage by water or water vapor.
- F. Replace all broken, lost and damaged adjacent material resulting from repair, removal, cleaning, and finishing of all woodwork under this section at no expense to the Owner.
- G. All Subcontractors are bound by the same requirements as the Contractor. Subcontractors shall not begin work unless approved by the Architect.
- H. Take all necessary precautions to protect all persons (whether engaged in the work of this Section or not) from all hazards of any kind associated with the work of this Section.

**New Jersey Transit
Hoboken Terminal
Main Waiting Room Restoration**

- I. Take all necessary precautions to protect all property and materials (whether subject to the work of this Section or not) from any harm or damage associated with the work of this Section.
- J. Perform all work of this Section in accordance with all Federal, State, and local regulations regarding the transportation, storing, handling, application, removal and disposal of the products involved.
- K. Take all necessary precautions to prevent fire and spread of fire.

PART 2 - PRODUCTS

2.1 BASIC REQUIREMENTS:

- A. The grades of all materials under this section shall be as defined by the rules of the recognized association of lumber manufacturers producing the materials specified. Wood for millwork shall conform to, or exceed, the requirements of "Premium Grade, Class 1 " as established by Quality Standards or the Architectural Woodwork Institute (AWI) and shall be provided in the cuts and figure required to match existing wood. Where conflicts occur between these standards and this Specification, the more stringent requirement shall govern in each case.
- B. Lumber and finished woodwork throughout shall be of sound stock, thoroughly seasoned, free from all knots, and if new, kiln-dried to a moisture content not exceeding 6–11% for millwork.
- C. Work that is to be finished shall be free from defects or blemishes on surfaces exposed to view. Any materials which are in any way defective and do not meet specifications for quality and grade, or are otherwise not in proper condition, shall be rejected.

2.2 CLEANING MATERIALS:

- A. Cleaning Pads: Scotch-Guard Red Pads, or approved equal.
- B. Cleaning Pads: 0000 steel wool, clean and free of contaminants and corrosion.
- C. Clean, lintless cotton rags and cheesecloth.

2.3 PUTTIES, ADHESIVES, AND FASTENERS:

- A. Fillers for holes and losses in wood: Pigmented oil base putty formulated specifically for use on wood. Provide "Color Putty." Mix different colors of putty to match color of finished wood.
- B. All glues shall be non-staining waterproof wood glues as manufactured by 3M Company, Pittsburgh Plate Glass Company, Borden Company, or approved equal.
- C. Provide new screws to match existing.
- D. Provide new nails and brads to match existing

New Jersey Transit
Hoboken Terminal
Main Waiting Room Restoration

PART 3 - EXECUTION

3.1 GENERAL:

A. Field Conditions

1. Take all necessary field measurements and verify all installation conditions prior to ordering and fabrication of material.
2. Existing Conditions and Documents: The Contractor shall visit the site and shall examine the drawings and specifications for the material of the various surfaces and the extent of repair work.
3. Coordinate work with other trades as required during salvage and restoration operations.

B. Remove and label existing hardware and fixtures.

1. Remove all extraneous nails, staples, bolts, hooks, etc. from woodwork. Fill resulting holes, gouges and indentations, and sand smooth with approved filler material.

3.2 RESTORATION METHODS:

A. Crack and hole filling:

1. Replace all missing or otherwise defective wood in kind unless approved by Architect. Finished woodwork shall be fully intact and structurally sound.
2. Patch holes, indentations gouges, etc. using wax crayon touch up stick for holes less than 1/16" X 1/16" and wood filler for holes between 1/16" and 1" wide and 1/2" deep. For holes larger than 1" X 1" X 1/2" deep, use Dutchman repairs.

B. Replacement and reattaching of missing or loose trim elements

1. Fabricate all new woodwork in the areas designated on the Drawings.
2. New woodwork shall match the original wood species, grain and profile, as specified.
3. Attach elements with waterproof adhesive and secure with clamps until dry.
4. Finish the new woodwork to match the proposed finish on the original woodwork and millwork.

3.3 Dutchman Repairs

A. Repair deteriorated, split, or missing wood with Dutchman repairs where indicated on drawings. Use the following procedure for Dutchman repairs:

1. Neatly cut out defective materials and enough sound wood to bond Dutchman to sound substrate. Form a prismatic void in existing wood with square corners and edges. Cut Dutchman to exactly fit void, with exposed portion matching original profile of woodwork, and grain of Dutchman parallel to original wood grain direction.
2. Secure Dutchman with waterproof adhesive and clamp in place until glue is set.
3. Where it is necessary to cut off an end of a component and install Dutchman, use a diagonal scarf joint for end-to-end joints.

**New Jersey Transit
Hoboken Terminal
Main Waiting Room Restoration**

B. Sand to smooth surface.

3.5 HARDWARE REPLACEMENT

A. Replace all existing hardware excepting hinges – see Section 08 71 00.

PART 4 - COMPENSATION

4.1 PAYMENT

A. Payment for "Architectural Woodwork Restoration" covered by this section shall be included in the Division lump sum item for "Architectural Woodwork Restoration in Division 6".

4.2 MEASUREMENT

A. All work required to complete the specific tasks in this section shall not be measured.

END OF SECTION

SECTION 08 71 10 – FINISHING HARDWARE

PART 1.00 - GENERAL

1.01 GENERAL REQUIREMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the Contract Documents.

1.02 WORK INCLUDED

- A. Work of this Section includes all labor, materials, equipment and services necessary to furnish and install all the finish hardware as shown on the drawings and specified herein.
- B. Consultation with Architect and the Owner.

1.03 RELATED WORK

- A. Architectural Woodwork Restoration (wood doors, frames & glazing) - Section 06 01 40
- B. Electrical- Section 16000

1.04 QUALITY ASSURANCE

- A. Hardware shall be suitable and adapted for its required use and shall fit its designated location. Should any hardware as shown, specified or required fail to meet the intended requirements or require modification to suit or fit the designated location, determine the correction or modification necessary and notify the Architect in ample time to avoid delay in the manufacture and delivery of hardware.
- B. For fire rated openings provide hardware complying with NFPA Standard No. 80 requirements of authorities having jurisdiction.
- C. Barrier Free Requirements: Maximum pressure applied to the latch area to open exterior doors shall not exceed fifteen (15) pounds. Interior doors which have a self-closing feature shall require pressure not to exceed eight (8.5) pounds.
- D. Hardware Supplier Qualifications: The Hardware Supplier shall have been regularly engaged in the sale and distribution of Finish Hardware for projects of comparable scope and size for a minimum of 5 years. The Hardware Supplier shall have an AHC of the Door and Hardware Institute on staff who will be responsible for overseeing the scheduling, detailing, ordering, and coordinating of Finish Hardware, and shall be available for consultation with the Architect, at no additional cost to the Owner, during progress of construction. The Hardware Supplier shall be a direct factory authorized distributor for all finish hardware items being furnished in accordance with this Specification.

1.05 SUBMITTALS

- A. Before any finish hardware is ordered or purchased, submit catalog cuts and a complete Hardware Schedule of Finish Hardware. Each item listed in the Hardware Schedule shall be identifiable with respect to manufacture, brand, catalog number, material, and finish.
- B. Where submission differs from Schedule given herein, use different color or other means of identification to bring change to the attention of the Architect.

