Chris Christie, Governor Kim Guadagno, Lieutenant Governor Jamie Fox, Board Chairman Veronique Hakim, Executive Director



February 19, 2015

To Whom It May Concern:

RE: New Jersey Transit Agreement No. 15-015X
Orange Annex Roof Replacement
Orange, New Jersey
Addendum No. 1

Prospective consultants are hereby advised of the following additions, deletions and/or clarifications for which bids are due on Tuesday, March 12, 2013 at 2:00 p.m.

- 1. Please find attached the Pre-Bid Conference Agenda.
- 2. Please find attached the Pre-Bid Conference and Site Visit Attendance Sheet.
- 3. Please find attached additional information and a drawing for the Orange Annex Roof Replacement.
- 4. Pictures for the Upper and Lower roof of the Orange Annex Roof Replacement.

FOR PROSPECTIVE CONSULTANTS ONLY

This concludes Addendum No. 1 bidders must electronically acknowledge receipt of this addendum with its bid submission. Failure to do so may render the bid non-responsive.

Sincerely,
Shelley D. Harris
Shelley D. Harris
Principal Contract Specialist
Procurement Department



PRE-BID CONFERENCE & SITE VISIT <u>Attendance Sheet</u>

INVITATION FOR BID (IFB) NO. 15-015X

ORANGE ANNEX ROOF REPLACEMENT ORANGE, NJ

PRE-BID CONFERENCE AGENDA

THURSDAY, FEBRUARY 5, 2015 @ 10:00 A.M.

<u>NAME/</u> COMPANY NAME	ADDRESS	TELEPHONE NO./FAX NO.	DBE
MTBLLC	1122 S-PRINER AVE	732 7741806	-
BARIN FISHBAND PASSAIC HETELL	5 Contral AV	973-546-9000	
N-S. K.	50 BA JAN STREAT	718.3319419	
Michael V. Petrik Integrity Roufing	1395 Witherspoon St Rahway, NT 07065	732-680-1111	
WACE Knehr Northeast Root Maintenace	649 cutherine St. Porth Andry NJ. 08861	737 442 2020	
NJT	NEwark, NJ	973-491- 8061	
2H NOLT	53 (noss Kily A).	856 7539333	
Prava due	245 hiscott DL Rahung NT	732-322	

PRE-BID CONFERENCE & SITE VISIT Attendance Sheet

INVITATION FOR BID (IFB) NO. 15-015X

ORANGE ANNEX ROOF REPLACEMENT ORANGE, NJ

PRE-BID CONFERENCE AGENDA

THURSDAY, FEBRUARY 5, 2015 @ 10:00 A.M.

<u>NAME/</u> COMPANY NAME	ADDRESS	TELEPHONE NO./FAX NO.	DBE
MARK HOLMES PINTRIBAL CONSTRUCTION	SO DRIFT AUZ	(109-538-1298	465
EDUANNO BELANCO	MANUFACTOR LAND 1 1 A COOLER	(473) 491-746)	
NJT			
JEFF DONFIEL	8 MAIN ST	908-616-6479	-
Glenn Bû, Hen/			
Sheley D family		(913)491-7538	

INVITATION FOR BID (IFB) NO. 15-015X

ORANGE ANNEX ROOF REPLACEMENT ORANGE, NEW JERSEY

PRE-BID CONFERENCE AGENDA

THURSDAY, FEBRUARY 5, 2015 @ 10:00 A.M.

I. INTRODUCTION

A. Proposal Process

Shelley D. Harris

Principal Contract Specialist

B. Panelist

Eduardo Blanco Project Manager

II. SBE REQUIREMENTS

Jacquelin Rush-Gilbert

Senior Contract Compliance Specialist

15% DBE Goal

III. PROJECT OVERVIEW

Eduardo Blanco

IV. TECHNICAL REQUIREMENTS

Eduardo Blanco

V. QUESTIONS FROM THE FLOOR

Panelist

VI. CLOSING REMARKS

Shelley D. Harris

VII. ADJOURNMENT

Shelley D. Harris

INVITATION FOR BID (IFB) NO. 15-015X

ORANGE ANNEX ROOF REPLACEMENT ORANGE, NEW JERSEY

PRE-BID CONFERENCE AGENDA

THURSDAY, FEBRUARY 5, 2015 @ 10:00 A.M.

<u>Agenda</u>

Introduction **Proposal Process** Project Overview **Technical Requirements** Questions and Answer Session

General

Attendance List

Project Dates:

Solicit Bids:

January 22, 2015

Pre-Bid Conference:

February 5, 2015 – 10:00 a.m.

Site Visit:

Immediately Following the Pre-Bid Conference Friday, February 6, 2015- Close of Business

Prequalification Due:

Deadline for Questions: Thursday, February 12, 2015 – Close of Business

Bid Opening:

Thursday, February 26, 2015 - 2:00 p.m.

Bids are to be submitted to NJ TRANSIT's Bid Desk located on the 6th Floor at One Penn Plaza East prior to the time specified. Late bids may not be accepted.

Communications:

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

Bidders are also advised that any discussions held regarding this project are considered informal and are not binding. The only means for modifying the Invitation for Bid is through a formal written Addendum. Therefore, any inquiries or requests for clarification must be submitted in writing. Inquiries and requests for clarification may be faxed to (973) 491-7854 or e-mailed to my attention at sharris@nitransit.com. Any response NJ TRANSIT elects to make will be made by a written Addendum to the Bid and issued to all plan holders.

Procurement E-Bidding Addenda No. 3 Check-Off List

Date:	: February 26, 2015		IFB # 15-015X			
Contra	ct Specialist	Shelley D. Harris				
		Ext. 7538				
Addenda package includes changes to the following:						
□ Addenda Document Clarification - PDF□ Bid Items - Excel						
	Change the following bid item: to revise the prequalification criteria.					
	 □ Technical Specifications - PDF □ Geotech Specifications - PDF □ Bidders Prequal Document - PDF 					
Change to Bid Opening is as follows:						
Tuesday / Thursday March 3, 2015 @ 2:00 Bid Room						
Change to Bid Schedule is as follows:						
Prebid			Conf Room			
Site Visit Conf Room						

4-14-10

Chris Christie, Governor Kim Guadagno, Lieutenant Governor Jamie Fox, Board Chairman Veronique Hakim, Executive Director



February 20, 2015

To Whom It May Concern:

RE: New Jersey Transit Agreement No. 15-015X

Orange Annex Roof Replacement

Orange, New Jersey Addendum No.2

Prospective consultants are hereby advised of the following additions, deletions and/or clarifications for which bids are due on Thursday, February 26, 2015 at 2:00 p.m.

1. Contractors must be prequalified for Building Construction (BC) and a General Contractor (GC) or for Building Construction (BC) with a Specialty (SP) in roofing with a minimum rating of "I" (\$1,000,001 to \$2,000,000).

FOR PROSPECTIVE CONSULTANTS ONLY

This concludes Addendum No. 2 bidders must electronically acknowledge receipt of this addendum with its bid submission. Failure to do so may render the bid non-responsive.

Sincerely,
Shelley D. Harris
Shelley D. Harris
Principal Contract Specialist
Procurement Department

Chris Christie, Governor Kim Guadagno, Lieutenant Governor Jamie Fox, Board Chairman Veronique Hakim, Executive Director



February 26, 2015

To Whom It May Concern:

RE:

New Jersey Transit Agreement No. 15-015X

Orange Annex Roof Replacement

Orange, New Jersey Addendum No. 3

Prospective consultants are hereby advised of the following additions, deletions and/or clarifications for which bids are due on Thursday, February 26, 2015 at 2:00 p.m.

- 1. The date for which bids are due has been changed from Thursday, February 26, 2015 at 2:00 p.m. to Tuesday, March 3, 2015 at 2:00 p.m.
- Please <u>disregard</u> the original Technical Specification and <u>replace with</u> the attached Revised Technical Specification dated 02/26/15. <u>Please Note</u>: Division 15 - Mechanical was erroneously left out when the Technical Specification was uploaded to Bid-X.

FOR PROSPECTIVE CONSULTANTS ONLY

This concludes Addendum No. 3 bidders must electronically acknowledge receipt of this addendum with its bid submission. Failure to do so may render the bid non-responsive.

Sincerely,
Shelley D. Harris
Shelley D. Harris
Principal Contract Specialist
Procurement Department

TECHNICAL SPECIFICATIONS

ORANGE ANNEX ROOF REPLACEMENT

ORANGE, NJ

ROOF REPLACEMENT PROJECT

Paul V. Giammona Registered Architect State of New Jersey NJ License No. Al-16461

TECHNICAL SPECIFICATIONS

TABLE OF CONTENTS

DIVISION 6 - WOOD AND PLASTICS

06114 - WOOD BLOCKING AND CURBING

DIVISION 7 - THERMAL AND MOISTURE PROTECTION

07552 - SBS-MODIFIED BITUMINOUS MEMBRANE ROODING, COLD APPLIED

07620 - SHEET METAL AND FLASHING AND TRIM

DIVISION 10 - SPECAILITIES

10290 - BIRD CONTROL

DIVISION 15 - MECHANICAL

15160 - STORM DRAINAG PIPING

SECTION 06114

WOOD BLOCKING AND CURBING

PART 1 GENERAL

1.1 SUMMARY

A. Section includes roof curbs, blocking, Fire resistant blocking and grounds.

1.2 SUBMITTALS

- A. Submit in accordance with General Provisions for Construction.
- B. Product Data: Submit technical data on wood preservative and fire retardant treatment materials and application instructions.

1.3 QUALITY ASSURANCE

- A. Perform Work in accordance with the following:
 - Lumber Grading Agency: Certified by NIST PS 20.
 Plywood Grading Agency: Certified by NIST PS 20.
 - 2. Plywood Grading Agency: Certified by APA/EWA.

PART 2 PRODUCTS

2.1 MATERIALS

A. Lumber Grading Rules: AP&PA. Plywood: APA/EWA Rated Sheathing

2.2 ACCESSORIES

- A. Fasteners and Anchors:
 - Fasteners: Hot dipped galvanized steel for high humidity and treated wood locations, unfinished steel elsewhere.
 - Anchors: Toggle bolt type for anchorage to hollow masonry.
 Expansion shield and lag bolt type for anchorage to solid masonry or concrete. Bolt or ballistic fastener for anchorages to steel.

2.3 FACTORY WOOD TREATMENT

A. Fire Retardant Treatment: Pressure treatment, AWPA C20 for lumber and AWPA C27 for plywood, Exterior Type, chemically treated and pressure impregnated; capable of providing a maximum flame spread/smoke development rating of 25/450.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify existing conditions before starting work.
- B. Verify substrate conditions are ready to receive blocking, curbing and framing.

3.2 PREPARATION

A. Coordinate placement of blocking, curbing and framing items.

3.3 INSTALLATION

- A. Set members level and plumb, in correct position.
- B. Place horizontal members, crown side up.
- C. Construct curb members of solid wood sections.
- D. Curb roof openings except where prefabricated curbs are provided. Form corners by alternating lapping side members.
- E. Secure sheathing to framing members with ends over firm bearing and staggered.

3.4 SCHEDULES

A. Roof Blocking: S/P/F species, 19 percent maximum moisture content, pressure preservative treatment.

PART 4 COMPENSATION

4.1 MEASUREMENT AND PAYMENT

- A. Measurement: The work of this section shall not be measured.
- B. Payment: The cost of this section shall be included in the lump sum bid item C06-001-002.0, wood blocking and curbing

END OF SECTION

SECTION 07552

SBS-MODIFIED BITUMINOUS MEMBRANE ROOFING, COLD-APPLIED

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. SBS-modified bituminous membrane roofing system on wood deck.
 - Roof insulation.
 - 3. Roof surfacing consisting of mineral granulated cap sheet.
- B. Related Sections include the following:
 - 1. Division 6 Section "Miscellaneous Carpentry" for wood nailers, curbs, and blocking.
 - 2. Division 7 Section "Sheet Metal Flashing and Trim" for custom metal roof penetration flashings, flashings, and counterflashings.
 - 3. Division 7 Section "Manufactured Roof Specialties" for manufactured copings, roof edge flashings, roof edge drainage systems, counterflashings, and reglets.
 - 4. Division 7 Section "Roof Expansion Assemblies."
 - 5. Division 7 Section "Joint Sealants."
 - 6. Division 15 Section "Plumbing Specialties" for roof drains.
- C. Allowances: Refer to Division 1 Section "Allowances" for description of Work in this Section affected by allowances.
- D. Unit Prices: Refer to Division 1 Section "Unit Prices" for description of Work in this Section affected by unit prices.

1.3 DEFINITIONS

A. Roofing Terminology: Refer to ASTM D 1079 and glossary of NRCA's "The NRCA Roofing and Waterproofing Manual" for definition of terms related to roofing work in this Section.

1.4 PERFORMANCE REQUIREMENTS

- A. General: Provide installed roofing membrane and base flashings that remain watertight; do not permit the passage of water; and resist specified uplift pressures, thermally induced movement, and exposure to weather without failure.
- B. Material Compatibility: Provide roofing materials that are compatible with one another under conditions of service and application required, as demonstrated by roofing manufacturer based on testing and field experience.

FMG Listing: Provide roofing membrane, base flashings, and component materials that comply with requirements in FMG 4450 and FMG 4470 as part of a roofing system and that are listed in FMG's "Approval Guide" for Class 1 or noncombustible construction, as applicable. Identify materials with FMG markings.

- 1. Fire/Windstorm Classification: Class 1A- 90.
- Hail Resistance: SH.

D. Flashings: Comply with requirements of Division 7 Section "Sheet Metal Flashing and Trim." Provide base flashings, perimeter flashings, detail flashings and component materials that comply with requirements and recommendations of the following:

- 1. FMG 1-49 Loss Prevention Data Sheet for Perimeter Flashings.
- 2. FMG 1-29 Loss Prevention Data Sheet for Above Deck Roof Components.
- 3. NRCA Roofing and Waterproofing Manual (Sixth Edition) for construction details and recommendations.
- 4. SMACNA Architectural Sheet Metal Manual (Sixth Edition) for construction details

1.5 SUBMITTALS

- A. Product Certificate: Submit notarized certificate, indicating complete list of products intended for use under Work of this Section, including product names and numbers and manufacturers' names, with statement indicating that products to be provided meet the requirements of the Contract Documents.
 - B. Shop Drawings: For roofing system. Include plans, elevations, sections, details, and attachments to other Work.
 - 1. Base flashings, cants, and membrane terminations.
 - 2. Tapered insulation, including slopes.
 - 3. Crickets, saddles, and tapered edge strips, including slopes.
 - 4. Insulation fastening patterns.

C.

