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PROJECT MANUAL

WILLINGBORO TOWNSHIP - COUNTRY CLUB POOL
DRAINPIPE REPAIR
WILLINGBORO TOWNSHIP, BURLINGTON COUNTY, NJ

OWNER:

Township of Willingboro
1 Rev Dr Martin Luther King Jr. Drive
Willingboro, NJ08046

Hugh J. Dougherty, P.E.
New Jersey License No. GE34634

PROJ. NO. WTCEX 22031
January 26, 2024

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NOTICE - ADVERTISEMENT

Notice is hereby given that sealed bids will be received by the **Township of Willingboro** for “WILLINGBORO TOWNSHIP – COUNTRY CLUB POOL DRAINPIPE REPAIR” and will be opened and read in public at the Township of Willingboro Administrative Offices located at 1 Rev Dr Martin Luther King Jr Drive, Willingboro, New Jersey, on **Tuesday, March 5, 2024 at 11:00 AM** prevailing time.

A pre-bid meeting is scheduled for **Tuesday, February 13, 2024 at 11:00 AM** at 440 Beverly Rancocas Road, Willingboro, NJ.

The work includes the furnishing of all labor, material, and equipment necessary or required to complete all work set forth in these Specifications. Estimated quantities for the various sites are summarized as follows:

<u>Item</u>	<u>Estimated Quantity</u>
1. Bonding, Mobilization, HASP, Dewatering Plan, Shoring Plan and Project Initiation	1 LS
2. Disconnect / Reconnect Utilities	1 LS
3. Demolition / New Construction: Chain Link Fence	150 LF
4. Demolition / New Construction: Concrete Pool Deck, Walkways and Flatwork	1,200 SF
5. Demolition / New Construction: Surge Tank	1 LS
6. Demolition / New Construction: Pool Deck Drains (from the area of demolished concrete pool deck and flatwork: 4 drains and connecting piping)	1 LS
7. Demolition / New Construction: Light Pole w/ fixture, wiring	1 UN
8. Construct and Maintain: Erosion and Sedimentation Controls	1 LS
9. Excavate, Stockpile, Transport and Dispose Soil (Clean Fill)	1,000 CY
10. Dewatering (All Design, Permitting, Equipment, Labor, Maintenance required)	10 Days
11. Excavation Support and Protection / Shoring (All Design, Permitting, Equipment, Labor, Maintenance required)	1 LS
12. Disconnect 8” PVC Skimmer Drainpipe (Shallow Depth - To allow placement of excavation shoring)	1 LS
13. Deep Drainpipe Repair (10”PVC)	1 LS
14. Reconnect 8”PVC Skimmer Drainpipe	1 LS
15. Backfill Excavation: Flowable Fill	1,000 CY
16. New Construction: Diving Board	1 LS

Specifications, and forms of bid for the proposed work prepared by Pennoni Associates, Inc., Municipal Engineers, and approved by the Township of Willingboro have been filed and are available at the Township of Willingboro Administration Office, 1 Rev. Dr. Martin Luther King Drive, Willingboro, New Jersey, 08046, and may be inspected by prospective bidders during regular business hours. The electronic copy of the bid documents is available via email. Bidders shall request a copy of the bid documents from Pennoni Associates, by e-mail at ABorstad@Pennoni.com with a cc to JMullan@Pennoni.com and CKunder@Pennoni.com.

Submission of Bid: All bids must be submitted on the bid proposal forms approved and provided for by the bid specifications in order to be considered. Bidders are to provide one (1) clearly sealed and marked ORIGINAL, one (1) clearly marked COPY and one electronic copy on USB drive. Please have each item on checklist color tabbed and numbered in your bid packet for a more time efficient packet review.

Bids must be enclosed in a sealed envelope bearing the name and address of the bidder and the name of the project on the outside, addressed to Willingboro Township, and must be accompanied by a Certified Check, Bid Bond or Cashier's Check drawn to the order of Willingboro Township for ten percent (10%) of the total amount bid, provided said security need not be more than \$20,000.00. All bid guarantees shall be accompanied by an executed consent from an approved surety company, licensed to conduct business in the State of New Jersey, agreeing to furnish the required Performance, Payment and Maintenance Bond upon the award of contract.

The signed Proposal forms and bid security must be delivered to the place on or before the hour named above. The accepted bidder must sign the contract within ten (10) days after the Notice of Award or forfeit his bid security. Bid securities will be returned to all but the three apparent lowest responsible bidders. All other bid securities will be returned after awarding and signing of the contract and approval of the Contractor's Performance Bond.

The Township will not assume responsibility for bids mailed in.

Bidders are required to comply with the requirements of N.J.S.A 10:5-31 et seq. and N.J.A.C. 17:27.

The right is reserved to reject any or all Proposals, in whole or in part, or to make awards to such bidder or bidders, who, in the judgment of the Township of Willingboro makes the most advantageous bid and to waive such informalities as may be permitted by law.

BY ORDER OF THE TOWNSHIP COMMITTEE OF THE TOWNSHIP OF WILLINGBORO.

Bradon Garcia,
Township Clerk

SECTION B

INSTRUCTIONS TO BIDDERS

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1. BIDDER'S RESPONSIBILITY / BID SCHEDULE

Each bidder shall familiarize himself with all of the attached forms, Instruction, General Conditions, Specifications, and Contract Drawings, as he will be held responsible to fully comply therewith.

Each bidder is strongly encouraged to attend the pre-bid meeting to acquaint themselves with conditions affecting the work.

a. Bid Schedule:

- Public Notice – February 4, 2024
- Pre-Bid Walkthrough – February 13, 2024
- Questions Due – February 16, 2024
- Responses Due – February 20, 2024
- Bid Opening – March 5, 2024

2. DELIVERY OF PROPOSALS

It is the responsibility of the bidder to deliver his bid prior to the time of opening, regardless of what medium he uses to deliver it. No bid shall be considered if it arrives after the time set for the receipt of bids. Envelopes containing proposals shall be sealed, addressed to the Owner at the location specified for the opening of bids and submitted on the Form of Proposal furnished herein. The envelope shall also bear the identification of the Project, Contract No. and date and time of bid opening.

3. EXPLANATION TO BIDDERS

Any explanation desired by bidders regarding the meaning or interpretation of the drawings and specifications must be requested to the ENGINEER in writing and with sufficient time allowed for a reply to reach them before the submission of their bids. Verbal explanations or instructions given before the award of the contract will not be binding. Any interpretation which may result in a substantial change in the Plans and/or Specifications and may have an effect on the prices bid therefore will be issued in the form of an addendum to all bidders, and its receipt by the bidder shall be acknowledged.

4. MODIFICATIONS TO SPECIFICATIONS -ADDENDA

The right is reserved, as the interest of the OWNER may require, to revise or amend the specifications and/or drawings prior to the date set for opening bids. Such revisions and amendments, if any, will be announced by an addendum or addenda. Copies of such addenda as may be issued will be furnished to all prospective bidders. If the revisions and amendments are of a nature which required material changes in quantities or prices bid, or both, the date set for opening bids may be postponed by such number of days as in the opinion of the ENGINEER will enable bidders to revise their bids. In such case, the

addendum will include an announcement of the new date for opening bids.

Bidders shall acknowledge receipt of all addenda which have been issued during the period of bidding and agree that said addenda shall become part of this contract. The bidders shall list the numbers and issuing dates of the addenda received and acknowledge same on the appropriate page provided in the Form of Proposal section of these specifications.

5. BID GUARANTY

Each bid must be accompanied by a cashier's check, certified check, or bid bond duly executed by the bidder as principal and an acceptable surety company, such guarantee to be made payable to the OWNER in the amount of ten percent (10%) of the bid, but not in excess of \$20,000.00. All bid guarantees shall be accompanied by an executed consent from an acceptable surety company, agreeing to furnish the required Performance and Maintenance Bonds upon the award of Contract. The surety company shall be one licensed to conduct business in the State of New Jersey.

6. METHOD FOR SUBMITTING BIDS

No proposal will be considered unless submitted upon the proposal form for the project. The blank spaces in the proposal form shall be filled in correctly, where indicated, for each and every item for which a description is given, and the bidder must state the prices (which shall be written in ink, in words and numerals) for which he proposes to do each part of the work contemplated. In case of discrepancy, the written words shall be considered as being the bid price.

The bidder shall sign his proposal correctly. If the proposal is made by an individual, in addition to his signature, his complete post office address should be given. If made by a firm or partnership, the complete post office address of each member of the firm or partnership must be given. If made by a corporation, the person signing the proposal should be the President or Vice President and the Secretary Treasurer or Treasurer of the corporation; otherwise, the signing individual's certificate or authority to execute such papers should accompany the proposal.

If bidder has been incorporated in some state other than New Jersey, bidder shall state whether the corporation is registered to do business in New Jersey. If bidder operates under an assumed or fictitious name, he shall state whether such name has been registered in New Jersey.

No contract will be awarded to a bidder who is a foreign corporation or operating under a fictitious or assumed name unless he has complied or agreed to comply, with the proper registration under the laws of New Jersey.

7. BIDDER'S QUALIFICATIONS

The bidder shall submit with his proposal a statement of facts in detail as to his previous experience in performing similar or comparable work, and of his business and technical organization and financial resources and plant available and to be used in performing the contemplated work.

Upon request, bidder shall prove that he has liquid assets, available for the project upon which he is bidding in an amount equal to fifteen percent (15%) of the first \$100,000.00 of the amount of the bid plus ten percent (10%) of the next \$900,000.00 plus five percent (5%) of the remainder of the bid.

None of the following will be considered as liquid assets:

- (a) Capital Stock of the Contractor.
- (b) Accounts receivable against which assignments have been made.
- (c) Equity in real estate.
- (d) Life Insurance.
- (e) Reserve representing pre-payment of taxes or other expenses.
- (f) Deposits held as security for other contracts.
- (g) Capital of proposed sub-contractors.

In addition to the financial and experience qualifications, the bidder may be required to prove to the satisfaction of the Owner that he has successfully completed a contract for similar work in an amount of not less than seventy-five percent (75%) of the amount of the proposed contract.

The foregoing will guide the Owner in determining the responsibility of the bidder, but additional information may be requested by the Owner whenever in its judgment such information is necessary to determine the responsibility of the bidder.

In the event the bidder fails, refuses or neglects to submit any required information within the reasonable time stated in any request therefore or fails to qualify as a responsible bidder, his proposal guaranty shall be forfeited to the use of the Owner, not as a penalty, but as liquidated damages.

8. BID OPENING PROCEDURE

Sealed proposals on projects will be received by the Owner at the designated place and until the time stated in the "Advertisement" at which time all proposals will be publicly opened and read. The Owner reserves the right to reject any or all bids, or parts thereof, as it may deem best for the interest of the Owner.

9. COLLUSIVE BIDS

The proposal of any bidder or bidders who engage in collusive bidding shall be rejected. Any bidder who submits more than one proposal in such manner as to make it appear that the proposals submitted are on a competitive basis from different parties shall be considered a collusive bidder. The Owner may reject the bid proposals of any collusive bidder upon bid opening. However, nothing in this section shall prevent a bidder from superseding a bid proposal by a subsequent proposal delivered prior to bid opening which expressly revokes the previous bid.

10. WITHDRAWAL OF BIDS

Bids may be withdrawn on written or telegraphic request received from bidders prior to the time fixed for opening. Negligence on the part of the bidder in preparing the bid confers no right for the withdrawal of the bid after it has been opened.

11. AWARD OF CONTRACT

The Owner's Solicitor shall have the right to waive informalities in the bids when such waiver is in the best interest of the Owner.

The contract will be awarded to the lowest responsible bidder within (60) days of the bid opening or all bids will be rejected. Thirty (30) day extensions of time may be made by the mutual written consent of the Owner and the lowest responsible bidder.

If the lowest bidder withdraws his bid, refuses award of contract, the Owner shall have the right to award to contract to the next lowest responsible bidder or to reject all bids and re-bid the contract.

12. EXECUTION OF CONTRACT

The bidder to whom award is made shall, within ten (10) days of his notice of award, execute the Contract Documents and furnish a Performance Bond in an amount equal to the full amount of the Contract. The Bond must be drawn by an acceptable surety company and be in the form of a combination Performance and two (2) year Maintenance Bond in the full amount of the contract. The two (2) year maintenance period shall begin on the date of the acceptance of the work by the OWNER.

No proposals or awards shall be considered binding upon the Owner unless and until the contract documents are properly executed by both parties.

13. FAILURE TO EXECUTE CONTRACT

If the lowest responsible bidder to whom the contract is awarded fails to submit bonds or execute the contract within the time specified, the amount of the proposal guaranty shall be paid to the Owner as liquidated damages. In such case the Owner, at his discretion may award the contract to the next lowest responsible bidder or reject all bids.

14. SUBLETTING OR ASSIGNING OF CONTRACT

The Contractor shall not sublet, sell, transfer, assign or otherwise dispose of the contract or any portion thereof, of his right, title or interest therein, without the written consent of the Owner.

15. REJECTION OF BIDS

The OWNER reserves the right to reject any and all bids when such rejection is in the interest of the OWNER; to reject the bid of a bidder who has previously failed to perform properly or complete on time contracts of a similar nature; and to reject the bid of a bidder who is not, in the opinion of the ENGINEER, in a position to perform the contract.

The OWNER further reserves the right to reject bids which are unbalanced if, in the opinion of the ENGINEER, said unbalanced bids could cause undue increases in contract costs.

16. PAYMENTS TO CONTRACTOR

The Contractor will prepare and submit to the ENGINEER a written pay request based on in place measurements, of work done by the Contractor during the pay period; ninety percent (90%) of such estimate shall be due the Contractor as payment on account within forty five (45) days after submittal to the ENGINEER barring any measurement disputes between the ENGINEER and the Contractor. The balance of ten percent (10%) of a monthly estimate shall be withheld until final acceptance of the completed work. However, when the total contract price exceeds One Hundred Thousand Dollars (\$100,000.00), then ninety-eight percent (98%) of such estimate shall be due the Contractor as above specified. The balance of two percent (2%) of a monthly estimate shall be withheld until final acceptance of the completed work, or in lieu of the two percent (2%) cash retainage the Contractor may agree to deposit negotiable bearer bonds of the State of New Jersey, or negotiable bearer bonds or notes of any political subdivision of the State, the value of which is equal to two percent (2%) of said estimate, provided they are delivered directly to and approved by the OWNER. The value of a bond or note shall mean par value or current market value, whichever is lower. The balance of a monthly estimate withheld and the bonds or notes deposited, and any interest accruing on such bonds or notes, shall be returned to the Contractor upon final acceptance of the completed work. Any interest accruing on cash payments withheld shall be credited to the OWNER.

17. TIME OF COMPLETION

Should all the work under the Contract not be completed within the time specified herein from notice to proceed, there shall be deduced and retained out of the payments which may be due the contractor, the sum as designated in the Proposal for each and every calendar day beyond the time stipulated, excepting Sundays and Legal Holidays, not as a penalty but as liquidated damage for engineering or other expenses.

18. RETURN OF BID GUARANTY

After bids are opened and read, bid securities will be returned to all but the three (3) apparent lowest responsible bidders on each contract. Those receiving returned bid securities must sign receipt for same. All other bid securities will be returned after the signing of a formal contract.

19. WAGE RATES

This contract is subject to New Jersey Department of Labor and Industry prevailing wage rates. Prevailing minimum wage rates are appended hereto. BIDS WILL NOT BE ACCEPTED FROM BIDDERS WHO ARE ON THE "DEBARRED LIST" OF THE NEW JERSEY DEPARTMENT OF LABOR AND INDUSTRY.

20. CHAPTER 33, P.L. 1977, C.52:25-24.2

This Contract is subject to the Act requiring corporation and partnership bidders for State, County, Municipal or School District Contracts to submit a list of the names and addresses of all stockholders owning ten percent (10%) or more of their stock, or ten percent (10%) or more of the stock of their corporate stockholders, or in the case of partnership, the names and addresses of those partners owning ten percent (10%) or greater interest therein.

21. AFFIRMATIVE ACTION (N.J.S.A. 10:5-31 et seq., N.J.A.C. 17:27)

If awarded a contract, your company/firm will be required to comply with the requirements of N.J.S.A. 10:5-31 et seq. and N.J.A.C. 17:27. Details for compliance with the Affirmative Action Regulations are provided in the GENERAL PROVISIONS under Mandatory Equal Opportunity Language.

END OF SECTION

SECTION C STATEMENT OF WORK

TOWNSHIP OF WILLINGBORO COUNTRY CLUB POOL DRAINPIPE REPAIR CONTRACT NO. WTCEX 22031

1.1 GENERAL

This project consists of repair the deep drainpipe associated with the Country Club Pool. Investigations to date indicate that there is a leak in the deep drainpipe as it exits the pool envelope. The deep drainpipe is 10-inch Schedule 80 PVC.

The required depth of the excavation to repair the drainpipe is anticipated to be upwards of 20 feet below the existing grade, while groundwater is expected at a depth of 10 feet below the existing grade. It is anticipated that dewatering will be required. The groundwater should be lowered to a minimum of 5 feet below the proposed excavation depths during the repair operations.

Temporary excavation support will be necessary to perform the anticipated drainpipe repairs. All excavation bracing should be constructed in accordance with OSHA Earthwork standards.

A Geotechnical Report regarding the site conditions was prepared by Pennoni Associates, Inc.; the Report is incorporated as part of this Project Manual as an Appendix.

1.2 DESCRIPTION OF WORK

A. Bonding, Mobilization, Health and Safety Plan (HASP) Preparation, Dewatering Plan Preparation, Shoring Plan Preparation and Project Initiation

HASP, Dewatering Plan and Shoring Plan shall be prepared by qualified professionals with the requisite experience in preparing same, with qualifications as stipulated in this Project Manual.

B. Sitework (Selection Demolition and New Construction)

1. Disconnect / Reconnect Utilities

Disconnect Utilities that traverse the excavation area prior to excavation activities, while protecting Utilities outside of the excavation area as necessary. Reconnect Utilities as part of site restoration activities. Work to be performed by qualified professionals with the requisite qualifications and/or certifications to perform such work.

2. Demolition / New Construction: Chain Link Fence

Remove fencing as necessary to provide equipment access to the excavation area. Remove fence posts as necessary to provide equipment access to the excavation area. Replace the

fence as part of site restoration activities (match new fencing to existing remaining fencing).

3. Demolition / New Construction: Concrete Pool Deck, Walkways and Flatwork
4. Demolition / New Construction: Pool Surge Tank
5. Demolition / New Construction: Pool Deck Drains and associated Piping

From the area of the demolished concrete pool deck and flatwork: 4 drains and connecting piping. Temporarily plug or seal remaining adjacent pool deck drain system to prevent drainage from said remaining system into the excavation.

6. Demolition / New Construction: Light Pole with fixture and wiring

Reconstruct Light Pole in same location as demolished Light Pole as part of site restoration activities.

7. Construct and Maintain Erosion and Sedimentation Controls

In accordance with Burlington County Soil Conservation District standards.

C. Deep Drainpipe Repair

1. Excavate, Stockpile, Transport and Dispose Soil

The total amount of soil to be excavated and managed is expected to be between 900 and 1,100 cubic yards. While it is presumed that excavated soils will be deemed clean based on site history, the effort and cost to comply with disposal facility requirements will be borne by the Contractor and should be included in the proposed fee.

2. Dewatering

Item shall include all design, permitting, equipment, materials, labor, and maintenance required to dewater the excavation during the deep drainpipe repair activities. The required depth of the excavation to repair the drainpipe is anticipated to be upwards of 20 feet below the existing grade, while groundwater is expected at a depth of 10 feet below the existing grade. The groundwater should be lowered to a minimum of 5 feet below the proposed excavation depths during the repair operations.

A Geotechnical Report regarding the site conditions was prepared by Pennoni Associates, Inc.; the Report is incorporated as part of this Project Manual as an Appendix.

3. Excavation Support and Protection / Shoring

Item shall include all design, permitting, equipment, materials, labor, and maintenance required to provide excavation support in accordance with OSHA Earthwork Standards. The excavation support and protection systems shall be designed to resist all lateral loading and surcharge, including but not limited to, retained soil, groundwater pressure,

adjacent building loads, adjacent traffic loads, construction traffic loads, material stockpile loads, and seismic loads.

A Geotechnical Report regarding the site conditions was prepared by Pennoni Associates, Inc.; the Report is incorporated as part of this Project Manual as an Appendix.

4. Disconnect / Remove 8" PVC Skimmer Drainpipe from Excavation Area

The placement of excavation protection /shoring will require the disconnection of the skimmer drainpipe which is located approximately 3-feet beneath the ground surface, running parallel to the deep drainpipe. The skimmer drainpipe will require disconnection and removal from the excavation area. A temporarily plug or seal of the remaining skimmer drain will be required to prevent drainage into the excavation.

5. Deep Drainpipe Repair

Investigations to date indicate that there is a leak in the deep drainpipe as it exits the pool envelope. The pipe is 10" Schedule 80 PVC.

6. Reconnect 8" PVC Skimmer Drainpipe

7. Backfill Excavation: Flowable Fill

D. New Construction: Diving Board

1.3 CONSTRUCTION SCHEDULE AND PHASING

- A. A pre-construction meeting shall be held with the Contractor, Township, and Township Engineer prior to starting work to determine schedule and phasing.
- B. It is anticipated that the work will be performed during normal work hours.

1.4 COORDINATION

- A. In general, work shall be planned and coordinated through the office of the ENGINEER. Utility companies shall be notified directly by the Contractor at least 72 hours in advance of excavation or other work which may conflict with the operation of said utilities. A list of the individual companies having utilities in the project area is provided at the end of the section. Participating members of the "One Number to Call System" of underground facilities may be contacted at 1-800-272- 1000.
- B. The contractor shall obtain all necessary building permits. The Township will waive permit fees.
- C. The contractor shall notify the Township and Pennoni, in writing, at least seventy-two (72) hours in advance of any disruption to electric, communication, sewer or water service.

- D. Each Contractor shall lay out and install his work at such time or times and in such manner as to facilitate general progress of the project.
- E. Coordinate all work as further described in the General Provisions Section of the Contract Documents.
- F. Utility companies having jurisdiction in the Project Area:

Sanitary Sewer Willingboro Municipal Utilities Authority
433 John F. Kennedy Way
Willingboro, NJ 08046
(609) 877-2900

Water Willingboro Municipal Utilities Authority
433 John F. Kennedy Way
Willingboro, NJ 08046
(609) 877-2900

Gas P.S.E. & G.
300 Connecticut Drive
Burlington, NJ 08016
(609) 239-2401 (Emergency)
(609) 239-2478 (Off-Hours Emergency)

Electric P.S.E. & G.
300 New Albany Road
Moorestown, NJ 08057
(800) 436-7734

Telephone Verizon
2225 Evesham Road
Voorhees, NJ 08043
(856) 728-9988

Cable Comcast Cable
1250 Haddonfield-Berlin Road
Cherry Hill, NJ 08034
(856) 893-2900

1.5 ACCESS

- A. Work areas must be kept neat and properly protected.
- B. Contractor shall secure the site at the end of each work day. Special care should be provided to site security over weekends and longer cessations of work.

END OF SECTION

SECTION D
GENERAL CONDITIONS

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2. CHARACTER OF WORK AND MECHANICS
3. SITE INVESTIGATION
4. OPERATIONS AND STORAGE AREAS
5. PROGRESS CHARTS AND REQUIREMENTS FOR OVERTIME WORK
6. SUBCONTRACTORS
7. QUALITY OF ARTICLES, MATERIALS AND EQUIPMENT
8. PROTECTION OF MATERIAL AND WORK
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GENERAL CONDITIONS

1. SCOPE OF WORK

The work to be performed under this contract consists of furnishing all materials, equipment, supplies, labor and transportation, including fuel, power, water and performing all work as required in the Statement of Work in the contract, in strict accordance with the specifications, schedules and drawings, all of which are made a part hereof, and including such detail drawings as may be furnished by the ENGINEER from time to time during the prosecution of the work in explanation of said drawings.

2. CHARACTER OF WORK AND MECHANICS

The work shall be executed in the best and most workmanlike manner by qualified, careful and efficient mechanics in strict accordance with the drawings and specifications.

3. SITE INVESTIGATION

The Contractor acknowledges that he has satisfied himself as to the nature and location of the work, the general and local conditions, including but not restricted to those bearing upon transportation, disposal, handling and storage of materials, availability of labor, water, electric power, roads and uncertainties of weather, river stages, tides or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment and facilities needed preliminary to and during the prosecution of the work. The Contractor further acknowledges that he has satisfied himself as to the character, quality and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the ENGINEER (including, but not limited to the Geotechnical Report include as an Appendix herein), as well as from information presented by the drawings and specifications made a part of this contract. Any failure by the Contractor to acquaint himself with the available information will not relieve him from responsibility for estimating properly the difficulty or cost of successfully performing the work. The OWNER assumes no responsibility for any conclusions or interpretations made by the Contractor on the basis of the information made available by the ENGINEER. The OWNER also assumes no responsibility for any understanding or representations made by its officers or agents during or prior to the execution of this contract, unless (1) such understanding or representations are expressly stated in the contract, and (2) the contract expressly provides that the responsibility therefore is assumed by the OWNER representations.

4. OPERATIONS AND STORAGE AREAS

- a. All operations of the Contractor (including storage of materials) shall be confined to areas approved by the ENGINEER. No unauthorized or unwarranted entry upon or passage through, or storage or disposal of materials shall be made upon private premises. The Contractor shall be liable for any and all damage caused by him to such private premises. The Contractor shall hold and save the OWNER, ENGINEER and their officers and agents free and harmless from liability of any nature or kind arising from any use, trespass or damage occasioned by his operations on premises of third persons.
- b. Temporary buildings (storage sheds, shops, offices, etc.) may be erected by the Contractor only with the approval of the ENGINEER, and shall be built with labor and materials furnished by the Contractor without expense to the OWNER. Such temporary buildings and/or utilities shall remain the property of the Contractor and will be removed by him at his expense upon the completion of the work. With the written consent of the ENGINEER, such buildings and/or utilities may be abandoned and need not be removed.
- c. The Contractor shall, under regulations prescribed by the ENGINEER, use only established roadways or construct and use such temporary roadways as may be approved by the ENGINEER. Where materials are transported in the prosecution of the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicle or prescribed by any federal, state or local law or regulation. When it is necessary to cross curbs or sidewalks, protection against damage shall be provided by the Contractor, and any damaged roads, curbs or sidewalks shall be repaired by, or at the expense of, the Contractor.

5. PROGRESS CHARTS AND REQUIREMENTS FOR OVERTIME WORK

- a. The Contractor shall, within five (5) days after date of notice to proceed, prepare and submit to the ENGINEER for approval a practical schedule showing the date on which he will start the several salient features (including procurement of materials, plant and equipment) and the contemplated dates for completing same.
- b. If, in the opinion of the ENGINEER, the Contractor falls behind the progress schedule, the Contractor shall take such steps as may be necessary to improve his progress, and the ENGINEER may require him to increase days of work, and to submit for approval such supplementary schedule or schedules in chart form as may be deemed necessary to demonstrate the manner in which the agreed rate of progress will be regained, all without additional cost to the OWNER.
- c. Failure of the Contractor to comply with the requirements of the ENGINEER under the provision shall be grounds for determination by the ENGINEER that the Contractor is not prosecuting the work with such diligence as will insure completion

within the time specified. Upon such determination, the ENGINEER may terminate the Contractor's right to proceed with the work, or any separable part thereof, in accordance with the delays - damage clause of the contract.

6. SUBCONTRACTORS

Within seven (7) days after the award of any subcontract, the Contractor shall deliver to the ENGINEER a statement setting forth the name and address of subcontractors. If for sufficient reason, at any time during the progress of the work, the ENGINEER and OWNER determine that any subcontractor is undesirable, they will notify the Contractor accordingly and immediate steps will be taken for cancellation of such subcontract. Subletting by subcontractors shall be subject to the same regulations. Nothing contained in this contract shall create any contractual relation between the subcontractor and the OWNER and/or ENGINEER.

7. QUALITY OF ARTICLES, MATERIALS AND EQUIPMENT

- a. Articles, materials and equipment to be incorporated into the work under the contract shall be new and unused unless otherwise specified; and where required to conform to standard specifications of the ENGINEER or other authorities incorporated by reference, will conform to the respective editions, including amendments specified; or where the editions are not specified, will conform to the editions, including amendments in effect on the date of the Invitation for Bids.
- b. Any samples and descriptive data required shall:
 1. Be submitted within the time specified in these specifications, or, if no time be specified, within a reasonable time before use to permit inspection and testing.
 2. Be shipped, prepaid and delivered, as specified in these specifications, or as directed by the ENGINEER.
 3. Be properly marked to show the name of the material, trade name of manufacturer, place of origin, name and location of the project where the material represented by the sample is to be used, and the name of the contractor submitting the sample.
- c. Samples not subject to destructive tests may be retained until the completion of the work, but thereafter will be returned to the Contractor, if he so requests, in writing, at his own expense. Failure of any sample to pass the specified requirements will be sufficient cause for refusal to consider further any sample from the same manufacturer whose material failed to pass the tests.

8. PROTECTION OF MATERIAL AND WORK

The Contractor shall at all times protect and preserve all materials, supplies and equipment of every description (including property which may be OWNER furnished or owned) and all work performed. All reasonable requests of the ENGINEER to enclose or specially protect such property shall be complied with. If, as determined by the ENGINEER, material, equipment, supplies and work performed are not adequately protected by the Contractor, such property may be protected by the OWNER and the cost thereof may be charged to the Contractor or deducted from any payments due to him.

9. PROTECTION OF VEGETATION

- a. The Contractor will preserve and protect all existing vegetation such as trees, shrubs and grass on or adjacent to the site which do not unreasonably interfere with the construction as may be determined by the ENGINEER. The Contractor will be responsible for all unauthorized cutting or damaging of trees and shrubs, including damage due to careless operation of equipment, stockpiling of materials, or tracking of grass areas by equipment.
- b. Care will be taken by the Contractor in felling trees authorized for removal to avoid any unnecessary damage to vegetation that is to remain in place. Any limbs or branches of trees broken during such operations shall be trimmed with a clean cut and painted with an approved tree pruning compound. The Contractor will be liable for, or may be required to replace or restore at his own expense, all vegetation destroyed or damaged.
- c. Protect existing structures and other property at site or adjacent thereto, including walks, pavements and roadways.
- d. Promptly remedy all damage or loss, at no expense to the Owner.

10. POSSESSION PRIOR TO COMPLETION

The OWNER shall have the right to take possession of or use any completed or partially completed part of the work. Such possession or use shall not be deemed an acceptance of any work not completed in accordance with the contract. If such prior possession or use by the OWNER delays the progress of the work or causes additional expenses to the Contractor, an equitable adjustment in the contract price and/or the time of completion will be made and the contract shall be modified in writing accordingly.

11. SUSPENSION OF WORK

The ENGINEER may order the Contractor to suspend all or any part of the work for such period of time as may be determined by them to be necessary or desirable for convenience of the OWNER. Unless such suspension unreasonably delays the progress of the work and

causes additional expense to the Contractor, no increase in contract price will be allowed. In the case of suspension of all or any part of the work for an unreasonable length of time, causing additional expense not due to the fault or negligence of the Contractor, the ENGINEER shall make an adjustment in the contract price in the amount of the additional proper expense and modify the contract accordingly. An extension of time for the completion of the work in the event of any such suspension will be allowed the Contractor, providing, however, that the suspension was not due to the fault or negligence of the Contractor.

12. CLEANING UP

The Contractor shall at all times keep the construction area, including storage areas used by him, free from accumulations of waste materials or rubbish and prior to completion of the work remove the rubbish from the premises. Upon completion of the construction, the Contractor shall leave the work and premises in a clean, neat and workmanlike condition satisfactory to the ENGINEER.

13. BONDS

- a. Performance, Payment and Maintenance Bonds. The Contractor shall furnish a performance, payment and maintenance bond with good and sufficient surety or sureties acceptable to the OWNER in connection with the performance of the work under this Agreement. The penal sum of such performance and maintenance bonds will be one hundred percent (100%) of the contract price. After completion and acceptance of all work, the maintenance bond shall remain in effect for a two (2) year period as guarantee against latent defects.
- b. Any bonds required hereunder will be dated as of the same date as the contract and will be furnished by the Contractor to the OWNER at the time the contract is executed, and must be accompanied by a Power of Attorney Certificate and Financial Statement.

14. INSPECTION

The work is subject to inspection by the ENGINEER or their appointed inspectors to insure strict compliance with the terms of the contract. No inspector is authorized to change any provision of the specifications without written authorization of the ENGINEER, nor shall the presence or absence of an inspector relieve the Contractor from any requirements of the contract. As soon as practicable after the completion of the entire work, or any divisible part thereof as may be designated in these specifications, an examination thereof will be made by the ENGINEER at the site of the work. If such work is found to comply fully with the requirements of the contract, it will be accepted, and final payment therefore will be made in accordance with the clause of the contract entitled, "Payments to Contractors."

15. INSTALLATION, OPERATION AND MAINTENANCE MANUALS

Upon completion of all work the Contractors will furnish six (6) copies of Record Data and Installation, Operation and Maintenance Manuals for all Mechanical and Electrical Equipment. Maintenance Manuals shall include complete wiring diagrams, normal causes of failures and how to remedy them, with complete instructions on maintenance of equipment. Delivery of these manuals will be made to the ENGINEER prior to submittal of semi-final estimate for payment by the Contractor.

END OF SECTION

SECTION E
SPECIAL CONDITIONS

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1. ON-SITE CONDITIONS
2. UTILITIES
3. RESPONSIBILITY REGARDING EXISTING UTILITIES, PIPES AND STRUCTURES
4. STORING OF MATERIALS
5. WATER SUPPLY
6. PRECONSTRUCTION CONFERENCE
7. COMMUNICATIONS
8. EXECUTION, CORRELATION AND INTENT OF DOCUMENTS

1. ON-SITE CONDITIONS

Meet following conditions during the progress of contract as specified in the New Jersey Department of Transportation Standard Specifications, as currently amended.

- a. Public Safety and Convenience
- b. Sanitary, Health and Safety Provisions
- c. Final Clean Up
- d. Equipment

2. UTILITIES

Adhere to the Standard Specifications regarding location of and construction around public utilities, including those publicly and privately owned.

Permit owners of utilities, or their agents, access to site work at all times, in order to relocate or protect their facilities. Cooperate and coordinate with utility owners in performing this work.

Notify utility owners not less than ten (10) days in advance of any work that will endanger or affect their facilities.

Separate payment will not be made for protection and preservation of utilities and cooperation and coordination with their owners. Include all such costs in unit price bid for the various items of contract as listed in Proposal.

Any public utility facilities being constructed under this contract shall be subject to inspection by the utility owner during construction, and the utility owner shall be given the opportunity to inspect material to be used in reference to the specifications and plan details applying to such materials.

Comply with requirements of Blasting--Excavating--Restrictions, State of New Jersey--Laws of 1964 Section I, P.L. 1964c 53 (C.2A:170-69.4), as currently amended, which generally requires notification of gas company before any work commences within 200 feet of their services.

Contact the following a minimum of ten (10) days prior to construction:

- "One Number to Call System": (800)272-1000

The Contractor is advised that the "One Number to Call System" Service noted above does not necessarily include all utilities in the construction area. Some utility companies (for example, New Jersey-American Water Company) may require separate notification.

3. RESPONSIBILITIES REGARDING EXISTING UTILITIES, PIPES AND STRUCTURES

Existence and location of utilities, pipes and structures shall be investigated and verified in field by Contractor before starting work.

Contractor shall be held responsible for any damages to and for protection of all existing utilities and structures.

4. STORING OF MATERIALS

All materials required in the work may be stored on site subject to approval by the ENGINEER. All such materials, tools, and machinery stored upon public thoroughfares shall be provided with approved warning lights or other devices to protect pedestrian and vehicular traffic.

5. WATER SUPPLY

Provide all water for construction purposes, including expense of having water conveyed about the work, in prices stipulated for various items of the work under this contract. The source, quality and quantity of water furnished shall at all times be satisfactory to ENGINEER.

Existing water supply lines may be connected for construction water providing a meter is installed at Contractor's expense and water paid for by Contractor.

6. PRECONSTRUCTION CONFERENCE

A Preconstruction Conference will be held at the office of the ENGINEER or at the construction site, at the discretion of the ENGINEER. The ENGINEER will notify the Contractor of date and time.

7. COMMUNICATIONS

Forward all communications to OWNER through ENGINEER.

8. EXECUTION, CORRELATION AND INTENT OF DOCUMENTS

The Contract Documents as defined in the General Provisions are complementary, and what is called for by any one shall be as binding as if called for by all.

END OF SECTION

SECTION F
GENERAL PROVISIONS

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3. OBLIGATIONS OF CONTRACTOR
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GENERAL PROVISIONS

1. DEFINITIONS

Wherever the term "OWNER" is used herein, it shall refer to the Municipality, the party of the first part to this Agreement.

Wherever the term "Contractor" is used herein, it shall refer to and designate the party of the second part to this Agreement, or his or their legal representative, successors or assigns.

Wherever the term "ENGINEER" is used herein, it shall refer to and designate the ENGINEER duly authorized by the OWNER to approve the construction of the improvements contemplated herein, or the duly appointed assistant or representative of said ENGINEER. ENGINEER as referenced in STANDARD SPECIFICATIONS, shall be interpreted to mean the ENGINEER duly authorized by the OWNER to observe the construction of the improvements contemplated herein, or the duly appointed assistant or representative of said ENGINEER.

Wherever the terms "Mayor" and "Clerk" are used herein, they shall refer to and designate the Mayor and Clerk of the Municipality.

Wherever the term "As Designated" is used herein, it shall be held to refer to information or directions indicated on the contract drawings or in the specifications covering the construction of the improvements contemplated herein.

Wherever the term "Approved" is used herein, it shall be held, unless otherwise specified, to mean as approved by the ENGINEER. Similar use will be made of the terms "Directed," "Required," "Permitted" and words of like import.

The Contract Documents consist of Advertisement Instructions to Bidders, Statement of Work, General Conditions, Special Conditions, General Provisions, General Specifications, Proposal, Contract Documents, Wage Rate Determinations and Plans, including all modifications incorporated in the documents before their execution.

The term "Subcontractor" as employed herein, includes only those having a direct contract with the Contractor, and it includes one who furnishes material worked to a special design according to the Plans and Specifications of this work, but does not include one who merely furnishes material not so worked.

"Written Notice" shall be deemed to have been duly served if delivered in person to the authorized agent of the Contractor, such as superintendent or foreman in charge of work or to a member of the firm or to an officer of the corporation for whom it is intended, or if

delivered at or sent by registered mail to the last business address known to him who gives the notice.

"Section" shall refer to either the specification section of these specifications in which case it will be followed by the term "of these specifications" or a specified section of the Standard.

Specifications in which case it will be followed by the term "of the STANDARD SPECIFICATIONS".

"Commissioner" as referenced in STANDARD SPECIFICATIONS shall be interpreted to mean ENGINEER.

"Department" as referenced in STANDARD SPECIFICATIONS shall be interpreted to mean the ENGINEER duly authorized by the OWNER to observe the construction of the improvements contemplated herein, or the duly appointed assistant or representative of said ENGINEER.

"Provide" shall be interpreted to mean to furnish and install complete.

"Standard Specifications", the New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, dated 2007, and all amendments thereto.

"State", as referenced in STANDARD SPECIFICATIONS shall be interpreted to mean OWNER.

2. EXTENT OF CONTRACT

The Advertisement, Instructions to Bidders, Proposals, Bonds, General Specifications and Contract Drawings are, and shall be taken to be a part of this contract. All work and materials mentioned in the specifications and not shown on the drawings, and all work and materials shown on the drawings and not mentioned in the specifications, and all work and materials necessary for the completion of the work according to the true intent and meaning of the contract drawings and specifications, shall be furnished, performed and done as if the same were both mentioned in the specifications and shown on the drawings. In case of disagreement between the plans and specifications, the ENGINEER will decide which shall prevail and the Contractor shall proceed in accordance with the ENGINEER's decision at no change in contract price.

Should anything be omitted from the contract drawings or specifications which is necessary to a clear understanding of the work, or should any error appear either in any of the various instruments furnished or in the work done by other contractors affecting the work included under this contract, the Contractor shall promptly notify the ENGINEER of such omission or errors and in the event of the Contractor's failure to do so, he shall make good any

damage to or defect in his work caused thereby. He will not be allowed to take advantage of any error or omission on the contract drawings, as full instructions will be furnished by the ENGINEER. Should such error or omission be discovered, the Contractor shall carry out such instructions as if originally specified.

Each and every provision of law and clause required by law to be inserted in this contract shall be deemed to be inserted herein, and this contract shall be read and enforced as though it were included herein, and if through mere mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party hereto, the contract shall forthwith be physically amended to make such insertion.

3. OBLIGATIONS OF CONTRACTOR

The Contractor shall, at his own cost and expense, and in strict conformity with the hereinafter contained or hereto annexed specifications and the contract drawings, furnish all the materials and labor and all tools, implements, machinery and appliances of every kind necessary or proper for the purpose, and in good substantial and workmanlike manner and within the time hereinafter specified, perform and complete the work required under this contract. He shall complete the entire work to the satisfaction and approval of the ENGINEER, and shall accept in consideration thereof, and as full compensation therefor, the sums set opposite the respective classes of work and materials named in the contract and proposal herein contained or hereto annexed, the said sums being the amounts at which the contract therefor was awarded to the Contractor at the public letting thereof.

4. ABSENCE OF CONTRACTOR

In the absence of the Contractor there shall at all times be a duly authorized representative on the work, who shall receive and execute all information provided by the ENGINEER, and such information so given to and received by said representative, shall be deemed to have been given to and received by the Contractor.

5. NOTICES TO CONTRACTOR

The residence or place of business given in the bid or proposal upon which this contract is founded is hereby designated as the place where all notices, letters and other communications shall be served, mailed to or delivered. Any notice, letter or other communication addressed to the Contractor and delivered at the above named place or deposited in a postpaid wrapper in any post office box regularly maintained by the United States Post Office Department shall be deemed sufficient service thereof upon the Contractor, and the date of mailing shall be the date of service. The place named may be changed at any time by an instrument in writing, executed and acknowledged by the Contractor and delivered to the ENGINEER.

Nothing herein contained shall be deemed to preclude or render inoperative the service of any notice, letter or other communication upon the Contractor personally.

6. INSPECTION

The ENGINEER or his authorized representative will inspect the materials furnished and the work done under this contract, and he is also hereby authorized and empowered to reject and refuse all work and materials and the method of application of any part thereof, under or in fulfillment of this contract, that does not comply in kind, quality, quantity, time or place with the specifications and the contract drawings. The inspections, approval or acceptance of any part of the work herein contracted for, or the materials used therein, or any payment on account thereof, shall not prevent the rejection of said work or materials at any time thereafter during the existence of this said work or materials be found to be defective or not in accordance with the requirements of this contract.

7. ENGINEER'S STATUS

The ENGINEER is the agent of the OWNER to the extent provided in the Contract Documents and in special instances he shall, upon request, show the Contractor written authority.

As the ENGINEER is, in the first instance, the interpreter of the conditions of the contract and the judge of its performance, he shall side neither with the OWNER nor with the Contractor, but shall use his powers under the contract to enforce its faithful performance by both.

In case of the termination of the employment of the ENGINEER, the OWNER shall appoint a capable and reputable Engineer against whom the Contractor makes no reasonable objection, whose status under the contract shall be that to the former ENGINEER.

8. ENGINEER'S DECISION

The ENGINEER shall, in all cases, determine the amount, quality, acceptability of the work, materials and equipment which are to be paid for under this contract. He shall also determine all questions in relation to said work and the performance thereof, and decide upon questions which may arise relative to the fulfillment of this contract on the part of the Contractor, except as provided herein. The determinations of the ENGINEER as to work, materials and equipment shall be subject to the final approval of the OWNER.

9. ACCESS TO WORK

The Contractor shall at all times give access to the work to the OWNER, to the ENGINEER and the assistants and inspectors under them, and to representatives of the Department of Health of the State. The Contractor shall furnish all the necessary facilities for determining both on the work and at the places of manufacture, that all work to be done and all materials to be furnished under this contract is being performed and are being made strictly in accordance with the terms of the contract and with the contract drawings and specifications. The Contractor shall notify the ENGINEER in writing at least seven (7) days previous to the commencement of the manufacture of any materials, of the time and place where the manufacture is to take place, in order that a representative of the OWNER may be present

to inspect the manufacture, should it be so desired.

10. COMPETENT WORKERS TO BE EMPLOYED

The Contractor shall employ only competent and skillful workers to do the work, and whenever the ENGINEER shall notify the Contractor in writing that any worker on the work is, in their opinion, disorderly, disrespectful, or otherwise unsatisfactory, the Contractor, on receiving such notice, shall forthwith dismiss such person and shall not again employ him for any part of the work without the written consent of the ENGINEER.

11. LAW AND ORDINANCES

The Contractor shall keep himself fully informed of, and shall carefully observe and comply with all State, County and local laws, ordinances and regulations which in any manner affect the conduct of the work, and all such orders or decrees as exist at present and those which may be enacted later, of bodies having any jurisdiction or authority over the work, and shall indemnify and save harmless the OWNER, ENGINEER and all their officers, agents and servants against any claim or liability arising from or based upon the violation of any such law, ordinance, regulation, order or decree, whether by himself or his employees.

12. PERMITS

The Contractor shall take out all necessary permits from the municipal or other public authorities, and shall give all notices required by law or municipal ordinance. Any charge or fee for permits issued by the municipality shall be borne by the OWNER. The OWNER will be reimbursed by the Contractor for the cost of inspection of the work under this contract required by public authorities other than the OWNER, and the municipality, such as the County or the State. The Contractor shall comply with all requirements of the 1964 Assembly Bill No. 803, an act to amend and supplement an act relating to excavation or blasting near pipes distributing or transmitting manufactured, mixed, or natural gas, approved May 12, 1964 (P.L. 1964, C. 53).

13. LABOR-EMPLOYMENT-WAGES-HOURS

The Contractor shall comply with all requirements of the labor laws of the State applicable to contracts on behalf of a municipality for construction, alteration or repair of any building or public work.

14. WORKERS COMPENSATION

The Contractor shall take out and maintain Workers Compensation Insurance to fully protect the OWNER as required by existing law, or as such may be amended during the life of this contract. In case the Contractor shall subcontract any portion of the work, he shall require that all employees of the subcontractor are properly covered by such Workers Compensation Insurance. In case any class of employees engaged in hazardous work under this contract is not protected under Workers Compensation statute, the Contractor shall provide, and shall cause each subcontractor to provide, adequate and suitable insurance for the protection of his employees not otherwise protected.

15. PUBLIC LIABILITY, PROPERTY AND AUTOMOBILE INSURANCE

The Contractor shall take out and maintain during the life of this contract the various types and amounts of insurance as required to protect the Contractor, the OWNER and any subcontractor performing work covered by this contract from claims for damages or personal injury, including accidental death, as well as from claims for property damages which may arise from operations under this contract, whether such operations be by himself or by any subcontractor or by anyone directly employed by either of them.

Pennoni Associates Inc. and its consultants shall specifically be named as additional insured. The following requirements apply to coverages that shall be provided and maintained:

LIABILITY

A. Coverage is to be written on a Commercial General Liability Form providing:

- 1) Premises/Operations Liability Coverage
- 2) Products/Completed Operations Liability Coverage
- 3) Blanket Contractual Liability Coverage
- 4) Broad Form Property Damage Coverage
- 5) Independent Contractors Liability Coverage
- 6) Personal Injury Liability Coverage
- 7) Underground Hazard Liability Coverage
- 8) Explosion and Collapse Hazard Liability Coverage
- 9) Broad Form Comprehensive General Liability Endorsement

(Coverage as required under #7 or #8 shall be waived by the OWNER if the work to be performed by the Contractor on behalf of the OWNER does not necessitate these coverages.)

The Liability Policy must be written with a minimum combined single limit of \$1,000,000 for Bodily Injury and Property Damage.

AUTOMOBILE LIABILITY

- A. The coverage is to be written on a Commercial Automobile Liability form providing liability coverage for all owned, hired and non-owned automobiles.
- B. The Automobile Liability Policy must be written with a minimum combined single limit of \$1,000,000 for Bodily Injury and Property Damage.

WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY

- A. The Worker's Compensation Policy must be issued to provide statutory coverage for the State of New Jersey.

EXCESS LIABILITY/UMBRELLA

- A. Umbrella Liability coverage is to be provided with a minimum limit of \$1,000,000 in excess of all underlying primary coverages required by the OWNER.

OWNER'S, CONTRACTOR'S PROTECTIVE LIABILITY

- A. An Owner's, Contractor's Protective Liability Policy with a \$2,000,000 Limit of Liability must be provided in the name of the OWNER of the project.

BUILDER'S RISK

- A. Builder's Risk coverage will be provided on an "All Risk Basis" subject to standard policy conditions and exclusions for the total value of the amount shown within the bid for any structure or building that will become real property upon completion of the contract. Otherwise this coverage will not be required.

FILING OF CERTIFICATES, ENDORSEMENTS AND POLICIES

- A. Certificates in triplicate from the insurance carrier stating the limits of liability and expiration date shall be filed with the OWNER before operations are begun. Such certificates shall not merely name the types of policy provided, but shall specifically refer to this Contract and shall contain a separate express statement of compliance with each of the requirements as set forth in the section.
- B. All policies as hereinafter required shall be so written that the OWNER and additional insured will be notified of cancellation or restrictive amendment at least thirty (30) days prior to the effective date of such cancellation or amendment.
- C. If any part of the work is sublet, insurance of the same types and limits as required by above items shall be provided by or on behalf of the subcontractor to cover that part of the work that they have contracted to perform.
- D. The policies of insurance so required to be purchased and maintained shall include as additional insured OWNER, ENGINEER, ENGINEER'S Consultants and any other persons or identities named in the supplementary conditions and shall include coverage for their respective officers and employees.

