

**SPECIFICATIONS  
FOR  
REHABILITATION OF EAST HAZELWOOD AVENUE MINOR  
BRIDGE (RA-69)  
CITY OF RAHWAY, COUNTY OF UNION, NEW JERSEY  
BA NO. 52-2017; UNION COUNTY ENGINEERING PROJECT NO. 2013-009**

**AUGUST 2017**

**UNION COUNTY OFFICIALS  
BOARD OF CHOSEN FREEHOLDERS**

Bruce H. Bergen, Chairman  
Sergio Granados, Vice Chairman  
Linda Carter, Freeholder  
Angel G. Estrada, Freeholder  
Christopher Hudak, Freeholder  
Mohamed S. Jalloh, Freeholder  
Bette Jane Kowalski, Freeholder  
Alexander Mirabella, Freeholder  
Vernell Wright, Freeholder

**CLERK OF THE BOARD**  
James E. Pellettiere, RMC

**COUNTY MANAGER**  
Alfred J. Faella

**DEPARTMENT OF ENGINEERING, PUBLIC WORKS AND  
FACILITIES MANAGEMENT**  
Joseph A. Graziano, Sr., CPWM  
Director, Department of Engineering, Public Works and  
Facilities Management

**COUNTY ENGINEER  
DIVISION OF ENGINEERING**  
Thomas O. Mineo, P.E.  
2325 South Avenue  
Scotch Plains, New Jersey 07076  
Telephone: (908) 789-3675  
Fax: (908) 789-3674

**PREPARED BY:**  
**Remington, Vernick & Arango Engineers, RVA**  
One Harmon Plaza, Suite 210  
Secaucus, New Jersey 07094  
T: 201-624-2137  
F: 201-624-2136

**COUNTY OF UNION  
NOTICE TO BIDDERS**

Sealed bids will be received by the director of the Division of Purchasing, or her designee, at the County of Union, New Jersey on September 7, 2017 at 10:30 a.m., prevailing time, in the 3<sup>rd</sup> Floor Conference Room, U.C. Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey for:

**REHABILITATION OF EAST HAZELWOOD AVENUE MINOR BRIDGE (RA-69)  
CITY OF RAHWAY, COUNTY OF UNION, NEW JERSEY  
BA NO. 52-2017; UNION COUNTY ENGINEERING PROJECT NO. 2013-009**

Bid Packages may be obtained at no charge by registering and downloading at <http://ucnj.org/bid-specs>. Bid Packages may also be obtained in person from the Division of Engineering at 2325 South Avenue, Scotch Plains, New Jersey 07076 between 8:30 a.m. and 4:00 p.m. weekdays upon payment of a non-refundable money order or bank check in the amount of \$275.00 made payable to the County of Union. No Personal / Company checks will be accepted. Requests for mailing of specifications will not be honored. For further information please call 908-789-3675.

The County reserves the right to reject any and all bids and to waive any and all informalities in the bid.

Bids shall be submitted in a sealed envelope and clearly marked with the subject of the bid, name and address of the bidder, phone & fax number, and date of the bid opening. Each bid must be delivered to reach the Division of Purchasing prior to the stated time of the opening of the bids. The County will not be responsible for late delivery by the U.S. Mail or any other carrier. If hand delivered, please note that parking and security access at the County Complex may cause delays and bidders should take them into consideration in order to submit a timely bid. **No late bids will be accepted.**

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

**LAURA M. SCUTARI, QPA, MPA, DIRECTOR OF PURCHASING**

**UNION COUNTY BOARD  
OF CHOSEN FREEHOLDERS**  

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***We're Connected to You!***

NB-1

**REHABILITATION OF EAST HAZELWOOD AVENUE MINOR BRIDGE (RA-69)**  
**CITY OF RAHWAY, COUNTY OF UNION, NEW JERSEY**  
BA No. 52-2017; Union County Engineering Project No. 2013-009

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**UNION COUNTY BOARD OF CHOSEN FREEHOLDERS  
INSTRUCTIONS TO BIDDERS AND FORMS**

**DEFINITIONS**

Wherever reference is made to the County, Title of Project, Bidder, or Vendor/Contractor they shall be as follows:

**OWNER/COUNTY:**

Union County Board of Chosen Freeholders  
UC Administration Building, 6<sup>th</sup> Floor  
10 Elizabethtown Plaza  
Elizabeth, New Jersey 07207

**ADDRESS BIDS AND SUBMIT TO:**

Union County Division of Purchasing  
UC Administration Building, 3<sup>rd</sup> Floor  
10 Elizabethtown Plaza  
Elizabeth, NJ 07207  
Attn: Laura M. Scutari, QPA, MPA, Director, Division of Purchasing  
Telephone: 908-527-4130  
Facsimile: 908-558-2548

**TITLE OF PROJECT:** Rehabilitation of East Hazelwood Avenue Minor Bridge (RA-69)  
City of Rahway, County of Union, New Jersey  
BA#52-2017; Union County Engineering Project #2013-009

**BIDDER:** Bidder shall be a single overall contract bidder

**ENGINEER:** Remington, Vernick & Arango Engineers, RVA  
One Harmon Plaza, Suite 210  
Secaucus, New Jersey 07094

**COUNTY ENGINEER AND/OR CONSTRUCTION MANAGER (as applicable):**

**COUNTY ENGINEER:**

Thomas O. Mineo, P.E.  
Union County  
Division of Engineering  
2325 South Avenue  
Scotch Plains, NJ 07076  
Office: (908) 789-3675  
Facsimile: (908) 789-3674  
Email: [tmineo@ucnj.org](mailto:tmineo@ucnj.org)

**CONSTRUCTION MANAGER:**

## GENERAL SPECIFICATIONS

### 1. BID FORM

Bids for this Work will be enclosed in a sealed envelope addressed to the Purchasing Division, County of Union, New Jersey, Union County Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey 07207, with the full name of the Project clearly marked on the outside. Refer to the sheet marked "Notice of Bid (Advertisement)" for the correct name of the Project. Bidders must submit their bids on the attached pricing sheet (Bid Form), in a sealed envelope addressed to the County and bearing on the outside: the name of the Bidder, Bidder's business address, and the title of the Project.

The Division of Purchasing will receive the bids for this Work at the Union County Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey on the date and time noted on the sheet marked "**Notice of Bid (Advertisement)**".

The County will not assume responsibility for bids forwarded by mail. It is the individual's responsibility to see that the bids are presented to the Purchasing Division at the time and at the place designated.

Bids will be accepted only on the Bid Form supplied. Bids on forms other than the original supplied herein will be rejected. The "complete" Bid Documents includes the Bid Bond, Bid Form, Bidder's Checklist, Consent of Surety, Ownership Disclosure Certification, Non-Collusion Affidavit, and any other documents noted in these Instructions to Bidders or Contract Document to be submitted with this Bid.

The bidder will state in the bidding sheet the price per unit of measure for each scheduled Item of Work for which he will agree to carry out the Work, and the Total Bid Price for the construction of the Project.

The prices in the Bid Form shall be typed or written in pen and ink. Erasures or alterations must be initialed by the bidder in ink.

The bidding sheet for this Project may include a fixed amount as a Bid Allowance. If applicable, all bidders are required to add this fixed amount to their base bid and to include this additional amount in their Bid Bond. This sum will be included in the Contract as well as the performance, labor and materials bond. Payment by the County will be made to the Contractor from these funds only upon the completion of extra Work pursuant to a written Change Order(s) signed by the County's Engineer or his designee and the Contractor, prior to the commencement of such Work. Work commenced prior to written approval by the County shall be done at Contractor's risk. Such payment will only be in the amount agreed to by the parties, in writing in the Change Order(s). See Section 37, Change Orders, of these general specifications for further details.

Refer to Bid Document Submission Checklist for all required documents.

In the event there is a discrepancy between the unit price given and the extended total, the unit price will govern. Any discrepancies will be mathematically adjusted.

Insert applicable alternates, if any have been specified, applicable to the Bidder's Work. All alternates MUST be bid upon. Any Bidder's failure to do so will be deemed a material, non-waivable defect and shall render the bid nonresponsive. The Bidder shall clearly designate whether the change in price is an addition or subtraction, by using either a "+" sign or the word "addition", or in the alternative, a "-" sign or the word "minus". If there is no other change in price, the Bidder shall insert "NC" or "No Charge".

When two or more low bids are equal in all respects, awards will be made according to the provisions of N.J.S.A. 40A:11-6.1(d).

Where unit prices have already been established by the Contract Documents, the Bidder agrees that such unit prices shall prevail. All unit prices, whether filled in by the Bidder or established by the Contract Documents, shall become part of the Contract. No bid will be considered or award made, unless applicable unit prices, as required, are filled in.

The County reserves the right to reject any or all bids and also reserves the right to waive any informality in the bids received so long as said waiver is not of a response which is considered to be material and non-waivable pursuant to law.

The County of Union has the right to reject any and all bids from any bidder that is in, or contemplates bankruptcy of any chapter of nature. Said bidder shall notify the County, in writing, of any condition or knowledge of the same.

Conditional bids will not be accepted. Bids may be withdrawn prior to the advertised time for the opening of bids or authorized postponement thereof or in accordance with the provisions of N.J.S.A. 40A:11-23.3 discussed below. Bids received after the advertised time shall not be considered. Bidders shall be solely responsible for premature opening or late delivery of bids not properly marked, addressed, or directed.

## 2. WITHDRAWAL OF BID DUE TO MISTAKE

N.J.S.A. 40A:11-23.3 authorizes a bidder to request withdrawal of a public works bid due to a mistake on the part of the bidder. A mistake is defined by N.J.S.A. 40A:11-2(42) as a clerical error that is an **unintentional and substantial computational error** or **an unintentional omission of a substantial quantity of labor, material, or both, from the final bid computation.**

A bidder claiming a mistake under N.J.S.A. 40A:11-23.3 must submit a request for withdrawal, **in writing**, by certified or registered mail to Laura M. Scutari, QPA, MPA,

Director, Division of Purchasing, County of Union, New Jersey, Union County Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey 07207. The bidder must request withdrawal of a bid due to a mistake, as defined by the law, within five business days after the receipt and opening of the bids. Since the bid withdrawal request shall be effective as of the postmark of the certified or registered mailing, Laura M. Scutari, QPA, Director of the Division of Purchasing or his designee may contact all bidders, after bids are opened, to ascertain if any bidders wish to, or already have exercised a request to withdraw their bid pursuant to N.J.S.A. 40A:11-23.3.

A bidder's request to withdraw the bid **shall** contain evidence, including any pertinent documents, demonstrating that a mistake was made. Such documents and relevant written information shall be reviewed and evaluated by the County's designated staff pursuant to the statutory criteria of N.J.S.A. 40A:11-23.3.

The County will not consider any written request for a bid withdrawal for a mistake, as defined by N.J.S.A. 40A:11-2(42), by a bidder in the preparation of a bid proposal unless the postmark of the certified or registered mailing is within the five business days following the opening of bids.

### **3. QUALIFICATIONS OF BIDDERS AND REQUIRED SUBMISSIONS**

The County may make such investigation as it deems necessary to determine the ability of the Bidders to perform the Work, which includes investigation of any and all subcontractors listed with the bid. The Bidder shall furnish any information and data for this purpose as the County may request.

### **4. INTERPRETATIONS AND ADDENDA**

Any explanation desired by a bidder regarding the meaning or interpretation of the Contract Documents must be requested in writing to the County Engineer or Design Professional as the case may be and with reasonable time allowed for a reply to reach bidders before submission of their bids. Any interpretation or instruction made by the County Engineer will be in the form of an addendum to the Contract Documents or clarification and will be furnished to all prospective bidders. Oral explanations or instructions given before the award of the Contract will not be binding. Bidders are required to bring to the attention of the County Engineer, the discovery of any apparent ambiguity, inconsistency, error, discrepancy, omission in the Contract Documents for interpretation and correction at least ten (10) working days before opening of bids with the exception of Saturdays, Sundays and holidays.

All Addenda issued through the Offices of the County Engineer are amendments to the Contract Documents and shall be considered in preparing bids. Same shall become part of the Contract Documents.



Addenda take precedence over all earlier documents and over each other according to the latest date. Addenda unless themselves interpretive remain subject to interpretation the same as any other document incorporated in the Contract.

Addenda may be issued by the County Engineer up to seven (7) working days prior to the opening of bids. Failure of any bidder to receive an addendum shall not relieve such bidder from the obligation imposed by such addendum. Bidders are to keep themselves currently acquainted with the Contract Documents during the entire bidding period and make inquiry on their own initiative as to issuance of any Addenda. Receipts of all Addenda shall be acknowledged on the "*Acknowledgement of Receipt of Changes*" included in the bid package and must be submitted with the bid.

## **5. OBLIGATION OF BIDDER TO INSPECT SITE AND CONTRACT DOCUMENTS**

At the time of the opening of bids, each Bidder will be presumed to have inspected the site(s) and to have read, and be thoroughly familiar with the Contract Documents. The failure or neglect of any Bidder to receive or examine any form, instrument, or document shall in no way relieve any Bidder from any obligation in respect to its bid.

The Bidder shall examine the contents of the Project Manual and the set of Drawings and assure itself that all pages of the Specifications, Drawings, and other Contract Documents are included in the documents obtained for bidding purposes. Should the Specifications, Drawings, and other Contract Documents be incomplete, the Bidder shall notify the County Engineer in writing, who will supply the Bidder with any missing pages of Specifications, Drawings, or other Contract Documents. The lack of such written notification by the Bidder will be construed as evidence that the Specifications, Drawings, or other Contract Documents supplied it for bidding purposes are full and complete and as a waiver of any subsequent claim to the contrary.

## **6. BID AND PERFORMANCE GUARANTEE**

Each bidder must furnish a Bid Bond, Certified Check or Bank Cashier's Check in the amount of ten percent (10%) of the Bid. Checks shall be drawn to the order of the County of Union, New Jersey, not to exceed \$20,000.

Each bidder must furnish with the bid a certificate from a Surety Company, i.e. Consent of Surety, stating that in the event of the contract being awarded to said bidder, such Surety Company will provide the Contractor with Bonds guaranteeing the faithful performance of the Work in accordance with the plans and specifications, and the payment for labor, materials, and all other indebtedness which may accrue on the account of this Work. A Performance, Labor and Materials bond will be furnished by the Contractor upon an award of Contract, and will be in the amount of 100% of the contract price.

A one-year Maintenance Bond will be required upon acceptance of the Project by the County in the amount as stated in Section 15 of the General Specifications. Bonds will be written by a firm authorized to issue the bonds under the laws of the State of New Jersey and be in a form acceptable to the County Counsel.

N.J.S.A. 40A:11-1.1 et. seq. allows the prime Contractor to furnish the Performance Security for his Subcontractors. The County of Union requires Performance Security to be furnished by the prime contractor for the entire job in the total amount of the contract.

The County of Union shall award the contract or reject all bids within sixty (60) days; except that the bids of any bidders who consent thereto may, at the request of the County be held for consideration for such longer periods as may be agreed.

The County will return all certified checks or cashier's checks after the proposals have been opened, read, tabulated and checked except those of the three (3) bidders who have bid the lowest total price for carrying out the Project. The County will return the checks of these bidders when a contract is awarded to the successful bidder within ten (10) days after the award of the contract.

If the successful bidder refuses or neglects to sign the said Agreement and furnish the required bonds, the Bid Bond will be held and used by the County to offset any damages for such refusal or neglect.

## **7. COMMENCEMENT AND COMPLETION**

Work will not commence until a Notice to Proceed is received from the County Engineer.

Upon substantial completion of the Project, the Contractor must request a joint inspection with the County Engineer. Upon completion of this inspection, the County Engineer will prepare a list of incomplete or incorrect items (punch list) and have Contractor initial and date same. The Contractor shall rectify all deficiencies noted on the punch list within 30 calendar days of receipt of the list. The County Engineer may approve extensions for extenuating circumstances.

## **8. BIDDER AFFIDAVIT**

All Bidders are required to complete, sign, and submit with their Bid, the attached "Affidavit Regarding List of Debarred, Suspended or Disqualified Bidders". (See form enclosed)

## **9. BID SECURITY**

All Bidders are required to submit a form of Bid Security with their bids.  
(Bid Bond or Certified Funds)

The Bid Security shall be in the amount of ten percent (10%) of the Bid, but not in excess of Twenty Thousand Dollars (\$20,000.00), and payable to the order of the "County of Union."

## 10. LABOR AND MATERIALS

The prices will cover all costs of any nature incident to and growing out of the Work, including all labor, material, equipment, transportation, loss by damage or destruction of the Project, settlement of damages, and for replacement of defective work or materials. N.J.S.A. 54:32B-1 et seq. exempts all materials sold to the County of Union from sales or use taxes and should not be included in the prices provided on the Bidding Sheet.

## 11. INSURANCE REQUIREMENTS

The County of Union requires all contractors to be able to comply with the following insurance requirements. In the event a bid is accepted by the County, the contractor must accept the applicable insurance requirements, as set forth below, as part of any contract awarded to it by the County.

Contractor shall carry and maintain at all times while the contract is in full force and effect, the following insurance coverage with an insurance company or companies acceptable to the County, with limits not less than those shown below. A Certificate of Insurance shall be filed with the County prior to commencement of any Work indicating the following:

- a) Commercial General Liability (CGL): Coverage for all operations including, but not limited to, contractual, products and completed operations, and personal injury with limits no less than \$5,000,000 per occurrence/\$10,000,000 aggregate. The County of Union, its Board of Chosen Freeholders, officers, employees, agents and servants shall be included as an additional insured. Coverage is provided on a primary and non-contributory basis to the County of Union, et al.
- b) Automobile Liability: Coverage for all owned, non-owned and hired vehicles with limits not less than \$5,000,000 per occurrence, combined single limits (CSL) or its equivalent.
- c) Workers Compensation: As required by the State of New Jersey and Employers Liability with limits not less than \$1,000,000 per accident for bodily injury or disease.
- d) Professional Liability (if design/build): Coverage with limits not less than \$1,000,000 per occurrence or claim, \$2,000,000 aggregate

- e) Contractor's Pollution Legal Liability and/or Asbestos Legal Liability and/or Errors & Omissions (if project involves environmental hazards): Coverage with limits no less than \$1,000,000 per occurrence or claim/\$2,000,000 aggregate.
- f) Builders Risk (for major renovations): During the course of construction utilizing an "All Risk" coverage form with limits equal to the completed value of the project and no coinsurance penalty provisions.

Where applicable, a waiver of subrogation in favor of the County of Union, its Board of Chosen Freeholders, officers, employees, agents, servants and the State of New Jersey is to be included in those policies of insurance where permitted by law.

Notice of Cancellation: Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the Entity.

Special Risks or Circumstances: The County reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

## **12. INDEMNIFICATION REQUIREMENTS**

The County of Union requires all bidders to accept the following indemnification requirements in the event the County accepts their bid. The Contract awarded by the County to the successful bidder will contain the following provision:

"To the fullest extent permitted by law the Contractor shall indemnify and hold harmless the owner and the owner's consultants, agents, representatives, and employees from and against any and all claims, damages, losses, costs, and expenses, including, but not limited to attorneys' fees, legal costs and legal expenses arising out of or resulting from the performance of the Contractor's work under this contract, provided that such claim, damage, loss, cost, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) caused or alleged to be caused by the negligent acts, negligent omissions, and/or fault of the Contractor, anyone directly or indirectly employed or retained by the Contractor, or anyone for whose acts the Contractor may be liable regardless of whether caused in part by the negligent act or omission of a party indemnified hereunder provided it is not caused by the sole negligence of a party indemnified hereunder. Contractor shall further indemnify and hold harmless the County and the County's consultants, agents, representative, and employees from and against any and all claims, damages, losses, costs, and expenses, including, but not limited to attorneys' fees, legal costs and legal expenses, arising out of or resulting from performance of the work, provided that such claim, damage, loss, cost, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the work itself) caused or alleged to be caused by the negligent acts, negligent omissions, and/or fault of

the County or the County's consultants, agents, representatives, or employees and arises out of this project and provided such claim, damage, loss, cost, or expense is not caused by the sole negligence of a party indemnified hereunder."

### **13. ROYALTIES AND PATENTS**

The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall hold the County harmless from loss on account thereof.

### **14. PLANS AND SPECIFICATIONS**

In carrying out the Work, the plan(s) and the specifications will be followed by the Contractor. Minor alterations in the plan may be made or permitted by the County Engineer from time to time and, if no additional Work is necessary, there will be no additional charge for carrying out such minor alterations.

The Contractor shall provide the County Engineer a set of reproducible as-built drawings upon completion of the Project. The Contractor shall maintain an updated construction progress plan in the Project field office at all times.

When applicable, The New Jersey Department of Transportation Standard Specifications for Road and Bridge Construction, as amended, and Supplemental Specifications for State Aid Projects, herein after referred to as the "Standard Specifications", are made a part of these specifications and contract for the improvements, and will govern the construction of this Project, the material used and the execution of this Project, except as revised and modified herein. The references to these specifications are given herein for the purpose of aiding in the rapid location of the description of the various items herein specified. The entire Work must be carried on and completed to the satisfaction of the County. The Standard Specifications are amended as follows:

"Any reference to the Commissioner, Department, Department Laboratory, Engineer or Inspector should be redefined to be the County of Union".

### **15. GUARANTEE AGAINST DEFECTIVE WORK**

Prior to final payment being made or before the release of the performance security required by Section 3 above, the Contractor and Surety shall execute and deliver to the County an original Maintenance Bond with an original signature and seal having a penal sum equal to:

- A) One hundred percent (100%) of the final adjusted Contract amount, if such amount is \$50,000.00 or less;

- B) Fifty percent (50%) of the final adjusted Contract amount, if such amount be greater than \$50,000.00 but less than \$250,000.00; and,
- C) Twenty-five percent (25%) of the final adjusted contract amount, if such amount is \$250,000.00 or more.

The Bond and Surety shall be satisfactory to the Union County Counsel. The Surety shall hold a Certificate of Authorization to do business in the State of New Jersey and shall conform to P.L. 1995 c.384, codified as N.J.S.A. 2A:44-143, 144. The Surety Disclosure Statement and Certification required by N.J.S.A. 2A: 44-143, 144, shall be attached to the Bond. Such Maintenance Bond shall remain in full force and effect for a period of one (1) year from the date of Final Completion. Such Maintenance Bond shall also provide that the Contractor and the Surety guarantee to replace for the said period of one (1) year from the date of Final Completion, all Work performed and/or all materials furnished that were not performed or were not furnished in accordance to the terms and performance requirements of the Contract Documents, and will make good any defects thereof which become apparent before the expiration of one (1) year. If, during that period, any part of the Project, in the judgment of the Engineer, is found defective, the Contractor will repair or replace same within five (5) days of receipt of notice from the County Engineer. If the Contractor refuses or neglects to do such Work in the time specified, the County Engineer may have the Work done by others and the Contractor or his Surety thereof will pay the cost.

The Contractor will furnish the County a Maintenance Bond for a percentage of the final adjusted contract price, as stated above. The one (1) year period will start the day of Final Completion of Project by the County. Final payment is conditional on the receipt of a maintenance bond in a form acceptable to County Counsel.

## **16. TRAFFIC AND STREET MAINTENANCE**

The Work must be started and performed by the Contractor in such a manner as to minimize delays to the traveling public. It must be completed in a timely fashion, with little or no inconvenience to traffic and pedestrians, where such inconvenience may be avoided.

All municipal, county, and state roadways shall remain open to traffic unless otherwise provided for in the technical specifications.

If modified traffic patterns are authorized in order to provide a safe working or traveling environment, the Contractor is responsible for providing all equipment, barrels, cones, signs, and barricades to implement the work zone and detours, unless otherwise specified in the technical specifications. All work zones and detours shall be established in accordance with the technical plans and specifications if provided or in strict compliance with the current version of the Manual for Uniform Traffic Control Devices (MUTCD). The Contractor shall obtain approval for these work zones and

detour plans from the Municipal Police or applicable police agency and the Union County Bureau of Traffic Maintenance prior to implementation.

All traffic control plans shall provide for safe movement of vehicular, bicycle, and pedestrian traffic. Particular attention shall be given to requirements of the Americans with Disabilities Act.

No portion of any street or alleyway may be used for the storage of any materials or equipment without the approval of the Municipal Police or other applicable police agency. Sidewalks, gutters, drains, fire hydrants and private drives shall be maintained for their intended use unless specifically approved by the County Engineer.

Upon suspension of Work, at the end of the day or for protracted periods, the Contractor shall remove all rubbish and materials from the Work site to the approved storage/staging location. All road cuts, saw cuts, and trenches that may pose hazard to vehicular, pedestrian, or bicycle traffic, to include handicapped users, shall be filled to the surface of the roadway or sidewalk. At no time will steel plates or settled trenches be allowed at the daily suspension of Work, unless specifically approved by the County Engineer.

Use of Traffic Control Officers shall be determined by the County in accordance with the provisions of N.J.S.A. 40A:11-23.1(c). If applicable to the Project, the County shall have provided an allowance for same as set forth in the Bid Form.

With respect to pedestrian traffic, the Contractor shall install signs restricting access of the general public and, as necessary, Union County employees to the area of construction. The Contractor shall provide safe access to required areas and place physical barriers to restricted areas. These barriers may range from caution tape to actual barriers, at the direction of the County Engineer.

## **17. CONTRACTOR'S EMPLOYEES**

The Contractor must employ only suitable and competent labor in the Work, and must remove from the Work any incompetent, unsuitable, or disorderly person upon complaint from the County Engineer.

The parties to any contract resulting from this proposal do hereby agree that the provisions of N.J.S.A. 10:2-1 through 10:2-4 (discrimination in employment on public works contracts): 34:11-56.25 et seq. (payment of prevailing rate of wages determined pursuant to N.J.S.A. 34:11-56.30 by the Commissioner), and the Rules and Regulations promulgated pursuant thereto, are hereby made a part of any contract and are binding upon them.

There will be no discrimination against any employee who is employed in the Work to be covered by any contract resulting from this bid because of age, race, creed, color, national origin, ancestry, marital status or sex.

Any person, firm, or corporation violating the provisions of this Section will be deemed and judged a disorderly person.

### **18. OWNERSHIP DISCLOSURES REQUIRED**

Pursuant to P.L. 1977, N.J.S.A. 52:25-24.2, the Bidder shall submit with its Bid, or prior to receipt of bids, a statement setting forth the names and addresses of all stockholders in the corporation or partnership bidding who own ten percent (10%) or greater interest therein. (See forms attached)

### **19. NON-COLLUSION AFFIDAVIT**

The Bidder shall submit with its bid either the attached completed "Non-Collusion Affidavit" or a statement of non-collusion with verbiage similar to same.

### **20. EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCES**

The successful bidder shall be required to complete and submit an Initial Project Workforce Report, New Jersey Department of Treasury Form AA-201, upon notification of award. Failure to submit this completed form may result in the Contract being terminated.

The successful bidder shall also be required to submit a copy of its Monthly Project Workforce Report, New Jersey Department of Treasury Form AA-202, to the New Jersey Department of Treasury's Division of Public Contracts Equal Employment Opportunity Compliance and to the Board.

### **21. COMPLIANCE WITH NEW JERSEY PREVAILING WAGE ACT**

The County of Union, in order to fulfill the requirements of N.J.S.A. 34:11-56a.25 et seq, requires that the following additional conditions be strictly followed. The bidders represent that he is not listed or is not on record in the Office of the Commissioner or the Department of Labor and Industry as one who failed to pay prevailing wages in accordance with the provisions of this Act. The bidder agrees to the inclusion of a contract provision upon award which specifically requires said Contractor to fully comply with each and all of the requirements of the aforesaid Act as it relates to prevailing rates of wages on public contracts as set forth in the New Jersey Prevailing Wage Act, P.L. 1963, Chapter 150 and P.L. 1974, Chapter 64.



A Copy of the Prevailing Wage Rates is attached for your reference. Applicable rates are those wages and fringe benefit rates in effect on the date the contract is awarded. All predetermined rate increases listed at the time the contract award must also be paid, beginning on the dates specified. Rates may change between the time of issuance of this determination and the award of the public works contract. Therefore, prior to the award of the contract, verification must be made with the Public Contracts section, to insure that the rates contained in this determination are still prevailing.

The Contractor agrees to abide and be bound by each and all of the said statutory provisions with respect to the payment of prevailing rates of wages, and acknowledges that the County reserves the right to terminate the Contractor's (or his subcontractors') right to proceed with the scope of Work, or such portion thereof that relates to the failure to pay prevailing rates of wages. In such event or under the terms of N.J.S.A. 34:11-56.27, the Contractor and his surety will be liable to the County of Union for any excess costs occasioned by such a violation.

The Contractor or subcontractors for this Project will post the Prevailing Wage Rates for each craft and classification involved as determined by the Commissioner of Labor and Industry, including the effective date of any changes thereof, in prominent and easily accessible places at the site of the Work or at such place or places as are used by them to pay workmen their wages.

The County of Union requires a copy of payroll records from the Contractor and subcontractors. Payroll records shall be submitted with each voucher request for payment. Prevailing wage rates may be obtained from the New Jersey Labor, Division of Workplace Standards, Public Contracts Section, (609-292-2259).

In addition to compliance with the New Jersey Prevailing Wage Act, the County requires compliance with procedures established by Resolution No. 2014-0408 adopted by the Union County Board of Chosen Freeholders on May 8, 2014. The resolution is furnished in Section 51 of these General Specifications.

#### UNION LABOR IS PREFERRED ON ALL COUNTY WORK

The foregoing reference to specific laws will not be deemed to be a limitation of obligation of the Contractor to perform his obligations in full compliance with the provisions and requirements of all federal and state statues and local ordinances applicable to the Work to be done under the contract.

It is agreed and understood that any contracts and/or orders placed as a result of this proposal will be governed and construed and the rights and obligations of the parties hereto will be determined in accordance with the laws of the State of New Jersey.

Upon completion of the Work, the Contractor will furnish a Certification of Compliance with the New Jersey Prevailing Wage Act. The certificate in a form acceptable to County Counsel is a condition of the final payment. (See form attached)

## **22. BRAND NAME OR EQUAL**

When the Specifications, Forms, and other Contract Documents use “brand name or equivalent” or similar language, the listed brand name shall serve as a reference or point of comparison for the functional or operational characteristic desired for the goods or services being requested. Where a bidder attempts to submit an equivalent product for a brand name, it shall be the responsibility of the bidder to fully describe and document the product to be provided with the bid in order to establish the equivalence claim.

- A. If the Bidder proposes to offer substitute goods as an equal to those specified herein, the bidder shall so indicate with the Bid Proposal. For the purposes of this paragraph, a proposed item shall be considered equal to goods specified herein if:
  - 1. The County, in its sole discretion, determines that: (i) the goods conform substantially, even with deviations, to the brand name goods specified herein; (ii) the goods are equal to or greater than the brand name goods specified herein in terms of quality, durability, functionality, appearance, strength and design; (iii) the goods are capable, at least as well as the brand name goods specified herein, or performing with existing equipment; and (iv) the goods do not cost the County more than the brand name goods specified herein costs the County.
  
- B. To offer substitute goods as an equal to those specified herein, it is necessary that:
  - 1. The Bidder submits sufficient information with its bid to permit the County to determine that the goods are equivalent to the brand name goods specified herein, including, but not necessarily limited to the brand, catalog number and specifications/data sheets;
  
  - 2. The Bidder fully identifies and describes the variations of the goods from the brand name goods specified herein on a separate sheet that is to be submitted with the bid proposal. Bidder's literature WILL NOT suffice in explaining exceptions to these specifications.

3. The Bidder certifies that the goods (i) are similar in substance to the brand name goods specified; and (ii) are suited to the same use as the item specified;

- C. The County shall be allowed a reasonable time within which to evaluate the Bidder's proposal to offer substitute goods as an equal to those specified herein. The County shall be the sole judge of acceptability. No "or-equal" goods shall be ordered, delivered, assembled, set-up or utilized until the County's evaluation is complete. The County's determination as to equivalency shall be deemed final and absolute.

In the event the Bidder does not provide sufficient supporting documentation with the bid, it will be presumed and required that the brand name goods and services as described in the specifications will be provided.

### **23. LINES AND GRADES**

Normally, horizontal and vertical control points will be provided in the technical specifications. All other surveying will be the responsibility of the Contractor unless otherwise noted.

### **24. NUMBER OF WORKING DAYS**

In accordance with NJSA 40A:11-17, the Work for the within Project shall be completed as specified on the Time of Completion Form. See form attached

There shall be taken a deduction from the contract price, or any wages paid by the County, to any inspector(s) necessarily employed by it on the Work, for any number of days in excess of the number allowed in the specifications.

### **25. PROMPT PAYMENT OF CONSTRUCTION CONTRACTS (NJ Prompt Payment Act)**

Pursuant to NJSA 2A:30A-1 et. seq., payment to the Contractor, other than for Work done pursuant to a contact allowance, where applicable, shall be processed and paid as follows:

1. All contractor bills shall be either approved for payment, or notice provided as to why the bill or any portion of it will not be approved by the representative(s) of the governing body no later than the public meeting following 20 calendar days of the billing date as defined in the statute.

2. If the billing is approved, said bill shall be paid in the payment cycle following the meeting.

## **26. STOPPING WORK ON ACCOUNT OF BAD WEATHER**

Work must only be performed in weather suitable for the type of construction planned or underway. Extremes in temperature, humidity, precipitation, evaporation, etc. can detrimentally affect the constructed product. Refer to the Standard and Technical Specifications for specific items.