- C. Samples for Verification: For the following products:
 - 1. 12-by-12-inch square of base sheet and ply sheet/flashing backer sheet.
 - 2. 12-by-12-inch square of cap sheet/flashing cap sheet.
 - 3. 12-by-12-inch square of roof insulation.
 - 4. 12-by-12-inch square of walkway pad or cap sheet walkway.
 - 5. Six insulation fasteners of each type, length, and finish.
- D. Installer Certificates: Signed by roofing system manufacturer certifying that Installer is approved, authorized, or licensed by manufacturer to install roofing system.
- E. Manufacturer Certificates: Signed by roofing manufacturer certifying that roofing system complies with requirements specified in "Performance Requirements" Article.
 - 1. Submit evidence of meeting performance requirements, including FMG listing.
- F. Manufacturer Certificates: Indicating compliance of proposed products with requirements, including:
 - Product Compatibility: Indicate manufacturer has verified compatibility
 of roofing system components, including but not limited to: Roofing
 base and ply sheets, membrane backer and flashing sheets,
 reinforcement fabric felts and mats, adhesives, mastics, coatings, and
 sealants.
- G. Manufacturer Approval of Testing Agency: Manufacturer's letter indicating acceptance of qualifications and approval of testing agency to perform inspections specified under Part 3 Article "Field Quality Control."
 - 1. Indicate manufacturer's approval of testing agency's authority to perform final roofing inspection and manufacturer's warranty certification.
- H. Qualification Data: For Installer, manufacturer, and manufacturer's technical representative.
- I. Qualification Data: For testing agency and testing agency personnel.
 - 1. Product Test Reports: Based on evaluation of comprehensive tests performed by manufacturer and witnessed by a qualified testing agency, for components of roofing system.
- J. Research/Evaluation Reports: For components of roofing system.
 - 1. Building Officials and Code Administrators International Evaluation Service (BOCA-ES) Evaluation Reports.
 - 2. International Code Council (ICC).
 - 3. International Council of Building Officials, Inc. Evaluation Service (ICBO-ES) Evaluation Reports.
 - 4. National Evaluation Service, Inc. (NES).

- K. Maintenance Data and Training Materials: For roofing system to include in maintenance manuals and Owner's training library.
- L. Warranties: Special warranties specified in this Section.
- M. Inspection Report: Copy of roofing system manufacturer's daily and final technical inspection reports of roofing installation

1.6 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified firm that is approved, authorized, or licensed by roofing system manufacturer to install manufacturer's product and that is eligible to receive manufacturer's warranty.
- B. Manufacturer Qualifications: A qualified manufacturer that has FMG approval for roofing system identical to that used for this Project.
- C. Manufacturer's Technical Representative Qualifications: An authorized full-time employee representative of manufacturer, not engaged in the sale of material, experienced in the installation and maintenance of the specified roofing system and qualified to determine Installer's compliance with the requirements of this Project.
 - 1. Should roof manufacturer not employ full-time inspection personnel, inspector shall be certified as a Registered Roof Observer by the Roof Consultants Institute, and shall be experienced in the installation and maintenance of the specified roofing system and qualified to determine Installer's compliance with the requirements of this project.
- D. Source Limitations: Obtain components for roofing system from or approved by roofing system manufacturer.
- E. Fire-Test-Response Characteristics: Provide roofing materials with the fire-test-response characteristics indicated as determined by testing identical products per test method below by UL, FMG, or another testing and inspecting agency acceptable to authorities having jurisdiction. Materials shall be identified with appropriate markings of applicable testing and inspecting agency.
- 1. Exterior Fire Test Exposure: Class A; ASTM E 108, for application and roof slopes indicated. Delete subparagraph below if fire-resistance rating of roof assembly is not applicable. Indicate rating, testing agency, and testing agency's design designation on Drawings.
 - 2. Fire-Resistance Ratings: ASTM E 119, for fire-resistance-rated roof assemblies of which roofing system is a part.
- F. Preinstallation Conference: Conduct conference at Project site. Comply with requirements in Division 1 Section "Project Management and Coordination." Review methods and procedures related to roofing system including, but not limited to, the following:

- Meet with Owner, Architect, Owner's insurer if applicable, testing and inspecting agency representative, roofing Installer, roofing system manufacturer's representative, and installers whose work interfaces with or affects roofing including installers of roof accessories and roofmounted equipment.
- 2. Review methods and procedures related to roofing installation, including manufacturer's written instructions.
- 3. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
- 4. Examine substrate conditions and finishes for compliance with requirements, including flatness and fastening.
- Review structural loading limitations of roof deck during and after roofing.
- 6. Review base flashings, special roofing details, roof drainage, roof penetrations, equipment curbs, and condition of other construction that will affect roofing system.
- 7. Review governing regulations and requirements for insurance and certificates if applicable.
- 8. Review temporary protection requirements for roofing system during and after installation.
- 9. Review roof observation and repair procedures after roofing installation.

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver roofing materials to Project site in original containers with seals unbroken and labeled with manufacturer's name, product brand name and type, date of manufacture, and directions for storage.
- B. Store liquid materials in their original undamaged containers in a clean, dry, protected location and within the temperature range required by roofing system manufacturer. Protect stored liquid material from direct sunlight.
 - 1. Discard and legally dispose of liquid material that cannot be applied within its stated shelf life.
- C. Protect roof insulation materials from physical damage and from deterioration by sunlight, moisture, soiling, and other sources. Store in a dry location. Comply with insulation manufacturer's written instructions for handling, storing, and protecting during installation.
- D. Handle and store roofing materials and place equipment in a manner to avoid permanent deflection of deck.

1.8 PROJECT CONDITIONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit roofing system to be installed according to manufacturer's written instructions and warranty requirements.

1.9 WARRANTY

- A. Warranty, General: Warranties specified shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
- A. Special Manufacturer's Warranty: Submit roofing system Manufacturer's special warranty, in which manufacturer agrees to repair or replace components of roofing system that fail in materials or workmanship within specified warranty period. Failure includes roof leaks.
 - Special warranty includes roofing membrane, base flashings, roofing membrane accessories, roof insulation, fasteners, cover boards, walkway products sheet metal flashings and trim, copings, roof edge flashings, roof edge drainage systems, counterflashings and reglets, and roof expansion assemblies specified in other Division 7 Sections and other components of roofing system.
- 2. Warranty Period: 20 years from date of Substantial Completion.
- 3. Upon Substantial Completion, Roofing Manufacturer shall deliver the Owner a twenty (20) year manufacturer Roof System Warranty and Service Agreement and Owner's Manual. Manufacturer shall, during the second, fifth, tenth and fifteenth year of this warranty, inspect and provide a written Executive Summary.
- 4. The membrane manufacturer's liability shall include the total cost of the materials (insulation, insulation fasteners, insulation adhesives, roofing material and sheet metal components) and the labor to install these materials. The dollar amount shall be clearly stated on the warranty.
- 5. Manufacturer shall, during the second, fifth, tenth and fifteenth year of this warranty service agreement, provide the following for the manufacturer's roof system:
- 1. Inspection by a Manufacturer's Technical Service Representative and delivery of a written inspection report documenting roof conditions.
- 2. Preventive maintenance and necessary repairs, including splits, tears, or breaks in the roof membrane system and flashings which threaten the integrity of the roof system and are not exempt due to neglect, negligence, vandalism, or some other exclusion. General rooftop housekeeping and cleanup, subject to limits, but generally including removal of incidental debris.
- 6. New Roof Component Coverage: A single manufacturer shall provide specified warranty. The manufacturer's warranty must include labor and material coverage against leakage on all components including those manufactured by others. Included in the warranty coverage are the following:
- 1. Insulation materials, fasteners, and adhesives.
- New and temporary roof membrane components and adhesives.

- 3. Metal edge components including cleat strips.
- 4. Tapered edge and cant strips.
- 5. Surface mastics, coatings, stripping, plies, including elastomeric coatings.
- 6. All drain and scupper flashings.
- 7. Any roof leaks or other problems caused by substrate movement (e.g. insulation movement) of any component other than the deck shall not be excluded.
- 8. Any movement associated with metal edge joints or flanges causing leaks.
- Damages caused by wind speed up to specified wind speed for Project.
- 10. Permanent tie-ins and/or joints separating new and old roofing.
- 11. Materials not manufactured by the roofing system manufacturer must be clearly stated on the warranty that they are covered by the conditions of the warranty.
- 7. The Roofing Contractor shall certify compliance with the above warranty requirements by submitting a copy of the warranty as a submittal item upon request of the Owner. The manufacturer will advise the customer in writing how to maintain the warranty in the form of an Owner's Manual.
- 8. Allowable Exclusions: The following exclusions are the only exclusions permitted on the warranty.
 - 1. Natural or accidental disasters including, but not limited to, damage caused by lightning, hailstorms, floods, hurricane force winds (74 mph or greater), tornadoes, earthquakes, fire, animals, penetration of the membrane, or chemical attack by outside agents.
 - 2. Any intentional or negligent act on the part of the Owner or any third party including, but not limited to, misuse, traffic, storage of or discharge of materials or effluent on the roof. Any repair of these items will be at the owner's expense.
 - 3. Distortion, expansion or contraction of the roofing system caused by faulty original construction or design of building components including parapet walls, copings, chimneys, skylights, vents or roof deck, or lack of positive, proper, or adequate drainage resulting in ponding water on the roof.
- 9. The Roofing Contractor shall certify compliance with the above warranty requirements by submitting a copy of the warranty as a submittal item upon request of the Owner. A letter from an officer of the manufacturer must be submitted, which states that the submitted warranty shall be issued at Substantial Completion. The Owner reserves the right to reject roofing systems that do not meet warranty requirements.
- B. Special Project Warranty: Submit roofing Installer's warranty, on warranty form at end of this Section, signed by Installer, covering Work of this Section, including all components of roofing system such as roofing membrane, base flashing, roof insulation, fasteners, cover boards, substrate boards, vapor retarders, roof pavers, and walkway products, for the following warranty period:
 - 1. Warranty Period: Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Manufacturer/Product: The roof system specified in this section is based upon Tremco, Inc. products named in other Part 2 articles. Subject to compliance with requirements, provide the named product or an approved comparable product by one of the following:
- 1. SBS-Modified Bituminous Membrane Roofing:
- 1. Tremco Inc.
- 2. Or, approved equal.
- B. In other Part 2 articles where titles below introduce lists, the following requirements apply for product selection:
- 1. Products: Subject to compliance with requirements, provide one of the products specified.
- 2. Manufacturers: Subject to compliance with requirements, provide products by the manufacturers specified.

2.2 BASE-SHEET MATERIALS

A. Base Sheet: ASTM D 4601, Type II, non-perforated, asphalt-impregnated and -coated, glass-fiber sheet, dusted with fine mineral surfacing on both sides.

2.3

- A. Ply Sheet: BURmastic Premium Composite Ply: Non-perforated, SBS modified, asphalt-coated, polyester/fiberglass/polyester reinforced sheet dusted with fine mineral surfacing on both sides which meets the requirements of ASTM D 4601, Type II, and the following properties:
- 1. Tensile Strength, minimum, ASTM D 5147: machine direction, 220 lbf/in; cross machine direction, 230 lbf/in.
- Tear Strength, minimum, ASTM D 5147: machine direction, 380 lbf; cross machine direction, 380 lbf.
- 3. Elongation at 77 deg. F, minimum, ASTM D 5147: machine direction, 6.0 percent; cross machine direction, 6.0 percent.
- 4. Thickness, minimum, ASTM D 146: 0.05 inch.
- 5. Weight, minimum, ASTM D 228: 30 lb/100 sq. ft.
- 6. Asphalt, minimum, ASTM D 228: 10 lb/100 sq. ft.

2.4 ROOFING MEMBRANE CAP SHEETS, SBS-MODIFIED BITUMEN

- A. Cap Sheet: POWERply Premium FR: ASTM D 6162, Grade G, Type III, composite polyester and glass fiber reinforced, SBS/SIS/SEBS-modified asphalt sheet; granular surfaced; suitable for application method specified and as follows:
- Exterior Fire-Test Exposure, ASTM E 108: Class A.

- 2. Tensile Strength at 73 deg. F, minimum, ASTM D 5147: machine direction 480 lbf/in; cross machine direction 500 lbf/in.
- 3. Tear Strength at 73 deg. F, minimum, ASTM D 5147: machine direction, 780 lbf; cross machine direction 760 lbf.
- 4. Elongation at 73 deg. F, minimum, ASTM D 5147: machine direction, 6.0 percent; cross machine direction, 6.0 percent.
- 5. Low Temperature Flex, maximum, ASTM D 5147: -35 deg. F.
- 6. Thickness, minimum, ASTM D 5147: 0.160 inch.
- B. BASE Flashing Backer Sheet: BURmastic Modified Premium Composite Ply
- C. Flashing Cap Sheet: POWERply Premium FR

2.5 COLD-APPLIED ADHESIVE MATERIALS

- A. Ply & Cap Sheet Adhesive: POWERply Standard Cold Adhesive LV: One-part, asbestos-free, low-volatile, cold-applied adhesive specially formulated for compatibility and use with specified roofing membranes and flashings, with the following physical properties:
 - 1. Asbestos Content, EPA 600 R-93/116: None.
 - Volatile Organic Compounds (VOC), maximum, ASTM D 6511: 250 g/L.
 - 3. Nonvolatile Content, minimum, ASTM D 6511: 75 percent.
 - 4. Flash Point, minimum, ASTM D 93: 100 deg. F.
- B. Flashing Backer & Cap Sheet Adhesive: ELS: ASTM D 4586, Type II, Class 1, one-part, asbestos-free, cold-applied mastic specially formulated for compatibility and use with specified roofing membranes and flashings, with the following properties:
 - 1. Asbestos Content, ASTM D 276: None.
 - Volatile Organic Compounds (VOC), maximum, ASTM D 6511: 234 g/L.
 - 3. Resistance to Sag, maximum, ASTM D 4586: 1/8 inch.
 - 4. Moisture Vapor Transmission, ASTM E 398: 0.25 g/100 sq. in./24 hr at 0.020 in. thickness, average.

2.6 ASPHALT MATERIALS

- A. Low-VOC Asphalt Primer: TREMprime LV: ASTM D 41, low-VOC, solvent-based asphalt primer with the following physical properties:
 - 1. Asbestos Content, EPA 600 R-93/116: None.
 - 2. Volatile Organic Compounds, maximum, ASTM D 3960: 350 g/L.
 - 3. Flash Point, minimum, ASTM D 3278: 100 deg. F.

2.7 AUXILIARY ROOFING MEMBRANE MATERIALS

- A. General: Auxiliary materials recommended by roofing system manufacturer for intended use and compatible with roofing membrane.
- B. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required by roofing system manufacturer for application.
- C. Mastic Sealant: Polyisobutylene, plain or modified bitumen, non-hardening, non-migrating, non-skinning, and nondrying.
- D. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening roofing membrane components to substrate, tested by manufacturer for required pullout strength, and acceptable to roofing system manufacturer.
- E. Metal Flashing Sheet: Metal flashing sheet is specified in Division 7 Section "Sheet Metal Flashing and Trim."
- F. Roofing Granules: Ceramic-coated roofing granules, No. 11 screen size with 100 percent passing No. 8 sieve and 98 percent of mass retained on No. 40 sieve, color to match roofing membrane.
- G. Miscellaneous Accessories: Provide miscellaneous accessories recommended by roofing system manufacturer.