16. SOCIAL SECURITY ACT

The Contractor shall be and remain an independent contractor with respect to all services performed hereunder and agrees to and does hereby accept full liability for the payment of any and all contributions or taxes for social security, unemployment insurance, federal withholding tax or old age retirement benefits, pensions or annuities, nor or hereafter imposed under any state or federal law which are measured by the wages, salaries, or other remuneration paid to persons employed by the Contractor on work performed under the terms of this contract, and further agrees to obey all lawful rules and regulations and to meet all lawful requirements which are now or hereafter may be issued or promulgated

under said respective laws by any duly authorized state or federal officials; and said Contractor also agrees to indemnify and save harmless the OWNER from any such contributions or taxes or liability thereof.

17. ASSIGNMENT OF CONTRACT

The contractor or his thoroughly qualified and designated representative shall give his personal attention constantly to the faithful prosecution of the work. He shall not assign, transfer, convey or otherwise dispose of this contract, or his right, title, or interest in, or to the same or any part thereof, without the previous approval of the OWNER.

The Contractor shall not assign, by power of attorney or otherwise, any of the monies to become due and payable under this contract, unless by and with the written consent of the OWNER, and such consent or approval, if given, will not relieve the Contractor from any of the obligations of said contract.

Assignment of this contract or any part thereof or of any funds to be received thereunder by the Contractor shall contain a clause to the effect that it is agreed that the funds to be paid the assignee under the assignment are subject to a prior lien for services rendered or materials supplied for the performance of the work called for in said contract in favor of all persons, firms or corporations rendering such services or supplying such materials.

18. ROYALTIES AND PATENTS

The Contractor shall indemnify and save harmless the OWNER and its officers and agents from all damages, judgements, claims and expenses arising from the infringement of any letters, patent, or patent right because of any royalty, fee or license for the use, arrangement of operation of any tools, machinery, appliances, devices, materials, process or processes which may be used by the Contractor or furnished by him in fulfillment of the requirements of this contract. In the event of any claim or action at law on account of such patent or fees, it is agreed that the OWNER may retain out of the monies which are, or which may become due the Contractor under his contract, a sum of money sufficient to protect itself against loss, and to retain the same until said claims are paid or satisfactorily adjusted.

19. CLAIMS FOR LABOR, MATERIALS AND DAMAGES

The Contractor shall, from time to time, as required by the OWNER, furnish the OWNER with satisfactory evidence that all persons who have done work or furnished materials under this contract, or have suffered some damage on account of the Contractor's operations, have been fully paid or secured; and in case such evidence be not furnished as aforesaid, such amount as the OWNER may consider necessary to meet the lawful claims of the persons aforesaid will be retained from the monies otherwise due said Contractor, until the liabilities aforesaid have been fully satisfied. It is understood and agreed, however, that the OWNER hereby assumes no obligation toward such claimants, nor in any way undertakes to pay such claims out of any funds due or that may become due the Contractor, or out of its own funds.

20. ACCIDENTS AND CLAIMS TO BE GUARDED AGAINST

All machinery and other physical hazards shall be guarded in accordance with safety codes approved by the American Standard Association, unless such codes are not compatible with Federal, State or Municipal Laws or Regulations.

The Contractor, when necessary, shall erect and maintain on the work such strong and suitable barriers and at nighttime such red lights as will efficiently and effectually prevent any accident to life, limb or property on consequence of said work, or in the use or occupancy of street, alley, highway or public or private grounds.

The status of the Contractor in the work to be performed by him under the contract is that of an independent contractor. As such, the work, in every respect, from the execution of the contract and during progress of the work thereunder, and until final acceptance, shall be under the charge and in care of the Contractor and at his risk. He shall properly safeguard against any or all injury to the public, to public and private property, materials and things and, as such, the Contractor alone shall be responsible for any and all damage, loss or injury to persons or property that may arise, or be incurred in, or during the conduct or progress of said work without regard to whether the Contractor, his subcontractors, agents or employees, have been negligent. The Contractor shall keep the OWNER and ENGINEER free from and discharged of any and all responsibility and liability therefor of any sort or kind whatsoever. The Contractor shall assume all responsibility for risks and casualties of every description and for any or all damage, loss or injury to persons or property arising out of the nature of the work from the action of the elements, or from any unforeseen or unusual difficulty or circumstance.

Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to, all persons, work materials, equipment and property at the site or adjacent thereto.

Contractor shall designate a safety representative at the site whose responsibilities shall be safety precautions and the prevention of accidents.

The Contractor shall assume and be liable for all blame and loss of whatsoever nature by reason of neglect or violation of any Federal, State, County or local laws, statutes, ordinances or any and all rules and regulations promulgated thereunder. The Contractor shall indemnify and save harmless the OWNER and ENGINEER and all of their respective officers, agents and employees from all liability or suits or actions at loss or in equity of any kind whatsoever arising from the failure of the Contractor to comply with the terms and conditions of the contract, plans and specifications or any Federal or State statutes or local ordinances or any rules and regulations promulgated, in accordance with the provisions of such statutes or ordinances by the United States, the State of New Jersey, or any municipality thereof, or by any department or agency of any or all thereof, and the

Contractor shall, if required by the OWNER or ENGINEER, produce evidence of settlement of any such action before final payment under the contract shall be made by the OWNER.

The Contractor shall, unless otherwise specified, maintain and pay for such insurance, issued in the name of the OWNER, as will protect the OWNER from contingent liability under this contract, and the OWNER's right to enforce against the Contractor any provision of this article shall be contingent upon the full compliance by the OWNER with the terms of such insurance policy or policies, a copy of which shall be deposited with the OWNER.

21. STATEMENT OF QUANTITIES

The quantities of the work to be done and the materials to be furnished under this contract as given in the Instructions to Bidders or attached hereto or as indicated on the contract drawings, are to be used solely as a uniform basis for comparing proposals and/or for determining the amount of the Contractor's performance bond. The OWNER shall not be held responsible if any of the said quantities are found incorrect or omitted and the Contractor shall not make any claim for damages or for loss of profits or for an extension of time because of a difference between the quantities of the various classes or work as estimated and the work actually performed. If any error, omission, or misstatement is discovered in the said estimated quantities, the same shall not invalidate the contract or release the Contractor from execution and completion of the whole or any part of the work to the satisfaction of the ENGINEER and in accordance with the specifications and plans and for the prices agreed upon and fixed therefor or excuse him from any of the obligations or liabilities set forth in the Contract Documents, or entitle him to any damages or compensation otherwise than is specified in said Contract Documents. The quantities of the various work on which payments will be made to the Contractor are to be determined by measurements of the work actually performed by the Contractor and accepted by the ENGINEER as being satisfactorily completed in accordance with the requirements of the Contract Documents.

Before submitting this proposal, the Contractor shall determine for himself the quantities of work required and the conditions under which the work will be performed, by such means as he may prefer, and shall assume all risks as to variations in the quantities of the different classes of work.

He shall not at any time after the submission of this proposal, dispute or complain of the schedule of quantities or assert that there was any misunderstanding as to the amount or character of the work to be done, and shall not make any claim for damages, or for loss of profits, or for an extension of time because of a difference between the quantities of the various classes of work stated, and the quantities of work actually performed.

22. MATERIALS AND WORK

All materials furnished under this contract shall be as specified or required, or in the absence of particular specification shall be the best of their respective kinds, or new stock, unused and not deteriorated and all the work contemplated and described shall be done in

a good, substantial and workmanlike manner. Only manufactured products of the United States, wherever available, shall be incorporated into the work of the contract.

Wherever in these specifications or on the plans, the terms ASTM, AWWA, ASA and SAE specifications are used, it shall be considered to mean the latest pertinent specifications (Standard or Tentative) of the American Society for Testing Materials, American Water Works Association, American Standard Association, and the Society of Automotive Engineers respectively, and any subsequent amendments thereto.

Wherever in the contract drawings or specifications any item of equipment or material is designated by reference to a particular brand name, manufacturer or trade name, it shall be understood that an approved equal product, acceptable to the ENGINEER, may be substituted by the bidder. The Contractor will be required to demonstrate to the satisfaction of the ENGINEER that the equipment, devices or materials he proposes to furnish are, in fact, similar or equal to those designated.

23. DEFECTIVE WORK OR MATERIALS

If at any time before the final acceptance of the work, any materials or workmanship shall be discovered, which do not comply with the specifications and contract drawings, they shall be immediately removed by the Contractor, when notified to do so by a written notice from the ENGINEER, and shall be replaced at the Contractor's expense. Any work condemned by the ENGINEER as unsuitable or improperly done shall be removed and repaired, or otherwise remedied, as requested by the ENGINEER.

All material condemned by the ENGINEER shall be removed from the site of the work within two (2) days if and after notice to that effect is given.

Should defective work be suspected and the ENGINEER so requires, the Contractor shall uncover, take down or make openings in the finished work for the purpose of examining at such points as said ENGINEER designates. Should the work thus exposed or examined prove satisfactory, the uncovering, taking down or making openings in and the replacing of the covering or the making good of the parts removed shall be paid for in accordance with the contract prices for the items involved; but should the work exposed or examined prove unsatisfactory, the uncovering, taking down and replacing and making good shall be at the expense of the Contractor.

If the Contractor shall neglect or refuse to remove or replace the same within seven (7) days from the date of the written notice from the ENGINEER to do so, said notice being served either personally or by leaving it at his place of business or with his agent in charge of the work, then the OWNER may remove or cause the same to be removed and satisfactorily replaced by contract or otherwise, as he may deem expedient, and charge the expense thereof to the Contractor. The expense so charged will be deducted and paid by the OWNER out of such monies as are or may become due under this Agreement; or if such monies are not sufficient to meet the said expense, the additional monies shall be

furnished by the Contractor; and if he refuses or neglects to provide the necessary monies, they shall be provided by his surety.

24. PERMISSIBLE CHANGES AND VARIATIONS IN THE WORK

Should it be deemed necessary in the execution of the work, by reason of any condition or circumstance arising or discovered after the making of the contract, to make any minor variation desirable or necessary for the stability, economy or betterment of the work, which variations increase or decrease the quantities of the work specified or change the location thereof to an extent not unreasonably affecting the conditions of the work, and further interpreted by the ENGINEER as involving no classes of work other than those called for by this contract, the Contractor shall, upon written order from the ENGINEER to that effect, make such minor variations. If such minor variations diminish the quantity of the work to be done, no claim for damages or for anticipated profits on the work that may be dispensed with shall thereby accrue to the Contractor, and the value of the work dispensed with will not be included in any payments made to the Contractor. If such minor variations increase the amount of the work, the value of such increase shall be determined and fixed by the ENGINEER in accordance with the quantity of such work actually done, and/or at the unit prices stipulated in the contract.

Such alterations or changes as are mentioned in this section shall not vitiate or annul the obligations of the contract or the agreement of the work.

25. EXTRA WORK

Any extra work not originally contemplated under this contract and not covered by unit or lump sum prices in the proposal shall be performed by the Contractor if ordered in writing by the ENGINEER. Such extra work shall be subject to payment under the contract with a subsidiary agreement or a change order fixing the prices and method of payment and of doing the work or shall be compensated on the basis of reasonable cost of necessary labor and materials and an allowance of fifteen percent for overhead and profit as may be stipulated by the OWNER in the written authorization for the work.

A formal subsidiary agreement will be prepared for execution by the OWNER and Contractor in all cases of extra work involving major changes in or additions to the project. A change order in letter form addressed to the Contractor by the ENGINEER and containing approved endorsements of the OWNER and Contractor will be prepared in all cases of extra work involving major changes in or additions to the project. At the discretion of the OWNER, extra work may be ordered on a labor, materials, overhead and profit basis as set forth above.

In cases where extra work is ordered on a labor, materials, overhead and profit basis, the cost may include all items of labor or materials, the use of power tools and equipment actually used, power and all items of cost such as public liability and workmen's compensation insurance, pro rata charges for foreman, also social security, old age and unemployment insurance; however, no percentage for overhead and profit shall be allowed on items of social security, old age and unemployment insurance. If deductions are ordered,

the credits shall be the net costs. Among the items considered as overhead are included insurance other than mentioned above, bond or bonds, superintendent, timekeeper, clerks, watchmen, use of small tools, incidental job burdens, and general office expense. Charges for equipment shall be based upon the latest rental rates published by the Associates Equipment Distributors, Chicago, Illinois.

The Contractor shall give the ENGINEER access to all accounts, bills, payrolls and vouchers relating to such extra work and he agrees that he shall have no claim for compensation for such extra work in the case of items not covered by unit prices unless a statement in writing of the actual cost of the same, fully itemized as to labor, materials and other allowable costs is presented to the ENGINEER before the fifteenth day of the month following that during which each specific order was complied with by him.

26. OTHER CONTRACTS

It is understood and agreed that the Contractor shall execute his work in such a manner and in such order as will not interfere with work in progress and will permit the OWNER to perform other work or to enter into other contracts for work and materials to be constructed or placed in, on, or about the work herein described, with the least interference possible and with complete cooperation whenever it is desirable to prosecute said work, either simultaneously with the work under this contract or otherwise. It is agreed that the Contractor shall not be entitled to any damages or extra compensation from the OWNER on account of any work performed by the OWNER or other contractors that in any way affects the work under this contract, provided that such work of the OWNER and other contractors shall, in the opinion of the ENGINEER, be performed in a proper and expeditious or a necessary manner. The ENGINEER shall decide all questions between the Contractor hereunder, the other contractors, and the order of carrying on the work shall always be subject to their approval.

If, in the judgement of the ENGINEER, the joint occupation of the site of the work by the OWNER, or by two or more contractors working on different contracts at the same time actually impedes progress on the work herein described, then upon the recommendation of the ENGINEER, the OWNER may extend the time for the completion of the work by a length of time which accords with and compensates for the delay so caused. In case the Contractor by his own acts, or the acts of any person or persons in his employ, shall unnecessarily delay, in the opinion of the ENGINEER, the work of the OWNER or other contractors by not allowing them sufficient opportunity or facility to perform work as may be specified, the Contractor shall, in that case, pay all costs and expenses incurred by such parties due to any such delays, and he hereby authorizes the OWNER to deduct the amount of such cost and expenses from any monies due or to become due the Contractor under this contract. The ENGINEER, subject to the approval of the OWNER, shall decide the extent of such delay or delays, and the amount of such cost and expenses, and their decision shall be binding upon both parties to this contract. Nothing contained in this paragraph shall, however, relieve said Contractor from any liability or damage resulting to the OWNER on account of such delay or delays.

If any part of the Contractor's work depends for proper execution or results upon the work

of any other contractor, the Contractor shall inspect and promptly report to the ENGINEER any defects in such work that render it unsuitable for such proper execution and results. His failure to so inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of his work, except as to defects which may develop in the other contractor's work after the execution of his work.

To insure the proper execution of this subsequent work, the Contractor shall measure work already in place and shall at once report to the ENGINEER any discrepancy between the executed work and the drawings.

27. SUSPENSION OF WORK

The OWNER shall have the right to suspend the whole or any part of the work to be done hereunder, when, in the opinion of the OWNER, the Contractor is not doing the work in accordance with the provisions of the contract and specifications.

28. REMEDIES

All claims, counterclaims, disputes and other matters in question between the OWNER and the Contractor arising out of or relating to this Agreement or the breach thereof will be decided by arbitration if the parties hereto mutually agree, or in a court of competent jurisdiction within the State in which the OWNER is located.

29. ABANDONMENT OF WORK

Should the Contractor abandon or in any manner fail to complete the said work, the OWNER is hereby authorized and empowered to pay any laborers for work done who may have been employed by said Contractor upon the work herein, and to pay any claims against the Contractor for material furnished, out of any funds that would otherwise be due or become due said Contractor under this contract, and in every such case the said OWNER is hereby authorized and empowered to ascertain through the ENGINEER, the amount or amounts so due or owing to such labor or laborers, or for material, from said Contractor, in such manner and upon such proof as the said ENGINEER may deem sufficient; and the amount or amounts so found by the ENGINEER to be due and payable be final and conclusive against the Contractor, and may therefore be paid by the OWNER to said labor or laborer, or to liquidate claims for materials furnished; and any estimate may be withheld from said Contractor until all such claims for labor or material on his contract have been satisfied.

30. FORFEITURE OF CONTRACT

The OWNER at any time during the continuance of the contract for the work herein provided for, and prior to the date of the acceptance of the work as hereinafter provided, shall have the right and power to declare the whole or any part of the same forfeited for the violation of any of the conditions, terms, requirements or limitations herein contained, if the performance of the contract is unnecessarily or unreasonably delayed, or if the Contractor is not progressing with the work as fast as is necessary to insure its completion within the time specified by this contract, or if the Contractor is showing bad faith in

carrying out the contract, or if the work be not fully completed within the time fixed in this contract, for its completion, or within the time to which such completion may be extended as hereinafter provided, or further, if the Contractor shall fail or refuse to remedy or repair defective work or materials when so ordered as herein provided. If the OWNER shall declare the said contract forfeited, in whole or in any particular, such declaration of forfeiture shall in no way relieve or affect the liability of the Contractor and his sureties for breach of any of the covenants and conditions of said contract.

The OWNER will give written notice of the Contractor stating the effective date of the forfeiture. This notice will be delivered to the Contractor at least five (5) days before said effective date.

On such event, all finished or unfinished documents, data, studies, surveys, drawings, maps, models, photographs and reports prepared by the Contractor under this Contract shall, at the option of the OWNER, become the OWNER's property and the Contractor shall be entitled to receive just and equitable compensation for any work satisfactorily completed hereunder.

Notwithstanding the above, the Contractor shall not be relieved of liability to the OWNER for damages sustained by the OWNER by virtue of any breach of the Contract by the Contractor, and the OWNER may withhold any payments due the Contractor until such time as the exact amount of damages due the OWNER from the Contractor is determined.

31. COMPLETION OF CONTRACT BY OWNER

If the work to be done hereunder shall be abandoned by the Contractor, or, if this contract shall be assigned or the work sublet by him, otherwise than as herein specified, or if at any time and for reasons hereinbefore specified, the OWNER declares the contract forfeited, the OWNER may notify the Contractor to discontinue all work or any part thereof, hereunder, or may notify the said Contractor to remedy or correct the condition or breaches enumerated by a written notice served upon the Contractor. In the event that the work is ordered discontinued as herein provided, or in case the said conditions or breaches are not remedied and corrected to the satisfaction of the OWNER within seven (7) days from the service of the said written notice, the OWNER will thereupon have the power to contract for the completion of the work, or such parts thereof, in the manner prescribed by law, or to employ such and so many persons as he may deem advisable, by contract or otherwise to work at and complete the work herein described or such parts thereof, and to use such machinery, materials, tools and appliances as may be found upon the site of the work, and to produce other materials, machinery, tools and appliances for the completion of the same, and to charge the expense so incurred to the Contractor. The expense so charged will be deducted and paid by the OWNER out of such monies as may be due or may at any time thereafter become due to the Contractor under and by virtue of this contract or any part thereof. In case such expense exceeds the amount due and payable or which would become due and payable under this contract, if completed by the Contractor, the amount of such excess shall be repaid to the OWNER and in case such expense shall be less than the sum which would have been payable under this contract, if the same had been completed by the Contractor, then the Contractor shall be entitled to receive the difference. When any

particular part of the work is being carried on by the OWNER, by contract or otherwise, under the provisions of this clause of the contract, the Contractor shall continue the remainder of the work in conformity with the terms of this contract, and in such manner as will in nowise hinder or interfere with the persons or workers employed, as above provided, by the OWNER, by contract or otherwise, to do any part of the work or to complete the same under the provisions of this article of the contract.

32. COMPLETION OF WORK DEFINED

The completion of the herein specified work is defined as that stated when the installations and the appurtenant equipment included under this contract have been completed and tested, and are together, ready for continuous permanent use and occupancy for the purpose intended. After this date, there may still remain some cleaning up or other minor work, which does not prevent the permanent use of the contracted work.

33. TIME FOR COMPLETION

Work on this contract shall be commenced within ten (10) days from the date a notice from the OWNER/ENGINEER is received to commence work.

The work shall be carried on with such force and in such manner and order and at such points that by the date stipulated in the proposal and contract, or as may be modified or extended as hereinafter provided, the whole work and its parts shall be performed in accordance with the terms of this contract.

It is mutually agreed and understood by and between the parties hereto that time is an essential part of this contract, and that, if the Contractor shall fail to complete the work or any part thereof within the time above fixed, the OWNER may retain as liquidated damages as a result of such delay, from monies that are or which may become due the said Contractor, such sum per day as specified in the contract for each and every day (Sundays and legal holidays excepted) the completion of the work be delayed beyond the time specified herein for such completion.

It is understood and agreed that by the signing of the foregoing contract the Contractor waives any legal defense he might have because of the omission of a bonus clause in the event of completion before the date agreed upon, the term "Liquidated Damages" governing absolutely.

It is agreed by and between the parties hereto that inasmuch as expenses and inconvenience and other damages will be sustained by the OWNER in the event that said Contractor fails to perform the work herein specified within the time herein set forth, such as inconvenience of the public, consulting and field engineering expenses, interest charges, wages, salaries of inspectors, delay caused to other work by failure to perform this contract, and other elements, some of which are indefinite and in some cases insusceptible of easy proof, the sum per day specified in the contract for each day's delay (Sundays and legal holidays excepted) shall be considered as liquidated damages and not as a penalty and shall become

due said OWNER as full payment for all such expenses and damages sustained to fit by the failure of said Contractor to complete the work as herein specified.

34. DELAYS AND EXTENSION OF TIME FOR COMPLETION

The OWNER shall have the right to defer the beginning or to suspend the whole or any part of the work herein contracted to be done whenever, in the opinion of the OWNER or ENGINEER, it is necessary or expedient for the OWNER to do so. If the Contractor is delayed in the completion of the work by such deferral or suspension or by strikes, lockouts, fire, delay of common carriers, unavoidable casualties, delays caused by other contractors, subcontractors or suppliers or for any other reason outside of the control of the OWNER, then for all such delays and suspensions, the Contractor shall be allowed one day additional to the time herein stated for each and every day of such delay so caused in the completion of the work, the same to be determined by the ENGINEER. No such extension shall be made for any of such delays unless within ten days after the beginning of such delay, a written request for additional time is filed by the Contractor with the ENGINEER. In case of a continuing cause of delay, only one request shall be necessary.

Nothing herein shall limit the Contractor's remedy for the OWNER's negligence, bad faith, active interference, tortious conduct or other reasons un contemplated by the parties that delay the Contractor's performance, to giving the Contractor an extension of time for performance under this contract. In such cases, the Contractor may claim as additional compensation only the amount of any additional out-of-pocket expenses actually incurred as a result of such action by the OWNER. No claim for such damages shall be given unless within ten days after the beginning of such delay, a written request for additional compensation shall be filed with the ENGINEER. In case of a continuing cause of delay, only one request shall be necessary. The Contractor shall provide the OWNER and the ENGINEER with such documentation as may be requested to verify the claim for reimbursement of actual additional out-of-pocket expenses.

35. PRICES

The OWNER will pay and the Contractor shall receive the prices stipulated in the proposal herein contained or hereto annexed, as full compensation for furnishing all the materials and performing all the labor which may be required in the prosecution and completion of the work in the contract as described and specified, and as shown on the contract drawings, and also for all loss and damages arising out of the nature of the work aforesaid, or from the action of the elements or from any unforeseen obstruction or difficulty encountered in the prosecution of work, and for all expense incurred by or in consequence of the suspension or discontinuance of the work as herein specified.

36. APPROVAL AND ACCEPTANCE OF WORK

Following the completion of this contract, as such completion is defined herein, and as soon thereafter as practicable, the OWNER will inspect the entire work on all parts and details or cause the same to be inspected, and if said work and all contract performances are found to be satisfactory and in accordance with the provisions and terms of the contract and specifications, the OWNER will certify the work as completed and will accept it, but

conditional upon the subsequent remedying of defects which may become manifest within a period of one year following completion and as herein required. The certification of completion and the said acceptance of the work will be prerequisite to final payment hereunder.

Twenty-four (24) months after the date of the certificate of acceptance as hereinbefore set forth, and as soon thereafter as practicable, the OWNER shall make a review and reinspection of the work and performances of this contract, or cause the same to be made. If the said performances and work shall be found satisfactory and the work not to have deteriorated through defects of workmanship or materials, then the OWNER shall certify the release and payment of the two year Maintenance Bond herein elsewhere specified, if applicable, and such certification shall be prerequisite to the release of the sureties on the contract bonds. If, however, the review and reinspection as herein or any prior inspection discloses defects due to the non-fulfillment of this contract, or non-compliance with its requirements, the OWNER shall so notify the Contractor in writing, and thereupon the Contractor shall, at his own expense, repair or replace and shall make good all defects of workmanship, material and guarantee, and shall rectify any non-compliance, and such repairs and fulfillment shall be a prerequisite to the release and payment of the two year Maintenance Bond, if applicable, and to the release of the surety of the contract bond. If, however, the Contractor shall, after due notice, refuse or neglect to make good the defects as notified and to the satisfaction of the OWNER, then the OWNER may and is empowered to proceed in the manner described in the event of abandonment or forfeiture of the work by the Contractor and completion by the OWNER and the payment of claims for material and labor and other expenses as provided in such procedures shall be a prerequisite to the termination of guarantee, to the release of guarantee retainer and to the release of the surety on the bond.

37. ESTIMATES AND PAYMENT - PARTIAL AND FINAL

The ENGINEER will, each month, make an approximate partial estimate, such as he shall believe to be just and fair, of the amount and value of the work done and the materials incorporated into the work during the previous calendar month, whenever said monthly work exceeds One Thousand Dollars (\$1,000.00) in value. More frequent estimates may, at the option of the OWNER, be made at any time during the progress of the work, and payment may at any time be withheld if the work is not proceeding in accordance with the contract.

All requests for payment shall be accompanied by certified payroll records provided by the Contractor to the ENGINEER. For contracts where the Specifications require record drawings, updated record drawings shall be submitted with each payment request. No payments will be authorized by the OWNER unless said certified payroll records and record drawings have been submitted.

Upon such estimate being made and certified by the ENGINEER and approved by the OWNER, the OWNER will pay to the Contractor ninety percent (90%) of the amount stated in such estimate or certificate to be the value of the work therein certified to have been done, except that when the total contract price exceeds One Hundred Thousand Dollars

(\$100,000.00), then the OWNER will pay to the Contractor ninety eight percent (98%) of the amount stated on said estimate or certificate. In lieu of the two percent (2%) cash retainage on contracts exceeding \$100,000.00, the Contractor may agree to deposit negotiable bearer bonds of the State of New Jersey, or negotiable bearer bonds or notes of any political subdivision of the State, the value of which is equal to two percent (2%) of said estimate or certificate, provided they are delivered directly to and approved by the OWNER. The value of a bond or note shall mean par value or current market value, whichever is lower. The OWNER may at all times reserve and retain out of any or all of said partial payments, all such sums as it is or may be authorized to reserve or retain.

The making of any such estimates or payment thereon shall not be taken or construed as an approval or acceptance by the OWNER of any work so estimated. Allowances will be made for all materials placed along or upon the site, or stored at secured locations, which are suitable for use in the execution of the contract, if the person providing the materials furnishes releases of liens for the materials at the time each estimate of work is submitted for payment. The total of all the partial payments shall not exceed ninety percent (90%) of the cost of the materials. The cost of such materials shall be verified by vouchers from the materials' suppliers.

Following the completion of the work and the acceptance thereof as previously defined, the Contractor shall file with the OWNER his Contractor's Certificate duly executed. As soon after as practicable, the ENGINEER will make a final estimate of the amount of work done by the Contractor and of the value thereof. Upon such estimate being made and certified by the ENGINEER and approved by the OWNER, the OWNER will return to the Contractor any bonds or notes deposited and any interest accruing on such bonds or notes, and will pay the Contractor the full value of the work done under this contract. Any interest accruing on cash payments withheld shall be credited to the OWNER.

38. LIENS

The final payment shall not become due until the Contractor, if required, shall deliver to the OWNER a complete release of all liens arising out of this contract, or receipts in full in lieu thereof and, if required, an affidavit that so far as he has knowledge or information the release and receipts include all the labor and material for which a lien could be filed; but the Contractor may, if any subcontractor refuses to furnish a bond satisfactory to the OWNER to indemnify him against any lien. If any lien remains unsatisfied after all payments are made, the Contractor shall refund to the OWNER all monies that the later may be compelled to pay in discharging such a lien, including all costs and a reasonable attorney's fee.

39. CONTRACTOR'S CLAIM FOR DAMAGES

If the Contractor shall claim compensation for any damage sustained by reason of the acts of the OWNER, or its agents, he shall, within seven (7) days after the sustaining of such damage, make a written statement to the ENGINEER of the nature of the damage sustained. On or before the fifteenth day of the month subsequent to that in which any such damage shall have been sustained, the Contractor shall file with the ENGINEER an itemized

statement of the details and the amount of such damage, and unless such statement is made as thus required, his claim for compensation shall be forfeited and invalidated, and he shall not be entitled to payment on account of any such damage.

40. NO WAIVER OF CONTRACT

Neither an extension of time for any reason beyond the date fixed herein for the completion of the contract, nor the delivery and acceptance of any articles or materials, nor any payment for, nor acceptance of the whole or any part of the work by the ENGINEER, nor any possession taken by the OWNER, or its employees or agents, shall be deemed to be a waiver by the OWNER of the right to abrogate this contract for abandonment or delay or non-performance in the manner herein provided, nor shall it operate to void or annul any of the terms of this contract.

41. NO ESTOPPEL

Neither the OWNER nor any department or officer thereof, shall be precluded or estopped by any return or certificate made or given to the OWNER, the ENGINEER, or other officer, agent or appointee to the OWNER under any provision of this agreement, from any time before the completion and acceptance of the work, and payment therefore, or before the payment of the guarantee retainer, pursuant to any such return or certificate showing the true and correct amount and character of the work done and materials furnished by the Contractor or any other person under this agreement, or that any such return or certificate is untrue and incorrect or improperly made in any particular, or that the work and materials, or any part thereof, do not in fact conform to the specifications and contract drawings, and the OWNER shall not be precluded or estopped, notwithstanding any such return or certificate any payment in accordance therewith, from demanding and recovering from the Contractor such damages as it may sustain by reason of his failure to comply with the specifications and contract drawings.

42. SUBLETTING

The Contractor must perform, construct or install not less than 50% of each contract with his own forces and equipment. Only special items approved by the ENGINEER may be sublet.

The Contractor shall not sublet any part of the work included in this contract without the previous approval of the ENGINEER. In making application for subletting any portion of the work, the Contractor shall state in writing, the portion of the work which each subcontractor is to do or the material which he is to furnish, his place of business, and such other information as may be required in order to ascertain whether such subcontractor is responsible, reliable and able to perform the work or to furnish the materials as called for in the specifications.

Subletting, if permitted, shall not relieve the Contractor of any of his obligations under this

contract. The Contractor shall be as fully responsible to the OWNER for the acts and omissions of his subcontractors, and of persons either directly or indirectly employed by them as he is for the acts and omissions of persons directly employed by him.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work, to bind subcontractors to the Contractor by the terms of the General Conditions and other Contract Documents insofar as applicable to the work of subcontractors, and to give the Contractor the same power as regards terminating any subcontract that the OWNER may exercise over the Contractor under any provisions of the Contract Documents.

Nothing contained in this contract shall create any contractual relations between any subcontractor and the OWNER.

Within five days after the Contractor receives payment for work performed under this contract, he shall pay each subcontractor for the amount allowed the Contractor for and on account of work performed by the subcontractor to the extent of the subcontractor's interest therein.

43. RELATIONS OF CONTRACTOR AND SUBCONTRACTOR

The Contractor agrees to bind every subcontractor and every subcontractor agrees to be bound by the terms of the Agreement, the General Conditions, the Drawings and Specifications as far as applicable to his work, including the following provisions of this article, unless specifically noted to the contrary in a subcontract approved in writing as adequate by the OWNER or ENGINEER.

This does not apply to minor subcontracts. The subcontractor agrees:

- A. To be bound to the Contractor by the terms of the Agreement, General Conditions, Drawings and Specifications, and to assume toward him the obligations and responsibilities that he, by those documents, assumes toward the OWNER.
- B. To submit to the Contractor applications for payment in such reasonable time as to enable the Contractor to apply for payment.
- C. To make all claims for extras, for extensions of time and for damages for delays or otherwise, to the Contractor in the manner provided in the General Conditions for like claims by the Contractor upon the OWNER, except that the time for making claims for extra cost is one week.

The Contractor agrees:

- A. To be bound to the subcontractor by all the obligations that the OWNER assumes to

- the Contractor under the Agreement, General Conditions, Drawings and Specifications, and by all the provisions thereof affording remedies and redress to the Contractor from the OWNER.
- B. To pay the subcontractor, upon the payment of certificates, if issued under the schedule of values described herein, the amount allowed to the Contractor on account of the subcontractor's work to the extent of the subcontractor's interest therein.
 - C. To pay the subcontractor, upon the payment of certificates, if issued otherwise than in "b" so that at all times his total payments shall be as large in proportion to the value of the work done by him as the total amount certified to the Contractor is to the value of the work done by him.
 - D. To pay the subcontractor to such extent as may be provided by the Contract Documents or the subcontract, if either of these provides for earlier or larger payments than the above.
 - E. To pay the subcontractor on demand for his work or materials as far as executed and fixed in place, less the retained percentage, at the time the certificate should be issued, even though the ENGINEER fails to issue it for any cause not the fault of the subcontractor.
 - F. To pay the subcontractor a just share of any fire insurance money received by him, the Contractor.
 - G. To make no demand for liquidated damages or penalty for delay in any sum in excess of such amount as may be specifically named in the subcontract.
 - H. That no claim for services rendered or materials furnished by the Contractor or to the subcontractor shall be valid unless written notice thereof is given by the Contractor to the subcontractor during the first ten (10) days of the calendar month following that in which the claim originated.
 - I. To give the subcontractor an opportunity to be present and to submit evidence in any arbitration or court action involving his rights.
 - J. If arbitration is used, name as arbitrator under arbitration proceedings as provided in the General Conditions, the person nominated by the subcontractor, if the sole cause of dispute is the work, materials, rights or responsibilities of the subcontractor; or if of the subcontractor and other subcontractors jointly, to name as such arbitrator the person upon whom they agree.
 - K. In the matter of arbitration or court action, their rights and obligations and all procedures shall be analogous to those set forth in this contract.

Nothing in this paragraph shall create any obligation on the part of the OWNER to pay or see to the payment of any sums to any subcontractor.

44. WAGE RATES

This contract is subject to the New Jersey State Department of Labor and Industry prevailing wage rates. Prevailing minimum wage rates are appended to this contract. BIDS WILL NOT BE ACCEPTED FROM BIDDERS WHO ARE ON THE "DEBARRED LIST OF THE NEW JERSEY DEPARTMENT OF LABOR AND INDUSTRY."

The wage rates shall be made a part of the contract for performance of the described work. Contractors and subcontractors performing the described work shall post the prevailing wage rates for each craft and classification involved as herein determined in a prominent and easily accessible place at the site of the work or at such place or places as are used to pay workers their wages.

Applicable rates are those in effect at that date on which a contract is awarded, and must be kept current as indicated. The wage rates are conclusive for a period of two (2) years from date of issuance unless superseded within said two (2) year period by a later determination.

Employers not paying the itemized employees benefits to a payee designated in a collective bargaining agreement shall pay them directly to the employee on each pay day.

NOTE: Each clause of these specifications is to be followed wherever it may apply throughout the work irrespective of the section or subdivision of the specifications in which the clause may appear.

45. MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE
N.J.S.A. 10:53-1 et seq., N.J.A.C. 17:27

During the performance of this contract, the contractor agrees as follows:

A. 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 or sex. Except with respect to affectional or sexual orientation, the contractor will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation 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. 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.

- B. 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 or sex.
- C. The contractor or subcontractor, where applicable, will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- D. 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.
- E. When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the applicable employment goal prescribed by N.J.A.C. 17:27-7.3; provided, however, that the Division may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, 1, 2 and 3, as long as the Division is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Division , that its percentage of active “card carrying” members who are minority and women workers is equal to or greater than the applicable employment goal established in accordance with N.J.A.C. 17:27-7.3.

The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

- 1. If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et. seq., as supplemented and amended from time to time and the Americans with Disabilities Act. If the contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the contractor or subcontractor agrees to attempt to hire or schedule minority and women workers directly, consistent with the applicable

employment goal. 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 the applicable employment goal, the contractor or subcontractor agrees to be prepared to hire or schedule minority and women workers directly, consistent with the applicable employment goal, by complying with the hiring or scheduling procedures prescribed under (2) below; and the contractor or subcontractor further agrees to take said action immediately if it determines or is so notified by the Division that the union is not referring minority and women workers consistent with the applicable employment goal.

2. If the hiring or scheduling of a workforce consistent with the employment goal has not or cannot be achieved for each construction trade by adhering to the procedures of (1) 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 consistent with the applicable county employment goals:
 - a) To notify the public agency compliance officer, the Division, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;
 - b) To notify any minority and women workers who have been listed with it as awaiting available vacancies;
 - c) 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;
 - d) 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 until such time as the workforce is consistent with the employment goal;
 - e) If it is necessary to lay off some of the workers in a given trade on the construction site, to assure, consistent with the applicable State and Federal statutes and court decisions, that sufficient minority and women employees remain on the site consistent with the employment goal; and to employ any minority and women workers so laid off by the contractor on any other construction site on which its workforce composition is not consistent with an employment goal established pursuant to rules implementing N.J.S.A. 10:5-31 et. seq.;
 - f) To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:

- (1) 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 determine the qualifications of such individuals and if the contractor's or subcontractor's workforce in each construction trade is not consistent with the applicable employment goal, it shall hire or schedule those individuals who satisfy appropriate qualification standards. However, a contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Division. If necessary, the contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (3) below.
 - (2) If the contractor's or subcontractor's workforce is consistent with the applicable employment goal, the name of any interested women or minority individual shall be maintained on a waiting list for the first consideration, in the event the contractor's or subcontractor's workforce is no longer consistent with the applicable employment goal.
 - (3) If, for any reason, said contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the public agency compliance officer and to the Division.
 - (g) To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Division and submitted promptly to the Division upon request.
3. The contractor or subcontractor agrees that nothing contained in (2) 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 county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to 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 (2) above it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

4. After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Division an initial project workforce report (Form AA 201) provided to the public agency by the Division for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of this contract to the Division and to the public agency compliance officer. The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the-job programs for outreach and training of minorities and women.
5. The contractor and its subcontractors shall furnish such reports or other documents to the Division of Contract Compliance & EEO as may be requested by the Division from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Contract Compliance & EEO for conducting a compliance investigation pursuant to Subchapter 10 of the Administrative Code at N.J.A.C. 17:27.

END OF SECTION

SECTION G

GENERAL SPECIFICATIONS

INDEX

<u>SECTION NO.</u>	<u>TITLE</u>
01050	Construction Layout
01060	Regulatory Requirements and Applicable Standards
01150	Measurement and Payment
01210	Project Meetings
01310	Construction Schedules
01340	Shop Drawings, Product Data and Samples
01380	Pre Construction Video
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01545	Protection of Existing Utilities
01640	Substitutions
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01730	Subsurface Investigation

SECTION 01050

CONSTRUCTION LAYOUT

1.1 GENERAL

Construction Layout consists of establishing the location for work to be performed under this contract.

1.2 QUALIFICATIONS

New Jersey Licensed Land Surveyor shall be employed by Contractor to perform all Construction Layout.

1.3 OWNER'S ENGINEER/SURVEYOR RESPONSIBILITIES

- A. Provide location and elevation of basic vertical control points for use by Contractor's Surveyor for performing Construction Layout.
- B. Provide basic horizontal control points for use by Contractor's Surveyor for performing Construction Layout.

1.4 CONTRACTOR'S SURVEYOR RESPONSIBILITIES

- A. Establish lines and levels, locate and layout, by instrumentation and similar appropriate means, all work under this contract.
- B. Check all established lines and levels, locations and layout for all work under this contract both before and during construction.
- C. Present copies of cut sheets prepared during course of work to the ENGINEER's representative on the job for his use in inspection of the work.
- D. Locate and protect control points provided by the ENGINEER prior to starting work and preserve all permanent control points during construction.
 - 1. Make no changes or relocations without prior written notice to ENGINEER, and the ENGINEER's approval.
 - 2. Report to ENGINEER when any control point is lost or disturbed.

3. Points lost, damaged, displaced or removed through fault of the Contractor which are still required for completion of work, as determined by ENGINEER, shall be replaced by Contractor's Surveyor at no additional cost to OWNER.

1.5 SUBMITTALS

- A. Submit name and address of Surveyor to ENGINEER.
- B. On request of ENGINEER, submit documentation to verify accuracy of Construction Layout.
- C. Submit certificate signed by registered surveyor certifying that elevations and locations of improvements are in conformance or nonconformance with Contract Documents.

1.6 PAYMENT

No separate cost shall be allowed for Construction Layout. All costs incurred by Contractor for Construction Layout shall be reflected in the overall contract price.

END OF SECTION

SECTION 01060

REGULATORY REQUIREMENTS AND APPLICABLE STANDARDS

1.1 DESCRIPTION

A. Work included:

1. Throughout the Contract Documents, reference is made to codes and standards which establish qualities and types of workmanship and materials, and which establish methods for testing and reporting on the pertinent characteristics.
2. Where materials or workmanship are required by these Contract Documents to meet or exceed the specifically named code or standard, it is the Contractor's responsibility to provide materials and workmanship which meet or exceed the specifically named code or standard.
3. It is also the Contractor's responsibility, when so required by the Contract Documents or by written request from the ENGINEER, to deliver to the ENGINEER all required proof that the materials or workmanship, or both, meet or exceed the requirements of the specifically named code or standard. Such proof shall be in the form requested in writing by the ENGINEER, and generally will be required to be copies of a certified report of test conducted by a testing agency approved for that purpose by the ENGINEER.

A. Related work described elsewhere: Specific naming of codes or standards occurs on the drawings and in other section of these Specifications.

1.2 QUALITY ASSURANCE

- A. Familiarity with pertinent codes and standards: In procuring all items used in this work, it is the Contractor's responsibility to verify the detailed requirements of the specifically named codes and standards and to verify that the items procured for use in this work meet or exceed the specified requirements.
- B. Rejection of noncomplying items: The ENGINEER reserves the right to reject items incorporated into the work which fail to meet the specified minimum requirements. The ENGINEER further reserves the right, and without prejudice to other recourse the ENGINEER may take, to accept noncomplying items subject to an adjustment in the Contract amount as approved by the ENGINEER and to the OWNER.
- C. Applicable standards listed in these specifications include, but are not necessarily

limited to, standards promulgated by the following agencies and organizations:

1. AASHTO = American Association of State Highway and Transportation Officials
341 National Press Building
Washington, D.C. 20004
2. ACI = American Concrete Institute
Box 19150, Redford Station
Detroit, Michigan 48129
3. ANSI = American National Standards Institute
(successor to USASI and ASI)
1430 Broadway
New York, NY 10018
4. ASTM = American Society for Testing & Materials
1916 Race Street
Philadelphia, PA 19103
5. AWWA = American Water Works Association, Inc.
6666 West Quincy Avenue
Denver, Colorado 80235
6. NEC = National Electrical Code (See NFPA)
7. NEMA = National Electrical Manufacturers Association
155 East 44th Street
New York, NY 10017
8. UL = Underwriters' Laboratories, Inc.
207 East Ohio Street
Chicago, Il 60611
9. NSPC = National Standard Plumbing Code
1016 20th St., N.W.
Washington, D.C. 20036
10. NFPA = National Fire Protection Association
60 Batterymarch Street
Boston, MA 02110
11. BOCA = The BOCA Basic Building Code Building
Officials & Code Administrators
International, Inc.
17926 S. Halstead Street
Homewood, Il 60430

12. NJDOT = Standard Specifications for Road and
Bridge Construction
New Jersey Department of Transportation
Trenton, NJ 08625

END OF SECTION

SECTION 01150

MEASUREMENTS AND PAYMENTS

PART 1 GENERAL

1.1 DESCRIPTION

- A. Payment for materials furnished and work done under this contract will be made as hereinafter stipulated for the amount of materials furnished and Work performed under authorization of Owner, or his authorized representatives, and in accordance with their measurements. Contractor shall not be entitled to receive additional compensation for any Work or materials except as shall be authorized by written order of the Owner.

1.2 AUTHORITY

- A. Measurement methods delineated in the individual specification sections, if any, are intended to complement the criteria of this section.
- B. The Contractor shall take all measurements and compute quantities. The ENGINEER will verify measurements and quantities.

1.3 MEASUREMENT AND QUANTITIES

- A. Stipulated Lump Sum or Unit Price Measurement: Items measured by weight, volume, area, or linear means or combination, as appropriate, as a completed item or unit of the Work.

1.4 PAYMENT

- A. Payment includes: Full compensation for all required supervision, labor, products, tools, equipment, plant, transportation, services and all incidental work; erection, application or installation of any item of the Work; overhead and profit.
- B. Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the ENGINEER multiplied by the unit price for Work which is incorporated in or made necessary by the Work.
- C. Work items shall all other items incidental thereto in accordance with the Plans and Specifications
- D. All excavation shall be unclassified.

1.5 DEFECT ASSESSMENT

- A. Replace the Work, or portions of the Work, not conforming to specified requirements.

1.6 NON-PAYMENT FOR REJECTED PRODUCTS

- A. Payment will not be made for any of the following:
 1. Products wasted or disposed of in a manner that is not acceptable.
 2. Products determined as unacceptable before or after placement.
 3. Products placed beyond the lines and levels of the required Work.
 4. Products remaining on hand after completion of the Work.
 5. Loading, hauling, and disposing of rejected Products.

1.7 WORK ITEMS

- A. Take all measurements and compute quantities. The ENGINEER will verify measurements and quantities.
- B. Unit Quantities: Quantities and measurements indicated in the Bid Form are for contract purposes only. Quantities and measurements supplied or placed in the Work shall determine payment. Actual quantities provided will determine payment.
- C. Payment Includes: Full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.
- D. Payment for work which is not specifically covered by a pay item in the Contract, but is required to complete work in an item for which payment is to be made, will be considered to be included in the price bid for that pay item in the Contract. The cost of work which is not specifically covered by a pay item and is not directly related to any of the pay items in the Contract will be considered to be included in the prices bid for the various pay items scheduled in the Contract.

Defect Assessment: The Work, or portions of the Work, not conforming to specified requirements, shall be replaced. If, in the opinion of the ENGINEER, it is not practical to remove and replace the Work, the ENGINEER will direct an appropriate remedy or adjust payment.

END OF SECTION

SECTION 01210

PROJECT MEETINGS

1.1 DESCRIPTION

- A. Contractor shall attend preconstruction meeting, periodic progress meetings, and special meetings called throughout the progress of the work.
- B. Representatives of Contractors, subcontractors and suppliers attending the meetings shall be qualified and authorized to act on behalf of the entity each represents.
- C. ENGINEER may attend meetings to ascertain that work is expedited consistent with Contract Documents and the construction schedules.

1.2 PRECONSTRUCTION MEETING

- A. Will be scheduled by the ENGINEER within fifteen (15) days after date of Notice to Proceed.
- B. Location: A central site, convenient for all parties.
- C. Attendance:
 - 1. OWNER'S Representative
 - 2. ENGINEER and his professional consultants
 - 3. Resident Project Representative
 - 4. Contractor's Superintendent
 - 5. Major Subcontractors
 - 6. Major Suppliers
 - 7. Other as appropriate.
- D. Suggested agenda:
 - 1. Distribution and discussion of:
 - a. List of major subcontractors and suppliers.

- b. Projected construction schedules.
2. Critical work sequencing.
3. Major equipment deliveries and priorities.
4. Project coordination.
5. Procedures and processing of:
 - a. Field decisions
 - b. Proposal requests
 - c. Submittals
 - d. Change orders
 - e. Applications for payment, including vouchers and current cost estimates.
6. Adequacy of distribution of Contract Documents.
7. Procedures for maintaining Record Documents.
8. Use of premises:
 - a. Office, work and storage areas
 - b. OWNER'S requirements.
9. Construction facilities, controls and construction aids.
10. Temporary utilities.
11. Safety and first-aid procedures.
12. Security procedures.
13. Housekeeping procedures.

1.3 PROGRESS MEETINGS

- D. Will be scheduled on a regular periodic basis, as required, by the ENGINEER.
- E. Additional meetings will be held as required by progress of the work.

- F. Location of the meetings: The project field office of the Contractor.
- G. Attendance:
1. ENGINEER, and his professional consultants as needed.
 2. Subcontractors as appropriate to the agenda.
 3. Suppliers as appropriate to the agenda.
 4. Others.
- H. Suggested agenda:
1. Review, approval of minutes of previous meetings.
 2. Review of work progress since previous meeting.
 3. Field observations, problems, conflicts, recommendations.
 4. Problems which impede Construction Schedule.
 5. Review of off-site fabrication, delivery schedules.
 6. Corrective measures and procedures to regain projected schedule.
 7. Revisions to Construction Schedule.
 8. Plan progress, schedule, during succeeding work period.
 9. Coordination of schedules.
 10. Review submittal schedules, expedite as required.
 11. Maintenance of quality standards.
 12. Review proposed changes for:
 - a. Effect on Construction Schedule and on completion date.
 - b. Effect on other contracts of the Project.