- C. Hardware Supplier to provide all product information, wiring diagrams, and electrical data to the Electrical Contractor.
- D. Samples: Submit samples as requested by Architect. Do not proceed with installation until samples have been approved. Approved samples may be installed in the work after substantial completion of work. Samples shall include one (1) each of the following samples:
 - 1. Hinge (each type)
 - 2. Surface Closer
 - 3. Lockset
 - 4. Overhead Stop
 - 6. Push-Pull Plates
 - 7. Finish Sample of all other hardware

1.06 PRODUCT HANDLING

- A. Pack finish hardware in approved manufacturer's containers, complete with trimmings, bolts, screws, washers, etc., as required for application and securement. Each container shall bear a suitable label which shall state the quantity and kind of contents of said container, as well as identifying marks relating to the approved Hardware Schedule and its location in the project.
- B. Knobs, handles, pulls and other items of finish hardware with easily damaged finishes shall be individually wrapped before placing in containers and with sufficient sheet cloth or cotton-backed paper which shall be adequately tied with heavy strings; all as necessary to protect the finishes.
- C. Finish hardware shall be delivered, as directed, to the building site or the factories of the various fabricators of metal work to which such hardware is to be applied. Deliver hardware in the order required and in ample time to permit application at the building, or fabricators' shops, within the time required for the completion of the building.

1.07 JOB CONDITIONS

- A. Field Service: The hardware supplier shall assign a competent representative, acceptable to the Architect, to be at the jobsite each time a major shipment of finish hardware is received. Such representative shall assist in "checking in" these shipments and shall secure a receipt covering the contents of each shipment. In addition, such representative shall be available for immediate call to the jobsite when, in the opinion of the Architect, his presence is necessary.
- B. Templates: Promptly following approval of the Hardware Schedule by the Architect, furnish and deliver template information, to the fabricators, of items to which finish hardware is to be applied.
 - 1. Such deliveries shall be made in ample time to avoid delays in such work of said fabricators. Provide drawings, schedules and detailed information to other trades as necessary for them to accommodate and prepare their work to receive the finish hardware.
- C. Cooperation and Coordination
 - 1. Cooperate and coordinate work with that of other trades supplying materials or performing work in contact with, connecting to, underlying, or overlaying the work of this Section.

2. Provide complete data of requirements for work of this Section to those other trades whose work is affected by or dependent upon the work of this Section.
 3. Furnish all items to be built into other work in ample time to avoid delaying the progress of such work.
 4. Examine all drawings covering the work of this Section and refer to all other drawings, including mechanical and electrical drawings, which may affect the work of this Section or require coordination by this trade.
- D. Existing Conditions: Hardware Supplier shall verify all existing conditions in the field to ensure compatibility with hardware specified in the Hardware Sets herein. Any discrepancies between existing field conditions and hardware specified shall be brought to the attention of the Architect immediately. Hardware Supplier shall not order any hardware until all discrepancies are rectified and written approval is granted by the Architect. Note: all existing doors are min. 2" thick.

PART 2.00 - PRODUCTS

2.01 GENERAL

- A. Requirements for design, grade, function, finish, size and other distinctive qualities of each type of finish hardware are indicated herein. Products are identified by using appropriate hardware designation numbers.
- B. Manufacturers are listed for each hardware type required. Provide either the product designated, or approved equal.
- C. Proprietary Products: References to specific proprietary products are used to establish minimum standards of utility and quality. Other materials may be considered by the Architect in accordance with the provisions of these specifications.
- D. Notwithstanding anything to the contrary in this specification or the drawings, the finish hardware shall conform to the requirements of governmental authorities having jurisdiction and such requirements shall be followed as if specifically set forth in this specification.
- E. Finish hardware shall conform to the applicable requirements of the American Insurance Association, and the National Board of Fire Underwriters' Laboratories, Inc., and other local authorities having jurisdiction, and each such item shall bear a label or mark of the Underwriters' Laboratories, Inc., indicating its conformity with such requirements for use in connection with its specified location.
- F. Finish hardware shall be uniform in color and finish and free from imperfections affecting its appearance, function, operation and serviceability. Such hardware shall be suited and adapted to its required use and shall fit its respective location.
- G. Where the finished shape or size of members receiving finish hardware are such as to prevent or render unsuitable the use of the specific types or sizes of such hardware, suitable types or sizes shall be furnished, having as nearly as practicable the same function, operation and quality as the specified hardware.
- H. Bolts, screws and other fastenings required for the application of the finished hardware shall be of size and type to fit requirements and shall be of the same material and finish as the exposed parts of such hardware which they adjoin. Exposed screws and bolts shall have countersunk oval heads and bolts shall be provided with cap nuts. Countersunk part of screw and bolt holes shall be finished smoothly

without sharp edges and form a firm seal for such screw and bolt heads. Full threaded wood screws shall be furnished for all wood applications.

2.02 PRODUCTS AND MANUFACTURERS

- A. The following are acceptable manufacturers, unless specifically indicated in the Hardware Sets. Underlined Manufacturers are those whose products are indicated in the hardware sets. Acceptable substitutions require the written approval of the Architect 10 days prior to the Bid date. Catalog cut sheets, physical samples, and a statement from the manufacturer showing compliance with the original items specified must be submitted along with the substitution request. No substitutions will be considered after the award of the Contract.

LOCKSETS, LATCHSETS, & DEADLOCKS: Yale Security Inc.

EXIT DEVICES: Yale Security Inc.

CLOSERS: Norton, Yale Security Inc., or LCN

PUSH AND PULL BARS, PROTECTION PLATES: Rockwood

STOPS: Rockwood

OVERHEAD STOPS: Yale Security Inc. or Rixson

SILENCERS: Rockwood

SADDLES & GASKETING: National Guard Products or Pemko

ELECTROMAGNETIC EGRESS SYSTEMS & ACCESSORIES: Securitron

ELECTRICAL MODIFICATIONS: ACSI

2.03 SPECIFIC ITEMS

A. Closers

1. Unless otherwise indicated, closers shall not be visible on the public side of doors. Closers opening into public spaces shall be provided with parallel arms and brackets to suit.
2. Closers shall be sized in accordance with the accepted manufacturer's standards to suit height, width, and weight of door and draft conditions.

B. Locking and Latching Devices

1. Mechanical: Provide types, functions, as specified. Coordinate with Owners keying requirements.

C. Keys and Keying

1. Establish New Removable Core Security Cylinder Grand Master Key system for this project. Allow for 100% expansion. For the protection of the owner, all cylinders shall be keyed at the factory where permanent records shall be established and maintained. This Grand Master Key system shall be comprised of interchangeable core security cylinders on all locksets and exit devices.

