

CITY OF SOUTH AMBOY

MIDDLESEX COUNTY, NEW JERSEY

**Standard Form
Contract & Bond
General Requirements
Bidding Sheets
and**

**SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT
MIDDLESEX COUNTY, NEW JERSEY**

Bid Date: TBD

**MAYOR
FRED HENRY**

**CITY COUNCIL
MICHAEL GROSS - PRESIDENT**

**BRIAN McLAUGHLIN
ZUSETTE DATO**

**THOMAS B. REILLY
CHRISTINE NOBLE**

Prepared By:

Steven A. Tardy, P.E.
P.E. License No. 38934
French and Parrello Associates
1800 Route 34 Suite 101
Wall, NJ 07719

Federal Project Number: TBD

**CITY OF SOUTH AMBOY
MIDDLESEX COUNTY, NEW JERSEY**

**NOTICE TO BIDDERS
RFB# F-XXX-2021**

Notice is hereby given that sealed bids will be received until **10:30 a.m., prevailing time, on Wednesday, January 20, 2021** by the of the City of South Amboy, Middlesex County, New Jersey, for the South Amboy Ferry Terminal – Site Development, located along Radford Ferry Road, South Amboy, New Jersey. **THE BIDS WILL BE OPENED AND READ IN PUBLIC AT CITY HALL, 140 NORTH BROADWAY, SOUTH AMBOY, NEW JERSEY 08879.**

Contract documents for the proposed work, prepared by French and Parrello Associates, are on file in the office of the Business Administrator, Glenn R. Skarzynski, MPA, at: City Hall, 140 North Broadway, South Amboy, New Jersey. These may be inspected and/or obtained by prospective bidders during business hours beginning on, Date, 2021, and upon proper notice.

Bidders shall refer any questions regarding this bid in writing via letter or fax to: Glenn R. Skarzynski, MPA, Business Administrator, City of South Amboy, 140 North Broadway, South Amboy, New Jersey, 08879 or by fax at 732-727-0650.

Bids must be made on standard Proposal forms furnished by the City of South Amboy, and in the manner designated and required by the specifications; must be enclosed in sealed envelopes bearing the project name and the name and address of the bidder on the outside; and addressed to the **MAYOR AND COUNCIL, CITY OF SOUTH AMBOY, 140 NORTH BROADWAY, SOUTH AMBOY, NEW JERSEY 08879.**

Bids must be accompanied by an agreement of surety (original consent of surety) furnished by only those sureties who meet the requirements set forth in *N.J.S.A. 2A:44-143*, wherein the surety company agrees to post a performance bond of 100% of the awarded amount, and a payment bond of 100% of the awarded amount, if the contract is awarded in principal. The aggregate sum of both bonds shall therefore equal 200% of the total contract price.

A further guaranty (surety) accompanying all bids shall be given in the amount of ten percent (10%) of the bid, but not in excess of twenty thousand dollars (\$20,000.00) made payable to the ‘Treasurer, City of South Amboy and shall be given in the form of a Certified Check, Cashier’s Check or Original Bid Bond from a reputable insurance company. **THIS 10% GUARANTY IS MANDATORY.**

The Contractor will be required to comply with requirements of *N.J.S.A. 10:2-1* (Anti-Discrimination in Employment), *N.J.S.A. 10:5-31 et seq.* and *N.J.A.C.17:27 et seq.* (Equal Employment Opportunity), *42 U.S.C. § 12101 et seq.* (Americans with Disabilities Act), *N.J.S.A. 52:32-44 et seq.* (New Jersey Business Registration) and *N.J.S.A. 34:11-56.25 et seq.* (New Jersey Prevailing Wage Act).

The right is reserved to reject all bids in accordance with applicable laws and regulations. The right is also reserved to increase or decrease the quantities specified, in the manner designated in the specifications.

By order of the South Amboy City Council.

Fred Henry, Mayor

SPECIAL PROVISIONS
FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT
IN THE CITY OF SOUTH AMBOY, MIDDLESEX COUNTY,
NEW JERSEY

AUTHORIZATION OF CONTRACT

The Contract is authorized by the provisions of Title 27 of the Revised Statutes of New Jersey and supplements thereto, and Title 23 of the United States Code - Highways.

SPECIFICATIONS TO BE USED

The 2019 Standard Specifications for Road and Bridge Construction, of the New Jersey Department of Transportation (Department) as amended herein will govern the construction of this Project and the execution of the Contract.

These Special Provisions consist of the following:

Pages 1 to 161 inclusive.

WAGE RATES

General wage determinations issued under Davis-Bacon and related acts, published by US Department of Labor, may be obtained from the Wage Determinations online website at <https://beta.sam.gov/search?index=wd>. Select state, county and construction type heading: HIGHWAY where the Project is to be performed then click Search.

Pay the prevailing wage rates determined by the United States Secretary of Labor and the New Jersey Department of Labor and Workforce Development. If the prevailing wage rate prescribed for any craft by the United States Secretary of Labor is not the same as the prevailing wage rate prescribed for that craft by the New Jersey Department of Labor and Workforce Development, pay the higher rate.

State wage rates may be obtained from the New Jersey Department of Labor & Workforce Development (Telephone: 609-292-2259) or by accessing the Department of Labor & Workforce Development's website at https://www.nj.gov/labor/wagehour/wagerate/prevailing_wage_determinations.html. The State wage rates in effect at the time of award are part of this Contract, pursuant to Chapter 150, Laws of 1963 (N.J.S.A. 34:11-56.25 et seq.)

If an employee of the Contractor or subcontractor has been paid a rate of wages less than the prevailing wage, the Department may suspend the Work, and declare the Contractor in default.

The NJDOT must report all suspected or reported violations to the federal agency providing the funding for the project.

Contractor's compliance is required with the Copeland "Anti-Kickback" Act, (40 U.S.C. 3145), as supplemented by the Department of Labor regulations (29 CFR Part 3, "Contractors and subcontractors on Public Building or Public Work Financed in Whole or In Part by Loans or Grants from the United States"). Each contractor or subcontractor is prohibited from inducing by any means, any person employed in the construction, completion or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The NJDOT must report all suspected or reported violations to the federal agency providing the funding for the project.

The following information is located at the end of these Special Provisions:

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

1. Disadvantaged Business Enterprise Utilization. (Federal Aid Project Attachment 1)
2. Specific Equal Employment Opportunity Responsibilities on NJDOT Federal Aid Projects. (Federal Aid Project Attachment 2)
3. Requirements for Affirmative Action to Ensure Equal Employment Opportunity on NJDOT Federal Aid Projects. (Federal Aid Project Attachment 3)
4. Federal Equal Employment Opportunity Contract Specifications for NJDOT Federal Aid Projects. (Federal Aid Project Attachment 4)
5. State of New Jersey Mandatory Equal Employment Opportunity Language on NJDOT Federal Aid Projects. (Federal Aid Project Attachment 5)
6. Investigating, Reporting and Resolving Employment Discrimination and Sexual Harassment Complaints on NJDOT Federal Aid Projects. (Federal Aid Project Attachment 6)
7. Payroll Requirements for NJDOT Federal Aid Projects. (Federal Aid Project Attachment 7)
8. FHWA-1273 Required Contract Provisions, Federal Aid Construction Contracts. (Federal Aid Project Attachment 8)
9. State Mandatory Addendum to FHWA 1273 Required Contract Provision, Federal Aid Construction Contracts as Amended or Supplemented. (Federal Aid Project Attachment 9)
10. Federal Mandatory Equal Opportunity Language on Federal Aid Projects. (Federal Aid Project Attachment 10)
11. Byrd Anti-Lobbying Certification. (Federal Aid Project Attachment 11)

GENERAL

All awards shall be made subject to the approval of the New Jersey Department of Transportation. No construction shall start before approval of said award by the New Jersey Department of Transportation. Prior to the start of construction, the contractor must submit a Material Questionnaire (SA-11) listing all sources of materials. Any materials used on the project from a nonapproved New Jersey Department of Transportation source will be considered non-participating. The contractor is also notified that the District Office, Division of Local Aid and Economic Development must be notified of the construction commencement date at least three (3) calendar days prior to the start of construction.

Award of contract and subletting will not be permitted to, materials will not be permitted from, and use of equipment will not be permitted that is owned and/or operated by, firms and individuals included in the report of suspensions, debarments and disqualifications of firms and individuals as maintained by the Department of the Treasury, General Services Administration, CN-039, Trenton NJ 08625 (609-292-5400).

Payment for a pay item in the proposal includes all the compensation that will be made for the work of that item as described in the contract documents unless the "basis of payment" clause provides that certain work essential to that item will be paid for under another pay item.

Whenever any section, subsection, subpart or subheading is amended by such terms as changed to, deleted or added it is construed to mean that it amends that section, subsection, subpart or subheading of the 2019 Standard Specifications unless otherwise noted.

Whenever reference to page number is made, it is construed to refer to the 2019 Standard Specifications unless otherwise noted.

Henceforth, in this supplementary specification, whenever reference to the State, Commissioner, Department, Engineer or Inspector is made, it is construed to mean the particular municipality or county executing this contract.

Whenever reference to Title 27 is made, it is construed to mean Title 40.

DIVISION 100 – GENERAL PROVISIONS

SECTION 101 – GENERAL INFORMATION

101.01 INTRODUCTION

THE FOLLOWING IS ADDED:

Pursuant to N.J.S.A. 27:1B-21.6 and USC (United States Code) Title 23 Section 115, the Department intends to enter into a contract for the advancement of the Project. However, sufficient funds for the Project may not have been appropriated, and only amounts appropriated by law may be expended. Payment under the Contract is restricted to the amounts appropriated for a fiscal year (FY).

Governing bodies have no legal obligation to make such an appropriation. There is no guarantee that additional funds will be appropriated. Failure by governing bodies to appropriate additional funds will not constitute a default under, or a breach of, the Contract. However, if the Department terminates the Contract or suspends work because funds have not been appropriated, the parties to the Contract will retain their rights for suspension and termination as provided in 108.13, 108.14, and 108.15; except as indicated below.

Do not expend or cause to be expended any sum in excess of the amount allocated in the current fiscal year's Capital Program (as specified below). The Department will notify the Contractor when additional funding has been appropriated. Any expenditure by the Contractor which exceeds the amount appropriated is at the Contractor's risk and the Contractor waives its right to recover costs in excess of that appropriated amount.

The approved _____ Capital Program has an item with \$ _____ million for the construction of the Project.

101.02 ABBREVIATIONS

THE FOLLOWING ABBREVIATIONS ARE ADDED:

AD	After Dredge
AIWW	Atlantic Intercoastal Waterway
BCE	Bureau of Coastal Engineering
BD	Before Dredge
CFR	Code of Federal Regulations
EHP	Environmental Planning and Historic Preservation Program
MHW	Mean High Water
MHHW	Mean Higher High Water
MLW	Mean Low Water
MLLW	Mean Lower Low Water
MTL	Mean Tide Line
NAD '83	North American Datum 1983 (Horizontal)
NAVD'88	North American Vertical Datum 1988 (Vertical)
NJICWW	New Jersey Intracoastal Waterway
OMR	Office of Maritime Resources
RE	Resident Engineer
SAV	Submerged Aquatic Vegetation

101.03 TERMS

THE FOLLOWING TERMS ARE ADDED:

Alternate Proposal Guarantee. Bid security provided in lieu of the proposal bond in the form of either a cashiers or certified check.

Change Order. This term is deleted and replaced as follows: The term "Change Order" means a written order issued by the City to the Contractor after execution of the Contract authorizing one or more of the following:

1. Changes in the work
2. Modifications in the basis of payment for the Work affected by the changes.
3. Modifications to Contract Time

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

4. Modifications in Quantities
5. Addition of Pay Items

Clerk. The Clerk of the City of South Amboy.

Consent of Surety. A statement submitted with the Bid, from a Surety Company duly authorized by the State, to the effect that said Surety Company will furnish the necessary Bonds for the bidder, if awarded the contract.

City. The City of South Amboy, which is a body corporate in the State of New Jersey.

Design Engineer. The person in responsible charge of the project and its design.

Executive Director of Regional Operations. In the text of the Standard Specifications, change these words to read: City of South Amboy.

Full Traffic Access. All work is complete to allow safe unencumbered use of the final paved portion of roadway throughout the project including but not limited to striping, RPMs, rumble strips, highway lighting, and traffic signals as determined by the RE.

Key Person. The "Key Person" is defined as the foreman of the crew acting within the scope of the particular duties delegated to him. An on-site foreman will be required at the job site at all times when work is being performed. The on-site foreman must be a direct employee of the Contractor who has been employed by said Contractor for a minimum uninterrupted period of one year. The on-site foreman shall be authorized by the Contractor to direct all aspects of the work including the ordering of materials.

Normal Working Hours. The term "Normal Working Hours" shall be defined as eight (8) consecutive hours worked, excluding lunch, with a starting time between 6:00 am and 9:00 am.

Materials Engineer (ME). Defined as the Resident Engineer or his/her duly authorized representative, authorized to test materials and ensure compliance with the contract documents.

Premium Time (s). The term "Premium Time(s)" shall be defined as the hours directed by the Resident Engineer to be worked outside of the normal working hours defined herein or the hours worked on Saturdays, Sundays, and State Holidays.

Site. The term "Site" is defined to include all parcels of land on which construction activities will occur, including those inundated with water, and any part of a pier, roadway, or other structure, and appurtenances thereto, and any City of South Amboy facility or contractor's shop. Depending on the nature of repair, the work may be done at the subject parcels, or the individual elements may be moved to a City Facility or to the contractor's shop for repair work.

Parcel. A legally recognized, piece of land or property, described by metes and bounds.

Proposal. This term is deleted and replaced as follows: The term "Proposal" means the offer of a bidder, properly signed, and guaranteed, on the prepared forms furnished by the City of South Amboy.

Proposal Bond. The term "Proposal Bond" means the security furnished with the bid to guarantee that the bidder shall enter into the contract if awarded same, and that said bidder will be able to obtain satisfactory Performance and Payment Bonds.

Resident Engineer (RE). Defined as the individual duly authorized by the City of South Amboy to oversee construction activities on its behalf.

Solicitor. A legal representative of the City of South Amboy, duly authorized to act on its behalf, on designated matters.

Special Provisions. The additions to, or amendments of, the Standard Specifications, making the Standard Specifications applicable to this project.

101.04 INQUIRIES REGARDING THE PROJECT

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

Inquiries regarding the various type of work of this contract shall be directed to the City of South Amboy - Business Administrator, having offices at the City Hall, 140 North Broadway, South Amboy, New Jersey, 07779, or such other individual as may be designated:

Glenn R. Skarzynski, MPA
Business Administrator
P 732-525-5933
F 732-727-0650
ba@southamboynj.gov

A. Before Award of the Contract, all inquiries shall include the following:

1. Name of the Company
2. Telephone number, fax number, and contact person, and
3. Specifics of the inquiry, including anticipated impacts.

The City will investigate the information provided in the inquiry and then respond through an addendum only if determined to be necessary.

SECTION 102 – BIDDING REQUIREMENTS AND CONDITIONS

102.01 QUALIFICATION TO BID

THIS TITLE AND SUBSECTION ARE DELETED AND REPLACED AS FOLLOWS:

102.01 INFORMATION REQUESTED FROM PROSPECTIVE BIDDERS

Refer to Subsection 102.10.

The City reserves the right to not execute a contract with any Bidder who fails to supply the requested information.

102.03 REVISIONS BEFORE SUBMITTING A BID

THIS SUBSECTION IS DELETED AND REPLACED AS FOLLOWS:

The Contractor is advised that addenda will be issued pursuant to *N.J.S.A. 40A:11-23(c)(2)*. Notice of addenda shall be provided no later than seven days, except Saturday, Sundays, or holidays, prior to the date of acceptance of bid. When addenda and other forms of notice giving revisions and interpretations of the contract documents are mailed or otherwise transmitted to prospective bidders, acknowledgment thereof must be made by the bidder. Acknowledgment forms must be fully executed and attached to the Proposal at the time of bidding. If said acknowledgment is not present when bids are opened and reviewed, the Proposal shall be considered to be irregular and rejected.

102.04 EXAMINATION OF CONTRACT AND PROJECT LIMITS

THE FIRST SENTENCE OF THE FIRST PARAGRAPH IS REVISED AS FOLLOWS:

The Bidder may inspect available records at the South Amboy City Hall, 140 North Broadway, South Amboy, New Jersey, or at such other locations as directed in response to the request.

1. Evaluation of Subsurface and Surface Conditions.

THE SECOND AND THIRD PARAGRAPHS OF SUBPART (1) ARE DELETED AND REPLACED AS FOLLOWS:

The Contractor is advised that files, plans, reports or other documents may exist for this site. Such information as may exist is available for review and inspection at the South Amboy City Hall at the address listed above, or at such other locations as directed in response to any written request. It is the Contractor's responsibility to request review and inspection of such information prior to bidding.

102.07 PREPARATION OF THE BID

THE FIRST AND SECOND SENTENCES OF THE FIRST PARAGRAPH ARE DELETED AND REPLACED AS FOLLOWS:

The bid is the completed Proposal documents that are submitted by the Bidder to the City at the time of the opening of bids. The Bidder shall submit a Proposal on the forms furnished by the City.

THE THIRD, FOURTH AND FIFTH PARAGRAPHS ARE DELETED.

THE FOLLOWING IS ADDED:

In all instances, the Proposal Form shall govern. Bid prices presented on any other form submitted by the Bidder, if different from those submitted on the Proposal Form, shall not govern.

All figures entered in the “Unit Price” and “Amounts” columns and the figure for the “Total Contract Price” shall be in ink or shall be typed. The Bidder may make additions or corrections to the unit prices, lump sum prices, or amounts as contained on the Proposal Form. These changes shall be made in ink and initialed.

The Proposal Form must be signed in ink by the Bidder.

102.09 PROPOSAL BOND

THE SECOND PARAGRAPH OF THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

The Proposal, when submitted, shall be accompanied by an original proposal bond satisfactory to the City, for a sum of ten percent (10%) of the total amount bid but not in excess of \$20,000.00. Alternately, a proposal guarantee may be substituted for the original proposal bond, provided that this guarantee be in an equal amount and provided in the form of a certified check or cashier’s check made payable to the Treasurer, City of South Amboy. In the event of default by the Contractor as defined in Subsection 103.06, funds from the original proposal bond, or from the alternate proposal guarantee will be forfeited and will be disbursed as further specified in Subsection 103.06.

102.10 SUBMISSION OF BIDS

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

The Proposal shall be enclosed in a sealed envelope and shall bear on the outside, the name and address of the bidder, as well as the designation of the project. Proposals must be received prior to or at the time and place specified in the Advertisement.

Proposals will not be accepted after the receipt of bids has been declared closed by the presiding officer.

Enclosed in the sealed envelope with the Proposal shall be the following **MANDATORY** documents:

- (1) One (1) original of the signed and completed Schedule of Quantities and Prices (two additional photocopies requested, but not mandatory).
- (2) Bid guarantee (original bid bond or guaranteed funds).
- (3) Surety certificate (original consent of surety)*.
- (4) Acknowledgement of receipt of addenda or revisions (if any).
- (5) A statement of ownership substantially in the form provided with the Proposal.
- (6) A Non-Collusion Affidavit on the form provided with the Proposal.
- (7) Disclosure of Energy Sector Investment Activities in Iran.
- (8) Bidder’s Checklist substantially in the form provided with the Proposal.

- (*) The original Consent of Surety must be a firm commitment by the surety company to post the required bonds and may not contain any conditions or reservations, other than the condition that the contract be awarded to the Contractor. An acceptable sample Consent of Surety is attached as Exhibit E of the PROPOSAL document.

Additionally, the following documents are **PREFERRED** at the time of bid, but only mandatory prior to Award of Contract:

- (1) Copy of Public Works Contractor Registration Act Certificate for the bidder, effective on the date of bid

- (2) Copy of the N.J. Business Registration Certificate or other acceptable proof of Business Registration for the bidder and any designated subcontractor.
- (3) References / List of previous and/or active relevant work
- (4) Certification of available equipment

The documents required under the "Mandatory" heading of the Bidder's Checklist must be submitted with the bid. The documents under the "Preferred at Time of Bid" heading must be submitted prior to award of contract. The City shall set a deadline for submission of any documents which are not submitted with the bid and which are listed under the "Optional" heading on the Bidders Checklist. The City may in its discretion extend the deadline to submit "Optional" items, upon request by the Bidder. If a document is not submitted by the deadline or the extended deadline, if any, the bid will be rejected.

The City has determined that the Designated Subcontractor statute, namely N.J.S.A. 40A:11-16, does not apply to this project because the project does not involve the construction, alteration or repair of a "public building". Therefore, it is not necessary for bidders to identify Designated Subcontractors in their bids.

By submitting its bid to the City, the Bidder warrants that no person or selling agency has been employed or retained by the Bidder to solicit or secure such 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 Bidder for the purpose of securing business, for the breach or violation of which warranty the City shall have the right to annul such Contract without liability or in its discretion to deduct from the contract price or consideration the full amount of such commission, percentage, brokerage or contingent fee as required by N.J.S.A. 52:34-15.

102.11 WITHDRAWAL OF BIDS

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLCED AS FOLLOWS:

A Bidder may withdraw a bid after it has been submitted to the City, provided the request for such withdrawal is received in writing or by fax, before the time set for bid opening. Bids may be withdrawn after bid opening pursuant to N.J.S.A. 40A:11-23.3.

102.13 CONSIDERATION OF BIDS

THE FOLLOWING IS ADDED:

After the proposals are opened and read, they are compared on the basis of the correctly determined summation of the correctly determined products of all the quantities for Pay Items shown in the Proposal multiplied by the unit prices bid. The Total Contract Price resulting from such comparisons is available to the public upon request. Award will be made on the basis of the Total Contract Price.

In the event of a discrepancy between the unit price bid for any Pay Item and the extension shown for that item under the column of the Proposal Form designated "Amount", the unit price is to govern. In addition, the Total Contract Price will be revised, if necessary, to equal the sum of the (corrected) extended item prices. Where a unit price is bid for a Pay Item, but no extension is provided, the City will provide the extension based on the unit price bid and the estimated quantity for that Pay Item. Where an extension is provided by the bidder in the "Amount" column, but no unit price appears in the "Unit Price" column of the Proposal Form, the City will provide the unit price by dividing the "Amount" figure provided by the Bidder by the estimated quantity. Where no figure is provided by the bidder in both the "Unit Price" and "Amount" columns for one or more Pay Items, or where no figure is provided in the "Amount" column for one or more lump sum Pay Items, the City will consider the amount bid to be zero (\$0.00) for that item provided, however, the City may reject such a bid if this result would be unconscionable and it is shown that the failure to include a bid price was a mistake.

All Bidders must be legally authorized to do business in New Jersey.

The City reserves the right to waive non-material defects in a bid.

102.15 DISQUALIFICATION OF BIDDERS

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

The City may disqualify a Bidder if the City finds that it has had prior negative experience with the Bidder in accordance with N.J.S.A. 40A:11-4. Disqualification shall be automatic (without opportunity for a hearing) if the disqualification is based on the Bidder's suspension or debarment by an agency or department of the executive branch of the State.

The City may reject a bid submitted by that Bidder if a Bidder is determined by the City to lack responsibility. Factors demonstrating a lack of responsibility include, but are not be limited to:

1. Evidence of collusion among Bidders.
2. Uncompleted work, which in the judgment of the City, might hinder or prevent completion of additional work if awarded.
3. Submission of a materially unbalanced bid. A materially unbalanced bid is a bid where there is a reasonable doubt that award to the Bidder submitting a mathematically unbalanced bid, which is structured on the basis of nominal prices for some work and inflated prices for other work, will result in the lowest ultimate cost to the City or would result in progress payments to the bidder that would exceed the reasonable value of the work performed.
4. Lack of competency or lack of adequate machinery, plant, or other equipment.
5. Unsatisfactory performance on previous or current contracts.
6. Questionable moral integrity as determined by the City.
7. Any other outward actions or lack of action that demonstrates the Bidder is not responsible.
8. Failure to pay, or satisfactorily settle, all bills due for labor, equipment or material on previous contracts.
9. Failure to reimburse the City for monies owed on any previously awarded contracts including those where the prospective bidder is a party to a joint venture and the joint venture has failed to reimburse the City for monies owed.
10. Documented failure to comply with the conditions of permits on previous contracts

102.16 REJECTION OF ALL BIDS

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

The City may reject all bids for the reasons cited in NJSA 40A:11-13.2.

THE FOLLOWING SUBSECTION IS ADDED:

102.17 ANNUAL POLITICAL DISCLOSURE

In accordance with N.J.S.A. 19:44A-20.27, any business entity that has received \$50,000 or more cumulatively in contracts from New Jersey governmental entities in a calendar year is required to file an annual Business Entity (“BE”) disclosure report with ELEC. These reports are due by March 30 following the year reported. At a minimum, a list of all business entities that file an annual report will be listed on ELEC’s website at www.elec.state.nj.us. If you have any questions, please contact ELEC at: 1-888-313-ELEC (toll free in NJ) or 1-609-292-8700.

SECTION 103 – AWARD AND EXECUTION OF CONTRACT

103.03 RELEASE OF PROPOSAL BOND

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

In accordance with NJSA 40A:11-24:

The City will release all Proposal Bonds except those of the 3 lowest Bidders within 10 days after opening of bids.

The City will release the Proposal Bond of the three remaining Bidders when the Contract, Performance Bond and Payment Bond have been executed and delivered as specified in 103.04, or, if not executed, when other disposition of the matter has been made by the City.

103.04 EXECUTION OF THE CONTRACT

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

After award or conditional award, the City will prepare the necessary contract documents and deliver them to the successful bidder by certified mail, return receipt requested. The Bidder shall then have 10 calendar days from the receipt of these documents to sign and return the Contract, Performance Bond, Payment Bond, Insurance and Equal Employment Opportunity Documents. If the contract is not executed by the City within 30 days following receipt from the Bidder of the signed contract documents, the bidder shall have the right to withdraw his/her bid without penalty. The contract shall not be considered as effective until it has been fully executed.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

A Form of Contract is attached to these Special Provisions as Exhibit G of the PROPOSAL document.

103.05 ESCROW OF BID DOCUMENTS

THIS SUBSECTION IS DELETED IN ITS ENTIRETY.

103.06 FAILURE TO EXECUTE CONTRACT

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

Failure on the part of the Bidder to whom the contract has been awarded to execute and deliver the contract as provided for in Subsection 103.04 and the bonds as provided for in Subsection 151.03.01 in the manner and within the time provided is just cause for the annulment of the award. If the award is annulled for the above reasons, the proposal bond or proposal guarantee, as described in Subsection 102.09 shall become forfeited and the City will proceed to be covered under the terms of the proposal bond. Award may then be made to the next lowest responsible Bidder, or the work may be re-advertised and constructed under contract or otherwise, in accordance with applicable law.

SECTION 104 – SCOPE OF WORK

104.01 INTENT

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

The work to be performed under this Contract includes the construction of access roadways, curbing and sidewalks, landscaping, parking, site lighting & security, water, sewer, electric and communication services, bulkheads, dredging and a floating dock. The construction of a terminal building is also being planned, with its location presented on the project site plan. However, the terminal building is **NOT** part of the work and the building will be constructed at a later date, under a separate bid.

In constructing the proposed project, the following work will be performed:

- Salvage and storage of historically significant artifacts.
- Site clearing and demolition.
- Installation of soil erosion and sediment control measures, including floating turbidity barrier.
- Excavation and disposal of previously identified regulated soil and associated excavation shoring, dewatering and treatment of contaminated groundwater.
- Installation of post-excavation recovery / monitoring wells.
- Dredging of sediment to be amended with cement and utilized as upland fill. (Processed Dredge Material).
- Installation of wick drains, settlement plates, inclinometers, temporary retaining wall and surcharge fills.
- Installation of steel sheet piling with anchors, a concrete cap and railing.
- Placement and compaction of fill to raise site grades.
- Installation of retaining walls to facilitate the raising of site grades, including a seawall.
- Installation of manholes, catch basins and stormwater piping.
- Installation of gas, electric, sewer and water utilities.
- Installation of curbing, sidewalks and site lighting.
- Installation of fiber optic and cable services.
- Installation of conduit for future electric vehicle charging stations.
- Installation of pervious pavement and an underdrain system.
- Installation of a sanitary pump station for the ferry building and pump-out system for the ferry boats.
- Installation of a floating dock system consisting of floating barge with articulating access ramps, fixed platforms and ramps, loading ramps for ferry boats, fenders, cleats, mooring piles and dolphins.
- Installation of pavilion building, including pile supported building foundations.
- Installation of front entranceway including entrance sign and entrance pillars with banner poles.
- Installation of landscaping and flagpoles.
- Installation of historical accommodations including interpretive signs, ground markers, railbed display, stone sleeper display and re-purposed catenary lighting structures
- Installation of site-wide security and wi-fi systems.

In accomplishing the proposed work, the contractor shall take care not to unnecessarily disturb existing improvements including those below the ground surface. All excavations at the site must be performed under the oversight of the qualified archaeologist or their designee.

The Contractor is advised that, under this Contract, new utility services will be installed at the project site by the various utility companies. The Contractor will be responsible for coordination and scheduling of his work to assist the utility companies with their installations. Specifics regarding same are discussed further in Sections 105 and 201 of these Special Provisions.

The work under this project includes all required labor, equipment, material and other incidental and necessary work shown on the Construction Plan and as further described herein in accordance with the Standard Specifications for Road and Bridge Construction and these Special Provisions, or as directed by the RE.

THE FOLLOWING SUBPARTS ARE ADDED:

104.01.01 Archaeological Monitoring Protocol

The Contractor is advised that he/she is responsible for coordination and scheduling of all work under this Contract with the Archaeological Monitoring work, which is to be performed by the City's Archaeological Consultant. Specifics regarding same are included in Appendix A of these Special Provisions.

104.01.02 Available Site Information

Geotechnical and Environmental explorations and testing were performed to facilitate design. For informational purposes, this data is made available to the Contractor. Interpretation and use of this information are at the discretion and risk of the Contractor. The Contractor shall make any additional explorations and testing necessary to complete his work. The site information made available to the Contractor includes Geotechnical Test Borings in Appendix B, Environmental Probes and Testing in Appendix C and Dredging Sediment Sampling and Testing in Appendix D.

104.02 VALUE ENGINEERING

THIS SUBSECTION IS DELETED IN ITS ENTIRETY.

104.03 CHANGES TO THE CONTRACT

104.03.01 Authority To Make Changes

THE FIRST SENTENCE OF THE FIRST PARAGRAPH IS REVISED AS FOLLOWS:

Quantities shown in the proposal are approximate for bidding purposes only and the City reserves the right to increase or decrease quantities, alter or delete items, as needed during the period of the contract. All unit bid prices must remain as quoted and shall not be subject to increase for the duration of the Contract.

104.03.03 Types of Changes

THE FOLLOWING IS ADDED:

N.J.S.A. 40A:11-16.7 governing changed conditions shall apply to this project. To the extent section 104.03.03 conflicts with N.J.S.A. 40A:11-16.7, the latter shall control. N.J.S.A. 40A:11-16.7 provides:

- 1. Differing Site Conditions.** If the Contractor encounters differing site conditions during the progress of the work of the contract, the Contractor shall promptly notify the City in writing of the specific differing site conditions encountered before the site is further disturbed and before any additional work is performed in the impacted area.

Upon receipt of a differing site conditions notice in accordance with paragraph (1) of this subsection, or upon the City otherwise learning of differing site conditions, the City shall promptly undertake an investigation to determine whether differing site conditions are present.

If the City determines that there are different site conditions, the City shall provide prompt written notice to the Contractor containing directions on how to proceed.

- a. The City shall make a fair and equitable adjustment to the contract price and contract completion date for increased costs and delays resulting from the agreed upon differing site conditions encountered by the Contractor.
- b. If both parties agree that the City's investigation and directions decrease the Contractor's costs or time of performance, the City shall be entitled to a fair and equitable downward adjustment of the contract price or time of performance.
- c. If the City determines that there are no differing site conditions present that would result in additional costs or delays, the City shall so advise the Contractor, in writing, and the Contractor shall resume performance of the contract, and shall be entitled to pursue a differing site conditions claim against the City for additional compensation or time attributable to the alleged differing site conditions.

Execution of the contract by the Contractor shall constitute a representation that the Contractor has visited the site and has become generally familiar with the local conditions under which the work is to be performed.

As used in this subsection, "differing site conditions" mean physical conditions at the contract work site that are subsurface or otherwise concealed and which differ materially from those indicated in the contract documents or are of such an unusual nature that the conditions differ materially from those ordinarily encountered and generally recognized as inherent in the work of the character provided for in the contract.

2. **Suspension of Work.** The City shall provide written notice to the Contractor in advance of any suspension of work lasting more than 10 calendar days of the performance of all or any portion of the work of the contract.

If the performance of all or any portion of the work of the contract is suspended by the City for more than 10 calendar days due to no fault of the Contractor or as a consequence of an occurrence beyond the City's control, the Contractor shall be entitled to compensation for any resultant delay to the project completion or additional Contractor expenses, and to an extension of time, provided that, to the extent feasible, the Contractor, within 10 calendar days following the conclusion of the suspension, notifies the City, in writing, of the nature and extent of the suspension of work. The notice shall include available supporting information, which information may thereafter be supplemented by the Contractor as needed and as may be reasonably requested by the City. Whenever a work suspension exceeds 60 days, upon seven days' written notice, either party shall have the option to terminate the contract for cause and to be fairly and equitably compensated therefor.

Upon receipt of the Contractor's suspension of work notice in accordance with paragraph (2) of this subsection, the City shall promptly evaluate the Contractor's notice and promptly advise the Contractor of its determination on how to proceed in writing.

- a. If the City determines that the Contractor is entitled to additional compensation or time, the City shall make a fair and equitable upward adjustment to the contract price and contract completion date.
- b. If the City determines that the Contractor is not entitled to additional compensation or time, the Contractor shall proceed with the performance of the contract work, and shall be entitled to pursue a suspension of work claim against the City for additional compensation or time attributable to the suspension.

Failure of the Contractor to provide timely notice of a suspension of work shall result in a waiver of a claim if the City can prove by clear and convincing evidence that the lack of notice or delayed notice by the Contractor actually prejudiced the City's ability to adequately investigate and defend against the claim.

3. **Change in Character of Work.** If the Contractor believes that a change directive by the City results in a material change to the contract work, the Contractor shall so notify the City in writing. The Contractor shall continue to perform all work on the project that is not the subject of the notice.

Upon receipt of the Contractor's change in character notice in accordance with paragraph (1) of this subsection, the City shall promptly evaluate the Contractor's notice and promptly advise the Contractor of its determination on how to proceed in writing.

- a. If the City determines that a change to the Contractor's work caused or directed by the City materially changes the character of any aspect of the contract work, the City shall make a fair and equitable upward adjustment to the contract price and contract completion date. The basis for any such price adjustment shall be the difference between the cost of performance of the work as planned at the time of contracting and the actual cost of such work as a result of its change in character, or as otherwise mutually agreed upon by the Contractor and the City prior to the contractor performing the subject work.

- b. If the City determines that the Contractor is not entitled to additional compensation or time, the Contractor shall continue the performance of all contract work, and shall be entitled to pursue a claim against the City for additional compensation or time attributable to the alleged material change.

As used in this subsection, “material change” means a character change which increases or decreases the Contractor's cost of performing the work, increases or decreases the amount of time by which the Contractor completes the work in relation to the contractually required completion date, or both.

4. Change in Quantities. The City may increase or decrease the quantity of work to be performed by the Contractor.

- a. If the quantity of a pay item is cumulatively increased or decreased by 20 percent or less from the bid proposal quantity, the quantity change shall be considered a minor change in quantity.
- b. If the quantity of a pay item is increased or decreased by more than 20 percent from the bid proposal quantity, the quantity change shall be considered a major change in quantity.

For any minor change in quantity, the City shall make payment for the quantity of the pay item performed at the bid price for the pay item.

For a major increase in quantity, the City or Contractor may request to renegotiate the price for the quantity in excess of 120 percent of the bid proposal quantity. If a mutual agreement cannot be reached on a negotiated price for a major quantity increase, the City shall pay the actual costs plus an additional 10 percent for overhead and an additional 10 percent for profit, unless otherwise specified in the original bid.

For a major decrease in quantity, the City or Contractor may request to renegotiate the price for the quantity of work performed. If a mutual agreement cannot be reached on a negotiated price for a major quantity decrease, the City shall pay the actual costs plus an additional 10 percent for overhead and an additional 10 percent for profit, unless otherwise specified in the original bid; provided, however, that the City shall not make a payment in an amount that exceeds 80 percent of the value of the bid price multiplied by the bid proposal quantity.

As used in this subsection, the term “bid proposal quantity” means the quantity indicated in the bid proposal less the quantities designated in the project plans as “if and where directed”. The second paragraph is revised as follows:

The City will make payment for increased costs resulting from a Differing Site Condition as a change in the character of work; however, the City will not consider making payment for a Differing Site Condition unless the resulting change in cost exceeds \$7,500. Except, if the Contractor incurs cost as the result of multiple differing site conditions, with the cost of each separate Differing Site Condition having a value of at least \$1,500 but not more than \$7,500, the City will consider making payment for such costs if the aggregate cost of the multiple Differing Site Conditions exceeds \$7,500. If the change in cost exceeds these amounts, the City will base the modification on the total cost of the change, and the City will not deduct the threshold amount of \$7,500 from the cost of the change.

104.03.04 Contractual Notice

THE SECOND PARAGRAPH IS REVISED AS FOLLOWS:

Immediately provide written notice to the RE of a circumstance that is believed to be a change to the Contract. Include the following in the initial written notice:

1. A statement that this is a notice of a change.
2. The date when the circumstances believed to be a change were discovered.
3. A detailed and specific statement describing the nature and circumstances of the change.
4. If the change will or could affect costs to the City.
5. If the change will or could affect Contract Time as specified in 108.11.01.C.
6. A written estimate for the change. If the Contractor fails to provide an estimate of the proposed change that is acceptable to the Resident Engineer in a timely manner, and in no event more than thirty days after the events or conditions giving rise to the change occur, are discovered or were reasonably discoverable, then the City reserves the right to terminate or suspend the project, or portions thereof that are the subject of the change, with no compensation to the contractor. Such termination or suspension shall be in addition to any other right or remedy that may be available under the Contract Documents. In the event that the Contractor proceeds with the provision of work materials that are claimed to be change in the Contract Documents, failure of the

Contractor to make application for change as set forth in the contract documents shall constitute of waiver for such claims.

In addition to the hard copy of the notice, email the notice to the RE. It is not necessary to attach listed documents to the email.

Notice shall be given in accordance with Subsection 107.12.01.

In no event shall the Contractor begin work or incur any expenses with relation to the claimed change prior to giving notice.

104.03.08 Force Account

8. Profit.

THE FIRST SENTENCE IS DELETED AND REPLACED AS FOLLOWS:

The City will make payment for profit at the rate of five (5%) percent applied on the following:

9. Overhead.

THE FIRST SENTENCE IS DELETED AND REPLACED AS FOLLOWS:

The City will make payment for overhead at the rate of ten (10%) percent applied on the following:

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Payment for overhead costs will not be allowed for force account work made pursuant to a Construction Order not granting an extension of contract time.

104.03.09 Delay Damages

1. Non-Productive Activity.

e. Equipment.

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

The Contractor is advised that he will not be additionally compensated for overhead, general superintendence or other costs attributed to the delay for which no specific allowance is herein provided. The Contractor is directed to make provisions for all such costs in the unit prices bid for the various items in the proposals. Extensions of time are only granted on the condition that the Contractor waives any and all claims for such additional compensation during the period of the extension.

SECTION 105 – CONTROL OF WORK

105.01 AUTHORITY OF THE DEPARTMENT

THIS SUBSECTION TITLE IS CHANGED TO THE FOLLOWING:

105.01 AUTHORITY OF THE CITY

105.01.01 RE

THE FOLLOWING IS ADDED:

Unless otherwise directed, all communications with the City shall be forwarded to the Business Administrator as specified in section 101.04 of these Special Provisions, unless otherwise specified in writing from the City.

All Project related correspondence (i.e., emails, letters, Notice of Changes etc.) shall be forwarded to the RE with a copy to the Business Administrator and the Design Engineer.

The Business Administrator and the Design Engineer shall also hold the same authority as the RE.

105.01.02 Inspection

THE FOLLOWING IS ADDED:

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

In addition to inspection, laboratory testing will be provided by the City. Inspectors under the jurisdiction of the Resident Engineer shall be present to inspect the work.

These Inspectors shall be paid by the City, however, should the need arise where the contractor chooses to work (with the City's permission) at night, on weekends, on State holidays or at any other times other than normal working hours for construction jobs (nine hour days), then the contractor shall assume responsibility for paying the inspection costs, including overtime charges, at rates established by the Business Administrator or Resident Engineer. All additional costs shall be paid directly to the City who will then pay the inspector.

The contractor shall be responsible for notifying the Resident Engineer and Inspectors of day-to-day work schedules. However, if the contractor fails to notify the Resident Engineer and Inspector of any job cancellation, then the contractor shall be responsible for paying four (4) hours of any inspection costs, including laboratory testing.

THE FOLLOWING SUBPART IS ADDED:

105.01.04 Design Engineer

Should any difference arise between the contracting parties as to the meaning or intent of the specifications, the Design Engineer's decision is to be the final and conclusive. The work is to be done according to the direction of the Design Engineer, Resident Engineer and the Inspector and if any material they do not approve of is brought on the project, it is to be removed at the expense of the Contractor.

105.02 RESPONSIBILITIES OF THE CONTRACTOR

105.02.02 Superintendent

THE FOLLOWING IS ADDED:

The Contractor shall be present on the job site during all working hours or be represented by a competent Superintendent who is satisfactory to the Engineer.

THE FOLLOWING SUBPART IS ADDED:

105.02.07 Public Convenience and Safety

The Contractor shall, prior to commencement of the Work, distribute to all the properties along this road a "Construction Notice", a statement that the City will supply regarding the work that will take place for this project.

Conduct work and place the materials to be used as to cause as little obstruction as possible to the traveling public. All driveways and portions of highways adjoining the roadway under construction shall not be obstructed more than is absolutely necessary.

Take all steps necessary to provide for the protection of private property in the vicinity of the construction site, such as, but not limited to, windows, driveways, lawns and shrubs. Any damage caused to the property of third parties by the Contractor's operations must be repaired at the Contractor's expense.

105.04 PLANS AND SPECIFICATIONS

THE LAST SENTENCE OF THIS SUBSECTION IS DELETED AND REPLACED AS FOLLOWS:

In case of discrepancy, calculated dimensions will govern over scaled dimensions; Plans will govern over Specifications; Right-of-Way Plans will govern over Plans when setting monuments; Special Provisions will govern over Standard Specifications.

105.05 WORKING DRAWINGS

THE SECOND PARAGRAPH IS DELETED AND REPLACED WITH THE FOLLOWING:

Ensure that working drawing submissions also conform to the NJDOT design manuals and other NJDOT standards for the proposed work. After Award, the City will provide additional formatting information, the number of copies required, and the address of the receiving designated design unit.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

THE FOLLOWING IS ADDED TO THE SECOND PARAGRAPH:

The Contractor shall furnish the Resident Engineer with four prints (on white background) of each working drawing submitted for review. If prints are returned for correction, four additional prints of the revised drawings shall be resubmitted until finally reviewed and certified or approved. Originals of the drawings may be required to be furnished upon completion of the work, if so directed by the Engineer. Drawings for metal parts or structures shall include a shop bill of material on each individual drawing showing all pertinent information including weights of all items. Note that the submission of four prints will result in one (1) set being returned to the Contractor. Submit additional sets as required for distribution by the Contractor.

THE REMAINDER OF THE PARAGRAPHS IS REVISED AS FOLLOWS:

All references to 22"x 36" working drawings are revised to 24"x 36" working drawings.

THE FOLLOWING ITEMS ARE ADDED TO THE LIST OF REQUIRED CERTIFIED WORKING DRAWING BUT ARE NOT CONSIDERED TO BE ALL INCLUSIVE:

- Construction Access Plan
- Staging Plans, including earthwork.
- Environmental Remediation.
- Dredging and Processing of Sediment.
- Wick Drains, Settlement Plates and Inclometers.
- Temporary Retaining Wall for Surcharge Fills.
- Concrete Cap on Sheeting, Splash Pad, Stairs and Ramps including reinforcing steel and joint locations.
- Permanent Pre-Cast Concrete Retaining Walls, including Seawall.
- Steel Sheet Piling, Steel Tie-Back Sheeting, Walers and Anchors
- Floating Dock System including floating barge with articulating access ramps, fixed platforms and ramps, loading ramps for ferry boats, fenders, cleats, mooring piles and dolphins.
- Railings and handrails.
- Pavement Underdrains.
- Pavilion Foundations and Pavilion Structure.
- Pump Station Packages Nos. 1 and 2.
- Sanitary Sewer Service Connection & Manholes
- Electric Service, Transformer and Meter Package
- Railroad Track and Stone Sleeper Interpretive Displays
- Security and wi-fi System

All drawings described above shall be on 24" x 36" sheets unless otherwise directed by the Engineer. The title block in the lower right-hand corner shall contain the following information: Name of Project, Project Number if applicable, Contractor, and Fabricator and/or Supplier.

The following plans, and other documents, will be requested by the RE:

1. **Dredging Work Plan.** Prepare and submit for approval a Work Plan drawing that shows the locations and intended sequential order of dredging work in detailed increments and the intended location of the mixing operations and unloading operations, prior to commencement of dredging operations. Indicate the length and width of dredge cuts to be made for each incremental segment and show the relationship of the overall dredge area. Include in the Work Plan a description demonstrating that the dredging equipment to be used will meet the requirements as described in Section 202A of these specifications.

Submit a detailed description of the equipment, means and methods of excavation, mixing of sediment with cement and upland placement. Obtain written approval of the Work Plan from the RE prior to start of mobilization.

In accordance with Section 202A, also include the following items related to the dredged material mixing site:

1. Step-by-step procedures for mixing cement with sediment for form Processed Dredge Material.
2. Procedure for unloading PDM.
3. Access route plan and working platforms.

2. **Channel Closure Plan.** If applicable, prepare and submit for approval a Channel Closure Plan prior to commencement of dredging operations. Include description of allowable closure dates and times of day. Include a log of correspondence and proof of coordination with the US Coast Guard.

THE THIRD PARAGRAPH IS CHANGED TO:

Submit working drawings on 24 × 36-inch sheets. Submit design calculations required for the working drawings on 8-1/2 × 11-inch paper.

1. **Certified Working Drawings.**

THE LAST SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The City will require 14 days for review and certification or rejection and return of certified working drawings.

2. **Approved Working Drawings.**

THE LAST SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The City will require 14 days for review and approval or rejection and return of working drawings.

105.07 COOPERATION WITH UTILITIES

105.07.01 Working in the Vicinity of Utilities

A. Initial Notice.

THE FOLLOWING IS ADDED:

Attention of bidder is directed to the fact that the Contractor is responsible to ascertain the location of any existing utilities and telecommunications lines prior to any excavation work.

Before starting any work, the Contractor shall notify all Utility Companies operating in the area and in addition notify the Underground Location Service, phone no. 1 800 272 1000.

Locate utilities throughout the project area prior to beginning work. Plans do not identify utility locations accurately, thus requiring full mark-out.

No work shall commence until the utility lines are fully marked-out and test pits performed to determine horizontal and vertical locations, throughout.

B. Locating Existing Facilities.

PART (2) IS CHANGED TO:

2. The corporations, companies, agencies, or municipalities owning or controlling utilities at or near the site or proposed to provide utility service to the site/project are listed below:

Jersey Central Power and Light (JCP&L)

Attn: Chris Gunther
101 Crawford's Corner Road
Holmdel, NJ 07733
(732) 212-4287
(732) 546-8925 (cell)
cgunther@firstenergycorp.com

Cablevision

Attn: Juan A. Key
751 Brick Boulevard
Brick, NJ 08723
(973) 659-2210
@cable.comcast.com

Verizon

Attn: Bill Higgins
999 W. Main Street
Freehold, NJ 07728
(732) 683-5180
william.w.higgins@verizon.com

Public Service Electric and Gas (PSEG)

Attn: Michael Meehan
80 Park Plaza
Newark, NJ 07102
(732) 220-6242
(732) 921-2447 (cell)
michael.meehan@pseg.com

Middlesex County Utilities Authority (MCUA)

Attn: Kevin Aiello
PO Box 159 - 2571 Main Street Extension
Sayreville, NJ 08872
(732) 721-3800 Ext. 230
kaiello@mcua.com

Middlesex Water Company (MWC)

Attn: Ladislao F. Monterrosa
485C Route 1 South, Suite 400
Iselin, NJ 08830
(732) 634-1550
(732) 638-7531 (Direct)
lmonterrosa@middlesexwater.com

Transcontinental Gas Pipeline Corp

2800 Post Oak Boulevard
Houston, Texas 77251

NJ Transit Rail Corporation

1 Penn Plaza E STE 1
Newark, NJ 07105

Consolidated Rail Corporation

110 Franklin Road SE
Roanoke, VA 24042-0028

Bidders are advised to verify the above information as to its accuracy and completeness is not guaranteed by the City.

Fiber Optic Markout Form is available at: <http://www.state.nj.us/transportation/eng/elec/ITS/requests.shtm>.

C. Protection of Utilities.

THE FOLLOWING IS ADDED:

During the paving operations it shall be the responsibility of the Contractor to install and/or adjust to grade, all valve boxes. It shall be the obligation of the respective utility companies to supply the appropriately sized risers and to ensure that before paving operations begin the existing box covers are not stuck in place.

If the risers are not available or the existing covers are found to be immovable, the Contractor shall be relieved of this responsibility and the normal procedure of paving over the marked boxes shall be followed.

Facility Daily Access Request Form is available at: <http://www.state.nj.us/transportation/eng/elec/ITS/access.shtm>.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

E. Damage.

THE FOLLOWING IS ADDED:

The Contractor is hereby notified that the safety of all utility structures encountered in the work is his responsibility and all damage caused by his operations must be repaired at his expense.

105.07.02 Work Performed by Utilities

THE FOLLOWING IS ADDED:

When the removal, relocation, de energization or replacement of utility structures or facilities is deemed nonessential by the Engineer for carrying out the project, but is performed for the Contractor's convenience, the cost of such work shall be borne entirely by the Contractor.

A. New Utilities – JCP&L, PSE&G, Verizon, Cablevision, Middlesex Water Company, MCUA.

The attention of the Contractor is called to fact there are new underground utility service installations proposed on this project. These include gas, electric, water as well as fiber optics and cable for phone and internet service. The contractor will be responsible for any clearing, grading, excavation, backfill and construction layout deemed necessary by the utility companies to accomplish proposed installations. Contractor shall perform all required work for water and sewer service installations. Contractor shall install all manholes, conduits, handholes and other accessories necessary for electric power service and arrange for utility company to install electrical conductors. The Contractor shall make necessary arrangements for the installation of fiber optic and gas service, and provide necessary excavation and backfill. No specific payment will be made for coordination work performed by the Contractor and costs for same shall be included in the lump sum bid for the item entitled "Clearing Site". The cost for the utility companies to install electric conductors, fiber optic service, cable service and gas service by utility companies for "hook-ups" shall be paid under the items entitled "Electric Service Allowance," "Fiber Optic and Cable Service Allowance" and "Gas Service Allowance" for which set amounts have been established on the bid form and are not subject to modification by the Contractor. No work performed by the Contractor shall be paid for under the referenced allowance items.

B. Utilities – General.

Every effort has been made to accurately show the location of various utilities within the project limits. The Contractor is responsible for any damage to same. As such it is the responsibility of the Contractor to visit the site and to contact the utilities present to ascertain the exact location of existing facilities, both those which are shown on the construction plans and any installations which may have occurred since these plans were prepared. The Contractor shall not start construction until supplying the City with a confirmation number obtained from the One-Call System in accordance with P.L. 1194, Chapter 118, Item #11 of the Underground Facility Protection Act.

Participating utilities include the following:

Verizon, JCP&L, PSE&G, Comcast Cable, Middlesex Water Company (MWC), and Middlesex County Utilities Authority (MCUA).

The Contractor should note that underground facilities of other utilities which do not participate in the underground mark out service may exist at the site.

It shall be the responsibility of the Contractor to visit the site prior to bidding and to ascertain whether or not the proposed utility installations are compatible with his/her proposed scheduling and equipment. If for any reason the Contractor feels that the utility installations are unacceptable, it will be his/her responsibility to notify the City prior to bidding. Any changes from the proposed utility installations are made subsequent to the award of contract will be subject to approval of the Resident Engineer, and any delays or additional expenses attributable thereto will be the sole responsibility and expense of the Contractor.

The Contractor shall coordinate his/her activities with those of the utility companies involved in the relocation or maintenance of existing of utility facilities of the installation of new utility facilities. It shall be the responsibility of the Contractor to notify the Engineer, in writing, whenever it becomes apparent that completion of the project will be delayed because of delays in relocating, de energizing, etc. existing on-site utilities or the installation of new utilities. In the absence of such notification, subsequent delays in completion of work will be solely the responsibility of the Contractor and liquidated damages will be assessed as elsewhere specified herein.

Service connections damaged by the Contractor shall be repaired by licensed tradespeople at the Contractor's expense.
Contractor shall maintain all legal and recommended clearances from existing utility lines.

105.08 ENVIRONMENTAL PROTECTION

1. Historical and Archaeological Sites.

THE FOLLOWING IS ADDED:

Memorandum of Agreement: The City of South Amboy has entered into an Agreement with the Federal Highway Administration and the New Jersey State Historic Preservation Office (SHPO) to construct a ferry facility [including the access roadway, parking, terminal and in-water improvements] to accommodate three ferry vessels in South Amboy, Middlesex County using funds provided by the Federal Highway Administration (FHWA) via the New Jersey Department of Transportation (NJDOT).

In accordance with that Agreement, it has been determined, that background and field research have indicated that physical remains of the Camden and Amboy [ca. 1831 - 1871] and Pennsylvania [ca. 1871- 1965] Railroads persist within and beyond the Project area, but the integrity of the physical remains is low. The historic significance of the Property within the Project area relates primarily to it being the location of nationally significant events, the feeling or sense of place conveyed by the few physical remains, and the setting of the former rail yard and piers. Consultants have compiled an inventory of visible railroad remains and found that only catenary structures and displaced stone sleepers, and two coal thawing sheds and associated infrastructure remain intact.

The FHWA has determined that the construction of this Project as proposed will have an adverse effect on the Camden & Amboy Railroad (Main Line) Historic District due to the alteration and/or removal of the catenary structures and stone sleepers and that the NJDOT and FHWA have considered alternatives to avoid or minimize the adverse effects and have found that they are not feasible.

However, a Camden and Amboy Corridor Management Study identified appropriate mitigation strategies and additional opportunities which were considered by the Project sponsors in developing a mitigation program to offset the adverse effects of the proposed construction.

As part of the Agreement, The City of South Amboy has agreed to use the services of a consultant and prior to the initiation of any construction; Construction Inspectors and Contractors shall be informed about the need for identification, evaluation and protection of historic properties and that they are informed of all stipulations in the Memorandum of Agreement which is included the Appendix as a reference document.

The City is required to develop an archeological monitoring/data recovery procedure, which provides for notification and coordination with NJDOT, SHPO and FHWA should historic resources and/or features be uncovered during construction. The procedure shall provide for immediate cessation of construction activities in any areas where undocumented remains are uncovered, notification of qualified archeologists to collect initial information about the resources identified and convene a consultation meeting; and implementation of any data collection/mitigation procedures which might, through consultation, be determined appropriate.

In addition, at the City's expenses, a professionally qualified archeological monitor shall be present on-site and shall inspect all excavations and earthmoving operations that may result in subsurface disturbance. The Contractor should be aware that two types of monitoring may be anticipated, and provisions for both types shall be included in the procedures developed;

1. Observational monitoring - which entails visual examination of work in progress and the rapid documentation of features or artifacts through photography, survey, and written notes.
2. Documentary monitoring - requires discontinuation of construction related work for a longer period of time to investigate and document [sufficiently to meet any requirements for archeological mitigation] archeological features which are significant or potentially significant.

The City has engage a Landscape Architect with the goal to ensure that, to the degree possible, all pertinent features of the facility will be compatible with the historic architecture and engineering characteristics, features, and setting of the Camden and Amboy Railroad (Main Line) Historic District.

The Contractor is required to be familiar with the Memorandum of Agreement which is included in Appendix E as a reference document.

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

5. Additional Requirements and Conditions.

This section also covers prevention of environmental pollution and damage as the result of construction operations under this Contract and for those measures set forth in other sections of these specifications. For the purpose of these Specifications, environmental pollution and damage are defined as the presence of chemical, physical, or biological elements or agents which adversely affect human health or welfare; unfavorably alter ecological balances of importance to human life; affect other species of importance to man; or degrade the utility of the environment for aesthetic, cultural, and/or historical purposes. The control of environmental pollution and damage requires consideration of air, water, and land, and includes management of visual esthetics, noise, solid waste, radiant energy and radioactive materials, as well as other pollutants.

There are necessary measures for protection of the environment. Environmental protection requirements under this contract are as important to overall completion of work as other technical aspects. Failure to meet the requirements of these specifications for environmental protection may result in work stoppages, or termination for default. No claims for extension of time or damages due to any such work stoppages are permitted. Promptly perform any repairs from damages caused by the violation of the provisions of these specifications at no additional cost to the City.

Also, comply with the following:

- a. **Quality Control.** Establish and maintain quality control oversight for all items of the work. Report any deviations of the work with respect to the Contract Specifications or Plan Drawings to the RE by the close of business on the day of occurrence.
- b. **Permits and Authorizations.** Comply with all requirements under the terms and conditions set out in the following permit(s) and authorization(s) listed in Section 107.01.02.
- c. **Environmental Protection Plan.** Prior to commencing work, submit a written Environmental Protection Plan containing detailed plans for compliance with all Federal, State and Local permit conditions. Approval of the Contractor's plan will not relieve the Contractor of its responsibility for adequate and continuing control of pollutants and other environmental protection measures. Include the following in the Environmental Protection Plan:
 - (1) Methods for protection of features to be preserved within authorized work areas. Prepare a listing of methods to protect resources needing protection, i.e., trees, shrubs, vines, grasses and ground cover, landscape features, air and water quality, fish and wildlife, soil, historic, archeological, and cultural resources.
 - (2) Procedures to be implemented to provide the required environmental protection and to comply with the applicable laws and regulations. Provide a written assurance that immediate corrective action will be taken to prevent pollution of the environment due to accident, natural causes, or failure to follow the procedures set out in accordance with the Environmental Protection Plan.
 - (3) Plans showing locations of any proposed temporary excavations or embankments for haul roads, stream crossing, material storage areas, structures, sanitary facilities, and stockpiles of excess or spoil materials. Indicate the features designed to protect the road structure and the environment from dredged material spills or pipeline leaks for all pipeline road crossings or tunnels.
 - (4) Methods of protecting surface and ground water during construction activities.
 - (5) A description of the methods and measures for the prevention of oil spills (i.e., ground cover, containment, absorbent, etc.) Include detailed procedures for dealing with any oil or contaminant spill to include but not be limited to required notifications to regulatory agencies, a spill procedure checklist, spill procedure action diagram showing activities to be performed, Contractor's staff of responsible parties, subcontract or service companies and detailed 24-hour contact information for anyone in the Contractor's activity chain.
 - (6) Work area plan showing the proposed activity in each portion of the area and identifying the areas of limited use or nonuse. Include measures for marking the limits in the Environmental Protection Plan.

- d. **Hazardous Material.** If evidence of hazardous material not specified in the Contract is discovered, immediately cease construction operations and notify the RE. Do not resume construction operations in that area until the Department provides direction.
- e. **Disposal of Solid Wastes.** Place solid wastes (excluding clearing debris) in containers that are emptied on a regular schedule. Conduct all handling and disposal in accordance with Federal, State, and local regulations.
- f. **Disposal of Discarded Materials.** Handle discarded materials other than those that can be included in the solid waste category as directed by the RE.
- g. **Protection of Water Resources.** Keep construction activities under surveillance, management, and control to avoid pollution of surface and ground waters.

Turbidity – Conduct dredging and disposal operations in a manner to minimize turbidity and conform to all water quality standards and special conditions as prescribed by the approved permits and/or permit modifications.

Oil Spill Prevention – Prevent oil or other hazardous substances from entering the ground, drainage, or local bodies of water. Provide containment, diversionary structures, or equipment to prevent discharged oil from reaching a watercourse. Take immediate action to contain and clean up any spill of oily substances, petroleum products, and hazardous substances. Immediately report such spills to the RE and appropriate authorities as outlined in the Environmental Protection Plan.

- h. **Protection of Fish and Wildlife Resources.** Keep construction activities under surveillance, management, and control to minimize interference with, disturbance to, and damage of fish and wildlife.
- i. **Protection of Air Resources.** Keep construction activities under surveillance, management, and control to minimize pollution of air resources. Perform all activities, equipment, processes and work operations in strict accordance with the applicable air pollution standards of the State of New Jersey and all Federal emission and performance laws and standards.
- j. **Sound Intrusions.** Keep construction activities under surveillance and control to minimize damage to the environment by noise.
- k. **Preservation and Restoration of Landscape and Marine Vegetation Damages.** Restore all landscape features and marine vegetation damaged or destroyed during construction operations outside the limits of the approved work areas.

THE FOLLOWING SUBSECTION IS ADDED:

105.11 ACCESS TO THE WORKSITE

Water access to the dredging site is from the Raritan Bay and, Raritan River, via South Amboy Reach. Access to the project site may be made via the interstate highway system, the Garden State Parkway, Route 35, Route 9, and local streets in the various municipalities where work is proposed. Rail and airport facilities may not be available within close proximity to the work sites.

The Contractor is responsible for making an investigation of available roads for transportation, clearances for bridges, schedules of lift bridges, load limits for bridges and roads, and other conditions affecting the transportation of materials and equipment to the project site.

Any required transportation permits or special transportation costs are the responsibility of the Contractor.

SECTION 106 – CONTROL OF MATERIAL

THE SECTION HEADING IS CHANGED TO:

SECTION 106 – CONTROL OF MATERIAL AND EQUIPMENT

106.01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS

THE FOLLOWING IS ADDED:

The Contractor shall unload all approved materials promptly upon their arrival and transport them to the site of the work and he shall pay any or all damages or other charges incurred by failure to unload materials within the time allotted therefore by the transportation companies. However, no seals shall be broken until they are examined by the Resident Engineer or his representative.

For telecommunication and video surveillance services or equipment a certification is required to confirm that the telecommunication and video surveillance services or equipment are not from companies as listed in 2 CFR 200.216. Ensure that the certification includes the statement that all telecommunication and video surveillance services or equipment proposed in this project are not produced by companies as listed in 2 CFR 200.216.

106.03 FOREIGN MATERIALS

THE SUBSECTION HEADING IS CHANGED TO:

106.03 FOREIGN MATERIALS AND EQUIPMENT

202. Wholly State Funded Projects

THE ENTIRE TEXT IS CHANGED TO:

Due to the requirements of MAP-21 (Moving Ahead for Progress in the 21st Century Act), comply with the Federal Aid Project requirements specified under Subpart 2.

THE FOLLOWING IS ADDED TO THE END OF THE SUBSECTION:

Comply with 2 CFR 200.216 Prohibition on Certain Telecommunication and Video Surveillance Services or Equipment.

Do not provide Telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities). Do not provide video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities). Do not provide Telecommunications or video surveillance services provided by such entities or using such equipment.

Do not provide Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

Do not provide any equipment assembled by others that has an integral component that was manufactured and supplied by the aforementioned companies.

106.05 MATERIALS , INSPECTIONS, TESTS, AND SAMPLES

THE FOLLOWING IS ADDED:

The City will perform materials testing, for NJDOT compliance, for all major items associated with this project.

106.06 PLANT INSPECTION

THE FOLLOWING IS ADDED:

The Contractor hereby agrees through its sub-contractual agreements, with their suppliers, to grant access to the City's materials testing technicians.

106.07 CERTIFICATION OF COMPLIANCE

THE FOLLOWING IS ADDED TO THE SUBSECTION:

In the event that materials or assemblies used on the basis of certifications of compliance are sampled and tested and found to be in nonconformance with the contract requirements, all costs for said tests and for any future tests regarding that same material, shall be borne by the Contractor. An amount equal to the cost of subject tests may be deducted from the next

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

regular payment made to the Contractor. This clause shall apply regardless of any certifications that may have been submitted by the Contractor.

As specified, certifications shall be provided for all material and/or assemblies required for this contract.

SECTION 107 – LEGAL RELATIONS

107.01 LEGAL JURISDICTION

107.01.02 Permits, Licenses and Approvals

THE FOLLOWING IS ADDED TO THE SUBSECTION:

The Contractor is advised that several permits have been issued for this project. The Contractor must comply with the terms, conditions and restrictions contained in said permits. A copy of each permit is included in Appendix F of these Special Provisions.

No separate payment shall be made for work associated with conformance to permit regulations and conditions, rather, all costs for same shall be included in the various pay items in the proposal.

The Contractor is advised that he must email the U.S. Coast Guard a completed LNM (Local Notice to Mariners) form to D1LNM@uscg.mil or fax to Mary Swanson at 617-223-8291 two weeks before work is to begin. The LNM can be found online at: <https://www.navcen.uscg.gov/?pageName=lnmMain>

The Contractor is informed that the following licenses have been received for this project:

- Tidelands license **1331-10-0002.1 TDI190001** for portion of Lot 26.03, Block 161.01, South Amboy, Middlesex County, NJ
- Tidelands license **1331-10-0002.3 TDI190001** for portion of Lot 90.01, Block 161.01, South Amboy, Middlesex County, NJ

The Contractor is informed that the following permits have been received for this project:

- Soil Erosion and Sediment Control Certification Ref. No. 2020-0751
- NJDEP Permit No. 1220-02-0002.5 LUP190001. WFD IP-(inwater/landward), Water Quality Certificate /Acceptable Use Determination
- NJDEP Permit Number NJ0088323 – NJPDES Permit 5G3 for Construction Activity Stormwater (GP)
- The Department of the Army Permit Application File Number NAN-2020-00587

The Contractor is advised that these Permits and any associated permit conditions or restrictions must be strictly adhered to throughout construction. The contractor is advised that these permits have the following restriction on “in-water” work:

The NJDEP and USACE permits indicate permittee and their agents, shall avoid in-water work from **January 1 to May 31 of any calendar year** to minimize impacts to winter flounder early life stages and their EFH.

The NJDEP permit indicates permittee and their agents, shall avoid in-water work from **March 1 to June 30 of any calendar year** to minimize impacts to migrating and spawning anadromous fish.

If the steel sheeting is installed prior to the timing restriction period, construction behind the steel sheeting may proceed during the timing restriction period.

The contractor is notified that no activities which would result in disturbance to the sediment in the Raritan River, Raritan Bay or any waters adjoining the project site will be permitted during the timing restriction period including but not limited to:

- Steel Sheet Piling installation within the waterway.
- Dredging.
- Installation of Mooring Piles for Floating Dock System and Dolphins.

The NJDEP and USACE permits do not authorize the disturbance of mudflats. There shall be no disturbance to areas designated as mudflats on site.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

Consistent with Assembly Bill, No. 2804, P.L. 2007, CHAPTER 113, the use of creosote treated material (or other descriptive term from the law) in the construction of the permitted structure(s) is prohibited by the NJDEP permit.

The permit approvals received for this project establish the maximum limit of disturbance for the contractor's work. The contractor is responsible for the selection of the appropriate construction access method that meets the conditions of the various permits while adhering to the project schedule. No additional compensation will be made by the City if the Contractor chooses to use different means and methods to construct the Project.

THE FOLLOWING SUBPART IS ADDED:

107.01.04 Easements

The Contractor is advised that several easements have been obtained for this project. The Contractor must comply with the terms, conditions and restrictions contained in said easement agreements. A copy of each easement is included in Appendix G of these Special Provisions.

Only certified clean fill may be placed on properties that are not owned by the City and for which legal access is provided through the easements described herein.

No separate payment shall be made for work associated with conformance with easement agreements, rather, all costs for same shall be included in the various pay items in the proposal.

The Contractor is informed that the following easement have been obtained for this project:

- Temporary Construction Easement for Lot 25.08, Block 161.02, South Amboy, Middlesex County, NJ
- Temporary Grading and Drainage Easement for portion of Lot 25.05, Block 161.02, South Amboy, Middlesex County, NJ
- Temporary Grading and Drainage Easement for portion of Lot 6.03, Block 161.02, South Amboy, Middlesex County, NJ
- Sanitary Line Construction and Maintenance Easement for portion of Lot 6.03, Block 161.02, South Amboy, Middlesex County, NJ

The referenced easements are summarized herein.

Temporary Construction Easement for Lot 25.08, Block 161.02, South Amboy, Middlesex County, NJ: The Grantor does hereby grant, remise and relinquish to the Grantee and its agents, contractors, servants and employees, the right, privilege, authority and easement to use and occupy, temporarily, for a period not to exceed the completion of the Ferry Terminal Project or three (3) years from the date of this Easement Agreement, whichever is sooner, the Grantor Property in conjunction with the Ferry Terminal Project and its supporting structures and all related planning, testing and construction, and to go on, over and across the Grantor Property, including but not limited to the parking, storage, maintenance and use of construction trailers, equipment and vehicles and the stockpiling and storage of fill and all other material, excavated from the Grantee Property or stockpiled on the Grantor Property site for use in the Grantee's construction project. Provided that the Grantee is diligently pursuing the Ferry Terminal Project but the construction is not completed within the three year term as stated above, Grantor will grant an extension of the temporary easement until the construction of the Ferry Terminal Project is completed, but not to exceed an additional period of twenty-four (24) months.

Grantee shall and hereby does indemnify, hold harmless and defend Grantor and its successors and assigns from and against any and all losses, claims, damages, liabilities, liens, costs and expenses arising in connection with any construction, maintenance or utilization of the Grantor Property by Grantee, its employees, agents, servants and contractors.

Grantee shall restore the Grantor Property as nearly as reasonably possible to its preexisting condition. This restoration shall include removal of all construction equipment, tools, trailers, materials and debris, regrading, compacting, reseeding and mulching the Grantor Property and removing all stockpiled materials. Grantor shall conduct soil testing after the stockpiles have been removed to verify that no environmental contamination or regulated hazardous material that may have resulted from Grantee's use of the Grantor Property and stockpiling of materials remains on the Grantor Property. If the soil sampling identifies the existence of any environmental contamination or regulated hazardous material on the

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

Grantor Property, Grantee shall promptly remediate such conditions in accordance with all regulatory standards with any soil contamination being remediated to non-residential/commercial standards, at Grantee's sole cost.

Additionally, it is noted that a 2 foot thick cap of certified clean fill provided on Block 161,02, Lot 25.08.

Temporary Grading and Drainage Easement for portion of Lot 25.05, Block 161.02, South Amboy, Middlesex County, NJ.

Temporary Grading and Drainage Easement for portion of Lot 6.03, Block 161.02, South Amboy, Middlesex County, NJ

Sanitary Line Construction and Maintenance Easement for portion of Lot 6.03, Block 161.02, South Amboy, Middlesex County, NJ

THE FOLLOWING SUBPART IS ADDED:

107.01.05 New Jersey Business Registration Requirements – Construction

The Contractor will comply with the New Jersey Business Registration Requirements for construction, as explained in Exhibit D and as stated in Form of Contract (Exhibit G) of these Special Provisions.

107.04 NEW JERSEY CONTRACTUAL LIABILITY ACT
THIS SUBSECTION IS ELETED IN ITS ENTIRETY.

107.05 LIMITATIONS OF LIABILITY
DELETE "except as permitted by N.J.S.A. 59:13-8."

107.06 PERSONAL LIABILITY OF PUBLIC OFFICIALS
THE LAST SENTENCE IS CHANGED TO:

There shall be no liability upon the Mayor, City Council, City Administrator, the governing body of the municipality or municipalities within the limits of the project either personally or in an official capacity.

107.09 INDEPENDENT CONTRACTOR
THE SECOND SENTENCE IS CHANGED TO:

It shall neither hold itself out as, nor claim to be, an officer or employee of the City by reason hereof.

107.10 NON-THIRD PARTY BENEFICIARY CLAUSE
DELETE "and also by virtue of the provisions of N.J.S.A. 59:13-1 et seq., which allows suit against the State in Contract only on the basis of express contracts or contracts implied in fact.

107.11 RISKS ASSUMED BY THE CONTRACTOR
REPLACE THE PARAGRAPH BEGINNING "Defend and indemnify..." (immediately after Subparagraph 4, entitled Risks of Loss to Property of Those Performing the Work) WITH:

The Contractor will indemnify and hold harmless the City of South Amboy, its City Council, its Constitutional Officers, and their respective servants, volunteers, and agents (collectively the "City") for and from any and all losses, costs, damages, claims, suits and/or liabilities arising from any and all State or Federal actions of whatever kind, including Section 1983 claims, including counsel fees and costs of suit (collectively the "losses"), described in Sections 107.11.3 and 107.11.4 above, to which the City may be put by reason of any claim for damages of any kind to persons, business entities,

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

or property due, in whole or in part, to the carelessness or negligence of the Contractor. It is the expressed intent of the parties hereto that the Contractor shall defend and indemnify the City even for the City's own alleged or actual partial negligence up to and until such a time as a trier of fact, be it a judge, jury, or binding arbiter, determines that the losses were the result of the sole and complete negligence of the City.

The Contractor will also indemnify and hold harmless the City for and from any and all losses to which the City may be put by reason of the Contractor's failure to pay its workers, suppliers, or subcontractors for labor or materials provided to the City.

The Contractor further agrees that the City reserves its right to monitor and actively participate in the defense of any and all claims against the City, at its own expense, if, in its sole discretion, it chooses to do so.

107.11.01 Risks

107.11.02 General Insurance

A. Policy Requirements.

THE SIXTH, SEVENTH AND EIGHTH SENTENCES ARE DELETED AND REPLACED AS FOLLOWS:

The certificates of insurance shall be on an Acord® form or a substantially similar form. Ensure that insurance policies are endorsed to provide written notice to the City at least 30 days prior to changes to and/or cancellation of the policies. Upon request, provide the RE with a certified copy of each policy and all applicable endorsements to each policy.