END OF SECTION

SECTION 01310

CONSTRUCTION SCHEDULES

1.1 GENERAL

Promptly after award of the contract, the Contractor shall prepare and submit to the ENGINEER estimated construction progress schedules for the work, with sub schedules of related activities which are essential to its progress.

- A. Submit revised progress schedules periodically.
- B. Related requirements in other parts of the Contract Documents:
See the General Conditions.

1.2 FORM OF SCHEDULES

- A. Prepare schedules in the form of a horizontal bar chart.
 - 1. Provide separate horizontal bar for each trade or operation.
 - 2. Horizontal time scale: Identify the first workday of each week.
 - 3. Scale and spacing: To allow space for notation and future revisions.
 - 4. Minimum sheet size: 18-inch by 24-inch.
- B. Format of listings: The chronological order of the start of each item of work.
- C. Identification of listings: By major specification section numbers.

1.3 CONTENT OF SCHEDULES

- A. Construction progress schedule:
 - 1. Show the complete sequence of construction by activity.
 - 2. Show the dates for the beginning, and completion of each element of construction.
 - 3. Show projected percentage of completion for each item, as of the first day of each month.
- B. Provide sub schedules to define critical portions of prime schedules.

1.4 PROGRESS REVISIONS

- A. Indicate progress of each activity to date of submission.
- B. Show changes occurring since previous submission of schedule:
 - 1. Major changes in scope.
 - 2. Activities modified since previous submission.
 - 3. Revised projections of progress and completion.
 - 4. Other identifiable changes.
- C. Provide a narrative report as needed to define:
 - 1. Problem areas, anticipated delays, and the impact on the schedule.
 - 2. Corrective action recommended, and its effect.
 - 3. The effect of changes on schedules of other prime contractors.

1.5 SUBMISSIONS

- A. Submit initial schedules within five (5) days after Notice to Proceed.
 - 1. ENGINEER will review schedules and return review copy within ten (10) days after receipt.
 - 2. If required, resubmit within seven (7) days after return of review copy.
- B. Submit revised progress schedules with each application for payment.
- C. Submit one (1) reproducible transparency and one (1) opaque reproduction.

1.6 DISTRIBUTION

- A. Distribute copies of the reviewed schedules to:
 - 1. Job site file.
 - 2. Subcontractors.
 - 3. Other concerned parties.

- B. Instruct recipients to report promptly to the Contractor, in writing, any problems anticipated by the projection shown in the schedules.

END OF SECTION

SECTION 01340

SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

1.1 GENERAL

- A. Submit to ENGINEER shop drawings, product data and samples required by the Specifications sections.
- B. Related Requirements in other parts of the Contract Documents:

Quality of Articles, Materials and Equipment: General Conditions.
- C. Schedule submission for shop drawings, product data and samples at least fourteen (14) working days before dates reviewed submittals will be needed.

1.2 SHOP DRAWINGS

- A. Original drawings, prepared by Contractor, subcontractor, supplier or distributor, which illustrate some portion of the work; showing fabrication, layout, setting or erection details.
- B. Present drawings in a clear and thorough manner:

Details shall be identified by reference to sheet and detail or schedule numbers shown on Contract Drawings.
- C. Minimum sheet size: 8.5-inches by 11-inches.

1.3 PRODUCT DATA

- A. Preparation:
 - 1. Clearly mark each copy to identify pertinent products or models.
 - 2. Show performance characteristics and capacities.
 - 3. Show dimension and clearances required.
 - 4. Show wiring or piping diagrams and controls.
- B. Manufacturer's standard schematic drawings and diagrams:
 - 1. Modify drawings and diagrams to delete information not applicable to the work.

2. Supplement standard information to provide information specifically applicable to the work.
- C. Manufacturer's catalog sheets, brochures, diagrams, illustrations and other standard descriptive data:
1. Clearly mark each copy to identify pertinent materials, products or models.
 2. Show dimensions and clearances required.

1.4 SAMPLES

- A. Office samples: Of sufficient size and quantity to clearly illustrate:
1. Functional characteristics of product or material with integrally related parts and attachment devices.
 2. Full range of color, texture, and pattern.
 3. After review, samples will be retained by ENGINEER. Upon completion of the work, Contractor may submit written request for return of samples.

1.5 CONTRACTOR'S RESPONSIBILITIES

- A. Review shop drawings, product data and samples prior to submission.
- B. Determine and verify:
 1. Field measurements.
 2. Field construction criteria.
 3. Catalog numbers and similar data.
 4. Conformance with specifications.
- C. Coordinate each submittal with requirements of the work and of the Contract Documents.
- D. Contractor's responsibility for errors and omissions in submittals is not relieved by ENGINEER's review of submittals.
- E. Contractor's responsibility for deviations in submittals from requirements of

Contract Documents is not relieved by ENGINEER'S review of submittals, unless ENGINEER gives written acceptance of specific deviations.

- F. Notify ENGINEER, in writing at time of submission, of deviations in submittals from requirements of Contract Documents.
- G. Begin no fabrication or work which requires submittals until return of submittals with ENGINEER'S stamp and initials or signature indicating review and approval.

1.6 SUBMISSION REQUIREMENTS

A. Make submittals so as to cause no delay in the work or in the work of any other Contractor.

B. Number of submittals required:

Shop drawings: Submit a minimum of six (6) legible reproductions of all complete and detail drawings to the ENGINEER for approval.

C. Accompany submittals with transmittal letter, in duplicate containing:

1. Date of submission and dates of any previous submissions.
2. Project title and number.
3. Contractor's name and address.
4. The number of each shop drawing, product data and sample submitted.
5. Notification of deviations from Contract Documents.
6. Other pertinent data.

D. Submittals shall include:

1. Date and revision date.
2. Project title and number.
3. The names of:
 - a. ENGINEER.
 - b. Contractor.
 - c. Subcontractor.

- d. Supplier.
 - e. Manufacturer.
 - f. Separate details when pertinent.
4. Identification of product or materials.
 5. Field dimensions clearly identified as such.
 6. Specification section number.
 7. Relation to adjacent or critical features of the work or materials.
 8. Applicable standards, such as ASTM or Federal Specification numbers.
 9. Identification of deviations from Contract Documents.
 10. Identification of revisions on resubmittals.
 11. An 8-inch by 3-inch blank space for Contractor and ENGINEER stamps.
 12. Contractor's stamp, initialed or signed, certifying to review of submittal, verification of products, field measurements and field construction criteria, and coordination of the information within the submittal with requirements of the work and of Contract Documents.

1.7 RESUBMISSION REQUIREMENTS

- A. Make any corrections or changes in the submittals required by the ENGINEER and resubmit until approved.
- B. Shop drawings and product data:
 1. Revise initial drawings or data, and resubmit as specified for the initial submittal.
 2. Indicate any changes which have been made other than those requested by the ENGINEER.
- C. Samples: Submit new samples as required for initial submittals.

1.8 DISTRIBUTION

- A. Distribute reproductions of Shop Drawings and copies of Product Data which

carry the ENGINEER stamp of approval to:

1. Subcontractors.
2. Supplier.
3. Contractor's file.

1.9 ENGINEER DUTIES

- A. Review submittals with reasonable promptness.
- B. Review for:
 1. Design concept of project.
 2. Information given in Contract Documents.
- C. Review of separate item does not constitute review of an assembly in which item functions.
- D. Affix stamp and initials or signature certifying to review of submittal.
- E. Return submittals to Contractor for distribution or resubmission.

END OF SECTION

SECTION 01380

PRECONSTRUCTION VIDEO

1.1 DESCRIPTION

- A. Employ a competent photographer to take a preconstruction video of the project site and adjacent areas prior to construction, but following completion of the utility markouts.

1.2 MATERIALS

Videos:

- 1. DVD format.
- 2. Identification:
 - a. Date and time of video.
 - b. Name & address of photographer.

1.3 METHODS OF WORK

A. Photography required:

- 1. Provide two (2) copies of a video that depict existing conditions prior to construction, but following the completion of the utility markouts.
- 2. Provide photographs weekly and at the end of the project after restoration.
- 3. Provide two (2) copies of the video within fourteen (14) calendar days after it is taken.
- 4. Views required:
 - a. Detailed coverage of existing conditions.

B. Technique:

- 1. Factual presentation. Provide continuous narrative of view including direction, location and description of viewing area.
- 2. Correct exposure and focus:

- a. High resolution and sharpness.
- b. Maximum depth of field.
- c. Minimum distortion.

C. Delivery:

Deliver two (2) copies of the video to the ENGINEER.

1.4 PAYMENT

- A. Include all costs for video in the overall contract price.
- B. Parties requiring additional videos will pay photographer directly.

END OF SECTION

SECTION 01510

ENVIRONMENTAL PROTECTION

1.1 GENERAL

The work covered by this Section consists of furnishing all labor, materials, and equipment, and performing of all work required for the prevention of environmental pollution during, and as the result of, construction operations under this Contract. For the purpose of this Specification, environmental pollution is 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, or affect other species of importance to man. The control of environmental pollution requires consideration of air, water and land.

1.2 APPLICABLE REGULATIONS

The Contractor and his subcontractors, in the performance of this Contract, shall comply with all applicable federal, state, and local laws and regulations concerning environmental pollution control and abatement in effect on the date of this solicitation, as well as specific requirements stated elsewhere in this Specification as applicable.

1.3 NOTIFICATION

The ENGINEER will notify the Contractor of any noncompliance with the foregoing provisions and the corrective action to be taken. The Contractor shall, after receipt of such notice, take corrective action immediately. If the Contractor fails or refuses to comply promptly, the ENGINEER may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of time lost due to any such stop order shall be made the subject of a claim for extension of time or for excess costs or damages by the Contractor unless it is later determined that the Contractor was in compliance.

1.4 SUBCONTRACTORS

Compliance with the provisions of this Section by subcontractors will be the responsibility of the Contractor.

1.5 DUST CONTROL

The Contractor shall maintain all work areas free from dust that would contribute to air pollution. Dust control shall be performed as the work proceeds and whenever dust nuisance or hazard occurs.

1.6 PROTECTION OF LAND RESOURCES

It is intended that the land resources within the project boundaries and outside the limits of

permanent work performed under this Contract be preserved in their present condition or be restored to a condition after completion of construction that will not detract from the appearance of the project. Insofar as possible, the Contractor shall confine his construction activities to areas defined by the Plans and Specifications or to be cleared for other operations.

1.7 PAYMENT

Unless otherwise indicated in the Proposal Section of these Specifications, costs incurred by the Contractor for items of ENVIRONMENTAL PROTECTION shall be reflected in the overall contract price.

END OF SECTION

SECTION 01530

BARRIERS

PART 1 GENERAL

1.1 DESCRIPTION

- A. Furnish, install and maintain suitable barriers as required to prevent public entry, and to protect the work and existing facilities; remove when no longer needed, or at completion of work.

1.2 REQUIREMENTS OF REGULATORY AGENCIES

Comply with Federal, State and local codes and regulations.

PART 2 PRODUCTS

2.1 MATERIALS

General: Materials may be new or used, suitable for the intended purpose, but must not violate requirements of applicable codes and standards.

2.2 BARRIERS

Materials to Contractor's option, as appropriate to serve the required purpose.

PART 3 EXECUTION

3.1 GENERAL

- A. Install facilities of a neat and reasonable uniform appearance, structurally adequate for the required purposes.
- B. Maintain barriers during entire construction period.
- C. Relocate barriers as required by progress of construction.

3.2 REMOVAL

- A. Completely remove barricades, including foundations, when construction has progressed to the point that they are no longer needed, and when approved by ENGINEER.
- B. Clean and repair damage caused by installation, fill and grade the areas of the site to required elevations and slopes, and clean the area.

PART 4 PAYMENT

4.01 PAYMENT

All costs for this item shall be included in the prices bid for various items scheduled in the Proposal.

END OF SECTION

SECTION 01545

PROTECTION OF EXISTING PUBLIC UTILITIES

1.1 SECTION INCLUDES

- A. Definitions
- B. Diligent Inquiry
- C. Notification
- D. Avoid Damage and Protect Utilities
- E. Notification of Damage and Costs
- F. Contractor Convenience

1.2 APPROXIMATE LOCATION OF UTILITIES

- A. The contractor will note that the horizontal and vertical location of all underground utilities shown on the contract drawings is approximate only and no guarantee is herein implied that all existing underground utilities or services are shown thereon.

1.3 DEFINITIONS

- A. The terms public utility or public utilities used in this article shall be construed to include those publicly and privately owned.

1.4 DILIGENT INQUIRY

- A. Within the site of the Project there may be public utility structures, and notwithstanding any other clause or clauses of this Contract, the Contractor shall not proceed with his work until he has made diligent inquiry of the offices of the ENGINEER, the utility companies and municipal authorities or other utilities to determine their exact location.

1.5 NOTIFICATION

- A. The Contractor shall notify the Garden State Utility Location Service "one-call" system (1-800-272-1000) at least three (3) days prior to construction for mark out of all public utilities. Contractor shall supply ENGINEER with the one-call system certification number.

- B. The Contractor shall notify, in writing, the utility companies and municipalities or other utilities involved of the nature and scope of the Project and of his operations that may affect their facilities or property. Two copies of such notices shall be sent to the ENGINEER.

1.6 AVOID DAMAGE AND PROTECT UTILITIES

- A. The Contractor shall carry out his work carefully and skillfully and shall support and secure public utility structures so as to avoid damage to them. Flow in drains and sewers shall be satisfactorily maintained. He shall not move without the utilities written consent any public utility structures, and at the completion of the work their condition shall be as safe and permanent as before.

1.7 NOTIFICATION OF DAMAGE AND COSTS

- A. When public utility structures, facilities or equipment are damaged by the Contractor, he shall notify the utilities, who may cause the damage to be repaired at the Contractor's expense.
- B. If the cost thereof be not paid by the Contractor within 30 days after repairs have been completed, the Owner, as defined in this Contract, may retain an amount sufficient to cover the cost from any monies due or that may become due to the Contractor under this contract.

1.8 CONTRACTOR CONVENIENCE

- A. When the removal, relocation or replacement of public utility structures or facilities is not deemed essential by the ENGINEER for carrying out the Project as planned, but is performed for the Contractor's convenience, the cost of such work shall be included in the prices bid for the various items scheduled in the Proposal. When such removal, relocation or replacement is deemed essential by the ENGINEER for carrying out the work of the Project as planned, the cost shall be borne by the Owner or the owner utility.

END OF SECTION

SECTION 01640

SUBSTITUTIONS

1.1 GENERAL

Related requirements specified elsewhere:

1. Substitutions during bidding: Instructions to Bidders.
2. Shop Drawings, Product Data and Samples: Section 01340

1.2 SUBSTITUTIONS

- A. Within fifteen (15) days after Notice to Proceed ENGINEER will consider formal requests from Contractor for products in place of those specified.
- B. Submit four (4) copies of request for substitution. Include in request as applicable:
 1. Complete data substantiating compliance of proposed substitution with Contract Documents.
 2. For products:
 - a. Product identification, including manufacturer's name and address.
 - b. Manufacturer literature:
 - (1) Product description
 - (2) Performance and test data
 - (3) Reference standards
 - c. Samples
 - d. Name and address of similar projects on which product was used, and date of installation.
 3. For construction methods:
 - a. Detailed description of proposed method.
 - b. Drawings illustrating methods.
 4. Itemized comparison of proposed substitution with product or method specified.

5. Accurate cost data on proposed substitution as for product or method specified.
 6. Relation to separate contracts.
- C. In making requests for substitution, Bidder represents:
1. He has personally investigated proposed product or method and determined that it is equal or superior in all respects to that specified.
 2. He will provide the same guarantee for substitution as for product or method specified.
 3. He will coordinate installation of accepted substitution into work making such changes as may be required for work to be completed in all respects.
 4. He waives all claims for additional costs related to substitutions which consequently become apparent.
 5. Cost data is complete and includes all related costs under this contract.
- D. Substitutions will not be considered if:
1. They are indicated or implied on shop drawings of product data submittals without formal request submitted in accordance with Paragraph 1.02.
 2. Acceptance will require substantial revision of Contract Documents.

END OF SECTION

SECTION 01700
CONTRACT CLOSEOUT

1.1 SECTION INCLUDES

- A. Closeout procedures.
- B. Final cleaning.
- C. Adjusting.
- D. Project record documents.
- E. Operation and maintenance data.
- F. Warranties.
- G. Spare parts and maintenance materials.

1.2 CLOSEOUT PROCEDURES

- A. Submit written certification that Contract Documents have been reviewed, Work has been inspected, and that Work is complete in accordance with Contract Documents and ready for ENGINEER's inspection.
- B. Provide submittals to ENGINEER that are required by governing or other authorities.
- C. Submit the following documents:
 - 1. Application for Final Payment.
 - 2. Form of Contractor's Certificate (page J-17 of the Contract).
 - 3. Statement of Surety Company (form at the end of this section).
 - 4. Project Record Documents.

1.3 FINAL CLEANING

- A. Execute final cleaning prior to final inspection.
- B. Clean site.
- C. Remove waste and surplus materials, rubbish, and construction facilities from the site.

1.4 PROJECT RECORD DOCUMENTS

- A. Maintain on site, one set of the following record documents; record actual revisions to the Work:
 - 1. Contract Drawings.
 - 2. Specifications.
 - 3. Addenda.
 - 4. Change Orders and other Modifications to the Contract.
 - 5. Reviewed shop drawings, product data, and samples.
- B. Store Record Documents separate from documents used for construction.
- C. Record information concurrent with construction progress.
- D. Specifications: Legibly mark and record at each Product section description of actual Products installed, including the following:
 - 1. Manufacturer's name and product model and number.
 - 2. Product substitutions or alternates utilized.
 - 3. Changes made by Addenda and Modifications.
- E. Record Documents and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - 2. Field changes of dimension and detail.
 - 3. Details not on original Contract Drawings.
- F. Delete ENGINEER title block from all documents.
- G. Submit documents to ENGINEER with claim for final Application for Payment.

END OF SECTION

STATEMENT OF SURETY COMPANY

IN ACCORDANCE with the provisions of the CONTRACT dated _____

between the Township of Willingboro _____

(Owner)

and _____

(Contractor)

the _____

(Surety)

_____, SURETY on the Labor and Material Payment BOND of _____

(Contractor)

after a careful examination of the books and records of said CONTRACTOR or after receipt of an affidavit from CONTRACTOR, which examination of affidavit satisfies SURETY that all claims, for labor and materials have been satisfactorily settled, hereby approved by the final payment of the said

_____, CONTRACTOR

and by these presents witnesseth that payment to the CONTRACTOR of the final estimates shall not relieve surety of any of its obligations to Township of Willingboro _____

(Owner)

as set forth in the said SURETY COMPANY'S BOND.

IN WITNESS WHEREOF, said SURETY has hereunto set its hand and seal this _____ day of _____,

ATTEST:

(SEAL) _____ BY: _____

(President)

NOTE: This statement, if executed by any person other than the President or Vice President of the Company, must be accompanied by a certificate of even date showing authority conferred upon the person so signing to execute such instruments on behalf of the Company represented.

SECTION 01710

CLEANING AND RESTORATIONS

1.1 DESCRIPTION

- A. Related work specified elsewhere:
 - 1. General requirements for cleaning and restorations: See the General Conditions.
 - 2. Cleaning for specific products or work: Specification Section for that work.
- B. Maintain premises and public properties free from accumulations of waste, debris and rubbish caused by work operations.
- C. During the course of the work, remove waste materials, rubbish, tools, equipment, machinery and surplus materials; clean all sight exposed surfaces; leave project clean and ready for occupancy.
- D. Restore or replace, when and as directed by the ENGINEER, any public or private property disturbed or damaged by Contractor's work operations to a condition at least equal to that existing prior to beginning work, or as otherwise specified. Materials, equipment and methods shall be approved by the ENGINEER. These restorations shall include areas used by the Contractor for temporary storage of materials and for equipment.

1.2 METHODS OF CONDUCTING WORK - CLEANING

- A. Requirements of regulatory agencies: Dispose of all solid waste materials in permanently established licensed OSWA (Office of Solid Waste Administration, New Jersey Department of Environmental Protection) landfills, or in temporary landfill sites approved by OSWA.
- B. Safety requirements:
 - 1 Hazards control:
 - a) Store volatile wastes in covered metal containers and remove from premises daily.
 - b) Prevent accumulation of wastes which create a hazardous condition.
 - c) Provide adequate ventilation during use of volatile or noxious substances.

2. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws:

- a) Do not burn or bury rubbish and waste materials on project site.
- b) Do not dispose of volatile wastes such as mineral spirits, oil or paint thinner in storm or sanitary drains.
- c) Do not dispose of wastes into streams or waterways.

C. Cleaning during construction:

- 1. Execute periodic cleaning to keep the work and the site free from accumulations of waste materials, rubbish and debris resulting from construction operations.

D. Dust control:

- 1. The Contractor shall employ construction methods and means that will keep flying dust to the minimum. The cost of carrying out the foregoing provisions shall be included in the prices bid for the various items in the Contract.

E. Final cleaning:

- 1. Employ skilled workmen for final cleaning.
- 2. Prior to final acceptance, Contractor shall conduct an inspection of all work areas to verify that the entire work is clean.

1.3 METHODS OF CONDUCTING WORK - RESTORATIONS

A. General: All existing structures and areas disturbed or damaged during the work under this Contract shall be restored or replaced to a condition at least equal to that existing prior to beginning work, or as otherwise specified.

1.4 QUANTITY AND PAYMENT

All costs for CLEANING AND RESTORATIONS shall be included in prices bid for various items scheduled in the Proposal.

END OF SECTION

SECTION 01730

SUBSURFACE INVESTIGATION

1.1 DESCRIPTION

- A. Subsurface investigation includes the excavation of test pits to ascertain the location of buried utilities or subsurface conditions.
- B. Before laying pipes or constructing any structures, the Contractor shall ascertain the location and grade of utility pipes and other subsurface structures which may interfere with such construction. Test pits shall be excavated wherever necessary to obtain the required information, subject to the approval of the ENGINEER.
- C. Before any excavation commences the Contractor shall perform subsurface investigations to determine the following:
 - 1. Top and bottom elevation of utility.

All dimensions and elevations shall be obtained by the Contractor and transmitted to the ENGINEER, if and where required.

1.2 MATERIALS

- A. Materials are required for backfill.

1.3 METHODS OF WORK

- A. The approximate locations of known utility structures and facilities that may be encountered within and adjacent to the limits of the work are shown on the plans. The accuracy and completeness of this information is not guaranteed by the ENGINEER, and the bidder is advised to ascertain for himself all the facts concerning the location of these utilities.
- B. The Contractor shall adhere to Section 105.09, Cooperation with Utilities, of the Standard Specifications regarding location of and construction around public utilities.
- C. All test pits shall be excavated, backfilled and compacted in accordance with Section 02325 or as directed by the ENGINEER. In paved areas all pits shall be maintained in a passable condition to motor vehicles by the Contractor in a manner as approved by the ENGINEER. In unpaved areas the surfaces shall be restored in accordance with soil erosion standards as specified and shown.

- D. The Contractor shall permit the owners of the utilities or their agent, access to the site of the work at all times, in order to relocate or protect their facilities, and he shall cooperate with them in performing this work.
- E. The Contractor shall cooperate with the utility owners concerned and shall notify them not less than ten (10) days in advance of the time he proposes to perform any work that will endanger or affect their facilities.
- F. Contractor shall maintain all temporary restorations.

1.4 QUANTITY AND PAYMENT

- A. Unless specified or noted otherwise, no separate measurement and no separate payment will be made for test pits conducted to investigate soil and groundwater conditions or for test pits conducted relative to structures and/or utilities shown on the plans.

END OF SECTION

SECTION H
TECHNICAL SPECIFICATIONS
INDEX

<u>SECTION</u>	<u>TITLE</u>
312319	Dewatering
315000	Excavation Support and Protection
02230	Site Clearing
02314	Excavation
02325	Trench Excavation, Backfill and Compaction
02541	PVC Pipe and Fittings
02754	Concrete Sidewalks
02830	Vinyl Coated Chain Link Fence
02845	Traffic Control and Signage
02910	Temporary Soil Erosion and Sediment Control

SECTION 312319

DEWATERING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

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

1.2 SUMMARY

- A. Section includes construction dewatering.
- B. Related Requirements:
 - 1. Section 312000 "Earth Moving" for excavating, backfilling, site grading, and controlling surface-water runoff and ponding.
 - 2. Section 311000 "Site Clearing" for site stripping, grubbing, and stockpiling topsoil, and removal of above- and below-grade improvements and utilities.
 - 3. Section 312200 "Material Handling and Waste Management During Demolition and Construction" for handling, storage, and disposal of materials.
 - 4. Division 01 Section Construction Progress Documentation for recording preexisting conditions and dewatering system progress.

1.3 ACTION SUBMITTALS

- A. Installer: Provide name(s) and qualifications for well point contractor and any other subcontractor providing monitoring.
- B. Shop Drawings: For dewatering system, prepared by or under the supervision of a qualified professional engineer.
 - 1. Include plans, elevations, sections, and details.
 - 2. Include layouts of piezometers and flow-measuring devices for monitoring performance of dewatering system.
 - 3. Include written plan for dewatering operations including sequence of well and well-point placement coordinated with excavation shoring and bracings and control procedures to be adopted if dewatering problems arise.

1.4 QUALITY ASSURANCE

- A. **Installer Qualifications:** An installer with a minimum of five years' experience in **[design of dewatering systems and]** dewatering work.

1.5 FIELD CONDITIONS

- A. **Project-Site Information:** A geotechnical report has been prepared for this Project and is available for information only. The opinions expressed in this report are those of a geotechnical engineer and represent interpretations of subsoil conditions, tests, and results of analyses conducted by a geotechnical engineer. Owner is not responsible for interpretations or conclusions drawn from this data.
 - 1. Make additional test borings and conduct other exploratory operations necessary for dewatering according to the performance requirements.
- B. **Survey Work:** Engage a qualified land surveyor or professional engineer to survey adjacent existing buildings, structures, and site improvements; establish exact elevations at fixed points to act as benchmarks. Clearly identify benchmarks and record existing elevations.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. **Dewatering Performance:** Design, permit, furnish, install, test, operate, monitor, and maintain dewatering system of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of ground water and permit excavation and construction to proceed on dry, stable subgrades.
 - 1. Design dewatering system, including comprehensive engineering analysis by a qualified professional engineer.
 - 2. Continuously monitor and maintain dewatering operations to ensure erosion control, stability of excavations and constructed slopes, prevention of flooding in excavation, and prevention of damage to subgrades and permanent structures.
 - 3. Prevent surface water from entering excavations by grading, dikes, or other means.
 - 4. Accomplish dewatering without damaging existing buildings, structures, and site improvements adjacent to excavation.
 - 5. Remove dewatering system when no longer required for construction.
 - 6. Place filter bags on stable or well vegetated areas which are flatter than 5% and which will not erode when subjected to bag discharge.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by dewatering operations.
 - 1. Prevent surface water and subsurface or ground water from entering excavations, from ponding on prepared subgrades, and from flooding the site or surrounding area.
 - 2. Protect subgrades and foundation soils from softening and damage by rain or water accumulation.
- B. Install dewatering system to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.
- C. Provide temporary grading to facilitate dewatering and control of surface water.
- D. Protect and maintain temporary erosion and sedimentation controls, which are specified in **Section 015000 "Temporary Facilities and Controls,"** **Section 311000 "Site Clearing,"** during dewatering operations.

3.2 INSTALLATION

- A. Obtain necessary Federal, State, and/or Local permits to install and pump wells and piezometers.
- B. Install dewatering system utilizing wells, well points, or similar methods complete with pump equipment, standby power and pumps, filter material gradation, valves, appurtenances, water disposal, and surface-water controls.
 - 1. Space well points or wells at intervals required to provide sufficient dewatering.
 - 2. Use filters or other means to prevent pumping of fine sands or silts from the subsurface.
- C. Place dewatering system into operation to lower water to specified levels before excavating below ground-water level.
- D. Provide sumps, sedimentation tanks, and other flow-control devices as required by authorities having jurisdiction.

- E. Provide standby equipment on-site, installed and available for immediate operation, to maintain dewatering on continuous basis if any part of system becomes inadequate or fails.

3.3 OPERATION

- A. Operate system continuously until drains, sewers, and structures have been constructed and fill materials have been placed or until dewatering is no longer required.
- B. Operate system to lower and control ground water to permit excavation, construction of structures, and placement of fill materials on dry subgrades. Drain water-bearing strata above and below bottom of foundations, drains, sewers, and other excavations.
 - 1. Do not permit open-sump pumping that leads to loss of fines, soil piping, subgrade softening, and slope instability.
 - 2. Reduce hydrostatic head in water-bearing strata below subgrade elevations of foundations, drains, sewers, and other excavations.
 - 3. Maintain piezometric water level a minimum of **60 inches** below bottom of excavation.
- C. Dispose of water removed by dewatering in a manner that avoids endangering public health, property, and portions of work under construction or completed. Dispose of water and sediment in a manner that avoids inconvenience to others.
- D. Remove dewatering system from Project site on completion of dewatering. Plug or fill well holes with sand or cut off and cap wells a minimum of **36 inches** below overlying construction.

3.4 FIELD QUALITY CONTROL

- A. Observation Wells: Provide a minimum of two observation wells or piezometers and take measurements; additional observation wells may be required by authorities having jurisdiction.
 - 1. Observe and record daily elevation of ground water and piezometric water levels in observation wells.
 - 2. Repair or replace, within 24 hours, observation wells that become inactive, damaged, or destroyed. In areas where observation wells are not functioning properly, suspend construction activities until reliable observations can be made. Add or remove water from observation-well risers to demonstrate that observation wells are functioning properly.
 - 3. Fill observation wells, remove piezometers, and fill holes when dewatering is completed.

- B. Provide continual observation to ensure that subsurface soils are not being removed by the dewatering operation.
- C. Prepare reports of observations.

3.5 PROTECTION

- A. Protect and maintain dewatering system during dewatering operations.
- B. Promptly repair damages to adjacent facilities caused by dewatering.

END OF SECTION

SECTION 315000

EXCAVATION SUPPORT AND PROTECTION

PART 4 - GENERAL

4.1 RELATED DOCUMENTS

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

4.2 SUMMARY

- A. Section includes temporary excavation support and protection systems.
- B. Related Requirements:
 - 1. Section 312000 "Earth Moving" for excavating and backfilling, for controlling surface-water runoff and ponding, and for dewatering excavations.
 - 2. Section 312319 "Dewatering" for lowering groundwater.

4.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at **[Country Club Ridge Swimming Pool] <Windover Lane, Willingboro, NJ 08046>**.
 - 1. Review geotechnical report.
 - 2. Review existing utilities and subsurface conditions.
 - 3. Review coordination for interruption, shutoff, capping, and continuation of utility services.
 - 4. Review proposed excavations.
 - 5. Review proposed equipment.
 - 6. Review monitoring of excavation support and protection system.
 - 7. Review coordination with wells and waterproofing.
 - 8. Review abandonment or removal of excavation support and protection system.

4.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
1. Include construction details, material descriptions, performance properties, and dimensions of individual components and profiles, and calculations for excavation support and protection system.

- B. Delete "Shop Drawings" Paragraph below if Contractor designs the excavation support and protection system.
- C. Shop Drawings: For excavation support and protection system, prepared by or under the supervision of a qualified professional engineer.
 - 1. Include plans, elevations, sections, and details.
 - 2. Show arrangement, locations, and details of soldier piles, piling, lagging, tiebacks, bracing, and other components of excavation support and protection system according to engineering design.
 - 3. Indicate type and location of waterproofing.
 - 4. Include a written plan for excavation support and protection, including sequence of construction of support and protection coordinated with progress of excavation.
- D. Delegated-Design Submittal: For excavation support and protection systems, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

4.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For the following:
 - 1. Land surveyor.
 - 2. Professional Engineer: Experience with providing delegated-design engineering services of the type indicated, including documentation that engineer is licensed in the jurisdiction in which Project is located.
- B. Contractor Calculations: For excavation support and protection system. Include analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
- C. Existing Conditions: Using photographs or video recordings, show existing conditions of adjacent construction and site improvements that might be misconstrued as damage caused by inadequate performance of excavation support and protection systems. Submit before Work begins.

4.6 CLOSEOUT SUBMITTALS

- A. Record Drawings: Identify locations and depths of capped utilities, abandoned-in-place support and protection systems, and other subsurface structural, electrical, or mechanical conditions.

4.7 FIELD CONDITIONS

- A. Interruption of Existing Utilities: Do not interrupt any utility-serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility according to requirements indicated:

1. Make additional test borings and conduct other exploratory operations as necessary.
- B. Survey Work: Engage a qualified land surveyor or professional engineer to survey adjacent existing buildings, structures, and site improvements; establish exact elevations at fixed points to act as benchmarks. Clearly identify benchmarks and record existing elevations.

PART 5 - PRODUCTS

5.1 PERFORMANCE REQUIREMENTS

- A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design excavation support and protection systems to resist all lateral loading and surcharge, including but not limited to, retained soil, groundwater pressure, adjacent building loads, adjacent traffic loads, construction traffic loads, material stockpile loads, and seismic loads, based on the following:
1. Compliance with OSHA Standards and interpretations, 29 CFR 1926, Subpart P.
 2. Compliance with requirements of authorities having jurisdiction.
 3. Compliance with utility company requirements.

5.2 MATERIALS

- A. Provide materials that are either new or in serviceable condition.
- B. Structural Steel: ASTM A36/A36M
- C. Steel Sheet Piling: ASTM A328/A328M, ASTM A572/A572M
- D. Wood Lagging: Lumber, mixed hardwood, nominal rough thickness of 3 inches.
- E. Tiebacks: Steel bars, ASTM A722/A722M.

PART 6 - EXECUTION

6.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards that could develop during excavation support and protection system operations.
1. Shore, support, and protect utilities encountered.

6.2 INSTALLATION - GENERAL

- A. Locate excavation support and protection systems clear of permanent construction, so that construction and finishing of other work is not impeded.
- B. Install excavation support and protection systems to ensure minimum interference with site pavements, utilities, the existing pool and other adjacent occupied and used facilities.
 - 1. Do not close or obstruct walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
- C. Install excavation support and protection systems without damaging existing buildings, structures, and site improvements adjacent to excavation.

6.3 SOLDIER PILES AND LAGGING

- A. Install steel soldier piles before starting excavation.
 - 1. Extend soldier piles below excavation grade level to depths adequate to prevent lateral movement.
 - 2. Space soldier piles at regular intervals not to exceed allowable flexural strength of wood lagging.
 - 3. Accurately align exposed faces of flanges to vary not more than **2 inches (50 mm)** from a horizontal line and not more than 1:120 out of vertical alignment.
- B. Install wood lagging within flanges of soldier piles as excavation proceeds.
 - 1. Trim excavation as required to install lagging.
 - 2. Fill voids behind lagging with soil, and compact.
- C. Install walers horizontally at locations indicated on Drawings and secure to soldier piles.

6.4 SHEET PILING

- A. Before starting excavation, install one-piece sheet piling lengths and tightly interlock vertical edges to form a continuous barrier.
- B. Accurately place the piling using templates and guide frames unless otherwise recommended in writing by the sheet piling manufacturer.
 - 1. Limit vertical offset of adjacent sheet piling to 60 inches.
 - 2. Accurately align exposed faces of sheet piling to vary not more than **2 inches** from a horizontal line and not more than 1:120 out of vertical alignment.
- C. Cut tops of sheet piling to uniform elevation at top of excavation.

6.5 TIEBACKS

- A. Drill, install, grout, and tension tiebacks.
- B. Test load-carrying capacity of each tieback and replace and retest deficient tiebacks.

6.6 BRACING

- A. Locate bracing to clear columns, floor framing construction, and other permanent work. If necessary to move brace, install new bracing before removing original brace.
 - 1. Do not place bracing where it will be cast into or included in permanent concrete work unless otherwise approved by Owner's Engineer.
 - 2. Install internal bracing if required to prevent spreading or distortion of braced frames.
 - 3. Maintain bracing until structural elements are supported by other bracing or until permanent construction is able to withstand lateral earth and hydrostatic pressures.

6.7 MAINTENANCE

- A. Monitor and maintain excavation support and protection system.
- B. Prevent surface water from entering excavations by grading, dikes, or other means.
- C. Continuously monitor vibrations, settlements, and movements to ensure stability of excavations and constructed slopes and to ensure that damage to permanent structures is prevented.

6.8 FIELD QUALITY CONTROL

- A. Survey-Work Benchmarks: Resurvey benchmarks regularly during installation of excavation support and protection systems, excavation progress, and for as long as excavation remains open.
 - 1. Maintain an accurate log of surveyed elevations and positions for comparison with original elevations and positions.
 - 2. Promptly notify Owner's Engineer if changes in elevations or positions occur or if cracks, sags, or other damage is evident in adjacent construction.
- B. Promptly correct detected bulges, breakage, or other evidence of movement to ensure that excavation support and protection system remains stable.
- C. Promptly repair damages to adjacent facilities caused by installation or faulty performance of excavation support and protection systems.

6.9 REMOVAL AND REPAIRS

- A. Remove excavation support and protection systems when construction has progressed sufficiently to support excavation and bear earth and hydrostatic pressures. Remove in stages to avoid disturbing underlying soils or damaging structures, pavements, facilities, and utilities.
 - 1. Remove excavation support and protection systems to a minimum depth of 48 inches below overlying construction, and abandon remainder.
 - 2. Repair or replace, as approved by Owner's Engineer, adjacent work damaged or displaced by removing excavation support and protection systems.
- B. Leave excavation support and protection systems permanently in place.

END OF SECTION

SECTION 02230

SITE CLEARING

1.1 DESCRIPTION OF WORK

- A. Remove shrubs, grass and other vegetation, improvements, or obstructions interfering with installation of new construction. Remove such items elsewhere on-site or premises as specifically indicated.
- B. Site clearing includes, but is not limited to:
 - 1. Protect existing trees to remain.
 - 2. Clear and grub vegetation to the limits shown.
 - 3. Dispose of vegetation and other debris resulting from clearing operations.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Environmental Protection - Section 015100 of the General Specifications.
- B. Tree Removal – Section 02231.

1.3 ACCESS AND USE OF SITE

- A. Contractor shall only be permitted access to the site and access on the site by utilizing those areas to be cleared or by those areas which have been cleared and are within the limits of construction as outlined on the drawings.

All of Contractor's operation will be limited to those areas to be cleared and/or are within the limits of construction detailed on the drawings.

1.4 PROTECTION

- A. Protect existing trees and other vegetation not shown for removal, against unnecessary cutting, breaking or skinning of roots, skinning and bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip line, excess foot or vehicular traffic or parking of vehicles within drip line. Provide temporary guards to protect trees and vegetation to be left standing.
- B. Provide protection for roots over 1-1/2" diameter cut during construction operations. Coat cut faces with an emulsified asphalt, or other acceptable coating, formulated for use on damaged plant tissues. Temporarily cover exposed roots with wet burlap to prevent roots from drying out; cover with earth as soon as possible.
- C. Repair or replace trees and vegetation indicated to remain which are damaged by construction operations, in a manner acceptable to the Engineer. Employ licensed arborist to repair damages to trees and shrubs.
- D. Protect trees, shrubs and lawns, areas to receive planting, rock outcropping and other features

remaining as part of final landscaping.

- E. Protect bench marks and existing structures, roads, sidewalks, paving and curbs against damage from vehicular or foot traffic.
- F. Protect existing site improvements and site amenities outside the limits of work. Protect existing site amenities within the limits as shown on drawings.
- G. Maintain designated temporary roadways, walkways and detours, for vehicular and pedestrian traffic.
- H. Environmental Protection - Comply with Section 015100 and all drawings and documents related hereto.

1.5 JOB CONDITIONS

A. Environmental Protection

- 1. Contractor shall take whatever precautions are necessary to prevent soil erosion, water pollution, and other conditions detrimental to the environment. Should such environmentally detrimental conditions develop due to site clearing operations, Contractor shall correct the conditions immediately. All measures of sediment and erosion control plans and specification Section 029100 shall be followed.
- 2. Contractor shall not permit human waste, garbage, kitchen or laundry wash, manure, sawdust, or other environmentally destructive material to enter any spring, stream, water course, pond, lake or wetland. All such materials shall be removed from the site on a periodic basis and at the completion of the work.

B. Existing Roads

- 1. Conduct site clearing operations to ensure minimum interference with roads, streets, walks, and other adjacent facilities. Do not close or obstruct streets, walks or other occupied or used facilities.

1.6 PREPARATION

- A. Maintain bench marks, monuments and other reference points. Reestablish if disturbed or destroyed, at no cost to the Owner.
- B. Layout the Work in accordance with drawings and reference points. Protect all reference stakes, and bench marks and replace if disturbed or removed without prior approval.

1.7 SITE CLEARING

- A. Carefully and cleanly cut roots and branches of trees indicated to be left standing, where such roots and branches obstruct new construction.
- B. Strip existing topsoil in areas designated for excavation. Stockpile topsoil for later use.
 - 1. Strip topsoil to whatever depths encountered in a manner to prevent intermingling with

underlying subsoil or other objectionable material.

- a. Remove heavy growths of grass from areas before stripping topsoil. Strip to sufficient distance to remove the main root system.
 2. Stockpile topsoil in storage piles. Construct storage piles to freely drain surface water. Cover storage piles if required to prevent wind-blown dust. Stockpiled topsoil may be protected from erosion by establishing a cover of annual grass.
 3. Dispose of unsuitable or excess topsoil off site at the Contractors expense and at a site selected by the Contractor.
- C. Clearing and Grubbing: Clear site of shrubs and other vegetation, except for those indicated to be left standing.
1. Cut stumps and roots at ground level. Minor root removal will be permissible as approved by the Engineer. Any voids requiring borrow fill to be placed and compacted shall be performed at the Contractor's expense. Remove brush, roots, matted leaves and other foreign matter.
 2. Use only hand methods for grubbing inside drip line of trees indicated to be left standing.
 3. Cease operations immediately if adjacent structures appear to be in danger. Notify Engineer. Do not resume operations until directed.
- D. Removal of Improvements: Remove existing above-grade and below-grade improvements necessary to permit construction, and other work as indicated on the drawings.
- E. Protection of Existing Trees to Remain: All existing trees within Contract limit line to remain shall be protected.
- F. Tree limbs shall be removed to a height of ten (10') feet above finish grade. Tree limbs to be removed shall be directed in the field. Limbs shall be removed and exposed end sealed in accordance with accepted landscaping practices.

1.8 DISPOSAL OF WASTE MATERIALS

- A. Removal of Debris and Excess Materials:
2. All tree stumps, trash and debris shall become Contractor's property and shall be removed from the site for safe, legal, offsite disposal.

1.9 RELOCATION/RESETTING MAILBOXES, SIGNS, ETC.

- A. Contractor shall restore reset and/or replace all street and traffic signs, mailboxes, etc. disturbed during the course of his operations.

END OF SECTION

SECTION 02314

EXCAVATION (UNCLASSIFIED)

1.1 DESCRIPTION

The excavation and removal of all earth, rock, brick, stone, concrete, small structures, existing pavements, and all other materials encountered, required for the construction of roadways and their appurtenances; the transportation of the excavated material; all grading, compacting and subgrade preparation, topsoiling, fertilizing, seeding, and mulching; the disposal of unsuitable and surplus materials; and all other work as specified in this section.

1.2 MATERIALS

No materials are involved.

1.3 CONSTRUCTION

A. Reference Standards used in this Specification section.

New Jersey Department of Transportation Standard Specifications:

1. Section 202: Roadway Excavation
2. Section 203: Embankment
3. Section 301: Subgrade

B. Protection:

1. Protect trees, shrubs, lawns and other features remaining as part of final landscaping.
2. Protect curbs, inlets, manholes, utility poles, and all other existing structures to remain.
3. Refer to paragraphs of General Conditions and Supplementary Conditions regarding protection of vegetation and structures.
4. Protect newly graded areas from traffic and erosion. Keep free of trash and debris.
5. Repair and reestablish grades in settled, eroded, and rutted areas to specified tolerances.
6. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, reshape and compact to required density prior to further construction.

C. Preparation:

1. Field measurements:
 - a. Layout work limits. Coordinate this work with the ENGINEER.
 - b. Set grade stakes.
2. Prior to commencement of work, establish location and extent of all utilities in the work areas. Maintain and protect as required existing utilities which pass through the work area.
3. Prior to excavating, cut existing pavement vertically with sharp tool on a straight line at a distance of six (6") inches beyond limits of excavation shown on plans. Maintain cut straight and neat, or recut and dress as directed by the ENGINEER.

D. Grading:

1. Grade project site to required levels, profiles, contours, and elevations, ready for finish grading and paving.
2. Methods of construction for excavation and grading shall conform to Sections 202, 203 and 301 of the Standard Specifications.
3. Grades shall be uniform levels or slopes between points where elevations are given or between such points and existing finished grades. Abrupt change in slopes shall be rounded.
4. Use all means necessary to prevent dust being a nuisance to the public.
5. Soil shall not be worked, or fill placed, during freezing weather, when frozen, or unstable due to excessive moisture.
6. Unstable or unsuitable material encountered at the prescribed bottom limits of roadway excavation shall be removed within limits as directed by the ENGINEER.
7. Compaction:

Compact any embankment for this project as specified in Section 203.03.02 of the Standard Specifications. Embankment material shall be free of stumps, brush, weeds, roots, and other material that may decay.
8. Compact subgrade in all paved areas as specified in Section 301.03.01 of the Standard Specifications.
9. Dispose of surplus or unsuitable excavated materials.

END OF SECTION

SECTION 02325

TRENCH EXCAVATION, BACKFILLING AND COMPACTING

1.1 DESCRIPTION

A. Description of Work:

Trench excavation, backfilling and compacting includes but is not limited to:

1. Excavation for trenches and trench backfilling.
2. Placement and stabilization of trench soils.
3. Rough and finish grading of the work area.
4. Furnishing and installing trench stabilization material, select backfill material and low strength concrete fill.
5. Sheeting of trenches as required within the Theoretical Railroad Embankment Line.
6. Dewatering as required by site conditions.

B. Definitions:

1. Trench excavation: Removal and disposal of all material encountered when establishing required grade elevations, including pavements, concrete slabs and other obstruction.
2. Unauthorized excavation: Removal of materials beyond specified subgrade elevations without approval of the ENGINEER.

1.2 MATERIALS

- ##### A. Flowable Backfill Material: Controlled Low Strength Material (CLSM) shall conform to and be constructed according to NJDOT Specifications.

1.3 METHODS OF CONSTRUCTION

A. Requirements of Regulatory Agencies:

1. All excavations shall be in compliance with Federal Occupational Safety and Health Act, Sections 1926.650 thru 1926.653 and Rules and Regulations of the State of New Jersey Department of Labor and Industry, Bureau of Engineering and Safety, N.J.A.C. 12:180.
2. Excavation work shall be in compliance with applicable requirements of other governing authorities having jurisdiction.

B. Reference Standards included in this Specification Section:

1. New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, 2001 (Standard Specifications), as currently amended.
 - a. Section 901.03: Coarse Aggregate
 - b. Section 901.04: Broken Stone
 - c. Section 901.09: Soil Aggregate
2. American Society for Testing and Materials (ASTM):
 - a. D-1556-64 (Reapproved 1974): Density of Soil in Place by the Sand-Cone Method.
 - b. D-1557-78: Moisture Density Relations of Soils and Soil Aggregate Mixtures Using 10 lb. Rammer and 18-inch Drop.
 - c. D-2049-69: Relative Density of Cohesionless Soils.
 - d. D-2992-78: Density of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depth).

C. Submittals:

1. Test reports:

When directed by the ENGINEER, submit test reports on all select backfill material in accordance with the standards.

2. Submit test reports as approved by the Engineer.

D. Job conditions:

1. Existing utilities: Should uncharted, or incorrectly charted piping or other utilities be encountered during excavation, consult the Utility Owner immediately for directions. Cooperate with the OWNER and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of Utility Owner.
2. Do not interrupt existing utilities serving facilities occupied and used by OWNER or others, except when permitted in writing by the ENGINEER and then only after acceptable temporary utility services have been provided.

E. Use of explosives: The use of explosives is not permitted unless approved by the ENGINEER.

F. Protection of persons and property:

1. Barricade open excavations occurring as part of this work and post with warning lights as required to protect persons on site. Operate warning lights as recommended by authorities having jurisdiction.
 2. Protect trees, shrubs, lawns and other features remaining as part of final landscaping.
 3. Protect structures, utilities, sidewalks, pavements and other facilities from damage caused by settlement, lateral movement, undermining washout and other hazards created by earthwork operations.
 4. Refer to paragraphs of General Conditions regarding protection of vegetation and structures.
 5. In the event of damage, immediately make all repairs and replacements to the approval of the ENGINEER at no cost to the owner.
- G. Dust control: Use all means necessary to control dust on and near the work if such dust is caused by the Contractor's operations during performance of the work or if resulting from the conditions. Do not resume work until conditions are favorable as determined by the ENGINEER.
- H. Weather conditions: Do not place, spread, roll or fill material during freezing, raining or otherwise unfavorable weather conditions. Do not resume work until conditions are favorable as determined by the ENGINEER.
- I. Inspection by Contractor: Examine the areas and conditions under which trenching, backfilling, compacting and grading are to be performed and notify the ENGINEER in writing of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.
- J. Preparation:
1. Prior to commencement of work, establish location and extent of all utilities in the work area(s). Maintain, and protect as required existing utilities which pass through the work area.
 2. Prior to excavation in pavement areas, cut existing pavement vertically with sharp tool on a straight line to the limits of excavation shown on the Plans or as approved by the ENGINEER.
- K. Excavation:
1. Unauthorized excavation: Unauthorized excavation, including remedial work directed by the ENGINEER, shall include removing all loosened material and providing broken stone material as required to attain a firm and unyielding foundation and to attain required grade elevations to the approval of the ENGINEER.