2.8 ROOF INSULATION

- A. General: Provide preformed roof insulation boards that comply with requirements and referenced standards, selected from manufacturer's standard sizes and of thicknesses indicated.
- B. Polyisocyanurate Board Insulation: ASTM C 1289, Type II, Class 1, Grade 2, HCFC-free, with felt or glass-fiber mat facer on both major surfaces.
- C. Tapered Insulation: Provide factory-tapered insulation boards fabricated to slope of 1/4 inch per 12 inches, unless otherwise indicated.
- D. Provide preformed saddles, crickets, tapered edge strips, and other insulation shapes where indicated for sloping to drain. Fabricate to slopes indicated.

2.9 INSULATION ACCESSORIES

A. General: Roof insulation accessories recommended by insulation manufacturer for intended use and compatible with membrane roofing.

- B. Fasteners: Factory-coated steel fasteners and metal or plastic plates meeting corrosion-resistance provisions in FMG 4470, designed for fastening roof insulation to substrate, and acceptable to roofing system manufacturer.
- C. Insulation Adhesive: Low Rise Foam Insulation Adhesive: Two-component, solvent-free, low odor, elastomeric urethane adhesive formulated to adhere roof insulation to substrate, with the following physical properties:
 - 1. Flame Spread Index, ASTM E 84: 10.
 - 2. Smoke Developed Index, ASTM E 84: 30.
 - Asbestos Content, EPA 600/R13/116: None.
 - 4. Volatile Organic Compounds (VOC), maximum, ASTM D 3960:

0 g/L.

- 5. Tensile Strength, minimum, ASTM D 412: 250 psi.
- 6. Peel Adhesion, minimum, ASTM D 903: 17 lbf/in.
- 7. Flexibility, 70 deg. FASTM D 816: Pass.
- D. Insulation Cant Strips: ASTM C 208, Type II, Grade 1, cellulosic-fiber insulation board.
- E. Tapered Edge Strips: ASTM C 208, Type II, Grade 1, cellulosic-fiber insulation board.
- F. Cover Board: SecureRock ASTM C 1177/C 1177M, water-resistant gypsum substrate, 1/4 inch
- G. Substrate Joint Tape: 6- or 8-inch- wide, coated, glass-fiber joint tape.

2.10 WALKWAYS

- A. Walkway Pads: Trem-Tred: Mineral-granule-surfaced, reinforced asphaltic composition, slip-resisting pads, manufactured as a traffic pad for foot traffic and acceptable to roofing system manufacturer, 1/2 inch thick, minimum, with the following physical properties:
 - 1. Flexural Strength at max. load, minimum, ASTM C 203: 218 psi.
 - 2. Granule adhesion (weight loss), maximum, ASTM D 4977: 1.1 gram.
 - 3. Impact Resistance at 77 deg. F, ASTM D 3746: No Damage to Roof.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates, areas, and conditions, with Installer present, for compliance with the following requirements and other conditions affecting performance of roofing system:

- 1. Verify that roof openings and penetrations are in place and set and braced and that roof drains are securely clamped in place.
- 2. Verify that wood cants, blocking, curbs, and nailers are securely anchored to roof deck at penetrations and terminations and that nailers match thicknesses of insulation.
- 3. Verify that surface plane flatness and fastening of steel roof deck comply with requirements in Division 5 Section "Steel Deck."
- Verify that wood deck is securely fastened with no projecting fasteners and with no adjacent units in excess of 1/16 inch out of plane relative to adjoining deck.
- 5. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Clean substrate of dust, debris, moisture, and other substances detrimental to roofing installation according to roofing system manufacturer's written instructions. Remove sharp projections.
- B. Prevent materials from entering and clogging roof drains and conductors and from spilling or migrating onto surfaces of other construction. Remove roof-drain plugs when no work is taking place or when rain is forecast.

3.3 INSTALLATION, GENERAL

- A. Install roofing system in accordance with manufacturer's recommendations.
- B. Install roofing membrane, base flashings, and component materials in compliance with requirements in FMG 4450 and FMG 4470 as part of a membrane roofing system as as listed in FMG's "Approval Guide" for fire/windstorm classification indicated. Comply with recommendations in FMG Loss Prevention Data Sheet 1-49.
- C. Install roofing system in accordance with the following NRCA Manual Plates and NRCA recommendations; modify as required to comply with requirements of FMG references above:
- 1. Base Flashing at Parapet Wall: Plates MB-1 and MB-1S.
- 2. Base Flashing and Counter flashing at Parapet Wall: Plates MB-4 and MB-4S.
- 3. Base Flashing and Counter flashing at Parapet Wall, Movement Joint: Plates MB-6 and MB-6S.
- 4. Base and Surface-mounted Counter flashing: Plates MB-4 and MB-4S.
- 5. Perimeter Edge, Raised: Plates MB-2- and MB-2S.
- 6. Perimeter Edge, Gravel-stop: Plates MB-3 and MB-3S.
- 7. Scupper, Raised: Plates MB-21 and MB-21S.
- 8. Gutter at Draining Edge: Plates MB-22 and MB-22S.
- 9. Expansion Joint, with metal cover: Plates MB-7 and MB-7S and Division 7 Section "Sheet Metal Flashing and Trim."

- 10. Expansion Joint, with pre-manufactured cover: Plates MB-7A and MB-7AS and Division 7 Section "Roof Expansion Assemblies."
- 11. Curb Detail at Rooftop HVAC Units, Pre-manufactured: Plates MB-12 and MB-12S and Division 7 Section "Roof Accessories."
- 12. Curb Detail at Rooftop HVAC Units, Job-Built, Wood: Plates MB-13 and MB-13S.
- 13. Curb Detail at Skylight, Roof Hatch, and Smoke Vents: Plates MB-14 and MB-14S and Division 7 Section "Roof Accessories."
- 14. Penetration, Structural Member: Plates MB-15 and MB-15S.
- 15. Penetration, Sheet Metal Enclosure: Plates MB-16 and MB-16S
- 16. Penetration, Stack Flashing: Plates MB-17 and MB-17S.
- 17. Penetration, Pocket: Plates MB-19 and MB-19S.
- 18. Roof Drain: Plates MB-20 and MB-20S.

3.4 INSULATION INSTALLATION

- A. Comply with roofing system manufacturer's written instructions for installing roof insulation.
- B. On wood decks only, install one lapped base sheet course and mechanically fasten to substrate according to roofing system manufacturer's written instructions.
- C. Insulation Cant Strips: Install and secure preformed 45-degree insulation cant strips at junctures of built-up roofing membrane system with vertical surfaces or angle changes greater than 45 degrees.
- D. Install tapered insulation under area of roofing to conform to slopes indicated.
- E. Install insulation with long joints of insulation in a continuous straight line with end joints staggered between rows, abutting edges and ends between boards. Fill gaps exceeding 1/4 inch with insulation.
 - 1. Cut and fit insulation within 1/4 inch of nailers, projections, and penetrations.
- F. Install insulation at minimum thickness of [1 inches] [1-1/2 inches] [2 inches (50 mm)] [3 inches] [4 inches].
- G. Install insulation at average overall thickness of minimum [1 inches] [1-1/2 inches (38 mm)] [2 inches] [3 inches] [4 inches]
- H. Install one or more layers of insulation under area of roofing to achieve required thickness. Where overall insulation thickness is [1-1/2 inches] [2 inches (50 mm)] or greater, install 2 or more layers with joints of each succeeding layer staggered from joints of previous layer a minimum of 6 inches in each direction.
- I. Trim surface of insulation where necessary at roof drains so completed surface is flush and does not restrict flow of water.

- J. Install tapered edge strips at perimeter edges of roof that do not terminate at vertical surfaces.
- K. Mechanically Fastened and Adhered Insulation: Install each layer of insulation and secure first layer of insulation to deck using mechanical fasteners specifically designed and sized for fastening specified board-type roof insulation to deck type.
- 1. Fasten first layer of insulation according to requirements in FMG's "Approval Guide" for specified Windstorm Resistance Classification.
- 2. Fasten first layer of insulation to resist uplift pressure at corners, perimeter, and field of roof.
- 3. Install subsequent layers of insulation in a solid application of cold-applied adhesive.
- L. Install cover boards over insulation with long joints in continuous straight lines with end joints staggered between rows. Stagger joints from joints in insulation below a minimum of 6 inches in each direction. Loosely butt cover boards together and fasten to roof deck. Tape joints if required by roofing system manufacturer.
- 1. Adhere according to requirements in FMG's "Approval Guide" for specified Windstorm Resistance Classification.
- 2. Adhere to resist uplift pressure at corners, perimeter, and field of roof.
- 3. Apply cold-applied adhesive to underside and immediately bond cover board to substrate.

3.5 ROOFING MEMBRANE INSTALLATION, GENERAL

- A. Start installation of roofing membrane in presence of roofing system manufacturer's technical personnel.
- B. Cooperate with testing and inspecting agencies engaged or required to perform services for installing roofing system.
- C. Coordinate installing roofing system so insulation and other components of the roofing membrane system not permanently exposed are not subjected to precipitation or left uncovered at the end of the workday or when rain is forecast.
- 1. Provide tie-offs at end of each day's work to cover exposed roofing membrane sheets and insulation with a course of coated felt set in roofing cement with joints and edges sealed.
- 2. Complete terminations and base flashings and provide temporary seals to prevent water from entering completed sections of roofing system.
- 3. Remove and discard temporary seals before beginning work on adjoining roofing.
- D. Substrate-Joint Penetrations: Prevent roofing asphalt from penetrating substrate joints, entering building, or damaging roofing system components or adjacent building construction.

3.6 SBS-MODIFIED BITUMINOUS MEMBRANE INSTALLATION

A. Install two (2) plies of modified bituminous roofing membrane ply sheets according to roofing manufacturer's written instructions, starting at low point of roofing system. Extend roofing membrane sheets over and terminate beyond cants, installing as follows:

- 1. Adhere to substrate in cold-applied adhesive.
- 2. Broom-in ply sheets with stiff bristled broom to ensure proper adhesion.
 - B. Install modified bituminous roofing membrane cap sheet according to roofing manufacturer's written instructions, starting at low point of roofing system. Offset laps from laps of preceding ply sheets and align cap sheet without stretching. Lap in direction to shed water. Extend cap sheet over and terminate beyond cants.
 - 1. Unroll roofing membrane sheets and allow them to relax for minimum time period required by manufacturer.
 - 2. Adhere to substrate in cold-applied adhesive.
 - Immediately after installation, to ensure complete and continuous seal and contact between adhesive and cap sheet, apply a minimum 75pound weighted roller over entire adhered cap sheet.
 - C. Accurately align roofing membrane sheets, without stretching, and maintain uniform side and end laps. Stagger end laps.
 - 1. Heat-weld all laps with electric powered hot air equipment to provide a continuous seal leaving no voids.
 - 2. Provide sufficient pressure during heat weld process to permanently adhere laps.
 - 3. Assure the bitumen on both upper and lower lap faces has melted and a minimum 1/8" bitumen bead is present along each lap edge.

3.7 FLASHING AND STRIPPING INSTALLATION

- A. Install base flashing over cant strips and other sloping and vertical surfaces, at roof edges, and at penetrations through roof, and secure to substrates according to roofing system manufacturer's written instructions and as follows:
 - 1. Prime substrates with asphalt primer if required by roofing system manufacturer.
 - Flashing Backer Sheet Application: Adhere flashing sheet to substrate in cold-applied adhesive at rate required by roofing system manufacturer.
- 3. Flashing Sheet Application: Adhere flashing sheet to substrate in cold-applied adhesive at rate required by roofing system manufacturer.
- 1. Using a hand-held hot-air welding machine, heat-weld all vertical flashing laps, seams, corners and leading edge.
- Provide sufficient pressure during heat weld process to permanently adhere laps.
- 3. Assure the bitumen on both upper and lower lap faces has melted and a minimum 1/8" bitumen bead is present along each lap edge.
- B. Extend base flashing up walls or parapets a minimum of 8 inches above roofing membrane and 4 inches onto field of roofing membrane.
- C. Mechanically fasten top of base flashing securely with termination bar and fasteners every 6" or 8" on center. 8" minimum.

- D. Install roofing membrane cap-sheet stripping where metal flanges and edgings are set on membrane roofing according to roofing system manufacturer's written instructions.
- E. Roof Drains: Set 30-by-30-inch metal flashing in bed of asphalt roofing cement on completed roofing membrane. Cover metal flashing with roofing membrane cap-sheet stripping and extend a minimum of 6 inches beyond edge of metal flashing onto field of roofing membrane. Clamp roofing membrane, metal flashing, and stripping into roof-drain clamping ring.
- Install stripping according to roofing system manufacturer's written instructions.

3.8 WALKWAY INSTALLATION

- A. Walkway Pads: Install walkway pads manufacturers according to manufacturer's written instructions.
- 1. Set walkway pads in cold-applied adhesive.

3.9 FIELD QUALITY CONTROL

- A. Manufacturer's Technical Representative: Contractor shall engage a qualified manufacturer's technical representative acceptable to Owner for a minimum of 5 full-time days per week on site to perform roof tests and inspections and to prepare test reports.
- B. Test Cuts: Before flood coating and surfacing built-up roofing membrane, test specimens will be removed to evaluate problems observed during quality-assurance inspections of roofing membrane as follows:

 1. Approximate quantities of components within as 6
- Approximate quantities of components within roofing membrane will be determined according to ASTM D 3617.
- 2. Test specimens will be examined for interply voids according to ASTM D 3617 and to comply with criteria established in Appendix 3 of ARMA/NRCA's "Quality Control Guidelines for the Application of Built-up Roofing."
- C. Final Roof Inspection: Arrange for roofing system manufacturer's technical personnel to inspect roofing installation on completion and submit report to Architect.
- 1. Notify Architect or Owner 48 hours in advance of date and time of inspection.
- D. Repair or remove and replace components of roofing system where test results or inspections indicate that they do not comply with specified requirements.
- E. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.

3.10 PROTECTING AND CLEANING

A. Protect roofing system from damage and wear during remainder of construction period. When remaining construction will not affect or endanger roofing, inspect roofing for deterioration and damage, describing its nature and extent in a written report, with copies to Architect and Owner.

- B. Correct deficiencies in or remove roofing system that does not comply with requirements, repair substrates, and repair or reinstall roofing system to a condition free of damage and deterioration at time of Substantial Completion and according to warranty requirements.
- C. Clean overspray and spillage from adjacent construction using cleaning agents and procedures recommended by manufacturer of affected construction.