## **27. ACCESS FOR OTHER CONTRACTORS**

The Contractor for this Work will give proper access to other contractors who may be employed upon the Project and must not hinder or delay unnecessarily any Work that may be progressing under other contracts.

## **28. CONDEMNED MATERIALS AND WORK**

Any materials and or part of the Work that may be condemned by the County Engineer will be removed and replaced by the Contractor or otherwise rectified, as may be directed by the County Engineer. No payment will be made upon the Work until such faulty work has been made good as may be directed. In the event the Contractor refuses or neglects to make good such faulty work, he will be deemed to have abandoned the contract and proceedings may be taken against him as provided herein.

## **29. STORAGE**

In the event that it is necessary for the Contractor to stockpile or store materials or equipment on the job site, the Contractor shall inform the County of such necessity and the County may offer available space, if any, for storage of such materials or equipment. The Contractor shall use said space only for such purpose. Any and all materials which may be stored in such space or which may be brought onto the job site at any time by the Contractor will be at the Contractor's sole risk. The County will not be responsible for loss of or damage to said materials or equipment for any cause whatsoever. The Contractor shall take necessary measures to protect any such storage area and shall be responsible for any and all damages.

## **30. FINAL CLEAN UP**

Upon completion of the Work, the Contractor will remove all equipment, unused materials, rubbish, etc., and will repair, or replace in an a manner acceptable to the County Engineer, all areas that may have been damaged in the prosecution of the Work. Same shall be a condition precedent to final payment. Should said Contractor

fail to comply with this requirement, the County shall undertake the clean-up with its own forces and charge the cost of same against the Contractor's contract balance.

### 31. SUB-LETTING OF WORK

Except for the List of Subcontractors, pursuant to NJSA 40A:11-16 (See form attached), no portion of the Work will be sublet by the Contractor to any other entities, except with the consent of the County Engineer. A complete list of subcontractors must be submitted to the County Engineer at the preconstruction meeting. If the job does not warrant a preconstruction meeting, the Contractor must submit such list prior to the start of Work.

All Subcontractors will be subject to NJSA 34:11-56 et al.

N.J.S.A. 40A:11-16 requires the bidder to list in the bid sheets the name or names of all subcontractors involved in the following types of Work: plumbing and gas fitting and all kindred work, steam and hot water heating, ventilating apparatus, steam power plants and kindred work, electrical work, ornamental iron work, and structural steel. In addition, the County may require the identification of specific additional subcontractors. If these trades are expected to be part of the contract, such subcontractors should be listed on the "Subcontractor Identification Statement List of Subcontractors" and Bidder shall certify same on the accompanying sheet titled "Subcontractor Identification Certification". (See forms attached) **Bidder's failure to submit these two forms shall be considered a material defect and result in rejection of Bidder's bid.** Substitutions of any listed subcontractors pursuant to NJSA 40A:11-16 will not be permitted except with the consent of the County Engineer.

### 32. SAFETY

The Contractor shall observe all rules and regulations of the Federal, State, and local health officials. Attention is directed to Federal, State, and local laws, rules, and regulations concerning construction safety and health standards. The Contractor shall not require any worker to work in surroundings or under conditions that are unsanitary, hazardous, or dangerous to the worker's health or safety.

The Contractor shall admit to the site, without delay and without the presentation of an inspection warrant, any inspector of OSHA or other legally responsible agency involved in safety and health administration upon presentation of proper credentials.

The Contractor shall make available to the Contractor's employees, subcontractors, the County Engineer, and the public, all information pursuant to OSHA 29 CFR Part 1926.59 of The Hazard Communication Standard 29 CFR 1910.1200, and shall also maintain a file on each job site containing all Material Safety Data Sheets (MSDS) for products in use at the Project. These Material Safety Data Sheets shall be made available to the Engineer upon request.

The Contractor shall at all times conduct the Work to provide for the safety and convenience of the general public and protection of persons and property. The safety provisions of applicable laws, OSHA regulations, building and construction codes, and the rules and regulations of the New Jersey Department of Labor and Commerce shall be observed.

### **33. QUALITY, SAFETY AND PERFORMANCE STANDARDS**

All goods and services must be constructed and provided with the highest quality materials and workmanship. It is the intent of these specifications that only equipment equal to, or exceeding, the standard specified will be acceptable in order to protect the safety of the occupants of the Building.

### **34. MATTERS NOT MENTIONED IN CONTRACT DOCUMENTS**

Any Work, material, or method, not specifically described in these specifications, but shown upon the plans of the Work, will be carried out as shown on said plan.

### **35. PERMITS**

The Contractor will obtain all necessary permits required by law and provide the County with necessary approvals prior to commencement of permitted Work.

### **36. CONTRACTOR TO PROVIDE PROOF OF PAYMENT**

Upon the completion of the Work, the Contractor will furnish a General Release as proof that all claims for labor, materials, etc., have been settled by the Contractor. The General Release, in a form acceptable to County Counsel, is a condition of final payment.

### **37. CHANGE ORDERS**

Change Order Procedures shall comply with *N.J.A.C. 5:30-11.1 et seq.*, "Change Orders and Open End Contracts" and subsequent provisions of the New Jersey Administrative Code.

### **38. SUPPLEMENTAL WORK**

In case any supplemental work is necessary, it will be performed by the Contractor at a price fixed by agreement between the Contractor and the County Engineer and approved by the County as specified in Section 36. The Contractor will do no supplemental work on any character, for which the Contractor will demand pay, except upon the written order of the County.

### **39. FORM OF CONTRACT**

The Contract will be subject to all statutory provisions on the matter of Public Works, Public Contracts, The Law Against Discrimination, the Laws Governing Affirmative Action and Prevailing Rates of Wages under the laws of New Jersey.

The Agreements shall be executed by both parties not later than twenty-one (21) days from the date of the award by the County (Sundays and holidays excluded); however, such time frame may be extended by agreement of the parties.

### **40. PROGRESS PAYMENTS**

Monthly progress payments will be made based on the value of labor and materials incorporated in the Work and of materials suitably stored at the site. An itemized schedule of values shall be submitted with each Application for Payment.

(Refer to the Owner/Contractor Agreement for Retainage and other conditions pertaining to payment and the application of NJSA 2A:30A-1 et. seq.)

All Applications for Payment shall be accompanied by paid invoices for materials incorporated in the Work and for materials suitably stored at the site, and affidavit(s) by Subcontractors whose Work was included in the next to the last application to the effect such Work and such materials have been paid for.

No payment shall be made without Contractor having provided all submittals set forth in this Section, and the approval of same by the County.

For contracts exceeding \$100,000.00, monthly payments will be made on the Work to the extent of 98% of the value of the Work done which is considered to be retainage.

For contracts less than \$100,000.00, monthly payments will be on the Work to the extent of 90% of the value of the Work done. In lieu of the retainage, the Contractor will, at his option, deposit with the County Counsel negotiable bearer bonds of the State of New Jersey or any political subdivision thereof, equal to the amount otherwise withheld as retainage.

When the Project is completed, the final cost of the Project will be based on actual quantities of authorized Work done under each item scheduled in the bidding sheet and approved Change Orders, if any. The money due to the Contractor as determined by said final certificate after deduction of previous monthly payments on account, will be paid to the Contractor in accordance with the terms of the contract dealing with Prompt Payment, providing, however that before such final payment is made, all outstanding claims against the Contractor must be satisfied. Before final

payment is released, the Contractor must furnish: **a)** Maintenance Bond (see Section 6 of these general specifications); **b)** Certification of Compliance, New Jersey Prevailing Wage Act (see Sections 21 and 51); and **c)** General Release (see Section 36) in a form satisfactory to County Counsel; **d)** complete set of as-built plans in the latest AutoCad on compact disc; and **e)** a complete set of in-progress photos in jpg, jpeg, or bmp digital format on a compact disc.

#### **41. INSPECTION**

The Work must be done in accordance with the plans and specifications, and will be inspected by the County Engineer. An inspector may be placed upon the Work at any time by the County Engineer to see that the plans, specifications, and instructions of the County Engineer are carried out. In connection herewith, bidders are referred to N.J.S.A. 40A:11-17.

#### **42. DAMAGES**

The Contractor will be held responsible for all damages that may occur to Work, or to persons or property by reason of the nature of the Work or from the elements, or by reason of inadequate protection of the Work, or from any carelessness or negligence on his part or on the part of his employees. The County will withhold payments on the Work until all suits or claims for damages sustained on, or by reason of, this Work will have been settled by the Contractor.

The construction and final completion of this Work will be guaranteed by the Contractor. Any damages that may be done to the Work or any part thereof, by the elements or otherwise, during its construction, will be made good by the Contractor.

#### **43. LIQUIDATED DAMAGES**

If the Project is not completed within the time specified herein or within such further time as may have been granted by the County Engineer, then the Contractor hereby agrees to pay to the County as liquidated damages, but not as a penalty, \$1,000.00 per day for each and every calendar day that he is in default on time to complete the Work. The said sum will be deducted from moneys due the Contractor and if the damages exceed this amount, then the Contractor or his Surety Company will pay the excess. These damages may be waived at the option of the County.



## **44. AFFIRMATIVE ACTION REQUIREMENTS**

### **EXHIBIT B (Revised 4/10)**

#### **MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE N.J.S.A. 10:5-31 et seq. (P.L. 1975, C. 127) N.J.A.C. 17:27**

#### **CONSTRUCTION CONTRACTS**

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

The contractor or subcontractor, where applicable, will not discriminate against any employee or applicant for employment because of age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Except with respect to affectional or sexual orientation and gender identity or expression, the contractor will ensure that equal employment opportunity is afforded to such applicants in recruitment and employment, and that employees are treated during employment, without regard to their age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex. Such equal employment opportunity shall include, but not be limited to the following: employment, up-grading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

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

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

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

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Division may, in its discretion, exempt a contractor or subcontractor from

compliance with the good faith procedures prescribed by the following provisions, A, B and C, as long as the Division is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Division, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2. The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

(A) If the contractor or subcontractor has a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor shall, within three business days of the contract award, seek assurances from the union that it will cooperate with the contractor or subcontractor as it fulfills its affirmative action obligations under this contract and in accordance with the rules promulgated by the Treasurer pursuant to N.J.S.A. 10:5-31 et. seq., as supplemented and amended from time to time and the Americans with Disabilities Act. If the contractor or subcontractor is unable to obtain said assurances from the construction trade union at least five business days prior to the commencement of construction work, the contractor or subcontractor agrees to afford equal employment opportunities minority and women workers directly, consistent with this chapter. If the contractor's or subcontractor's prior experience with a construction trade union, regardless of whether the union has provided said assurances, indicates a significant possibility that the trade union will not refer sufficient minority and women workers consistent with affording equal employment opportunities as specified in this chapter, the contractor or subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.

(B) If good faith efforts to meet targeted employment goals have not or cannot be met for each construction trade by adhering to the procedures of (A) above, or if the contractor does not have a referral agreement or arrangement with a union for a construction trade, the contractor or subcontractor agrees to take the following actions:

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

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

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

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

(5) If it is necessary to lay off some of the workers in a given trade on the construction site, layoffs shall be conducted in compliance with the equal employment opportunity and non-discrimination standards set forth in this regulation, as well as with applicable Federal and State court decisions;

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

(i) The contractor or subcontractor shall interview the referred minority or women worker.

(ii) If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in order to perform the work of the construction trade, the contractor or subcontractor shall in good faith determine the qualifications of such individuals. The contractor or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification standards in conformity with the equal employment opportunity and non-discrimination principles set forth in this chapter. However, a contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the 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.

(iii) The name of any interested women or minority individual shall be maintained on a waiting list, and shall be considered for employment as described in (i) above, whenever vacancies occur. At the request of the Division, the contractor or subcontractor shall provide evidence of its good faith efforts to employ women and minorities from the list to fill vacancies.

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

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

(C) The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall

not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that, in implementing the procedures of (B) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

After notification of award, but prior to signing a construction contract, the contractor shall submit to the public agency compliance officer and the Division an initial project workforce report (Form AA 201) electronically provided to the public agency by the Division, through its website, for distribution to and completion by the contractor, in accordance with N.J.A.C. 17:27-7. The contractor also agrees to submit a copy of the Monthly Project Workforce Report once a month thereafter for the duration of this contract to the Division and to the public agency compliance officer.

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

(D) The contractor and its subcontractors shall furnish such reports or other documents to the Division of Public Contracts Equal Employment Opportunity Compliance as may be requested by the Division from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Public Contracts Equal Employment Opportunity Compliance for conducting a compliance investigation pursuant to **Subchapter 10 of the Administrative Code (NJAC 17:27)**.

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#### 45. INVESTMENT ACTIVITIES IN IRAN

Pursuant to P.L. 2012, c.25, codified as NJSA 2:32-55 *et seq*, prohibits State and local public contracts with persons or entities engaging in certain investment activities in energy or finance sectors of Iran.

#### 46. COMPLIANCE WITH THE PUBLIC WORKS CONTRACTOR REGISTRATION ACT - (NJSA 34:11-56.48 *et. seq.*)

Pursuant to the above-referenced law, Bidders are required to be registered with the New Jersey Department of Labor and to possess a current certificate by said Department indicating compliance with the Act prior to the time and date that bids are received. Bidders are notified of this requirement of their compliance. Such certificates or applications shall also be provided for each Subcontractor furnishing plumbing and gas fitting, steam and hot water heating and ventilating apparatus, and all kindred work, steam power plants and kindred work, electrical work, structural steel and ornamental iron work, and such other subcontractors as the specifications require relative to prior identification.

#### 47. UTILITIES

Attention of the bidder is directed to the fact that 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 and described herein. The accuracy and completeness of this information is not guaranteed by the County Engineer and the bidder is advised to ascertain for himself all the facts concerning the location of these and other utilities.

The Contractor will not proceed with his Work until he has made diligent inquiries of all public utility and municipal officials to determine the exact location of all underground structures and pipes within the site of the Project. The Contractor will notify utility owners not less than ten (10) days in advance of the time he proposes to perform any Work that will endanger or affect their facilities in compliance with **New Jersey One-Call**. In excavating in any part of the Work, care must be taken not to remove or damage any gas, water, sewer, or other pipe, conduit, or structure, - public or private - without the concurrence of the owner and the County Engineer. The Contractor will, at his own expense, shore up, secure and maintain a continuous flow in such structures, and will keep them in repair until final acceptance of the Work.

When pipes or other structures are encountered or when the removal, relocation or protection of these utilities are necessary in carrying out the Project as planned, the Contractor will cooperate with the owner of said utilities and will permit the owners or their agents access to the site of the Work in order to relocate or protect their facilities

and not hinder or delay unnecessarily the Work of the owners in moving same. No extra allowance of payment will be made to the Contractor for the use of any materials, equipment, etc., or for the performance of any Work in connection with the moving of said structures unless the Contractor is specifically ordered by the County Engineer to furnish such materials, equipment, or services. If directed by the County Engineer to do any Work or furnish any materials or equipment, payment will be allowed the Contractor in accordance with the unit prices bid for such Work, or, if such items are not scheduled in the proposal, such Work shall be allowed "Supplemental Work" as provided in Section 39 of these general specifications. The corporations, companies, agencies or municipalities owning or controlling the utilities, and the name, and telephone numbers are listed in the beginning of the Technical Specifications.

#### **48. MATERIAL COMPLIANCE AND SHOP DRAWINGS**

The Contractor will require the manufacturer or supplier to furnish three (3) copies of Certification of Compliance with each delivery of materials, components and manufactured items for the Project. Two (2) copies will be furnished to the County Engineer; one copy will be retained by the Contractor. Certificates of Compliance will contain the following information:

1. Project to which material is consigned;
2. Name of the Contractor to which the material is supplied;
3. Kind of material supplied;
4. Quantity of material represented by the Certificate;
5. Means of identifying the consignment, such as label marking, seal number, etc.;
6. Date and method of shipment;
7. That the material is in conformity with the pertinent specifications stated in the certificate; and
8. Signature of a person having legal authority to bind the supplier.

The Contractor will submit to the County Engineer for his approval five (5) copies of complete and fully detailed shop or working drawings for those items listed in the beginning of the technical specifications.

Each drawing will identify the name of the job, location and Contractor.

All drawings will be approved in accordance with the standard specifications. Refer to the Technical Specifications for specific items.

All materials or articles used in the Work will be of American manufacture, insofar as same are available, in conformance with N.J.S.A. 40A:11-18.

#### **49. PRECONSTRUCTION**

In order to provide full coordination of this Project among the parties concerned, the County Engineer will arrange for a preconstruction meeting between the Contractor, County Engineer and other interested parties as soon as possible after the contract is executed. At this meeting the Contractor will present his proposed schedule of Work which shall be subject to review and approval of the County through its designated representatives.

#### **50. DISPUTES UNDER THE CONTRACT**

A dispute arising under the Contract shall be submitted in writing to the County Engineer with all facts and supporting data. The County Engineer will review the dispute and issue his decision or request additional facts or documentation after which he will render his decision.

In the event the dispute is not then resolved, the matter shall, pursuant to law, be submitted to mediation before being submitted to a court of competent jurisdiction venued in Union County.

The County Engineer will notify the County Counsel when a matter is to be submitted to mediation. The County Counsel will communicate with the parties and inform them of the procedures to be followed in making such a submission.

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## 51. CONTRACTOR BUSINESS REGISTRATION CERTIFICATE New Mandatory Requirement -Effective 1/18/2010

The recently enacted **P.L. 2009, c.315**, requires that effective January 18, 2010; a contracting agency must receive proof of the bidder's business registration prior to the award of a contract. However, the proof must show that the bidder was in fact registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

If subcontractors are named on the bid, proof of the business registration for each subcontractor must be provided prior to the award of bid. Similarly to the bidder, the proof must show that each subcontractor was registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

Proof of business registration shall be

- A copy of a Business Registration Certificate issued by the Department of the Treasury, Division of Revenue; or
- A copy of the web version provided by the NJ Division of Revenue, or

Register online at <http://www.state.nj.us/treasury/revenue/busregcert.htm>. Click the "online" link and then select "Register for Tax and Employer Purposes or call the Division at 609-292-1730.

**Note: A NJ Certificate of Authority is not acceptable.**

**FAILURE** to submit proof of registration of the bidder or any subcontractor named on the bid prior to the award of contract shall be cause to reject the bid.

**FAILURE** of the bidder or any subcontractor named on the bid to be registered prior to the receipt of bids is cause for a **MANDATORY REJECTION** of bids. (A NON-WAIVABLE DEFECT). This covers construction Work as well as non-construction bids.

### **IN ADDITION:**

*N.J.S.A. 52:32-44* imposes the following requirements on Contractors and all subcontractors that knowingly provide goods or perform services for a Contractor fulfilling this contract:

- 1) the Contractor shall provide written notice to its subcontractors and suppliers to submit proof of business registration to the Contractor;
- 2) subcontractors through all tiers of a project must provide written notice to their subcontractors and suppliers to submit proof of business registration and subcontractors shall collect such proofs of business registration and maintain them on file;



- 3) prior to receipt of final payment from a contracting agency, the Contractor must submit to the contacting agency an accurate list of all subcontractors and suppliers or attest that none was used; and,
- 4) during the term of this contract, the Contractor and its affiliates shall collect and remit, and shall notify all subcontractors and their affiliates that they must collect and remit, to the Director, New Jersey Division of Taxation, the use tax due pursuant to the Sales and Use Tax Act, (*N.J.S.A. 54:32B-1 et seq.*) on all sales of tangible personal property delivered into this State.

A Contractor, subcontractor or supplier who fails to provide proof of business registration or provides false business registration information shall be liable to a penalty of \$25 for each day of violation, not to exceed \$50,000 for each business registration copy not properly provided or maintained under a contract with a contracting agency. Information on the law and its requirements are available by calling (609) 292-9292.

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## **52. BID PROTEST – LEGAL FEES AND COSTS**

In the event a Bidder unsuccessfully challenges a Bid Submission by filing an action in a court of law concerning same, said Bidder shall be responsible for payment of reasonable legal costs and fees incurred by the County relating to said protest.

## **53. AMERICAN GOODS AND PRODUCTS WHERE POSSIBLE**

Bidder shall comply with the requirements of NJSA 40A:11-18 and use only manufactured and farm products of the United States, wherever available, for the Project.

## **54. NEW JERSEY PAY-TO-PLAY REQUIREMENTS**

This Contract is required by law to be publicly advertised for bids. As such, lists of political contributions pursuant to NJSA 19A:44A-1 et. seq. are NOT REQUIRED to be provided with the bids.

## **55. STATEMENT OF EQUIPMENT TO BE USED IN CONSTRUCTION**

Pursuant to NJSA 40A:11-20 entitled Certificate of Bidder Showing Ability to Perform Contract, the County requires a Certification from all bidders submitting a bid showing that the Bidder owns, leases, or controls all necessary equipment required by the Project Plans and Specifications. All bidders shall provide this information at the time of the bid opening using the attached form entitled, "CERTIFICATE OF BIDDER SHOWING ABILITY TO PERFORM CONTRACT".

If the Bidder is not the actual owner of the equipment, it shall state the source from which the equipment will be obtained and shall attach a certificate from the owner or person in control of the equipment demonstrating that the equipment owner has granted the Bidder control of the requisite equipment during such time as may be necessary for completion of the portion of the contract for which the equipment is necessary.

## **56. NEW JERSEY SALES AND USE TAX REQUIREMENTS,**

Contractors are required to comply with the following:

**New Jersey Sales and Use Tax Requirements:** All contractors with subcontractors, or any of their affiliates, who enter into contracts for the provision of goods or services with or for New Jersey local government entities, are required to collect and remit to the New Jersey Director of Taxation in the Department of the Treasury the use tax due on all of their sales of tangible personal property delivered into the State of New Jersey pursuant to the "Sales and Use Tax Act," (NJSA 54:32B-1 et. seq.),

regardless of whether the tangible personal property is intended for a contract with the contracting agency. This tax shall be remitted for the term of the Contract.

For purposes herein "affiliate" shall mean any entity that: (a) directly, indirectly, or constructively controls another entity, (b) is directly, indirectly, or constructively controlled by another entity, or (c) is subject to the control of a common entity. For purposes of the immediately preceding sentence, an entity controls another entity if it owns, directly or indirectly, more than fifty percent (50%) of the ownership interest in that entity. NJSA 52:32-44(g)(3).

ALFRED J. FAELLA  
COUNTY MANAGER

LAURA M. SCUTARI, QPA, MPA  
DIRECTOR / DIVISION OF PURCHASING

**BID DOCUMENT SUBMISSION CHECKLIST**

ALL SIGNATURES AND SEALS SHALL BE ORIGINALS UNLESS OTHERWISE SPECIFIED  
BID SHEETS SHOULD NOT BE SUBMITTED DOUBLE SIDED PAGES, (SINGLE SIDE ONLY)

**EACH BIDDER SHOULD COMPLETE THIS FORM AND INITIAL EACH ENTRY.**

DATE COMPLETED: \_\_\_\_\_

**PLEASE SUBMIT BID DOCUMENTS ON SINGLE SIDED PAPER ONLY, WITH THE EXCEPTION OF THE SURETY AND BID BOND DOCUMENTS.**

**IN ACCORDANCE WITH THE BID SPECIFICATIONS I HAVE REVIEWED, COMPLETED / EXECUTED AND INCLUDED THE FOLLOWING FORMS:**

\_\_\_\_\_ Bid Form Page (**Signed, Dated and Bid on all alternatives applicable to the Work**).

\_\_\_\_\_ Security in the form of:

- \_\_\_\_\_ Bid bond in an amount equal to 10% of the total amount of this bid not to exceed \$20,000.00; or
- \_\_\_\_\_ Certified check or cashier's check in the amount of 10% of this bid not to exceed \$20,000.00

\_\_\_\_\_ Consent of Surety form signed by a Surety Company if the total amount of your Bid is over \$36,000.00. If your bid is accepted, the Surety Company that provided the Consent shall be required to furnish a Performance, Labor and Materials Bond in the amount of 100% of the award of the contract. The County of Union has provided its Consent of Surety form for your use. The use of this form by your Surety Company will expedite the bid review process and eliminate the possibility of having your bid rejected. If, however, you should need to use another form, please use language similar to that used on the Union County form and avoid making any additions or deletions to the Union County form language. In lieu of the Consent of Surety you may submit a Certified Check in the full amount of the bid.

\_\_\_\_\_ STATEMENT OF BIDDER OWNERSHIP. Pursuant to N.J.S.A. 52:25-24.2, which includes **BOTH** of the following documents:

- Bidder Signature Page
- Bidder Disclosure Statement (**Fill out 2 pages completely**)

\_\_\_\_\_ SUBCONTRACTOR IDENTIFICATION. Pursuant to N.J.S.A. 40A:11-16, which includes **BOTH** of the following documents:

- Subcontractor Identification Statement: List of Subcontractors (**only for certain types of work**)
- Subcontractor Identification Certification

\_\_\_\_\_ Acknowledgement of Addendum form: (**This form is to be used only when an addendum has been added to the specifications**).

\_\_\_\_\_ A copy of the State of New Jersey Department of the Treasury, Division of Revenue, **Business Registration Certificate ("BRC")** should be included with the bids as it must be received by the County prior to the award of the contract. The BRC provided must show that the Bidder was registered at the time of receipt of bids or the bid will be rejected.

\_\_\_\_\_ A copy of the State of New Jersey Department of the Treasury, Division of Revenue, **Business Registration Certificate ("BRC")** of all named or listed subcontractors (List of Subcontractors) in a Construction bid should be included with the bid as the BRC(s) must be received by the County prior to the award of the contract. Each subcontractor's certificate provided must show that the subcontractor was registered at the time of the receipt of bids or the bid will be rejected.

- \_\_\_\_\_ Affirmative Action Requirement
- \_\_\_\_\_ Experience Statement
- \_\_\_\_\_ Certificate of Bidder showing ability to perform Contract
- \_\_\_\_\_ Non-Collusion Affidavit – Fill out completely and notarize
- \_\_\_\_\_ Certificates from New Jersey Department of Labor – Public Works Contractor Registration Act. **(Only for certain types of work)**
- \_\_\_\_\_ Federal Attachments **(If applicable)**
- \_\_\_\_\_ NJDPMC Certificate / Notice of Classification **(If applicable)**
- \_\_\_\_\_ Americans with Disabilities Act
- \_\_\_\_\_ Statement of Bidder's Qualifications
- \_\_\_\_\_ Contractor Performance Record
- \_\_\_\_\_ Affidavit Regarding List of Debarred, Suspended or Disqualified Bidders
- \_\_\_\_\_ Prior Negative Experience Questionnaire
- \_\_\_\_\_ Contractor's Certification of Compliance – New Jersey Prevailing Wage Act
- \_\_\_\_\_ Uncompleted Contracts Affidavit **(For Bidder, if applicable) MUST ALSO PROVIDE DPMC FORM 701**
- \_\_\_\_\_ Certificate of Insurance Statement
- \_\_\_\_\_ Collection of Use Tax on Sales to Local Government Statement
- \_\_\_\_\_ Time of Completion
- \_\_\_\_\_ Disclosure of Investment Activities in Iran form

**I HAVE TAKEN THE FOLLOWING ACTIONS:**

- \_\_\_\_\_ Visited the site and attended the Pre-Bid Meeting **(Where applicable)**
- \_\_\_\_\_ Reviewed the Contract Documents (including any permits the County or its professionals may have obtained), Work, Site, Locality, and Local Conditions and Laws and Regulations that in any manner may affect Cost, Progress, Performance or Furnishing of Work.
- \_\_\_\_\_ Reviewed Bond Requirements
- \_\_\_\_\_ Provided Proof of Compliance with New Jersey Prevailing Wage Act
- \_\_\_\_\_ Reviewed Form of Owner/Contractor Agreement and General Conditions to the Contract

**NOTE: QUESTIONS PERTAINING TO THIS BID ARE TO BE DIRECTED TO DIVISION OF ENGINEERING AT 908-789-3675**

## **BIDDING DOCUMENTS**

The Bidding Documents consist of the following items:

- **ADDENDA, if issued**
- **CLARIFICATIONS, if issued**
- **INSTRUCTION TO BIDDERS**
- **BID FORM**
- **SPECIFICATIONS:**     **As outlined in the Table of Contents and included in the Project Manual.**
- **DRAWINGS:**           **As per List of Drawings, indicated on the Project Title Sheet.**

Bidder's Name \_\_\_\_\_

**BID FORM**

I/We have carefully examined the plans, specifications, and advertisement for bid for the

**REHABILITATION OF EAST HAZELWOOD AVENUE MINOR BRIDGE (RA-69)  
CITY OF RAHWAY, COUNTY OF UNION, NEW JERSEY  
BA NO. 52-2017; UNION COUNTY ENGINEERING PROJECT NO. 2013-009**

that is on file in the Union County Division of Engineering. I/We have inspected the site of the work and will contract to do all the work and furnish all materials mentioned in said plans and specifications. Work will be accomplished in the manner prescribed therein.

**BASE BID ITEMS:**

ITEM	CONTRACT QUANTITY	UNITS	DESCRIPTION	UNIT PRICE	AMOUNT
<b>ROADWAY PAY ITEMS</b>					
1	1	LS	MOBILIZATION	\$	\$
2	230	LF	SILT FENCE	\$	\$
3	15	UN	HAYBALE (IF AND WHERE DIRECTED)	\$	\$
4	65	LF	FLOATING TURBIDITY BARRIER, TYPE 2	\$	\$
5	900	SF	SEDIMENT CONTROL BAG	\$	\$
6	7	UN	INLET FILTER TYPE 2, 2 X 4	\$	\$
7	30	UN	BREAKAWAY BARRICADE	\$	\$
8	30	UN	DRUM	\$	\$
9	50	UN	TRAFFIC CONE	\$	\$
10	300	SF	CONSTRUCTION SIGNS	\$	\$

ITEM	CONTRACT QUANTITY	UNITS	DESCRIPTION	UNIT PRICE	AMOUNT
11	1	ALLOWANCE	TRAFFIC DIRECTOR, UNIFORM POLICE	\$50,000.00	\$50,000.00
12	530	LF	CONSTRUCTION BARRIER CURB	\$	\$
13	2	UN	TEMPORARY CRASH CUSHION, QUADGUARD 3 BAYS X 24" WIDE	\$	\$
14	2	UN	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	\$	\$
15	2	UN	PORTABLE VARIABLE MESSAGE SIGN	\$	\$
16	1	LS	FUEL PRICE ADJUSTMENT	\$5,000.00	\$ 5,000.00
17	1	LS	ASPHALT PRICE ADJUSTMENT	\$1,000.00	\$1,000.00
18	-	-	NO ITEM	\$0.00	\$ 0.00
19	1100	CY	EXCAVATION, UNCLASSIFIED	\$	\$
20	180	CY	I-9 SOIL AGGREGATE	\$	\$
21	1900	SY	DENSE GRADED AGGREGATE BASE COURSE, 4" THICK	\$	\$
22	300	GAL	TACK COAT	\$	\$
23	660	GAL	PRIME COAT	\$	\$
24	230	TON	HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK	\$	\$
25	660	TON	HOT MIX ASPHALT 25M64 BASE COURSE, 6" THICK	\$	\$
26	180	SY	NON-VEGETATIVE SURFACE, HOT MIX ASPHALT	\$	\$



ITEM	CONTRACT QUANTITY	UNITS	DESCRIPTION	UNIT PRICE	AMOUNT
27	7	UN	RECONSTRUCTED INLET, TYPE B USING NEW CASTING	\$	\$
28	2	UN	RESET CASTING (IF & WHERE DIRECTED)	\$	\$
29	190	SY	CONCRETE SIDEWALK, 4" THICK	\$	\$
30	260	LF	10" X 20" CONCRETE VERTICAL CURB	\$	\$
31	250	LF	BEAM GUIDE RAIL	\$	\$
32	100	LF	BEAM GUIDE RAIL ELEMENT	\$	\$
33	42	LF	THRIE BEAM GUIDE RAIL, BRIDGE	\$	\$
34	1	UN	FLARED GUIDE RAIL TERMINAL	\$	\$
35	2	UN	TANGENT GUIDE RAIL TERMINAL	\$	\$
36	200	SF	TRAFFIC MARKINGS. THERMOPLASTIC	\$	\$
37	1300	LF	TRAFFIC STRIPES, LONG-LIFE EPOXY RESIN, 4"	\$	\$
38	200	SY	TOPSOILING, 6" THICK	\$	\$
39	200	SY	TOPSOIL STABILIZATION, TYPE 2 MAT	\$	\$
40	200	SY	STRAW MULCHING	\$	\$
41	200	SY	FERTILIZING AND SEEDING, TYPE A-3	\$	\$
42	100	CY	EXCAVATION TEST PITS (IF & WHERE DIRECTED)	\$	\$

ITEM	CONTRACT QUANTITY	UNITS	DESCRIPTION	UNIT PRICE	AMOUNT
<b>BRIDGE PAY ITEMS</b>					
43	1	LS	CLEARING SITE - BRIDGE	\$	\$
44	1	LS	TEMPORARY COFFERDAM	\$	\$
45	0	0	NO ITEM	\$0.00	\$0.00
46	3540	LB	REINFORCEMENT STEEL, EPOXY-COATED	\$	\$
47	1300	SF	CONCRETE SPALL REPAIR, 2" TO 6" DEEP	\$	\$
48	200	SF	CONCRETE SPALL REPAIR, OVER 6" DEEP	\$	\$
49	0	--	NO ITEM	\$0.00	\$0.00
50	5	CY	UTILITY GROUT REPAIR	\$	\$
51	135	LF	PRESSURE INJECTION, CONCRETE CRACKS	\$	\$
52	1	LS	CONCRETE CORING FOR 12" WATER MAIN RELOCATION	\$	\$
53	1	LS	PRE-CAST REINFORCED CONCRETE STRUCTURAL SLAB	\$	\$
54	75	LF	CONCRETE BRIDGE PARAPET W/ARCHITECTURAL FINISH	\$	\$
55	7	CY	CONCRETE BRIDGE SIDEWALK	\$	\$

ITEM	CONTRACT QUANTITY	UNITS	DESCRIPTION	UNIT PRICE	AMOUNT
56	2	UNIT	DATE PANEL	\$	\$

**TOTAL BASE BID ITEMS NOS. 1 THROUGH 56:**

\_\_\_\_\_

Written

\_\_\_\_\_

Figures

**BID CONTINGENCY: (To be used if and when directed by the County)**

**One Hundred Thousand Dollars and No Cents**

Written

**\$100,000.00**

Figures

**TOTAL BASE BID ITEMS NOS. 1 THROUGH 56 PLUS BID CONTINGENCY AMOUNT:**

\_\_\_\_\_

Written

\_\_\_\_\_

Figures

**NOTE: Bid Contingency may include one-half of one percent of contract amount set aside for local training if and when directed by the County.**

Bidder's Name \_\_\_\_\_

**CONSENT OF SURETY**  
TO ACCOMPANY PROPOSAL (BID)

\_\_\_\_\_ (hereinafter called Surety), organized and existing under the laws of the State of \_\_\_\_\_ duly authorized and qualified to transact business in the State of New Jersey, in consideration of the sum of One Dollar (\$1.00), lawful money of the United States of America, to it in hand paid, receipt whereof is hereby acknowledged, and in consideration, hereby certifies and agrees that if the contract for which the attached proposal is made be awarded to \_\_\_\_\_ (hereinafter called Contractor) for the performance of certain work and labor or the supplying of certain materials, or both, as more particularly set forth in said proposal and described for purposes of this instrument as a proposal for \_\_\_\_\_ to the COUNTY OF UNION and if Contractor shall enter into the contract, Surety will become bound as surety for its faithful performance, labor and material payment and will provide the Contractor with a performance, labor and material payment bond in the full amount of the contract price.