C. Renewal.

THE FIRST SENTENCE IS DELETED AND REPLACED WITH FOLLOWING:

Submit certificates of insurance to demonstrate continuous coverage until Acceptance.

Certificates of Insurance for each policy issued from the Contractor must carry evidence that City, its officers, employees and agents have been added to the policies as additional insured.

107.12 THE CONTRACTUAL CLAIM RESOLUTION PROCESS

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED WITH THE FOLLOWING:

107.12.01 Alternative Dispute Resolution

If the parties are unable to resolve a contractual claim amicably, including a notice of change under Section 104.03, the parties will participate in good faith, in non-binding mediation pursuant to N.J.S.A. 40A:11-50.

Either party may demand such mediation by written notice to the other party. The written notice shall contain at least (a) a brief statement of the nature of the dispute, and (b) the name, address and phone number of that party's designated representative for purposes of mediation. The other party shall designate its representative in writing no later than five business days after receipt of the demand for mediation. The respective designees shall thereupon, and promptly, with due regard for the need for timely action, choose a mediator. If the parties cannot agree on a mediator, or if they prefer, they shall choose a reputable mediation firm. Any mediation firm so chosen shall present a list of at least five proposed mediators to the parties and shall provide the parties with a summary of each person's qualifications to serve as the mediator. Each party shall rank the proposed mediators in order of preference. The fifth person on each list will be excluded from further consideration. The chosen mediator shall be the person who is the combined highest-ranking mediator on both preference lists, excluding the fifth person on each list. In the event of a tie, the mediator shall be chosen by lot.

The parties will not be bound by the Rules of Evidence in presenting their positions before the mediator.

The mediation shall be conducted in such reasonable and efficient manner as may be agreed between the parties and the mediator or, in the lack of such an agreement, as may be determined by the mediator.

Each party will bear its own cost of participation in mediation and they will divide the cost of the mediator equally.

If, after a good faith effort to resolve the dispute through mediation, the dispute is not resolved, either party may terminate the mediation by written notice to the mediator and to the other party, whereupon either party may submit the dispute to

the Superior Court of New Jersey, Middlesex County, for adjudication, which Court shall have exclusive original jurisdiction over the dispute.

107.13 LITIGATION OF CLAIMS BY THE CONTRACTOR
THIS SUBSECTION SHALL BE DELETED IN ITS ENTIRETY.

SECTION 108 – PROSECUTION AND COMPLETION

108.01 SUBCONTRACTING

1. Values and Quantities.

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

202. There are no Specialty Items in this Project.

108.02 COMMENCEMENT OF WORK

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

Unless otherwise stated, the Contractor shall commence the work herein covered within ten (10) days after the date of the mailing of a notice to proceed along with the fully executed Contract by the City. However, in no case shall the Contractor commence work until a construction schedule is submitted to and approved by the Resident Engineer and participation in preconstruction conference scheduled by the City, unless the Contractor is specifically authorized to commence work by the City in writing.

Should Contractor begin work prior to execution of the Contract by the City of South Amboy, such work shall be considered as having been done by him/her at his/her own risk and as a volunteer. In the event the City decides to reject the Contract, the Contractor shall at his/her own expense do such work as is necessary to leave the site in a neat condition to the satisfaction of the Resident Engineer. If any of the work done prior to the City's rejection affects any existing road or highway, the Contractor shall at his/her expense restore it to its former condition, or the equivalent thereof, to the satisfaction of the Resident Engineer. However, all work done in accordance with the Contract Documents prior to its execution by the City will, when he/she executes the Contract, be considered authorized work and will be paid for as provided in the Contract.

The Contractor shall not be entitled to any additional compensation or an extension of time for any delay, hindrance, or interference caused by or attributable to commencement of work prior to execution of the Contract by the City.

The Contractor shall notify in writing the Engineer, as well as the City's Fire, Police and First Aid Squads at least 7 days in advance of beginning construction. Such notification shall include the duration of project and a description of the methods to be employed to maintain site access and traffic throughout the work site.

In no case will work commence prior to receipt and approval by the City of the necessary insurance documents.

108.03 DAILY COMMUNICATIONS

THE FOLLOWING IS ADDED:

108.03.01 Dredging Operations (Including Upland Placement)

For any dredge utilized, prepare and submit a "Daily Report of Operations" each day in an approved electronically-transmitted format. An example daily production report with the categories and types of data required is included as an attachment to these Special Provisions as Dredging Related Project Attachment 1. Report additional information as directed by the RE, on the daily report to match the work being performed on the project. Submit for approval the format of the Daily Report of Operations and the submittal process prior to the start of dredging operations. For reporting purposes, the working day runs from midnight to midnight. Submit this report on a daily basis (by 11:00 AM the following working day) and not in groups for multiple days. Include copies of the original leverman's or dredge operator's delay log with each Daily Report of Operations.

Additionally, maintain one up to date copy of all the daily reports on the dredge (or another location agreeable to the RE). Include in these reports a description of the work performed in sufficient detail so that the RE can review the progress of the work and include a listing of the equipment and man-hours expended on this phase of work.

Failure to submit acceptable Daily Production Reports will result in suspension of work by the RE pending corrective action by the Contractor. No compensable time extension will be awarded for any delay due to such failure to submit acceptable Daily Production Reports.

Further instructions on the preparation of the reports will be furnished at the Pre-Construction Meeting.

108.07 TRAFFIC CONTROL

108.07.02 Changes to the Traffic Control Plan (TCP)

THE FIRST SENTENCE IN THE FIRST PARAGRAPH IS CHANGED TO:

Submit requests for changes to the TCP to the RE for approval at least 30 days before the change is needed.

108.09 MAINTENANCE WITHIN THE PROJECT LIMITS

THE FOLLOWING IS ADDED:

The Contractor shall be responsible for the complete maintenance of any roadway and driveways within the limits of work that is to remain open to traffic during construction. The roadway shall be kept free of all obstructions and kept in a smooth riding condition at all times. All potholes, washouts, and cave-ins, developing during this period shall be properly filled with material and by a method approved by the RE. However, the Contractor shall not be required to remove snow and ice on public roads over which traffic is being maintained.

No separate payment will be made for this work; rather, all costs for same shall be included in the lump sum price bid for the item entitled "Clearing Site".

108.10 CONTRACT TIME

THE ENTIRE SUBSECTION TEXT IS CHANGED TO:

This contractual time of Completion includes two, 180 Calendar Day period (January 1 to June 30th) when NJDEP and USACE permit restrictions prevent the Contractor from performing in-water activities.

South Amboy Reach, a navigable waterway under Federal jurisdiction and located immediately to the east of the Project Site, must remain open at all times during construction and the Contractor may not impede navigation with any barges, equipment or turbidity control measures.

All work herein specified shall be completed within 650 calendar days of the execution of the contract which is the date the fully signed contract is mailed, or hand delivered to the Contractor.

- A. Complete all work required for Substantial Completion no later than 625 Calendar days from Notice to Proceed.
- B. Achieve Completion within 650 Calendar days from Notice to Proceed.

As per section 101.03 TERMS:

Completion is achieved when all of the following have occurred:

1. The Work has been satisfactorily completed in all respects according to the Contract.
2. The Project is ready for use by the City as required by the Contract.
3. The Contractor has satisfactorily executed and delivered to the RE all documents, certificates, and proofs of compliance required by the Contract including the Notice of Completion.

- C. After achieving Completion, the Contractor must Submit Final Project Documents in 30 calendar days.

108.12 RIGHT-OF-WAY RESTRICTIONS

THE FOLLOWING IS ADDED:

The Contractor shall obtain from the RE all information regarding Right of Entry Agreements; and ROW Parcels and Easements acquired for the Project as well as the nature and type of title acquired. The Contractor shall make periodic requests for updates to this information during the course of the Contract.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

The Contractor shall not enter an Easement until the City provides written notice to the property owner. The Contractor shall provide a copy of all notices for the RE 14 calendar days prior to entering a particular Easement or right, which is lesser than a fee interest. The Contractor shall make no claim for delays by reason that entry upon an Easement or right which is lesser than a fee interest is conditioned upon notice or is limited in duration; the Contractor is required to schedule accordingly and take such limitations into account when planning performance of the Work.

Temporary Easements and/or temporary construction rights will in most cases contain a limitation as to the length of time that they are extent. The Contractor shall schedule the Work pursuant to Subsection 108.04 so as to accommodate the particular time limitations of an Easement or right which is lesser that a fee interest. The Contractor shall provide a written request to the RE that the City procure an extension from the owner of a particular temporary easement or right, which is lesser that a fee simple interest, so as to enable the Contractor to continue occupancy of or re-enter same in the future, beyond the initial time period set forth in the respective property description prior to the expiration thereof.

Where the Contractor fails to complete the work within an area of a temporary easement or right lesser that a fee interest during the time allowed under the property description, by reason of the Contractor's own fault, the Contractor shall reimburse the State for the sum payable to the owner of the underlying fee interest for the extended period of occupancy use. The RE may deduct an amount equal to such payments from the monthly estimate of Work performed after providing 30 day written notice to the Contractor of such action, including a breakdown of the costs sought or to be sought by reason of the delay in timely vacating a temporary easement or right lesser that a fee interest.

108.14 DEFAULT AND TERMINATION OF CONTRACTOR'S RIGHT TO PROCEED
LIST (1) OF THE FIRST PARAGRAPH IS CHANGED TO:

- 202. Fails to begin construction operations within 10 days of execution of the Contract.

THE FOLLOWING IS ADDED AFTER THE SECOND PARAGRAPH:

If the City directs the Surety to complete the Contract, and the Surety elects to use a completion-contractor to perform the Work, the Surety must promptly submit to the City a request for approval of the proposed completion-contractor as a subcontractor as per Section 108.01. The City has the right to reject a request by the Surety to use the Contractor as the completion-contractor, either directly or under the direction of a consultant to the Surety. In addition, the City has the right to reject a request by the Surety to contract with employees of the Contractor, directly or under the direction of a consultant to the Surety, to complete the Contract. The City's right to reject contained in this paragraph is based on the sole discretion of the City.

108.18 SUBSTANTIAL COMPLETION

THE FOLLOWING IS ADDED AFTER THE SECOND SENTENCE IN THE FIRST PARAGRAPH:

As part of the inspection, the City of South Amboy will perform one after-dredge survey as specified in Section 202.04.

108.19 COMPLETION AND ACCEPTANCE

THE FOLLOWING IS ADDED:

No Incentive Payment for Early Completion is specified for this project.

108.20 LIQUIDATED DAMAGES

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Liquidated damages are as follows:

- A. For each day that the Contractor fails to complete the work as specified in Subpart A of Subsection 108.10 of these Special Provisions, for Substantial Completion, the City will assess liquidated damages in the amount of \$2,500.00.
- B. For each day that the Contractor fails to achieve Completion as specified in Subpart B of Subsection 108.10 of these Special Provisions, the City will assess liquidated damages in the amount of \$2,500.00.
- C. For each day that the Contractor fails to submit Final Project Documents in Subpart C of Subsection 108.10 of these Special Provisions, the City will assess liquidated damages in the amount of \$2,500.00.

THE FOLLOWING IS ADDED:

When the Contractor may be subjected to more than one rate of liquidated damages established in this Section, the City will assess liquidated damages at the higher rate.

108.21 WARRANTIES

THE FOLLOWING IS ADDED:

Before final payment is made, as provided for in Subsection 109.11, the Contractor shall furnish Maintenance Bond in a sum equal to 10% of the final contract price. The Maintenance Bond shall be satisfactory to the City and the Bond shall remain in full force and effect for a period of one (1) year from the date of acceptance of the project by the City and shall provide that the Contractor guarantees to replace all materials furnished that were not furnished in accordance with the terms of the contract, and make good defects in material or workmanship which become apparent before the expiration of one (1) year.

SECTION 109 – MEASUREMENT AND PAYMENT

109.01 MEASUREMENT OF QUANTITIES

THE SECOND PARAGRAPH IS DELETED:

THE LAST PARAGRAPH IS DELETED.

THE FOLLOWING IS ADDED:

All Items under this contract shall be Measured for Payment.

The contractor shall take elevations on both edge of pavements and the centerline after the HMA Base Course has been laid. These elevations shall be reviewed with the field inspector and a hard copy supplied to the Engineer. This is to verify that the base course conforms to the plan grades.

109.02 SCOPE OF PAYMENT

THE THIRD SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The City will not make additional or separate payment for work or portion of work unless specifically provided for in the “Measurement and Payment” Subsection.

109.03 PAYMENT FOR FORCE ACCOUNT

THE FOLLOWING IS ADDED:

Payment for overhead costs will not be allowed for force account work made pursuant to a construction order not granting an extension of contract time.

109.05 ESTIMATES

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

The Contractor shall be advised that partial payments will be made pursuant to N.J.S.A. 2A:30A-2(a).

In response to a monthly invoice from the contractor the RE will determine the approximate quantities of work satisfactorily completed in accordance with the Contract documents during the preceding period. Partial payments on account of such estimates will be made based on the prices bid in the Proposal or as provided by Field Order, Change Order or supplementary agreement.

No such estimate or payment shall be required to be made when, in the judgment of the Resident Engineer, the work is not proceeding in accordance with the Contract documents or following the Resident Engineer giving the Contractor and Surety notice of delay, neglect or default under Subsection 108.14.

No such estimate or payment shall be construed to be an acceptance of any defective work or improper materials. The Resident Engineer upon determining that any payment under a previous estimate was improper, unwarranted, or incorrect

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

for any reason may deduct the amount of such payment from the subsequent monthly estimate and partial payments made to the Contractor.

From the total amounts ascertained as payable, the City will deduct and withhold 2 percent in retainage from the total Estimate amount for State Funded Projects. On State Funded Projects, the Contractor may not withhold subcontractor retainage that exceeds the amount of retainage that the Department withholds from the Contractor.

Regarding Federally Funded Projects, the City will deduct and withhold 2 percent in retainage from the total Estimate amount, excluding amounts for subcontracted work, until Substantial Completion. Pursuant to 49 C.F.R. § 26.29(b)(1), the Contractor may not withhold retainage from a subcontractor on Federally Funded Projects.

Before the issuance of each payment, certify, on forms provided by the City, whether:

A. On Federally Funded Projects

1. No subcontractor or supplier was used on the project; or
2. Each subcontractor and supplier used on the project has been paid the amount due, from the previous progress payment and will be paid the amount due from the current progress payment, for the subcontractor or supplier's work that was paid by the City.

B. On State Funded Projects

1. No subcontractor or supplier was used on the project; or
2. Each subcontractor and supplier used on the project has been paid the amount due, excluding retainage, from the previous progress payment and will be paid the amount due from the current progress payment, excluding retainage, for the subcontractor or supplier's work that was paid by the Department; or
3. There exists a valid basis under the terms of the subcontractor's or supplier's contract to withhold payments from the subcontractor or supplier. Therefore, the following subcontractors and suppliers have not been paid for work performed or materials supplied to the project from the proceeds of the previous progress payment or will not be paid for work performed or materials supplied to this project from the proceeds of the current progress payment, or both.

109.06 MATERIALS PAYMENTS AND STORAGE

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED BY THE FOLLOWING:

No payments will be made for materials until they have been incorporated into the finished and accepted work except for electrical equipment used for installation of traffic signals, which will be paid at 90% of invoice cost at time of delivery.

109.07 BONDS POSTED IN LIEU OF RETAINAGES

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

The Contractor may post bonds in lieu of allowing the deduction of 2% retainage, in accordance with N.J.S.A. 40A:11-16.1

109.08 AS-BUILT QUANTITIES

THIS SUBSECTION IS DELETED AND REPLACED AS FOLLOWS:

Following Completion, the Resident Engineer will finalize as-built quantities for all pay Items and Extra Work which has been authorized and incorporated into the Project. When such as-built quantities are completed, they are incorporated into a proposed final certificate. The Contractor assumes the positive obligation of assisting the Resident Engineer wherever possible in the preparation of such as-built quantities. The Resident Engineer may from time to time, before Substantial Completion, 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 are subject to recalculation in completion of the Final Certificate.

109.09 AUDITS

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Pursuant to N.J.S.A. 52:15C-14(d), relevant records of private vendors or other persons entering into contracts with the City are subject to audit or review by the New Jersey Office of the State Comptroller. Therefore, the Contractor shall maintain all documentation related to products, transactions or services under the Contract for a period of five years from

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

the date of final payment. Such records shall be made available to the New Jersey Office of the State Comptroller upon request.

109.10 CONTRACTOR'S COMPLIANCE WITH N.J.S.A. 34:11-56.25, ET SEQ.
THE FOLLOWING IS ADDED TO THE END OF THIS SUBSECTION:

All statutory references and requirements, which pertain only to the state, shall be construed to mean corresponding statutory provisions applicable to counties.

109.11 FINAL PAYMENT AND CLAIMS

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

The final payment certificate shows the total amount payable to the Contractor, including therein itemization of said amount segregated as to pay item quantities, Extra Work, and any other basis for payment, and also shows therein all deductions made or to be made for prior payments, and as required pursuant to the contract documents. All prior estimates and payments are subject to correction in the final certificate.

The final Change Order shows all adjustments from estimated to as-built quantities as indicated on the Final Payment Certificate as well as any other information and/or authorizations typically included in Change Orders pursuant to the Construction Specifications as added to and amended by these Special Provisions.

The Engineer shall provide the Contractor with the Final Change Order and Final Payment Certificate. Within 30 calendar days after the Final Change Order and Final Payment Certificate have been provided to the Contractor, the Contractor shall either:

1. Sign and return the Final Change Order.
2. Submit written acceptance of the Final Change Order with exception or reservation as further described herein.

The Contractor's failure to return the signed Final Change Order or to submit written acceptance of the Final Change Order with exception or reservation within said 30 calendar days will be construed as an acceptance of the Final Change Order without exception or reservation. Final payment will be made to the Contractor following acceptance of the Final Change Order by the City of South Amboy in the amount set forth in the Final Payment Certificate.

Execution of the Final Change Order, as evidenced by the Contractor's signature thereon, constitutes acceptance of the Final Change Order and Final Payment Certificate without exception or reservation. By accepting the Final Change Order as described, or as described in the preceding paragraph, the Contractor thereby releases the City of South Amboy, the Mayor, City Council, the Engineer, their agents, officers and employees from all claims and liabilities of whatsoever nature for anything done or furnished or in any manner growing out of performance of the work.

If the Contractor submits to the Engineer his written acceptance of the Final Change Order conditioned with exception or reservation, the acceptance shall contain a release signed by the Contractor in the following form:

In consideration of the above payment pursuant to the Final Change Order, I hereby release the City of South Amboy, the Mayor, City Council, the Engineer, their agents, officers, and employees from all claims and liabilities of whatsoever nature for anything done or furnished or in any manner growing out of performance of the work except for the reservation shall state the specific amounts of the claims being reserved. Failure to state specific amounts shall result in a waiver of such claims. The Contractor can reserve only those claims properly filed with the Engineer pursuant to Subsection 107.12.01 and not previously resolved. The Contractor waives all claims for which the required notice has not been filed.

If the Contractor conditions his acceptance of the Final Change Order, he shall submit with his conditional release information sufficient to enable the Engineer to determine the facts or contentions involved in the reserved claims. The claims filed by the Contractor shall be in sufficient detail to enable the Engineer to ascertain the basis and amount of said claims. As a minimum, the following information must accompany each claim:

1. A detailed factual statement of the claim providing all necessary dates, locations and items of work affected by the claim, and
2. the date on which facts arose which gave rise to the claim, and
3. a copy of the correspondence for the specific claim by the Contractor pursuant to Subsection 107.12.01, and
4. the name, function, and activity of each City individual, official or employee involved in or knowledgeable about such claim, and

5. the specific provisions of the Contract which support or mitigate against the claim and statement of the reasons why such provisions support or mitigate against the claim, and
6. if the claim relates to a decision of the Engineer which Contract leaves to Engineer's discretion or as to which the Contract provides that the Engineer's decision is final, the Contractor shall set out in detail all facts supporting his contention that the decision of the Engineer was fraudulent or capricious or arbitrary or is not supported by substantial evidence, and
7. the identification of any documents and the substance of any oral communications relating to such claim, and
8. a statement as to whether the additional compensation or extension of Contract Time sought is based on the operation of the provisions of the Contract or an alleged breach of contract, and
9. if an extension of Contract Time is sought, the specific days for which it is sought and the basis for such claim, and
10. if additional compensation is sought, the exact amount sought and a breakdown of that amount into the following categories:
 - Direct Labor
 - Direct Materials
 - Job Overhead
 - Overhead (general and administrative)
 - Subcontractor's Work
 - Other categories as specified by the Contractor

Failure to provide all requested information within the time specified will result in rejection of a claim. The requested information is in addition to the information provided pursuant to Subsection 107.12.01.

The Contractor may request an additional fourteen (14) calendar days to provide additional information regarding the claims which he reserved in his acceptance, but all information must be submitted to the Engineer within forty-four (44) calendar days of the issuance of the Final Change Order.

The Engineer will review the information submitted by the Contractor and attempt to resolve the reserved claims within thirty (30) calendar days, unless that time period is extended by agreement between the parties.

If the Engineer determines after review of the claims that no further payment is warranted except for the sum indicated in the Final Payment Certificate, he will so advise the Contractor in writing. Final payment will be made following acceptance of the Final Change Order by the City of South Amboy in the amount set forth in the Final Payment Certificate.

If the parties agree to a resolution of the reserved claims, the Engineer will issue an amended Final Change Order and Final Payment Certificate which will include all sums previously included in the Final Change Order and Final Payment Certificate as well as the additional payment being made on the claims. Within fourteen (14) calendar days, the Contractor shall submit to the Engineer his acceptance or rejection of this amended Final Change Order. If the Contractor wishes to accept the amended Final Change Order, he shall sign and return same. Execution of the amended Final Change Order, as evidenced by the Contractor's signature thereon, constitutes acceptance of the amended Final Change Order and Final Payment Certificate. By accepting the amended Final Change Order as described, the Contractor thereby releases the City of South Amboy, the Mayor, the City Council, the Engineers, and all their agents, officers and employees from all claims and liabilities of whatsoever nature for anything done or furnished or in any manner growing out of performance of the work. If the Contractor wishes to reject the amended Final Change Order, written notice of his rejection shall be given to the Engineer. If the Contractor rejects the amended Final Change Order, final payment will be made following acceptance of the original Final Change Order by the City in the amount set forth in the original Final Payment Certificate. The Contractor may dispute this decision in accordance with Section 107.12.

The Contractor's failure to submit any written acceptance or rejection of the amended Final Change Order within said fourteen (14) calendar days will be construed as a rejection of the amended Final Change Order and final payment will be made to the Contractor following acceptance of the original Final Change Order by the City of Chosen Freeholders in the amount set forth in the original Final Payment Certificate.

Failure of the Contractor to accept any tendered final payment whether based on the original or amended Final Payment Certificate, shall not affect completion of the contract.

In any case, final payment will not be released until such time as the Contractor provides the City with a sworn statement, on a form provided by the City, identifying the project and stating that all employees have been paid in full at the prevailing wage rate, all suppliers of materials have been paid in full, and that no outstanding obligations exist from the Contractor

to any individual supplier or subcontractor for the furnishing of any labor or materials needed for the performance of the contract. This requirement is in addition to the requirement for the one-year maintenance bond described in section 108.21 Warranties.

THE FOLLOWING SUBSECTION IS ADDED:

109.13 PROMPT PAYMENT

The City's Prompt Payment Provisions which will apply to this project, are contained in the Form of Contract which is attached hereto as Exhibit B of the PROPOSAL document.

DIVISION 150 – CONTRACT REQUIREMENTS

SECTION 151 – PERFORMANCE BOND AND PAYMENT BOND

151.03 PROCEDURE

151.03.01 Performance Bond and Payment Bond

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

Within ten (10) City business days of the date of Award or Conditional Award, the bidder to whom the contract has been awarded shall complete and deliver a Performance Bond and a Payment Bond on forms satisfactory to the City of South Amboy. Each bond shall be separate and distinct, and each shall be for a sum equal to the total contract price. The aggregate sum of both bonds shall therefore equal 200% of the total contract price. The Performance Bond shall be maintained by the contractor until acceptance of the contract, and the Payment Bond shall be maintained by the Contractor until such time as any and all claims against the contractor by subcontractors, material suppliers, or others have been resolved. In the event of the insolvency of the surety, the contractors shall forthwith furnish and maintain, as above provided, other surety satisfactory to the City.

All alterations, extensions of Contract Time, extra and additional work, and other changes authorized by the Contract Documents may be made without securing the consent of the surety or sureties of the bonds.

The surety corporation bonds shall be furnished by only those sureties who meet the requirements set forth in N.J.S.A. 2A:44-143. The bonds shall be accompanied by a certification as to authorization of the attorney-in-fact to commit the surety company and a true and correct statement of the financial condition of said surety company.

SECTION 155 – CONSTRUCTION FIELD OFFICE

155.03.01 Field Office

4. Communication Equipment.

SUBPART A IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

202. Telephones. Construction Engineering and Inspection firms to provide their own cell phones.

SUBPART D IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

d. Computer System. Provide one (1) computer system meeting the following requirements:

1. Intel I7, gen 6 processor or equivalent having a clock speed of 4.5 GHz or faster, 16 GB or greater RAM, 2 GB or greater graphics memory, 256 GB or greater Solid-State Drive designated as drive C, one DVD (+/-) Writer Drive, one CD-R Recordable Drive. Ensure the system is USB 3.0 compatible and has at least two front USB ports. Include docking station, keyboard, optical mouse and 2-piece desktop speakers.
2. Wired Router with appropriate number of ports and cables and a print server. Ensure there is at least one wired Ethernet switch.
3. High-speed broad band connection and service with a minimum speed of 100 Megabits per second (mbps) with dynamic IP address for the duration of the project.
4. 27 inch or larger Flat Screen LCD monitor with tilt/swivel capabilities.
5. 500 GB or larger solid-state external drive with backup software for MS-Windows.
6. 1 Flatbed USB version 2.0 or greater Color Scanner with automatic document feed and wireless connectivity.
7. Uninterruptible power supply (UPS).
8. Surge protector for the entire computer configuration to be used in conjunction with the UPS.
9. Computer workstation, chair, printer stand, and/or table having both appropriate surface and chair height.

10. One can of compressed air and screen cleaning solution every other month of the duration of the contract.

If more than one computer configuration is specified, provide one network interface card for the base computer configuration and hardwire connections between computer configurations as directed by the RE.

Also provide:

1. Ten (10) USB 8 GB Flash/Jump memory drives
2. Forty (40) CD-R 700 MB (or larger) recordable CD's compatible with the CD drive and 10 recordable DVD's.
3. One (1) CD/DVD Holder (each holds 50)

One (1) color laser printer and supplies as follows:

1. Minimum of 192 Megabytes of expanded memory, printer cable, and legal-size paper tray.
2. One (1) set of printer ink cartridges every other month for the duration of the construction project for each printer.
3. Paper to fit printer

Software as follows:

1. Microsoft Windows, latest version with future upgrades for the duration of the entire project.
2. Microsoft Office Professional, latest version.
3. Norton's System Works for Windows, latest version, or compatible software package with future upgrades and latest virus patches.
4. Anti-Virus software, latest version with monthly updates for the duration of the contract.
5. Visio Professional Graphics Software for Windows, latest version
6. Primavera Project Management, latest version
7. Adobe Acrobat Professional, latest version, or compatible software for Scanner

When the computer system is no longer required by the RE, the City will remove and destroy the hard drive, and return the computer system to the Contractor. The City will retain other data storage media.

6. Office Equipment. Provide the following:

PART (B) AND (C) ARE CHANGED TO:

- b. One (1) digital camera(s). Ensure each digital camera has auto-focus, with rechargeable batteries and charger, 32 GB memory card, USB Memory Card Reader compatible with camera and field office computer, 3 inch LCD monitor, 12 mega pixel resolution, 12 X optical zoom lens, built in flash, image stabilization, computer connections, and a carrying case.
- c. One (1) video camcorder(s). Ensure each video camcorder is a mini DVD camcorder with 12x optical zoom, 2" LCD monitor, USB 2.0 compatible and includes USB 2.0 connections.

7. Inspection Equipment.

1. Two (2) Calculators with trigonometric capability
2. One (1) Date/ Received stamp and ink pad
3. One (1) Electronic Smart level, 4 foot
4. One (1) Electronic Smart level, 2 foot
5. Two (2) Carpenter rulers
6. One (1) Steel tape, 100 feet
7. One (1) Cloth tape, 100 feet
8. One (1) Illuminated measuring wheel
9. One (1) Plumb bob and cord
10. One (1) Line level and cord
11. One (1) Surface thermometer
12. One (1) 1 Concrete thermometer
13. One (1) Digital infrared asphalt thermometer
14. One (1) Direct Tension Indicator (DTI) Feeler Gage, 0.005 inch
15. One (1) Sledgehammer, 8lb

16. One (1) Self leveling laser level with range of 100 feet and an accuracy of ¼ inch per 100 feet
17. Five (5) Hard hats – orange, reflectorized hard hats according to ANSI Z89.1.
18. Five (5) Safety garments – orange, reflectorized, 360° high visibility safety garments according to ANSI/ISEA Class 3, Level 2 standards. To be replaced yearly for the duration of the contract.
19. Three (3) Sets of rain gear with reflective sheeting
20. Five (5) Sets of hearing protection with an NRR rating of 22 Db
21. Five (5) Sets of eye protection according to ANSI Z87.1
22. Two (2) Sets of fall arrest equipment according to ANSII Z359.1 Standards consisting of a full body harness, lanyard and anchor.
23. One (1) Light meter – capable of measuring the level of luminance in foot-candles
24. Five (5) Lantern flashlights, 6V with monthly battery replacements
25. One (1) Digital Psychrometer
26. One (1) Chain Drag according to ASTM D4580-86
27. One (1) 1 Testing equipment and apparatus conforming to AASHTO T23, T119, T152
28. Five (5) Hard Bound Daily Diaries, 5-½” X 8” minimum with one day per page. To be provided yearly for the duration of the contract.
29. Fifty (50) Legal size hanging folders
30. Fifty (50) Legal size manila file folders – three tab16.
31. One(1) Self-leveling laser level with range of 100 feet and an accuracy of ¼ inch per 100 feet.

155.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
FIELD OFFICE TYPE B, SET UP	UNIT
FIELD OFFICE TYPE B, MAINTENANCE	MONTH

SECTION 156 – MATERIALS FIELD LABORATORY AND CURING FACILITY

156.01 DESCRIPTION

THIS SUBSECTION IS CHANGED TO:

This Section describes the requirements required to coordinate materials testing with the professional service and/or testing services firm under contract with South Amboy as part of the City’s construction inspection and oversight team.

SECTION 157 – CONSTRUCTION LAYOUT AND MONUMENTS

157.03 PROCEDURE

157.03.01 Construction Layout

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

The Contractor shall provide all work required in connection with the layout for construction of the project, using control points and data shown on the plans. These shall be in conformance with survey information contained in the contract plans. All Work must be performed under the supervision of a New Jersey Licensed Land Surveyor.

The Contractor shall furnish all necessary qualified personnel and adequate equipment to preserve such controls throughout the duration of the contract and shall lay out all of the lines and grades necessary for the complete construction of the project. Prior to commencement of construction, the Contractor shall verify the difference in elevation between benchmarks and shall check the baselines for closure.

The Contractor shall provide the Engineer with copies of all calculations and staking data at least two Working Days before the use of said stakeout information. The survey notes and data shall include, but not be limited to, field notes that were used to establish and set construction stakes, field notes for the alignment, horizontal, and vertical project control, and field notes to document the easement and the monument location.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

The Contractor shall make all necessary computations to establish the exact position of all the work from the control points which are shown in the plans or furnished by the RE. All the work shall be referenced to baselines which the Contractor shall establish from the control points, reestablish when necessary and maintain throughout the life of the contract so as not to delay the RE from making necessary preliminary, interim, and final measurements and from checking the Contractor's layout if he/she so desires.

The Contractor will be responsible for laying out all work to be done by utility companies using baselines established by the Contractor from control points provided by the RE. It shall be the responsibility of the Contractor to coordinate with the utility companies and to make certain that any layout work necessary for the relocation of utilities is accomplished in a timely fashion.

The Contractor shall be responsible for the preservation of all control points furnished by the RE for his/her use in staking out the work. If such control points are damaged, lost, displaced, or removed, they shall be reset by the City and all costs therefore may be deducted from subsequent payments made to the Contractor.

The Contractor shall be responsible for maintaining the points he/she has established. Any error or apparent discrepancies found in the plans or specifications shall be immediately called to the attention of the RE in writing for interpretation prior to proceeding with work.

The Contractor shall be responsible for the finished work conforming to the lines and grades called for in the plans and specifications and he/she shall correct all errors caused by his/her personnel or Sub Contractors in his/her employ at no cost to the City at the direction of the RE.

Attention is directed to the need for caution in laying out and constructing storm drains, headwalls, and embankments, to ascertain that these items do not encroach on private property or areas where easements have not been obtained.

SECTION 158 – SOIL EROSION AND SEDIMENT CONTROL AND WATER QUALITY CONTROL

158.03 CONSTRUCTION

158.03.02 SESC Measures

16. Concrete Washout System.

THE FOLLOWING IS ADDED AFTER THE SECOND PARAGRAPH:

The Contractor is advised that this project may require the installation, maintenance, and removal of more than one washout facility to accomplish the work.

158.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE DELETED:

<i>Item</i>	<i>Pay Unit</i>
EROSION CONTROL SEDIMENT REMOVAL	CUBIC YARD

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
INLET FILTER TYPE 2, 2'X4'	UNIT
FLOATING TURBIDITY BARRIER, TYPE 3	LINEAR FOOT
OIL ONLY EMERGENCY SPILL KIT, TYPE 1	UNIT

THE FOLLOWING IS ADDED:

No separate payment will be made for erosion control sediment removal and maintenance of the soil erosion and sediment control measures. All cost thereof shall be included in the unit price bid for the various soil erosion and sediment control items.

The cost of all temporary seeding will be included in the costs bid for the various items of the proposal.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

SECTION 159 – TRAFFIC CONTROL

159.01 DESCRIPTION

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

The maintenance and protection of traffic with minimum interference is of first importance. The Contractor shall provide and maintain to the satisfaction of the Resident Engineer, adequate and safe means of passage of vehicular and pedestrian traffic at all times along Radford Ferry Road to the entrance road for the Manhattan Beach Project. This requirement shall include vehicular (including fire, police and other emergency vehicles and school buses) and pedestrian access to all residences, businesses, schools and public buildings adjoining or affected by the work. Sufficient width shall be provided at driveways to allow safe and convenient turning through them and the outside edges shall be plainly marked as required by the Resident Engineer. To facilitate timely response by emergency personnel, the Contractor shall also provide and maintain to the satisfaction of the Resident Engineer, adequate and safe means of access and egress to the project site and areas of the site where workers may be present.

Unless otherwise indicated herein, the Contractor may be permitted/required to work during nighttime hours as directed or approved by the City. Prior to the start of nighttime operations, a lighting plan shall be submitted for review and approval. The lighting plan shall specify the construction area to be lit, the layout of the lighting units, and the illumination intensity of the lighting system with calculations to show minimum foot-candles. The construction area is defined as the area in which any and all work related to the construction is on-going and is to be performed during the hours of darkness. No nighttime construction shall begin until the City approves the lighting plan in writing.

The Contractor shall notify in writing the Resident Engineer, as well as the City's Fire, Police and First Aid Squads at least 7 days in advance of beginning construction. Such notification shall include the duration of project and a description of the methods to be employed to maintain access as described in this section.

In no case will work commence prior to receipt and approval by the City of the necessary insurance documents.

Before beginning work on any phase of the project, the Contractor shall furnish and install all specified traffic control devices necessary, in the opinion of the Resident Engineer, to protect the public during his/her operations.

All traffic warning signs shall be furnished, erected, and maintained in a suitable manner as determined by the Resident Engineer and shall be maintained so as to provide maximum visibility and legibility.

159.03 PROCEDURE

159.03.01 Traffic Control Coordinator

THE FIRST PARAGRAPH BEFORE THE LIST IS CHANGED TO:

Before starting Work, submit to the RE the name, training, work experience, and contact information of an employee assigned as the on-site Traffic Control Coordinator (TCC). The TCC must be certified as having successfully completed the Rutgers CAIT Traffic Control Coordinator Program, or an equivalent course as approved by the NJDOT Office of Capital Project Safety. The TCC must also successfully complete an approved Traffic Coordinator refresher course every 2 years. The TCC is a full-time position and the employee designated as TCC must be available on a 24 hour a day, 7 days a week basis. The TCC shall have the responsibility for and authority to implement and maintain all traffic operations for the Project on behalf of the Contractor. Ensure that the TCC is present at the work site at all times while the Work is in progress. The TCC's responsibilities and duties shall include the following:

159.03.02 Traffic Control Devices

THE FIRST PARAGRAPH IS CHANGED TO:

Ensure that FHWA category 1, 2, 3, and 4 traffic control devices (TCDs) conform to the requirements of the 2016 Edition of the Manual for Assessing Safety Hardware (MASH), except that TCDs manufactured on or before December 31, 2019 must have been purchased by the Contractor on or before December 31, 2019, and conform to the requirements of NCHRP 350, MASH 2009, or MASH 2016. Provide each device's applicable MASH 2016, MASH 2009, or NCHRP 350 test results and FHWA Eligibility letter, if issued by the FHWA, to the RE. Provide the RE with the purchase date certification for devices not meeting the MASH 2016 requirements upon delivery to the site. Ensure that traffic control devices meet or exceed an acceptable condition as described in the ATSSA guide Quality Standards for Work Zone Traffic Control

Devices. Traffic control devices need not be new but must be in good condition. Provide traffic control devices according to MUTCD.

202. Construction Barrier Curb.

THE SECOND PARAGRAPH IS CHANGED TO:

At least 30 days before delivering construction barrier curb to the Project Limits, provide the RE notice that the barrier curb is available for inspection. Ensure the barrier curb is not stacked for this inspection. The RE will inspect the barrier curb, along with a Contractor representative, to determine what pieces are not approved for delivery to the Project Limits. Final determination of construction barrier approval will be made at the time of placement at the Project.

PART (5) IS CHANGED TO:

5. **Temporary Crash Cushion.** Install inertial barrier systems as specified in 611.03.01. Install temporary compressive crash cushions as specified in 611.03.02. Immediately repair or replace crash cushions that become damaged or become inoperable. Begin repair or replacement of the temporary crash cushion within 1 hour of receiving notice of damage from the Department. Ensure that workers assigned to such repair or replacement work continuously until the temporary crash cushion is repaired or replaced. If the Contractor fails to respond to a damage notification and begin work within 1 hour of notification, or does not continue to work until the temporary crash cushion is repaired or replaced, the Department, will require closure of the adjacent live lane. Lane occupancy charges will be imposed as specified in 108.08 for the period of time the adjacent lane is closed. Should the Department have to respond to a repair with its own forces because of a Contractor's lack of response to a damage notification, the Contractor agrees to pay the Department a sum of \$3,000 for costs of mobilizing its forces and equipment. In addition, the Contractor must pay the Department the actual cost of material used for the repair and pay the actual costs of police traffic protection. Maintain an adequate number of replacement parts to repair damaged units at all times. Keep the areas in front, atop, and around the crash cushions clear of snow accumulation of more than 4 inches in depth.

Upon removal of the crash cushion, cut anchor bolts at least 3 inches below the surface of the surrounding roadway. Repair HMA pavement as specified in 401.03.03. Repair concrete pavement as specified in Section 452.

9. Portable Trailer Mounted CCTV Camera Assembly (PTMCCA).

159.03.08 Traffic Direction

B. Police.

THE SECOND PARAGRAPH PART 2 IS CHANGED TO:

202. Temporary closure of all lanes on state highways and interstates.

159.04 MEASUREMENT AND PAYMENT

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED BY THE FOLLOWING:

<i>Item</i>	<i>Pay Unit</i>
CONSTRUCTION IDENTIFICATION SIGN, 4' X 6'	UNIT

No separate payments will be made for Traffic Control. The costs for Traffic Control shall be included in various bid items provide for on the project.

SECTION 160 – PRICE ADJUSTMENTS

160.03.01 Fuel Price Adjustment

THE FIFTH PARAGRAPH IS CHANGED TO:

The Department will calculate fuel price adjustment on a monthly basis using the following formula:

$$F = (MF - BF) \times G$$

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

Where:

- F = Fuel Price Adjustment
- MF = Monthly Fuel Price Index for work performed from the first day of the month to the last day of the month prior to the estimate cutoff date
- BF = Basic Fuel Price Index
- G = Gallons of Fuel for Price Adjustment

THE SEVENTH PARAGRAPH IS CHANGED TO:

The basic fuel price index is the previous month's fuel price index before receipt of bids. The Department will use the fuel price index for the month before the regular monthly estimate cutoff date as the Monthly Fuel Price Index for work performed in the previous calendar month. If the Monthly Fuel Price Index increases by 50 percent or more over the Basic Fuel Price Index, do not perform any work involving Items listed in Table 160.03.01-1 without written approval from the RE.

160.03.02 Asphalt Price Adjustment

THE THIRD PARAGRAPH IS CHANGED TO:

The Department will calculate the asphalt price adjustment by the following formula:

$$A = (MA - BA) \times T$$

Where:

- A = Asphalt Price Adjustment
- MA = Monthly Asphalt Price Index for work performed from the first day of the month to the last day of the month for the month prior to the estimate cutoff date
- BA = Basic Asphalt Price Index
- T = Tons of New Asphalt Binder¹

1. The Department will determine the weight of asphalt binder for price adjustment by multiplying the percentage of new asphalt binder in the approved job mix formula by the weight of the item containing asphalt binder. If a Hot Mix Asphalt Item has a payment unit other than ton, the Department will apply an appropriate conversion factor to determine the number of tons of asphalt binder used.

THE SIXTH PARAGRAPH IS CHANGED TO:

The basic asphalt price index is the asphalt price index for the month before the opening of bids. The Department will use the asphalt price index for the month before the regular monthly estimate cutoff date as the monthly asphalt price index for work performed in the previous calendar month.

DIVISION 200 – EARTHWORK

SECTION 201 – CLEARING SITE

201.01 DESCRIPTION

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

All Work performed shall comply with the conditions of the MOA. Prior of Contractor's mobilization, the Archaeological Monitor shall perform a site inspection and shall identify items of historical significance and notify RE and Contractor of findings. Prior to disturbing site, Contractor shall salvage, store and protect all items determined by the Archaeological Monitor to be of historical significance. All salvage and site clearing activities and all subsurface excavations shall be observed by and coordinated with the Archaeological Monitor. For the duration of the project, Contractor shall salvage, store and protect all items identified by the Archaeological Monitor to be of historical significance.

This Work shall consist of clearing of the site; installation of monitoring wells in accordance with NJDEP requirements; sealing of abandoned wells in accordance with NJDEP requirements; and the removal of debris and non-contaminated or non-hazardous materials except for items which are to be removed according to the work of other Sections.

Clearing Site shall include the removal of and/or resetting and/or replacement of any fences, pavement, concrete sidewalks, curb, inlets, manholes, pipes, timber piles, timber and steel sheeting, remnants of anchor system of the existing timber/steel sheet pile bulkhead and similar obstructions along the line of work. Clearing Site shall also include the complete removal of all timber and steel sheet pile walls that are in conflict or would be left on the channel side of the proposed bulkhead and whose limits are further defined on the construction plan.

Clearing Site shall also include removal, resetting, relocating, and/or replacement if damaged and item was intended to remain of any signs, fences, pavement, raised pavement markers, concrete slabs, decorative shrubs, sidewalks, walkways, aprons, driveways, curbing, retaining walls, hedges or trees, lawn decorations, minor yard structures, mailboxes or similar obstructions along the line of work. Clearing Site shall also include removal of tree stumps, underbrush, clearing of wooded areas or any unsuitable or undesirable obstructions in the area of work.

Clearing Site shall include the removal of all trees as necessary for the progress of the work unless specifically identified as "To Remain" Trees to remain shall be protected from damage. Trees to be removed will be marked by the RE and no clearing of trees, shrubs and brush shall be started until such marking has been done. All shrubs, brush, and undergrowth within the limits of grading shall be removed whether individually shown on the plans or not.

Any trees trimmed during clearing operations which are deemed in the sole opinion of the Resident Engineer to be substantially damaged shall be removed in their entirety by the Contractor at no additional costs to the City. This shall hold true even in the case when the center of the tree is located beyond the proposed limits of clearing. The Contractor is advised to inspect the site prior to bidding and to include all such costs in the lump sum bid for the item entitled CLEARING SITE.

201.03 CONSTRUCTION

201.03.01 Clearing Site

Remove trees and branches within 15 feet of any overhead wires. If the resulting tree is rendered hazardous, then remove the entire tree according to Section 802.

B. Clearing and Grubbing.

THE FOLLOWING IS ADDED:

If necessary, the contractor shall remove and trim an 18-foot vertical clearance of the trees, reset mailboxes, fire hydrants, signs, and fences.

Remove all excess material from the preparation and grading of the shoulders prior to the placement of Topsoil, Fertilizing and seeding, and Straw mulching or Turf Repair strip.

202. Preservation and Resetting. The contractor shall be required to preserve any existing sprinkler system, signs, posts, conduit, etc. This work shall include any relocating, adjusting the height or anything else needed to restore these items to working condition.

The contractor shall also be responsible for resetting to the proper elevation any utility box, meter, valve, vent, casting, etc. that lies behind the edge of pavement/curb.

201.03.02 Clearing Site, Bridge and Clearing Site, Structure

THE FOLLOWING IS ADDED TO THIS SUBPART:

The Contractor shall anticipate the presence of subsurface piles, mudsills, or remains of previous structures not indicated on the plans which may have to be partially or entirely removed to facilitate construction. No separate payment will be made for this work, and all costs associated with same shall be included in the lump sum bid for the items entitled CLEARING SITE.

No dumping of debris will be permitted in the Raritan River, Raritan Bay or any open waters adjoining the site. Any debris that falls into the water due to the Contractor's operations shall be retrieved and disposed of properly, by the Contractor at his/her expense.

201.03.05 Monitoring Wells

THE FOLLOWING IS ADDED TO THIS SUBPART:

Upon receipt of LSRP approval, seal monitoring wells according to N.J.A.C. 7:9-D et seq.

201.03.06 Sealing Abandoned Wells

THE FOLLOWING IS ADDED TO THIS SUBPART:

Provide a copy of the well abandonment records to the LSRP.

If proposing an alternate method to seal the abandoned wells, obtain written approval from the RE and LSRP.

201.03.07 Demolition

5. Backfilling.

THE FOLLOWING IS ADDED:

All imported fill material must be confirmed and verified with the LSRP as certified as clean fill.

THE FOLLOWING SUBPART IS ADDED:

201.03.10 Disposal of Removed Materials and Debris

The disposal of materials and debris accumulated by clearing site, demolition of structures; excavation; roadways, culverts, pipes and other structures is regulated under the Solid and Hazardous Waste Management Rules (NJSA 13:1 E-1) and is governed by NJAC 7:26 et seq. No separate payment shall be made for the disposal of contaminated non-hazardous or hazardous materials removed under Clearing Site. The disposal of regulated materials is not included under this section, as this work is included in the Pay Items found in Section 202.04.

For this site, the Contractor shall dispose all material and debris found on or above the surface in accordance with the NJDEP regulations. Proper documentation from the disposal facility shall be submitted to the LSRP. At the discretion of the LSRP, soil, sub-soil or objects unearthed, shall be stored in a disposal area found on-site, designated by the LSRP, and tested prior to removal from the site.

201.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

The installation and/or abandonment of Monitoring Wells shall be measured and paid for by the unit. The Contractor shall be responsible for obtaining all well drilling permits. No separate payment will be made for the costs or fees associated with obtaining well drilling permits; the cost thereof shall be included in the unit price bid for the pay item Monitoring Well.

Separate payment will not be made for fees and associated costs required to dispose of the materials removed under Clearing Site. All costs thereof shall be included in the price bid for the Pay Item except that the disposal of regulated materials is not included under this section, as this work is included in the Pay Items found in Section 202.04.

Payment for the item entitled CLEARING SITE will be made periodically as described in Section 109.05 based on the approximate percentage of project completion as determined by the ratio of total payments to date to the original total contract cost of the project.

The City will not make payment for the Pay Item CLEARING SITE in excess of \$250,000.00 until Completion.

SECTION 202 – EXCAVATION

202.01 DESCRIPTION

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

This section describes the work consisting of excavation and removal or relocation of all earth, rock, boulders, brick, stone and concrete masonry, small structures and other materials encountered of whatever nature, required to complete the remediation efforts, exclusive of these materials provided for payment under other items scheduled in the Proposal; the transportation of the excavated materials; the disposal of unsuitable and surplus materials be they unclassified, contaminated non-hazardous, or hazardous; and other work as herein described. This Section shall also include the sawcutting and removal of existing hot mix asphalt, concrete pavement or composite pavement as indicated on the plans or as directed by the RE.

This section also describes environmental remediation work required at the site. All remediation work shall be supervised by the Licensed Site Remediation Professional (LSRP) and shall be conducted in accordance with these specifications. The LSRP is responsible for the oversight of remediation efforts, as necessary to document to the New Jersey Department of Environmental Protection (NJDEP) that the work has been successfully completed. The LSRP shall have the authority to stop work.

This Section also describes the requirements for designing and furnishing groundwater treatment systems, including frac tanks, for the purpose of storing, managing, treating and disposing of contaminated groundwater and the reporting of groundwater management.

The Contractor is required to coordinate with the LSRP regarding all remediation efforts, including the treatment of contaminated groundwater. The Contractor will be responsible for the cost of the loading, transportation and disposal of unclassified, contaminated non-hazardous, or hazardous material. The Contractor will also be responsible for all dewatering and the treatment of contaminated groundwater. The Contractor shall be responsible for the sampling, testing, analysis, waste facility applications and fees or costs associated with environmental remediation.

All work performed shall comply with the conditions of the Memorandum of Agreement (MOA) and all subsurface excavations shall be observed by and coordinated with the Archaeological Monitor.

All work performed on adjoining properties shall be in accordance with the easements provided in Section 107.01.04 and shall be coordinated with the respective property owners.

202.03 CONSTRUCTION

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Excavations shall be shored, braced and sheathed/sheeted as conditions warrant or as otherwise directed by the RE. If the RE is of the opinion that sufficient shoring, sheathing, sheeting, bracing, etc. have not been provided, he/she may direct the Contractor to install additional shoring, sheathing, sheeting, bracing, etc., or otherwise address area of concern, at the expense of the Contractor.

202.03.01 Stripping

THE SECOND PARAGRAPH IS CHANGED TO:

Strip vegetation. Avoid distributing existing subgrade to the greatest extent possible, to avoid encountering historically significant soil strata and artifacts. Stripping shall only be permitted in areas where there is existing vegetation and only to the depth of the root mat. No stripping shall be permitted in areas which are currently bear of vegetation. Confirm the extent of stripping with the RE based on field conditions. Temporarily store in stockpiles, as specified in 202.03.03.B, stripped material including excess that is determined suitable for the future use of the City. The Contractor will sample and analyze stripped material in stockpiles, at the direction of the RE and LSRP, to determine suitability for use as topsoil. Reuse or dispose of unsuitable stripped material as specified in 202.03.03.C.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

202.03.02 Excavation, Test Pit

All excavations shall be performed under the oversight of the Archaeological Monitor. Should historically significant soil strata or artifacts be encountered, refer to Archaeological Monitor Plan for guidance. The Archaeological Monitor shall have the authority to stop work.

202.03.03 Excavation, Unclassified

THE FOLLOWING IS ADDED TO THIS SUBPART:

All excavations shall be performed under the oversight of the Archaeological Monitor. Should historically significant soil strata or artifacts be encountered, refer to Archaeological Monitor Plan for guidance. The Archaeological Monitor shall have the authority to stop work.

The Contractor is advised that in the event an excavation becomes unstable as a result of a lack of adequate drainage, the Contractor will be required to excavate and compact using the directed method as specified in 203.03.02C to the satisfaction of the RE at no cost to the City.

A. Excavating

1. Wet Areas.

THE FOLLOWING IS ADDED:

All pipe and subsurface structures shall be laid on a solid, dry foundation. The Contractor shall furnish all equipment and labor necessary to keep all excavations free from water that is above or below ground. Any pipe laid or subsurface structures constructed in water or wet excavations will be removed and reinstalled at the Contractor's expense.

The Contractor shall provide, maintain and operate such drains, percolation stone, trenches, sumps, pumps, hoses, piping, well-pointing systems, and other related approved means and equipment as may be necessary to keep the excavations free from water during all stages of the construction operations and course of work. The Contractor shall provide such dikes, ditches, sumps and pumping that may also be required to prevent the flow of surface waters into excavated areas and into any and all areas where construction or installation is in progress. All water pumped from the excavation shall be discharged in such a manner as shall not cause injury to completed work, damage to property, health hazards or impediments to traffic.

Water shall be completely removed from all excavations promptly and continuously throughout the progress of the work and the Contractor shall keep excavations absolutely dry at all times until the storm drains have been properly joined and bedded and work completed. Precautions shall be taken to protect uncompleted work from flooding during storms or from other causes.

The Contractor is advised that there are areas of known groundwater contamination and additional areas may also be present. All groundwater shall handled, treated and discharged in accordance with NJDEP regulations.

The Contractor shall be responsible for all permits and fees associated with dewatering activities as well as groundwater treatment, discharge and reporting.

202.03.05 Excavation, Regulated Material (Non-Hazardous and Hazardous)

THIS SUBPART IS DELETED AND REPLACED WITH THE FOLLOWING:

The LSRP is responsible for the monitoring and reporting associated with the remediation. The Contractor is required to coordinate with and assist the LSRP with these efforts, as necessary. The Contractor shall be responsible for all work associated with the remediation, including excavation, sampling, testing, analysis, permits, permit fees, transport, disposal fees, etc.

Regulated material excavation consists of excavation and management of material of whatever nature encountered that is classified as regulated, non-hazardous material or regulated, hazardous material in the NJDEP Solid Waste Regulations, or any material to be excavated pursuant to the applicable NJDEP-regulations or as designated by the LSRP.

There are two (2) areas identified on the plans as requiring environmental remediation, PR-1 and PR-6. These areas are known to contain regulated contaminated, non-hazardous material, based upon previous sampling and analysis events. Handle regulated material according to applicable Federal, State, and local laws, rules, and regulations; and as specified

herein. Dispose of contaminated non-hazardous or hazardous regulated material as specified in 202.03.08 and as authorized by the LSRP.

1. **Pre-Excavation Plans.** Contractor shall prepare and comply with the following plans. If the Contractor fails to follow the pre-excavation plans, the RE and/or LSRP may suspend the Work.

- a. **Site-Specific Health and Safety Program (HASP).** The Contractor shall prepare a Site-Specific HASP in compliance with applicable requirements provided in 29 CFR 1910.120(b)(4) to protect the health and safety of personnel during the sampling, excavation, handling and disposal of contaminated non-hazardous or hazardous site soils. This HASP will also represent the health and safety measures appropriate to adequately protect the public from those work tasks and activities described within the document.

All employees working at the site (such as, but not limited to, equipment operators, general laborers and others) who are or may be exposed to contaminated non-hazardous materials, hazardous materials, health hazards, or safety hazards and their supervisors and management responsible for the site shall receive training meeting the requirements of 29 CFR 1910.120 before they are permitted to engage in activities that could expose them to contaminated non-hazardous and hazardous materials, safety, or health hazards, and they shall receive review training as specified.

The Contractor shall comply with and implement health and safety standards at least as stringent as those found within the Site-Specific HASP.

- b. **Materials Handling Plan.** The Contractor shall, prior to the initiation of any on-site activities, develop a Materials Handling Plan (MHP) for contaminated non-hazardous or hazardous material encountered, moved, and disposed of or recycled during construction. The Contractor shall provide the MHP to the LSRP for review and comments. The Contractor shall revise the MHP as necessary based upon the LSRP's comments. The MHP includes the following:

1. Techniques to be used in managing contaminated non-hazardous or hazardous material to protect adjoining properties and workers and visitors to the Project Limits against exposure to contaminated non-hazardous or hazardous material and to prevent release of contaminated non-hazardous or hazardous material to the environment;
2. Standard operating procedures for excavation, stockpiling, transporting, measurement, and disposal of contaminated non-hazardous or hazardous material;
3. Current receiving facility certification and permits;
4. Qualifications of the A-901 licensed hauler;
5. Proposed routes to receiving facilities and weighing facilities;
6. Waste characterization forms;
7. A sampling and analysis protocol for characterizing the contaminated non-hazardous or hazardous material for off-site disposal. Include the name, address, and telephone number of the contact for the proposed environmental laboratory and the name and experience of the proposed environmental sampling technician. The proposed environmental laboratory and proposed environmental sampling technician are subject to the LSRP's review and approval;
8. Requirements of the receiving facility to accept the contaminated non-hazardous or hazardous material.

Implement the MHP, as approved by the LSRP, at the beginning of excavation. The LSRP shall perform oversight functions as required to confirm the Contractor's adherence with the MHP.

- c. **Spill Prevention, Control, and Countermeasures Plan.** The Contractor shall, prior to the initiation of any on-site activities, develop a Spill Prevention, Control, and Countermeasures (SPCC) Plan describing the methods of preventing discharges of contaminated non-hazardous or hazardous stormwater, ground water, sediments, materials exhibiting a petroleum hydrocarbon-like sheen, or free product during stormwater control, excavation, and dewatering operations. Prepare the SPCC Plan according to Federal, State, and local laws, rules, and regulations relative to contaminated non-hazardous or hazardous discharges. Implement the LSRP approved SPCC Plan before beginning excavation.

Detail methods, personnel, equipment, and reporting requirements on how to manage contaminated non-hazardous or hazardous stormwater, groundwater, sediments, materials exhibiting a petroleum hydrocarbon-like sheen, or free product during stormwater control, excavation, and dewatering operations.

Contaminated non-hazardous or hazardous stormwater, groundwater, sediments, materials exhibiting a petroleum hydrocarbon-like sheen, free product or have otherwise been determined to be contaminated non-hazardous or hazardous shall not be discharged into the environment. Specify methods and equipment for collecting, pumping, treating, monitoring, and disposing of liquids generated by stormwater control. Specify measures to prevent stormwater run-on and runoff and measures for dewatering of excavations, dewatering of sediments, decontaminating personnel and equipment, and storing fuels and chemicals. Include detailed water collection, treatment, monitoring, discharge activities, and reporting requirements. Provide daily construction reports to identify water collection, treatment, monitoring, and discharge activities; personnel and equipment; and relevant quantities. Provide a detailed plan, including the treatment train components, for dewatering in areas of petroleum contamination as specified in 158.03.02.

2. **Excavating.** Excavate contaminated non-hazardous or hazardous material as specified in Section 202.03.03A, as directed by the LSRP.
3. **Temporarily Storing.** If directed by the LSRP, temporarily store contaminated non-hazardous or hazardous material in stockpiles within the Project Limits in a temporary staging area as identified and pre-designated in the MHP. Stockpiles shall be constructed on polyethylene sheeting and contained with haybales or silt fence placed continuously at the perimeter of the stockpiles, unless otherwise directed by the LSRP. The Contractor may sample and analyze materials in-situ for disposal. The materials may then be excavated and placed directly into trucks and hauled directly to the approved disposal facility.

Cover stockpiles with polyethylene sheeting at the conclusion of each workday at a minimum or more frequently as necessary or at the direction of the LSRP. Secure the cover in place at all times. Overlap joints in the polyethylene sheeting a minimum of 12 inches, and place securing materials along the joints. Maintain the cover and replace damaged polyethylene sheeting as needed.

Clean equipment used for the movement of excavated material at the end of each working day or before removing it from the Project Limits. Liquids from cleaning equipment that is being used for managing contaminated non-hazardous regulated material or hazardous regulated material must be containerized, sampled for laboratory analysis if necessary, and disposed off-site at a permitted facility. Install non-vegetative erosion control features to limit the movement of the excavated material from equipment cleaning areas. Temporarily store the excavated material from equipment cleaning in stockpiles.

Dispose of contaminated non-hazardous material within 180 days of being stockpiled as specified in 202.03.08.

Do not reuse hazardous material. Dispose of hazardous material as specified in 202.03.09 within 90 days of the initiation of being stored in stockpiles.

4. **Sampling and Analysis.** Sampling and analysis (testing) will be performed by the by the Contractor and all analytical data will be provided to the LSRP.
5. **Document Control.** Provide the following items:
 - a. **Soil/Sediment Usage Tracking Log.** Complete a tracking log for each working day involving excavation, stockpile, transport, and disposal of contaminated non-hazardous or hazardous material. Monitor and record the following information on the tracking log:
 1. Date
 2. Location maps showing excavation and placement, including depth, of material
 3. Type, volume, and characteristics of contaminated non-hazardous or hazardous material removed
 4. Names and signatures of personnel responsible for preparing and executing the tracking log

Submit copies of daily tracking logs to the RE and LSRP on a weekly basis.

- b. **Materials and Handling Reports.** Submit weekly reports to the RE and LSRP documenting the excavation, stockpiling, sampling, off-site management, and temporary on-site placement of contaminated, non-hazardous regulated material. Indicate the location and dates of excavation, stockpiling, sampling, off-site management, and temporary on-site placement of contaminated non-hazardous material. Hazardous regulated materials, if encountered, are to be direct loaded into trucks or roll-off dumpsters for transport and disposal at a pre-approved permitted facility. Explain changes to or variations from the MHP. Additionally, include dates of planned excavation, sampling, and off-site management of contaminated, non-hazardous, regulated material for the coming months.

A final report documenting the management of contaminated non-hazardous or hazardous regulated material shall be prepared by the Contractor and shall be submitted to the RE and LSRP, for review and acceptance.

- c. **Sampling Logs and Analytical Reports.** The contractor shall provide Sampling Logs and Analytical Reports to the LSRP.
- d. **SPCC Logs.** Maintain a SPCC log for water collection, monitoring, and handling activities, and make the log available to the RE upon request. In the SPCC log, note daily water removal, treatment and discharge volumes, effluent sampling activities and results, discharge or spill incidents, and sampling and reporting activities.
- e. **SPCC Documentation.** SPCC-related information shall be recorded by the Contractor and provided to the LSRP.

The Contractor will coordinate and assist the LSRP in reporting activities as necessary.

202.03.09 Disposal of Regulated Material, Non-Hazardous

THIS SUBPART IS DELETED AND REPLACED WITH THE FOLLOWING:

This subsection describes the requirements for the disposal of contaminated non-hazardous material. This includes all materials of whatever nature encountered that are to be removed from the site that are **not** specifically designated as “hazardous”.

The LSRP is responsible for the monitoring and reporting associated with the remediation. The Contractor is required to coordinate with and assist the LSRP with these efforts. The Contractor will be responsible for the cost of the loading, transportation and disposal of contaminated non-hazardous material as well as all groundwater related activities including dewatering, storage, treatment and disposal. The Contractor will also be responsible for the sampling, testing, analysis, waste facility applications and fees or costs associated with the same.

Load, transport, and dispose of contaminated non-hazardous material that the RE or LSRP determine to be unusable, or unsuitable for the Project according to Federal, State, and local laws, rules, and regulations and as specified in 202.03.03.C.

Perform soil sampling and analyses according to disposal facility requirements and the Site-Specific HASP. Provide a copy of sampling log, chain of custody form, and analytical report to the RE and LSRP. Procedures for sampling should be in accordance with the NJDEP Field Sampling Procedures Manual, NJDEP Technical Requirements for Site Remediation, NJDEP Management of Excavated Soils Guidelines, Appendix 1 of the NJDEP Waste Classification Form, and EPA requirements.

The sampling, testing and analysis, waste facility applications and acceptance documentation shall be performed by the Contractor. Submit to the RE and LSRP all analytical results, a bill of lading, and and/or contaminated non-hazardous manifest, for each truckload of contaminated non-hazardous material removed from the Project Limits. Ensure that the bill of lading and contaminated non-hazardous waste manifest include the following information:

1. Transport SubContractor name, address, permit number, A-901 license number, and telephone number
2. Type and quantity of material removed
3. Weight of vehicle with weigh slip
4. Recycling or disposal facility name, address, permit number, and telephone number
5. Date removed from the Project Limits
6. Signature of transport vehicle operator

The RE will sign the bills of lading/contaminated non-hazardous waste manifests for the City as the generator. Submit 1 copy of the bill of lading/contaminated non-hazardous waste manifest to the LSRP or RE by the end of each working day that the transport vehicle leaves the site.

The A-901 licensed hauler shall transport the contaminated non-hazardous material to the disposal/recycling facility with no unauthorized stops in between, except as required by regulatory authority. The hauler shall use appropriate vehicles and operating practices to prevent spillage or leakage from occurring during transport. Remove excess soil adhering to the wheels or under carriage of the vehicles before leaving the Project Limits. If soil or water escapes to the public roads, immediately clean the road to restore it to the original condition and immediately notify the RE, and LSRP, and the NJDEP at 1-877-WARNDEP (927-6337). Do not transport contaminated non-hazardous material over public roads if they contain free liquid or are sufficiently wet to be potentially flowable during transport.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

Submit one (1) copy of the documentation of the disposal facility's acceptance of the regulated, non-hazardous material, including the weight ticket slips, to the Engineer, LSRP and the County of origin within fifteen (15) days of acceptance at the disposal facility.

Immediately submit written notification to the RE and LSRP if problems arise, regarding the facility chosen to accept the contaminated non-hazardous material for off-site management, that would require the return of waste, or if the chosen facility has violated any environmental regulation that may result in regulatory enforcement action. Coordinate with the LSRP to locate an alternate disposal facility and obtain the Engineer's written approval of off-site management at such facility.

202.03.10 Disposal of Regulated Material, Hazardous

THIS SUBPART IS DELETED AND REPLACED WITH THE FOLLOWING:

This subsection describes the requirements for the disposal of hazardous material. This includes all materials of whatever nature encountered that are to be removed from the site that are specifically designated as "hazardous" pursuant to United States Environmental Protection Agency (EPA) and/or NJDEP regulations.

The LSRP is responsible for the monitoring and reporting associated with the remediation. The Contractor is required to coordinate with the LSRP. The Contractor will be responsible for the cost of the loading, transportation, and disposal of hazardous material as well as all groundwater related activities including dewatering, storage, treatment and disposal. The Contractor will also be responsible for the sampling, testing, analysis, waste facility applications and fees or costs associated with the same.

Load, transport, and dispose of hazardous material for the Project according to Federal, State, and local laws, rules, and regulations and as specified in 202.03.03.C2 and as authorized by the LSRP.

Submit to the RE and LSRP a bill of lading/hazardous waste manifest for each truckload of hazardous material removed from the Project Limits.

For each truckload of hazardous material removed from the Project Limits, submit to the RE a legible bill of lading and a legible hazardous waste manifest that include the following information:

1. Transport SubContractor name, address, EPA Transporter ID number, A-901 license number, and telephone number
2. Type and quantity of material removed
3. Weight of vehicle with weigh slip
4. Recycling or disposal facility name, address, permit number, and telephone number
5. Date removed from the Project Limits
6. Signature of transport vehicle operator
7. Waste manifest tracking number

The RE will sign the manifest as the generator and will forward questions or concerns to the Bureau of Environmental Program Resources for resolution. The manifest will verify the type and quantity of hazardous regulated material being transported off-site.

The Uniform Hazardous Waste Manifests are required by the Federal Resource Conservation and Recovery Act (RCRA) Code of Federal Regulations (CFR) 40 CFR Subchapter I, Parts 262.20 to 262.23) and N.J.A.C 7:26G-Subchapter 7 for all off-site shipments of hazardous materials. The City is the generator of the waste.

The A-901 licensed hauler shall transport the hazardous regulated material to the disposal/recycling facility with no unauthorized stops in between, except as required by regulatory authority. The hauler shall use appropriate vehicles and operating practices to prevent spillage or leakage from occurring during transport. Remove excess soil adhering to the wheels or under carriage of the vehicles before leaving the Project Limits. If soil or water escapes to the public roads, immediately clean the road to restore it to the original condition and immediately notify the RE and LSRP. Do not transport hazardous material over public roads if they contain free liquid or are sufficiently wet to be potentially flowable during transport.

Immediately submit written notification to the RE and LSRP if problems arise, regarding the facility chosen to accept the hazardous material for off-site management, that would require the return of waste, or if the chosen facility has violated any environmental regulation that may result in regulatory enforcement action. Coordinate with the LSRP to locate an alternate disposal facility and obtain the RE's written approval of off-site management at such facility.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

The Contractor will be responsible for and the LSRP will oversee the following activities as necessary:

- Completion of the manifest form in accordance with all applicable regulations and mail to the Bureau of Environmental Program Resources at 951 Parkway Avenue, PO Box 600, Trenton, NJ 08625-0600 to ensure that the “final disposition” (RCRA Treatment, Storage, and Disposal (TSD) facility to Generator) copy of the manifest is mailed back to the office responsible for the record keeping requirements.

The LSRP will keep a copy of the manifest form returned from the RCRA TSD for the Contract files. The Bureau of Environmental Program Resources will distribute the original manifests in accordance with the regulations and also for retention of the manifests per regulatory requirements.

Submit 1 copy of the documentation of the disposal facility's acceptance of the hazardous regulated material, including the weight ticket slips, to the LSRP and RE and the county of origin within 15 days of acceptance at the disposal facility.

THE FOLLOWING SUBPARTS ARE ADDED:

202.03.12 Reuse or Disposal of Excess Material (Non-contaminated or non-hazardous)

The LSRP is responsible for observing and monitoring the sampling and testing performed by the Contractor and for the NJDEP reporting associated with the remediation. The Contractor is required to coordinate with and assist the LSRP with these efforts as necessary. The Contractor will be responsible for the cost of the loading, transportation, waste facility applications and disposal of contaminated non-hazardous or hazardous material. The Contractor shall also be responsible for any sampling, testing and analysis that is required to classify excavated materials.

- A. Reuse.** It is intended that Regulated, Non-Hazardous materials excavated from within the limits of Areas PR-1 and PR-6 be disposed of off-site in accordance with 202.03.09. The Contractor may reuse non-contaminated or Regulated, Non-Hazardous material excavated from outside the limits of Areas PR-1 and PR-6, if the requirements specified in 901.11 are met, to construct Items requiring soil aggregates. Submit written notification to and receive authorization from the LSRP and RE at least 15 days before reuse.

If approved by the LSRP, the Contractor may reuse broken concrete, HMA pieces, and millings in the lower portion of I-14 soil aggregate. Spread out pieces in layers, with the pieces lying flat and not arching, with spaces between the pieces filled with soil. Use pieces with a maximum individual size of 2 cubic feet, with a 2-foot maximum dimension on any side. Do not place the broken concrete, HMA pieces and milling within 2 feet of the final subgrade, less than 2 feet above the highest seasonal high ground water table or within 2 feet of any underground utility. Compact material using the directed method as specified in 203.03.02.C.

Dispose of excavated material that will not be reused as specified in 202.03.03.C2.

- B. Disposal.** Dispose of excess contaminated non-hazardous or hazardous material as specified in 202.03.03.C2 as authorized by the LSRP.

Dispose of excess Acid Producing Soils (APS) at approved landfills according to applicable Federal, State, and local laws, rules, and regulations. For excavation not designated as contaminated non-hazardous or hazardous material or APS, provide the following before removing the excess excavation material from the Project Limits:

1. At least 10 days before disposing, submit the disposal procedure and location to the RE and LSRP for approval. Do not dispose of excavation on property proposed to be or used for parks, playgrounds, and other recreational purposes; educational facilities; environmentally sensitive areas such as wetlands; historic sites; or within sight of a State highway during all seasons.
2. Obtain the property owner's notarized authorization of the acceptance of the excess material and where it is being placed.

Once material leaves the Project Limits, having received authorization from the LSRP, the Contractor is responsible for ensuring that the handling procedures, placement method, and disposal location are according to applicable Federal, State, and local laws, rules, and requirements, including permits that may be issued for the Project. If the disposal of excess material results in a violation notice from any governmental authority, immediately correct the violation. Indemnify and defend the City for any violation incurred, penalty assessed, or any claims, suits, losses, demands or damages of whatever kind or nature arising out of, or claimed to arise out of, the improper disposal of excess materials.

If the Contractor does not correct the violation to the satisfaction of the governmental authority that issued the violation notice, the Contractor is responsible for assessed penalties including costs incurred by the City to remedy the violations.

Dispose of other material or debris as specified in 201.03.03.C2.

202.03.13 Treatment, Operations, and Reporting of Groundwater Management

All groundwater encountered during excavation activities (dewatering operations) must be properly treated before being discharged to a surface water body. The Contractor shall be responsible for the design, operation and de-contamination of the treatment system in accordance with applicable requirements. The Contractor shall also be responsible for obtaining all necessary permits and for performing the work in accordance with the permit requirements. Establish a Pollution Prevention and Control Plan as specified in 202.03.05.1C prior to any excavation, dewatering, and groundwater treatment. The Contractor will obtain the New Jersey Pollutant Discharge Elimination System (NJPDES) Permit (General Groundwater Remediation Clean-Up Permit Authorization – Non-Petroleum Product Cleanup or Category B4B – General Groundwater Petroleum Product Cleanup) for a surface water discharge of treated groundwater and Treatment Works Approval (TWA) permits, and any other required permits, for the discharge of treated groundwater. If the Contractor proposes to discharge treated groundwater back to the ground, then the Contractor must obtain an NJDEP Site Remediation and Waste Management Program (SRWMP) Discharge to Groundwater Permit-By-Rule Authorization. Implement a groundwater treatment system with a design in accordance with the TWA permit and effluent parameters in accordance with the NJPDES BGR. Groundwater treatment system includes, but is not limited to, frac-tank(s), an oil-water separator, liquid phase granular activated carbon, and multi-bag filters for sediment removal. Provide a licensed water supply and wastewater treatment operator, who will be responsible for operation and maintenance (O&M) and sampling of groundwater treatment system effluent and the preparation of monthly discharge monitoring reports (DMR) to be submitted to the NJDEP in accordance with the NJPDES for discharge to a surface water body.