2. Additional excavation:
 - a. When excavation has reached required subgrade elevations, notify the ENGINEER who will make an inspection of conditions.
 - b. If unsuitable bearing materials are encountered at the required subgrade elevations, carry excavations deeper and replace the excavated material as approved by the ENGINEER.
 - c. Removal of unsuitable material and its replacement as approved by the ENGINEER.
3. Stability of excavations:
 - a. Slope sides of excavations to comply with local codes and ordinances having jurisdiction. Shore and brace where sloping is not possible because of space restrictions or stability of materials excavated.
 - b. Maintain sides and slopes of excavations in a safe condition until completion of backfilling.
4. Shoring and bracing:
 - a. Provide materials for shoring and bracing, such as sheet piling, uprights, stringers and cross-braces, in good serviceable condition.
 - b. Establish requirements for trench shoring and bracing to comply with local codes and authorities having jurisdiction.
 - c. Maintain shoring and bracing in excavations regardless of time period excavations will be open.
 - d. Brace, sheet, and support trench walls in such a manner that they will be safe and that the ground along side the excavation will not slide or settle, and that all existing improvements of every kind, whether on public or private property, will be fully protected from damage.
 - e. In the event of damage to such improvements, immediately make all repairs and replacements necessary to the approval of the ENGINEER and at no additional cost to the OWNER.
 - f. Arrange bracing, sheeting and shoring so as to not place stress on any portion of the completed work until the general construction thereof has proceeded far enough to provide sufficient strength.
 - g. Exercise care in the drawing and removal of sheeting, shoring, bracing and timbering to prevent collapse and caving of the excavation faces being supported.
 - h. Sheeting used in Theoretical Railroad Embankment Line will be cut 2' below finished grade and left in place.

- i. Sheeting left in place shall be indicated on as-built drawings.
5. Dewatering:
- a. Prevent surface water and subsurface or groundwater from flowing into excavations and from flooding project site and surrounding area.
 - b. Do not allow water to accumulate in excavations. Remove water to prevent softening of foundation bottoms, undercutting footings, and soil changes detrimental to stability of subgrades and foundations. Provide and maintain pumps, well points, sumps, suction and discharge lines, and dewatering system components necessary to convey water away from excavations.
 - c. Convey water removed from excavations and rainwater to temporary drainage ditches and other diversions outside excavation limits for each structure. Do not use trench excavations as temporary drainage ditches.
6. Material storage:
- a. Stockpile satisfactory excavated materials where directed until required for use as backfill or fill. Place, grade and shape stockpiles for proper drainage.
 - b. Locate and retain soil materials away from edge of excavations.
 - c. Dispose of excess soil material and waste materials as herein specified. Excavated material unsuitable for backfilling shall be kept separate from other materials excavated, and disposed of. Material suitable for backfilling shall not be disposed of until completion of filling or backfilling operations.
7. Excavation for trenches:
- a. Dig trenches to the uniform width required for the particular item to be installed, sufficiently wide to provide ample working room.
 - (1) Maximum trench width to a point two feet above the outside top of pipe shall be the pipe outer diameter plus eighteen inches.
 - (2) Maximum trench width at ground surface shall be as indicated on the Plans.
 - b. Excavate trenches to the depth indicated or required. Carry the depth of trenches for piping to establish the indicated flow lines and invert elevations.
 - c. Trenches for pipes shall not be opened more than the number of linear feet of pipe that can be placed and backfilled in one day.
 - d. Grub roots and stumps within six inches of outside surface of pipe bottom and sides to minimum depth of six inches below grade.
 - e. Pipe bedding shall be in accordance with the details shown on the Plans.
- L. Backfill and compaction:

1. General:
 - a. Backfill with flowable fill.
2. Backfill excavation as promptly as work permits, but not until completion of the following:
 - a. Acceptance by the ENGINEER of construction below finish grade.
 - b. Inspection, testing, approval and recording locations of underground utilities.
 - c. Removal of shoring and bracing, and backfilling of voids with satisfactory materials. Cut off temporary sheet piling driven below bottom of structure or utilities, or leave in place if required.
 - d. Removal of trash and debris.
3. Backfilling prior to approvals:
 - a. Should any of the work be so enclosed or covered up before it has been approved, uncover all such work at no additional cost to the OWNER.
 - b. After the work has been completely tested, inspected and approved, make all repairs and replacements necessary to restore the work to the condition in which it was found at the time of uncovering, all at no additional cost to the OWNER.
4. Placement and compaction:
 - a. Place backfill materials in layers not more than six inches (6") in loose depth.
 - b. Control soil compaction during construction providing minimum percentage of density specified for each area classification listed below.
 - c. Pavement areas are defined, for the purpose of this Paragraph, as extending a minimum of five feet (5') beyond the pavement.
 - d. Compact soil to not less than the following percentages of maximum dry density for soils which exhibit a well defined moisture density relationship determined in accordance with ASTM D-1557; and not less than the following percentages of relative density, determined in accordance with ASTM D-2049, for soils which will not exhibit a well defined moisture density relationship:
 - (1) Structures: Compact top 12 inches (12") of subgrade and each layer of backfill or fill material at 95 percent (95%) maximum dry density or 90 percent (90%) relative dry density.
 - (2) Lawn on Unpaved Areas: Compact top six inches (6") of subgrade and each layer of backfill or fill material at 90 percent (90%) maximum dry density.

- (3) Walkways: Compact top six inches (6") of subgrade and each layer of backfill or fill material at 95 percent (95%) maximum dry density or 90 percent (90%) relative dry density.
 - (4) Pavement Areas: Compact top 12 inches (12") of subgrade and each layer of backfill or fill material at 95 percent (95%) maximum dry density or 90 percent (90%) relative dry density.
 - (5) Trench Stabilization Materials: Compact each layer of material to 95 percent (95%) of maximum dry density.
- e. Moisture control:
- (1) Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade, or layer of soil material, to prevent free water appearing on surface during or subsequent to compaction operations.
 - (2) Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density.
 - (3) Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by discing, harrowing or pulverizing until moisture content is reduced to a satisfactory value.
- f. Puddling or jetting will not be permitted.
- g. Do not place backfill material on surfaces that are muddy, frozen or contain frost or ice, other unsuitable materials.
- h. Place backfill materials evenly adjacent to structures, to required elevations. Take care to prevent wedging action of backfill against structures by carrying the material uniformly around structure to approximately same elevation in each lift.
- i. Compact backfill to height of two feet (2') above top of pipe using approved flat faced mechanical tampers. Compact backfill more than two feet (2') above top of pipe using approved vibratory soil compactors or flat-faced mechanical tampers.

M. Grading of disturbed areas:

1. General: Uniformly grade all disturbed areas. Smooth finished surface within specified tolerances, compact with uniform levels or slopes between points where elevations are shown, or between such points and existing grades.
2. Grading: Grade areas to prevent ponding. Finish surfaces free from irregular surface changes, and as follows:

- a. Lawn or unpaved areas: Finish areas to receive topsoil to within not more than 0.10 foot above or below the required subgrade elevations.
 - b. Walks: Shape surface of areas under walks to line, grade and cross-section, with finish surface not more than 0.10 foot above or below the required subgrade elevation.
 - c. Pavements and slabs: Shape surface of areas under pavement to line, grade and cross-section, with finish surface not more than 1/2 inch above or below the required subgrade elevation.
3. Compaction: After grading, compact subgrade surfaces to the depth and percentage of maximum density for each area classification.
 4. Treatment after grading:
 - a. After grading is completed and the ENGINEER has finished his inspection, permit no further grading except with the approval of and inspection of the ENGINEER.
 - b. Use all means necessary to prevent erosion of freshly graded areas during construction and until time as permanent cover material is installed.
 5. Prepare pavement subgrade areas as specified in Section 208.04 of the Standard Specifications except as modified by the requirements of this Specification Section.

N. Field Quality Control:

1. The ENGINEER, at his discretion, will perform compaction testing in accordance with one or more of the following standards:
 - a. ASTM D-1556
 - b. ASTM D-1557
 - c. ASTM D-2049
 - d. ASTM D-2922
2. Contractor shall employ and pay for the services of an Independent Testing Laboratory acceptable to the ENGINEER to perform additional field quality control sampling and testing when initial compaction tests performed by the ENGINEER indicate work does not comply with the Contract Documents. Sampling and testing shall be performed using the same methods as were used by the ENGINEER.
3. When testing service reports indicate that compaction is below specified densities, the Contractor shall provide additional compaction and retesting as approved by the ENGINEER, at no additional cost to the OWNER.

O. Maintenance:

1. Protection of graded areas:

- a. Protect newly graded areas from traffic and erosion. Keep free of trash and debris
- b. Repair and re-establish grades in settled, eroded and rutted areas to specified tolerances.

2. Reconditioning compacted areas: Where completed compacted areas are distributed by subsequent construction operations or adverse weather, scarify surface, reshape and compact to required density prior to further construction.

P. Disposal of excess and waste materials: Remove waste materials, including unacceptable excavated material, trash and debris, and dispose of it off the OWNER'S property.

1.4 QUANTITY AND PAYMENT

A. Trench excavation, backfilling and compacting: No separate measurement or payment shall be made for this item. All work shall be paid for under the prices submitted for the various related items of work listed in the Proposal.

END OF SECTION

SECTION 02754

CONCRETE SIDEWALKS

1.1 DESCRIPTION

- A. Remove and replace existing concrete sidewalk at locations as required.
- B. Remove and replace additional concrete sidewalk to be designated by the ENGINEER prior to construction at the unit prices bid.

1.2 MATERIALS

- A. Concrete:
 - 1. Use concrete meeting the requirements of Class "B" concrete as defined in the NJDOT Standard Specifications, 4000 PSI.
 - 2. Use air-entrained concrete.
- B. Cement aggregates, water and air-entrainment methods and materials: as specified in the NJDOT Standard Specifications.
- C. Joint filler: Bituminous cellular type, as specified in the NJDOT Standard Specifications.
- D. Curing compound: White or clear pigmented liquid, as specified in the NJDOT Standard Specifications.

1.3 CONSTRUCTION

- A. Reference standards included in this Specification section:
 - 1. New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, 2007, or as currently amended:
 - a. Concrete Surface Course
 - b. Sidewalks and Driveways
 - c. Curing Materials for Concrete
 - d. Joint Fillers, Preformed.
- B. Submittals: CERTIFICATES: All deliveries of concrete shall be accompanied by delivery slips, copies of which shall be provided to the ENGINEER by the Contractor.
- C. Environmental Requirements:

1. Allowable concrete temperatures:
 - a. Cold weather: 60 degrees F. when discharged from the mixer.
 - b. Hot weather: Maximum concrete temperature is 80 degrees F.
2. Do not place concrete during rain, when atmospheric temperature is at or below 36 degrees F., or when conditions are otherwise unfavorable as determined by the ENGINEER.

D. Protection:

1. Protect concrete from pedestrian and vehicular traffic, rain damage and vandalism until concrete has been sufficiently cured as determined by the ENGINEER.
2. Method of protection shall be approved by the ENGINEER prior to beginning work under this section.
3. Damaged concrete, resulting from improper protection, shall be replaced as directed by the ENGINEER, at no additional cost to the owner.

E. Preparation:

1. Coordinate with ENGINEER for marking out of apron removal limits.
2. Excavate subgrade and set forms so that finished structure conforms to lines and grades shown on Plans, or as directed by the ENGINEER.
3. Prepare subgrade to provide a firm, even surface. Place 4" thick DGA subbase material and compact.
4. Verify that earthwork is completed to correct line and grade.
5. Verify that forms conform to line, grade and cross section shown on Plans.
6. Check that subgrade is smooth, compacted and free of frost or excessive moisture.
7. Do not commence work until conditions are satisfactory.

F. Performance: Method of apron construction shall conform to the NJDOT Standard Specifications paragraph entitled, "Concrete Sidewalks and Driveways," except as modified by the Supplemental Requirements below:

1. Construction shall conform to the requirements described in the Statement of Work, and shall be in accordance with the Plans.

2. Restorations shall be performed as specified in the section entitled, "Cleaning and Restorations."

END OF SECTION

SECTION 02830

VINYL COATED CHAIN LINK FENCE

PART 1. GENERAL

1.1 DESCRIPTION

- A. Vinyl coated chain link fencing and accessories.
- B. Concrete post footings.

1.2 RELATED SECTIONS

- A. None.

1.3 SUBMITTALS

- A. Shop drawings: Layout of fences and gates with dimensions, details, and finishes of components, accessories, and post foundations.
- B. Product data: Manufacturer's catalog cuts indicating material compliance and specified options.
- C. Samples: If requested, samples of materials (e.g., fabric, wires, and accessories).
- D. Warranty Information

PART 2. MATERIALS

2.1 MANUFACTURER

- A. Manufacturer: Master Halco /Anchor Fence, Baltimore, MD Phone (410) 633-6500 Fax (410) 633-6506.
- B. Alternate Manufacturers:
 - 1. Merchant Metals
 - 2. Ameristar
 - 3. Or, approved equal.
- C. Product shall be from a qualified manufacturer having a minimum of five (5) years experience manufacturing of zinc galvanized and vinyl coated steel chain link fencing.
- D. Obtain chain link fences and gates, including accessories, fittings, and fastenings, from a single source.

2.2 PRODUCT WARRANTY: 15 years on all fence fabric and framing components and coatings.

2.3 CHAIN LINK FENCE FABRIC

- A. Fabric: 9 gauge, ASTM F 641, galvanized steel core wire, helically wound and woven.
- B. Mesh Sizes: 2" diamond mesh for all fences and gates.
- C. Height: As noted on Drawings.
- D. Coating: Vinyl coating per ASTM F 668, Class 2b, 10 mils minimum thickness, thermally fused and adhered to steel fabric.
- E. Color: Black.

2.4 STEEL FENCE FRAMING

- A. Steel Pipe - Type I: ASTM F 1083, standard weight schedule 40; minimum yield strength of 25,000 psi; sizes as indicated. Hot-dipped galvanized with minimum average 1.8 oz/ft² of coated surface area.
- B. Sizes:
 - 1. End and Corner Post - 4 inch O.D.
 - 2. Line (intermediate) Posts - 2 1/2 inch O.D.
 - 3. Top, Middle and Bottom Rail and Braces - 1 5/8 inch O.D.
- C. Frame Coatings: Powder coated per ASTM F1043, 10 mils. min. thickness, thermally fused and adhered to steel pipe.
- D. Color: To be selected by Owner.

2.5 CHAIN LINK SWING GATES

- A. Gate Frames: Fabricate chain link swing gates in accordance with ASTM F 900, using two inch (2") square tubular galvanized steel members, weighing 2.60 lb/ft. Fusion or stainless steel welded connections forming rigid one-piece unit.
- B. Chain Link Gate Fabric: MATCH FENCE FABRIC. Install fabric with hook bolts and tension bars at all 4 sides. Attach to gate frame at not more than 15" on center.
- C. Hardware materials: Hot dipped galvanized steel or malleable iron shapes to suit gate size.
- D. Finish for Gate Frame, Fabric and Hardware: MATCH FENCING.
- E. Hinges: Structurally capable of supporting gate leaf and allow opening and closing without binding. Non-lift-off type hinge design shall permit gate to swing 180° outward.
- F. Latch: Forked type capable of retaining gate in closed position and have provision for - padlock. Latch shall permit operation from either side of gate.

- G. Keeper: Provide keeper for each gate leaf. Gate keeper shall consist of mechanical device for securing free end of gate when in full open position.
- H. Double gates: Provide drop rod to hold inactive leaf. Provide gate stop pipe to engage center drop rod. Provide locking device and padlock eyes as an integral part of latch, requiring one padlock for locking both gate leaves.
- I. Gate posts: Steel pipe, standard weight schedule 40; minimum yield strength of 25,000 psi, size as indicated below.

<u>Gate Leaf Single Width</u>	<u>Post Size (Round)</u>	<u>Weight</u>
6 ft. or less	2.875 in.	5.79 lb/ft
6 ft. to 12 ft.	4.00 in.	9.11 lb/ft
12 ft. to 19 ft.	6.625 in.	18.97 lb/ft
19 ft. to 23 ft.	8.625 in.	28.55 lb/ft

2.6 ACCESSORIES

- A. General: Provide items required to complete fence system. Galvanize each ferrous metal item and finish to match framing.
- B. Post caps: Formed steel alloy weather tight closure cap for tubular posts. Provide one cap for each post.
- C. Top rail and brace rail ends: Pressed steel per ASTM F626, for connection of rail and brace to terminal posts.
- D. Top rail sleeves: 7" expansion sleeve with spring, allowing for expansion and contraction of top rail.
- E. Wire ties: 9 gauge galvanized steel wire for attachment of fabric to line posts. Double wrap 13 gauge for rails and braces. Hog ring ties of 12-1/2 gauge for attachment of fabric to tension wire.
- F. Brace and tension (stretcher bar) bands: Pressed steel. At square post provide tension bar clips.
- G. Tension wire: Metallic coated steel wire, 7 gauge, 0.177" diameter core wire with tensile strength of 75,000 psi. Finish: SAME AS FENCE FRAME AND FABRIC.
- H. Tension (stretcher) bars: One piece lengths equal to 2 inches less than full height of fabric with a minimum cross-section of 3/16" x 3/4" or equivalent fiber glass rod. Provide tension (stretcher) bars where chain link fabric meets terminal posts.
- I. Truss Rods and Tightener: Steel rods with minimum diameter of 5/16". Capable of withstanding a tension of minimum 2,000 lbs.

J. Nuts and bolts shall be galvanized, not vinyl coated.

2.7 SETTING MATERIALS

A. Concrete: Minimum 28-day compressive strength of 3500 psi minimum.

PART 3. CONSTRUCTION

3.1 EXAMINATION

- A. Verify areas to receive fencing are completed to final grades and elevations.
- B. Ensure property lines and legal boundaries of work are clearly established.
- C. Verify areas to assure sufficient space to receive slide gates in open position (gate and overhang).

3.2 CHAIN LINK FENCE FRAMING INSTALLATION

- A. Install chain link fence in accordance with ASTM F-567 and manufacturer's instructions.
- B. Locate terminal post at each fence termination and change in horizontal or vertical direction of 30° or more.
- C. Space line posts uniformly at the following dimensions:
 - 1. 8 ft. o.c. maximum for 4 ft. to 8 ft. high fence
 - 2. 10 ft. o.c. maximum for fence greater than 8 ft. in height
- D. Concrete set posts: Drill holes in firm, undisturbed or compacted soil. Holes shall have diameter 4 times greater than outside dimension of post, and depths approximately 6" deeper than post bottom. Excavate deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads. Set post bottom 36" below surface when in firm, undisturbed soil. Place concrete around posts in a continuous pour. Trowel finish around post. Slope to direct water away from posts.
- E. Drive Anchor posts: With protective cap, drive post 36" into ground. Slightly below ground level install drive anchor shoe fitting. Install 2 diagonal drive anchors and tighten in the shoe.
- F. Check each post for vertical and top alignment, and maintain in position during placement and finishing operations.
- G. Bracing: Install horizontal pipe brace at mid-height for fences 6' and over, on each side of terminal posts. Firmly attach with fittings. Install diagonal truss rods at these points. Adjust truss rod, ensuring posts remain plumb.

- H. Tension wire: Provide tension wire at bottom of fabric [and at top, if top rail is not specified]. Install tension wire before stretching fabric and attach to each post with ties. Secure tension wire to fabric with 12-1/2 gauge hog rings 24" on center.
- I. Top rail: Install lengths, 21'. Connect joints with sleeves for rigid connections for expansion/contraction.
- J. Center Rails (for fabric height 12' and over). Install mid rails between posts with fittings and accessories.
- K. Bottom Rails: Install bottom rails between posts with fittings and accessories.

3.3 CHAIN LINK FABRIC INSTALLATION

- A. Fabric: Install fabric on playing field side and attach so that fabric remains in tension after pulling force is released. Leave approximately 2" between finish grade and bottom selvage. Attach fabric with wire ties to line posts at 15" on center and to rails, braces, and tension wire at 24" on center.
- B. Tension (stretcher) bars: Pull fabric taut; thread tension bar through fabric and attach to terminal posts with bands or clips spaced maximum of 15" on center.

3.4 CHAIN LINK SWING GATE INSTALLATION

- A. Gate Posts
 1. Install gate posts in accordance with manufacturer's instructions.
 2. Concrete set gate posts: Drill holes in firm, undisturbed or compacted soil. Holes shall have diameter 4 times greater than outside dimension of post, and depths approximately 6" deeper than post bottom. Excavate deeper as required for adequate support in soft and loose soils, and for posts with heavy lateral loads. Set post bottom 36" below surface when in firm, undisturbed soil. Place concrete around posts in a continuous pour. Trowel finish around post and slope to direct water away from posts.
 3. Gate posts and hardware: Set keeper, stops, sleeves into concrete. Check each post for vertical and top alignment, and maintain in position during placement and finishing operations.
- B. Swing Gate
 1. Install gates plumb, level, and secure for full opening without interference.
 2. Attach hardware by means which will prevent unauthorized removal.
 3. Adjust hardware for smooth operation.
- C. Location: To be determined by Township.

3.5 ACCESSORIES

- A. Tie wires: Bend ends of wire to minimize hazard to persons and clothing.

B. Fasteners: Install nuts on side of fence opposite fabric side for added security.

3.6 GROUNDING

A. Chain link fencing shall be grounded as shown on the plans due to the proximity of the proposed athletic field lights.

3.7 CLEANING

A. Clean up debris and unused material, and remove from the site.

END OF SECTION

SECTION 02845

TRAFFIC CONTROL AND SIGNAGE

1.1 DESCRIPTION

- A. The work of this section shall consist of providing traffic protection devices, informational signs, and traffic directors (trained flaggers) to assure safe flow of traffic and protection of pedestrians in the vicinity of the construction site.

1.2 MATERIALS

- A. Materials shall consist of signs and other traffic control devices as described in the MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS.
- B. Other materials not specifically required on the Plans that shall be immediately available to the Contractor for traffic control includes:
 - 1) Traffic Cones
 - 2) Battery operated flashing devices
 - 3) Drums
 - 4) Other as approved by ENGINEER upon reasonable notice.

1.3 TRAFFIC DIRECTOR QUALIFICATIONS

The contractor shall provide the following personnel:

- A. **Trained Flaggers.** Trained flaggers shall be in good physical condition, including sight and hearing, mentally alert, and shall have a courteous but firm manner, neat appearance, and a sense of responsibility for the safety of the public. Trained flaggers shall wear an orange or fluorescent orange garment such as a shirt, jacket, or vest. This garment shall be reflectorized for nighttime operations with reflective material that shall be orange in color. When controlling traffic, trained flaggers shall be equipped with STOP/SLOW paddles, and shall follow the procedures stipulated for flaggers in the MUTCD.

Trained flaggers as specified in this Subsection shall be an approved subcontractor or employees of the Contractor. They shall not be police from any jurisdiction working on behalf of the Contractor while in uniform or in any other official status. All trained flaggers shall be formally trained in flagging operations and proper use of the **STOP/SLOW** paddle. This training may consist of ATSSA (American Traffic Safety Services Association), union, or trade association training, or training by an individual who has received formal training from a recognized program or agency in work zone traffic control. When requested by the Engineer or Township Police, trained flaggers shall demonstrate competency. Failure to demonstrate competency shall result in the immediate replacement with a competent person.

- B. The Contractor shall provide the Engineer and the Township Police with certificates of training for each flagger on the job site prior to work start, and shall have a copy of the certificates available on site.
- C. Should the Township Police determine that their presence is necessary to maintain traffic control, the Township will provide for their direct payment. **The Contractor is required to provide trained flaggers and maintain proper traffic control. Should the Township Police determine that their presence is necessary due to the Contractor's failure to provide trained flaggers and/or maintain**

proper traffic control, any payment due to the Township Police will be deducted from monies due to the Contractor under the contract.

1.4 METHODS OF CONSTRUCTION

- A. Before beginning work on any phase of the project, the contractor shall furnish and install all warning signals, barricades, lights, flares and other devices necessary to protect the public and workmen during that phase of his operations.
- B. During the work on this project, the contractor shall provide supplementary traffic protection devices, such as traffic cones, flashers and drums. When lack of any required safety devices presents an immediate hazard, the Engineer or Township Police may order that such devices be provided by the contractor.
- C. Trained flaggers shall be provided whenever alternate two-way traffic is maintained in a single lane, whenever contractor's operations require closing of a lane or portion of a lane on a multiple lane roadway, whenever the contractor's equipment or vehicles are entering or leaving active roadways at other than normal street intersections, whenever a contractor's operations will be contrary to or cause confusion regarding normal traffic control devices (traffic signals, signs, etc.) within a work area and whenever else, in the opinion of the Engineer or Township Police, the contractor's operations cause such hazards as to require the use of trained flaggers.
- D. Trained flaggers shall be responsible and thoroughly familiar with their responsibilities, and while serving as flaggers, shall not be required to perform any other duties. Flaggers shall be provided with an orange or red flag, an orange or orange and white traffic safety vest and white or orange hard hat or other appropriate head gear.
- E. When two-way traffic must be maintained throughout the work area during construction, at least two 10' lanes must be maintained for traffic and shall be directed by trained flaggers.
- F. Any restriction of traffic at any time shall be subject to the approval of the Engineer and the Township Police Department. The contractor shall submit a narrative Traffic Control Plan indicating the methods of traffic control anticipated.
- G. The contractor shall provide adequate means of access for fire, police and emergency vehicles throughout the duration of the project.
- H. All roadways must be fully open to the public during contractor non-working hours.

END OF SECTION

SECTION 02910

TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES

1.1 DESCRIPTION

- A. This work shall consist of temporary measures to control erosion and sediment during the life of the contract, as shown on the Plans and as approved by the ENGINEER and/or as directed by the Engineer in the field.
- B. The temporary control provisions contained herein shall be coordinated with the permanent improvements (grass, pavement and other restorations) specified elsewhere in the contract to the extent practical to assure effective and continuous erosion and sediment control throughout the construction and post-construction period.
- C. The erosion and sediment control measures described herein shall be continued until the construction is complete and final restorations installed.

1.2 MATERIALS

- A. All materials and methods of construction shall be in accordance with the New Jersey State Standards for Soil Erosion and Sediment Control.

1.3 METHODS OF CONSTRUCTION

- A. Contractor shall comply with the construction requirements shown on the plan entitled, "Soil Erosion Control Notes", which is appended hereto and is a part of the Contract Documents.
- B. Contractor shall adhere, as closely at practicable, to the construction sequence provided on the plan entitled, "Soil Erosion Control Notes".
- C. In the event of conflict between these requirements and pollution control laws, rules, or regulations of other federal or state or location agencies, the more restrictive laws, rules or regulations shall apply.
- D. The Contractor will be responsible for maintaining all soil erosion and sediment control measures as specified on the Plans. All temporary measures shall be removed by the Contractor as approved by the ENGINEER.

END OF SECTION

SECTION 02924

FERTILIZING AND SEEDING

1.1 DESCRIPTION

Provide lime, fertilizer, Type "A-3" seed mixture, and straw mulch protection for:

1. Restoration of existing grass areas disturbed by Contractor's operations.
2. Stabilization of unpaved areas.

1.2 MATERIALS

A. Seed Mixture:

1. New Jersey Department of Transportation Type "A-3" Seed Mixture:

<u>Kind of Seed</u>	<u>Minimum Purity, Percent</u>	<u>Minimum Germination, Percent</u>	<u>Percent of Total Weight of Mixture</u>
Tall Fescue (Rebel or Falcon)	95	80	60
Kentucky Bluegrass (Kenblue, South Dakota or Park)	85	75	10
Chewings Fescue (Highlight or Jamestown)	95	85	20
Perennial Ryegrass	98	85	10

2. Use clean, dry, new crop seed. Use certified seed when available.

B. Topsoil: As specified in Section 02922, "Topsoiling."

C. Ground limestone:

1. Minimum total calcium and magnesium oxides content: 40 percent (40%).
2. Physical Properties:

<u>Sieve Size</u>	<u>Total Percent Passing Minimum</u>
No. 20	100
No. 60	80
No. 100	60

D. Fertilizer:

1. Use fertilizer having commercial designation of 5-10-5 or any 1-2-1 ratio fertilizer.
2. Minimum available nutrients, percent by total weight:
 - a. 5, Nitrogen
 - b. 10, Phosphoric Oxide
 - c. 5, Potash
3. For fertilizer to be applied with mechanical spreader in dry form, a minimum of 75 percent (75%) shall pass a No. 8 sieve, minimum of 75 percent (75%) shall be retained on a No. 16 sieve, and maximum free moisture content shall be 2 percent (2%).

E. Water: Free of substances harmful to plant growth.

F. Mulch: As specified in Section 02926, "Mulching."

1.3 METHODS OF CONSTRUCTION

A. Submittals:

1. Certificates:
 - a. Seed producer's certified analysis of composition, purity, and germination of seed mixture, dated within nine (9) months of sowing.
 - b. Manufacturer's certified chemical analysis of fertilizer composition.
 - c. Manufacturer's certified chemical and physical composition analysis of ground limestone.
 - d. Submit all of the above to ENGINEER prior to incorporation of materials into project.
2. Delivery slips: Accompany each delivery of seed, ground limestone,

and fertilizer with delivery slip showing the product weight.

3. Test reports:
 - a. Submit results of test report for pH analysis of soil, and when ground limestone is required, the total amount of magnesium and calcium oxides required.
 - b. Submit as specified in Section 01410, Testing Laboratory Services.
- B. Product delivery, storage and handling:
 1. Deliver all materials in accordance with manufacturer's printed instructions, and in such manner as to protect from moisture.
 2. Store and handle material in accordance with manufacturer's printed instructions, and in such manner as to protect from moisture.
- C. Job conditions:
 1. Existing conditions: Perform seeding only after preceding work affecting ground surface is completed.
 2. Environmental requirements:
 - a. Plant seed on unfrozen soil. Soil shall be in friable condition at time of seeding.
 - b. Do not perform seeding when wind exceeds 15 mph.
 - c. Do not seed between calendar dates from May 15th to August 15th, and from October 15th to March 15th, except when weather and soil conditions are favorable as determined by ENGINEER.
 3. Protection: Restrict foot and vehicular traffic from seeded areas after planting to end of the establishment period.
- D. Protection (prior to seeding):
 1. Check that clearing, soil preparation and preceding work affecting ground surface is completed.
 2. Verify that soil is unfrozen and within allowable moisture content.
 3. Do not start work until conditions are satisfactory.
 4. When specified, install bed of topsoil.

5. When soil to be seeded has a pH value of less than 5.8, evenly spread ground limestone, which is dry and free flowing, over area to be seeded at rate that will change soil pH value to 6.5. Thoroughly mix limestone into upper 3 to 4 inches of soil by discing, harrowing, or other approved method.
6. Within limits set forth under materials, select fertilizer for use on the project. Use one selection throughout project. Apply fertilizer in quantity necessary to yield 60 pounds of nitrogen per acre. Thoroughly mix fertilizer into upper 3 to 4 inches of soil by discing, harrowing, or other approved method.
7. Water dry soil at least 24 hours prior to seeding to obtain a loose friable seed bed.
8. Before applying seed, remove all stones, rocks, lumps, roots, wires, clods, and there objects measuring 1 inch or larger in any dimension.

E. Application:

1. Broadcast half of seed with mechanical seeder.
2. Broadcast remaining half of seed at right angles to first seeding pattern, using same broadcast method.
3. Apply seed at the following rate:

Type "A" Seed Mixture: 100 lbs/acre.
4. Cover seed to depth of 1/8 inch by raking or other method approved by ENGINEER.
5. Roll seeded area with roller weighing maximum of 150 pounds per foot of width.
6. Water seeded area until water penetrates to a depth of 3 to 4 inches.
7. Finished seeded areas shall be smooth, even, and to prescribed lines and contour.

F. Protection (after seeding):

1. Spread straw mulch with a tackifier over all seeded areas larger than one square foot.
2. When directed by ENGINEER, erect temporary signs and barriers to protect seeded areas from pedestrian and vehicular traffic.

G. Lawn establishment:

1. Watering:

- a. Keep soil moist during seed germination period.
 - b. Method of watering shall provide equal distribution and coverage to all areas seeded.
 - c. Contractor shall water area to a depth of 2" once a week until final acceptance.
2. Mowing: Mow unacceptable weedy areas in fertilized and seeded areas as directed by ENGINEER if, prior to the establishment of a satisfactory stand of grass, an excess amount of weed growth becomes established. Now at Contractor's expense.
 3. Relime, refertilize and reseed, as directed by the ENGINEER, all seeded areas which become eroded or otherwise disturbed; or which require mowing of weedy areas in order to establish acceptable turf.
 4. Relime, refertilize and reseed, as directed by ENGINEER, spots larger than one square foot not having uniform stand of grass practically weed free, and not containing plants in reasonable proportion to the various kinds of seed in the grass seed mixture.
 5. Perform all lawn establishment work in accordance with the specifications without additional compensation.
 6. Establishment period to extend until acceptance of project by ENGINEER.
- H. Cleaning:

In addition to cleaning required in Section entitled, "Cleaning and Restorations:"

1. Immediately clean spills on paved and finished surface areas.
2. Remove debris and excess materials from project site.
3. Dispose of protective barricades and warning signs at termination of lawn establishment period.

I. Field quality control:

J. Seed mixture:

1. ENGINEER reserves the right to have certified seed mixtures samples and tested after delivery to the project. Contractor shall pay for testing and related costs when materials are found not to be in compliance with these specifications.
2. Sampling and testing will be conducted in accordance with New Jersey State Seed Law, Chapter 189, P.L. 1948, and with the rules and regulations for testing seeds adopted by the Association of Official Seed Analysts.

SECTION 02541

P.V.C. PIPE AND FITTINGS

1.1 DESCRIPTION

P.V.C. pipe for drain.

1.2 MATERIALS

A. General:

1. Pipe and fittings shall be manufactured from virgin rigid PVC (polyvinyl chloride) vinyl compounds with a cell class of 12454 as identified in ASTM D 1784..
2. PVC Schedule 80 pipe shall be Iron Pipe Size (IPS) conforming to ASTM D 1785. Injection molded PVC Schedule 80 fittings shall conform to ASTM D 2467. PVC Schedule 80 threaded fittings shall conform to ASTM D 2464. Pipe and fittings shall be manufactured as a system and be the product of one manufacturer. All pipe and fittings shall be manufactured in the United States. Pipe and fittings shall conform to NSF International Standard 61 and the health effects portion of NSF Standard 14.

1.3 CONSTRUCTION

A. Reference standards used in this Specification section:

1. New Jersey State Highway Department Standard Specifications:
 - a. Section 914: Portland Cement Concrete
2. American Society for Testing and Materials (ASTM):
 - a. ASTM D-1784: Rigid Poly (Vinyl Chloride) (PVC) Compounds and Chlorinated Poly (Vinyl Chloride) (CPVC) Compounds.
 - b. ASTM D-1869: Rubber Rings for Asbestos-Cement Pipe.
 - c. ASTM D-2241: Poly (Vinyl Chloride) (PVC) Plastic Pipe (SDR-PR).
 - d. ASTM D-2467: Socket-Type Poly (Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80.
 - e. ASTM D-2564: Solvent Cements for Poly (Vinyl Chloride) (PVC) Plastic Pipe and Fittings.
 - f. ASTM D-2855: Making Solvent-Cemented Joints with Poly (Vinyl Chloride) (PVC) Pipe and Fittings.
 - g. ASTM D-3034, Standard Specification for Type PSM Poly Vinyl Chloride (PVC) Sewer Pipe and Fittings.

3. American Water Works Association (AWWA):
 - a. AWWA C900- PVC pressure pipe, 4" through 12" for Water distribution.
- B. Submittals:
1. Manufacturer's literature and recommendations:
 - a. Submit manufacturer's descriptive literature for all materials to be used.
 - b. Submit pipe manufacturer's recommended method of gasket installation.
 - c. Submit all of the above for Engineer's approval.
 2. Certificates:
 - a. Submit manufacturer's certified letter stating that pipe or joint material ordered meets requirements of this Specification. Letter shall indicate compliance with appropriate reference standards listed.
 - b. Submit copies prior to installing materials.
- C. Product delivery, storage and handling:
1. Storage of materials:
 - a. Store materials to prevent physical damage off of the roadway surface.
 - b. Store pipe and fittings off ground to prevent dirt and debris from entering.
 - c. Store flexible gasket materials and joint primer or adhesive compounds, in cool, dry place. Keep rubber gaskets clean, away from oil, grease, excessive heat, and out of direct rays of sun.
 2. Handling of materials:
 - a. Protect materials during transportation and installation to avoid physical damage.
 - b. Use extra care in cold weather when flexibility and impact resistance of PVC pipe is reduced.
 - c. Do not install out-of-round pipe.
 - d. Unload pipe to prevent abrasion.
 - e. Do not drag or push pipe when handling or distributing on project site.
- D. Inspection by Contractor:
1. Check pipe for following information which shall be clearly marked on each pipe section:

- a. Nominal size and O.D. base.
 - b. Material code designation "P.V.C. 1120".
 - c. SDR number or ASTM pressure rating.
 - d. ASTM designation number.
 - e. Manufacturer's name or trademark and production record code.
2. Check fittings for the following markings:
 - a. ASTM specification number or SDR number.
 - b. Manufacturer's name or trademark.
 - c. Nominal size.
 - d. The material designation PVC, PSM.
 3. Inspect pipe for defects prior to placement in trench. The pipe and fittings shall be free from visible cracks, holes, foreign inclusions or other injurious defects. Assure that all materials are of the type specified and are not defective. Unmarked pipe; or pipe and materials not meeting Specifications requirements shall be removed from the site as directed by the Engineer.

E. Installation:

1. Excavation and backfill for pipes shall conform to the Specification section entitled, "Trench Excavating, Backfilling and Compacting".
2. Lay pipe only in the presence of the Engineer. Engineer may order removal and relaying of pipe not so laid. All sanitary sewer main piping shall be installed with the aid of a laser.
3. Initial backfill material shall be blended quarry stone, $\frac{3}{4}$ " nominal stone size, with 6" minimum bedding under the pipe to minimum 12" above the pipe.
4. Lay pipe to lines shown on Plans.
5. Do not lay pipe on unsuitable material, in wet trench, or in same trench with another pipe or utility.
6. Lower pipe into trench with ropes, machinery, or other means approved by Engineer.
7. All pipe and fittings shall be cleaned of all dirt and other debris before being installed and shall be kept clean until accepted in the completed work.
8. Pipe cuts shall be made square using tubing cutter, miter box, fine-toothed hand saw or other approved tools. Standard pipe cutters shall not be used. Bevel ends using factory-finished beveled end as a guide. Locate reference mark for joining pipe at proper distance from bevel.

10. Maintain minimum of twelve inch clearance between outside surface of pipe and outside surface of other pipes and structures. When this clearance cannot be obtained, contact the Engineer for instructions prior to proceeding with the pipe installation.
11. Joints once made and disturbed shall be subject to immediate rejection. Take necessary steps to prevent movement of pipe while in trench and during backfilling operations.
12. Seal open pipe ends with approved plugs whenever work is stopped. Remove plug prior to beginning work, inspect and clean pipe.
13. Drainage of trench water through pipe shall not be permitted.
14. Buried pipe shall be installed in accordance with ASTM F 1668 and ASTM D 2774. Solvent cement joints shall be made in a two-step process with a primer meeting ASTM F 656 and a medium- or heavy-bodied solvent cement conforming to ASTM D 2564. The system shall be protected from chemical agents, fire-stopping materials, thread sealant, plasticized-vinyl products or other aggressive chemical agents not compatible with PVC compounds. The system shall be hydrostatically tested after installation..

END OF SECTION

BID DOCUMENT SUBMISSION CHECKLIST

Township of Willingboro
(Name of Local Contracting Unit)

Country Club Pool- Deep Drainpipe Repair
(Name of Construction/Public Works Project)

WTCEX 22031
(Project Or Bid Number)

A. Failure to submit the following documents is a mandatory cause for the bid to be rejected.

(N.J.S.A. 40A:11-23.2)

Required With Submission of Bid (Owner's checkmarks)	Initial Each Item Submitted with Bid (Bidder's Initial)
<input checked="" type="checkbox"/> A bid guarantee as required by N.J.S.A. 40A:11-21	
<input checked="" type="checkbox"/> A certificate from a surety company, pursuant to N.J.S.A. 40A:11-22	
<input checked="" type="checkbox"/> A statement of corporate ownership, pursuant to N.J.S.A.52:25-24.2	
<input checked="" type="checkbox"/> A listing of subcontractors as required by N.J.S.A. 40A:11-16	
<input checked="" type="checkbox"/> If applicable, bidder's acknowledgment of receipt of any notices(s) or revisions(s) or addenda to an advertisement, specifications or bid document(s)	

B. Failure to submit the following documents may be a cause for the bid to be rejected.

(N.J.S.A. 40A:11-23.1b.)

Required with Submission of Bid (Owner's checkmarks)	Initial Each Item Submitted with Bid (Bidder's Initials)	Required with Submission of Bid (Owner's checkmarks)	Initial Each Item Submitted with Bid (Bidder's initials)
<input checked="" type="checkbox"/> Disclosure of Investment Activities in Iran		<input checked="" type="checkbox"/> Consent of surety as to maintenance bond as Required by N.J.S.A. 40A:11-16.3b	
<input checked="" type="checkbox"/> Consent of Surety as to a Labor and Material Payment Bond		<input checked="" type="checkbox"/> Submission of a Non-Collusion Affidavit (this form must be Notarized)	
		<input checked="" type="checkbox"/> Certification of Bidder showing that Bidder Owns, leases or controls any necessary equipment	
<input checked="" type="checkbox"/> Statement of compliance with N.J.S.A. 45:14C-2(h)		<input checked="" type="checkbox"/> One (1) original and two (2) copies of complete bid package	
<input checked="" type="checkbox"/> Public Works Contractors Registration Act Certificate shall be in effect at time of bid as required by N.J.S.A. 34:11- 56.48 et seq.			

C. SIGNATURE; The undersigned hereby acknowledges and has submitted the above listed requirements

Name of Bidder: _____

By Authorized Representative: _____

Signature: _____

Print Name and Title: _____

Date: _____

SECTION I

PROPOSAL

**TOWNSHIP OF WILLINGBORO
COUNTRY CLUB POOL- DEEP DRAINPIPE REPAIR
CONTRACT NO. WTCEX 22031**

TO: THE TOWNSHIP OF WILLINGBORO

The undersigned hereby declares that he/she/they has/have carefully examined the specifications, plans and form of contract for the project named above; that he/she they has/have carefully examined the site of the project; and that he/she/they will contract to carry out and complete said project as specified and delineated at the price per unit measure for each scheduled item of work stated in the Schedule of Prices following.

It is understood that the Total Price for the entire contract stated by the undersigned in the Schedule is based on the estimated quantities and will control in the awarding of the contract. It is further understood that the quantities stated in this Schedule of Prices for the various items are estimated only and may be increased or decreased. Payment will be made only for the actual quantity of authorized work done under each scheduled item.

It is further understood that the following procedure will be used to correct numerical discrepancies found in the Schedule of Prices following:

1. All Unit Prices and the Total Price for the entire contract shall be expressed in both words and figures, and in case of discrepancy, the written price shall govern over the price stated in figures.
2. If based on the above, it is found that the written Total Price for the entire contract is found to have been incorrectly computed, then changes will be made in any or all unit prices so as to attain conformity with said Total Price before the contract is executed.

The undersigned proposes to furnish all labor, materials and equipment required to construct and complete the structures and do other work complete in every detail, in accordance with plans, specifications and other contract documents prepared by Pennoni Associates Inc., Consulting Engineers, at and for the following Lump Sum Prices and Unit Prices:

**TOWNSHIP OF WILLINGBORO
COUNTRY CLUB POOL- DEEP DRAINPIPE REPAIR
CONTRACT NO. WTCEX 22031**

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>UNIT PRICE</u>	<u>TOTAL PRICE</u>
BASE BID			
1.	1 Lump Sum Bonding, Mobilization, HASP, Dewatering Plan, Shoring Plan and Project Initiation Lump Sum Price _____ Dollars and _____ Cents	\$ _____	\$ _____
2.	1 Lump Sum Disconnect and Reconnect Utilities Lump Sum Price _____ Dollars and _____ Cents	\$ _____	\$ _____
3.	150 Linear Feet Demolition/ New Construction Chain Link Fence Unit Price per Linear Foot _____ Dollars and _____ Cents	\$ _____	\$ _____
4.	1,200 SF Demolition/ New Construction Concrete Pool Deck, Walkways, and Flatwork Unit Price per Square Foot _____ Dollars and _____ Cents	\$ _____	\$ _____

**TOWNSHIP OF WILLINGBORO
COUNTRY CLUB POOL- DEEP DRAINPIPE REPAIR
CONTRACT NO. WTCEX 22031**

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>UNIT PRICE</u>	<u>TOTAL PRICE</u>
5.	1 Lump Sum Demolition/ New Construction Surge Tank Lump Sum Price _____ Dollars and _____ Cents	\$ _____	\$ _____
6.	1 Lump Sum Demolition/ New Construction Pool Deck Drains (from the area of demolished concrete pool deck and flatwork: 4 drains and connecting piping) Lump Sum Price _____ Dollars and _____ Cents	\$ _____	\$ _____
7.	1 Unit Demolition/ New Construction Light Pole w/ Fixture and Wiring Unit Price Per Unit _____ Dollars and _____ Cents	\$ _____	\$ _____
8.	1 Lump Sum Construct and Maintain Erosion and Sedimentation Controls Lump Sum Price _____ Dollars and _____ Cents	\$ _____	\$ _____

**TOWNSHIP OF WILLINGBORO
COUNTRY CLUB POOL- DEEP DRAINPIPE REPAIR
CONTRACT NO. WTCEX 22031**

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>UNIT PRICE</u>	<u>TOTAL PRICE</u>
9.	1,000 Cubic Yards Excavate, Stockpile, Transport and Dispose Soil (Clean Fill) Unit Price per Cubic Yard _____ Dollars and _____ Cents	\$ _____	\$ _____
10.	10 Days Dewatering (All Design, Permitting, Equipment, Labor, Maintenance required) Unit Price per Day _____ Dollars and _____ Cents	\$ _____	\$ _____
11.	1 Lump Sum Excavation Support and Protection / Shoring (All Design, Permitting, Equipment, Labor, Maintenance required) Lump Sum Price _____ Dollars and _____ Cents	\$ _____	\$ _____
12.	1 Lump Sum Disconnect 8" PVC Skimmer Drainpipe (Shallow Depth - To allow placement of excavation shoring) Lump Sum Price _____ Dollars and _____ Cents	\$ _____	\$ _____
13.	1 Lump Sum Deep Drain Repair (10" PVC) Lump Sum Price _____ Dollars and _____ Cents	\$ _____	\$ _____

**TOWNSHIP OF WILLINGBORO
COUNTRY CLUB POOL- DEEP DRAINPIPE REPAIR
CONTRACT NO. WTCEX 22031**

<u>ITEM NO.</u>	<u>DESCRIPTION</u>	<u>UNIT PRICE</u>	<u>TOTAL PRICE</u>
14.	1 Lump Sum Reconnect 8" PVC Skimmer Drainpipe Lump Sum Price _____ Dollars and _____ Cents	\$ _____	\$ _____
15.	1,000 Cubic Yards Backfill Excavation: Flowable Fill Unit Price Per Cubic Yard _____ Dollars and _____ Cents	\$ _____	\$ _____
16.	1 Lump Sum New Construction: Diving Board Lump Sum Price _____ Dollars and _____ Cents	\$ _____	\$ _____

TOTAL BASE BID

Contract WTCEX 22031
Items 1-16

_____ Dollars
and _____ Cents \$ _____

All Base Contract items must be bid.

The Owner reserves the right to award the contract to the lowest responsive, responsible bidder based on the Base Bid.

PROPOSAL (Continued)

The undersigned hereby agrees to complete all work within the number of calendar days listed below from the date of notice to begin work, which will be forwarded to the Contractor by the ENGINEER. Contractor further agrees that the OWNER may, without recourse or other legal action, retain from the monies that are or may become due the amount stipulated below for each and every calendar day (Sundays and legal holidays excepted) that the completion of the work may be delayed beyond the time stipulated below. Such amount is hereby mutually agreed, not as a penalty, but as liquidated damages accruing to the OWNER due to such delay for extra costs due to engineering or other expenses. The schedule of completion dates and amount for liquidated damages are as follows:

<u>CONTRACT</u>	<u>CALENDAR DAYS TO COMPLETE</u>	<u>LIQUIDATED DAMAGES</u>
Contract No. WTCEX 22031		Base Bid and/or Alternate(s)
Base Bid	Sixty (60)	\$500.00/Day

There is enclosed herewith the required bid security (Cashier's Check, certified check, or bid bond) to the order of the TOWNSHIP OF WILLINGBORO in the sum of _____ Dollars (\$ _____), and a duly executed consent from an approved surety company, licensed to conduct business in the State of New Jersey, agreeing to furnish the required bond upon the award of contract.

Name and business address of bidder to whom all formal notices are to be sent:

PROPOSAL (Continued)

CONTRACT NO. WTCEX 22031 CONTRACTOR

The undersigned offers the following information relative to the facilities, ability and financial resources available for the fulfillment of the contract if such be awarded to him.