**NOTE:**  
Expiration date  
Needed if Annual  
Surety

\_\_\_\_\_  
**NAME OF INSURANCE COMPANY**

**ADDRESS:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
**ORIGINAL SIGNATURE**  
**ATTORNEY-IN-FACT FOR INSURANCE CO.**

**NOTE: PROOF OF AUTHORITY OF OFFICERS OF SURETY COMPANY TO EXECUTE THIS DOCUMENT MUST BE SUBMITTED.**

**BIDDER SIGNATURE PAGE**

THE BIDDER MUST READ THE FOLLOWING INSTRUCTIONS TO COMPLETE THIS PAGE:

1. If doing business under a **trade name, partnership or a sole proprietorship**, you must submit the bid under exact title of the trade name, partnership, or proprietorship, and the bid must be signed by either the **owner**, or a **partner** and **witnessed** by a **notary public**.
2. If a **Corporation**, the bid must be signed by the **President** or **Vice President** and **witnessed** by a **Corporate Secretary** (corporate title must be exact) and **affix corporate seal**. If a Corporate Secretary does not exist, President or Vice President's signature shall be witnessed by a Notary Public.
3. Other persons **authorized** by **corporate resolution** to execute agreements in its behalf may also sign the bid documents (pages). **Copy of a resolution must accompany the bid.**
4. The person who signs this bid form **must also** sign the **Non-Collusion Affidavit**.
5. You **cannot** witness your own signature.

\_\_\_\_\_  
NAME OF BIDDER

\_\_\_\_\_  
\_\_\_\_\_  
ADDRESS OF BIDDER

\_\_\_\_\_  
ORIGINAL SIGNATURE  
CORPORATE SECRETARY

\_\_\_\_\_  
PRINT NAME AND TITLE  
CORPORATE SECRETARY

TEL: \_\_\_\_\_  
FAX: \_\_\_\_\_  
E-Mail: \_\_\_\_\_

BY: \_\_\_\_\_  
ORIGINAL SIGNATURE

Corporate Seal

\_\_\_\_\_  
PRINT OR TYPE NAME AND TITLE

**WARNING: IF YOU FAIL TO FULLY, ACCURATELY, AND COMPLETELY SUPPLY THE INFORMATION REQUESTED ON THIS PAGE, YOUR BID MAY BE REJECTED.**

Bidder's Name \_\_\_\_\_

**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)**

**STATEMENT OF OWNERSHIP DISCLOSURE - CONTINUED**

(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

**STATEMENT OF OWNERSHIP DISCLOSURE - CONTINUED**

**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 non-corporate 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 **County of Union** 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 **County of Union** to notify the **County of Union** 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 **County of Union** to declare any contract(s) resulting from this certification void and unenforceable.

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



Bidder's Name \_\_\_\_\_

**SUBCONTRACTOR IDENTIFICATION STATEMENT**  
**LIST OF SUBCONTRACTORS**

This form is ONLY required for plumbing and gas fitting, steam and hot water heating and ventilating apparatus, steam power plants, electrical work, structural steel, ornamental iron work, and any other trades required to be identified by the specifications (including, but not limited, to satisfying any DPMC Classification requirements).

**CHECK THIS BOX IF NONE OF THE ABOVE LISTED TRADES OR THOSE REQUIRED TO BE IDENTIFIED IN THE SPECIFICATIONS ARE TO BE USED TO PERFORM THE WORK**

In compliance with N.J.S.A. 40A:11-16 and the bid specifications, the undersigned hereby lists the name or names of the following subcontractors:

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Subcontract Amount: \$ \_\_\_\_\_

Specific Scope of Work Subcontracted: \_\_\_\_\_

License No. \_\_\_\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Subcontract Amount: \$ \_\_\_\_\_

Specific Scope of Work Subcontracted: \_\_\_\_\_

License No. \_\_\_\_\_

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: \_\_\_\_\_ Subcontract Amount: \$ \_\_\_\_\_

Specific Scope of Work Subcontracted: \_\_\_\_\_

License No. \_\_\_\_\_

**IF MORE THAN THREE SUBCONTRACTORS, PLEASE COPY THIS SHEET AS NECESSARY AND ATTACH TO THE BID PACKAGE.**

(Continued on following page)

Bidder's Name \_\_\_\_\_

**SUBCONTRACTOR IDENTIFICATION CERTIFICATION**

Note the law does not permit the listing of alternate subcontractors. However, multiple subcontractors for the same trade are permitted to be named provided the bidder meets the following requirements:

- Bidder identifies each subcontractor named for that category;
- Bidder states the scope of work, goods and services (the portion of the work) to be performed by each subcontractor; and
- Bidder provides the price quote provided by each subcontractor.

The bidder is advised that any change of subcontractor(s) from ones listed herein is subject to the County's approval. Change of subcontractor(s) will be approved only if made for good cause and not as a result of an arbitrary purpose.

The undersigned Bidder certifies and declares the subcontractors listed above shall be used as subcontractors to complete certain portions of the work in this project as set forth in N.J.S.A. 40A: 11-16.

\_\_\_\_\_  
**Witness**

Date \_\_\_\_\_

\_\_\_\_\_  
**NAME OF BIDDER**

\_\_\_\_\_  
**ADDRESS**

**By:** \_\_\_\_\_  
**ORIGINAL SIGNATURE ONLY**

\_\_\_\_\_  
**PRINT NAME AND TITLE**

Bidder's Name: \_\_\_\_\_

**ACKNOWLEDGMENT OF ADDENDUM**

**COUNTY OF UNION**

Rehabilitation of East Hazelwood Avenue Minor Bridge (RA-69  
**(Name of Construction /Public Works Project)**

2013-009  
**(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 County of Union'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.

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

**ACKNOWLEDGMENT BY BIDDER:**

**NAME OF BIDDER:** \_\_\_\_\_

**ORIGINAL SIGNATURE:** \_\_\_\_\_

**PRINTED NAME AND TITLE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

## **CONTRACTOR BUSINESS REGISTRATION CERTIFICATE**

New Mandatory Requirement - Effective 1/18/2010

The recently enacted **P.L. 2009, c.315**, requires that effective January 18, 2010; a contracting agency must receive proof of the bidder's business registration prior to the award of a contract. However, the proof must show that the bidder was in fact registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

If subcontractors are named on the bid, proof of the business registration for each subcontractor must be provided prior to the award of bid. Similarly to the bidder, the proof must show that each subcontractor was registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

Proof of business registration shall be

- A copy of a Business Registration Certificate issued by the Department of the Treasury, Division of Revenue; or
- A copy of the web version provided by the NJ Division of Revenue, or

Register online at [www.nj.gov/treasury/revenue/taxreg.htm](http://www.nj.gov/treasury/revenue/taxreg.htm). Click the "online" link and then select "Register for Tax and Employer Purposes or call the Division at 609-292-1730.

**Note: A NJ Certificate of Authority is not acceptable.**

**FAILURE** to submit proof of registration of the bidder or any subcontractor named on the bid prior to the award of a contract shall be cause to reject the bids.

**FAILURE** of the bidder or any subcontractor named on the bid to be registered prior to the receipt of bids is cause for a **MANDATORY REJECTION** of bids. (A NON-WAIVABLE DEFECT). This covers construction work as well as non-construction bids.

### **IN ADDITION:**

The contractor shall provide written notice to all **subcontractors and suppliers** not specifically named on the bid of the responsibility to register and submit proof of business registration to the contractor. The requirement of proof of business registration extends down through all levels (tiers) of the project.

Before final payment on the contract is made by the contracting agency, the contractor shall submit an accurate list and the proof of business registration of each subcontractor or supplier used in the fulfillment of the contract, or shall attest that no subcontractors were used.

For the term of the contract, the contractor and each of its affiliates and a subcontractor and each of its affiliates [N.J.S.A. 52:32-44(g)(3)] shall collect and remit to the Director, New Jersey Division of Taxation, the use tax due pursuant to the Sales and Use Tax Act on all sales of tangible personal property delivered into this State, regardless of whether the tangible personal property is intended for a contract with a contracting agency.

A business organization that fails to provide a copy of a business registration as required pursuant to section 1 of P.L.2001,c.134 (C.52:32-44 et al.) or subsection e. or f. of section 92 of P.L.1977,c.110 (C.5:12-92), or that provides false business registration information under the requirements of either of those sections, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000 for each business registration copy not properly provided under a contract with a contracting agency.

Bidder's Name \_\_\_\_\_

**BUSINESS REGISTRATION**  
Mandatory Requirement

P.L. 2009, c.315, requires that effective January 18, 2010; a contracting agency must receive proof of the bidder's business registration prior to the award of a contract. However, the proof must show that the bidder was in fact registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

If subcontractors are named on the bid, proof of the business registration for each must be provided prior to the award of a contract. Similarly to the bidder, the proof must show that each subcontractor was registered with the State of New Jersey Department of the Treasury, Division of Revenue and obtained the business registration prior to the receipt of bids.

Proof of business registration shall be:

- A copy of a Business Registration Certificate issued by the Department of Treasury, Division of Revenue; or
- A copy of the web printed version provided by the NJ Division of Revenue

**STATE OF NEW JERSEY**  
**BUSINESS REGISTRATION CERTIFICATE**  
FOR STATE AGENCY AND CASINO SERVICE CONTRACTORS

TAXPAYER NAME: TAX REGISTRATION TEST ACCOUNT  
TAXPAYER IDENTIFICATION: 870-087-3627000  
ADDRESS: 847 ROEBLING AVE, TRENTON, NJ 08611  
ISSUANCE DATE: 07/14/04

TRADE NAME: TAX REG TEST ACCOUNT  
SEQUENCE NUMBER: 1093907  
ISSUANCE DATE: October 14, 2004

**STATE OF NEW JERSEY**  
**BUSINESS REGISTRATION CERTIFICATE**

Taxpayer Name: TAX REG TEST ACCOUNT  
Trade Name:  
Address: 847 ROEBLING AVE, TRENTON, NJ 08611  
Certificate Number: 1093907  
Date of Issuance: October 14, 2004

For Office Use Only:  
20041014112012533

ATTACH BRC HERE

Bidder's Name \_\_\_\_\_

**AFFIRMATIVE ACTION REQUIREMENT**

**REQUIRED AFFIRMATIVE ACTION EVIDENCE**

General Requirements of P.L. 1975, c. 127: You are hereby put on notice that:

CONSTRUCTION CONTRACTS: The successful contractor must submit within three (3) days of the notice of intent to award or the signing of the contract the initial project manning report (A.A.201). This report should be submitted at the time the signed contract is returned to the County of Union. Attention: *Affirmative Action Officer*.

**If the successful contract does not submit the initial project manning report (A.A.201) within the three (3) days from the time the signed contract is returned to the County of Union, the County of Union WILL declare the contractor non-responsive and award the contract to the next lowest responsible bidder.**

\_\_\_\_\_  
NAME OF BIDDER

\_\_\_\_\_  
ORIGINAL SIGNATURE

\_\_\_\_\_  
PRINT OR TYPE NAME AND TITLE

\_\_\_\_\_  
DATE THIS FORM IS COMPLETED

**EXPERIENCE STATEMENT**

I hereby certify that my company has performed the following private or public work, which is relevant to this bid. I further certify that my company has never defaulted under any contract. Should you not sign this form due to prior defaults, please provide details on an attached sheet.

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Date

\_\_\_\_\_  
NAME OF BIDDER

\_\_\_\_\_  
\_\_\_\_\_  
ADDRESS

By: \_\_\_\_\_  
ORIGINAL SIGNATURE ONLY

\_\_\_\_\_  
PRINT NAME AND TITLE

**YOU MAY ATTACH ADDITIONAL SHEETS, BUT YOU MUST SIGN AND WITNESS THIS SHEET.**

**CERTIFICATE OF BIDDER SHOWING ABILITY TO PERFORM CONTRACT**

STATE OF NEW JERSEY / \_\_\_\_\_ )  
Specify, if Other ) SS:  
COUNTY OF \_\_\_\_\_ )

I, \_\_\_\_\_, of the (City, Town, Borough, etc.) of \_\_\_\_  
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 ("Contractor"), and that I executed said  
proposal with full authority to do so; and that said Contractor, pursuant to N.J.S.A. 40A:11-20, certifies  
that it owns, leases or controls all the necessary equipment required by the Plans, Specifications and  
Advertisements under this Bids are asked for.

If the Bidder is not the actual owner or lessee of any such equipment, then the Bidder shall attach to this  
Certificate information identifying the source from which the equipment will be obtained, and such  
information shall be accompanied by a certificate from the owner or person in control of the equipment  
definitively granting to the Bidder the control of the equipment required during such time as may be  
necessary for the completion of that portion of the contract.

\_\_\_\_\_  
(Also type or print name of affiant under signature)

By:\_\_\_\_\_



Bidder's Name \_\_\_\_\_

**NON-COLLUSION AFFIDAVIT**

(N.J.S.A. 52:34-15)

STATE OF \_\_\_\_\_ )

) **SS:** \_\_\_\_\_

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 for the above named project, and that I executed the said proposal with full authority to do so; that said bidder has not, directly or indirectly, entered into any agreement, participation 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 COUNTY OF UNION, NEW JERSEY relies upon the truth of the statements contained in said proposal and in the statements contained in the 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 bonafide established commercial or selling agencies maintained by \_\_\_\_\_ (N.J.S.A. 52:34-15).

\_\_\_\_\_  
**NAME OF BIDDER**

\_\_\_\_\_  
**ORIGINAL SIGNATURE ONLY**

**NOTE: The person who signed the bidder signature page for the bidder should sign this form also.**

Subscribed and sworn before me  
this \_\_\_\_\_ day of \_\_\_\_\_, 200\_\_\_\_.

\_\_\_\_\_  
Notary Public of the State of \_\_\_\_\_  
My commission expires: \_\_\_\_\_

**WARNING: IF YOU FAIL TO FULLY, ACCURATELY, AND COMPLETELY FILL OUT THIS AFFIDAVIT OF NON-COLLUSION, YOUR BID MAY BE REJECTED.**

**Contractor Registration Advisement**  
For Public Works Projects

A new law, known as "The Public Works Contractor Registration Act" (P.L. 1999, c.238), became effective April 11, 2000. Under the Act, no contractor/subcontractor will be permitted to bid on or engage in any contract for public work, as defined in Section 2 of P.L. 1963, c.150 (C:34:11-56.26), unless that contractor/subcontractor is registered with the New Jersey Department of Labor. The Act provides that upon registration with the Department, a public works contractor/subcontractor will be issued a certificate by the Department indicating compliance with the Act's requirements. The registration fee has been set at \$300.00 per year. Upon the effective date of the Act, public bodies will be expected to request production of such a certificate from those bidding on or engaging in public works projects.

It is important to note that the term "contractor," is defined in the, Act as, "a person, partnership, association, joint stock company, trust, corporation or other legal business entity or successor thereof who enters into a contract which is subject to the provision of the "New Jersey Prevailing Wage Act," P.L. 1963, c.150 (C.34:11-56.25, et seq.) for the construction, reconstruction, demolition, alteration, repair or maintenance of a public building regularly open to and used by the general public or a public institution, and includes any subcontractor or lower tier subcontractor as defined herein: except that, for the purposes of the act, no pumping station, treatment plant or other facility associated with utility and environmental construction, reconstruction, demolition, alteration, repair or maintenance shall be regarded as a public building regularly open to and used by the general public or a public institution."

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

Contractor Registration Unit  
New Jersey Department of Labor  
Division of Wage & Hour Compliance  
PO Box 389  
Trenton, New Jersey 08625-0389  
Telephone: 609-292-9464  
Fax: 609-633-8591  
E-mail: [contreg@dol.state.nj.us](mailto:contreg@dol.state.nj.us)

Bidder's Name \_\_\_\_\_

**AMERICANS WITH DISABILITIES ACT**  
EQUAL OPPORTUNITY FOR INDIVIDUALS WITH DISABILITIES

The contractor and the County of Union (hereafter "Owner") do hereby agree that the provisions of Title II of the Americans With Disabilities Act of 1990 (the "Act") (42 U.S.C.S12.101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereunto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the Owner pursuant to this contract, the contractor agrees that the performance shall be in strict compliance with the Act. In the event the contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the contractor shall defend the Owner in any action or administrative proceeding commenced pursuant to this Act. The contractor shall indemnify, protect, and save harmless the Owner, its agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The contractor shall, at its own expense, appear, defend, and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the Owner's grievance procedure, the contractor agrees to abide by any decision of the Owner which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the Owner, or if the Owner incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the contractor shall satisfy and discharge the same at its own expense.

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

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

It is further agreed and understood that the Owner assumes no obligation to indemnify or save harmless the contractor, its agents, servants, employees and subcontractors for any claim which may arise out of their performance of this Agreement. Furthermore, the contractor expressly understands and agrees that the provisions of this indemnification clause shall in no way limit the contractor's obligations assumed in this Agreement, nor shall they be construed to relieve the contractor from any liability, nor preclude the Owner from taking any other actions available to it under any other provisions of this Agreement or otherwise at law.

Name \_\_\_\_\_ (Please print or type)

Signature \_\_\_\_\_ Date \_\_\_\_\_

Bidder's Name \_\_\_\_\_

**STATEMENT OF BIDDER'S QUALIFICATIONS**

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. Questions may be answered on separate attached sheets. The Bidder may submit any additional information it desires.

1. \_\_\_\_\_  
(Name of Bidder)

2. \_\_\_\_\_  
(Permanent Main Office Address)

3. \_\_\_\_\_  
(When Organized)

4. \_\_\_\_\_  
(If a Corporation, where incorporated)

5. Number of years your organization has been engaged in construction or contracting business under present firm or trade name? \_\_\_\_\_

6. How many years of experience in construction work has your organization had (a) as a general contractor? And/or (b) As a subcontractor? \_\_\_\_\_

7. Contracts on hand: (Attach a list or table showing gross amounts of each Contract and the appropriate dates of completion) \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. General character of work performed by you. \_\_\_\_\_  
\_\_\_\_\_

9. Have you ever failed to complete any work awarded to you? \_\_\_\_\_  
\_\_\_\_\_

10. Have you ever defaulted on a Contract? \_\_\_\_\_ If so, complete details, including where and why?  
\_\_\_\_\_  
\_\_\_\_\_

**STATEMENT OF BIDDER'S QUALIFICATIONS - (continued)**

11. Has any officer or partner of your organization ever failed to complete a construction contract handled in its own name? If so, state name of individual, name of owner, location and type of project, and reason for the failure to complete. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

12. List your major equipment available for this Contract.  
 \_\_\_\_\_  
 \_\_\_\_\_

13. Experience in the construction work similar in importance to this Project.  
 \_\_\_\_\_  
 \_\_\_\_\_

14. Have you had any material adverse changes from the trades as listed in NJ Notice of Classification within last five (5) years? \_\_\_\_\_. If so, list prior classification.

15. Background and experience of the principal members of your organization, including the officers.

Individual's Name	Present Position or Office	Yrs. of Construction Experience	Magnitude & Type of Work	In What Capacity

16. Bank Reference. (Name, Address, Phone, Representative) \_\_\_\_\_
17. Will you, upon request, fill out a detailed financial statement and furnish any other information that may be required by the proper agency? \_\_\_\_\_
18. The undersigned, hereby authorizes and requests any person, firm or corporation to furnish any information requested by the proper agency in verification of the responses comprising this Statement of Bidder's Qualifications.
17. Bidder's telephone number, fax number and e-mail address (if applicable).
- Phone \_\_\_\_\_
- Fax \_\_\_\_\_
- E-mail \_\_\_\_\_
- Mobile \_\_\_\_\_

Dated at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
BIDDER (Signature)

\_\_\_\_\_  
BIDDER (Print Name)

Subscribed and sworn to before me  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
(Seal) Notary Public of New Jersey/  
Specify Other State  
My Commission Expires \_\_\_\_\_, 20\_\_.

**NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH  
YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.**

Bidder's Name \_\_\_\_\_

**CONTRACTOR PERFORMANCE RECORD**

List all contracts completed by you below or provide separate form.

Name of Owner	Name & Location of Project: Type Of Work	Prime or Sub-Cont.	Engineer or Architect in Charge for Owner	Contract Price (Omit Cost)	Date Completed	Was Time* Extension Necessary	Were Any Penalties Imposed	Were Liens* Claims or Stop Notice Filed

\* If answer is YES, provide explanation of details in connection with non-completion of contracts, time extensions, penalties imposed, labor troubles, liens, claims and notices filed against contracts listed in preceding item "Performance Record" on an attached sheet.

**NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.**

Bidder's Name \_\_\_\_\_

**CONTRACTOR PERFORMANCE RECORD**  
**CERTIFICATION**

The information above is true and complete to the best of my knowledge and belief.

\_\_\_\_\_  
(Name of Organization)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Title)

Subscribed and sworn to before me

this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
(Seal) Notary Public of New Jersey/  
Specify Other State

My Commission Expires \_\_\_\_\_, 20\_\_.



Bidder's Name \_\_\_\_\_

**AFFIDAVIT REGARDING LIST OF DEBARRED,  
SUSPENDED OR DISQUALIFIED BIDDERS**

STATE OF NEW JERSEY / \_\_\_\_\_ )  
Specify, if Other ) SS:  
COUNTY OF \_\_\_\_\_ )

I, \_\_\_\_\_, of the (City, Town, Borough, etc.) of \_\_\_\_\_  
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. I have executed the said Proposal with full  
authority to do so. Said Bidder is not at the time of the making this bid included on the New Jersey State  
Treasurer's or the Federal Government's List of Debarred, Suspended or Disqualified Bidders as a result  
of action taken by any State or Federal Agency.

\_\_\_\_\_  
Name of Contractor

By: \_\_\_\_\_  
(Signature of Authorized Representative)

Subscribed and sworn to before me  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
(Seal) Notary Public of New Jersey/  
Specify Other State

My Commission Expires \_\_\_\_\_, 20\_\_.

**NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR  
PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.**

**PRIOR NEGATIVE EXPERIENCE QUESTIONNAIRE**

(N.J.S.A. 40A:11-4)

1. Within the past ten (10) years, have you been found, through either court adjudication, arbitration, mediation, or other contractually stipulated alternate dispute resolution mechanism, to have: failed to provide or perform goods or services; or failed to complete a contract in a timely manner; or otherwise performed unsatisfactorily under a prior contract with a public entity?

\_\_\_\_\_ yes                      \_\_\_\_\_ no    If yes, please provide full, detailed explanation.

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2. Within the past ten (10) years, have you defaulted on a contract, thereby requiring a public entity to utilize the services of another contractor to provide the goods or perform the services or to correct or complete the contract?

\_\_\_\_\_ yes                      \_\_\_\_\_ no    If yes, please provide full, detailed explanation.

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3. Within the past ten (10) years, have you defaulted on a contract, thereby requiring a public entity to look to your surety for completion of the contract or tender of the costs of completion?

\_\_\_\_\_ yes                      \_\_\_\_\_ no    If yes, please provide full, detailed explanation.

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4. Within the past ten (10) years, have you been debarred or suspended from contracting with any of the agencies or department of the executive branch of the State of New Jersey at the time of the contract award, where the action was based on failure to perform a contract for goods or services with a public entity?

\_\_\_\_\_ yes                      \_\_\_\_\_ no    If yes, please provide full, detailed explanation.

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Bidder's Name \_\_\_\_\_

**PRIOR NEGATIVE EXPERIENCE CERTIFICATION**

I hereby certify that the above statements are true and accurate as of this \_\_\_\_\_  
day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
Name of Contractor

By \_\_\_\_\_  
(Signature of Authorized Representative)

Subscribed and sworn to before me  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
(Seal) Notary Public of New Jersey/  
Specify Other State

My Commission Expires \_\_\_\_\_, 20\_\_.

**NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.**

Bidder's Name \_\_\_\_\_

**TO BE COMPLETED ONLY WHEN FINAL PAYMENT IS REQUESTED**

**CONTRACTOR'S CERTIFICATION OF COMPLIANCE - NEW JERSEY PREVAILING WAGE ACT**

**TO:** County of Union  
Division of Engineering  
2325 South Avenue  
Scotch Plains, New Jersey 07076

**CONTRACT:**

**PROJECT:**

In accordance with the requirements of the New Jersey Prevailing Wage Act, N.J.S.A. 34:11-56 et al \*, the undersigned contractor on the public work being performed for:

**COUNTY OF UNION**

hereby certifies that he/she has complied with the contract requirements regarding the payment of the minimum prevailing wages established under "The New Jersey Prevailing Wage Act" N.J.S.A. 34:11-56 et al.

**CONTRACTOR:**

**ADDRESS:**

**BY:**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**ORIGINAL SIGNATURE ONLY**

**STATE OF NEW JERSEY**

**COUNTY OF \_\_\_\_\_**

Being by me duly sworn according to law, on his oath deposes and says that \_\_\_\_\_ is \_\_\_\_\_ of \_\_\_\_\_ the above named contractor, and that the facts set forth in the above statement are true.

Subscribed and sworn before me  
this \_\_\_\_ day of \_\_\_\_\_, 200 \_\_\_\_.

\_\_\_\_\_  
Notary Public: \_\_\_\_\_  
My Commission Expires: \_\_\_\_\_

\* N.J.S.A. 34:11-56.33 requires the contractor and subcontractor to file written statements with the public body in form satisfactory to the Commissioner certifying to the amounts then due and owing from such contractor and subcontractor filing such statement to any and all workmen for wages due on account of the public work, setting forth therein the names of the persons whose wages are unpaid and the amount due to each respectively. Union County will withhold the amount so deducted for the benefit of the workmen whose wages are unpaid as shown by the verified statement filed, and will pay directly to any workman the amount shown by such statement to be due to him for such wages. Such payment shall thereby discharge the obligation of the contractor to the person receiving such payment to the extent of the amount thereof.

Bidder's Name \_\_\_\_\_

**UNCOMPLETED CONTRACTS AFFIDAVIT**  
(To be Submitted with DPMC Form 701)

**PURSUANT TO N.J.A.C. 17:19-2.13, BIDDER DECLARES THE FOLLOWING WITH RESPECT TO ITS UNCOMPLETED CONTRACTS, ON ALL WORK, FROM WHATEVER SOURCE (PUBLIC AND PRIVATE), BOTH IN NEW JERSEY AND FROM OTHER GOVERNMENTAL JURISDICTIONS**

ENTITY	PROJECT TITLE	ORIGINAL CONTRACT AMOUNT	UNCOMPLETED AMOUNT AS OF BID OPENING DATE	NAME AND TELEPHONE NUMBER OF PARTY TO BE CONTACTED FRM ENTITY FOR VERIFICATION

**TOTAL AMOUNT OF UNCOMPLETED CONTRACTS \$** \_\_\_\_\_

Sworn and Subscribed to Before me

This \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
Notary Public

**BIDDER:**

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print Name)

**NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.**

Bidder's Name \_\_\_\_\_

**CERTIFICATE OF INSURANCE STATEMENT**

The Bidder fully understands the County of Union insurance requirements as stated in the Instructions to Bidders as well as the Owner/Contractor Agreement and agrees to provide all insurance required by these documents prior to the issuance of the Notice to Proceed.

\_\_\_\_\_  
BIDDER (Signature)

\_\_\_\_\_  
BIDDER (Print Name)

**NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.**

Bidder's Name \_\_\_\_\_

**COLLECTION OF USE TAX ON SALES TO LOCAL GOVERNMENTS STATEMENT**

The Bidder fully understands the requirements of the use tax on sales to local governments as stated in the General Conditions to the Contract for Construction and the Instructions to Bidders, and agrees at all times to comply with the "Contractor Use Tax Collection Legislation", as defined therein, and the terms relating thereto contained in the Contract Documents.

\_\_\_\_\_  
BIDDER (Signature)

\_\_\_\_\_  
BIDDER (Print Name)

**NOTE: FAILURE TO COMPLETE AND SUBMIT THIS DOCUMENT WITH YOUR PROPOSAL MAY RESULT IN A REJECTION OF YOUR BID.**

Bidder's Name \_\_\_\_\_

**TIME OF COMPLETION**

The undersigned proposed that if awarded the Contract, the scope of work will be started within ten (10) calendar days and will be substantially completed within **One Hundred Twenty (120) calendar days** from the date of the notice to proceed.

I, \_\_\_\_\_ of \_\_\_\_\_  
NAME (Print or type) COMPANY

Agree to complete work in the time frame specified \_\_\_\_\_  
SIGNATURE

**SITE VISIT – GENERAL CONTRACTOR**

I, \_\_\_\_\_ of \_\_\_\_\_  
NAME (Print or type) COMPANY

Visited the site of the work on \_\_\_\_\_  
SIGNATURE



**COUNTY OF UNION NEW JERSEY**  
**Division of Purchasing**  
**DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN**

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Solicitation Number: \_\_\_\_\_ Bidder/Offeror: \_\_\_\_\_

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Pursuant to Public law 2012, c. 25, any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must complete the certification below to attest, under penalty of perjury, that the person or entity, or one of the person or entity's parents, subsidiaries, or affiliates, is not identified on a list created and maintained by the Department of the Treasury as a person or entity engaging in investment activities in Iran. If the Director finds a person or entity to be in violation of the principles which are the subject of the law, s/he shall take action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the person or entity.

**I certify, pursuant to Public Law 2012, c. 25, that the person or entity listed above for which I am authorized to bid/renew:**

is not providing goods or services of \$20,000,000 or more in the energy sector of Iran, including a person or entity that provides oil or liquefied natural gas tankers, or products used to construct or maintain pipe lines used to transport oil or liquefied natural gas, for the energy sector of Iran,  
AND

is not a financial institution that extends \$20,000,000 or more in credit to another person or entity, for 45 days or more, if that person or entity will use the credit to provide goods or services in the energy sector in Iran.

In the event that a person or entity is unable to make the above certification because it or one of its parents, subsidiaries, or affiliates has engaged in the above-referenced activities, a detailed, accurate and precise description of the activities must be provided in part 2 below to the Division of Purchase under penalty of perjury. Failure to provide such will result in the proposal being rendered as non-responsive and appropriate penalties, fines and/or sanctions will be assessed as provided by law.

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**PART 2: PLEASE PROVIDE FURTHER INFORMATION RELATED TO INVESTMENT ACTIVITIES IN IRAN.** You must provide, accurate and precise description of the activities of the bidding person/entity, or one of its parents, subsidiaries or affiliates, engaging in the investment activities in Iran outlined above by completing the boxes below.

Name \_\_\_\_\_ Relationship to Bidder/Offeror \_\_\_\_\_

Description of Activities \_\_\_\_\_

Duration of Engagement \_\_\_\_\_ Anticipated Cessation Date \_\_\_\_\_

Bidder/Offeror Contact Name \_\_\_\_\_ Contact Phone Number \_\_\_\_\_

Certification: I, being duly sworn upon my oath, hereby represent and state that the foregoing information and any attachments thereto 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 Union County 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 County to notify the County 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, and 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 Union County, New Jersey and that the County at its option may declare any contract(s) resulting from this certification void and unenforceable.