2. Provide Temporary Construction Cores.
 3. All masterkeys shall be identified with a registry number, and shall not be stamped with MASTER or letter M.
 4. All keys shall be stamped "DO NOT DUPLICATE".
 5. Furnish:

2	Grand Masterkeys
5	Masterkeys each section
5	Control Keys
3	Keys per lockset
100	Key Blanks
 6. All keying shall be thoroughly checked with the Architect and Owner. Final keying requirements shall be submitted in writing, for final approval by the Owner and/or Architect.
 7. Provide a key control system including envelope, labels, tags with self-locking key clips, receipt forms, 2-way visible card index, temporary markers, permanent markers, and standard metal cabinet, all as recommended by the system manufacturer, with capacity for 150% of the number of locks required for the project. Provide complete cross index system set up by the key control manufacturer and/or Hardware Supplier and place keys on markers and hooks in the cabinet, as determined by the final approved key schedule.
- D. Stops: Provide stops to limit the degree of opening, but in no case shall the door open less than 90 degrees. Stops help to prevent damage to adjacent walls, columns, equipment, the door or its hardware.
1. Overhead Closers/Stops
 - a. Size overhead closers/stops to suit door width, height, weight and draft condition.
 - b. Overhead stops shall have stainless steel tracks with a built-in shock absorber.
 - c. Overhead Holder shall be tri-packed for Stop, Hold-open, and Friction Hold Open Functions.
- E. Pushes and Pulls: Provide concealed fasteners where practical. Where exposed fasteners are required provide flush type finished to match push or pull.
- F. Flush Bolts: Provide top and bottom extension type flush bolts, mounted twelve (12) inches and seventy-two (72) inches respectively from the bottom of scheduled doors. Provide each bottom flush bolt with a dustproof strike.
- G. Kickplates: Kickplates for push side of door to be 2" less door width. Kickplates on pull side of door to be 1 ½" less door width.
- H. Silencers: Provide silencers for all non-gasketed and non-weatherstripped frames. Provide three (3) for each single swing door and two (2) for each pair of doors.
- 2.04 FINISHES
- A. Provide finish hardware with the following finishes unless otherwise shown:

1. Surface Closers: 605 (Polished Brass)
2. Locksets: 605
 - a. Exit Devices: 605
3. Stops: 605
4. Pushes, Pulls, Kick Plates, Mop Plates, Armor Plates, Protective Covers: 605

PART 3.00 - EXECUTION

3.01 GENERAL

- A. Make periodic checks during construction in order to ascertain that the finish hardware furnished has been installed correctly. After completion of all construction work, adjust finish hardware to work properly; test all keys and adjust as required for smooth, free operation.
- B. All electrical connections shall be concealed (without exposed wiring or conduit) inasmuch as possible without causing visible or structural damage to surrounding historic fabric. Coordinate all door hardware preparation with restoration efforts.

3.02 INSTALLATION

- A. Mount hardware in locations recommended by the Door and Hardware Institute unless otherwise indicated.
- B. Use the templates provided by hardware item manufacturer.
- C. Conform to ANSI 117.1 for positioning requirements for the handicapped.
- D. Clean adjacent surfaces soiled by hardware installation.
- E. Prior to Final Inspection make final check and adjustment of all hardware, clean operating items as necessary to restore proper function and finish of hardware.

3.02 HARDWARE SETS (see Door Schedule on drawings for Door Heights, Widths, Thicknesses and Finishes).

HW Set 1

D04, D05

2 ea	Closer	UNI-75-SDST-0	605E	Norton
2 ea	Pull	134 x 70C	605	Rockwood
4 ea	Push Bar	51	605	Rockwood
4 ea	Kickplates	10"	605	Rockwood
2 ea	Overhead Stop	6 Series	605E	Rixson
2 ea	Door Sweep	200SBR	605	NGP
2 ea	Silencers	609	Grey	Rockwood
1 ea	Saddle	Existing to remain	--	

HW Set 2

D08

2 ea	Closer	UNI-75-SDST-0	605E	Norton
------	--------	---------------	------	--------

FINISHING HARDWARE

**New Jersey Transit
Hoboken Terminal
Waiting Room Restoration**

R2 - 8.20.13

1 ea	Flush Bolt	557	605	Rockwood
1 ea	Bolt	630	605	Rockwood
1 ea	Dummy Set	HA x FN8771FLDT	605	
1 ea	Lockset	HA x FN8705FL	605	Yale
2 ea	Overhead Holders	6 Series	605E	Rixson
4 ea	Kickplate	10"	605	Rockwood
2 ea	Silencers	608	Grey	Rockwood
1 ea	Saddle	Existing to remain	--	

HW Set 3

D09

1 ea	Closer	UNI-75-SDST-0	605	Norton
1 ea	Lockset	HA x FN8707FL	605	Yale
1 ea	Overhead Holders	6 Series	605E	Rixson
2 ea	Kickplate	10"	605	Rockwood
2 ea	Silencers	608	Grey	Rockwood
1 ea	Saddle	Existing to remain	--	

HW Set 4

D10

1 ea	Closer	4400	605E	Yale
1 ea	Lockset	HA x FN8705FL	605	Yale
1 ea	Overhead Holder	6 Series	605E	Rixson
1 ea	Kickplate	10"	605	Rockwood
3 ea	Silencers	608	Grey	Rockwood

HW Set 5

D17

2 ea	Closer	4400	605E	Yale
2 ea	Flush Bolt	557	605	Rockwood
1 ea	Dummy Set	HA x FN8771FLDT	605	Yale
1 ea	Lockset	HA x FN8705FL	605	Yale
2 ea	Overhead Holders	6 Series	605E	Rixson
4 ea	Kickplate	10"	605	Rockwood
2 ea	Silencers	608	Grey	Rockwood
1 ea	Saddle	Marble by Other	--	

3.03 ELECTRICAL HARDWARE SETS

HW Set E1

D01, D02

2 ea	Closers	UNI-75-SDST-0	605E	Norton
2 ea	Exit Device	XX-V-LBR	605	Monarch
2 ea	Electrical Mod.	VR-1500-AE-LM-	--	ACSI
1 ea	Pull	134 x 70C	605	Rockwood
1 ea	Pull	134 x 70C x Cyl. Prep	605	Rockwood
2 ea	Magnet Strike & Lock	SAM w. SMLS & SMSS	605	Securitron
2 ea	Overhead Holder	6 Series	605E	Rixson
1 ea	Threshold	426BR	605	NGP
1 ea	Weatherstrip	116NDKB	DKB	NGP
2 ea	Door Sweep	200SBR	605	NGP

FINISHING HARDWARE

08 71 10-7

**New Jersey Transit
Hoboken Terminal
Waiting Room Restoration**

R2 - 8.20.13

1 ea	Seals	120SBR	605	NGP
4 ea	Kickplate	10"	605	Rockwood
1 ea	Card Reader	By NJT	--	
1 ea	Key Switch	MKA	605	Securitron
1 ea	Cylinder for MKA	To Suit	605	Yale
1 ea	Cylinder for Exit	To Suit	605	Yale
1 ea	Power Supply	BPS-24-1 x TM-8 x B-24-4	--	Securitron
1 ea	Wiring Diagram	By Hardware Supplier	--	

Operation: Egress all times by pressing Exit Device or by Fire Release system if activated. Entrance by card reader or key, when station is closed. Electromagnetic locks must remain de-energized (open from exterior) while station is open. Power supply to be mounted in a concealed location in the adjacent room. Coordinate voltage and electrical with DIVISION 16 Electrical.