END OF SECTION

SECTION 07620

SHEET METAL FLASHING AND TRIM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this

1.2 SUMMARY

A. Section Includes:

- Manufactured reglets with counterflashing.
- Formed roof drainage sheet metal fabrications.
- Formed and manufactured low-slope roof sheet metal fabrications.

B. Related Requirements:

- Division 6 "Miscellaneous Carpentry" for wood nailers, curbs, and blocking.
- Division 7 "SBS-Modified Bituminous Membrane Roofing, Cold Applied" for installation of sheet metal flashing and trim integral with roofing.

1.3 COORDINATION

- A. Coordinate sheet metal flashing and trim layout and seams with sizes and locations of penetrations to be flashed, and joints and seams in adjacent materials.
- B. Coordinate sheet metal flashing and trim installation with adjoining roofing and wall materials, joints, and seams to provide leak-proof, secure, and noncorrosive installation.

1.4 PREINSTALLATION MEETINGS

A. Pre-installation Conference: Conduct conference at Project site.

- Review construction schedule. Verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
- 2. Review special roof details, roof drainage, roof-penetration flashing, equipment curbs, and condition of other construction that affect sheet metal flashing and trim.

3. Review requirements for insurance and certificates if applicable.

4. Review sheet metal flashing observation and repair procedures after flashing installation.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for each manufactured product and accessory.
- B. Shop Drawings: For sheet metal flashing and trim as required by architect.
- C. Samples for Initial Selection: For each type of sheet metal and accessory indicated with factory-applied finishes.
- D. Samples for Verification: For each type of exposed finish.
 - Sheet Metal Flashing: 12 inches long by actual width of unit, including finished seam and in required profile. Include fasteners, cleats, clips, closures, and other attachments.
 - Trim, Metal Closures, Expansion Joints, Joint Intersections, and Miscellaneous Fabrications: 12 inches long and in required profile. Include fasteners and other exposed accessories.

1.6 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For fabricator.
- B. Product Certificates: For each type of coping and roof edge flashing that is SPRI ES-1 tested and FM Approvals approved.
- C. Product Test Reports: For each product, for tests performed by a qualified testing agency.
- D. Sample Warranty: For special warranty.

1.7 CLOSEOUT SUBMITTALS

A. Maintenance Data: For sheet metal flashing and trim, and its accessories, to include in maintenance manuals.

1.8 QUALITY ASSURANCE

- A. Fabricator Qualifications: Employs skilled workers who custom fabricate sheet metal flashing and trim similar to that required for this Project and whose products have a record of successful in-service performance.
 - For copings and roof edge flashings that are SPRI ES-1 tested and FM Approvals approved, shop shall be listed as able to fabricate required details as tested and approved.

1.9 DELIVERY, STORAGE, AND HANDLING

- A. Do not store sheet metal flashing and trim materials in contact with other materials that might cause staining, denting, or other surface damage. Store sheet metal flashing and trim materials away from uncured concrete and masonry.
- B. Protect strippable protective covering on sheet metal flashing and trim from exposure to sunlight and high humidity, except to extent necessary for period of sheet metal flashing and trim installation.

1.10 WARRANTY

- A. Special Warranty on Finishes: Manufacturer agrees to repair finish or replace sheet metal flashing and trim that shows evidence of deterioration of factory-applied finishes within specified warranty period.
 - 1. Exposed Panel Finish: Deterioration includes, but is not limited to, the following:
 - Color fading more than 5 Hunter units when tested according to ASTM D 2244.
 - Chalking in excess of a No. 8 rating when tested according to ASTM D 4214.
 - Cracking, checking, peeling, or failure of paint to adhere to bare metal.
 - 2. Finish Warranty Period: 20 years from date of Substantial Completion.

2.1 PERFORMANCE REQUIREMENTS

- A. General: Sheet metal flashing and trim assemblies shall withstand wind loads, structural movement, thermally induced movement, and exposure to weather without failure due to defective manufacture, fabrication, installation, or other defects in construction. Completed sheet metal flashing and trim shall not rattle, leak, or loosen, and shall remain watertight.
- B. Sheet Metal Standard for Flashing and Trim: Comply with NRCA's "The NRCA Roofing Manual" and SMACNA's "Architectural Sheet Metal Manual" requirements for dimensions and profiles shown unless more stringent requirements are indicated.
- C. Sheet Metal Standard for Copper: Comply with CDA's "Copper in Architecture Handbook." Conform to dimensions and profiles shown unless more stringent requirements are indicated.
- D. SPRI Wind Design Standard: Manufacture and install copings and roof edge flashings tested according to SPRI ES-1.
- E. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes to prevent buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

2.2 SHEET METALS

- A. General: Protect mechanical and other finishes on exposed surfaces from damage by applying strippable, temporary protective film before shipping.
- B. Copper Sheet: ASTM B 370, cold-rolled copper sheet, H00 or H01 temper.
 - 1. Manufacturers: Subject to compliance with requirements, provide products available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Hussey Copper Ltd.
 - b. Revere Copper Products, Inc.
 - c. Approved by roof material manufacturer for use as part of full system roof warranty.
 - 2. Nonpatinated, Exposed, Lacquered Finish: Finish designations for copper alloys comply with system defined in NAAMM's "Metal Finishes Manual for Architectural and Metal Products."

- C. Aluminum Sheet: ASTM B 209, alloy as standard with manufacturer for finish required, with temper as required to suit forming operations and performance required; with smooth, flat surface.
 - 1. As-Milled Finish: Standard one-side bright.
 - a. Color: As determined by owner and architect.
 - b. Color: As selected by Architect from full range of industry colors and color densities.

2. Exposed Coil-Coated Finish:

- a. Two-Coat Fluoropolymer: AAMA 620. Fluoropolymer finish containing not less than 70 percent PVDF resin by weight in color coat. Prepare, pretreat, and apply coating to exposed metal surfaces to comply with coating and resin manufacturers' written instructions.
- D. Stainless-Steel Sheet: ASTM A 240/A 240M or ASTM A 666, Type 304, dead soft, fully annealed; with smooth, flat surface.
 - 1. Finish: 2D (dull, cold rolled).

2.3 UNDERLAYMENT MATERIALS

- A. Self-Adhering, High-Temperature Sheet: Minimum 30 mils thick, consisting of a slip-resistant polyethylene- or polypropylene-film top surface laminated to a layer of butyl- or SBS-modified asphalt adhesive, with release-paper backing; specifically designed to withstand high metal temperatures beneath metal roofing. Provide primer according to written recommendations of underlayment manufacturer.
 - 1. Products: Subject to compliance with requirements, provide the following available products that may be incorporated into the Work include, but are not limited to, the following:
 - Carlisle Residential, a division of Carlisle Construction Materials; WIP 300HT.
 - Grace Construction Products, a unit of W. R. Grace & Co.-Conn.;
 Grace Ice and Water Shield HT.
 - c. Henry Company; Blueskin PE200 HT.
 - d. Kirsch Building Products, LLC; Sharkskin Ultra SA.
 - e. Metal-Fab Manufacturing, LLC; MetShield.
 - f. Owens Corning; WeatherLock Specialty Tile & Metal Underlayment.
 - g. Polyguard Products, Inc.; Deck Guard HT.
 - h. Protecto Wrap Company; Protecto Jiffy Seal Ice & Water Guard HT.

SDP Advanced Polymer Products Inc; Palisade SA-HT.

2.4 MISCELLANEOUS MATERIALS

- A. General: Provide materials and types of fasteners, solder, protective coatings, sealants, and other miscellaneous items as required for complete sheet metal flashing and trim installation and as recommended by manufacturer of primary sheet metal or manufactured item unless otherwise indicated.
- B. Fasteners: Wood screws, annular threaded nails, self-tapping screws, self-locking rivets and bolts, and other suitable fasteners designed to withstand design loads and recommended by manufacturer of primary sheet metal or manufactured item.
 - General: Blind fasteners or self-drilling screws, gasketed, with hexwasher head.
 - a. Exposed Fasteners: Heads matching color of sheet metal using plastic caps or factory-applied coating. Provide metal-backed EPDM or PVC sealing washers under heads of exposed fasteners bearing on weather side of metal.
 - b. Blind Fasteners: High-strength aluminum or stainless-steel rivets suitable for metal being fastened.
 - c. Spikes and Ferrules: Same material as gutter; with spike with ferrule matching internal gutter width.
 - 2. Fasteners for Copper Sheet: Copper, hardware bronze or passivated Series 300 stainless steel.
 - 3. Fasteners for Aluminum Sheet: Aluminum or Series 300 stainless steel.
 - 4. Fasteners for Stainless-Steel Sheet: Series 300 stainless steel.

C. Solder:

- 1. For Copper: ASTM B 32, Grade Sn50, 50 percent tin and 50 percent lead with maximum lead content of 0.2 percent.
- 2. For Stainless Steel: ASTM B 32, Grade Sn60, with acid flux of type recommended by stainless-steel sheet manufacturer.
- D. Sealant Tape: Pressure-sensitive, 100 percent solids, polyisobutylene compound sealant tape with release-paper backing. Provide permanently elastic, non-sag, nontoxic, non-staining tape 1/2 inch wide and 1/8 inch thick.
- E. Elastomeric Sealant: ASTM C 920, elastomeric polyurethane polymer sealant; of type, grade, class, and use classifications required to seal joints in sheet metal flashing and trim and remain watertight.

- F. Butyl Sealant: ASTM C 1311, single-component, solvent-release butyl rubber sealant; polyisobutylene plasticized; heavy bodied for hooked-type expansion joints with limited movement.
- G. Epoxy Seam Sealer: Two-part, noncorrosive, aluminum seam-cementing compound, recommended by aluminum manufacturer for exterior nonmoving joints, including riveted joints.
- H. Bituminous Coating: Cold-applied asphalt emulsion according to ASTM D 1187.
- I. Asphalt Roofing Cement: ASTM D 4586, asbestos free, of consistency required for application.

2.5 MANUFACTURED SHEET METAL FLASHING AND TRIM

- A. Reglets: Units of type, material, and profile required, formed to provide secure interlocking of separate reglet and counterflashing pieces, and compatible with flashing indicated with factory-mitered and -welded corners and junctions and with interlocking counterflashing on exterior face, of same metal as reglet.
 - Manufacturers: Subject to compliance with requirements, provide products by one of the following available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Cheney Flashing Company.
 - b. Fry Reglet Corporation.
 - c. Heckmann Building Products, Inc.
 - d. Hickman, W. P. Company.
 - e. Hohmann & Barnard, Inc.
 - f. Keystone Flashing Company, Inc.
 - g. National Sheet Metal Systems, Inc.
 - h. Sandell Manufacturing.
 - 2. Material: Stainless steel, 0.019 inch thick.
 - Concrete Type: Provide temporary closure tape to keep reglet free of concrete materials, special fasteners for attaching reglet to concrete forms, and guides to ensure alignment of reglet section ends.
 - 4. Masonry Type: Provide with offset top flange for embedment in masonry mortar joint.
 - Accessories:
 - a. Flexible-Flashing Retainer: Provide resilient plastic or rubber accessory to secure flexible flashing in reglet where clearance does

- not permit use of standard metal counterflashing or where Drawings show reglet without metal counterflashing.
- b. Counterflashing Wind-Restraint Clips: Provide clips to be installed before counterflashing to prevent wind uplift of counterflashing's lower edge.
- 6. Finish: Mill.

2.6 FABRICATION, GENERAL

- A. General: Custom fabricate sheet metal flashing and trim to comply with details shown and recommendations in cited sheet metal standard that apply to design, dimensions, geometry, metal thickness, and other characteristics of item required. Fabricate sheet metal flashing and trim in shop to greatest extent possible.
 - Fabricate sheet metal flashing and trim in thickness or weight needed to comply with performance requirements, but not less than that specified for each application and metal.
 - 2. Obtain field measurements for accurate fit before shop fabrication.
 - Form sheet metal flashing and trim to fit substrates without excessive oil
 canning, buckling, and tool marks; true to line, levels, and slopes; and with
 exposed edges folded back to form hems.
 - 4. Conceal fasteners and expansion provisions where possible. Do not use exposed fasteners on faces exposed to view.
- B. Fabrication Tolerances: Fabricate sheet metal flashing and trim that is capable of installation to a tolerance of 1/4 inch in 20 feet on slope and location lines indicated on Drawings and within 1/8-inch offset of adjoining faces and of alignment of matching profiles.
- C. Fabrication Tolerances: Fabricate sheet metal flashing and trim that is capable of installation to tolerances specified in MCA's "Guide Specification for Residential Metal Roofing."
- D. Expansion Provisions: Form metal for thermal expansion of exposed flashing and trim.
 - 1. Form expansion joints of intermeshing hooked flanges, not less than 1 inch deep, filled with butyl sealant concealed within joints.
 - 2. Use lapped expansion joints only where indicated on Drawings.
- E. Sealant Joints: Where movable, nonexpansion-type joints are required, form metal to provide for proper installation of elastomeric sealant according to cited sheet metal standard.

- F. Fabricate cleats and attachment devices from same material as accessory being anchored or from compatible, noncorrosive metal.
- G. Fabricate cleats and attachment devices of sizes as recommended by cited sheet metal standard for application, but not less than thickness of metal being secured.
- H. Seams: Fabricate nonmoving seams with flat-lock seams. Tin edges to be seamed, form seams, and solder.
- I. Seams: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with elastomeric sealant unless otherwise recommended by sealant manufacturer for intended use. Rivet joints where necessary for strength.
- J. Seams for Aluminum: Fabricate nonmoving seams with flat-lock seams. Form seams and seal with epoxy seam sealer. Rivet joints where necessary for strength.
- K. Do not use graphite pencils to mark metal surfaces.

2.7 LOW-SLOPE ROOF SHEET METAL FABRICATIONS

- A. Roof-Edge Fascia: Manufactured, two-piece, roof-edge fascia consisting of snap-on metal fascia cover in section lengths not exceeding 12 feet and a formed- or extruded-aluminum anchor bar with integral drip-edge cleat to engage fascia cover. Manufactured preformed cant edge system. Provide matching corner units.
 - 1. Subject to compliance with requirements, provide Tremco, TremLock Fascia.
 - 2. Corners: Factory mitered and continuously welded.
 - 3. Scuppers: Factory mitered and continuously welded.
 - 4. Splice Plates: Concealed, of same material, finish, and shape as fascia cover.
 - 5. Provide extenders fabricated from 0.050 gauge aluminum to match fascia material.
 - 6. Provide end closer as required by manufacturer to close parapet to metal edge transitions.
- B. Copings: Manufactured, in minimum 96-inch long, but not exceeding 144-inch long, sections. Fabricate joint plates of same thickness as copings. Furnish with continuous cleats to support edge of external leg and drill elongated holes for fasteners on interior leg. Miter corners, fasten and seal watertight.
 - 1. Subject to compliance with requirements, provide Tremlock Coping
 - a. Aluminum: 0.050 inch thick.
 - b. Corners: Factory mitered and continuously welded.