FACILITIES: That he or they own and have available for immediate use on the proposed work the following plant and equipment:

ABILITY: That he or they have performed the following work: (Give location, kind, size or cost and reference to name and address of client or engineer.)

(LIST UNDER "STATEMENT OF QUALIFICATIONS")

FINANCIAL RESOURCES: That information relative to his or their financial resources can and may be obtained from the following: (Give name, business and address.)

PROPOSAL (Continued)

CONTRACT NO. WTCEX 22031 SUBCONTRACTOR

The undersigned offers the following information relative to the facilities, ability and financial resources available for the fulfillment of the contract if such be awarded to him.

FACILITIES: That he or they own and have available for immediate use on the proposed work the following plant and equipment:

ABILITY: That he or they have performed the following work: (Give location, kind, size or cost and reference to name and address of client or engineer.)

(LIST UNDER "STATEMENT OF QUALIFICATIONS")

FINANCIAL RESOURCES: That information relative to his or their financial resources can and may be obtained from the following: (Give name, business and address.)

SUBCONTRACTOR: List Name, Address and Telephone Number:

PROPOSAL (Continued)

CONTRACT NO. WTCEX 22031 INSTALLER QUALIFICATIONS

The projects listed below have been constructed by the bidder or persons to be in responsible charge of this project.

REFERENCES

<u>Date of Completion</u>	<u>Owner & Contact No.</u>	<u>Location</u>	<u>Engineer & Contact No.</u>
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

The bidder attests to the fact that he or the subcontractor has crews trained and expert in the construction of the type specified.

PROPOSAL (Continued)

The undersigned states that the names and addresses of persons interested as principals in this Proposal are as follows:

(Write first name in full):

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

If a partnership or corporation, give the names of all partners, or all officers of the corporation with the addresses of each:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

ADDENDA:

The bidder acknowledges the receipt of Addenda enumerated below which have been issued subsequent to the original advertisement date and agrees that said Addenda shall become a part of this Contract.

ADDENDUM NO.

ISSUING DATE

_____	_____
_____	_____
_____	_____

PROPOSAL (Continued)

Upon request the bidder will be expected to amplify the foregoing statements as necessary to satisfy the OWNER concerning his ability to successfully perform the work in a satisfactory manner.

The undersigned bidder submitting this proposal or bid certifies and affirms that such bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived, or agreed, directly or indirectly, with any bidder or person, to put in a sham bid, or that such other persons shall refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of said bidder or any other bidder or fix any overhead, profit or cost element of said bid price, or that of any other bidder, or to secure any advantage against the OWNER or any person interested in the proposed contract; and further, that such bidder has not, directly or indirectly, submitted this bid, or the contents thereof, or divulged information or data relative thereto any association or to any member or agent thereof; and, that no member of the OWNER's Officials or Employees of said OWNER is interested directly or indirectly in the bid or in any portion of the bid, nor in the Contract or in any part of the Contract which may be awarded the undersigned on the basis of such bid.

Signed this _____ day of _____, 20____.

Bidder

By _____
(Signature of Individual, Partner, or
Officer Signing the Proposal)

(SEAL)

(Seal is required if Bidder
is a corporation)

Title

PROPOSAL (Continued)

DATE: _____, 20____
OWNER: TOWNSHIP OF WILLINGBORO
CONTRACT NO(S): WTCEX 22031
CONTRACT TITLE(S): Country Club Pool- Deep Drainpipe Repair

AFFIRMATIVE ACTION
QUESTIONNAIRE AND INFORMATION FORM
FOR
CONSTRUCTION CONTRACTS

- 1.01 Please complete the following questions. In the event that your firm is awarded the Contract(s), this information will be used to provide your office with the necessary forms and will serve as a check list to insure that all required documentation is submitted.
- 1.02 DO NOT submit any documentation or complete any forms at this time. ONLY answer the questions and sign the certification.

-
1. Does your firm have existing federally approved or sanctioned affirmative action program?
- Yes No
- A. If YES, a photostatic copy of this approval will be required to be submitted to the Public Agency.
2. If your answer to Question No. 1 is NO, you will be required to submit a completed Project Manning Report, Form AA201-A (Building Construction or Form AA201-B (Heavy Construction). You will be required to distribute the copies as designated on the Form (2-Affirmative Action Office, 1-Public Agency, 1-retained by Contractor.
- A. For construction projects with a total construction cost of less than \$50,000, the Project Manning Report will not be required except when requested by the Affirmative Action Office.
3. Subcontractors with four (4) or fewer employees are exempt from the requirements of Questions 1 and 2.

PROPOSAL (Continued)

1.03 Submission Schedule: If, a prior to or at the time the Public Agency submits a contract for signing, a Contractor does not submit evidence of an existing federally approved or sanctioned Affirmative Action Program, then no later than three (3) calendar days after Contractor signs the contract, the Contractor shall submit the required documentation. All documentation required by the Public Agency shall be submitted to the ENGINEER. All documentation required to be submitted to the State Affirmative Action Office shall be submitted directly to them.

1.04 The purpose of this questionnaire and information form is to provide general guidance to the Contractor. All responsibility for complying with the Affirmative Action Regulations (P.L. 1975, c. 127) rests solely with the Contractor.

1.05 I certify that all the above information is correct to the best of my knowledge.

NAME: _____

SIGNATURE: _____

TITLE: _____

DATE: _____

PROPOSAL (Continued)

NON-COLLUSION AFFIDAVIT

STATE OF NEW JERSEY
COUNTY OF _____

I, _____ of the City of _____
in the County of _____ and the State of _____ of
full age, being duly sworn according to law on my oath depose and say that:

I am _____ of the firm of _____

the bidder making the Proposal for the above named project, and that I executed the said Proposal with full authority so to do; that said bidder has not, directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free, competitive bidding in connection with the above named project; and that all statements contained in said Proposal and in this affidavit are true and correct, and made with full knowledge that the OWNER relies upon the truth of the statements contained in said proposal and in the Statements contained in this affidavit in awarding the contract for the said project.

I further warrant that no person or selling agency has been employed or retained 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

_____ (N.J.S.A.52:34-15)
(Name of Contractor)

(Also type or print name of
affiant under signature)

Subscribed and sworn before me this
_____ day of _____, 20_____

Notary Public of

My Commission Expires _____

ACKNOWLEDGEMENT OF RECEIPT OF CHANGES TO BID DOCUMENTS FORM

(Name of Local Contracting Unit)

(Name of Construction/Public Works Project)

(Project or Bid Number)

Pursuant to N.J.S.A. 40A:11-23.1a., the undersigned bidder hereby acknowledges receipt of the following notices, revisions, or addenda to the bid advertisement, specifications or bid documents. By indicating date of receipt, bidder acknowledges the submitted bid takes into account the provisions of the notice, revision or addendum. Note that the local unit's record of notice to bidders shall take precedence and that failure to include provisions of changes in a bid proposal may be subject for rejection of the bid.

Local Unit Reference Number or Title of Addendum/Revision	How Received (mail, fax, pick-up, etc.)	Date Received

Acknowledgment by bidder:

Name of Bidder: _____

By Authorized Representative:

Signature: _____

Printed Name and Title: _____

Date: _____

STANDARD BID DOCUMENT REFERENCE

Name of Form	COMBINED CERTIFICATION: PROHIBITED ACTIVITIES IN RUSSIA AND BELARUS & INVESTMENT ACTIVITIES IN IRAN					
Statutory Reference	P.L. 2022, c. 3 N.J.S.A. 52:32-55 et seq. N.J.S.A. 40A:11-2.1 N.J.S.A. 18A:18A-49.4					
Applicability		Y/N		Mandatory	Optional	N/A
	LPCL	Y	Goods and Services	X		
	PSCL	Y	Construction			X
Instructions Reference						
Description	P.L. 2022, c. 3 prohibits the award, renewal, amendment, or extension of State and local public contracts for goods or services with persons or entities engaging in prohibited activities in Russia or Belarus. P.L. 2012, c.25 prohibits the award or renewal of State and local public contracts for goods and services with persons or entities engaged in certain investment activities in the energy or finance sectors of Iran. Before a goods and services contract can be entered into, vendors and contractors must certify that neither they nor any parent entity, subsidiary, or affiliate is listed on the New Jersey Department of the Treasury’s list of entities determined to be engaged in prohibited activities in Russia or Belarus pursuant to P.L. 2022, c. 3 (" Russia-Belarus list ") or in Iran pursuant to P.L. 2012, c. 25 (" Chapter 25 list ").					

Prohibited Russia-Belarus Activities & Iran Investment Activities

Person or Entity

Part 1: Certification

COMPLETE PART 1 BY CHECKING ONE OF THE THREE BOXES BELOW

Pursuant to law, any person or entity that is a successful bidder or proposer, or otherwise proposes to enter into or renew a contract, for goods or services must complete the certification below prior to contract award to attest, under penalty of perjury, that neither the person or entity, nor any parent entity, subsidiary, or affiliate, is identified on the Department of Treasury's Russia-Belarus list or Chapter 25 list as a person or entity engaging in prohibited activities in Russia, Belarus or Iran. Before a contract for goods or services can be amended or extended, a person or entity must certify that neither the person or entity, nor any parent entity, subsidiary, or affiliate, is identified on the Department of Treasury's Russia-Belarus list. Both lists are found on Treasury's website at the following web addresses:

<https://www.nj.gov/treasury/administration/pdf/RussiaBelarusEntityList.pdf>
www.state.nj.us/treasury/purchase/pdf/Chapter25List.pdf

As applicable to the type of contract, the above-referenced lists must be reviewed prior to completing the below certification.

A person or entity unable to make the certification must provide a detailed, accurate, and precise description of the activities of the person or entity, or of a parent entity, subsidiary, or affiliate, engaging in prohibited activities in Russia or Belarus and/or investment activities in Iran. The person or entity must cease engaging in any prohibited activities and provide an updated certification before the contract can be entered into.

If a vendor or contractor is found to be in violation of law, action may be taken as appropriate and as may be provided by law, rule, or contract, including but not limited to imposing sanctions, seeking compliance, recovering damages, declaring the party in default, and seeking debarment or suspension of the party.

CONTRACT AWARDS AND RENEWALS

I certify, pursuant to law, that neither the person or entity listed above, nor any parent entity, subsidiary, or affiliate appears on the N.J. Department of Treasury's lists of entities engaged in prohibited activities in Russia or Belarus pursuant to P.L. 2022, c. 3 or in investment activities in Iran pursuant to P.L. 2012, c. 25 ("Chapter 25 List"). I further certify that I am the person listed above, or I am an officer or representative of the entity listed above and am authorized to make this certification on its behalf. (Skip Part 2 and sign and complete the Certification below.)

CONTRACT AMENDMENTS AND EXTENSIONS

I certify, pursuant to law, that neither the person or entity listed above, nor any parent entity, subsidiary, or affiliate is listed on the N.J. Department of the Treasury's lists of entities determined to be engaged in prohibited activities in Russia or Belarus pursuant to P.L. 2022, c. 3. I further certify that I am the person listed above, or I am an officer or representative of the entity listed above and am authorized to make this certification on its behalf. (Skip Part 2 and sign and complete the Certification below.)

IF UNABLE TO CERTIFY

I am unable to certify as above because the person or entity and/or a parent entity, subsidiary, or affiliate is listed on the Department's Russia-Belarus list and/or Chapter 25 Iran list. I will provide a detailed, accurate, and precise description of the activities as directed in Part 2 below, and sign and complete the Certification below. Failure to provide such will prevent the award of the contract to the person or entity, and appropriate penalties, fines, and/or sanctions will be assessed as provided by law.

Part 2: Additional Information

PLEASE PROVIDE FURTHER INFORMATION RELATED TO PROHIBITED ACTIVITIES IN RUSSIA OR BELARUS AND/OR INVESTMENT ACTIVITIES IN IRAN.

You must provide a detailed, accurate, and precise description of the activities of the person or entity, or of a parent entity, subsidiary, or affiliate, engaging in prohibited activities in Russia or Belarus and/or investment activities in Iran in the space below and, if needed, on additional sheets provided by you.

Part 3: Certification of True and Complete Information

I, being duly sworn upon my oath, hereby represent and state that the foregoing information and any attachments there, to the best of my knowledge, are true and complete. I attest that I am authorized to execute this certification on behalf of the above-referenced person or entity.

I acknowledge that the Contracting Unit is relying on the information contained herein and hereby acknowledge that I am under a continuing obligation from the date of this certification through the completion of any contracts with the Contracting Unit to notify the Contracting Unit in writing of any changes to the answers of information contained herein.

I acknowledge that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification. If I do so, I recognize that I am subject to criminal prosecution under the law and that it will also constitute a material breach of my agreement(s) with the Contracting Unit and that the Contracting Unit at its option may declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print)		Title	
Signature		Date	

STATEMENT OF OWNERSHIP DISCLOSURE

N.J.S.A. 52:25-24.2 (P.L. 1977, c.33, as amended by P.L. 2016, c.43)

This statement shall be completed, certified to, and included with all bid and proposal submissions. Failure to submit the required information is cause for automatic rejection of the bid or proposal.

Name of Organization: _____

Organization Address: _____

Part I Check the box that represents the type of business organization:

- Sole Proprietorship (skip Parts II and III, execute certification in Part IV)
- Non-Profit Corporation (skip Parts II and III, execute certification in Part IV)
- For-Profit Corporation (any type) Limited Liability Company (LLC)
- Partnership Limited Partnership Limited Liability Partnership (LLP)
- Other (be specific): _____

Part II

- The list below contains the names and addresses of all stockholders in the corporation who own 10 percent or more of its stock, of any class, or of all individual partners in the partnership who own a 10 percent or greater interest therein, or of all members in the limited liability company who own a 10 percent or greater interest therein, as the case may be. **(COMPLETE THE LIST BELOW IN THIS SECTION)**

OR

- No one stockholder in the corporation owns 10 percent or more of its stock, of any class, or no individual partner in the partnership owns a 10 percent or greater interest therein, or no member in the limited liability company owns a 10 percent or greater interest therein, as the case may be. **(SKIP TO PART IV)**

(Please attach additional sheets if more space is needed):

Name of Individual or Business Entity	Home Address (for Individuals) or Business Address

Part III DISCLOSURE OF 10% OR GREATER OWNERSHIP IN THE STOCKHOLDERS, PARTNERS OR LLC MEMBERS LISTED IN PART II

If a bidder has a direct or indirect parent entity which is publicly traded, and any person holds a 10 percent or greater beneficial interest in the publicly traded parent entity as of the last annual federal Security and Exchange Commission (SEC) or foreign equivalent filing, ownership disclosure can be met by providing links to the website(s) containing the last annual filing(s) with the federal Securities and Exchange Commission (or foreign equivalent) that contain the name and address of each person holding a 10% or greater beneficial interest in the publicly traded parent entity, along with the relevant page numbers of the filing(s) that contain the information on each such person. **Attach additional sheets if more space is needed.**

Website (URL) containing the last annual SEC (or foreign equivalent) filing	Page #'s

Please list the names and addresses of each stockholder, partner or member owning a 10 percent or greater interest in any corresponding corporation, partnership and/or limited liability company (LLC) listed in Part II **other than for any publicly traded parent entities referenced above.** The disclosure shall be continued until names and addresses of every noncorporate stockholder, and individual partner, and member exceeding the 10 percent ownership criteria established pursuant to N.J.S.A. 52:25-24.2 has been listed. **Attach additional sheets if more space is needed.**

Stockholder/Partner/Member and Corresponding Entity Listed in Part II	Home Address (for Individuals) or Business Address

Part IV Certification

I, being duly sworn upon my oath, hereby represent that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge: that I am authorized to execute this certification on behalf of the bidder/proposer; that the **Township of Willingboro** is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the completion of any contracts with the **Township** to notify the **Township** in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the, permitting the **Township** to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):		Title:	
Signature:		Date:	

STANDARD BID DOCUMENT REFERENCE	
Name of Form:	FEDERAL NON-DEBARMENT CERTIFICATION
Statutory Reference:	N.J.S.A. 52:32-44.1 (P.L. 2019, c.406)
Description:	Meets statutory criteria for certification of non-debarment by a federal government agency.

Summary of the Certification Requirements under N.J.S.A. 52:32-44.1

Pursuant to state law any natural person, company, firm, association, corporation, or other entity prohibited, or “debarred,” from contracting with the federal government agencies, shall also be prohibited from contracting for public work in the state of New Jersey. This prohibition also extends to any affiliate organization(s) held by or subject to the control of an entity of that prohibited person or entity.

Prior to awarding a contract for public work a local units must obtain written certification from the contracting person or entity through the form below, attesting to their non-debarment from contracting with federal government agencies. Contracting units are reminded that they must fill-in the boilerplate information in the certification sections of Parts II through IV regarding their name and type of contracting unit before using the form.

**CERTIFICATION OF NON-DEBARMENT
FOR FEDERAL GOVERNMENT CONTRACTS**

N.J.S.A. 52:32-44.1 (P.L. 2019, c.406)

This certification shall be completed, certified to, and submitted to the contracting unit prior to contract award, except for emergency contracts where submission is required prior to payment.

PART I: VENDOR INFORMATION	
Individual or Organization Name	
Address of Individual or Organization	
DUNS Code (if applicable)	
CAGE Code (if applicable)	
Check the box that represents the type of business organization:	

- Sole Proprietorship (skip Parts III and IV)
 Non-Profit Corporation (skip Parts III and IV)
 For-Profit Corporation (any type)
 Limited Liability Company (LLC)
 Partnership
 Limited Partnership
 Limited Liability Partnership (LLP)
 Other (be specific): _____

PART II – CERTIFICATION OF NON-DEBARMENT: Individual or Organization			
<p>I hereby certify that the individual or organization listed above in Part I is not debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the Township of Willingboro is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by the Township of Willingboro to notify the Township of Willingboro in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the Township of Willingboro, permitting the Township of Willingboro to declare any contract(s) resulting from this certification void and unenforceable.</p>			
Full Name (Print):		Title:	
Signature:		Date:	

PART III – CERTIFICATION OF NON-DEBARMENT: Individual or Entity Owning Greater than 50 Percent of Organization

Section A (Check the Box that applies)

<input type="checkbox"/>	Below is the name and address of the stockholder in the corporation who owns more than 50 percent of its voting stock, or of the partner in the partnership who owns more than 50 percent interest therein, or of the member of the limited liability company owning more than 50 percent interest therein, as the case may be.
Name of Individual or Organization	
Home Address (for Individual) or Business Address	
OR	
<input type="checkbox"/>	No one stockholder in the corporation owns more than 50 percent of its voting stock, or no partner in the partnership owns more than 50 percent interest therein, or no member in the limited liability company owns more than 50 percent interest therein, as the case may be.

Section B (Skip if no Business entity is listed in Section A above)

<input type="checkbox"/>	Below is the name and address of the stockholder in the corporation who owns more than 50 percent of the voting stock of the organization's parent entity, or of the partner in the partnership who owns more than 50 percent interest in the organization's parent entity, or of the member of the limited liability company owning more than 50 percent interest in organization's parent entity, as the case may be.
Stockholder/Partner/Member Owning Greater Than 50 Percent of Parent Entity	
Home Address (for Individual) or Business Address	
OR	
<input type="checkbox"/>	No one stockholder in the parent entity corporation owns more than 50 percent of its voting stock, no partner in the parent entity partnership owns more than 50 percent interest therein, or no member in the parent entity limited liability company owns more than 50 percent interest therein, as the case may be.

Section C – Part III Certification

I hereby certify that no individual or organization that is debarred by the federal government from contracting with a federal agency owns greater than 50 percent of the **Organization listed above in Part I** or, if applicable, owns greater than 50 percent of a parent entity of the **Organization listed above in Part I**. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the **Township of Willingboro** is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award with the **Township of Willingboro** to notify the **Township of Willingboro** in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the **Township of Willingboro** permitting the **Township of Willingboro** to declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print):		Title:	
Signature:		Date:	

Part IV – CERTIFICATION OF NON-DEBARMENT: Contractor – Controlled Entities

Section A



Below is the name and address of the corporation(s) in which the **Organization listed in Part I** owns more than 50 percent of voting stock, or of the partnership(s) in which the **Organization listed in Part I** owns more than 50 percent interest therein, or of the limited liability company or companies in which the **Organization listed above in Part I** owns more than 50 percent interest therein, as the case may be.

Name of Business Entity	Business Address

Add additional sheets if necessary

OR



The **Organization listed above in Part I** does not own greater than 50 percent of the voting stock in any corporation and does not own greater than 50 percent interest in any partnership or any limited liability company.

Section B (skip if no business entities are listed in Section A of Part IV)			
<input type="checkbox"/>	Below are the names and addresses of any entities in which an entity listed in Part III A owns greater than 50 percent of the voting stock (corporation) or owns greater than 50 percent interest (partnership or limited liability company).		
Name of Business Entity Controlled by Entity Listed in Section A of Part IV		Business Address	
Add additional Sheets if necessary			
OR			
<input type="checkbox"/>	No entity listed in Part III A owns greater than 50 percent of the voting stock in any corporation or owns greater than 50 percent interest in any partnership or limited liability company.		
Section C – Part IV Certification			
<p>I hereby certify that the Organization listed above in Part I does not own greater than 50 percent of any entity that that is debarred by the federal government from contracting with a federal agency and, if applicable, does not own greater than 50 percent of any entity that in turns owns greater than 50 percent of any entity debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the Township of Willingboro is relying on the information contained herein and that I am under a continuing obligation from the date of this certification through the date of contract award by the Township of Willingboro to notify the Township of Willingboro in writing of any changes to the information contained herein; that I am aware that it is a criminal offense to make a false statement or misrepresentation in this certification, and if I do so, I am subject to criminal prosecution under the law and that it will constitute a material breach of my agreement(s) with the Township of Willingboro, permitting the Township of Willingboro to declare any contract(s) resulting from this certification void and unenforceable.</p>			
Full Name (Print):		Title:	
Signature:		Date:	

SECTION J

CONTRACT DOCUMENTS

* * *

PERFORMANCE, PAYMENT, AND TWO-YEAR MAINTENANCE BOND

CONTRACT

THIS AGREEMENT, made and executed at the Township of Willingboro,
Burlington County, New Jersey, this _____ day of _____, 20____
by and between the Township of Willingboro, hereinafter called the OWNER and

hereinafter called the "Contractor."

WITNESSETH: That the said Contractor has agreed and by these presents does agree with the OWNER for the prices stipulated in and proposal herein contained or hereunto annexed and under the penalty expressed in bonds bearing even date with these presents, and herein contained or hereunto annexed, to furnish at his own cost and expense all the necessary materials, labor, superintendence, tools and appliances and shall execute, construct and finish and test in expeditious and workmanlike manner, the

Township of Willingboro

Contract No. WTCEX 22031

and appurtenances commencing the work within ten (10) days from the date of notice from the office of the ENGINEER to commence work and executing the same within the time and in the manner specified and in conformity with the requirements set forth in the specifications herein contained or hereunto attached and in accordance with the contract drawings of said work on file in the office of the OWNER and all to the acceptance of the said OWNER.

CONTRACT (Continued)

The Contractor shall proceed with the said work in a prompt and diligent manner and shall do the several parts thereof at such times in such order as the ENGINEER may direct. Further, he shall complete the whole of said work through final restoration in accordance with the specifications and contract drawings to the satisfaction of the OWNER, and within the calendar days specified within the Proposal section from the date of notice to begin work, and in default of completion within the time as fixed, the Contractor shall pay the OWNER an amount equal to Five Hundred Dollars (\$500.00) for each and every day (Sundays and legal holidays excepted) the completion of the work may be delayed beyond the date fixed, in the manner and as stipulated. Contract period, as stated, acknowledges delay time for delivery of equipment and extension of Contract period will be allowed as appropriate.

The OWNER shall not be liable to the Contractor for any neglect, default, delay or interference of or by any other contractor, nor shall any such neglect, default, delay or interference of any other contractor, or alteration which may be required in said work, release the Contractor from the obligation to finish the said work within the time aforesaid or from the damages to be paid in default thereof.

Name and address of each person or company interested in the Contract:

It is hereby mutually agreed that the OWNER is to pay and the Contractor is to receive the prices stipulated in the Proposal herein contained or hereto annexed, as full compensation for furnishing all materials and labor in building, constructing and testing, and in all respects completing the herein specified and for fully complying with the terms and conditions of this Contract.

CONTRACT (Continued)

The status of the Contractor in the work to be performed by him under the Contract is that of an independent contractor. As such, the work, in every respect, from the execution of the Contract and during progress of the work thereunder, and until final acceptance, shall be under the charge and in care of the Contractor and at his risk. He shall properly safeguard against any or all injury to the public, the public and private property, materials and things, and, as such, the Contractor alone shall be responsible for any and all damage, loss or injury to persons or property that may arise, or be incurred in, or during the conduct or progress of said work without regard to whether the Contractor, his subcontractors, agents or employees, have been negligent. The Contractor shall keep the OWNER and ENGINEER free and discharged of any and all responsibility and liability therefor of any sort or kind whatsoever. The Contractor shall assume all responsibility for risks and casualties of every description and for any or all damage, loss or injury to persons or property arising out of the nature of the work from the action of the elements, or from any unforeseen or unusual difficulty or circumstance. The Contractor shall assume and be liable for all blame and loss of whatsoever nature by reason of neglect or violation of any State, County or local laws, statutes, ordinances or any and all rules and regulations promulgated thereunder. The Contractor shall indemnify and save harmless the OWNER and ENGINEER and all of the respective officers, agents and employees from all liability or suits or actions at law or in equity of any kind whatsoever arising from the failure of the Contractor to comply with the terms and conditions of the Contract, the plans and specifications or State statutes or local ordinances or any rules and regulations promulgated, in accordance with the provisions of such statutes or ordinances by the State of New Jersey or any municipality thereof or by any department or agency of any or all thereof, and the Contractor shall, if required by the OWNER or ENGINEER, produce evidence of settlement of any such action before final payment under the Contract shall be made by the OWNER.

The Contractor shall, unless otherwise specified, maintain and pay for such insurance, issued in the name of the OWNER as will protect the OWNER from contingent liability under this Contract and the OWNER's right to enforce against the Contractor any provision of this article shall be contingent upon the full compliance by the OWNER with the terms of such insurance policy or policies, a copy of which shall be deposited with the OWNER.

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE (N.J.S.A. 10:53-1 et seq., N.J.A.C. 17:27)

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 or sex. Except with respect to affectional or sexual orientation, the contractor will take affirmative action to ensure that such applicants are recruited and employed, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation 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. The

contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation or sex.

The contractor or subcontractor, where applicable, will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer advising the labor union or workers' representative of the contractor's commitments under this act and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

The contractor or subcontractor where applicable, agrees to comply with any regulations promulgated by the Treasurer pursuant to **N.J.S.A. 10:5-31 et seq.**, as amended and supplemented from time to time and the Americans with Disabilities Act.

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the applicable employment goal prescribed by **N.J.A.C. 17:27-7.3**; provided, however, that the Division may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, A, B and C, as long as the Division is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Division, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the applicable employment goal established in accordance with **N.J.A.C. 17:27-7.3**.

The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

(A) If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to **N.J.S.A. 10:5-31 et. seq.**, as supplemented and amended from time to time and the Americans with Disabilities Act. If the contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the contractor or subcontractor agrees to attempt to hire or schedule minority and women workers directly, consistent with the applicable employment goal. 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 the applicable employment goal, the contractor or subcontractor agrees to be prepared to hire or schedule minority and women workers directly,

consistent with the applicable employment goal, by complying with the hiring or scheduling procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines or is so notified by the Division that the union is not referring minority and women workers consistent with the applicable employment goal.

(B) If the hiring or scheduling of a workforce consistent with the employment goal has not or cannot be achieved 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 consistent with the applicable county employment goals:

(1) To notify the public agency compliance officer, the Division, and minority and women referral organizations listed by the Division pursuant to N.J.A.C. 17:27-5.3, of its workforce needs, and request referral of minority and women workers;

(2) To notify any minority and women workers who have been listed with it as awaiting available vacancies;

(3) Prior to commencement of work, to request that the local construction trade union refer minority and women workers to fill job openings, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade;

(4) To leave standing requests for additional referral to minority and women workers with the local construction trade union, provided the contractor or subcontractor has a referral agreement or arrangement with a union for the construction trade, the State Training and Employment Service and other approved referral sources in the area until such time as the workforce is consistent with the employment goal;

(5) If it is necessary to lay off some of the workers in a given trade on the construction site, to assure, consistent with the applicable State and Federal statutes and court decisions, that sufficient minority and women employees remain on the site consistent with the employment goal; and to employ any minority and women workers so laid off by the contractor on any other construction site on which its workforce composition is not consistent with an employment goal established pursuant to rules implementing **N.J.S.A. 10:5-31 et. seq.**;

(6) To adhere to the following procedure when minority and women workers apply or are referred to the contractor or subcontractor:

(i) If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in order to perform the work of the construction trade, the contractor or subcontractor shall determine the qualifications of such individuals and if the contractor's or subcontractor's workforce in each construction trade is not consistent with the applicable employment goal; it shall hire or schedule those individuals who satisfy appropriate qualification standards. However,

a contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Division. If necessary, the contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below.

(ii) If the contractor's or subcontractor's workforce is consistent with the applicable employment goal, the name of any interested women or minority individual shall be maintained on a waiting list for the first consideration, in the event the contractor's or subcontractor's workforce is no longer consistent with the applicable employment goal.

(iii) If, for any reason, said contractor or subcontractor determines that a minority individual or a woman is not qualified or if the individual qualifies as an advanced trainee or apprentice, the contractor or subcontractor shall inform the individual in writing of the reasons for the determination, maintain a copy of the determination in its files, and send a copy to the public agency compliance officer and to the Division.

(7) To keep a complete and accurate record of all requests made for the referral of workers in any trade covered by the contract, on forms made available by the Division and submitted promptly to the Division upon request.

(C) The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement , exceeds the ratio established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that, in implementing the procedures of (B) above it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Division an initial project workforce report (Form AA 201) provided to the public agency by the Division for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7.3

The contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of this contract to the Division and to the public agency compliance officer.

The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the-job programs for outreach and training of minorities and women.

(D). The contractor and its subcontractors shall furnish such reports or other documents to the Division of Contract Compliance & EEO as may be requested by the Division from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Contract Compliance & EEO for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code at N.J.A.C. 17:27.**

CONTRACT (Continued)

PERFORMANCE, PAYMENT, AND TWO-YEAR MAINTENANCE BOND

CONTRACT NO. WTCEX 22031

BOND NO.

Know all men by these presents, that we, the undersigned _____, as principal and _____, as sureties, are hereby held and firmly bound unto the Township of Willingboro in the penal sum of _____ dollars, for the payment of which well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors and assigns.

Signed this _____ day of _____, 20__

The condition of the above obligation is such that whereas, the above named principal did on the day of _____, 20__, enter into a contract with the Township of Willingboro, which said contract is made a part of this the bond the same as though set forth herein;

Now, if the said _____ shall well and faithfully do and perform the things agreed to be done and performed according to the terms of said contract, and shall pay all lawful claims of subcontractors, materialmen, laborers, persons, firms or corporations for labor performed or materials, provisions, provender or other supplies or teams, fuels, oils, implements or machinery furnished, used or consumed in the carrying forward, performing or completing of said contract, we agreeing and assenting that this undertaking shall be for the benefit of any subcontractor, materialman, laborer, person, firm or corporation having a just claim, as well as for the obligee herein; and shall continue said obligation for two years from the date of completion and acceptance of the work to be performed under the said contract to guarantee against defects in the work which, in the judgement of the obligee or its successors or assigns having jurisdiction in the premises, are caused by defective or inferior materials and/or workmanship, then this obligation shall be void; otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

The said surety hereby stipulates and agrees that no modifications, omissions or additions in or to the terms of the said contract or in or to the plans or specifications therefor shall in anywise affect the obligation of said surety on its bond.

CONTRACT (Continued)

The Principal and the Surety agree that in case of default in and/or any action arising out of this Bond, the Obligee or any person, association, partnership and/or corporation who shall be entitled to institute and maintain an action upon this Bond, as above provided, may use, for the purpose of the establishment of the claim, a copy of this Bond, duly certified by the Obligee to be true and correct; and the Principal and the Surety agree that any action instituted upon any part of this Bond shall not be a bar to any subsequent action upon the same part or any other part of this Bond.

Each reference in this Bond to the Obligee shall also include the officers, employees and representatives of said Obligee.

It is the intention of the parties hereto to be legally bound by this instrument.

IN WITNESS THEREOF THE said Principal and Surety have duly executed this Bond in triplicate under seal and day and year first above written.

SIGNED, SEALED AND DATED THIS _____ day of _____, 20_.

Principal

Attest: _____

By _____ (L.S.)

Title of Officer

Secretary

(SEAL)

Surety

Address

Attest: _____

By _____ (L.S.)

Title of Officer

(SEAL)

APPENDIX WAGE RATES



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

PREVAILING WAGE RATE DETERMINATION

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

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

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

Prevailing Wage Rate

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

W = Wage Rate per Hour **B** = Fringe Benefit Rate per Hour* **T** = Total Rate per Hour

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

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

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

Apprentice Rate Schedule

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

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

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

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

Comments/Notes

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

Public Works Contractor Registration

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

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

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

Snow Plowing

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

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Air Conditioning & Refrigeration - Service and Repair

PREVAILING WAGE RATE

	03/01/23
Journeyman (Mechanic)	W44.23 B28.63 T72.86

Craft: Air Conditioning & Refrigeration - Service and Repair

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
As Shown	1st Year	2nd Year	3rd Year	4th Year	5th Year	Wage = %	of Jnymn	Wage		
Wage and Bene	40%	50%	60%	70%	80%	Bene = %	of Jnymn	Bene		

Ratio of Apprentices to Journeymen - 1:4

Craft: Air Conditioning & Refrigeration - Service and Repair

COMMENTS/NOTES

THESE RATES MAY BE USED FOR THE FOLLOWING:

- Service/Repair/Maintenance Work to EXISTING facilities.
- Replacement or Installation of air conditioning and refrigeration equipment when the combined tonnage does not exceed 15 tons for refrigeration, or 25 tons for air conditioning.
- Replacement or Installation of "packaged" or "unitary" rooftop-type units when the combined tonnage of the units does not exceed 75 tons.

NOTE: These rates may NOT be used for any work in new construction (including work on new additions).

The regular workday shall consist of 8 hours, starting between 6:00 AM and 10:00 AM, Monday through Friday.

SHIFT DIFFERENTIALS:

- The second and third shifts shall be paid an additional 15% of the hourly rate.
- All shifts must run for a minimum of 5 consecutive days.

OVERTIME:

Hours worked in excess of 8 per day or before or after the regular workday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the hourly rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the hourly rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Boilermaker PREVAILING WAGE RATE

	01/12/24
Foreman	W54.11 B47.08 T101.19
General Foreman	W56.11 B48.14 T104.25
Journeyman	W49.11 B45.31 T94.42

Craft: Boilermaker APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
1000 Hours	65%	70%	75%	80%	85%	90%	95%			
Benefit =	38.33	39.30	40.32	41.31	42.32	43.32	44.30			

Ratio of Apprentices to Journeymen - *

* 1 apprentice will be allowed for the first 5 journeymen, 1 apprentice for the next 10 journeymen and 1 apprentice for each succeeding 20 journeymen up to a maximum of 5 apprentices per contractor on any one job.

Craft: Boilermaker COMMENTS/NOTES

HIGH WORK: All apprentices working on the erection, repair, or dismantling of smoke stacks, standpipes, or water towers shall be paid the Journeyman rate.

The regular workday shall consist of 8 hours, between 8:00 AM and 4:30 PM.

SHIFT DIFFERENTIALS:

- The second shift shall work 7½ hours and receive 8 hours pay, at a rate equal to the regular hourly rate plus 10%.
- The third shift shall work 7 hours and receive 8 hours pay, at a rate equal to the regular hourly rate plus 20%.
- For "Municipal Water Works" projects only, the following shall apply: Two, four day, 10 hour shifts may be worked at straight time Monday through Thursday. The day shift shall work four days, at 10 hours, for 10 hours pay. The second shift shall work four days, at nine and a half hours, for 10 hours pay, plus 10% the hourly rate for new work and .25 cents on repair work. Friday may be used as a make-up day at straight time, due to weather conditions, holiday or any other circumstances beyond the employer's control.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays (except Labor Day) shall be paid at double the hourly rate. All hours on Labor Day shall be paid at four times the hourly rate.
- If any other craft employed by the same contractor, or a subcontractor thereof, receives double time in lieu of time and one-half, then the Boilermaker shall receive double time in lieu of time and one-half.
- For "Municipal Water Works" projects only, the following shall apply: Four 10 hour days may be worked Monday through Thursday at straight time. Friday may be used as a make-up day for a day lost to inclement weather, holiday or other conditions beyond the control of the employer. Overtime shall be paid for any hours that exceed 10 hours per day or 40 hours per week.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

RECOGNIZED HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Boilermaker - Minor Repairs

PREVAILING WAGE RATE

	01/12/24
Foreman	W35.88 B17.89 T53.77
General Foreman	W36.38 B17.89 T54.27
Mechanic	W34.38 B17.89 T52.27

Craft: Boilermaker - Minor Repairs

COMMENTS/NOTES

NOTE: These rates apply to MINOR REPAIR WORK ONLY (repair work in the field for which the contract amount does not exceed \$125,000.00), for boilers that do not produce electric or are not used in the heating of petroleum products.

OVERTIME:

Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays (except Labor Day) shall be paid at double the hourly rate. All hours on Labor Day shall be paid at four times the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Washington's Birthday, Good Friday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Thanksgiving Day, day after Thanksgiving, Christmas Day. Saturday holidays observed the preceding Friday, Sunday holidays observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Bricklayer, Stone Mason

PREVAILING WAGE RATE

	06/01/23
Deputy Foreman	W51.00 B36.28 T87.28
Foreman	W55.75 B36.28 T92.03
Journeyman	W48.00 B36.28 T84.28

Craft: Bricklayer, Stone Mason

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	40%	50%	55%	60%	65%	70%	75%	80%		
6 Months										
Benefits	4.00	5.00	5.50	6.00	24.29	26.00	27.73	29.43		

Ratio of Apprentices to Journeymen - 1:5

Craft: Bricklayer, Stone Mason

COMMENTS/NOTES

The regular workday shall consist of 8 hours, between 6:00 AM and 4:30 PM.

SHIFT DIFFERENTIALS:

- When a 2 shift schedule (including a day shift) is established, the first, or day shift, shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular rate plus 10%, inclusive of benefits.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular hourly rate, the second shift shall receive the regular rate plus 10%, inclusive of benefits, and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis. The second shift shall receive the regular rate plus 10%, inclusive of benefits, and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When an irregular shift must be established, this shift shall receive the regular rate plus 10%, inclusive of benefits.

OVERTIME:

- The first 2 hours in excess of 8 per day, or before or after the regular workday that are not shift work, Monday through Friday, shall be paid at time and one-half the regular rate, inclusive of benefits. Any additional overtime shall be paid at double the regular rate, inclusive of benefits. The first 10 hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. Any additional overtime shall be paid at double the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.
- Saturday may be used as a make-up day for hours lost to inclement weather.
- When Bricklayers/Stone Masons work on Saturday with Laborers, and no other crafts are working on the project for the day, benefits may be paid at straight time. If other crafts are present, the applicable overtime rate for benefits shall be paid.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Carpenter PREVAILING WAGE RATE

	05/04/23
Foreman	W62.72 B37.56 T100.28
Journeyman	W54.54 B32.73 T87.27

Craft: Carpenter APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	40%	55%	65%	80%	90%					
Benefit	59% of	Appren	tice	Wage	for all	intervals	+ \$0.56			

Ratio of Apprentices to Journeymen - 1:3

For Solar installation- all work on solar projects that fall under the jurisdiction of the carpenters, and does not require an electrician, the ratio of Apprentices to Journeymen shall be 1:1.

Craft: Carpenter COMMENTS/NOTES

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES REGISTERED AS OF 5-1-19:

INTERVAL PERIOD AND RATES
 Yearly 40% 55% 65% 80%
 Benefits 59% of apprentice wage rate for all intervals + \$0.56

FOREMAN REQUIREMENTS:

- When there are 2 or more Carpenters on a job, 1 shall be designated as a Foreman.
- When there are 21 or more Carpenters on a job, 2 shall be designated as Foremen.

The regular workday shall consist of 8 hours, starting between 6:00 AM and 9:00 AM.

SHIFT DIFFERENTIALS:

- When a 2 shift schedule (including a day shift) is established, the day shift shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular rate plus 10%, inclusive of benefits.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular hourly rate, the second shift shall receive the regular rate plus 10% and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis. The second shift shall receive the regular rate plus 10% and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When an irregular shift must be established, this shift shall receive the regular rate plus 15%, inclusive of benefits.

OVERTIME:

- All hours in excess of 8 per day, or before or after an established shift that are not shift work, and all hours on Saturdays shall be paid at time and one-half the hourly rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the hourly rate, inclusive of benefits.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for a day lost due to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans' Day may be substituted for the day after Thanksgiving.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Carpenter - Resilient Flooring

PREVAILING WAGE RATE

	05/04/23
Foreman	W62.72 B37.47 T100.19
Journeyman	W54.54 B32.64 T87.18

Craft: Carpenter - Resilient Flooring

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	40%	55%	65%	80%	90%					
Benefit	59% of	Appren	tice	Wage	for all	intervals	+ \$0.47			

Ratio of Apprentices to Journeymen - *

* Ratio is 1 apprentice to 2 journeymen. No more than 3 apprentices may be on any 1 project.

Craft: Carpenter - Resilient Flooring

COMMENTS/NOTES

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES REGISTERED AS OF 5-1-19:

INTERVAL PERIOD AND RATES
 Yearly 40% 55% 65% 80%
 Benefits 59% of apprentice wage rate for all intervals + \$0.47

FOREMAN REQUIREMENTS:

- On any job where there are 4 or more Carpenters of Resilient Flooring, 1 must be designated a Foreman.

FOR SYNTHETIC TURF INSTALLATION ONLY:

- The rate shall be 90% of the wage and benefit rate.

The regular workday consists of 8 hours, starting between 6:00 AM and 9:00 AM.

SHIFT DIFFERENTIALS:

- When a 2 shift schedule (including a day shift) is established, the day shift, shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular wage rate plus 10%.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular wage rate, the second shift shall receive the regular wage rate plus 10% and the third shift shall receive the regular wage rate plus 15%.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis. The second shift shall receive the regular wage rate plus 10% and the third shift shall receive the regular wage rate plus 15%.
- When an irregular shift must be established, this shift shall receive the regular rate plus 15%, inclusive of benefits.

OVERTIME:

- Hours in excess of 8 per day or 40 per week, or before or after the regular workday, Monday through Friday, shall be paid at time and one-half the wage rate. Saturday may be used as a make-up day, at straight time, up to 8 hours, for hours lost to reasons beyond the control of the employer, up to a total of 40 hours per week; hours in excess of 8 on Saturday shall then be paid at time and one-half the wage rate. If Saturday is not a make-up day, all hours on Saturday shall be paid at

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

time and one-half the wage rate. All hours on Sundays and holidays shall be paid at double the wage rate.

- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for hours lost to reasons beyond the control of the employer. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the wage rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday. Veterans' Day may be substituted for the day after Thanksgiving.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Carpenter-Residential Construction

PREVAILING WAGE RATE

	07/19/23
Foreman	W52.62 B11.78 T64.40
Journeyman	W45.76 B10.97 T56.73

Craft: Carpenter-Residential Construction

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	40%	55%	65%	80%						
Benefit	12% of	Appren	tice	wage rate	for all	intervals	+ \$5.47			

Ratio of Apprentices to Journeymen - 1:3

Craft: Carpenter-Residential Construction

COMMENTS/NOTES

FOREMAN REQUIREMENTS:

- When there are 2 or more Carpenters on a job, 1 shall be designated as a Foreman.
- When there are 21 or more Carpenters on a job, 2 shall be designated as Foremen.

The regular workday shall consist of 8 hours, starting between 6:00 AM and 9:00 AM.

RESIDENTIAL CONSTRUCTION:

All residential construction (excluding commercial buildings and institutional housing), no more than four (4) floors in height above grade consisting of those projects involving the construction, alteration, or repair of town houses or row houses, single family homes, mobile homes, multi-family homes, mixed-use buildings that include commercial space on the first floor or below grade, and apartment buildings.

SHIFT DIFFERENTIALS:

- When a 2 shift schedule (including a day shift) is established, the day shift shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular rate plus 10%, inclusive of benefits.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular hourly rate, the second shift shall receive the regular rate plus 10% and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis. The second shift shall receive the regular rate plus 10% and the third shift shall receive the regular rate plus 15%, inclusive of benefits.
- When an irregular shift must be established, this shift shall receive the regular rate plus 15%, inclusive of benefits.

OVERTIME:

- All hours in excess of 8 per day, or before or after an established shift that are not shift work, and all hours on Saturdays shall be paid at time and one-half the hourly rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the hourly rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for a

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

day lost due to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans' Day may be substituted for the day after Thanksgiving.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Cement Mason

PREVAILING WAGE RATE

See " Bricklayer, Stone Mason" Rates

Craft: Cement Mason

COMMENTS/NOTES

***See " Bricklayer, Stone Mason" Rates

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Commercial Painter

PREVAILING WAGE RATE

	05/02/23
Foreman	W48.02 B29.51 T77.53
General Foreman	W52.38 B29.51 T81.89
Journeyman	W43.65 B29.51 T73.16

Craft: Commercial Painter

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	40%	45%	55%	65%	70%	75%	80%	80%		
6 Months										
Benefits	8.85	8.85	11.25	11.25	12.30	12.30	15.10	15.10		

Ratio of Apprentices to Journeymen - 1:4

Craft: Commercial Painter

COMMENTS/NOTES

* Commercial Painters perform work on all commercial structures such as offices, schools, hotels, shopping malls, restaurants, condominiums, etc.

Spraying, sandblasting, lead abatement work on commercial buildings, work performed above 3 stories or 30 feet in height, or using swing scaffolds requires an additional 10% of the wage rate.

FOREMEN REQUIREMENTS:

- When there are 4 or more Painters on a job, 1 shall be designated a Foreman.
- When there are 15 or more Painters on a job, 1 shall be designated a General Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:

- Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular rate.
- Saturday or Sunday may be used to make up a day lost to inclement weather, at straight time.
- Four 10-hour days may be worked, at straight time, Monday through Friday.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, General Election Day,

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Veterans' Day, Thanksgiving Day, Christmas Day.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - **BURLINGTON**

Craft: Diver **PREVAILING WAGE RATE**

	05/02/23
Diver	W58.41 B41.89 T100.30
Tender	W46.73 B41.89 T88.62

Craft: Diver **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
1500 hours	70%	75%	80%	85%						
Benefit	30.24	31.25	32.23	33.25						

Ratio of Apprentices to Journeymen - 1:4

Craft: Diver **COMMENTS/NOTES**

NOTE: All dive crews must consist of a Tender, a Diver, and a Standby Diver (Standby Diver is the same rate as a Diver).

- Diver- will perform all Dive related tasks at hand.
- Tender- will provide Tending support to the in water Diver and who may also be designated as a Standby Diver .

Diving in Contaminated Water (including, but not limited to, radioactively contaminated water, sewer effluent combined sanitary and storm sewers, or any environment known to be harmful to those with skin contact): Shall receive an additional 20% of the hourly rate.

OVERTIME:

- The first 2 hours in excess of 8 per day (9th and 10th hours), Monday through Friday, and the first 8 hours on Saturdays shall be paid at time and one-half the hourly rate. Hours in excess of 10 per day, Monday through Friday, hours in excess of 8 per day on Saturdays, and all hours on Sundays and holidays shall be paid at double the hourly rate.
- Employees may work four 10-hour days, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, the first 10 hours on Friday shall be paid at time and one-half the hourly rate. Hours in excess of 10 per day shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day. Saturday holidays will be observed the preceeding Friday and Sunday holidays will be observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Dockbuilder/Pile Driver

PREVAILING WAGE RATE

	05/02/23
Foreman	W56.08 B41.89 T97.97
Journeyman	W46.73 B41.89 T88.62

Craft: Dockbuilder/Pile Driver

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
1500 hours	40%	50%	65%	80%						
Benefits	24.51	26.53	29.34	32.29						

Ratio of Apprentices to Journeymen - 1:3

Craft: Dockbuilder/Pile Driver

COMMENTS/NOTES

NOTE: The following shall be required for type of work indicated-

- There shall be one foreman and four journeymen on all land pile driving rigs. As part of the crew, one may be an apprentice.
- There shall be one foreman and two journeymen on self-contained hydraulic driving rigs. As part of the crew, one may be an apprentice.
- There shall be one foreman and two journeymen when driving sheeting with an excavator. As part of the crew, one may be an apprentice.
- When utilizing a drill rig to install Auger cast piles there shall be one foreman and two journeymen. As part of the crew, one may be an apprentice.
- There shall be one journeyman on drilled or bored soldier piles.
- There shall be not less than one journeyman per rig on all drilled shaft and caissons.
- There shall be not less than one journeyman per rig on all earth retention tie-back and anchors.

Creosote Handling:

- May 1st to Sept. 30th: + \$0.50 above hourly rate
- Oct. 1st to April 30th: + \$0.25 above hourly rate

Hazardous Material Work:

- On hazardous material work on a state or federally designated hazardous work site where the worker is required to wear Level A, B or C personal protection, the worker shall receive an additional 20% of the hourly rate, per hour.
- A Dockbuilder/Pile Driver working on a hazardous waste removal project, or site requiring hazardous waste related certification, but who is not working in a zone requiring level A, B or C personal protection, shall receive the hourly rate plus an additional \$1.00 per hour. This type of work does not include the handling of creosote or CCA materials; coated materials such as bitumastic, or galvanized; painted materials or any products designed to be used in the industry.