HW Set E2

D03				
1 ea	Electrified Hinge	BB5005-600-T-1108	605	Bommer/ACSI
1 ea	Closer	4400 (pull side)	605E	Yale
1 ea	Lockset	HA x FN8708FL	605	Yale
1 ea	Lock Electrification	1510C-AE-LM-8708	--	ACSI
1 ea	Magnet	SAM-SC	--	Securitron
2 ea	Kickplates	10"	605	Rockwood
1 ea	Threshold	425BR	605	NGP
1 ea	Power Supply	BPS-24-1 x TM-8 x B-24-4	--	Securitron
1 ea	Card Reader	By NJT	--	
3 ea	Silencers	608	Grey	Rockwood
1 ea	Wiring Diagram	By Hardware Supplier		

Operation: Entrance by Card reader or Key. Egress by lockset all times. Power supply to be mounted in a concealed location in the Ticket Office. Coordinate voltage and electrical with DIVISION 16 Electrical.

HW Set E3

D11, D12, D13, D14, D15, D16				
2 ea	Closers	UNI-75-SDST-0	605	Norton
2 ea	Exit Device	XX-V-LBR	605	Monarch
2 ea	Electrical Mod.	VR-1500-AE-LM-1500	--	ACSI
1 ea	Pull	134 x 70C	605	Rockwood
1 ea	Pull	134 x 70C x Cyl. Prep	605	Rockwood
2 ea	Magnet Strike & Lock	SAM	605	Securitron
2 ea	Overhead Holder	6 Series	605E	Rixson
1 ea	Threshold	426BR	605	NGP
2 ea	Weatherstrip	116NDKB	DKB	NGP
2 ea	Door Sweep	200SBR	605	NGP
2 ea	Seals	120SBR	605	NGP
4 ea	Kickplate	10"	605	Rockwood
1 ea	Card Reader	By NJT	--	
1 ea	Key Switch	MKA	605	Securitron
1 ea	Cylinder for MKA	To Suit	605	Yale
1 ea	Cylinder for Exit	To Suit	605	Yale
1 ea	Power Supply	BPS-24-1 x TM-8 x B-24-4	--	Securitron
1 ea	Wiring Diagram	By Hardware Supplier	--	

FINISHING HARDWARE

08 71 10-8

New Jersey Transit
Hoboken Terminal
Waiting Room Restoration

R2 - 8.20.13

Operation: Egress all times by pressing Exit Device or by Fire Release system if activated. Entrance by card reader or key, when station is closed. Electromagnetic locks must remain de-energized (**open from exterior**) while station is open. Power supply to be mounted in a concealed location in the adjacent room. Coordinate voltage and electrical with DIVISION 16 Electrical.

HW Set E4 (non electrified)

D19, D20, D21, D22

1 ea	Closers	4400	605	Yale
1 ea	Exit Device	1500	605	Yale
1 ea	Pull	134 x 70C	605	Rockwood
1 ea	Pull	134 x 70C x Cyl. Prep	605	Rockwood
1 ea	Threshold	426BR	605	NGP
1 ea	Weatherstrip	116NDKB	DKB	NGP
1 ea	Door Sweep	200SBR	605	NGP
1 ea	Seals	120SBR	605	NGP
2 ea	Kickplate	10"	605	Rockwood

SECTION 090120.91 PLASTER REPAIR AND REPLICATION

PART 1 - GENERAL

1.1 SECTION INCLUDES:

- A. The work of this Section consists of providing all labor, materials and equipment and services to complete the following plaster repairs on the contract drawings of the Waiting Room of the Hoboken Terminal.
 - 1. Repair of flat plaster damaged by flood waters in the North and East Vestibules.
 - 2. Repair of molded plaster in the North and East Vestibules
 - 3. Replication of plaster ornament.
 - 4. Contractor shall inspect all flat and molded plaster surfaces to determine any defects prior to the installation of this contract. Any such defects shall be reported to the Architect prior to beginning the work of this section.
 - 5. Painting of new and existing plaster surfaces

1.2 REFERENCED SECTIONS:

- A. Section 040140.92 Interior Masonry Restoration
- B. Section 060140.91 Architectural Woodwork Restoration
- C. Section 05700 Ornamental Metalwork Restoration
- D. Section 090160.91 Terrazzo Floor Restoration

1.3 REFERENCES:

- A. All work will conform to ASTM-C842, the Application of Interior Gypsum Plaster.
- B. ASTM C5- Quicklime for Structural Purposes; Current Edition
- C. ASTM C28 – Gypsum Plasters; current Edition.
- D. ASTM C35 – Inorganic Aggregates for Use in Gypsum Plaster; Current Edition
- E. ASTM C206 – Finishing Hydrated Lime; Current Edition
- F. ASTM C207 – Hydrated Lime for Masonry Purposes; Current Edition
- G. ASTM C631 – Bonding Compounds for Interior Plastering; Current Edition
- H. ASTM C841 – Installation of Interior Lathing and Furring, Current Edition
- I. ASTM C847 – Metal Lath, Current Edition
- J. See “Repairing Historic Flat Plaster Walls and Ceilings,” Preservation Brief #21, Preservation Assistance Division, NPS, 1989.

- K. See "Preserving Historic Ornamental Plaster," Preservation Brief #23, Preservation Assistance Division, NPS, 1990.
- L. Secretary of the Interior's Standards. All work shall comply with the United States Secretary of the Interior Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings, unless indicated otherwise.

1.4 JOB CONDITIONS:

- A. Quantity and Location: The Contractor and the Architect shall review all of the areas mentioned to confirm quantities and location of plaster repairs.
- B. Only apply paint to dry clean surfaces, when the relative humidity exceeds 85%. No not paint damp surfaces or in the direct sun.

1.5 QUALITY CONTROL:

- A. Mechanics shall be highly skilled in the art and craft of plastering, both flat and ornamental, with the work of this section to the highest standard for such work. No allowances will be made for the lack of skill of the mechanics.
- B. All replication work shall be performed by a plaster ornament Fabricator with experience in ornamental plaster fabrication and replication. The Fabricator must have a minimum of five (5) years of experience and adequate facilities and capacity to furnish the quality, size and quantity of units required. Fabricator must demonstrate three projects similar in scope and type to the required work in the New York / New Jersey region involving facilities designated as Landmarks by local government, or building listed on the National or State Register of Historic Places.
- C. Installation and restoration shall be performed by a Contractor specializing in plaster installation with experience in ornamental plaster installation. The Contractor must have a minimum of five (5) years of experience working with historic plaster.. Contractor must demonstrate three projects similar in scope and type to the required work in the New York / New Jersey region involving facilities designated as Landmarks by local government, or building listed on the National or State Register of Historic Places.
- D. Contractor shall maintain a steady work crew consisting of skill mechanics who are experienced with the materials and methods specified, and are familiar with the design requirements. Contractor shall maintain a full-time Foreperson who fluently speaks, reads and writes English. Contractor shall confirm that all workers understand the job's requirement. Mechanics shall be fully supervised to ensure that the work is accomplished to meet or exceed the highest standards of the trade.
- E. Work is to be performed on a daily basis without interruption unless directed otherwise by the Architect.
- F. In acceptance or rejection of the work of this Section, no allowances shall be made for lack of skill on the part of the craftspersons or mechanics.
- G. All new plaster work shall match the original in all respects, including profile, texture, dimensions, etc.
- H. Obtain materials for plaster replication and installation from a single source to ensure a match in quality, color and texture.