Full Name (Print) \_\_\_\_\_ Signature \_\_\_\_\_

Title \_\_\_\_\_ Date \_\_\_\_\_

**STANDARD SPECIFICATION FORM - SS-1**

## STANDARD SPECIFICATIONS

The Standard Specifications for Road and Bridge Construction of New Jersey Department of Transportation, 2007 Edition; is added to and/or amended elsewhere herein by the Notice to Contractors (Advertisement), Proposal, Information for Bidders, General Conditions, Special Provisions, Project Plans, and Supplementary Specifications; shall, insofar as technical requirements are involved, govern in the execution of this project.

Such Standard Specifications are made a part of these Specifications by this reference and will not be repeated herein. It is the responsibility of prospective bidders to familiarize themselves with these Standard Specifications, copies of which may be examined at the office of the Engineer and may be obtained, upon payment of the cost thereof, from:

Department of Transportation  
State of New Jersey  
1035 Parkway Avenue  
Trenton, New Jersey 08625

The Notice to Bidders (Advertisement), Proposal, General Conditions, Instructions to Bidders, Special Provisions, Project Plans and/or Technical Specifications shall govern and prevail in the case of conflict between them and the Standard Specifications.

In these Standard Specifications the words "COMMISSIONER" or "DEPARTMENT" shall refer to and mean the person, persons, body, board or agent legally empowered to enter into contracts and otherwise legally act for the Owner. The words "RESIDENT ENGINEER (RE)", "ENGINEER" or "STATE" shall refer to and mean the professional engineering representative of the Owner as hereinbefore defined and the word "INSPECTOR" shall mean the authorized project representative of the Engineer with the authority as hereinbefore defined. The word "LABORATORY" shall mean and refer to the Engineer who may, at his discretion, and with the consent of the Owner, employ qualified technical personnel or testing laboratories to assist him in fulfilling the duties normally assigned to the "LABORATORY" in these Standard Specifications.

When reference is made herein to the bulletins, standards, specifications, publications or requirements of the Manual on Uniform Traffic Control Devices (MUTCD), Institute of Traffic Engineers (ITE), Federal Highway Administration (FHWA), American Association of State Highway Officials (AASHO), the American Concrete Institute (ACI), the American Society of Civil Engineers (ASCE) or similar national or regional societies, associations, institutes or organizations; the requirements of the bulletins, specifications, publications or requirements referred to shall be considered a part of these Specifications by such reference and shall not be repeated herein but shall have the same import and be as binding as if herein set forth in full.

# **TECHNICAL SPECIFICATIONS**

## TECHNICAL SPECIFICATIONS

### CONDITIONS SPECIFIC TO THIS PROJECT

*The Rehabilitation of East Hazelwood Avenue Minor Bridge Ra-69 Project* in Rahway City. The work shall include the complete replacement of the bridge superstructure with a new reinforced concrete slab bridge founded on the existing concrete abutments. The concrete abutments and wingwalls will undergo concrete spall repairs to repair all deteriorated and loose concrete. Asphalt approach pavement will be reconstructed and new stone masonry faced reinforced concrete parapets will be installed, as well as new steel beam guide rail. The aesthetic appearance of the stone masonry of the parapets will be similar to Monroe Street Bridge over the Rahway River in the City of Rahway. The construction will be staged, as the road will remain open to traffic during the construction duration.

There are **extensive underground utilities** within the project area as well as overhead utilities. Refer to the Utility Relocation Plan in the Contract Drawings for requirements and responsibilities of the utility work.

Generally the utility work shall consist but not limited to the following scope of work. A 10" abandoned gas main is present below the north sidewalk which will be capped and removed by the contractor during construction. A 30" concrete sanitary sewer pipe is below the westbound lane; this utility will remain in place while concrete repairs are occurring adjacent to it. 12" and 8" water mains are present at the site. Both water mains will be shut off during construction, and the 8" water main will be capped and removed by the water company with the contractor installing a 20" sleeve for an 18" casing pipe. The casing pipe is for the 12" water main. Two (2) Fiber optic duct banks are present at the bridge which remains in place during construction. Five (5) metal conduits run along the south side of the bridge. These are from the pole risers along the southeast sidewalk. The utilities within these conduits must be maintained and supported during construction. There are reinforced concrete stormwater drainage pipes which will remain while concrete repairs occur adjacent to them. An abandoned steel pipe, and unidentified concrete pipe and an unidentified steel pipe are present below the south sidewalk which must be capped and removed. All utilities which are capped and removed shall then have non-shrink grout placed in the voids left by the utilities. Overhead utilities within the vicinity of construction on the east side of the bridge will be relocated by PSE&G and shall generally consist of the removal of a utility pole on the northeast corner of the bridge as it is no longer in service. The overhead wire to the pole will be relocated to the south side of the bridge. Street lights shall be removed and reinstalled by the contractor for construction staging and similarly Type B storm sewer inlets shall be temporary converted to Type E inlets for construction staging purposes.

The contractor shall coordinate their work with any planned utility relocations as part of the construction and the existing utilities that will remain in their present location. It is the sole responsibility of the Contractor to investigate and use due care when operating in the vicinity of any utility. No additional compensation will be made for utility coordination and any other work involving the existing utilities.

Furthermore, the contractor is advised the **Route 9 overpass bridge is adjacent and partially overhead of the project bridge, and means and methods shall be used to construct the work of the contract with this Route 9 overpass bridge in place.** No additional compensation will be made.

Prior to the start of work, the Contractor shall go over the limits of all work with the Engineer or duly appointed representative.

*The time of completion for this project has been set at One Hundred Twenty (120) calendar days of the Notice to Proceed.*

*It is noted punch-list items will invariably arise. To minimize disruption to its citizens, the County shall require all punch-list items brought to the Contractor's attention, to be rectified within seven (7) calendar days from receipt of said items. If said punch-list items are not resolved to the satisfaction of the Engineer, within the specified time, Liquidated Damages as specified in Section 43 of the General Specifications ('G' sheets of this specification) shall be pursued, commencing on the eighth calendar day.*

*The County retains the right to increase or decrease any and all quantities up to 25 percent of those estimated, at the unit prices bid.*

*Certified payroll records shall be produced and submitted on a bi-weekly basis to the County for all personnel involved with this project. The County shall withhold any and all payments until the certified payroll records are received.*

## SPECIAL PROVISIONS

### AUTHORIZATION OF CONTRACT

The Contract is authorized by the provisions of Title 27 of the Revised Statutes of New Jersey and supplements thereto.

### SPECIFICATIONS TO BE USED

The 2007 Standard Specifications for Road and Bridge Construction, of the New Jersey Department of Transportation as amended herein will govern the construction of this Project and the execution of the Contract.

General wage determinations issued under Davis-Bacon and related acts, published by US Department of Labor, may be obtained from the Davis-Bacon web site at <http://www.access.gpo.gov/davisbacon/nj.html> under the appropriate county; select the construction type.

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

State wage rates may be obtained from the New Jersey Department of Labor & Workforce Development (Telephone: 609-292-2259) or by accessing the Department of Labor & Workforce Development's web site at [http://lwd.dol.state.nj.us/labor/wagehour/wagehour\\_index.html](http://lwd.dol.state.nj.us/labor/wagehour/wagehour_index.html) The State wage rates in effect at the time of award are part of this Contract, pursuant to Chapter 150, Laws of 1963 (NJSA 34:11-56.25, et seq.).

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

State wage rates may be obtained from the New Jersey Department of Labor & Workforce Development (Telephone: 609-292-2259) or by accessing the Department of Labor & Workforce Development's web site at [http://lwd.dol.state.nj.us/labor/wagehour/wagehour\\_index.html](http://lwd.dol.state.nj.us/labor/wagehour/wagehour_index.html) The State wage rates in effect at the time of award are part of this Contract, pursuant to Chapter 150, Laws of 1963 (N.J.S.A. 34:11-56.25 et seq.).

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

The following Wholly State funded project Attachments that are located at the end of these Special Provisions:"

1. State of New Jersey Equal Employment Opportunity Special Provisions for Construction Contracts Funded by Wholly or partially State Funds.
2. Payroll Requirements for 100 Percent State Projects.
3. Americans with Disabilities Act for 100 Percent State Funded Contracts.
4. Small Business Enterprise Utilization Attachment for 100% State Funded Contracts.

The following additional project specific Attachments are located at the end of these Special Provisions:

## GENERAL

Award of contract and subletting will not be permitted, materials will not be permitted from, and use of equipment will not be permitted that is owned and/or operated by, firms and individuals included in the report of suspensions, debarments and disqualifications of firms and individuals as maintained by the Department of the Treasury, General Services Administration, CN-039, Trenton NJ 08625 (609-633-3990).

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

Whenever any section, subsection, subpart or subheading is amended by such terms as changed to, deleted or added it is construed to mean that it amends that section, subsection, subpart or subheading of the 2007 Standard Specifications unless otherwise noted.

Whenever reference to page number is made, it is construed to refer to the 2007 Standard Specifications, as amended herein, unless otherwise noted.

Henceforth in this supplementary specification whenever reference to the State, Commissioner, Department, Engineer or Inspector is made, it is construed to mean the UNION COUNTY ENGINEER.

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

Materials or assemblies as specified will be accepted on the basis of certificates of compliance stating that such materials or assemblies fully comply with the requirements of the contract.

Materials or assemblies used on the basis of certificates of compliance may be sampled and tested at any time and if found not to be in conformity with the contract requirements, will be subject to rejection whether in place or not. The Contractor shall require the manufacturer or supplier to furnish three copies of certificates of compliance with each delivery of materials, components and manufactured items that are acceptable by certification. One copy shall be furnished to the Engineer, one copy shall be furnished to the District Office, Bureau of Local Government Services and the Contractor shall retain one copy.

Certificates of compliance shall contain the following information:

1. Project and location to which the material is consigned.
2. Name of the Contractor to which the material is supplied.
3. Kind of material supplied.
4. Quantity of material represented by the certificate.
5. Means of identifying the consignment, such as label marking, seal number, etc.
6. Date and method of shipment.
7. Statement that the material has been tested and found in conformity with the pertinent contract requirements stated in the certificate.
8. Signature of a person having legal authority to bind the supplier.
9. Signature attested to by a Notary Public or other properly authorized person.

Payments relative to materials specified, shall be accepted on the basis of certificates of compliance shall not be made until the Engineer has in his possession an acceptable certificate of compliance.



## FOREIGN MATERIALS

The attention of the Contractor is directed to all existing federal and state statutes and regulations that prohibit on any public work the use, by the Contractor or subcontractor, of materials produced or manufactured outside the United States of America. Exceptions to this prohibition, upon the findings of the Engineer, are allowed only where its enforcement would be inconsistent with the public interest or where the material is not produced or manufactured in the United States in sufficient quantities and of a sufficient quality.

If the Engineer finds in the performance of the contract there has been a failure to comply with the provisions relative to foreign materials, he shall make public his findings, and no other contract for the construction of any public work by this contracting agent shall be awarded to such Contractor, or to any partnership, association or corporation with which such Contractor is associated or affiliated, within a period of three years after such finding is made public.

Where the use of foreign material is allowed, such material shall be furnished in accordance with the following requirements:

1. Materials manufactured or produced outside the United States shall be delivered to a location, approved by the Engineer, where they shall be retained until examination can be completed.
2. The Contractor shall arrange, at his expense, any testing which the Engineer feel necessary to ascertain the acceptability of the material.
3. A certificate of compliance shall accompany each lot of foreign material. In addition, certified mill tests reports shall be attached to the certificate of compliance for those materials for which mill test reports are required and shall clearly identify the lot to which they apply. Certificates of compliance shall contain the following information:
  - A. Project to which the material is consigned.
  - B. Name of the Contractor to which the material is supplied.
  - C. Kind of material supplied.
  - D. Quantity of material represented by the certificate.
  - E. Means of identifying the consignment, such as label marking, seal number, etc.
  - F. Date and method of shipment.
  - G. Statement that the material has been tested and found in conformity with the pertinent contract requirements stated in the certificate.
  - H. Signature of a person having legal authority to bind the supplier.
  - I. Signature attested to by a notary public or other properly authorized person.

**The following Sections of the Standard Specifications are deleted:**

- SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS
- SECTION 103 - AWARD AND EXECUTION OF CONTRACT

The above Sections of the Standard Specifications are changed to the requirements of the County of Union in General Specifications attached hereto.

**The below Sections of the Standard Specifications have been changed to the requirements of the County of Union as stipulated herein, in the event of conflicts between the below sections and those of Union County, Union County stipulations shall govern.**

- SECTION 104 - SCOPE OF WORK
- SECTION 109 - MEASUREMENT AND PAYMENT

## **DIVISION 100 - GENERAL PROVISIONS**

### **SECTION 101 - GENERAL INFORMATION**

#### **101.03 TERMS**

THE FOLLOWING TERMS ARE CHANGED.

##### **Completion**

(3) IS CHANGED TO:

3. the Contractor has satisfactorily executed and delivered to the RE all documents, required forms, certifications, and proofs of compliance required by the Contract Documents, it being understood that the satisfactory execution and delivery of documents, certificates, and proofs of compliance is a requirement of the Contract.

**Department:** Shall be defined as the County of Union.

**Resident Engineer (RE)** shall be defined as a representative of the County of Union or Engineer.

**Pavement Structure.** The combination of pavement, base courses, and when specified, a subbase course, placed on a subgrade to support the traffic load and distribute it to the roadbed (see Figure 101-1). These various courses are defined as follows:

1. **Pavement.** One or more layers of specified material of designed thickness at the top of the pavement structure.
2. **Base course.** One or more layers of specified material of designed thickness placed on the subgrade or subbase.
3. **Subbase.** One or more layers of specified material of designed thickness placed on the subgrade.

## SECTION 104 - SCOPE OF WORK

### 104.03.03 Types of Changes

#### 3. Changes in the Character of Work.

##### a. Differing Site Condition.

THE SECOND PARAGRAPH IS CHANGED TO:

The Department will make payment for increased costs resulting from a Type 1 or Type 2 Differing Site Condition as a change in the character of work; however, the Department will not consider making payment for a differing site condition unless the resulting change in cost exceeds \$7,500. Except, if the Contractor incurs cost as the result of multiple differing site conditions, with the cost of each separate differing site condition having a value of at least \$1,500 but not more than \$7,500, the Department will consider making payment for such costs if the aggregate cost of the multiple differing site conditions exceeds \$7,500. If the change in cost exceeds these amounts, the Department will base the modification on the total cost of the change, and the Department will not deduct the threshold amount of \$7,500 from the cost of the change.

### 104.03.04 Contractual Notice

THE SECOND PARAGRAPH IS CHANGED TO:

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

1. A statement that this is a notice of a change.
2. The date when the circumstances believed to be a change was discovered.
3. A detailed and specific statement describing the nature and circumstances of the change.
4. If the change will or could affect costs to the Department.
5. If the change will or could affect Contract Time as specified in 108.11.01.C.

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

### 104.03.08 Force Account

#### 7. Equipment.

##### a. Contractor-Owned Equipment.

PART 1 IS CHANGED TO:

- 1 The Department will calculate the "rental" hourly rates by dividing the monthly rate by 176. The Department will not use weekly, daily, or hourly rates. The Department will apply rental hourly rates for every hour the equipment is in active use, except that for any 30-day period, the Department will limit the total amount paid for each piece of equipment to a maximum of the monthly rate.

THE FOLLOWING PART IS ADDED:

6. The Department will make payment for costs for transporting equipment to and from the work site, if said costs are solely required as a direct result of the Force Account activity.

THE SECOND PARAGRAPH IS CHANGED TO:

The payment established is full payment for all equipment costs, including the cost of fuel, repairs, maintenance, depreciation, storage and incidentals.

**10. Subcontractors.**

THE SECOND PARAGRAPH IS CHANGED TO:

The Department will make payment for markup on subcontracted work at the rate of 5 percent applied on the total amount of all costs for subcontracted force account work up to \$500,000 and 2% applied on the total amount of all costs for subcontracted force account work over \$500,000.

**104.03.09 Delay Damages**

**1. Non-Productive Activity.**

**e. Equipment.**

THE FIRST SENTENCE IS CHANGED TO:

If as the result of the delay, equipment cannot be used for any active work, and is directed by the RE to remain on the work site during the delay, the Department will make payment as specified in 104.03.08.7.a.5.

## SECTION 105 - CONTROL OF WORK

### 105.05 WORKING DRAWINGS

THE SECOND PARAGRAPH IS CHANGED TO:

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

THE THIRD PARAGRAPH IS CHANGED TO:

Submit working drawings on 22 × 36-inch sheets. The Department may approve the use of 8-1/2 x 11 inch sheet on a case by case basis. Submit design calculations required for the working drawings on 8-1/2 × 11-inch paper. Submit 7 copies of the working drawings to the designated design unit for review with a copy of the transmittal letter to the RE. For railroad-carrying structures, submit 4 additional copies to the designated design unit. Submit an additional copy for each outside testing agency or authority involved in the Project.

THE NINTH PARAGRAPH IS CHANGED TO:

Submit working drawings for certification or approval as specified in Table 105.05-1. This list is not all inclusive. Ensure that the working drawings submitted for approval are signed and sealed by a Professional Engineer. The working drawings submitted for certification are not required to be signed and sealed by a Professional Engineer unless they alter the original Contract.

TABLE 105.05-1 IS CHANGED TO:

<b>Table 105.05 1 - Working Drawing Submission Category</b>	
<b>Certified</b>	<b>Approved</b>
Breakaway I-Beam GA Sign Support Posts	Catalog Cuts (related to landscape Items)
Bridge Drainage	Change in Structural Steel Details
Bridge Railing and Fencing Anchorage System	Change of Pre-stressed Concrete Strand Patterns
Catalog Cuts	Demolition Plans
Composite Piles	Erection Plans
DMS Sign Support Structure	High Load Multi-Rotational (HLMR) Bearings
DMS Standard Ground Mounted	Isolation Bearings
Elastomeric Bearings Pads	ITS System Drawings, including Block Diagrams
Electrical Items Not Pre-Qualified	Machinery and Electrical Items for Movable Bridges
Expansion Deck Joint Assembly Systems	Mechanically Stabilized Earth (MSE) Walls
Modular Expansion Joint Assembly	Other work shown on the Plans as conceptual
Pre-cast Pre-stressed Concrete Beams and Piles Fabrication	Pre-cast Concrete Arch Structures
Reinforced Elastomeric Bearings	Pre-cast Concrete Box Culverts

Sign Legends  
Sign Support Structures  
Structural Steel Fabrication

Prefabricated Modular Walls  
Stay-In-Place Forms  
Temporary Sheeting and Cofferdams  
Temporary Shielding  
Temporary Structures  
Value Engineering Plans

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THE FIRST PARAGRAPH UNDER PART 1 OF TENTH PARAGRAPH IS CHANGED TO:

1. **Certified Working Drawings.** For working drawings requiring certification, include 2 blank blocks directly above the title block. Designate one block for design unit certification, and designate the other block for the Contractor's approval stamp and a signed statement stating that the Contract has not been altered. The Department will require 30 days for review and certification or rejection and return of certified working drawings.
1. **Certified Working Drawings.**

THE LAST SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The Department will require 15 days for review and certification or rejection and return of certified working drawings.

2. **Approved Working Drawings.**

THE LAST SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The Department will require 15 days for review and approval or rejection and return of working drawings.

#### **105.07 Cooperation with Utilities.**

THE FOLLOWING HAS BEEN ADDED

- A. **General.** It is understood and agreed that the Contractor has considered in its Proposal all of the permanent and temporary utility facilities in their present, new, or relocated positions to the extent required by the Contract Documents and as revealed by its own investigations; is aware that utility service demands, adverse field conditions and emergencies may affect the Utility's ability to comply with the proposed schedules for utility work; is cognizant of the limited ability of the County to control the actions of the Utility(s), and has made allowances in its Proposal that it is not entitled to any Additional Compensation by reasons of delays, inconvenience or damage sustained by the Contractor due to any interference from utility facilities or the operation of moving or installing them. Similarly, the Contractor is deemed to understand that only limited extensions of time may be granted as specified in Subsection 108.11.

The Contractor shall notify, in writing, the Utility(s) involved of the nature and scope of the Project, and of its operations that may affect their facilities or property. The notice shall include an inquiry for all information required to determine the location of the existing utility facilities and the Contractor shall also provide the portion of the approved Preliminary Schedule relative to that respective Utility. Two copies of such notices and the Utility's responses shall be sent to the Resident Engineer prior to the start

of Construction Operations. The Contractor shall also attend a Utility pre-construction conference prior to the start of Construction Operations.

The Contractor shall provide each Utility the portion of the approved Baseline CPM Schedule related to the respective Utility and any approved updates or revisions that affect that Utility.

Information on the Utility(s), including the work to be performed by the Utility(s) on the Project, will be provided in the Special Provisions.

The corporations, companies, agencies, or municipalities owning or controlling the utilities, and the name, title, address, and telephone number of their local representative are attached herein.

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

The Contractor is advised that the design for this Contract did not identify any anticipated utility conflicts. However, this Contract does require the Contractor to call the State's One Call System as specified in Subpart C., to verify that a conflict does not exist.

A pre-construction meeting will be held to enable full coordination of parties involved in this project. The County will arrange this meeting shortly after award of contract and prior to the start of any work and send an agenda and written invitations to municipal officials, utility owners and any other interested parties.

*A minimum of five business days prior to the pre-construction meeting, the Contractor will provide the County, in writing, with the following:*

- 1. Proposed work schedule;*
- 2. List of Sub-Contractors;*
- 3. List of material suppliers;*
- 4. Certificates of Compliance for all materials and or assemblies, including: Raised Pavement Markings; Signs; Public Sidewalk Ramp Delineation, etc.;*
- 5. Breakdown of any lump-sum items;*
- 6. Shop drawings of all construction items.*

**THE CONTRACTOR WILL NOT COMMENCE WORK UNTIL THE ABOVE MATERIAL IS RECEIVED & APPROVED.**



## SECTION 106 - CONTROL OF MATERIAL

### 106.07.01 Certification of Compliance

Submit manufacturer's Certifications of Compliance stating that the materials and/or assemblies fully comply with the requirements of the Contract when required by the Contract or requested by the Department.

Ensure that Manufacturer's Certification of Compliance contains the following information:

1. Project Name.
2. Name of the Contractor.
3. Material description.
4. Quantity of material represented by the certification.
5. Means of identifying the consignment, such as label marking or seal number.
6. Date and method of shipment.
7. A statement that the material conforms to the Contract material requirements and that representative samples have been sampled and tested.
8. If the submission is for an assembly of materials, a statement that the assembly conforms to the Contract.
9. Signature of a person having legal authority to bind the supplier.
10. Typed or printed name of the person who signed the certification.

Before incorporating the materials into the Project, obtain three (3) copies of the manufacturer's Certifications of Compliance for materials, components, and manufactured items that are accepted by certification. Retain 1 copy and submit two (2) copies to the RE. With the Certification of Compliance, provide a transmittal identifying the Item for which it is submitted. For products that contain steel or iron, attach additional documents as required by the certification procedures as specified in 106.07.02. The Contractor may submit the Certifications of Compliance electronically to the RE in a scanned document. Include the transmittal and all backup documentation in the scanned document.

The Department has the right to sample and test materials or assemblies accepted on the basis of Certifications of Compliance at any time. The Department will reject materials or assemblies, whether in place or not, if found not to be in conformance with the Contract requirements.

The Department will not make payment for an Item for which material is accepted on the basis of a Certification of Compliance until the RE has received the required Certification of Compliance and has inspected and accepted the material or assembly.

### 106.07.02 Certification for iron and steel

- A. Pre-cast Concrete Steel and Concrete Pipe Certification of Compliance.** For pre-cast concrete and concrete pipe items, a Buy America Compliance Plan is required to confirm that the material meets the Buy America requirements as specified in 106.03. The ME will periodically audit compliance with the program at the pre-cast plant. If the pre-cast concrete item is not inspected by ME, submit a Certification of Compliance for the pre-cast concrete item as required in 106.07.01. When a Certification of Compliance is submitted, ensure that the Certification of Compliance contains a statement that the reinforcing steel used in the pre-cast concrete item complies with the Buy America requirements as specified in 106.03
- B. Incidental Steel or Iron Components and Manufactured Products.** Incidental steel and iron components such as lifting hooks, tie wire, chairs, nuts, bolts and screws are not required to be certified for compliance with Buy America requirements. For manufactured products that are not made predominantly of steel, the steel components are not required to be certified for compliance

with Buy America requirements.

- C. Step Certification of Compliance.** For products that contain steel or iron components and are not covered in 106.07.02.A or 106.07.02.B, step Certification of Compliance is required to confirm that the item meets the Buy America requirements as specified in 106.03. A step certification is a process under which each handler (e.g., supplier, fabricator, manufacturer, processor, coating facility) of the iron and steel components certifies that the steel and iron components were of domestic origin and that their step in the process was domestically performed.

Every step in the process from melting to coating must be performed in the United States in order for the steel or iron component to be considered domestic and must be documented by step certification. If a domestic source for a steel or iron component cannot be found, submit a request for waiver to the Department. Do not purchase non-domestic steel or iron components without the express written consent of the Department.

Ensure that 3 copies of the Contractor's Certification of Compliance (Form DC-17) and the step Certifications of Compliance are provided for items containing steel or iron. Retain 1 copy and submit 2 copies to the RE. The Contractor may submit the DC-17 and the step certifications electronically in a scanned document.

Ensure that step Certifications of Compliance contain the following information:

1. Name of the Company supplying the material.
2. Name and location of the Company the material was shipped to.
3. Material description.
4. Quantity of material represented by the Certification.
5. Means of identifying the consignment, such as label marking or seal number.
6. Date and method of shipment.
7. A statement that the material conforms to the Contract material requirements and to the Buy America requirements in 106.03.
8. A statement that all steel or iron components in the material or assembly were "melted and manufactured in the US," unless there is non-domestic steel or iron in the material or assembly.
9. If there is non-domestic steel or iron in the assembly, describe in detail the non-domestic steel or iron material and the quantity. Attach a copy of the Department's approval for the use of non-domestic steel or iron components.
10. Signature of a person having legal authority to bind the supplier.
11. Typed or printed name of the person who signed the certification.

The Department will not make payment for work containing steel or iron materials until the RE has received the required DC-17 and step Certifications of Compliance and has inspected and accepted the material or assembly.

## SECTION 107 - LEGAL RELATIONS

### 107.04 NEW JERSEY CONTRACTUAL LIABILITY ACT

THE FOURTH PARAGRAPH IS CHANGED TO:

For purposes of determining the date of “completion of the contract” pursuant to N.J.S.A. 59:13-5, “completion of the contract” occurs on the date that the Contractor provides written notice to the Department of Acceptance or conditional Acceptance of the Proposed Final Certificate or the 30th day after the Department issues the Proposed Final Certificate, whichever event occurs first.

### 107.09 INDEPENDENT CONTRACTOR

THE ENTIRE SUBSECTION IS CHANGED TO:

The relationship of the Contractor to the State is that of an independent contractor. Conduct business consistent with such status. Do not hold out or claim to be an officer or employee of the Department by reason hereof. Do not make a claim, demand, or application to or for the rights or privileges applicable to an officer or employee of the Department, including, but not limited to, Workers Compensation Insurance, unemployment insurance benefits, social security coverage, or retirement membership or credit.

### 107.11 RISKS ASSUMED BY THE CONTRACTOR

THE ENTIRE SUBSECTION IS CHANGED TO:

- 1. Risks of Loss or Damage to the Permanent Construction.** Until Acceptance, and within the limits of the Project’s work, the Contractor shall bear the risk of all loss or damage to all permanent construction and temporary construction performed under this Contract and to materials, whether or not it has received payment for such construction or materials under Subsection 109.05, 109.06, or 109.07, except payment will be made to the Contractor for the repair or replacement of any permanent element of the construction which has not been accepted by the Department, if the element of the work damaged is completed to the stage of serving its intended function and is subsequently damaged by accident by public traffic. In order to receive payment, the Contractor must supply satisfactory evidence that such damage was caused by a public traffic accident that was not caused by vandalism or by the equipment of the Contractor or any of its subcontractors or suppliers. Satisfactory evidence shall generally be limited to: accident reports filed with the Division of Motor Vehicles, police agencies or insurance companies; statements by reliable, unbiased eye witnesses; identification of the vehicle involved in the accident. Physical evidence that the damage was caused by a motor vehicle (such as tire marks or broken headlight glass) will not be sufficient unless it can be clearly shown that the damage was not caused by the Contractor’s vehicles or by vandalism. The Contractor shall take every precaution, as allowed by the Contract against injury or damage to any part of the construction or to materials by the action of the elements, the traveling public, vandalism, or from any other cause, whether arising from the execution or the non-execution of the work. The Contractor shall promptly repair, replace, and make good any such damage or loss without cost to the Department. The Contractor shall not bear such risk of loss or damage, which arises from acts of war or floods, tidal waves, earthquakes, cyclones, tornadoes, hurricanes, or other cataclysmic natural phenomenon unless such loss or damage is covered by insurance.

THE FOLLOWING SUBSECTION IS ADDED:

**107.17 COMMUNICATION WITH THE NEWS MEDIA**

Do not communicate with the news media or issue a news release without obtaining a prior written approval from the Department.

## SECTION 108 - PROSECUTION AND COMPLETION

### 108.01 SUBCONTRACTING

#### 1. Values and Quantities.

THE FOLLOWING IS ADDED TO FIRST PARAGRAPH

1. There are no Specialty Items in this Project.

THE THIRD PARAGRAPH IS CHANGED TO:

If a partial quantity of work for a unit price Item is subcontracted, the Department will determine the value of the work subcontracted by multiplying the price of the Item by the quantity of units to be performed by the subcontractor.

THE FOURTH PARAGRAPH IS CHANGED TO:

If only a portion of work of an Item is subcontracted, the Department will determine the value of work subcontracted based on the value of the work subcontracted as indicated in the subcontract agreement and as shown in a breakdown of cost submitted by the Contractor.

### 108.02 COMMENCEMENT OF WORK

THE SUBPART 4 IN THE FIRST PARAGRAPH IS CHANGED TO:

4. Progress schedule as specified in 153.03

### 108.06 NIGHT OPERATIONS

THE FOLLOWING IS ADDED TO THE BEGINNING OF THE FIRST PARAGRAPH:

The Contractor shall be responsible for furnishing, maintaining, removal & or disposal of all equipment, material & manpower necessary for compliance with this sub-section.

#### 2. Visibility Requirements for Workers and Equipment.

THE FIRST PARAGRAPH IS CHANGED TO:

Ensure that workers wear a 360° high-visibility retroreflective safety garment meeting ANSI/ISEA Class 3, Level 2 standards.

### 108.07 TRAFFIC CONTROL

THE FOLLOWING IS ADDED:

Working hours for this project are as follows:

Weekdays (Monday through Friday)

Day-Time 9:00 am to 4:00 pm

Weekends/Holidays

Not Allowed without Approval from Union County

**108.07.01 Interference**

THE FOLLOWING IS ADDED TO THIS SUB-SECTION:

It shall be the Contractor's responsibility to maintain driveway access for all adjacent property owners. *In the event industrial and commercial driveway access must be temporarily denied, the Contractor shall provide written notice to the Engineer and property owner at least five (5) working days in advance of the driveway closing.*

***THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL WORK ZONES FOR THE CONSTRUCTION. ALL TRAFFIC CONTROL DEVICES & MANPOWER NECESSARY TO MAINTAIN SUCH WORK ZONES IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES SHALL BE SUPPLIED, IMPLEMENTED AND REMOVED AT THE APPROPRIATE TIME BY THE CONTRACTOR.***

**108.09 Maintenance within the Project Limits**

The following is added to this sub-section:

The Contractor shall not be responsible for removal of ice or snow from sections of roadways opened to traffic or for damage to the project caused by the operation of snow plows or other snow removal or deicing operations carried on by others under the supervision or direction of the County. The Contractor shall not be responsible for mowing unless an item for mowing is scheduled in the proposal form. However, the Contractor shall be responsible for the removal of all leaves, debris and other material on the road, prior to reconstruction and resurfacing. The Contractor will also be responsible for street sweeping prior to resurfacing operations, and at the end of each day following milling operations.

**108.11.01 Extensions to Contract Time**

**B. Types of Delays.**

**1. Non-Excusable Delays.**

THE FOLLOWING IS ADDED:

For work performed by Utilities, delays up to 30 percent of the estimated duration specified in 105.07.02 are considered non-excusable. The duration includes both the advance notice and the completion of the work by the Utility.

**2. Excusable, Non-Compensable Delays.**

**b. Utilities.**

THE LAST PARAGRAPH IS CHANGED TO:

If approved excusable, non-compensable delays exceed a total of 90 days, the time in excess of 90 days will become excusable and compensable as specified in 108.11.01.B.3.