FOREMAN REQUIREMENTS:

- When there are 3 or more Dockbuilders/Pile Drivers on a job, 1 shall be designated as a Foreman.

SHIFT WORK:

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

- Shift work pertains to both land and water work.
- When a 2 shift schedule (including a day shift) is established, the first shift shall start between 5:00 am and 8:00 am and work for 7 and one-half hours and receive 8 hours pay. The second shift shall start when the first shift ends and shall work for 7 and one-half hours and receive 8 hours pay.
- When a three shift schedule is established, all shifts shall work 7 and one-half hours and receive 8 hours pay.
- When there is no day shift, and a second or third shift is established, a worker shall be paid at time and one-half of the hourly rate.

OVERTIME:

- The first 2 hours in excess of 8 per day (9th and 10th hours), Monday through Friday, and the first 8 hours on Saturdays shall be paid at time and one-half the hourly rate. Hours in excess of 10 per day, Monday through Friday, hours in excess of 8 per day on Saturdays, and all hours on Sundays and holidays shall be paid at double the hourly rate.
- Employees may work four 10-hour days, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, the first 10 hours on Friday shall be paid at time and one-half the hourly rate. Hours in excess of 10 per day shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day. Saturday holidays will be observed the preceeding Friday and Sunday holidays will be observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Drywall Finisher

PREVAILING WAGE RATE

	05/02/23
Foreman	W47.17 B29.54 T76.71
General Foreman	W49.31 B29.54 T78.85
Journeyman	W42.88 B29.54 T72.42

Craft: Drywall Finisher

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	40%	50%		60%	70%		80%	90%		
6 Months										
Benefits	Intervals	1 to 2 =	11.45	Intervals	3 to 4 =	14.33	Intervals	5 to 6 =	18.04	

Ratio of Apprentices to Journeymen - 1:4

Craft: Drywall Finisher

COMMENTS/NOTES

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, and the third shift shall receive 8 hours pay for 7 hours of work.
- Shift work must run for a minimum of 5 consecutive workdays.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.
- Saturday or Sunday may be used to make up a day lost to inclement weather, at straight time.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Saturday holiday observed the preceding Friday. Sunday holiday observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Electrician - North

PREVAILING WAGE RATE

	01/01/24	07/01/24
Asst. General Foreman	W68.30 B45.49 T113.79	W70.45 B46.93 T117.38
Crane Operator, High Voltage Splicer, Welder	W62.58 B41.74 T104.32	W64.58 B43.05 T107.63
Foreman	W65.45 B43.62 T109.07	W67.55 B45.00 T112.55
General Foreman	W74.00 B49.23 T123.23	W76.35 B50.76 T127.11
Journeyman	W56.89 B38.02 T94.91	W58.71 B39.21 T97.92

Craft: Electrician - North

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	16.28	21.71	27.14	32.56	40.70					
Benefits	65.2% of	Apprentic	Wage	Rate	+ \$0.76					

Ratio of Apprentices to Journeymen - 1:4

Craft: Electrician - North

COMMENTS/NOTES

APPRENTICE RATE SCHEDULE AS OF 1-1-24:
 INTERVAL PERIOD AND RATES
 Yearly 17.07 22.76 28.45 34.13 42.67
 Benefits 65.5% of Apprentice Wage Rate + \$0.76

APPRENTICE RATE SCHEDULE AS OF 7-1-24:
 INTERVAL PERIOD AND RATES
 Yearly 17.61 23.48 29.36 35.23 44.03
 Benefits 65.5% of Apprentice Wage Rate + \$0.76

FOREMAN REQUIREMENTS:

- When there are 2 or more electricians on the job, 1 shall be designated a Foreman.
- 1 additional Foreman shall be designated for every 10 additional electricians.
- When there are 2 or more Foremen on the job, 1 shall be designated a General Foreman.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

The regular workday is 8 hours between 7:00 AM and 4:30 PM.

SHIFT DIFFERENTIAL:

- Shift work must run for a minimum of 5 workdays.
- 2nd Shift (4:30 PM-12:30 AM) shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the hourly rate, per hour, inclusive of benefits.
- 3rd Shift: (12:30 AM-8:00 AM) shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the hourly rate, per hour, inclusive of benefits.

OVERTIME:

- The first 4 hours in excess of 8 per day, and hours before or after the regular workday that are not shift work, Monday through Friday, and the first 8 hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. Hours in excess of 12 per day, Monday through Friday, in excess of 8 on Saturdays, and all hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked at straight time, Monday through Thursday or Tuesday through Friday.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

**** MUNICIPALITIES COVERED:**

Bordentown City & Twp., Burlington City & Twp., Eastampton, Chesterfield, Fieldsboro, Florence, Mansfield, Mount Holly, New Hanover, North Hanover, Pemberton Boro. & Twp., Springfield, Tabernacle, Wrightstown.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Electrician - South

PREVAILING WAGE RATE

	10/02/23
Asst. General Foreman	W64.43 B55.99 T120.42
Foreman	W60.13 B52.68 T112.81
General Foreman	W69.80 B60.11 T129.91
Journeyman, Cable Splicer	W53.69 B47.73 T101.42
Lead Foreman	W61.74 B53.91 T115.65
Working Foreman, Welder, Crane Operator (all types)	W56.37 B49.79 T106.16

Craft: Electrician - South

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	16.30	20.70	23.40	27.63	31.87					
Benefits	7.94	9.19	9.95	11.16	12.36					

Ratio of Apprentices to Journeymen - 2:3

Craft: Electrician - South

COMMENTS/NOTES

THESE RATES ALSO APPLY TO THE FOLLOWING:

- All new construction.
- All burglar and fire alarm work.
- All fiber optic work.
- Teledata work involving more than 15 instruments or voice/data lines.
- All camera installations.

Height Work: 40 feet above ground/floor: +10% of the wage and benefit amount.

FOREMAN REQUIREMENTS (number of Electricians on site):

(2 to 10) - a Working Foreman; (11 to 22) - a Foreman; (23 to 44) - a Lead Foreman; (35 to 48) - an Assistant General Foreman; (49 or more) - a General Foreman.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

The regular workday consists of 8 hours, between 7:00 AM and 4:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must run for a minimum of 5 consecutive workdays
- 2nd Shift (4:30 PM to 12:30 AM): 8 hrs. pay for 7.5 hrs. work + an additional 10% of the wage rate, inclusive of benefits.
- 3rd Shift (12:30 AM to 8:00 AM): 8 hrs. pay for 7 hrs. work + an additional 15% of the wage rate, inclusive of benefits.

OVERTIME:

The first 4 hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and the first 8 hours on Saturdays, shall be paid at time and one-half the regular rate, inclusive of benefits. Hours in excess of 12 per day, Monday through Friday, in excess of 8 on Saturdays, and all hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

****MUNICIPALITIES COVERED:**

Bass River, Beverly City, Cinnaminson, Delanco, Delran, Edgewater Park, Evesham, Hainesport, Lumberton, Maple Shade, Medford, Medford Lakes, Moorestown, Mount Laurel, Palmyra, Riverside, Riverton, Shamong, Southampton, Washington, Westampton, Woodland, Willingboro.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Electrician - Teledata - North (15 Instruments & Less)

PREVAILING WAGE RATE

	05/02/23
Assistant General Foreman	W53.45 B35.55 T89.00
Foreman	W48.75 B32.49 T81.24
General Foreman	W55.59 B36.95 T92.54
Journeyman Technician	W42.76 B28.59 T71.35
Lead Foreman	W50.88 B33.88 T84.76
Working Foreman	W46.60 B31.09 T77.69

Craft: Electrician - Teledata - North (15 Instruments & Less)

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	20.95	24.80	31.21	36.77						
Benefits	65.2% of	Apprentic	Wage	Rate	+\$0.71					

Craft: Electrician - Teledata - North (15 Instruments & Less)

COMMENTS/NOTES

NOTE: These rates are for service, maintenance, moves and/or changes affecting 15 instruments or less. These rates may NOT be used for any new construction or any fiber optic work.

FOREMAN REQUIREMENTS:

- 1 to 10 workers- 1 Working Foreman
- 11 to 20 workers- 1 Working Foreman and 1 Foreman
- 21 to 30 workers- 1 Working Foreman, 1 Foreman and 1 Lead Foreman
- 31 to 40 workers- 1 Working Foreman, 2 Foremen and 1 General Foreman
- 41 to 50 workers- 1 Working Foreman, 4 Foremen, 1 Assistant General Foreman and 1 General Foreman
- 51 to 60 workers- 1 Working Foreman, 5 Foremen, 1 Assistant General Foreman and 1 General Foreman
- 61 to 70 workers- 1 Working Foreman, 6 Foremen, 1 Assistant General Foreman and 1 General Foreman
- 71 to 80 workers- 1 Working Foreman, 7 Foremen, 2 Assistant General Foremen and 1 General Foreman
- 81 to 90 workers- 1 Working Foreman, 8 Foremen, 2 Assistant General Foremen and 1 General Foreman
- 91 to 100 workers- 1 Working Foreman, 9 Foremen, 2 Assistant General Foremen and 1 General Foreman.

HEIGHT WORK (40 feet above ground or floor):

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Workers shall be paid an additional 10% of the regular rate, inclusive of benefits.

The regular workday shall be 8 hours, between 8:00 AM and 4:30 PM.

SHIFT DIFFERENTIAL:

- Shift work must run for a minimum of 5 workdays.
- 2nd Shift (4:30 PM-12:30 AM) shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the hourly rate, per hour, inclusive of benefits.
- 3rd Shift: (12:30 AM-8:00 AM) shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the hourly rate, per hour, inclusive of benefits.

OVERTIME:

Hours in excess of 8 per day, or outside the regular workday, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

=> See "Electricians - North" for the list of municipalities covered by these rates.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Electrician - Teledata - North (16 Instruments & More)

PREVAILING WAGE RATE

	01/01/24	07/01/24
Assistant General Foreman	W68.30 B45.49 T113.79	W70.45 B46.90 T117.35
Foreman	W65.45 B43.62 T109.07	W67.45 B44.93 T112.38
General Foreman	W74.00 B49.23 T123.23	W76.35 B50.76 T127.11
Journeyman Technician	W56.89 B38.02 T94.91	W58.71 B39.21 T97.92
Lead Foreman	W65.45 B43.62 T109.07	W67.45 B44.93 T112.38
Working Foreman	W65.45 B43.62 T109.07	W67.45 B44.93 T112.38

Craft: Electrician - Teledata - North (16 Instruments & More)

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	16.28	21.71	27.14	32.56	40.70					
Benefits	65.2% of	Apprentic	Wage	Rate	+\$0.76					

Ratio of Apprentices to Journeymen - 1:4

Craft: Electrician - Teledata - North (16 Instruments & More)

COMMENTS/NOTES

APPRENTICE RATE SCHEDULE AS OF 1-1-24:
 INTERVAL PERIOD AND RATES
 Yearly 17.07 22.76 28.45 34.13 42.67
 Benefits 65.5% of Apprentice Wage Rate + \$0.76

APPRENTICE RATE SCHEDULE AS OF 7-1-24:
 INTERVAL PERIOD AND RATES
 Yearly 17.61 23.48 29.36 35.23 44.03
 Benefits 65.5% of Apprentice Wage Rate + \$0.76

NOTES:

1) These rates are for service, maintenance, moves and/or changes affecting 16 or more instruments, and fiber optic work. These rates may NOT be used for any new construction.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

2) The number of electricians on the jobsite is the determining factor for which Foreman Category applies.

FOREMAN REQUIREMENTS:

1 to 10 workers- 1 Working Foreman

11 to 20 workers- 1 Working Foreman and 1 Foreman

21 to 30 workers- 1 Working Foreman, 1 Foreman and 1 Lead Foreman

31 to 40 workers- 1 Working Foreman, 2 Foremen and 1 General Foreman

41 to 50 workers- 1 Working Foreman, 4 Foremen, 1 Assistant General Foreman and 1 General Foreman

51 to 60 workers- 1 Working Foreman, 5 Foremen, 1 Assistant General Foreman and 1 General Foreman

61 to 70 workers- 1 Working Foreman, 6 Foremen, 1 Assistant General Foreman and 1 General Foreman

71 to 80 workers- 1 Working Foreman, 7 Foremen, 2 Assistant General Foremen and 1 General Foreman

81 to 90 workers- 1 Working Foreman, 8 Foremen, 2 Assistant General Foremen and 1 General Foreman

91 to 100 workers- 1 Working Foreman, 9 Foremen, 2 Assistant General Foremen and 1 General Foreman.

HEIGHT WORK (40 feet above ground or floor):

Workers shall be paid an additional 10% of the regular rate, inclusive of benefits.

The regular workday shall be 8 hours, between 8:00 AM and 4:30 PM.

SHIFT DIFFERENTIAL:

- Shift work must run for a minimum of 5 workdays.

- 2nd Shift (4:30 PM-12:30 AM) shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the hourly rate, per hour, inclusive of benefits.

- 3rd Shift: (12:30 AM-8:00 AM) shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the hourly rate, per hour, inclusive of benefits.

OVERTIME:

Hours in excess of 8 per day, or outside the regular workday, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

=> See "Electricians - North" for the list of municipalities covered by these rates.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Electrician - Teledata - South (15 Voice/Data Lines & Less)

PREVAILING WAGE RATE

	05/02/23
Master Technician/Gen. Foreman (31+ Workers on job)	W51.90 B38.44 T90.34
Senior Technician/Lead Foreman (21-30 Workers on job)	W47.31 B36.98 T84.29
Technician A/Foreman (11-20 Workers on job)	W45.18 B36.31 T81.49
Technician B/Working Foreman (4-10 Workers on job)	W43.92 B34.91 T78.83
Technician C/Journeyman (1-3 Workers on job)	W40.00 B32.66 T72.66

Craft: Electrician - Teledata - South (15 Voice/Data Lines & Less)

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
6 Months	17.26	17.26	20.54	20.54	25.48	25.48	30.02	30.02		
Benefits	9.65	9.65	10.62	10.62	12.57	12.57	14.92	14.92		

Ratio of Apprentices to Journeymen - 2:3

Craft: Electrician - Teledata - South (15 Voice/Data Lines & Less)

COMMENTS/NOTES

NOTE: These rates are for service, maintenance, moves and/or changes affecting 15 voice/data lines or less. These rates may NOT be used for any new construction or fiber optic work.

FOREMAN REQUIREMENTS:

The number of electricians on the jobsite is the determining factor for which Foreman category applies.

HIGH WORK: Any work performed 40 feet above ground or floor: +10% of the wage and benefit amount.

SHIFT DIFFERENTIAL:

- 2nd Shift (4:30 PM to 12:30 AM) - 8 hrs. pay for 7.5 hrs. work + an additional 10% of the wage rate, inclusive of benefits.
- 3rd Shift (12:30 AM to 8:00 AM) - 8 hrs. pay for 7 hrs. work + an additional 15% of the wage rate, inclusive of benefits.

OVERTIME:

Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

=> See "Electrician - South" for the list of municipalities covered by these rates.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Electrician - Teledata - South (16 Instruments & More)

PREVAILING WAGE RATE

Craft: Electrician - Teledata - South (16 Instruments & More)

COMMENTS/NOTES

See "Electrician - South" Rates

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Electrician- Outside Commercial- North

PREVAILING WAGE RATE

	01/01/24	07/01/24
Assistant General Foreman	W68.30 B44.91 T113.21	W70.45 B46.30 T116.75
Crane Operator, High Voltage Splicer, Welder	W62.58 B41.21 T103.79	W64.58 B42.51 T107.09
Foreman	W65.45 B43.07 T108.52	W67.55 B44.43 T111.98
General Foreman	W74.00 B48.60 T122.60	W76.35 B50.12 T126.47
Groundman, Truck & Winch Operator- Level I	W17.07 B11.79 T28.86	W17.60 B12.13 T29.73
Groundman, Truck & Winch Operator- Level II	W22.76 B15.47 T38.23	W23.48 B15.93 T39.41
Groundman, Truck & Winch Operator- Level III	W28.45 B19.15 T47.60	W29.36 B19.74 T49.10
Groundman, Truck & Winch Operator- Level IV	W36.98 B24.66 T61.64	W38.16 B25.71 T63.87
Groundman, Truck & Winch Operator- Level V	W45.51 B30.18 T75.69	W46.97 B31.12 T78.09
Heavy Equipment Operator	W56.89 B37.53 T94.42	W58.71 B38.71 T97.42
Journeyman Lineman	W56.89 B37.53 T94.42	W58.71 B38.71 T97.42

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Electrician- Outside Commercial- North

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
6 Months	32.56	35.28	37.99	40.70	43.42	46.13	48.84			
Benefits	64.65% of	Apprentic	Wage	Rate	+ \$0.76					

Craft: Electrician- Outside Commercial- North

COMMENTS/NOTES

APPRENTICE RATE SCHEDULE AS OF 1-1-24:

INTERVAL	PERIOD AND RATES									
6 Months	34.13	36.98	39.82	42.67	45.51	48.36	51.20			
Benefits	64.65% of Apprentice Wage Rate + \$0.76									

APPRENTICE RATE SCHEDULE AS OF 7-1-24:

INTERVAL	PERIOD AND RATES									
6 Months	35.23	38.16	41.10	44.03	46.97	49.90	52.84			
Benefits	64.65% of Apprentice Wage Rate + \$0.76									

* FOR UTILITY WORK PLEASE SEE STATEWIDE RATES

The regular workday is 8 hours between 7:00 AM and 4:30 pm.

SHIFT DIFFERENTIALS:

2nd Shift (4:30 PM to 12:30 AM): 8 hrs. pay for 7.5 hrs. work + an additional 10% of the regular rate, inclusive of benefits.
 3rd Shift (12:30 AM to 8:00 AM): 8 hrs. pay for 7 hrs. work + an additional 15% of the regular rate per hour, inclusive benefits.

FOREMAN REQUIREMENTS:

When there are 2 or more electricians on the job, 1 shall be designated a Foreman.
 1 additional Foreman shall be designated for every 10 additional electricians.
 When there are 2 or more Foremen on the job, 1 shall be designated a General Foreman.
 An Assistant General Foreman shall be designated for every 50 electricians working on the job.

OVERTIME:

The first 4 hours in excess of 8 per day, and hours before or after the regular workday that are not shift work, Monday through Friday, and the first 8 hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits.

Four 10-hour days may be worked at straight time, Monday through Thursday or Tuesday through Friday.

RECOGNIZED HOLIDAYS:

New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day and Christmas Day. Sunday holidays will be observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Electrician- Outside Commercial- South

PREVAILING WAGE RATE

	10/02/23
Assistant General Foreman	W64.43 B55.92 T120.35
Foreman	W60.13 B52.58 T112.71
General Foreman	W69.80 B60.08 T129.88
Groundhand, Truck Driver, Conduit Installer (1 year or more experience)	W26.85 B26.74 T53.59
Groundhand, Truck Driver, Conduit Installer (2 years or more experience)	W37.58 B35.08 T72.66
Groundhand, Truck Driver, Conduit Installer (3 years or more experience)	W45.64 B41.34 T86.98
Groundhand, Truck Driver, Conduit Installer (less than 1 year exp.)	W21.48 B1.31 T22.79
Journeyman Lineman	W53.69 B47.58 T101.27
Lead Foreman	W61.74 B53.82 T115.56
Working Foreman	W56.37 B49.66 T106.03

Craft: Electrician- Outside Commercial- South

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
6 Months	25.52	27.63	29.75	31.87	33.99	36.11	38.22			
Benefits	10.35	10.97	11.57	12.20	12.81	13.43	14.05			

Craft: Electrician- Outside Commercial- South

COMMENTS/NOTES

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

* FOR UTILITY WORK PLEASE SEE STATEWIDE RATES

FOREMAN REQUIREMENTS (number of Electricians on site):

(1 to 10)- one Working Foreman.

(11 to 20)- one Working Foreman and one Foreman.

(21 to 30)- one Working Foreman, one Foreman and one Lead Foreman.

(31 to 40) - one Working Foreman, two (2) Foremen and one Lead Foreman.

(41 to 50)- one Working Foreman, four (4) Foremen, one Assistant General Foreman (runs 5 foremen), and one General Foreman.

(51 to 60)- one Working Foreman, five (5) Foremen, one Assistant General Foreman (runs 5 foremen), and one General Foreman

(runs one foreman).

(61 to 70)- one Working Foreman, six (6) Foremen, one Assistant General Foreman (runs 5 foremen), and one General Foreman

(runs two foremen).

(71 to 80)- one Working Foreman, seven (7) Foremen, two (2) Assistant General Foremen and one General Foreman.

(81 to 90)- one Working Foreman, eight (8) Foremen, two (2) Assistant General Foremen, and one General Foreman.

(91 to 100)- one Working Foreman, nine (9) Foremen, two (2) Assistant General Foremen and one General Foreman.

The regular workday consists of 8 hours, between 7:00 AM and 4:30 PM.

SHIFT DIFFERENTIALS:

Shift work must run for a minimum of 5 consecutive workdays.

2nd Shift (4:30 PM to 12:30 AM): 8 hrs. pay for 7.5 hrs. work + an additional 10% of the wage rate, inclusive of benefits.

3rd Shift (12:30 AM to 8:00 AM): 8 hrs. pay for 7 hrs. work + an additional 15% of the wage rate, inclusive of benefits.

OVERTIME:

All hours in excess of 8 per day, Monday through Friday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and Holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS:

New Year's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Electrician-Utility Work (North)

PREVAILING WAGE RATE

Rates are located in the "Statewide" rate package

Craft: Electrician-Utility Work (North)

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
* 6 Months	60%	65%	70%	75%	80%	85%	90%			
Benefits	69% of	Appren	tice	Wage	Rate	for all	intervals			

Craft: Electrician-Utility Work (North)

COMMENTS/NOTES

Electrician-Utility Work (North) rates are located in the "Statewide" rate package.

* The apprentice wage rate is paid at the percentage of the Journeyman Lineman wage rate located in the "Statewide" rate package.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Electrician-Utility Work (South)

PREVAILING WAGE RATE

Rates are located in the "Statewide" rate package

Craft: Electrician-Utility Work (South)

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
6 Months	32.52	35.23	37.94	40.65	43.36	46.07	48.78			
Benefits	28.97	30.65	32.31	33.98	35.69	37.36	39.02			

Craft: Electrician-Utility Work (South)

COMMENTS/NOTES

Electrician-Utility Work (South) rates are located in the "Statewide" rate package.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Elevator Constructor

PREVAILING WAGE RATE

	01/01/24
Helper-Over 5 Years	W48.28 B43.04 T91.32
Helper-Under 5 Years	W48.28 B42.08 T90.36
Mechanic (Journeyman) over 5 years	W68.97 B44.70 T113.67
Mechanic (Journeyman) under 5 years	W68.97 B43.32 T112.29
Mechanic in Charge (Foreman) over 5 years	W77.59 B45.39 T122.98
Mechanic in Charge (Foreman) under 5 years	W77.59 B43.84 T121.43
Probationary Helper (1st 6 months)	W34.49 B41.25 T75.74

Craft: Elevator Constructor

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	55%	65%	70%	80%						
Benefits	full	journeyma	benefit	rate for	all	intervals				

Ratio of Apprentices to Journeymen - *

* Total number of helpers and apprentices shall not exceed the number of mechanics on the job except where 2 teams are working, 1 additional helper or apprentice may be employed for first 2 teams and an extra helper or apprentice for each additional 3 teams. Further, the employer may use as many helpers or apprentices as needed under the direction of a mechanic in wrecking of old plants, handling and hoisting material, and on foundation work. When replacing cables on existing elevators, employer may use 2 helpers or apprentices to 1 mechanic.

Craft: Elevator Constructor

COMMENTS/NOTES

SHIFT DIFFERENTIALS:

- 2nd Shift (4:30 PM to 12:30 AM) shall be established on the basis of 7.5 hours of work for 8 hours of pay, plus an additional 10% per hour.
- 3rd Shift (12:30 AM to 8:00 AM) shall be established on the basis of 7 hours of work for 8 hours of pay, plus an additional 15% per hour.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays, Sundays, and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday to Thursday or Tuesday to Friday, at straight time. When working a 4-10 hour day schedule, all hours worked on a day other than the days established for the 4-10 hour schedule shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day and day after, Christmas Day. Saturday holidays observed the preceding Friday, Sunday holidays observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Glazier PREVAILING WAGE RATE

	05/02/23
Foreman	W50.68 B36.62 T87.30
Journeyman	W46.68 B36.62 T83.30

Craft: Glazier APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	19.39	22.52	26.22	29.31						
Benefits	19.73	21.77	23.33	25.59						

Ratio of Apprentices to Journeymen - 1:3

Craft: Glazier COMMENTS/NOTES

HIGH WORK (30 feet above ground /floor or using a swing stage): +\$1.00/hr

FOREMAN REQUIREMENT:

- When 4 or more Glaziers are working on a job that runs for 10 days or more, 1 shall be designated a Foreman.

The regular workday shall be 8 hours, between 6:00 AM and 4:30 PM.

SHIFT DIFFERENTIALS:

- Second and Third shift shall receive the regular hourly rate, plus 15% per hour.

OVERTIME:

- The first 2 hours in excess of 8 per day (9th and 10th hours), or outside the regular workday, Monday through Friday, that are not shift work, and the first 8 hours on Saturdays shall be paid at time and one-half the regular rate. All other daily overtime, and all hours on Sundays and holidays shall be paid at double the regular rate.

- Four 10-hour days may be worked at straight time, Monday through Friday. The 11th and 12th hours on the 4 days worked, and the first 12 hours on the fifth day shall be paid at time and one-half the regular rate. All other daily overtime, and all hours on Saturdays, Sundays, and holidays shall be paid at double the regular rate.

- Benefits on overtime hours are as follows:

Time and one-half = \$45.26/hr.

Double time = \$53.90/hr.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Thanksgiving Day, Christmas Day.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Heat & Frost Insulator

PREVAILING WAGE RATE

	06/01/23
Foreman (11-20 workers)	W63.62 B43.46 T107.08
Foreman (1-5 workers)	W60.73 B43.46 T104.19
Foreman (21-49 workers)	W66.52 B43.46 T109.98
Foreman (50+ workers)	W69.41 B43.46 T112.87
Foreman (6-10 workers)	W61.89 B43.46 T105.35
Journeyman	W57.84 B43.46 T101.30

Craft: Heat & Frost Insulator

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
1000 Hours	40%	45%	48%	50%	55%	60%	65%	70%	75%	80%
Benefits	32.97	32.97	Intervals	3 to 10 =	37.22					

Ratio of Apprentices to Journeymen - 1:4

Craft: Heat & Frost Insulator

COMMENTS/NOTES

FOREMAN REQUIREMENTS:

- Foremen shall be designated based upon the number of Heat & Frost Insulators on the job, with the rates as shown above.
- If there is only 1 Heat & Frost Insulator on the job, he or she must be designated a Foreman.

The regular workday shall be 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must run for a minimum of 3 consecutive workdays, with a minimum of 2 consecutive shifts each day.
- 2nd Shift shall be between the hours of 4:00 PM and 12:00 AM.
- 3rd Shift shall be between the hours of 12:00 AM and 8:00 AM.
- All shift work shall be paid an additional 15% of the regular rate, inclusive of benefits.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

OVERTIME:

- The 2 hours immediately before or after the regular workday, and the first 10 hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours in excess of 10 per day, Monday through Saturday, and all hours on Sundays and holidays (except Labor Day), shall be paid at double the regular rate, inclusive of benefits. All hours on Labor Day shall be paid at triple the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Heat & Frost Insulator - Asbestos Worker

PREVAILING WAGE RATE

	06/01/23
Material Handler - 1st Level	W32.01 B23.80 T55.81
Material Handler - 2nd Level	W46.47 B23.80 T70.27
Mechanic (Journeyman)	W57.84 B43.46 T101.30

Craft: Heat & Frost Insulator - Asbestos Worker

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	SEE	Heat &	Frost	Insulator						

Craft: Heat & Frost Insulator - Asbestos Worker

COMMENTS/NOTES

NOTE: These rates apply ONLY to the REMOVAL of insulation containing asbestos from mechanical systems, including containment erection and demolition, and the placing of material in appropriate containers.

JOB TITLES:

- Mechanic: 8,000 hours or more of asbestos removal experience
- Material Handler - 2nd Level: 3,000 hours or more (up to 8,000 hours) of asbestos removal experience
- Material Handler - 1st Level: up to 3,000 hours of asbestos removal experience

RATIOS:

- The first worker on the project must be a Mechanic.
- Ratio of Material Handlers to Mechanics is 5:1 (5 Handlers to 1 Mechanic), with a minimum of two of the Handlers being 2nd Level Handlers.

SHIFT DIFFERENTIALS:

- 2nd Shift shall work 7.5 hours and receive 8 hours pay, plus \$0.25 per hour.
- 3rd Shift shall work 7 hours and receive 8 hours pay, plus \$0.50 per hour.

OVERTIME:

- Hours in excess of 40 per week, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits.
- All hours on Sundays and holidays (except Labor Day) shall be paid at double the regular rate, inclusive of benefits.
- All hours on Labor Day shall be paid at triple the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Industrial Painter- Bridges

PREVAILING WAGE RATE

	02/01/23	02/01/24	02/01/25	02/01/26
Foreman	W63.28 B34.92 T98.20	W0.00 B0.00 T100.20	W0.00 B0.00 T102.20	W0.00 B0.00 T104.20
General Foreman	W65.78 B34.92 T100.70	W0.00 B0.00 T102.70	W0.00 B0.00 T104.70	W0.00 B0.00 T106.70
Journeyman	W58.28 B34.92 T93.20	W0.00 B0.00 T95.20	W0.00 B0.00 T97.20	W0.00 B0.00 T99.20

Craft: Industrial Painter- Bridges

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	50%	70%	90%							
6 Months										
Benefits	13.65	20.81	27.43							

Ratio of Apprentices to Journeymen - 1:3

Craft: Industrial Painter- Bridges

COMMENTS/NOTES

* Industrial Painters perform work on all industrial structures, such as bridges.

These rates apply to: All bridges that span waterways, roadways, railways and canyons. All tunnels, overpasses, viaducts and all appurtenances.

FOREMEN REQUIREMENTS:

- When there are 4 or more Painters on a job, 1 shall be designated a Foreman.
- When there are 15 or more Painters on a job, 1 shall be designated a General Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays and Sundays shall be paid at time and one-half the regular rate. All hours on holidays shall be paid at double the regular rate, except Veterans Day, which shall be paid at time and one-half the regular rate.
- During a regular work week schedule, Saturday may be used as a make-up day lost to inclement weather, paid at the regular rate.
- Four 10-hour days may be worked, at the regular rate, Monday through Thursday. When the four 10-hour day schedule is used, the 11th and 12th hours shall be paid at time and one-half the regular rate. After the 12th hour, a worker shall be paid at double the regular rate. Friday may be used as a make-up day lost to inclement weather, paid at the regular rate.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Saturday holiday observed the preceding Friday. Sunday holiday observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Industrial Painter- Structural Steel

PREVAILING WAGE RATE

	02/01/23	02/01/24	02/01/25	02/01/26
Foreman	W52.02	W0.00	W0.00	W0.00
	B32.57	B0.00	B0.00	B0.00
	T84.59	T86.59	T88.59	T90.59
General Foreman	W54.52	W0.00	W0.00	W0.00
	B32.57	B0.00	B0.00	B0.00
	T87.09	T89.09	T91.09	T93.09
Journeyman	W47.02	W0.00	W0.00	W0.00
	B32.57	B0.00	B0.00	B0.00
	T79.59	T81.59	T83.59	T85.59

Craft: Industrial Painter- Structural Steel

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	SEE	INDUST	RIAL	PAINTER	BRIDGES					

Ratio of Apprentices to Journeymen - 1:3

Craft: Industrial Painter- Structural Steel

COMMENTS/NOTES

* Industrial Painters perform work on all industrial structures, such as water tanks, waste water facilities, refineries, any structural steel work, etc.

These rates apply to: All work in power plants (any aspect). On steeples, on dams, on hangers, transformers, substations, on all open steel, in refineries, tank farms, water/sewerage treatment facilities and on pipelines.

FOREMEN REQUIREMENTS:

- When there are 4 or more Painters on a job, 1 shall be designated a Foreman.
- When there are 15 or more Painters on a job, 1 shall be designated a General Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays and Sundays shall be paid at time and one-half the regular rate. All hours on holidays shall be paid at double the regular rate, except for Veterans Day, which shall be paid at time and one-half the regular rate.
- During the regular work week schedule, Saturday may be used to make-up a day lost to inclement weather, paid at the regular rate.
- Four 10-hour days may be worked, at the regular rate, Monday through Thursday. When the four 10-hour day schedule is used, the 11th and 12th hours shall be paid at time and one-half the regular rate. After the 12th hour, a worker shall be paid at double the regular rate. Friday may be used as a make-up day lost to inclement weather, paid at the regular rate.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Saturday holiday observed the preceding Friday. Sunday holiday observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Industrial Painter- Water Tanks

PREVAILING WAGE RATE

	02/01/23	02/01/24	02/01/25	02/01/26
Foreman	W53.07 B32.22 T85.29	W0.00 B0.00 T87.29	W0.00 B0.00 T89.29	W0.00 B0.00 T91.29
General Foreman	W55.57 B32.22 T87.79	W0.00 B0.00 T89.79	W0.00 B0.00 T91.79	W0.00 B0.00 T93.79
Journeyman	W48.07 B32.22 T80.29	W0.00 B0.00 T82.29	W0.00 B0.00 T84.29	W0.00 B0.00 T86.29

Craft: Industrial Painter- Water Tanks

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	50%	70%	90%							
6 Months										
Benefits	13.65	20.81	27.43							

Ratio of Apprentices to Journeymen - 1:3

Craft: Industrial Painter- Water Tanks

COMMENTS/NOTES

* Industrial Painters perform work on all industrial structures, such as water tanks, waste water facilities, refineries, any structural steel work, etc.

These rates apply to: All new and repaint water tanks (interior and exterior).

FOREMEN REQUIREMENTS:

- When there are 4 or more Painters on a job, 1 shall be designated a Foreman.
- When there are 15 or more Painters on a job, 1 shall be designated a General Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays and Sundays shall be paid at time and one-half the regular rate. All hours on holidays shall be paid at double the regular rate, except Veterans Day, which shall be paid at time and one-half the regular rate.
- During a regular work week schedule, Saturday may be used to make-up a day lost to inclement weather, paid at the regular rate.
- Four 10-hour days may be worked, at the regular rate, Monday through Thursday. When the four 10-hour day schedule is used, the 11th and 12th hours shall be paid at time and one-half the regular rate. After the 12th hour, a worker shall be paid at double the regular rate. Friday may be used as a make-up day lost to inclement weather, paid at the regular rate.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Saturday holiday observed the preceding Friday. Sunday holiday observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Ironworker

PREVAILING WAGE RATE

	07/01/23
Foreman- Fence and Guardrail	W54.56 B36.94 T91.50
Foreman-Rod/Mesh	W59.78 B37.72 T97.50
Foreman-Structural	W60.93 B37.72 T98.65
Journeyman- Fence and Guardrail	W50.52 B36.94 T87.46
Journeyman-Rod/Mesh	W51.99 B37.72 T89.71
Journeyman-Structural	W52.99 B37.72 T90.71

Craft: Ironworker

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	66%	79%	88%							

Ratio of Apprentices to Journeymen - *

* On all work EXCEPT Ornamental Iron and Bridge Cable Spinning Work 1:4; On Ornamental Iron and Bridge Cable Spinning Work 1:1.

Craft: Ironworker

COMMENTS/NOTES

Note: For work on hazardous waste sites, workers shall receive an additional \$3.00 per hour.

The regular workday shall consist of 8 hours between 6:00 AM and 5:00 PM.

SHIFT DIFFERENTIALS:

- Second shift shall receive an additional 10% per hour.
- Third shift shall receive an additional 15% per hour.
- An irregular shift (shift starting after 6:00 PM) shall receive an additional 15% per hour.

OVERTIME:

- Time and one-half the wage rate for hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and for all hours on Saturdays. Double the wage rate for all hours on Sundays and holidays.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

- Employees may work four 10-hour days, Monday to Thursday, at straight time. Friday may be used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours worked on Friday shall be paid at time and one-half the wage rate.

- Benefits on overtime hours shall be paid at the following rates:

For Rod/Mesh and Structural-

When wages are time and one-half, benefits = \$43.08.

When wages are double, benefits = \$48.44.

For Fence and Guardrail-

When wages are time and one-half, benefits = \$41.91.

When wages are double, benefits = \$46.88.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, General and Presidential Election Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Laborer - Asbestos & Hazardous Waste Removal

PREVAILING WAGE RATE

	09/05/23
Foreman	W44.75 B24.71 T69.46
Journeyman (Handler)	W39.78 B24.71 T64.49

Craft: Laborer - Asbestos & Hazardous Waste Removal

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	22.07	25.75	29.42	33.10						
Benefit	22.06	for	all	intervals						

Ratio of Apprentices to Journeymen - *

* Ratio of apprentices to journeymen shall not be more than one apprentice for the first journeyman and no more than one (1) apprentice for each additional three (3) journeymen.

Craft: Laborer - Asbestos & Hazardous Waste Removal

COMMENTS/NOTES

NOTE: These rates apply to work in connection with Asbestos, Radiation, Hazardous Waste, Lead, Chemical, Biological, Mold Remediation and Abatement.

The regular workday shall be 8 hours.

OVERTIME:

- Hours in excess of 8 per day, Monday through Saturday, and all hours on Sunday and holidays shall be paid at time and one-half the regular rate.
- Benefits on ALL overtime hours shall be paid at straight time.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Easter, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. (Holidays start at 12:00 am).

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - **BURLINGTON**

Craft: Laborer - Building

PREVAILING WAGE RATE

	11/14/23
Class A Journeyman	W38.25 B32.42 T70.67
Class B Journeyman	W37.25 B32.42 T69.67
Class C Journeyman	W31.70 B32.42 T64.12
Foreman	W43.00 B32.42 T75.42
General Foreman	W47.75 B32.42 T80.17

Craft: Laborer - Building

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
	60%	70%	80%	90%	of Class B	wage rate				
6 Months										
Benefit	29.17	29.17	29.17	29.17						

Ratio of Apprentices to Journeymen - *

* Ratio of apprentices to journeymen shall not be more than one apprentice for the first journeyman and no more than one (1) apprentice for each additional three (3) journeymen.

Craft: Laborer - Building

COMMENTS/NOTES

CLASS A: Specialist laborer including mason tender or concrete pour crew; scaffold builder (scaffolds up to 14 feet in height); operator of forklifts, Bobcats (or equivalent machinery), jack hammers, tampers, motorized tampers and compactors, vibrators, street cleaning machines, hydro demolition equipment, riding motor buggies, conveyors, burners; and nozzle men on gunite work.

CLASS B: Basic laborer - includes all laborer work not listed in Class A or Class C.

CLASS C: Janitorial-type light clean-up work associated with the TURNOVER of a project, or part of a project, to the owner. All other clean-up work is Class B.

The regular workday shall be 8 hours between 6:00 AM and 6:00 PM.

SHIFT DIFFERENTIALS:

- Shift work must run for a minimum of 5 consecutive workdays.
- When a 2-shift schedule is worked, including a day shift, both shifts shall be established on the basis of 8 hours pay for 8 hours worked. The second shift shall receive the regular rate plus an additional 10%.
- When a 3-shift schedule is worked, the day shift shall be established on the basis of 8 hours pay for 8 hours worked, the second shift shall be established on the basis of 8 hours pay for 7.5 hours worked, and the third shift shall be established

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

on the basis of 8 hours pay for 7 hours worked. The day shift shall receive the regular rate, the second shift shall receive the regular rate plus an additional 10%, and the third shift shall receive the regular rate plus an additional 15%.

- When a second or third shift is worked with no day shift, the second or third shift shall be established on the basis of 8 hours pay for 8 hours worked. The second shift shall receive the regular rate plus an additional 10%, and the third shift shall receive the regular rate plus an additional 15%.

- When an irregular shift must be established this shift shall receive the regular rate plus an additional 10%.

OVERTIME:

- Hours in excess of 8 per day, or outside the regular workday that are not shift work, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate. Saturday may be used as a make-up day (paid at straight time) for a day lost to inclement weather, or for a holiday that is observed during the work week, Monday through Friday. All hours on Sundays and holidays shall be paid at double the regular rate.

- Four 10-hour days may be worked Monday to Thursday, at straight time, with Friday used a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the regular rate.

- Benefits on ALL overtime hours shall be paid at time and one-half.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Laborer - Heavy & General

PREVAILING WAGE RATE

Rates are located in the
"Statewide" rate package

Craft: Laborer - Heavy & General

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
1000 Hours	60%	70%	80%	90%						
Benefit	23.98	for	all	intervals						

Ratio of Apprentices to Journeymen - *

* No more than 1 apprentice for the first journeyman and no more than 1 apprentice for each additional 3 journeymen.

Craft: Laborer - Heavy & General

COMMENTS/NOTES

Heavy & General Laborer rates are located in the "Statewide" rate package.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Laborer-Residential and Modular Construction

PREVAILING WAGE RATE

	04/01/23
* Skilled Tradesman (only applies to Modular Construction)	W27.90 B5.45 T33.35
Foreman (person directing crew, regardless of his skill classification)	W31.90 B5.45 T37.35
Laborer (for single family and stand-alone duplex owned by single owner)	W17.85 B2.95 T20.80
Residential and Modular Construction Laborer	W23.90 B5.45 T29.35

Craft: Laborer-Residential and Modular Construction

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
	As shown	800 hours	600 hours	600 hours						
wage & benefits	70%	80%	90%							

Ratio of Apprentices to Journeymen-

One (1) apprentice shall be allowed for the first journeyman on site and no more than one (1) additional apprentice for each additional three (3) journeymen on site.

Craft: Laborer-Residential and Modular Construction

COMMENTS/NOTES

* SKILLED TRADESMAN- any worker doing work not typically done by a Building Laborer. Some examples are installing interior doors, sheet rock, hooking up appliances, installing light fixtures, installing railing systems, etc. Please note where local building codes require that certain work be performed under the supervision of a licensed tradesman (i.e. Plumber, Electrician, etc.) Laborers shall work under such supervision.

RESIDENTIAL CONSTRUCTION- All residential construction (not commercial), single-family, stand-alone duplex houses, townhouses and multi-family buildings of not more than four (4) floors. Each housing unit must be fully and independently functional; each housing unit must have its own kitchen and bathroom. The definition includes all incidental items such as site work, parking areas, utilities, streets and sidewalks. Please note the construction must be Residential in nature. A First Floor at or below grade may contain commercial space not to exceed 50% square footage of the floor; at least 50% of the First Floor must contain living accommodations or related nonresidential uses (e.g. laundry space, recreation/hobby rooms, and/or corridor space). Basement stories below grade used for storage, parking, mechanical systems/equipment, etc., are considered basement stories which are not used in determining the building's height. An attic is an unfinished space located immediately below the roof. Such space is not used in determining a building's height even if used for storage purposes. In addition, barracks and dormitories are not considered residential projects.

MODULAR RESIDENTIAL CONSTRUCTION- all aspects of modular residential construction (not commercial) at the site of installation of structures of no more than four (4) stories, including all excavation and site preparation, footings and

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

foundation systems whether poured on-site or prefabricated, all underground waterproofing, underground utilities, concrete slabs, sidewalks, driveways, paving, hardscape and landscaping. Please note the construction must be Residential as defined above. All work performed by the Set Crew (the crew of workers who set the modular boxes on the foundation), including the rigging, setting, attaching and assembly of all modules and structural members, preparation of the foundation to accept modules, such as sill plates, connection of all in-module and under-module connections including, but not limited to, plumbing, electrical, HVAC, fire suppression, CATS, telephone, television/internet, and fiber optic, the building or installation of any porches or decks regardless of material or method of construction, the on-site installation of, or completion of any roof system, doors, windows and fenestrations, including flashing, gutter and soffit systems, waterproofing, insulation and interior and exterior trim work, and painting. Please note that modular construction does not include on-site stick built construction, tip up construction or panel built construction.

The regular workday shall be 8 hours between 6:00 AM and 6:00 PM.

OVERTIME:

Hours worked in excess of 8 per day/40 per week, Monday through Saturday, and all hours worked on Sunday and holidays shall be paid at time and one-half the hourly rate.

RECOGNIZED HOILDAYS:

New Year's Day, Martin Luther King Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day and Christmas Day.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Operating Engineer - Field Engineer

PREVAILING WAGE RATE

Rates are located in the
"Statewide" rate package

Craft: Operating Engineer - Field Engineer

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	70%	75%	of Rod/	Chainman	Wage					
Yearly			80%	90%	Transit/	Instrument	man	Wage		

Ratio of Apprentices to Journeymen - *

* No more than 1 Field Engineer Apprentice per Survey Crew.

Craft: Operating Engineer - Field Engineer

COMMENTS/NOTES

Operating Engineer - Field Engineer rates are located in the "Statewide" rate package.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Painter - Line Striping

PREVAILING WAGE RATE

	12/01/23
Apprentice (1st year)	W29.89 B15.70 T45.59
Apprentice (2nd year)	W34.10 B26.65 T60.75
Foreman (Charge Person)	W43.10 B27.43 T70.53
Journeyman 1 (at least 1 year of working exp. as a journeyman)	W38.33 B27.43 T65.76
Journeyman 2 (at least 2 years of working exp. as a journeyman)	W42.10 B27.43 T69.53

Craft: Painter - Line Striping

COMMENTS/NOTES

OVERTIME:

Hours in excess of 8 per day, Monday through Saturday, and all hours on Sundays and holidays shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day and Christmas Day. Veterans Day may be substituted for the day after Thanksgiving.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Paperhanger PREVAILING WAGE RATE

	05/02/23
Foreman	W52.82 B29.51 T82.33
Journeyman	W48.02 B29.51 T77.53

Craft: Paperhanger APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	SEE	COMME RC	IAL	PAINTER						

Craft: Paperhanger COMMENTS/NOTES

FOREMEN REQUIREMENTS:

- When there are 4 or more Paperhangers on a job, 1 shall be designated a Foreman.

The regular workday shall consist of 8 hours between 7:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- The second shift shall receive an additional 10% of the hourly rate, per hour, and the third shift shall receive an additional 15% of the hourly rate, per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular rate.
- Saturday or Sunday may be used to make up a day lost to inclement weather, at straight time.
- Four 10-hour days may be worked, at straight time, Monday through Friday.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, General Election Day, Veterans Day, Thanksgiving Day, Christmas Day

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION

County - BURLINGTON

Craft: Pipefitter PREVAILING WAGE RATE

*** see PLUMBER Rates***

Craft: Pipefitter COMMENTS/NOTES

See PLUMBER Rates

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Plasterer PREVAILING WAGE RATE

See "Cement Mason" Rates

Craft: Plasterer COMMENTS/NOTES

See CEMENT MASON Rates

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Saturdays, and all hours on Sundays and holidays, shall be paid at double time, inclusive of benefits.

- Four 10-hour days may be worked, Mon to Thurs, at straight time, with Friday used as a make-up day for a day lost due to inclement weather. If Fri. is not a make-up day, the first 10 hours shall be paid at time and one-half, and hours in excess of 10 at double time, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

MUNICIPALITIES COVERED:

Bordentown City and Twp., Burlington City and Twp., Eastampton Twp., Chesterfield Twp., Fieldsboro Boro., Florence Twp., Mansfield Twp., Mount Holly Twp., New Hanover Twp., North Hanover Twp., Pemberton Boro. and Twp., Springfield Twp., Westampton Twp., Wrightstown Boro.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Washington Twp., Woodland Twp., Willingboro Twp.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Roofer PREVAILING WAGE RATE

	05/19/23
Foreman (5 workers or less)	W44.63 B34.62 T79.25
Foreman (6 workers or more)	W45.13 B34.62 T79.75
Journeyman	W42.63 B34.62 T77.25

Craft: Roofer APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	52%	55%	60%	75%						
Benefits	23.39	27.89	34.62	34.62						

Ratio of Apprentices to Journeymen - *

* 1:2, 2:4, 3:6, 4:8, 5:10, 6:12, 7:14

Craft: Roofer COMMENTS/NOTES

NOTE: Mopper, Operator of Felt Laying Machine or Slag Dispenser shall receive an additional \$.50 per hour.

FOREMAN REQUIREMENTS:

- There must be a Foreman on all jobs.
- Foreman rate depends on the number of Roofers on the job, as indicated.

The regular workday is 8 hours between 5:00 AM and 4:30 PM.

OVERTIME:

Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and all hours on Saturdays, Sundays, and holidays shall be paid at time and one-half the wage rate.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Roofer - Shingle, Slate & Tile

PREVAILING WAGE RATE

	05/19/23
Foreman (3 workers or less)	W33.10 B22.10 T55.20
Foreman (4 workers or more)	W33.85 B22.10 T55.95
Helper	W16.43 B22.10 T38.53
Journeyman (shingle work)	W32.85 B22.10 T54.95

Craft: Roofer - Shingle, Slate & Tile

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	60%	70%	80%							
Benefits	22.10	22.10	22.10							

Ratio of Apprentices to Journeymen - *

* 1:2, 2:4, 3:6, 4:8, 5:10, 6:12, 7:14

Craft: Roofer - Shingle, Slate & Tile

COMMENTS/NOTES

NOTE: Above rates are for Shingle work only. Slate and Tile work rates are an additional \$3.00 per hour.