- I. Materials shall be used only at the manufacturer's recommended temperature allowances. Installation work may only be performed as long as the ambient temperature remains above 40 degrees Fahrenheit and below 80 degrees Fahrenheit and will remain so for the next 48 hours.
- J. Allowable Tolerances
 - 1. All new plaster repairs shall exactly match and continue existing edges and contours of plasterwork. Repairs shall be true and flat in connection with adjacent plaster and match the curved profile of the adjacent material where applicable. Visual irregularities shall be corrected in all cases. Ridges, ledges, and irregularities in the work shall be cause for the work to be rejected by the Architect. Contractor shall remove rejected work and provide new plasterwork complying with requirements of this section at no additional cost to the owner. Do not exceed 1/8" in 8'-0" for bow or warp of surface or for plumb or level.

1.6 SUBMITTALS:

- A. Contractor qualification data: Submit qualification data and references for firms and persons specified in Section 1.5 "Quality Assurance" to demonstrate their capabilities and experience. Bidders shall visit the site and make themselves familiar with the site conditions.
- B. Contractor shall submit a work plan including detailed descriptions of how the work of this Section will be accomplished. This should include products to be used, methods for mold making, methods for replication, methods for installation, etc.
- C. Provide written descriptions, drawings and diagrams outlining proposed methods and procedures for protection of personnel, the public, and the existing construction during the work of this Section.
- D. Contractor shall submit copies of the manufacturer's technical data for handling, storage and application of each product used in plaster replication and installation, including the manufacturer's recommendations for application and use. Include test reports and certificates that verify the product's compliance with the specification's requirements.
- E. Shop Drawings:
 - 1. Contractor shall submit complete shop drawings showing the dimensions, layout, sections and ornate details, where applicable, of all plaster replication. Drawings shall also show cross section of plaster profile.
 - 2. All drawings when viewed together, shall show all details of the profile, bonding, anchoring (if necessary and all other essential aspects of the work.
- F. If alternate methods and materials to those specified are proposed for any phase of the restoration work, provide written description. Provide evidence of successful use on comparable projects and demonstrate its effectiveness for use on this project.
- G. Mock-ups:
 - 1. Prior to executing work, provide in-place mock-up panels for the Architect's approval. Resubmit panels until the Architect is fully satisfied. Mock-up panels shall be prepared by the Contractor using the same workmen, methods and materials that will be employed for the remainder of the work. At the discretion of

- the Architect, mock-ups shall be prepared in the presence of the Architect. Mock-ups shall be approved for texture, and profile.
2. At an area of the site where approved by the Architect, Contractor shall provide a minimum of two samples of flat plaster panels.
 3. At an area of the site where approved by the architect, Contractor shall provide a minimum of two samples of decorative molding panels.
 4. These samples panels shall be large enough to demonstrate range of treatments needed for flat surfaces and molded areas.
 5. Contractor shall protect approved mock-up panels for the duration of the work. Mock-ups may be part of the Work, and may be incorporated into the finished work when so approved by the Architect.
 6. Revise sample panels as necessary to secure this approval.
 7. Mock-ups will serve as a standard for the acceptance or rejection for the work of this Section.
 8. Once plaster has cured, prepare a mock-up for each paint finish required at a location selected by the Architect. Each painting sample to be not less than two (2) square feet in size.
- H. Provide methods of protecting the stone walls, terrazzo floors and any additional materials in the space during the plaster work.

1.7 COORDINATION:

- A. At least three weeks prior to commencing the work of this Section, a meeting must be scheduled at the jobsite to discuss conformance with the requirements of specifications and job site conditions. Representatives of the Fabricator, Contractor, Architect and other parties involved in the scope of this work shall attend the meeting.
- B. Contractor shall coordinate his or her work with that of other trades related to the successful completion of the work of this Section. Contractor shall not proceed with aspects of this work that require completion of other trades until all such work of other trades is completed.
- C. Field Supervised Construction: The Fabricator shall notify the Architect before beginning plaster ornament replication. Obtain the Architect's approval before proceeding with replication. Contractor shall also notify Architect before beginning plaster installation. Obtain Architects' approval before proceeding with the installation.

1.8 PROTECTION:

- A. Protect all adjacent areas from damage during the work of this Section using approved means of physical protection.
- B. Protect all adjacent surfaces and projections from all dropping materials. Use canvas or polyethylene covers, if necessary, and remove all unwanted material that comes in contact with any historic material immediately so as not to cause staining.

1.9 EXTRA STOCK:

- A. Upon completion of this portion of the work deliver to Hoboken Terminal an extra stock of paint equalizing approximately 10% of each color and gloss used in each coating material used with all such extra stock tightly sealed in clearly labeled containers.

1.10 DELIVERY, STORAGE AND HANDLING

- A. All materials shall be delivered to the job site in factory-sealed containers clearly labeled as to product, manufacturer, color, and other pertinent characteristics.
- B. All materials for use in the work of this Section shall be stored under environmental conditions recommended by the manufacturer. Materials should be kept dry (includes protection from liquid moisture and water vapor), well-ventilated and free of foreign matter.
- C. Arrangement shall be made with the Architect to store equipment and materials in designated areas. The Architect shall not be responsible for damaged or stolen materials or equipment left on the premises by the Contractor.
- D. All vessels shall have tight fitting covers. At no time shall vessels containing chemicals be carried to working levels when vessels are open.
- E. Transport, lift, and handle new plaster units with care, avoiding excessive stress and preventing damage; use appropriate equipment and methods.

PART 2 - PRODUCTS

2.1 MATERIALS:

- A. General
 - 1. Grade and Quality: Materials shall conform to requirements of this Section and shall be new, free from defects, and of recent manufacture.
 - a. Where any manufacturer makes more than one grade of each material specified, use highest grade and quality of each material, whether or not material is mentioned by trade name in these specifications.
 - b. Where products specified by name and number are not available, furnish products equal to original specifications, as approved by Architect or Architect's Representative at no additional cost to the Owner.
 - 2. Ready-Mixed Products: Wherever a ready-mixed product is specified for use, containers shall bear labels giving exact formula of the mixture. The formula shall be guaranteed by the manufacturer, and the product shall be subject to chemical analysis by the Architect's Representative or designated others, at Contractor's expense.
 - 3. Manufacturer's Instructions: Comply with material manufacturer's instructions for use of products (including surface preparation, mixing, applying, drying, etc.). In case of conflict with requirements of this Section, the more stringent requirements shall govern.
 - 4. ASTM Standards: All materials shall comply with relevant ASTM standards.