**108.19 COMPLETION AND ACCEPTANCE**

THE FOLLOWING IS ADDED:

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

## **SECTION 109 - MEASUREMENT AND PAYMENT**

### **109.01 MEASUREMENT OF QUANTITIES**

THE SECOND PARAGRAPH IS DELETED:

### **109.02 SCOPE OF PAYMENT**

THE THIRD SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

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

### **109.05 ESTIMATES**

THE SECOND PARAGRAPH IS CHANGED TO:

The RE will provide a summary of the Estimate to the Contractor. Before the issuance of each payment, certify, on forms provided by the Department, that:

- Each subcontractor or supplier has been paid the amount due from the previous progress payment and shall be paid the amount due from the current progress payment and that full payment for any retainage withheld from a subcontractor has been or will be made within 30 days after the subcontractor's work has been satisfactorily completed; or
- There exists a valid basis under the terms of the subcontractor's or supplier's contract to withhold payment from the subcontractor or supplier, and therefore payment is withheld.

THE TENTH PARAGRAPH IS CHANGED TO:

The RE has the right to not process an Estimate when, in the judgment of the RE, the Work is not performed or proceeding as specified in the Contract or following the Department giving the Contractor and Surety notice of default as specified in 108.14.



**DIVISION 150 - CONTRACT REQUIREMENTS**

**SECTION 151 - PERFORMANCE BOND AND PAYMENT BOND**

**151.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING IS ADDED:

Payment will not be made for Performance Bond and Payment Bond. All costs thereof shall be included within the various bid pay items.

## **SECTION 152 - INSURANCE**

### **152.03.01 Owner's and Contractor's Protective Liability Insurance**

#### **A. Policy Requirements.**

THE FOURTH SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

Ensure that policies are underwritten by companies with a current A.M. Best rating of A- with a Financial Size Category of VII or better.

### **152.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING IS ADDED:

Payment will not be made for insurance of any kind. All costs thereof shall be included within the various bid pay items.

## **SECTION 153 - PROGRESS SCHEDULE**

### **153.03.02 CPM Progress Schedule Updates**

THE LAST PARAGRAPH IS CHANGED TO:

If the project falls behind schedule for non-excusable delays, so that the schedule indicates that the Work will not be completed by the Completion date, as specified in 108.10, take the necessary steps to improve progress. Under such circumstances, the RE may direct the Contractor to increase the number of shifts, begin overtime operations, work extra days including weekends and holidays, and supplement its construction plant. Furthermore, the RE may require the Contractor to submit for approval a recovery schedule showing how the Contractor proposes to meet the directed acceleration.

#### **2. Tabular Reports.**

THE FIRST SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

The RE may require 3 color paper copies of the longest path sort, total float sort, responsibility sort, area sort, and Gantt chart.

### **153.03.03 Bar Chart Progress Schedule and Updates**

#### **A. Schedule.**

THE THIRD SENTENCE OF THE THIRD PARAGRAPH IS CHANGED TO:

Provide 3 color paper copies of a bar chart progress schedule or similar type that is acceptable to the RE for approval as follows:

THE FOLLOWING IS ADDED:

If the project falls behind schedule for non-excusable delays, so that the schedule indicates that the Work will not be completed by the Completion date, as specified in 108.10, take the necessary steps to improve progress. Under such circumstances, the RE may direct the Contractor to increase the number of shifts, begin overtime operations, work extra days including weekends and holidays, and supplement its construction plant. Furthermore, the RE may require the Contractor to submit for approval a recovery schedule showing how the Contractor proposes to meet the directed acceleration.

### **153.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING IS ADDED:

Payment will not be made for Project Schedules of any kind including updates. All costs thereof shall be included within the various bid pay items.

THE THIRD PARAGRAPH IS CHANGED TO:

If the Contractor's CPM Progress Schedule update is not approved by the date of the progress meeting for the following update, the Department will assess liquidated damages to recover the Department's increased administrative costs. The Department will assess damages for each delinquent update as follows:

## **SECTION 157 - CONSTRUCTION LAYOUT AND MONUMENTS**

### **157.03.01 CONSTRUCTION LAYOUT**

THE SEVENTH PARAGRAPH IS CHANGED TO:

Provide the Utilities with the layout needed to install relocated utility facilities and coordinate the Work. Ensure that relocated facilities do not conflict with proposed construction, including High Voltage Proximity Act conflicts.

### **157.03.01 MEASUREMENT AND PAYMENT**

THE FOLLOWING IS ADDED:

Payment will not be made for Construction Layout. All costs thereof shall be included within the various bid pay items.

**SECTION 158 - SOIL EROSION AND SEDIMENT CONTROL AND WATER  
QUALITY CONTROL**

**158.04 MEASUREMENT AND PAYMENT**

THE PAY ITEM CONCRETE WASHOUT SYSTEM IS DELETED AND THE FOLLOWING IS ADDED:

Separate payment will not be made for Concrete Washout System but the costs shall be included in the various items of the proposal.

## SECTION 159 - TRAFFIC CONTROL

THE FOLLOWING IS ADDED AFTER THE FIRST PARAGRAPH:

***ALL WORKERS SHALL WEAR REFLECTORIZED GARMENTS, UTILIZING 360° VISIBILITY, AS SPECIFIED FOR TRAFFIC DIRECTORS.***

***THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL WORK ZONES FOR THE CONSTRUCTION. ALL TRAFFIC CONTROL DEVICES WITHIN WORK ZONES SHALL BE ESTABLISHED IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES. ALL TRAFFIC CONTROL MEASURES SHALL BE SUPPLIED, IMPLEMENTED AND REMOVED AT THE APPROPRIATE TIME BY THE CONTRACTOR.***

**All traffic control devices shall comply with these Specifications and the Standard Details for Traffic Control Devices as developed by the New Jersey Department of Transportation.**

**All traffic control devices furnished by the Contractor shall be new, or in acceptable condition as defined by the American Traffic Safety Services Association (ATSSA), Quality Standards For Work Zone Traffic Control Devices – 3<sup>rd</sup> Edition. Traffic control devices damaged under this Contract as a result of carelessness or mishandling by the Contractor (i.e., running over cones or barrels with his equipment or splashing tar on traffic control devices, etc.) shall be replaced by the Contractor at no additional cost to the County. The Contractor shall replace damaged traffic control devices within one (1) calendar day. The County reserves the right to reject any traffic control device, which in their sole opinion does not satisfy the criteria of these Specifications, is damaged or otherwise incapable of providing the function for which it was intended. In this event, the Contractor shall replace the deficient traffic control devices and/or materials within one (1) calendar day. Upon completion of the Project, all traffic control devices and materials furnished by the Contractor shall be removed by the Contractor.**

**All signs furnished by the Contractor shall conform to the latest addition Manual of Uniform Traffic Control Devices and the U.S.D.O.T. Manual of Standard Highway Signs. *All signs & traffic control devices shall be manufactured with, or incorporate 3M diamond grade material or approved equal. All signs shall be aluminum, with a thickness of 0.100 inches, and cut to Standard sizes.***

Should the Contractor begin work prior to the work zone being properly established as described herein, the County shall assume no responsibility for tort liability issues arising from the Contractor's premature start. All liability and consequence arising from a premature start is solely the Contractor's.

In the event that the manhole, inlet or other appurtenance is in the middle of a travel way and the placement of a traffic device would impede the flow of traffic, the manhole, inlet or other appurtenance will be ramped in accordance with Construction Details with fresh hot mix asphalt material (either cold or hot mix). The use of millings to perform this operation will not be allowed.

### **159.03.01 TRAFFIC CONTROL COORDINATOR**

THE FOLLOWING IS ADDED:

The Contractor shall be responsible for project maintenance within the project limits until acceptance. This maintenance shall consist of continuous and effective work prosecuted day by day, with adequate equipment and forces to the end that the roadway is kept in satisfactory condition at all times. In the case

of a contract requiring the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.

Prior to the start of construction operations, the Contractor shall assign a supervisory-level employee to be the Traffic Control Coordinator. The Engineer and affected municipalities shall be notified as to the name & telephone number of this individual on a 24-hour, 7-day a week basis. **A PAGER NUMBER FOR THIS PURPOSE WILL NOT SUFFICE. IF AND WHEN THE NUMBER IS CALLED, THE CONTRACTOR OR DULY APPOINTED AGENT MUST BE AVAILABLE TO ANSWER AND RESPOND TO THE EMERGENCY CALL. THE CONTRACTOR'S RESPONSE TIME TO EMERGENCIES THAT ARISE DURING THIS PROJECT SHALL BE WITHIN ONE (1) HOUR.**

The Traffic Control Coordinator shall be responsible for ensuring that the Contractor meets all provisions of the current edition of the Manual on Uniform Traffic Control Devices, OSHA, ANSI and Title 39 – Uniform Motor Vehicle Laws of New Jersey. The Traffic Control Coordinator shall be the liaison between the Contractor and County for the duration of the project. It will be his/her responsibility to notify the Engineer when and where the Contractor's work force and equipment shall be throughout the workday. The Traffic Control Coordinator is responsible for the following:

- Provide that all Contractor equipment and vehicles are properly stored and parked so as not to create a traffic hazard;
- Coordinate the Contractor's work schedule and need for traffic directors with the Engineer or duly appointed representative with regards to the maintenance and protection of traffic;
- Confirm the Contractor's compliance and cooperation with the Engineer with regards to the maintenance and protection of traffic;
- Repositioning of traffic control devices displaced by traffic or construction equipment;
- Notifying County forces of damaged traffic control devices;
- Confirm that all traffic control devices moved or repositioned by the Contractor or his forces are placed in their original position;
- Coordinate all Concrete Construction Work Zones, including signage, traffic control devices and the appropriate manpower.

The Contractor shall be responsible for maintaining safe and adequate pedestrian access in, near or around the work site. Neither the Contractor's equipment nor debris and materials shall occupy any part of the sidewalk, path or traveled way that is not being constructed.

All equipment, materials, excavated material or debris shall be removed by the end of the workday. Material or debris left at the end of the day by the Contractor on, near or adjacent to the sidewalk or traveled way that is open to pedestrians and vehicles is subject to removal by the County forces. In this event, the costs associated with the removal will be deducted from monies owed the Contractor.

### **159.03.02 Traffic Control Devices**

THE FOLLOWING IS ADDED AFTER THE FIRST PARAGRAPH:

Traffic Control devices shall be NCHRP-350 crash test compliant by the NJDOT and shall be duly certified, if necessary.

Newly purchased devices shall be NCHRP-350 compliant. A list of NCHRP 350 compliant and FHWA approved devices can be found at:

[http://www.fhwa.dot.gov/safety/fourthlevel/pro\\_res\\_road\\_nchrp350.htm](http://www.fhwa.dot.gov/safety/fourthlevel/pro_res_road_nchrp350.htm)

#### **4. Portable Variable Message Signs (PVMS)**

THE FOLLOWING IS ADDED:

Install and activate portable variable message signs (PVMS). Install one (1) PVMS in advance of the construction limits along each approach to the work zone. Activate PVMS a minimum of one full week (7 calendar days) in advance of the start of construction and remove PVMS upon completion of the construction. PVMS shall generally read the expected construction duration and expected delays. The actual messages shall be provided by the County.

THE FOLLOWING SUBSECTION IS REPLACED IN ITS ENTIRETY WITH THE FOLLOWING:

#### **6. Traffic Control Truck with Mounted Crash Cushions.**

THE LAST SENTENCE IS CHANGED TO:

Submit drawings to the RE detailing the manner of securing the ballast, signed and sealed by a Professional Engineer, certifying that it is capable of withstanding the impact forces for which the impact attenuator is rated. Contractor shall provide Traffic Control Truck with Mounted Crash Cushion to aid in the placement of traffic control devices as needed for the duration of the project when directed.

### **159.03.06 TEMPORARY TRAFFIC STRIPES AND TEMPORARY TRAFFIC MARKINGS**

THE ENTIRE TEXT IS CHANGED TO:

Apply temporary traffic stripes and markings when the ambient and surface temperatures are at least 45 °F and rising and the surface temperature is no more than 140 °F. Apply the traffic paint in a wet film thickness of  $6 \pm 1$  mil. Apply glass beads to the wet paint in a uniform pattern and at the rate of 12 pounds per gallon of paint. Ensure TRAFFIC STRIPES and TRAFFIC MARKINGS are applied within 14 days of placing temporary traffic stripes and markings unless directed by the RE.

### **159.03.08 TRAFFIC DIRECTION**

#### **A. Flagger.**

THE LAST SENTENCE IS CHANGED TO:

Ensure that the flagger is equipped with a STOP/SLOW paddle and follows MUTCD flagging procedures.

THE FOLLOWING IS ADDED TO THIS SECTION:

*Should the circumstances arise during any construction operations where the use of flaggers are not permitted by the Motor Vehicle & Traffic Laws of New Jersey, Title 39, specifically 39:4-57 and or 39:4-80 & 81, or any other section in Title 39, or in the opinion of the Engineer, where the limitations of such flaggers in the roadway do not optimize the safety of pedestrians & the motoring public, Off-Duty Police Traffic Directors shall be utilized. Under these circumstances, it shall be the Contractor's responsibility to coordinate & schedule all officers necessary for the appropriate construction phases;*



*however, the County of Union will regulate the amount of & location of each director. The Contractor shall be responsible for paying prevailing wage rates for Police Traffic Directors, at the respective Municipal Police Department rate. Reimbursement for police traffic directors shall be based on the amount of actual person-hours provided by the respective municipalities. Reimbursement will not be made for any:*

- *differential overtime rate;*
- *vehicle charges;*
- *Administration fees, & or taxes.*

*Payment of such shall be included in the overall price bid for various traffic control pay items. The Contractor shall be required to produce proof of both payment & hours worked for each officer, at each post for each assignment. Should the Contractor fail to produce said proof, the County will withhold payment on this item until such time that adequate & satisfactory proof can be provided.*

**B. Police.**

THIS SUBSECTION HAS BEEN REPLACED IN ITS ENTIRETY WITH THE FOLLOWING:

The Contractor shall coordinate with local police department from the Rahway City as to their requirements or compliance with State Law for police presence during commencement from one construction stage to the next construction stage only. Contractor shall be responsible for scheduling all work and notifications with the local police to comply with local ordinance or police presences. The use of police services does not relinquish or diminish the Contractor's responsibilities for work zone safety nor shall they serve as a substitute for traffic director flaggers. County is not responsible for interruptions or delays to construction activities resulting from any failure of police presences at the work site.

**159.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING PAY ITEM IS ADDED:

<i>Item</i>	<i>Pay Unit</i>
TRAFFIC DIRECTOR, UNIFORM POLICE	DOLLAR (ALLOTMENT)

THE PAY ITEMS TEMPORARY PAVEMENT MARKERS, TEMPORARY PAVEMENT MARKING TAPE, TEMPORARY TRAFFIC STRIPES AND TEMPORARY TRAFFIC MARKINGS ARE DELETED AND THE FOLLOWING IS ADDED:

Separate payment will not be made for Temporary Pavement Markers, Temporary Pavement Marking Tape, Temporary Traffic Stripes and Temporary Traffic Markings but the costs shall be included in the various items of the proposal.

THIS SUB-SECTION IS AMENDED AS FOLLOWS:

The County has included an allotted cost in the bid proposal for the presence of uniform police for this project. The Contractor shall provide invoice receipt from the municipality for work performed by uniform police, as well as the municipality requirements for police presence on public roadways for construction activity in justifying payment and reimbursement.

Where Police Traffic Directors may be utilized, the Contractor shall notify the respective Police Department at least four (4) business days (96 hours) in advance of requiring the traffic directors. Should there be a difference between the Engineer's requirement, and that of the Police Department, the Contractor shall immediately notify the Engineer and request clarification.

If the Contractor cancels any work, without prior notice to the affected Municipal Police Department, then any costs incurred from the respective Police Departments shall become the Contractor's responsibility. The Contractor shall be responsible for establishing any and all escrow accounts that may be required by the Municipal Police Department. The Contractor shall confirm specific details of hiring Traffic Directors with each respective Police Department.

Separate payment will not be made for relocating traffic control devices as required or as directed. Separate payment will not be made for posts or stands for construction signs. Separate payment will not be made for traffic control coordinator. Separate payment will not be made for moving the traffic control truck units during the various stages of construction. Separate payment will not be made for escape ramps provided at the edges of pavement lifts or at excavations. All costs thereof shall be included in the prices bid for the various Pay Items scheduled in the Bid Sheets.

All property owner notices, traffic control devices & manpower necessary to maintain such work zones utilizing the necessary devices and items, other than those stipulated to be paid under a separate bid pay item shall be supplied, implemented and removed at the appropriate time by the Contractor. Separate payment will not be made for the cost of such traffic control devices, any relocation of such and associated manpower but the costs shall be included in the various items of the proposal.

For traffic control devices measured by the linear foot or unit basis that are specified in 159.03.02, the Department will make payment for the maximum quantity in service at one time as required by the Contract. For CONSTRUCTION SIGNS, the Department will make payment for the maximum quantity of specific sign types in service at one time as required by the Contract. If a particular sign type has more than one unique text, each sign with a unique text will be considered to be a specific sign type. The Department will make payment for 50 percent of the Contract bid price for traffic control devices specified in 159.03.02 that are measured on a linear foot, square foot or unit basis upon approved placement. The Department will prorate the balance of payment over the duration of the Contract.

## SECTION 160 - PRICE ADJUSTMENTS

### 160.03.01 Fuel Price Adjustment

THROUGHOUT THIS SUBSECTION, TABLE 161.03.01-1 IS CHANGED TO TABLE 160.03.01-1

THE THIRD PARAGRAPH IS CHANGED TO:

If the as-built quantity of an Item listed in Table 160.03.01-1 differs from the sum of the quantities in the monthly Estimates, and the as-built quantity cannot be readily distributed among the months that the Item listed in Table 160.03.01-1 was constructed, then the Department will determine fuel price adjustment by distributing the difference in the same proportion as the Item's monthly Estimate quantity is to the total of the Item's monthly estimates.

THE 25 TH LINE IN THE TABLE 160.03.01-1 IS CHANGED TO:

HOT MIX ASPHALT \_\_\_\_\_ BASE COURSE                      2.50 Gallons per Ton

### 160.03.02 Asphalt Price Adjustment

NOTE 1 OF THE THIRD PARAGRAPH IS CHANGED TO:

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

THE FOURTH PARAGRAPH IS CHANGED TO:

$$A = B \times [(MA - BA)/BA] \times C \times M \times G$$

Where:

A = Asphalt Price Adjustment

B = Bid Price for Tack Coat/Prime Coat

MA = Monthly Asphalt Price Index

BA = Basic Asphalt Price Index

C = Petroleum Content of the Tack Coat and Prime Coat in Percent by Volume:

    Use 100% for cutbacks and Tack Coat 64-22

    60% for Polymer Modified Tack Coat

    60% for RS or similar type emulsions

M = Percentage of Bid Price Applicable to Materials Only: Use 82%

G = Gallons of Tack Coat and Prime Coat Furnished and Applied

### 160.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED TO THIS SUB-SECTION:

**An Allowance for Asphalt Price Adjustment and Fuel Price Adjustment has been established in the bid proposal sheet. The allowance amount will be adjusted based on the formulas established in the specifications for calculating price adjustments if warranted.**

**Asphalt price adjustments will not be made for Tack Coat and Prime Coat.**

## **SECTION 161 - FINAL CLEANUP**

### **161.04 MEASUREMENT AND PAYMENT**

THE ENTIRE SUBSECTION IS CHANGED TO:

Separate payment will not be made for Final Cleanup but the costs shall be included in various items of the proposal.

## **SECTION 201 - CLEARING SITE**

### **201.04 MEASUREMENT AND PAYMENT**

THE SUB-SECTION IS CHANGED AS FOLLOWS:

The County will not measure and not make payment for Stripping and Clearing Site.

Separate payment will not be made for: the removal of existing asphalt, pipe, bollards, inlets & castings, manholes & castings and other drainage structures; the removal of sidewalk, driveways, various types of curb and gutters; the removal of raised pavement markings (RPM'S); the removal of various striping & marking material; removal of loop detector lead; and the removal of existing signs to be replaced and or upgraded, unless otherwise provided in these supplementary specifications. When removal of such materials is required within the excavation for the roadway, and its right-of-way, it shall be included in the proposed work of these items.

Separate payment will not be made for clearing site but the cost will be included in the various pay items in the Bidding Sheets.

## SECTION 202 - EXCAVATION

### 202.02 MATERIALS

THE FIRST IN THE LIST IS CHANGED TO:

Coarse Aggregate (No. 57, or 67)..... 901.03

### 202.03.03 Excavating Unclassified Material

#### A. Excavating.

THE FIRST PARAGRAPH IS CHANGED TO:

Unclassified excavation consists of excavation and management of material of whatever nature encountered, including regulated material, pavement removal and acid producing soil.

### 202.03.04 Excavating Regulated Material.

THE FIRST PARAGRAPH IS CHANGED TO:

Regulated material excavation consists of excavation and management of material of whatever nature encountered that is classified as regulated or hazardous material in the NJDEP Solid Waste Regulations, N.J.A.C. 7:26-1 *et seq.* or N.J.A.C 7:26-8.

THE FIRST SENTENCE OF THE SECOND PARAGRAPH IS DELETED

#### 3. Temporarily Storing.

THE FIRST PARAGRAPH IS CHANGED TO:

Temporarily store regulated or hazardous material in stockpiles within the Project Limits and as shown on the Plans. Construct stockpiles on polyethylene sheeting. Contain stockpiles with haybales or silt fence placed continuously at the perimeter of the stockpiles. For hazardous material, if a stockpile area is not available within the Project Limits, sample and analyze materials in-situ for disposal. Excavate and place the hazardous regulated material directly into trucks, and haul it directly to the approved disposal facility.

### 202.03.05 Excavating Acid Producing Soil (APS)

THE FIRST SENTENCE OF THE SECOND PARAGRAPH IS DELETED

### 202.03.07 Reuse or Disposal of Excess Material

#### A. Reuse.

THE THIRD PARAGRAPH IS CHANGED TO:

Upon RE's approval, reuse excavated soil to widen or flatten slopes of embankment, to fade embankments into cuts, or as approved at other locations. Ensure that the excess material is not reused within a wetland, a transition area, a riparian zone, a flood hazard area or other regulated area

without obtaining an appropriate NJDEP permit.

**B. Disposal.**

PARTS 1 AND 2 UNDER THE FIRST PARAGRAPH ARE CHANGED TO:

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

**202.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING PAY ITEMS ARE DELETED:

<i>Item</i>	<i>Pay Unit</i>
PRESPLITTING	SQUARE YARD
EXCAVATION, REGULATED MATERIAL	CUBIC YARD
SOIL SAMPLING AND ANALYSES, REGULATED	UNIT
EXCAVATION, ACID PRODUCING SOIL	CUBIC YARD
SOIL SAMPLING AND ANALYSES, ACID PRODUCING SOIL	UNIT
DISPOSAL OF ACID PRODUCING SOIL	TON
DISPOSAL OF REGULATED MATERIAL	TON
DISPOSAL OF REGULATED MATERIAL, HAZARDOUS	TON
REMOVAL OF PAVEMENT	SQUARE YARD

THE FOLLOWING IS ADDED:

Disposal of asphalt and concrete will be made to an N.J.D.E.P. approved recycling facility. The Contractor shall notify the Recycle Facility to provide the County with appropriate credit for recycling.

The Department will not make payment for presplitting but all costs shall be included in the unit price bid for the item Excavation, Unclassified.

The Department will not make payment for the excavation of regulated materials or acid producing soils but all costs shall be included in the unit price bid for the item Excavation, Unclassified.

The Department will not make payment for soil sampling and analyses required to complete the project but all costs shall be included in the unit price bid for the item Excavation, Unclassified.

The Department will not make payment for removal of pavement but all costs shall be included in the unit price bid for the item Excavation, Unclassified.

The Department will not make payment for disposal of material of whatever nature encountered but all costs shall be included in the unit price bid for the item Excavation, Unclassified.

The Department will not make payment for sawcutting, stripping and disposal of excess, unstable or unsuitable or unusable material from Excavation, Unclassified.

The Department will measure Excavation, Unclassified in unstable areas by the cubic yard of material actually excavated in the work. The Department will make payment for Excavation, Unclassified as specified in this section.



**SECTION 401 - HOT MIX ASPHALT (HMA) COURSES**

**401.02.01 Materials**

EMULSIFIED ASPHALT UNDER TACK COAT IS REVISED TO:

Emulsified Asphalt, Grade RS-1, CRS-1, SS-1, SS-1h, Grade CSS-1 or CSS-1h ..... 902.01.03

**401.02.02 Equipment**

THE LAST PARAGRAPH IS CHANGED TO:

When an MTV is used, install a paver hopper insert with a minimum capacity of 14 tons in the hopper of the HMA paver.

**401.03.02 Tack Coat and Prime Coat**

TABLE 401.03.02-1 IS CHANGED TO:

<b>Table 401.03.02-1 Tack Coat Application</b>			
<b>Material</b>	<b>Spraying Temp, °F</b>	<b>Gallons per Square Yard</b>	<b>Season</b>
<b>Cut-Back Asphalt:</b>			
RC-70	120 to 190	0.05 to 0.15	Oct 15 to Apr 15
<b>Emulsified Asphalt:</b>			
RS-1	70 to 140	0.05 to 0.15	All year
CRS-1	125 to 185	0.05 to 0.15	All year
SS-1, SS-1h	70 to 140	0.05 to 0.15	All year
CSS-1, CSS-1h	70 to 140	0.05 to 0.15	All year

TABLE 401.03.02-2 IS CHANGED TO:

<b>Table 401.03.02-2 Prime Coat Application</b>			
<b>Cut-Back Asphalt</b>	<b>Spraying Temp, °F</b>	<b>Gallons per Square Yard</b>	<b>Season</b>
MC-30	85 to 150	0.1 to 0.5	Oct 15 to Apr 15
MC-70	120 to 190	0.1 to 0.5	Oct 15 to Apr 15
<b>Emulsified Asphalt:</b>			
CSS-1	70 to 140	0.1 to 0.50	All year

**401.03.03 HMA Courses**

**D. Transportation and Delivery of HMA.**

THE FIRST PARAGRAPH IS CHANGED TO:

Deliver HMA using HMA trucks in sufficient quantities and at such intervals to allow continuous placement of the material. Do not allow trucks to leave the plant within 1 hour of sunset unless nighttime lighting is provided as specified in 108.06. The RE will reject HMA if the HMA trucks do not meet the requirements specified in 1009.02. The RE will suspend construction operations if the Contractor fails to maintain a continuous paving operation. Before the truck leaves the plant, obtain a weigh ticket from a

fully automatic scale. Before unloading, submit for each truckload a legible weigh ticket that includes the following:

1. Name and location of the HMA plant.
2. Project title.
3. Load time and date.
4. Truck number.
5. Mix designation.
6. Plant lot number.
7. Tare, gross, and net weight.

## **E. Spreading and Grading.**

### **1. Longitudinal Joints.**

THE FOLLOWING IS ADDED TO THIS SUB-SECTION:

When constructing the first lane, care shall be exercised in rolling so as not to displace the line and grade of the edges of the HMA. The joint in the surface course shall be offset from the lane lines by 6 inches except for the centerline of a roadway in which the joint shall fall between the double yellow traffic stripes.

A wedge joint shall be constructed when traffic is to be maintained and lift thickness is greater than 2 1/4 inches. A vertical edge joint will be permitted for lift thickness 2 1/4 inches or less when traffic has to be maintained. For lift thickness greater than 2 1/4 inches and traffic is not required to be maintained, a vertical edge shall be utilized.

Longitudinal joints shall be constructed utilizing one of the following methods:

- A. Vertical Edge Joint.** The paver shall be positioned so that in spreading, the HMA material uniformly overlaps the edge of the lane previously placed by 1 to 2 inches and shall be left sufficiently high to allow for compaction. In general, the height of the uncompacted HMA above the compacted HMA shall be 1/4 inch for each 1 inch of compacted mix. The overlapped HMA material being placed in the abutting lane shall be tightly crowded (bumped) over the joint. Any material in excess of the 1 to 2 inch overlap shall be pulled away from the joint and removed instead of broadcasting onto the new mat. When compacted, the new mat at the joint shall be even or slightly higher (Maximum 1/8 of an inch) than the previously placed adjoining mat. If the newly compacted mat results in a depression at the joint of 1/8 of an inch or more lower than the previously placed adjacent HMA layer, all paving operations shall cease until corrective action is taken by the Contractor to prevent reoccurrence. For all longitudinal joints that do not meet this requirement, the Contractor shall saw joints according to dimension guidelines of Subsection 404.19 and seal with an approved sealer.
- B. Wedge Joint.** The sloped plate of the paver shall produce a wedge edge having a face slope of 3H: 1V. The plate shall be so constructed as to accommodate compacted layer thickness of 2 to 4 inches. The bottom of the sloped plate shall be mounted 1 inch above the existing surface. The plate shall be interchangeable on either side of

the screed. The Contractor shall maintain the wedge configuration under traffic conditions.

All loose material shall be removed from the traveled way before opening to traffic. The rolling operation of the adjoining lane shall proceed as indicated in Subpart A above, except that care shall be taken to keep coarse aggregate away from the point where the wedge meets the surface of the previously placed lane.

To assure a true line, the paver shall closely follow lines or markings placed along the joint for alignment purposes. All longitudinal joints shall be constructed parallel to the centerlines within a tolerance of plus or minus 3 inches for every 100 linear feet. If this tolerance is not met, the mat shall be cut back to conform. The width and depth of overlapped material shall be kept uniform at all times. Overlapped material shall be looted back, pushing the material to the edge of the cold HMA mat and directly over the joint with the hot HMA mat. In no case shall excess material be broadcast across the new layer. All excess material shall be removed.

#### **F. Compacting**

THE FOLLOWING IS ADDED TO THIS SUB-SECTION:

When compacting the longitudinal edge of the first lanes placed using the wedge joint, the breakdown roller shall not extend more than 2 inches over the top of the sloped face of the wedge joint. The Contractor shall submit a plan, to ensure material at the wedge edge is properly seated and loose material is removed, for the Resident Engineer's approval prior to the commencement of paving operations.

Care shall be taken to prevent lateral displacement of the unconfined edge during the compaction operation. The edge of the drums of vibratory or static wheel rollers shall extend over the free edge of the mat by at least 6 inches. When compacting the joint, while paving the adjacent lane, the roller shall be placed on the newly placed HMA and overlap the joint by a distance of approximately 6 inches.

Alternate trips of the roller shall be terminated in stops approximately 2 feet from the preceding stop. When paving in echelon, rollers compacting the mat behind the lead paver shall maintain approximately 6 inches of uncompacted material adjacent to the second paver. After mix from the second paver is placed against the uncompacted edge of the mat from the first paver, the rollers shall compact the HMA on both sides of the joint.

#### **401.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING IS ADDED:

The Department will make a payment adjustment for HMA air void quality by the following formula:

$$\text{Pay Adjustment} = Q \times \text{BP} \times \text{PPA}$$

Where:

BP = Bid Price

Q= Air Void Lot Quantity

PPA= air void PPA as specified in 401.03.03H.

The Department will make a payment adjustment for HMA thickness quality by the following formula:

$$\text{Pay Adjustment} = Q \times \text{BP} \times \text{PPA}$$

Where:

BP = Bid Price

Q= Thickness Lot Quantity

PPA= thickness PPA as specified in 401.03.03I

The Department will make a payment adjustment for HMA ride quality, as specified in 401.03.03J.

The County will not measure and will not make payment for the following items:

MTV

Test Strips

Quality Control for Compaction including comparison cores and nuclear density testing

Polymerized Joint Adhesive

All costs thereof shall be included in the prices bid for the various Hot Mix Asphalt items.

Pay Adjustments for Air Voids, Thickness and Ride Quality will be made according to Subsections 401.03.03.H, 401.03.3.I, and 401.03.03.J, respectively.

Disposal of asphalt will be made to an N.J.D.E.P. approved recycling facility. Prior to the start of operations, the Contractor shall notify the County of the location where the asphalt will be disposed. Disposal of the asphalt will be carried out in accordance with the Standard Specifications

***Hot mix asphalt material for manhole, inlet and other ramping will not be measured. No separate payment will be made for this hot mix asphalt material.***

A prime coat will be applied to dense graded aggregate base prior to placement of hot mix asphalt pavement.

A tack coat will be applied to all layers of hot mix asphalt courses, prior to placement of new hot mix asphalt course. In addition, a tack coat will be applied at the edges of the new pavement between paver passes.

Separate payment will not be made for temporary hot mix asphalt pavement but the costs shall be included in the various traffic control pay items.

**SECTION 501- SHEETING AND COFFERDAMS**

**501.01 DESCRIPTION**

THE FOLLOWING IS ADDED:

The Contractor is advised the installation of sheeting, cofferdams, and other bridge elements may interfere with the adjacent Route 9 overhead bridge. The Contractor shall be prepared to design and or change his means and methods of construction to maintain safe working clearances during the project construction.

The Contractor is advised the installation of sheeting, cofferdams, and other bridge elements may interfere with underground water, fiber optics, storm sewer, sanitary sewer and gas utilities. The Contractor shall be prepared to design and or change his means and methods of construction to maintain safe working clearances for the underground utilities during the project construction.

**501.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING PAY ITEM IS REVISED AS FOLLOWS:

<i>Item</i>	<i>Pay Unit</i>
TEMPORARY SHEETING	LUMP SUM

THE LAST PARAGRAPH IS REVISED AS FOLLOWS:

Temporary and permanent sheeting will not be measured but the cost shall be paid on a lump sum basis.

## SECTION 504 - STRUCTURAL CONCRETE

### 504.03.01 REINFORCEMENT STEEL

#### E. Placing and Fastening.

THE FOLLOWING IS ADDED:

Distance from the forms shall be maintained by means of metal bar chairs with plastic coated feet of the proper length.