HELPER RATIO: 1 Helper to 1 Journeyman

FOREMAN REQUIREMENTS:

- There must be a Foreman on all jobs.
- Foreman rate depends on the number of Roofers on the job, as indicated.

OVERTIME:

Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays, Sundays, and holidays shall be paid at time and one-half the wage rate.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Sheet Metal Sign Installation

PREVAILING WAGE RATE

	07/28/23
Foreman	W32.46 B25.93 T58.39
Journeyman	W30.46 B25.93 T56.39

Craft: Sheet Metal Sign Installation

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
1000 Hours	40%	45%	50%	55%	60%	65%	70%	75%	80%	90%
Benefits	25.06	25.13	25.21	25.28	25.36	25.43	25.51	25.58	25.67	25.81

Ratio of Apprentices to Journeymen - 1:2

Craft: Sheet Metal Sign Installation

COMMENTS/NOTES

HAZARDOUS DUTY:

Sign Installers working from a bosun's chair or outside swinging scaffold at a height of 60 feet or more: + \$5.00 per hour.

FOREMAN REQUIREMENTS:

When there are 3 or more Sign Installers on a job, one must be designated a Foreman.

The regular workday shall be 8 hours, between 8:00 AM and 5:00 PM.

OVERTIME:

Hours in excess of 8 per day, or outside the regular workday, Monday through Friday, and all hours on Saturdays and Sundays shall be paid at time and one-half the regular rate. All hours on holidays shall be paid at time and one-half the regular rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, day after Thanksgiving, Christmas Day. Saturday holidays will be observed the preceding Friday, Sunday holidays will be observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

hours on Saturday, shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular rate.

- Benefits on overtime hours are as follows:

Time and one-half = \$54.69.

Double-time = \$61.99.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Saturday holidays will be observed the preceding Friday, Sunday holidays will be observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Tile Worker PREVAILING WAGE RATE

	06/13/23
Finisher	W43.56 B29.69 T73.25
Setter	W51.96 B34.86 T86.82

Craft: Tile Worker APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
750 Hours	40%	45%	50%	55%	60%	65%	70%	75%	80%	90%

Ratio of Apprentices to Journeymen - 1:4

Craft: Tile Worker COMMENTS/NOTES

NOTE: These rates also apply to Terrazzo and Marble work.

OVERTIME:

Hours in excess of 8 per day, Monday through Friday, and the first 10 hours on Saturdays shall be paid at time and one half the regular rate, inclusive of benefits. Hours in excess of 10 on Saturdays, and all hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS:

New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day. Sunday holidays shall be observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Truck Driver

PREVAILING WAGE RATE

	05/02/23	05/01/24
Bucket, Utility, Pick-up, Fuel Delivery trucks	W46.06 B38.88 T84.94	W0.00 B0.00 T88.43
Dump truck (single axle), Asphalt Distributor, Tack Spreader	W46.06 B38.88 T84.94	W0.00 B0.00 T88.43
Euclid-type vehicles (large off-road equipment)	W46.21 B38.88 T85.09	W0.00 B0.00 T88.58
Helper on Asphalt Distributor truck	W46.06 B38.88 T84.94	W0.00 B0.00 T88.43
Low Boy Driver	W47.71 B38.88 T86.59	W0.00 B0.00 T90.08
Slurry Seal, Seeding/Fertilizing/Mulchi ng truck	W46.06 B38.88 T84.94	W0.00 B0.00 T88.43
Straight 3-axle trucks, Dump Truck (3-axle), Dump Truck (tandem)	W46.11 B38.88 T84.99	W0.00 B0.00 T88.48
Tractor-Trailer truck (all types)	W46.21 B38.88 T85.09	W0.00 B0.00 T88.58
Vacuum or Vac-All truck (entire unit)	W46.06 B38.88 T84.94	W0.00 B0.00 T88.43
Winch Trailer Driver	W46.31 B38.88 T85.19	W0.00 B0.00 T88.68

Craft: Truck Driver

COMMENTS/NOTES

Foreman: + \$.75 cents per hour. Overtime rate shall be increased accordingly.

HAZARDOUS WASTE REMOVAL WORK:

- On a hazardous waste site requiring Level A, B, or C personal protection for any worker: + \$3.00 per hour.
- On a hazardous waste site not designated Level A, B, or C: + \$1.00 per hour.

The regular workday consists of 8 hours starting between 6:00 AM and 8:00 AM.

SHIFT DIFFERENTIAL:

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Any shift starting at a time other than 6:00 AM or 8:00 AM shall receive an additional \$3.00 per hour.

BLENDED RATE:

- When a truck driver is performing work on site and also serving as a material delivery driver, the driver shall be paid a "blended rate" which shall be 80% of the above-listed wage rates, plus the full benefit rate. This rate shall be used when the driver "round robins" for a minimum of 6 hours during the work day.

OVERTIME:

- Hours in excess of 8 per day, or before or after the regular workday that are not shift work, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.

- Benefits on overtime shall be \$46.41.

- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veteran's Day, Thanksgiving Day, Christmas Day. Veteran's Day may be substituted for the day after Thanksgiving. Sunday holidays will be observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Truck Driver-Material Delivery Driver

PREVAILING WAGE RATE

	05/02/23	05/01/24
Driver	W36.85 B38.88 T75.73	W0.00 B0.00 T81.14
New Hires: 1st Year	W36.85 B38.88 T75.73	W0.00 B0.00 T81.14

Craft: Truck Driver-Material Delivery Driver

COMMENTS/NOTES

NOTE: These rates may only be used for the delivery of *materials TO the job site (*building materials that will become a permanent part of the job site, such as sand, stone, aggregates, asphalt, sheetrock, 2x4's, etc.). In addition, only the following types of truck may be used for such deliveries (Dump Truck or Flat-bed truck). Please note that this rate does not apply to material suppliers or their employees (who do not perform services at the job site), and for the delivery of equipment and/or items that will not become a permanent part of the job site.

OVERTIME: Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate. Benefits on overtime shall be \$46.41.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day, July 4th, Labor Day, Veteran's Day, Thanksgiving Day, Christmas Day. Veteran's Day may be substituted for the day after Thanksgiving. Sunday holidays will be observed the following Monday.

**NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION**

County - BURLINGTON

Craft: Welder PREVAILING WAGE RATE

Welder

Craft: Welder COMMENTS/NOTES

Welders rate is the same as the craft to which the welding is incidental .

STATEWIDE RATES

OPERATING ENGINEERS **Rates Expiration Date :**

{For apprentice rates refer to "Operating Engineers" apprentice rates in any county rate package}

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must be established for 5 consecutive workdays.
- Any work started outside of the allowed start time, 6:00 AM to 9:00 AM, except for * tidal work, shall be considered an irregular shift and paid at straight time, plus 15% for the first eight hours, inclusive of benefits.
- * FOR TIDAL WORK- a contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work), providing the eight hour shift is completed between the hours of 5:00 AM and 6:30 PM.
- All time worked in excess of an established shift (an established shift is a shift that is determined at the time of the bid) shall be paid at the applicable overtime rate. When a portion of an established shift works into Saturday, Sunday or a holiday, that time worked shall be paid at the established shift rate.
- When working with other trades who receive a higher irregular shift differential, these employees shall also receive the higher differential rate.

OVERTIME:

- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veterans Day.

For projects bid after April 1, 2020, on hazardous waste removal work of any kind, including a state or federally designated site, where the operating engineer is required to wear level A, B, or C personal protection, the operating engineer shall receive an hourly wage rate of his regular hourly wage plus \$5.00 per hour.

- An operating engineer working at a hazardous waste removal project or site at a task requiring hazardous waste related certification, but who is not working in a zone requiring level A, B, or C personal protection, shall receive an hourly wage rate of his regular rate plus \$1.00 per hour.

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
57.63	37.65	95.28	98.03	100.53

CLASSIFICATIONS:

A-Frame

Backhoe (combination)

Boom Attachment on loaders (Except pipehook)

Boring & Drilling Machine

Brush Chopper, Brush Shredder, Tree Shredder, Tree Shearer

Bulldozer, finish grade

Cableway

Carryall

Concrete Pump

Concrete Pumping System (Pumpcrete & similar types)

Conveyor, 125 feet or longer

Drill Doctor (Duties include dust collector and maintenance)

Front End Loader (2 cu. yds. but less than 5 cu. yds.)

Grader, finish

Groove Cutting Machine (ride-on type)

Heater Planer

Hoist: Outside Material Tower Hoist (all types including steam, gas, diesel, electric, air hydraulic, single and double drum, concrete, brick shaft caisson, snorkle roof, and other similar types, Except Chicago-boom type) * receives an additional \$1.00 per hour on 100 ft. up to 199 ft. total height, and an additional \$2.00 per hour on 200 ft. and over total height.

Hydraulic Crane (10 tons & under)

Hydraulic Dredge

Hydro-Axe

Hydro-Blaster

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
57.63	37.65	95.28	98.03	100.53

CLASSIFICATIONS:

Jack (screw, air hydraulic, power-operated unit, or console type, Except hand jack or pile load test type)

Log Skidder

Pan

Paver, concrete

Plate & Frame Filter Press

Pumpcrete (unit type)

Pumpcrete, Squeezecrete, or Concrete Pumping machine (regardless of size)

Scraper

Side Boom

Straddle Carrier (Ross and similar types)

Whiphammer

Winch Truck (hoisting)

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
55.72	37.65	93.37	96.12	98.62

CLASSIFICATIONS:

- Asphalt Curbing Machine
- Asphalt Plant Engineer
- Asphalt Spreader
- Autograde Curb Trimmer & Sidewalk Shoulder Slipform (CMI & similar types)
- Autograde Curecrete Machine (CMI & similar types)
- Autograde Tube Finisher & Texturing Machine (CMI & similar types)
- Bar Bending Machines (Power)
- Batcher, Batching Plant, & Crusher [On Site]
- Belt Conveyor System
- Boom-Type Skimmer Machine
- Bridge Deck Finisher
- Bulldozer (all sizes)
- Captain (Power Boats)
- Car Dumper (railroad)
- Compressor & Blower unit for loading/unloading of concrete, cement, fly ash, or similar type materials (used independently or truck-mounted)
- Compressor (2 or 3 battery)
- Concrete Breaking Machine
- Concrete Cleaning/Decontamination Machine
- Concrete Finishing Machine
- Concrete Saw or Cutter (ride-on type)
- Concrete Spreader (Hetzl, Rexomatic & similar types)
- Concrete Vibrator

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
55.72	37.65	93.37	96.12	98.62

CLASSIFICATIONS:

- Conveyors - under 125 feet
- Crane Signalman
- Crushing Machine
- Directional Boring Machine
- Ditching Machine - Small (Ditchwitch, Vermeer or similar types)
- Dope Pot - Mechanical (with or without pump)
- Dumpster
- Elevator
- Fireman
- Fork Lift (Economobile, Lull & similar types)
- Front End Loader (1 cu. yd. and over but less than 2 cu. yds.)
- Generator (2 or 3 battery)
- Giraffe Grinder
- Goldhofer/Hydraulic Jacking Trailer
- Grader & Motor Patrols
- Grout Pump
- Gunnite Machine (Excluding nozzle)
- Hammer - Vibratory (in conjunction with generator)
- Heavy Equipment Robotics - Operator/Technician
- Hoist (roof, tigger, aerial platform hoist, house car)
- Hopper
- Hopper Doors (power operated)
- Ladder (motorized)

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2023			07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
55.72	37.65	93.37	96.12	98.62

CLASSIFICATIONS:

Laddervator

Locomotive (Dinky-type)

Maintenance Utility Man

Master Environmental Maintenance Technician

Mechanic

Mixer (Except paving mixers)

Pavement Breaker (truck-mounted or small self-propelled
ride-on type)

Pavement Breaker - maintenance of compressor or hydraulic unit

Pipe Bending Machine (power)

Pitch Pump

Plaster Pump (regardless of size)

Post Hole Digger (post pounder, auger)

Rod Bending Machines

Roller (black top)

Scale (power)

Seamen Pulverizing Mixer

Shoulder Widener

Silo

Skimmer Machine (boom type)

Steel Cutting Machine (service & maintenance)

Tamrock Drill

Tractor

Transfer Machines

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2023			07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
55.72	37.65	93.37	96.12	98.62

CLASSIFICATIONS:

Tug Captains

Tug Master (Power Boats)

Ultra High Pressure Waterjet Cutting Tool System -
Operator/Maintenance Technician

Vacuum Blasting Machine - Operator/Maintenance Technician

Vibrating Plant (used with unloading)

Welder & Repair Mechanic

Effective Dates:

07/01/2023			07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
50.38	37.65	88.03	90.78	93.28

CLASSIFICATIONS:

Assistant Engineer/Oiler

Driller's Helper

Field Engineer - Transit man or Instrument man

Maintenance Apprentice (Deckhand)

Maintenance Apprentice (Oiler)

Mechanic's Helper

Off Road Back Dump

Tire Repair & Maintenance

Effective Dates:

07/01/2023			07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
47.80	37.65	85.45	88.20	90.70

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman

TERRITORY
ENTIRE STATE

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION

OPERATING ENGINEERS Rates Expiration Date :

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
57.96	37.65	95.61	98.36	100.86

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (minimum)

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
59.22	37.65	96.87	99.62	102.12

CLASSIFICATIONS:

- Autograde Pavement Profiler (CMI & similar types)
- Autograde Pavement Profiler - Recycle Type (CMI & similar types)
- Autograde Placer/Trimmer/Spreader Combination (CMI & similar types)
- Autograde Slipform Paver (CMI & similar types)
- Backhoe (Excavator)
- Central Power Plant
- Concrete Paving Machine
- Cranes, Derricks, Pile Drivers (all types), under 100 tons with a boom (including jib and/or leads) under 100 ft.
- Draglines
- Drill, Bauer, AMI and similar types
- Drillmaster, Quarrymaster
- Drillmaster/Quarrymaster (down-the-hole drill), rotary drill, self-propelled hydraulic drill, self-powered drill
- Elevator Grader
- Field Engineer-Chief of Party
- Front End Loader (5 cu. yards or larger)
- Gradall
- Grader, Rago
- Helicopter Co-Pilot
- Helicopter Communications Engineer
- Juntann Pile Driver
- Locomotive (large)
- Mucking Machine

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
59.22	37.65	96.87	99.62	102.12

CLASSIFICATIONS:

Pavement & Concrete Breaker (Superhammer & Hoe Ram)

Pile Driver

Prentice Truck

Roadway Surface Grinder

Scooper (loader & shovel)

Shovel (Excavator)

Trackhoe (Excavator)

Tree Chopper with boom

Trenching Machine (cable plow)

Tunnel Boring Machine

Vacuum Truck

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
54.09	37.65	91.74	94.49	96.99

CLASSIFICATIONS:

- Chipper
- Compressor (single)
- Concrete Spreader (small type)
- Conveyor Loader (Except elevator graders)
- Engines, Large Diesel (1620 HP) & Staging Pump
- Farm Tractor
- Fertilizing Equipment (operation & maintenance)
- Fine Grade Machine (small type)
- Form Line Grader (small type)
- Front End Loader (under 1 cubic yard)
- Generator (single)
- Grease, Gas, Fuel, & Oil Supply Trucks
- Heaters (Nelson or other type)
- Lights - portable generating light plant
- Mixer, Concrete (small)
- Mulching Equipment (operation & maintenance)
- Power Broom or Sweeper
- Pump (diesel engine & hydraulic - regardless of power)
- Pump (larger than 2 inch suction, including submersible pumps)
- Road Finishing Machine (small type)
- Roller - grade, fill, or stone base
- Seeding Equipment (operation & maintenance)
- Sprinkler & Water Pump Trucks

OPERATING ENGINEERS Rates Expiration Date :

Effective Dates:

07/01/2023			07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
54.09	37.65	91.74	94.49	96.99

CLASSIFICATIONS:

Steam Generator or Boiler

Stone Spreader

Tamping Machine (vibrating ride-on type)

Temporary Heating Plant (Nelson or other type, including propane, natural gas, and flow-type units)

Water or Sprinkler Truck

Welding Machine (gas, diesel, or electric convertor, of any type)

Welding System - Multiple (rectifier transformer type)

Wellpoint Systems (including installation by bull gang and maintenance)

Effective Dates:

07/01/2023			07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
61.04	37.65	98.69	101.44	103.94

CLASSIFICATIONS:

Helicopter Pilot/Engineer

Effective Dates:

07/01/2023			07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
65.72	37.65	103.37	106.12	108.62

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), 100 tons and over and TOWER CRANE with boom (including jib and/or leads) 140 ft. and over

Effective Dates:

07/01/2023			07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
64.72	37.65	102.37	105.12	107.62

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), 100 tons and over and TOWER CRANE with boom (including jib and/or leads) from 100 ft. to 139 ft.

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
61.22	37.65	98.87	101.62	104.12

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types) , under 100 tons with a boom (including jib and/or leads) 140 ft. and over

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
63.72	37.65	101.37	104.12	106.62

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), 100 tons and over and TOWER CRANE with a boom (including jib and/or leads) under 100 ft.

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
60.22	37.65	97.87	100.62	103.12

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), under 100 tons with a boom (including jib and/or leads) from 100 ft. to 139 ft.

STRUCTURAL STEEL ERECTION Rates Expiration Date :

{For apprentice rates refer to "Operating Engineers" apprentice rates in any county rate package}

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must be established for 5 consecutive workdays.
- Any work started outside of the allowed start time, 6:00 AM to 9:00 AM, except for * tidal work, shall be considered an irregular shift and paid at straight time, plus 15% for the first eight hours, inclusive of benefits.
- * FOR TIDAL WORK- a contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work), providing the eight hour shift is completed between the hours of 5:00 AM and 6:30 PM.
- All time worked in excess of an established shift (an established shift is a shift that is determined at the time of the bid) shall be paid at the applicable overtime rate. When a portion of an established shift works into Saturday, Sunday or a holiday, that time worked shall be paid at the established shift rate.
- When working with other trades who receive a higher irregular shift differential, these employees shall also receive the higher differential rate.

OVERTIME:

- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veterans Day.

For projects bid after April 1, 2020, on hazardous waste removal work of any kind, including a state or federally designated site, where the operating engineer is required to wear level A, B, or C personal protection, the operating engineer shall receive an hourly wage rate of his regular hourly wage plus \$5.00 per hour.

- An operating engineer working at a hazardous waste removal project or site at a task requiring hazardous waste related certification, but who is not working in a zone requiring level A, B, or C personal protection, shall receive an hourly wage rate of his regular rate plus \$1.00 per hour.

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
62.85	37.65	100.50	103.25	105.75

CLASSIFICATIONS:

Helicopter Co-Pilot & Communications Engineer

TERRITORY
ENTIRE STATE

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION

STRUCTURAL STEEL ERECTION Rates Expiration Date :

Effective Dates:

07/01/2023			07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
58.79	37.65	96.44	99.19	101.69

CLASSIFICATIONS:

A-Frame

Cherry Picker -10 tons or less (Over 10 tons use crane rate)

Hoist (all types Except Chicago-boom)

Jack (screw, air hydraulic, power-operated unit or console type, Except hand jack or pile load test type)

Side Boom

Straddle Carrier

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
56.13	37.65	93.78	96.53	99.03

CLASSIFICATIONS:

- Aerial Platform Used On Hoists
- Apprentice Engineer/Oiler with Compressor or Welding Machine
- Captain (Power Boats)
- Compressor (2 or 3 in battery)
- Concrete Cleaning/Decontamination Machine Operator
- Conveyor or Tugger Hoist
- Directional Boring Machine
- Elevator or House Car
- Fireman
- Forklift
- Generator (2 or 3)
- Heavy Equipment Robotics, Operator/Technician
- Maintenance Utility Man
- Master Environmental Maintenance Technician
- Tug Master (Power Boats)
- Ultra High Pressure Waterjet Cutting Tool System Operator/Maintenance Technician
- Vacuum Blasting Machine Operator/Maintenance Technician
- Welding Machines, Gas or Electric Converters on any type-2 or 3 in battery including diesels

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2023			07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
54.60	37.65	92.25	95.00	97.50

CLASSIFICATIONS:

Compressor (Single)

Generators

Welding Machines, Gas, Diesel, Or Electric Converters of any type-single

Welding System, Multiple (Rectifier Transformer Type)

Effective Dates:

07/01/2023			07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
50.84	37.65	88.49	91.24	93.74

CLASSIFICATIONS:

Assistant Engineer/Oiler

Drillers Helper

Field Engineer - Transit/Instrument Man

Maintenance Apprentice (Deckhand)

Maintenance Apprentice (Oiler)

Off Road Back Dump

Effective Dates:

07/01/2023			07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
58.41	37.65	96.06	98.81	101.31

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (Minimum)

Effective Dates:

07/01/2023			07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
47.80	37.65	85.45	88.20	90.70

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
59.55	37.65	97.20	99.95	102.45

CLASSIFICATIONS:

Field Engineer-Chief of Party

Vacuum Truck

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
67.74	37.65	105.39	108.14	110.64

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms, including jib, 140 ft. and over, above ground). Derricks (all derricks, land, floating or Chicago Boom type with booms including jib, 140 ft. and over, above ground), and Pile Drivers (all types) 100 tons and over and Tower Cranes.

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
66.08	37.65	103.73	106.48	108.98

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms including jib, less than 140 ft. above ground), Derricks (all derricks, land, floating or Chicago Boom type with booms including jib, less than 140 ft. above ground), Pile Drivers (all types), 100 tons and over and Tower Crane.

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
63.24	37.65	100.89	103.64	106.14

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms including jib, 140 ft. and over, above ground), Derricks (all derricks, land, floating or Chicago Boom type with booms including jib, 140 ft. and over, above ground), Pile Drivers (all types), under 100 tons.

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
61.58	37.65	99.23	101.98	104.48

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms including jib, less than 140 ft. above ground), Derricks (all derricks, land, floating or Chicago Boom type with booms including jib, less than 140 ft. above ground), Pile Drivers (all types), under 100 tons.

TERRITORY
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NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
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STRUCTURAL STEEL ERECTION Rates Expiration Date :

Effective Dates:

07/01/2023			07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
63.24	37.65	100.89	103.64	106.14

CLASSIFICATIONS:

Helicopter Pilot & Engineer

TEST BORING PRELIMINARY TO CONSTRUCTION-SOUTH/WEST **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Hunterdon, Mercer, Monmouth, Ocean, Salem, Sussex, Warren

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must be established for 5 consecutive workdays.
- Any work started outside of the allowed start time, 6:00 AM to 9:00 AM, except for * tidal work, shall be considered an irregular shift and paid at straight time, plus 15% for the first eight hours, inclusive of benefits.
- * FOR TIDAL WORK- a contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work), providing the eight hour shift is completed between the hours of 5:00 AM and 6:30 PM.
- All time worked in excess of an established shift (an established shift is a shift that is determined at the time of the bid) shall be paid at the applicable overtime rate. When a portion of an established shift works into Saturday, Sunday or a holiday, that time worked shall be paid at the established shift rate.
- When working with other trades who receive a higher irregular shift differential, these employees shall also receive the higher differential rate.

OVERTIME:

- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veterans Day.

For projects bid after April 1, 2020, on hazardous waste removal work of any kind, including a state or federally designated site, where the operating engineer is required to wear level A, B, or C personal protection, the operating engineer shall receive an hourly wage rate of his regular hourly wage plus \$5.00 per hour.

- An operating engineer working at a hazardous waste removal project or site at a task requiring hazardous waste related certification, but who is not working in a zone requiring level A, B, or C personal protection, shall receive an hourly wage rate of his regular rate plus \$1.00 per hour.

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
59.22	37.65	96.87	99.62	102.12

CLASSIFICATIONS:

Driller

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
52.38	37.65	90.03	92.78	95.28

CLASSIFICATIONS:

Driller's Helper

FREE AIR TUNNEL JOBS **Rates Expiration Date :**

{For apprentice rates refer to "Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$3.00/hr
- other Hazardous Waste site: + \$1.00/hr

Effective Dates:

03/01/2023

Rate	Fringe	Total
50.30	35.73	86.03

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

03/01/2023

Rate	Fringe	Total
50.00	35.73	85.73

CLASSIFICATIONS:

Heading Foreman, Shaft Foreman, Rod Foreman, Electrician Foreman, Rigging Foreman

FREE AIR TUNNEL JOBS **Rates Expiration Date :**

Effective Dates:

03/01/2023

Rate	Fringe	Total
49.50	35.73	85.23

CLASSIFICATIONS:

Iron Foreman, Caulking Foreman, Form Foreman, Cement Finishing Foreman, Concrete Foreman, Track Foreman, Cleanup Foreman, Grout Foreman

Effective Dates:

03/01/2023

Rate	Fringe	Total
52.00	35.73	87.73

CLASSIFICATIONS:

Blaster

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.95	35.73	84.68

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.60	35.73	84.33

CLASSIFICATIONS:

Skilled Men (including Caulker, Powder Carrier, all other skilled men)

Skilled Men (including Miner, Drill Runner, Iron Man, Conveyor Man, Manitenance Man, Safety Miner, Rigger, Block Layer, Cement Finisher, Tod Man)

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.45	35.73	84.18

CLASSIFICATIONS:

Semi-Skilled Men (including Bell or Signal Man Top or Bottom, Form Worker & Mover, Concrete Worker, Shaft Man, Tunnel Laborer, Caulker's Helper, all other semi-skilled)

Semi-Skilled Men (including Miner's Helper, Chuck Tender, Track Man, Nipper, Brake Man, Derail Man, Cable Man, Hose Man, Gravel Man, Form Man)

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NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
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FREE AIR TUNNEL JOBS Rates Expiration Date :

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.05	35.73	83.78

CLASSIFICATIONS:

All Others (including Powder Watchman, Change House Attendant, Top Laborer)

DRILL FOR GROUND WATER SUPPLY **Rates Expiration Date :**

The well driller and/or helper may perform all work relative to the construction, finishing, and servicing of wells, pumps and borings for ground water supply. The present methods of well drilling entailing as they do, many diverse job operations calling for drilling, pump discharge, piping, and the operation of various types of related power equipment, shall all be within the job duties and functions of the well driller and/or helper. In the event that an extension of work should occur beyond water well drilling functions, into the field of general construction work, such extension of work would come under the appropriate rates listed elsewhere in this wage determination.

- For Work Hours, Shift Differentials, Overtime Rates, and Recognized Holidays see the "Operating Engineers" section of this wage determination.

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
57.97	37.65	95.62	98.37	100.87

CLASSIFICATIONS:

Driller

Effective Dates:

	07/01/2023		07/01/2024	07/01/2025
Rate	Fringe	Total	Total	Total
51.13	37.65	88.78	91.53	94.03

CLASSIFICATIONS:

Driller's Helper

OPERATING ENGINEERS MARINE-DREDGING **Rates Expiration Date :**

NOTE: These wage rates only apply to dredging and other marine construction activities occurring in navigable waters and their tributaries.

Boat crews carrying explosive material (dynamite, pourfex, and other similar materials) shall be paid at 120% of the hourly wage rate for hours engaged in handling of said materials. Employees required to possess a Hazardous Material Certification as a condition of employment shall be compensated at 120% of the hourly wage rate.

OVERTIME:

Hours in excess of 40 per week, and all hours on Saturdays and Sundays, shall be paid at time and one-half the hourly rate. All hours on holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Martin Luther King Day, Good Friday, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

Effective Dates:

10/01/2023

Rate	Fringe	Total
45.26	15.22	60.48

CLASSIFICATIONS:

Lead Dredgerman, Operator, Leverman

Licensed Tug Operator (over 1000 HP)

Effective Dates:

10/01/2023

Rate	Fringe	Total
39.14	14.79	53.93

CLASSIFICATIONS:

Derrick Operator, Spider/Spill Barge Operator

Engineer, Electrician, Chief Welder, Chief Mate

Fill Placer, Operator II

Licensed Boat Operator

Maintenance Engineer

Effective Dates:

10/01/2023

Rate	Fringe	Total
36.84	14.63	51.47

CLASSIFICATIONS:

Certified Welder

OPERATING ENGINEERS MARINE-DREDGING **Rates Expiration Date :**

Effective Dates:

10/01/2023

Rate	Fringe	Total
35.83	14.31	50.14

CLASSIFICATIONS:

Mate, Drag Barge Operator, Steward, Assistant Fill Placer

Welder

Effective Dates:

10/01/2023

Rate	Fringe	Total
34.68	14.23	48.91

CLASSIFICATIONS:

Boat Operator

Effective Dates:

10/01/2023

Rate	Fringe	Total
28.81	13.82	42.63

CLASSIFICATIONS:

Shoreman, Deckhand, Rodman, Scowman

Effective Dates:

10/01/2023

Rate	Fringe	Total
40.33	14.87	55.20

CLASSIFICATIONS:

Crane Operator

MICROSURFACING/SLURRY SEAL Rates Expiration Date :

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem

IN ALL OTHER COUNTIES use the Heavy and General Laborers - North "Slurry Seal Laborer" rates.

SHIFT DIFFERENTIALS:

Any shift starting at 3:30 PM or later shall receive an additional \$0.35/hr

OVERTIME:

Hours in excess of 8 per day or 40 per week shall be paid at time and one-half the hourly rate. All hours on holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day.

Effective Dates:

03/01/2017

Rate	Fringe	Total
36.50	21.27	57.77

CLASSIFICATIONS:

Foreman

Effective Dates:

03/01/2017

Rate	Fringe	Total
33.80	21.27	55.07

CLASSIFICATIONS:

Box man

Effective Dates:

03/01/2017

Rate	Fringe	Total
31.75	21.27	53.02

CLASSIFICATIONS:

Microsurface/Slurry Preparation

Effective Dates:

03/01/2017

Rate	Fringe	Total
31.75	21.27	53.02

CLASSIFICATIONS:

Squeegee man

TERRITORY
ENTIRE STATE

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION

MICROSURFACING/SLURRY SEAL Rates Expiration Date :

Effective Dates:

03/01/2017

Rate	Fringe	Total
30.30	21.27	51.57

CLASSIFICATIONS:

Cleaner, Taper

ASPHALT LABORERS - SOUTH **Rates Expiration Date :**

"THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$5.00/hr
- other Hazardous Waste site: + \$1.00/hr

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

Effective Dates:

03/01/2023

Rate	Fringe	Total
51.80	35.73	87.53

CLASSIFICATIONS:

Paving Foreman

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.35	35.73	84.08

CLASSIFICATIONS:

Head Raker

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.50	35.73	84.23

CLASSIFICATIONS:

Screedman

ASPHALT LABORERS - SOUTH Rates Expiration Date :

Effective Dates:

03/01/2023

Rate	Fringe	Total
47.95	35.73	83.68

CLASSIFICATIONS:

Tampers, Smoothers, Kettlemen,
Painters, Shovelers, Roller Boys

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.05	35.73	83.78

CLASSIFICATIONS:

Milling Controller

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.25	35.73	83.98

CLASSIFICATIONS:

Traffic Control Coordinator

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.20	35.73	83.93

CLASSIFICATIONS:

Raker, Luteman

TEST BORING PRELIMINARY TO CONSTRUCTION-NORTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:
Bergen, Essex, Hudson, Middlesex, Morris, Passaic, Somerset, Union

SHIFT DIFFERENTIAL:

Employees on a shift other than between the hours of 8:00 AM and 5:00 PM shall receive an additional \$2.00 per hour.

OVERTIME:

Hours in excess of 8 per day, Monday through Friday, and all hours on Saturday shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular rate.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day. Sunday holidays observed the following Monday.

Hazardous Waste Pay (for Levels A, B, and C): an additional 15% of the hourly rate, per hour.

A newly hired Helper with no experience in the industry shall be paid as follows:

- 1st year on the job - 70% of Helper wage rate
- 2nd year on the job - 80% of Helper wage rate
- 3rd year on the job - 90% of Helper wage rate
- All helpers receive full fringe benefit rate.

Effective Dates:

12/01/2023

Rate	Fringe	Total
36.28	33.49	69.77

CLASSIFICATIONS:

Helper (4th year helper)

Effective Dates:

12/01/2023

Rate	Fringe	Total
46.25	33.49	79.74

CLASSIFICATIONS:

Driller

Effective Dates:

12/01/2023

Rate	Fringe	Total
52.66	33.49	86.15

CLASSIFICATIONS:

Foreman

HEAVY & GENERAL LABORERS - NORTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, Warren

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$5.00/hr
- other Hazardous Waste site: + \$1.00/hr

Effective Dates:

03/01/2023

Rate	Fringe	Total
47.55	35.73	83.28

CLASSIFICATIONS:

"D" Rate:

basic, landscape, asphalt, slurry seal, or railroad track laborer; utility meter installer; flagman; salamander tender; pitman; dumpman; rakers or tampers on cold patch work; wrappers or coaters of pipe; waterproofer; timberman; wagon drill or drill master helper; powder carrier; magazine tender; signal man; power buggy operator; tree cutter; operator of basic power tools

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.25	35.73	83.98

CLASSIFICATIONS:

"C" Rate:

pipe layer; laser man; conduit or duct line layer; operator of jack hammer, chipping hammer, pavement breaker, concrete cutter, asphalt cutter, sheet hammer, or walk-behind saw cutter; sandblaster; acetylene cutting or burning; wagon drill, directional drill, or hydraulic drill operator; drill master; core driller; traffic control coordinator; asphalt raker or lute man

HEAVY & GENERAL LABORERS - NORTH **Rates Expiration Date :**

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.50	35.73	84.23

CLASSIFICATIONS:

"B" Rate:

concrete finisher; setter of brick or stone pavers; stone cutter; form setter; manhole, catch basin, or inlet builder; asphalt screedman; rammer; hardscaping; gunite nozzle man

Effective Dates:

03/01/2023

Rate	Fringe	Total
52.05	35.73	87.78

CLASSIFICATIONS:

"A" Rate:

blaster

Effective Dates:

03/01/2023

Rate	Fringe	Total
51.80	35.73	87.53

CLASSIFICATIONS:

"FOREMAN" Rate:

labor foreman, asphalt foreman, drill foreman, pipe foreman, grade foreman, finisher foreman, concrete foreman

Effective Dates:

03/01/2023

Rate	Fringe	Total
52.80	35.73	88.53

CLASSIFICATIONS:

"GENERAL FOREMAN" Rate

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$5.00/hr
- other Hazardous Waste site: + \$1.00/hr

Effective Dates:

03/01/2023

Rate	Fringe	Total
47.55	35.73	83.28

CLASSIFICATIONS:

basic, landscape, or railroad track laborer; utility meter installer; flagman; salamander tender; pitman; dumpman; rakers or tampers on cold patch work; wrappers or coaters of pipe; waterproofers; tree cutter, timberman

Effective Dates:

03/01/2023

Rate	Fringe	Total
47.55	35.73	83.28

CLASSIFICATIONS:

wagon drill or drill master helper; powder carrier; magazine tender; signal man

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date :**

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.25	35.73	83.98

CLASSIFICATIONS:

pipe layer; laser man; conduit or duct line layer; operator of jack hammer, chipping hammer, pavement breaker, concrete cutter, asphalt cutter, sheet hammer, or walk-behind saw cutter; sandblaster; acetylene cutting or burning

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.25	35.73	83.98

CLASSIFICATIONS:

wagon or directional drill operator; drill master

Effective Dates:

03/01/2023

Rate	Fringe	Total
52.05	35.73	87.78

CLASSIFICATIONS:

blaster

Effective Dates:

03/01/2023

Rate	Fringe	Total
51.80	35.73	87.53

CLASSIFICATIONS:

labor foreman, drill foreman, pipe foreman, grade foreman, finisher foreman, concrete foreman

Effective Dates:

03/01/2023

Rate	Fringe	Total
52.80	35.73	88.53

CLASSIFICATIONS:

general foreman

TERRITORY
ENTIRE STATE

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date :**

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.50	35.73	84.23

CLASSIFICATIONS:

concrete finisher; setter of brick or stone pavers; stone cutter; form setter; manhole, catch basin, or inlet builder; rammer; gunite nozzle man

PIPELINE - MAINLINE TRANSMISSION Rates Expiration Date :

These rates apply to the following: welding on Transportation Mainline pipe lines (cross-country pipe lines, or any segments thereof, transporting coal, gas, oil, water or other transportable materials, vapors or liquids, including portions of such pipe lines within private property boundaries up to the final metering station or connection - the point where a valve, consumer connection, or town border station divides mainline transmission lines or higher pressure lateral and branch lines from lower pressure distribution systems).

PER DIEM PAYMENT:

In addition to the total wage rate paid for each craft, the following per diem (per day) amounts must also be paid - Pipeline Journeyman: \$80.50; Pipeline Journeyman Welder: \$140.50; and Pipeline Helper: \$64.50. Note: in order to receive the per diem payment an employee must work a minimum of 8 hours in a 24 hour period.

NOTES:

- Journeymen employed as "stringer bead" welders and journeymen who are regularly employed as "hot-pass" welders shall receive \$1.00 per hour more than other journeymen.
- Welders running "stringer bead" or "hot-pass" on "cutouts" or "tie-ins" on a production basis shall be paid \$1.00 per hour above the journeymen rate.
- Whenever a welder helper is employed using a power buffer or power grinder immediately behind the stringer bead and/or hot-pass welders, and the pipe gang is set on a production basis, the helper shall be paid \$2.00 per hour above the helper rate.
- If back welding is performed inside a pipe under either or both of the following conditions, the welder engaged in the welding will receive \$3.00 per hour above the regular rate for the job only for the days on which such back welding is performed:
 - The employer elects, as a regular procedure, to back weld each line-up. This condition is not intended to apply to occasional back welding performed by the pipe gang to repair a bead, to rectify a "high-lo" condition or wall thickness, etc.
 - A welder is required to back weld a completed weld behind the firing line.
- If the welder helper is required to go inside the pipe for the purpose of brushing, buffing and grinding the weld, they shall receive a wage rate \$1.00 per hour above the regular helper rate for the days involved.
- Welders working on "hot work" shall be paid \$2.00 per hour above the regular rate for each day engaged in such work. "Hot work" is defined as work on lines in service where there is the danger of fire or explosion.

The regular workday shall be 8 hours, between 8:00 AM and 4:30 PM.

OVERTIME:

Hours in excess of 8 per day, and all hours on Sundays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day. Sunday holidays observed the following Monday.

Effective Dates:

07/01/2023

Rate	Fringe	Total
57.34	34.70	92.04

CLASSIFICATIONS:

Pipeline Journeyman Welder

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PIPELINE - MAINLINE TRANSMISSION Rates Expiration Date :

Effective Dates:

07/01/2023

Rate	Fringe	Total
57.34	34.70	92.04

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

07/01/2023

Rate	Fringe	Total
33.84	24.32	58.16

CLASSIFICATIONS:

Pipeline Helper

PIPELINE - GAS DISTRIBUTION **Rates Expiration Date :**

These rates apply to the following: welding on gas line distribution systems (that portion of the gas distribution system placed in streets, roads, subways, tunnels, viaducts, highways and easements which serves the users of gas).

SHIFT DIFFERENTIALS:

An "irregular" shift may start any time from 5:00 PM to 12:00 AM, Monday through Friday, and shall receive an additional 15% of the regular rate per hour, inclusive of benefits.

OVERTIME:

Hours in excess of forty per week, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day. Sunday holidays observed the following Monday.

Effective Dates:

11/01/2023

Rate	Fringe	Total
64.70	31.84	96.54

CLASSIFICATIONS:

Pipeline Journeyman Welder

Effective Dates:

11/01/2023

Rate	Fringe	Total
64.70	31.84	96.54

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

11/01/2023

Rate	Fringe	Total
41.00	23.56	64.56

CLASSIFICATIONS:

Pipeline Helper

ASPHALT LABORERS- NORTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, Warren

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$5.00/hr
- other Hazardous Waste site: + \$1.00/hr

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

Effective Dates:

03/01/2023

Rate	Fringe	Total
51.80	35.73	87.53

CLASSIFICATIONS:

Asphalt Foreman

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.50	35.73	84.23

CLASSIFICATIONS:

Asphalt Screedman

Effective Dates:

03/01/2023

Rate	Fringe	Total
48.25	35.73	83.98

CLASSIFICATIONS:

Asphalt Raker or Lute Man

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PREVAILING WAGE RATE DETERMINATION

ASPHALT LABORERS- NORTH Rates Expiration Date :

Effective Dates:

03/01/2023

Rate	Fringe	Total
47.55	35.73	83.28

CLASSIFICATIONS:

Asphalt Laborer

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date :**

Electrician-Utility Work (North)

(For apprentice rates refer to Electrician-Utility Work (North) in any county rate package).

These rates apply to work contracted for by the following utility companies:

Public Service Electric & Gas Co. of NJ, GPU Energy, Borough of Madison Electric Department, Sussex Rural Electric Cooperative, Rockland Utilities, and Butler Municipal Electric Co.

These rates do not apply to work on substations or switching stations.

For Utility work contracted for by a utility company other than those listed above or those listed under "Electrician-Utility Work (South), see the "Outside Commercial Rates" for the county in which the jobsite is located.

* FOR OUTSIDE COMMERCIAL RATES PLEASE SEE COUNTY RATES

The regular workday is 8 hours, between 6:00 AM and 6:00 PM.

FOR EMERGENCY WORK ONLY: (emergency work is defined as work caused by storm, catastrophe, act of god, and circumstances beyond the control of the employer)-all hours of work shall be paid at double the hourly rate.

SHIFT DIFFERENTIALS:

Shift work must run for a minimum of 5 consecutive workdays.

2nd shift (between the hours of 4:30 PM and 1:00 AM): 8 hours of work + 17.3% of the regular rate, inclusive of benefits.

3rd shift (between the hours of 12:30 AM and 9:00 AM): 8 hours of work + 31.4% of the regular rate per hour, inclusive of benefits.

OVERTIME:

Hours in excess of 8 per day, or before or after the regular workday Monday through Friday, that is not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the hourly rate, inclusive of benefits.

Four 10-hour days may worked, at straight time, between 6:00 AM and 6:00 PM, Monday through Thursday.

RECOGNIZED HOLIDAYS:

New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day and Christmas Day, or day on which they are legally observed.

Effective Dates:

	12/03/2023		12/01/2024
Rate	Fringe	Total	Total
62.94	43.42	106.36	109.56

CLASSIFICATIONS:

Chief Lineman

Effective Dates:

	12/03/2023		12/01/2024
Rate	Fringe	Total	Total
59.38	40.97	100.35	103.36

CLASSIFICATIONS:

Journeyman Lineman

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date :**

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
59.38	40.97	100.35	103.36

CLASSIFICATIONS:

Special License Operator

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
58.79	40.56	99.35	102.32

CLASSIFICATIONS:

Transit Man

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
57.00	39.33	96.33	99.21

CLASSIFICATIONS:

Line Equipment Operator

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
49.88	34.41	84.29	86.81

CLASSIFICATIONS:

Dynamite Man

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
74.23	51.21	125.44	129.20

CLASSIFICATIONS:

General Foreman

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
68.29	47.12	115.41	118.85

CLASSIFICATIONS:

Assistant General Foreman

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date :**

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
66.51	45.89	112.40	115.76

CLASSIFICATIONS:

Line Foreman

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
48.10	33.18	81.28	83.72

CLASSIFICATIONS:

Street Light Mechanical Leader

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
45.72	31.54	77.26	79.58

CLASSIFICATIONS:

Groundman Winch Operator

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
45.72	31.54	77.26	79.58

CLASSIFICATIONS:

Groundman Truck Operator

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
45.13	31.13	76.26	78.55

CLASSIFICATIONS:

Street Light Mechanic

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
45.13	31.13	76.26	78.55

CLASSIFICATIONS:

Line Equipment Mechanic

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date :**

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
38.60	26.63	65.23	67.17

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
35.63	24.58	60.21	62.02

CLASSIFICATIONS:

Groundman 1st Year

Effective Dates:

12/03/2023			12/01/2024
Rate	Fringe	Total	Total
58.79	40.56	99.35	102.32

CLASSIFICATIONS:

Line Equipment Foreman

ELECTRICIAN- UTILITY WORK (SOUTH) **Rates Expiration Date :**

Electrician-Utility Work (South)

(For apprentice rates refer to Electrician-Utility Work (South) in any county rate package).

These rates apply to work contracted for by the following utility company:

Atlantic City Electric.

These rates do not apply to work on substations or switching stations.

For utility work contracted for by a utility company other than the one listed above or those listed under "Electrician-Utility Work (North), see the "Outside Commercial Rates" for the county in which the jobsite is located.

* FOR OUTSIDE COMMERCIAL RATES PLEASE SEE COUNTY RATES

The regular workday is 8 hours, between 7:00 AM and 4:30 PM.

FOR EMERGENCY WORK ONLY: (emergency work is defined as work caused by storm, catastrophe, act of god, and circumstances beyond the control of the employer)- all hours of work shall be paid at double the hourly rate.

SHIFT DIFFERENTIALS:

Shift work must run for a minimum of 5 consecutive workdays.

When two (2) or three (3) shifts are worked the following shall apply:

1st shift (between the hours of 8:00 AM and 4:30 PM)

2nd shift (between the hours of 4:30 PM and 12:30 AM): 8 hours of work + 10% of the regular rate of pay for 7.5 hours worked.

3rd shift (between the hours of 12:30 AM and 8:00 AM): 8 hours of work + 15% of the regular rate of pay for 7 hours worked.

OVERTIME:

Hours in excess of 8 per day, or before or after the regular workday Monday through Friday, that is not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate. All hours on Sundays and Holidays shall be paid double the hourly rate.

Four 10-hour days may be worked, at straight time, between 6:00 AM and 6:00 PM, Monday through Thursday with Friday used as a make-up day.

RECOGNIZED HOLIDAYS:

New Year's Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day or on days celebrated.

WORKING RULES:

There shall be a Foreman in charge of each work crew. No crews are to exceed twelve (12) men, including Foremen.

There shall be a General Foreman designated for transmission work when three (3) or more crews are on the same job and for distribution work where there are more than twenty (20) employees on site.

A small job crew shall consist of five (5) or less employees, one (1) of the Journeyman Linemen in the crew shall be designated as a Small Job Foreman.

Work performed from ladders and/or mechanical lift equipment shall be the work of Linemen and/or Apprentices.

On new construction, fitting and framing poles, towers or structures may be done by Journeymen and/or Apprentices. Groundmen may assist, but may not perform any work which would be performed by Linemen if assembled in the air.

There shall be a Journeyman Lineman in each pole setting, erection, grounding, wire and cable-pulling crew of more than three (3) men.