- B. Plaster
 - 1. U.S. Gypsum, National Gypsum Company or Approved Equal. Gypsum plaster shall comply with ASTM-C28. Neat plaster for hand application of scratch coat over metal lath shall contain not less than 0.01 percent by weight of synthetic or vegetable fibers or not less than 0.02 percent by weight of mineral fibers.
 - 2. Hydrated Lime: pressure hydrated, shall comply with ASTM-C206.
 - 3. Molding Plaster: white, shall comply with ASTM-C28.
 - 4. Patching Plaster: white, shall comply with ASTM-C28.
- C. Plaster Mixes
 - 1. Procedures:
 - a. Proportion and measure the materials for each batch of plaster accurately.
 - b. Prepare batches in quantity for complete use within a maximum of one hour after mixing, and to set up within a maximum of four hours.
 - c. Do not re-temper or use partially set plaster.
 - d. Do not use frozen, caked, or lumpy material, but remove such material from the job site immediately.
 - e. Withhold 10% of the required water until the mixing cycle is nearly completed, then add water as needed to achieve the required consistency.
 - f. Gypsum scratch coat: One part fibered Gypsum, neat plaster, 2 parts sand by weight.
 - g. Gypsum brown coat: one part gypsum plaster, three parts sand by weight.
 - h. Gypsum finish: 1/16" to 1/8" neat (no lime) hard white coat (similar to U.S. Gypsum diamond finish), or approved equal.
 - i. Patching plaster: follow manufacturer's directions.
 - j. Flame Spread Index shall be less than 75 when tested in accordance with ASTM E84.
- D. Lath
 - 1. Galvanized expandable diamond mesh metal lath and galvanized nails, type and size as determined by size of repair.
- E. Water
 - 1. Provide water which is potable and free from all substances that would be deleterious to gypsum plaster.
- F. Sand
 - 1. Shall comply with ASTM-C35.
- G. Fiber
 - 1. Non-staining, alkali resistant synthetic or vegetable or mineral product not more than 2" long, clean and free from foreign material.
- H. Retarding Agents

1. The use of retarding agents in plaster mixes will not be permitted.
- I. Bonding Agents
 1. If bonding agent is used it shall comply with ASTM-C631 and be a material producing a permanent bond and not affected by freezing, heat, acids, alkalis, dampness and producing no discoloration to finished plaster surfaces.
 2. Approved bonding agent:
 - a. Bulldog Grip PL Premium polyurethane adhesive, as manufactured by LePage/Henkle
 - b. Plasterweld as manufactured by Larsen Products Corp. or approved equal.
 - J. Other Materials
 1. Spackling Compound: DAP/Bondex Spackling Paste as manufactured by DAP, Inc. or approved equal.
 2. Provide other materials not specifically described but required for a complete and proper installation, as selected by the Fabricator or Contractor, subject to the approval of the Architect.
 - K. Paint:
 1. Provide the best quality "Architectural" grade painting products for all required painting made by Benjamin Moore, Sherwin Williams or approved manufacturing equal. Comply with the number of coats and required minimum mil thickness as specified by the manufacturer.
 2. Paint underside of stair plaster finishes in the same color and gloss as the existing finish.

PART 3 - EXECUTION

3.1 TEMPORARY PROTECTION:

- A. Cover adjacent surfaces and adjacent decorative features with protective sheeting to contain any fragments and dust during removal and preparation and to contain plaster droppings during the application of respective base, brown and finish coats.

3.2 INSPECTION:

- A. The Contractor shall examine substrates and conditions under which this work is to be performed and notify the Architect in writing of conditions detrimental to the proper completion of the work. Do not proceed until unsatisfactory conditions are corrected. Commencement of work indicates that Contractor accepts substrate and conditions.
- B. Correct any conditions that are detrimental to the successful completion of the work. Sequencing of work should be scheduled to ensure that completed work will match existing.
- C. Perform a thorough examination of the existing conditions. Perform any necessary tests on an inconspicuous surface to determine the current conditions and appropriate steps and materials necessary for repair and restoration of the plaster

3.3 SUBSTRATE PREPARATION:

- A. Preparing void: Carefully remove all soft, broken, loose, delaminated, non-adhering, or flaking plaster back to lath or to solid, sound adjacent plaster, making clean and sharp locations due to the degree of repair necessary. Ensure that remaining plaster is completely bonded to substrate.
- B. Damaged Lath: All damaged or deteriorated lath shall be removed and replaced with galvanized metal diamond edges, beveled inward to provide mechanical.
- C. Securing Lath:
 - 1. Space fasteners not more than 6" apart.
 - 2. Attach lath to supports with fasteners appropriate to rigidly secure lath.
 - 3. Do not continue lath across expansion or control joints.
 - 4. Lap diamond mesh lath in a minimum of 1" at all sides.

3.4 PLASTER RESTORATION WORK, GENERAL:

- A. General: Replicate, repair, and restore plasterwork in locations indicated on Drawings, as required to repair surfaces damaged for installation of other work, and as directed by the Architect.
- B. Supports: Repair or replace supports and lath as required to provide sound, secure, well-anchored surfaces for receiving plaster.
- C. Plaster thicknesses: Thicknesses indicated shall be considered minimum. In each location, provide thickness required to provide plumb and square wall surfaces and level ceiling surfaces and to provide surfaces flush with adjacent surfaces.
- D. Building In: Build in work of others and do all cutting and patching plaster in this connection. Where abutting other built-in materials plaster shall be finished tightly against them and be neatly trimmed.
- E. Execute plaster repairs edge to edge in long strips or large areas for each separate coat. Where breaks are necessary lap new work over adjoining work.
- F. Bring finished plaster surface to a true plane. When complete, surface shall be clean and free from blisters, pits, discoloration, cracks, or other defects. In all cases plasterwork is to be delivered clean and perfect in every respect.
- G. Provide all repairs to existing plaster surfaces to provide sound, smooth, even surfaces matching adjacent surfaces. Reattach loose plaster, fill holes, cracks, gouges, spalls and other imperfections.

3.5 APPLICATION

- A. General:
 - 1. Schedule application of plaster to precede application of other finishes which could be damaged by operations incidental to plastering.
 - 2. Apply the appropriate thickness for each specific application according to the National Plasterer's Association Guidelines.

3. Each new plaster layer should be lapped or stepped over old plaster layers so that the old and new are evenly joined.
- B. Two-Coat Application (Base Coat and Finish Coat):
1. Apply the base coat with sufficient material and force to cover the substrate and to form a good bond and good keys in the lath.
 2. Double back with the same plaster mix.
 3. Bring base coat out to grounds prior to plaster set up.
 4. Smooth off plaster to form a true and level surface.
 5. Lightly cross rake or hatch, leaving texture adequate to promote a solid bond with the finish coat.
- C. Three-Coat Application (Base Coat, Brown Coat and Finish Coat):
1. Apply the base coat with sufficient material and force to cover the substrate and to form a good bond, or key as appropriate.
 2. Cross rake or hatch to provide a surface sufficiently rough to receive second coat (brown coat), and allow to dry.
 3. Set screeds prior to application of the brown coat.
 4. Apply the brown coat, bring the surface up to the ground, and flatten to a true surface using a straight edge or two handled float, but without applying water.
 5. Lightly cross rake or hatch, leaving sufficient texture to promote sound bond with the finish coat.
- D. Finish-Coat Application:
1. General:
 - a. Apply finish coat to base plaster coats, which have set up and are partially dry.
 - b. Where base coats are more than partially dry, dampen the base coats by misting with water.
 2. Trowel Finish:
 - a. Apply the finish coat with sufficient material and force to secure a sound bond.
 - b. Fill out to a true, flat and even surface.
 - c. When the finish coat has begun to set, trowel with clean water to a smooth finish which is free from surface defects and irregularities.
 - d. Finish flat plaster true and even within a tolerance of 1 in 500 maximum variation from true flatness, leaving the finish surface without tool marks and other blemishes.
- E. Gypsum Plaster Finish Coat on Existing Base Coats:
1. Apply bonding agent to existing base coat and then apply finish coat as specified above.