Metal bar chairs with plastic coated feet of the proper length shall be used to support all reinforcement steel.

Hardware for reinforcement steel in structures, epoxy coated.

Bar supports and screed supports shall be epoxy coated. Tie wires shall be plastic coated or epoxy coated.

### 504.03.02 Constructing Concrete

#### B. Forms.

THE FOLLOWING IS ADDED:

All formwork joints shall be tight and aligned so as to produce smooth even exposed concrete surfaces without ridges, offsets or irregularities.

All steel forms used for forming exposed surfaces of structures shall be lined with finished lumber (i.e. coated plywood or approved equal) to provide smooth even concrete surfaces. If and where the condition of the proposed steel forms is like new (i.e. without dents, warps, holes, etc.) and will provide smooth even exposed concrete surfaces, the contractor may request in writing that the engineer waive the requirement to line steel forms with finished lumber.

#### C. Limitations of Placing.

THE FOLLOWING IS ADDED:

**The contractor's attention is called to this subsection. This project will be constructed during winter months therefore Section 1. "Cold Weather Concreting" shall be strictly enforced. The contractor will be expected to adhere to all requirements of this section. No extra work claims will be entertained for any work described in this section.**

#### G. Removal of Forms and Falsework.

THE FOLLOWING IS ADDED:

Do not remove forms and false work until the concrete obtains a compressive strength of 4000 psi.

#### **504.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING IS ADDED:

No separate or extra payment shall be made for cold weather concreting, but cost shall be included in concrete items.

**SECTION 505 - PRE-CAST AND PRE-STRESSED STRUCTURAL CONCRETE**

**505.01 DESCRIPTION**

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

The work to be performed under this Contract includes installation of a pre-cast, reinforced concrete, structural slab.

**505.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING ITEM IS ADDED:

<i>Item</i>	<i>Pay Unit</i>
PRE-CAST REINFORCED CONCRETE STRUCTURAL SLAB	LUMP SUM



## **SECTION 507 - CONCRETE BRIDGE DECK AND APPROACHES**

### **507.03.03 Date Panel**

THE ENTIRE SUBSECTION IS CHANGED AS FOLLOWS:

The date panel is to be cast in one piece of statuary bronze. Background shall be in dark oxidized hard matted surface having a stippled appearance; borders and tops of letters to have a smooth, burnished finish. Concealed anchorage shall be 4-1/2" diameter threaded expansion type anchor bolts, non-corroding type.

Prior to constructing the date panel, submit a full size drawing of the date panel showing the size and arrangement of letters for the approval of the County. Block letters shall be used. Date panel having dimensions shown on the drawing shall be set in concrete at determined by the County.

### **507.03.05 Concrete Parapet and Barrier Curb**

THE SECOND PARAGRAPH IS CHANGED TO:

Cure using curing compound as specified 504.03.02.F. If drilling is required for subsequent construction, allow the concrete to cure for a minimum of 14 days before drilling

### **507.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING IS ADDED:

No separate or extra payment shall be made for cold weather concreting, but cost shall be included in concrete items.

The following section has been added:

## **SECTION 555 - BRIDGE SUBSTRUCTURE REHABILITATION**

### **555.01 Description.**

All work under this section shall be carried to the limits directed by the engineer.

The bridge elements to be included in the substructure shall be the abutments, wingwalls, and other concrete substructure elements.

#### **(A) Concrete Spall Repair**

This work shall consist of the repair of concrete including removing and properly disposing of loose and deteriorated concrete, saw cutting the edges of areas to be repaired, cleaning the surfaces of concrete within the limits of repair, installing galvanized or epoxy coated steel mesh for repairs deeper than four inches, applying an epoxy bonding compound to the surface of existing concrete to be repaired if recommended by the manufacturer and placing new restoration material.

#### **(B) Utility Grout Repair**

This work shall consist of removal and disposal of the existing utility beyond the structure limits. The exposed utility ends shall be capped. All loose, delaminated, and deteriorated concrete shall be removed that existed within the utility penetration. Non-shrink grout shall be placed in the existing penetration, and applying an epoxy bonding compound to the surface of existing concrete to be repaired if recommended by the manufacturer and placing new restoration material.

### **555.02 Materials.**

#### **(A) Repair of Concrete.**

Class B concrete shall conform to section 903.

Pneumatically applied mortar shall conform to the requirements of section 553.

Epoxy and quick-setting patch materials shall conform to the applicable requirements of section 903.07.

Epoxy coating for existing reinforcement steel shall conform to the requirements of subsection 905.01 (c) and shall be ply-tile (520) as supplied by M.A. Broder Co., 600 Reed Road, Bromall, Pennsylvania 19008 (telephone: 215-353-5100); Scotchkote 214 pc as supplied by 3m company, St. Paul, Minnesota 55144, (telephone: 800-553-1380); or approved equal.

Supplemental reinforcement steel in structures, epoxy coated shall conform to subsection 905.

Epoxy coated steel mesh shall conform to AASHTO m 55 with an epoxy coating in conformance with subsection 905.01.01. Galvanized steel wire mesh shall conform to subsection 905.01.03.

Epoxy bonding coat shall conform to the requirements of Section 903. Slow set bonding agent shall be "weld-crete" as manufactured by Larson Products Corporation, Rockville, Maryland; Sika Armatec 110 as manufactured by Sika Chemical Corporation, Lynhurst, New Jersey or equal. These bonding agents are suitable for spall repairs that are formed prior to placing concrete.

Anchors for attaching steel reinforcement shall be power driven fasteners as manufactured by one of the following suppliers:

**Hilti, Inc.**

P.O. Box 21148  
Tulsa, Oklahoma  
74121 Telephone:  
800-879-8000

**Ramset fastening  
systems** Route 139  
Bradford, Connecticut

**Remington**  
25000 s. Western  
Avenue Park Forest,  
Illinois

**(B) Utility Grout Repair.**

Non-Shrink Grout shall conform to subsection 903.08.02.

Epoxy bonding coat shall conform to the requirements of Section 903.

**555.03 Construction.**

**A.) Concrete Spall Repair (varying depths):**

Concrete Spall Repair of varying depths shall consist of removing all delaminated or deteriorated concrete to a maximum depth of 1 inch below any existing reinforcement steel.

Repair of substructure concrete shall be performed at areas outlined as Concrete Spall Repair of varying depths at locations designated by the engineer. The application of each type of Concrete Spall Repair shall be based on the depth actually encountered in the field after the removal of loose and deteriorated concrete.

The lateral limits of each area to be removed and replaced will be delineated by the Engineer and suitably marked. Areas in need of repair will be designated by the Engineer in the field. These areas may have been increased or been repaired in the interim. **Final sounding will be necessary for final acceptance of the repaired area.**

Repair areas shall be saw cut to a depth of 3/4 inch with a power saw capable of making straight cuts prior to removal of deteriorated concrete, or if an area is to be repaired with pneumatically applied concrete, the edges of the repair area shall be chiseled to a depth of one (1) inch.

All deteriorated or unsound concrete shall be removed to sound concrete or as directed by the engineer. Minimum depth of concrete removal shall be one (1) inch. If deteriorated or unsound concrete appears to extend below existing ground, the existing ground shall be excavated as required to allow for removal of all unsound or deteriorated concrete. The cost of excavating and backfilling of the existing ground will be included in the cost for substructure Concrete Spall Repairs. Concrete may be removed by means of approved pneumatic lightweight chipping hammers or hand tools. The size of the hammers shall not exceed 8 pounds with the bit removed. Pneumatic tools should not be placed in direct contact with reinforcement steel. Extreme care shall be taken when reinforcement steel, pre-stressed tendons or anchor bolts are uncovered so as not to damage the steel or the anchor bolt or their bond in the surrounding sound concrete. At no time shall the reinforcement steel be used for creating leverage when chipping concrete. Reinforcement steel or other embedded items damaged during concrete removal shall be repaired by the contractor, as directed by the engineer, at no additional cost to the county. Where removal of the deteriorated concrete destroys the bond between the reinforcement steel and the concrete or where more than 1/2 the diameter of the rebar is exposed, removal shall extend to at least one (1) inch beyond the bars. The limits of the cavity for deep, narrow repairs (depth equals or exceeds twice the width) shall be undercut to lock the repair patch in place.

After removal of unsound concrete, the surfaces of the remaining concrete shall be cleaned with compressed air jets to assure removal of all loose concrete, dust, and other foreign material. Compressors used for air jets shall be equipped with a functioning oil trap to prevent contamination. Embedded items shall be cleaned of all loose adhering concrete, rust and scale. Adhering concrete shall be removed from exposed reinforcement steel.

Any appurtenances such as drain pipes, conduits, and/or their supports that would interfere with the repair work shall be removed prior to the removal of damaged concrete, and reinstalled after completion of the repairs. Cost to be included in other items.

After removal of spalled concrete, repairs should be completed promptly.

For Concrete Spall Repairs greater than four (4) inches in depth and greater than 2 feet by 1 feet in size, galvanized or epoxy coated welded wire mesh (4 x 4 -w2.0 x w2.0) shall be adequately anchored into sound concrete as directed by the engineer. Provide two (2) inches of cover over the welded wire mesh. No separate payment will be made for the welded wire mesh.

Adequate provisions must be made to prevent pieces of broken concrete from interfering with, or striking traffic.

Details of platforms, catches or other methods of collecting materials resulting from the preparation of spall areas for repair shall be of the contractor's design, signed and sealed by a professional engineer licensed in the state of New Jersey, and shall be submitted to the engineer for review before commencing concrete

removal.. Materials collected shall not be allowed to accumulate, but shall be promptly removed and legally disposed of away from the right-of-way in accordance with section 201.

After completion of the removal and cleaning operations, and immediately prior to the placement of any non-epoxy patch material, the surfaces shall receive a coating of the bonding compound applied in accordance with the manufacturer's recommendations and as directed by the engineer. Bonding compound shall not be applied in conjunction with pneumatically applied mortar.

Where installation of forms prohibits the use of epoxy bonding compound due to application and drying problems, slow setting bonding agent shall be applied to concrete contact surfaces. Bonding agent application conditions and procedures shall be as recommended by the manufacturer. Concrete shall be placed within a period of 48 hours after application of the bonding agent. If this time period is exceeded, another coating of the material shall be applied.

The pot-life of the epoxy bonding compound, mixing period, maximum time lapse between mixing compound and placing of the new concrete, are all dependent on the temperature, humidity, and wind conditions. The contractor shall be acquainted with such information as recommended by the manufacturer, and shall schedule repair operations accordingly.

Non-epoxy patch materials shall be placed immediately while the bonding compound is still tacky. If the bonding compound dries before the patch material is placed, another coating of epoxy bonding compound shall be applied, as herein described, at no additional cost to the authority.

When quick-setting patch material is specified, all operations shall conform to the manufacturer's recommendations. Two copies of the manufacturer's technical data sheets shall be submitted to the engineer. A technical representative of the manufacturer shall be present on the site to provide guidance in the preparation and placement of the quick setting patch material based on prevailing climatic and job conditions. The representative shall be present at least during one complete cycle of the procedures required for the initial placement.

Quick-setting patch material shall be hand applied or formed in accordance with the manufacturer's instructions. Hand-application of patch material for repairs will not be permitted.

Preparation, placement and curing of epoxy patch material shall be in accordance with the manufacturer's recommendations.

Placement and curing of pneumatically applied mortar shall conform to the requirements of section 553.

Whatever means of placing the patch material is employed, it shall be such that the material will completely fill the space to be replaced, be thoroughly compacted, and free of air pockets. All details of design, such as v-grooves, chamfers, joints, etc., in the existing abutment or pier shall be duplicated in the repair work under this section.

Where existing flashing is encountered at filled joints, the contractor shall use extreme care during the work (removal of concrete, formwork and placing new reinforcement steel and concrete) so as to prevent damage to the flashing. Damaged flashing shall be repaired by the contractor to the satisfaction of the engineer at no cost to the authority.

After the patch material is in place, normal finishing operations shall be completed. Reinforcement steel, placing of concrete, forming, removal of forms, finishing and curing of the patch material shall conform to the applicable requirements of section 504.

Cavities left in concrete after removal of form ties or form anchors shall be filled with non-shrink mortar similar to that of which the concrete for spall repair is prepared, or non-shrink grout.

#### B.) Utility Grout Repair:

Utility grout repair shall consist of removal and disposal of the existing utility to a minimum of 6" beyond the structure limits. The exposed utility end shall be capped. All loose, delaminated, and deteriorated concrete shall be removed that existing within the utility penetration. Non-shrink grout shall be placed in the existing penetration filling the void and creating a smooth surface with the existing concrete surface. The repair shall be to the satisfaction of the resident engineer.

The utility to be removed will be designated by the engineer. The application of the Utility Grout Repair shall be based on the volume of the void actually encountered in the field after the removal of the utility and loose and deteriorated concrete.

Preparation, placement and curing of the material shall be in accordance with the manufacturer's recommendations.

After removal of unsound concrete, the surfaces of the remaining concrete shall be cleaned with compressed air jets to assure removal of all loose concrete, dust, and other foreign material. Compressors used for air jets shall be equipped with a functioning oil trap to prevent contamination. Embedded items shall be cleaned of all loose adhering concrete, rust and scale. Adhering concrete shall be removed from exposed reinforcement steel.

After completion of the removal and cleaning operations, and immediately prior to the placement of any non-epoxy material, the surfaces shall receive a coating of the bonding compound applied in accordance with the manufacturer's recommendations and as directed by the engineer. Bonding compound shall not be applied in conjunction with pneumatically applied mortar.

Where installation of forms prohibits the use of epoxy bonding compound due to application and drying problems, slow setting bonding agent shall be applied to concrete contact surfaces. Bonding agent application conditions and procedures shall be as recommended by the manufacturer. Concrete shall be placed within a period of 48 hours after application of the bonding agent. If this time period is exceeded, another coating of the material shall be applied.

The pot-life of the epoxy bonding compound, mixing period, maximum time lapse between mixing compound and placing of the new concrete, are all dependent on the temperature, humidity, and wind conditions. The contractor shall be acquainted with such information as recommended by the manufacturer, and shall schedule repair operations accordingly.

Whatever means of placing the grout material is employed, it shall be such that the material will completely fill the space to be replaced, be thoroughly compacted, and free of air pockets. All details of design, such as v-grooves, chamfers, joints, etc., in the existing abutment shall be duplicated in the repair work under this section.

Cavities left in concrete after removal of form ties or form anchors shall be filled with non-shrink mortar similar to that of the non-shrink grout.

**555.04 Measurement and Payment**

The Department will measure and make payment for items as follows:

<i>Item</i>	<i>Unit</i>
CONCRETE SPALL REPAIR, 2" TO 6" DEEP	SQUARE FOOT
CONCRETE SPALL REPAIR, OVER 6" DEEP	SQUARE FOOT
UTILITY GROUT REPAIR	CUBIC YARD

Individual areas of spall repair will be computed to the nearest square foot of exposed surface areas.

Individual areas of utility grout repair will be computed to the nearest cubic yard of exposed surface volumes.

No separate payment will be made for sawcutting edges of repairs, supplementing reinforcement steel, or removing and capping the utility. All associated costs will be included in the various repair items.

Final quantities and payment for the items above will be determined by the engineer from the final depth and repair surface area measured in the field after preparation of the area and prior to placement of the patching material, regardless of the original designation or preparatory work for another repair type.

No payment will be made for the disposal of debris, temporary shielding of traffic and debris catches and/or platforms. All associated costs shall be included in the various repair items.

## **SECTION 602 - DRAINAGE STRUCTURES**

### **602.03.03 Setting Castings, Resetting Castings, and Reconstructing Inlets and Manholes**

THE FOLLOWING IS ADDED:

Existing inlet and manhole castings which are no long required shall become the property of Union County.

### **602.03.07 Curb Pieces**

THE FOLLOWING IS ADDED:

Existing curb pieces which are no long required shall become the property of Union County.



## SECTION 606 - SIDEWALKS, DRIVEWAYS, AND ISLANDS

### 606.01 Description.

THE FOLLOWING IS ADDED

### 606.03.02 Concrete Sidewalks, Driveways, and Islands.

THE FOLLOWING IS ADDED:

The Contractor shall include the cost of all sidewalk, apron and brick removal, excavation, material disposal, expansion joint material, reinforcement material (where necessary & directed by the Engineer), curing material, adjacent site restoration, and all other material necessary for the construction of driveway aprons and various types of sidewalk, in the cost of the various items listed above. The unit price bid for these items shall include all work described heretofore for these items.

The various items for Concrete Sidewalk, consists of the removal and disposal of any existing concrete, brick or hot mix asphalt walks; excavation to the proper depth all around; setting forms as required; placing a 4" stone subbase as required; and pouring and finishing of concrete sidewalk and ramp as required at each location. After the stripping of forms, each site shall be cleaned and restored to match all adjacent conditions, including topsoil and seeding as required. The unit price given by the bidder shall include all work & restoration described hereto, for this item.

Disposal of concrete and asphalt will be made to an NJDEP approved recycling facility. The Contractor shall notify the Recycle Facility to provide the County with appropriate credit for recycling. Any brick pavers removed from the project shall be delivered to the respective Municipal Department of Public Works whence the material originated from.

New sidewalk shall meet existing sidewalk, at an existing or newly formed joint. The Contractor shall include the cost of all expansion joint materials in the unit prices.

Concrete for Concrete Sidewalks, shall be Gray, Class B, 4500 psi, 6% air-entrained, unless otherwise specified.

Concrete sidewalks shall be constructed in 4 ft. x 4 ft. squares using approved separators. An expansion joint shall be placed at 12-foot intervals. A 4-inch layer of *¾-inch clean stone subbase* shall be placed immediately below the new concrete sidewalk. This 4-inch subbase shall be constructed in accordance with Section 301, except that payment will not be made this layer. The preparation and compaction of the subbase shall be made part of the unit price bid for the Concrete Sidewalk item.

### E. Expansion Joints

THIS SUB-SECTION PART E IS CHANGED AS FOLLOWS:

Expansion joints shall be ½ inch wide, placed at intervals of approximately 12 feet, and shall be filled with preformed joint filler.

## **H. Protection and Curing**

THE LAST SENTENCE IS CHANGED TO:

Ensure vehicles and other loads are not placed on sidewalks, islands, and driveways until the concrete has attained compressive strength of 3000 pounds per square inch, as determined from 2 concrete cylinders field cured according to AASHTO T 23.

## SECTION 607 - CURBS

### 607.01 Description.

THE FOLLOWING IS ADDED:

These items shall consist of the removal and disposal of various types of curb, including: concrete, Belgian block, combination curb & gutter; and or hot mix asphalt concrete curb; excavation to the proper depth; setting forms as required; placing 6" stone base as required; and pouring and finishing of concrete curb and granite as required at each location, all in the process of constructing new curb. After the stripping of forms, each site will be cleaned and restored to match all adjacent conditions, including adjoining turf repair strips in accordance with Section 805.

### 607.03.02 Concrete Vertical Curb and Concrete Sloping Curb

#### C. Installing Joints

The following is added to this sub-Section:

Expansion joints shall be provided opposite joints in abutting concrete surface course and at approximately equal distances of not more than 10 feet between joints. Joints shall be filled with preformed expansion joint filler, ½ inch thick, which shall be flush with the top and face. Between concrete curbs and concrete surface or base course, ½-inch, preformed, expansion-joint filler shall be installed and the joint shall be sealed with hot-poured joint sealer.

All materials and equipment necessary to complete the type of curb installation described in Section 607.03.02, where necessary, will also be included in the overall payment for this Item.

#### D. Placing Concrete.

THE ENTIRE TEXT IS CHANGED TO:

Place concrete for vertical curb and sloping curb as specified in 607.03.01.D, except that consolidation may be achieved by hand spading or internal mechanical vibrators.

### 607.03.04 Concrete Vertical Curb and Concrete Sloping Curb, Dowelled

#### D. Placing Concrete.

THE ENTIRE TEXT IS CHANGED TO:

Place concrete for vertical and sloping curb as specified in 607.03.02.D.

### 607.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

The Contractor shall include the cost of all curb removal, excavation, material disposal, expansion joint material, curing material, adjacent site restoration and dowels (where required) in the cost of the curbs. All curbs shall be depressed at handicap ramps, in accordance with the respective construction details, included in these specifications. All materials, labor & equipment necessary to complete this work shall

be included in the unit price bid for the curb item. The unit price bid for this item shall include all work described heretofore.

## SECTION 608 - NON-VEGETATIVE SURFACES

THE ENTIRE SECTION IS CHANGED TO:

### 608.01 DESCRIPTION

This Section describes the requirements for constructing non-vegetative surfaces of HMA; color-coated HMA; porous HMA; broken stone, and polyester matting.

### 608.02 MATERIALS

#### 608.02.01 Materials

Provide materials as specified:

Broken Stone, Coarse Aggregate No. 3.....	901.03
HMA (9.5M64).....	902.02
Asphalt-Stabilized Drainage Course.....	902.06
Non-Vegetative Surface Coating.....	912.02.04
Herbicide.....	917.11.03
Polyester Matting.....	919.15

Provide Non-Vegetative Surface, Porous HMA conforming to the requirements of Asphalt-Stabilized Drainage Course.

#### 608.02.02 Equipment

Provide equipment as specified:

HMA Compactor.....	1003.05
Vibratory Drum Compactor.....	1003.06
HMA Plant.....	1009.01
HMA Trucks.....	1009.02

### 608.03 CONSTRUCTION

#### 608.03.01 Non-Vegetative Surface, HMA

Excavate as specified in 202.03.03. Shape and compact the underlying material to produce a firm, even surface. Obtain RE approval before finishing excavation. If the RE determines that the bottom of the excavation is unstable, undercut, backfill, and compact as directed by the RE.

Construct the non-vegetative surface, HMA before installing guide rail. Obtain RE approval for alternate methods of construction.

Deliver HMA as specified in 401.03.03.D. Construct non-vegetative surfaces 4 inches thick. Place and compact the material to produce a surface free of roller marks and ridges. Spread and grade the HMA as specified in 401.03.03.E. Ensure that the finished surface is smooth, even, and graded to drain away from the guide rail. Compact HMA as specified in 401.03.03.F. Spread, rake, and lute areas not accessible to pavers and rollers with hand tools and compact with dynamic compactors.

Repair non-vegetative surface damaged by guide rail installation with HMA. Use hand tampers around posts and other obstacles where mechanical compactors are not accessible.

**608.04 MEASUREMENT AND PAYMENT**

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

Item	Pay Unit
NON-VEGETATIVE SURFACE, HOT MIX ASPHALT	SQUARE YARD

When the RE directs undercutting of unstable material in the excavation area, the Department will make payment, as specified in 104.03.03, for the additional excavation. The Department will also make payment, as specified in 104.03.03, for the additional bedding if there is not an excess of excavated material available for use as bedding.

## **SECTION 609 - BEAM GUIDE RAIL**

### **609.03.01 Beam Guide Rail**

THE SEVENTH PARAGRAPH IS CHANGED TO:

Install flexible delineators with white retroreflective sheeting on the right side of the direction of traffic. Install flexible delineators with yellow retroreflective sheeting on the left side of the direction of traffic. Mount flexible delineators on the blockout of beam guide rail using either a "U" channel base on the I-beam blockout or a flat base attached to a wood, polymer, or other solid top blockout. Attach the base to the blockout using an adhesive recommended by the manufacturer of the base and panel.

### **609.04 MEASUREMENT AND PAYMENT**

THE PAY ITEM REMOVAL OF BEAN GUIDE RAIL IS DELETED AND THE FOLLOWING IS ADDED:

Separate payment will not be made for the removal of beam guide rail but the cost shall be included in the price bid for the various beam guide rail items.

Separate payment will not be made for connections of the various beam guide rail types to the parapet including extra posts, blockouts and rail elements but the cost shall be included in the various beam guide rail items.

## SECTION 610 - TRAFFIC STRIPES, TRAFFIC MARKINGS AND RUMBLE STRIPS

### 610.01 Description

THE FOLLOWING IS ADDED TO THIS SECTION:

Traffic stripes and pavement markings of the various types, shall be installed prior to the roadway being opened for traffic, unless prior approval is obtained from the Engineer. Should this approval be granted, or such is not recommended by the Manufacturer of the material, the Contractor shall pre-mark the newly surfaced road, prior to such being opened to traffic, and in the presence of the Engineer's representative. The use of traffic control devices (i.e., cones or drums) to delineate traveled ways, crosswalks, stop bars, etc. will not be allowed.

Temporary tapes and/or paint may be utilized on milled surfaces only. No additional payment will be made for temporary traffic tape and or paint. All labor & materials necessary to install and remove temporary striping items shall be made part of the various striping items as described herein.

Materials used on this project shall meet all manufacturers' specifications.

### 610.02.02 Equipment.

THE FOLLOWING IS ADDED:

All equipment for applying traffic stripes or traffic markings shall be equipped with glass bead dispensers of a type that will mechanically and automatically dispense beads uniformly on wet stripes or markings at the rates specified.

### 610.03 CONSTRUCTION

#### 610.03.01 Long-Life Traffic Stripes

THE ENTIRE SUBSECTION IS CHANGED TO:

- A. Striping Plan.** At least 20 days before beginning the work, submit to the RE for approval a striping plan that includes:
1. Schedule of operations for applying traffic stripes.
  2. Number and type of equipment.
  3. Manufacturer's recommendations for use of the materials, including, but not limited to, mixing ratios and application temperatures.
  4. Details on the means and methods for surface preparation
  5. Details on the means and methods for premarking
  6. Details on the proposed test strip such as location, length etc
- B. Surface Preparation.** Immediately before striping the pavement surface, clean the surface of dirt, oil, grease, and foreign material, including curing compound on new concrete. Clean the surface two (2) inches beyond the perimeter of the stripes to be placed.
- C. Striping Test Strip.** Before beginning striping operations, construct 1 or more striping test strips to demonstrate the Contractor's ability to meet the requirements specified in 610.03.01.D. For each striping test strip, apply striping to approximately 500 linear feet of pavement with the same striping procedure that will be used for the Project. Construct a test strip for each applicator unit and epoxy



resin material used. Provide the RE with 50 test cards made of heavy stock paper measuring 8 inches by 2 inches, and two wet film thickness gauges. Construct additional test strips when major equipment repairs or adjustments are made or when the traffic stripes are determined to be defective. Construct additional test strips when traffic striping operations are performed on multiple, non-continuous occasions. Perform additional test strips as requested by the RE. When the test strip is in compliance, as determined by the RE, proceed with striping operations. Each test strip may remain in place and become part of the finished stripes subject to the requirements of 610.03.01.E.

- D. Applying Striping.** Mix epoxy resin with an automatic proportioning and mixing machine, and hot-spray the compound at a temperature of between 100 and 130 °F onto dry surfaces. Apply the compound with a wet film thickness of  $20 \pm 1$  mil. Apply the material during dry weather conditions when the ambient temperature is a minimum of 45 °F and the surface temperature is a minimum of 50 °F. Adjust operations as required for the prevailing ambient and surface conditions to achieve a no-track drying time of 30 minutes or less.

Immediately after, or in conjunction with, the compound application, uniformly apply 12 pounds of large glass beads per gallon of epoxy resin to the compound. After applying the large glass beads, uniformly apply 12 pounds of small glass beads per gallon of epoxy resin to the compound.

Remove all compound that has been tracked or spilled outside of the intended placement areas.

- E. Performance.** Ensure that the traffic stripes, show no fading, lifting, cracking, chipping for any reason including but not limited to traffic wear, maintenance activities including snow plowing, until Acceptance. Ensure that 60 days after application, traffic stripes have a minimum retroreflectance value of:

375 millicandelas per square meter per lux for white traffic stripe

250 millicandelas per square meter per lux for yellow traffic stripe

- F. Defective work.** Replace traffic stripes that are determined by the RE before Acceptance to be defective or that are damaged during construction. Remove defective stripes as specified in 610.03.08.

Replace an entire 10-foot skip line if the RE determines the stripe to have a deficiency.

If the RE determines, based upon calculated and measured yields, that the striping has a wet film thickness of less than 19 mils, restripe the entire length with 20 mils of new compound.

Provide the RE with an LTL-X Reflectometer that has been certified by the manufacturer as being calibrated within the last two years. The RE will test the retroreflectance of traffic stripes. Replace traffic stripes that do not meet the retroreflectance values indicated in 610.03.01.E. Replace the entire length of striping where improper curing or discoloration has occurred. Discoloration is localized areas or patches of brown or grayish colored compound. Where improper curing or discoloration occurs intermittently in intervals of 100 feet or less throughout the striping length, replace the entire length of striping from the beginning of the first occurrence until the end of the last occurrence, plus 5 feet on each end.

Replace the entire length of striping that has failed to bond to the pavement, or has chipped or cracked. Where more than 25 spots of chipping, cracking, or poor bonding have occurred within 1000 linear feet of striping, replace the entire 1000 foot length of striping as indicated in 610.03.01.E.

- G. Opening to Traffic.** Complete each application of all types of traffic stripes and allow to thoroughly dry before opening to traffic. At a minimum, delineate center lines on undivided roadways and broken lines between lanes before the traveled way is opened. The RE will determine when the traveled way can be opened to traffic.

THE FOLLOWING IS ADDED TO SUBSECTION C:

The traffic lines shall be applied in accordance with the manufacturer's installation instructions.

All traffic stripes, words, legends and markings shall conform to the current edition of the Manual on Uniform Traffic Control Devices (MUTCD) for size, color, shape and placement.

All centerline markings shall be a six-inch wide double yellow line for the entire length of the road. Additionally, the Contractor performing this work shall provide a six-inch wide gap between the double yellow lines for the placement of plowable raised pavement markers, either installed under this or future contracts. In the event that a six-inch wide gap is not provided, the Contractor shall remove that length of line not in compliance and reapply the material to provide the required gap distance without additional compensation. Openings 6" in length may be provided at 20 foot intervals along edge lines placed on the inside radius of super elevated curves, to avoid surface ponding.

Longitudinal lines shall be offset at least 4 inches from construction joints of Portland cement concrete pavements and joints and shoulder breaks of hot mix asphalt concrete pavements.

All stray materials which result from the application of traffic marking lines and symbols shall be cleaned up and disposed of prior to opening the road to traffic and to the satisfaction of the Engineer. **The use of grinders or similar method will not be allowed on the new pavement surface.** Additionally where applicable, excess glass beads that are on the roadway surface shall be cleaned up prior to opening the road to traffic. The beads must be swept or vacuumed up. The use of blowers to clean the roadway surface of glass beads is not an acceptable method of removal.

When traffic lines are specified in the contract for newly paved asphalt concrete surfaces, they shall be applied before public traffic is allowed on the freshly paved surface. In snow removal states, the traffic lines should preferably be inlaid in the fresh surface during final rolling of the mat, but in any case they shall be applied before the close of the shift on the day that the surface is paved. These traffic lines can also be overlaid on existing pavement surfaces in accordance with the manufacturer's installation instructions.

THE FOLLOWING IS ADDED TO SUBSECTION D:

- D. Performance.** Ensure that the traffic markings show no fading, lifting, cracking, chipping for any reason including but not limited to traffic wear, maintenance activities including snow plowing, until Acceptance. Ensure that 60 days after application, traffic markings have a minimum retroreflectance value of:

375 millicandelas per square meter per lux for white traffic markings

250 millicandelas per square meter per lux for yellow traffic markings

At no additional compensation by the County, the Contractor shall remove all traffic paint where the striping or markings will not be directly under long-life material, replace long-life traffic stripes or traffic markings damaged due to any sawing or sealing of joints in the HMA overlay, and replace all existing pavement reflectors that have been marred by striping or marking material as a result of improperly located traffic stripes or traffic markings.

- E. **Defective work.** Replace thermoplastic traffic markings that are determined by the RE before Acceptance to be defective or that are damaged during construction. Remove defective markings as specified in 610.03.08.

Replace the entire area of thermoplastic traffic markings determined to be less than the required thickness, to have incorrect color or width, to have failed to bond to the pavement, or to have chipped or cracked. The minimum replacement area is an individual word or symbol, or for longitudinal lines the entire length from where the deficiency first occurs to where it no longer exists.

The RE will determine initial retroreflectance as follows:

Provide the RE with an LTL-X Reflectometer that has been certified by the manufacturer as being calibrated within the last two years. The RE will test the retroreflectance of traffic markings. Replace traffic markings that do not meet the retroreflectance values indicated in 610.03.02.D.

Complete each application of traffic markings and allow to thoroughly dry. All stray materials which result from the application of traffic lines and markings shall be cleaned up and disposed of prior to opening the road to traffic and to the satisfaction of the Resident Engineer. The use of grinders or similar method will not be allowed on newly paved surfaces. Additionally, where applicable, excess glass beads that are on the roadway surface shall be cleaned up prior to opening the road to traffic. The beads must be swept or vacuumed up - the use of blowers to clean the roadway surface of glass beads is not an acceptable method of removal.

- F. **Opening to Traffic.** Complete each application of thermoplastic traffic markings and allow to thoroughly dry before opening to traffic. The RE will determine when the traveled way can be opened to traffic.