- c. Scuppers: Factory mitered and continuously welded.
- d. Splice Plates: Concealed, of same material, finish, and shape as fascia cover.
- e. Provide extenders fabricated from 0.050 gauge aluminum to match fascia material.
- f. Provide end closer as required by manufacturer to close parapet to metal edge transitions.
- g. Color: Kynar finished with color fading warranty. Color as directed by architect.
- C. Counterflashing: Fabricate from the following materials:
 - 1. Aluminum: 0.032 inch
- D. Roof-Penetrations & Pitch Pockets: Fabricate from the following materials:
 - 1. Box Copper: 16 oz./sq. ft. thick.
 - 2. Flange Lead 4lb. soft rolled. (30" x 30")
- E. Roof-Drain Flashing: Fabricate from the following materials:
 - 1. 4lb. soft rolled lead. (30" x 30")

2.8 MISCELLANEOUS SHEET METAL FABRICATIONS

- A. Equipment Support Flashing: Fabricate from the following materials:
 - 1. Stainless Steel: 0.019 inch thick.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions, with Installer present, for compliance with requirements for installation tolerances, substrate, and other conditions affecting performance of the Work.
 - 1. Verify compliance with requirements for installation tolerances of substrates.
 - Verify that substrate is sound, dry, smooth, clean, sloped for drainage, and securely anchored.
 - Verify that air- or water-resistant barriers have been installed over sheathing or backing substrate to prevent air infiltration or water penetration.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 UNDERLAYMENT INSTALLATION

A. Self-Adhering Sheet Underlayment: Install self-adhering sheet underlayment, wrinkle free. Prime substrate if recommended by underlayment manufacturer. Comply with temperature restrictions of underlayment manufacturer for installation; use primer for installing underlayment at low temperatures. Apply in shingle fashion to shed water, with end laps of not less than 6 inches staggered 24 inches between courses. Overlap side edges not less than 3-1/2 inches. Roll laps and edges with roller. Cover underlayment within 14 days.

3.3 INSTALLATION, GENERAL

- A. General: Anchor sheet metal flashing and trim and other components of the Work securely in place, with provisions for thermal and structural movement. Use fasteners, solder, protective coatings, separators, sealants, and other miscellaneous items as required to complete sheet metal flashing and trim system.
 - Install sheet metal flashing and trim true to line, levels, and slopes. Provide uniform, neat seams with minimum exposure of solder, welds, and sealant.
 - 2. Install sheet metal flashing and trim to fit substrates and to result in watertight performance. Verify shapes and dimensions of surfaces to be covered before fabricating sheet metal.
 - 3. Space cleats not more than 12 inches apart. Attach each cleat with at least two fasteners. Bend tabs over fasteners.
 - 4. Install exposed sheet metal flashing and trim with limited oil canning, and free of buckling and tool marks.
 - 5. Torch cutting of sheet metal flashing and trim is not permitted.
 - 6. Do not use graphite pencils to mark metal surfaces.
- B. Metal Protection: Where dissimilar metals contact each other, or where metal contacts pressure-treated wood or other corrosive substrates, protect against galvanic action or corrosion by painting contact surfaces with bituminous coating or by other permanent separation as recommended by sheet metal manufacturer or cited sheet metal standard.
 - Underlayment: Where installing sheet metal flashing and trim directly on cementitious or wood substrates, install underlayment and cover with slip sheet.
- C. Fasteners: Use fastener sizes that penetrate wood blocking or sheathing not less than 1-1/4 inches for nails and not less than 3/4 inch for wood screws.
- D. Conceal fasteners and expansion provisions where possible in exposed work and locate to minimize possibility of leakage. Cover and seal fasteners and anchors as required for a tight installation.

- E. Seal joints as required for watertight construction.
 - 1. Use sealant-filled joints unless otherwise indicated. Embed hooked flanges of joint members not less than 1 inch into sealant. Form joints to completely conceal sealant. When ambient temperature at time of installation is between 40 and 70 deg F, set joint members for 50 percent movement each way. Adjust setting proportionately for installation at higher ambient temperatures. Do not install sealant-type joints at temperatures below 40 deg F.
 - 2. Prepare joints and apply sealants to comply with requirements in Section 079200 "Joint Sealants."
- F. Soldered Joints: Clean surfaces to be soldered, removing oils and foreign matter. Pre-tin edges of sheets with solder to width of 1-1/2 inches; however, reduce pre-tinning where pre-tinned surface would show in completed Work.
 - 1. Do not solder metallic-coated steel and aluminum sheet.
 - 2. Do not use torches for soldering.
 - 3. Heat surfaces to receive solder, and flow solder into joint. Fill joint completely. Completely remove flux and spatter from exposed surfaces.
 - 4. Stainless-Steel Soldering: Tin edges of uncoated sheets, using solder for stainless steel and acid flux. Promptly remove acid flux residue from metal after tinning and soldering. Comply with solder manufacturer's recommended methods for cleaning and neutralization.
 - 5. Copper Soldering: Tin edges of uncoated sheets, using solder for copper.
 - 6. Copper-Clad Stainless-Steel Soldering: Tin edges of uncoated sheets, using solder for copper-clad stainless steel.
- G. Rivets: Rivet joints in uncoated aluminum where necessary for strength.

3.4 ROOF-DRAINAGE SYSTEM INSTALLATION

- A. General: Install sheet metal roof-drainage items to produce complete roof-drainage system according to cited sheet metal standard unless otherwise indicated. Coordinate installation of roof perimeter flashing with installation of roof-drainage system.
- B. Hanging Gutters: Join sections with joints sealed with sealant. Provide for thermal expansion. Attach gutters at eave or fascia to firmly anchor them in position. Provide end closures and seal watertight with sealant. Slope to downspouts.
 - Fasten gutter spacers to front and back of gutter.
 - 2. Anchor and loosely lock back edge of gutter to continuous cleat eave or apron flashing.

- 3. Anchor gutter with gutter brackets straps spaced not more than 24 inches apart to roof deck, unless otherwise indicated, and loosely lock to front gutter bead.
- 4. Anchor gutter with spikes and ferrules spaced not more than 24 inches apart.
- 5. Install gutter with expansion joints at locations indicated, but not exceeding, 50 feet apart. Install expansion-joint caps.
- C. Downspouts: Join sections with 1-1/2-inch telescoping joints.
 - 1. Provide hangers with fasteners designed to hold downspouts securely to walls. Locate hangers at top and bottom and at approximately 60 inches o.c.
 - 2. Provide elbows at base of downspout to direct water away from building.
 - 3. Connect downspouts to underground drainage system.
- D. Splash Pans: Install where downspouts discharge on low-slope roofs. Set in asphalt roofing cement compatible with the substrate.
- E. Parapet Scuppers: Continuously support scupper, set to correct elevation, and seal flanges to interior wall face, over cants or tapered edge strips, and under roofing membrane.
 - 1. Anchor scupper closure trim flange to exterior wall and solder to scupper.
 - 2. Loosely lock front edge of scupper with conductor head.
 - 3. Solder exterior wall scupper flanges into back of conductor head.
- F. Conductor Heads: Anchor securely to wall, with elevation of conductor head rim at minimum of 1 inch below scupper or gutter discharge.
- G. Expansion-Joint Covers: Install expansion-joint covers at locations and of configuration indicated. Lap joints minimum of 4 inches in direction of water flow.

3.5 ROOF FLASHING INSTALLATION

- A. General: Install sheet metal flashing and trim to comply with performance requirements, sheet metal manufacturer's written installation instructions, and cited sheet metal standard. Provide concealed fasteners where possible, and set units true to line, levels, and slopes. Install work with laps, joints, and seams that are permanently watertight and weather resistant.
- B. Roof Edge Flashing: Anchor to resist uplift and outward forces according to recommendations in FM Global Property Loss Prevention Data Sheet 1-49 for FM Approvals' listing for required windstorm classification.

- C. Copings: Anchor to resist uplift and outward forces according to recommendations in cited sheet metal standard unless otherwise indicated.
 - Copings: Anchor to resist uplift and outward forces according to recommendations in FM Global Property Loss Prevention Data Sheet 1-49 for specified FM Approvals' listing for required windstorm classification.
- D. Pipe or Post Counterflashing: Sweat-solder all pitch-pocket boxes and caps. Install counterflashing umbrella with close-fitting collar with top edge flared for elastomeric sealant, extending minimum of 4 inches over base flashing. Install stainless-steel draw band and tighten. Sweat-solder perimeter of cap to box.
- E. Counterflashing: Coordinate installation of counterflashing with installation of base flashing. Insert counterflashing in reglets or receivers and fit tightly to base flashing. Extend counterflashing 4 inches over base flashing. Lap counterflashing joints minimum of 4 inches. Secure in waterproof manner by means of snap-in installation and sealant or lead wedges and sealant unless otherwise indicated.
- F. Roof-Penetration Flashing: Coordinate installation of roof-penetration flashing with installation of roofing and other items penetrating roof. Seal with elastomeric sealant and clamp flashing to pipes that penetrate roof.

3.6 MISCELLANEOUS FLASHING INSTALLATION

A. Equipment Support Flashing: Coordinate installation of equipment support flashing with installation of roofing and equipment. Weld or seal flashing with elastomeric sealant to equipment support member.

3.7 CLEANING AND PROTECTION

- A. Clean exposed metal surfaces of substances that interfere with uniform oxidation and weathering.
- B. Clean and neutralize flux materials. Clean off excess solder.
- C. Clean off excess sealants.
- D. Remove temporary protective coverings and strippable films as sheet metal flashing and trim are installed unless otherwise indicated in manufacturer's written installation instructions. On completion of sheet metal flashing and trim installation, remove unused materials and clean finished surfaces as recommended by sheet metal flashing and trim manufacturer. Maintain sheet metal flashing and trim in clean condition during construction.

E. Replace sheet metal flashing and trim that have been damaged or that have deteriorated beyond successful repair by finish touchup or similar minor repair procedures.

END OF SECTION

SECTION 10290

BIRD CONTROL

PART 1- GENERAL

1.1 SUMMARY

- 1. Design Requirements: Select appropriate size and system as determined by site conditions to prevent birds from landing and roosting on specified surfaces.
 - Control devices and associated wiring and connections for the work of this Section.

1.2 QUALITY ASSURANCE

- Single Source Responsibility: Furnish products from one manufacturer for entire project.
- 2. Obtain all technical information from the manufacturer.
- 3. Utilize Authorized installers who are knowledgeable in Bird-control product installations.
- Installer shall visit the site to gather all information on existing site conditions.

1.3 SUBMITTALS

- Product Data: Submit manufacturer's descriptive literature and product specifications for each product including catalogs, installation instructions other descriptive material.
- 2. Provide Warranty on Material and Installation.
- 3. Provide samples of each type of spike excluding proposed fastening methods.
- Provide statement by official indicating that they are a certified installation company.

1.4 PRODUCT HANDLING

1. Protect Bird-Control products from damage before, during and after the installation.

1.5 PROJECT CONDITONS

- Coordination: Furnish samples of system(s) so installation can be coordinated with existing conditions and within on-site conditions.
- Visit site and field measure prior to fabrication and delivery of materials.

1.6 WARRANTY

1. Non Electrified

1. Product shall carry a minimum 5-year guarantee against U.V. breakdown.

PART 2- PRODUCTS

2.1 MANUFACTURER

 Nixalite of America Inc. 1025 16th Avenue
 East Moline, II 61244 1424

East Moline, II 61244-1424

Ph: 888-624-1189 Fax: 888-624-1196

Bird-B-Gone, Inc.
 Bird Spike 2000TM
 23918 Skyline
 Mission Viejo, CA 92692

Tel: 800-392-6915 or 949-472-3122

Fax: 949-472-3116

3. Approved Equal

2.2 PRODUCT DESCRIPTION

1. Model Designation:

Perimeter of Roof and all other applications
 A. Standard Seagull resistant Bird Control

2.3 MATERIALS

- 1. Material: U.V. Stabilized Polycarbonate. Heat and weather resistant (+310 Deg. F. to —200 Deg. F.) Stainless Steel Rods.
 - 1. Construction: Rigid.
 - 2. Adaptation: Tin snips, hacksaw, etc. can be used to cut/adapt the product to desired length.
 - Metal: Provide self-drilling stainless steel screws with resilient washers for fastening.

2.4 MOUNTING SYSTEMS

 Steel, Brick, Stone or Concrete: Use an outdoor construction adhesive that is not silicone based. Purchase from the manufacturer or call for recommended adhesives. If mounting surface warrants, screw or bolt down Bird Control in conjunction with using the adhesive.

PART 3- EXECUTION

3.1 EXAMINATION

- Examine the installation area and note any detrimental or hazardous work conditions. Notify contracting officer or inspector of the detrimental work conditions.
- Do not proceed with installation until conditions are correct.

3.2 SURFACE PREPARATION

- 1. Surface should be thoroughly cleaned and free of bird droppings, nesting materials, rust, peeling paint or other debris.
- 2. Remove or repair articles that may damage Bird Control after installation, including overhanging foliage, brush and loose parts on the structure.

3.3 INSTALLATION

- Install Bird Control as recommended by the manufacturer.
- 2. Bird Control should be installed correctly, covering the entire depth of the surface, not just the perimeter.
- 3. Follow the contours and angles closely: cut or break away to fit properly.
- 4. Space materials in accordance with manufacturer's recommendations.
- Install with appropriate anchors or fasteners for each substrate.
- 6. Install warning decals on windows where electrified wire is on ledge outside.

3.4 INSPECTION

- 1. Visually inspect Bird Control for any signs of poor installation, including loose screws, fasteners and un-removed debris.
- 1. Immediately correct and repair as necessary.

PART 4 - COMPENSATION

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 C10-000-001.0, Bird Control.

END OF SECTION

SECTION 15160

STORM DRAINAGE PIPING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Roof drains.
 - 2. Cleanout repair and pipe flushing.

1.2 REFERENCES

- A. American Society of Mechanical Engineers:
 - ASME A112.21.2M Roof Drains.

1.3 SUBMITTALS

- A. Submit manufacturer's product data in accordance with the General Provisions.
- B. Shop Drawings: Indicate sizes and quantity of roof drain sumps.
- C. Product Data:
 - 1. Storm Drainage Specialties: Submit manufacturers catalog information, component sizes, rough-in requirements, service sizes, and finishes.
- D. Manufacturer's Installation Instructions: Submit installation instructions for material and equipment.

1.4 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this section with minimum three years experience.
- B. Installer: Company specializing in performing Work of this section with minimum three years experience.

1.5 FIELD MEASUREMENTS

Verify field measurements prior to fabrication.