3.6 WARRANTY

- A. One (1) year manufacturer's warranty for all materials supplied, effective from date of receipt of materials. Product will conform to samples and drawings approved by the Architect. Any defects in workmanship will be correct or replaced at the discretion of the Architect and at no cost to Owner of impact to the schedule.

3.7 PAINTING

- A. Cover adjacent surfaces and adjacent decorative features with protective sheeting, drop clothes or masking to protect all surfaces not requiring painting.
- B. Ensure all new and existing plaster surfaces are clean and ready to receive a finish free of all dust, grease, oil, dirt or other foreign matter, as required by manufacture's surface preparation specifications.
- C. Materials Preparation:
 - 1. Mix and prepare paint materials in strict accordance with the manufacturer's recommendations.
 - 2. When materials are not in use, store in tightly covered containers.
 - 3. Maintain containers used in storage, mixing and application of paint in a clean condition free from foreign materials and residue.
- C. Stir paint before application and at frequent intervals during application to produce a mixture of uniform density.
- D. Paint Application:
 - 1. Apply in accordance with manufacturer's directions. Use methods best suited for the type of material being applied.
 - 2. Perform all painting in a professional manner with skilled mechanics.
 - 3. Keep paint free from skins, lumps and foreign matter. Keep pigment fillers and other materials well stirred while material is being applied.
 - 4. Apply paint in a smooth, even film, free from runs, sags, brush marks, laps, spotting or other surface imperfections. Finish surfaces shall be uniform.
 - 5. Before subsequent coats are applied, remove all painted surfaces which exhibit blisters or other imperfections.
 - 6. Apply primers to surfaces that have been cleaned, pre-treated, or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
 - 7. Do not apply subsequent coats of paint until the preceding coat is completely dry. Allow longer drying time of recommended by the manufacturer or dependent upon humidity.

8. Apply the first top coat within two weeks after application of the primer and apply the second top coat within two weeks after application of the first top coat.
- E. Each coat must be inspected and approved by the Architect before application of the subsequent coat and no credit for such coat shall be given. Recoat work in question at no additional expense to owner.
- F. No work will be accepted until it conforms in every respect to the approved test sample.
- G. At no additional expense to Owner, apply additional coats when undercoats or other conditions show through the final coat of paint.
- H. The final coat of paint shall exhibit a uniform finish, color and appearance. Work which does not conform to this standard will be rejected.

3.8 CLEAN UP

- A. Upon completion of all other work of this Section, inspect all plaster surfaces and correct conditions which do not meet specified requirements.
- B. Remove protective materials and plaster materials from adjacent surfaces.
- C. Clean all areas of plaster droppings and splatter restoring affected areas to clean and neat conditions.

PART 4 - COMPENSATION

4.1 PAYMENT

- A. Payment for "Plaster Repair & Restoration" covered by this section shall be included in the Division lump sum item for "Plaster Repair & Restoration in Division 9".

4.2 MEASUREMENT

- A. All work required to complete the specific tasks in this section shall not be measured.

END OF SECTION

SECTION 090160.91 – TERRAZZO FLOOR RESTORATION

PART 1 - GENERAL

1.1 SECTION INCLUDES:

- A. The work of this Section consists of providing all labor, materials and equipment and services to complete the following terrazzo tile floor repairs in the waiting room of the Hoboken Terminal.
 - 1. Repair of Terrazzo Floors, including but not limited to:
 - a. Cleaning terrazzo floors in the work areas.
 - b. Patching damaged terrazzo tiles
 - c. Replacing missing tile
 - d. Replacing damaged brass divider strips
 - e. Sealing all terrazzo floors in the work areas.

1.2 REFERENCED SECTIONS:

- A. Section 040140.92 Interior Masonry Restoration
- B. Section 05700 Ornamental Metal Restoration
- C. Section 060140.91 Architectural Wood Restoration
- D. Section 090120.91 Plaster Repair and Replication

1.3 REFERENCES:

- A. Comply with the specifications and recommendations of the NTMA (National Terrazzo and Mosaic Association).
- B. General Service Administrations (GSA) Preservation Note 43, Restoring and Maintaining Terrazzo Flooring
- C. ASTM C150 – Standard Specification for Portland Cement
- D. ASTM C33 – Standard Specification for Concrete Aggregates
- E. ASTM C241 – Standard Test Methods for Abrasion Resistance

1.4 JOB CONDITIONS:

- A. Quantity and Location: The Contractor and the Architect shall review all of the areas mentioned to confirm quantities and location of terrazzo floor repairs

1.5 QUALITY CONTROL:

- A. Work shall be performed by a Contractor specializing in the fabrication and repair of terrazzo floors. The Contractor must have a minimum of five (5) years of experience. Contractor must demonstrate three projects similar in scope and type to the required work in the New York / New Jersey region involving facilities designated as Landmarks by local government, or building listed on the National or State Register of Historic Places

- B. Mechanics shall be highly skilled in the art and necessary crafts of terrazzo floor repair, with the work of this Section to the highest standard for such work. No allowances will be made for the lack of skill of mechanics.
- C. All work shall be carried out in accordance with the standards of the National Terrazzo and Mosaic Association, Inc., except where indicated in these specifications.
- D. Contractor should be a member of The National Terrazzo and Mosaic Association, Inc., or certified by that organization as qualified to perform the work of this Section in accordance with the specified requirements.

1.6 SUBMITTALS:

- A. Submit materials list of all items to be provide under this Section.
- B. Product literature and manufacturer's recommendations for all materials proposed to be provided for this Section.
- C. Samples
 - 1. Three samples of replacement pre-cast terrazzo tile required, size to match existing.
 - 2. Provide cured samples of terrazzo patching repair mix, not less than 12" square.
 - 3. Sample of the replacement brass dividing strip for the joint.
- D. If alternate methods and materials to those specified are proposed for any phase of the restoration work, provide written description. Provide evidence of successful use on comparable projects and demonstrate its effectiveness for use on this project.
- E. Mock-ups: At an area on the site where approved by the architect, provide a mock-up terrazzo floor repair panel. The mock-ups may be part of the Work, and may be incorporated into the finished work, when so approved by the Architect. Revise as necessary to secure the Architect's approval. The mock-up panels, when approved by the Architect will be used as the standard for all terrazzo floor repairs as the basis for acceptance or rejection of the Work. Mock-ups are to include:
 - 1. Patching repair sample
 - 2. Brass dividing strip replacement

1.7 COORDINATION:

- A. Delay grinding, sealing and finishing until heavy trade work is completed and construction traffic through the area is restricted

PART 2 - PRODUCTS

2.1 CLEANING MATERIALS:

- A. Provide a commercially prepared product formulated especially for cleaning terrazzo floors, having a pH of between 7-10, free from crystallizing salts or water soluble alkaline salts, biodegradable, and phosphate free.