#### **610.03.08 Removal of Traffic Stripes and Markings**

THE FOLLOWING HAS BEEN ADDED:

Equipment for removing the various types of traffic stripes or traffic markings shall be designed with a vacuum system to remove all millings from the pavement surface and prevent airborne residue from escaping into the atmosphere. All equipment including traffic marking tape applicator and retrometer shall be duly calibrated and shall conform to manufacturer's requirements.

#### **610.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING IS ADDED:

Payment for traffic stripes will be made for the number of linear feet installed, accepted and placed in accordance with the requirements of these and the manufacturer's specifications at the price bid per linear foot under the item TRAFFIC STRIPES, LONG LIFE EPOXY RESIN, 4".

No additional payment will be made for the removal of reflectors & castings.

The cost for the removal of traffic lines and markings including solid areas, letters, arrows, and other symbols from HMA and Portland cement concrete surfaces shall be included in the unit price bid for this item.

Traffic lines will be paid for at the contract unit price, which shall be full compensation for cleaning and preparing the pavement surface, for furnishing and placing all materials, and for all materials, labor, tools, equipment and incidentals necessary to complete the work.

At no cost to the County, the Contractor shall remove all traffic paint where the striping or markings will be directly under proposed long-life material, replace long-life traffic stripes or traffic markings damaged due to any sawing or sealing of joints in the hot mix asphalt concrete overlay (resurfacing), and replace all existing pavement reflectors that have been marred by striping or marking material as a result of improperly located traffic stripes or traffic markings.

## SECTION 651 - WATER

### 651.01 DESCRIPTION

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

The work to be performed under this Contract includes the coring of a 20" diameter opening in the existing abutments for the 18" pipe casing which will be placed through the existing abutment walls. The 18" pipe casing will be provided by Suez Water's contractor. All work and materials associated with creating a new 20" diameter opening and pipe casing installation repairs to the previous penetration location, are included in this work.

### 651.02 MATERIALS

THE FOLLOWING IS ADDED:

GROUT.....903.08.02

Epoxy bonding coat shall conform to the requirements of section 903.

### 651.03 CONSTRUCTION

THE FOLLOWING IS ADDED

#### 651.03.09 Concrete Coring for 12" Water Main Relocation

**A. Scheduling and Requirements:** Prior to construction, a contractor hired by Suez Water will cap and remove the 12" water main within 50 feet of the structure prior to the start of construction. Suez Water's contractor will provide an 18" pipe casing for the new 12" water main to be placed through the existing abutment. Following installation of the 18" pipe casing, the contractor shall backfill to the elevation of the pipe bedding so Suez Water's contractor can install and run the new pipe through the casing.

**B. Previous Penetration Repair and Sleeve Construction:**

A 20" diameter concrete opening shall be cored in the existing abutments at an elevation as specified in the contract plans. Any space between the 20" opening and casing pipe shall be filled with non-shrink grout.

Non-shrink grout shall be placed in the existing penetration filling the void and creating a smooth surface with the existing concrete surface. All loose and deteriorated concrete shall be removed prior to placing grout. The repair shall be to the satisfaction of the resident engineer.

Preparation, placement and curing of the material shall be in accordance with the manufacturer's recommendations.

After removal of unsound concrete, the surfaces of the remaining concrete shall be cleaned with compressed air jets to assure removal of all loose concrete, dust, and other foreign material. Compressors used for air jets shall be equipped with a functioning oil trap to prevent

contamination. Embedded items shall be cleaned of all loose adhering concrete, rust and scale. Adhering concrete shall be removed from exposed reinforcement steel.

After completion of the removal and cleaning operations, and immediately prior to the placement of any non-epoxy material, the surfaces shall receive a coating of the bonding compound applied in accordance with the manufacturer's recommendations and as directed by the engineer. Bonding compound shall not be applied in conjunction with pneumatically applied mortar.

Where installation of forms prohibits the use of epoxy bonding compound due to application and drying problems, slow setting bonding agent shall be applied to concrete contact surfaces. Bonding agent application conditions and procedures shall be as recommended by the manufacturer. Concrete shall be placed within a period of 48 hours after application of the bonding agent. If this time period is exceeded, another coating of the material shall be applied.

The pot-life of the epoxy bonding compound, mixing period, maximum time lapse between mixing compound and placing of the new concrete, are all dependent on the temperature, humidity, and wind conditions. The contractor shall be acquainted with such information as recommended by the manufacturer, and shall schedule repair operations accordingly.

Placement and curing of pneumatically applied mortar shall conform to the requirements of section 553.

Whatever means of placing the grout material is employed, it shall be such that the material will completely fill the space to be replaced, be thoroughly compacted, and free of air pockets. All details of design, such as v-grooves, chamfers, joints, and any other necessary details in the existing abutment shall be duplicated in the repair work under this section.

Cavities left in grout after removal of form ties or form anchors shall be filled with non-shrink mortar similar to that of the non-shrink grout.

#### **651.04 MEASUREMENT AND PAYMENT**

THE FOLLOWING IS ADDED:

<i>Item</i>	<i>Pay Unit</i>
CONCRETE CORING FOR 12" WATER MAIN RELOCATION	LUMP SUM

THIS SUB-SECTION IS CHANGED AS FOLLOW:

The item *Concrete Coring For 12" Water Main Relocation* includes all required work completed to the satisfaction of the resident engineer. No separate payment will be made for the removal and disposal of all loose and deteriorated concrete and debris, non-shrink grout or concrete repair material, sawcutting edges of repairs, supplementing reinforcement steel, coordination with Suez Water's contractor or for temporary shielding of traffic. All associated costs to complete this work shall be included in the repair item.

The item *Reset Water Valve Box* shall not be measured, and no separate payment will be made.

## SECTION 653 - GAS

### 653.04 MEASUREMENT AND PAYMENT

THIS SUB-SECTION IS CHANGED AS FOLLOWS:

The item *Reset Gas Valve Box* shall not be measured and no separate payment will be made.

## SECTION 901 - AGGREGATES

### 901.10.03 Virgin and RAP Mixture

#### 3. Density Control

THE FOLLOWING IS **ADDED**:

When AASHTO T 310 (Direct Transmission Method, nuclear gauge method for measuring density and moisture content) is used to perform Compaction Acceptance Testing (Subsection 302.03.01), **a representative sample of five tests for each 5,000 square yards lot will be taken.**



## SECTION 902 - ASPHALT

### 902.02.02 Composition of Mixtures

TABLE 902.02.02-2 IS CHANGED TO:

<b>Table 902.02.02-2 Additional Fine Aggregate Requirements for HMA</b>		
<b>Tests</b>	<b>Test Method</b>	<b>Minimum Percent</b>
<b>Uncompacted Void Content of Fine Aggregate</b>	AASHTO T 304, Method A	45
<b>Sand Equivalent</b>	AASHTO T 176	45

### 902.02.04 Sampling and Testing

#### B. Sampling.

THIS ENTIRE PART IS CHANGED TO:

The ME will take a random sample from each 700 tons of production for volumetric acceptance testing and to verify composition. The ME will perform sampling according to AASHTO T 168, NJDOT B-2, or ASTM D 3665.

### 902.03.02 Mix Design

THE FOLLOWING IS ADDED TO THIS SUB-SECTION:

**UNLESS OTHERWISE APPROVED BY THE ENGINEER, ONLY ONE SOURCE OF SUPPLY FOR HOT MIX ASPHALT MATERIAL MAY BE USED ON THE PROJECT.**

THE FOURTH PARAGRAPH IS CHANGED TO:

The ME will test 2 specimens to verify that the final JMF produces a mixture that has a minimum void content as specified in Table 902.03.03-1. The ME will determine percent air voids according to AASHTO T 209, and either NJDOT B-6 or AASHTO T 331.

### 902.03.03 Sampling and Testing

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Ensure that the mix meets the requirements as specified in 902.02.04.A, otherwise the RE or ME will reject the material.

THE SECOND PARAGRAPH IS CHANGED TO:

During production, the ME will take one random acceptance sample from each 700 tons of production to verify composition. Conduct air voids and drain down tests as directed by the ME.

THE FOURTH PARAGRAPH IS CHANGED TO:

The ME will perform sampling according to NJDOT B-2 or ASTM D 3665, and will perform testing for composition according to AASHTO T 308 or NJDOT B-5. Perform testing for air voids according to AASHTO T 209 and either NJDOT B-6 or AASHTO T 331. Perform testing for drain down according to NJDOT B-7 or NJDOT B-8.

**902.04.03 Sampling and Testing**

THE FIRST PARAGRAPH IS CHANGED TO:

Ensure that the mix meets the requirements as specified in 902.02.04.A, otherwise the RE or ME will reject the material. Maintain the temperature of the mix between 300 °F and 330 °F. Perform and meet requirements for quality control testing as specified in 902.02.04.C.

THE SECOND PARAGRAPH IS CHANGED TO:

During production, the ME will take one random acceptance sample from each 700 tons of production to verify composition. Conduct drain down tests as directed by the ME.

**902.05.01 Composition of Mixture**

THE FIFTH PARAGRAPH IS CHANGED TO:

For fine aggregate, use stone sand conforming to 901.05.02. Ensure that the combined fine aggregate in the mixture conforms to the requirements in Table 902.02.02-2.

**902.05.02 Mix Design**

THE FIRST PARAGRAPH IS CHANGED TO:

Design the SMA to meet the requirements in Table 902.05.02-1 and Table 902.05.02-2. Prepare the JMF according to AASHTO R 46. Determine the JMF at 4 percent air voids and 75 gyrations of the Superpave gyratory compactor.

TABLE 902.05.02-2 IS CHANGED TO:

<b>Table 902.05.02-2 SMA Mixtures Volumetric For Design and Plant Production</b>		
<b>Property</b>	<b>Production Control Tolerances</b>	<b>Requirement</b>
Air Voids	±1%	4.0%
Voids in Mineral Aggregate (VMA)	–	17.0% minimum
VCA <sub>mix</sub>	–	Less than VCA <sub>dry</sub>
Drain down @ production temperature	–	0.30% maximum
Asphalt Binder Content (NJDOT B-5)	±0.15%	6% minimum
Asphalt Binder Content (AASHTO T 308)	±0.40%	6% minimum
Tensile Strength Ratio (AASHTO T 283)	–	80% minimum

### **902.05.03 Sampling and Testing**

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Ensure that the mix meets the requirements as specified in 902.02.04.A, otherwise the RE or ME will reject the material.

THE SECOND PARAGRAPH IS CHANGED TO:

During production at the plant, the ME will take a sample from each 700 tons of production to verify composition and air voids. Conduct drain down, VCAmix, VCAdry, and VMA testing as directed by the ME. Perform tests according to AASHTO R 46.

THE FOURTH PARAGRAPH IS CHANGED TO:

The ME will perform sampling according to NJDOT B-2 or ASTM D 3665, and will perform testing for composition according to AASHTO T 308, or NJDOT B-5. The ME will determine bulk specific gravity of the compacted sample according to AASHTO T 166 or AASHTO T 331. The ME will use the most current QC maximum specific gravity test result, obtained according to AASHTO T 209, in calculating the volumetric properties of the SMA. Perform testing for drain down according to AASHTO T 305.

### **902.06.03 Sampling and Testing**

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Ensure that the mix meets the requirements as specified in 902.02.04.A, except that the temperature of the mix at discharge is required to be between 230 °F and 275 °F, otherwise the RE or ME will reject the material.

THE SECOND PARAGRAPH IS CHANGED TO:

During production, the ME will take one random acceptance sample from each 700 tons of production to verify composition. Conduct drain down tests as directed by the ME.

## SECTION 903 – CONCRETE

### 903.02.04 Viscosity Modifying Admixture

THE FIRST SENTENCE IS CHANGED TO:

Use a viscosity modifying admixture that is listed on the QPL and that, when evaluated according to the test methods and mix design proportions in AASHTO M 194, conforms to the following physical requirements:

### 903.03.06 Tables

#### Table 903.03.06-2 Requirements for Structural Concrete Items

THE SEVENTH LINE UNDER CAST-IN-PLACE ITEMS IS CHANGED TO:

Table 903.03.06-2 Requirements for Structural Concrete Items				
	Concrete Class	Slump <sup>1</sup> (inches)	Percent Air Entrainment for Coarse Aggregate <sup>1</sup>	
			No. 57 & No. 67	No. 8
Decks, Sidewalks, Curbs, Parapets, Concrete Patch	A	3 ± 1	6.0 ± 1.5	7.0 ± 1.5

### 903.05.04 Control and Acceptance Testing Requirements

THE SUPERScript REFERENCE NO. 4 UNDER TABLE 903.05.04-1 IS CHANGED TO:

4. For chloride permeability testing, the ME will mold 4 additional cylinders, taking 2 cylinders each from 2 randomly selected delivery trucks for testing at 56-days.

THE FOURTH PARAGRAPH IS CHANGED TO:

If, upon testing at 56 days, 1 or more individual test results exceed 2000 coulombs, the RE may:

1. Require that the Contractor remove and replace the defective lot, or
2. Allow the Contractor to submit a corrective action plan for approval.

### 903.06.02 SCC For Pre-cast Concrete

THE ENTIRE PART B. IS CHANGED TO:

- B. Mix Design and Verification.** Design the mix, as specified in 903.03.02 or 903.05.02, to conform to the strength, water-cement ratio, and air content requirements for the specified class of concrete for the item that is being cast. In addition, ensure that the SCC conforms to the requirements specified in Table 903.06.02-1.

**Table 903.06.02-1 Requirements for SCC for Pre-cast Concrete**

<b>Property</b>	<b>Test Method</b>	<b>Requirement</b>
Slump Flow	NJDOT C-4	16 to 24 inches
Visual Stability Index		
Plastic Concrete	NJDOT C-4	1 maximum
Hardened Concrete	NJDOT C-5	1 maximum

Perform mix design verification as specified in 903.03.02 or 903.05.02. For the verification batch, ensure that the air content is in the top half of the allowable range and the slump flow is between 22 and 24 inches. Perform air content, slump flow, and visual stability index (plastic concrete) testing on the verification batch. Make concrete cylinders for compression testing as specified in 903.03.02 or 903.05.02 and make 2 additional 4 × 8 inch cylinders for visual stability index on the hardened concrete. Saw the additional cylinders length-wise according to NJDOT C-5. The ME will perform the compressive strength testing and the visual evaluation to assign a visual stability index in order to approve the mix.

## SECTION 904 – PRE-CAST AND PRE-STRESSED CONCRETE

### 904.01.01 Component Materials

THE FOLLOWING SENTENCE IS ADDED AT THE END:

For Pre-cast Concrete, the minimum cement content specified in Table 903.03.06-3 is not required for Class A or Class B concrete.

### 904.01.02 Fabrication

THE ENTIRE SUBPART IS CHANGED TO:

Fabricate pre-cast concrete at a plant as specified in 1011.01 and listed on the QPL.

1. **Placing Reinforcement Steel.** Before placing the concrete, place reinforcement steel in position as shown on the approved working drawings and as specified in 504.03.01. Firmly tie the reinforcement to prevent displacement during placing of the concrete.
2. **Placing Concrete.** Place concrete as specified in 504.03.02.B, 504.03.02.C, 504.03.02.D, and 504.03.02.E. Before placing concrete, ensure that reinforcement steel and any other embedded materials are free of loose rust, frost, dirt, oil, or contaminants that may prevent a bond with the concrete. Consolidate concrete with internal vibrators. The fabricator may use external vibration to supplement internal vibration. If using SCC, minimize or eliminate the use of vibrators to prevent segregation.

### 904.01.06 Quality Control and Acceptance Requirements

THE FOLLOWING IS ADDED AFTER THE SECOND PARAGRAPH:

Follow the Department approved Buy America Compliance Plan. Provide documentation of compliance when requested by the ME.

### 904.02.01 Component Materials

THE FOLLOWING SENTENCE IS ADDED AT THE END:

For Pre-cast Concrete, the minimum cement content specified in Table 903.03.06-3 is not required for Class A or Class B concrete.

### 904.02.02 Fabrication

THE FIRST SENTENCE IN THE FIRST PARAGRAPH IS CHANGED TO:

1. Place concrete as specified in 504.03.02.C, 504.03.02.D, and 504.03.02.E.

THE SECOND SENTENCES IN THE FIRST PARAGRAPH IS CHANGED TO:

Fabricate pre-cast concrete at a plant as specified in 1011.01 and listed on the QPL.

### 904.02.06 Quality Control and Acceptance Requirements

THE FOLLOWING IS ADDED AFTER THE SECOND PARAGRAPH:

Follow the Department approved Buy America Compliance Plan. Provide documentation of compliance when requested by the ME.

STEP 2 IN THE THIRD PARAGRAPH IS CHANGED TO:

2. Dimensions not conforming to the tolerances specified in Table 904.02.02-1.

#### **904.03.01 Component Materials**

THE FOLLOWING IS ADDED AT THE END:

For Pre-cast Concrete, the minimum cement content specified in Table 903.03.06-3 is not required for Class A or Class B concrete.

#### **904.03.02 Fabrication**

THE FIRST SENTENCE IN THE FIRST PARAGRAPH IS CHANGED TO:

Fabricate pre-cast concrete at a plant as specified in 1011.01 and listed on the QPL.

2. **Placing Concrete.**

THE FIRST SENTENCE IN THE FIRST PARAGRAPH IS CHANGED TO:

Place concrete as specified in 504.03.02.B, 504.03.02.C, 504.03.02.D, and 504.03.02.E.

#### **904.03.06 Quality Control and Acceptance Requirements**

THE FOLLOWING IS ADDED AFTER THE SECOND PARAGRAPH:

Follow the Department approved Buy America Compliance Plan. Provide documentation of compliance when requested by the ME.

THE FOLLOWING IS ADDED AFTER THE LAST PARAGRAPH:

If the ME does not inspect the pre-cast concrete item, submit certifications of compliance as specified in 106.07.

#### **904.04.02 Fabrication**

THE FIRST SENTENCE IN THE FIRST PARAGRAPH IS CHANGED TO:

Fabricate pre-stressed concrete at a plant as specified in 1011.02 and listed on the QPL.

3. **Placing Concrete.**

THE SECOND SENTENCE IN THE FIRST PARAGRAPH IS CHANGED TO:

Place concrete as specified in 504.03.02.B, 504.03.02.C, 504.03.02.D, and 504.03.02.E.

#### **904.04.06 Quality Control, Quality Assurance, and Acceptance Requirements**

THE FOLLOWING IS ADDED AFTER THE SECOND PARAGRAPH:

Follow the Department approved Buy America Compliance Plan. Provide documentation of compliance when requested by the ME.

THE FOLLOWING IS ADDED AFTER THE LAST PARAGRAPH:

If the ME does not inspect the pre-cast concrete item, submit certifications of compliance as specified in 106.07.



## **SECTION 905 - REINFORCEMENT METALS**

### **905.01 REINFORCEMENT STEEL**

THE ENTIRE SUBPART IS CHANGED TO:

Provide reinforcement steel manufactured at an AASHTO NTPEP (National Transportation Product Evaluation Program) certified mill. For a list of NTPEP certified mills, see the following webpage: <http://data.ntpep.org/Module/REBAR/Overview.aspx>.

For reinforcement steel, submit a certification of compliance as specified in 106.07. Attach copies of the mill certifications for each heat of reinforcement steel. The ME will randomly sample and test heats of reinforcement steel for quality assurance. The ME will randomly inspect and sample galvanized and epoxy coated reinforcement steel for quality assurance.

#### **905.01.03 Welded Wire Reinforcement**

THE SECOND PARAGRAPH IS CHANGED TO:

When approved as an alternate to galvanized reinforcement bars, use galvanized welded wire reinforcement that meets the requirements of ASTM A 641, Table 1, Class 1.

#### **905.01.05 Dowels**

THE ENTIRE SUBPART IS CHANGED TO:

Use plain reinforcement bars according to ASTM A 615, Grade 60. Galvanize according to ASTM A 123.

#### **905.03.03 Dowel Bars**

THE FIRST PARAGRAPH IS CHANGED TO:

For dowel bars in transverse joints, use epoxy-coated, Grade 60, plain reinforcement steel according to ASTM A 615. If shown on the Plans, use dowel bars fitted with end caps. Ensure that the end caps are non-metallic and designed to prevent the entrance of grout or mortar into the expansion void.

## SECTION 911 - SIGNS, SIGN SUPPORTS, AND DELINEATORS

### 911.02.03 Non-Breakaway Sign Supports for Ground Mounted Signs

THE LAST SENTENCE OF THE SECOND PARAGRAPH IS CHANGED TO:

Tie-wrap posts during shipment and handling to protect the finish.

### 911.03 FLEXIBLE DELINEATORS

#### 1. Delineator Dimensions.

##### b. Guide Rail Mounted.

THE ENTIRE TEXT IS CHANGED TO:

Ensure that the unit for beam guide rail mounted flexible delineators has a minimum width of 3 inches and a minimum thickness of 0.100 inch. Use units of a height that will ensure that the top of the reflective area is  $5 \pm 2$  inches above the top of post.

Design the base of the unit to mount over the I-beam blockout or to the top of a wood or synthetic blockout, of the beam guide rail.

THE FOLLOWING IS ADDED:

- d. Construction Barrier Curb Mounted.** For construction barrier curb top mounted flexible delineators, use a delineator that is 6 x 12 inches with a minimum thickness of 0.100 inch. For construction barrier curb side mounted flexible delineators, use a delineator that is 3-1/2 x 3-1/2 inches with a minimum thickness of 0.100 inch, and that has a base that forms a "T" shape with the panel for mounting on the barrier curb and is flexible or hinged so as to return to its original position after being struck.

THE FOLLOWING IS ADDED:

- d. Construction Barrier Curb Mounted.** Ensure that the sheeting for top mounted flexible delineators is 6 x 12 inches and the sheeting for side mounted flexible delineators is 3-1/2 x 3-1/2 inches.

Submit a certification of compliance, as specified in 106.07, for delineators.

## SECTION 912 - PAINTING, COATINGS, TRAFFIC STRIPES AND TRAFFIC MARKINGS

### 912.03.01 Epoxy Traffic Stripes

#### B. Glass Beads.

THE FIRST PARAGRAPH IS CHANGED TO:

Submit certifications of compliance as specified in 106.07 for each lot of glass beads used on the Contract. For each lot of glass beads, submit test results indicating the parts per million of lead, antimony and arsenic as determined by testing according to Environmental Protection Agency testing method 3052 and testing method 6010B or 6010C. Ensure that glass beads do not contain more than 200 ppm of lead, 200 ppm of antimony, or 100 ppm of arsenic.

### 912.03.02 Thermoplastic Traffic Markings

THE SUB-SECTION SHALL BE REVISED AS FOLLOWS:

For traffic markings, use either preformed or hot extruded thermoplastic conforming to AASHTO M 249, except that for preformed thermoplastic, the minimum thickness requirement is 90 mils. Use beads conforming to AASHTO M 247, Type 1, with a moisture resistant coating. Ensure that glass beads do not contain more than 200 ppm of lead, 200 ppm of antimony, or 100 ppm of arsenic.

Submit certifications of compliance, as specified in 106.07, for each batch of materials used on the Contract. For each lot of glass beads, submit test results indicating the parts per million of lead, antimony and arsenic as determined by testing according to Environmental Protection Agency testing method 3052 and testing method 6010B or 6010C.

Thermoplastic for long-life traffic markings shall be hot extruded material. Thermoplastic material shall be applied to the road surface in a molten state by the *Ribbon/Extrude Method*, whereby, the suspended extrusion die has multi (four) sided control of the flow and shape of the materials. The thermoplastic shall conform to the requirements of AASHTO M 249, except as follows:

1. All thermoplastic material shall be applied at a *thickness of 125 mils*.
2. For white, the composition of the mixture shall be as follows:

<b>Component</b>	<b>Percent by weight</b>
Resin/Binder	22-26 percent
Glass Beads (pre-mix)	30 percent minimum
White Pigment	10 percent minimum
Calcium Carbonate and Inert Fillers (shall not contain silica other than as glass beads)	34-38 percent

3. Only yellow non-lead formulas shall be used, the composition of the mixture shall be as follows:

<b>Component</b>	<b>Percent by weight</b>
Resin/Binder	22-26 percent
Glass Beads (pre-mix)	30 percent minimum
Yellow Pigment	2 percent minimum
Calcium Carbonate and Inert Fillers (shall not contain silica other than as glass beads)	42-46 percent

The yellow material's combined totals of lead, cadmium, mercury, and hexavalent chromium shall not exceed 100 parts per million. *The thermoplastic manufacturer shall certify, according to Sub-section 106.04, that the material will meet the requirements specified.*

The material, when formed into traffic stripes & markings, shall be readily renewable by placing an overlay of new material directly upon an existing line of the same material. Such new material shall bond itself to the existing line in such a manner to avoid splitting and or separation. *The thermoplastic material shall not deteriorate on contact with the following: Sodium Chloride, Calcium Chloride, or other de-icing chemicals; oil contents of paving materials and or vehicles.*

#### **912.04 TEMPORARY TRAFFIC STRIPES AND MARKINGS**

##### **912.04 Latex Paint**

THE FOLLOWING SHALL BE ADDED TO THE BEGINNING OF THIS SUB PART:

*Latex Traffic Paint shall only be utilized and accepted for use as temporary striping & marking of milled surfaces. All other striping & markings shall conform to Sub-sections 912.10.C, as amended herein. Temporary traffic marking tape may also be used; however, product will require approval of the Engineer, prior to any use.*

##### **912.04.01 Latex Paint**

THE ENTIRE SUBPART TEXT IS CHANGED TO:

For temporary traffic stripes, use latex traffic paint that is a fast-drying white, or non-lead yellow, ready-mixed pigmented binder emulsified in water and capable of anchoring reflective glass beads that are separately applied. Ensure that the color matches FED-STD-595B color chip No. 33538 for yellow and No. 37886 for white. Ensure that the paint has a maximum no-track time of 120 seconds when applied in a wet film thickness of  $15 \pm 1$  mil, at 140 °F, and with 12 pounds per gallon of glass beads. In addition, ensure that the finished product meets the following:

1. Volume of solids is a minimum 61 percent.
2. Total solids are a minimum of 77.5 percent total non-volatiles by weight, when tested according to ASTM D 2369.
3. Weight per gallon is a minimum  $14 \pm 0.2$  pounds per gallon for each color.
4. Hegman Grind is a minimum of 2 Hegman when tested according to ASTM D 1210.
5. Viscosity is between 70 and 95 Krebs Units at 77 °F, when tested according to ASTM D 562.

Use glass beads conforming to AASHTO M247, Type 1, with a moisture resistance coating. Ensure that glass beads do not contain more than 200 ppm of lead, 200 ppm of antimony, or 100 ppm of arsenic.

Submit a certification of compliance, as specified in 106.07, for latex and glass beads. For each lot of glass beads, submit test results indicating the parts per million of lead, antimony and arsenic as determined by testing according to Environmental Protection Agency testing method 3052 and testing method 6010B or 6010C.

## **SECTION 913 - GUIDE RAIL, FENCING, RAILING AND BOX BEAM**

### **913.01.01 Rail Element**

THE SECOND PARAGRAPH IS CHANGED TO:

Submit a certification of compliance as specified in 106.07.

### **913.01.02 End Treatments**

THE SECOND PARAGRAPH IS CHANGED TO:

Submit a certification of compliance as specified in 106.07.

### **913.01.03 Posts and Blockouts**

THE FOURTH PARAGRAPH IS CHANGED TO:

Provide certifications of compliance, as specified in 106.07.

### **913.01.04 Rub Rail**

THE SECOND PARAGRAPH IS CHANGED TO:

Submit a certification of compliance as specified in 106.07.

### **913.01.05 Miscellaneous Hardware**

SUBPART 3 OF THE FIRST PARAGRAPH IS CHANGED TO:

3. Use plates for guide rail on bridges and buried guide rail terminals conforming to ASTM A 36 and galvanized according to ASTM A 123.

THE SECOND PARAGRAPH IS CHANGED TO:

Submit a certification of compliance as specified in 106.07. The ME may randomly inspect hardware for quality assurance.

### **913.03.01 Steel Railing**

THE ENTIRE SUBPART IS CHANGED TO:

Fabricate steel bar bridge railing and steel railing components of combination railing system from structural steel as specified in 906.01 and 906.04. For non-traffic steel railing, construct welds according to the requirements of AWS D1.1 Structural Welding Code. Use bolts and bolting materials as specified in 908.01. When specified, paint as specified in 906.06 or galvanize as specified in 912.02.01. Submit certifications of compliance, as specified in 106.07 and copies of mill certifications.

THE FOLLOWING SUBSECTIONS IS ADDED:

**913.04 BOX BEAM FOR CONSTRUCTION BARRIER CURB.**

Ensure that the box beam is made of cold-formed welded and seamless structural tubing. Ensure that the box beam conforms to ASTM A500, Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes, Grade B.

Ensure that the box beam is tested in accordance with ASTM E436 on a 2 x 9 inch galvanized specimen at -0.4°F and provide certified test result to the ME.

The Department will reject the material if the average percent shear area falls below 50.

Ensure that the identification number/information is placed on the material at an interval of 4 feet or less.

Ensure that the box beam is galvanized in accordance with ASTM A123. Fasteners are galvanized and conform to the following unless specified otherwise in the contract documents: Bolts ASTM A307 Grade A, nuts ASTM A563 Grade A or better, and washers ASTM F844.

## SECTION 1001 – TRAFFIC CONTROL EQUIPMENT

THE FOLLOWING SUBSECTION IS ADDED:

### **1001.04 PORTABLE VARIABLE MESSAGE SIGN WITH REMOTE COMMUNICATION**

THE ENTIRE SUBSECTION IS CHANGED TO:

Provide a NTCIP compliant portable variable message sign as described under 1001.02 with the exceptions noted below and each equipped with broadband cellular modem.

Ensure that the sign panel is color full matrix model that displays a combination of letters and graphic images.

Ensure that the sign panel is capable of displaying three lines of text with variable size characters.

Ensure nine characters are displayed per line for posting travel times. For this nine character requirement, smaller size characters may be allowed that meets MUTCD guidelines.

Ensure that the panel is also capable of displaying eight (8) characters per line with a minimum character height of eighteen (18) inches.

Ensure that the PVMSRC can be integrated with the Department's central DMS control software for remote operation.

### **1001.05 PORTABLE TRAILER MOUNTED CCTV CAMERA ASSEMBLY**

Provide a Portable Trailer Mounted CCTV Camera Assembly (PTMCCA) with the following:

#### **A. Trailer Platform**

1. Maximum size, including tongue, 14 feet long by 7 feet wide by 8 feet high.
2. NJDOT approved lighting package to include electrical brake and marker lights with wire connections.
3. Primed and painted with powder coated orange color.
4. Fitted with manual telescoping outriggers with adjustable jacks sized to counter full mast extension.
5. Four 3500 pounds, drop leg, top wind screw jacks.
6. All equipment secured to prevent theft or separation from platform.
7. 24/7 operation in all weather conditions.
8. One locking NEMA-4 equipment box for operational controls.
9. Removable wheels (with wheel locks) when trailer is in deployed position.
10. Operation manual with a copy placed in the storage bin.

#### **B. Mast**

1. 150 pounds payload capacity.
2. 29 feet to 32 feet of extension with capability to mount antenna at 20 feet, 25 feet or at the top, 10 feet maximum nested length of mast - 3 to 9 sections.
3. Un-guyed.



4. Driven by galvanized steel cable.
5. Spiral conduit for cables.
6. Compactly retractable when nested into storage container at the bottom & foldable for easy transport.
7. Operated by a power winch with a safety brake.
8. Capable of being raised or lowered during sustained wind speeds of 30 miles per hour.

### **C. Power Source**

Equip the PTMCCA with either a diesel charged or a solar charged battery system. Ensure that the PTMCCA is also capable of operating on 120-volt AC electrical service. The Department may require a solar charged battery system in noise sensitive areas. Provide the power with a battery backup system capable of providing continuous operation when the primary power source fails. Ensure that the power source meets the following requirements:

1. Diesel. Ensure that the fuel tank is capable of operating the sign for a period of 72 hours without refueling. Equip with an exhaust muffler and a United States Department of Forestry approved spark arrester. Ensure that the engine is shock mounted to reduce vibration and locked in a ventilated enclosure.
2. Solar. Provide solar panels capable of recharging the batteries at a rate of 4 hours of sun for 24 hours of camera usage. Ensure that the battery capacity is capable of operating the sign for a period of 18 days without sunlight.

### **D. Electronics**

1. Cellular (CDMA), microwave, or 802.11 bandwidth option.
2. Work lights in all cabinets.
3. Remote trailer diagnostics (battery level, charging output, etc.).

### **E. Camera and Software**

Ensure that the camera has the following characteristics:

1. Dome Camera in a heavy duty plastic dome or with a weather resistant case.
2. Impact resistant viewing window.
3. Minimum resolution of NTSC 704 (H) x 480 (V).
4. Backlight compensation.
5. Image stabilization.
6. Light Sensitivity 0.02 lux NIR Mode.
7. Auto Focus with Manual Focus capability.
8. Auto White Balance with Manual White Balance capability.
9. Motorized Zoom up to 16x optical, 10x digital.
10. Motorized Pan-Tilt, pan 360°, tilt 180°.
11. Thermostatically controlled heater and defroster -50° to 140°F operating range.
12. Windshield wiper.

13. 24/7 operation in all weather conditions.
14. Time and date stamp.