PART 2 - PRODUCTS

2.1 ROOF DRAINS

- A. Manufacturers:
 - 1. Josam.
 - 2. Zurn.
 - 3. J.R. Smith Co.
- B. Roof Drain (RD-1):
 - 1. Assembly: ASME A112.21.2M.
 - 2. Body: Galvanized cast iron with sump Josam Series 21500 or approved equal.
 - Strainer: Removable cast iron dome with vandal proof screws.
 - 4. Accessories: Coordinate with roofing type, :
 - Membrane flange and membrane clamp with integral gravel stop.
 - b. Adjustable under deck clamp.
 - c. Roof sump receiver.
 - d. Waterproofing flange.
 - e. Controlled flow weir.
 - f. Leveling frame.
 - g. Adjustable extension sleeve for roof insulation.
 - h. Perforated or slotted ballast guard extension for inverted roof.

2.2 CLEANOUTS

- A. Exterior drainage pipes: Repair damaged cleanouts to match existing.
- B. Platform accessible cleanouts: Repair damaged cleanouts to match existing.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that all existing roofing materials are removed and ballast is relocated prior to roof drain installation.

3.2 FIELD QUALITY CONTROL

A. Cleanout all existing storm drainage lines with mechanical devices. Clean drains and drain piping from drain to five feet out of building perimeter.

B. Test storm drainage piping system in accordance with applicable authority having jurisdiction. Flush all piping after cleaning process is complete.

PART 4 - COMPENSATION

4.1 MEASUREMENT AND PAYMENT

A. The work under this section will not be measured or paid for separately, but the cost here of shall be included in the section C15-001-001.0, Storm Drainage Piping.

END OF SECTION

SPECIAL PROVISIONS FOR THE ORANGE ANNEX ROOF REPLACEMENT SEALED BID NO. 15-015X

SP.1 COMMUNICATIONS WITH NJ TRANSIT

Add the following to Section II, Instructions to Bidders for Construction, Sub-Article B.2:

All inquiries and request for clarifications, except as noted in S.P.3 below: shall be submitted to NJ TRANSIT's Procurement Department to the attention of:

Ms. Shelley D. Harris
Principal Contract Specialist
Office: (973) 491-7538
Fax: (973) 491-7854
sharris@nitransit.com

SP.2 PREQUALIFICATION OF BIDDERS (C.2)

Supplement Article C.2 of NJ TRANSIT's Instructions to Bidders for Construction by adding the following:

Contractors must be prequalified for Building Construction (BC), General Contractor (GC) with a specialty in roofing, for an amount equal to or exceeding the bid amount. NJ TRANSIT suggests a minimum rating of "I" \$1,000,001 to \$2,000.000.

The paper original of the completed Prequalification Questionnaire and photocopies of all supporting documents shall be submitted by <u>Wednesday</u>, <u>January 14</u>, <u>2015</u> to:

Ms. Shelley D. Harris
NJ TRANSIT
One Penn Plaza East
Newark, NJ 07105
RE: IFB No. 15-015X
Prequalification Documents

SP.3 DESCRIPTION OF WORK

Add the following as new Article 1.18 of the General Provisions for Construction:

1.18 Description of Work

NJ TRANSIT plans to repair the roof at Orange Annex Bus Facility, in Orange, NJ.

The work for this contract generally consists of furnishing all labor, materials, equipment, tools and incidentals necessary to construct and complete the project as identified in the plans and specifications, including, but not limited to, the following:

- 1) Selective demolition work
- 2) Install Roof System
- 3) Clean Out Drains
- 4) Install new roof drains and coping with Bird control.
- 5) Cleanup and demobilization.

SP.4 ABBREVIATIONS AND DEFINITIONS

Modify the definition of Construction Manager found in Appendix A to read as follows:

Construction Manager – The authorized representative of NJ TRANSIT who provides construction management services to the project and is the point of contact for NJ TRANSIT.

SP.5 PERMITS, LAWS, AND REGULATIONS

Add the following as a new subarticle 1.6.10 of the General Provisions for Construction:

1.6.10 It shall be the Contractor's responsibility to familiarize itself with the DCA and DCA approval process. The Contractor shall incorporate anticipated DCA inspections in the Project Schedule.

The Contractor further recognizes the necessity to schedule construction subcode 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 scheduled inspections may be canceled by the DCA or other agencies without warning.

SP.6 TIME OF COMPLETION - DELAY - LIQUIDATED DAMAGES

Add the following to Article 2.1.1 of the General Provisions for Construction:

The time of completion for the Project shall be one hundred and twenty (120) calendar days after the effective date of Notice to Proceed.

Add the following to Article 2.1.2 of the General Provisions for Construction:

The Contractor shall pay to NJ TRANSIT the amount of \$1,600 per day as liquidated damages for each calendar day delay in completing the work beyond the stated time of completion.

SP.7 USE OF PREMISES

Add the following to General Provision 4.2 to read as follows:

The Orange Annex is an active NJ Transit facility. The contractor shall maintain all current operations during construction, including but not limited to access to staff, parking and operational functionality of the facility. Any request for modifications to any operation currently used at the facility is subject to NJ Transit approval. All requests to modify operations are to be in writing with a thirty day (30) review period. Any requests denied shall not be the basis for additional time or compensation to the contract.

SP.8 PROTECTION AGAINST DAMAGE

Add the following as new subarticle 4.5.8 of the General Provisions for Construction:

4.5.8 The Contractor shall provide equipment cut sheets and plans for equipment locations, and swings, and signed and sealed calculations by a licensed NJ Professional Engineer for the use of cranes.

SP.9 MAINTENANCE OF MARINE TRAFFIC

Delete Article 4.10 of the General Provisions for Construction in its entirety.

SP.10 MAINTENANCE OF RAILROAD TRAFFIC

Delete Article 4.11.1 of the General Provisions for Construction in its entirety.

SP.11 ARTS IN TRANSIT

Delete Article 4.13.5 of the General Provisions for Construction in its entirety.

SP.12 FIELD OFFICE AND SANITARY FACILITIES

Add the following to the end of Subarticle 5.2.7:

8. Provide necessary office supplies (as determined by NJ TRANSIT) paid for in the Field Office allowance item.

Delete the last paragraph of Article 5.2.9.

SP.13 CONSTRUCTION PROGRESS SCHEDULE

Add the following as new subarticle 6.2.16 of the General Provisions for Construction:

6.2.16 The Detailed Baseline Project Schedule shall identify all long-lead items essential to the major components of the project, indicating the projected duration for the submittal, approval and fabrication for each item. Upon review of the schedule, if in the view of NJ TRANSIT there are essential items that are not reflected in the schedule as long-lead items, the Contractor should be advised of such and include those items in a resubmittal of the Detailed Project Schedule.

Once the Detailed Baseline Project Schedule has been approved, the original duration indicated for the submittal, approval and fabrication of all long-lead items shall not change without an explanation supporting the change in the narrative report, and the approval of the changes by NJ TRANSIT.

SP.14 PRODUCT AND EQUIPMENT SUBMITTALS

Replace Article 6.7.1of the General Provisions for Construction with the following:

For approval of alternate products and equipment (approved equals or substitutions), the Contractor shall 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 Contract Documents. The Contractor shall properly submit complete identifying information, note whether the item is included in the Technical Specifications and state Technical Specifications Section and Paragraph. All 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. The Contractor must allow a 30 day review by NJ TRANSIT for each request. No additional time will be added to the contract schedule for this review.

Add the following new paragraph to the end of Article 6.7.2.1 of the General Provisions for Construction:

Where the manufacturer's equipment model number is specified, but is unavailable due to being discontinued or replaced, an equivalent or upgraded model from the same manufacturer shall be specified. The contractor shall submit an analysis of the proposed product versus the specified product for NJ Transit approval. That model shall be provided at no additional cost to NJ TRANSIT, and will be considered as part of the contractor's original bid and shall not be the basis of a claim for additional compensation or delay. NJ TRANSIT shall be the sole judge as to whether a model is equivalent or better.

SP.15 CONSTRUCTION LAYOUT

Delete Article 6.10 of the General Provisions for Construction in its entirety

SP.16 MATERIALS-WORKMANSHIP-LABOR

Supplement Article 7.2.5 of the General Provisions for Construction with the following:

The Contractor assumes all the responsibility and liability associated with ensuring that all workers in its employment or that of its subcontractors 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.

SP.17 INSPECTION OF WORK

Add the following to the end of Article 7.3.1:

The Contractor is responsible for arranging for timely inspections by the NJDCA and notifying the Construction Manager of the time and date of same.

SP.18 INSURANCE

Add the following to the end of subarticle 9.2.3:

The policy shall include coverage for replacement cost of any/all property damage arising out of work performed pursuant to this contract including but not limited to the NJTPD Driving Simulator and Fire Arms Training Simulator.

The policy shall also include coverage both certified and non-certified acts of terrorism.

SP.19 NEW JERSEY PREVAILING WAGE ACT (11.1.1)

In accordance with Section IV, General Provisions for Construction, Sub-Article 11.1.1, attached is the New Jersey Department of Labor Prevailing Wage Rate Determination applicable for the Project (Attachment A).

SP.20 DISADVANTAGED BUSINESS ENTERPRISE (DBE) GOAL ASSIGNMENT (11.3)

As an aid in meeting its commitment to its Disadvantaged Business Enterprise (DBE) Program, NJ TRANSIT has assigned a Race Conscious 15% DBE goal on the gross sum amount of the bid or Contract value for DBE subcontracting participation. All NJ Unified Certification Program (NJUCP) certified DBE firms, including suppliers, are eligible to participate in this contract.

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

The Contractor shall refer to the DBE requirements for Federally Funded Construction Contracts and Subcontracts included in the IFB for the requirements concerning the DBE obligations and mandatory submissions (Attachment B) for this contract. In accordance with those requirements, the Contractor shall identify all DBE and Non-DBE subcontractors and suppliers proposed to participate in or solicited for this contract. The two apparent low bidders shall complete and submit the mandatory required forms (A, A1, A2, B and NJUCP DBE letter) and any applicable supplemental forms (AA, AA!, AA@, BB)with their bids or within seven (7) calendar days of the bid opening date. Contractors are strongly encouraged to submit these forms with the bid to prevent delay of award. These mandatory required forms shall be completed entirely with no blank fields. Any questions regarding the DBE requirements or the mandatory required forms for this contract should be directed to:

Ms. Jacquelin Rush-Gilbert
Senior Contract Compliance Specialist
(973) 491-8061
jrush-gilbert@njtransit.com

SP. 21 EMPLOYEE PROTECTIONS - CONSTRUCTION ACTIVITIES (14.1)

Supplement Article 14.1 of the General Provisions for Construction by adding the following:

Attachment C – Federal General Wage Determination for Essex County , New Jersey . (9 pages).

SP. 22 NOTICE OF EXECUTIVE ORDER 125 REQUIREMENT FOR POSTING OF WINNING PROPOSAL AND CONTRACT DOCEMENTS

Add the following as New Article E.10 of the Instruction to Bidders for Construction:

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

http://nj.gov/comptroller/sandytransparency/contracts/sandy/.

The contract resulting from this IFB is subject to the requirements of Executive Order No. 125. Accordingly, the OSC will post a copy of the contract, including the IFB, the winning bidder's bid and other related contract documents for the above contract on the SANDY Transparency website.

The apparent low bidder and the second low bidder may designate specific information as not subject to disclosure.

However, such bidder must have a good faith legal and/ or factual basis to assert that such designated portions of its bid (i) are proprietary and confidential financial or commercial information or trade secrets or (ii) must not be disclosed to protect the personal privacy of an identified individual. Accordingly the apparent low bidder and the second low bidder must, if necessary, notify NJ TRANSIT in writing, in care of the Contract Specialist, within seven (7) calendar days of the date for receipt of bids identifying the location in the bid of any such designation and a redacted copy of the proposal should be provided.

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

END OF SECTION

IFB No. 15 - 015X

ORANGE ANNEX ROOF REPLACEMENT ORANGE, NJ

ATTACHMENT A

DBE REQUIREMENTS FOR RACE CONSCIOUS FEDERAL PROCEUREMENT ACTIVITIES

Procurement Staff 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)
☐ Copy of NJUCP DBE and NAICS Code Certification
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)
Copy of NJUCP DBE and NAICS Code Certification

NJ TRANSIT'S DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM POLICY STATEMENT

TO ALL NJ TRANSIT EMPLOYEES AND THE CONTRACTING COMMUNITY:

The NEW JERSEY TRANSIT CORPORATION (NJ TRANSIT) administers its Disadvantaged Business Enterprise (DBE) Program in accordance with the U.S. Department of Transportation (USDOT) regulation 49 CFR Part 26, and hereby reaffirms and formalizes its commitment to the DBE Program, and its objective: to create a "level playing field" in NJ TRANSIT's procurement activities.

As a major provider of public transportation with thousands of employees who have extensive daily contact with the public, NJ TRANSIT recognizes its responsibility to the community that it serves. It is the policy and commitment of NJ TRANSIT not to discriminate based on race, color, national origin, or sex in the award and performance of any NJ TRANSIT contract or in the administration of its DBE Program. It is also the policy of NJ TRANSIT to ensure that DBEs have a fair opportunity to be informed about, compete for, and participate in USDOT-assisted contracts.

In keeping with this commitment and this agency's obligations under 49 CPR Part 26, NJ TRANSIT will make every effort to achieve the following objectives:

- Ensure that only firms that fully meet eligibility standards of 49 CFR Part 26 are permitted to participate as DBEs on NJ TRANSIT contracts;
- Remove barriers that may prevent some DBBs from being able to participate on NJ TRANSIT contracts; and,
- Support the development of DBE firms, so they can compete successfully in the marketplace outside of the DBE Program.

Implementation of the DBE Program is accorded the same priority as compliance with all other legal obligations required by the USDOT. Contractors/consultants shall comply with the DBE Program requirements in the award and administration of NJ TRANSIT contracts. Failure by the contractor/consultant to carry out these requirements shall constitute a breach of the contract, which could result in the termination of the contract or other such remedy, as NJ TRANSIT deems appropriate.

The VP of the Office of Civil Rights & Diversity Programs is the Disadvantaged Business Enterprise Liaison Officer (DBELO) for NJ TRANSIT and is responsible for implementing all aspects of NJ TRANSIT's DBB program and ensuring appropriate DBB participation in NJ TRANSIT's procurement activities.

NJ TRANSIT'S Board of Directors is committed to the DBE Program. All Assistant Executive Directors, General Managers, Chiefs, and their staff, and DBE and non-DBB business communities that participate in USDOT-assisted contracts all share in the responsibility for making NJ TRANSIT'S DBE Program a success. This policy is disseminated to all tiers of our organization, and to the DBE and non-DBE business communities that participate in our USDOT-assisted contracts.