In accordance with the terms and conditions of the NJDEP TWA permit issued to the contractor, upon closure of the ground water treatment system, a Certification of Completion must be signed by the Permittee (Contractor) that the treatment works has been inspected and tested under the supervision of a New Jersey-licensed professional engineer. This work shall be performed within the specified period. Provide three copies of a letter to the RE and LSRP, signed and sealed by a New Jersey-licensed professional engineer, referencing the permit number, name of the permittee, location of the treatment works. This/These letters shall be submitted for each treatment system and for each mobilization of the treatment system.

202.03.14 Frac Tank

The Contractor shall be responsible for the design, operation and de-contamination of the groundwater treatment system in accordance with applicable requirements. Contractor shall determine Frac Tank requirements (capacities) and staging locations. Pump all groundwater temporarily stored in Frac Tank(s) into the nearby treatment system before discharging to a surface water body in accordance with any NJPDES BGR. When no longer needed for temporary storage, coordinate servicing, emptying/cleaning, and removal of Frac Tank(s).

Empty the tank(s) of contaminated groundwater and clean tank(s) of all contaminated sediments by a qualified cleaning company. Certify tank(s) as clean prior to removal from the site.

Dispose sediments removed from the Frac Tank(s) at an approved disposal facility.

202.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
TREATMENT, OPERATIONS AND REPORTING OF GROUNDWATER MANAGEMENT	LUMP SUM

THE EIGHTH PARAGRAPH IS DELETED AND REPLACED AS FOLLOWS:

The City will not measure nor make payment for temporary seeding. The cost thereof shall be included in the unit price bid for CLEARING SITE.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

THE FOLLOWING IS ADDED:

The Lump Sum bid price for TREATMENT, OPERATIONS AND REPORTING OF GROUNDWATER MANAGEMENT shall include the design, furnishing, operation and de-contamination of dewatering and groundwater treatment systems. No additional payments will be made for dewatering or frac tanks.

No separate payment shall be made for saw cutting. The cost thereof shall be included in the unit price bid for EXCAVATION, UNCLASSIFIED.

The item entitled REMOVAL OF PAVEMENT is deleted and the City will not measure or make payment for this item. The cost thereof shall be included in the unit price bid for EXCAVATION, UNCLASSIFIED.

No separate payment shall be made for the cost of construction from material excavated, reused, or concrete rubblized from the Project. The cost therefore shall be included in the unit price bid for EXCAVATION, UNCLASSIFIED.

EXCAVATION, UNCLASSIFIED shall include all costs associated with the excavation of the existing stockpiles on Block 161.02, Lot 25.08, as well as any other excavations required on the project, and reuse of materials as I-14 Soil Aggregate. The quantity of imported I-14 Soil Aggregate required for the project has been reduced by the quantity of material to be generated by excavations at the project site.

The cost for EXCAVATION, UNCLASSIFIED shall include the costs associated with the use of excavated materials on the project. This work shall include placing and compacting or disposal of materials. It is anticipated that excavated materials will be utilized within the proposed surcharge stockpile associated with site preparation activities. No separate payment will be made for excavation and re-location of the soils used to construct the surcharge stockpile. All costs associated with these activities are to be included in the cost for EXCAVATION, UNCLASSIFIED. The measurement of the volume to be paid under the item EXCAVATION, UNCLASSIFIED shall be based on the initial excavation only, based on the site conditions at the commencement of construction. Payment for EXCAVATION, UNCLASSIFIED shall be made as follows: 65% upon initial excavation and placement, including compaction, on-site and 35% upon completion of all earthwork activities associated with attaining subgrade elevations below coarse aggregate and topsoil. No payment will be made for materials placed in uncompacted stockpiles.

No separate payment shall be made for excavation and backfill for subsurface structures, shoring, sheathing, bracing, etc., or for dewatering. All costs for same shall be included in unit prices bid for the various subsurface structure and pipe items.

The item entitled STRIPPING is deleted and the City will not measure or make payment for this item. The cost thereof shall be included in the unit price bid for CLEARING SITE.

The RE will be responsible for measuring of pay items for the purpose of calculating payment. The RE will coordinate with the LSRP to maintain accurate records of all materials excavated.

Excavation of the various kinds will be measured by the cubic yard. In computing volumes of excavation, the average end area method is used.

Excavation for Test Pits will be measured by the cubic yard.

Disposal of Regulated Material, Non-Hazardous and Regulated Material, Hazardous will be measured by the ton. The Contractor will be responsible for the cost of the loading, transportation and disposal of Regulated Material and Regulated Material, Hazardous. The Contractor will also be responsible for the sampling, testing, waste facility applications and fees or costs associated with the same.

No separate payment will be made for the disposal or relocation of unclassified materials. The cost thereof shall be included in the unit price bid for the pay item Excavation, Unclassified.

At the discretion of the RE, material specified to be measured by the cubic yard may be weighed and such weights converted to cubic yards for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by laboratory analysis of random samples.

Separate payment will be made for the backfilling of all excavations with materials and methods as specified in Section 203 - Embankment.

THE FOLLOWING SECTION IS ADDED:

SECTION 202A – DREDGING

202A.01 DESCRIPTION

This section describes the requirements for performing mechanical dredging in areas designated, the mixing of dredge materials with cement to create a Processed Dredged Material (PDM), curing and transportation of PDM, and the placement and compaction of PDM on the project site in areas designated to receive I-14 Soil Aggregate. The Contractor shall propose the area where PDM will be placed to RE, for approval.

The work to be performed under this section consists of providing all materials, plant, labor, equipment and services to perform the work described. The Contractor will be solely responsible for compliance with all permits and requirements for dredging, dewatering, processing, transportation, offloading and placement and compaction of the dredge material, as well as for providing all required Coast Guard notifications and obtaining any additional permits which may be desired to facilitate his work.

This work requires the presence of the Archeological Monitor as identified in the project archeological monitoring plan.

This work is subject to scheduling restrictions associated with in-water activities. Refer to the current New Jersey Department of Environmental Protection (NJDEP) Waterfront Development Permit and Water Quality Certificate (WQC) and Army Corps Permit for conditions and restrictions of work. This work must be performed between the period of July 1st to December 31st.

202A.02 MATERIALS

202A.02.01 Materials

Sampling and testing of the sediment to be dredged were conducted by the French and Parrello. Refer to Appendix D for available sampling and testing results. Interpretation of the information provided shall be at the Contractor’s discretion and risk.

Portland Cement 903.01

Dredged material from this project shall be processed using a minimum of 8% Portland Cement on barges/scows prior to placement on-site. The method of mixing shall be proposed by the Contractor and approved by the RE.

PDM Bench Scale Testing. The Contractor shall conduct laboratory bench scale testing prior to full-scale field implementation of work to determine the type and ratio of the additive(s) needed to meet the project specific PDM performance characteristics. The additive(s) must solidify the dredged material enough to facilitate the transportation, handling and placement of the PDM. At a minimum, for the additives proposed, the Contractor shall provide laboratory test results indicating.

1. Moisture Content at Time of Compaction
2. Maximum Dry Density and Optimum Moisture Content
3. CBR Test Results
4. Unconfined Compression Test Results

PDM Physical Property Requirements. The PDM shall meet the following minimum requirements:

PDM Preparation		
	Test Method	Range
Moisture	ASTM D4959	< 50%
Particle Size	ASTM D6913	< 4 inch

PDM Placement		
	Test Method	Range
CBR	ASTM D1883	> 10
Strength	ASTM D2850 ASTM D3080 ASTM D4767	> 2,000 psf
Density	ASTM D1557	95%
Trafficability	Not Applicable	72 hours

202A02.02 Equipment

The contractor must employ a minimum complement of plant (dredges and scows, plus mixing, unloading, transportation, placement and compaction equipment) on the project such that the average daily production indicated in the approved project schedule and work plans is achieved.

Measure and report the capacity of the dredging plant operations to the RE for project schedule review and revise schedule projections based on the actual production of the work performed.

- A. Noise Control** – Provide all equipment, dredge/barges, boats, and tugs used on this work with satisfactory mufflers or other noise abatement devices. Conduct operations to comply with all federal, state, and local laws pertaining to noise. Minimize the use of horns and whistle signals to absolute necessity in order to perform as quiet an operation as possible.
- B. Site Access** - Construct access routes and operational areas between the access road and staging area as needed support dewatering and processing operations. Existing bulkheads are known to be in poor condition. Contractor to evaluate stability of ground in areas of proposed operations. The contractor shall carefully evaluate the project site constraints when determining the appropriate means and methods for dredging, dewatering, processing, transporting and placing dredged materials.

202A.03 CONSTRUCTION

202A.03.1 Method of Dredging

Only MECHANICAL dredging employing a clamshell is allowed under this contract. No hydraulic dredging is permitted. Dredging shall be performed under the oversight of the Archaeological Monitor.

Excavate all dredged material within the channel to the required depth and transport to the Dredged Material Dewatering site as shown on the working drawings. Submit daily production information on dredging progress to RE no later than 11:00 AM the following day. Furnish additional equipment for removal of trash and debris such as a barge mounted crane or excavator to remove and transport materials to an approved offsite disposal site. Do not place or store trash, debris or similar materials at project site.

The dredge shall be operated so as to control the rate of descent of the bucket so as to maximize the vertical cut of the clamshell bucket while not penetrating the sediment beyond the vertical dimension of the open bucket (i.e. overfilling the bucket). This will reduce the amount of free water in the dredged material, will avoid overfilling the bucket, and minimize the number of dredge bucket cycles needed to complete the dredging contract.

The closed clamshell environmental bucket shall be lifted slowly through the water, at a rate of 2 feet per second or less. Dredged material shall be placed into the barge in a manner that prevents spillage of the material overboard. The discharge (i.e. "overflow") of water from the barge/scow into which dredged material is placed is prohibited.

All barges or scows used to hold, or transport, dredged material shall be of solid hull construction or be sealed with concrete. The gunwales of the dredge scows shall not be rinsed or hosed during dredging except to the extent necessary to ensure the safety of workers maneuvering on the dredge scows. All decant water holding scows shall be watertight and of

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

solid hull construction. Ensure that no leaks, overflow, scupper discharge or other means allows dredged material to enter the water during the transport process.

Decant water from this project may only be discharged into the channel from where the dredged material originated, in close proximity to the dredging contract area. Discharge to another receiving waterbody requires prior approval from the City and may require a New Jersey Discharge Pollutant Elimination System/Discharge to Surface Water (NJDPES/DSW) permit. All water shall be held in the decant holding scow a minimum of 24 hours after the last addition of water to the scow. The decant water may only be discharged after this 24-hour retention period. During pumping of the decant water from the holding scow, great care shall be taken to avoid re-suspending or pumping sediment which has settled in the decant holding scow.

202A.03.02 Continuity of Work

Sequence the dredging such that the channel depth is completed in a continuous manner. Leave no shoals or obstructions that block the continuity of the work completed at any time during the project. Do not change the approved sequence of dredging in the work plan without the written approval of the RE.

202A.03.03 Pumping of Bilges

Do not pump or release oil or bilge water containing oil into any waterway. Pumping of oil or bilge water containing oil into a navigable water, or into areas which would permit the oil to flow into such water, is prohibited by Section 13 of the River and Harbor Act of 1899, approved March 3, 1899 (30 Stat. 1152, 33 U.S.C. 407). Violation of this prohibition is subject to the penalties under the referenced Acts.

202A.03.04 Historically Significant Artifacts

If any artifacts or other objects having scientific or historical value, or are of interest to the public, are discovered, located and/or recovered, or struck, immediately notify the Archaeological Monitor and RE. The Contractor acknowledges that the site(s), articles, or other materials are the property of the State of New Jersey.

202A.03.05 Fuel Oil Transfer-Operations

Perform fuel oil transfer operations in accordance with U.S. Coast Guard regulations (33 CFR 156.120).

202A.03.06 Signal Lights

Display signal lights and conduct operations in accordance with the General Regulations of the Department of the Army and of the US Coast Guard governing lights and day signals to be displayed; vessels working on wrecks, dredges and vessels engaged in laying cables or pipe or in submarine or bank protection operations, lights to be displayed on dredge pipelines, and day signals to be displayed by vessels of more than 65 feet in length moored or anchored in a fairway or channel, and the passing of other vessels of floating plant working in navigable channels, as set forth in Commandant US Coast Guard Instruction M16672.2, Navigation Rules: International – Inland (COMDTINST M 16672.2) or 33 CFR 81 Appendix A (International) and 33 CFR 84 through 89 (Inland), as applicable.

202A.03.07 Inspection

Furnish the use of such boats, boatman, laborers, and material forming a part of the ordinary and usual equipment and crew of the dredging plant as may be necessary to allow for the proper inspection and supervision of the work by crew and RE. Provide a means of marine transportation from all points on shore designated by the RE to and from the Contractor's operations and dredge area.

202A.03.08 Notification of the U S Coast Guard and NJDEP Bureau of Coastal Engineering

- 1. Navigation Aids** - Do not remove, change the location, obstruct, willfully damage, make fast to, or interfere with any aid to navigation. Only the U S Coast Guard or Bureau of Coastal Engineering is permitted to remove navigation aids located within or near the areas required to be dredged in advance of dredging operations.

2. **Dredging Aids** - Obtain approval from the U S Coast Guard for all buoys, dredging aid markers to be placed in the water, and dredging aid markers affixed with a light prior to the installation. Do not color or place dredging aid markers and lights in a manner that they will obstruct or be confused with navigation aids.

202A.03.09 Work Area

Exclude the public from the work areas in the immediate vicinity of dredging, processing, transporting, and placement operations. Coordinate with local boating, commercial fishing interests, municipalities and/or other interested parties to affect suitable arrangements for maintenance of marine or other traffic during the dredging operations. Should restricted access enforcement assistance be required, coordinate with local enforcement agencies. Take measures to exclude the public from active work areas.

1. **Access** - Access to the dredge area is by water only. Provide safe, well-lighted, 24-hour, access to the dredge for employees as needed and for personnel as requested by the RE. Obtain all necessary permission for use of landing areas to load and offload crews and supplies.

Provide and maintain safe access necessary for equipment and plant to and from the work site, mooring area, and disposal area. Ascertain the environmental conditions that can affect the access such as climate, winds, current, waves, depths, shoaling, and scouring tendencies.

2. **Protection of Existing Waterways** - Conduct operations in such a manner that material or other debris are not placed outside of dredging limits or otherwise deposited in existing side channels, the South Amboy Reach, or other areas being utilized by vessels. Promptly remove and properly dispose of any bottom material or other debris placed into areas described above because of the work.

202A.03.10 Utility Crossing

Verify the locations and depths of any utility crossings and take precautions against damages which might result from its operations, especially the bucket and the sinking of dredge spuds and/or anchors into the channel bottom. If any damage occurs as a result of its operations, suspend dredging until the damage is repaired. Costs for repair of the damaged utilities and downtime of the dredge and attendant plant are not compensable and are the responsibility of the Contractor.

Refer to the NJDOT Standard Specifications for Road and Bridge Construction 2019 - Section 105.07 for notification requirements and procedures for determining the location of existing utilities.

202A.03.11 Dredge Pipelines

THIS SECTION IS NOT APPLICABLE.

202A.03.12 Dredge Template

Project Depth - Payment will be made for the material actually removed to the template lines and widths to a required depth and material within an over depth tolerance (measured vertically) of one (1) foot below the required dredging template for the dredging of channels as shown on the Plans.

Side Slopes - Material actually removed, within the limits approved by the RE, to provide for final side slopes not flatter than that shown on the contract plans, but not in excess of the amount originally lying above this limiting side slope, will be measured in accordance with the provisions contained in Section 202A.04.

Excessive Dredging – Materials taken from beyond the limits as described above under Project Depth and Side Slopes, are deducted from the total amount dredged as excessive over depth dredging, or excessive side slope dredging, and payment will not be made, therefore. Limit the excavation area as shown on the plans. The Contractor is solely responsible for any penalties or fines due to permit violations which may arise from over-excavation, or excavation beyond the limits of dredging shown on the plans. Nothing herein is to prevent payment for the removal of shoals identified by the RE.

Position Monitoring – Limit the excavation area as shown on the plans. The Contractor is solely responsible for any penalties or fines due to permit violations which may arise from over-excavation, or excavation beyond the limits of dredging shown on the plans.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

Misplaced Material - Remove and redeposit any material placed elsewhere than in designated or approved places, where directed by the RE. Should the material be allowed to remain in place as misplaced material, the quantity of the misplaced material will be deducted from the contract quantity eligible for payment.

202A.03.13 Dredged Material Dewatering Site Preparation

THIS SECTION IS NOT APPLICABLE.

202A.03.14 Processed of Dredged Material

The raw dredged material shall be processed for beneficial reuse and placed as subbase material beneath the proposed roadways and parking lots on the project site, as specified on the contract drawings. Solidification/stabilization shall be accomplished by the addition of Portland Cement to dredged material in a predetermined ratio (minimum of 8% per the approved NJDEP permit) based on volume (in-scow processing) of the dredged material. The contractor shall perform any sampling and bench testing in accordance with Section 202A.02.01. prior to mobilization.

Following the minimum 24-hour holding period after dredging, standing water shall be pumped from the scow into a nearby decant scow, or discharged to the receiving water if allowed by the NJPDES permit. Following the dewatering phase, debris shall be removed using a rake mounted on a hydraulic excavator to remove wire, cable, etc. that could damage equipment/mixing head.

To determine the appropriate ratio of additives to introduce, a volumetric estimate of the dredged material in the scow shall be performed. A minimum of 8% cement by volume shall be mixed with the dredged material per the NJDEP permit. To minimize fugitive dust when placing dry cement, the cement shall be misted during the addition process. A mixing head shall be deployed using a long reach excavator, or other suitable method, to incorporate cement with the dredged material.

Once the mixing is completed, the PDM shall remain in the scow as necessary to cure, but for no more than 24 hours. After initial curing, the PDM shall be either stockpiled or taken directly to the placement site. Curing times shall be determined by the Contractor based on moisture, temperature and weather conditions. Storage of PDM shall be avoided unless necessitated by weather or considerations at the placement site. PDM shall be placed at the final designated location within two to three days of mixing and not be disturbed. Double handling of PDM should be avoided whenever possible. The Contractor shall endeavor to place and compact the PDM as rapidly as possible to obtain the best geotechnical properties.

A spill plate shall be placed between the barge and the upland property during the off-loading of material on the upland property. The spill plate shall be maintained during the entire off-loading operation at this site.

202A.03.14.01 Materials

THIS SECTION IS NOT APPLICABLE.

202A.03.14.02 Quality Control

1. **Quality Control Project Plan** - The Contractor shall develop and implement a Quality Control Project Plan prior to initiation of the work. The Quality Control Project Plan shall include frequency of testing, dredge material processing procedures, type and source of amendments, and PDM placement procedures, locations, depths, and acceptability criteria. The Quality Control Project Plan shall include contingencies for failure to meet the criteria for engineering properties or performance specified herein.

- a. **Dredging Operation (Barge) Level and Processing Operations Quality Control Checks.**

Quality Control tests shall be performed for each barge-load of dredged material (approximately 3,000 cubic yards) to manage the in-barge settling of the dredged material and decanting of the supernatant water and verify/modify the PDM amendments prior to processing to meet required performance criteria.

The dredged material decanting procedure used, the time required for decanting, and the discharge point for the supernatant water shall be recorded for each barge. The dredged material settling time (24 hours

or greater) shall be recorded. When directed by the RE, samples of the supernatant water and testing for suspended sediment levels shall be provided by the Contractor.

Debris shall be removed from the barges prior to processing. The time to remove debris and the nature of the debris shall be recorded. If unusually large amounts of undersized debris remain in the material, the RE shall be notified.

Water content of dredge material shall be determined after the decanting process is completed. The weight of the dredged material shall be determined by a volume survey for in-scow processing.

b. Post-Processing, Truckload, and Stockpile Quality Control Checks

The curing time at the processing location shall be recorded. Any post-processing moisture conditioning or mixing performed at the processing location shall be recorded. PDM shall be inspected for free water, debris, and heterogeneity which may warrant rejection and reprocessing of the PDM or require a longer curing period.

Each truckload of PDM shall be weighted prior to on-site stockpiling and/or transportation to the placement site. The time of stockpiling and its purpose (awaiting placement approval, sequencing, moisture condition, etc.) and any shaping/grading or covering method employed to avoid moisture gain shall be recorded. Geotechnical tests of the stockpiled PDM may be required by the RE to verify the PDM meets the performance requirements.

For stockpile periods of more than two weeks, or in periods of excessive rain or snow, the PDM shall be re-tested and its moisture content recorded prior to placement.

c. Placement (Lift) Quality Control Checks

Quality Control Checks shall be performed for every lift of PDM placed at the project site, as specified on the contract drawings, following compaction, and prior to placing a subsequent lift or covering the PDM. Elevation markers should be used to ensure the proper lift height is achieved. The moisture content shall be verified to allow proper compaction and any oversize debris should be removed.

The compaction procedure (equipment and time) shall be recorded, and the in-situ density tested to verify that it meets the project specifications below. If testing results do not meet project requirements, the PDM lift shall be re-compacted and/or moisture conditioned as necessary to achieve proper compaction.

The source, volume and placement location of all PDM on the project site shall be document. Mixing sources of PDM for each lift should be avoided if possible.

d. Qualifications of Site Managers

Operators and placement site managers assigned the project shall have prior experience processing and placing PDM, and/or be properly trained for successful processing and placement of PDM.

e. Contingency Planning

Laboratory data shall be carefully reviewed to determine the dredged material and bench-scale PDM performance as compared to the permit requirements and the placement site criteria. Adjustments shall be made to the processing procedures to ensure that marginally acceptable material do not impact either the dredging operation or beneficial reuse for the project. If quality control checks reveal a batch (or batches) do not meet geotechnical specifications, the material shall be either held, or blended as necessary to meet the specifications.

2. Processed Dredged Material (PDM) Testing Requirements. The PDM shall meet the following minimum requirements for the project:

PDM Preparation			
	Test Method	Range	Frequency
Moisture	ASTM D4959	< 50%	3,000 cubic yards
Particle Size	ASTM D6913	< 4 inch	3,000 cubic yards

PDM Placement			
	Test Method	Range	Frequency
CBR	ASTM D1883	> 10	3,000 cubic yards
Strength	ASTM D2850 ASTM D3080 ASTM D4767	> 2,000 psf	3,000 cubic yards
Density	ASTM D1557	95%	10,000 square feet
Trafficability	Not Applicable	72 hours	3,000 cubic yards

202A.04 Measurement and Payment

The City will measure and make payment for Items as follows:

<i>Item</i>	<i>Pay Unit</i>
DREDGING, PROCESSING, TRANSPORT AND PLACEMENT	CUBIC YARD

DREDGING, TRANSPORT AND PLACEMENT will be measured based on the volume of sediment dredged as measured by before dredge and after dredge surveys. No separate measurement will be made for the dewatering equipment, cement additive, mixing equipment or other items necessary to dewater and mix cement and other required additives with the dredged material to facilitate dewatering, processing, and placement of the dredged material.

The total amount of material dredged, transported, and placed in the designated placement sites and to be paid for under the respective pay items is measured by the cubic yard (CY) in place by computing the volume between the bottom surface shown by the soundings of the last survey performed immediately before dredging and the bottom surface shown by the soundings of an after-dredge survey made as soon as practicable after dredging has been completed for the project minus any amount dredged outside the design template including allowable tolerances specified in Section 202A.03.12.

Division of the project into channel segments for purposes of after dredging surveys and payment quantity calculations and the timing of after dredging surveys will be as determined by the RE.

The City will perform the immediate before and an after dredging survey within each RE approved channel segment in accordance with the requirements of Section 202A.04 Dredge Quantity Surveys, of these Special Provisions. The City will compute the volume removed and paid for under this portion of the contract by using the average end area method.

Dredge Quantity Surveys

The before dredging (BD) and after dredging (AD) hydrographic surveys are required for payment and for final acceptance of the project and only one AD survey per RE approved channel segment will be performed by the City. BD and AD quantity surveys will be conducted by the City, and the City will utilize the data derived from these surveys in computing the quantities of work performed and the actual construction completed and in place. Surveys will be performed according to the guidelines in the latest edition of the U.S. Army Corps of Engineers Engineering Manual (EM) 1110-2-1003 entitled “HYDROGRAPHIC SURVEYING for shallow draft channels. The RE will review the AD survey data to determine if the dredging performed by the Contractor is in accordance with the proposed lines and grades shown on the plans. If the RE determines that the dredging does not conform to the plans, take corrective measures, and perform the work necessary to remedy the deficiencies identified by the RE. Upon completion of the corrective work, notify the RE of the need for an additional AD survey. If acceptability is not achieved after review of an additional AD survey of the work, or a segment of the work (if the Contract is divided into segments), a meeting will be held

between the Contractor and the RE to expeditiously resolve the issue. Costs of Contractor equipment and personnel standby time, if any, to resolve any deficiencies including failure to meet the proposed lines and grades of the dredge template is at the Contractor's expense. Contractor standby time to allow completion of the final City AD survey at the end of the dredging work will be allowed as non-compensable extension of the Contract Period. No payment will be made to the Contractor for such standby time.

Before-Dredge Survey. Hydrographic survey of the dredging areas will be conducted by the Department prior to the start of dredging activity. The timing, equipment and methods used for survey will be as determined by the City. The before-dredge (BD) survey data will be used as information for computing the payment quantity of dredging pay items. Provide a minimum of ten (10) days' notice in advance of commencement of dredging operations to allow for completion of the BD survey.

BD survey data and the results of volume calculations of the estimated material to be dredged to the maximum depth will be furnished to the Contractor after award and prior to commencement of dredging. Perform a detailed review of the BD survey data and available estimated volume calculations and report any discrepancies in writing prior to start of dredging. No dredging is to be performed in any area where a BD survey has not been performed, reviewed by the contractor, and accepted as having no discrepancies.

After-Dredge Survey. Hydrographic survey of the dredging sites will be conducted by the City upon completion of dredging activity. The timing, equipment and methods used for survey will be as determined by the City. The after-dredge survey data will be used to determine acceptance of the dredging work and for computing the payment quantity of dredging pay items. Provide ten (10) days advance notice, in writing, and regular updates to the RE of the need for an after-dredge survey for the completed work or any divisible portion of the work separated for payment. The surveys are required for payment and for final acceptance of the project or of divisible portions of the project to be approved for payment.

The City will make volume computations based on the BD and AD surveys of the dredging areas using the average end-area method. The volume of material dredged for payment is defined as the difference between the before-dredge (BD) and after-dredge (AD) surveys minus any amount dredged outside the design template including allowable tolerances specified in Section 202A.03.12.

The City will perform the BD Survey and one initial AD survey of each RE-approved channel, channel segment, or group of channels. The Contractor may perform interim AD surveys, at no additional cost to the City, and seek interim payment from the City for the segmented dredged areas. Final pay volumes will be made based on initial BD and final AD surveys, with any interim payments being subtracted from the monies due the Contractor for performing the dredging work. The cost incurred by the City for performing any additional AD surveys, subsequent to the initial AD survey per RE- approved channel, channel segment, or group of channels, as a result of the Contractor not meeting the line, grade or design dredge template shape as determined by the RE, will be deducted from the monies owed the Contractor for performing the dredging work.

Under no circumstance, other than obvious and uncorrectable error as determined by the RE, will Contractor conducted surveys be used for acceptance or the calculation of final payment. The Contractor may request additional AD surveys to be conducted by the City and to be used for final payment, provided that this request is made to the RE, in writing, at least 14 days prior to the desired timing of the additional AD survey. No more than one additional AD survey per calendar month may be requested. The cost of these Contractor requested surveys shall be deducted from the monies owed the Contractor for performing the dredging work.

SECTION 203 – EMBANKMENT

203.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This section also describes the requirements for providing and installing Vertical Wick Drains, also known as prefabricated vertical drains, to provide drainage paths for pore water in soft compressible soils and for providing and installing I-14 Soil Aggregate (Surcharge) to preload soft compressible soils thereby inducing consolidation settlement, as shown on the Plans.

This section also describes the requirements for geotechnical instrumentation and monitoring. This work includes providing labor, transportation, equipment, materials, and incidentals necessary for installing and maintaining instrumentation required to observe ground movements during placement of embankment and preload surcharge operations.

This Section also describes the requirements for furnishing controlled low strength material (CLSM) as backfill where granular or site-excavated backfill placed in the required layer thickness cannot be compacted or consolidated to the required uniformity or density.

This Section also describes the requirements for furnishing CLSM as bedding material for pipe, electrical, telephone, and other types of conduits where granular or site-excavated backfill placed in the required layer thickness cannot be compacted or consolidated to the required uniformity or density.

The Contractor must reuse excavated material meeting the requirements of 901.11 to construct Items requiring soil aggregates. This will include reusing broken concrete. Only after this material is reused may the Contractor utilize additional soil aggregate.

All Work performed on adjoining properties shall be in accordance with the easements provided in Section 107.01.04 and shall be coordinated with property owners.

203.02 MATERIALS

203.02.01 Materials

THIS SUBPART IS DELETED AND REPLACED AS FOLLOWS:

Provide I-9 Soil Aggregate, I-11 Soil Aggregate or I-14 Soil Aggregate, for backfilling Excavation, Unclassified and Excavation, Regulated Material, respectively, or as directed by the RE and coordinated with the LSRP. All imported fill material must be confirmed and verified with the LSRP as certified clean fill, in accordance with NJDEP’s Fill Material Guidance for SRP Sites. Provide materials as specified:

Soil Aggregate (I-9, I-11, and I-14) 901.11

THE FOLLOWING MATERIAL IS ADDED TO THE LIST

Coarse Aggregate (No. 57) 901.03
Controlled Low Strength Material (CLSM) 903.09
Vertical Wick Drains 919.16

203.02.02 Equipment

THE FOLLOWING EQUIPMENT IS ADDED TO THE LIST

Settlement Platforms 1013.01
Inclinometers 1013.02

203.03 CONSTRUCTION

THE FOLLOWING IS ADDED:

203.03.02 Soil Aggregate

A. Constructing Embankment

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Only certified clean fill may be placed on properties that are not owned by the City and for which legal access is provided through the Easements described in Section 107.01.04.

The RE will determine the classification of the subgrade material specified in Table 203.03.02-1. Table 203.03.02-1 shall be modified as follows:

- Place and Compact fills situated 1 foot below the water table at the time of placement using the End Dump Method as specified in 203.03.02.B.1.
- Place and Compact fills situated 1 foot above the water table at the time of placement using the Density Control Method as specified in 203.03.02.B.4.

Where duplicate criteria have been provided, the more stringent criteria shall apply, or as otherwise deemed appropriate by the RE.

THE FOLLOWING IS ADDED TO THE FOURTH PARAGRAPH:

Before placing embankment or any other unbound aggregate material, such as subbase or dense graded aggregate, on existing pavement, break the pavement into pieces that are a maximum of 12 inches in all dimensions.

B. Placing and Compacting Methods

1. End Dump Method

THE FOLLOWING IS ADDED TO THIS SUBPART:

Fills placed in the annular space located between existing and proposed walls and bulkheads shall be vibrated or otherwise agitated to fill voids to the greatest extent possible. Notify RE of any instances where the presence or filling of voids are a concern.

4. Density Control Method

THIS SUBPART IS DELETED IN ITS ENTIRETY AND REPLACED BY THE FOLLOWING:

All fills situated 1 foot above the water table at the time of placement shall be placed in maximum 12-inch thick lifts (loose thickness) and compacted to 95% of their maximum dry density as determined by the Modified Proctor Test, AASHTO T-180 (ASTM D-1557). Fill density shall be determined using a Nuclear Density Gage. Density Testing shall be performed by the City's inspection agency on each lift, at the following rates

- One test per 5,000 square foot of plan area for all fills placed below buildings, retaining walls, splash pad, other structures.
- One test per 10,000 square foot of plan area for all fills placed below pavements, sidewalks and landscaped areas.
- One test per 2,500 square foot of plan area behind walls (within 15 feet of wall).
- RE to provide instructions for testing associated with the backfilling of pipes, inlets, manholes, other structures, utilities, etc.
- Additional tests shall be performed as deemed necessary by the RE. RE to provide instructions for testing associated with the backfilling of pipes, inlets, manholes, other structures, utilities, etc.

THE FOLLOWING IS ADDED:

203.03.03 Vertical Wick Drains

- A. **Working Drawings.** Submit for review a Soil Consolidation and Instrumentation Work Plan at least 15 days before the start of vertical wick drain installation. Do not begin Vertical Wick Drain installation until no exceptions are taken. Include in the Soil Consolidation and Instrumentation Work Plan the following:

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

1. Size, type, weight, maximum downward thrust, and configuration of the installation rig
2. Proposed methods and equipment of predrilling for Vertical Wick Drains, when necessary.
3. Cross sectional dimensions and length of mandrel
4. Details and dimensions of Vertical Wick Drain anchorage
5. Detailed description of proposed installation procedures
6. Manufacturer literature documenting the physical and mechanical properties of the Vertical Wick Drain
7. Proposed methods for splicing Vertical Wick Drains
8. One sample of the unspliced Vertical Wick Drain and 3 samples of proposed splices with accompanying manufacturer specification of the Vertical Wick Drain material. The unspliced sample is 10 feet long. The spliced sample includes 3.5 feet of unspliced material on both sides of the splice. The manufacturer must stamp or label the samples stating they are representative of the Vertical Wick Drain material having its specific trade name.
9. Qualification of the Contractor and personnel for Vertical Wick Drain installation operations.
10. Gradation and proctor test results representative of the surcharge material proposed.

A Contractor and superintendent, each with at least 5 years of documented experience with Vertical Wick Drains, must perform the Vertical Wick Drain installation.

Review boring logs and Ground Improvement Details to select appropriate means, methods, and equipment for vertical wick drain installation.

The RE will approve of the sample Vertical Wick Drain materials before delivery of the material to the project. The Vertical Wick Drain manufacturer must be a specialist in the manufacture of Vertical Wick Drains and have produced a minimum of 1,500,000 lineal feet of the Vertical Wick Drain material proposed for the project that have been used in successful applications within the past 5 years.

Certify and provide proof of work experience in the work described: the Contractor has successfully installed at least 1,500,000 lineal feet of Vertical Wick Drain during the last 5 years and is a certified installer of the Vertical Wick Drain manufacturer. In addition, the Contractor has successfully completed at least 5 projects within the last 5 years of similar size and complexity in this type of installation in similar subsurface conditions.

Include a project summary for each referenced project. The project summary contains the start and completion date of the project, total quantity for the Vertical Wick Drains, and a detailed description of the project, site conditions and subsurface conditions. The project description includes the nature of the project, details of the Vertical Wick Drain materials, the equipment and techniques used, the total length of Vertical Wick Drains installed, individual length of the deepest Vertical Wick Drain installed, the client name and address, and the name and telephone number of the representative of the consultant and owner for whom the work was performed and who can attest to successful completion of the work and any other information relevant to demonstrating the Contractor's qualifications.

Assign an experienced, full-time supervisor who has been in responsible charge of supervising Vertical Wick Drain installation operations for at least 5 projects in the last 5 years. The supervisor must be present at the work site at all times during Vertical Wick Drain installation. Provide written verification of the supervisor's experience. The qualifications of the supervisor will be subject to approval.

Include in the working drawing submittal means and methods of providing temporary stability for surcharge (i.e. side slopes, geosynthetic reinforcement, temporary sheeting)

- B. Shipping and Storage.** Label or tab Vertical Wick Drain materials so that the information for sample identification and other quality control purposes can be read from the label. As a minimum, identify each roll by the manufacturer as to lot or control numbers, individual roll number, date of manufacture, and product identification information. Provide Vertical Wick Drains wrapped in heavy paper, burlap, plastic, or similar heavy-duty protective covering during shipping and storage. Protect the Vertical Wick Drains from sunlight, soil, dust, debris, and other detrimental substances during shipping and storage.

Reject all material that is damaged during shipping, unloading, storage, handling, or that does not meet the minimum requirements of the Vertical Wick Drain material.

- C. Wick Drain Installation.** Locate, number, and stake planned Vertical Wick Drains. Take all reasonable precautions to preserve the stakes. Do not vary the as-installed location of the Vertical Wick Drains by more than 6 inches from the plan locations in the approved work plan. Reject and abandon-in place Vertical Wick Drains that are more than

6 inches from design plan locations or are damaged or improperly installed. Install additional Vertical Wick Drains to replace the damaged ones.

Install Vertical Wick Drains using approved modern equipment of a type that will cause minimum disturbance of the subsoil during installation and maintain the mandrel in a vertical position. Use constant load or constant downward rate of advancement methods. The use of a vibrator, impact hammer, or jetting techniques is not permitted.

Prior to the installation of production Vertical Wick Drains, demonstrate that the proposed equipment, method, and materials produce satisfactory installation by installing trial Vertical Wick Drains at each test location shown on the Plans or as designated by the RE.

Install Vertical Wick Drains using a mandrel or sleeve that inserts the drain into the soil. Use a mandrel or sleeve that protects the drain material from tears, cuts, and abrasion during installation and that retracts after each drain is installed. Alternated raising or lowering of the mandrel during advancement is not permitted. Raising the mandrel is permitted only after completion of the drain installation.

Provide a mandrel or sleeve with an anchor rod or similar arrangement at the bottom to permit the installation of the drain and to anchor the drain tip at the required depth at the time of mandrel withdrawal. Use anchors with dimensions that conform as closely as possible to the dimensions of the mandrel so as to minimize soil disturbance.

Predrill or spud through hard or dense materials prior to installation of the Vertical Wick Drain. Use a maximum 4-inch diameter auger/drill/spud/etc. to predrill or spud through embankments or hard/dense materials. Predrilling or spudding will not be considered differing site conditions. The predrilling or spudding must not penetrate more than 1 foot into the underlying compressible soil.

Install Vertical Wick Drains from the working surface to the depth shown on the drawings or to such depth as directed by the Engineer. The Engineer may vary the depth, spacing, or the number of drains to be installed and revise the plan limits for this work as necessary.

Plumb equipment for installing Vertical Wick Drains prior to installing each drain. Do not deviate from the vertical more than 5 inches in 10 feet during installation of drains.

Splice or connect the Vertical Wick Drain material to provide continuity of the Vertical Wick Drain materials. Provide a 4- to 8-inch length of Vertical Wick Drain material protruding above the drainage layer surface at each Vertical Wick Drain location. Cut the Vertical Wick Drain material neatly at its upper end at the working grade.

Observe precautions necessary for protection of field instrumentation devices. Pay for the replacement of all instrumentation equipment that has been damaged or becomes unreliable as a result of these operations.

Use augering, spudding, or other methods to loosen the soil and clear obstructions. Do not allow the auger to penetrate more than 1 foot into the underlying compressible soil.

Penetrate overlying fill material as necessary to satisfactorily install the Vertical Wick Drains. Clear obstructions defined as any man-made or natural object or strata that prevent the proper insertion of the mandrel and installation of the Vertical Wick Drain.

Use augering, spudding or other approved methods to loosen the soil and all obstructing material prior to the installation of Vertical Wick Drains. The obstruction clearance procedure is subject to approval. The RE's approval does not relieve the Contractor of responsibility to clear obstructions in accordance with the specifications.

When obstructions are found, implement the following procedure in the listed sequence:

1. Immediately notify the RE prior to completing the drain or any other drains.
2. Attempt to install drains adjacent to the obstructed location at the direction of the RE and under his review:
 - a. Attempt to install an offset drain within 2 feet horizontally of the obstructed drain.
 - b. Implement obstruction clearance procedures and install the drains at the design location.
 - c. Use obstruction clearance procedures only as directed by the Engineer.

Splice Vertical Wick Drain material by stabling. Provide splices with structural and hydraulic continuity of the drain. A maximum of 1 splice per drain installed is permitted.

Approval of Vertical Wick Drain installation equipment by the Engineer will not relieve the Contractor of the responsibility to install Vertical Wick Drains correctly. If at any time the RE concludes that the Contractor's methods

of installation do not produce a satisfactory Vertical Wick Drain, alter the method and equipment as necessary to produce satisfactory results.

- D. Quality Control.** During Vertical Wick Drain installation, provide the RE with suitable means of determining depth of the advancing drain at any given time and the length of the drain installed at each location.

Supply a summary report to the RE for each workweek of Vertical Wick Drain installation. Include in the summary drain type, locations, length to the nearest 1-foot length of Vertical Wick Drain installed at that location, and the location of all Vertical Wick Drains that do not extend to the planned depth.

- E. Surcharge.** Place I-14 Soil Aggregate to the thicknesses shown in the Plans in coordinated effort with the Instrumentation and Monitoring as specified in subpart 203.03.04. The I-14 Soil Aggregate material shall have a minimum total unit weight of 120 pcf at the required compaction level or as otherwise approved by the RE. Place and compact surcharge as specified in subsection 203.03.02.B.

When the instrumentation data indicate potentially damaging ground displacements, modify the construction rate and sequence unless otherwise approved, at no additional cost to the City, and take other action, unless otherwise approved, to reduce further excess ground displacements to an acceptable quantity.

Vertical wick drain installation, embankment fill placement, temporary retaining wall construction, and all other modifications to the existing ground must not take place until geotechnical instrumentation installation has been completed and approved and baseline readings have been taken for each instrument.

203.03.04 Geotechnical Instrumentation and Monitoring

Instrument monitoring is the reading or measuring of installed instruments at defined time intervals; calculating elevations, changes from initial elevations (vertical displacements) ; and recording and plotting all instrument readings. Survey control consists of precise field measurements as specified herein, taken by qualified personnel using approved methods and equipment for accurately determining elevations, coordinates, and distances essential for the prosecution of this Section's work. The purpose of instrument monitoring is to accomplish some or all of the following:

1. To provide baseline data for the RE prior to the commencement of Embankment construction,
2. To provide reliable information for the RE to assess the fill performance and embankment stability, and ground movements resulting from Embankment construction.
3. To permit timely implementation of proper remedial measures when and as required to prevent slope stability failures, damage or both to existing structures, roadways, equipment, and utilities.
4. To provide reliable information to determine the rate(s) of settlement and evaluate the performance of the Embankment construction.
5. To permit the RE to evaluate the actual time for which all surcharge, as shown on the Plans, is required to achieve the desired degree of consolidation of the underlying compressible soil.
6. To document ground movements and preload performance.

- A. Working Drawings.** The RE reserves the right to approve each of the materials to be used in fulfilling the requirements of instrumentation work. Approval of the materials to be used for instrumentation does not eliminate the responsibility to provide instrumentation in accordance with these specifications. The RE reserves the right to inspect, test and approve the workmanship of the instrumentation equipment and materials.

The manufacturer will make a final quality assurance inspection before shipment. During the inspection, complete a checklist to indicate each inspection and test detail. Supply a completed copy of the checklist with each instrument. The RE reserves the right to approve, disapprove, modify, or change the method of installation and maintenance of monitoring devices. Approval of the method of installation and maintenance of monitoring devices does not eliminate the responsibility to install and maintain the instruments according to the specifications

- 1. Schedule and Procedures.** Proposed schedule and procedures for instrumentation installation and performance of initial reading monitoring for the instruments. Detailed step-by-step procedure for installation, together with a sample installation record sheet. Bind and index the procedures. The installation procedures include, but are not limited to:

1. Drill casing type and size.
2. Sample depths.
3. The method to be used for cleaning the inside of casing.

4. Depth increments for backfilling boreholes with sand.
5. Method for overcoming buoyancy of instrumentation components during grouting.
6. Method for sealing of joints in inclinometer casing to prevent ingress of grout.
7. Detailed step-by-step procedures for conducting all optical survey measurements to obtain initial readings to the specified accuracy, including types of surveying equipment, all as specified herein.
8. Method and equipment for mixing and placing the grout.

Provide manufacturer's catalog cuts, working drawings, material specifications, installation and maintenance instructions, and other data appropriate to the work of this Section.

Within 2 days of receipt of each instrument at the site, submit a copy of the factory calibration, manufacturer's test equipment certification and completed copy of quality assurance checklist.

2. **Survey Control Layout.** Show survey benchmarks and baselines. Show proposed location of benchmarks to permit surveying with sight distances less than 200 feet.
3. **Instrumentation Layout and Installation Details.** Instrumentation personnel and surveyors, including the geotechnical instrumentation engineer, the superintendent, the driller, the field survey party chief, and all other field and office personnel will be subject to approval. Provide resumes for all such personnel associated with the review, approval, calibration, installation, monitoring, and remediation of all geotechnical monitoring instruments prior to their start of work on the project. No substitutions are allowed without prior notice, including submission and subsequent approval of the replacement's resume.

Provide resumes for all supervisory personnel, technicians, and drillers performing the instrumentation work.

- a. **Geotechnical Instrumentation Engineer.** Installation and monitoring of all settlement and ground displacement monitoring devices will be under the supervision of a geotechnical engineering consulting firm which has previous experience in supervising installation and monitoring of similar instrumentation devices. Retain the firm, the individual, or both who will actually be performing the field supervision for both installation and monitoring. The instrumentation personnel will include a Supervising Engineer, who is a Professional Engineer registered in the State of New Jersey, with at least 2 years of direct field experience in the installation and monitoring of the types of instruments specified herein to supervise and be responsible for instrumentation installation. Responsibilities of the geotechnical engineering consulting firm include, but are not limited to the following:
 1. Prepare detailed step-by-step procedures and installation schedule for all instruments specified herein.
 2. Review and approve all data submittals.
 3. Be on-site and supervise the installation of each geotechnical monitoring instrument.

Conduct each of the following tasks as applicable for each instrument specified herein:

1. Pre-installation acceptance tests
2. Post-installation acceptance tests
3. Field calibration
4. Initial reading and data collection
5. Data reduction, processing, plotting, and reporting.

- b. **Professional Land Surveyor.** The person in responsible charge of the surveyors must be a Professional Land Surveyor registered in the State of New Jersey, with a minimum of 4 years of experience in deformation measurements of the types and accuracies specified herein.

The field survey party chief must have a minimum of 2 years of experience in deformation survey measurements of the types and accuracies specified herein.

Within 2 days of installing each instrument, submit an installation record sheet, including the appropriate items from the following list.

1. Project name.
2. Contract name and number.
3. Instrument type and number including readout unit.
4. Planned location in horizontal position and elevation.

5. Planned orientation.
6. Planned lengths and volumes of backfill.
7. Personnel responsible for installation.
8. Plant and equipment used to include diameter and depth of all drill casing or augers used.
9. Date and time of start and completion of installation.
10. Spaces on record sheet for necessary measurements or readings required at hold-points during installation to ensure that all previous steps have been followed correctly including instrument readings made during installation.
11. A log of subsurface data indicating the elevations of strata changes encountered in the borehole. Soil strata nomenclature conforming to the Burmister Classification System.
12. Type(s) and depth(s) of backfill used to fill instrumentation boreholes.
13. As-built location in horizontal position, adjacent ground elevation, top of instrument elevation for settlement platform risers, and bottom of borehole elevation for inclinometers.
14. As-built orientation.
15. Result of post-installation acceptance test.
16. Weather conditions at the time of installation.
17. Notes of importance on the installation including problems encountered, delays, unusual features of the installation, and details of all events that may have a bearing on instrument behavior.

For each instrument type, provide an instruction manual that includes the following:

1. A description of the purpose of the instrument.
2. Theory of operation
3. Step-by-step procedures for pre-installation acceptance testing when instruments are received on site, to ensure the instruments are functioning properly before installation
4. Calibration documentation
5. Step-by-step instrument installation procedures including materials, tools, spare parts, borehole requirements, and post-installation acceptance tests.
6. Maintenance procedures
7. Step-by-step data collection procedures
8. Data reduction, processing, and plotting procedures

B. Pre-installation Acceptance Testing. Do not deliver or install instrumentation on the site before review and approval of the materials, products, and installation procedures.

Conduct a factory calibration on all instruments at the manufacturer's facility before shipment. Include a calibration curve with data points clearly indicated, and a tabulation of the data with each factory calibration. Provide calibration sheets for each instrument prior to installation. Mark each instrument with a unique identification number.

When instruments are received at the site, the instrumentation personnel and geotechnical engineering consulting firm will perform pre-installation acceptance tests to ensure that the instruments and readout units are functioning correctly before installation. Pre-installation acceptance tests will include relevant items from the following list.

1. Check that the model, dimensions, materials, etc. are correct.
2. Check that quantities received correspond to quantities ordered.
3. Check all components for signs of damage in transit.
4. Examine factory calibration curve and tabulated data to verify conformance with this Section and completeness.
5. Examine manufacturer's final quality assurance inspection checklist to verify completeness.
6. Check cable length.
7. Check that tag numbers match on instrument/cable sets
8. At point of connection to instrument, bend cable back and forth while reading the instrument to verify connection integrity.
9. Perform resistance and insulation testing in accordance with manufacturer's recommendations using a gauge insulation or circuit tester that applies no more than 2 volts.
10. Verify that all components fit together in the correct configuration.

During pre-installation acceptance testing of each instrument, instrumentation personnel complete a pre-installation acceptance test record form. Repair all instruments that fail the specified pre-installation acceptance test such that

they pass a subsequent pre-installation acceptance test, or replace with a new instrument at no additional cost to the City.

- C. Survey Control and Layout.** Before the start of construction, establish bench marks for use by monitoring instruments using bench marks installed as part of this Contract, to the tolerances specified herein.

Establish the elevation of benchmarks to 0.04 inch. Establish the initial elevation of settlement platform (top of riser), Wire Piezometers (Vibrating) (pressure sensor) and open standpipe piezometers (top of PVC riser pipe) to 0.1 inch.

Establish the initial coordinates of each instrument installation to 0.1 feet. Establish the initial position of control stake points to 0.1 inch.

Establish the elevation of bench marks by running level circuits started and closed at the specified existing benchmarks.

Establish turning points during leveling so that foresight and back-sight distances are approximately equal. Use well-defined surface points of solid objects or masonry nails driven into pavement for turning points. Do not exceed sight distances of 200 feet. Establish an error of closure less than 0.1 inch for level circuit closures. If an error of closure greater than 0.1 inch is achieved for any level circuit, resurvey the circuit. Prove the established elevations of benchmarks by obtaining consistent results on at least 3 separate and complete level circuits. If an inconsistent elevation for any benchmark results, resurvey the level circuit until correct and repeatable elevations are obtained. Check elevation of bench marks every month or otherwise directed.

- D. Installation and Monitoring.** Provide and install all instrumentation at the locations and in accordance with the details shown on the Plans, and in accordance with the requirements of these specifications. Give at least 10 days' notice prior to installing each instrument.

- 1. Settlement Platforms.** Fabricate and install settlement platforms as shown on the Plans and Details.

Place settlement platforms on a sand base after filling in all depressions and grading the platform subgrade. Tamp the sand base using a vibratory smooth-plate tamper to provide a firm, unyielding, and level bearing surface for the settlement platform. The compacted surface must not be more than 1/8 inch per foot from level in all directions. For settlement platforms placed on or near original ground, strip all vegetation and construct a minimum of 6 inches of sand to provide a level base for the settlement platform. For settlement platforms placed atop a sand blanket, install the settlement platform after installing the Vertical Wick Drains by leveling the sand blanket. Each section will have vertical pipes with a maximum length of 5 feet. Provide centralizers between the riser pipe and casing pipes at maximum intervals of 5 feet to ensure verticality.

Place the fill surrounding the settlement platform riser in a controlled manner to prevent damaging or moving the riser pipe. The outer protective casing must not be more than 1/8 inch per foot from vertical in all directions at all times while placing the surrounding fill. Periodically check the verticality of the outer casing while placing the fill to ensure this result.

As the height of fill above the settlement platform changes, increase or decrease the casing and riser in maximum 5 foot increments to maintain the top of the pipe and casing above the embankment. As each additional length of pipe is added or removed, immediately transfer the pipe cap on the casing to the top section on the settlement platform to prevent fill material from entering the casing.

Mark each settlement platform with barricades as described above. Additionally, paint the casing pipe Day-Glo orange or yellow. Maintain the paint during the Contract.

The Contractor and RE will jointly take the initial settlement platform readings immediately after installing the settlement platform and before placing fill. Survey the position and elevation of the settlement platform risers at least twice per week until 1 month after completion of placement of the embankment fill or surcharge, whichever is later, and then at least once every week until removal of the surcharge.

The settlement platform risers should not rise above 4 feet over the surrounding ground surface elevation. Add or remove sections as necessary during filling or removal of fill to maintain the tops of the pipes at least 2 feet above the surface of the fill.

Survey the settlement platform risers immediately before and after additional extensions are added or removed. Give at least 2 days' notice before extension or removal of the settlement platform risers.

Upon completion of final readings, and unless otherwise directed that the settlement platform may be abandoned, cut off the platform at a determined elevation and dispose, leave the remaining settlement platform in place.

2. **Inclinometer.** Provide and install inclinometers as specified herein and as shown on the Plans. Install the inclinometers at the locations and elevations shown on the Plans. Install the inclinometers and obtain baseline readings before earthwork commences. The RE reserves the right to modify the locations and elevations based on the materials encountered in the boreholes during installation. Place the inclinometers to the estimated depth shown on the Plans.

Drill boreholes for instrumentation under the supervision of a licensed well driller in the State of New Jersey with at least 4 years of direct field experience in drilling boreholes for the types of instruments specified herein. Install the inclinometer within a cased borehole having a minimum diameter of 4 inches, or as recommended by the manufacturer, whichever is greater.

After completion of installation, perform a post-installation acceptance test to verify that all inclinometers function correctly.

The geotechnical engineering consultant and RE will jointly take the initial inclinometer readings immediately after installation of the inclinometer and before placement of fill. The geotechnical engineering consultant will then take the remainder of the baseline readings and additional readings at least once a week thereafter for the duration of the Contract.

Protect and maintain the inclinometers in working order during the period of this Contract.

Upon completion of final readings, and once it has been determined an inclinometer may be abandoned in accordance with 203.03.04.F. Cut off the casing at an approved elevation or location and dispose, leave the remaining inclinometers casing in place.

Obtain baseline readings for all instruments before placing embankment, surcharge, or preload material. Take initial readings daily at approximately the same time for 3 successive days following installation to establish baseline readings. Transmit all readings of geotechnical instrumentation monitoring devices by noon of the following day for each reading to allow for review daily. Take all initial readings in the presence of the RE. Perform and report the results of pre-installation and post installation measurements. Protect all instruments from damage and maintain instruments. Replace an instrument that fails the specified post-installation acceptance test with an identical instrument at no additional cost to the City.

The geotechnical engineering consultant will forward the baseline reading results for approval prior to the start of fill placement.

Monitor all deformation monitoring points by optical survey method to determine vertical displacements, if any, occurring during construction.

Coordinate with the RE to verify consistency of collected data. Provide all graduations in English Units. Report the reading of settlement platforms and inclinometers weekly, or collect readings continuously and make available via secure server.

Verify, record, and review all steps in the installation procedures for instruments during installation.

- C. **Protection and Maintenance.** Protect and maintain instrument systems throughout the entire Contract. Protect from damage due to construction operations, weather, traffic, and vandalism, survey reference and control points, instruments and appurtenant fixtures, and other components of the instrumentation systems. Replace all instrumentation that may be damaged or are not functioning properly or consistently. Maintenance includes repairs to damaged or missing components of systems, and raising and lowering instrumentation, as required, during general excavation and fill placement and removal.

- D. **Damaged or Inoperative Instruments.** Notify the RE of monitoring devices that become damaged or inoperable within 12 hours of the time becoming aware of such conditions. Cease all earthwork operations within a specified distance until the damaged instrumentation is repaired or replaced. The RE will make the sole determination as to the specified distance to which earthwork will cease. The repair or replacement will occur within 1 week of notification of damage, unless otherwise specified. Repair or replace damaged or inoperative instruments at no cost to the Department.

E. Scheduling. Except where otherwise specified, maintain access to instruments. Temporary stoppage or interruption of certain portions of the work may be required to enable the geotechnical engineering consulting firm to monitor, take readings, replace instrumentation, or both. The geotechnical engineering consulting firm performs such monitoring and measurement in a manner not to delay the work unnecessarily. Include time for such monitoring and measuring in the schedule, and allow for remediation/reinstallation of replacement instruments in the event of damage or inoperability, due to any cause whatsoever.

F. Instrumentation Removal. Unless otherwise directed, leave all instruments in place except those that may be removed or abandoned, because of interference with planned or possible future construction. When directed, remove and dispose of those portions of all instruments, including standpipes and covers that are readily accessible. Grout all remaining open portions of boreholes, open inclinometer casings, backfill the area and/or patch asphalt and concrete surfaces in like kind, and restore to the RE’s satisfaction. Use cement grout consisting of Type III Portland cement and water. Do not demolish, abandon, remove, or dispose of instrumentation without prior approval.

Restore all surfaces affected by installation of instruments to the original condition prior to completion of the work.

THE FOLLOWING SUBPART IS ADDED:

203.03.05 Controlled Low Strength Material (CLSM)

Place CLSM as backfill or bedding material where compaction or consolidation of granular or site-excavated backfill in the required thickness cannot achieve uniformity or density required, or as directed by the RE.

Place the CLSM mixture directly from the mixer into the space to be filled or by other methods approved by the RE. CLSM can be placed year-round but must be protected from freezing until it has hardened. Refer to Section 504.03.02 for limitations of placing.

Submit the name and qualifications of the company that will be performing the installation of the CLSM; and a plan specifying the materials, means, and methods for the installation to the RE and the City for approval.

203.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
I-9 SOIL AGGREGATE	CUBIC YARD
I-11 SOIL AGGREGATE	CUBIC YARD
I-14 SOIL AGGREGATE	CUBIC YARD
GEOTEXTILE	SQUARE YARD
CONTROLLED LOW STRENGTH MATERIAL	CUBIC YARD
VERTICAL WICK DRAIN	LINEAR FOOT
VERTICAL WICK DRAIN OBSTRUCTION CLEARANCE	LINEAR FOOT
SLOPE INCINOMETER CASING	LINEAR FOOT
SETTLEMENT PLATFORM	UNIT

THE FOLLOWING IS ADDED:

Payment for I-14 SOIL AGGREGATE will only include quantities of I-14 Soil Aggregate constructed from imported material that has not been excavated or reused from the Project Site. All imported fill material must be confirmed and verified with the LSRP as certified clean fill, in accordance with NJDEP’s Fill Material Guidance for SRP Sites. The quantity of I-14 Soil Aggregate required for the project has been reduced by the quantity of material to be generated by the relocation and reuse of the existing stockpiles on Block 161.02, Lot 25.08 and other materials excavated from the project site, as I-14 Soil Aggregate, to be paid under the item EXCAVATION, UNCLASSIFIED.

The cost for I-14 SOIL AGGREGATE shall include the cost for importing, placing and compacting aggregate. It is anticipated that imported I-14 Soil Aggregate may be utilized in the construction of the proposed surcharge stockpile associated with site preparation activities. No separate measurement or payment will be made for excavation and re-location of the soils used to construct the surcharge stockpile. All costs associated with these activities are to be included in the cost for I-14 SOIL AGGREGATE. Payment for I-14 SOIL AGGREGATE shall be made as follows: 80% upon importing soil material and initial placement (including compaction) on-site and 20% upon completion of all earthwork activities associated with attaining subgrade elevations below coarse aggregate and topsoil. This criteria shall apply

regardless of where I-14 Aggregate is utilized and regardless of whether or not I-14 Aggregate needs to be relocated. No payment will be paid for materials placed in uncompacted stockpiles.

Only certified clean fill may be placed on properties that are not owned by the City and for which legal access is provided through the Easements described in Section 107.01.04.

Measure and pay for VERTICAL WICK DRAIN by the linear foot including the distance that the mandrel tip and Vertical Wick Drain strip penetrate below the approved top elevation of existing subgrade. Perform predrilling at no additional cost, if required. Include mobilization costs and costs associated with work plan preparation in the cost per linear foot of VERTICAL WICK DRAIN.

Measure and pay for Inclinator by the linear foot measured from the bottom of borehole to the existing ground surface. Include in the cost bid for INCLINOMETER all costs associated with providing inclinometers, NJDEP Well permits, drilling boreholes for inclinometers, installing inclinometers in boreholes, testing inclinometers, reading and reporting results from inclinometers, geotechnical instrumentation consultant costs, repair costs, and abandonment.

Measure and pay for SETTLEMENT PLATFORM by the unit. Include in the cost bid for SETTLEMENT PLATFORM all costs associated with providing Settlement Platforms, installing Settlement Platforms, reading and reporting results from Settlement Platforms, geotechnical instrumentation consultant costs, repair costs, and abandonment.

The City will make payment for CONTROLLED LOW STRENGTH MATERIAL based on the total calculated volume of CLSM fill required.

DIVISION 300 – SUBBASE AND BASE COURSE

SECTION 301 – SUBBASE

301.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This section also describes the requirements for constructing pervious pavement system subbase courses.

301.02 MATERIALS

THE FOLLOWING MATERIAL IS ADDED TO THE LIST

Coarse Aggregate (No. 2)	901.03
AASHTO Coarse Aggregate No. 57	AASHTO M 80
Geotextile	919.01

THE FOLLOWING IS ADDED:

The pervious pavement storage bed, subbase materials shall be Coarse Aggregate (No. 2), crushed stone or crushed gravel, meeting the requirements of subsection 901.03. The pervious pavement choker course must consist of clean, washed AASHTO Coarse Aggregate No. 57.

301.03 CONSTRUCTION

THE FOLLOWING SUBPART IS ADDED:

301.03.02 Pervious Pavement Subbase

- A. Preparing Subgrade.** Prepare subgrade as specified in 301.03.01.A. Place geotextile for separation of between subgrade and No. 2 Stone.
- B. Spreading and Grading.** Do not place subbase material when the subgrade is frozen or unstable. Notify the RE if the finished subgrade is unstable and obtain RE approval before removing unstable material. Backfill the area with suitable material and compact using the directed method as specified in 203.03.02.B.3.

Storage bed aggregate must be clean, open-graded broken stone. The stone must be washed, prior to placement, to minimize the amount of stone dust and other fine particles.

Place the subbase material on the grade with a mechanical spreader, except in limited or restricted areas where the use of hand spreading, end-dumping, or both, is allowed. In those locations, place the subbase material with trucks and carefully unload on the grade so that the distance the material must be moved is minimized. Do not spread material from piles dumped on the grade. Spread the subbase material in a manner that does not break down material and eliminates segregation, ruts, and ridges. Remove and replace any and all portions of this course which become contaminated, degrade or otherwise do not conform to the requirements of these specifications.

- C. Compacting.** Storage bed aggregate must be placed in lifts and compacted using plate compactors. The maximum loose lift thickness is 6 inches. The subbase material must be compacted to the satisfaction of the Engineer.

301.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
PERVIOUS PAVEMENT SUBBASE	CUBIC YARD
GEOTEXTILE	SQUARE YARD

THE FOLLOWING IS ADDED:

The quantity to be paid for PERVIOUS PAVEMENT SUBBASE shall be the number of cubic yards of material placed for the pervious pavement storage bed and choker course, measured in the completed work, within the payment lines, as

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

shown on the plans or as ordered by the RE. The computed volume shall NOT be reduced by the volume of the 3” perforated underdrains, inspection ports or any other structures.

SECTION 302 – AGGREGATE BASE COURSE

302.01 DESCRIPTION

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

DENSE GRADED AGGREGATE, 4” THICK shall be utilized beneath CONCRETE SIDEWALKS, 5” THICK.

DENSE GRADED AGGREGATE, 6” THICK shall be utilized beneath CONCRETE SPLASH PAD AND CONCRETE PAD - PLAZA WALKWAY & PAVILION - 8 INCH.

302.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
DENSE GRADED AGGREGATE, 4” THICK	SQUARE YARD
DENSE GRADED AGGREGATE, 6” THICK	SQUARE YARD

DIVISION 400 – PAVEMENTS

SECTION 401 – HOT MIX ASPHALT (HMA) COURSES

401.01 DESCRIPTION

THE FOLLOWING IS ADDED:

“HMA MILLING, 3” OR LESS" shall include the furnishing of all material, labor and equipment necessary to mill existing bituminous concrete surfaces or concrete pavement to the elevations shown on the plans or as directed by the RE.

401.03.01 Milling

A. HMA Milling.

THE FOLLOWING IS ADDED:

Stage	Max. Time Interval Allowed
3	72 Hours

The depth of milling on this project will average between 1 and 3 inches. Milling shall be done in repeated passes, if necessary, to accomplish the desired profile and cross-sections.

The Contractor shall be responsible for the removal of any existing raised pavement markers from the surface of the roadway, regardless of whether or not full milling is required on that road.

The Contractor shall be responsible for milling a 40 to 50-foot transverse keyway at each starting point and ending point, at each railroad crossing, and at each bridge deck approach where the resurfacing is not to continue over the bridge, in order to provide a smooth transition.

Unless otherwise directed by the Resident Engineer, on original concrete roadways having 3 inches or less, existing bituminous concrete overlays, the asphalt pavement shall be milled completely down to the concrete pavement to eliminate areas of spalling.

Full Milling will be required on at least portions of some of the Roads. The contractor is reminded that any areas of roadway where the centerline or lane line striping is removed, temporary latex traffic paint must be applied to the affected areas prior to opening the road to traffic. No separate payment shall be made for the cost of said temporary striping. The cost thereof shall be included in the price bid for the various pay items included in the Proposal

The Contractor shall make prior arrangements with the respective municipalities and/or water companies to obtain a source for any water required for the milling operation.

In order to minimize hazard and inconvenience to the traveling public, milled pavement areas shall not be left unpaved for more than four (4) days. The contractor shall make every attempt to coordinate the milling and paving operations as closely as possible. The maintenance of milled roadway surfaces subsequent to the milling operation including the ramping of starting and finishing, bridge, and railroad keyways, and the ramping around of all exposed structures, shall be the responsibility of the Contractor. It shall also be the responsibility of the Contractor to remove all material placed in aforementioned keyway and ramped areas, prior to the commencement of paving.

401.03.03 HMA Pavement Repair

THE FOLLOWING IS ADDED:

Sawcut existing HMA pavement to a maximum depth of 10 inches, or to the full depth of bound layers, whichever is less. Sawcut lines parallel and perpendicular to the roadway baseline and 3 inches away, at the closest point, from the damaged area to be repaired.

Remove damaged and loose material to a depth of at least 3 and no more than 10 inches below the level of milling within the boundary of the sawcuts to form rectangular openings with vertical sides. Shape and compact the underlying surface to produce a firm, level base. Ensure that the remaining pavement is not damaged.

401.03.07 HMA Courses

A. Paving Plan.

PART (4) IS CHANGED TO:

4. Lighting plan for night operations as specified in 108.06.

C. Test Strip.

REPLACE THE FIRST PARAGRAPH OF THIS SECTION WITH THE FOLLOWING:

Test Strip. Construct a test strip for each HMA mix for contracts with more than a total of 5,500 tons of HMA. For HMA HIGH RAP, construct the test strip at least 14 days prior to production. Test strips are not necessary for temporary pavement. Ensure that the tack coat or prime coat has been placed as specified in 401.03.05 and 401.03.06, before placing HMA. Transport and deliver, spread and grade, and compact as specified in 401.03.07.D, 401.03.07.E, and 401.03.07.F, respectively, and according to the approved paving plan. Construct a test strip for the first 700 to 1,200 square yards placed for each job mix formula. If the paving lot area is less than 700 square yards, the District Local Aid Office may waive the coring requirements. While constructing the test strip, record the following information and submit to the RE:

D. Transportation and Delivery of HMA.

THE SECOND SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

Do not allow trucks to leave the plant within 1 hour of sunset unless lighting for night operations is provided as specified in 108.06.

G. Opening to Traffic.

THE FOLLOWING IS ADDED AFTER THE LAST PARAGRAPH:

Ensure that RPMs are installed and rumble strips are constructed within 14 days of opening each day's surface paving to traffic.

H. Air Void Requirements.

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

Pavement lots are defined as approximately 15,000 square yards of pavement in Surface area. If pavement lot area is less than 5000 square yards, the Local Aid District Office may waive the air voids requirements.

The RE will designate an independent testing agency (Laboratory) to perform the quality assurance sampling, testing and analysis. The Laboratory is required to be accredited by the AASHTO Accreditation Program (www.amrl.net). The Laboratory's accreditation must include AASHTO T 166 and AASHTO T 209.

The Laboratory Technician who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

The Laboratory will determine air voids from 5 (Five), 6-inch diameter cores taken from each lot in random locations within the traveled way and at least one core in each travel lane. The HMA Core Sampling Plan form provided on the Local Aid Website must be utilized by the Laboratory to determine the random locations of the cores. The Laboratory may rerun the random location functions on the HMA Core Sampling Plan form to resolve any conflicts generated by the HMA Core Sampling Plan form and physical limitations of the HMA lot, such as utility conflicts, or the specifications defined herein. The coring locations must be designated by a station and offset, and offsets are taken from the left edge of the pavement in the direction of travel within the lane lines. The Laboratory must disclose the contents of the HMA Core Sampling Plan with the Contractor to assist in the schedule of construction.

The Laboratory will determine air voids of cores from the values for the maximum specific gravity of the mix and the bulk specific gravity of the core. The Laboratory will determine the maximum specific gravity of the mix according to NJDOT B-3 and AASHTO T 209, except that minimum sample size may be waived in order to use a 6-inch diameter core sample. The Laboratory will determine the bulk specific gravity of the compacted mixture by testing each core according to AASHTO T 166.

The Laboratory will calculate the percent defective (PD) as the percentage of the lot outside the acceptable range of 2 percent air voids to 8 percent air voids. The acceptable quality limit is 15 percent defective. For lots in which PD > 15, the City will assess a negative pay adjustment.

The Laboratory will use and submit to the RE form DS8S-PD provided from the Local Aid District Office and verify manually the PD calculation.

The Laboratory will calculate pay adjustments based on the following:

- 1. Sample Mean (\bar{X}) and Standard Deviation (S) of the N Test Results (X_1, X_2, \dots, X_N).**

$$\bar{X} = \frac{(X_1 + X_2 + \dots + X_N)}{N}$$

$$S = \sqrt{\frac{(X_1 - \bar{X})^2 + (X_2 - \bar{X})^2 + \dots + (X_N - \bar{X})^2}{N - 1}}$$

- 2. Quality Index (Q).**

$$Q_L = \frac{(\bar{X} - 2.0)}{S}$$

$$Q_U = \frac{(8.0 - \bar{X})}{S}$$

- 3. Percent Defective (PD).** Using NJDOT ST for the appropriate sample size, the Laboratory will determine PD_L and PD_U associated with Q_L and Q_U , respectively. $PD = PD_L + PD_U$
- 4. Reduction Per Lot.** Calculate the reduction per lot as specified in Table 401.03.07-3:

Table 401.03.07-3	
Reduction in Payment for Nonconformance to Air Void Requirements	
Percent Defective (PD) Per Lot	Reduction Per Lot (%)
$0 < PD \leq 15$	0
$15 < PD \leq 30$	0.5
$30 < PD \leq 35$	2
$35 < PD \leq 40$	10
$40 < PD \leq 45$	15
$45 < PD \leq 50$	20
$50 < PD \leq 60$	30
$60 < PD \leq 75$	45
$PD > 75$	Remove & Replace

- 5. Outlier Detection.** If $PD < 10$, the Laboratory will not screen for outliers. If $PD \geq 10$, the Laboratory will screen acceptance cores for outliers using a statistically valid procedure. The following procedure applies only for a sample size of 5 or 10.
 - The Laboratory will arrange the core results in ascending order, in which X_1 represents the smallest value and X_N represents the largest value.
 - If X_N is suspected of being an outlier, the Laboratory will calculate:

$$R = \frac{X_N - X_{(N-1)}}{X_N - X_1}$$

- If X_1 is suspected of being an outlier, the Laboratory will calculate:

$$R = \frac{X_2 - X_1}{X_N - X_1}$$

4. For N = 5 if R > 0.642, the value is judged to be statistically significant and the core is excluded.
For N = 10 if R > 0.412, the value is judged to be statistically significant and the core is excluded.

If an outlier is detected for N = 5 and no retest is warranted, the Contractor may replace that core by taking an additional core at the same offset and within 5 feet of the original station. If an outlier is detected and a retest is justified, take a replacement core for the outlier at the same time as the 5 additional retest cores are taken. If the outlier replacement core is not taken within 15 days, the Laboratory will use the initial core results to determine reduction per lot.

If an outlier is detected for N = 10, the Contractor may replace that core by taking an additional core at the same offset and within 5 feet of the original station. If the outlier replacement core is not taken within 15 days, the Laboratory will use the initial core results to determine the reduction per lot.

6. **Retest.** If the initial series of 5 cores produces a percent defective value of PD ≥ 30 for mainline or ramp lots, or PD ≥ 50 for other pavement lots, the Contractor may elect to take an additional set of 5 cores at random locations chosen by the HMA Core Sampling Plan form. Take the additional cores within 15 days of receipt of the initial core results. If the additional cores are not taken within the 15 days, the Laboratory will use the initial core results to determine the PPA. If the additional cores are taken, the Laboratory will recalculate the reduction per lot using the combined results from the 10 cores.
7. **Removal and Replacement.** If the final lot PD ≥ 75 (based on the combined set of 10 cores or 5 cores if the Contractor does not take additional cores), remove and replace the lot and all overlying work. The replacement work is subject to the same requirements as the initial work.

For shoulder lots, the City will assess the calculated reduction per lot instead of removal and replacement. Fog seal the lot as specified in 422.03.01.

I. Thickness Requirements.

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

Thickness requirements will apply when full-depth, uniform-thickness HMA pavement construction is shown.

Pavement lots are defined as approximately 15,000 square yards of pavement area. The Engineer will not include areas consisting of different HMA mixtures or thicknesses in the same lot. If thickness lot area is less than 5000 square yards, the District Local Aid Office may waive the thickness requirements.

The RE will designate an independent testing agency (Laboratory) to perform the quality assurance sampling, testing and analysis. The Laboratory is required to be accredited by the AASHTO Accreditation Program (www.amrl.net). The Laboratory's accreditation must include AASHTO T 166 and AASHTO T 209.