Effective Dates:

12/03/2023

Rate	Fringe	Total
69.38	57.15	126.53

CLASSIFICATIONS:

General Foreman

ELECTRICIAN- UTILITY WORK (SOUTH) **Rates Expiration Date :**

Effective Dates:

12/03/2023

Rate	Fringe	Total
61.79	52.45	114.24

CLASSIFICATIONS:

Foreman

Effective Dates:

12/03/2023

Rate	Fringe	Total
58.54	50.46	109.00

CLASSIFICATIONS:

Small Job Foreman

Effective Dates:

12/03/2023

Rate	Fringe	Total
54.20	47.78	101.98

CLASSIFICATIONS:

Heavy Equipment Operator

Effective Dates:

12/03/2023

Rate	Fringe	Total
54.20	47.78	101.98

CLASSIFICATIONS:

Cable Splicer

Effective Dates:

12/03/2023

Rate	Fringe	Total
54.20	47.78	101.98

CLASSIFICATIONS:

Journeyman Lineman

Effective Dates:

12/03/2023

Rate	Fringe	Total
54.20	47.78	101.98

CLASSIFICATIONS:

Journeyman Welder

ELECTRICIAN- UTILITY WORK (SOUTH) **Rates Expiration Date :**

Effective Dates:

12/03/2023

Rate	Fringe	Total
54.20	47.78	101.98

CLASSIFICATIONS:

Journeyman Painter

Effective Dates:

12/03/2023

Rate	Fringe	Total
43.36	41.09	84.45

CLASSIFICATIONS:

Light Equipment Operator

Effective Dates:

12/03/2023

Rate	Fringe	Total
37.94	37.71	75.65

CLASSIFICATIONS:

Groundman Truck Driver

Effective Dates:

12/03/2023

Rate	Fringe	Total
35.23	36.05	71.28

CLASSIFICATIONS:

Groundman 3rd Year

Effective Dates:

12/03/2023

Rate	Fringe	Total
32.52	34.37	66.89

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

12/03/2023

Rate	Fringe	Total
29.81	32.69	62.50

CLASSIFICATIONS:

Groundman 1st Year

TERRITORY
ENTIRE STATE

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date :

Effective Dates:

12/03/2023

Rate	Fringe	Total
23.85	29.03	52.88

CLASSIFICATIONS:

Flagman

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS Rates Expiration Date :

****THESE RATES APPLY TO CONSTRUCTION ON NEW TRANS HUDSON TUNNELS ONLY****

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$3.00/hr
- other Hazardous Waste site: + \$1.00/hr

Effective Dates:

03/01/2023

Rate	Fringe	Total
75.46	35.73	111.19

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

03/01/2023

Rate	Fringe	Total
75.01	35.73	110.74

CLASSIFICATIONS:

Heading Foreman, Shaft Foreman, Rod Foreman, Electrical Foreman, Rigging Foreman

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS **Rates Expiration Date :**

Effective Dates:

03/01/2023

Rate	Fringe	Total
74.26	35.73	109.99

CLASSIFICATIONS:

Iron Foreman, Caulking Foreman, Form Foreman, Cement Finishing Foreman, Concrete Foreman, Track Foreman, Clean-up Foreman, Grout Foreman

Effective Dates:

03/01/2023

Rate	Fringe	Total
78.01	35.73	113.74

CLASSIFICATIONS:

Blaster

Effective Dates:

03/01/2023

Rate	Fringe	Total
73.43	35.73	109.16

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

03/01/2023

Rate	Fringe	Total
72.91	35.73	108.64

CLASSIFICATIONS:

Skilled Men (including Caulker, Powder Carrier, all other skilled men)

Skilled Men (including Miner, Drill Runner, Iron Man, Conveyor Man, Maintenance Man, Safety Miner, Rigger, Block Layer, Cement Finisher, Rod Man)

Effective Dates:

03/01/2023

Rate	Fringe	Total
72.68	35.73	108.41

CLASSIFICATIONS:

Semi-Skilled Men (including Bell or Signal Man top or bottom, Form Worker & Mover, Concrete Worker, Shaft Man, Tunnel Laborer, Caulker's Helper, all other semi-skilled)

Semi-Skilled Men (including Miner's Helper, Chuck Tender, Track Man, Nipper, Brake Man, Derail Man, Cable Man, Hose Man, Gravel Man, Form Man)

TERRITORY
ENTIRE STATE

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT
PREVAILING WAGE RATE DETERMINATION

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS Rates Expiration Date :

Effective Dates:

03/01/2023

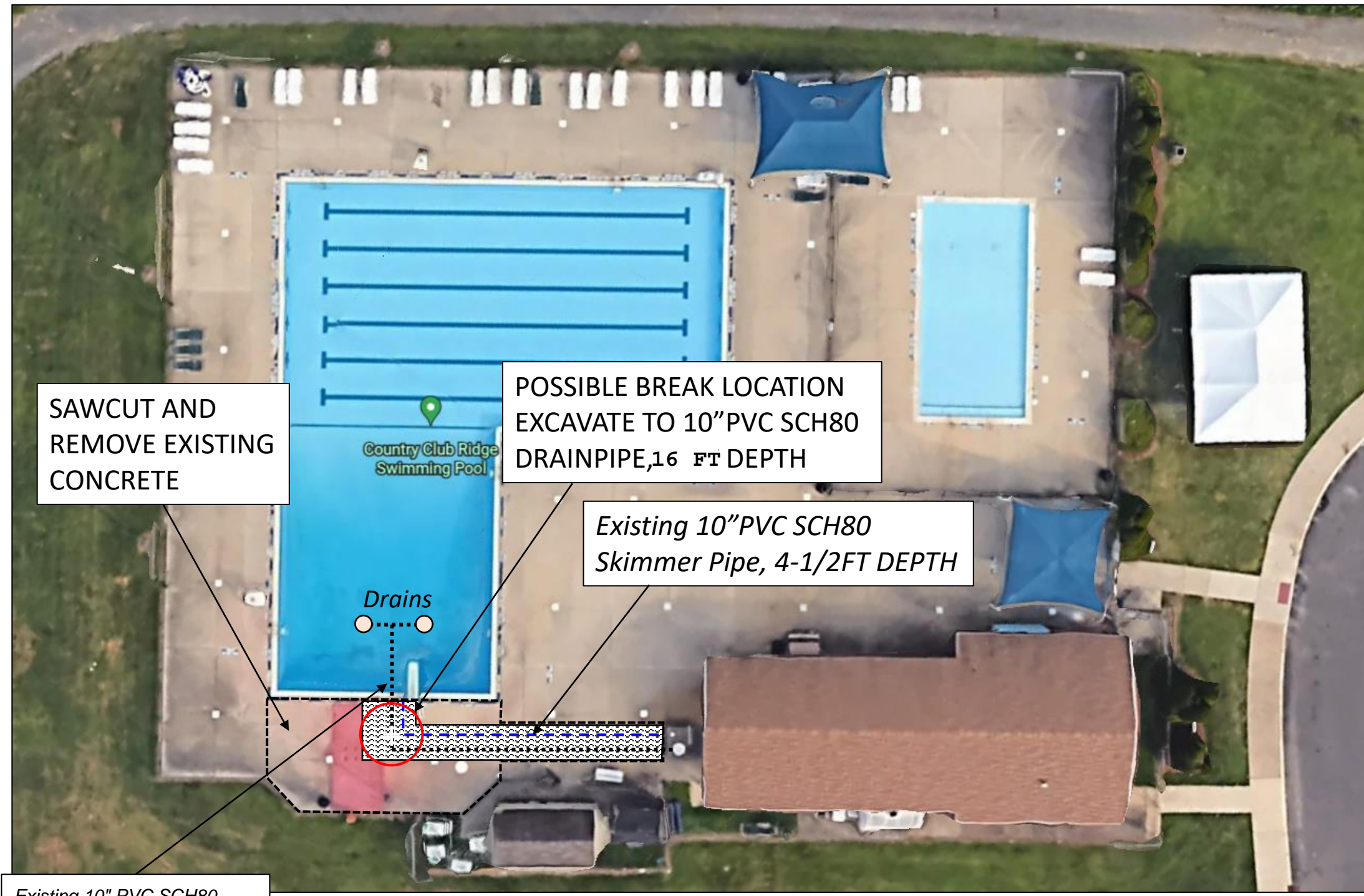
Rate	Fringe	Total
72.08	35.73	107.81

CLASSIFICATIONS:

All others (including Powder Watchman, Change House Attendant, Top Laborer, Job Steward)

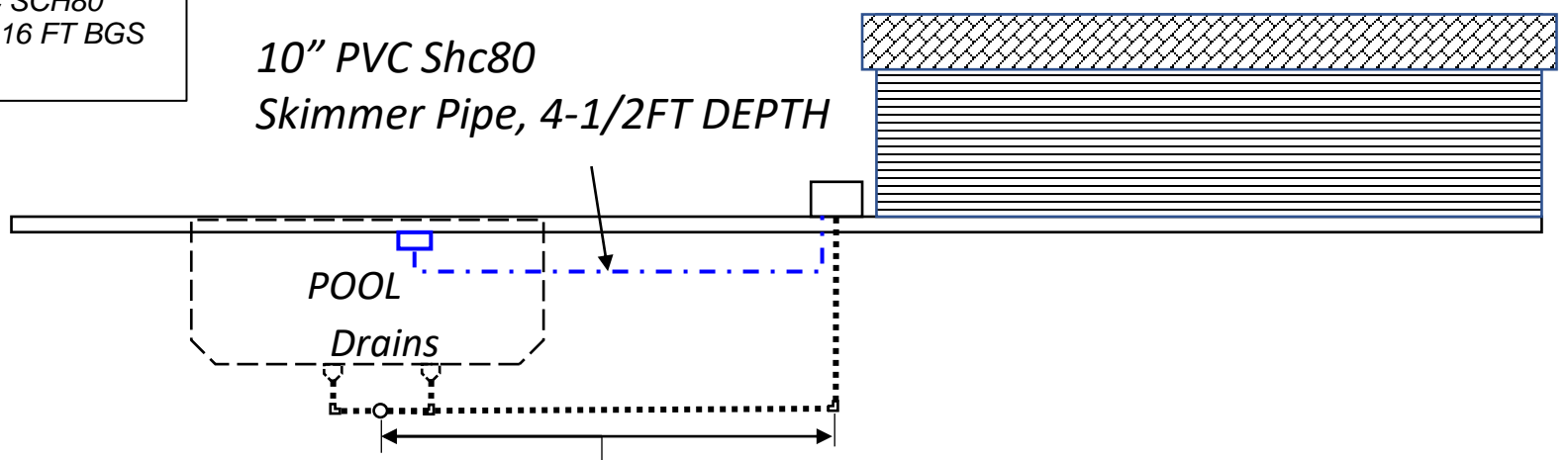
APPENDIX PLAN

Review Plan Only
Not For Construction



Existing 10" PVC SCH80
Deep Drainpipe, 16 FT BGS

10" PVC Sch80
Skimmer Pipe, 4-1/2FT DEPTH



REPLACE 10" PVC SCH80 - 50 LF

**Country Club Pool
Drainpipe Repairs**

NO.	DATE	REVISIONS

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PROJECT: WTCEX22033
DATE: 01/23/2023
DRAWN BY: NTS
CHECKED BY: FTH
APPROVED BY:

APPENDIX GEOTECHNICAL REPORT

June 27, 2023

WTCEX22031

Mr. Dwayne Harris, Township Manager
Township of Willingboro
1 Rev Dr Martin Luther King Jr Dr
Willingboro, NJ 08046

**Re: Geotechnical Engineering Services
Country Club Pool Leak Investigation
Willingboro Township, New Jersey**

Dear Mr. Harris:

Pennoni Associates Inc. (Pennoni) is pleased to submit this report summarizing our geotechnical engineering services for the anticipated excavation support associated with the Country Club Ridge Swimming Pool leak investigation project located in Willingboro Township, New Jersey. This report provides a brief background on the project, a summary of our field exploration, laboratory testing performed, and recommendations regarding temporary excavation support for the anticipated excavation. These services were performed in general accordance with Pennoni's scope of work provided in our proposal dated April 21, 2023, and your subsequent notice to proceed via electronic mail on April 24, 2023.

To assist with the performance of our services we reviewed the following documents:

- A drawing sheet illustrating the repair location titled, "Country Club Pool – Drainage Repairs," prepared by Pennoni Associates, Inc., dated January 23, 2023;
- Electronic Mail correspondence indicating notice to proceed for the geotechnical investigation titled, "Willingboro Country Club Pool – Proposed Scope of Services," submitted by Dwayne Harris of Willingboro Township, dated April 24, 2023;
- An interactive topographic map titled, "Contours of Burlington County, NJ (5 ft)," prepared by Burlington County, New Jersey and Esri, developed in 2005; and
- A geotechnical report titled, "Geotechnical Engineering Services – Willingboro Fire Hall," prepared by Pennoni Associates, Inc. dated November 26, 2013, revised October 5, 2015.

BACKGROUND

Previous investigation by Pennoni identified a leak of up to 20,000-gallons per day from the Country Club Ridge Swimming Pool located in Willingboro, New Jersey, as indicated on the attached Site Location Sketch, SL-1. The investigation to date has indicated that the leak is emanating from the pool's deep drainpipe. The drainpipe consists of a 10-inch schedule 80 PVC pipe which exits from the deep end of the pool towards the area of the former diving platform, whereupon it turns at an apparent 90-degree angle and runs towards the pool filter house. The depth of the pipe is believed to be approximately 16 to 18 feet below the existing ground surface.

Observations made during survey activities and subsequent investigations suggest that the depth to groundwater in the area of the deep drainpipe is 10 to 12 feet beneath the ground surface. Specific evidence includes the observation of approximately 3 to 4 feet of standing water in the pool after it had been emptied and left to sit overnight. Further, the surge tank located adjacent to the pool was observed with standing water approximately 10 feet beneath the ground surface. Apparent groundwater seepage was also noted through structural cracks of the pool wall.

The proposed excavation is generally located within an existing concrete paved area adjacent to the deep end of the pool. The anticipated excavation area is bordered by the existing pool to the northwest followed by open grass covered area and single-family residential housing to the north and west, open grass covered area followed by the Country Club Ridge School and associated basketball courts to the southeast, and a bituminous paved parking area followed by Windover Lane to the east. Based on available topographic information as referenced above the site generally appears to slope downwards from east to southwest ranging from elevations 70 to 60 feet, Mean Sea Level (MSL). The ground surface at the anticipated excavation location is estimated at approximately 70 feet (MSL).

Based on the above referenced drawing, the drainpipe to be repaired as well as a 8-inch PVC SCH80 Skimmer Pipe are in the general area of the proposed excavation. The drainpipe to be repaired is anticipated approximately 16 to 18 feet (elevation 54 to 52 feet, MSL) below the existing ground surface, and the existing skimmer pipe is estimated approximately 4.5 feet (elevation 65.5 feet, MSL) below the existing ground surface. Based on the approximate depth of the existing drainpipe, temporary excavations on the order of up to 20 feet are anticipated. Additional existing utilities observed at the project site include (but may not be limited to) communications lines and electric lines.

FIELD EXPLORATION

One Standard Penetration Test (SPT) boring, labeled "B-1" was performed on May 15, 2023, as shown on the attached Testing Location Sketch, TL-1. The test boring was performed to a depth of approximately 30 feet below the existing ground surface (termination elevation of 40 feet, MSL). Sampling was performed in general accordance with ASTM D 1586. Continuous sampling was performed to approximately 16 feet below the existing ground surface and then in 5-foot intervals until the termination depth.

At the conclusion of the drilling, the test borings were backfilled with the soil cuttings with excess spoils mounded over the borehole. Settlement and softening of the backfilled borehole may occur resulting in a depression or hole at the ground surface. SPT borings were performed by CGC Geoservices using a track mounted drill rig with 3¼ inch hollow stem augers and an automatic hammer. Our T. Thomson, Jr. PhD, PE, D.GE, LEED AP directed the field work and N. Fisher, provided full-time observation of the test drilling operations. The Testing Location Sketch and test boring log are attached herein.

LABORATORY TESTING PROGRAM

Following the field exploration, the soil samples were delivered to our laboratory for visual classification and testing. The laboratory program consisted of the following:

- Moisture Content (ASTM D 2216) 2 tests
- Sieve Analysis (ASTM D 6913) 2 tests
- Atterberg Limits (ASTM D 4318) 1 test

Samples for testing were selected by Pennoni's geotechnical engineer. Results of the laboratory testing are attached herein.

SITE CHARACTERISTICS

Geology

According to the interactive 'Mineral Resources Online Spatial Data' map prepared by USGS, the project site is located within the Merchantville Formation of the Coastal Plain Province. The Merchantville Formation is

described as sand, glauconite, locally has high quartz content, very clayey and silty, massive to thick-bedded, grayish-olive-green to dark-greenish-gray.

According to the USDA Web Soil Survey mapping, the site is located within Urban land (URSACB). URSACB generally consists of loamy sand and clay loam. Urban land generally consists of disturbed land including developed structures and/or site pavements. The anticipated depths to the water table and a restrictive feature were not indicated.

Subsurface Characteristics

Subsurface stratigraphy encountered within the boring generally consists of a surficial layer of topsoil underlain by loose to medium dense sand with varying amounts of silt. The sand layer was underlain by a stiff to very stiff clay to silty clay with varying amounts of sand. The clay was bisected by a dense sand layer with varying amounts of silt/clayey silt and gravel. The boring was ultimately terminated within the clay stratum. For descriptive purposes, the soil layers can be classified as shown in Table 1 below.

Table 1: Subsurface Stratigraphy

Stratum	Approximate Thickness (ft)	Description	USCS Classification
T	0.25	Topsoil	--
A	6.0	Brown fine to medium to coarse SAND, little to some silt, trace fine gravel (loose to medium dense, dry to moist)	SM
B ^[1]	2.0 - 4.0	Orange to brown to black CLAY to Silty CLAY, trace to some fine to medium to coarse sand, trace fine gravel (stiff to very stiff, moist to wet)	CH
C	4.0	Brown fine to medium to coarse SAND, little to some silt to clayey silt, trace to little fine gravel (dense, moist to wet)	SP to SM

[1] Stratum B was not fully penetrated in Boring "B-1."

Groundwater

Observations for groundwater were made in the boring during and immediately after the completion of the drilling. Groundwater was observed at approximately 10 feet below the ground surface during drilling, and at approximately 20 feet immediately following the completion of the drilling, before augers were removed (elevations ranging from 60 to 50 feet, MSL). Following the removal of the augers, a cave-in depth of approximately 5 feet (elevation 65 feet, MSL) was observed. Groundwater observations are for the times indicated and may not be indicative of seasonal variations in the groundwater levels. Seasonal variations on the order of several feet should be anticipated.

As noted in the Background section above, the observations in the SPT boring generally agree with observations noted in the field during previous site visits. Based on this information, a groundwater table depth of 10 feet (elevation 60 feet, MSL) below the existing ground surface is to be assumed.

SHORING ANALYSIS AND DESIGN

Lateral Earth Pressure Parameters

Temporary excavation support will be necessary to perform the anticipated drainpipe repairs. All excavation bracing has been designed and should be constructed in accordance with OSHA Earthwork standards. The

parameters presented below have been used to estimate lateral earth pressures in design of temporary shoring.

Table 2: Lateral Earth Pressure Parameters

Parameter	Stratum A	Stratum B (Equivalent Clay)	Stratum C
Unit Weight, pcf	115	100 (100)	125
Effective Unit Weight, pcf	62.6	47.6 (47.6)	72.6
Angle of Internal Friction, degrees	29	(25)	36
Cohesion, psf	--	1,000 (0)	--
K_a	0.35	1.00 (0.41)	0.26
K_o	0.52	1.00 (0.28)	0.41
K_p	2.88	1.00 (2.46)	3.85

Sheet Pile Shoring

Pennoni utilized CivilTech Software’s Shoring Suite Version 8.18c to perform our analysis. Shoring Suite is a suite of modules used for analyzing various types of shoring. We utilized the Earth Pressure and Shoring modules in our analysis for sheet pile shoring. The soil strata depths, soil parameters, and the groundwater depth as indicated in the report above were input into the Earth Pressure Module to determine the resulting lateral earth pressures (active and passive) which were then imported into the shoring module.

The analysis was performed for the maximum anticipated excavation depth of 20 feet and includes bracing of the excavation. Surcharge loading considered for the design included loading from the existing storage shed. Structural loading information regarding the shed was not available at the time of this report. Loading conditions were assumed approximately 10 feet wide, 10 feet behind the anticipated shoring, and loading of 2 ksf at a depth of 2.5 feet below the ground surface. Should structural information regarding the shed become available, the surcharge loading should be re-evaluated. It is recommended that the excavated soils are to be stored in excess of 20 feet from the shoring to avoid adding additional surcharge loads to the shoring. Additionally, we recommend that no construction equipment or material be stored within 20 feet from the shoring. Should soil be stockpiled closer to the wall, additional analyses of the shoring stability will be required.

Once the loading (i.e., earth pressures and surcharge) were imported into the Shoring module, the sheet pile type PZ27 was selected, and the sheet pile properties were imported into the module from the accompanying database. This module analyzed the selected sheet pile type based on the imported loading conditions and determined a minimum embedment depth of 22 feet would be necessary for support of the excavation. Additionally, bracing in the form of struts was modeled at 3 feet and 12 feet below the top of the wall. Calculations indicate allowable lateral forces of 2.5 and 14.7 kip per linear foot are required for the struts against each wall, respectively.

In addition to the sheet pile shoring and strutting for the excavation, it is recommended that additional bracing be installed to prevent undermining of the existing pool, the filter house, and surrounding utility structures.

The general sheet pile shoring design is illustrated in the attached Conceptual Sheet Pile Shoring Sketch, SK-1.

Groundwater and Surface Water Management

Based on the observed groundwater during field explorations, free-standing water is anticipated during excavation to repair the drainpipe. The depth of the excavation is anticipated on the order of up to 20 feet below the existing grade and the groundwater is anticipated at a depth of 10 feet below the existing ground surface. We recommend that the groundwater be lowered to a minimum of 5 feet below the proposed excavation depths during the repair operations. Dewatering using a well point system should be adequate to maintain stable groundwater conditions during the drainpipe repairs. The contractor shall obtain the required State and Local permits associated with groundwater withdrawal/well points and discharge the groundwater in accordance with the applicable permit conditions. The drainpipe repair excavation should not be used as a detention basin or sump. During construction, surface runoff should be prevented from entering the excavation by creating soil berms or diversion swales along the perimeter if the excavation is expected to be open for a long period of time. Where ponding does occur, the water should be pumped immediately, and grades should then be established to prevent further ponding.

Existing Utilities

Existing utilities noted in the field included (but may not be limited to) a drainpipe, a skimmer pipe, communications and electric lines. Utilities within the approximate footprint of the excavation include the drainpipe and the skimmer pipe.

Earthwork

Exposed subgrades should be thoroughly proof rolled using a minimum 10-ton vibratory roller operated in static mode or a fully loaded dump truck in an attempt to identify unstable (soft, yielding, etc.) surface areas. During proof rolling any unstable area found should be stabilized by excavating and replacing those soils with suitable soil (adequately compacted, see below), by lowering the moisture content of the subgrade soils and compacting them, or by other methods (placing a geotextile and stone layer, etc.). To reduce the potential for damage to the subgrade, we recommend that construction traffic over the subgrade be kept to a minimum and dewatering remain in effect until backfilling efforts are completed. Also, site pavements and concrete for slabs on grade should be placed as soon as possible following the subgrade preparation.

Our experience indicates that the on-site sandy soils of Strata A and C may be reused for the construction, provided all organics and debris larger than 3 inches in its greatest dimension be removed prior to reuse. Due to the high plasticity nature of the Stratum B clay, this material is not suitable to be reused for the construction. Strata A and C soils were observed to contain a significant amount of fine-grained material (silts/clays). These types of soils are sensitive to moisture and may therefore require wetting or drying prior to compaction. Drying 'wet' soil is difficult during wet periods and during lower temperatures. Therefore, provisions for importing structural fill should be included in the contract documents. If necessary, granular fill should consist of well-graded material with a maximum particle size less than 3 inches, not more than 20 percent passing the No. 200 sieve and have a plasticity index (PI) not greater than 8 percent.

Fills should be placed in layers not exceeding 8 to 10 inch loose measure. This criterion might be adjusted by the geotechnical engineer in the field depending on the conditions present at the time of construction, on the compaction equipment used, and on the fill materials selected. Fills for support of slabs on grade/pavements should be compacted to at least 98 percent of the laboratory determined dry density, ASTM D 698, when small, hand-operated compaction equipment is used, and to at least 95 percent of the laboratory determined maximum dry density, ASTM D 1557, when self-propelled, heavy-duty construction equipment is used.

Construction Adjacent to Existing Structures

The drainpipe repairs will include significant dewatering as well as significant excavations to reach the pipe. Dewatering on the order of up to 15 feet will significantly reduce the effective strength of the soils in the general area of the dewatering. Reduced effective strength will likely result in settlement of the surrounding area, including in the general area surrounding the pool, the filter house, and the surrounding utility structures. During the dewatering and excavation process, the pool should be drained to a depth no greater than the groundwater table to prevent uplift. Additional bracing against the pool as well as at the extent of the excavation adjacent to the filter house is recommended to avoid undermining of the existing structure. Settlement monitoring of the existing structures close in proximity to the excavations should be considered. During the excavation process, the excavated soils should be stockpiled a minimum of 20 feet from the sheet pile shoring.

LIMITATIONS

This work has been performed in accordance with generally accepted professional practice in the fields of geotechnical and geophysical engineering. This warranty is in lieu of all other warranties either expressed or implied. Our conclusions and recommendations are based on the data revealed by this exploration. We are not responsible for any conclusions or opinions drawn from the data included herein, other than those specifically stated, nor are the recommendations presented in this report intended for direct use as construction specifications. This report is intended for use with regard to the specific project described herein; any changes in loads, structures, or locations should be brought to our attention so that we may determine how they may affect our conclusions. An attempt has been made to provide for normal contingencies, but the possibility remains that unexpected conditions may be present which we are not aware of. If additional or contradictory data are revealed in the future, we should be notified so that modifications to this report can be made, if necessary. If we do not review relevant construction documents and witness the relevant construction operations, then we cannot be responsible for any problems that may result from misinterpretation or misunderstanding of this report or failure to comply with our recommendation.

We trust that the information presented in this report is what you require at this time, and we thank you for the opportunity to assist you with this project. If you have any questions, or if you need any further assistance with this project, please contact this office at your earliest convenience.

Sincerely,

PENNONI ASSOCIATES INC.



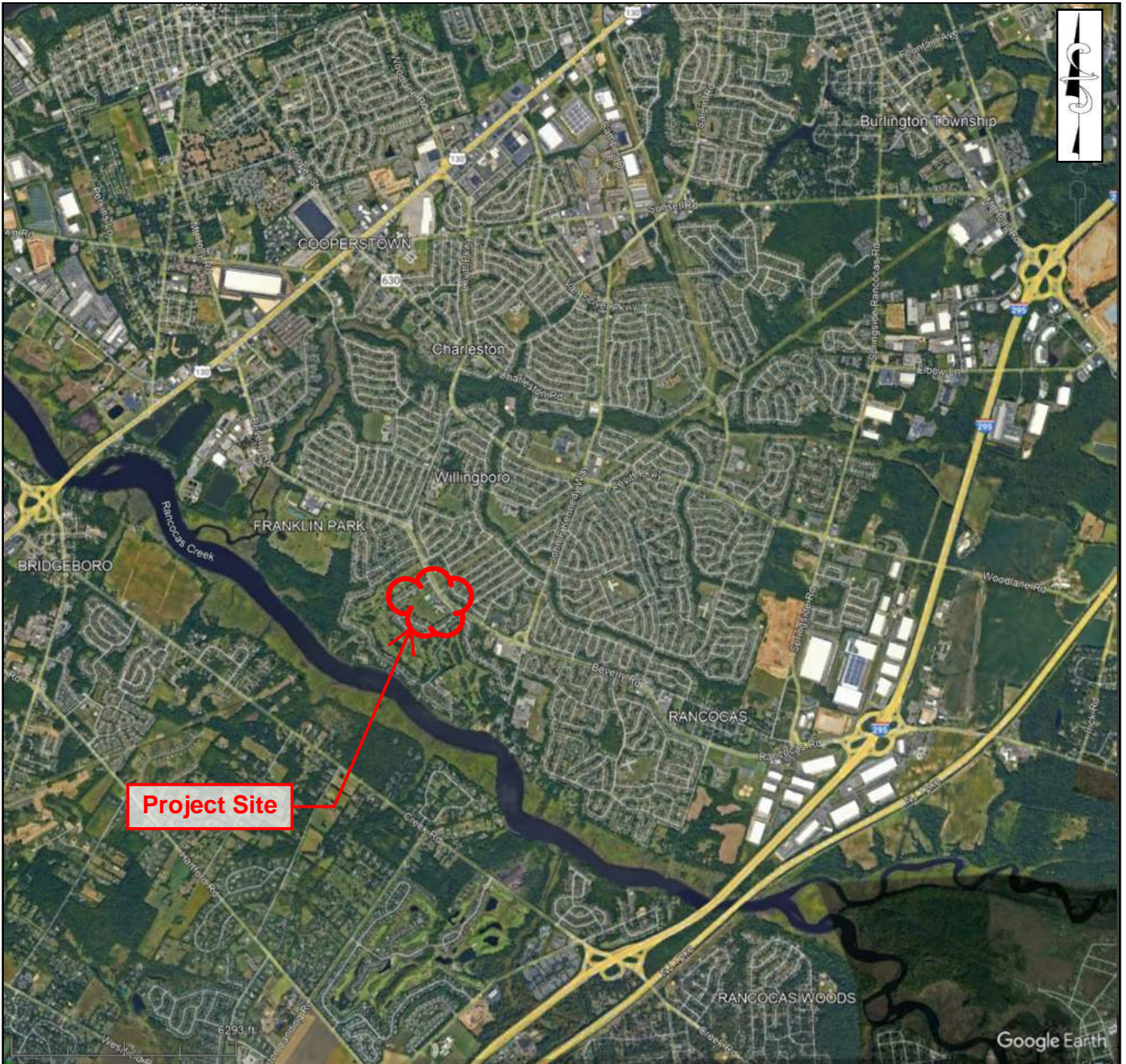
Jacqueline E. Kelley, PE (DE)
Staff Geotechnical Professional



Theodore A. Thomson, Jr., PhD, PE, DGE, LEED AP
Associate Vice President/Geotechnical Division Manager

*Attachments: Site Location Sketch, SL-1
Testing Location Sketch, TL-1
Boring Log (1 page)
Laboratory Testing Results (3 pages)
Conceptual Sheet Pile Shoring Sketch, SK-1*

Site Location Sketch



Pennoni Associates, Inc.
121 Continental Drive, Suite 207
Newark, DE 19713

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NF

CHECKED BY:

JEK

PROJECT No:

WTCEX22031

SCALE:

AS SHOWN

DATE:

6/23/2023

FIGURE No.

SL-1

COUNTRY CLUB POOL INVESTIGATION - WILLINGBORO TOWNSHIP, NJ

Testing Location Sketch



- Approximate Boring Location



Pennoni Associates, Inc.
121 Continental Drive, Suite 207
Newark, DE 19713

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FIGURE No.

TL-1

COUNTRY CLUB POOL INVESTIGATION - WILLINGBORO TOWNSHIP, NJ



TEST BORING LOG

TEST BORING B-1

PAGE 1 OF 1

NORTHING 432254.1

EASTING 381108.08

CLIENT Willingboro Township

PROJECT NAME Country Club Pool Leak Investigation

PROJECT NUMBER WTCEX22031

PROJECT LOCATION Windover Lane, Willingboro, NJ

DATE STARTED 5/15/23 COMPLETED 5/15/23

GROUND ELEVATION 70.0' +/- Mean Sea Level

DRILLING CONTRACTOR CGC Geoservices, LLC

WATER ENCOUNTERED:

DRILLING METHOD Hollow Stem Auger

▽ DURING DRILLING 10.0' / Elev 60.0'

DRILLER / HELPER Wellington / James

▼ AT END OF DRILLING 20.0' / Elev 50.0'

LOGGED BY N. Fisher CHECKED BY J. Kelley

AFTER DRILLING _____

DEPTH (ft)	SAMPLE TYPE NUMBER	RECOVERY (in.)	BLOW COUNTS	GRAPHIC LOG	STRATA	DESCRIPTION	REMARKS
0						Depth 0.3 3 in. TOPSOIL Elev. 69.8	
	S-1	14	1-5-5-6		T	2.0 Brown fine to medium SAND, little silt, trace fine gravel	Dry
	S-2	18	4-4-4-5		A	4.0 Brown fine to medium SAND, some silt	Moist
5	S-3	16	4-2-4-8			6.0 Brown fine to medium SAND, some silt, trace fine gravel	Moist
	S-4	14	4-4-5-10		B	64.0 Brown CLAY, trace fine to medium sand, trace fine gravel	Moist
	S-5	24	21-23-17-17		C	8.0 Brown medium to fine to coarse SAND, little clayey silt, trace fine gravel	Moist to wet
10	S-6	16	16-21-17-20			10.0 Brown fine to medium to coarse SAND, some silt, little fine gravel	Wet on spoon
	S-7	24	15-5-4-5			12.0 Orange CLAY, trace fine sand	Moist, mottling
15	S-8	24	3-10-18-10			14.0 Orange to brown CLAY, some fine to medium to coarse sand, little fine gravel	Wet
	S-9	24	4-4-5-6		B	18.5 Black CLAY, trace fine to medium sand, trace fine gravel	
20						23.0 Black Silty CLAY, trace fine sand	Moist
	S-10	24	6-6-5-5				
25							
	S-11	24	2-4-7-7				Wet
30							

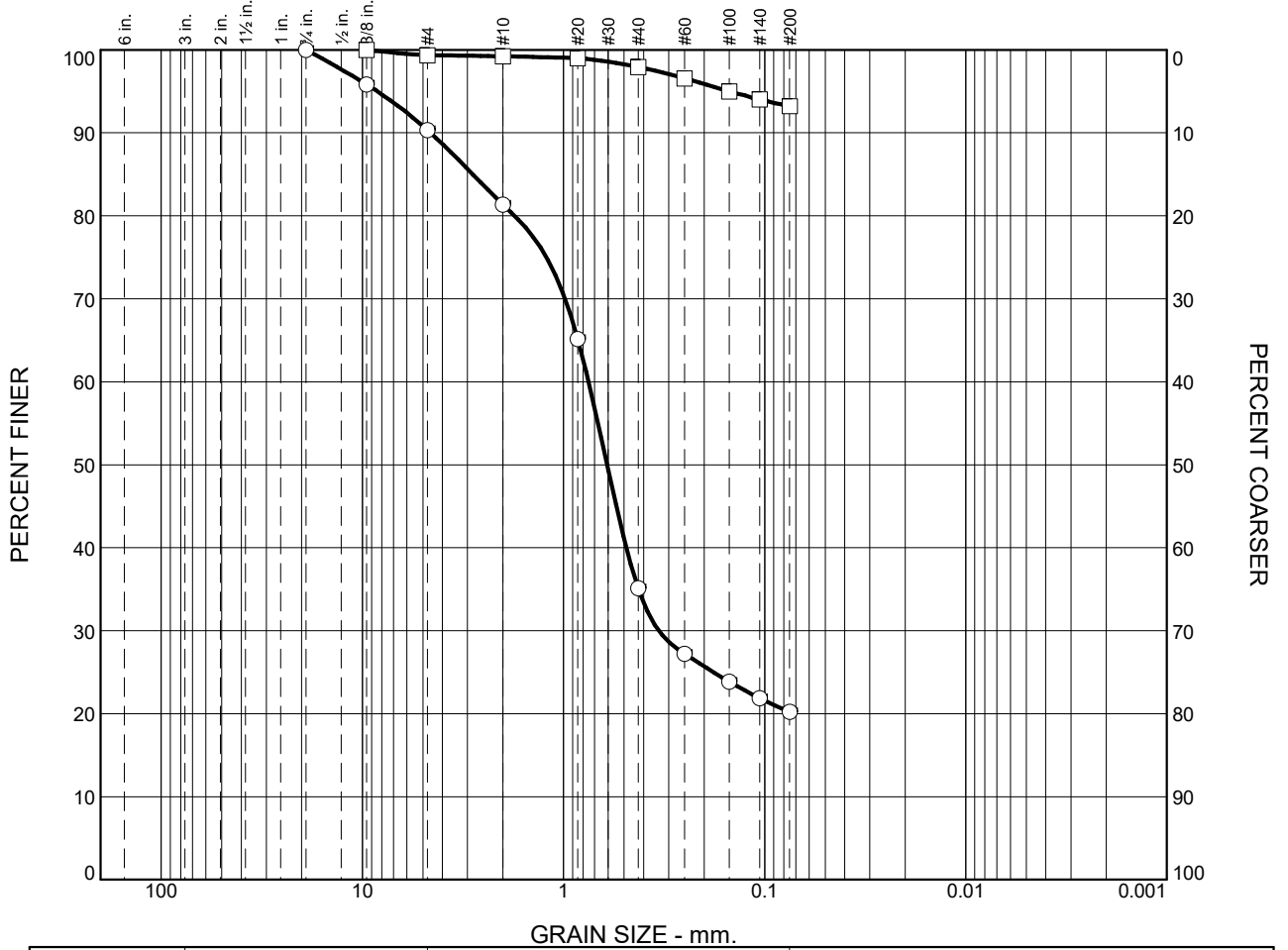
Borehole terminated at 30.0 feet.

NOTES:

Ground surface elevation estimated from an interactive topographic map titled, "Contours of Burlington, NJ (5 ft)," prepared by Burlington County, NJ and Estri, developed in 2005.

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicative of apparently identical samples.

Particle Size Distribution Report



	GRAIN SIZE - mm.							
	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○	0	0	10	9	46	15	20	
□	0	0	1	0	1	5	93	

SOIL DATA					
SYMBOL	SOURCE	SAMPLE NO.	DEPTH (ft.)	Material Description	USCS
○	B-1	S-5	8-10'	M/F/C Sand, Some Silt/Clay, Little Fine Gravel	
□	B-1	S-9	18.5-20'	Clay, Trace F/M Sand, Trace Fine Gravel	CH

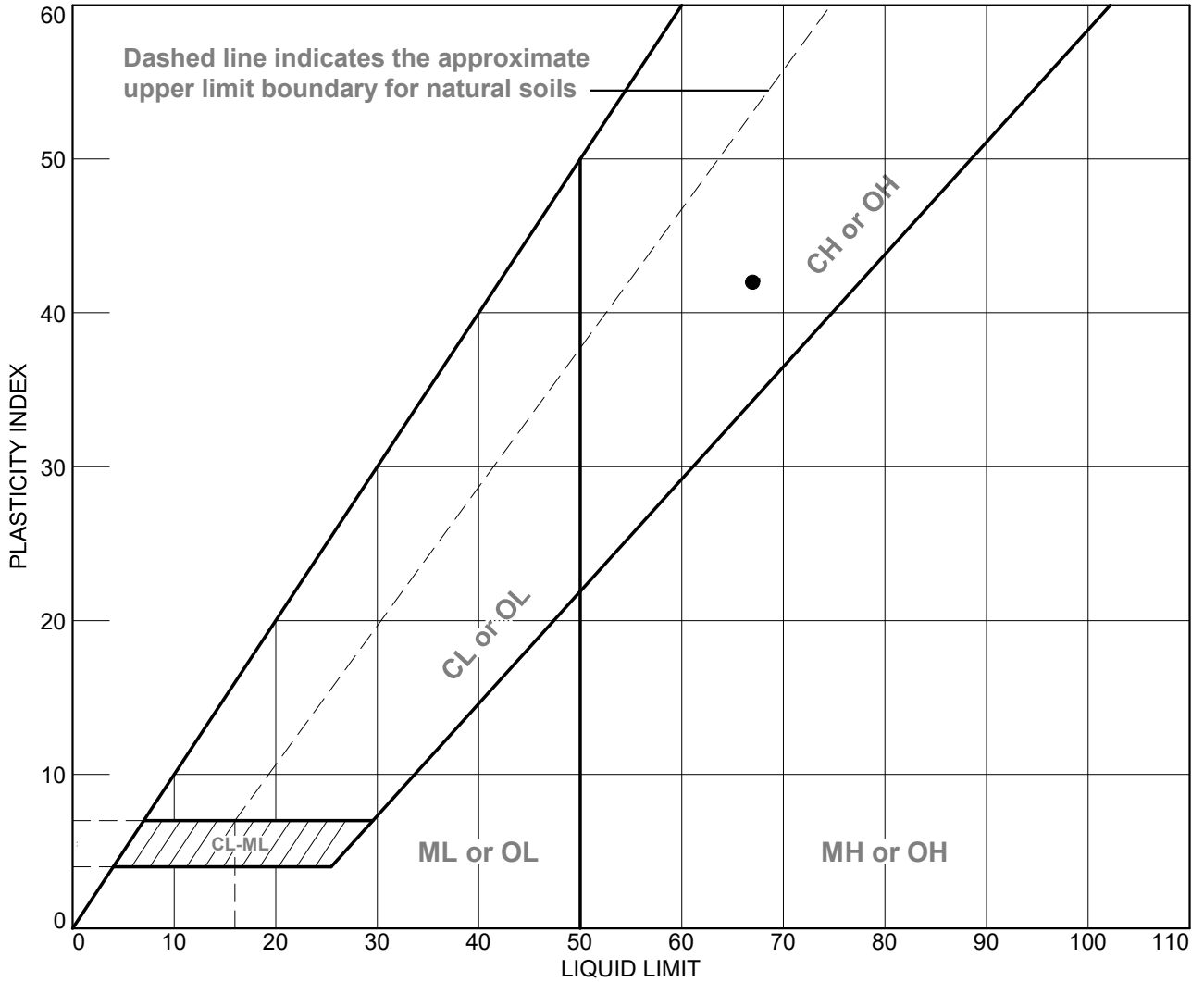
<p>PENNONI ASSOCIATES INC.</p>	<p>Client: Township of Willingboro Project: Willingboro Country Club Project No.: WTCEX-22031.01</p>
<p>Figure S-1</p>	

Tested By: MB

Checked By: MP

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicative of apparently identical s

LIQUID AND PLASTIC LIMITS TEST REPORT



SOIL DATA								
SYMBOL	SOURCE	SAMPLE NO.	DEPTH	NATURAL WATER CONTENT (%)	PLASTIC LIMIT (%)	LIQUID LIMIT (%)	PLASTICITY INDEX (%)	USCS
●	B-1	S-9	18.5-20'	33.7	25	67	42	CH

PENNONI ASSOCIATES INC.

Client: Township of Willingboro
Project: Willingboro Country Club

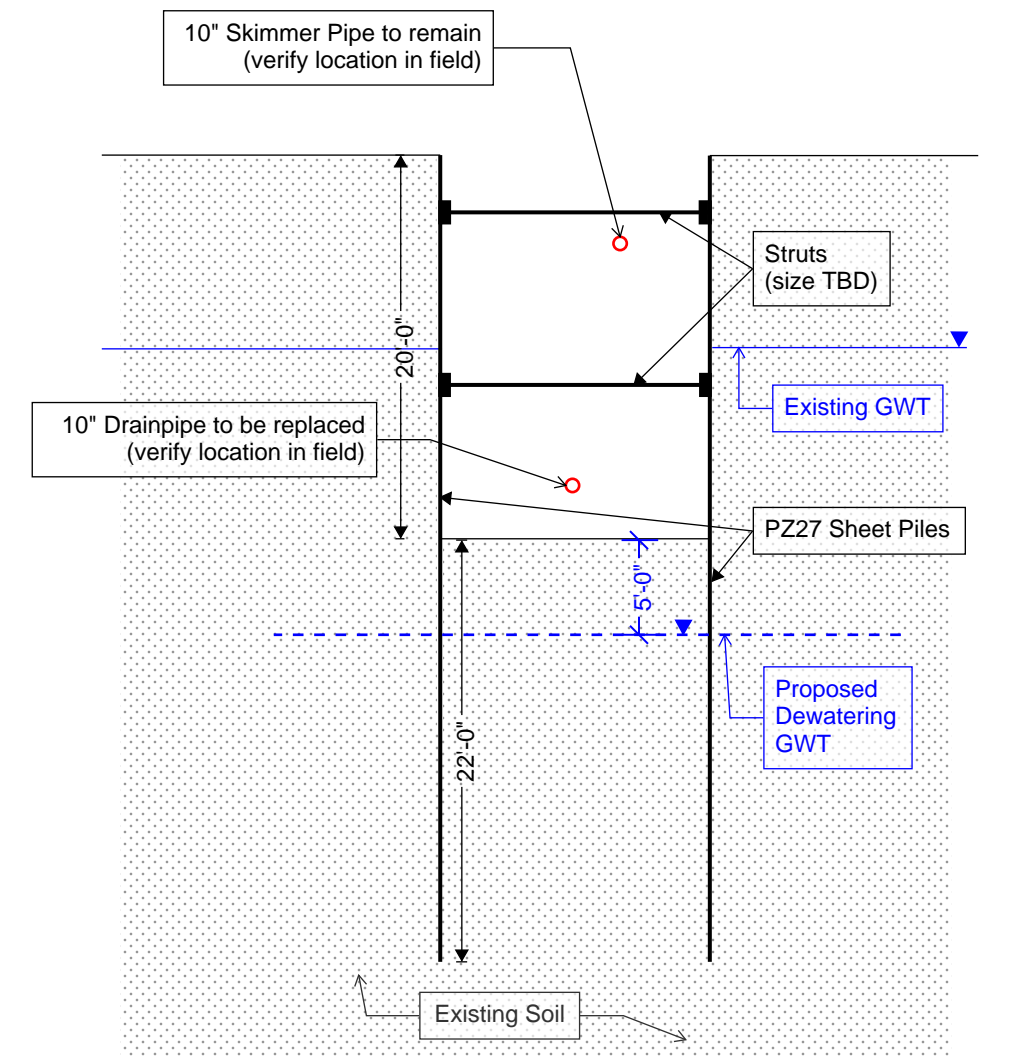
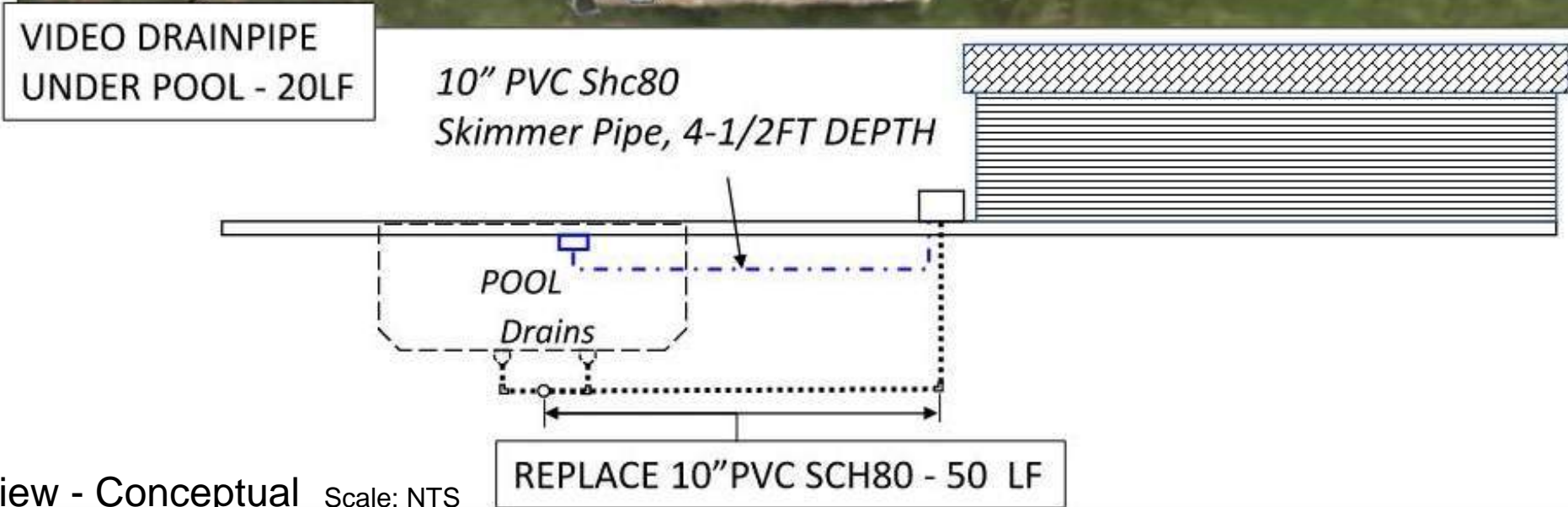
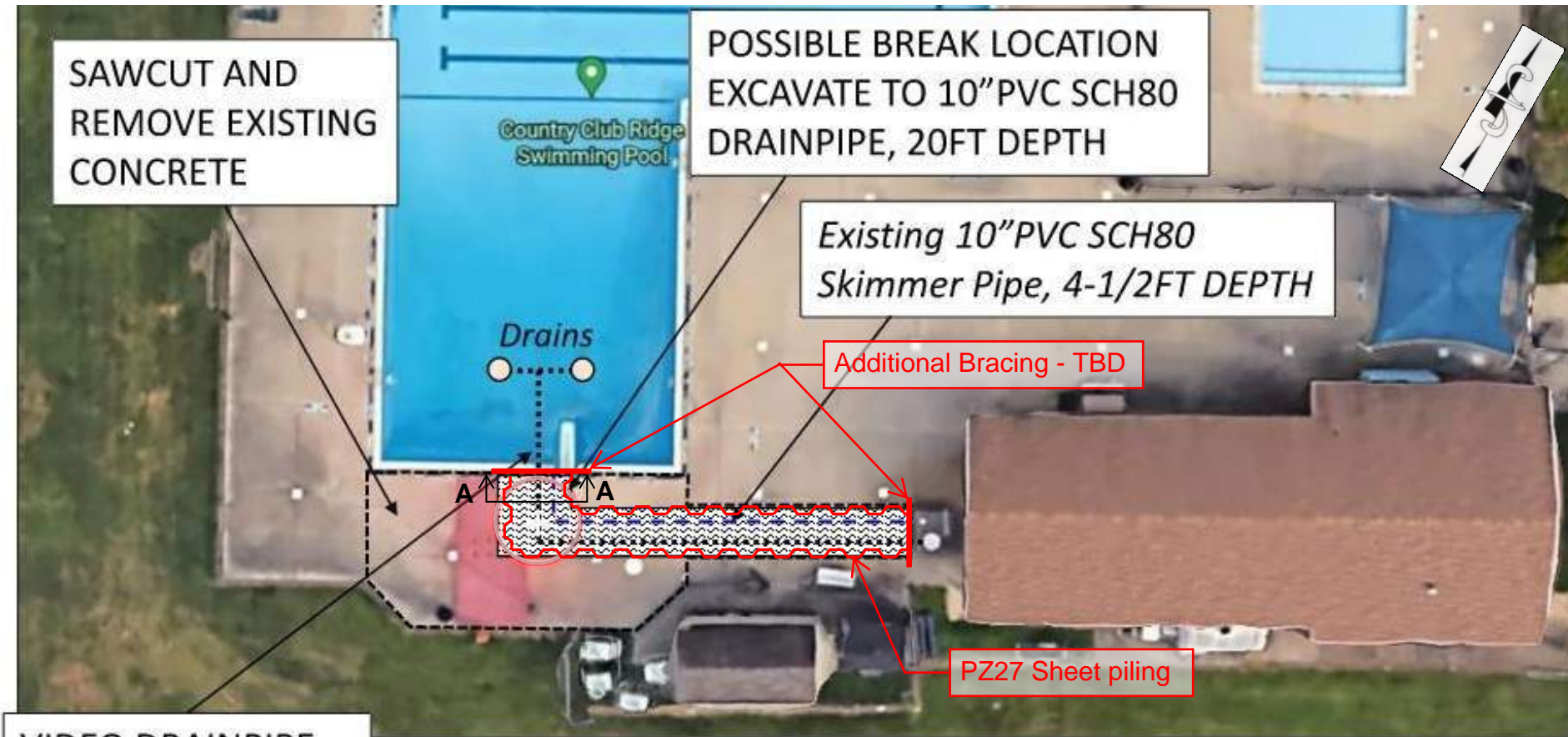
Project No.: WTCEX-22031.01

Figure A-1

Tested By: MB

Checked By: MP

Conceptual Sheet Pile Shoring Sketch



Section A-A - Elevation View - Sheet Pile Shoring
Scale: 1" = 10'

Plan View - Conceptual Scale: NTS



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DRAWN BY: JEK	SCALE: AS SHOWN	DATE: 6/23/2023
CHECKED BY: TAT	FIGURE No.	
PROJECT No: WTCEX22031	SK-1	