2.2 SEALING MATERIALS:

- A. Provide a commercially prepared sealer formulated especially for sealing terrazzo, having a pH between 7-10, not discoloring or yellowing, providing a slip-resistant surface with a flash-point of 95 degrees Fahrenheit minimum in accordance with ASTM D56.

2.3 PATCHING MATERIALS:

- A. Portland Cement: shall comply with ASTM C50, Type I, white.
- B. Sand: shall comply with ASTM C33 for fine aggregates.
- C. Marble Chips: Provide in conformance with MTMA standards and with the following attributes:
 - 1. Shall comply with ASTM C241 with HA10 minimum, and with 24-hour absorption rate of not more than 0.75%.
 - 2. Provide chips containing no deleterious or foreign matter, and with dust content less than 1% by weight.
 - 3. Label bags legibly with correct name and size of chips.
 - 4. Colors and gradation of aggregates sizes as required to match original existing intact materials and patterns. Original plans often contain the exact terrazzo mix.
 - 5. Aggregate colors should be matched after cleaning or taken from the interior of core samples depending upon the scope of work.
- D. Colorants: Provide alkali-resistant non-fading color pigments as appropriate to each particular terrazzo mixture required.
- E. Curing Compound: Liquid-membrane-forming compound, ASTM C309, Type I.
- F. Reinforcement: Provide 16 gage 2" by 2" galvanized welded wire fabric which complies with ASTM A185.

2.4 REPLACEMENT TILE:

- A. Provide replacement pre-cast terrazzo tile that matches the existing in color, aggregate, texture and size.
- B. Surface of new tile is to match that of undamaged historic tiles.

2.5 EQUIPMENT:

- A. Plastic sheeting.
- B. Grinding stones: fine grit emery stones manufactured specifically for restorative type grinding and surfacing of terrazzo surfaces (#40 and #80 grit stones).
- C. Power saw.

- D. Hand tools:
 - 1. Trowel
 - 2. Chisel
 - 3. Hand Grinder
- E. Resurfacing Screens: a fine grit screen manufactured specifically for restorative type grinding and resurfacing terrazzo surfaces.

2.5 BRASS JOINT STRIPS:

- A. Brass joint strips to match existing in size, shape and color.

PART 3 - EXECUTION

3.1 TEMPORARY PROTECTION:

- A. Cover adjacent surfaces and adjacent decorative features with protective sheeting to contain any fragments and dust during removal and preparation and to contain materials during their application.

3.2 INSPECTION:

- A. The Contractor shall examine substrates and conditions under which this work is to be performed and notify the Construction Manager in writing of conditions detrimental to the proper completion of the work. Do not proceed until unsatisfactory conditions are corrected. Commencement of work indicates that Contractor accepts substrate and conditions.
- B. Correct any conditions that are detrimental to the successful completion of the work. Sequencing of work should be scheduled to ensure that completed work will match existing.
- C. Perform a thorough examination of the existing conditions. Perform any necessary tests on an inconspicuous surface to determine the current conditions and appropriate steps and materials necessary for replication and replacement of select areas of existing terrazzo surface.

3.3 PATCHING DAMAGED TILES:

- A. Surface Preparation.
 - 1. With a power saw or hand tools, cut around the area to be patched. The perimeter of the area to be patched should have vertical sides that are perpendicular to the horizontal surface. Do not feather the edge of the void. If the patch is larger than an inch square, slightly undercut this edge. Remove all loose and deteriorated terrazzo.
 - 2. Clean surface of debris and any obstructing material. Saturate void with water to prevent quick surface drying. Ensure that water penetrates into the surface in order to achieve a proper bond.
 - 3. Apply a cement paste and work into the surface. Do not allow cement paste to dry before placing terrazzo composition.

- B. Application:
1. Mix two parts blended marble chips with one part Portland cement and coloring pigment. Add enough water to make this mix plastic.
 2. Apply this mixture to the prepared void, making sure it is applied to the wet cement paste preparation layer. Work the patching material into the void ensuring intimate contact to all areas including sides of the void.
 3. Seed additional marble chips of the same blend over the patch, as required to establish a uniform coverage.
 4. Compact patch, remove all excess water and cement from the surface.
 5. Cover the patch with paper or polyethylene sheeting to prevent quick hydration. Cure until topping develops sufficient strength to prevent lifting or pulling of terrazzo chips during grinding.
 6. Sand surface with a hand sander or small grinding tool, using fine grit stones to achieve desired finish.
 - a. Use a #40 or finer grit stone for the initial grinding, exposing the marble chips. Follow with a fine #80 grit stone.
 7. Thoroughly rinse surface with clean, clear water.
 8. Remove excess rinse water and machine or hand apply grout using identical Portland cement color and pigments as used in topping taking care to fill all voids completely.
 9. Cover grouted surface with paper or polyethylene for at least 72 hours.
 10. Final polish with a #80 or finer grit stone. Care should be taken to limit grinding and polishing to a small distance beyond the perimeter of the patch.
 11. Produce a finished terrazzo surface showing a percentage of marble chips equal to that of the existing terrazzo surface.
 12. Seal patch with a penetrating type terrazzo sealer per section 3.6.

3.4 REPLACING CRACKED, HEAVILY DAMAGED OR MISSING TILES:

- A. Using a diamond tipped blade, cut around all damaged tiles to at least the depth of the tile.
- B. Remove the tile and setting bed.
- C. Clean the resultant void of all loose material, dust, and debris; and dampen the surface.
- D. Replace brass dividing strips to match existing.
- E. Mix and apply a sand-cement mortar into which the new tile will be added.
- F. Apply a slurry to the void and fit the tile into it. Ensure the new tile is level with the surrounding terrazzo. Make any adjustments by gently knocking the tile using a rubber mallet.

3.5 REPLACEMENT OF BRASS JOINT STRIPS

- A. Replace missing brass dividing strip to match existing.
- B. If replacing dividing strip in an area where the surrounding terrazzo is sound, set the strip in epoxy.

3.6 SEALING TERRAZZO

- A. Ensure the surface to be sealed is dry, and free of dirt and debris.
- B. Apply the sealer according to the manufacturer's recommendations.
- C. Ensure that an even, streak-free finish is achieved.
- D. Allow the sealer to cure as per the manufacturer's recommendations prior to receiving traffic.

3.7 ADJUSTING / CLEANING:

- A. Upon completion of all other work of this Section, inspect all terrazzo surfaces and correct conditions which do not meet the specified requirements.
- B. Remove protective materials from adjacent surfaces.
- C. Upon completion of the sealing process, provide adequate protection to prevent damage to the finished terrazzo surfaces until acceptance of the Work.
- D. Clean the work of this Section in accordance with recommendations of the manufacturers of the materials used.
- E. Provide terrazzo surfaces free from cracks, chips and other surface defects.

END OF SECTION