The Laboratory Technician who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

The Laboratory will test for thickness using the full-depth cores taken for surface course air voids, evaluated according to NJDOT B-4. The Laboratory will base acceptance on total thickness and thickness of the surface course.

1. **Total Thickness.** The Laboratory will calculate the percent defective (PD) as the percentage of the lot that is less than the design thickness. The Laboratory will consider 25 percent defective as the acceptable quality limit. For lots where PD < 25, the City will award a positive pay adjustment. For lots where PD > 25, the City will assess a negative pay adjustment.

The City will base total thickness acceptance on the percentage of the lot estimated to fall below the specified thickness as follows:

- a. **Sample Mean (\bar{X}) and Standard Deviation (S) of the N Test Results (X1, X2,...,XN).** Calculate as specified in 401.03.07.H.1.

$$\bar{X} = \frac{(X_1 + X_2 + \dots + X_N)}{N}$$

$$S = \sqrt{\frac{(X_1 - \bar{X})^2 + (X_2 - \bar{X})^2 + \dots + (X_N - \bar{X})^2}{N - 1}}$$

b. Quality Index (Q_I).

$Q_I = ((\bar{X} - T_{des}) / S)$, and T_{des} is the design thickness.

- c. Percent Defective (PD).** Using NJDOT ST for the appropriate sample size, determine the percentage of material (PD) falling below the design thickness associated with QL (lower limit).
- d. Reduction in Payment.** The City will determine the reduction in payment based on the quantity of the surface course multiplied by the percent reduction in payment from Table 401.03.07-5.

Table 401.03.07-5 Reduction for Nonconformance to Air Voids Requirements	
Percent Defective	Percent Reduction
0 to 25.0	0
25.1 to 30.0	2
30.1 to 35.0	5
35.1 to 40.0	10
40.1 to 45.0	20
Over 45.0	Remove & Replace

- e. Retest.** If the initial series of 5 cores produces a percent defective value of $PD \geq 30$, the Contractor may elect to take an additional set of 5 cores at random locations chosen by the RE. Notify the RE within 15 days of receipt of the initial core results to take the additional cores. If the RE is not notified within the 15 days, the Laboratory will use the initial core results to determine the reduction in payment for nonconformance requirements. If the additional cores are taken, the ME will recalculate the reduction in payment for nonconformance requirements using the combined results from the 10 cores.
- f. Removal and Replacement.** If the lot $PD \geq 45$, remove and replace, or mill and overlay, the lot. The replacement work is subject to the same requirements as the initial work.

2. Surface Course Thickness. The Laboratory will evaluate the surface course solely to determine whether a remove- and-replace or an overlay condition exists, not for pay adjustment. The Laboratory will calculate the percent defective (PD) as the percentage of the lot that is less than the allowable thickness for the nominal maximum aggregate used in the surface course. The Laboratory will accept pavement lots with $PD \leq 30$ and will reject pavement lots with $PD > 30$.

The Laboratory will base surface thickness acceptance on the percentage of the lot estimated to fall below the allowable thickness as follows:

- a. Sample Mean (\bar{X}) and Standard Deviation (S) of the N Test Results (X₁, X₂,...,X_N).** Calculate as specified in 401.03.03.I.1.
- b. Quality Index (Q_L).**
- $Q_L = ((\bar{X} - T_{all}) / S)$, and T_{all} is the minimum allowable thickness from Table 401.03.07-6.

Table 401.03.07-1 Surface Course Thickness Requirements	
HMA Mix Design Size Designation	Minimum Allowable Compacted Lift Thickness (T ^{all})
4.75 MM	0.75 inch
9.5 MM	1.00 inch
12.5 MM	1.25 inches
19 MM	2.00 inches

- c. Percent Defective.** Using NJDOT ST - Statistical Tables (NJDOT Standard Specs for Roads and Bridges 2019-NJDOT TEST METHODS) for the appropriate sample size, determine the percentage of material (PD) falling below the allowable thickness associated with Q_L (lower limit).
- d. Retest.** If the initial series of 5 cores produces a percent defective value of $PD > 30$, the Contractor may take an additional 5 cores at random locations determined by the Laboratory. Notify the RE within 15 days

of receipt of the initial core results to take the additional cores. If the RE is not notified within the 15 days, the Laboratory will use the initial core results to determine the PPA. When the additional cores are taken, the Laboratory will recalculate the reduction in payment for nonconformance requirements using the combined results from the 10 cores to obtain the total PD.

- e. **Removal and Replacement.** If the surface course fails to meet the acceptance requirement with a PD ≤ 45, the City will require removal and replacement of the lot. The replacement work is subject to the same requirements as the initial work.

401.04 MEASUREMENT AND PAYMENT

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

The City will measure and make payment for Items as follows:

<i>Item</i>	<i>Pay Unit</i>
HMA MILLING, 3" OR LESS	SQUARE YARD
TACK COAT	GALLON
HOT MIX ASPHALT 9.5 M 64 SURFACE COURSE	TON
HOT MIX ASPHALT 19 M 64 BASE COURSE	TON

The specified depth of the milling is measured from the original surface to the top of the high spots of the textured surface.

The RE will measure TACK COAT by the volume delivered, converted to the number of gallons at 60 °F as calculated by the temperature-volume correction factors specified in 902.01.

The City will measure HOT MIX ASPHALT 9.5 M 64 SURFACE COURSE, and HOT MIX ASPHALT 19 M 64 BASE COURSE by the ton as indicated on the certified weigh tickets, excluding unused material. When nominal maximum aggregate size 3/8 inch HMA surface course is directed for use in transition (run out) areas, the City will include this weight with the weight for HOT MIX ASPHALT 9.5 M 64 SURFACE COURSE.

The City will make a payment adjustment for HMA air void quality per lot by the following formula:

$$\text{Pay Adjustment Per HMA Lot} = Q \times \text{BP} \times \text{Reduction Per Lot (\%)}$$

Where:

BP = Bid Price of HMA

Q = Quantity of HMA in lot receiving payment adjustment

Reduction Per Lot (%) = Air void Reduction (%) per lot as specified in 401.03.07.H

The City will make a payment adjustment for HMA thickness quality per lot by the following formula:

$$\text{Pay Adjustment Per HMA Lot} = Q \times \text{BP} \times \text{Percent Reduction (\%)}$$

Where:

BP = Bid Price of HMA

Q = Quantity of HMA in lot receiving payment adjustment

Percent Reduction (%) = Thickness Percent Reduction (%) per lot as specified in 401.03.07.I

The City will make a payment adjustment for HMA ride quality, as specified in 401.03.07.J.

If the Contractor feels it will be necessary to perform the final paving at night, it will be his responsibility to obtain approvals from the Municipality and the County. All of the costs associated with the night-time work pertaining to the same shall be the sole responsibility of the Contractor. No additional payment will be made for such night work. All costs must be included in the various pay items in the bid Proposal.

No separate payment will be made for core samples. All costs for furnishing labor, equipment, and materials for core samples including but not limited to the drilling equipment, hot mix asphalt fill material, transportation and testing of samples shall be included in the various hot mix asphalt pay items in the Proposal.

SECTION 402 HMA FRICTION COURSE

402.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This section describes the requirements for constructing permeable asphalt that consists of a permeable asphalt surface course and a permeable asphalt base course over the storage bed. Permeable asphalt is also referred to as an open graded friction course (OGFC).

The porosity of the permeable asphalt surface course shall be 15-25%.

The binder used in the surface course is for parking lots, polymer modified binder PG 64E-22 is specified due to its ability to minimize scuffing caused by automobiles with power steering.

The porosity of any permeable asphalt base course must be $\geq 25\%$.

402.02 MATERIALS

THE FOLLOWING IS ADDED:

The item Tack Coat shall not be used to bind the OGFC surface and base courses together. Sealant, prime coat and other treatments that reduce the rate of infiltration shall not be applied to the base and surface courses.

Key properties and characteristics for porous asphalt mix are as follows:

Air Voids (AASHTO T.269-11/ASTM D3203M-11) $> 16\%$

Drain Down – (AASHTO T305-09/ASTM 6390-11) $< 0.3\%$

Minimum asphalt content for 9.5 MM nominal aggregate is 5.75% by weight. For 19MM Nominal aggregate minimum asphalt content is highest possible without exceeding drain down requirements

402.03 CONSTRUCTION

402.03.01 Open-Graded Friction Course and Modified Open-Graded Friction Course

E. Spreading and Grading.

THIS SECTION IS DELETED AND REPLACED WITH THE FOLLOWING

Spread and grade OGFC as specified in 401.03.07E. Installation of permeable asphalt requires the following temperature guidelines as follows:

1. Asphalt base course: 200 – 245 °F,
2. Finish rolling base course: 140 – 150 °F,
3. Asphalt surface course: 200 – 220 °F and
4. Finish rolling surface course: 110 – 140 °F.

G. Opening to Traffic.

THIS SECTION IS DELETED AND REPLACED WITH THE FOLLOWING:

Vehicular use is prohibited for at least 48 hours once the pavement installation is complete.

THE FOLLOWING SUBPART (J) IS ADDED:

- J. Post Construction Testing.** Post-construction testing of the permeable asphalt surface course is required and must conform to the methods of either ASTM C1701: Standard Test Method for Infiltration Rate of In-Place Pervious Concrete or ASTM C1781: Standard Test Method for Surface Infiltration Rate of Permeable Unit Pavement Systems. A minimum of three locations must be used for the test and should be spaced evenly across the pervious paving system. Failure to achieve the minimum design infiltration rate of the surface course at one or more location indicates the system cannot be put in service until the system is corrected to yield all passing values. Unlike the test methodology outlined in the ASTM standards, the test results must not be averaged. The maintenance plan must include a log for recording each location and its test result for future reference.

402.04 MEASUREMENT AND PAYMENT
THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
MODIFIED OPEN-GRADED 9.5MM FRICTION COURSE	TON
MODIFIED OPEN GRADED 19 MM FRICTION COURSE	TON

DIVISION 500 – BRIDGES AND STRUCTURES

SECTION 501 – SHEETING AND COFFERDAMS

501.02 MATERIALS

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

All temporary sheeting and temporary cofferdams shall be hot rolled sheets.

501.03 CONSTRUCTION

THE FOLLOWING IS ADDED BEFORE SUBPART 501.03.01:

Excavations deeper than 5 feet shall have the sides sheeted or shored or shall have the sides sloped back to the angle of repose of the materials in accordance with the applicable OSHA requirements. Step slopes surrounding sheeting to improve stability and prevent wedge action. The design and types of bracing, shoring, sheet piling, temporary cofferdams, or similar temporary construction shall be the responsibility of the Contractor, and shall comply with OSHA requirements, be suitable to the conditions encountered, and ensure proper construction of the permanent structures or other necessary excavations. Design calculations shall be signed by a Professional Engineer licensed in the State of New Jersey.

501.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

Refer to Section 511 for Steel Bulkhead construction.

SECTION 502 – LOAD BEARING PILES

502.01 DESCRIPTION

The first sentence of this subsection is changed to:

The work shall consist of furnishing and driving all piles required for the support of the pavilion building as shown on the plans and further described herein.

502.02.02 Equipment

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Contractor shall utilize fixed-leads or another suitable means approved by the RE for maintaining pile positioning during driving. This may include pre-drilling to a sufficient depth to adequately fix the location of the pile for driving.

502.03 CONSTRUCTION

502.03.01 Furnishing Pile Driving Equipment

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Test piles of the specified materials and dimensions shall be furnished and driven, with an impact hammer, at locations designated by the Resident Engineer.

502.03.03 Driving Piles

A. Wave Equation Analysis (WEAP)

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED WITH THE FOLLOWING

Contractor shall submit Wave Equation Analyses for the proposed driving equipment to the RE for approval, prior to mobilization of equipment. Wave Equation Analyses shall be submitted in accordance with the requirements for Working Drawings, Section 105.05.

B. Methods of Driving.

2. Penetration

THE FOLLOWING IS ADDED:

All bearing piles shall be driven to the minimum tip elevations indicated. Water jets will be allowed to facilitate construction of piles, subject to the requirements specified below.

Water jets will be allowed to facilitate the placement of piles. In general, at least the last five feet of penetration will be accomplished without the aid of a jet. This, however, may be subject to change at the direction of the Engineer to provide for actual subsurface conditions encountered during the course of the work.

Pile installation records shall be taken by a qualified geotechnical engineer retained by the Contractor and shall include a record of hammer blows during the pile driving and the results of the pile inspection.

C. Test Piles.

THIS SUBPART HAS BEEN DELETED AND REPLACED AS FOLLOWS:

Test piles of the specified materials and dimensions shall be furnished and driven, with an impact hammer at the designated locations directed by the Engineer. Two (2) test piles are required for the subject project. The test piles shall be ordered at sixty (60) feet in length. In general, lengths of test piles will be greater than the lengths of production piles. Equipment and procedure (criteria) used for driving test piles shall be identical to that which the Contractor proposes to use on the production piles.

Test piles shall be driven continuously, without interruption, to an ultimate bearing capacity of 120 kips (allowable bearing capacity of 60 kips) provided that the minimum pile tip elevation has been achieved. The Engineer may require that the piles be driven beyond the specified resistance even though the minimum tip elevation has been achieved.

Dynamic Pile Load Tests shall be performed on test piles to verify capacity.

Test piles of the materials and dimensions specified and lengths directed shall be furnished. Test piles shall be driven with the same type of equipment that is used for driving production piles. Test piles shall be driven at the designated locations to the bearing capacity and minimum penetration that is shown on the plans. The Engineer shall be the sole judge in determining bearing capacity and the length of pile to be driven

SUBPART 1 STATIC PILE LOAD TEST IS DELETED IN ITS ENTIRETY.

2. Dynamic Pile Load Test.

THE FOLLOWING SHALL BE ADDED TO THIS SUBSECTION

Dynamic Pile Load Tests shall be performed on test piles to verify capacity.

D. Production Pile Lengths.

THIS SUBSECTION IS DELETED AND REPLACED AS FOLLOWS:

Piles shall be furnished in accordance with an order list based on results obtained from driving test piles. Said order list will be approved by the RE but shall be prepared by the Contractor. Said list shall not be prepared until all test piles are

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

driven. Test piles shall be driven as early in the project as possible so as to minimize delays that could be caused by long lead times sometimes associated with obtaining production piles.

The actual length of piles required shall be determined by the Contractor according to this Subsection by driving test piling to determine the actual lengths needed before ordering the remaining piles and shall include an allowance for cutoffs necessitated by driving operations and subsurface variations. Piles shall be furnished in accordance with an order list based on results obtained from driving test piles and on other geotechnical information, when available. Said order list will be approved by the Engineer but shall be prepared by the Contractor. Said list shall not be prepared until all test piles are driven. Test piles shall be driven as early in the project as possible so as to minimize delays that could be caused by long lead times sometimes associated with obtaining production piles. The lengths of bearing piles shown on the plans are for estimating purposes only and are subject to variation based on results of test piles.

The actual length of piles required shall be determined by the Contractor according to this Subsection by driving test piling to determine the actual lengths needed before ordering the remaining piles and shall include an allowance within his unit bid price for cutoffs necessitated by driving operations and subsurface variations.

502.04 MEASUREMENT AND PAYMENT

THE FOLLOWING PAY ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
CONCRETE-FILLED STEEL PIPE PILE, 12.75" DIAMETER	LINEAR FOOT

PREBORED HOLES shall be paid by the linear foot and shall include the cost of equipment, labor and all incidental costs. No separate payment shall be made for restrikes, jetting, spudding or any other method used to facilitate pile driving procedures. The cost shall be included in the price of the respective pile items.

CONCRETE-FILLED STEEL PIPE PILE, 12.75" DIAMETER shall be paid by the linear foot and shall include the cost of equipment, materials, labor and all incidental costs. No separate payment will be made for the following items: furnishing equipment for driving steel piles, furnishing test piles, wave equation analyses, cut-offs, flat plate at end of pile or concrete fill within steel piles. All cost associated with these items shall be included in the unit price bid for the pay item CONCRETE-FILLED STEEL PIPE PILE, 12.75" DIAMETER. Length of steel pipe piles shall be measured from the pile tip to cut-off elevation, including test piles.

DYNAMIC PILE LOAD TESTS shall be paid by the unit and shall include all costs associated with performing the testing and providing CAPWAP results to RE.

SECTION 504 – STRUCTURAL CONCRETE

504.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This Section also describes the requirements for furnishing and placing of the concrete structures, etc., together with all hardware required to complete the structures as shown on the plans and as herein specified.

504.02 MATERIALS

504.02.01 Materials

THE FOLLOWING MATERIAL IS ADDED TO THE LIST

Water Repellent Seal Coat	912.01.05
No. 57 Coarse Aggregate	901.03

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

504.03 CONSTRUCTION

504.03.01 Reinforcement Steel

THE FOLLOWING IS ADDED:

All reinforcement steel shall be galvanized. Epoxy coated reinforcing steel shall not be permitted.

C. Field Cutting.

THE FOLLOWING IS ADDED TO THIS SUBPART:

When galvanized reinforcing bars are cut in the field, the cut ends of the bars shall be treated with two (2) coats of Carbozinc 4195 zinc rich epoxy or equal, approved by the RE, according to the requirements of ASTM A 780.

D. Field Bending.

THE FOLLOWING IS ADDED TO THIS SUBPART:

Galvanized reinforcing bars shall be fabricated prior to galvanizing. Field bending of galvanized reinforcing steel shall not be permitted without authorization of the RE.

E. Placing and Fastening.

THE FOLLOWING IS ADDED TO THIS SUBPART:

Bar support chairs and ties for galvanized reinforcement shall be hot dip galvanized.

F. Splices.

THE FOLLOWING IS ADDED TO THIS SUBPART:

The shop drawings shall specifically note bars which will require splices. If bars so noted were not scheduled to be spliced on the construction plans, the proposed splice shall be subject to the approval of the RE.

504.03.02 Concrete

C. Limitations of Placing.

1. Cold Weather Concreting.

THE FOLLOWING IS ADDED:

The Contractor is advised that no additional compensation will be made in the event that protection from cold weather is required during the curing of concrete. Any cost that could be incurred therefore should be included in the unit prices bid for the various items in this contract.

D. Placing and Consolidating Concrete.

THE FOLLOWING IS ADDED:

The Contractor shall construct construction and contraction joints where shown on plans and where directed by the RE. Costs for this work shall be included in the price bid for the various concrete items in the proposal. In addition, the Contractor shall submit a plan for approval by the RE showing any additional construction or contraction joints which are necessitated by the Contractor's formwork. These additional joints shall not be constructed unless authorized by the RE. The Contractor may be required to submit additional reinforcement drawings should the additional of contraction joints be approved.

G. Removal of Forms and Falsework.

THE FOLLOWING IS ADDED:

The first paragraph of this Subsection is amended to change the minimum time required before stripping of forms for walls from one day to three days.

H. Finishing Concrete Surfaces.

THE FOLLOWING IS ADDED:

1. Class 7, Concrete Penetrating Sealer. Upon completing and properly curing the Class 2 Finish, apply a silane penetrating sealer conforming to Subsection 912.02.05 for the following exposed concrete surfaces listed below:

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

1. All surfaces of the concrete sheet pile cap and pipe collar.
2. Top surface of the concrete splash pad, concrete walkway on pier and concrete slab at pavilion.
3. All surfaces of stairs and ramps.

The concrete surfaces receiving the penetrating sealer shall be prepared and the sealer shall be applied in accordance with manufacturer's best recommended procedures and practices. The number of coats of sealer to be applied shall be as recommended by the Manufacturer and approved by Engineer. The Contractor shall be qualified to perform concrete sealing by reason of documented experience and/or training provided by product manufacturer.

504.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEM IS ADDED:

<i>Item</i>	<i>Pay Unit</i>
CONCRETE SPLASH PAD	CUBIC YARD
CONCRETE PAD - PLAZA WALKWAY & PAVILION - 8 INCH	CUBIC YARD
CONCRETE SHEET PILE CAP	CUBIC YARD
CONCRETE FOUNDATION, PAVILION	CUBIC YARD
CONCRETE STAIRS, TYPE 1	UNIT
CONCRETE STAIRS, TYPE 2	UNIT
CONCRETE STAIRS, TYPE 3	UNIT
CONCRETE HANDICAP RAMPS	UNIT
CONCRETE PIPE COLLAR	LUMP SUM

THE FOLLOWING IS ADDED:

CONCRETE SPLASH PAD and CONCRETE PAD - PLAZA WALKWAY & PAVILION - 8 INCH shall be measured by the cubic yard. No separate payment will be made for formwork or sealing concrete with water repellent seal coat. All such costs of same shall be included in the unit price bid for the respective pay items incorporating this work. Reinforcing steel will be paid under item REINFORCING STEEL, GALVANIZED.

CONCRETE SHEET PILE CAP and CONCRETE FOUNDATION, PAVILION shall be measured by the cubic yard. No separate payment will be made for reinforcing steel, formwork or sealing concrete with water repellent seal coat. All such costs of same shall be included in the unit price bid for the respective pay items incorporating this work.

CONCRETE STAIRS, TYPE 1, CONCRETE STAIRS, TYPE 2, CONCRETE STAIRS, TYPE 3 and CONCRETE HANDICAP RAMPS shall be measured by the unit. No separate payment will be made for reinforcing steel, formwork, sealing concrete with water repellent seal coat or No. 57 Coarse Aggregate. Unit price bid for the respective pay items shall incorporate all items necessary to complete work, less railings. Pay items for railings are presented under Subsection 509.04.

CONCRETE PIPE COLLAR (at sheet pile wall) shall be paid on a lump sum basis. No separate payment will be made for reinforcing steel, shear studs, formwork or sealing concrete with water repellent seal coat. Lump sum price bid shall incorporate all items necessary to complete work.

SECTION 506 – STRUCTURAL STEEL

506.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This Section describes the labor, materials, equipment and supervision necessary to manufacturing or shop-fabricating metal elements, including double channel walers, threaded tie-rod anchors, turnbuckles, couplers, washer plates, splice plates, angels and other miscellaneous structural steel.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

506.02 MATERIALS

506.02.01 Materials

THE FOLLOWING IS ADDED:

Structural Steel unless otherwise noted, including rolled shapes and plates, shall conform to the following items material requirements:

- 1. Double Channel Waler – 50 KSI
- 2. Treaded Tie Rods and Turnbuckles – ASTM-A615, Grade 75 KSI
- 3. Bearing Plates and Washer Plates – Grade 75 KSI
- 4. Splice Plates – Grade 75 KSI
- 5. Angles – Grade 75 KSI

All structural steel shall be Hot-Dip Galvanized in accordance with Section 517 – Coatings.

Tie rods for steel sheet pile bulkhead shall be 1-3/4 inch diameter thread bar, conforming to ASTM A 615 Grade 75 ksi and shall be as manufactured by DYWIDAG Systems International, USA, Inc., Lincoln Park, NJ, Williams Form Engineering corporation, Grand Rapids, MI or approved equal.

506.03 CONSTRUCTION

THE FOLLOWING IS ADDED:

Except as noted, work shall conform to the following codes and standards:

- 1. American Society of Testing and Materials (ASTM), latest edition
- 2. American Institute of Steel Construction (AISC) Specification for the Design, Fabrication and Erection of Structural Steel for Buildings, latest editions.
- 3. American Welding Society (AWS).

506.03.01 Structural Steel

A. Working Drawings.

THE FOLLOWING IS ADDED:

Submit for approval to fabrication all information necessary for the fabrication of the component parts. Indicate size and weight of members, type and location of shop and field connections, the type size and extent of all welds, and welding sequences. Use American Welding Society welding symbols. Approval of shop drawing will be for size and arrangement of principal and auxiliary members and strength connections. Any errors in dimensions shown on shop drawings shall be responsibility of the contractor.

The Contractor shall use only certified welders and the shielding arc process for all welding performed in connection with the work of this section. Each welder shall be certified for the particular work, prior to commencing the work, which must be accomplished.

Completed welds will be subject to inspection and approval of independent testing agency. Faulty welds shall be cut out and replaced at no cost to the City.

Upon completion of this portion of the work, and as a condition of its acceptance, the Contractor shall deliver to the City a letter signed by an official of the miscellaneous metal fabricating firm or firms certifying that all fabricated metal has been fabricated in complete accordance with this section of these specifications.

Refer to Section 511 for additional requirements associated with working drawings for bulkhead anchorage system.

506.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEM IS ADDED:

<i>Item</i>	<i>Pay Unit</i>
STRUCTURAL STEEL, GALVANIZED	POUND

THE FOLLOWING IS ADDED:

SPECIAL PROVISIONS FOR THE SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

Cost of all walers, channels, threaded tie-rod anchors, turnbuckles, bearing plates, bolts, hex nuts, spacers, welds, threaded bar connectors and washers for all steel sheet piling and steel tie-back sheeting shall be paid for under the pay item STRUCTURAL STEEL, GALVANIZED.

No separate payment will be made for any equipment necessary to install the STRUCTURAL STEEL, GALVANIZED. All costs for same shall be included in the price bid for these items.

No separate payment will be made for the galvanizing on structural steel. All costs for galvanizing shall be included in the unit prices bid for the pay items STRUCTURAL STEEL, GALVANIZED.

SECTION 509 – BRIDGE COMINATION RAILING, MISCELLANEOUS RAILINGS, AND FENCE

509.01 DESCRIPTION

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

The work shall also include the installation of railings on bulkhead, precast concrete retaining wall, stairs and ramps.

509.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEM IS ADDED:

<i>Item</i>	<i>Pay Unit</i>
RAILING, BULKHEAD	LINEAR FOOT
RAILING, PRECAST RETAINING WALL	LINEAR FOOT
RAILING, STAIRS	LUMP SUM
RAILING, HANDICAP RAMPS	LUMP SUM

The price bid for RAILING, BULKHEAD; RAILING and PRECAST RETAINING WALL shall be paid on a linear foot basis and shall include all labor methods, materials, and any other incidentals hereto required for the fabrication, furnishing and installation. No separate will be made for coring or drilling, or hardware required for the mounting of railings.

The price bid for RAILING, STAIRS and RAILING, HANDICAP RAMPS shall be paid on a lump sum basis and shall include all labor methods, materials, and any other incidentals hereto required for the fabrication, furnishing and installation. No separate will be made for coring or drilling, or hardware required for the mounting of railings.

SECTION 511 – BULKHEAD, FENDER AND DOLPHIN SYSTEMS

511.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This section describes all labor, materials, equipment and supervision necessary to furnish and install the following:

1. Anchored steel sheet pile bulkhead
2. Tie rods, turnbuckles, nuts and anchor plates
3. Wale system

The terms “Steel Sheet Piling” and “Steel Tie-Back Sheeting” includes all labor and materials necessary to install and maintain sheet piling, dikes, falsework, bracing, well points, pumps, other dewatering measures, including water quality measures, required to construct foundations and other structural elements.

This Section also describes the requirements for furnishing and installing timber pile clusters, concrete-filled steel mooring piles, and all associated hardware.

511.02 MATERIALS

511.02.01 Materials

THE FOLLOWING MATERIAL IS ADDED TO THE LIST

Epoxy-Polyamide Mastic	912.02.05
Timber Connectors and Hardware	915.06

THE FOLLOWING IS ADDED:

Steel Sheet Piling and Tie Back Sheeting shall be new steel sheeting and shall be protected the full length of all surfaces with coal tar epoxy paint as specified in 511.03.01. All steel sheet piling and tie back sheeting scheduled to remain in place shall be hot rolled and meet the requirements of the Standard Specifications for steel sheeting of the American Society of Testing. All steel sheet piling shall be hot rolled and meet ASTM A690 Steel (Marine Grade 50).

Refer to Section 506 for threaded tie-rods, walers, bearing plats, bolts and all other hardware related to anchorage system for bulkhead (other than steel sheeting).

A. Steel Sheet Piling. Shall be ASTM A690 Steel (Marine Grade 50). Minimum properties:

Weight.....	40.0 lb/ft ²
Elastic Section Modulus.....	60.7 in ³ /ft.
Moment of Inertia	490.85 in ⁴ /ft.
Minimum Thickness	0.50 in.

B. Steel Tie-Back Sheeting. Shall be ASTM A690 Steel (Marine Grade 50). Minimum properties:

Weight.....	22.0 lb/ft ²
Elastic Section Modulus.....	18.1 in ³ /ft.
Moment of Inertia	84.38 in ⁴ /ft.
Minimum Thickness	0.375 in.

Dolphin piles for the 7 pile clusters shall be new, clean peeled Greenheart timber piles.

511.02.02 Equipment

THE FOLLOWING MATERIAL IS ADDED TO THE LIST

Timber Pile Hammer.....	1004.04
-------------------------	---------

511.03 CONSTRUCTION

511.03.01 Sheet Piling and Polymer Structural Members.

THIS SUBPART IS DELETED AND REPLACED AS FOLLOWS:

A. Quality Assurance. Except as noted, work shall conform to the following codes and Standards, latest edition:

1. ASTM - Specifications for the American Society for Testing and Materials
2. ANSI/AASHTO/AWS - Bridge Welding Code DI.5-85
3. AISC - Specifications of the American Institute of Steel Construction

Comply with all rules, regulations, laws and ordinances of the State of New Jersey, and all other federal, state, and local authorities having jurisdiction. All labor, materials, equipment and services necessary to make work comply with such requirements shall be provided without additional cost to City.

All welding shall be performed by operators who have been previously qualified by tests as prescribed in the "ANSI/AASHTO/A\VS Bridge Welding Code DI.3-8S". Evidence that welders meet qualification requirements shall be submitted to the Owner before welding is begun.

B. Working Drawings. At least 30 days before beginning work, submit working drawings for approval for steel sheet piling, including anchor sheeting and tieback anchors.

Steel sheet piling and steel tie-back sheeting are shown in schematic outline on the contract plans. The successful bidder may use the configuration shown on the plans to develop working drawings.

Such submittals shall be sufficiently detailed to show line, grade, and structural details such as sheet piling layout and all anchor locations, waler layout and splice locations and other related details. A numbering system shall be provided for the anchors. Submittals shall also provide information regarding staging considerations when necessary, and shall consider impacts to adjacent structures and utilities. Working drawings are also to comply with the requirements of 501.03.03A.

Submit to the RE for review the following items:

1. Driving plan and schedule for installation of the steel sheet pile bulkhead.
2. Method of installation of steel sheet piling, including size and type of pile hammer, and temporary systems.
3. Templates and falsework to be used for support and layout of sheet piles during driving.
4. Materials and methods for temporary lateral support of existing structures during sheet pile installation if required.

Certify that materials are new and meet or exceed specification requirements by submitting a notarized copy of chemical and physical tests results.

- C. Shipping, Storing and Handling.** Ship, store and handle components, including fiberglass tubes, protective coatings, and concrete to avoid damage. When pile tips are required, attach to the pile before shipping. Store piles on a minimum of 6 inch wide timber cribbing arranged to support and to maintain straightness within the specified tolerance. Store components so that they may be easily inspected. When storing components, protect from exposure to extreme heat or impact. Only use fabric slings to move composite, timber, and concrete materials.

The Contractor shall deliver steel sheet piles in a timely manner to assure continuity of pile driving.

Sheet piles shall be handled, transported, stacked and protected to prevent damage.

Materials shall be stored in areas on site or on barges as approved by the RE.

- D. Coating Steel.** This work consists of furnishing all materials, labor, equipment, tools and all other incidentals required to provide a protective coal tar epoxy coating on steel sheet piling and steel tie-back sheeting used for bulkheads and welded shear studs. Shear studs to be welded and inspected prior to the start of the epoxy coating process. The exposed surfaces of galvanized bolts shall be coated with Coal Tar Epoxy after installation to match steel sheet piling. Refer to Section 517 – Coatings.

- E. Constructing Bulkhead.** All steel sheet piles shall be observed and/or tested prior to installation. Observations and/or testing shall include:

1. Checking sheet piles for general straightness: Piles with kinks in local areas along the interlock or that have excessive bowing or camber shall be rejected.
2. Gauging all pile interlocks: Thumbs of interlocks shall be of the proper size to fit into the corresponding interlock openings. Piles whose interlocks are not within acceptable tolerance shall be rejected.
3. Checking piles for lamination flaws or gas pockets: Piles showing evidence of lamination flaws shall be rejected.

Drive piles as specified in 502.03.03.B. The Contractor may use lighter driving equipment or vibratory pile drivers. Ensure that the completed piling is vertical, in line, driven to the prescribed depth, cut off to a straight line at the shown elevation, and watertight at the joints.

1. **Lines and Grades.** The Contractor shall establish sheet pile locations and all elevations required. A baseline and benchmark located on or close to the site will be provided by the City. The Contractor shall be responsible for maintenance and protection of the baseline and benchmark, and all pile location markers.
2. **Erection of Steel Sheet Piling.** Steel sheet piling for the proposed steel sheet pile bulkhead shall be installed at the locations and elevations as shown on the Contract Drawings.

Driving equipment and method shall be reviewed by the RE prior to commencement of installation. No jetting will be permitted, except as may be necessary to remove obstructions. Jetting must be approved by the RE prior to its application.

Sheet piles shall be driven within an approved falsework or approved template to be reviewed by the RE during the Submittal phase. In planning driving arrangements, the Contractor shall take into account site conditions.

Sheet piles shall be driven plumb and true to line. Maximum deviation from the intended wall line shall not exceed 2 in. over the entire length.

Sheet piles shall be driven to elevations specified on the Drawings.

No pile splicing will be permitted.

Touch up of all damage to coatings shall be in accordance with 511.03.01.E.

3. **Tie Rod Installation.** Tie rods shall be supported at a maximum of 20 feet on center to the line and grade of its final position using a wood block on a solid base approved by the RE (not required for tie rods less than 25 feet long).

Contractor shall be required to elevate each tie rod, after soil compaction. The final tie rod position, at the mid point of the tie rod shall be approximately 1.0 inch above theoretical grade for every 20 feet of tie rod length.

Tie rods shall be installed snug tight after bulkhead alignment has been established.

Contractor shall not run any compacting equipment over tie rods until a minimum of 6 inches of backfill material has been packed over the tie rods.

4. **Alternate Procedure.** The Contractor may propose alternative bulkhead and anchored tie-rod installation procedures and construction sequences to improve installation efficiency. Alternative procedures shall be used only with the approval of the RE, and must provide both temporary lateral support and a completed installation that will meet specification requirements.

- F. **Incidental Surfaces and Coating Repair.** The Epoxy-Polyamide Mastic shall be used to repair the Coal Tar Epoxy surfaces damaged, marred or in any other way rendered ineffective. Repair to damage to coal tar epoxy surfaces resulting from driving the steel sheet pile shall be limited to the top three feet of the steel sheet. This Mastic shall be used to coat nuts, bolts and washers, threads and any other surfaces, exposed or lying within the fill, or as directed by the Engineer.

1. **Surface Preparation.** Remove all dirt, oil, grease, rust, marine growth and other interference materials. When working at splash zone or in saltwater, coat cleaned metal surfaces as soon as possible to minimize new corrosion. Follow manufacturer's recommendations for mixing, application, surface preparation, thinning and curing.

2. **Application.** Apply by hand. (Wear rubber gloves if sensitive to epoxy or polyamide resins.) If applying to dry surfaces in air, periodically rewet hands with water to keep product from sticking to hands.

Spread smoothly on surface in 1/8" to 1/4" layer using heavy hand pressure to displace water and air bubbles. Smooth off by hand. When starting another handful, start spreading away from the previously applied film so as not to trap air bubbles or leave an area of uncoated surface. When used as a patch or grout, force material into hole or crack and smooth by hand to the thickness needed.

3. **Coating Thickness.** 1/8" to 1/4" dry film

4. **Final Curing Time.** Do not use below 50°F. Follow manufacturer's recommendations.

5. **Inspection.** Satisfactory performance will be based on acceptance of the completed work by the Engineer. All work will be subject to the inspection by the Engineer.

6. **Appearance of Finished Coating.** The finished coating shall be smooth and free of sharp protuberances. Sharp protuberances shall be cut off using a sharp wood chisel laid flat against the surface. The areas from which material has been removed shall be recoated to smooth the surface.

- G. **Defective Work.** The following shall be grounds for rejection and replaced at no additional cost to the City:

1. Any improperly fabricated parts.
2. Any damaged parts.
3. Any parts improperly installed in the work.
4. Any parts found not to have the proper coating.
5. Otherwise not in conformance with this specification or the contract documents.

THE FOLLOWING SUBPARTS ARE ADDED:

511.03.02 Driving Dolphin Piles

A. Quality Assurance. Except as noted, work shall conform to the latest editions of the following codes, specifications and standards including, but not limited to:

1. American Society for Testing and Materials (ASTM), Specifications: D25 Round Timber Piles.
2. American Institute of Timber Construction (AITC).

B. Working Drawings. Submit for approval by RE proposals for following items:

1. Driving plan and schedule for installation of timber and pipe piles.
2. Method of installation of piles including size and type of pile hammer.
3. Templates and falsework to be used to support layout of piles during driving.
4. Pile point and method of attachment, if required.
5. AWWA quality stamp on each new treated pile.
6. Certification of timber pile species.
7. Shop drawing for all shop fabricated items shall be submitted to the RE for approval before beginning fabrication.
8. Manufacturers' literature and specification on wire rope, chains, shackles, expansion bolts and hoist support pin.
9. List of all other hardware with quantities and material specifications.

C. Storage and Handling. Timber piles shall be handled with care to prevent damage. Damaged piles will be rejected and replaced at no additional cost to the City. Piles shall be stored space beneath them and situated to prevent being exposed to standing water.

Inspect piles in the leads, and where the protective shell or treated wood is impaired, between cutoff and a point which will be not less than 10 feet below ground, the piles shall be repaired as specified under Timber Treatment unless the pile is damaged to such an extent that it is rejected. Rejected piles will be replaced at no additional cost to the City. Support pile laterally during driving, but not unduly restrained from rotation in the leads. Where pile orientation is essential, take special care to maintain the orientation during driving. Take special care in supporting battered piles to prevent excess bending stresses in the pile. When necessary, place collars around the pile head to prevent brooming. Cant hooks shall not be used in handling treated piles. Cut piles by sawing or other means approved by RE. Holes for rebar shall be of a size that will ensure a driving fit.

D. Driving. All piles shall be marked at a given distance from the bottom, which will show above the waterline after driving, so that the bottom elevation of each pile and its relation with adjacent piles can be recorded. Drive dolphin piles to elevation: -30.0 NGVD DATUM

If obstructions are encountered the Contractor shall make reasonable efforts to remove obstruction. Reasonable efforts shall include excavation if obstruction is shallow or probing with steel pile to remove or bypass the obstruction. This work shall be considered as part of the work associated with pile installation.

1. **Tolerances.** Butts shall be within 4 inches of the location indicated. Manipulation of piles to force them into position will not be permitted. Check all piles for heave. Redrive heaved piles to force them to required elevation. Piles damaged, mislocated, or driven out of alignment shall be replaced or additional piles driven as directed at no additional cost to the City.

A complete and accurate record of each pile shall be furnished by the Contractor. The record shall indicate the pile location, diameter, length, hammer (make and model), number of blows per 6" for the final 36 inches of penetration, and all other pertinent information.

511.03.03 Driving Mooring Piles

A. Quality Assurance. Except as noted, work shall conform to the latest editions of the following codes, specifications and standards including, but not limited to:

1. American Society for Testing and Materials (ASTM)
2. American Welding Society (AWS)
3. American Institute of Steel Construction (AISC)

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

B. Working Drawings. Submit for approval by RE proposals for following items:

1. Driving plan and schedule for installation of timber and pipe piles.
2. Method of installation of piles including size and type of pile hammer.
3. Templates and falsework to be used to support layout of piles during driving.
4. Pile point and method of attachment, if required.
5. Certify that steel materials are new and meet or exceed specification requirements.
6. Shop drawing for all shop fabricated items shall be submitted to the RE for approval before beginning fabrication.
7. Manufacturers's literature and specification on wire rope, chains, shackles, expansion bolts and hoist support pin.
8. List of all other hardware with quantities and material specifications.

C. Storage and Handling. Steel piles shall be handled with care to prevent damage to pile and coating. Damaged piles will be rejected and replaced at no additional cost to the City. Piles shall be stored space beneath them and situated to prevent being exposed to standing water.

Inspect piles in the leads, and where the protective shell or treated wood is impaired the piles shall be repaired unless the pile is damaged to such an extent that it is rejected. Rejected piles will be replaced at no additional cost to the City. Support pile laterally during driving, but not unduly restrained from rotation in the leads. Where pile orientation is essential, take special care to maintain the orientation during driving.

D. Driving. All piles shall be marked at a given distance from the bottom, which will show above the waterline after driving, so that the bottom elevation of each pile and its relation with adjacent piles can be recorded. Drive without interruption to required tip elevation. Cut off shall be as indicated on drawings.

No pile splices will be permitted.

Contractor shall notify City 48 hours prior to driving and no piles shall be driven to final position without presence or RE.

1. **Tolerances.** Heads of piles shall be within 2 inches of the location indicated. Manipulation of piles to force them into position will not be permitted. Check all piles for heave and settlement. Redrive heaved piles to required tip elevation. Piles shall be driven within 0.5% of plumb.

A complete and accurate record of each pile shall be furnished by the Contractor. The record shall indicate the pile location, diameter, length, hammer (make and model), number of blows per 6" for the final 36 inches of penetration, and all other pertinent information.

511.04 MEASUREMENT AND PAYMET

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
STEEL TIE-BACK SHEETING	SQUARE FOOT
7-PILE DOLPHIN CLUSTER	UNIT

THE SECOND PARAGRAPH IS DELETED AND THE FOLLOWING IS ADDED TO THIS SUBSECTION:

The prices bid for STEEL SHEET PILING and STEEL TIE BACK SHEETING shall include all costs that may be incurred to construct, coat, brace, connect, connect to existing bulkheads, cut to the limits shown on the Plans, as may be required to construct the work shown on the Plans. This price shall also include all costs associated in any way with initial dewatering, maintenance pumping, supplemental dewatering to remove floodwaters and debris from within the permanent sheeting.

STEEL SHEET PILING and STEEL TIE BACK SHEETING shall be measured by square foot of sheeting left in place.

No separate payment will be made for the shear studs, their installation, or coating. All costs for shear studs shall be included in the price bid for STEEL SHEET PILING and STEEL TIE BACK SHEETING.

No separate payment will be made for any equipment necessary to install the STEEL SHEET PILING and STEEL TIE BACK SHEETING. All costs for same shall be included in the price bid for these items.

No separate payment will be made for the coal tar epoxy coating on steel sheet piling or steel tie-back sheeting. All costs for coal tar epoxy coating shall be included in the unit prices bid for the pay items being coated.

THE FOLLOWING IS ADDED:

No separate payment will be made for the following items: furnishing equipment for driving timber piles, timber pile furnished, 12” diameter, timber pile driven, 12” diameter. All cost associated with these items shall be included in the unit price bid for the pay item 7-PILE DOLPHIN CLUSTER.

The cost for threaded tie-rod anchors, couplers, turnbuckles, wales, plates, bolts, etc included in the construction of the Bulkhead shall be paid under the Unit Price bid for the pay item STRUDCTURAL STEEL, GALVANIZED.

The cost for mooring piles included in the construction of the Floating Dock System shall be paid under the Lump Sum bid for the pay item FLOATING DOCK SYSTEM. No separate payment will be made for the mooring piles or any associated work.

SECTION 513 – RETAINING WALLS

513.01 DESCRIPTION

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

The work shall consist of furnishing materials, labor, equipment and supervision for the construction of Precast Concrete Retaining Walls in accordance with the requirements of this section and in acceptable conformity with the lines, grades, design and dimensions shown in the project site plans.

The work shall also include the design and installation of temporary walls required for site preparation activities and surcharging program.

513.02 MATERIALS

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Pre-Cast Concrete Retaining Wall 904.02

Contractor shall be responsible for the design of the Pre-Cast Concrete Retaining Wall. Pre-Cast Concrete Retaining Wall shall satisfy FEMA requirements for a Gravity Seawall. At a minimum, the design shall consider the following conditions:

1. Case I – 250 psf uniform surcharge load behind wall.
2. Case II - A full hydrostatic load.
3. Case III – Wave Impact Loads and Impact Loads from Floating Debris per FEMA design requirements.

Temporary walls systems shall be selected and design by the Contractor and approved by RE. Design shall address all conditions and loads associated with proposed construction activities. Design shall be in accordance with FHWA design requirements for temporary walls.

513.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEM IS ADDED:

<i>Item</i>	<i>Pay Unit</i>
RETAINING WALL, LOCATION 1	SQUARE FOOT
RETAINING WALL, LOCATION 2	SQUARE FOOT
TEMPORARY RETAINING WALL, SURCHARGE	LUMP SUM

RETAINING WALL, LOCATION 1 and RETAINING WALL, LOCATION 2 shall consist of Pre-Cast Concrete Retaining Wall as described in these specifications. The price bid for RETAINING WALL, LOCATION 1 and RETAINING WALL, LOCATION 2 and shall include all labor, materials, and any other incidentals hereto, including 18” thick stone drainage layer, filter fabric and drainage pipe. Payment for I-9 and I-14 Aggregates utilized to backfill walls shall be made under the bid items in Section 203.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

The price bid for TEMPORARY RETAINING WALL, SURCHARGE shall include all labor, materials, and any other incidentals hereto for designing, furnishing, installing and removing temporary wall. Payment for I-9 and I-14 Aggregates shall be made under the bid items in Section 203.

THE FOLLOWING SECTIONS ARE ADDED:

SECTION 515 – FLOATING DOCK SYSTEM

515.01 DESCRIPTION

This section describes all labor, materials, equipment and supervision necessary to design and construct a floating dock system for use in support of new commuter ferry operations. This work shall include the steel barges, spudwells, mooring piles, fender frames, extruded rubber fenders, moveable bow loading ramps with electric and mechanical hoists, removable ballast, cleats and other miscellaneous hardware necessary for an operational system satisfying stringent safety criteria. The reference drawings that are part of contract documents are intended to depict the concept for the floating dock system. The details presented in the reference drawings may not reflect all of the specific needs of the floating dock system but present the Contractor with a basis to develop a final design to satisfy the intent of the contract documents. The Contractor shall not build from any reference drawing. It is the responsibility of the Contractor to use the written specifications and reference drawings to properly develop the final design and engineering drawings to construct the floating dock system. The Contractor shall include, as a minimum, all costs to provide and deliver the following:

1. Using the reference drawings and specifications provided, complete the design for the fabrication of the floating dock system including steel barges, coatings, cathodic protection, spudwells, mooring piles, fender frames/brackets, extruded rubber fenders, moveable bow loading ramps with electric and mechanical hoists, surface markings, removable ballast, cleats and other miscellaneous hardware required for an operational system satisfying stringent safety criteria. The Contractor shall prepare and submit design calculations and detailed working drawings signed and sealed by a Professional Engineer licensed in the State of New Jersey to RE for approval, prior to fabrication.
2. Fabricate floating dock system, with equipment and appurtenant features, from final design documents prepared by the Contractor and approved by the RE.
3. Test floating dock system and all related equipment and systems.
4. Deliver and install the completed floating dock system at the designated location.
5. Final installation and demonstration of the completed floating dock system with all equipment and appurtenant features presented on the final design documents prepared by the Contractor and approved by the RE, including movable bow loading ramps with electric and mechanical hoists, non-slip decking, fixed platforms, articulating gangway and railings.

The floating dock system as referenced in this section shall include the steel barge and all related fixtures, equipment, coatings and miscellaneous features, including, but not limited to.

1. Steel barges with watertight hatches.
2. Spudwells and Mooring Piles
3. Fender Framing and Extruded Rubber Fenders
4. Three (3) Movable Bow Loading Ramps with Mechanical and Electric Hoist Systems
5. Coatings, including corrosion protection, surface markings and tactile warning strips.
6. Galvanic cathodic protection
7. Removable Ballast
8. Safety Ladders
9. Cleats

Designer, Fabricator and Contractor shall demonstrate a minimum 5 years of experience specific to the barges, floating dock systems and related marine construction.

**SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT**

515.02 MATERIALS AND DESIGN

The steel barge shall be designed and constructed in accordance with the latest edition and interpretations of the rules, regulations, and requirements and standards of the Legislation, Regulatory Agencies, and technical organizations listed as follows:

1. American Bureau of Shipping (ABS) “Rules for Building and Classing Steel Vessels for Service on Rivers and Intracoastal Waterways.”
2. American Bureau of Shipping (ABS) “Rules for Building and Classing Marine Vessels”:
 - a. Part 2 – Rules for Materials and Welding
3. International Association of Classification Societies (IACS) Guide No. 47 “Shipbuilding and Repair Quality Standard.”
4. 33 CFR Subchapter E – USCG, Inland Navigation Rules.
5. 46 CFR Subchapter C – Uninspected Vessels. USCG inspection and certification is not required.
6. 46 CFR Subchapter C – Part 28, Subpart E – Stability
7. U.S. Army Corps of Engineers, Publication No. EM 385-1-1, “Safety and Health Requirements Manual.”

515.02.01 Materials

Unless otherwise specified or noted on the drawings, all structural hull material shall be in accordance with the following specifications:

1. American Bureau of Shipping (ABS), “Rules for Building and Classing Marine Vessels” and “Rules for Building and Classing Steel Vessels for Service on Rivers and Intracoastal Waterways”.
2. Welding Materials - ABS “Approved Welding Electrodes, Wire-Flux and Wire Gas Combination”.
3. Bolts, nuts and screws – ASTM A307-82, Specification for Carbon Steel Externally and Internally Threaded Standard Fasteners.

All articles, fittings, equipment, machinery, supplies, and materials used in the construction and outfitting of the vessel shall be new, of the highest grade, free from defects and imperfections, and be the standard product of reputable manufacturers, to the maximum extent practicable. Any material not specified shall be the best of their kind for the purpose intended. All items shall be suitable for workboat application and meet the latest requirements of standard specifications published by National Agencies. No salvaged materials shall be used in the works. Spare parts and service shall be readily obtainable.

Where not otherwise specified, provide materials in accordance with the following:

Concrete	903.03
Structural Precast Concrete	904.03
Structural Steel	906.01
Bolts and Bolting Materials	908
Dimension Timber	915.04
Timber Treatment	915.05

All materials comprising the barge shall be suitable for northern U.S. climate, similar to existing installations that have successfully withstood several years of continuous saltwater immersion and multiple freeze thaw cycles.

The hull steel plate shall be ABS Grade A Steel. The steel structural shapes, stiffeners, and angles shall be ASTM A36 steel or higher.

Refer to Section 517 for Coatings. Barge shall be coated with 3-part Epoxy Coating System.

515.02.02 Design

These specifications are intended to describe the required specifications for floating dock system. The principal dimensions of the steel barges are:

DIMENSION	BARGE 1	BARGE 2
LENGTH	130' - 0"	100' - 0"
BEAM	28' - 0"	12' - 0"
DEPTH	8' - 0"	8' - 0"
DESIGN DRAFT	2' - 0"	2' - 0"

Barges shall be designed to accommodate a minimum uniform live load of 150 pounds per square foot on the top deck in addition to loads related to dead load, equipment, fenders, platforms, non-skid decking, railings, spudwells and mooring piles. Design shall be all-inclusive and shall include fenders, mooring piles, 3 movable bow loading ramps, removeable ballast, cathodic protection, coatings, etc.

The Contractor shall be required to develop drawings to achieve a final design to conform to the requirements of the contract documents. These drawings shall be developed and submitted to the RE for review and approval.

The Contractor shall provide a Statement of Fact as a part of this contract indicating (1) the deck structure is designed for a minimum uniform live load of 150 psf or otherwise deemed appropriate (but not less than 150 psf) (2) the deck and hull is designed for loads to be imposed by spudwells, mooring piles, cleats, movable bow loading ramps, fixed platforms and any other possible loadings.

All welding and weld sizes shall be in accordance with the applicable standards of the American Bureau of Shipping. All welding shall be performed in accordance with AWS and ABS specifications and procedures.

The shell and main deck plating shall be constructed of longitudinal strakes of lengths consistent with accepted practice for hulls. All seams shall be connected with full penetration welds. Hull plating seams may not fall within 12 inches forward or aft of flat-of-bottom transverse tangent line (bottom rake), nor within 2 inches of a girder or plate stiffener. Seams shall not be aligned directly over bulkhead plating or over the webs of stiffeners and transverses.

When penetrations are made in watertight bulkheads, shell or deck, the plating shall be restored to watertight condition in accordance with the ABS Rules. All such penetrations and deck openings shall be suitably designed and reinforced in accordance with NSRP 0490.

All deck fittings and deck equipment shall be mounted on ½ inch insert plates. Plates shall have 6-inch radius corners and extend a minimum of 6 inches beyond the item in all directions. All deck fittings shall be welded to the insert plates with combination fillet and single bevel groove welds. All insert plates shall be welded to the deck plate with continuous, perimeter welds. No insert plates shall be required where the deck fittings are to be mounted to 1 inch thick or greater deck plating.

All structural drawings submitted by the Contractor to the RE, for approval, shall be submitted with supporting calculations.

515.02.02.01 Corrosion Protection

The choice of materials, the fabrication procedures, and the coating systems to be used in the fabrication of the floating dock system, shall indicate that careful consideration was given by the Contractor to improve corrosion resistance and life expectancy.

As an example, the structure shall be designed and fabricated by the contractor to avoid corrosion, by effectively:

1. Insulating the contact surfaces between two dissimilar metals against galvanic corrosion.
2. Preventing the entrapment of water (facilitate drainage and avoid pockets where water can accumulate).
3. Facilitating the application of paint coatings (i.e. eliminate non accessible voids).

Refer to Section 517 for Coatings. Barge shall be coated with 3-part Epoxy Coating System. Contractor shall submit a coatings plan, manufacture's literature and manufacture's certifications that the proposed coating products are appropriate for their proposed use, including exposure level.

515.02.02.02 Barge Accessories. Design shall include the following.

- A. Coatings and Tactile Warning Strip.** Coatings required for corrosion protection and safety markings, including tactile strips, shall be provided in accordance with Section 517. The top surface of the steel barges, ramps, gangways and platforms shall be coated with a non-skid system.
- B. Fender Frames/Brackets, Extruded Rubber Fender Units, Spudwells and Mooring Piles.** Fender frames/brackets, extruded rubber fender units, spudwells and mooring piles shall be designed as complete system addressing impact loads on ferries, lateral and vertical movement of floating dock system from berthing loads and wave action as well as tidal and storm related changes in the water surface elevation. Minimum design conditions for the design of floating dock system include:

Min. Berthing Velocity	1 ft/sec
Min. Ferry Weight	450,000 lbs.
Min. Wave Height:	----
Operational	1.5 ft
Extreme	4.5 ft

- C. Moveable Bow Loading Ramps and Hoist Systems.** Moveable Bow Loading Ramps shall be designed to accommodate the ferry boats proposed by ferry service operator, to be selected by the City. Ramps shall have both mechanical and electrical hoist systems.

The Contractor shall anticipate changes in the hoist systems and ramps that will be specific to the system operator once selected by the City. Modifications required to meet the specific ferry operator operation requirements shall be performed, as necessary, by the Contractor at no additional cost to the City.

- D. Structural Aluminum.** Non-skid decking, railings, fixed platforms and gangways shall be provided in accordance with Section 516 and as indicated on the contract drawings.
- E. Ancillary Items.** Cleats, ladders and other incidentals indicated on the reference drawings and as required to complete an operational floating dock system satisfying stringent safety criteria. This work shall include surface markings required for safe and effective operation of the floating dock system, including marking on barge and mooring piles.

515.02.03 Submittals

A. Experience Documentation

Contractor shall submit to RE, for approval, documentation that the designer and fabricator have a minimum 5 years of experience specific to the design and construction of barges, floating dock systems and related marine construction. Provide examples of previous design/installments of similar systems.

B. Working Drawings and Catalog Cuts.

- 1. Steel Barge.** Submit for approval by the RE the following items:
 - a. Shop drawings including: overall plan, cross-section, and details of the proposed steel barge, spudwell and mooring piles. Details shall include welding process.
 - b. Design calculations for barge, fenders, mooring piles and appurtenant systems. Calculations shall be stamped by a Professional Engineer registered in the State of New Jersey.
 - c. Manufacture’s literature and procedures for coatings, including tactile warning strips.
 - d. Manufacture’s literature and installation procedures for galvanic type anodes.
 - e. Schedule and procedure for installation of the barge and mooring piles.
 - f. Ballasting plan and procedure.

- 2. Fender Bracket Fabrication and Extruded Rubber Fender Units.** Submit for approval by the RE the following items:

Shop drawings shall indicate materials, dimensions, welding and surface preparation/finishing. Provide manufacture’s literature, design data and attachment details for extruded rubber fender units.

- 3. Movable Bow Loading Ramps and Hoist Systems.** Submit for approval by the RE the following items:
- a. Fabrication plans and installation procedures for bow loading ramps and hoist systems.
 - b. Manual hoist manufacture's literature and hoist installation instructions and operations manual.
 - c. Electric hoist manufacture's literature and hoist installation instructions and operations manual.

515.02.04 Construction Standards

All material, machinery and equipment shall be new, of current manufacture and suitable for the marine service intended. Spare parts and service shall be readily obtainable.

All material, unless otherwise specified in these specifications or in the drawings, shall be of commercial quality to ASTM, ANSI, or SAE specifications.

During construction and before delivery, the Contractor shall be responsible for protection of all material, equipment, etc., intended for the barge.

The overweight tolerance of members shall be within the limits defined by the specifications of the American Society for Testing and Materials.

All materials shall be free of imperfections due to manufacturing processes and from defects which adversely affect appearance or serviceability.

All plating shall be neatly cut, fitted and welded. All sharp edges or projections which constitute a personnel hazard shall be removed or ground smooth. All notches shall have a radius to prevent stress concentrations.

Where aluminum must be attached to dissimilar metals or between dissimilar alloys of aluminum, fasteners shall be of stainless steel of an approved design with insulation as required to eliminate metal to metal contact.

All galvanizing shall be done after fabrication by the hot dip process, and the zinc shall be not less than 98% pure. In instances where some types of metals cannot be hot dip galvanized, zinc silicate coating may then be substituted.

515.03 CONSTRUCTION

515.03.01 Floating Dock System

- A. Steel Barge Fabrication.** Fabrication shall conform to ABS Rules for Building and Classing Steel Barges.

All welding shall be in accordance with the current rules of the American Bureau of Shipping, except where stated otherwise. All welding equipment used on the work shall be of a modern type subject to close control. The electrodes used throughout the work shall be suitable for use with the parent metal at each weld, and be approved by ABS.

All exterior seams shall be double welded watertight. Plates, gussets and internal frames shall be welded on both sides. Welding shall be the SAW process to the maximum extent possible by subassemblies and the SMAW process would be used in place of SAW when necessary. Submittals for the barge shall include, for approval, which welding process would be used at each location.

Welding procedures, as to direction, length, numbers and sequence of beads, shall be carefully planned to minimize lock-up stresses. Care shall be exercised to produce smooth even beads, especially on all exposed plating and fittings. Beads shall be ground where directed by the RE or his authorized representative.

The contractor shall employ appropriate welding procedures and grounding connections to preclude the possibility of anodic erosion of the hull after launching.

Steel plating shall be installed using proper welding procedures and sequences to insure fair, undistorted plating panels. The use of filler materials to surface unfair areas is not acceptable.

Maximum allowable plating distortion is depicted in the IACS. Guide No. 47. Distortion shall not exceed the amounts in this guide.

B. Testing of Steel Barge.

- 1. Nondestructive Inspection of Welds.** Inspection of welded joints is to be carried out by an approved nondestructive test method such as radiographic ultrasonic, magnetic-particle or dye-penetrant inspection.

If inspection by any method should indicate the presence of defects that could jeopardize the integrity of structure, removal and repair of such defects are to be to the satisfaction of the City.

One hundred percent of all butt welds connecting the exterior plates, or the barge shall be radiographically tested in accordance with AWS D1.1. Each butt weld shall be tested for its full length.

All other welds shall be tested by the method involving liquid penetration in accordance with AWS D1.1. Each weld shall be tested for its full length.

Ten percent of all welds, except exterior butt welds, shall be tested.

- 2. Air Testing.** Air testing and hydrostatic testing shall be performed. During air testing all boundary welds, erection joints, and penetrations including pipe connections are to be examined with a suitable leak indicator solution prior to the application of special coatings. Air test pressure should normally be 0.138 bar (0.14 kgs/cm², 2 lbs/in²). Means are to be provided to prevent accidental overpressuring of tanks during testing. Air pressure drop testing, i.e. checking for leaks by monitoring drop in pressure, is not an acceptable substitute for required hydrostatic or air testing.

- C. Surface Preparation and Coatings.** Surface preparation for all structural steel shall be in accordance with Steel Structures Painting Council Standards SSPC-SP10-85 (Near White Metal Blast) throughout. Profile blasting shall be in accordance with the primer manufacturer's requirements. All mill scale, weld spatter, dirt, oil and grease shall be removed.

Immediately upon completion of surface preparation, all steel shall be coated with the coating system described in the following.

The contractor can use either pre-construction primer or limit initial coating to base coat only. If initial coating with base coat is selected, prior to application of subsequent coats, all steel shall be sand swept clean (light blast) or water blasted and any damaged areas repaired prior to application of the remainder of the system. All areas needing repair shall be cleaned to bare metal, spot blasted to restore profile and re-coated with the base coat.

Refer to Section 517 for Coatings including coatings for corrosion protection, surface markings on barge and mooring piles and tactile warning strips.

- D. Cathodic Protection.** The contractor shall provide and install weld-on type aluminum anodes for the barge hull to mitigate corrosion. The anodes shall be manufactured and certified in accordance with MIL-SPEC MIL-A-24779.

- E. Fit-Out of Floating Dock System.** The contractor shall provide and install the following.

1. Fender Framing/Brackets and Extruded Rubber Fenders
2. Movable Bow Loading Ramps with Mechanical and Electric Hoist Systems
3. Non-skid decking, railings and fixed platforms
4. Cleats
5. Safety Ladders

- F. Pre-Installation Inspection.** Prior to installing the floating dock system, the RE shall be contacted by the Contractor for inspection of the barge.

Prior to installing the steel barge, the Contractor shall inspect the site and all other work affecting the facility.

- G. Installation.** The steel barge shall be installed as shown on submitted plans or as agreed upon by the RE and Contractor. This work shall include the installation of the mooring piles.

- H. Defective Work.** Any defective or damaged portions of the steel barge shall be replaced as directed by the RE at no additional cost to the City.

515.03.02 Ballast

Removable concrete shall be provided as required to attain freeboard and as required by approved design. Contractor shall provide verification prior to installation that quantity of ballast that will produce required freeboard. The density of the concrete ballast shall have a nominal density of 145 pounds per cubic foot. Contractor shall verify density to determine actual quantity required to obtain required freeboard.

Removable ballasting shall be accomplished at the site with all appurtenances in place on float including gangway. Ballast shall be added in an amount sufficient to produce required freeboard along longitudinal sides with a list and trim tolerance of 1". The ballast blocks shall be placed on 3" x 12" CCA treated timbers (0.6 pcf), wrapped in plastic and strapped to the timber members to prevent any shifting after the final ballasting is completed.

515.04 MEASUREMENT AND PAYMENT

The Department will measure and make payment for Items as follows:

<i>Item</i>	<i>Pay Unit</i>
FLOATING DOCK SYSTEM	LUMP SUM

The following items will not be measured for payment:

1. Steel sectional floating barge with watertight hatches.
2. Spudwells and Mooring Piles
3. Fender Framing and Extruded Rubber Fenders
4. Movable Bow Loading Ramps with Mechanical and Electric Hoist Systems
5. Coatings for corrosion protection, surface markings and tactile warning strips.
6. Galvanic cathodic protection
7. Removable Ballast
8. Safety Ladders
9. Cleats

No separate payment will be made for Items 1 through 9 above. All associated costs for design, fabrication and installation shall be included in the lump sum unit price bid for the item FLOATING DOCK SYSTEM. Payment for aluminum non-slip decking, railings, fixed platforms and gangways shall be paid as indicated in Section 516.04.

SECTION 516 – STRUCTURAL ALUMINUM

516.01 DESCRIPTION

This section describes all labor, materials, equipment, and supervision necessary to design, supply, fabricate and install aluminum gangways, ramps, platforms, decking and railings. The suppliers of the gangways, ramps, platforms and railings shall be approved by the RE. This work shall include decking and railings to be mounted on the barges.

The aluminum gangways, ramps, platforms, decking and railings shall be fabricated by a company specializing in the fabrication of these items for floating dock systems with a minimum of 5 years documented experience.

The aluminum gangways, ramps, platforms, decking and railings are shown on Contractor Drawings are conceptual and are not intended for fabrication or construction. The Contractor shall prepare and submit design calculations and detailed working drawings signed and sealed by a professional Engineer licensed in the State of New Jersey to RE for approval prior to fabrication. Final calculations shall demonstrate that the gangways using the criteria specified in this Section as a minimum standard are designed to withstand the required loading without damage throughout the specified design life.

516.02 MATERIALS

Provide materials as specified:

Aluminum Alloy 6061-T6	ASTM B 308
Bolts and Bolting Material	ASTM Series 300, Type 316
Stainless Steel, Type 316	ASTM F 899

Materials and components used shall be new and shall be free from defects which would adversely affect the performance and maintainability of individual components or of the overall assembly or structure. Materials not specified herein shall be of the same or higher quality used for the intended purpose in commercial practice.

All aluminum assemblies shall be fabricated from aluminum alloy 6061-T6.

All welded connections shall be M.I.G. welded in accordance with AWS standards.

A. Connection Hardware. All nuts, bolts and washers shall be stainless steel ASTM Series 300, type 316.

All nuts shall be self-locking or provide double nuts on each bolt.

The gangway connection pins and sleeves shall be Type 316 stainless steel.

All dissimilar metals shall be separated by plastic separation sheets or bushings not less than 1/16 inch thick. The separation sheets shall be Nylatron-GS, plastic sheet conforming to Military Specification MIL-P-15035 or other suitable material for precluding galvanic corrosion.

B. Design Requirements. Gangway and Platforms shall be designed by the Contractor and shall conform to the following:

1. The length and width of the gangways shall be as shown on contract drawings and reviewed shop drawings.
2. The vertical design load shall be the combination of the dead weight of the structure, including any attached utilities, and either live load Case A or Case B, whichever governs.
 - a. Case A shall be a uniform live load of 100 pounds per square foot of deck surface area.
 - b. Case B shall be a concentrated live load of 400 pounds applied anywhere on the deck surface.
3. The horizontal design load shall be a uniform wind load, according to ASCE 7-16, per square foot of profile area. The horizontal design load shall be applied in combination with the dead weight.
4. The maximum allowable deflection under the vertical design live load (L) shall equal the span divided by 360.
5. Deck and structural components shall be designed with a minimum safety factor on working stress as specified in Aluminum Association - Aluminum Design Manual ADM-1 for bridge type structures. For non-aluminum structural components, similar safety factors shall apply.
6. The walking surface of the gangway, including the transition and hinge plates, shall be provided with a non-skid surface to provide traction, especially when wet. The decking for both the gangway, ramps and platforms shall be non-skid with either a raised rib profile with ribs no higher than ¼” and perpendicular to the flow of traffic or covered with a uniform carborundum surface. Surfaces capable of having a slope of 1:33 or greater shall have a static coefficient of friction of 0.8 or greater when wet. Surfaces where slope will always be less than 1:22 shall have a static coefficient of friction of 0.5 or greater when wet.
7. The gangways shall be fitted with a guardrail on each side of the walking surface with a handrail extending a minimum of 1 foot beyond the ends of the structure, with return at the ends. The rails shall be fabricated of aluminum pipe or tubing. Openings in the guardrail shall not permit passage of a 4-inch diameter sphere, including the transitions at each end of the gangway at extreme low and high tides.
8. Design shall also consider stresses resulting from handling and installation.
9. Gangway shall be designed to withstand dock motions, including a vertical change in dock elevation due to water level fluctuation as indicated on contract drawings and reviewed shop drawings and horizontal drift due to wind loads without structure interference or overstress, including fatigue of gangway members and supports. Gangway wheels shall remain in contact with the tracks on the dock at all times.
10. Transition plate shall make a smooth, gap-free transition between the gangway deck and the floating dock. The

transition plate shall be designed for a minimum 100 psf live load, be made from at least 0.25-inch thick material, and shall be attached to the gangway by means of a continuous pipe hinge. The transition plate shall be the full width of the gangway and have a maximum slope of 12 (horizontal) : 1 (vertical). The sliding edge of the transition plate shall be fitted with a continuous UHMW polyethylene wear block that is a minimum of 0.5-inch thick, which shall be beveled conforming to code requirements for accessibility and safety.

11. Wheels shall be provided at the dock end of the gangway. The wheels shall have an allowable load rating greater than that required by the design loads. The gangway design shall allow the wheels to be supported by the wheel track at all times regardless of dock motions.
12. Wheels shall be kept on the track by wheel guides for each wheel. The wheel guides shall be of such length to underlie the gangway wheels without contact to the gangway structure at any time and not present a tripping hazard.
13. Provide a gangway hinge at the gangway platform end. The hinge shall be designed to permit rotation of the gangway in the vertical and horizontal directions to accommodate float motions for all environmental conditions.
14. The gangway hinge shall make a smooth, gap-free transition between the gangway walking surface and the landside abutment walking surface. The hinge plate shall be designed for a minimum 100 psf live load, be made of at least 0.25-inch thick material, and shall be the full width of the walking surface.
15. Completed gangway shall have a manufacturer's label plate attached in a conspicuous location. This label plate shall be stainless steel. The following information shall be stamped or etched into this plate in letters not less than 0.25-inch high, filled with black enamel:
 - a. Manufacturer's name
 - b. Date of manufacture
 - c. Overall length, not including the transition and hinge plates
 - d. Overall weight, including the transition and hinge plates
16. The gangway system, including all structural components of the system, shall be designed for a minimum 40-year life expectancy.
17. Provide gangway railing capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
 - a. Uniform live load of 50 lbf / ft applied horizontally along centerline of top rail.
 - b. Concentrated live load of 200 lbf applied in any direction along railing, including top rail and any mid-rails.
 - c. Uniform and concentrated live loads need not be assumed to act concurrently.
18. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

516.03 CONSTRUCTION

A. Quality Assurance. Except as noted, work shall conform to the following codes and standards:

1. Aluminum Association Specifications for Aluminum Structures – Allowable Stress Design.
2. Americans with Disabilities Act Accessibility Guidelines (ADA).
3. American Welding Society AWS D1.2 Structural Welding Code – Aluminum.
4. The Contractor shall ensure the gangway system provided works over extreme tide range; Elevation -2.5 to Elevation +2.5 (NGVD).
5. Welders shall be currently certified to weld the various materials to be incorporated in the work. Copies of the certification shall be furnished to the RE.

6. Welding procedures shall be in accordance with AWS D 1.2 – Structural Welding Code, Aluminum and Aluminum Construction Manual, Section 5 as applicable. Surfaces of parts to be welded shall be free from scale, paint, grease, or other foreign matter. Welds shall be sufficient size and shape to develop the full strength of the parts connected by the welds. Welds shall transmit stress without permanent deformation or failure when the parts connected by the weld are subject to proof and service loading. Contractor shall obtain the services of an independent testing laboratory, satisfactory to the City, to perform weld inspection utilizing visual, ultrasonic or other techniques applicable to aluminum welding. Deficiencies revealed by this inspection shall be repaired at the Contractor’s expense. Inspection reports and deficiency correction reports shall be submitted to the RE.
- B. Working Drawings.** Shop drawings shall be submitted for acceptance and shall indicate all material thicknesses, dimensions and show in detail all connections and welds for review prior to fabrication.
1. **Calculations.** The Contactor shall submit design calculations of all structural components and connections. Design calculations, acceptable to the City, shall accompany shop drawings complete with the signature and seal of the Registered Professional Engineer, Licensed in the State of New Jersey responsible for the work.
 2. **Material Data.** Submit material data.
 3. **Field Fabrication.** Submit field fabrication shop AWS D1.2 welding procedures to the RE for review prior to the start of welding.
 4. **Welder Qualifications.** Submit field AWS D1.2 welder qualifications to the RE for verification of current certification.
 5. **Inspection Reports.** Submit field in process and final welding inspection reports performed by an American Welding Society (AWS) Certified Welding Inspector (CWI).
- C. Preparation and Installation.** Fabricate and install in accordance with the Aluminum Association Specification for Aluminum Structures and American Welding Society Standards.
- Inspection of all field and shop fabrication welding shall be performed by an AWS CWI. CWI shall be present at the start of welding activities. CWI shall also perform final inspection on 100% of complete welds.
- Field in process and final welding inspection reports shall be provided to the RE.

516.04 MEASUREMENT AND PAYMENT

The Department will measure and make payment for Items as follows:

<i>Item</i>	<i>Pay Unit</i>
ALUMINUM GANGWAYS, RAMPS, PLATFORMS, RAILINGS AND DECKING	LUMP SUM

The lump sum cost for ALUMINUM GANGWAYS, RAMPS, PLATFORMS, RAILINGS and DECKING shall include all aluminum gangways, ramps, platforms, railings and decking and railings to be mounted on the barges as well as related incidents.

No separate payment will be made for design, fabrication, shipping or incidental work. All associated costs shall be included in the lump sum unit price bid for the item ALUMINUM GANGWAYS, RAMPS, PLATFORMS, RAILINGS and DECKING.

SECTION 517 – COATINGS

517.01 DESCRIPTION

This section describes the requirements for all labor, materials, equipment and supervision necessary for the cleaning and coating of the following:

1. Coating on all steel sheeting shall be **Coal Tar Epoxy**.
2. Coating of barges shall be **3-Part Epoxy Coating System**.
3. Coating on all steel mooring piles (exterior and interior) shall be a **2-Part Abrasion Resistant Epoxy Coating**.
4. Coating on all steel threaded tie-rod anchors and related hardware shall be **Hot-Dipped Galvanizing**.
5. Coating on all steel walers, bearing plates and miscellaneous hardware shall be **Hot-Dipped Galvanizing**.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

6. Coating on reinforcing steel shall be **Hot Dipped Galvanizing**.

517.02 MATERIALS

Provide materials as specified:

Coal Tar Epoxy	912.01.03
3-Part Epoxy Coating System	912.01.06
2-Part Abrasion Resistant Epoxy Coating.....	912.01.07
Hot-Dipped Galvanizing	912.02.01

Coating on all field welded or damaged areas shall be with the same coating system and shall be applied in accordance with the manufacturer's recommendation.