Date: 1/38/2013

James Weinstein
Executive Director

Chris Christie, Governor Kim Guadagno, Lieutenant Governor Joseph D. Bertoni, Acting Board Chairman Veronique Hakim, Executive Director



ANNOUNCEMENT CHANGE IN POLICY (PROOF OF DBE CERTIFICATION)

TO ALL EMPLOYEES AND CONTRACTING COMMUNITY

Effective September 1, 2014, the New Jersey Unified Certification
Program (NJUCP) partners will no longer issue certificates as proof of DBE certification. The certifying partners (NJDOT, PANY/NJ and NJT) will continue to issue certification letters to firms, which include the North American Industry Classification System (NAICS) codes assigned to the firm based on the business activities or services it renders. The DBE firm should retain the letter as proof of DBE certification.
Bidders shall request this letter from the DBE firm(s) and submit with all other required documents in the Bid or Proposal.

If you have any questions pertaining to this change please contact Ms. Lisa-Marie Codrington, Director of Contract Compliance at (973) 491-8941 or Mr. L. A. Hernández, Manager, Certification and Outreach at (973) 491-7530.

NJT Contract #: 15-015K

NEW JERSEY TRANSIT CORPORATION DBE REQUIREMENTS FOR RACE-CONSCIOUS FEDERAL PROCUREMENT ACTIVITIES

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NEW JERSEY TRANSIT CORPORATION DBE REQUIREMENTS FOR RACE-CONSCIOUS FEDERAL PROCUREMENT ACTIVITIES

The following pages provide Bidders/Proposers/Primes on federal contracts with New Jersey Transit (NJT), information about NJT's Disadvantaged Business Enterprise (DBE) Program, administered by the Office of Business Development (OBD). Prospective Bidders/Proposers/Primes will have an opportunity to ask questions regarding the directives contained in the DBE specifications at the pre-bid/pre-proposal conference(s). Further clarification of the DBE specifications, along with assistance in completing the forms, can be obtained by calling (973) 491-7593.

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 conscious* goal of awarding percent of the gross sum bid/proposal to certified NJUCP DBE firms. Should the actual contract amount increase or decrease, through approved change order(s), the assigned goal may remain. The OBD will determine if the change orders and/or contract phases will result in an adjustment to the DBE participation goal.

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 <u>quality</u>, <u>quantity</u>, and <u>intensity</u> 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.
- 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 <u>not reject</u> 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, 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 Bldder/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) <u>Form A1 Bidder/Proposer Solicitation and Contractor Information</u>: Lists all DBE and Non-DBE sub contractor/subconsultants, including suppliers, solicited for, and participating on this contract.
- (c) <u>Form A2- Non-DBE Sub Utilization</u>: 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) <u>DBE Good Faith Effort Form (if applicable):</u> Identifies any DBE subcontractor invited to quote, but declined to do so for any reason.
- (f) <u>Trucking Commitment Agreement (if applicable):</u> 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) <u>Form E1- DBE Prime's Monthly Payment Report (For DBE Prime Only):</u> Records monthly payments <u>issued</u> 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) <u>Form AA1 Second Tier Bidder/Proposer Solicitation and Contractor Information:</u> Lists all Second Tier DBE firms participating on this contract as indicated on Form AA and Form AA2.
- (c) <u>Form AA2- Second Tier Non-DBE Sub Utilization:</u> 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 <u>fee/commission only</u>, *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; <u>one-word descriptions are not acceptable</u>. (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 <u>not</u> 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: <u>The Bidder/Proposer/Prime is prohibited from completing any portion of the form and from directing DBE(s) to sign a blank form.</u>

- (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 <u>non-DBE</u> percentage of work is <u>not counted</u> 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; <u>one-word descriptions are not acceptable</u>. Descriptions should include: type of services provided, total number of units, price per unit, total cost, etc.

(e) <u>DBE Good Faith Effort</u>: (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.njucp.net and www.njucp.net and 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 <u>not</u> be given for any work to be performed without the appropriate NAICS code. Status can be verified through <u>www.nicup.net</u> and <u>www.census.gov/eos/www/naics/</u>.

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 contract, the firm's participation will <u>not count</u> 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 DBEs subcontractor/subconsultant is a DBE.
- (a) Work that a DBE subcontracts to a <u>non-DBE firm does not count</u> 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 <u>DBE Prime</u>, 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 <u>owns and operates at least one</u> 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 <u>regular dealer</u> 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 <u>regular dealer</u> 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 <u>are not regular dealers</u> 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 DBE Requirements for Federal Procurement Activities [rev Sept 15, 2010]

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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)

The Bidder/Proposer/Prime shall not terminate for convenience, or any other reason, and then perform the work of 4.1 the terminated subcontractor/subconsultant with its own forces 9self-perform) 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:
- Written communications (over a period) from the Prime and/or NJT's PM/CM team to the DBE, notifying the (a) DBE of its poor performance must be provided to the OBD.
- The OBD will arrange a meeting with the DBE, the Prime, and a representative from Procurement and (b) project management to discuss the specifics of the performance issue.
- The DBE must provide a written plan identifying the efforts it will make to correct the deficiencies. (c)
- The Prime must provide the DBE with a minimum of 30 calendar days from acceptance of its plan to improve its (d) 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

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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 <u>prior review and approval</u> 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, <u>prior to the issuance of each progress payment by NJT</u>, 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 <u>received</u> 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 <u>all retainage</u> 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 <u>following written</u> <u>approval of NJT.</u>
- 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 Audit and Penalties

- During the performance of any contract and for a period of up to three (3) years following completion of the contract work, NJ TRANSIT may conduct reviews for compliance with the requirements of the DBE Program. Such reviews may include, but not be limited to, the evaluation of monthly reports, desk audits and site visitations.
- 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.

<u>Certification</u> - 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.

<u>DBE Goal</u> - 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.

<u>DBE Sub-Prime</u> - 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).

<u>DBE Ineligibility</u> – means a firm's DBE status changes or ceases due to change in ownership, management, or size, etc. <u>DBE Prime</u> – means the successful Bidder is a DBE firm and has a direct contract with NJT.

<u>DBE Trucking Firm</u> – 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.

<u>Joint Venture</u>—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.

<u>Prime</u> - 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.

Requiar 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.

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

<u>Transit Vehicle Manufacturer (TVM)</u> - 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 28.49.

<u>U.S. DOT</u> – 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, 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)
Copy of NJUCP DBE and NAICS Code Certification
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)
Copy of NJUCP DBE and NAICS Code Certification

REQUIRED FORMS

ENCLOSED FOR COMPLETION (MANDATORY):

Form A; A1; A2; B; D & Trucking Commitment Schedule

TO BE OBTAINED AND SUBMITTED (MANDATORY):

➤ Copy of NJUCP DBE and NAICS Code Certification

Consult DBE Program Requirements for further guidance.

MANDATORY FORM FOR BIDDER/PROPOSER/PRIME: COMPLETE ENTIRELY

FORM A (Fed)

First Tier DBE UTILIZATION - FORM A

Project Name:	NJT Contract No:		
Assigned DBE Goal %: NJT Procurement Specialist.	Contract Value (\$):_		
First Tier DBE must perform at least 51% of its subcontract value if subcontracting to a Second -Tier DBE or Non-DBE, Do not count Non-DBE portion toward the goal.	if subcontracting to a Second -Tier DBE or Non-DBE. Do n	ot count Non-DBE portior	toward the
Name, Address and Telephone # of DBE Subcontractor/Subconsultant	Provide <u>Detailed</u> 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	vs.	*
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 <u>NOT PERMISSIBLE</u> for any reason (pre or post-award), without submitting a written request to the Office of Business Development and receiving <u>WRITTEN APPROVAL</u> 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.	n this schedule conditioned upon execution of a contract with NJ 1 OT PERMISSIBLE for any reason (pre or post-award), without submit Development. Failure to obtain written approval shall result in the bn	FRANSIT for the above refere tting a written request to the (each of contract and subject to	nced project. The Office of Business o corrective action
Company Name:	Authorized Signature:		
Company Address:	Print Name:		
	Title:		!
Federal Tax ID #:	Prime Contractor's DBE Lialson Officer.		
Company Tel #:	Date Signed:		

To Add Subs Use Additional Forms

MANDATORY FORM: COMPLETE ENTIRELY

BIDDER SOLICITATION & CONTRACTOR INFORMATION - FORM A1

Date:	Telephone 样:
Project Title:	Prime Confractor/Consultant:

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

	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			
Ethnioity			
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:			

Page 1

NJT Subrecip - Fed Form A1 rev Jun 2010, rev 0314

MANDATORY FORM: COMPLETE ENTIRELY

BIDDER SOLICITATION & CONTRACTOR INFORMATION - FORM A1

Doto	Date.	Telephone #:
roject Title:	ime Contractor/Consultant	

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

		THE WORLD IN SECURING THE WORLD ON THIS PROJECT.	WILL WORK ON THIS PROJECT.
	Subcontractor/Subconsultant	Subcontractor/Subconsultant	Subcontractor/Subconsultant
Company's Full Name			
Address			
City		2	
Zip			
County			
Phone			
Fax			
E-mail			
Owner			
Date Established			
Date Certified			
Ethnicity			
Gender			
Certification Status: DBE or Non-DBE			
Federal Tax ID # / SSN #		03	
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:			

NJT Subreicipient- Fed FORM A1 rev Jun 2010 rev 0314

To Add Subs Use Additional Forms

NON-DBE SUBCONTRACTOR UTILIZATION - FORM A2 Directions: To be completed by any Bidden/Proposen/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 <u>Detailed</u> Scope of Work to be Performed	Dollar Amount of Subcontractor/Sub- consultant Work (\$) Awarded	Percentage of Subcontract or Work (%)
			· 64	%
			€9	%
	i.k	**	w	%
			s ,	*
		g .	&	%
Must provide a detailed scope of work; one-word descriptions are not acceptable.	criptions are not acceptable.	TOTALS	₆	%

SECOND TIER DBE UTILIZATION-FORM AA

Project Name:	NJT Contract No:	ct No:	
DBE Sub-Prime (First Tier) Subcontractor Contract Value (\$): I plan to subcontract % of my subcontract to Secon following:	ontractor Contract Value (\$): % of my subcontract to Second Tier DBE subcontractor(s)/subconsultant(s) listed on the chart below to perform/supply the	d on the chart below to perfo	rm/supply the
Second Tier D	Second Tier DBE subs must perform 100% of their scope of work.		
Name, Address and Telephone# of Second Tier DBE Subcontractor/Subconsultant	Provide <u>Detailed</u> Scope of Work to be Performed	Dollar Value of Subcontractor/Sub- consultant Work (5) Awarded	Percentage of Subcontractor Work (%)
			%
			%
			%
Any First-Tier DBE firm listed on the Form A must identify any DBE firm it will use to perform its scope of work	TOTALS	S	%
The undersigned understands its approval to perform on the above contract is based upon its identified DBE team listed above and its Non-DBE team listed on the Form AA2. The DBE Sub-Prime must receive written approval from the Office of Business Development for any changes to its DBE and/or Non-DBE subcontractors, their dollar values of scope of work identified on the Form AA and/or AA2 before making any changes. It attests that the identified firms will perform all work. Failure to adhere to, or falsification of any information contained herein shall result in breach of contract and subject to corrective action to be determined by NJ TRANSIT.	voe contract is based upon its identified DBE team listed above and its Non-DBE team listed on the Form AA2 ice of Business Development for any changes to its DBE and/or Non-DBE subcontractors, their dollar values on king any changes. It attests that the identified firms will perform all work. Failure to adhere to, or falsification ract and subject to corrective action to be determined by NJ TRANSIT.	ve and its Non-DBE team listed or Non-DBE subcontractors, thei brm all work. Failure to adhere ITRANSIT.	on the Form AA2 ir dollar values of to, or falsification
DBE Sub-Prime Firm:	Authorized Signature:		
Company Address:	Print Name:		
	Title:		
Federal Tax ID #			

Sub-Prime's DBE Liaison Officer: Date Signed: Company Tel #:_ Fede DBE S

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): S_____ 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 Ist 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.

Fed Form E (Page 1 of 2) Report for the Month of: Notice to Proceed Date: NJT Project Mgr Name: Assigned DBE Goal %: NJT Contract #: PRIME CONTRACTOR Monthly DBE Payment Report - Form E Total Payments Received from NJT Date: Change Orders (Overall Inc/Dec.): Mandatory Form Submit Monthly Total Contract Amount to Date: _ Prime Original Contract Value: Name of Project:

Final Pmt (Y/N)			1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
% Overall Work Finished			
Total DBE Payments made to Date in (\$)			•
Date(s) Payment Made This Month			79 7(je) 11
Payment(s) Made to DBE in this Month in \$\$ (ltamize)			u
Date of Invoice Received in this Month			(S)[29].
Amount of Invoice Received this Month (\$)			69
Change Order Amount \$ (+F)			47
Original Contract Amount \$			
Work Task Performed			\$ स्टांट्राह्य
Name of DBE Subcontractor			

Prime Contractor Information:

Prime Firm Name:

Project Director Signature: _ Project Director Name: _ Federal TIN #._ Date: Telephone #: Address:

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

CACCALLO T ALCO COCC TITLE CAMP CACC CALL				
ber of Days Past Due Comments:) Num	Invoice Amount (Invoice Date	Invoice #

This form is not to be altered in any way.

Fed Form E rev Sept 2010 For assistance completing this form, call 973-491-7539, 8058, 8768, 8575, 8069, 8941

Form E - Prime Contractor's DBE Payment Certification

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If yes,

If no, please complete fields in box below: (Use additional paper, if needed)

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

- Have you notified the DBE subcontractor(s) that you are withholding payment and the reason(s) why? તં
- 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.
- By signing this form, I certify that all of the above represent true and accurate information. က

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	Payment:	

DO NOT WRITE BELOW. DEPARTMENTAL USE ONLY.

- Approved
- Denied 00

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

THIS FORM IS DUE ON THE 7TH OF EACH MONTH Please forward to: Office of Civil Rights and Diversity Programs Business Development

This form is not to be altered in any way.

Fed Form E rev Sept 2010 For assistance completing this form, call 973-491-7539, 8058, 8768, 8575, 8069, 8941

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 1** and 31** of THIS Month.	than one payment/invoice between the 1** and 31** of <u>THIS</u> 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
									*	
4	ss.	S	TOTALS	\$	HOTAIIS >	\$	TOTALS	s		
ı #	d on your subcont	Is retainage held on your subcontract? Yes or No (circle one) If yes,	le one) if yes,	how much? \$. Did your final pa	yment include	Did your final payment include retainage? Yes or No (circle one)	lo (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.

Comments: use additional paper if necessary	
ne	
invoice Amount (\$)	
Invoice Date	
Invoice #	-

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

Date:
Title:
Signature:
Jam

THIS FORM IS DUE ON THE 7TH OF EACH MONTH I<u>MMEDIATELY FOLLOWING DBE'S SUBCONTRACT START DATE,</u> 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.

Rev Fed Form E2 - Sept 2010

DBE TRUCKING COMMITMENT

AGREEMENT

The DBE Trucking Firm Commitment Agreement sheet attached must be signed and completed entirely. Make duplicate copies for additional subcontractors as needed. Please read DBE Requirement Language for details.