The top surface of the steel barges, ramps, gangways and platforms shall be coated with a non-skid system.

517.02.01 Colors

Provide colors as specified:

Barges	See Below
Sides and Bottom of Steel Barges.....	Black or as selected by City
Spudwells, Fender Frames/Brackets and Cleats	Black or as selected by City
Top Deck Surface of Steel Barges	Gray or as selected by City
Mooring Piles.....	Brown or as selected by City
Steel Sheet Piling	Black or as selected by City

517.03 CONSTRUCTION

A. Quality Assurance. The latest editions of the following specifications and standards.

1. Steel Structures Painting Council (SSPC): Surface Preparations Specifications and standards herein referred to.
2. American Society for Testing and Materials (ASTM): specifications and standards herein referred to.

B. Working Drawings. Submit for approval by the Owner the following items:

1. Nonskid system to be used for deck surface of steel barges, ramps, gangways and platforms.
2. Color alternatives for 3 Part Epoxy Coating System for Barge.
3. Color alternatives for 2 Part Abrasion Resistant Epoxy Coating for mooring piles.
4. Color alternatives for Coal Tar Epoxy for steel sheet piling.
5. Manufacturer's literature and recommended application instructions for each coating and coating system.
6. Certification that materials meet specification requirements and that the proposed product is suitable for intended use.
7. Galvanizing Certification; the galvanizer shall provide a notarized statement indicating compliance with the ASTM Standard and that the dry kettle method with zinc-nickel alloy was used and shall stamp a representative number or pieces. The stamp shall indicate the ASTM Standard and the coating weight.

C. Shop Surface Preparation.

All surfaces shall be thoroughly prepared for coating application in strict accordance with the coating manufacturer's recommendation and shall supersede any specification herein provided the manufacturer's recommendations are of a higher standard.. The most stringent criteria shall apply.

All cleaning and coating work must be performed in a heated building. Preceding grit blasting, steel must be heated to at least 100 degrees F. to eliminate possibility of moisture on the surfaces to be cleaned and coated.

Heated building does not pertain to steel barge. Interior and exterior of steel barge shall be grit blasted and coated in accordance with this specification and in accordance with manufacturers recommendation and shall be performed in a controlled atmosphere.

Surface should be clean, dry and free of contaminants per SSPC-SP1. The steel shall be Near-White Blast Cleaned according to SSPC-SP10 with a 2 to 4 mil profile. All work blasted in one day must be coated on that day.

Any areas of the surface which show traces of oil, grease, or other organic matter shall be removed prior to coating. The contamination shall be removed by using either a solvent or spot blasting.

All surfaces to be coated must be completely dry, free of moisture, soil, dust and grit at the time the coating is applied.

The City's representative shall have access to each part of the process and shall have the right and opportunity to witness any of the quality control tests and/or perform such test himself on a random sampling basis.

D. Application of Coating (Shop Coat).

1. Coal Tar Epoxy

- a. Application.** The following procedures shall apply. Two coats shall be shop applied by SSPC rated personnel using commercially available spray equipment or with equipment as recommended by the manufacturer of the product with approval of the RE and Inspector. Humidity, drying times, ambient air and steel temperatures, and all other limits and restrictions as set forth by the manufacturer of the materials shall be strictly adhered to. The second coat shall be applied after the first coat has dried to where it feels tacky to the touch or as recommended by the manufacturer of the materials.

The coatings shall exhibit reasonable leveling without excessive sagging when applied at the required film thickness. Proper adhesion between coats shall be ensured, depending; on method of coating application, without undue restrictions concerning timing, temperature or other conditions associated with application. Coating manufacturer's recommendations shall be adhered to. The temperature of the coating shall be within 15 degrees F. of the temperature of the steel at the time of application of the coating.

Where coating on any type of surface has commenced, the complete coating operation, including priming and finishing coats when multiple coats are used on that portion of the work, shall be completed as soon as practicable, without prolonged delays. Where necessary, sufficient time shall elapse between successive coats to permit them to dry properly for recoating and this period shall be modified as necessary to suit curing conditions.

- b. Coating Thickness.** A **minimum thickness** (not average) of **16 mils dry film** is required on all surfaces to be coated. Where more than one coat is required to achieve the recommended film build, the interval between coats should be as short as possible. To ensure maximum intercoat adhesion, it is recommended that:
 - (1) The next coat shall be applied in accordance with the coating manufacturer's recommendations.
 - (2) If the previous coat has cured for more than the recoat time specified by the manufacturer, wash with fresh water, then brush blast to provide an adequate mechanical bond before recoating.
- c. Final Curing Time.** Coating surfaces shall be permitted as long as curing time as practical but, in any event, the following minimum requirements shall be met. The steel coated with the coal tar epoxy system shall not be driven until the finished coating has cured at least 7 days at 77°F or been post-cured at higher temperatures for a short period of time in accordance with the coating manufacturer's recommendations.

Post-curing Temperature Recommendations:

- 12 Hours at 120°F
- 18 Hours at 110°F
- 30 Hours at 100°F
- 96 Hours at 90°F
- 168 Hours at 77°F

- d. Thinning.** Whenever possible the material shall be applied without thinning. Where thinning must be done, it shall be as recommended by the coating manufacturer. If the material is thinned, it may be necessary to apply more than the standard 1 or 2 coats to attain the required minimum (not average) dry film thickness of 18 mils.
- e. Appearance of Finished Coating.** The finished coating shall be generally smooth and free of sharp protuberances which could be removed by abrasion. A minor amount of sags, dimpling, or curtaining

which does not exceed 2 to 3 percent of the surface will not be considered cause for rejection unless they present sharp edges which might be removed by abrasion.

Sharp protuberances shall be cut off using a sharp wood chisel laid flat against the surface. The area from which material has been removed shall be recoated to smooth the surface.

2. 3-Part Epoxy Coating System

- a. **Application.** All coatings shall be applied in accordance with the manufacture's recommendations. The coatings shall exhibit reasonable leveling without excessive sagging when applied at the required film thickness. Proper adhesion between coats shall be ensured, depending on method of coating application, without undue restrictions concerning timing, temperature or other conditions associated with application. Coating manufacturer's recommendations shall be adhered to. The temperature of the coating shall be within 15 degrees F. of the temperature of the steel at the time of application of the coating.

Where coating on any type of surface has commenced, the complete coating operation, including priming and finishing coats when multiple coats are used on that portion of the work, shall be completed as soon as practicable, without prolonged delays. Where necessary, sufficient time shall elapse between successive coats to permit them to dry properly for recoating and this period shall be modified as necessary to suit curing conditions.

- b. **Coating Thickness.** 3-Part system shall consist of a prime coat, barrier coat and urethane topcoat. A **minimum thickness** (not average) of **16 mils dry film** is required for the combined total dry thickness of the prime coat and barrier coat, on all surfaces to be coated, or as otherwise recommended by the manufacture for the intended use. The more stringent criteria shall apply.

Where two coats are required to achieve the recommended film build, adhere to the manufacture's recommendation on the interval between coats, as required to ensure maximum inter-coat adhesion.

- c. **Final Curing Time.** Coated surfaces shall be permitted as long a drying time as practicable but, in any event, the minimum requirements shall be in accordance with the coating manufacturer's recommendations.
- d. **Thinning.** Adhere to manufacture's recommendations and restrictions, as necessary to provide the most durable application of the coating.
- e. **Appearance of Finished Coating.** The finished coating shall be generally smooth and free of sharp protuberances which could be removed by abrasion. A minor amount of sags, dimpling, or curtaining which does not exceed 2 to 3 percent of the surface will not be considered cause for rejection unless they present sharp edges which might be removed by abrasion.

Sharp protuberances shall be cut off using a sharp wood chisel laid flat against the surface. The area from which material has been removed shall be recoated in a manner leaving a smooth surface.

3. 2 Part Abrasion Resistant Epoxy Coating

- a. **Application.** All coatings shall be applied in accordance with the manufacture's recommendations. The coatings shall exhibit reasonable leveling without excessive sagging when applied at the required film thickness. Proper adhesion between coats shall be ensured, depending on method of coating application, without undue restrictions concerning timing, temperature or other conditions associated with application. Coating manufacturer's recommendations shall be adhered to. No coatings shall be applied when substrate is with 5 degrees F. of the dew point.

Where coating on any type of surface has commenced, the complete coating operation, including priming and finishing coats when multiple coats are used on that portion of the work, shall be completed as soon as practicable, without prolonged delays. Where necessary, sufficient time shall elapse between successive coats to permit them to dry properly for recoating and this period shall be modified as necessary to suit curing conditions

The coating material shall be applied strictly in accordance with the coating manufacturer's recommendation as to coating application procedure and curing; schedule.

- b. **Coating Thickness.** A **minimum thickness** (not average) of **24 mils dry film** is required on all surfaces to be coated. This includes the exterior and interior of mooring piles.

The cured coating shall be of uniform color, gloss and thickness, and shall be free of blisters, pinholes, fish eyes, sags, runs, and any other irregularities.

- c. **Appearance of Finished Coating**

The coater shall be responsible for all quality control checking including visual inspection, thickness measurements, and holiday testing, and shall keep records on the results of all such inspections in a form suitable to the City's representative.

The City's representative shall have access to each part of the process and shall have the right and opportunity to witness any of the quality control tests and/or perform such test himself on a random sampling basis.

4. Galvanizing

- a. **Application.** Hot dip galvanizing shall be in a dry kettle process in accordance with ASTM A 123, ASTM A 153 and ASTM A767, as applicable. All metal shall be galvanizing after fabrication. Galvanizing shall be done with a nickel enrichment of the galvanizing tank such as "NiGalv" or approved equal. Galvanized shall provide notarized certification that the galvanizing process used was done in accordance with these specifications and has the nickel enrichment. It shall state day each piece was galvanized. Priming of galvanized steel shall be done by the galvanizer within 12 hours of galvanizing.

Prior to galvanizing, all metal shall be cleaned (pickled) in accordance with SSPC- SP8. Cleaning shall remove all rust, scale, and coating surface must be clean, dry, undamaged and free of all loose rust, dirt, grease, or other contaminants including salt deposits.

Galvanize all ferrous fasteners, clips, sleeves, anchors and accessories in contact with galvanized items. All galvanized materials shall be inspected for compliance with these specifications and marked with a stamp indicating the name of the galvanizer, the ASTM Specification and the weight of the zinc coating in ounces per square foot.

A notarized statement of compliance with specifications shall be furnished to the City by the galvanizer with the initial shipment.

Items to be galvanized shall be galvanized after fabrication. Where size of assembly is too large for complete unit galvanizing, these assemblies shall be galvanized prior to fabrication, in as large sections as practical and then only with the written approval of the RE.

Field surface preparation and coating shall only take place on items requiring field assembly or touch up including channel connections, weldments, scraps, chips and areas where coating has been damaged.

Grind, wire brush, or, otherwise clean to grey metal. Work to be at least equivalent to Power Tool Cleaning as defined by SSPC specification SP-3. All work cleaned must be coated on that day.

Traces of oil, grease, or other organic matter on areas of the surface shall be removed prior to coating. The contamination shall be removed by using either a solvent or spot blasting.

- b. **Coating Thickness.** The minimum thickness of galvanized coatings shall be **1.35 times** the minimum required by ASTM A 123, ASTM A 153 and ASTM A767, as applicable. For structural steel and threaded tie-rod anchors, the **minimum coating thickness** shall be **5.3 mils** (1.35 x 3.9 mils). For structural bolts, the **minimum coating thickness** shall be **2.8 mils** (1.35 x 2.1 mils).

- E. **Field Surface Preparation.** Field surface preparation and coating shall only take place on items requiring field assembly or touch up including:

1. Pile connections
2. Weldments, scraps, chips and areas where coating has been damaged.

Grind, wire brush, or otherwise clean to grey metal. Work to be at least equivalent to Power Tool Cleaning as defined by SSPC specification SP-3. All work cleaned must be coated on that day.

Traces of oil, grease, of other organic matter on areas of the surface shall be removed prior to coating. The contamination shall be removed by using either a solvent or spot blasting.

All surfaces to be coated must be completely dry, free of moisture, soil, dust and grit at the time the coating is applied.

No sandblasting of newly galvanized metal shall occur. Contractor to follow coating manufacturer's recommendations for primer coating of galvanized metal.

F. Field Coating. Prior to installation, all items which will become inaccessible after installation shall be coated. After coated items have been installed, field coat all accessible areas which have been scraped or chipped.

1. **Coal Tar Epoxy.** The touch up on Coal Tar Epoxy coatings shall be with the same Coal Tar Epoxy coating utilized during shop coating and with the same coating manufacturer. Application of field coating shall be as recommended by the manufacturer and curing criteria prior to installation shall be strictly adhered to.

2. **3-Part Epoxy Coating System.** The touch up on Epoxy coatings shall be with the same Epoxy coating system utilized during shop coating and with the same coating manufacturer. Application of field coating shall be as recommended by the manufacturer and curing criteria prior to installation shall be strictly adhered to.

3. **Epoxy Fusion Bonded Coating Touch Up.** The touch up epoxy material shall be a two-part epoxy system designed and color- matched for patching the epoxy coating used on the steel sheet piling.

a. **Mixing.** Mix ratio of Part A to Part B shall be 1:1 by volume. The two parts must be thoroughly mixed until a uniform color is achieved. If thinning is required, thin each part separately to minimize loss of pot life with thinner recommended by the producer. Pot life should be approximately 6 hours.

b. **Application.** Material should be capable of being applied with ordinary brush or roller at a temperature of 55 degrees F. and above. A tack-free surface should be achieved in 2 to 3 hours at 72 degrees F. Full cure should be achieved in 3 to 5 days at 72 degrees F. Care should be exercised in handling parts before they are fully cured.

4. **Galvanized Coating Touch Up.** Touch-up and repair damaged and field welded metal-coated surfaces, clean welds, bolted connections and abraded areas. At galvanized surfaces, apply organic zinc repair paint complying with requirements of ASTM A780. Galvanizing repair paint shall have 65 percent zinc by weight. Thickness of applied galvanizing repair paint shall be not less than coating thickness required by ASTM A 123 or A153 as applicable. Touch-up of galvanized surfaces with aerosol spray, silver paint, bright paint, or aluminum paints is not acceptable. Existing work shall be protected from spillage and spattering during application of coatings. All spillages and spattering shall be cleaned up immediately. Contractor is responsible to leave existing areas free of all such foreign materials.

G. Field Testing. Coatings may be inspected by the Owner using holiday detectors, field adhesion test or a combination of both.

H. Care of Existing Work. Existing work shall be protected from spillage and spattering during application of coatings. All spillage and spattering shall be cleaned up immediately. Contractor is responsible to leave existing areas free of all such foreign materials.

I. Inspection. Satisfactory performance will be based on an acceptance of the completed work by an independent inspector satisfactory to the City. The inspector, such as KTA-TATOR Inc. or approved equal, must be thoroughly qualified to perform the inspections and testing as specified herein. Original copies of the inspection reports shall be mailed directly to the Engineer. Materials not certified as meeting the requirements of this specification will not be accepted for use on the project. No specific payment will be made for the inspections and certifications of the coating systems. All costs for same shall be included in the unit bid prices for the steel sheet pile and steel pile items.

In the event that materials delivered to the project site do not comply to the requirements specified herein, the City reserves the right to reject these materials regardless of whether or not they are accompanied by certification. The City also reserves the right to have a representative present at the time the coatings are being applied and/or inspected. All preparation, blasting and coating work will be subject to continuous inspection.

The coated steel shall be 100 percent holiday tested and 100 percent pinhole free. Holiday testing shall be completed after the final coat of coal tar epoxy. Steel surfaces not meeting these requirements shall be blast cleaned as specified herein before any recoating will be permitted.

The coated steel, as approved by the RE, shall be free of any defects, such as lifting, bubbling, blisters, holidays, scaling or other impairments for one year after acceptance of the installation by the City. Any defects within the one-year period will be repaired or replaced by the Contractor at the expense of the Contractor.

- J. **Protection of Coated Steel.** The Contractor shall exercise extreme care in the handling of all steel so as not to damage the coated surface. Any damage to the coating due to handling or construction operations shall be repaired immediately, if not rejected by the Engineer, by the Contractor at no additional expense to the City.
- K. **Defective Materials.** Coating, which in the opinion of the Owner does not meet acceptance, shall be redone at no additional cost to the City.

517.04 MEASUREMENT AND PAYMENT

No separate payment will be made for labor, materials, equipment and supervision necessary to, clean and coat steel barges, steel pipe piles, steel sheeting, steel walers, angle brackets and bent plate cap, thread tie-rod anchors and washer plates, splice plates, etc. All costs necessary for cleaning and coating of these items shall be included in the unit price bid for the various items to be coated.

DIVISION 600 – MISCELLANEOUS CONSTRUCTION

SECTION 601 – PIPE

601.02 MATERIALS.

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Pipe Bedding shall consist of either Coarse aggregate, size No. 57, Dense Graded Aggregate (DGA) or clean ¾” stone, as approved by RE.

Material for broken stone shall conform to Subsection 901.03.01 and for washed gravel shall conform to Subsection 901.03.02

Underdrain pipe shall be 3” diameter perforated polyvinyl chloride, schedule 80 pipe. The pipe shall be located within the proposed storage bed subbase layer under the previous pavement parking lot. The network of underdrain pipes shall collect runoff and transport it to the proposed storm sewer inlets. The aggregate layer must have sufficient depth to provide at least 3 inches of aggregate above and below the pipe network.

Inspection ports, with a removable cap, shall be provided at locations shown on the plans and further described. Inspection ports shall consist of 3” diameter clean out, solid 3” diameter polyvinyl chloride vertical pipe, 3” 90-degree bend and solid 3” diameter polyvinyl chloride horizontal pipe connecting to 3” diameter perforated polyvinyl chloride, schedule 80 pipe. Each inspection port shall be placed at minimum of 3 feet from any edge.

PVC Gravity Sewer Pipe and Fittings. NPS 15 (DN375) and Smaller: ASTM D-3034, SDR 35, for solvent-cemented or gasketed joints. The following shall apply.

- a. ASTM F477, elastomeric seals.
- b. Joints shall be push-on type in accordance with ASTM D-3212.
- c. Rubber ring gaskets in accordance with ATM D-1869.

Use products manufactured by Canplas, Inc., IPS Corp, NDS Inc, Plastic Oddities Inc, Sioux Chief Manufacturing Co., Inc. or approved equal.

601.03 CONSTRUCTION

601.03.01 Installing Pipe

C. Bedding.

THE FOLLOWING IS ADDED TO SUBPART (C):

Pipe Bedding shall be installed with all drainage pipe installations and consist of material shaped to conform to the lower part of the pipe exterior. The minimum thickness of the bedding material, after shaping, shall be 6” below the pipe invert or as directed by the RE.

Pipe bedding shall be as shown in the trench detail on the plans or as directed by the RE. The Contractor shall take extreme care in shaping the bottom of the trench to the bottom of the pipe as indicated in the detail or as directed by the RE. Bedding shall be placed so that the pipe is true to line and grade and to provide uniform and continuous support of the pipe barrel. Bedding shall not be laid to the grade of the pipe more than 10 feet in advance of the men laying the pipe.

THE FOLLOWING IS ADDED TO SUBPART (G):

G. Dewatering. All pipes shall be laid on a solid, dry foundation. The Contractor shall furnish all equipment and labor necessary to keep all trenches free from water that is above or below ground. Any pipe laid in water or wet trenches will be removed and reinstalled at the Contractor’s expense.

The Contractor shall provide, maintain, and operate such drains, percolation stone, trenches, sumps, pumps, hoses, piping, well-pointing system, and any other related approved means and equipment as may be necessary to keep the

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

excavations free from water during all stages of the construction operations and course of work. The Contractor shall provide such dikes, ditches, sumps and pumping that may also be required to prevent the flow of surface waters into excavated areas and into any and all areas where construction or installation is in progress. All water pumped from the excavation shall be discharged in accordance with state, local and federal regulations in such a manner as shall not cause injury to work completed, damage to property, health hazards, or impediment to traffic. All costs for dewatering shall be included in the prices bid in the proposal for the various items.

Water shall be completely removed from all excavations promptly and continuously throughout the progress of the work and the Contractor shall keep excavations absolutely dry at all times until the storm drains have been properly joined and bedded and work completed. Precautions shall be taken to protect uncompleted work from flooding during storms or from other causes.

No separate payment shall be made for the dewatering of the trench. Dewatering shall be included in the various items as set forth in the proposal.

601.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
15" REINFORCED CONCRETE PIPE	LINEAR FOOT
18" REINFORCED CONCRETE PIPE	LINEAR FOOT
24" REINFORCED CONCRETE PIPE	LINEAR FOOT
30" REINFORCED CONCRETE PIPE	LINEAR FOOT
36" REINFORCED CONCRETE PIPE	LINEAR FOOT
42" REINFORCED CONCRETE PIPE	LINEAR FOOT
6" POLYVINYL CHLORIDE PIPE	LINEAR FOOT
3" PERFORATED POLYVINYL CHLORIDE, UNDERDRAIN PIPE SCHEDULE 80	LINEAR FOOT
3" POLYVINYL CHLORIDE INSPECTION PORT	UNIT

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

No separate payment shall be made for furnishing and installing 3" diameter clean out, solid 3" diameter polyvinyl chloride vertical pipe, 3" 90-degree bend and solid 3" diameter polyvinyl chloride horizontal pipe connecting to 3" diameter perforated polyvinyl chloride, schedule 80 pipe. Payment for same shall be included in the price bid for the 3" POLYVINYL CHLORIDE INSPECTION PORT.

No separate payment will be made for bedding and backfill associated with pipes. All labor and material costs associated with bedding and backfill shall be included in the unit price bid for the various drainage pipe items in the Proposal.

Re-laid or reset pipe of various sizes and kinds will not be measured for compensation.

No separate payment will be made for concrete seals for storm sewers. Payment for same shall be as provided on the construction plans and if not so provided shall be included in the unit price bid for the pay item of the pipe for which the seal is constructed.

Additional excavation necessitated by a change in vertical depth of pipe due to a change to plan, or as directed by the Resident Engineer, shall be included in the pay item EXCAVATION, UNCLASSIFIED.

No separate payment shall be made for the dewatering of the trench. Dewatering shall be included in the various items as set forth in the proposal.

The City will make payment for restoring the pavement structure for trenches in the traveled way and shoulder, if any, under various Items of the Contract.

SECTION 602 – DRAINAGE STRUCTURES

602.02 MATERIALS

THE FOLLOWING IS ADDED:

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

All inlet castings shall be provided with bicycle safe grates and shall comply with current NJDEP Regulations. Including the provision of debris retention openings and the language “Dump No Waste Drains to Waterways” permanently cast into their top surface.

All new inlet castings shall be provided with bicycle safe grates and shall comply with current NJDEP Regulations. Castings for Type 'B' inlets shall be Campbell Foundry Pattern No. 2618 with Eco Curb Piece Type N or approved equal.

602.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
INLET, TYPE B	UNIT
RECONSTRUCTED INLET, TYPE B, USING NEW CASTING	UNIT
MANHOLE, 6' DIAMETER	UNIT

THE FOLLOWING IS ADDED:

Additional excavation necessitated by a change in vertical depth of structures due to a change to plan, or as directed by the Engineer, shall be included in the pay item EXCAVATION, UNCLASSIFIED.

No separate payment will be made for bedding and backfill associated with inlets, manholes or other drainage structures, but all labor and material costs shall be included in the unit price bid for the various drainage items in the Proposal.

SECTION 603 – SLOPE AND CHANNEL PROTECTION

603.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
RIPRAP STONE CHANNEL PROTECTION, 42” THICK (D50=14”)	SQUARE YARD

RIPRAP STONE CHANNEL PROTECTION, 42” THICK (D50=14”) shall be utilized for the construction of scour hole and shall include the cost of all associated earthwork and materials. No separate payments shall be made for excavation, backfill or filter fabric.

SECTION 606 – SIDEWALKS, DRIVEWAYS AND ISLANDS

606.02 MATERIALS

620.02.01 Materials

THE FOLLOWING IS ADDED TO THIS SUBPART:

Provide materials as specified:

Brick Paving Blocks.....	910.01.02
--------------------------	-----------

606.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
CONCRETE SIDEWALK, REINFORCED, 5” THICK	SQUARE YARD
DETECTABLE WARNING SURFACE	SQUARE YARD
BRICK PAVING BLOCKS	SQUARE YARD

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

THE FOLLOWING IS ADDED:

The pay item CONCRETE SIDEWALK, REINFORCED, 5” THICK shall include all materials and labor required to construct the concrete sidewalk. Payment for dense graded aggregate shall be made under the bid items in Section 302.04.

The pay item BRICK PAVING BLOCKS shall include all materials and labor required to install pavers, including pvc edging, quarry dust or sand leveling base, dense graded aggregate base and geotextile. Payment for CONCRETE SPLASH PAD shall be made under the bid items in Section 504.04.

SECTION 607 – CURB

607.01 DESCRIPTION

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

The work under this part of the contract shall include the furnishing and installation of precast concrete parking bumper curb, also referred to as bumper blocks or concrete wheel stops.

607.02 MATERIALS

607.02.01 Materials

THE FOLLOWING IS ADDED TO THIS SUBPART:

Provide materials as specified:

Non-Structural Precast Concrete..... 904.01

Wheel Stop shall be of precast concrete construction, designed for H20 loading non roadway applications with the following dimensions: 6” High x 6” Wide x 6’ Long as manufactured by Oldcastle Precast, Tinton Falls NJ (888) 965-3227 or equal.

Wheel stop shall include ¾” diameter hole at each end and be secured to the asphalt pavement by #4 bar anchor pins, 14” long. Wheel stop shall be precast concrete with a 28-day compressive strength of 4,000 psi and steel reinforcement consistent with ASTM A-615, Grade 60.

607.03 CONSTRUCTION

607.03.02 Concrete Vertical Curb and Concrete Sloping Curb

D. Placing Concrete.

THE ENTIRE TEXT IS CHANGED TO:

Place concrete for vertical curb and sloping curb as specified in 607.03.01.D, except that consolidation may be achieved by hand spading or internal mechanical vibrators. Concrete curb may be constructed from November 1 to March 15, subject to approval of the Resident Engineer.

F. Protecting and Curing Concrete.

THE FOLLOWING IS ADDED TO SUBPART (F):

Concrete curb shall be rejected and ordered replaced by the Resident Engineer if any or all of the following should occur or exist:

1. Staining or discoloration of the curb.
2. Curb out of alignment.
3. Expansion joints not perpendicular to the roadway.
4. Joints and surfaces improperly finished.
5. Expansion joints protrude from the curb.
6. Cracks, chips or other damage occur during the construction or maintenance period.
7. Settlement of curb.
8. Inspection not requested prior to the pouring of a curb.
9. Improper vibration of the concrete.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

- 10. Failure of the concrete to meet the strength requirements.
- 11. Vandalism during the initial set up of the curb.

607.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
9" X 18" CONCRETE VERTICAL CURB	LINEAR FOOT
CONCRETE WHEEL STOP	UNIT

The pay item 9" X 18" CONCRETE VERTICAL CURB and CONCRETE WHEEL STOP shall include all labor, materials and incidentals required to construct said items and any other incidentals hereto.

SECTION 610 – TRAFFIC STRIPES, TRAFFIC MARKINGS, AND RUMBLE STRIPS

610.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEM IS ADDED:

<i>Item</i>	<i>Pay Unit</i>
TRAFFIC STRIPES, 4"	LINEAR FOOT
TRAFFIC MARKING LINES, 24"	LINEAR FOOT

THE FOLLOWING SECTION IS ADDED:

SECTION 615 – PAVILION

615.01 DESCRIPTION

The work shall consist of designing, engineering, fabricating, furnishing and erecting a pavilion on the foundation system indicated in the contract documents as well as furnishing and installing concrete and brick pillars surrounding the steel columns supporting the pavilion roof. Pavilion shall be designed to accommodate the loading criteria indicated.

615.02 MATERIALS

615.02.01 Materials

Where not otherwise specified, provide materials in accordance with the following:

Concrete	903.03
Structural Precast Concrete	904.03
Structural Steel	906.01
Bolts and Bolting Materials	908
Brick Facade	910.01.01
Dimension Timber	915.04
Timber Treatment	915.05
Pavilion	919.23

Pre-engineered and pre-fabricated pavilion package shall include structural steel framing members, T&G wood roof deck, wood fascia, fasteners and metal seemed roof. Pavilion shall have a steel superstructure with metal seemed roof supported on timber planking. Colors: Superstructure steel shall be black. Wooden roof shall be stained brown. Metal seemed roof shall be green. Panel colors shall be submitted for superstructure steel, wooden planking and metal seemed roof, for approval. All metals shall be coated to prevent corrosion in harsh marine environment. Structural steel and roofing shall be galvanized and epoxy coated. Alternate coatings shall require approval by the RE. Refer to Section 919.23 for additional requirements.

615.02.02 Equipment

Contractor shall provide all cranes, rigging, falsework and temporary supports indicated in the erection plan.

615.03 CONSTRUCTION

A. Submittals. Contractor shall submit working drawings, calculations and erection plan for pavilion in accordance with the requirements of Section 105.05. Design shall meet or exceed applicable building code.

The submittal shall consist of the following phases:

- 1. Working Drawings.** Contractor shall submit calculations and working drawings for pavilion and decorative brick columns in accordance with the requirements of Section 105.05.
- 2. Erection Plan.** Contractor shall provide a plan indicating the means and methods to be utilized in erecting the pavilion. Erection plan shall indicate the minimum size crane required as well as temporary supports and other systems, materials or equipment required to complete the work in a safe manner.
- 3. Color Approval.** Custom colors to match specified. Provide color chart and lab sample for each color selected.

B. Installation of Pavilion. Pavilion shall be erected in accordance with the approved erection plan and manufactures recommendations. Perform installation in accordance with applicable federal, State, and local building and safety codes. Install shelter in accordance with manufacturer's approved shop drawing and good construction practices. Contractor to verify the prevailing weather conditions, including wind speed, are within acceptable limits prior to lifting any materials with a crane.

Clean installed work to like-new condition. Protect installed products until completion of project. Touch-up, repair, or replace damaged finishes before Substantial Completion. Touch up paint provided by manufacturer.

C. Installation of Precast Concrete and Brick Pillars. Precast concrete and brick façade shall be laid in uniform 3/8” thick mortar beds such that the bedding lines appear level and structures plumb. Façade shall be attached to concrete with dovetail fasteners as indicated. that horizontal joints and vertical joints in brick are not more than 3/8 inch wise. When the ambient temperature is below 40 degrees F, ensure that the mortar temperature is between 50 and 100 degrees F. Cover the masonry and maintain its temperature above 32 degrees F for 24 hours.

615.04 MEASUREMENT AND PAYMENT

The Department will measure and make payment for Items as follows:

<i>Item</i>	<i>Pay Unit</i>
PRE-ENGINEERED PAVILION	LUMP SUM

The LUMP SUM bid for PRE-ENGINEERED PAVILION shall include the cost of all labor, materials and equipment necessary for design, engineering, fabricating, furnishing and erecting a pavilion on the foundation system indicated in the contract documents as well as the installation of the concrete and brick pillars surrounding the steel columns supporting the pavilion also indicated on the contract documents.

The concrete foundations and supporting pilings shall be paid under their respective pay items within the contract.

SECTION 620 – ENTRANCE SIGN AND PILLARS

620.01 DESCRIPTION

The work shall consist of furnishing and construction the entrance sign and pillar structures indicated on the in the contract documents. Work shall include fabricating all custom metal signs/plaques indicated.

620.02 MATERIALS

Where not otherwise specified, provide materials in accordance with the following:

Concrete	903.03
----------------	--------

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

Mortar	903.08.01
Curing Materials	903.10
Precast Concrete.....	904.01
Reinforcement Steel.....	905.01
Welded Wire Reinforcement.....	905.01.03
Brick Façade	910.01.01
Banner Pole.....	919.22.09

620.03 CONSTRUCTION

- A. Working Drawings.** Contractor shall provide working drawings indicating concrete substructures, layout of precast concrete and brick façade as well as means for attaching precast concrete, brick, plaques, signs and banner poles to concrete base. Working drawings shall also present details of plaques and signs.
- B. Concrete Work.** All concrete related work shall conform to the requirements of Section 504 – Structural Concrete. Care shall be taken to properly cure base prior to erecting façade.
- C. Precast Concrete and Brick Façade.** Precast concrete and brick façade shall be laid in uniform 3/8” thick mortar beds such that the bedding lines appear level and structures plumb. Façade shall be attached to concrete with dovetail fasteners as indicated. that horizontal joints and vertical joints in brick are not more than 3/8 inch wise. When the ambient temperature is below 40 degrees F, ensure that the mortar temperature is between 50 and 100 degrees F. Cover the masonry and maintain its temperature above 32 degrees F for 24 hours.
- D. Metal Plaques, Signs and Poles.** All plaques, signs and poles shall properly fixed to concrete base.

620.04 MEASUREMENT AND PAYMENT

The Department will measure and make payment for Items as follows:

<i>Item</i>	<i>Pay Unit</i>
ENTRANCE SIGN & PILLERS	LUMP SUM

The LUMP SUM bid for ENTRANCE SIGN AND PILLERS shall include the cost of all labor, materials and equipment necessary for constructing structures indicated. This work shall include designing, engineering, fabricating, furnishing and erecting signs, plaques and banner poles indicated in the contract documents. No separate payment will be made for any incidental materials including stone base beneath foundations.

SECTION 625 – HISTORICAL ACCOMMODATIONS

625.01 DESCRIPTION

The work shall consist of the installation of a Railroad Interpretive Display, Raised Stone Sleep Display and Custom Catenary Lighting Structures using materials salvaged from the project site and as indicated in the contract documents. The work shall also include fabricating, furnishing and erecting Catenary Lighting Structures as indicated in the contract documents.

625.02 MATERIALS

Where not otherwise specified, provide materials in accordance with the following:

Concrete	903.03
Mortar	903.08.01
Curing Materials	903.10
Precast Concrete.....	904.01
Reinforcement Steel.....	905.01
Brick Façade	910.01.01
Stone Mulch	917.04.05
Catenary Lighting, Decorative.....	918.14.04
Geotextile.....	919.12

Sleeper stones, railroad track, spikes, anchor plates/clips and catenary poles shall be obtained from site salvage efforts at onset of project. Materials shall be stored at a safe location until needed.

625.03 CONSTRUCTION

- A. Submittals.** Contractor shall submit working drawings for Railroad Track Interpretive Display and Catenary Lighting Structure in accordance with the requirements of Section 105.05. Working drawings shall include a list of materials obtained from the site and details of fabrication and construction. Provide color samples for coatings to be utilized on catenary poles.
- B. Railroad Track Interpretive Display.** Contractor shall level and proof-roll ground to the satisfaction of RE and shall provide plastic sheathing at indicted. Set sleeper stones at the indicated gage and spacing and at such base elevations that the top elevation of the stones is consistent. Install railroad track and fasten to sleeper stones. Provide stone mulch and dress area.
- C. Raised Stone Sleeper Display.** Construct concrete foundations in accordance with Section 504. Brick façade shall be laid in uniform 3/8” thick mortar beds such that the bedding lines appear level and structures plumb. Façade shall be attached to concrete with dovetail fasteners as indicated. Horizontal and vertical joints between brick shall not be more than 3/8 inch wide. When the ambient temperature is below 40 degrees F, ensure that the mortar temperature is between 50 and 100 degrees F. Cover the masonry and maintain its temperature above 32 degrees F for 24 hours.
- D. Catenary Lighting Structures.** Contractor shall shop-fabricate lighting structure in accordance with the approved working drawings. Galvanize lighting pole in accordance with Section 517. Catenary lighting structures to be supported on concrete piers identified on the lighting details as Foundation Type 1. Foundations to be provided in accordance with Section 701.

625.04 MEASUREMENT AND PAYMENT

The Department will measure and make payment for Items as follows:

<i>Item</i>	<i>Pay Unit</i>
RAILROAD TRACK INTERPRETIVE DISPLAY	LUMP SUM
RAISED STONE SLEEPER DISPLAY	UNIT
CATENARY LIGHTING STRUCTURE	UNIT

The LUMP SUM bid for RAILROAD TRACK INTERPRITIVE DISPLAY shall include the cost of all labor, materials and equipment necessary for furnishing and installing display.

The UNIT price bid for RAISED STONE SLEEPER DISPLAY shall include the cost of all labor, materials and equipment necessary for furnishing and installing display. Each display shall consist of 6 brick columns with a stone sleeper cap stone.

The UNIT price bid for CATENARY LIGHTING STRUCTURE shall include the cost of all labor, materials and equipment necessary for fabricating, furnishing and erecting lighting structure. This shall include catenary pole, catenary lighting - decorative as well as all rigid non-metallic conduit and multiple lighting wire located on lighting structure. The cost for FOUNDATION TYPE 1 concrete pier as well as CONDUIT and LIGHTING WIRE providing power to the base of the lighting structure shall be provided and paid under the various bid items indicated in the contract documents.

SECTION 630 – SITE AMENITIES

630.01 DESCRIPTION

The work shall consist of fabricating, furnishing and installing interpretive exhibit panels, ground markers, flagpoles, bollards, precast concrete planters, trash receptacles, benches and bicycle racks where indicated in the contract documents and as ordered by the RE.

630.02 MATERIALS

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

630.02.01 Materials

Provide materials as specified:

Interpretive Exhibit Panels.....	919.22.01
Ground Markers.....	919.22.02
Flagpoles.....	919.22.03
Decorative Bollards.....	919.22.04
Precast Concrete Planters.....	919.22.05
Trash Receptacles.....	919.22.06
Benches.....	919.22.07
Bicycle Racks.....	919.22.08

All mounting hardware shall be stainless steel. Anti-corrosion coatings suitable for harsh marine environments shall be provided on all metals.

630.03 CONSTRUCTION

630.03.01 Interpretive Exhibit Panels, Ground Markers, Flagpoles and Bollards

- A. Submittals.** Provide submittals for materials proposed in accordance with applicable material specification for approval. Submittals shall include.
 - 1. Engineering Drawings, Sketches, and Images.** Submit for approval drawings, sketches and images identifying materials proposed, methods for installation and related hardware. All amenities to be installed on concrete foundations.
 - 2. Color Approval.** Provide color pallets and lab samples of any requested color swatches, for each item, for approval.
- B. Installation.** Construction concrete foundations or bases, or pre-auger holes for direct burial or encasement of item, as required by approved drawings to provide suitable support and anchorage. Mount, anchor or affix amenity in accordance with approved drawings and as direct by RE. All exposed mounting hardware shall be stainless steel.

630.03.02 Precast Concrete Planters, Trash Receptacles, Benches and Bicycle Racks

- A. Submittals.** Provide submittals for materials proposed in accordance with applicable material specification for approval. Submittals shall include.
 - 1. Engineering Drawings, Sketches, and Images.** Submit for approval drawings, sketches and images identifying materials proposed, methods for anchorage and related hardware.
 - 2. Color Approval.** Provide color pallets and lab samples of any requested color swatches, for each item, for approval.
- B. Installation.** Mount, anchor or affix amenity to concrete sidewalk or splash pad in accordance with approved drawings and as direct by RE. All exposed mounting hardware shall be stainless steel.

630.04 MEASUREMENT AND PAYMENT

The City will measure and make payment for Items as follows:

<i>Item</i>	<i>Pay Unit</i>
INTERPRETIVE EXHIBIT PANEL	UNIT
GROUND MARKERS, HISTORICAL	UNIT
FLAGPOLE, 35 FT	UNIT
FLAGPOLE, 40 FT	UNIT
DECORATIVE BOLLARDS	UNIT
PRECAST CONCRETE PLANTERS	UNIT
TRASH RECEPTICALS	UNIT
BENCHES	UNIT
BICYCLE RACKS	UNIT

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

Site amenities shall be measured by the number of UNITS acceptably delivered and installed by Contractor and approved by the RE.

The unit price bid per Site Amenity shall include the cost of all labor, materials and equipment necessary to furnish and install item to the satisfaction of the RE.

DIVISION 650 – UTILITIES

SECTION 651 – WATER

651.01 DESCRIPTION

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

The work shall also include the installation of ductile iron, high density polyethylene water pipe and fire hydrants.

651.02 MATERIALS

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

HDPE Water Pipe	909.02.02
Fire Hydrants	909.04

Soft Copper Tube and Fittings: Soft copper Tube shall comply with ASTM B 88, Type K water tube, annealed temper. Fittings shall comply with ASME B16.18, cast-copper-alloy or ASME B 16.22, wrought-copper, solder-joint pressure type. Furnish only wrought-copper fittings if indicated.

Hard Copper Tube and Fittings: Hard copper tube shall comply with ASTM B 88, Type K water tube, drawn temper. Fittings shall comply with ASME B16.18, cast-copper-alloy or ASME B16.22, wrought-copper, solder-joint pressure type. Furnish only wrought-copper fittings if indicated.

Ductile Iron Pipe and Gasket: Ductile iron pipe shall be Class 52 Ductile Iron, Seal Coated, Cement Lined (Double thickness) and shall comply with AWWA C151 with push-on joint bell & plain spigot end. Push-on-Joint, Ductile-Iron Fittings shall comply with AWWA C110, ductile or gray-iron standard pattern or AWWA C153 Ductile-Iron compact pattern. Gaskets shall comply with AWWA C111, rubber. All pipes/fittings to be encased in 8 mil polyethylene encasement-Repacor-8 mil ASTM D1248-89 TYPE 1 Black. US Pipe Tyton with Fieldlok Gasket or equal approved by RE.

Cast Iron Gate Valves: Non-Rising Stem, Resilient-Seated Gate Valves shall comply with AWWA C509, gray- or ductile-iron body and bonnet; with bronze or gray- or ductile-iron gate, resilient seats, bronze stem, and stem nut. Minimum working pressure shall be 200 psig. End connections shall be mechanical joint. Interior coating shall comply with AWWA C550. Mueller Model No. A-2360-20 (mj) or A-2360-6 (f) or equal approved by RE.

Valve Boxes: Valve boxes shall comply with AWWA M44 for cast-iron valve boxes. Include top section, adjustable extension of length required for depth of burial of valve, plug with lettering "WATER," bottom section with base of size to fit over valve, and approximately 5-inch- (125-mm-) diameter barrel. Bingham & Taylor fig. No. 4908 or equal approved by RE.

Water Meter Pit: Prefabricated water meter pit. Ford Meter Box, Double Lid Pit Setter with Wabash Cover or equal approved by RE. The Ford Meter Box Company, In. Wabash, Indiana, Phone: 260.563.3171, Email: fordmeterbox.com.

Water Meter: Badger Water Meter - Model 170 or equal approved by RE. Badger Meter, Milwaukee, WI, Phone: 800-876-3837, Email: www.badgermeter.com.

651.03 CONSTRUCTION

E. Installing Water Pipe

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

All pipe shall be laid on a solid, dry foundation. Pipe shall be laid true to the lines and grades shown on the Contract Drawings with the bell ends upstream. Each section of pipe shall rest upon the pipe bed the full length of its barrel and for a minimum of one-half its diameter with recesses excavated to accommodate bells and joints. Any pipe which has its grade or joints disturbed after laying shall be taken up and re-laid at the Contractor's expense. The Contractor shall close the ends of all unconnected pipe with a waterproof stopper. Bedding shall be in conformance with the standard detail.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

All pipes and joints shall be installed in accordance with the manufacturer's requirements. When the requirements contained in this specification exceed the manufacturer's specifications, the specifications contained herein shall govern.

Piping and appurtenances shall be cleansed of foreign matter before being lowered into the trench and shall be kept clean during the laying operations by plugging or other approved means. Cutting of pipe shall be done in a neat and workmanlike manner with an approved type of mechanical cutter without damage to the pipe or lining so as to leave a smooth end at right angle to the axis of the pipe.

All gaskets and mating surfaces shall be thoroughly cleaned and lubricated in accordance with the manufacturer's specifications. The pipe shall be aligned with the previously installed pipe and, with gasket in place, put together. After pipes are put together, the joint shall be inspected to verify that the gasket is properly positioned and that the joint has been properly made and is tight.

Install anchorage for tees, plugs and caps, bends, crosses, valves, and hydrant branches. Apply full coat of asphalt or other acceptable corrosion-resistant material to surfaces of installed ferrous anchorage devices.

Terminate piping with caps, plugs, or flanges as required for piping material on plans.

651.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEM IS ADDED:

<i>Item</i>	<i>Pay Unit</i>
2" HIGH DENSITY POLYETHYLENE WATER PIPE	LINEAR FOOT
6" DUCTILE IRON WATER PIPE, CLASS 52	LINEAR FOOT
WATER METER PIT	UNIT

The price bid for 6" DUCTILE IRON WATER PIPE, CLASS 52 and 2" HIGH DENSITY POLYETHYLENE WATER PIPE shall include all labor methods, materials, connection, coarse aggregate pipe bedding, valves, joints, service connections and any other incidentals hereto.

The price bid for WATER METER PIT shall include all labor methods, materials, connection, coarse aggregate pipe bedding, valves, joints, metering pits, meters, service connections and any other incidentals hereto.

SECTION 652 – SANITARY SEWERS

652.01 DESCRIPTION

THE FOLLOWING IS ADDED:

The work shall include the installation of the force main from Pump Station No. 1 at the ferry building to Sanitary Manhole (SAN MH) S1 and the force main from Pump Station No. 2 at the floating barge to Sanitary Manhole (SAN MH) S1 as well as the gravity sewer line from Sanitary Manhole (SAN MH) S1 to the sanitary manhole on the adjoining property identified as BNE Sanitary Manhole (SAN MH) S-15. Work on BNE property shall be in accordance with existing easement identified in Section 107.01.04 and shall be coordinated with BNE.

652.02 MATERIALS

652.02.01 Materials

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Non-Structural Precast Concrete	904.01
HDPE Pipe	909.02.02
Plastic Pipe	909.02.03
Castings and Components for Drainage Structures.....	909.03
Prefabricated Pump-Station System.....	919.24
Peristaltic Pump-Out System	919.25

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

Pump Station Package No. 1: Provided submittal on Pump Station Package No. 1 for approval by RE. Submittal shall include equipment and products required for a working pump station for the building consisting of concrete slab, chain link fence with gate, chemical feed storage tank, pump skid and wet well / valve chamber with access hatches, 2 pumps, trash basket, telemetry unit, floating switches, hoist, visual alarm, conduits and wiring for controls, control panel and all incidental materials.

Pump Station Package No. 2: Provided submittal on Pump Station Package No. 2 for approval by RE. Submittal shall include equipment and products required for a working ferry pump-out consisting of peristaltic pump with enclosure, suction line to remote pumping center, wireless controls, remote pumping center with hose rack and 100-foot flexible hose assembly.

Manhole Covers: Include indented top design with lettering as provided by City.

Protective Coatings on Manholes, Manhole Frames and Covers: One- or two-coat, coal-tar epoxy; 15-mil minimum thickness, unless otherwise indicated; factory or field applied to the following surfaces:

- a. Concrete Manholes: On exterior and interior surfaces.
- b. Manhole Frames and Covers: On entire surfaces.

THE FOLLOWING SUBSECTION IS ADDED:

652.02.02 Coordination

Coordination Drawings: Show manholes and other structures, pipe sizes, locations, and elevations. Include details of underground structures and connections. Show other piping in same trench and clearances from sewerage system piping. Indicate interface and spatial relationship between piping and proximate structures.

Coordination Profile Drawings: Show system piping in elevation. Draw profiles at horizontal scale of not less than 1 inch equals 50 feet (1:500) and vertical scale of not less than 1-inch equal's 5 feet (1:50). Indicate underground structures and pipe. Show types, sizes, materials, and elevations of other utilities crossing system piping.

THE FOLLOWING SUBSECTION IS ADDED:

652.03.10 Peristaltic Pump

Peristaltic pump to be installed on floating barge and shall be connected to suction line, force main and electric power per approved submittal. Wireless controls shall be provided at remote pumping center.

652.04 MEASUREMENT AND PAYMENT

THE FOLLOWING PAY ITEMS ARE ADDED:

<i>Pay Item</i>	<i>Pay Unit</i>
2" HIGH DENSITY POLYETHYENE SEWER PIPE	LINEAR FOOT
3" HIGH DENSITY POLYETHYENE SEWER PIPE	LINEAR FOOT
8" POLYVINYL CHLORIDE SEWER PIPE	LINEAR FOOT
MANHOLE, SANITARY SEWER, SPECIAL	LUMP SUM
AIR RELEASE VALVE AND MANHOLE, SANITARY SEWER	LUMP SUM
PRESSURE CLEAN OUT VALVE AND MANHOLE, SANITARY SEWER	LUMP SUM
PUMP STATION PACKAGE NO. 1	LUMP SUM
PUMP STATION PACKAGE NO. 2	LUMP SUM

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

Bid prices for all HIGH DENSITY POLYETHYENE SEWER PIPE shall include all cost for equipment, materials, labor, including tees, valves, bends, excavation, bedding and backfill required for the installation and hook-up of the sewer pipes.

Lump sum bid price for MANHOLE SANITARY SEWER, SPECIAL shall include all cost for equipment, materials and labor associated with the design, fabrication and installation of Sanitary Manhole S1 (SAN MH S1), including bedding and backfill and incidentals.

Lump sum bid price for AIR RELEASE VALVE AND MANHOLE, SANITARY SEWER shall include all cost for equipment, materials and labor associated with the design, fabrication and installation of Force Main Air Release Valve and Manhole, including air release valve, victaulic or dresser couplings, double strap tapping saddle or tee, all other related and required materials, bedding and backfill and incidentals.

Lump sum bid price for PRESSURE CLEAN OUT VALVE AND MANHOLE, SANITARY SEWER shall include all cost for equipment, materials and labor associated with the design, fabrication and installation of Pressure Cleanout Valve and Manhole, including union ball valve, threaded nipples, reducing coupling, treaded brass nipple, brass cap, wye, 45 degree bend, riser pipe and all other related and required materials, bedding and backfill and incidentals.

Lump sum bid price for PUMP STATION PACKAGE NO. 1 shall include all cost for equipment, materials, electrical work and labor, to provide a working pump station for building consisting of concrete slab, chain link fence with gate, chemical feed storage tank, pump skid and wet well / valve chamber, access hatches, 2 pumps, trash basket, telemetry unit, floating switches, hoist, visual alarm, conduits and wiring for controls, control panel and all incidental materials, products and labor.

Lump sum bid price for PUMP STATION PACKAGE NO. 2 shall include all cost for equipment, materials, electrical work and labor, to provide a working ferry pump-out consisting of peristaltic pump, control panel for wireless operation, fiberglass enclosure, suction sewer main, remote pumping center with digital wireless transmitter, 100-foot flexible hose assembly and all incidentals.

SECTION 653 – GAS

653.01 DESCRIPTION

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Contractor to provide coordination as well as excavation and backfill for the installation of gas service. Installation of gas service shall be by PSE&E or their designated contractor.

653.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEM IS ADDED:

<i>Item</i>	<i>Pay Unit</i>
2" GAS MAIN, EXCAVATION AND BACKFILL	LINEAR FOOT
GAS SERVICE ALLOWANCE	DOLLAR

GAS SERVICE ALLOWANCE shall include cost for the installation of the 2" gas main and connection to supply main by Utility Company. No work performed by the Contractor will be paid under GAS SERVICE ALLOWANCE. The price bid for 2" GAS MAIN, EXCAVATION AND BACKFILL shall include all coordination, labor and materials for the excavations and backfill associated with the installation of the gas main.

DIVISION 700 – ELECTRICAL

SECTION 701 – GENERAL ITEMS

701.01 DESCRIPTION

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

This work shall include providing the Electric Service, Transformer and Meter Package which shall consist of concrete pad, bollards, fencing, Unistrut mounts with concrete footings, transformer, utility meter socket, breaker panels, breakers, grounding rod any incidental thereto required construct the electric service indicated in the contract documents.

This work shall also include the coordination the installation of fiber optics and cable service.

701.02 MATERIALS

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Metal Wireways	918.08.01
Handholes and Boxes.....	918.08.02
Low Voltage Transformers	918.10.01
Panelboards.....	918.10.02
Wiring Devices	918.10.03
Fuses	918.10.04
Enclosed Switches.....	918.10.05
Identification for Electrical Systems.....	918.16

Provided submittal on Electric Service, Transformer and Meter Package for approval by RE. Submittal shall include concrete pad, chain link fence, bollards, transformer, meter pan, site lighting panelboard, transient voltage sure arrestor and all incidentals required to complete Utility Service Area. Location of centralized internet access point for Security / Wi-Fi systems shall be within the limits of the Utility Service Area and shall be presented on layout plan.

THE FOLLOWING SUBSECTION SHALL BE ADDED

701.02.01 COORDINATION

- A. Scheduling of Work.** Provide the RE and the designated JCP&L representative with a detailed schedule of when the electric utility work will be performed. Coordinate all electric utility work with the JCP&L representative and notify the RE and the JCP&L representative at least 2 weeks prior to starting electric utility work. Do not interrupt existing electric service until approved by the JCP&L representative.

Weather conditions may prevent connections to existing systems between June 1 and September 30. Do not perform work which will require electric transmission service interruptions from June 1 through September 30 without the approval of JCP&L. JCP&L may extend this period based on weather conditions and system demand. Notify JCP&L at least 1 month in advance of commencing conductor work.

If service transfers are required, coordinate service transfers with the JCP&L representative. Notify the property owner and all tenants affected by service interruptions or transfers prior to making the service transfer. Minimize disruption to normal operations of existing facilities and minimize any interruption of electric service to JCP&L customers. Protect existing facilities during construction and installation of the service transfer.

- B. Quality Control and Quality Assurance.** Provide access to the work for the JCP&L representative at all times. Perform all electric utility work in a manner acceptable to the JCP&L representative. Perform all electric utility work in accordance with JCP&L standards and details.
- C. Safety.** Perform work in accordance with applicable OSHA regulations, N.J.S.A. 34:6-47.1 et seq. “High Voltage Proximity Act”, and JCP&L safety standards.
- D. Energizing Lines.** Energize lines with the guidance of the JCP&L representative. Prior to energizing lines, submit a request to JCP&L. Switching orders may only originate from JCP&L employees. Submit a request for permission to energize transmission lines 10 days in advance of when the work will be performed. Request permission to energize distribution lines in a manner that will permit the JCP&L representative to submit a request to JCP&L’s Dispatch Office by 12:00 p.m. the previous working day.
- E. Field Testing.** Perform a high-potential test (also known as a dielectric voltage withstand test) on all cables and splices prior to energizing. Testing must be performed by a person who is qualified to operate the test equipment, and is familiar with the cable system. Ensure that the cables are disconnected from non-cable systems equipment, and that adequate physical clearances are maintained between all cable ends, energized cables, and electrical grounds

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

and all other equipment during the test. Prior to performing the test, verify that all taps or laterals in the circuit are cleared. In the event hot poured compound filled splices and terminations are involved, do not perform testing until they have cooled to ambient temperature. Set the relays in the high voltage direct current test equipment to operate between 5 and 25 milliamperes leakage. The shape of the leakage curve under constant voltage is more important than the absolute leakage current of a “go or no go” withstand test result. The field test voltage is related to the final factory applied dc potentials using a factor of 80 percent.

Ensure the high potential test is performed in the presence of the JCP&L representative. Apply a direct current field test voltage according to the following table:

Field Test Values				
Rated Voltage	dc Hi-Pot Test		dc Hi-Pot Test	
Phase to	(15 Minutes)			
Phase	Wall - mils	Kv	Wall - mils	kV
5000	90	25	115	35
8000	115	35	140	45
15000	175	55	220	65
25000	260	80	320	95
28000	280	85	345	100
35000	345	100	420	125
46000	445	130	580	170
69000	650	195	650	195

Note: If the leakage current quickly stabilizes, the duration may be reduced to 10 minutes.

After the voltage has been applied and the test level reached, record the leakage current at 1 minute intervals. If the leakage current decreases or stays steady after it has leveled off, the cable is considered satisfactory. If the leakage current starts to increase, excluding momentary spurts due to supply-circuit disturbances, extend the test to see if the rising trend continues. At the conclusion of the test, discharge the circuit through the test set and voltmeter circuit. After the potential drops below 95 percent of the test value, ground the cable, and discharge the circuit. Leave the grounds on all conductors for a minimum of 4 times as long as the test voltage was applied.

Remove and replace cables that fail to meet the requirements of the direct current field test. The Contractor is responsible for reimbursing the Department for any additional material costs incurred by the Department resulting from the failure to meet the requirements of the direct current field test.

- F. **As-built.** Upon completion of the work, submit to JCP&L as-built drawings in accordance with JCP&L standards. Prints of construction drawings, marked to show the final location, are acceptable. Provide a copy of the as-built drawings to the RE.

THE FOLLOWING SUBSECTION SHALL BE ADDED

701.03.16 Electric Manholes and Handholes

- A. **Excavation.** Excavate trenches for manholes, handholes and vaults and appurtenances. Provide vertical sides for excavations within the traveled way, shoulder, sidewalk areas, and where existing facilities require protection. Remove unstable material at the bottom of the excavation and backfill with granular material. Do not leave trenches open overnight unless protected by temporary fencing or steel plates. Remove and dispose of excess or unsuitable material as specified in 202.03.03.C.2.
- B. **Backfill.** Backfill with suitable material in lifts not exceeding 6 inches thick, loose measurement. If the backfill is predominantly granular material, compact the backfill material with a vibratory plate compactor. For material that is not predominately granular, compact the backfill material with a vibratory rammer compactor. If it is not possible to compact the backfill material, the Contractor may backfill with CLSM with the approval of the JCP&L representative. If using CLSM, install as specified in 601.03.01.F.

701.04 MEASUREMENT AND PAYMENT

THE FOLLOWING PAY ITEMS ARE ADDED:

<i>Pay Item</i>	<i>Pay Unit</i>
1 ½" RIGID NONMETALLIC CONDUIT	LINEAR FOOT
3" RIGID NONMETALLIC CONDUIT	LINEAR FOOT
4" RIGID NONMETALLIC CONDUIT	LINEAR FOOT
MULTIPLE LIGHTING WIRE, NO. 3/0AWG	LINEAR FOOT
MULTIPLE LIGHTING WIRE, NO. 2 AWG	LINEAR FOOT
MULTIPLE LIGHTING WIRE, NO. 3 AWG	LINEAR FOOT
MULTIPLE LIGHTING WIRE, NO. 4 AWG	LINEAR FOOT
MULTIPLE LIGHTING WIRE, NO. 6 AWG	LINEAR FOOT
MULTIPLE LIGHTING WIRE, NO. 8 AWG	LINEAR FOOT
ELECTRICAL HANDHOLES	UNIT
ELECTRIC SERVICE, TRANSFORMER AND METER PACKAGE	LUMP SUM
ELECTRIC SERVICE ALLOWANCE	DOLLAR
FIBER OPTIC AND CABLE SERVICE ALLOWANCE	DOLLAR
FOUNDATION, TYPE 1	UNIT
FOUNDATION, TYPE 2	UNIT

The price bid for the various items in this section shall include all equipment, labor methods, materials, any other incidentals hereto required to complete work to the satisfaction of the RE.

The lump sum price bid for ELECTRIC SERVICE, TRANSFORMER AND METER PACKAGE shall include all labor methods, materials, any other incidentals hereto to complete the electric service to the satisfaction of the RE. This work shall include concrete pad, bollards, fencing, Unistrut mounts with concrete footings, transformer, utility meter socket, breaker panels, breakers and grounding rod. This work shall include the concrete pad required by JCP&L for the mounting of primary transformer to be supplied and installed by JCP&L.

ELECTRIC SERVICE ALLOWANCE shall include cost for the installation of electrical service by JCP&L and shall include all labor and material and incidental costs for the supply and installation of conductors, primary transformer and service meter. No work performed by the Contractor will be paid under ELECTRIC SERVICE ALLOWANCE.

FIBER OPTIC AND CABLE SERVICE ALLOWANCE shall include cost for the installation of fiber optic and cable services by Verizon and Cablevision, respectively. No work performed by the Contractor will be paid under FIBER OPTIC AND CABLE SERVICE ALLOWANCE.

The price bid for ELECTRICAL HANDHOLES shall include all labor methods, materials, connection, coarse aggregate handholes and any other incidentals hereto.

The cost for fixture handholes shall be included in the bid item provided.

SECTION 703 – HIGHWAY LIGHTING

703.01 DESCRIPTION

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

The work shall also include the installation site lighting and decorative lights hanging from roof of canopy.

703.02 MATERIALS

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

Lighting Standard Aluminum	918.12.01
Lighting Standard Decorative	918.12.02
Luminaire.....	918.14.01
Luminaire Decorative	918.14.02
Pavilion Lighting, Decorative	918.14.03

703.04 MEASUREMENT AND PAYMENT

THE FOLLOWING PAY ITEMS ARE ADDED:

<i>Pay Item</i>	<i>Pay Unit</i>
LIGHTING STANDARD ALUMINUM	UNIT
LIGHTING STANDARD DECORATIVE	UNIT
LUMINAIRE	UNIT
LUMINAIRE DECORATIVE	UNIT
PAVILION LIGHTING, DECORATIVE	UNIT

The price bid for the various items in this section shall include all equipment, labor methods, materials, any other incidentals hereto required to complete work to the satisfaction of the RE.

SECTION 704 – INTELLIGENT TRANSPORTATION SYSTEMS (ITS)

704.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This work shall include design, supply, installation, set-up, and commissioning of a site security system consisting of cameras and license plate readers installed at the locations presented on the drawings, wireless systems necessary to integrate all surveillance equipment to a single, on-site hub and connection to the proposed fiber optic/cable network and the internet. The security system will be controlled and monitored from the City’s existing central monitoring station at police headquarters.

This work shall also include the design, supply, installation, set-up, and commissioning of a site-wide Wi-Fi system.

704.02 MATERIALS

704.02.01 Materials

THE FOLLOWING IS ADDED:

Camera, Tilt-Pan-Zoom	918.15.01
Camera, Fixed.....	918.15.02
Camera, Panoramic – 180/360 Degrees	918.15.03
Automatic License Plate Reader	918.15.04

Materials shall also include all antenna, wireless transmitters and receivers, POE switches, power supplies, transformers, routers, equipment cabinets, equipment cabinet foundations and all related hardware, including wiring and cabling required satisfy design requirements of 704.02.02.

Equipment cabinets rated for NEMA 3R standards.

THE FOLLOWING SUBSECTION SHALL BE ADDED:

704.02.03 Design

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

Contractor shall be responsible for final design of security and wi-fi systems. Security system shall be capable of utilizing all functions of the cameras and license plate readers specified, to the maximum rating of the equipment including, resolution and rate of pan-tilt-zoom actions of security cameras. Site-wide wi-fi system shall be capable of providing a minimum of 2 Giga Byte (GB)/sec of throughput to internet, with a minimum 1 GB/sec of throughput available at each hotspot. The throughput requirements indicated for wi-fi system shall be in addition to that required for security system. Final design shall include selection and integration of all antenna, wireless transmitters and receivers, POE switches, power supplies, routers, equipment cabinets and cabinet foundations and all related hardware, including wiring and cabling required.

All connections from camera and wi-fi antenna locations shall be wireless to POE Switch / Router System, which is to be hard-wired to the internet. Any alternate designs shall require approval by RE. Location of centralized internet access point for Security / WIFI systems shall be within the limits of the Utility Service Area and shall be presented on the layout plan for this area.

Per electrical design, power for lighting fixtures shall be 277 V, provide transformers as necessary for the powering of pole mounted security and wi-fi systems.

704.03 CONSTRUCTION

704.03.03 Design

Contractor shall be responsible for final design of security and wi-fi systems. Security system shall be capable of utilizing all functions of the cameras and license plate readers specified, to the maximum rating of the equipment including, resolution and rate of pan-tilt-zoom actions of security cameras. Site-wide wi-fi system shall be capable of providing a minimum of 2 Giga Byte (GB)/sec of throughput to internet, with a minimum 1 GB/sec of throughput available at each hotspot. The throughput requirements indicated for wi-fi system shall be in addition to that required for security system. Final design shall include selection and integration of all antenna, wireless transmitters and receivers, POE switches, power supplies, routers, equipment cabinets and cabinet foundations and all related hardware, including wiring and cabling required.

704.04 MEASUREMENT AND PAYMENT

THE FOLLOWING PAY ITEMS ARE ADDED:

<i>Pay Item</i>	<i>Pay Unit</i>
SITE SECURITY AND WI-FI SYSTEMS	LUMP SUM

Payment for SITE SECURITY AND WI-FI SYSTEMS shall include all costs for design, engineering, equipment, materials, and labor for providing security and wi-fi systems capable of meeting the design requirements specified. Materials shall include all cameras, license plate readers, antenna, wireless transmitters and receivers, POE switches, power supplies, routers, equipment cabinets and cabinet foundations and all related hardware, including wiring and cabling and other equipment and materials necessary to accomplish the work. Materials shall also include standards for the mounting of the license plate readers at required height to properly function and related foundations.

DIVISION 800 – LANDSCAPING

SECTION 802 – TRIMMING AND REMOVING TREES

802.04 MEASUREMENT AND PAYMENT

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED WITH THE FOLLOWING:

No separate payment shall be made for the cost of trimming any existing trees indicated on plans as required to construct the proposed improvements, or as directed by the RE for constructing the proposed improvements. Any trees trimmed which are deemed in the sole opinion of the engineer to be substantially damaged shall be removed in their entirety by the Contractor at no additional costs to the City. This shall hold true even in the case when the center of the tree is located beyond the proposed limits of clearing. All cost thereof shall be included in the lump sum price bid for the item "Clearing Site".

SECTION 804 – TOPSOIL SPREADING

804.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
TOPSOIL SPREADING, 5" THICK	SQUARE YARD

Contractor shall assume that all BORROW TOPSOIL will be imported, as the entire site shall be required to have a 2 foot thick cap of certified clean fill in landscaped areas.

The price bid for the various items in this section shall include all equipment, labor, materials, any other incidentals hereto required to complete work to the satisfaction of the RE.

SECTION 806 – FERTILIZING AND SEEDING

806.02 MATERIALS

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED WITH THE FOLLOWING:

Provide materials as specified:

Fertilizer, 1-2-1 Ratio.....	917.02.02
Pulverized Limestone.....	917.02.03
Straw Mulch.....	917.04.01
Tackifiers	917.05
Lawn Seed Mix	917.03.01
Marine Grassland Seed Mix.....	917.03.01

806.03 CONSTRUCTION

806.03.01 Fertilizing and Seeding

A. Optimal Seeding Seasons.

THE FIRST SENTENCE IS CHANGE TO:

Refer to Table 4-3 in The Standards for Soil Erosion and Sediment Control in New Jersey, 7th Edition, January 2014 for optimal and acceptable planting dates.

B. Soil Preparation.

THE FIRST PARAGRAPH IS CHANGED TO:

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

All soils existing and imported must be sampled and tested by an approved testing laboratory. All testing results must be submitted to the Resident Engineer for review. Soil analysis must include recommendations for corrective measures to produce the required soils for lawn seeding. When the topsoil to be seeded has a pH value of less than 6, incorporate sufficient pulverized limestone to increase the soil pH value to 6.5.

THE FOURTH PARAGRAPH IS CHANGED TO:

Cultivate areas to be seeded to provide a reasonably firm but friable seedbed to a depth of 4 inches. On slopes steeper than 3H:1V, the RE may reduce the depth of cultivation. Remove all vegetation, stones 1 inch or larger in any dimension, and other debris from areas to be seeded.

C. Seed and Fertilizer Application.

THIS SUBPART IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

Sow grass seed mixtures at the rate of 6 pounds per 1000 square feet. Use only 1 type of fertilizer to establish turf throughout the Project Limits. At the time of seeding, apply fertilizer at the rate necessary to yield 30 pounds of nitrogen per acre. Place seed and fertilizer by the following method only:

Hydraulic Method: Mix the seed and fertilizer in water, and then apply under pressure at the specified rates. Re-treat all areas inadequately covered.

806.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
FERTILIZING AND SEEDING, LAWN MIX	SQUARE YARD
FERTILIZING AND SEEDING, MARINE GRASSLAND MIX	SQUARE YARD

THE SECOND PARAGRAPH IS CHANGED TO:

Payment will not be made for areas of fertilizing and seeding disturbed by construction operations, beyond the prescribed grading limits, in islands and medians, and between prescribed grading limits and the right-of-way.

The price bid for the various items in this section shall include all equipment, labor, materials, any other incidentals hereto required to complete work to the satisfaction of the RE.

SECTION 807 – TOPSOIL STABILIZATION

807.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
SOIL STABILIZATION, TYPE 2 MAT	SQUARE YARD

The price bid for the various items in this section shall include all equipment, labor, materials, any other incidentals hereto required to complete work to the satisfaction of the RE.

SECTION 809 – MULCHING

809.02 MATERIALS

THE FOLLOWING ITEMS ARE ADDED:

Provide materials as specified:

Stone Mulch	917.04.05
-------------------	-----------

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

The price bid for the various items in this section shall include all equipment, labor, materials, any other incidentals hereto required to complete work to the satisfaction of the RE.

809.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
STONE MULCHING, 4" THICK	SQUARE YARD

The price bid for the various items in this section shall include all equipment, labor, materials, any other incidentals hereto required to complete work to the satisfaction of the RE.

SECTION 811 – PLANTING

811.03 CONSTRUCTION

811.03.02 Plant Establishment and Maintenance Period

THE FOLLOWING ITEMS ARE ADDED:

Plant Establishment and Maintenance Period shall be 1 year from substantial completion.

811.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

<i>Item</i>	<i>Pay Unit</i>
LARGE DECIDUOUS TREE, 2-2 1/2" CALIPER, B&B	UNIT
EVERGREEN TREES, 6-7 FT HIGH, B&B	UNIT
DECIDUOUS SHRUB, 18-24" HIGH, #3 CONTAINER	UNIT
DECIDUOUS SHRUB, 24-30" HIGH, B&B	UNIT
DECIDUOUS SHRUB, 3-4 FT" HIGH, B&B	UNIT
EVERGREEN SHRUB, 18-24" HIGH, #3 CONTAINER	UNIT
EVERGREEN SHRUB, 36-42" HIGH, B&B	UNIT
GROUND COVER, #1 CONTAINER	UNIT
PLANT ESTABLISHMENT AND MAINTENEANCE PERIOD, 1 YEAR	LUMP SUM

The price bid for the various items in this section shall include all equipment, labor, materials, any other incidentals hereto required to complete work to the satisfaction of the RE.

DIVISION 900 – MATERIALS

SECTION 901 – AGGREGATES

901.01 Source

THE FOLLOWING IS ADDED TO THIS SUBSECTION

All imported fills shall satisfy NJDEP criteria for “**Certified Clean Fill.**”

901.03 Course Aggregate

THE FOLLOWING IS ADDED TO THIS SUBSECTION

All imported fills shall satisfy NJDEP criteria for “**Certified Clean Fill.**”

901.10 Dense Graded Aggregate

THE FOLLOWING IS ADDED TO THIS SUBSECTION

All imported fills shall satisfy NJDEP criteria for “**Certified Clean Fill.**”

901.11 Soil Aggregate

THE FOLLOWING IS ADDED TO THIS SUBSECTION

All imported fills shall satisfy NJDEP criteria for “**Certified Clean Fill.**”

1. Composition of Soi Aggregate.

THE FOLLOWING SHALL BE ADDED TO THE FORTH PARAGRAPH OF THIS SUBPART:

The criteria presented in this paragraph shall only pertain to Designation I-14 Aggregate derived from on-site sources as EXCAVATION, UNCLASSIFIED.

THE FOLLOWING SHALL BE ADDED TO THIS SUBPART:

Imported I-14 Aggregate shall satisfy NJDEP criteria for “**Certified Clean Fill**” and shall not contain any deleterious or foreign matter.

2. Gradation.

THE FOLLOWING SHALL BE ADDED TO THE SECOND PARAGRAPH OF THIS SUBPART:

For Designation I-14 Aggregate derived from on-site sources, use only material which is suitable for intended purpose and will not encumber future excavations for drainage structures and utilities or other construction activities. For imported Designation I-14 Aggregate, use only material that is 100 percent passing the 2-inch sieve and satisfies NJDEP criteria for “**Certified Clean Fill.**”

SECTION 902 – ASPHALT

902.02 HOT MIX ASPHALT (HMA)

902.02.03 Mix Design

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Unless otherwise approved by the Resident Engineer, only one source of the supply for hot mix asphalt surface course may be used on the project.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

902.02.04 Sampling and Testing

THE FOLLOWING SUBPART (E) IS ADDED:

E. Acceptance of HMA. The City may accept the HMA as specified in 902.02.04 A through 902-02.04 D by employing staff or an independent testing agency at the HMA plant during production. The inspector who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

Alternatively, the City may accept the HMA by Certification of Compliance according to 106.07.

902.03 OPEN-GRADED FRICTION COURSE (OGFC) AND MODIFIED OPEN-GRADED FRICTION COURSE (MOGFC)

902.03.02 Mix Design

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Unless otherwise approved by the Resident Engineer, only one source of the supply for hot mix asphalt surface course may be used on the project.

902.03.03 Sampling and Testing

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Acceptance of HMA. The City may accept the HMA as specified in 902.03.03 by employing staff or an independent testing agency at the HMA plant during production. The inspector who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

Alternatively, the City may accept the HMA by Certification of Compliance according to 106.07.

SECTION 903 – CONCRETE

903.01 CEMENT

THE ENTIRE SUBSECTION TEXT IS CHANGED TO:

Use cement, listed on the QPL, that is either portland cement or blended hydraulic cement and conforms to the following:

Portland Cement, Type I, II, and Type III.....	ASTM C 150
Blended Hydraulic Cement, Type IS, IP, and IL	ASTM C 595

Only use Type III portland cement for Class V concrete, prestressed Items, and precast Items.

Use portland cement pre-blended with a maximum of 25 percent fly ash, by weight, or a maximum of 5 percent silica fume by weight, or with a maximum of 50 percent slag by weight for blended hydraulic cement Type IS or IP. Use portland cement pre-blended with a minimum of 5 percent limestone content and a maximum of 15 percent limestone content by weight for blended hydraulic cement Type IL. Ensure that a scaling test according to ASTM C 672 is completed on the mix design if more than 30 percent slag is used and that the concrete has a visual rating less than 3 after 50 cycles.

Do not add additional mineral admixtures to blended hydraulic cements Type IS or IP at the concrete plant unless approved by the ME. The use of additional mineral admixtures in blended hydraulic cement Type IL at the concrete plant is permitted if the mineral admixture is listed on the QPL

Do not mix different brands of cement, the same brand of cement from different mills, or different types of cement.

Provide suitable means for storing and protecting the cement against dampness. The ME will reject cement that has become partially set or that contains lumps of caked cement. Ensure that the temperature of the cement at the time of delivery to the mixer does not exceed 160 °F.

903.03.05 Control and Acceptance Testing Requirements

B. Quality Control

THE FOLLOWING IS ADDED TO THIS SUBPART:

Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements. When pumping concrete, take samples for tests at point of delivery from pumping line:

1. Contractor shall provide and maintain concrete cylinder initial curing storage for use of the Testing Agency which provides an environment with a temperature range between 60 and 80 degrees F (68 and 78 degrees for concrete strength specified to be 6000 psi or greater), shielded from direct sunlight, prevents the loss of moisture, and is accordance with ASTM C31. This storage must not be disturbed by construction activity or personnel.
2. Testing Frequency: Obtain at least one composite sample for each 50 cu. yd. or fraction thereof of each concrete mixture placed each day nor less than once for each 5000 square feet of surface area for slabs and walls.
 - a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.
3. Slump: ASTM C 143; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
4. Air Content: ASTM C 231, pressure method, for normal-weight concrete; ASTM C 173, volumetric method, for structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
5. Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each composite sample.
6. Unit Weight: ASTM C 567, fresh unit weight of structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
7. Compression Test Specimens: ASTM C 31.
 - a. Cast and laboratory cure one set of four 6"x12" or five 4"x8" standard cylinder specimens for each composite sample.
8. Compressive-Strength Tests: ASTM C 39; test one cylinder at seven days for information, one set of two 6"x12" or three 4"x8" laboratory-cured specimens at 28 days and hold one cylinder in reserve.
 - a. A compressive-strength test shall be the average compressive strength from the set of specimens obtained from same composite sample and tested at 28 days.
9. Test results shall be reported in writing to RE, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete Testing/Inspecting Agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
10. Discrepancy Test Reports: All test reports indicating a discrepancy with contract documents shall be transmitted by electronic mail or facsimile transmission immediately to all parties on the test report distribution list. Mailed copies shall be on different colored paper.

11. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by RE but will not be used as sole basis for approval or rejection of concrete.
12. Additional Tests: Testing/Inspecting Agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect. Testing/Inspecting Agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42 or by other methods as directed by RE.
13. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
14. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.

C. Acceptance Testing Procedures for Slump and Air Entrainment.

THE FOLLOWING SHALL BE ADDED TO THIS SUBPART

Refer to Section 903.03.05 B for additional criteria, including testing frequency. The most stringent criteria shall apply.

D. General Acceptance Testing Requirements for Strength.

THE FOLLOWING SHALL BE ADDED TO THIS SUBPART

Refer to Section 903.03.05 B for additional criteria, including testing frequency. The most stringent criteria shall apply.

E. Acceptance Testing for Strength for Pay-Adjustment Items.

4. Compute Percent Pay Adjustment (PPA).

THE FIFTH PARAGRAPH IS CHANGED TO:

If the City elects not to core, the Contractor may accept the PPA calculated by Equation 1 or 2, as appropriate, or, when approved by the City, the Contractor may take cores as specified in Table 903.03.06-4. Take the cores within 90 days from the date of concrete placement. The City will not award a positive pay adjustment based on core samples taken more than 90 days from the date of concrete placement. If electing to core, perform the coring as directed by the ME, and provide the cores to the ME for testing.

F. Acceptance Testing for Strength for Non-Pay-Adjustment Items

THIS SUBSECTION IS DELETED IN ITS ENTIRITY AND REPLACED WITH THE FOLLOWING:

Non-pay-adjustment Items are those concrete Items not specifically designated as pay-adjustment Items, as specified in 903.03.05.E. Such an item is eligible for 100 percent payment (PPA = 0) if each individual test result in a lot meets the retest limit specified in Table 903.03.06-4. If any individual test value (average of a cylinder pair) falls below the retest limit for non-pay-adjustment concrete in Table 903.03.06-4, the RE may reevaluate by coring or other suitable means. When this provision is applied to precast/prestressed concrete, the RE will evaluate each item in the bed separately.

If cores are taken, the City will use the core results to determine the final disposition of the lot. If, based on the core results, the RE rejects the lot, then the RE may do one of the following:

1. Require the Contractor to remove and replace the defective lot.
2. Allow the Contractor to leave the defective lot in place and receive a PPA computed by Equation 2.
3. Allow the Contractor to submit a plan, for approval, for corrective action.

SECTION 904 – PRECAST AND PRESTRESSED CONCRETE

904.01 NON-STRUCTURAL PRECAST CONCRETE

THE FOLLOWING SHALL BE ADDED TO THIS SUBSECTION

Normal-Traffic Precast Concrete Manholes: ASTM C 478 (ASTM C 478M), precast, rein-forced concrete, of depth indicated, with provision for rubber gasketed joints.

- a. Diameter: 48 inches minimum, unless otherwise indicated.
- b. Ballast: Increase thickness of precast concrete sections or add concrete to base section, as required to prevent flotation.
- c. Base Section: 6-inch minimum thickness for floor slab and 5-inch minimum thickness for walls and base riser section, and having separate base slab or base section with integral floor.
- d. Riser Sections: 5-inch minimum thickness, and lengths to provide depth indicated.
- e. Top Section: Eccentric-cone type, unless concentric-cone or flat-slab-top type is indicated. Top of cone of size that matches grade rings.
- f. Gaskets: ASTM C 443 (ASTM C 443M), rubber.
- g. Grade Rings: Include two or three reinforced-concrete rings, of 6- to 9-inch total thickness that matches frame and cover.
- h. Steps: Fiberglass or Aluminum, individual steps or ladder. Include width that allows worker to place both feet on one step and is designed to prevent lateral slippage off step. Cast or anchor into base, riser, and top section sidewalls with steps at 12-inch intervals. Steps: ASTM C 478 (ASTM C 478M), individual steps or ladder.
- i. Pipe Connectors: Flexible rubber manhole sleeves or boot secured to pipe with stain-less steel strapping or equal. PVC pipe to manhole seal shall be A-lok gasket or equal.

904.02 PRECAST CONCRETE RETAINING WALLS

THIS SECTION SHALL BE DELETED AND REPLACED BY THE FOLLOWING:

This Section includes furnishing all materials and labor required for the design and construction of a precast concrete modular block (PMB) retaining wall without geosynthetic reinforcement. Precast modular block retaining wall blocks under this section shall be cast utilizing a wet-cast concrete mix and exhibit a final handling weight in excess of 1,000 pounds per unit.

All units shall be wet-cast precast modular retaining wall units conforming to ASTM C1776.

All units for the project shall be obtained from the same manufacturer. The manufacturer shall be licensed and authorized to produce the retaining wall units by the precast modular block system patent holder/licensor and shall document compliance with the published quality control standards of the proprietary precast modular block system licensor for the previous three (3) years, or the total time the manufacturer has been licensed, whichever is less.

Concrete used in the production of the precast modular block units shall be first-purpose, fresh concrete. It shall not consist of returned, reconstituted, surplus or waste concrete. It shall be an original production mix meeting the requirements of ASTM C94 and exhibit the properties as shown in the following table:

Concrete Mix Properties

Freeze Thaw Exposure Class ⁽¹⁾	Minimum 28-Day Compressive Strength ⁽²⁾	Maximum Water Cement Ratio	Nominal Maximum Aggregate Size	Aggregate Class Designation ⁽³⁾	Air Content ⁽⁴⁾
Very Severe	4,500 psi	0.40	1 inch	4S	6.0% +/- 1.5%
Max. Water-Soluble Chloride Ion (Cl⁻) Content in Concrete, Percent by Weight of Cement^(5,6)					0.15
Max. Chloride as Cl⁻ Concentration in Mixing Water, Parts Per Million					1000
Max. Percentage of Total Cementitious Materials By Weight^(7,9) (Very Severe Exposure Class Only):					
Fly Ash or Other Pozzolans Conforming to ASTM C618					25
Slag Conforming to ASTM C989					50
Silica Fume Conforming to ASTM C1240					10
Total of Fly Ash or Other Pozzolans, Slag, and Silica Fume ⁽⁸⁾					50
Total of Fly Ash or Other Pozzolans and Silica Fume ⁽⁸⁾					35
Alkali-Aggregate Reactivity Mitigation per ACI 201					
Slump (Conventional Concrete) per ASTM C143⁽¹⁰⁾				5 inches +/- 1½ inches	
Slump Flow (Self-Consolidating Concrete) per ASTM C1611				18 inches – 32 inches	

- (1) Exposure class is as described in ACI 318. “Moderate” describes concrete that is exposed to freezing and thawing cycles and occasional exposure to moisture. “Severe” describes concrete that is exposed to freezing and thawing cycles and in continuous contact with moisture. “Very Severe” describes concrete that is exposed to freezing and thawing cycles and in continuous contact with moisture and exposed to deicing chemicals. Exposure class should be specified by owner/purchaser prior to order placement.
- (2) Test method ASTM C39.
- (3) Defined in ASTM C33 Table 3 *Limits for Deleterious Substances and Physical Property Requirements of Coarse Aggregates for Concrete*.
- (4) Test method ASTM C231.
- (5) Test method ASTM C1218 at age between 28 and 42 days.
- (6) Where used in high sulfate environments or where alkali-silica reactivity is an issue, water soluble chloride shall be limited to no more than trace amounts (from impurities in concrete-making components, not intended constituents.)
- (7) The total cementitious material also includes ASTM C150, C595, C845, C1157 cement. The maximum percentages shall include:
 - (a) Fly ash or other pozzolans in type IP, blended cement, ASTM C595, or ASTM C1157.
 - (b) Slag used in the manufacture of an IS blended cement, ASTM C595, or ASTM C1157.
 - (c) Silica fume, ASTM C1240, present in a blended cement.
- (8) Fly ash or other pozzolans and silica fume shall constitute no more than 25 and 10 percent, respectively, of the total weight of the cementitious materials.
- (9) Prescriptive limits shown may be waived for concrete mixes that demonstrate excellent freeze/thaw durability in a detailed and current testing program.
- (10) Slump may be increased by a high-range water-reducing admixture.

Each concrete block shall be cast in a single continuous pour without cold joints. With the exception of half-block units, corner units and other special application units, the precast modular block units shall conform to the nominal dimensions listed in the table below and be produced to the dimensional tolerances shown.

Block Type	Dimension	Nominal Value	Tolerance
28" Block	Height	18"	+/- 3/16"
	Length	46-1/8"	+/- 1/2"
	Width*	28"	+/- 1/2"
41" Block	Height	18"	+/- 3/16"
	Length	46-1/8"	+/- 1/2"
	Width*	40-1/2"	+/- 1/2"
60" Block	Height	18"	+/- 3/16"
	Length	46-1/8"	+/- 1/2"
	Width*	60"	+/- 1/2"

* Block tolerance measurements shall exclude variable face texture

Individual block units shall have a nominal height of 18 inches.

With the exception of half-block units, corner units and other special application units, the precast modular block units shall have two (2), circular dome shear knobs that are 10 inches, 7.5 inches, or 6.75 inches in diameter and 4 inches or 2 inches in height. The shear knobs shall fully index into a continuous semi-cylindrical shear channel in the bottom of the block course above. The peak interlock shear between any two (2) vertically stacked precast modular block units, with 10 inch diameter shear knobs, measured in accordance with ASTM D-6916 shall exceed 6,500 lb/ft at a minimum normal load of 500 lb/ft. as well as an ultimate peak interface shear capacity in excess of 11,000 lb/ft. The peak interlock shear between any two (2) vertically stacked precast modular block units, with 7.5 inch or 6.75 inch diameter shear knobs, measured in accordance with ASTM D-6916 shall exceed 1,850 lb/ft at a minimum normal load of 500 lb/ft as well as an ultimate peak interface shear capacity in excess of 10,000 lb/ft. Test specimen blocks tested under ASTM D6916 shall be actual, full-scale production blocks of known compressive strength. The interface shear capacity reported shall be corrected for a 4,000 psi concrete compressive strength. Regardless of precast modular block configuration, interface shear testing shall be completed without the inclusion of unit core infill aggregate.

The 28" and 41" precast modular block units may be cast with a 13" wide, continuous vertical core slot completely through the block, or solid concrete.

Without field cutting or special modification, the precast modular block units shall be capable of achieving a minimum radius of 14 ft 6 in.

The precast modular block units shall be manufactured with an integrally cast shear knobs that establishes a standard horizontal set-back for subsequent block courses. Horizontal Set-Back shall be 3/8" per course or 1.2 degrees.

The precast modular block units shall be furnished with the required shear knobs that provide the facing batter required in the construction shop drawings.

The precast modular block unit face texture shall be selected by the owner from the available range of textures available from the precast modular block manufacturer. Each textured block facing unit shall be a minimum of 5.76 square feet with a unique texture pattern that repeats with a maximum frequency of once in any 15 square feet of wall face.

The block color shall be selected by the owner from the available range of colors available from the precast modular block manufacturer.

All precast modular block units shall be sound and free of cracks or other defects that would interfere with the proper installation of the unit, impair the strength or performance of the constructed wall. PMB units to be used in exposed wall

construction shall not exhibit chips or cracks in the exposed face or faces of the unit that are not otherwise permitted. Chips smaller than 1.5” in its largest dimension and cracks not wider than 0.012” and not longer than 25% of the nominal height of the PMB unit shall be permitted. PMB units with bug holes in the exposed architectural face smaller than 0.75” in its largest dimension shall be permitted. Bug holes, water marks, and color variation on non-architectural faces are acceptable. PMB units that exhibit cracks that are continuous through any solid element of the PMB unit shall not be incorporated in the work regardless of the width or length of the crack.

Preapproved Products.

Redi-Rock Retaining Wall Systems as licensed by Redi-Rock International, LLC, 05481 US 31 South, Charlevoix, MI 49720 USA; telephone (866) 222-8400; website www.redi-rock.com; or equal.

Equivalent Products.

Technical information demonstrating conformance with the requirements of this specification for an alternative precast modular block retaining wall system must be submitted for review and approval.

SECTION 909 – DRAINAGE

909.02 PIPE

909.02.02 HDPE Pipe

THE FOLLOWING SHALL BE ADDED TO THIS SUBSET

HDPE Piping. NPS 2 and 3: HDPE pressure pipe, HDPE pressure fittings, push-on and gasket joint meeting AWWA C901/C906 for HDPE pressure pipe. Polyethylene pipe shall be made from HDPE material having a material designation code of PE4710 or higher. The material shall meet the requirements of ASTM D 3350 and shall have a minimum cell classification of PE445474C. Pressure Pipe shall be approved by the Underwriter’s Laboratory (UL) or Factory Mutual (FM). Only smooth wall HDPE will be permitted. Acceptable pipe manufactures include Performance, Pipe, Georg Fischer, JM Eagle, Driscoplex, WL Plastics or others approved by RE.

HDPE Butt Fusion Fittings. Butt Fusion Fittings shall meet the requirements of ASTM D3261. Molded and fabricated fittings shall have a pressure rating equal to or greater than the pipe unless otherwise specified on the plans. Butt Fusion Fittings shall be made of HDPE material with a minimum material designation code of PE4710 and with a minimum Cell Classification as required for HDPE Pipe. All fittings shall meet the requirements of AWWA C901/C906. Fabricated bend and tee fittings shall have a minimum of 3 segments. Markings for molded fittings shall comply with the requirements of ASTM D 3261. Fabricated fittings shall be marked in accordance with ASTM F 2206. Acceptable butt fusion fittings manufacturers include ISCO, IPEX, Georg Fisher or others approved by RE.

HDPE Electrofusion Fittings. Electrofusion Fittings shall be made of HDPE material with a minimum material designation code of PE 4710 and with a minimum Cell Classification as noted for HDPE pipe. Electrofusion Fittings shall have a manufacturing standard of ASTM F1055. Fittings shall have a pressure rating equal to the pipe unless otherwise specified on the plans. All electrofusion fittings shall be suitable for use as pressure conduits, and have nominal burst values of four times the Working Pressure Rating (WPR) of the fitting. Markings shall be according to ASTM F 1055. Acceptable electrofusion fittings manufacturers Agru America, Georg Fischer Central Plastics, Integrity Fusion Products, IPEX, Inc., M.T. Deason Company, Nupi Americas, Plasson USA, Strongbridge-Tega or others approved by RE.

909.02.03 Plastic Drainage Pipe

THE FOLLOWING SHALL BE ADDED TO THIS SUBSET

PVC Gravity Sewer Piping. NPS 8: PVC sewer pipe SDR-35 and fittings, solvent-cemented joints, or gaskets and gasketed joints.

PVC Gravity Sewer Pipe and Fittings. NPS 8: PVC sewer pipe SDR-35 and fittings, solvent-cemented joints, or gaskets and gasketed joints. ASTM D-3034, SDR 35, for solvent-cemented or gasketed joints. The following shall apply.

- a. ASTM F477, elastomeric seals.
- b. Joints shall be push-on type in accordance with ASTM D-3212.
- c. Rubber ring gaskets in accordance with ATM D-1869.

PVC Cleanouts and Riser Extension from Sewer Pipe to Cleanout at Grade. Use PVC SDR 35 soil pipe fittings in sewer pipes at branches for cleanouts and PVC SDR 35 soil pipe for riser extensions to cleanouts. Install piping so cleanouts open in direction of flow in sewer pipe.

909.02.08 Ductile Iron Sewer Pipe

THE FOLLOWING SHALL BE ADDED TO THIS SUBSET

Ductile iron sewer pipe and fittings shall conform to the following:

- a. Ductile Iron Pipe shall be centrifugally cast in metal or sand-lined molds to latest ANSI/AWWA Designation A21.51/C-151 specifications.
- b. The joint shall be a type that employs a single elongated grooved gasket to effect the joint seal, such U.S. Pipe and Foundry Company's Tyton Joint," James B. Clow and Sons, Inc. "Bell-Tite," or approved equal, conforming to latest ANSI/AWWA Designation A21.11/C-111.
- c. Pipe shall be furnished with flanges where connections to flange fittings are required and conform to latest ANSI/AWWA Designation C115/A21.15. Flanged pipe shall be Class 52 (minimum).
- d. The outside of the ductile iron pipe shall be coated with a uniform thickness of hot applied coal tar coating and the inside shall be lined with cement in accordance with latest ANSI/AWWA Designation A21.4/C-104.

909.04 FIRE HYDRANT

909.04.01 Hydrant Construction

Fire Hydrants shall meet or exceed ANSI/AWWA C502, latest revision for use in water supply systems. Rated working pressure shall be 250 psig, test pressure shall be 500 psig. Hydrants shall be dry-barrel construction closing with and opening against the inlet pressure. Hydrant main valve closure shall be of the compression type.

Traffic break feature to be designed for easy 360°rotation of nozzle section and incorporate the use of a 2-piece square rod and single cast-iron rod coupling secured with stainless steel coupling pins.

The hydrant shall have a travel stop nut in the top of the hydrant to limit the travel of the hydrant rod. Hydrant designs that allow the valve bottom to stop against the shoe or employ a stop in the drain mechanism resulting in a bending moment in the rod assembly are not allowed.

Hydrant upper and lower barrels and base shall be made of ductile iron. Hydrant to be Certified to NSF/ANSI/CAN 61 and NSF/ANSI 372. Hydrant shall be UL Listed and FM Approved, in allowable configurations.

909.04.02 Drainage System

The hydrant valve opening shall not be less than 5-1/4" and be designed so that removal of all working parts can be accomplished without excavating. The hydrant shall incorporate a draining system constructed entirely of bronze and positively activated by the compression of an e-coated stainless steel spring. Hydrant drains shall close completely after no more than 3 turns of the operating nut. There shall be a minimum of two internal drain ports in the hydrant seat and four outlets in the hydrant drain ring directing water to the exterior of the hydrant.

Hydrants employing sliding-style drains are not permitted.

909.04.03 Hydrant Barrels and Nozzles

Hydrant barrels shall be constructed of ductile iron and shall have (1) pumper nozzle and (2) hose nozzles. The operating nut, all nozzle cap nut dimensions and the nozzle threads shall be in compliance with the standards established by the local authorities.

All pumper and hose nozzles shall be retained by a single-piece threaded ductile iron retaining collar. Threaded-in nozzles and nozzles using set screws or wedge pins are not allowed.

909.04.04 Hydrant Coatings

Hydrant upper barrel shall be factory coated with an electrodeposition (E-coat) epoxy primer and a catalyzed two-part polyurethane top coat. Base shall be coated with fusion-bonded-epoxy.

All bolting below grade shall be Type 304 stainless steel.

909.04.05 Friction Loss

Friction loss shall not exceed 3.0 psig at 1000 GPM through the hydrant 4-1/2 in. pumper nozzle.

SECTION 910 – MASONRY UNITS

910.01 CLAY OR SHALE BRICK

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

910.01.01 Brick Façade

Brick Façade shall conform to the requirements of ASTM C902, Class SX, Type 1, Application PX and C67 for Freeze and Thaw. The units shall be standard 4" x 8" size having dimensions of 2 1/4" x 4" x 8" (including spacer nibs on the side), chamfered edges on both bed surfaces, 8,000 psi minimum compressive strength and below 8% cold water absorption. Brick Façade shall be English Edge as manufactured by Pine Hall Brick Co. or approved equal. Pine Hall Brick Co., Inc., 2701 Shorefair Drive, Winston-Salem, North Carolina, Phone No. 336,721,7500, Website: pinehallbrick.com.

910.01.02 Brick Paving Blocks

Brick Paving Blocks shall conform to the requirements of ASTM C902, Class SX, Type 1, Application PX and C67 for Freeze and Thaw. The units shall be standard 4" x 8" size having dimensions of 2 3/4" x 4" x 8" (including spacer nibs on the side), chamfered edges on both bed surfaces, 8,000 psi minimum compressive strength and below 8% cold water absorption. Brick Façade shall be English Edge as manufactured by Pine Hall Brick Co. or approved equal. Pine Hall Brick Co., Inc., 2701 Shorefair Drive, Winston-Salem, North Carolina, Phone No. 336,721,7500, Website: pinehallbrick.com.

SECTION 912 – PAINTS, COATINGS, TRAFFIC STRIPES, AND TRAFFIC MARKINGS

THE FOLLOWING SUBPART IS ADDED:

912.01.05 Water Repellent Seal Coat

Water repellent seal coat shall be Armor SX5000 Silane Penetrating Sealer as manufactured by Foundation Armor, Inc Amherst , NH (866) 306-0246 or approved equal. Product to clear in color at time of application, invisible when dry and DOT approved. The Contractor shall submit technical specifications and related documentation to RE for approval.

912.01.06 3-Part Epoxy Coating System

3-Part Epoxy Coating Systems shall be specifically manufactured for use on barges to be located in harsh marine environments and for the intended application for which it is proposed including hull, splash zone, deck, interior or any other location. The 3-part system shall be composed of the following coating types:

1. Self-priming epoxy base coat. (may be same product as barrier coat)
2. Abrasion resistant epoxy barrier coat.
3. Fade resistant urethane topcoat.

The coatings shall be chemically cured epoxy resins. Coating systems from PPG Industries (Protective & Marine Coatings Division), International Paint, Sherwin-Williams, Jotun, and Carboline have been reviewed and are pre-qualified to meet the coating requirements of this contract. The Contractor may select any of these systems at his discretion. However, the systems may not be "mixed".

If a pre-construction primer is used, only the pre-construction primers compatible with the pre-qualified coating system chosen will be accepted. The pre-construction primer shall be "weldable" and the coating thickness recommended by the paint manufacturer shall be strictly followed.

Warranty period on 3-part coating shall be 1-year. Contractor shall address any coating failures at no cost to the City.

912.01.07 2-Part Abrasion Resistant Epoxy Coating

2-Part Abrasion Resistant Epoxy Coating shall 100 % solids and shall be specifically manufactured for use on driven piles to be subjected to highly abrasive conditions. SigmaShield 1200 Epoxy Coating as manufactured by PPG Industries (Protective & Marine Coatings Division) or approved equal. The Contractor shall select a system at his discretion and provide manufactures certification on products appropriate use for intended application.

Warranty period on 2-Part Abrasion Resistant Epoxy Coating shall be 1-year. Contractor shall address any coating failures at no cost to the City.

912.02.01 Galvanizing (Zinc Coating)

THE FOLLOWING IS ADDED TO THIS SUBPART:

Hot dip galvanizing shall be in a dry kettle method, with a zinc-nickel alloy, in accordance with ASTM A 123, ASTM A 153 and ASTM A767, as applicable. Galvanizing shall be done with a nickel enrichment of the galvanizing tank such as "NiGalv" or approved equal.

SECTION 913 – GUIDE RAIL, FENCE, RAILING, AND BOX BEAM

913.03 BRIDGE RAILING

913.03.02 Aluminum Railing

THE FOLLOWING IS ADDED TO THIS SUBPART:

Manufacturer for the ornamental railing indicated on the contract documents CMI or approved equal. Corporate Office 605 Molly Lane, Woodstock, GA, Phone: 800-256-8857. Websites: cmilc.com/products/gatorbridge and cmilc.com/products/gatordock-aluminum. Locate sales: Joe Clarkson, 770-644-7660.

SECTION 915 – TIMBER AND TIMBER TREATMENT

915.02 ROUND TIMBER PILING

THIS SUBSECTION IS DELETED AND REPLACED AS FOLLOWS:

In the manufacture of round timber piling for dolphin piles, use new, clean peeled Greenheart timber piles for the 7-pile clusters, and new clean peeled and treated West Coast Douglas Fir or Southern Yellow Pine for the 3-pile clusters.

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

Minimum circumference of 38 inches, 3 feet from butt.

Rounder timber pile for dolphin piles shall be wrapped as indicated on contract drawings with 1" 6x19, fiber core, improved plow steel galvanized wire rope. Each pile shall be stapled at each wrap. Three cable clamps are required at each end.

All new Southern Pine and Douglas Fir timber piles shall be treated with chromated copper arsenate (CCA) in accordance with section 915.05. All timber piles shall be treated to a retention of 1.4 pounds per cubic foot of chromated copper arsenate.

All greenheart piles shall be banded within 4" of the top with stainless steel bands, 1-1/4" wide.

SECTION 917 – LANDSCAPING MATERIALS

917.03 SEED MIXTURE

917.03.01 Grass Seed Mixtures

THE FOLLOWING IS ADDED TO THIS SUBPART:

LAWN SEED MIX: Festuca Arundinacea 30%; Lolium Perenne 30%; POA Pratensis 'Seley' 15%; POA Pratensis, Appalachian 15%; Lolium Mutiflorum 10%. As manufactured and sold as Athletic Field Seed Mix by Ernst Seeds or approved equal. Ernst Seeds – 8884 mercer Pike, Meadville, PA 16335, Telephone 800-873-3321, Web Address: ernstseed.com.

MARITINE GRASSLAND SEED MIX: Andropogon Gerardii 12%; Asclepias Syriaca 6%; Chamaecrista Fasciculata 2 %; Elymus Virginicus 6%; Euthamia Graminifolia 9%; Panicum Amarum 15%; Panicum Virgatum 7%; Schizachyrium Scoparium 22%; Solidago Sempervirens 7%; Sorghastrum Nutans 6%; Symphyotrichum Laeve 8%. As manufactured by Pinelands Nursery or approved equal. Pinelands Nursery – 323 Island Road, Columbus NJ, 08022, Telephone 609-291-9486, Web Address: pinelandsnursery.com.

917.04 MULCH

917.04.05 Stone

THIS SUBPART IS DELETED IN ITS ENTIRETY AND REPLACED AS FOLLOWS:

For Stone Mulch, use 1" to 3" Delaware River Rock. Before use, submit a sample for the City's approval of size and color. With each shipment, provide a delivery ticket indicating source and weight of stone mulch.

SECTION 918 – ELECTRICAL MATERIALS

918.01 CONDUIT AND FITTINGS

THE FOLLOWING SUBSECTIONS ARE ADDED

Metal Conduit and Tubing: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following: AFC Cable Systems, Inc, Alflex Inc, Allied Tube & Conduit; a Tyco International Ltd. Co, Anamet Electrical, Inc.; Anaconda Metal Hose, Electri-Flex Co, Manhattan/CDT/Cole-Flex, Maverick Tube Corporation, O-Z Gedney; a unit of General Signal, Wheatland Tube Company, or equivalent approved by RE.

Rigid Steel Conduit shall comply with ANSI C80.1; IMC shall comply with ANSI C80.6; PVC-Coated Steel Conduit shall comply with NEMA RN 1 and have a minimum coating thickness of 0.040 inch; EMT shall comply with ANSI C80.3; FMC shall be Zinc-coated steel; LFMC shall be Flexible steel conduit with PVC jacket.

Fittings for Conduit including all types and Flexible and Liquidtight, EMT, and Cable: NEMA FB 1; listed for type and size raceway with which used, and for application and environment in which installed. Fittings for EMT: Steel or die-cast,

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

compression set-screw or compression type. Coating for Fittings for PVC-Coated Conduit: Minimum thickness, 0.040 inch, with overlapping sleeves protecting threaded joints.

Joint Compound for Rigid Steel Conduit or IMC: Listed for use in cable connector assemblies, and compounded for use to lubricate and protect threaded raceway joints from corrosion and enhance their conductivity.

Nonmetallic Conduit and Tubing: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following: AFC Cable Systems, Inc, Anamet Electrical, Inc.; Anaconda Metal Hose, Arncor Corporation, CANTEX Inc., CertainTeed Corp.; Pipe & Plastics Group, Condux International, Inc, Electri-Flex Co, Lamson & Sessions; Carlon Electrical Products, Manhattan/CDT/Cole-Flex, RACO; a Hubbell Company, Thomas & Betts Corporation or equivalent approved by RE.

ENT shall comply with NEMA TC 13. RNC shall comply with NEMA TC 2, Type EPC-40-PVC, unless otherwise indicated. LFNC shall comply with UL 1660. Fittings for ENT and RNC shall comply with NEMA TC 3; match to conduit or tubing type and material. Fittings for LFNC shall comply with UL 514B.

918.02 CABLE AND WIRE

THE FOLLOWING SUBSECTIONS ARE ADDED

Conductors and Cables: Manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following: AFC Cable Systems, Inc, Hubbell Power Systems, Inc, O-Z/Gedney; EGS Electrical Group LLC, 3M; Electrical Products Division, Tyco Electronics Corp, or equivalent approved by RE.

Copper Conductors shall comply with NEMA WC 70. Conductor Insulation shall comply with NEMA WC 70 for Types THW, THHN-THWN and XHHW. Multiconductor Cable shall comply with NEMA WC 70 for armored cable and Type MC metal-clad cable with ground wire.

918.03 BONDING AND GROUNDING MATERIALS

THE FOLLOWING SUBSECTIONS ARE ADDED

Grounding and Bonding Systems: Manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following: Burndy; Part of Hubbell Electrical Systems, Dossert; AFL Telecommunications LLC, ERICO International Corporation, Fushi Copperweld Inc, Galvan Industries, Inc.; Electrical Products Division, LLC, Harger Lightning and Grounding, ILSCO, O-Z/Gedney; A Brand of the EGS Electrical Group, Robbins Lightning, Inc, Siemens Power Transmission & Distribution, Inc, or equivalent approved by RE.

Electrical Components, Devices, and Accessories shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application, and shall comply with UL 467 for grounding and bonding materials and equipment.

Grounding and Bonding Conductors: Insulated Conductors shall be copper wire or cable insulated for 600 Volts unless otherwise required by applicable Code or authorities having jurisdiction. Bare Copper Conductors: Solid Conductors shall comply with ASTM B 3; Stranded Conductors shall comply with ASTM B 8. Bonding Cable shall be 28 kcmil, 14 strands of No. 17 AWG conductor, 1/4 inch in diameter; Bonding Conductor shall be No. 4 or No. 6 AWG, stranded conductor. Bonding Jumper shall be copper tape, braided conductors terminated with copper ferrules; 1-5/8 inches wide and 1/16 inch thick.

Grounding and Bonding Connectors: Connectors shall be listed and labeled by an NRTL acceptable to authorities having jurisdiction for applications in which used and for specific types, sizes, and combinations of conductors and other items connected. Bolted Connectors for Conductors and Pipes shall be Copper or copper alloy. Welded Connectors shall be Exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions.

Grounding and Bonding Electrodes: Ground Rods shall be copper-clad steel, sectional type; 3/4 inch by 10 feet.

918.08 CAST BOXES AND FITTING

THE FOLLOWING SUBSECTIONS ARE ADDED

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

918.08.01 Metal Wireways: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following: Cooper B-Line, Inc, Hoffman, Square D; Schneider Electric or equivalent approved by RE.

Sheet metal sized and shaped as indicated, NEMA 250, Type 3R, unless otherwise indicated.

Fittings and Accessories: Fittings and Accessories include couplings, offsets, elbows, expansion joints, adapters, hold-down straps, end caps, and other fittings to match and mate with wireways as required for complete system. Wireway Covers shall be Screw-cover type or as indicated. Finish shall be manufacturer's standard enamel finish.

918.08.02 Handholes and Boxes for Exterior Underground Wiring: Handholes and Boxes for Exterior Underground Wiring shall comply with SCTE 77. Frame and Cover shall be Gray in color. Units shall be designed for flush burial and have integral closed bottom, unless otherwise indicated.

Cover shall be weatherproof, secured by tamper-resistant locking devices and having structural load rating consistent with enclosure. Cover Finish shall be Nonskid finish shall have a minimum coefficient of friction of 0.50. Cover Legend shall be Molded lettering, "ELECTRIC." or as indicated for each service.

Conduit Entrance Provisions: Conduit-terminating fittings shall mate with entering ducts for secure, fixed installation in enclosure wall. Handholes 12 inches wide by 24 inches long and larger shall have inserts for cable racks and pulling-in irons installed before concrete is poured.

Handhole and Pull-Box Prototype Test: Test prototypes of handholes and boxes for compliance with SCTE 77. Strength tests shall be for specified tier ratings of products supplied. Tests of materials shall be performed by an independent testing agency. Strength tests of complete boxes and covers shall be by either an independent testing agency or manufacturer. A qualified registered professional engineer shall certify tests by manufacturer. Testing machine pressure gages shall have current calibration certification complying with ISO 9000 and ISO 10012, and traceable to NIST standards. Tier ratings shall meet equipment installation locations.

Fiberglass Handholes and Boxes with Polymer-Concrete Frame and Cover shall be sheet-molded, fiberglass-reinforced, polyester-resin enclosure joined to polymer-concrete top ring or frame. Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following: Armorcast Products Company, Carson Industries LLC, Christy Concrete Products, Synertech Moulded Products, Inc.; a division of Oldcastle Precast or equivalent approved by RE.

Fiberglass Handholes and Boxes shall be molded of fiberglass-reinforced polyester resin, with covers of polymer concrete. Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following: Quazite, Carson Industries LLC, Christy Concrete Products, Nordic Fiberglass, Inc, Strongwell – Quazite or equivalent approved by RE.

918.09 CABINETS

THE FOLLOWING SUBSECTIONS ARE ADDED

Boxes, Enclosures and Cabinets: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following: Cooper Crouse-Hinds; Div. of Cooper Industries, Inc, EGS/Appleton Electric, Erickson Electrical Equipment Company, Hoffman, Hubbell Incorporated; Killark Electric Manufacturing Co. Division, O-Z/Gedney; a unit of General Signal, RACO; a Hubbell Company, Robroy Industries, Inc.; Enclosure Division, Scott Fetzer Co.; Adalet Division, Spring City Electrical Manufacturing Company, Thomas & Betts Corporation, Walker Systems, Inc.; Wiremold Company, The Woodhead, Daniel Company; Woodhead Industries, Inc. Subsidiary or equivalent approved by RE.

Cast-Metal Outlet and Device Boxes shall comply with NEMA FB 1, ferrous alloy Type FD, with gasketed cover. NEMA 3R.

Cast-Metal Access, Pull, and Junction Boxes shall comply with NEMA FB 1, galvanized, cast iron with gasketed cover. NEMA 3R

918.10 PANEL BOARDS, TRANSFORMERS, CIRCUIT BREAKERS, AND MISCELLANIOUS

THE FOLLOWING SUBSECTIONS ARE ADDED

918.10.01 Low Voltage Transformers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following: Square D; by Schneider Electric, Eaton Electrical Inc.; Cutler-Hammer Products, Hammond Power Solutions, Powersmiths, General Electric, Siemens Energy & Automation, Inc or equivalent approved by RE. Obtain each transformer type from single source from single manufacturer.

Low Voltage Transformers shall be Factory-assembled and -tested, air-cooled units for 60-Hz service. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application. Transformers Rated 15 kVA and Larger: Comply with NEMA DOE-2016 energy-efficiency.

Cores shall be electrical grade, non-aging silicon steel with high permeability and low hysteresis losses.

Coils shall have continuous windings without splices except for taps. Internal coil connections shall be brazed or pressure type. Coil material shall be copper.

Shipping Restraints: Paint or otherwise color code bolts, wedges, blocks, and other restraints that are to be removed after installation and before energizing. Use fluorescent colors that are easily identifiable inside the transformer enclosure.

Distribution Transformers: Distribution Transformers shall comply with NFPA 70, and list and label as complying with UL 1561. Cores shall have one leg per phase. Enclosure shall be ventilated, NEMA 3R. Transformer shall comply with NEMA 250, Type 1.

Taps for Transformers 7.5 to 24 kVA: Two 2.5 percent tap above and two 2.5 percent tap below normal full capacity.

Insulation Class, Smaller than 30 kVA: 185 deg C, UL-component-recognized insulation system with a maximum of 115-deg C rise above 40-deg C ambient temperature.

Electrostatic Shielding: Each winding shall have an independent, single, full-width copper electrostatic shield arranged to minimize intertwining capacitance.

- Arrange coil leads and terminal strips to minimize capacitive coupling between input and output terminals.
- Include special terminal for grounding the shield.

Test and inspect transformers according to IEEE C57.12.01 and IEEE C57.12.91.

- Resistance measurements of all windings at the rated voltage connections and at all tap connections.
- Ratio tests at the rated voltage connections and at all tap connections.
- Phase relation and polarity tests at the rated voltage connections.
- No load losses, and excitation current and rated voltage at the rated voltage connections.
- Impedance and load losses at rated current and rated frequency at the rated voltage connections.
- Applied and induced tensile tests.
- Regulation and efficiency at rated load and voltage.
- Insulation Resistance Tests:
 - a. High-voltage to ground.
 - b. Low-voltage to ground.
 - c. High-voltage to low-voltage.
- Temperature tests.

918.10.02 Panelboards. Enclosures shall be flush and surface-mounted cabinets as requested and shall be rated for outdoor locations: NEMA 250, type 3R.

Front: Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions; for flush-mounted fronts, overlap box. Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover.

Panels and Trim Finishes: Steel and galvanized steel, factory finished immediately after cleaning and pretreating with manufacturer's standard two-coat, baked-on finish consisting of prime coat and thermosetting topcoat.

Back Boxes Finishes: Galvanized steel same finish as panels and trim.

Directory Card: Inside Panelboard door, mounted in metal frame with transparent protective cover.

Incoming Mains Location: Top and bottom as requested.

Phase, Neutral, and Ground Buses:

- Material: Hard-drawn copper, 98 percent conductivity.
- Equipment Ground Bus: Adequate for feeder and branch-circuit equipment grounding conductors; bonded to box.
- Neutral Bus: Neutral bus rated 100 percent of phase bus and UL listed.
- Split Bus: Vertical buses divided into individual vertical sections.

Conductor Connectors: Suitable for use with conductor material and sizes.

- Material: Hard-drawn copper, 98 percent conductivity.
- Main and Neutral Lugs: Mechanical type.
- Ground Lugs and Bus-Configured Terminators: Mechanical type.
- Feed-Through Lugs: Mechanical type, suitable for use with conductor material. Locate at opposite end of bus from incoming lugs or main device.
- Subfeed Double Lugs: Mechanical type suitable for use with conductor material. Locate at same end of bus as incoming lugs or main device.
- Extra-Capacity Neutral Lugs: Rated 200 percent of phase lugs mounted on extra-capacity neutral bus.

Service Equipment Label: NRTL labeled for use as service equipment for panelboards or load centers with one or more main service disconnecting and overcurrent protective devices.

Panelboard Short-Circuit Current Rating: Fully rated to interrupt symmetrical short-circuit current available at terminals.

Distribution Panelboards: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work shall be the following: Eaton – Cutler Hammer, Siemens, General Electric, Square D; a brand of Schneider Electric or equivalent approved by RE.

Distribution panelboards shall be NEMA PB 1, power and feeder distribution type. Doors shall be secured with vault-type latch with tumbler lock; keyed alike. For doors more than 36 inches high, provide two latches, keyed alike. Mains: Circuit breaker, or Lugs only as shown on plans.

Service Entrance: Rated as shown on plans.

Branch Overcurrent Protective Devices for Circuit-Breaker Frame Sizes 125 A and Smaller: Bolt-on circuit breakers.

Branch Overcurrent Protective Devices for Circuit-Breaker Frame Sizes Larger Than 125 A: Bolt-on circuit breakers;

Lighting and Appliance Branch-Circuit Panelboards: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work shall be the following: Eaton – Cutler Hammer, Siemens, General Electric Square D; a brand of Schneider Electric or equivalent approved by RE.

Lighting and Appliance Branch-Circuit Panelboards shall be NEMA PB 1, lighting and appliance branch-circuit type.

Mains: Circuit breaker or lugs only as shown on plans.

Branch Overcurrent Protective Devices: Bolt-on circuit breakers, replaceable without disturbing adjacent units.

Doors: Concealed hinges; secured with flush latch with tumbler lock; keyed alike.

Service Pedestal. Enclosure to be fabricated from a minimum of 14 gauge steel, stainless steel tamper-proof hinges, 3 point latch, and open bottom design. Enclosure color to match Customer specific custom color swatch and adhere to the maximum height of 54 inches. Transformer primary disconnect shall be a 400A LSI Electronic Trip Unit rated At 65 KAIC. Transformer coil to be copper.

Disconnecting and Overcurrent Protective Devices: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work shall be the following: Eaton – Cutler Hammer, Siemens, General Electric, Square D; a brand of Schneider Electric or equivalent approved by RE.

Molded-Case Circuit Breaker MCCB: Comply with UL 489, with interrupting capacity to meet available fault currents. Thermal-Magnetic Circuit Breakers: Inverse time-current element for low-level overloads, and instantaneous magnetic trip element for short circuits. Adjustable magnetic trip setting for circuit-breaker frame sizes 250 A and larger. Adjustable Instantaneous-Trip Circuit Breakers: Magnetic trip element with front-mounted, field-adjustable trip setting.

Electronic trip circuit breakers with rms sensing: field-replaceable rating plug or field-replicable electronic trip; and the following field-adjustable settings:

- Instantaneous trip.
- Long- and short-time pickup levels.
- Long- and short-time time adjustments.
- Ground-fault pickup level, time delay, and I^2t response.

Current-Limiting Circuit Breakers: Frame sizes 400 A and smaller; let-through ratings less than NEMA FU 1, RK-5.

GFCI Circuit Breakers: Single- and two-pole configurations with Class A ground-fault protection 6-mA trip.

Molded-Case Circuit-Breaker MCCB Features and Accessories:

- Standard frame sizes, trip ratings, and number of poles.
- Lugs: Mechanical style, suitable for number, size, trip ratings, and conductor materials.
- Ground-Fault Protection: Integrally mounted relay and trip unit with adjustable pickup and time-delay settings, push-to-test feature, and ground-fault indicator.
- Shunt Trip: 120 V trip coil energized from separate circuit, set to trip at 55 percent of rated voltage.
- Multipole units enclosed in a single housing or factory assembled to operate as a single unit.
- Handle Padlocking Device: Fixed attachment, for locking circuit-breaker handle in ON or OFF position.
- Handle Clamp: Loose attachment, for holding circuit-breaker handle in ON position.

918.10.03 Wiring Devices. Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work shall be the following: Cooper Wiring Devices; Division of Cooper Industries, Inc. (Cooper),

Hubbell Incorporated; Wiring Device-Kellems (Hubbell), Leviton Mfg. Company Inc. (Leviton), Pass & Seymour/Legrand (Pass & Seymour) or equivalent approved by RE.

Wiring Devices, Components, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application. Comply with NFPA 70.

GFCI Receptacles shall be straight blade, non-feed-through type and shall comply with NEMA WD 1, NEMA WD 6, UL 498, UL 943 Class A, and FS W-C-596. Include indicator light that shows when the GFCI has malfunctioned and no longer provides proper GFCI protection.

Duplex GFCI Convenience Receptacles shall be 125 V, 20 A. Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work shall be the following: Cooper; VGF20, Hubbell; GFR5352L, Pass & Seymour; 2095, Leviton; 7590, or equivalent approved by RE. Provide NEMA 3R, locking, cast aluminum in-use cover. Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work shall be the following: Hubbell; WP26E, Easton-Crouse Hinds WIUM1DW1 or equivalent approved by RE.

918.10.04 Fuses. Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work shall be the following: Cooper Bussmann, Inc, Edison Fuse, Inc, Ferraz Shawmut, Inc, Littelfuse, Inc. or equivalent approved by RE.

Cartridge fuses shall be NEMA FU 1, nonrenewable cartridge fuses with voltage ratings consistent with circuit voltages.

918.10.05 Enclosed Switches:

Fusible Switches. Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work shall be the following: Eaton – Cutler Hammer, Siemens, General Electric, Square D; a brand of Schneider Electric or equivalent approved by RE. Type HD, Heavy Duty, Single Throw, 600-V ac, 1200 A and Smaller: UL 98 and NEMA KS 1, horsepower rated, with clips or bolt pads to accommodate specified fuses, lockable handle with capability to accept three padlocks, and interlocked with cover in closed position.

Accessories:

- Equipment Ground Kit: Internally mounted and labeled for copper and aluminum ground conductors.
- Neutral Kit: Internally mounted; insulated, capable of being grounded and bonded; labeled for copper and aluminum neutral conductors.
- Class R Fuse Kit: Provides rejection of other fuse types when Class R fuses are
- Lugs: Compression type, suitable for number, size, and conductor material.
- Service-Rated Switches: Labeled for use as service equipment.

Non-Fusible Switches. Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work shall be the following: Eaton – Cutler Hammer, Siemens, General Electric, Square D; a brand of Schneider Electric or equivalent approved by RE. Type HD, Heavy Duty, Single Throw, 600-V ac, 1200 A and Smaller: UL 98 and NEMA KS 1, horsepower rated, lockable handle with capability to accept three padlocks, and interlocked with cover in closed position.

Accessories:

- Equipment Ground Kit: Internally mounted and labeled for copper and aluminum ground conductors.
- Neutral Kit: Internally mounted; insulated, capable of being grounded and bonded; labeled for copper and aluminum neutral conductors
- Lugs: Compression type, suitable for number, size, and conductor material.

Enclosures. Enclosed Switches: NEMA AB 1, NEMA KS 1, NEMA 250, and UL 50, to comply with environmental conditions at installed location. For outdoor location comply with NEMA 250.

918.12 PEDESTALS, POLES, TRANSFORMER BASES, AND MAST BRACKET ARMS

THE FOLLOWING SUBSECTIONS ARE ADDED

918.12.01 Lighting Standard Aluminum

Lighting Standard Aluminum shall be US Architectural 5-inch square pole, Model SNTA 5 or approved equal. To be manufactured from 6063-T6 Structural Grade Aluminum US Architectural Lighting, Palmdale, CA, Phone: 800-877-6537, Website: www.usaltg.com.

918.12.02 Lighting Standard Decorative

Lighting Standard Decorative shall be Sternberg Lighting 5-inch to 3-inch Tapered Pole or approved equal. Color to be selected by owner. Sternberg Lighting Company, 555 Lawrence Avenue, Roselle, Illinois 60172, Phone No. 847-588-3400, Website: sternberglighting.com.

918.14 LAMPS

THIS SUBSECTION IS DELETED IN ITS ENTIRETY AND REPLACED WITH THE FOLLOWING

918.14.01 Luminaire

US Architectural Lighting RAZG Series, LED Arm, Arm Mounted, IES TYPES: III, IVFT, VSQ.1, LED Optics, Sharp cutoff, 40K LED or approved equal. US Architectural Lighting, Palmdale, CA, Phone: 800-877-6537, Website: www.usaltg.com.

918.14.02 Luminaire Decorative

Luminaire Decorative shall be Sternberg Lighting “Town Square Caged Acorn” Model No. A880SRLED, as indicated on contract documents or approved equal. Sternberg Lighting Company, 555 Lawrence Avenue, Roselle, Illinois 60172, Phone No. 847-588-3400, Website: sternberglighting.com.

918.14.03 Pavilion Lighting, Decorative

Pavilion Lighting Decorative shall be Bock Lighting VRT-C18, VRT Style A, Aluminum Reflector, Power Coat Finish or approved equal. Exterior color to be Copper (G11). Interior color to be White (G1). Fixture to be top mounted with either ½-inch or ¾-inch NPT. Bock Lighting, 2476 Edison Blvd, Twinsburg, Ohio, Phone No: 216-912-7050, Website: www.bocklighting.com.

918.14.04 Catenary Lighting, Decorative

Catenary Lighting Decorative shall be Bock Lighting PA24” - Step Neck Dome – PA24GV/LAH01-1250-30k-0-10V/42COP/CUARXX/BC24/R56, Aluminum Reflector or approved equal. Galvanized or Power Coat Finish as selected by RE. Bock Lighting, 2476 Edison Blvd, Twinsburg, Ohio, Phone No: 216-912-7050, Website: www.bocklighting.com.

THE FOLLOWING SUBSECTION IS ADDED

918.15 SECURITY EQUIPMENT

918.15.01 Camera, Tilt-Pan-Zoom

BOSCH MIC IP Starlight 7100i, BOSCH AUTODOME IP Starlight 7000i or approved equals. Bosch Security Systems, Inc., Fairport, NY, Phone: 800-289-0096, Email Address: security.sales@us.bosch.com, Website: www.boschsecurity.us.

918.15.02 Camera, Fixed

BOSCH FLEXIDOME IP 7000 VR 1080p/60 IPS or approved equal. Bosch Security Systems, Inc., Fairport, NY, Phone: 800-289-0096, Email Address: security.sales@us.bosch.com, Website: www.boschsecurity.us.

918.15.03 Camera, Panoramic – 180 / 360 Degrees

BOSCH FLEXIDOME IP Panoramic 7000 Outdoor 12 MP/30 fps or approved equal. Bosch Security Systems, Inc., Fairport, NY, Phone: 800-289-0096, Email Address: security.sales@us.bosch.com, Website: www.boschsecurity.us.

918.15.04 Automatic License Plate Reader

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

BOSCH DINION Capture 7000 or approved equal. Bosch Security Systems, Inc., Fairport, NY, Phone: 800-289-0096, Email Address: security.sales@us.bosch.com, Website: www.boschsecurity.us.

THE FOLLOWING SUBSECTION IS ADDED

918.16 IDENTIFICATION FOR ELECTRICAL SYSTEMS

918.16.01 Power and Control Raceway Identification Materials: Comply with ANSI A13.1 for minimum size of letters for legend and for minimum length of color field for each raceway size.

Colors for Raceways Carrying Circuits at 600 V or Less: Black letters on an orange field. Legend shall indicate voltage and system or service type.

Colors for Raceways Carrying Circuits at More Than 600 V: Black letters on an orange field. Legend shall indicate "DANGER CONCEALED HIGH VOLTAGE WIRING."

918.16.02 Conductor Identification Materials: Color-Coding Conductor Tape: Colored, self-adhesive vinyl tape not less than 3 mils thick by 1 to 2 inches wide. Self-Adhesive, Self-Laminating Polyester Labels: Preprinted, 3-mil thick flexible label with acrylic pressure-sensitive adhesive that provides a clear, weather- and chemical-resistant, self-laminating, protective shield over the legend. Labels sized to fit the conductor diameter such that the clear shield overlaps the entire printed legend.

918.16.03 Magnetic Underground-Line Warning Tape. Recommended by manufacturer for the method of installation and suitable to identify and locate underground electrical and communications utility lines. Printing on tape shall be permanent and shall not be damaged by burial operations. Tape material and ink shall be chemically inert, and not subject to degrading when exposed to acids, alkalis, and other destructive substances commonly found in soils.

Color and Printing shall comply with ANSI Z535.1 through ANSI Z535.5.

- Inscriptions for Red-Colored Tapes: ELECTRIC LINE, HIGH VOLTAGE.
- Inscriptions for Orange-Colored Tapes: TELEPHONE CABLE, CATV CABLE, COMMUNICATIONS CABLE, OPTICAL FIBER CABLE.

918.16.04 Warning Labels and Signs: Warning Labels and Signs shall comply with NFPA 70 and 29 CFR 1910.145.

Metal-Backed, Butyrate Warning Signs:

- Weather-resistant, nonfading, preprinted, cellulose-acetate butyrate signs with 0.0396-inch galvanized-steel backing; and with colors, legend, and size required for application.
- 1/4-inch grommets in corners for mounting.
- Nominal size, 10 by 14 inches.

Warning label and sign shall include, but are not limited to, the following legends:

- Multiple Power Source Warning: "DANGER - ELECTRICAL SHOCK HAZARD - EQUIPMENT HAS MULTIPLE POWER SOURCES.
- Workspace Clearance Warning: "WARNING - OSHA REGULATION - AREA IN FRONT OF ELECTRICAL EQUIPMENT MUST BE KEPT CLEAR FOR 36 INCHES."

918.16.05 Equipment Identification Labels:

- Self-Adhesive, Engraved, Laminated Acrylic or Melamine Label: Adhesive backed, with white letters on a dark-gray background. Minimum letter height shall be 3/8 inch.
- Engraved, Laminated Acrylic or Melamine Label: Punched or drilled for screw mounting. White letters on a dark-gray background. Minimum letter height shall be 3/8 inch.

SECTION 919 – MISCELLANEOUS

919.01 GEOTEXTILES

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

Table 919.01-1 Requirements for Geotextiles		
Category	Test Method	Class
Separation Geotextile	AASHTO M 288	Class 2

THE FOLLOWING SUBPART IS ADDED:

919.01.01 Pervious Pavement Subbase

Use nonwoven separation geotextile Class 2 below Coarse Aggregate No. 2 to be provided for the pervious pavement subbase.

919.14 DETECTABLE WARNING SURFACE

THE FOLLOWING IS SUBPART ADDED:

919.14.01 Tactile Warning Strip

Tactile warning strip shall be Detectable Warning Surface as manufactured by AMS Tactile Systems, LLC, Stoughton, MA or approved equal.

THE FOLLOWING SUBSECTIONS ARE ADDED:

919.16 VERTICAL WICK DRAINS

Provide bonded Vertical Wick Drains consisting of newly-manufactured materials and composed of a polyethylene or polypropylene drainage core integrated with a geotextile jacket. The jacket allows free passage of pore water to the core without loss of soil material or piping. The core provides continuous vertical drainage. Use a band shaped drain with an aspect ratio (width divided by thickness) not exceeding 50. The Vertical Wick Drain must meet the following requirements:

1. **Jacket.** Provide a jacket with a synthetic, non-woven geotextile of 100 percent heat-set continuous filament polypropylene capable of resisting all bending, punching and tensile forces imposed during installation and during the design life of the drain. Do not use jacket material that is subject to localized damage (e.g., punching through the filter by sand or gravel particles). Provide jacket material that is sufficiently rigid to withstand lateral earth pressures due to embedment and surcharge that the vertical flow capacity through the core will not be adversely affected. Provide jacket material that is sufficiently flexible to bend smoothly during installation and induced consolidation settlement without damage. Provide jacket material that will not crack or peel during installation of the drain. Provide a jacket that conforms to the following specifications:

Table 919.16-1 Requirements for Vertical Wick Drain Jacket

Property	Test Method	Requirements
Minimum Specific Gravity	---	0.95
Minimum Abrasion Resistance	ASTM D3884	40 lbs.
Grab Tensile Strength		120 lbs.
Elongation at Break	ASTM D 4632	> 50%
Minimum Modulus		60 lbs. at 10% elongation
Trapezoidal Tear	ASTM D 4533	50 lbs.
Punch Strength	ASTM D 4833	38 lbs.
Mullen Burst Strength	ASTM D 3786	130 psi.

2. **Core.** Provide a core with a continuous plastic material fabricated to promote drainage along the axis of the vertical drain. Provide a core that conforms to the following specifications:

Table 919.16-2 Requirements for Vertical Wick Drain Core

Property	Test Method	Requirements
Tensile Strength	ASTM D 4595	235 lbs.

3. **Assembled Vertical Wick Drain.** The mechanical properties (strength and modulus) of the assembled drain must equal those specified for the component jacket and core. The assembled prefabricated drain is resistant against wet rot, mildew, bacterial action, insects, salts in solution in the groundwater, acids, alkalis, solvents, and other constituents in the site groundwater. Use 1 single type of assembled Vertical Wick Drain on the project. Provide an assembled drain that conforms to the following specifications:

Table 919.16-3 Requirements for Assembled Vertical Wick Drain

Property	Test Method	Min. Requirements
Width	N/A	4 inches
Discharge Capacity	ASTM D 4716	1.5 gpm @ 50 psi 1.5 gpm @ 25% compression

919.22 SITE AMENITIES

919.22.01 Interpretive Exhibit Panel

Interpretive Exhibit shall be Best Exhibits NPS-Style Frame and Traditional Exhibit Base or approved equal. Exhibit frame and base to be all aluminum construction, welded frame and welded frame to base connection, and power coat finish. Color to be selected by owner. Best Exhibits, 820 Industrial Court, Baraboo, WI, Phone No. 800-356-4882, Website: best-exfab.com.com.

Contractor to be provided educational artwork in pdf format. It will be the Contractors responsibility to have graphics printed on vinyl backing and installed within the educational sign frame.

919.22.02 Ground Marker

Ground Markers shall be Campbell Foundry Pattern 1202 or approved equal. Locking manhole shall be bolted with lettering on top of manhole. The Campbell Group, 800 Bergen Street, Harrison, NJ, Phone No. 973-483-5480, Website: campbellfoundry.com.

919.22.03 Flagpoles

Flagpoles shall be Black Anodized Aluminum, 35 or 40 foot high from groundline, as specified, and shall include spun aluminum ball, aluminum internal truck, swivel snaps, counterweight, retainer ring, fiberglass flash collar and fiberglass ground sleeve. Provide two (2) American Flags per pole. Eder Flag Manufacturing Company, Inc. Models EC35IH and EC40IH, as specified, or approved equal. Eder Flag Manufacturing Company, Inc., 1000 W. Rawson Ave., Oak Creek, WI 53154, Phone No: 1-800-852-2335, Website: www.ederflag.com.

919.22.04 Bollards

Bollards shall be “Main Street” Model by Iron Age Designs or approved equal. Black power coated cast aluminum. Iron Age Designs, 2104 SW 152nd Street, Burien, WA, Phone No. 877-418-3568 or 206-276-0925, Website: ironaregrates.com.

919.22.05 Precast Concrete Planters

Precast Concrete Planters shall be Pavilion Model No. TF-4183 by Crowd Control Warehouse, LLC or approved equal. Crowd Control Warehouse, LLC, 1525 W. Homer Street, Chicago, IL., Phone No. 847-991-9900, Website: crowdcontrolwarehouse.com.

919.22.06 Trash Receptacles

Trash receptacles shall be Model No. 102-32 by Dumor or approved equal. Color shall be black. For sales, contact General Recreation, Inc., PO Box 440, Newtown Square, PA, Phone No. 800-726-4793, Websites: dumor.com and generalrecreation.com.

919.22.07 Benches

Benches shall be Model Nos. 142 (with back) and 146 (backless) by Dumor or approved equal. Color shall be black. For sales, contact General Recreation, Inc., PO Box 440, Newtown Square, PA, Phone No. 800-726-4793, Websites: dumor.com and generalrecreation.com.

919.22.08 Bike Racks

Bike racks shall be Model No. 188-07 by Dumor or approved equal. Color shall be black. For sales, contact General Recreation, Inc., PO Box 440, Newtown Square, PA, Phone No. 800-726-4793, Websites: dumor.com and generalrecreation.com.

919.22.09 Banner Poles

Banner poles shall be black aluminum, 12 foot high and 5-inch diameter. Sternberg Lighting Model 650 Milford, 5-inch diameter or approved equal. Sternberg Lighting Company, 555 Lawrence Avenue, Roselle, Illinois 60172, Phone No. 847-588-3400, Website: sternberglighting.com.

Provide six (6) banners for each pole. Imagery for banners to be provided by City. Provide material samples of banners prior to ordering.

919.23 PAVILION

Pavilion shall be pre-engineered and prefabricated package and shall include structural steel framing members, T&G wood roof deck, wood fascia, and fasteners. All exposed bolts shall be stainless steel hidden, concealed inside the steel tubes. Structure shall be rectangular as indicated on the contract documents, with a gable roof pitched at 4:12 and minimum eave height of 8 feet from groundline. Appearance and dimensioning shall be in conformance with construction documents.

All metals shall be coated to prevent corrosion in harsh marine environment. Structural steel and roofing shall be galvanized and epoxy coated. Alternate coatings shall require approval by the RE.

919.23.01 Structural Components

Structural Framing: Fabricated for field assembly using bolted connections with no welding required or permitted; cold-formed shapes prohibited. (1) Columns & Beams: ASTM A500 Grade C structural steel tube. The following shapes are prohibited: I-beams, wide-flange beams, C-channels, Z-shapes. (2) Plates: ASTM A572 Grade 50. (3) Compression Ring: steel plate, ASTM A572 Grade 50. (4) Bolts: ASTM A325 high strength bolts. (5) Nuts: ASTM A563 high strength nuts. (6) Column Anchors: ASTM F1554 Grade 36, provided by Contractor or Owner, attached to top of foundation, recessed

below slab on grade. (7) Finish: Powder Coat. Epoxy powder coat primer. Double topcoat TGIC polyester powder coat; color to be selected from manufacturer's standard color chart by Owner. Primer plus finish coats shall be 7-12 mils thick. All materials inspected to meet 100% coating, proper cure, film thickness, and impact resistance. Wet-coat alternatives shall not be acceptable.

Roof System: (1) Structural Wood Deck: No.1 grade Southern Yellow Pine, kiln dried, center matched, tongue and groove, with veed edges 1 side (EV1S). (2) Fascia: Grade C or Better Clear Alaskan Yellow Cedar. (3) Metal Roof: Galvalume® metal roof panels with exposed fasteners. Max-Rib, minimum 26-gauge, 3'-0" wide panels precut to the length from the eave to the ridge. Ribs shall run with the pitch of the roof for proper drainage. Matching roof trim and fasteners. Factory pre-finished with Kynar 500® paint system; color to be selected by Owner from standard color chart. (4) Underlayment: HydraShell MAX.

919.23.02 Quality Insurance

Designer Qualifications: Design under direct supervision of a Professional Engineer experienced in design of this type of work and licensed in the State of New Jersey.

Manufacturer Qualifications: Company experienced in design and manufacture of shelters of the type specified, and having the following: (1) Minimum five years of experience in design and fabrication of pre-fabricated steel shelters. (2) Three references of similar shelters completed within the past year. (3) Fabricator membership in American Institute of Steel Construction (AISC), requiring quality control documentation and procedures. Provide current AISC shop certification upon request. (4) All welding to be performed to AWS standards by AWS certified welders. Provide welding certification upon request.

Codes and Regulations: Perform the work in accordance with applicable federal, State, and local building and safety codes and regulations.

919.23.03 Products and Manufactures

Approved products include Model TS-G3084-2T-04-TG as manufactured by RCP Shelters, Inc., or approved equal. RCP Shelters, Inc., 2100 SE Rays Way, Stuart, FL 34994, Toll Free: 800-525-0207, Fax: 772-288-0207, Website: www.rcpshelters.com, Email: info@rcpshelters.com.

919.24 PREFABRICATED PUMP STATION SYSTEM

Prefabricated pump station shall at a minimum, consist of the following:

- a. Concrete Wet Well & Valve Chamber: "Onelift RC509" manufactured by Old Castle Precast or approved equal. Wet well to include two (2) H20 Rated Hatches, Safety Ladder, PVC Vent, Hoist.
- b. Trash Basket: Trash Basket B1B manufactured by Halliday Products or approved equal.
- c. 2 - Pumps: MP 3085 HT 3-259 manufactured by FLYGT or approved equal.
- d. Jesco Pump Skid System with Magdos LA pumps and chemical controls or approved equal.
- e. Control Panel with 24-hour telemetry unit.
- f. Reinforced Concrete Turned Down Slabs.
- g. Electric and Telecom Utilities.
- h. Water Service.
- i. 8' High Chain Link Fence.

Prefabricated Pump Station Supplier: PSI Process, 201 Lincoln Blvd., Middlesex, NJ 08846, Contact: Ana Hende, Phone: 732-667-1833, Email: ana.hende@psiprocess.com or alternate supplier selected by Contractor.

919.25 PERISTALTIC PUMPOUT SYSTEM

Peristaltic pump system for ferry boats shall be rated for +3,300 gallons per hour in proposed configuration. Pump shall have minimum 5-hp motor, stainless steel pump frame, cast iron housing, oil free pump housing, leak detection switch,

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

textile reinforced internal hose, be capable of reversing flow, be capable of running dry without damage, be valve-less, seal-less and glandless. Pump to be mounted on floating dock and shall include a Digital Wireless Receiver and Fiberglass Enclosure.

Pump to be connected to Remote Pumping Station via 2” suction line. Remote Pumping Station to be provided with Digital Wireless Transmitter, Watertight Enclosure, and Hose Stand. Suction Pumpout Hose to be 100 foot long.

Peristaltic PumpOut System to be Keco 900 Series, 900R – M55 Pump as manufactured by Keco Pump and Equipment or approved equal. Keco Pump and Equipment, 3475 Kurtz Street, San Diego, CA, Phone: 800-900-7867, Website: www.pumpahead.com. Local Sales Contact Gus: Kreuzkamp, Sales Contact Phone: 203-877-2595, Email: sales@ajkreuzkamp.com.

DIVISION 1000 – EQUIPMENT

SECTION 1001 – TRAFFIC CONTROL EQUIPMENT

1001.03 TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHIONS

THE FIRST PARAGRAPH PART 1 IS CHANGED TO:

1. Meets crash-worthiness requirements as specified in 159.03.02.

THE FOLLOWING SUBSECTION IS ADDED:

1001.04 PORTABLE VARIABLE MESSAGE SIGN WITH REMOTE COMMUNICATION

Provide a NTCIP compliant portable variable message sign as described under 1001.02 with the exceptions noted below and each equipped with broadband cellular modem.

Ensure that the sign panel is color full matrix model that displays a combination of letters and graphic images.

Ensure that the sign panel is capable of displaying 3 lines of text with variable size characters.

Ensure 9 characters are displayed per line for posting travel times. For this 9 character requirement, smaller size characters may be allowed that meets MUTCD guidelines.

Ensure that the panel is also capable of displaying 8 characters per line with a minimum character height of 18 inches.

Ensure that the PVMSRC can be integrated with the Department's central DMS control software for remote operation.

1001.05 PORTABLE TRAILER MOUNTED CCTV CAMERA ASSEMBLY

Provide a Portable Trailer Mounted CCTV Camera Assembly (PTMCCA) with the following:

A. Trailer Platform

1. Maximum size, including tongue, 14 feet long by 7 feet wide by 8 feet high.
2. NJDOT approved lighting package to include electrical brake and marker lights with wire connections.
3. Primed and painted with powder coated orange color.
4. Fitted with manual telescoping outriggers with adjustable jacks sized to counter full mast extension.
5. Four 3,500 pounds, drop leg, top wind screw jacks.
6. All equipment secured to prevent theft or separation from platform.
7. 24/7 operation in all weather conditions.
8. One locking NEMA-4 equipment box for operational controls.
9. Removable wheels (with wheel locks) when trailer is in deployed position.
10. Operation manual with a copy placed in the storage bin.

B. Mast

1. 150 pounds payload capacity.
2. 29 feet to 32 feet of extension with capability to mount antenna at 20 feet, 25 feet or at the top, 10 feet maximum nested length of mast - 3 to 9 sections.
3. Un-guyed.
4. Driven by galvanized steel cable.
5. Spiral conduit for cables.
6. Compactly retractable when nested into storage container at the bottom, and foldable for easy transport.
7. Operated by a power winch with a safety brake.
8. Capable of being raised or lowered during sustained wind speeds of 30 miles per hour.

C. Power Source

Equip the PTMCCA with either a diesel charged or a solar charged battery system. Ensure that the PTMCCA is also capable of operating on 120 volt AC electrical service. The Department may require a solar charged battery system in noise sensitive areas. Provide the power with a battery backup system capable of providing continuous operation when the primary power source fails. Ensure that the power source meets the following requirements:

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

1. **Diesel.** Ensure that the fuel tank is capable of operating the sign for a period of 72 hours without refueling. Equip with an exhaust muffler and a United States Department of Forestry approved spark arrester. Ensure that the engine is shock mounted to reduce vibration and locked in a ventilated enclosure.
2. **Solar.** Provide solar panels capable of recharging the batteries at a rate of 4 hours of sun for 24 hours of camera usage. Ensure that the battery capacity is capable of operating the sign for a period of 18 days without sunlight.

D. Electronics

1. Cellular (CDMA), microwave, or 802.11 bandwidth option.
2. Work lights in all cabinets.
3. Remote trailer diagnostics (battery level, charging output, etc.)

E. Camera and Software

Ensure that the camera has the following characteristics:

1. Dome Camera in a heavy duty plastic dome or with a weather resistant case.
2. Impact resistant viewing window.
3. Minimum resolution of NTSC 704 (H) x 480 (V).
4. Backlight compensation.
5. Image stabilization.
6. Light Sensitivity 0.02 lux NIR Mode.
7. Auto Focus with Manual Focus capability.
8. Auto White Balance with Manual White Balance capability.
9. Motorized Zoom up to 16x optical, 10x digital.
10. Motorized Pan-Tilt, pan 360°, tilt 180°.
11. Thermostatically controlled heater and defroster -50° to 140°F operating range.
12. Windshield wiper.
13. 24/7 operation in all weather conditions.
14. Time and date stamp.

Ensure the software provides the following functionality:

1. Remote control of pan, tilt, and zoom.
2. Display of streaming video in MPEG format, motion-JPEG, and single snapshot JPEG images, remotely interchangeable by using central software.
3. Preset controls of pan/tilt/zoom combinations. Ensure all presets are accessible from a drop-down menu with descriptive name of preset. Set first 8 presets with quick-launch icons with graphical representation of the preset views.
4. Display of all the project's webcams in a single view screen.
5. Display of local time and weather conditions including temperature and humidity.
6. Saving images and sending email images.
7. Viewing archived images via a graphical calendar control and storing archived images at least every 5 minutes.
8. Three levels of password protection: administrator, user, and guest individual user accounts.
9. Monitoring and controlling the cameras using web access.

SECTION 1003 – HMA SITE EQUIPMENT

1003.01 MATERIALS TRANSFER VEHICLE (MTV)

THE FOLLOWING IS ADDED AFTER THE LAST PARAGRAPH:

Ensure the MTVs Gross Weight and maximum speed limit do not exceed the load restrictions as shown in 105.09 Special Provisions.

SECTION 1004 – PILE DRIVING EQUIPMENT

1004.01 IMPACT HAMMER

THE FIRST, SECOND, AND THIRD PARAGRAPHS ARE DELETED AND REPLACED AS FOLLOWS:

Provide air, steam or diesel-powered, or a type approved by City. The hammer furnished shall have a capacity at least equal to the hammer manufacture's recommendation for the total weight of pile and character of subsurface material to be encountered. The minimum driving energy of the hammer shall be 16,000 foot-pounds. For piles of any length, the maximum driving energy of the hammer shall be operated at the rate recommended by the manufacturer throughout the entire driving period. Sufficient pressure shall be maintained at the hammer so that: (1) for double-acting hammer, the number of blows per minute during and at the completion of the driving of a pile is equal approximately to that at which the hammer is rated; (2) for single-acting hammer, there is a full upward stroke of the ram; and (3) for differential-type hammer, there is a slight rise of the hammer base during each upward stroke.

THE FOLLOWING SUBSECTION IS ADDED:

1004.04 TIMBER PILE HAMMER

Provide air, vibratory, steam or diesel-powered, or a type approved by City. The hammer furnished shall have a capacity at least equal to the hammer manufacture's recommendation for the total weight of pile and character of subsurface material to be encountered. The minimum driving energy of the hammer shall be 6,500 foot-pounds. For piles of any length, the maximum driving energy of the hammer shall be 15,000 foot-pounds. Diesel-powered hammers shall be operated at the rate recommended by the manufacturer throughout the entire driving period. Sufficient pressure shall be maintained at the hammer so that: (1) for double-acting hammer, the number of blows per minute during and at the completion of the driving of a pile is equal approximately to that at which the hammer is rated; (2) for single-acting hammer, there is a full upward stroke of the ram; and (3) for differential-type hammer, there is a slight rise of the hammer base during each upward stroke.

1. **Timber Driving Helmets and Cushion Blocks.** Use a driving helmet or cap including a cushion block or cap block of a design approved by the City between the top of the pile and the ram to prevent impact damage to the pile. The driving helmet or cap and cushion block combination shall be capable of protecting the head of the pile, minimizing energy absorption, and transmitting hammer energy uniformly and consistently during the entire driving period. The driving helmet or cap shall fit snugly on the top of the pile so that the energy transmitted to the pile is uniformly distributed over the entire surface of the pile head. Demonstrate to the City that the equipment to be used on the project performs the above functions. The cushion block may be a solid or laminated softwood block with the grain parallel to the pile axis and enclosed in a close-fitting steel housing. The thickness of block shall be suitable for the length of the pile to be driven and the character of subsurface material to be encountered. Generally, thicker blocks are required for longer piles and softer subsurface material. Replace cushion block if it has been damaged, split, highly compressed, charred or burned or has become spongy or deteriorated in any manner. Under no circumstances will the use of small wood blocks, wood chips, rope or other material permitting excessive loss of hammer energy be permitted.