- DBEs must provide information for all DBE/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.
 - o 2nd Tier DBE trucking firms must perform 100% of their total subcontract value.
- For Non-DBE leased trucks, credit will only be given for the fee/commission that is received for arranging the transportation services.
 - All DBE-leased trucks are required to reflect the DBE firm's company name and identification number.

Copies of the following items must be attached for ALL trucks <u>owned</u> by the DBE:

- Proof of ownership: title(s) or finance agreement(s) ONLY
- registration card(s)
- insurance card(s)
- hazardous waste license(s), if applicable
- apportioned cab card(s), if applicable

Copies of the following items must be attached for ALL DBE/non-DBE trucks leased by the DBE:

- lease agreement(s)
- title(s)
- registration card(s)
- insurance card(s)
- hazardous waste license(s), if applicable
- apportioned cab card(s), if applicable

DBE TRUCKING FIRM COMMITMENT AGREEMENT

This commitment is subject to the award and receipt of a signed contract from NJ TRANSIT for the subject project. Note that copies of all supporting documents must be attached.

The DBE trucking firm will perfor Type of material to be handled, quan	m the following d utities to be hauled,	escribed wor dollar amount	k on the proje per unit, location	ct: (Specific work on the material wi	details should include: ill be transported).
					·
Dollar Value of DBE Subcontract: \$_					
Total Quantity/Units (if applicable:		Per Unit Cost	(if applicable):	\$	
Total Number of fully operational Total Number of fully operational (Provide a copy of lease agreement(s) for Total Number of fully operational (Provide a copy of lease agreement(s) for Specify ALL Vehicle Information	I trucks to be leas each trucking firm). Il trucks to be leas each trucking firm. *I	sed from a DB sed from a no Note that subcon if applicable	E? n-DBE? tracting is differe	nt from leasing as it	
		*(T= Title, F= A=Apportion	Finance Agreen ed Cab Card. La	nent, l=insurance : Lease Agreemen	Cord, R=Registration,
1 st Tier DBE Trucking	Firm				
# Of Trucks Owne	d				
VIN#	MAKE	YEAR	MODEL	(Indicate Yes/No/NA) HAZ WASTE DOC	*{Indicate T/F/I/R/A/L) OWNERSHIP DOCS
·					
×					

Non-DBE Trucking i	Firm				
# Of Trucks Leased From non-D	BE Trucking Firm				· · · · · · · · · · · · · · · · · · ·
Vin #	MAKE	YEAR	MODEL	(Indicate Yes/No/NA) HAZ WASTE DOC	(Indicate T/F/ I/R/A/L) OWNERSHIP DOCS
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# Of Trucks Leased From DBI	Trucking Firm			1	
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I hereby certify that the inforwriting within 10 days, if any		bove is corre	ct. I agree to	inform the Office of	Business Diversity in
1st Tier DBE Signature:					Date:
Print Name:					

SUPPLEMENTAL SECTION REQUIRED FORMS

ENCLOSED FOR COMPLETION (IF APPLICABLE):

> Form AA; AA1; AA2; BB; & Trucking Commitment Schedule

TO BE OBTAINED AND SUBMITTED (IF APPLICABLE):

> Copy of NJUCP DBE and NAICS Code Certification

Consult DBE Program Requirements for further guidance.

MANDATORY FORM: COMPLETE ENTIRELY

BIDDER SOLICITATION & CONTRACTOR INFORMATION - FORM AA1

NJT Contract No:	Project Title:	Title:	
OBE Sub-Prime:	Telephone #:	ne#	
Jate:			
	Tier of	halow for Second Tier contractor(s) narticipating on the project	
		Subcontractor/Subconsultant	Subcontractor/Subconsultant
Company's Full Name			
Address			
City			
Zip			
County			
Phone			
Fax			
E-mail			
Owner			
Date Established			
Date Certified			3.
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			
Primary NAICS Code:			

MANDATORY FORM BY DBE SUB-PRIME: COMPLETE ENTIRELY

NON-DBE SECOND TIER SUBCONTRACTOR UTILIZATION - FORM AA2

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		Percentage of Subcontractor Work (%)	%	%	%	*	%	%
8		Dollar Amount of Subcontractor/Subconsuitant Work (\$) Awarded	S	6 5	vs	69	69	v
DBE Sub-Prime Contract Value: \$_	Project Title:	Provide <u>Detailed Scope</u> of Work to be Performed				8		TOTALS
Date:		FEIN*						ions are not acceptable.
NJ Transit Contract No:	DBE Sub-Prime Contractor Name:	Name, Address and Telephone # of all Second Tier Subcontractor(s)/Subconsultant(s)						Must provide a detailed scope of work; one-word descriptions are not acceptable.

INTENT TO PERFORM AS A SECOND TIER DBE - FORM BB

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

<u>DIRECTIONS</u>: DBE(s) listed on the Form AA must complete all information on this form and must complete Form AA2 for any Non-DBE subcontractor performing a portion of its subcontract.

Name of First Tier DBE/Sub-Prime:	Name of Second Tier DBE Firm:
Project/Contract Name:	IFB/RFP Contract Number:
Does the undersigned intend to perform subcontract we Venture? Circle one. (Yes or No)	ork in connection with the above-mentioned project as a Joint
Will you subcontract any portion of your scope of work to	o a DBE(s)? Circle one. (Yes or No)
Will you subcontract any portion of your scope of work to	o a Non-DBE(s)? Circle one. (Yes or No)
The undersigned will perform the following described description of the type of work you will perform on you Bidder (optional)).	d work on the above-referenced project: (Provide a detailed are subcontract. Attach a copy of quote approved and signed by
Dollar Value of DBE Subcontract: \$	
Total Quantity/Units (if applicable):	
	ocontract value on detailed project specs received from the DBE
The Prime Contractor projected the following commence	ment and completion date for such work as follows:
DBE Contract Start Date: DBE Contract	
conditioned upon execution of a contract with the Pr	igreement for the above work with the DBE Sub-Prime ime on the project. As a Second Tier DBE subcontractor, I monitoring process set forth by NJ TRANSIT. I attest that I orkforce for the referenced project.
Signature of Second 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 as determined by NJ TRANSIT.

IFB No. 15 - 015X

ORANGE ANNEX ROOF REPLACEMENT ORANGE, NJ

ATTACHMENT B

NEW JERSEY DEPARTMENT OF LABOR PREVAILING WAGE RATE DETERMINATION

IFB No. 15 - 015X

ORANGE ANNEX ROOF REPLACEMENT ORANGE, NJ

ATTACHMENT C

FEDERAL GENERAL WAGE RATE DETERMINATION

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

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GENERAL PROVISIONS FOR CONSTRUCTION

1. GENERAL REQUIREMENTS

1.1 ABBREVIATIONS AND DEFINITIONS

1.1.1 ABBREVIATIONS:

<u>AAR</u>

Association of American Railroads

AASHTO

American Association of State Highway and Transportation Officials

AMTRAK

National Railroad Passenger Corporation

ANSI

American National Standards Institute (Formerly USASI, United States of American

Standards Institute, and ASA, American Standard Association)

AREMA

American Railway Engineering and Maintenance Association (Formerly AREA, American

Railway Engineering Association)

ASTM

American Society for Testing and Materials

CONRAIL

Consolidated Rail Corporation

CFR

Code of Federal Regulations

CPM

Critical Path Method

DCA

New Jersey Department of Community Affairs

FTA

Federal Transit Administration

MSDS

Material Safety Data Sheet(s)

NFPA

National Fire Protection Association

NJAC

New Jersey Administrative Code

NJDOT

New Jersey Department of Transportation

NJUFC

New Jersey Uniform Fire Code

NJ TRANSIT

New Jersey Transit Corporation

NJUCC

New Jersey Uniform Construction Code

NPC

Notice of Proposed Change

OSHA

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

USDOT

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.

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

<u>Advertisement</u>: 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.

<u>Approved Equal</u>: 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.

<u>Bid</u>: 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.

<u>Bid Security</u>: 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.

<u>Bidder</u>: 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.

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

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

<u>Business Registration</u>: 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.

<u>Change Order</u>: 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).

<u>Construction Equipment</u>: 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.

<u>Construction Manager</u>: 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.

<u>Contract</u>: 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.

<u>Contract Documents</u>: 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.

<u>Contract Drawings</u>: 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.

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

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

<u>Contract Time</u>: 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.

<u>Contracting Officer</u>: 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.

<u>Contractor</u>: 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.

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

<u>Directive Letter</u>: 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.

<u>Engineer</u>: 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.

<u>Execution of the Contract</u>: 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 seg. 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.

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

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

<u>Final Inspection</u>: 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.

<u>Form, Fit, and Function</u>: 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.

<u>General Provisions</u>: 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.

<u>Inspector</u>: 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.

<u>Installer</u>: 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.

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

<u>Logo</u>: 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).

<u>Performance and Payment Bonds</u>: The approved form of security furnished by the Contractor and it 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.

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

<u>Project Data</u>: 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.

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

Proposal: See Bid.

<u>Purchase Order:</u> 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.

<u>Samples</u>: 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.

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

<u>Specifications</u>: 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.

<u>Subcontractor</u>: 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.

<u>Substantial Completion</u>: 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.

<u>Substitution</u>: 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.

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

<u>Supplier</u>: 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.

<u>Surety</u>: 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.

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

<u>Technical Data</u>: 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.

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

<u>U.S. Department of Transportation</u>: 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).

<u>Work</u>: 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

- 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) <u>Standard 130 Standard for Fixed Guideway</u>
 <u>Transit Systems</u>;
 - 2.) American Railway Engineering and Maintenance Association (AREMA) Manual of Railway Engineering;
 - Industrial Risk Insurers (IRI) Standards;
 - 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 seg. 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.

- 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. 34:11-56.48 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.

- 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.
- 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 after 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.
- 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, he 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.
- 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.
- 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.
- 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:
 - 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.
- 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.
- 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					
1	II .	III			
LABOR ¹	Cost Calculation	Summary of Costs			
Name Each Trade Classification	(Manhours) x (Labor Costs) =	Α			

Table 3.2.1: Change Order Cost Proposal Format				
MATERIAL ²				
Name Each Major Type of Material	(Quantity) x (Unit Costs) =	В		
EQUIPMENT ³				
Name Each Major Piece of Equipment	(Time) x (Unit Costs) =	С		
SUBTOTAL	A + B + C =	D		
OVERHEAD ⁴	(D) x (Overhead %) =	E		
PROFIT⁵	(D) x (Profit %) =	F		
TOTAL	D+E+F=	G		
Footnotes: ¹ Labor Costs as specified in Sub ² Material Costs as specified in S ³ Equipment Costs as specified in ⁴ Overhead Markups as specified in A	ub-article 3.2.9.2 n Sub-article 3.2.9.3 I in Article 3.2.9.4			

- 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 Subarticle 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 Subarticle 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

- 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 <u>Material Costs</u>: 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, nonnegotiable overhead percentage markups set forth in Sub-article 3.2.10.

- 3.2.9.5 <u>Bond and Insurance</u>: Compensation for bond premiums and other insurance premiums not listed in Subarticle 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;
 - 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.
 - 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.
 - 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.
- 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.

- 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.
- 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 clutterfree 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. Accessability 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.
- 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 used only as guidelines and are not guaranteed as to their accuracy or correctness.

- 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

- 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
- 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.
- 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.
- 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.
- The Contractor shall conduct its Work and handle its equipment and materials so that no part of 9. 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.
 - 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.
- 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.
- 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
- 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).
- 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.

- 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.
 - 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 modern 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.
 - 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	<u>-</u>

- 5.2.8 The Contractor shall maintain and service the Field Office in accordance with the following requirements.

 The Contractor shall:
 - 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.
 - Provide adequate bottled water and paper cups inside the Field Office.
 - Provide coffee, filters, plastic stirrers, sugar, cups, napkins, and non-dairy creamer.
 - 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:
 - Trailer site preparation and trailer delivery.
 - 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.

- Obtaining and paying for any and all permits required for hauling, building and making utility connections for the trailer.
- 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.
- 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:
- 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

- 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

- 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.
- 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

- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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

- 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.

- 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.
- 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.
- 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.

- 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.
 - 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.
 - The percent complete using integers, which represents the activity's progress as of the status date.
 - 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:

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.

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:
 - Description of the project status.
 - 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.
 - Total float
 - 4. Schedule slippage, including a comparison to the previous month's status.
 - List of activities that may become critical within the next 30 day period.
 - Logic revisions/other changes as approved by NJ TRANSIT.
 - If the project falls behind, the measures the Contractor will take to get the project back on schedule.
- 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.

- 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.
- 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.
- 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.
- 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 6.4.11herein.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- 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

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.
- 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.
- 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 <u>named manufacturer's product(s)</u> 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 Subarticle 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:
 - 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.
 - 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

- 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.
- 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	15
Date	
Submittal Number	
Information regarding view such as location, dire or site and significant points of interest	ection

- 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.
- 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 asbuilt 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 fumishing 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):
 - 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;
 - 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;
 - Manufacturer's parts list and ordering requirements;
 - Names, addresses and telephone numbers of all manufacturers agents, Subcontractors, supply houses, etc. from which replacement parts, service and operating information can be obtained;
 - 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 included 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;
- Project title and number;
- Testing laboratory name, address and telephone number;
- 4. Name and signature of laboratory inspector:
- 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;
- 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
- 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;
 - 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 debarring 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.
- 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:

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 property 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.

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.

The Contractor expressly understands and agrees that insurance protection required by the Contract, or 9.1.4

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

9.1.3

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:

Fire Insurance and Extended Coverage (Builder's Risk): 9.2.1

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 <u>Commercial General Liability Insurance:</u>

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 <u>Automobile Liability Insurance</u>

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 <u>Asbestos Abatement Liability</u> – 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 <u>Asbestos Abatement Liability Insurance</u> 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 <u>Transportation Pollution Coverage {Form MCS90}</u> 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 <u>Interest of Members of Congress</u>: 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.

- 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.
- 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 my 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 State Ethics Commission 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 State Ethics Commission, 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.

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:
 - (I) 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 nondiscrimination 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 IO 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 will 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.
- 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.
- 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.

- 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.
- 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

- 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.
- 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.
- 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 Subarticle 13.2.1 above.

- 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:

- 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.
- 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;
- 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 CPR 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.
 - 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.

- 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

- Payrolls and basic records relating thereto shall be maintained by the Contractor during the course (a) 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).

- 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) <u>Information and Reports</u>

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
Celluose Loose Fill and Spray-On	75 percent post-consumer recovered paper

Perlite Composite Board	23 percent post-consumer recovered paper
Plastic Rigid Foam,	
Polyisocvanurate/Polyurethane	
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 form 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.
- 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)

County	Goal Percent
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)

County

Goal Percent

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)
 - As used in these specifications:
 - "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:
 - 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).
- 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.
- 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.

- 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.
- 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.
 - 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.
- 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.
- (i) 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.

- 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.
- 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".

- 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.