SECTION 1009 – HMA PLANT EQUIPMENT

1009.01 HMA PLANT

A. Requirements for HMA Mixing Plants.

8. Safety.

THE THIRD PARAGRAPH IS CHANGED TO:

When plant production occurs during night operations, provide permanently fixed lighting throughout the plant operations, plant laboratory, and truck scale areas to ensure a clear view of the operations. Also provide permanently mounted lighting at the sampling platforms to sufficiently illuminate the bed of the truck for inspection and sampling operations.

THE FOLLOWING SECTION IS ADDED:

SPECIAL PROVISIONS FOR THE
SOUTH AMBOY FERRY TERMINAL – SITE DEVELOPMENT

SECTION 1013 – GEOTECHNICAL INSTRUMENTATION AND MONITORING

1013.01 SETTLEMENT PLATFORMS

Provide, install, and report monitoring results for settlement platform as shown on the Ground Improvement Details sheet in the Plans, or as otherwise approved by the RE. Settlement platforms are surface displacement reference platforms placed on the prepared ground surface as shown on the Plans after grubbing and placement of the Vertical Wick Drains and incidental sand blanket drainage layer, and before placement of the preload fill.

A settlement platform consists of a square steel platform to which risers are attached. Extend the riser(s) as the embankment, preload, surcharge, or both is placed to maintain the top of the settlement platform between 2 and 4 feet above the average surrounding ground. Monitor settlement platforms by optical survey methods to determine vertical displacements occurring during and after embankment, preload, and surcharge fill placement.

Install and monitor settlement platforms in accordance with ASTM D6598 - Installing and Operating Settlement Platforms for Monitoring Vertical Deformations.

1013.02 INCLINOMETERS

Provide, install, monitor and report monitoring results for slope Inclinerometers as shown on the Ground Improvement Details sheet in the Plans, or as otherwise approved. Inclinerometers consist of specially manufactured PVC casing installed in vertical boreholes to monitor subsurface deformation of embankments. The inclinometers are surveyed using a digital inclinometer probe and data acquisition equipment to establish the initial profile of the casing prior to or during the initial stages of the embankment construction. Changes in the profile revealed by comparing subsequent surveys to the initial survey indicate ground deformation has occurred. Software provided by the inclinometer equipment manufacturer manages the survey data to show magnitude, direction and rate of ground deformation. For compatibility, inclinometer casing, digital probe, data acquisition equipment and software shall be purchased from one manufacturer. Equipment shall be purchased from one of the following manufacturers, or an approved equal:

Durham Geo Slope Indicator
2175 West Park Court
Stone Mountain, GA 30087
Tel: 770-465-7557
Fax: 770-465-7447

Geokon, Inc.
48 Spencer Street
Lebanon, NH 03766
Tel: 603-448-1562
Fax: 603-448-3216

Geonor, Inc.
51 US Highway 206
Suite 201
Augusta, NJ 07822
Tel: 570-296-4884
Fax: 570-296-4886

Install inclinometer casing in vertical boreholes to a minimum tip elevation of -30 feet or as directed by the Engineer. The PVC casing shall be installed in accordance with the manufacturer's requirements and shall include end caps, anchorage systems, and protective steel housing at the ground surface as recommended by the manufacturer. Perform initial baseline profile survey of the completed inclinometer casing installation within 24 hours of the completion.

Perform inclinometer surveys weekly (7 days) during active fill placement operations for the permanent and surcharge fills placed along the temporary walls. Provide data report of the profile data to the Resident Engineer for review on a weekly basis.

In the event an inclinometer casing is damaged or becomes no longer functional, the Contractor shall install a new replacement inclinometer within 7 days. Fill placement operations may need to cease in the immediate area of the damaged inclinometer if ongoing subsurface ground deformations were being observed or as directed by the Resident Engineer.

Review the instrumentation submittals before instrumentation installation. Protect and maintain all instrumentation throughout the Contract.

FEDERAL AID PROJECT ATTACHMENT 1

DISADVANTAGED BUSINESS ENTERPRISE UTILIZATION

- A. Utilization of Disadvantaged Business Enterprises as Subcontractors, Transaction Expeditors, Regular Dealers, Manufacturers and Truckers.** The Department advises the Contractor and subcontractors that failure to carry out the requirements in this attachment constitutes a material breach of Contract and, after the notification of the applicable Federal agency, may result in termination of the agreement or Contract by the Department or such remedy as the Department deems appropriate. Requirements set forth in this section shall also be physically included in all subcontracts in accordance with USDOT requirements.
- B. Policy.** It is the policy of the Department that Disadvantaged Business Enterprises, as defined in 49 CFR, Part 26; Titles I & V of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA); MAP-21, Moving Ahead for Progress in the 21st Century Act (P.L. 112-141); FAST-ACT, Fixing America's Surface Transportation Act (P.L. 114-94, December 4, 2015); and Section III below, shall have an equal opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this agreement. The Disadvantaged Business Enterprise requirements of 49 CFR, Part 26 et seq. apply to this agreement.
- C. Definitions**
- 1. Disadvantaged Business Enterprise (DBE).** A for-profit small business concern:
 - a. That is at least 51 percent owned by one or more individuals who are both socially and economically disadvantaged or, in the case of a corporation, in which 51 percent of the stock is owned by one or more such individuals; and
 - b. Whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individuals who own it, and who do not exceed the personal net worth criteria established in 49 CFR Part 26.
 - 2. Socially and economically disadvantaged individual.** Any individual who is a citizen (or lawfully admitted permanent resident) of the United States and who has been subjected to racial or ethnic prejudice or cultural bias within American society because of his or her identity as a member of groups and without regard to his or her individual qualities. The social disadvantage must stem from circumstances beyond the individual's control.
 - a. Any individual who a recipient finds to be a socially and economically disadvantaged individual on a case-by-case basis. An individual must demonstrate that he or she has held himself or herself out, as a member of a designated group;
 - b. Any individual in the following groups, members of which are rebuttably presumed to be socially and economically disadvantaged:
 - (1) Black Americans," which includes persons having origins in any of the Black racial groups of Africa
 - (2) Hispanic Americans," which includes persons of Mexican, Puerto Rican, Cuban, Dominican, Central or South American, or other Spanish or Portuguese culture or origin, regardless of race
 - (3) Native Americans," which includes persons who are enrolled members of a Federally or State recognized Indian tribe, Alaska Natives, or Native Hawaiians
 - (4) Asian-Pacific Americans," which includes persons whose origins are from Japan, China, Taiwan, Korea, Burma (Myanmar), Vietnam, Laos, Cambodia (Kampuchea), Thailand, Malaysia, Indonesia, the Philippines, Brunei, Samoa, Guam, the U.S. Trust Territories of the Pacific Islands (Republic of Palau), Republic of the Northern Marianas Islands, Samoa, Macao, Fiji, Tonga, Kiribati, Tuvalu, Nauru, Federated States of Micronesia, or Hong Kong
 - (5) Subcontinent Asian Americans," which includes persons whose origins are from India, Pakistan, Bangladesh, Bhutan, the Maldives Islands, Nepal or Sri Lanka

- (6) Women
 - (7) Any additional groups whose members are designated as socially and economically disadvantaged by the SBA, at such time as the SBA designation becomes effective.
 - (8) Being born in a particular country does not, standing alone, mean that a person is necessarily a member of one of the groups listed in this definition.
3. **Commercially Useful Function (CUF).** A DBE performs a commercially useful function when it is responsible for execution of a distinct element of the work of a contract and carrying out its responsibility by actually performing, managing and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for preparing the estimate, negotiating price, determining quality and quantity, ordering the material, arranging delivery, installing (where applicable), and paying for the material and supplies itself for the project.
 4. **Transaction expeditor (broker).** A DBE who arranges or expedites transactions and who arranges for material drop shipments.
 5. **DBE regular dealers.** A firm that 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. In addition, a regular dealer must own, operate or maintain a store, warehouse, or other establishment in which the materials, supplies, articles or equipment required under this Contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
 6. **DBE manufacturer.** A firm that operates or maintains a factory or establishment that produces on the premises, the materials, supplies, articles, or equipment required for the Contract.
 7. **Good faith effort (GFE).** Efforts to achieve a DBE goal or other requirement of 49 CFR Part 26, which by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement. Efforts to include firms not certified as DBEs in the state where the contract is being let are consequently not good faith efforts to meet a DBE contract goal.
 8. **Affirmative Action Plan.** An outline of the steps a contractor or subcontractor will implement to achieve equal employment opportunity and affirmative action and/or to correct its equal employment and affirmative action program deficiencies.
- D. Compliance.** The Contractor is responsible for compliance as specified in Section 105.
- E. Contractor's DBE Obligations.** Ensure that DBEs have an equal opportunity to receive and participate in contracts and subcontracts financed in whole or in part with Federal funds in performing work with the Department. Take all necessary and reasonable steps in accordance with 49 CFR, Part 26 and the Contract to ensure that DBEs are given equal opportunity to compete for and to perform on the Department's Federal Aid Projects. Do not discriminate in the award and performance of any Contract obligation including, but not limited to, performance of obligations on USDOT assisted contracts, as specified in Section 107.
1. Post Award Obligations
 - a. Give DBEs equal consideration with non-minority firms in negotiation for any subcontracts, purchase orders or leases.
 - b. Attempt to obtain qualified DBEs to perform the work. A directory of certified Disadvantaged Small Businesses Enterprise firms can be found in the New Jersey Unified Certification Program Vendor Certification database, online at: <https://njucp.dbesystem.com/>.
 2. Affirmative Action After Award of the Contract
 - a. **Subletting.** If at any time following the award of the Contract, the Contractor intends to sublet any portion(s) of the work under said Contract, or intends to purchase material or lease equipment not contemplated during preparation of bids, take affirmative action:
 - (1) Notify the RE, in writing, of the type and approximate value of the work which the Contractor intends to accomplish by such subcontract, purchase order or lease.

- (2) Submit the Post-Award Minority Certification (Part IV of the DC-18A Request for Approval to Sublet on Projects Utilizing the 2007 Specifications Form) to the Regional Supervising Engineer with the application to sublet, or prior to purchasing material or leasing equipment. Obtain Post Award Minority Certifications from the RE.
 - (3) Efforts made to identify and retain a DBE as a replacement subcontractor, lower tier subcontractor, transaction expeditor, regular dealer, supplier, manufacturer or trucker when the arrangements with the original DBE prove unsuccessful, shall be as specified in Section 108. Work in the category concerned shall not begin until such approval is granted in writing by the Department.
 - (4) Notification of a DBE firm's termination will be as specified in Section 108. Send notice in writing to the Department through the RE, with a copy to DCR/AA. Said termination notice will include the firm's ethnic classification, whether the firm is a DBE and the detailed reason(s) for termination.
- b. Selection and Retention of Subcontractors.** Do not discriminate in the selection and retention of subcontractors, including procurement of materials and leases of equipment as specified in 108.01. Provide the RE with a listing of firms, organizations or enterprises solicited and those utilized as subcontractors on the proposed project. Such listing shall clearly delineate which firms are classified as DBEs. Provide the RE with subcontract agreements for all subcontractors performing work on the Contract as specified in Section 108.
- (1) Efforts made to identify and retain a DBE as a replacement subcontractor, lower tier subcontractor, transaction expeditor, regular dealer, supplier, manufacturer or trucker when the arrangements with the original DBE prove unsuccessful, shall be submitted as specified in Section 108. Work in the category concerned shall not begin until such approval is granted in writing by the Department.
 - (2) Notification of a DBE firm's termination will be as specified in Subsection 108.01. Send notice in writing to the Department through the RE. Said termination notice will include the firm's ethnic classification, whether the subcontractor is a DBE and the detailed reason(s) for termination.
- c. Meeting Contract DBE Goal.** Report attainment toward meeting the Contract DBE goal by submitting monthly, all DBE participation, to the Department's RE and DCR/AA Contract Compliance Unit using the CR-267 – Monthly Report of Utilization of DBE/ESBE or SBE form. The form is due by the 5th of the month, and must list all DBEs used on the Contract to meet the Contract goal, the specific Contract work items each DBE is performing, whether the DBE is performing full or partial work on the items, and the amount paid to each DBE each month. Failure to report the information, and accurately report it may result in payment being delayed or withheld as specified in Section 105, assessing sanctions, or termination of the Contract as specified in Section 108.
- d. Termination, Substitution or Replacement of DBEs.** Make good faith efforts to replace a DBE that is terminated or has otherwise failed to complete its work on the Contract with another certified DBE, to the extent needed to meet the Contract DBE goal. Notify the DCR/AA immediately of the DBE's inability or unwillingness to perform and provide reasonable documented evidence. Prior to termination, substitution or replacement of a DBE subcontractor, lower tier subcontractor, transaction expeditor, regular dealer, supplier, manufacturer or trucker, submit a Revised CR-266 – Schedule of DBE/ESBE/SBE Participation form to the Department naming the replacement DBE firm(s), type of work performed, specific Contract work items, whether the DBE is performing full or partial work on the items, dollar value and percent of total Contract for each DBE firm. Submit detailed written explanation of why each change is being made, including documented evidence of good faith effort(s) with the submission of the revised Form CR-266. Submit along with the revised CR-266: 1) a completed Confirmation of DBE Firm (Form CR-273) to demonstrate direct written confirmation from each DBE firm participating on the Contract, confirming the kind and amount of work that was provided on the Contractor's CR-266, and if applicable; 2) a completed DBE Regular Dealer/Supplier Verification (Form CR-272) for all DBE Regular Dealers/Suppliers listed on the revised CR-266; and if applicable, 3) a completed DBE Trucking Verification (Form CR-274) for all DBE truckers listed on the revised

CR-266 form. The Contractor is not permitted to complete any portion of the CR-273, CR-272 or CR-274 forms. Termination, substitution or replacement of DBEs shall be made as specified in Section 108. Termination or replacement of DBEs cannot be made without prior written approval of the Department as per 108.01.

- e. Submission of Good Faith Effort Documentation.** If the Contractor is unable to meet the Contract goal for DBE participation, submit to the DCR/AA for review and approval, documented evidence of good faith efforts along with the monthly CR-267 form. This submission must include written details addressing each of the good faith efforts outlined in the Contract. Submittal of such information does not imply DCR/AA approval. The Department's DCR/AA has sole authority to determine whether the Contractor is meeting the Contract DBE goal or made adequate good faith efforts to do so.

- F. DBE Goals for the Contract.** This Contract includes a goal of awarding _____ percentage of the Total Contract Price to subcontractors, transaction expeditors, regular dealers, manufacturers and truckers qualifying as DBEs.

The Department's DCR/AA has sole authority to determine whether the Contractor met the goal or made adequate good faith efforts to do so. If the DCR/AA determines that the Contractor has failed to meet the Contract DBE goal or made adequate good faith efforts to do so, the Department will follow Section 105.

G. Counting DBE Participation.

1. Each DBE is subject to a certification procedure to ensure its DBE eligibility status prior to the award of the Contract. All DBEs working on the Contract must be certified DBEs. To receive DBE credit toward meeting a contract goal in the context of the contract award process, a DBE firm must be certified before the due date for bids or offers on the Contract, as stated in 49 CFR Part 26.81(c). There may be situations after the award of the Contract, however, in which it is appropriate to count DBE credit for the use of a DBE subcontractor certified after the contract is executed. To be eligible to obtain DBE credit, a DBE subcontractor must be certified before the subcontract on which it is working is executed.
2. The Department determines the percentage of DBE participation that will be counted toward the Contract DBE goal in accordance with 49 C.F.R. Part 26.55 et seq.
3. The Contractor will count DBE participation toward the Contract DBE goal only the value of the work actually performed by a certified DBE and only if the DBE performs a commercially useful function in the work of a contract as per 49 CFR, Subpart C, Part 26.55(c) and the Contract.
4. The Department will count DBE participation for DBE trucking firms in accordance with 49 C.F.R. Part 26.55 et seq. The DBE can count the entire value of services performed by DBE trucks. The DBE can count the value of non-DBE trucking services up to the value of services performed by DBE trucks used on the Contract. DBE participation can be counted for the value of services of non-DBE trucks that exceed the value of the services performed by DBE trucks only in the amount of the fee or commission a DBE receives as a result of the lease arrangement.
5. The Department will count DBE participation for DBE regular dealers, manufacturers and transaction expeditors in accordance with 49 C.F.R Part 26.55 et seq. Transaction expeditors/brokers will not receive DBE credit for any portion of the cost of the materials and supplies themselves toward the Contract DBE goal. For brokers, only the DBE's fee or commission, and no part of the cost of the goods, count towards DBE goals. The Department will determine if the fees are reasonable and not excessive as compared with fees customarily allowed for similar services. If a certified firm acts as a "regular dealer" in a given transaction, it is awarded DBE credit equivalent to 60 percent of the value of the items it supplies on that contract. This credit is awarded in recognition of the value the DBE adds to transaction and the risks that it takes.
6. If the Contractor is a certified DBE, payments made to the Contractor for work that the Contractor is certified to perform, and performed by the Contractor will be applied toward the Contract DBE goal. Payments made to the Contractor for work performed by non-DBEs will not be applied toward the Contract DBE goal.
7. When a DBE subcontractor sublets part of the work of its contract to another firm, the value of the subcontract work may be counted towards the Contract DBE goal only if the subcontractor itself is a

certified DBE. Work that a DBE subcontractor subcontracts to a non-DBE firm, cannot be counted towards the Contract DBE goal.

H. Commercially Useful Function

1. **Performance of Work.** The DBE must perform the work with their own permanent employees, or employees recruited through traditional recruitment and/or employment centers. DBEs must employ and control their own workforce, and cannot share employees with the Contractor, other subcontractors on the present project, or the renter-lessor of equipment being used on the present project. The DBE firm must be responsible for all payroll and labor compliance requirements for all of their employees performing work on the Contract. Direct or indirect payments by any other contractor are not allowed.
2. **Managing Work.** The DBE must manage the work themselves including the scheduling of work operations, ordering of equipment and materials, hiring/firing of employees, including supervisory employees, and preparing and submitting certified payrolls. The DBE must supervise their portion of daily work operations of the project. With respect to materials and supplies used on the Contract, the DBE must be responsible for preparing the estimate, negotiating price, determining quantity and quality, ordering the material, arranging delivery; installing, (where applicable), and paying for the material and supplies itself, for the project.
3. **Responsibility of Work.** A DBE must perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own workforce. The DBE must not subcontract 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.
4. **Equipment of DBE.** The DBE must perform the work stated in the subcontract with their own equipment, whether owned or leased and operated on a long term agreement, not an ad hoc or contract by contract agreement. The equipment must be owned by the DBE firm, or leased/rented from traditional equipment lease/rental sources. The equipment will not belong to the Contractor, any other subcontractor or lower tier subcontractors on the current project, or supplier of materials being installed by the DBE firm.
5. **Lease of Equipment.** A DBE firm may lease specialized equipment from a contractor, but not from the Contractor, if it is consistent with normal industry practices and at rates competitive for the area. Rental agreements must be for short periods of time, specify the terms of the agreement and involve specialty equipment to be used at the job site. The lease may allow the operator to remain on the lessor's payroll, if it is the generally accepted industry practice but the operation of the equipment must be subject to full control by the DBE. The DBE is expected to provide the operator for non-specialized equipment, and is responsible for all payroll and labor compliance requirements. A separate lease agreement is required.
6. **DBE Trucking.** DBE trucking companies must perform a commercially useful function in accordance with 49 CFR Part 26.55 et seq. Contrived arrangements for the purpose of meeting DBE goals will not be allowed. The DBE must be responsible for the management and supervision of the entire trucking operation on a contract-by-contract basis, and must own and operate at least one fully, licensed, insured and operational truck used on the Contract.

The DBE trucking firm is not permitted to obtain trucks from the Contractor to perform work on the project. The DBE may lease trucks from a subcontractor working on the project, provided the trucks are obtained from the subcontractor prior to the project letting. The DBE may lease trucks from another DBE, including an owner-operator that is certified as a DBE. The DBE may also lease trucks from non-DBEs and owner-operators. Bona fide lease agreements must be for the length of time needed by the DBE on the Contract and signed by both the DBE and the firm(s), either certified DBE or non-DBE, from which the trucks will be leased. Leases must indicate that the DBE has exclusive use and control over the truck. As per 49 CFR Part 26.55(d)(7), all leased trucks, including non-DBE trucks, must display the name and USDOT identification number issued for interstate commerce, of the DBE firm on the outside of the truck. DBE firms are expected to use the same trucks for DBE credit on all projects so use of leased vehicles on a project-by-project basis is not permitted.

The Contractor shall have signed Hiring Agreements. Submit copies of these signed Hiring Agreements, and copies of all signed lease agreements to the RE prior to the trucking firm's commencing work on the project. Prior to the DBE trucking firm beginning work on the Contract, DBE Trucking firms will be required to complete the DBE Trucking Verification (Form CR-274). The DBE and Contractor must sign the form and the Contractor submit the original CR-274 form directly to the Department's RE, with a copy submitted to the DCR/AA. The Contractor is not permitted to complete any portion of the CR-274 form. The Contractor must prepare, sign and submit with the CR-267 – Monthly Report of Utilization of DBE/ESBE or SBE form, a Monthly Trucking Verification form (CR-271), identifying each truck owner, DBE Certification number, company name and address, truck number, and commission or amount paid for all DBE and non-DBE truckers performing work on the project. Also, submit the form to the Department as per Section E of this Special Provision for DCR/AA review, approval and determination of credit toward the Contract goal. Failure to submit the forms may result in denial or limit of credit toward the Contract DBE goal, payment being delayed or withheld as specified in Section 105, assessing sanctions or termination of the Contract as specified in Section 108.

- 7. DBE Regular Dealers.** DBE regular dealers 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. In addition, a regular dealer must own, operate or maintain 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 this Contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

When the Contractor seeks credit toward the Contract DBE goal using DBE regular dealers, the DBE Regular Dealer/Supplier Verification (Form CR-272) must be completed and signed by the DBE regular dealer and then signed by the Contractor. Submit the form to the Department as per Section E of this Special Provision for the DCR/AA's review, approval and determination of credit toward the Contract DBE goal.

- 8. DBE Manufacturers.** DBE manufacturers must be a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required for this Contract.
- 9.** The Contractor shall not use a DBE solely for the purpose of acting as an extra participant in a transaction, a contract or the Contract through which funds are passed in order to obtain the appearance of DBE participation.

- I. Good Faith Effort.** To demonstrate good faith efforts to meet the Contract DBE goal, a Contractor shall, on an ongoing basis, document the steps it takes to obtain DBE participation in accordance with 49 CFR Part 26.53 and Appendix A, including but not limited to the following:

1. Conducting market research to identify small business contractors and suppliers and soliciting through all reasonable and available means the interest of all certified DBEs that have the capability to perform the work of the Contract. This may include attendance at pre-bid and business matchmaking meetings and events, advertising and/or written notices, posting of Notices of Sources Sought and/or Requests for Proposals, written notices or emails to all DBEs listed in the State's directory of transportation firms that specialize in the areas of work desired (as noted in the DBE directory) and which are located in the area or surrounding areas of the project.

Should solicit this interest as early in the acquisition process as practicable to allow the DBEs to respond to the solicitation and submit a timely offer for the subcontract. Determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.

2. Selecting 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 (for example, smaller tasks or quantities) to facilitate DBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces. This may include, where possible, establishing flexible timeframes for performance and delivery schedules in a manner that encourages and facilitates DBE participation.

3. Providing interested DBEs with detailed information about the plans, specifications, and requirements of the Contract in a timely manner to assist them in responding to a solicitation with their offer for the subcontract. Attempt to contact all potential subcontractors on the same day and use similar methods to contact them;
4. Negotiating in good faith with interested DBEs. Make a portion of the work available to DBE subcontractors and suppliers and select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. 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.

Consider a number of factors in negotiating with subcontractors, including DBE subcontractors. 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 failure to meet the contract DBE goal, as long as such costs are reasonable. The ability or desire of a Contractor to perform the work of a Contract with its own organization does not relieve the responsibility to make good faith efforts. Contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.

5. Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union status) are not legitimate causes for the rejection or non-solicitation of bids in the Contractor's efforts to meet the Contract DBE goal. Another practice considered an insufficient good faith effort is the rejection of the DBE because its quotation for the work was not the lowest received. However, nothing in this paragraph shall be construed to require the Contractor to accept unreasonable quotes in order to satisfy the Contract DBE goal.

Inability to find a replacement DBE at the original price is not alone sufficient to support a finding that good faith efforts have been made to replace the original DBE. The fact that the Contractor has the ability and/or desire to perform the contract work with its own forces does not relieve the Contractor of the obligation to make good faith efforts to find a replacement DBE, and it is not a sound basis for rejecting a prospective replacement DBE's reasonable quote.

Attempt, wherever possible, to negotiate prices with potential subcontractors which submitted higher than acceptable price quotes.

Keep a record of efforts, including the names of businesses contacted and the means and results of such contacts.

6. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
7. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
8. Effectively using the services of available minority/women community organizations; minority/women 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.

If the Contractor fails to meet the Contract DBE goal, they must submit documented evidence of good faith effort(s) with the CR-268 final DBE Report to the DCR/AA for review and approval. Submittal of such information does not imply DCR/AA approval. The Department's DCR/AA has sole authority to determine whether the Contractor met the Contract DBE goal or made adequate good faith efforts to do so. If the DCR/AA determines that the Contractor has failed to meet the Contract DBE goal or made adequate good faith effort to do so, the Department will follow Section 105.

J. Submission of Affirmative Action Program

Contractors, subcontractors and professional service firms performing work for the Department are required to submit their company's Affirmative Action Program annually to the DCR/AA. Contractors must have an **approved** Affirmative Action Program on file in the DCR/AA no later than seven (7) State business days after the date of bid opening. No recommendations to award will be made without an approved Affirmative Action Program on file in the DCR/AA. Ensure subcontractors and professional service firms have an approved Affirmative Action Plan on file in the DCR/AA prior to their beginning work on a particular project.

The Annual Affirmative Action Program will include, but is not limited to the following:

1. Copy of company's comprehensive EEO/Affirmative Action Plan, with a cover page that includes the company name and address, and signature of the Chief Executive or EEO Officer.
2. Copy of document designating the company's corporate EEO Officer, including the name, address and contact telephone number for the officer, and signature of the Chief Executive or President, on company letterhead.
3. Copy of the company's EEO Policy Statement on company letterhead, dated and signed by the Chief Executive and the EEO Officer.
4. Copy of the company's Sexual Harassment Policy on company letterhead.
5. EEO Legend such as letterhead, envelope, or published advertisement showing the company is an equal opportunity employer.
6. Copy of document designating the company's DBE Liaison Officer to administer the firm's Disadvantaged Business Program.
7. DBE Affirmative Action Plan which is an explanation of affirmative action methods intended to be used to seek out and consider DBEs as subcontractors, material suppliers or equipment lessors. This refers to the Contractor's ongoing responsibility, i.e., Disadvantaged Business Enterprise/Affirmative Action activities after the award of the Contract and for the duration of the Contract.

K. DBE Liaison Officer. Designate a DBE Liaison Officer who shall be responsible for the administration of your DBE program in accordance with the Contract, and ensuring that the Contractor complies with all provisions of 49 CFR Part 26.

L. Consent by Department to Subletting. The Department will not approve any subcontract proposed by the Contractor unless and until said Contractor has complied with the terms of the Contract.

M. Conciliation. Allegations of breach of any obligation contained in these DBE provisions and guidelines, will be investigated by the DCR/AA, the Federal Highway Administration and/or the USDOT.

N. Documentation

1. **Requiring of Information.** The Department or the Federal funding agencies may at any time require information as specified in Section 107 and deemed necessary in the judgment of the Department to ascertain the compliance of any Bidder, Contractor or subcontractor with the terms of the Contract.
2. **Records and Reports.** The Contractor, subcontractors and other sub-recipients will keep such records as are necessary to determine compliance with its Disadvantaged Business Enterprise Utilization obligations. These records kept will be designed to indicate:
 - a. The names of DBE contractors, subcontractors, transaction expeditors and material suppliers contacted for work on the Contract, including when and how contacted, and the specific Contract work items and other information provided to each.
 - b. Work, services and materials which are not performed or supplied by the Contractor.
 - c. The actual dollar value of work subcontracted and awarded to DBEs, including specific Contract work items and cost of each work item.
 - d. The progress being made and efforts taken in seeking out and utilizing DBEs to include: solicitations, specific Contract work items and the quotes and bids regarding those specific Contract work items, supplies, leases, or other contract items, etc.
 - e. Detailed written documentation of all correspondence, contacts, telephone calls, etc., including names and dates/times, to obtain the services of DBEs on the Contract.
 - f. Records of all DBEs and non-DBEs who have submitted quotes/bids to the Contractor on the Contract.

- g. Monthly CR-267 – Monthly Report, Utilization of DBE/ESBE or SBE, and other reports required for submission to the Department, hiring agreements, subcontracts, lease agreements, equipment rental agreements, supply tickets, delivery slips, payment information, and other records documenting DBE utilization on the Contract.
 - h. Documentation outlining EEO workforce information for the Contract.
 - i. Documentation outlining EEO and Affirmative Action efforts made in the administration and performance of the Contract.
- 3. Submission of Reports, Forms and Documentation.** Submit reports, forms and documentation, as required by the Department, on those contracts and other business transactions executed with DBEs in such form and manner as may be prescribed by the Department. Failure to submit the required forms, reports or other documentation as required may result in payment being delayed or withheld as specified in Section 105, assessing sanctions, or termination of the contract as specified in Section 108. Submission of falsified forms, reports or other required documentation may result in termination of the Contract as specified in Section 108, investigation by the Department’s Inspector General or U.S. DOT, or both, and prosecution by the State Attorney General’s Office or U.S. Department of Justice, or both.
- 4. Maintaining Records.** All records must be maintained for a period of three (3) years following acceptance of final payment and will be available for inspection by the Department, or the Federal funding agencies.
- O. Prompt Payment to Subcontractors.** On Federal Aid Projects, payment to subcontractors, equipment lessors, suppliers and manufacturers is made in accordance with Section 109.
- P. Non-Compliance.** Failure by the Contractor to comply with the DBE program, rules and regulations of 49 CFR Part 26 in the administration of the Contract may result in denial or limit of credit toward the Contract DBE goal, payment being delayed or withheld as specified in Section 105, assessing sanctions, liquidated damages as specified in Section 108, default as specified in Section 108, debarment, or termination of the Contract as specified in Section 108. The Contractor may further be declared ineligible for future Department contracts.

FEDERAL AID PROJECT ATTACHMENT 1

EMERGING SMALL BUSINESS ENTERPRISE UTILIZATION

- A. Utilization of Emerging Small Business Enterprises as Subcontractors, Transaction Expeditors, Regular Dealers, Manufacturers and Truckers.** The Department advises the Contractor and subcontractors that failure to carry out the requirements in this attachment constitutes a material breach of Contract and, after the notification of the applicable Federal agency, may result in termination of the agreement or Contract by the Department or such remedy as the Department deems appropriate. Requirements set forth in this section shall also be physically included in all subcontracts in accordance with USDOT requirements.
- B. Policy.** It is the policy of the Department that Emerging Small Business Enterprises, as defined in Section III below, shall have an equal opportunity to participate in the performance of contracts financed in whole or in part with Federal funds under this agreement. In furtherance of this policy the Department has established an Emerging Small Business Enterprise Program. This program is designed to promote participation and shared economic opportunity by smaller firms who qualify as ESBEs in NJDOT contracts and is undertaken pursuant to the authority contained in 49 CFR Part 26 et seq.
- C. Definitions**
1. **Emerging Small Business Enterprise (ESBE).** A for-profit small business concern classified as a small business pursuant to the appropriate Small Business Administration regulations:
 - a. That is at least 51 percent owned by one or more individuals who are economically disadvantaged or, in the case of a corporation, in which 51 percent of the stock is owned by one or more such individuals; and
 - b. Whose management and daily business operations are controlled by one or more of the economically disadvantaged individuals who own it, and who do not exceed the personal net worth criteria established in 49 CFR Part 26.

NOTE: DBEs automatically qualify as ESBEs.

2. **Owned and Controlled.** Defined as: that at least 51% of the ownership interests as well as the management and daily business operations of the firm reside in individuals whose personal net worth does not exceed the requirements established in 49 CFR, Part 26.
3. **Commercially Useful Function (CUF).** An ESBE performs a commercially useful function when it is responsible for execution of a distinct element of the work of a contract and carrying out its responsibility by actually performing, managing and supervising the work involved. . To perform a commercially useful function, the ESBE must also be responsible, with respect to materials and supplies used on the contract, for preparing the estimate, negotiating price, determining quality and quantity, ordering the material, arranging delivery, installing, (where applicable), and paying for the material and supplies itself for the project.
4. **Transaction expeditor (broker).** An ESBE who arranges or expedites transactions and who arranges for material drop shipments.
5. **ESBE regular dealer.** A firm that 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. In addition, a regular dealer must own, operate or maintain a store, warehouse, or other establishment in which the materials, supplies, articles or equipment required under this Contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
6. **ESBE manufacturer.** A firm that operates or maintains a factory or establishment that produces on the premises, the materials, supplies, articles, or equipment required for the Contract.
7. **Good faith effort (GFE).** Efforts to achieve an ESBE goal or other requirement of the ESBE Program and of 49 CFR Part 26, which by their scope, intensity, and appropriateness to the objective, can

reasonably be expected to fulfill the program requirement. Efforts to include firms not certified as ESBEs in the state where the contract is being let are consequently not good faith efforts to meet an ESBE contract goal.

- 8. Affirmative Action Plan.** An outline of the steps a contractor or subcontractor will implement to achieve equal employment opportunity and affirmative action and/or to correct its equal employment and affirmative action program deficiencies.

D Compliance. The Contractor is responsible for compliance as specified in Section 105.

E. Contractor ESBE Obligations. Ensure that ESBEs have an equal opportunity to receive and participate in contracts and subcontracts financed in whole or in part with Federal funds in performing work with the Department. Take all necessary and reasonable steps in accordance with 49 CFR Part 26 and the Contract to ensure that ESBEs are given equal opportunity to compete for and perform on the Department's Federal Aid Projects. Do not discriminate in the award and performance of any Contract obligation including, but not limited to, performance of obligations on USDOT assisted contracts, as specified in Section 107.

1. Post Award Obligations

- a. Give ESBEs equal consideration with minority firms in negotiation for any subcontracts, purchase orders or leases.
- b. Attempt to obtain qualified ESBEs to perform the work. A directory of certified Emerging Small Business Enterprise firms may be found in the Emerging Small Business (ESBE) Program online directory at: <http://www.state.nj.us/transportation/business/civilrights/pdf/ESBEDirectory.pdf>.

2. Affirmative Action after Award of the Contract

- a. Subletting.** If at any time following the award of the Contract, the Contractor intends to sublet any portion(s) of the work under said Contract, or intends to purchase material or lease equipment not contemplated during preparation of bids, take affirmative action:

- (1) Notify the RE, in writing, of the type and approximate value of the work which the Contractor intends to accomplish by such subcontract, purchase order or lease.
- (2) Submit the Post-Award Minority Certification (Part IV of the DC-18A Request for approval to Sublet on Projects Utilizing the 2007 Specifications Form) to the Regional Supervising Engineer with the application to sublet, or prior to purchasing material or leasing equipment. Obtain Post Award Minority Certifications from the RE.
- (3) Efforts made to identify and retain an ESBE as a replacement subcontractor, lower tier subcontractor, transaction expeditor, regular dealer, supplier, manufacturer or trucker when the arrangements with the original ESBE prove unsuccessful, shall be followed as specified for DBE subcontractors as specified in Section 108. Work in the category concerned shall not begin until such approval is granted in writing by the Department.
- (4) Notification of an ESBE firm's termination will be as specified in Section 108. Send notice in writing to the Department through the RE, with a copy to DCR/AA. Said termination notice will include the firm's ethnic classification, whether the firm is an ESBE and the detailed reason(s) for termination.

- b. Selection and Retention of Subcontractors.** Do not discriminate in the selection and retention of subcontractors, including procurement of materials and leases of equipment as specified in 108.01. Provide the RE with a listing of firms, organizations or enterprises solicited and those utilized as subcontractors on the proposed project. Such listing shall clearly delineate which firms are classified as ESBEs. Provide the RE with subcontract agreements for all subcontractors performing work on the Contract as specified in Section 108.

- (1) Efforts made to identify and retain an ESBE as a replacement subcontractor, lower tier subcontractor, transaction expeditor, regular dealer, supplier, manufacturer or trucker when the arrangements with the original ESBE prove unsuccessful, shall be submitted as specified in Section 108. Work in the category concerned shall not begin until such approval is granted in writing by the Department.

- (2) Notification of an ESBE firm's termination will be as specified in Subsection 108.01. Send notice in writing to the Department through the RE. Said termination notice will include the firm's ethnic classification, whether the firm is an ESBE and the detailed reason(s) for termination.
- c. Meeting Contract ESBE Goal.** Report attainment toward meeting the Contract ESBE goal by submitting monthly, all ESBE participation, to the Department's RE and DCR/AA Contract Compliance Unit using the CR-267 – Monthly Report of Utilization of DBE/ESBE or SBE form. The form is due by the 5th of the month, and must list all ESBEs used on the Contract to meet the Contract goal, the specific Contract work items each ESBE is performing, whether the ESBE is performing full or partial work on the items, and the amount paid to each ESBE each month. Failure to report the information, and accurately report it may result in payment being delayed or withheld as specified in Section 105, assessing sanctions, or termination of the Contract as specified in Section 108.
- d. Termination, Substitution or Replacement of ESBEs.** Make good faith efforts to replace an ESBE that is terminated or has otherwise failed to complete its work on the Contract with another certified ESBE, to the extent needed to meet the Contract ESBE goal. Notify the DCR/AA immediately of the ESBEs inability or unwillingness to perform and provide reasonable documented evidence. Prior to termination, substitution or replacement of an ESBE subcontractor, lower tier subcontractor, transaction expeditor, regular dealer, supplier, manufacturer or trucker, submit a Revised CR-266 – Schedule of DBE/ESBE/SBE Participation form to the Department naming the replacement ESBE firm(s), type of work performed, specific Contract work items, whether the ESBE is performing full or partial work on the items, dollar value and percent of total Contract for each ESBE subcontractor. Submit detailed written explanation of why each change is being made, including documented evidence of good faith effort(s) with the submission of the revised Form CR-266. Submit along with the Revised CR-266: 1) a completed Confirmation of ESBE Firm (Form CR-273) to demonstrate direct written confirmation from each ESBE firm participating on the Contract, confirming the kind and amount of work that was provided on the Contractor's CR-266, and if applicable; 2) a completed ESBE Regular Dealer/Supplier Verification (Form CR-272) for all ESBE Regular Dealers/Suppliers listed on the Revised CR-266 form, and if applicable; 3) a completed ESBE Trucking Verification (Form CR-274) for all ESBE truckers listed on the Revised CR-266 form. The Contractor is not permitted to complete any portion of the CR-273, CR-272 or CR-274 forms. Termination, substitution or replacement of ESBEs shall be made as specified in Section 108. Termination or replacement of ESBEs cannot be made without prior written approval of the Department as per 108.01.
- e. Submission of Good Faith Documentation.** If the Contractor is unable to meet the Contract goal for ESBE participation, submit to the DCR/AA for review and approval, documented evidence of good faith efforts along with the monthly CR-267 form. This submission must include written details addressing each of the good faith efforts outlined in the Contract. Submittal of such information does not imply DCR/AA approval.
- F. ESBE Goals for This Contract.** This Contract includes a goal of awarding _____ percentage of the Total Contract Price to subcontractors, transaction expeditors, regular dealers, manufacturers and truckers qualifying as ESBEs.

The Department's DCR/AA has sole authority to determine whether the Contractor met the goal or made adequate good faith efforts to do so. If the DCR/AA determines that the Contractor has failed to meet the Contract ESBE goal or made adequate good faith efforts to do so, the Department will follow Section 105.

G. Counting ESBE Participation.

- Each ESBE is subject to a certification procedure to ensure its ESBE eligibility status prior to the award of the Contract. All ESBEs working on the Contract must be certified ESBEs. To receive ESBE credit toward meeting a contract goal in the context of the contract award process, an ESBE firm must be certified before the due date for bids or offers on the Contract. There may be situations after the award of the Contract, however, in which it is appropriate to count ESBE credit for the use of an ESBE

subcontractor certified after the contract is executed. To be eligible to obtain ESBE credit, an ESBE subcontractor must be certified before the subcontract on which it is working is executed.

2. The Department determines the percentage of ESBE participation that will be counted toward the Contract ESBE goal in accordance with 49 C.F.R. Part 26.55 et seq.
3. The Contractor will count ESBE participation toward the Contract ESBE goal only the value of the work actually performed by a certified ESBE and only if the ESBE performs a commercially useful function in the work of a contract in accordance with 49 CFR, Subpart C, Part 26.55(c) and the Contract.
4. The Department will count ESBE participation for ESBE trucking firms in accordance with 49 CFR Part 26.55 et seq. The ESBE can count the entire value of services performed by ESBE trucks. The ESBE can count the value of non-ESBE trucking services up to the value of services performed by ESBE trucks used on the Contract. ESBE participation can be counted for the value of services of non-ESBE trucks that exceed the value of the services performed by ESBE trucks only in the amount of the fee or commission a ESBE receives as a result of the lease arrangement.
5. The Department will count ESBE participation for ESBE regular dealers, manufacturers and transaction expeditors in accordance with 49 C.F.R Part 26.55 et seq. Transaction expeditors/brokers will not receive ESBE credit for any portion of the cost of the materials and supplies themselves toward the Contract ESBE goal. For brokers, only the ESBE's fee or commission, and no part of the cost of the goods, count towards ESBE goals. The Department will determine if the fees are reasonable and not excessive as compared with fees customarily allowed for similar services. If a certified firm acts as a "regular dealer" in a given transaction, it is awarded ESBE credit equivalent to 60 percent of the value of the items it supplies on that contract. This credit is awarded in recognition of the value the ESBE adds to transaction and the risks that it takes.
6. If the Contractor is a certified ESBE, payments made to the Contractor for work that the Contractor is certified to perform, and performed by the Contractor will be counted toward the Contract ESBE goal. Payments made to the Contractor for work performed by non-ESBEs will not be applied toward the Contract ESBE goal.
7. When an ESBE subcontractor sublets part of the work of its contract to another firm, the value of the subcontract work may be counted towards the Contract ESBE goal only if the subcontractor itself is a certified ESBE. Work that an ESBE subcontractor subcontracts to a non-ESBE firm, cannot be counted towards the Contract ESBE goal.

H. Commercially Useful Function.

1. **Performance of Work.** The ESBE must perform the work with their own permanent employees, or employees recruited through traditional recruitment and/or employment centers. ESBEs must employ and control their own workforce, and cannot share employees with the Contractor, other subcontractors on the present project, or the renter-lessor of equipment being used on the present project. The ESBE firm must be responsible for all payroll and labor compliance requirements for all of their employees performing work on the Contract. Direct or indirect payments by any other contractor are not allowed.
2. **Managing Work.** The ESBE must manage the work themselves including the scheduling of work operations, ordering of equipment and materials, hiring/firing of employees, including supervisory employees, and preparing and submitting certified payrolls. The ESBE must supervise their portion of daily work operations of the project. With respect to materials and supplies used on the Contract, the ESBE must be responsible for preparing the estimate, negotiating price, determining quantity and quality, ordering the material, arranging delivery, installing, (where applicable), and paying for the material and supplies for the project.
3. **Responsibility of Work.** An ESBE must perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own workforce. The ESBE must not subcontract 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.
4. **Equipment of ESBE.** The ESBE must perform the work stated in the subcontract with their own equipment, whether owned or leased and operated on a long term agreement, not an ad hoc or contract by contract agreement. The equipment must be owned by the ESBE firm, or leased/rented

from traditional equipment lease/rental sources. The equipment will not belong to the Contractor, any other subcontractor or lower tier subcontractors on the current project, or supplier of materials being installed by the ESBE firm.

5. **Lease of Equipment.** An ESBE firm may lease specialized equipment from a contractor, but not from the Contractor, if it is consistent with normal industry practices and at rates competitive for the area. Rental agreements must be for short periods of time, specify the terms of the agreement and involve specialty equipment to be used at the job site. The lease may allow the operator to remain on the lessor's payroll, if it is the generally accepted industry practice but the operation of the equipment must be subject to full control by the ESBE. The ESBE shall provide the operator for non-specialized equipment, and is responsible for all payroll and labor compliance requirements. A separate lease agreement is required.
6. **ESBE Trucking.** ESBE trucking companies must perform a commercially useful function in accordance with 49 CFR Part 26.55 et seq. Contrived arrangements for the purpose of meeting ESBE goals will not be allowed. The ESBE must be responsible for the management and supervision of the entire trucking operation on a contract-by-contract basis, and must own and operate at least one fully, licensed, insured and operational truck used on the Contract.

The ESBE trucking firm is not permitted to obtain trucks from the Contractor to perform work on the project. The ESBE may lease trucks from a subcontractor working on the project, provided the trucks are obtained from the subcontractor prior to the project letting. The ESBE may also lease trucks from non-ESBEs and owner –operators. Bona fide lease agreements must be for the length of time needed by the ESBE on the Contract and signed by both the ESBE and the firm(s), either certified ESBE or non-ESBE, from which the trucks will be leased. Leases must indicate that the ESBE has exclusive use and control over the truck. As per 49 CFR Part 26.55(d)(7), all leased trucks, including non-ESBE trucks must display the name and USDOT identification number issued for interstate commerce, of the ESBE firm on the outside of the truck. ESBE firms are expected to use the same trucks for ESBE credit on all projects so use of leased vehicles on a project-by-project basis is not permitted.

The Contractor shall have signed Hiring Agreements. Submit copies of these signed Hiring Agreements, and copies of all signed lease agreements to the RE prior to the trucking firm's commencing work on the project. Prior to the ESBE trucking firm beginning work on the Contract, ESBE Trucking firms will be required to complete the ESBE Trucking Verification (Form CR-274). The ESBE and Contractor must sign the form and the Contractor submit the original CR-274 form directly to the Department's RE, with a copy submitted to the DCR/AA. The Contractor is not permitted to complete any portion of the CR-274 form. The Contractor must prepare, sign and submit with the CR-267 - Monthly Report of Utilization of DBE/ESBE or SBE form, a Monthly Trucking Verification form (Form CR-271), identifying each truck owner, ESBE Certification number, company name and address, truck number, and commission or amount paid for all ESBE and non-ESBE truckers performing work on the project. Also, submit the form to the Department as per Section E of this Special Provision for the DCR/AA's review, approval and determination of credit toward the Contract goal. Failure to submit the forms may result in denial or limit of credit toward the Contract ESBE goal, payment being delayed or withheld as specified in Section 105, assessing sanctions or termination of the Contract as specified in Section 108.

7. **ESBE Regular Dealers.** ESBE regular dealers 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. In addition, a regular dealer must own, operate or maintain 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 this contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

When the Contractor seeks credit toward the Contract ESBE goal using ESBE regular dealers, the ESBE Regular Dealer/Supplier Verification (Form CR-272) must be completed and signed by the ESBE regular dealer and then signed by the Contractor. Submit the form to the Department as per Section E of this Special Provision for the DCR/AA review, approval and determination of credit toward the Contract goal.

- 8. **ESBE Manufacturer.** ESBE manufacturers must be a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required for this Contract.
 - 9. The Contractor shall not use an ESBE solely for the purpose of acting as an extra participant in a transaction, a contract or the Contract through which funds are passed in order to obtain the appearance of ESBE participation.
- I. **Good Faith Effort.** To demonstrate good faith efforts to meet the Contract ESBE goal, a Contractor shall, on an ongoing basis, document the steps it takes to obtain ESBE participation in accordance with 49 CFR Part 26.53 and Appendix A, including but not limited to the following:

- 1. Conducting market research to identify small business contractors and suppliers and soliciting through all reasonable and available means the interest of all certified ESBEs that have the capability to perform the work of the Contract. This may include attendance at pre-bid and business matchmaking meetings and events, advertising and/or written notices, posting of Notices of Sources Sought and/or Requests for Proposals, written notices or emails to all ESBEs listed in the State's directory of transportation firms that specialize in the areas of work desired (as noted in the ESBE directory) and which are located in the area or surrounding areas of the project.

Solicit this interest as early in the acquisition process as practicable to allow the ESBEs to respond to the solicitation and submit a timely offer for the subcontract. Determine with certainty if the ESBEs are interested by taking appropriate steps to follow up initial solicitations.

- 2. Selecting portions of the work to be performed by ESBEs in order to increase the likelihood that the ESBE goals will be achieved. This includes, where appropriate, breaking out Contract work items into economically feasible units (for example, smaller tasks or quantities) to facilitate ESBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces. This may include, where possible, establishing flexible timeframes for performance and delivery schedules in a manner that encourages and facilitates ESBE participation.
- 3. Providing interested ESBEs with detailed information about the plans, specifications, and requirements of the Contract in a timely manner to assist them in responding to a solicitation with their offer for the subcontract. Attempt to contact all potential subcontractors on the same day and use similar methods to contact them;
- 4. Negotiating in good faith with interested ESBEs. Make a portion of the work available to ESBE subcontractors and suppliers and select those portions of the work or material needs consistent with the available ESBE subcontractors and suppliers, so as to facilitate ESBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of ESBEs 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 ESBEs to perform the work.

Consider a number of factors in negotiating with subcontractors, including ESBE subcontractors. 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 ESBEs is not in itself sufficient reason for failure to meet the Contract ESBE goal, as long as such costs are reasonable. The ability or desire of a Contractor to perform the work of a Contract with its own organization does not relieve the responsibility to make good faith efforts. Contractors are not, however, required to accept higher quotes from ESBEs if the price difference is excessive or unreasonable.

- 5. Not rejecting ESBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union status) are not legitimate causes for the rejection or non-solicitation of bids in the Contractor's efforts to meet the Contract ESBE goal. Another practice considered an insufficient good faith effort is the rejection of the ESBE because its quotation for the work was not the lowest received. However, nothing in this paragraph shall be construed to require the Bidder to accept unreasonable quotes in order to satisfy the Contract ESBE goal.

Inability to find a replacement ESBE at the original price is not alone sufficient to support a finding that good faith efforts have been made to replace the original ESBE. The fact that the Contractor has the ability and/or desire to perform the contract work with its own forces does not relieve the Contractor of the obligation to make good faith efforts to find a replacement ESBE, and it is not a sound basis for rejecting a prospective replacement ESBEs reasonable quote.

Attempt, wherever possible, to negotiate prices with potential subcontractors which submitted higher than acceptable price quotes.

Keep a record of efforts, including the names of businesses contacted and the means and results of such contacts.

6. Making efforts to assist interested ESBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
7. Making efforts to assist interested ESBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
8. Effectively using the services of available minority/women community organizations; minority/women 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 ESBEs.

If the Contractor fails to meet the Contract ESBE goal, they must submit documented evidence of good faith effort(s) with the CR-268 final ESBE Report to the DCR/AA for review and approval. Submittal of such information does not imply DCR/AA approval. The Department's DCR/AA has sole authority to determine whether the Contractor met the goal or made adequate good faith efforts to do so. If the DCR/AA determines that the Contractor has failed to meet the Contract ESBE goal or made adequate good faith effort to do so, the Department will follow Section 105.

J. Submission of Affirmative Action Program

Contractors, subcontractors and professional service firms performing work for the Department are required to submit their company's Affirmative Action Program annually to the DCR/AA. Contractors must have an **approved** Affirmative Action Program on file in the DCR/AA no later than seven (7) State business days after the date of bid opening. No recommendations to award will be made without an approved Affirmative Action Program on file in the DCR/AA. Ensure subcontractors and professional service firms have an approved Affirmative Action Plan on file in the DCR/AA prior to their beginning work on a particular project.

The Annual Affirmative Action Program will include, but is not limited to the following:

1. Copy of company's comprehensive EEO/Affirmative Action Plan, , with a cover page that includes the company name and address, and signature of the Chief Executive or EEO Officer..
2. Copy of document designating the company's corporate EEO Officer, including the name, address and contact telephone number for the officer, and signature of the Chief Executive or President, on company letterhead..
3. Copy of the company's EEO Policy Statement on company letterhead, dated and signed by the Chief Executive and the EEO Officer.
4. Copy of the company's Sexual Harassment Policy on company letterhead.
5. EEO Legend such as letterhead, envelope, or published advertisement showing the company is an equal opportunity employer
6. Copy of document designating the company's the company's ESBE Liaison Officer to administer the firm's Emerging Small Business Program.
7. ESBE Affirmative Action Plan which is an explanation of affirmative action methods intended to be used to seek out and consider ESBEs as subcontractors, material suppliers or equipment lessors. This refers to the Contractor's ongoing responsibility, i.e., Emerging Small Business Enterprise/Affirmative Action activities after the award of the Contract and for the duration of the Contract.

- K. ESBE Liaison Officer.** Designate an ESBE Liaison Officer who shall be responsible for the administration of your ESBE program in accordance with the Contract, and ensuring that the Contractor complies with all provisions of 49 CFR Part 26.
- L. Consent by Department to Subletting.** The Department will not approve any subcontract proposed by the Contractor unless and until said Contractor has complied with the terms of the Contract.
- M. Conciliation.** Allegations of breach of any obligation contained in these ESBE provisions will be investigated by the DCR/AA, the Federal Highway Administration and/or the USDOT.
- N. Documentation**
- 1. Requiring of Information.** The Department or the Federal funding agencies may at any time require information as specified in Section 107 and deemed necessary in the judgment of the Department to ascertain the compliance of any Bidder, Contractor or subcontractor with the terms of the Contract.
 - 2. Records and Reports.** The Contractor, subcontractors and other sub-recipients will keep such records as are necessary to determine compliance with its Emerging Small Business Enterprise Utilization obligations. These records kept will be designed to indicate:
 - a. The names of ESBE contractors, subcontractors, equipment lessors and material suppliers contacted for work on the Contract, including when and how contacted, and the specific Contract work items and other information provided to each.
 - b. Work, services and materials which are not performed or supplied by the Contractor.
 - c. The actual dollar value of work subcontracted and awarded to ESBEs, including specific Contract work items and cost of each work item.
 - d. The progress made and efforts taken in seeking out and utilizing ESBEs. This includes solicitations, specific Contract work items and the quotes and bids regarding those specific Contract work items, supplies, leases, or other contract items.
 - e. Detailed written documentation of all correspondence, contacts, telephone calls, including names and dates, to obtain the services of ESBEs on the Contract.
 - f. Records of all ESBEs and non-ESBEs who have submitted quotes/bids to the Contractor on the Contract.
 - g. Monthly CR-267 – Monthly Report, Utilization of DBE/ESBE or SBE, and other reports required for submission to the Department, hiring agreements, subcontracts, lease agreements, equipment rental agreements, supply tickets, delivery slips, payment information, and other records documenting ESBE utilization on the Contract.
 - h. Documentation outlining EEO workforce information for the Contract.
 - i. Documentation outlining EEO and Affirmative Action efforts made in the administration and performance of the Contract.
 - 3. Submission of Reports, Forms and Documentation.** Submit reports, forms and documentation, as required by the Department, on those contracts and other business transactions executed with ESBEs in such form and manner as may be prescribed by the Department. Failure to submit the required forms, reports or other documentation as required may result in payment being delayed or withheld as specified in Section 105, assessing sanctions, or termination of the contract as specified in Section 108. Submission of falsified forms, reports or other required documentation may result in termination of the Contract as specified in Section 108, investigation by the Department’s Inspector General, or U.S.D.O.T., or both, and prosecution by the State Attorney General’s Office or U.S. Department of Justice, or both.
 - 4. Maintaining Records.** All records must be maintained for a period of three (3) years following acceptance of final payment and will be available for inspection by the Department, or the Federal funding agencies.
- O. Prompt Payment to Subcontractors.** On Federal Aid Projects, payment to subcontractors, equipment lessors, suppliers and manufacturers is made in accordance with Section 109.
- P. Non-Compliance.** Failure by the Contractor to comply with the ESBE program, rules, regulations of 49 CFR Part 26 and these provisions in the administration of the Contract may result in denial or limit of credit toward the Contract ESBE goal, payment being delayed or withheld as specified in Section 105, assessing

sanctions, liquidated damages as specified in Section 108, default as specified in Section 108, debarment, or termination of the Contract as specified in Section 108. The Contractor may further be declared ineligible for future department contracts.

FEDERAL AID PROJECT ATTACHMENT 2

SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES ON NJDOT FEDERAL AID PROJECTS

(23 CFR, PART 230, SUBPART A, APPENDIX A TO SUBPART A - SPECIAL PROVISIONS)

The Contractor is obligated to comply with the policies, procedures and guidelines relative to the implementation of an Equal Employment Opportunity Program on Federal and Federal Aid Highway construction contracts, except for those contracts awarded under 23 U.S.C. 117, and to the preparation and submission of reports pursuant thereto as per 23 CFR, Part 230, Subpart A, Appendix A to Subpart A - Special Provisions.

A. General

1. **Equal Employment Opportunity Requirements.** Equal employment opportunity requirements not to discriminate and to take affirmative action to assure equal employment opportunity as required by Executive Order 11246 and Executive Order 11375 are set forth in Required Contract, Provisions (Form FHWA-1273 or 1316, as appropriate) and these Special Provisions which are imposed pursuant to 23 USC 140, as established by Section 22 of the Federal Aid Highway Act of 1968. The requirements set forth in the Contract constitute the specific affirmative action requirements for project activities under this Contract and supplement the equal employment opportunity requirements set forth in the Required Contract Provisions.
2. The Contractor will work with the State agencies and the Federal Government in carrying out Equal Employment Opportunity obligations and in their review of activities under the contract.
3. The Contractor, and all subcontractors holding subcontracts, not including material suppliers, of \$10,000 or more, will comply with the following minimum specific requirement activities of Equal Employment Opportunity: (The equal employment opportunity requirements of Executive Order 11246, as set forth in Volume 6, Chapter 4, Section 1, Subsection 1 of the Federal-Aid Highway Program Manual, are applicable to material suppliers, as well as contractors and subcontractors.) The Contractor will include these requirements in every subcontract of \$10,000 or more with such modification of language as is necessary to make them binding on the subcontractor.

- B. Equal Employment Opportunity Policy.** The Contractor will accept as its operating policy the following statement which is designed to further the provisions of equal employment opportunity to all persons without regard to their race, color, religion, sex, or national origin, and to promote the full realization of equal employment opportunity through a positive continuing program:

“It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training.”

- C. Equal Employment Opportunity Officer.** The Contractor will designate and make known to the Department contracting officers an Equal Employment Opportunity Officer (hereinafter referred to as the EEO Officer) who will have the responsibility for and must be capable of effectively administering and promoting an active EEO contractor program and who must be assigned adequate authority and responsibility to do so.

D. Dissemination of Policy

1. **Implementation.** All members of the Contractor’s staff who are authorized to hire, supervise, promote, and discharge employees, or who recommended such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the Contractor’s equal employment opportunity policy and contractual responsibilities to provide equal employment opportunity in each grade and classification of employment. To ensure compliance with the above agreement, the following actions will be taken as a minimum:

- a. **Initial Project Site Meeting.** Conduct an initial project site meeting with key supervisory and office personnel before or at the start of work, and then not less than once every 6 months, at which time the Contractor's Equal Employment Opportunity policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
 - b. **EEO Obligations.** All new supervisory and office personnel will be given a thorough indoctrination by the EEO Officer or other knowledgeable company official covering all major aspects of the Contractor's equal employment opportunity obligations within 30 days following their reporting for duty with the Contractor.
 - c. All personnel engaged in direct recruitment for the project will be instructed by the EEO Officer or appropriate company official in the Contractor's procedures for locating and hiring minority and female employees.
2. Take the following actions to make the Contractor's equal employment opportunity policy known to all employees, prospective employees and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc.:
 - a. Place notices and posters setting forth the Contractor's equal employment opportunity policy in areas readily accessible to employees, applicants for employment and potential employees.
 - b. Bring the Contractor's equal employment opportunity policy and the procedures to implement such policy to the attention of employees by means of meetings, employee handbooks, and/or other appropriate means.

E. Recruitment

1. When advertising for employees, include in all advertisements for employees the notation: "An Equal Opportunity Employer". Publish all such advertisements in newspapers or other publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
2. Unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority and female applicants, including, but not limited to, State employment agencies, schools, colleges and minority-group organizations. To meet this requirement, the Contractor will, through their EEO Officer, identify sources of potential minority and female group employees, and establish procedures with such identified sources whereby minority and female group applicants may be referred to the Contractor for employment consideration.
3. In the event the Contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he/she is expected to observe the provisions of that agreement to the extent that the system permits the Contractor's compliance with the equal employment opportunity contract provisions. (The US Department of Labor has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the Contractor to do the same, such implementation violates Executive Order 11246, as amended).
4. Encourage present employees to refer minority and female applicants for employment by posting appropriate notices or bulletins in areas accessible to all such employees. In addition, information and procedures pertaining to the referral of applicants will be discussed with employees.

F. Personnel Actions.

Wages, working conditions and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

1. Conduct a project site inspection at the start of work, and periodically thereafter, to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
2. Periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
3. Periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

4. Promptly investigate all complaints of alleged discrimination made to the Contractor in connection with its obligations under this Contract, and will resolve or attempt to resolve such complaints, within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, corrective action shall include such other persons. Upon completion of each investigation, inform complainants of all their avenues of appeal.

G. Training and Promotion

1. Assist in locating, qualifying, and increasing the skills of minority and women who are applicants for employment or current employees.
2. Advise employees and applicants for employment of available training programs and entrance requirements for each.
3. Periodically review the training and promotion potential of minority and female employees and encourage eligible employees to apply for such training and promotion.

H. On-the-Job Training. The Contractor, as part of their equal employment opportunity affirmative action program, shall provide on-the-job training aimed at developing full journey people in the type of craft or job classification involved on the project.

1. Apprenticeship and Training Programs

The minimum length and type of training for each position will be established in the training program selected by the Contractor and approved by the Department and the Federal Highway Administration. The Department will approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average apprentice or trainee for journey person status in the craft concerned by the end of the training period.

Apprenticeship programs registered with the US Department of Labor, Bureau of Apprenticeship and Training, (BAT) or with a State apprenticeship agency recognized by USDOL BAT and training programs approved but not necessarily sponsored by the US Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided such programs are being administered in a manner consistent with the equal employment obligations of Federal-aid highway contracts. Approval or acceptance of a training program shall be obtained from the DCR/AA prior to commencing work in the classifications covered by the Contractor's training program. The Division will review guidelines developed by the Contractor for approval or disapproval in accordance with the Training Guideline Approval Process described in the "Revised Standard Training Guidelines". The Division will also review existing guidelines for revision based on the same process.

It is the intention of these provisions that training be provided in construction crafts rather than clerk-typist or secretarial-type positions. Training is permitted in lower level management positions (e.g., timekeepers), where the training is oriented toward project site applications. Training in semi-skilled laborer positions is permitted provided that significant and meaningful training is available on the project site and approved by DCR/AA. Some offsite, classroom training (e.g., safety, first aid instruction) may be permitted as long as such training is an integral part of an approved training program and does not comprise a significant part of the overall training.

2. Contractor Submission and Department Approval of the Initial Training Program

At or after the preconstruction conference, and prior to the start of Work, submit a Training Program to the RE for review and comments prior to DCR/AA review and approval. The Contractor's training program shall include:

- a. Number of trainees or apprentices to be trained in all selected Training Positions,
- b. Standard Program Hours for all positions,
- c. Estimate of the Minimum Available Hours actually feasible on the project toward completion of the Standard Program Hours per position,
- d. Training schedule of Estimated Start Dates for the apprentices or trainees, developed and coordinated with the project's work progress schedule,
- e. Training Guidelines for all positions, and
- f. Training that will be provided by the Contractor and provided by Subcontractors.

The number of apprentices and trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journey people in the various crafts within a reasonable area of recruitment. Submit timely, revised Training Programs, as required throughout the project to ensure that feasible and Maximum Available Training is provided. Maximum Available Training is defined as bringing each apprentice or trainee onto the project when work first becomes available in his/her craft and providing all available training until hours are no longer available.

3. Assignment of Training to Subcontractors

In the event that portions of the Contract work are subcontracted, determine how many, if any, of the apprentices or trainees are to be trained by subcontractors, provided, however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by these Training Special Provisions. Ensure that these Training Special Provisions are made applicable to such subcontracts.

4. Reimbursement of the Contractor for Providing Training

The Contractor will be credited for each apprentice or trainee employed on the construction site who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such apprentices or trainees as provided hereinafter. Payment will be made under the pay item Trainees at the bid price in the Proposal per person-hour of training given an employee on this contract in accordance with an approved training program. If approved, payment will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other sources do not specifically prohibit the Contractor from receiving other reimbursement. Offsite, classroom training reimbursement may only be made to the Contractor when the company does one or more of the following and the apprentices or trainees are concurrently employed on a Federal-aid project: contributes to the cost of the training and/or provides instruction to apprentices or trainees or pays their wages during the offsite, classroom training (e.g., safety, first aid instruction) period.

Pay apprentices and trainees according to the project-specific New Jersey Department of Labor Prevailing Wage Rate Determination for the project. Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the Contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

I. Apprentice/Trainee Requirements of the Contract

The number of training positions will be _____, where feasible, consisting of at least _____ APPRENTICES and _____ TRAINEES. TRAINEE HOURS=_____.

Apprentices are defined as registered members of an approved apprenticeship program recognized by the United States Department of Labor (USDOL) Bureau of Apprenticeship and Training (BAT) or a New Jersey State apprenticeship agency recognized by USDOL BAT (e.g., New Jersey Department of Education). Graduates of the Pre-Apprenticeship Training Cooperative Program shall be classified as apprentices. Trainees are defined as skilled, semi-skilled or lower level management individuals receiving training per one of the approved NJDOT "Revised Standard Training Guidelines" (available from the DCR/AA).

Where feasible, assign at least 50% of the training positions to Skilled Crafts which include but are not limited to Carpenters, Dockbuilders, Electricians, Ironworkers and Operating Engineers.

1. Requirements for Recruitment, Selection and Approval of Apprentices and Trainees

Apprentices or trainees should be in their first year of apprenticeship or training. Interview and screen trainee candidates to determine if their actual work experience is equivalent to or exceeds that offered by the training program prior to submitting candidates on the Apprentice/Trainee Approval Memorandum (Form CR-1), via the RE, to the Division for review and approval or disapproval.

Training and upgrading of minorities (e.g., Blacks, Asians or Pacific Islanders, Native Americans or Alaskan Natives, Hispanics) and women toward journeyperson status is a primary objective of these Training Special Provisions. Accordingly, the Contractor shall make every effort to enroll minorities and women, by conducting systematic and direct recruitment through public and private sources likely to yield minority and female apprentices or trainees, to the extent that such persons are available within a reasonable area of recruitment. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as an apprentice or trainee in any position in which he or she has successfully completed a training course leading to journeyperson status or in which he or she has been employed as a journeyperson. The Contractor shall satisfy this requirement by including appropriate questions in the employment application or by other suitable means and by submitting an accurate and complete "Apprentice/Trainee Approval Memorandum" (Form CR-1) prior to the apprentice or trainee starting work on the project. Regardless of the methods used, the Contractor's records should document the findings in each case.

Skilled craft trainees may complete up to 3,000 total training hours on Department projects, with an extension of an additional 1,000 hours permitted on a case-by-case basis. Semi-skilled and lower-level management trainees attain journeyperson status upon completion of a training guideline and may complete up to three (3) different positions.

2. Documentation Required to be Signed by Apprentices or Trainees, and provided to the Department

Prior to the apprentice/trainee starting work on the project, submit an accurate, complete and signed Apprentice/Trainee Approval Memorandum for each apprentice/trainee to the RE for review, and final approval by DCR/AA. Once the notice that said apprentice/trainee has been approved to work on the Contract, said apprentice/trainee may start work on the Contract. No credit will be given for apprentices/trainees prior to said apprentice/trainee being approved by DCR/AA.

At the start of training, provide the RE and each apprentice or trainee with an applicable "Training Guideline" and, at the conclusion of training, an accurate and complete "Training Certificate for Reporting Hours to NJDOT" (Form CR-3), showing hours of training satisfactorily completed.

Maintain and submit an accurate and complete "NJDOT Contractor's 1409 Quarterly Training Report" (Form-CR-1409) to the RE within ten (10) days of the end of each training quarter (e.g., January 10, April 10, July 10, October 10); also provide a copy to each apprentice or trainee.

Maintain and submit accurate and complete "Biweekly Training Reports" (Form CR-2) to the RE, and each apprentice or trainee, as periodic reports documenting their performance under the Contract.

3. Determining Good Faith Compliance of Contract Apprentice/Trainee Program

Per the approved program or guideline, provide Maximum Available Training to apprentices and trainees by beginning their training as soon as feasible with the start of craft work utilizing the skill involved on the project construction site and by retaining them as long as training opportunities exist in their crafts or until their training program positions are completed.

Recall apprentices or trainees released due to reductions in force when the work scope permits and they are available to return. When they are unavailable to resume training on the project site, submit written proof of recall efforts and replacement candidates and/or positions in a timely manner. Do not terminate apprentices or trainees prior to completion of their training program positions without Department consultation and authorization. Apprentices or trainees are not required to be on board for the entire length of the Contract.

The Contractor shall have fulfilled the contractual responsibilities under these Training Special Provisions as specified in 23 CFR 230, Appendix B to Subpart A of Part 230 if the company has provided Acceptable Training to the number of apprentices or trainees specified in this contract and/or by providing the remaining hours required to complete training positions begun by apprentices or trainees on other projects. The number trained shall be determined on the basis of the total number enrolled on the Contract for a significant period.

Demonstrate all steps that have been taken in pursuance of enrolling minorities and women in the training program positions, prior to a determination as to whether the Contractor is in compliance with the Training Special Provisions of the Contract.

Submit to the RE written training program summaries at the 50% time and/or cost stage of the contract and also prior to project completion, describing all good faith efforts and particularly addressing Maximum Available Training for incomplete training positions, per the procedure found in the revised "Instructions for Implementing the Training Special Provisions".

4. Enforcement Measures and Contractor's Rating

Payment will not be made if either the failure to provide the required training or the failure to hire the apprentice or trainee as a journey person is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirements of the Contract.

Per established procedures and scheduled Contract Compliance Reviews, the Contractor's performance will be rated and reviewed periodically by the Department.

Failure of a Contractor to comply with the Training Special Provisions of the Contract, and as specified in 23 CFR Part 230, Appendix B to Subpart A of Part 230, may result in the actions as set forth as specified in Section 105.

J. Unions. If the Contractor relies in whole or in part upon unions as a source of employees, use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women within the unions, and to effect such union referrals to the construction project. Actions by the Contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

1. Use maximum effort to develop, in cooperation with the unions, joint training programs aimed at qualifying more minorities and women for union membership and increasing their skills in order for them to qualify for higher paying employment.
2. Use maximum effort to incorporate an equal employment opportunity clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.
3. Obtain information concerning the referral practices and policies of the labor unions except that to the extent such information is within the exclusive possession of the labor unions and such labor unions refuse to furnish this information to the Contractor, certify to the Department and set forth what efforts have been made to obtain this information.
4. In the event the unions are unable to provide the Contractor with a reasonable flow of minority and female referrals within the time limit set forth in the collective bargaining agreement, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability, making full efforts to obtain qualified and/or qualifiable minorities and women. (The US Department of Labor has held that it shall be no excuse that the union with which the Contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees). In the event the union referral practice prevents the Contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such Contractor shall immediately notify the Department.

K. Subcontracting

1. Use maximum effort to solicit bids from and to utilize minority subcontractors or subcontractors with meaningful minority and female representation among their employees. The Contractor may use lists of minority-owned construction firms as issued by the Department.
2. Ensure subcontractor compliance with the Contract Equal Employment Opportunity obligations.

L. Records and Reports

1. Maintain records necessary to determine compliance with the Contractor's equal employment opportunity requirements. Documents will include the following:
 - a. Number of minorities, non-minorities, and women employed in each work classification on the Contract.

- b. Progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and women (applicable only to Contractors who rely in whole or in part on unions as a source of their work force).
 - c. Progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees, and
 - d. Progress and efforts being made in securing the services of minority and female subcontractors or subcontractors with meaningful minority and female representation among their employees.
2. All such documents must be retained for a period of 3 years following completion of the Contract work and shall be available at reasonable times and places for inspection by authorized representatives of the Department and the Federal funding agencies.

FEDERAL AID PROJECT ATTACHMENT 3

REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY ON NJDOT FEDERAL AID PROJECTS

(MINORITY AND WOMEN WORK EMPLOYMENT GOAL OBLIGATIONS)

A. Employment Goals.

The goals for minority and female participation, in the covered area, expressed in percentage terms for the Contractor's aggregate work force in each trade, on all construction work are:

Minority And Women Employment Goal Obligations For Construction Contractors and Subcontractors on Federal Aid Projects		
County	Minority Participation Percent	Women Participation Percent
Atlantic	18.2	6.9
Bergen	22.6	6.9
Burlington	17.3	6.9
Camden	17.3	6.9
Cape May	14.5	6.9
Cumberland	16.0	6.9
Essex	17.3	6.9
Gloucester	17.3	6.9
Hudson	12.8	6.9
Hunterdon	17	6.9
Mercer	16.4	6.9
Middlesex	5.8	6.9
Monmouth	9.5	6.9
Morris	17.3	6.9
Ocean	17	6.9
Passaic	12.9	6.9
Salem	12.3	6.9
Somerset	17.3	6.9
Sussex	17	6.9
Union	17.3	6.9
Warren	1.6	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. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its Federally involved and non-Federally involved construction.

The Contractor's compliance with the Executive Order 11246 and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal 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. The hours of minority and female employment and training must be substantially uniform throughout the length of the Contract, and in each trade. Make a good faith effort to employ minorities and women evenly on each project. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for sole purpose of meeting the Contractor's goals is 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.

If a project is located in more than one county, the minority work hour goal, only, will be determined by the county which serves as the primary source of hiring or, if workers are obtained almost equally from one or more counties, the single minority goal will be the average of the affected county goals.

B. Reporting Requirements.

1. Provide the Department with written notification in triplicate within 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 will list the name, address and telephone number of the subcontractor; employer identification number of the subcontractor; 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.
2. Directly provide the Department with employment workforce data of the number and work hours of minority and non-minority group members and women employed in each work classification for the Contract. The Contractor, subcontractors, professional service firms and others working on the project must submit this information via a web-based application through the New Jersey portal, Vendor Workforce Reporting Manager. Instructions on how to complete Form CC-257R are provided within the web application. Instructions for registering and receiving the authentication code to access the web based application can be found at the Contractor Manpower Project Reporting CC-257R website at: <http://www.state.nj.us/transportation/business/civilrights/pdf/cc257.pdf>.
 - a. On a monthly basis, submit Form CC-257R through the web based application within 10 days following the end of each reporting month.
 - b. In addition to the above, submit a hard copy of the electronic Form CC-257R to the RE within 10 days following the end of each reporting month
 - c. Submit a copy of the confirmation e-mail of the successful submission of Monthly Employment Utilization Report to the RE within 10 days following the end of each reporting month.
3. All employment data must be accurate and consistent with the certified payroll records. The Contractor is responsible for ensuring compliance with these reporting requirements. Failure of the Contractor, subcontractors, professional service firms and others working on the Contract, to report monthly employment data may result in payments being delayed or withheld as per 105.01, or impact the Contractor's prequalification rating with the Department.

FEDERAL AID PROJECT ATTACHMENT 4

FEDERAL EQUAL EMPLOYMENT OPPORTUNITY CONTRACT SPECIFICATIONS FOR NJDOT FEDERAL AID PROJECTS

(AS REQUIRED PER EXECUTIVE ORDER 11246 AS AMENDED BY EXECUTIVE ORDER 11375 AND IMPLEMENTING REGULATIONS AT 41 C.F.R. PART 60)

- A. As used in these Specifications:
1. Covered area means the County or Counties in which the Project is located.
 2. Director means Director, Office of Federal Contract Compliance Programs, United States Department of Labor or any person to whom the Director delegates authority.
 3. Employer identification number means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, US Treasury Department Form 941.
 4. Minority includes:
 - a. Black (a person having origins in any of the black African racial groups not of Hispanic origin);
 - b. Hispanic (a person of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish culture or origin, regardless of race);
 - c. Asian and Pacific Islander (a person having originals in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
 - d. American Indian or Alaskan Native (a person having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participating or community identification).
- B. 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.
- C. Implement the specific affirmative action standards provided in paragraphs F1 through 16 of these specifications. 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. Covered Construction Contractors performing construction work in geographical areas where they do not have a Federal or Federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
- D. 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 excuses the Contractor's obligations under these Specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
- E. 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 US Department of Labor.
- F. Take specific affirmative action 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. Document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
1. 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. Where possible, assign

two or more women to each construction project. Specifically ensure that all foreman, 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.

2. 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.
3. 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 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 back to the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
4. Provide immediate written notification to the Director when the union or unions with which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or 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.
5. 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 source compiled under F2 above.
6. 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 its 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.
7. 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.
8. 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.
9. 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.
10. 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.
11. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.

12. 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.
 13. 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.
 14. Ensure that all facilities and company activities are provided in a manner such that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin cannot result. Do not require such segregated use by written or oral policies, nor tolerate such use by employee custom. Provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.
 15. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction Contractor and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 16. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
- G. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (F1 through 16). 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 F1 through 16 of these Specifications 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.
- H. A single goal for minorities and a separate single 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 nonminority. 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).
- I. Do not use the goals and timetables or affirmative action standards to discriminate against any person because of race, creed, color, national origin, age, ancestry, nationality, gender, disability, sex, affectional or sexual orientation, gender identity or expression, religion, and liability for military service.
- J. Do not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
- K. Carry out such sanctions and penalties for violation of these specifications and of the Equal Opportunity Clause, including suspensions, 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.
- L. Implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph F 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 these specifications, the Director shall proceed in accordance with 41 CFR 60-4.8.

- M. 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 hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone number, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (such as 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.
- N. 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 (such as those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).
- O. Failure of the Contractor or subcontractors to comply with the nondiscrimination provisions of the Contract may result in payment being delayed or withheld as specified in 105.01; default as specified in 108.14, liquidated damages as specified in 108.20, or termination of the Contract as specified in 108.15.02 pending corrective and appropriate measures taken by the Contractor to the satisfaction of the Department.

FEDERAL AID PROJECT ATTACHMENT 5

STATE OF NEW JERSEY MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE ON NJDOT FEDERAL AID PROJECTS

(N.J.S.A. 10:5-31 ET SEQ. (P.L.1975, C.127) N.J.A.C. 17:27-1.1 ET SEQ.)

During the performance of this contract, the contractor agrees as follows:

The Contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the Contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Department 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 will send to each labor union, with which it has a collective bargaining agreement, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The Contractor or subcontractor, where applicable, agrees to comply with any regulations promulgated by the Treasurer, pursuant to N.J.S.A. 10:5-31 et seq., as amended and supplemented from time to time and the Americans with Disabilities Act.

When hiring or scheduling workers in each construction trade, the Contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Dept. of 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 sub-contractor 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 sub-contractor agrees to afford equal employment opportunities 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 that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.

- B. If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of “A” above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the Contractor or subcontractor agrees to take the following actions:
1. To notify the public agency compliance officer, the Dept. of LWD, Construction EEO Monitoring Program, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;
 2. To notify any minority and women workers who have been listed with it as awaiting available vacancies;
 3. Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the Contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;
 4. To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the Contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;
 5. If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and non-discrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions;
 6. To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:
 - a. The Contractor or subcontractor shall interview the referred minority or women worker.
 - b. 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.
 - c. 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.
 - d. 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, Construction 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 Department and the Department of LWD, Construction EEO Monitoring Program an initial project workforce report (Form AA-201) electronically provided to the Department by the Department of LWD, Construction EEO Monitoring Program, through its web-site, 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 Department.

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 re-requested by the Dept. of LWD, Construction EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1.1 et seq.

It is the policy of the NJDOT that its contracts should create a work-force that reflects the diversity of the State of New Jersey. Therefore, contractors engaged by the NJDOT 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 NJDOT satisfaction that a good faith effort was made to ensure that minorities and women have been afforded equal opportunity to gain employment under the NJDOT contract with the Contractor. Payment may be withheld from a Contractor's contract for failure to comply with these provisions.

Evidence of a "good faith effort" includes, but is not limited to:

1. The Contractor shall recruit prospective employees through the New Jersey Career Connections website, managed by the Department of Labor and Workforce Development, available online at: http://careerconnections.nj.gov/careerconnections/for_businesses.shtml
2. The Contractor shall keep specific records of its efforts, including records of all individuals interviewed and hired, including the specific numbers of minorities and women;
3. The Contractor shall actively solicit and shall provide the NJDOT with proof of solicitations for employment, including but not limited to advertisements in general circulation media, professional service publications and electronic media; and
4. The Contractor shall provide evidence of efforts described at 2 above to the NJDOT no less frequently than once every 12 months.
5. The Contractor shall comply with the requirements set forth at N.J.A.C. 17:27-1.1 et seq.

FEDERAL AID PROJECT ATTACHMENT 6

INVESTIGATING, REPORTING AND RESOLVING EMPLOYMENT DISCRIMINATION AND SEXUAL HARASSMENT COMPLAINTS ON NJDOT FEDERAL AID PROJECTS

The Contractor and subcontractors agrees to the following requirements in order to implement fully the nondiscrimination provisions of the Contract.

The Contractor agrees that in instances when it receives from any person working on the project site a verbal or written complaint of employment discrimination, prohibited under N.J.S.A. 10:5-1 et seq., 10:2-1 et seq., 42 U.S.C. 2000(d) et seq., 42 U.S.C. 2000 (e) et seq. and Executive Order 11246, it shall take the following actions:

- A. Within one (1) working day commence an investigation of the complaint which shall include but not be limited to interviewing the complainant, the respondent, and all possible witnesses to the alleged act or acts of discrimination or sexual harassment.
- B. Prepare and keep for its use and file a detailed written investigative report which includes the following information:
 1. Investigatory activities and findings.
 2. Dates and parties involved and activities involved in resolving the complaint.
 3. Resolution and corrective action taken if discrimination or sexual harassment is found to have taken place.
 4. A signed copy of resolution of complaint by complainant and Contractor.

In addition to keeping in its files the above-noted detailed written investigative report, the Contractor shall keep for possible future review by the Department all other records, including but not limited to, interview memos and statements.

- C. Upon the request of the Department, provides to the Department within ten (10) calendar days a copy of its detailed written investigative report and all other records on the complaint investigation and resolution.
- D. Take appropriate disciplinary action against any Contractor employee, official or agent who has committed acts of discrimination or sexual harassment against any contractor employee or person working on the project. If the person committing the discrimination is a subcontractor employee, then the Contractor is required to attempt to effectuate corrective and/or disciplinary action by the subcontractor in order to establish compliance with the Contract.
- E. Take appropriate disciplinary action against any Contractor employee, official or agent who retaliates, coerces or intimidates any complainant and/or person who provides information or assistance to any investigation of complaints of discrimination or sexual harassment. If the person retaliating, coercing or intimidating a complainant or other person assisting an investigation is a subcontractor's employee, then the Contractor is required to attempt to effectuate corrective and/or disciplinary action by the subcontractor in order to establish compliance with the Contract.
- F. Ensure to the maximum extent possible that the privacy interests of all persons who give confidential information in aid of the Contractor's employment discrimination investigation are protected.

In conjunction with the above requirements, the Contractor shall develop and post a written sexual harassment policy for its work force.

Failure by the Contractor and subcontractors to comply with the above requirements may be cause for the Department to institute against the Contractor any and all enforcement proceedings and/or sanctions authorized by the Contract or by State and/or Federal law.

FEDERAL AID PROJECT ATTACHMENT 7

PAYROLL REQUIREMENTS FOR NJDOT FEDERAL AID PROJECTS

- A. Payroll Reports.** Each Contractor and subcontractor shall furnish the RE with payroll reports for each week of contract work. Such reports shall be submitted within 10 days of the date of payment covered thereby and shall contain the following information:
1. Each employee's full name and an individually identifying number, (e.g. the last four digits of the employee's social security number) of each such employee.
 2. The ethnicity and gender of each employee.
 3. Each employee's specific work classification (s).
 4. Entries indicating each employee's basis hourly wage rate(s) and, where applicable, the overtime hourly wage rate(s). Any fringe benefits paid to approved plans, funds or programs on behalf of the employee must be indicated. Any fringe benefits paid to the employee in cash must be indicated.
 5. Each employee's daily and weekly hours worked in each classification, including actual overtime hours worked (not adjusted).
 6. Each employee's gross wage.
 7. The itemized deductions made.
 8. The net wages paid.
- B. Statement of Wages.** Each Contractor or subcontractor shall furnish a statement each week to the RE with respect to the wages paid each of its employees engaged in contract work covered by the Copeland Act, as amended during the preceding weekly payroll period. The statement shall be executed by the Contractor or subcontractor or by an authorized officer or employee of the Contractor or subcontractors who supervises the payment of wages. Contractors and subcontractors must use the certification set forth on the Department's CR-347, or any form with identical wording. Each payroll submitted must be accompanied by a signed "Statement of Compliance".
- C. Maintaining Records.** Contractor and subcontractor shall maintain complete social security numbers and home address for employees. Government agencies are entitled to request or review all relevant payroll information, including social security numbers and addresses of employees. Contractors and subcontractors are required to provide such information upon request.
- D. Lack of Compliance.** Failure of the Contractor or subcontractor to comply with the payroll requirements may result in payment being delayed or withheld as specified in Section 105, default as specified in Section 108 or termination of the Contract as specified in Section 108.
- E. Diane B. Allen Equal Pay Act, N.J.S.A. 34:11-56.14b.** Pursuant to the DIANE B. ALLEN EQUAL PAY ACT, N.J.S.A. 34:11-56.14.b., the Contractor shall provide to the Commissioner of the New Jersey Department of Labor and Workforce Development, through certified payroll records required pursuant to P.L.1963, c.150 (C.34:11-56.25 et seq.), information regarding the gender, race, job title, occupational category, and rate of total compensation of every employee of the employer employed in the State in connection with the Contract. The Contractor shall provide the Commissioner, throughout the duration of the Contract, with an update to the information whenever payroll records are required to be submitted pursuant to P.L.1963, c.150 (C.34:11-56.25 et seq.). Completed forms should be emailed to: equalpayact@dol.nj.gov. If online submission is not possible, the form should be mailed to: Equal Pay Act, New Jersey Department of Labor and Workforce Development, P.O. Box 110, Trenton, NJ 08625-110.

Information regarding the Diane B. Allen Equal Pay Act and its requirements may be obtained from the New Jersey Department of Labor and Workforce Development (LWD) website at: <https://nj.gov/labor/equalpay/equalpay.html>

LWD forms may be obtained from the online web site at: https://nj.gov/labor/forms_pdfs/equalpayact/MW-562withoutfein.pdf

FEDERAL AID PROJECT ATTACHMENT 8

FHWA-1273

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Government wide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: 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, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon

completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective

bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants /

Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:

The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor 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 contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, 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 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 paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which 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 in 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 under paragraph 1.b. 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:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the

contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour 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 paragraphs 1.b.(2) or 1.b.(3) of this section, 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 an 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.

2. Withholding

The contracting agency 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, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, 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.

3. Payrolls and basic records

a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. 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 cost 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 contracting agency. 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 contracting agency for transmission to the State DOT, the FHWA 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 this section 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 contracting agency..

(2) Each payroll submitted shall be accompanied by a "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:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) 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 in Regulations, 29 CFR part 3;

(iii) 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 paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, 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 to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, 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 to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

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 (programs of the USDOL).

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 this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The

straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. 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.

8. 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 herein incorporated by reference in this contract.

9. 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 the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who 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.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. 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 workweek in which he or she is employed on such work to work

in excess of forty hours in such workweek 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 workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contracting agency 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 in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section 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 paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased

employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;
- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

* * * * *

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal,"

and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

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

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

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

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

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

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS
ROAD CONTRACTS**

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

FEDERAL AID ATTACHMENT 9

STATE MANDATORY ADDENDUM TO FHWA-1273 REQUIRED CONTRACT PROVISIONS, FEDERAL AID CONSTRUCTION CONTRACTS AS AMENDED OR SUPPLEMENTED

ALL CONTRACTORS MUST PROVIDE THIS LANGUAGE IN ANY CONTRACT WITH THEIR SUBCONTRACTORS AS REQUIRED BY 2 CFR PART 200 AND 2 CFR PART 200 APPENDIX II AND IS CURRENTLY NOT INCLUDED IN FHWA-1273, BUT IS REFLECTED IN PROPOSED AMENDMENTS NOT YET FINALIZED.

FHWA-1273 shall be read to include:

1. All references to “race, religion, sex, color, national origin, age or disability” shall be read to include “sexual orientation and gender identity”.
2. SECTION IV. DAVIS-BACON ACT AND RELATED ACT PROVISIONS shall apply if the project is defined to be on a Federal Aid highway, regardless of the location of the project in compliance with 23 USC 133(i).
3. SECTION IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT shall require in conformance with 2 CFR Part 200 and 2 CFR Part 200 Appendix II that contractors on all Federal Aid construction contracts in excess of \$150,000 and all related subcontracts, supply contracts and vendor contracts “comply with all related standards, orders or regulations issued pursuant to the Clean Air Act (42 USC 7401-7671q) and the Federal Water Pollution Control Act as amended (33 USC 1251-1387) as required by 2 CFR 200.326.
4. SECTION X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION shall be read to comply with 2 CFR Part 200 and 2 CFR Part 200 Appendix II to replace the Excluded Parties List System with the System For Award Management (SAM) as required by 2 CFR Part 180.
5. If the work requires that cargo be shipped by oceanic transport or across the Great Lakes, in compliance with Section 3511 of the Duncan Hunter National Defense Authorization Act of 2009 amending the Cargo Preference Act, each contract shall require that cargoes financed “in any way with Federal funds for the account of any persons unless otherwise exempted” requires the use of US-flag vessels to transport the materials or equipment acquired for a specific Federal Aid construction project.

FEDERAL AID ATTACHMENT 10

FEDERAL MANDATORY EQUAL OPPORTUNITY LANGUAGE ON FEDERAL AID PROJECTS

(AUTHORITY SUBJECT TO 41 CFR 60-1.4 IN COMPLIANCE WITH 2 CFR PART 200 AND 2 CFR PART 200 APPENDIX II)

All Contractors regardless of the value of the contract shall have this mandatory clause with their subcontractors:

The Contractor/Subcontractor hereby agrees that it will incorporate or cause to be incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following equal opportunity clause:

During the performance of this contract, the contractor agrees as follows:

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, 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.
- (2) 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, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) 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' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

- (7) 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 canceled, 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 may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- (8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) 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 the administering agency 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 the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: *Provided*, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

FEDERAL AID ATTACHMENT 11

BYRD ANTI-LOBBYING CERTIFICATION

Pursuant to 31 USC 1352 and 49 CFR part 21, Contractor and all subcontractors are required to comply with this Attachment. Contractor and all subcontractors shall be responsible to fill out Disclosure of Lobbying Activities Standard Form – LLL (as contained in this Attachment) and report it to the NJDOT Contract Compliance Unit for appropriate disclosure to the Federal Government.

All Contracts and subcontracts over \$100,000 shall require the following mandatory language in every contract:

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

1. No federal appropriate funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, or any employee of a Member of Congress in connection with this Federal contract, grant, loan or cooperative agreement, the undersigned shall complete and submit Disclosure of Lobbying Activities Standard Form – LLL (Federal Aid Attachment Form 11) in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

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

Pt. 21, App. B

31 CFR Subtitle A (7-1-10 Edition)

APPENDIX B TO PART 21—DISCLOSURE FORM TO REPORT LOBBYING
DISCLOSURE OF LOBBYING ACTIVITIES

Approved by OMB
 0348-0046

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
 (See reverse for public burden disclosure.)

1. Type of Federal Action: <input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance		2. Status of Federal Action: <input type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. initial award <input type="checkbox"/> c. post-award		3. Report Type: <input type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change For Material Change Only: year _____ quarter _____ date of last report _____	
4. Name and Address of Reporting Entity: <input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, if known: Congressional District, if known: _____			5. If Reporting Entity in No. 4 is Subawardee. Enter Name and Address of Prime: Congressional District, if known: _____		
6. Federal Department/Agency: _____			7. Federal Program Name/Description: CFDA Number, if applicable: _____		
8. Federal Action Number, if known: _____			9. Award Amount, if known: \$ _____		
10. a. Name and Address of Lobbying Entity (if individual, last name, first name, MI): _____ (attach Continuation Sheet(s) SF-LLL-A, if necessary)			b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI): _____		
11. Amount of Payment (check all that apply): \$ _____ <input type="checkbox"/> actual <input type="checkbox"/> planned		13. Type of Payment (check all that apply): <input type="checkbox"/> a. retainer <input type="checkbox"/> b. one-time fee <input type="checkbox"/> c. commission <input type="checkbox"/> d. contingent fee <input type="checkbox"/> e. deferred <input type="checkbox"/> f. other; specify: _____			
12. Form of Payment (check all that apply): <input type="checkbox"/> a. cash <input type="checkbox"/> b. in-kind; specify: nature _____ value _____					
14. Brief Description of Services Performed or to be Performed and Date(s) of Service, including officer(s), employee(s), or Member(s) contacted, for Payment Indicated in Item 11: _____ (attach Continuation Sheet(s) SF-LLL-A, if necessary)					
15. Continuation Sheet(s) SF-LLL-A attached: <input type="checkbox"/> Yes <input type="checkbox"/> No					
16. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.				Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____	
Federal Use Only:				Authorized for Local Reproduction Standard Form - LLL	

Office of the Secretary of the Treasury

Pt. 21, App. B

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity 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 a covered Federal action. Use the SF-LLL-A Continuation Sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

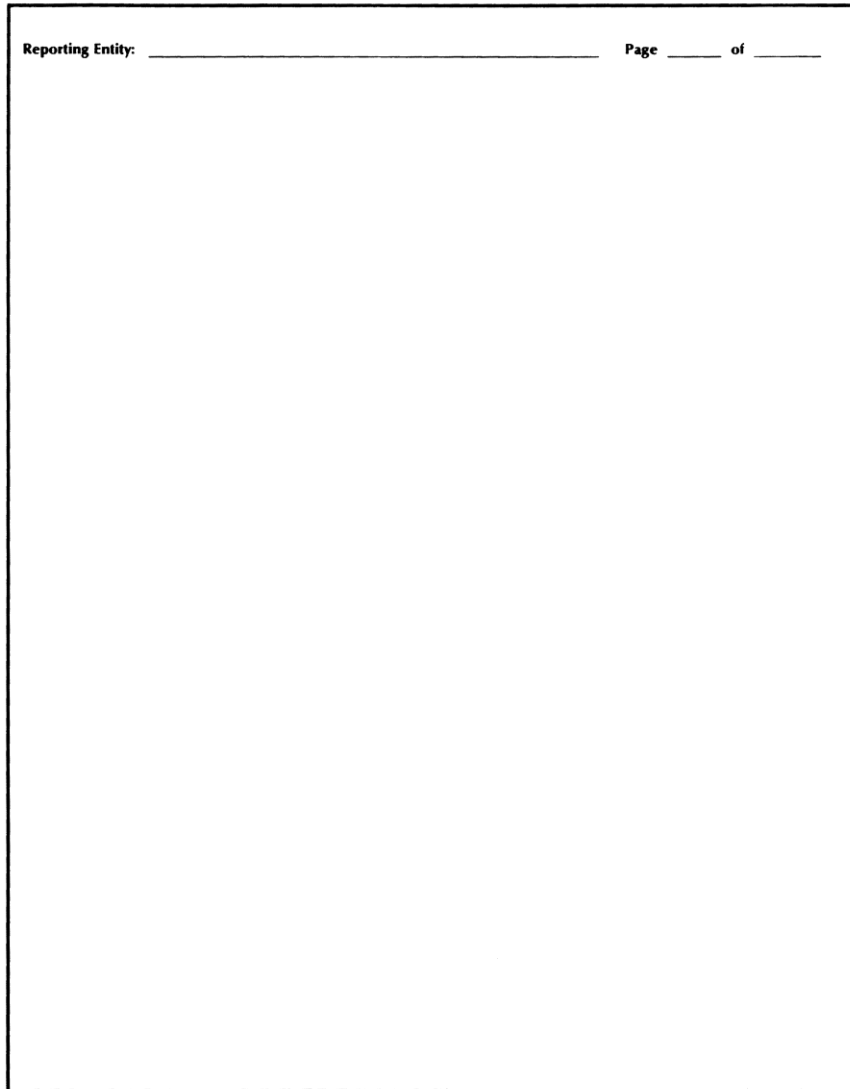
1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, state and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee", then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, state and zip code of the lobbying entity engaged by the reporting entity identified in item 4 to influence the covered Federal action.
(b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
11. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (item 4) to the lobbying entity (item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.
12. Check the appropriate box(es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.
13. Check the appropriate box(es). Check all boxes that apply. If other, specify nature.
14. Provide a specific and detailed description of the services that the lobbyist has performed, or will be expected to perform, and the date(s) of any services rendered. Include all preparatory and related activity, not just time spent in actual contact with Federal officials. Identify the Federal official(s) or employee(s) contacted or the officer(s), employee(s), or Member(s) of Congress that were contacted.
15. Check whether or not a SF-LLL-A Continuation Sheet(s) is attached.
16. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503.

**DISCLOSURE OF LOBBYING ACTIVITIES
CONTINUATION SHEET**

Approved by OMB
0348-0046

Reporting Entity: _____ Page _____ of _____



Authorized for Local Reproduction
Standard Form - ULL-A

STATE FUNDED PROJECT ATTACHMENT 1

SMALL BUSINESS ENTERPRISE UTILIZATION ON WHOLLY STATE FUNDED PROJECTS

- A. Utilization of Small Business Enterprises Businesses as Subcontractors, Transaction Expeditors, Regular Dealers, Manufacturers and Truckers.** The Department advises the Contractor and subcontractor that failure to carry out the requirements set forth in this attachment constitutes a material breach of Contract and, after notification to the applicable State agency, may result in termination of the agreement or Contract by the Department or such remedy as the Department deems appropriate. Requirements set forth in this section shall also be physically included in all subcontract agreements in accordance with State of New Jersey requirements.
- B. Policy.** It is the policy of the Department that Small Business Enterprises (SBE), as defined in N.J.A.C. 12A:10A-1.2 et seq., and N.J.A.C. 17:14-1.2 et seq., shall have the maximum opportunity to participate in the performance of contracts financed wholly with State funds. In this regard, the Department and all Contractors shall take all necessary and reasonable steps to ensure that registered Small Business Enterprises are utilized on, compete for, and perform on NJDOT construction contracts.
- C. Definitions**
- 1. Small Business Enterprise.** A businesses which has its principal place of business in the State of New Jersey; is independently owned and operated; has no more than 100 full-time employees; has gross revenues that do not exceed the applicable Federal revenue standards referenced at N.J.A.C. 17:14-2.1; and satisfies any additional eligibility standards under this chapter.

Small businesses with no more than 100 full-time employees will be registered in one of the following three categories:

 - a. Small business with gross revenues that do not exceed \$3 million.
 - b. Small businesses with gross revenues that do not exceed 50 percent of the applicable annual revenue standards set forth in federal regulation at 13 CFR 121.201, incorporated herein by reference, and as may be adjusted periodically.
 - c. Small business with gross revenues that do not exceed the applicable annual revenue standards set forth in federal regulation at 13 CFR 121.201, incorporated herein by reference, as may be adjusted periodically.

The business must be independently owned and operated, with management being responsible for both its daily and long-term operation, as well as owning at least 51 percent interest in the business.

Businesses must be incorporated or registered with the Division of Revenue & Enterprise Services to do business in the State and have its principal place of business in New Jersey, defined when:

 - a. 51 percent or more of its employees work in New Jersey supported by paid New Jersey unemployment taxes or;
 - b. 51 percent or more of its business operations/activities occur in New Jersey supported by income and/or business tax returns.
 - c. The business must be a sole proprietorship, partnership, limited liability company or corporation with 100 or fewer employees in full-time positions, not including:
 1. Seasonal and part-time employees employed for less than 90 days, if seasonal and casual part-time employment are common to that industry and
 2. Consultants employed under contracts for which the business wants to be eligible as a small business.
 - 2. Commercially Useful Function (CUF).** A SBE performs a commercially useful function when it is responsible for execution of a distinct element of the work of a contract and carrying out its responsibility by actually performing, managing and supervising the work involved. To perform a commercially useful function, the SBE must also be responsible, with respect to materials and supplies used on the contract, for preparing the estimate, negotiating price, determining quality and

quantity, ordering the material, arranging delivery, installing (where applicable), and paying for the material and supplies itself for the project.

3. **Transaction expeditor (broker).** A SBE who arranges or expedites transactions and who arranges for material drop shipments.
4. **SBE regular dealers.** A firm that 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. In addition, a regular dealer must own, operate or maintain a store, warehouse, or other establishment in which the materials, supplies, articles or equipment required under this Contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
5. **SBE manufacturer.** A firm that operates or maintains a factory or establishment that produces on the premises, the materials, supplies, articles, or equipment required for the Contract.
6. **Good faith effort (GFE).** Efforts to achieve a SBE goal or other requirement of N.J.A.C. 12A: 10A-1.2 et seq., and N.J.A.C. 17:14-1.2 et seq., which by their scope, intensity, and appropriateness to the objective, can reasonably be expected to fulfill the program requirement. Efforts to include firms not certified as SBEs in the state where the contract is being let are consequently not good faith efforts to meet a SBE contract goal.

D. Compliance. The Contractor is responsible for compliance as specified in Section 105.

E Contractor SBE Goal Obligations. Ensure that SBEs have an equal opportunity to receive and participate in contracts and subcontracts financed in whole with State funds in performing work with the Department. Take all necessary and reasonable steps in accordance with the Contract to ensure that SBEs are given equal opportunity to compete for and to perform on the Department's wholly State funded projects. Do not discriminate in the award and performance of any Contract obligation including, but not limited to, performance of obligations on wholly State funded contracts, as specified in Section 107.

1. Post Award Obligations

- a. Give SBEs equal consideration with non-small business firms in negotiation for any subcontracts, purchase orders or leases.
- b. Attempt to obtain qualified SBEs to perform the work. A directory of registered Small Businesses Enterprise firms can be found in the New Jersey Selective Assistance Vendor Information (NJSAVI) database online at: https://www20.state.nj.us/TYTR_SAVI/vendorSearch.jsp

2. Affirmative Action After Award of the Contract

- a. **Subletting.** If at any time following the award of the Contract, the Contractor intends to sublet any portion(s) of the work under said Contract, or intends to purchase material or lease equipment not contemplated during preparation of bids, take affirmative action:
 - (1) Notify the RE, in writing, of the type and approximate value of the work which the Contractor intends to accomplish by such subcontract, purchase order or lease.
 - (2) Submit the Post-Award SBE Certification Form to the Regional Supervising Engineer with the application to sublet, or prior to purchasing material or leasing equipment. Obtain Post Award SBE Certification forms from the RE.
 - (3) Efforts made to identify and retain a SBE as a replacement subcontractor, lower tier subcontractor, transaction expeditor, regular dealer, supplier, manufacturer or trucker when the arrangements with the original SBE prove unsuccessful, shall be followed as specified for SBE subcontractors in Section 108. Work in the category concerned shall not begin until such approval is granted in writing by the Department.
 - (4) Notification of a SBE subcontractor's termination will be the same as for SBE subcontractors, specified in Section 108. Send notice in writing to the Department through the RE, with a copy to DCR/AA. Said termination notice will include the firm's ethnic classification, whether the firm is a SBE and the detailed reason(s) for termination.
- b. **Selection and Retention of Subcontractors.** Do not discriminate in the selection and retention of subcontractors, including procurement of materials and leases of equipment as specified in 108.01. Provide the RE with a listing of firms, organizations or enterprises solicited and those

utilized as subcontractors on the proposed project. Such listing shall clearly delineate which firms are classified as SBEs. Provide the RE with subcontract agreements for all subcontractors performing work on the Contract as specified in Section 108.

- (1) Efforts made to identify and retain a SBE as a replacement subcontractor, lower tier subcontractor, transaction expeditor, regular dealer, supplier, manufacturer or trucker when the arrangements with the original SBE prove unsuccessful, shall be the same as for SBE subcontractors and submitted as specified in Section 108. Work in the category concerned shall not begin until such approval is granted in writing by the Department.
 - (2) Notification of a SBE firm's termination will be as specified in Subsection 108.01. Send notice in writing to the Department through the RE. Said termination notice will include the firm's ethnic classification, whether the firm is a SBE and the detailed reason(s) for termination.
- c. Meeting Contract SBE Goal.** Report attainment toward meeting the Contract SBE goal by submitting monthly, all SBE participation, to the Department's RE and DCR/AA Contract Compliance Unit using the CR-267 – Monthly Report of Utilization of DBE/ESBE or SBE form. The form is due by the 5th of the month, and must list all SBEs used on the Contract to meet the Contract goal, the specific Contract work items each SBE is performing, whether the SBE is performing full or partial work on the items, and the amount paid to each SBE each month. Failure to report the information, and accurately report it may result in payment being delayed or withheld as specified in Section 105, assessing sanctions, or termination of the Contract as specified in Section 108.
- d. Termination, Substitution or Replacement of SBEs.** Make good faith efforts to replace a SBE that is terminated or has otherwise failed to complete its work on the Contract with another registered SBE, to the extent needed to meet the Contract SBE goal. Notify the DCR/AA immediately of the SBE's inability or unwillingness to perform and provide reasonable documented evidence. Prior to termination, substitution or replacement of a SBE subcontractor, lower-tier subcontractor, transaction expeditor, regular dealer, supplier, manufacturer or trucker, submit a Revised CR-266 – Schedule of DBE/ESBE/SBE Participation form to the Department naming the replacement SBE firm(s), type of work performed, specific Contract work items, whether the SBE is performing full or partial work on the items, dollar value and percent of total Contract for each SBE firm. Submit detailed written explanation of why each change is being made, including documented evidence of good faith effort(s) with the submission of the revised Form CR- 266. Submit along with the revised CR-266: 1) a completed Confirmation of SBE Firm (Form CR-273) to demonstrate direct written confirmation from each SBE firm participating on the Contract, confirming the kind and amount of work that was provided on the Contractor's CR-266, and if applicable; 2) a completed SBE Regular Dealer/Supplier Verification (Form CR-272) for all SBE Regular Dealers/Suppliers listed on the revised CR-266; and if applicable, 3) a completed SBE Trucking Verification (Form CR-274) for all SBE truckers listed on the revised CR-266 form. The Contractor is not permitted to complete any portion of the CR-273, CR-272 or CR-274 forms. Termination, substitution or replacement of SBEs shall be made as specified in Section 108. Termination or replacement of SBE cannot be made without prior written approval of the Department as per 108.01.
- e. Submission of Good Faith Effort Documentation.** If the Contractor is unable to meet the Contract goal for SBE participation, submit to the DCR/AA for review and approval, documented evidence of good faith efforts along with the monthly CR-267 form. This submission must include written details addressing each of the good faith efforts outlined in the Contract. Submittal of such information does not imply DCR/AA approval.
- F. SBE Goals for this Contract.** This Contract includes a goal of awarding _____ percentage of the Total Contract Price to subcontractors qualifying as SBEs.

NOTE: SUBCONTRACTING GOALS ARE NOT APPLICABLE IF THE PRIME CONTRACTOR IS A REGISTERED SMALL BUSINESS ENTERPRISE (SBE) FIRM.

The Department's DCR/AA has sole authority to determine whether the Contractor met the Contract goal or made adequate good faith efforts to do so. If the DCR/AA determines that the Contractor has failed to meet the Contract SBE goal or made adequate good faith efforts to do so, the Department will follow Section 105.

G. Counting SBE Participation.

1. Each SBE is subject to a registration procedure to ensure its SBE eligibility status prior to the award of Contract. All SBEs working on the Contract must be registered SBEs. Only Small Business Enterprises registered prior to the date of bid, or prospective Small Business Enterprises that have submitted to the New Jersey Commerce and Economic Growth Commission on or before the day of bid, a completed "State of New Jersey Small Business Vendor Registration Form" and all the required support documentation, will be considered in determining whether the Contractor has met the established Contract SBE goal. Early submission of required documentation is encouraged.
2. The Department determines the percentage of SBE participation that will be counted toward the Contract SBE goal. Once a firm is determined to be a bona fide SBE by the New Jersey Commerce and Growth Commission, the total dollar value of the contract awarded to the SBE is counted toward the applicable goal.
3. The Contractor will count SBE participation toward the Contract SBE goal only the value of the work actually performed by a SBE when that SBE performs a commercially useful function in the work of a contract as per Section H of this Special Provision Attachment.
4. If a Contractor is part of a Joint Venture and one or more of the Sole Proprietorships, Partnerships, Limited Liability companies or Corporations comprising the Joint Venture is a registered SBE, the actual payments made to the Joint Venture for work performed by the SBE member, will be applied toward the Contract SBE goal. Payments made to the Joint Venture for work performed by a non-small business firm will not be applied toward the Contract SBE goal.
5. If the Contractor is a registered SBE, payments made to the Contractor for work that the Contractor is registered to perform, and performed by the Contractor will be applied toward the Contract SBE goal. Payments made to the Contractor for work performed by non-SBEs will not be applied toward the Contract SBE goal.
6. When a SBE subcontracts part of the work of its contract to another firm, the value of the subcontracted work may be counted towards the SBE goal only if the subcontractor itself is a SBE. Work that a SBE subcontracts to a non-SBE firm does not count toward the Contract SBE goal.

H. Commercially Useful Function

1. **Performance of Work.** The SBE must perform the work with their own permanent employees, or employees recruited through traditional recruitment and/or employment centers. SBEs must employ and control their own workforce, and cannot share employees with the Contractor, other subcontractors on the present project, or the renter-lessor of equipment being used on the present project. The SBE firm must be responsible for all payroll and labor compliance requirements for all of their employees performing work on the Contract. Direct or indirect payments by any other contractor are not allowed.
2. **Managing Work.** The SBE must manage the work themselves including the scheduling of work operations, ordering of equipment and materials, hiring/firing of employees, including supervisory employees, and preparing and submitting certified payrolls. The SBE must supervise their portion of daily work operations of the project. With respect to materials and supplies used on the Contract, the SBE must be responsible for preparing the estimate, negotiating price, determining quantity and quality, ordering the material, arranging delivery, installing, (where applicable), and paying for the material and supplies for the project.
3. **Responsibility of Work.** A SBE must perform or exercise responsibility for at least 30 percent of the total cost of its contract with its own workforce. The SBE must not subcontract 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.
4. **Equipment of SBE.** The SBE must perform the work stated in the subcontract with their own equipment, whether owned or leased and operated on a long term agreement, not an ad hoc or

contract by contract agreement. The equipment must be owned by the SBE firm, or leased/rented from traditional equipment lease/rental sources. The equipment will not belong to the Contractor, any other subcontractor or lower tier subcontractors on the current project, or supplier of materials being installed by the SBE firm.

5. **Lease of Equipment.** A SBE firm may lease specialized equipment from a contractor, but not from the Contractor, if it is consistent with normal industry practices and at rates competitive for the area. Rental agreements must be for short periods of time, specify the terms of the agreement and involve specialty equipment to be used at the job site. The lease may allow the operator to remain on the lessor's payroll, if it is the generally accepted industry practice but the operation of the equipment must be subject to full control by the SBE. The SBE shall provide the operator for non-specialized equipment, and is responsible for all payroll and labor compliance requirements. A separate lease agreement is required.
6. **SBE Trucking.** SBE trucking companies must perform a commercially useful function. Contrived arrangements for the purpose of meeting SBE goals will not be allowed. The SBE must be responsible for the management and supervision of the entire trucking operation on a contract-by-contract basis, and must own and operate at least one fully, licensed, insured and operational truck used on the Contract.

The SBE trucking firm is not permitted to obtain trucks from the Contractor to perform work on the project. The SBE may lease trucks from a subcontractor working on the project, provided the trucks are obtained from the subcontractor prior to the project letting. Bona fide lease agreements must be for the length of time needed by the SBE on the Contract and signed by both the SBE and the firm(s), either certified SBE or non-SBE, from which the trucks will be leased. Leases must indicate that the SBE has exclusive use and control over the truck. All leased trucks must display the name and USDOT identification number issued for interstate commerce, of the SBE firm, on the outside of the truck. SBE firms are expected to use the same trucks for SBE credit on all projects so use of leased vehicles on a project-by-project basis is not permitted.

The Contractor shall have signed Hiring Agreements. Submit copies of these signed Hiring Agreements, and copies of all signed lease agreements to the RE prior to the trucking firm's commencing work on the project. Prior to the SBE trucking firm beginning work on the Contract, SBE Trucking firms will be required to complete the SBE Trucking Verification (Form CR-274). The SBE and Contractor must sign the form and the Contractor submit the original CR-274 form directly to the Department's RE, with a copy submitted to the DCR/AA. The Contractor is not permitted to complete any portion of the CR-274 form. The Contractor must prepare, sign and submit along with the CR-267 – Monthly Report of Utilization of DBE/ESBE or SBE form, a Monthly Trucking Verification form (CR-271), identifying each truck owner, SBE Certification number, company name and address, truck number, and commission or amount paid for all SBE and non-SBE truckers performing work on the project. Also, submit the form to the Department as per Section E of this Special Provision for the DCR/AA's review, approval and determination of credit toward the Contract goal. Failure to submit the forms may result in denial or limit of credit toward the Contract SBE goal, payment being delayed or withheld as specified in Section 105, assessing sanctions or termination of the Contract as specified in Section 108.

7. **SBE Regular Dealers.** SBE regular dealers 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. In addition, a regular dealer must own, operate or maintain 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 this Contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.
8. **SBE Manufacturers.** SBE manufacturers must be a firm that operates or maintains a factory or establishment that produces on the premises, the materials, supplies, articles, or equipment required for this Contract.

9. The Contractor shall not use a SBE solely for the purpose of acting as an extra participant in a transaction, a contract or the Contract through which funds are passed in order to obtain the appearance of SBE participation.

I. **Good Faith Effort.** To demonstrate good faith efforts to meet the Contract SBE goal, a Contractor shall, on an ongoing basis, adequately document the steps it takes to obtain SBE participation, including but not limited to the following:

1. Conducting market research to identify qualified potential small business subcontractors and suppliers and soliciting through all reasonable and available means, the interest of registered SBEs that have the capability to perform the work of the Contract. This may include attendance at pre-bid and business matchmaking meetings and events, advertising and/or written notices, posting of Notices of Sources Sought and/or Requests for Proposals, written notices or emails to all registered SBEs listed in the New Jersey Selective Assistance Vendor Information (NJSAVI) database that specialize in the areas of work desired (as noted in SAVI) and which are located in the area or surrounding areas of the project.

Solicit this interest as early in the acquisition process as practicable to allow the SBEs to respond to the solicitation and submit a timely offer for the subcontract. Determine with certainty if the SBEs are interested by taking appropriate steps to follow up initial solicitations.

Request a listing of small businesses from the New Jersey Department of the Treasury, Division of Property Management and Construction if none are known to the Contractor

2. Selecting portions of the work to be performed by SBEs in order to increase the likelihood that the SBE goals will be achieved. This includes, where appropriate, breaking out Contract work items into economically feasible units (for example, smaller tasks or quantities) to facilitate SBE participation, even when the Contractor might otherwise prefer to perform these work items with its own forces. This may include, where possible, establishing flexible timeframes for performance and delivery schedules in a manner that encourages and facilitates SBE participation.
3. Providing all potential SBE subcontractors with detailed information about the plans, specifications, and requirements of the Contract in a timely manner to assist them in responding to a solicitation with their offer for the subcontract. Attempt to contact all potential subcontractors on the same day and use similar methods to contact them.
4. Negotiating in good faith with interested SBEs. Make a portion of the work available to SBE subcontractors and suppliers and select those portions of the work or material needs consistent with the available SBE subcontractors and suppliers, so as to facilitate SBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of SBEs 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 SBEs to perform the work.

Consider a number of factors in negotiating with subcontractors, including SBE subcontractors. 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 SBEs is not in itself sufficient reason for failure to meet the Contract SBE goal, as long as such costs are reasonable. The ability or desire of a Contractor to perform the work of a Contract with its own organization does not relieve the responsibility to make good faith efforts. Contractors are not, however, required to accept higher quotes from SBEs if the price difference is excessive or unreasonable.

5. Not rejecting SBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The contractor's standing within its industry, membership in specific groups, organizations, or associations and political or social affiliations (for example union vs. non-union status) are not legitimate causes for the rejection or non-solicitation of bids in the Contractor's efforts to meet the Contract SBE goal. Another practice considered an insufficient good faith effort is the rejection of the SBE because its quotation for the work was not the lowest received. However, nothing in this paragraph shall be construed to require the Bidder to accept unreasonable quotes in order to satisfy the Contract SBE goal.

Inability to find a replacement SBE at the original price is not alone sufficient to support a finding that good faith efforts have been made to replace the original SBE. The fact that the Contractor has the ability and/or desire to perform the contract work with its own forces does not relieve the Contractor of the obligation to make good faith efforts to find a replacement SBE, and it is not a sound basis for rejecting a prospective replacement SBE's reasonable quote. Attempt, wherever possible, to negotiate prices with potential subcontractors which submitted higher than acceptable price quotes.

Keep a record of efforts, including the names of businesses contacted and the means and results of such contacts.

6. Making efforts to assist interested SBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or Contractor.
7. Making efforts to assist interested SBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.

If the Contractor fails to meet the Contract SBE goal, they must submit documented evidence of good faith effort(s) to meet the goal with the CR-268 final SBE Report to the DCR/AA for review and approval. Submittal of such information does not imply DCR/AA approval. The Department's DCR/AA has sole authority to determine whether the Contractor met the Contract SBE goal or made adequate good faith efforts to do so. If the DCR/AA determines that the Contractor has failed to meet the Contract SBE goal or made adequate good faith effort to do so, the Department will follow Section 105.

J. Submission of Affirmative Action Program

Contractors, subcontractors and professional service firms performing work for the Department are required to submit their company's Affirmative Action Program annually to the DCR/AA. Contractors must have an **approved** Affirmative Action Program on file in the DCR/AA no later than seven (7) State business days after the date of bid opening. No recommendations to award will be made without an approved Affirmative Action Program on file in the DCR/AA. Ensure subcontractors and professional service firms have an approved Affirmative Action Plan on file in the DCR/AA prior to their beginning work on a particular project.

The Annual Affirmative Action Program will include, but is not limited to the following:

1. Copy of company's comprehensive EEO/Affirmative Action Plan, with a cover page that includes the company name and address, and signature of the Chief Executive or EEO Officer.
2. Copy of document designating the company's corporate EEO Officer, including the name, address and contact telephone number for the officer, and signature of the Chief Executive or President, on company letterhead.
3. Copy of the company's EEO Policy Statement on company letterhead, dated and signed by the Chief Executive and the EEO Officer.
4. Copy of the company's Sexual Harassment Policy on company letterhead.
5. EEO Legend such as letterhead, envelope, or published advertisement showing the company is an equal opportunity employer.
6. Copy of document designating the company's SBE Liaison Officer to administer the firm's Small Business Program.
7. SBE Affirmative Action Plan which is an explanation of affirmative action methods intended to be used to seek out and consider SBEs as subcontractors, material suppliers or equipment lessors. This refers to the Contractor's ongoing responsibility, i.e., Small Business Enterprise/Affirmative Action activities after the award of the Contract and for the duration of the Contract.

K. SBE Liaison Officer. Designate a SBE Liaison Officer who shall be responsible for the administration of your SBE program in accordance with the Contract, and ensuring that the Contractor complies with all provisions of the SBE Program.

L. Consent by Department to Subletting. The Department will not approve any subcontract proposed by the Contractor unless and until said Contractor has complied with the terms of the Contract.

M. Conciliation. In cases of alleged discrimination regarding these and all equal employment opportunity provisions and guidelines, investigations and conciliation will be undertaken by the DCR/AA.

N. Documentation

1. **Requiring of Information.** The Department or the State funding agencies may at any time require information as specified in Section 107.02 and deemed necessary in the judgment of the Department to ascertain the compliance of any Bidder, Contractor or subcontractor with the terms of the Contract.
 2. **Record and Reports.** The Contractor, subcontractors and other sub-recipients will keep such records as are necessary to determine compliance with its SBE obligations. These records kept will be designed to indicate:
 - a. The names of SBE contractors, subcontractors, transaction expeditors and material suppliers contacted for work on the Contract, including when and how contacted, and the specific Contract work items and other information provided to each.
 - b. Work, services and materials which are not performed or supplied by the Contractor.
 - c. The actual dollar value of work subcontracted and awarded to SBEs, including specific Contract work items and cost of each work item.
 - d. The progress being made and efforts taken in seeking out and utilizing SBEs to include: solicitations, specific Contract work items and the quotes and bids regarding those specific Contract work items, supplies, leases, or other contract items, etc.
 - e. Detailed written documentation of all correspondence, contacts, telephone calls, etc., including names and dates/times, to obtain the services of SBEs on the Contract.
 - f. Records of all SBEs and non-SBEs who have submitted quotes/bids to the Contractor on the Contract.
 - g. Monthly CR-267 – Monthly Report, Utilization of DBE/ESBE or SBE, and other reports required for submission to the Department, hiring agreements, subcontracts, lease agreements, equipment rental agreements, supply tickets, delivery slips, payment information, and other records documenting SBE utilization on the Contract.
 - h. Documentation outlining EEO workforce information for the Contract.
 - i. Documentation outlining EEO and Affirmative Action efforts made in the administration and performance of the Contract.
 3. **Submission of Reports, Forms and Documentation.** Submit reports, forms and documentation, as required by the Department, on those contracts and other business transactions executed with SBEs in such form and manner as may be prescribed by the Department. Failure to submit the required forms, reports or other documentation as required may result in payment being delayed or withheld as specified in Section 105, assessing sanctions, or termination of the contract as specified in Section 108. Submission of falsified forms, reports or other required documentation may result in termination of the Contract as specified in Section 108, investigation by the Department's Inspector General, and prosecution by the State Attorney General's Office.
 4. **Maintaining Records.** All records must be maintained for a period of three (3) years following acceptance of final payment and will be available for inspection by the Department, or the State funding agencies.
- O. Prompt Payment to Subcontractors.** Payment to subcontractors, equipment lessors, suppliers and manufacturers is made in accordance with Section 109.
- P. Non-Compliance.** Failure by the Contractor to comply with the SBE program, rules and regulations in the administration of the Contract may result in denial or limit of credit toward the Contract SBE goal, payment being delayed or withheld as specified in Section 105, assessing sanctions, liquidated damages as specified in Section 108, default as specified in Section 108, debarment, or termination of the Contract as specified in Section 108. The Contractor may further be declared ineligible for future Department contracts.

STATE FUNDED PROJECT ATTACHMENT 2

STATE OF NEW JERSEY EQUAL EMPLOYMENT OPPORTUNITY SPECIAL PROVISIONS FOR WHOLLY STATE FUNDED PROJECTS

- A. General.** It is the policy of the New Jersey Department of Transportation (hereafter "NJDOT") that its contracts should create a workforce that reflects the diversity of the State of New Jersey. Therefore, contractors engaged by the Department 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 Department'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 Department's contract with the Contractor. Payment may be withheld from a Contractor's contract for failure to comply with these provisions.

Evidence of a "good faith effort" includes, but is not limited to:

1. The Contractor shall recruit prospective employees through the New Jersey career connections website, managed by the Department of Labor and Workforce Development, available online at http://careerconnections.nj.gov/careerconnections/for_businesses.shtml
2. The Contractor shall keep detailed documented evidence of its efforts, including records of all individuals interviewed and hired, including the specific numbers of minorities and women;
3. The Contractor shall actively solicit and shall provide the Department with proof of solicitations for employment, including but not limited to advertisements in general circulation media, professional service publications and electronic media;
4. The Contractor shall provide evidence of efforts described at 2 above to the Department no less frequently than once every 12 months; and
5. The Contractor shall comply with the requirements set forth at N.J.A.C. 17:27-1.1 et seq.

The Contractor is required to implement and maintain a specific Affirmative Action Compliance Program of Equal Employment Opportunity in support of the New Jersey "Law Against Discrimination", N.J.S.A. 10:5-31 et seq., and according to the Affirmative Action Regulations set forth at N.J.A.C. 17:27-1.1 et seq.

The provisions of N.J.S.A. 10:2-1 through 10:2-4 and N.J.S.A. 10:5-31 et seq., as amended and supplemented) dealing with discrimination in employment on public contracts, and the rules and regulations promulgated pursuant thereunto, are hereby made a part of this contract and are binding upon the Contractor.

Noncompliance by the Contractor with the requirements of the Affirmative Action program for Equal Employment Opportunity may be cause for delaying or withholding monthly and final payments pending corrective and appropriate measures by the Contractor to the satisfaction of the Department.

The Contractor will cooperate with the State agencies in carrying out its Equal Employment Opportunity obligations and in their review of its activities under the contract.

The Contractor and all its subcontractors, not including material suppliers, holding subcontracts of \$2,500 or more, will comply with the following minimum specific requirement activities of Equal Opportunity and Affirmative Action set forth in these special provisions. The Contractor will include the following mandatory equal employment opportunity language in every subcontract of \$2,500 or more with such modification of language in the provisions of such contracts as is necessary to make them binding on the subcontractor.

During the performance of this Contract, the contractor agrees as follows:

1. 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. The Contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age,

race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, veteran's status, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

2. 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.
3. The Contractor or subcontractor will send to each labor union, with which it has a collective bargaining agreement, 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.
4. 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.
5. When hiring or scheduling workers in each construction trade, the Contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the NJ Department of Labor and Workforce Development, 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 NJ Department of Labor and Workforce Development, 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 NJ Department of Labor and Workforce Development, 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 sub-contractor agrees to afford equal employment opportunities 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 that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.
 - b. If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (a.) above, or if the Contractor does not have a referral agreement or arrangement with a union for a construction trade, the Contractor or subcontractor agrees to take the following actions:

- (1) To notify the public agency compliance officer, the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;
 - (2) To notify any minority and women workers who have been listed with it as awaiting available vacancies;
 - (3) Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the Contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;
 - (4) To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the Contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area;
 - (5) If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and non-discrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions;
 - (6) To adhere to the following procedure when minority and women workers apply or are referred to the Contractor or subcontractor:
 - i. The Contractor or subcontractor shall interview the referred minority or women 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 NJ Department of Labor and Workforce Development, 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 6(1) above, whenever vacancies occur. At the request of the NJ Department of Labor and Workforce Development, 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 NJ Department of Labor and Workforce Development, 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 NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program and submitted promptly to the NJ Department of Labor and Workforce Development, 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 apprentice-ship 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.

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.

The Contractor and its subcontractors shall furnish such reports or other documents to the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program as may be requested by the NJ Department of Labor and Workforce Development, 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 NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1.1 et seq..

The Contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and off-the-job programs for outreach and training of minority and female trainees employed on the construction projects.

- B. Equal Employment Opportunity Policy.** The Contractor agrees that it will accept and implement during the performance of this contract as its operating policy the following statement which is designed to further the provision of Equal Employment Opportunity to all persons 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 and to promote the full realization of Equal Employment Opportunity through a positive continuing program:

“It is the policy of this company that it 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 and that it will take Affirmative Action to ensure that 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, 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.”

- C. Equal Employment Opportunity Officer.** Designate and make known to the Department's contracting officers, an Equal Employment Opportunity Officer (hereafter “EEO Officer”) who will have the responsibility for and must be capable of effectively administering and promoting an active Equal Employment Opportunity program and be assigned adequate authority and responsibility to do so.

D. Dissemination of Policy.

- 1. Implementation.** All members of the Contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, will be made fully cognizant of, and will implement, the Contractor's Equal Employment Opportunity Policy and contractual responsibilities to provide Equal Employment Opportunity in each grade and classification of

employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

- a. **Initial Project Site Meeting.** Conduct an initial project site meeting with supervisory and personnel office employees before the start of work and then not less often than once every 6 months, at which time the Contractor's Equal Employment Opportunity Policy and its implementation will be reviewed and explained. The EEO Officer will conduct the meetings.
 - b. **EEO Obligations.** Give all new supervisory or personnel office employees a thorough indoctrination by the EEO Officer covering all major aspects of the Contractor's Equal Employment Opportunity obligations within 30 days following their reporting for duty with the Contractor.
 - c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the Contractor's procedures for locating and hiring minority and women workers.
2. Take the following actions in order to make the Contractor's Equal Employment Opportunity Policy known to all employees, prospective employees and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc.,:
 - a. Place notices and posters setting forth in the Contractor's Equal Employment Opportunity policy, as set forth in Section 2 of these Equal Employment Opportunity Special Provisions in conspicuous places readily accessible to employees, applicants for employment and potential employees.
 - b. Bring the Contractor's Equal Employment Opportunity Policy and the procedures to implement such policy to the attention of employees by means of meetings, employee handbooks, or other appropriate channels.

E. Recruitment

1. In all solicitations and advertisements for employees placed by or on behalf of the Contractor, the Contractor will 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, veterans status, disability, nationality or sex. All such advertisements will be published in newspapers or other publications having a large circulation among minorities and women in the area from which the project workforce would normally be derived.
2. Unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority and women applicants, including, but not limited to state employment agencies, schools, colleges and minority and women organizations. Through their EEO Officer, identify sources of potential minority and women employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the Contractor for employment consideration.
3. In the event the Contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the Contractor's compliance with Equal Employment Opportunity contract provisions. (The US Department of Labor has held that where implementations of such agreements have the effect of discriminating against minorities or women, or obligates the Contractor to do the same; such implementation violates Executive Order 11246, as amended).
4. In the event that the process of referrals established by such a bargaining agreement fails to provide the Contractor with a sufficient number of minority and women referrals within the time period set forth in such an agreement, the Contractor shall comply with the provisions of "Section I Unions" of this "State Of New Jersey Equal Employment Opportunity for Wholly State Funded Projects" Special Provision Attachment.

- F. Personnel Actions.** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to age, race, color, creed, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, veterans status, disability, nationality or sex. The following procedures shall be followed:

1. Conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
2. Periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
3. Periodically review selected personnel actions in-depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
4. Promptly investigate all complaints of alleged discrimination made to the Contractor in connection with his/her obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the Contractor will inform every complainant of all of their avenues of appeal.

G. Training and Promotions.

1. Assist in locating, qualifying, and increasing the skills of minority group and women workers, and applicants for employment.
2. Consistent with the Contractor's workforce requirements and as permissible under State regulations, make full use of training programs, i.e., apprenticeship, and on-the-job training programs, for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.
3. Advise employees and applicants for employment of available training programs and entrance requirements for each.
4. Periodically review the training and promotion potential of minority group and women workers and encourage eligible employees to apply for such training and promotion.

H. Unions. If the Contractor relies in whole or in part upon unions as a source of employees, the Contractor will use their good faith efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and women workers. Actions by the Contractor either directly or through a Contractor's association acting, as agent will include the procedures set forth below:

1. The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract of understanding, a notice advising the labor union or workers' representative of the Contractor's commitments under both the law against discrimination and this contract and shall post copies of the notice in conspicuous places readily accessible to employees and applicants for employment. Further, the notice will request assurance from the union or worker's representative that such union or worker's representative will cooperate with the Contractor in complying with the Contractor's Equal Employment Opportunity and Affirmative Action obligations.
2. The Contractor will use their best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.
3. The Contractor will use their best efforts to incorporate an Equal Employment Opportunity clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their age, race, color, creed, sex, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, or nationality.
4. The Contractor is to obtain information as to the referral practices and policies of the labor union except to the extent that such information is within the exclusive possession of the labor union and such labor unions refuse to furnish this information to the Contractor, certify to the Department and shall set forth what efforts have been made to obtain this information.
5. In the event the union is unable to provide the Contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the Contractor will, through independent recruitment efforts, fill the employment vacancies without regard to age, race, color, creed, sex, national origin, ancestry, marital status, affectional or sexual orientation,

gender identity or expression, disability, or nationality making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The US Department of Labor has held that it shall be no excuse that the union with which the Contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees). In the event the union referral practice prevents the Contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these Special Provisions, such Contractor shall immediately notify the Department.

- I. Subcontracting.** The Contractor will use his best efforts to solicit bids from and to utilize minority group and women subcontractors or subcontractors with meaningful minority group and women representation among their employees. Contractors may use lists of minority owned and women owned construction firms as issued by the NJDOT and/or the New Jersey Unified Certification Program (NJUCP).

Ensure subcontractor compliance with the Contract's Equal Employment Opportunity obligations.

J. Records and Reports

1. Keep such records as are necessary to determine compliance with the Contractor's Equal Employment Opportunity obligations. Records kept will be designed to indicate:
 - a. The work hours of minority and non-minority group members and women employed in each work classification on the project;
 - b. The progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and women (applicable only to Contractors who rely in whole or in part on unions as a source of their workforce);
 - c. The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and women workers; and
 - d. The progress and efforts being made in securing the services of minority group and women subcontractors or subcontractors with meaningful minority and women representation among their employees.
2. All such records must be retained for a period of 3 years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the NJDOT.
3. Submit monthly reports to the NJDOT after construction begins for the duration of the project, indicating the work hours of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on a form supplied by the NJDOT.

STATE FUNDED PROJECT ATTACHMENT 3

REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY ON WHOLLY STATE FUNDED PROJECTS

- A. Minority and Women Employment Goal Obligations.** The Department has established, pursuant to N.J.A.C. 17:27-7.2, the minority and women goals for each construction contractor and subcontractor based on availability statistics as reported by the New Jersey Department of Labor, Division of Planning and Research, in its report, "EEO Tabulation - Detailed Occupations by Race/Hispanic Groups." The goals for minority and women participation, in the covered area, expressed in percentage terms for the Contractor's aggregate work force in each trade, on all construction work are:

Minority and Women Employment Goal Obligations for Construction Contractors and Subcontractors on Wholly State Funded Projects		
County	Minority % Participation Percent	Women % Participation Percent
Atlantic	18	6.9
Bergen	22	6.9
Burlington	15	6.9
Camden	19	6.9
Cape May	5	6.9
Cumberland	27	6.9
Essex	53	6.9
Gloucester	9	6.9
Hudson	60	6.9
Hunterdon	3	6.9
Mercer	30	6.9
Middlesex	24	6.9
Monmouth	15	6.9
Morris	16	6.9
Ocean	7	6.9
Passaic	36	6.9
Salem	10	6.9
Somerset	20	6.9
Sussex	4	6.9
Union	45	6.9
Warren	5	6.9

The NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program has interpreted Section 7.2 of the State of New Jersey Affirmative Action Regulations as applicable to work hour goals for minority and women participation.

If a project is located in more than one county, the minority work hour goal will be determined by the county which serves as the primary source of hiring or, if workers are obtained equally from one or more counties, the single minority goal shall be the average of the individual goal for the affected counties.

The NJ State Department of Labor and Workforce Development, Construction EEO Monitoring Program may designate a regional goal for minority membership for a union that has regional jurisdiction. No regional goals shall apply to this project unless specifically designated elsewhere herein.

When hiring workers in the construction trade, the Contractor and/or subcontractor agree to attempt, in good faith, to employ minority and women workers in each construction trade, consistent with the applicable county or, in special cases, regional goals.

It is understood that the goals are not quotas. If the Contractor or subcontractor has attempted, in good faith, to satisfy the applicable goals, they will have complied with their obligations under these EEO Special Provisions. It is further understood that if the Contractor shall fail to attain the goals applicable to this project, it will be the Contractor's obligation to establish to the satisfaction of the Department that it has made a good faith effort to satisfy such goals. The Contractor or subcontractor agrees that a good faith effort to achieve the goals set forth in these special provisions shall include compliance with the following procedures:

- B. Requests for Referrals from Unions to Meet Contract Workforce Goals.** Requests shall be made by the Contractor or subcontractor to each union or collective bargaining unit with which the Contractor or subcontractor has a referral agreement or arrangement for the referral of minority and women workers to fill job openings. Requests shall also be made for assurances for the referral of minority and women workers to fill job openings. Requests shall also be made for assurances from such unions or collective bargaining units that they will cooperate with the Contractor or subcontractor in fulfilling the Affirmative Action obligations of the Contractor or subcontractor under this contract. Such requests shall be made prior to the commencement of construction under the contract.
1. The Contractor and its subcontractors shall comply with Section I, Unions of these EEO Special Provisions and, in particular, with Section I, Paragraph D, if the referral process established in any collective bargaining arrangement is failing to provide the Contractor or subcontractor with a sufficient number of minority and women referrals.
 2. The Contractor and its subcontractors shall notify the Department's Compliance Officer, the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program and at least one approved minority referral organization of the Contractor's or subcontractors work force needs and of the Contractor's or subcontractor's desire for assistance in attaining the goals set forth herein. The notifications should include a request for referral of minority and women workers.
 3. The Contractor and its subcontractors shall notify the Department's Compliance Officer and the NJ Department of Labor and Workforce Development, Construction EEO Monitoring Program in the event that a union or collective bargaining unit is not making sufficient minority and women referrals to enable the Contractor or subcontractor to attain the workforce goals for the Contract.
 4. The Contractor and its subcontractors shall make standing requests to all local construction unions, the State's training and employment service and other approved referral sources for additional referrals of minority and women workers until such time as the project workforce is consistent with the work hour goals for the Contract.
- C.** In the event that it is necessary to lay off some of the workers in a given trade on the construction site, the Contractor and its subcontractors shall ensure that fair layoff practices are followed regarding minority, women and other workers.
- D.** Comply with the other requirements of these EEO Special Provisions.
- E.** Reporting Requirements.
1. Directly provide the NJ Department of Labor and Workforce Development, Office of Diversity Compliance, Construction Contract Compliance Unit with workforce data for the Contract.
 - a. After notification of award, but prior to signing the Contract, submit to the Department and the Department of Labor and Workforce Development, Construction EEO Monitoring Program an AA-201 – Initial Project Workforce Report Construction form in accordance with N.J.A.C. 17:27-

7. Also, submit the info within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the Contract. This form is available online at the New Jersey Department of the Treasury's website at: http://www.nj.gov/treasury/contract_compliance/pdf/aa201.pdf. Instructions for completing the form can be found online at: http://www.state.nj.us/treasury/contract_compliance/pdf/aa201ins.pdf.
- b. Monthly, complete and submit an AA 202 - Monthly Project Workforce Report – Construction form for the duration of the Contract. This form may be completed:
- (1) Manually and mailed to the Department of Labor & Workforce Development, Construction & EEO Monitoring Program, P.O. Box 209, Trenton, NJ 08625-0209, or:
 - (2) Input electronically directly onto the AA-202 form via the Department of the Treasury's Premier Business Services Online Forms web application, located at: http://www.nj.gov/treasury/contract_compliance/. Instructions for setting up online access to the web application can be found at: http://www.nj.gov/treasury/contract_compliance/pdf/PBS-Introduction-Page.pdf. Follow all instructions to set up online access to the web application.
 - (3) Submit a printed copy of the AA-202 form to the Department along with the hard copy of the CC-257R and confirmation e-mail of the successful submission of Monthly Employment Utilization Report.
2. Directly provide the Department with employment workforce data of the number and work hours of minority and non-minority group members and women employed in each work classification for the Contract. The Contractor, subcontractors, professional service firms and others working on the project must submit this information via a web-based application through the New Jersey portal, Vendor Workforce Reporting Manager. Instructions on how to complete Form CC-257R are provided within the web application. Instructions for registering and receiving the authentication code to access the web based application can be found at the Contractor Manpower Project Reporting CC-257R website at: <http://www.state.nj.us/transportation/business/civilrights/pdf/cc257.pdf>.
- a. On a monthly basis, submit Form CC-257R through the web based application within 10 days following the end of each reporting month.
 - b. In addition to the above, submit a hard copy of the electronic Form CC-257R to the RE within 10 days following the end of each reporting month
 - c. Submit a copy of the confirmation e-mail of the successful submission of Monthly Employment Utilization Report to the RE within 10 days following the end of each reporting month.
3. All employment data must be accurate and consistent with certified payroll records. The Contractor is responsible for ensuring compliance with these reporting requirements. Failure of the Contractor, subcontractors, professional service firms and others working on the Contract to report monthly employment and wage data may result in payments being delayed or withheld as per 105.01, or impact the Contractor's prequalification rating with the Department.

STATE FUNDED PROJECT ATTACHMENT 4

INVESTIGATING, REPORTING AND RESOLVING EMPLOYMENT DISCRIMINATION AND SEXUAL HARASSMENT COMPLAINTS ON WHOLLY STATE FUNDED PROJECTS

The Contractor hereby agrees to the following requirements in order to implement fully the nondiscrimination provisions of the Supplemental Specifications:

The Contractor agrees that in instances when it receives from any person working on the project site a verbal or written complaint of employment discrimination, prohibited under N.J.S.A. 10:5-1 et seq. 10:2-1 et seq., 42 U.S.C. 2000 (d) et seq., 42 U.S.C. 2000(e) et seq. and Executive Order 11246, it shall take the following actions:

- A. Within one (1) working day commence an investigation of the complaint, which will include but not be limited to interviewing the complainant, the respondent, and all possible witnesses to the alleged act or acts of discrimination or sexual harassment.
- B. Prepare and keep for its use and file a detailed written investigation report which includes the following information:
 1. Investigatory activities and findings.
 2. Dates and parties involved and activities involved in resolving the complaint.
 3. Resolution and corrective action taken if discrimination or sexual harassment is found to have taken place.
 4. A signed copy of resolution of complaint by complainant and Contractor.

(In addition to keeping in its files the above-noted detailed written investigative report, the Contractor shall keep for possible future review by the Department, all other records, including, but not limited to, interview memos and statements.)

- C. Upon the request of the Department, provides to the Department within ten (10) calendar days a copy of its detailed written investigative report and all other records on the complaint investigation and resolution.
- D. Take appropriate disciplinary actions against any Contractor employee, official or agent who has committed acts of discrimination or sexual harassment against any Contractor employee or person working on the project. If the person committing the discrimination is a subcontractor employee, then the Contractor is required to attempt to effectuate corrective and/or disciplinary action by the subcontractor in order to establish compliance with the Contract.
- E. Take appropriate disciplinary action against any Contractor employee, official or agent who retaliates, coerces or intimidates any complainant and/or person who provides information or assistance to any investigation of complaints of discrimination or sexual harassment. If the person retaliating, coercing or intimidating a complainant or other person assisting in an investigation is a subcontractor's employee, then the Contractor is required to attempt to effectuate corrective and/or disciplinary action taken by the subcontractor in order to establish compliance with the Contract.
- F. Ensure to the maximum extent possible that the privacy interests of all persons who give confidential information in aid of the Contractor's employment discrimination investigation are protected.
- G. In conjunction with the above requirements, the Contractor herein agrees to develop and post a written sexual harassment policy for its workforce.
- H. The Contractor also agrees that its failure to comply with the above requirements may be cause for the Department to institute against the Contractor any and all enforcement proceedings and/or sanctions authorized by the Contract or by State and/or Federal law.

STATE FUNDED PROJECT ATTACHMENT 5

PAYROLL REQUIREMENTS FOR WHOLLY STATE FUNDED PROJECTS

- A. Payroll Reports.** Each Contractor and subcontractor shall furnish the RE with payroll reports for each week of contract work. Such reports shall be submitted within 10 days of the date of payment covered thereby and shall contain the following information:
1. Each employee's full name and address of each such employee.
 2. The ethnicity and gender of each employee.
 3. Each employee's specific work classification (s).
 4. Entries indicating each employee's basis hourly wage rate(s) and, where applicable, the overtime hourly wage rate(s). Any fringe benefits paid to approved plans, funds or programs on behalf of the employee must be indicated. Any fringe benefits paid to the employee in cash must be indicated.
 5. Each employee's daily and weekly hours worked in each classification, including actual overtime hours worked (not adjusted).
 6. Each employee's gross wage.
 7. The itemized deductions made.
 8. The net wages paid.
- B. Statement of Wages.** Each Contractor or subcontractor shall furnish a statement each week to the RE with respect to the wages paid each of its employees engaged in contract work covered by the New Jersey Prevailing Wage Act during the preceding weekly payroll period. The statement shall be executed by the Contractor or subcontractor or by an authorized officer or employee of the Contractor or subcontractors who supervises the payment of wages. Contractors and subcontractors must use the certification set forth on NJ Department of Labor Payroll Certification for Public Works Project (R-08-12-08), or any form with identical wording.
- C. Maintaining Records.** Contractor and subcontractor shall maintain complete social security numbers and home address for employees. Government agencies are entitled to request or review all relevant payroll information, including social security numbers and addresses of employees. Contractors and subcontractors are required to provide such information upon request.
- D. Lack of Compliance.** Failure of the Contractor or subcontractor to comply with the payroll requirements may result in payment being delayed or withheld as specified in Section 105, default as specified in Section 108 or termination of the Contract as specified in Section 108.
- E. Diane B. Allen Equal Pay Act, N.J.S.A. 34:11-56.14b.** Pursuant to the DIANE B. ALLEN EQUAL PAY ACT, N.J.S.A. 34:11-56.14.b., the Contractor shall provide to the Commissioner of the New Jersey Department of Labor and Workforce Development, through certified payroll records required pursuant to P.L.1963, c.150 (C.34:11-56.25 et seq.), information regarding the gender, race, job title, occupational category, and rate of total compensation of every employee of the employer employed in the State in connection with the Contract. The Contractor shall provide the Commissioner, throughout the duration of the Contract, with an update to the information whenever payroll records are required to be submitted pursuant to P.L.1963, c.150 (C.34:11-56.25 et seq.). Completed forms should be emailed to: equalpayact@dol.nj.gov. If online submission is not possible, the form should be mailed to: Equal Pay Act, New Jersey Department of Labor and Workforce Development, P.O. Box 110, Trenton, NJ 08625-110.

Information regarding the Diane B. Allen Equal Pay Act and its requirements may be obtained from the New Jersey Department of Labor and Workforce Development (LWD) website at: <https://nj.gov/labor/equalpay/equalpay.html>

LWD forms may be obtained from the online web site at: https://nj.gov/labor/forms_pdfs/equalpayact/MW-562withoutfein.pdf

STATE FUNDED PROJECT ATTACHMENT 6

AMERICANS WITH DISABILITIES ACT REQUIREMENTS FOR WHOLLY STATE FUNDED PROJECTS

Equal Opportunity for Individuals with Disabilities.

The CONTRACTOR and the STATE do hereby agree that the provisions of Title II of the American With Disabilities Act of 1990 (the "ACT") (42 U.S.C. Section 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 pursuant thereunto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the STATE 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 the STATE in any action or administrative proceeding commenced pursuant to this Act. The CONTRACTOR shall indemnify, protect, and save harmless the STATE, its 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 all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the STATE'S grievance procedure, the CONTRACTOR agrees to abide by any decision of the STATE which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the STATE or if the STATE incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the CONTRACTOR shall satisfy and discharge the same at its own expense.

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

It is expressly agreed and understood that any approval by the STATE 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 the STATE pursuant to this paragraph.

It is further agreed and understood that the STATE assumes no obligation to indemnify or save harmless the CONTRACTOR, its agents, servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, 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 Agreement, nor shall they be construed to relieve the CONTRACTOR from any liability, nor preclude the STATE from taking any other actions available to it under any other provisions of this Agreement or otherwise at law.