Ensure the software provides the following functionality:

1. Remote control of pan, tilt and zoom.
2. Display of streaming video in MPEG format, motion-JPEG, and single snapshot JPEG images, remotely interchangeable by using central software.
3. Preset controls of pan/tilt/zoom combinations. Ensure all presets are accessible from a drop-down menu with descriptive name of preset. Set first 8 presets with quick-launch icons with graphical representation of the preset views.
4. Display of all the project's web cams in a single view screen.
5. Display of local time and weather conditions including temperature and humidity.
6. Saving images and sending e-mail images.
7. Viewing archived images via a graphical calendar control and storing archived images at least every five minutes.
8. Three levels of password protection: administrator, user, and guest, individual user accounts.
9. Monitoring and controlling the cameras using web access.

## **SECTION 1009 - HMA PLANT EQUIPMENT**

### **1009.01 HMA PLANT**

#### **A. Requirements for HMA Mixing Plants.**

THE FOLLOWING IS ADDED AFTER THE SECOND PARAGRAPH:

The HMA producer is required to have a quality control (QC) program plan approved annually by the ME as per Materials Approval Procedure MAP-102. The HMA producer is required to ensure that the QC plan conforms to the requirements outlined in the report entitled "Hot Mix Asphalt Quality Control Program Plan" prepared by the Department of Transportation and New Jersey Asphalt Paving Association. Failure to follow these requirements will result in rejection of HMA materials supplied by the HMA producer and removal of the HMA supplier from the QPL.

END TECHNICAL SPECIFICATIONS

# **APPENDIX I**

**U.S. ARMY CORPS OF ENGINEERS - PERMIT**



DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS, NEW YORK DISTRICT  
JACOB K. JAVITS FEDERAL BUILDING  
26 FEDERAL PLAZA  
NEW YORK NY 10278-0090

MAY 09 2016

REGULATORY BRANCH

SUBJECT: Permit Application File Number NAN-2015-01725-ESW by Union County for Maintenance of Bridge Footings in An Unnamed Stream, tributary to the Rahway River in the City of Rahway, Union County, New Jersey

1. PERMITTEE:

Union County  
Attn: Thomas Mineo  
2325 South Avenue  
Scotch Plains, New Jersey 07076  
(908) 789-3690

2. On December 21, 2015, the New York District of the U.S. Army Corps of Engineers received a request for Department of the Army authorization to repair bridge-footing structures of the East Hazelwood Avenue Bridge RA-69 in-kind. Bridge repair activities will consist of 0.03 acres of temporary dewatering, bypass, and sediment excavation with replacement. Regulated work also consists of permanent impacts from the replacement of bridge footings through discharge of 109 cubic yards of concrete over an area of 0.03 acres in an unnamed stream, tributary to the Rahway River in the City of Rahway, Union County, New Jersey.

3. The specific applicant-provided details are as shown on the attached dated permit drawings.

4. This determination covers only the work described in the submitted material. Any major changes in the project may require additional authorizations from the New York District of the U.S. Army Corps of Engineers.

5. Based on the information submitted to this office and accomplishment of any required notification in accordance with the applicable federal requirements, our review of the subject work indicates that an individual Department of the Army permit is not required. It appears that the activities within the jurisdiction of this office could be accomplished under Department of the Army Nationwide General Permit Number 3, MAINTENANCE, in accordance with Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403). The nationwide permits are prescribed at Reissuance of Nationwide Permits in the Federal Register dated February 21, 2012 (77 FR 10184). The subject work may be performed without further authorization from this office provided it complies with Sections A through D, Number 3 MAINTENANCE; New York District regional conditions; with the following work-specific Special Conditions listed below; and any applicable regional conditions added by the State of New Jersey.

6. Other than the work-specific Special Conditions listed below, the 2012 nationwide general permits in the State of New Jersey, including their final regional conditions, water quality certifications, and coastal zone concurrence statements are available at:  
[http://www.nan.usace.army.mil/Portals/37/docs/regulatory/geninfo/natp/PN\\_NWPRRegCon](http://www.nan.usace.army.mil/Portals/37/docs/regulatory/geninfo/natp/PN_NWPRRegCon)

SUBJECT: Permit Application File Number NAN-2015-01725-ESW by Union County for Maintenance of Bridge Footings in An Unnamed Stream, tributary to the Rahway River in the City of Rahway, Union County, New Jersey

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dNJDE 16mar12.pdf

If you require a specific paper copy, please contact our Regulator-of-the-Day at 917-790-8511 to request one be mailed to you. Please be sure to have the above eighteen-character file number readily available when you call.

7. Work-specific Special Conditions:

(A) The permittee, and their agents, shall take actions to prevent construction materials, including debris, from entering any waterway to become drift or pollution hazards.

(B) The permittee shall contact the appropriate state and local government officials to ensure that the subject work is performed in compliance with their requirements.

(C) The permittee shall sign and submit the attached compliance certification form to this office within 30 days of the completion of the regulated activity authorized by this permit and any mitigation work required by Special Condition.

(D) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

8. Please note that this nationwide general permit (NWGP) verification is based on a preliminary jurisdictional determination (JD). A preliminary jurisdictional determination (JD) is not appealable. If you wish, prior to commencement of the authorized work you may request an approved jurisdictional determination (JD), which may be appealed, by contacting the New York District, US Army Corps of Engineers for further instructions. To assist you in this decision and address any questions you may have on the differences between preliminary and approved jurisdictional determinations, please review US Army Corps of Engineers Regulatory Guidance Letter Number 08-02, which can be found at:

<http://www.usace.army.mil/Portals/2/docs/civilworks/RGLS/rgl08-02.pdf>

9. This verification is valid until March 17, 2017, unless the nationwide general permits are modified, reissued, or revoked before then. This verification will remain valid until March 17, 2017, if the subject work activity complies with the terms of any subsequent modifications of the nationwide general permits. If the nationwide general permits are suspended, revoked, or modified in such a way that the subject activity would no longer comply with the terms and conditions of a nationwide general permit, and the proposed

MAY 09 2016

SUBJECT: Permit Application File Number NAN-2015-01725-ESW by Union County for Maintenance of Bridge Footings in An Unnamed Stream, tributary to the Rahway River in the City of Rahway, Union County, New Jersey

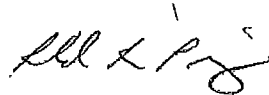
- 3 -

work activity has commenced, or is under contract to commence, the permittee will have twelve (12) months from the date of such permit action to complete the regulated work.

10. In order for us to better serve you and others, please complete our Customer Service Survey located at:

<http://www.nan.usace.army.mil/Missions/Regulatory/CustomerSurvey.aspx>

11. Any inquires should be directed to our Regulator-of-the-Day at 917-790-8511. Please be sure to have the above eighteen-character file number readily available when you call.



Ronald R. Pinzon  
Chief, Eastern Section

Enclosures (2)

1. Dated Permit Drawings
2. Completion Form

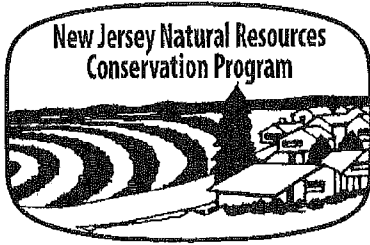
Copies furnished:

Remington & Vernick Engineers  
Attn: Stephen Beaver  
232 Kings Highway East  
Haddonfield, New Jersey 08033

# **APPENDIX II**

## **SOMERSET-UNION COUNTY SOIL CONSERVATION DISTRICT PERMIT**





**SOMERSET - UNION SOIL CONSERVATION DISTRICT**

Somerset County 4-H Center  
308 Milltown Road • Bridgewater, NJ 08807  
(908) 526-2701 Fax (908) 575-3977

January 11, 2016

County of Union  
Thomas Mineo, PE  
2325 South Avenue  
Scotch Plains, NJ 07076

**RE: Hazelwood Ave. Minor Bridge Ra-69 Repl.  
(plan 12/14/2015)  
Block Hazelwood Ave.ROW, Lot Hazelwood**

**Ave.ROW**

**City of Rahway  
Application #2015-1996**

Dear Sir or Madam:

The Somerset-Union Soil Conservation District has reviewed the above erosion control plan and certifies that the plan is in accordance with the N.J. Erosion and Sediment Control Act, Chapter 251, P.L. 1975.

This approval is limited to the soil erosion and sedimentation controls specified in this plan. It is not authorization to engage in the proposed land use unless such use has been previously approved by the municipality or other controlling agency.

All revisions and municipal renewals of this project will require resubmission and approval by the District. Any conveyance of the project (or portion thereof) will transfer full responsibility for compliance to subsequent owner(s). The District must be notified in writing of any change of ownership.

The District requires written notification prior to the start of land disturbance. Please be advised that failure to do so is considered a violation of State Law and a fine will be imposed.

If there are any questions, please feel free to call our office.

Very truly yours,

**SOMERSET-UNION S.C.D.**

Mark Kirby  
District Supervisor

*File Scan  
2013-009*

*Mark W Kirby  
→ PAUL*

RECEIVED  
UNION COUNTY

JAN 15 2016

Department of Engineering,  
Public Works & Facilities

MK/FC/JK J:\Access\MASTERS\CertLet-JS-SU.doc

Enclosure

- cc: City of Rahway Const. Off.
- Mun. Planning Board
- Mun. Engineer
- Remington, Vernick & Arango Engineers

# **APPENDIX III**

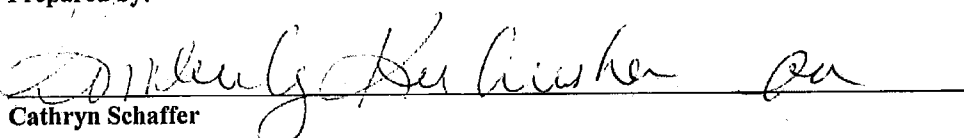
## **NJDEP PERMIT**



**STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DIVISION OF LAND USE REGULATION**  
Mail Code 501-02A, P.O. Box 420, Trenton, New Jersey 08625-0420  
Telephone: (609) 777-0454 or Fax: (609) 777-3656  
[www.nj.gov/dep/landuse](http://www.nj.gov/dep/landuse)



## PERMIT

<p>In accordance with the laws and regulations of the State of New Jersey, the Department of Environmental Protection hereby grants this permit to perform the activities described below. This permit is revocable with due cause and is subject to the limitations, terms and conditions listed below and on the attached pages. For the purpose of this document, "permit" means "approval, certification, registration, authorization, waiver, etc." Violation of any term, condition or limitation of this permit is a violation of the implementing rules and may subject the permittee to enforcement action.</p>		Approval Date <b>FEB 12 2016</b>
		Expiration Date <b>FEB 11 2021</b>
<b>Permit Number(s):</b> 2013-15-0003.1 WFD 150001	<b>Type of Approval(s):</b> Waterfront Development Individual Permit In-Water and Water Quality Certificate	<b>Enabling Statute(s):</b> N.J.S.A. 12:5-3 N.J.S.A. 58:10A N.J.S.A. 58:16A
<b>Permittee:</b> Thomas Mineo Union County, Division of Engineering 2325 South Avenue Scotch Plains, New Jersey 07076	<b>Site Location:</b> Hazelwood Avenue (CR 621) -- Bridge Ra-69 Block: N/A Lot: N/A Municipality: Rahway City County: Union	
<b>Description of Authorized Activities:</b> Union County, Division of Engineering will replace an existing bridge structure on Hazelwood Avenue (CR 621) over stream 10-5 which drains directly into the Rahway River. The project will install a 3-sided bridge structure in the location of the existing structure. In addition, portions of the existing sidewalks on both sides of the structure will be replaced. The subject site is located within the City of Rahway, Union County, and consisting of the replacement of Bridge Ra-69, Hazelwood Avenue (CR 621), over a stream 10-5 perpendicular with the Rahway River.		
<p>This permit is authorized under, and in compliance with the Freshwater Wetlands Protection Act Rules and following Rules on Coastal Zone Management, N.J.A.C. 7:7-1.1 et seq., specifically: <i>Navigation Channels 7:7-9.7, Flood Hazard Areas 7:7-9.25, Riparian Zones 7:7-9.26, Historic and Archaeological Resources 7:7-9.34, Endangered or Threatened Wildlife or Vegetation Species Habitats 7:7-9.36, Public Open Space 7:7-9.38, Special Urban Areas 7:7-9.41, Lands and Waters Subject to Public Trust Rights 7:7-9.48 and Public Access 7:7-16.9.</i></p> <p>By issuance of this permit, the State of New Jersey does not relinquish tidelands ownership or claim to any portion of the subject property or adjacent properties. The permittee shall allow an authorized Division representative the right to inspect the construction pursuant to N.J.A.C. 7:7-27.2(c)13. This letter of authorization to conduct a regulated activity in a wetland or open water includes a Water Quality Certificate for these activities.</p>		
<b>Prepared by:</b>  Cathryn Schaffer	<b>Received and/or Recorded by County Clerk:</b>	
<p>THIS PERMIT IS NOT EFFECTIVE AND NO CONSTRUCTION APPROVED BY THIS PERMIT, OR OTHER REGULATED ACTIVITY, MAY BE UNDERTAKEN UNTIL THE APPLICANT HAS SATISFIED ALL PRE-CONSTRUCTION CONDITIONS AS SET FORTH HEREIN.</p>		
<p align="center"><b>This permit is not valid unless authorizing signature appears on the last page.</b></p>		

**STANDARD CONDITIONS:**

1. **Recording of Permit:** This permit shall be recorded in its entirety in the office of the County Clerk or the Registrar of Deeds and Mortgages for each county where this project is located. Verified notice of this action shall be forwarded to the Division immediately thereafter.
2. **Responsibilities:**
  - a. The permittee, its contractors and subcontractors shall comply with all conditions of this permit, authorizing and/or supporting documents and approved plans and drawings.
  - b. A copy of this permit, other authorizing documents, records and information including all approved plans and drawings shall be maintained at the authorized site at all times and made available to Department representatives or their designated agents upon request.
3. **Permit modification:** Plans and specifications in the application and conditions imposed by this permit shall remain in full force and effect so long as the proposed development or any portion thereof is in existence, unless modified by the Department. No change in plans or specifications upon which this permit is issued shall be made except with the prior written permission of the Department. The filing of a request to modify an issued permit by the permittee, or a notification of planned changes or anticipated noncompliance does not stay any condition of this permit.
4. **Duty to minimize environmental impacts:** The permittee shall take all reasonable steps to prevent, minimize or correct any adverse impact on the environment resulting from activities conducted pursuant to the permit, or from noncompliance with the permit. The permittee shall immediately inform the Department of any unanticipated adverse effects on the environment not described in the application or in the conditions of this permit. The Department may, upon discovery of such unanticipated adverse effects, and upon the failure of the permittee to submit a report thereon, notify the permittee of its intent to suspend the permit.
5. **Proper site maintenance:** While the regulated activities are being undertaken, neither the permittee, its contractors nor subcontractors shall cause or permit any unreasonable interference with the free flow of a regulated feature by placing or dumping any materials, equipment, debris or structures within or adjacent to the regulated area. Upon completion or abandonment of the work, the permittee, its contractors or subcontractors shall remove and dispose of in a lawful manner all excess materials, debris, equipment, silt fences and other temporary soil erosion and sediment control devices from all regulated areas. Only clean non-toxic fill shall be used where necessary.
6. **Sediment control:** Development which requires soil disturbance, creation of drainage structures, or changes in natural contours shall conduct operations in accordance with the latest revised version of "Standards for Soil Erosion Sediment Control in New Jersey," promulgated by the New Jersey State Soil Conservation Committee, pursuant to the Soil Erosion and Sediment Control Act of 1975, N.J.S.A. 4:24-42 et seq. and N.J.A.C. 2:90-1.3-1.14.
7. **Rights of the State:**
  - a. This permit does not convey any property rights of any sort, or any exclusive privilege.
  - b. Upon notification and presentation of credentials, the permittee shall allow Department representatives or their designated agents, to enter upon the project site and/or where records must be kept under the conditions of this permit, inspect at reasonable times any facilities, equipment, practices or operations regulated or required under the permit, and sample or monitor for the purposes of determining compliance. Failure to allow

reasonable access shall be considered a violation of this permit and subject the permittee to enforcement action.

- c. The issuance of this permit shall in no way expose the State of New Jersey or the Department to liability for the sufficiency or correctness of the design of any construction, structure or structures. Neither the State nor the Department shall, in any way, be liable for the loss of life or property which may occur by virtue of the activity of development resulting from any permit.
8. **Duty to Reapply:** If the permittee wishes to continue an activity covered by the permit after the expiration date of the permit authorization, the permittee must apply for and obtain a new permit authorization.
  9. **Transfer of Permit:** This permit may not be transferable to any person unless the transfer is approved by the Department. Please refer to the applicable rules for more information.
  10. **Other Approvals:** The permittee must obtain any and all other Federal, State and/or Local approvals. Authorization to undertake a regulated activity under this permit does not indicate that the activity also meets the requirements of any other rule, plan or ordinance.
  11. **Noncompliance:**
    - a. Any noncompliance with this permit constitutes a violation, and is grounds for enforcement action, as well as modification, suspension and/or termination of the permit.
    - b. The permittee shall immediately report to the Department by telephone at (877) 927-6337 any noncompliance that may endanger health or the environment. In addition, the permittee shall report all noncompliance to Bureau of Coastal and Land Use Compliance and Enforcement, 401 E. State Street, 4th Floor, P.O. Box 420, Mail Code: 401-04C, Trenton, NJ 08625, in writing within five business days of the time the permittee becomes aware of the noncompliance. The written notice shall include: a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and, if the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter.
  12. **Appeal of Permit:** In accordance with the applicable regulations, any person who is aggrieved by this decision or any of the conditions of this permit may request a hearing within 30 days after notice of the decision is published in the DEP Bulletin. This request must include a completed copy of the Administrative Hearing Request Checklist. The DEP Bulletin is available through the Department's website at <http://www.nj.gov/dep/bulletin> and the Checklist is available through the Division's website at [http://www.nj.gov/dep/landuse/download/lur\\_024.pdf](http://www.nj.gov/dep/landuse/download/lur_024.pdf). In addition to your hearing request, you may file a request with the Office of Dispute Resolution to engage in alternative dispute resolution. Please see the website [www.nj.gov/dep/odr](http://www.nj.gov/dep/odr) for more information about this process.

**PROJECT SPECIFIC CONDITIONS:**

13. Limit of Authorized Riparian Zone Vegetation Disturbance – This permit authorizes the disturbance of 832 square feet of riparian zone vegetation.

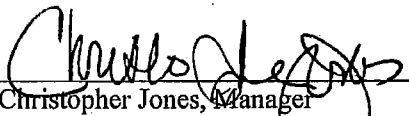
14. The permittee is responsible for obtaining all necessary approvals from any applicable agencies, including but not necessarily limited to Soil Conservation District Office.
15. All sediment barriers and other soil erosion control measures shall be installed prior to commencing any clearing, grading or construction onsite, and shall be maintained in proper working condition throughout the entire duration of the project.
16. Vegetation within 50 feet of the top of the bank shall only be disturbed in the areas specifically shown on the approved drawing/s. No other vegetation within 50 feet of the top of any stream bank onsite shall be disturbed for any reason. This condition applies to all channels onsite regardless of the contributory drainage area.
17. Upon completion of the project, all temporarily disturbed areas within freshwater wetlands, wetland transition area, State open waters and within 50 feet of the top of any stream bank onsite shall be restored to original topography and replanted with indigenous, non-invasive vegetation in accordance with N.J.A.C. 10.2(u).
18. All excavated material shall be disposed of in a lawful manner outside of any flood hazard area riparian zone, open water, freshwater wetland and adjacent transition area, and in such a way as to not interfere with the positive drainage of the receiving area.
19. For the purposes of this permit, the Department has determined that this project is not a Major Development as defined in the Stormwater Management rules at N.J.A.C. 7:8-1.2. Therefore, the Department did not review the project for compliance with these rules.

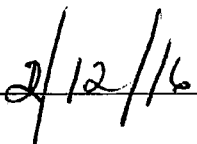
**APPROVED PLANS:**

**The drawings hereby approved** are six (6) sheets, prepared by Remington, Vernick & Arango, Engineers, dated October 2015, unrevised, entitled: "REPLACEMENT OF EAST HAZELWOOD AVE., MINOR BRIDGE Ra-69, CITY OF RAHWAY, UNION COUNTY, NEW JERSEY

"CONSTRUCTON PLAN," sheet 4;  
"ROADWAY PROFILE," sheet 5;  
"CROSS SECTIONS - 8+00 TO 10+00," sheet 6;  
"CROSS SECTIONS - 10+50 TO 12+00," sheet 7;  
"SOIL EROSION & SEDIMENT CONTROL ENVIRONMENTAL PLAN," Sheet 8; and  
"GENERAL PLAN, ELEVATION, & SECTION," sheet 11.

If you need clarification on any section of this permit or conditions, please contact our Technical Support Call Center at (609) 777-0454.

  
\_\_\_\_\_  
Christopher Jones, Manager  
Bureau of Urban Growth and Redevelopment  
Division of Land Use Regulation

  
\_\_\_\_\_  
Date

Original sent to Agent to record

C: Rahway City Construction Official  
Remington & Vernick Engineers, Attn: Frank J. Seney, Jr.

# **APPENDIX IV**

## **U. S. COAST GUARD PERMIT EXEMPTION**

U.S. Department of  
Homeland Security

United States  
Coast Guard



Commander  
First Coast Guard District

One South Street  
Battery Park Building  
New York, NY 10004-1466  
Staff Symbol: D1 (dpg)  
Phone: (212) 514-4331  
Fax: (212) 514-4337

16591/NV-938  
Stream 10-5//NJ

January 21, 2016

Mr. Frank J. Seney, P.E.  
Remington & Vernick Engineers  
232 Kings Highway East  
Haddonfield, NJ 08033

**RE: East Hazelwood Avenue Minor Bridge – Steam 10-5 (Rahway River)**

Dear Mr. Seney:

This responds to your correspondence of November 23, 2015 regarding the referenced project. The project as noted falls within the area of responsibility for the First Coast Guard District Bridge Branch (your correspondence had originally been transmitted to the Fifth Coast Guard District, located in Portsmouth, Virginia). Based on the documentation provided it is determined that no formal Coast Guard bridge permit will be required.

The project is placed in the Advance Approval category in accordance with 33 CFR 115.70. Future bridge projects along the same waterway will have to be independently evaluated before they may be considered for Advance Approval. This Advance Approval determination is valid for three years from the date of this letter. If construction does not commence within this time period, you must contact this office for reaffirmation of this authorization. Our approval also does not relieve the applicant, Union County, New Jersey, of the responsibility to ensure compliance with any applicable federal, state or local requirements for the proposed action.

Although this project will not require a bridge permit, other areas of Coast Guard jurisdiction apply and the following stipulations must be met:

- a) The lowest portion of the superstructure of the bridge across the waterway should clear the 100-year flood height elevation if feasible.
- b) The requirement to display permanent navigation lights at this bridge is waived. This waiver may be rescinded at any time in the future should nighttime navigation through the bridge be increased to a level determined by the District Commander to warrant lighting (generally four or more passages per week between the hours of sunset and sunrise).
- c) At no time during the bridge work will the waterway be closed to navigation without prior notification and approval of the Coast Guard.
- d) This office shall be notified as soon as possible referencing commencement and completion of bridge work so appropriate announcements may be prepared for our Local Notice to Mariners publication.
- e) Upon completion of construction, the bridge owner shall submit "as built" drawings showing navigational clearances through the bridge and sufficient data to allow this



office to prepare a completion report. This report is used for Coast Guard and other mariner publications.

- f) Any spillage of oil or oil-based products during construction must be reported promptly to the Coast Guard by calling 1-800-424-8802.

If you have any questions please call this office at the telephone number noted above.

Sincerely,



C. J. BISIGNANO  
Supervisory Bridge Management Specialist  
By direction

E-copy: U.S. Army Corps of Engineers – New York District  
Mr. Thomas Mineo, Union County Engineer – [tmineo@ucnj.org](mailto:tmineo@ucnj.org)  
U.S. Coast Guard Sector New York – Waterways Management

# **APPENDIX V**

## **SOIL BORING LOG**



## **NEW JERSEY PREVAILING WAGE RATES**

It is recommended the bidder download the wage rates immediately prior to the scheduled bid due date to insure the latest rates are included in their bid.

**[http://lwd.dol.state.nj.us/labor/wagehour/wagerate/prevailing\\_wage\\_determinations.html](http://lwd.dol.state.nj.us/labor/wagehour/wagerate/prevailing_wage_determinations.html)**



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](http://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 - UNION

Craft: Air Conditioning & Refrigeration - Service and Repair

PREVAILING WAGE RATE

	03/01/17
Journeyman (Mechanic)	W37.48 B22.91 T60.39

Craft: Air Conditioning & Refrigeration - Service and Repair

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	Mo. 1-3	Mo. 4-12	2nd Year	3rd Year	4th Year	5th Year		Wage = %	of Jnymn	Wage
As Shown										
Wage and Bene	50%	55%	60%	65%	75%	85%		Bene = %	of Jnymn	Bene

Ratio of Apprentices to Journeymen - 1:4

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM AFTER 3-1-13:

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

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 - UNION

**Craft: Boilermaker**

**PREVAILING WAGE RATE**

	01/01/17
Foreman	W48.70 B41.32 T90.02
General Foreman	W50.70 B42.30 T93.00
Journeyman	W43.70 B39.72 T83.42

**Craft: Boilermaker**

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
1000 Hours	65%	70%	75%	80%	85%	90%	95%			
Benefit =	33.58	34.50	35.38	36.24	37.12	37.49	38.85			

**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 - UNION**

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 - UNION

Craft: Boilermaker - Minor Repairs

PREVAILING WAGE RATE

	01/01/17
Foreman	W32.54 B16.17 T48.71
General Foreman	W33.04 B16.17 T49.21
Mechanic	W31.04 B16.17 T47.21

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).

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 - UNION

Craft: Bricklayer, Stone Mason

**PREVAILING WAGE RATE**

	05/01/17	05/01/18
Deputy Foreman	W44.10 B31.94 T76.04	W0.00 B0.00 T78.23
Foreman	W47.10 B31.94 T79.04	W0.00 B0.00 T81.23
Journeyman	W41.10 B31.94 T73.04	W0.00 B0.00 T75.23

Craft: Bricklayer, Stone Mason

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	40%	50%	55%	60%	65%	70%	75%	80%		
6 Months										
Benefits	3.72	4.65	5.12	5.58	20.48	21.83	23.18	24.52		

Ratio of Apprentices to Journeymen - 1:5

Craft: Bricklayer, Stone Mason

**COMMENTS/NOTES**

APPRENTICE RATE SCHEDULE AS OF 5-1-17:

INTERVAL	PERIOD AND RATES									
6 Months	40%	50%	55%	60%	65%	70%	75%	80%		
Benefits	3.80	4.75	5.23	5.70	21.16	22.55	23.95	25.33		

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

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

**County - UNION**

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.

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.

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

County - UNION

**Craft: Carpenter**

**PREVAILING WAGE RATE**

	05/01/17	11/01/17	05/01/18	11/01/18
Foreman	W54.37	W0.00	W0.00	W0.00
	B31.00	B0.00	B0.00	B0.00
	T85.37	T86.04	T87.29	T88.54
Journeyman	W47.28	W0.00	W0.00	W0.00
	B26.95	B0.00	B0.00	B0.00
	T74.23	T75.23	T76.48	T77.73

**Craft: Carpenter**

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	40%	55%	65%	80%	90%					
Benefit	57% of	Appren	tice	Wage	for all	intervals				
				Rate						

**Ratio of Apprentices to Journeymen - 1:3**

**Craft: Carpenter**

**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 7:00 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 15%, 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 15% and the third shift shall receive the regular rate plus 20%, 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 15% and the third shift shall receive the regular rate plus 20%, 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 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, 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 - UNION

**Craft: Carpenter - Resilient Flooring**

**PREVAILING WAGE RATE**

	05/01/17	11/01/17	05/01/18	11/01/18
Foreman	W54.37	W0.00	W0.00	W0.00
	B31.00	B0.00	B0.00	B0.00
	T85.37	T86.04	T87.29	T88.54
Journeyman	W47.28	W0.00	W0.00	W0.00
	B26.95	B0.00	B0.00	B0.00
	T74.23	T75.23	T76.48	T77.73

**Craft: Carpenter - Resilient Flooring**

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	40%	55%	65%	80%	90%					
Benefit	57%	of	Appren	tice	Wage	for all	intervals			
					Rate					

**Ratio of Apprentices to Journeymen - \***

\* 1 apprentice shall be allowed to every 2 journeymen or major fraction thereof. No more than 3 apprentices on any one job or project.

**Craft: Carpenter - Resilient Flooring**

**COMMENTS/NOTES**

**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 15%.
- 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 15% and the third shift shall receive the regular wage rate plus 20%.
- 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 15% and the third shift shall receive the regular wage rate plus 20%.

**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 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.

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

**County - UNION**

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.

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

County - UNION

Craft: Cement Mason

PREVAILING WAGE RATE

See "Bricklayer, Stone Mason" Rates

Craft: Cement Mason

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									

Ratio of Apprentices to Journeymen - 1:4

Craft: Cement Mason

COMMENTS/NOTES

\*\*\*See "Bricklayer, Stone Mason" Rates\*\*\*



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

County - UNION

Craft: Diver

**PREVAILING WAGE RATE**

	05/12/17	11/01/17	05/01/18	11/01/18
Diver	W56.84	W0.00	W0.00	W0.00
	B45.07	B0.00	B0.00	B0.00
	T101.91	T103.11	T104.36	T105.61
Tender	W45.10	W0.00	W0.00	W0.00
	B45.07	B0.00	B0.00	B0.00
	T90.17	T91.37	T92.62	T93.87

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).

DEPTH & PENETRATION RATES: Divers shall be paid the following depth and penetration rates, in addition to the regular hourly rate, when applicable:

**AIR DIVES:**

0-59 feet: No additional wage  
60-74 feet: + \$0.25 per foot  
75-125 feet: + \$0.78 per foot

**MIXED GAS DIVES:**

0-74 feet: No additional wage  
75-125 feet: + \$1.00 per foot  
126-200 feet: + \$2.00 per foot

**PENETRATION DIVES:**

126-200 feet: + \$1.50 per foot  
201-275 feet: + \$1.75 per foot  
276-350 feet: + \$2.00 per foot  
351-425 feet: + \$2.50 per foot

**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.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Presidential Election Day, Thanksgiving Day, Christmas Day. Veterans' Day may be switched with the day after Thanksgiving.

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

County - UNION

**Craft: Dockbuilder                      PREVAILING WAGE RATE**

	05/12/17	11/01/17	05/01/18	11/01/18
Foreman	W51.87 B45.07 T96.94	W0.00 B0.00 T97.99	W0.00 B0.00 T99.24	W0.00 B0.00 T100.49
Foreman (Concrete Form Work)	W51.29 B31.76 T83.05	W0.00 B0.00 T84.10	W0.00 B0.00 T85.35	W0.00 B0.00 T86.60
Journeyman	W45.10 B45.07 T90.17	W0.00 B0.00 T91.37	W0.00 B0.00 T92.62	W0.00 B0.00 T93.87
Journeyman (Concrete Form Work)	W44.60 B31.76 T76.36	W0.00 B0.00 T77.56	W0.00 B0.00 T78.81	W0.00 B0.00 T80.06

**Craft: Dockbuilder                      APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	Yearly	18.04	22.55	29.32	36.08					
Benefit	30.31	for all	intervals		Concrete	Form Work	Only Ben.	= 21.91	for all	intervals

**Ratio of Apprentices to Journeymen - \***

\* When there are 4 or fewer Dockbuilders on a job, no more than 1 may be an apprentice. When there are 5 or more Dockbuilders, there may be 1 apprentice for every 5 Dockbuilders.

**Craft: Dockbuilder                      COMMENTS/NOTES**

**CREOSOTE HANDLING:**

When handling creosote products on land piledriving, floating marine construction, and construction of wharves, the worker shall receive an additional \$0.25 per hour.

**HAZARDOUS WASTE WORK:**

- Hazardous waste removal work on a state or federally designated hazardous waste site where Level A, B, or C personal protection is required: an additional 20% of the hourly rate, per hour.
- Hazardous waste removal work in Level D, or where personal protection is not required: an additional \$1.00 per hour.

**CERTIFIED WELDER:** When required on the job by the project owner, a Certified Welder shall receive an additional \$1.00 per hour.

**FOREMAN REQUIREMENTS:**

The first Dockbuilder on the job shall be designated a Foreman.

**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.

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

**County - UNION**

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Presidential Election Day, Thanksgiving Day, Christmas Day. Veterans' Day may be switched with the day after Thanksgiving.

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

County - UNION

**Craft: Drywall Finisher**

**PREVAILING WAGE RATE**

	05/01/17
Foreman	W43.45 B23.60 T67.05
General Foreman	W45.43 B23.60 T69.03
Journeyman	W39.50 B23.60 T63.10

**Craft: Drywall Finisher**

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
4 Months	30%	40%	50%	60%	70%	75%	80%	85%	90%	
Benefits	Intervals	1 to 3 =	9.85	Intervals	4 to 6 =	12.28	Intervals	7 to 9 =	14.95	

**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 - UNION

**Craft: Electrician**

**PREVAILING WAGE RATE**

	05/29/17	05/28/18
Cable Splicer	W60.08 B34.53 T94.61	W61.52 B35.35 T96.87
Foreman	W61.17 B35.15 T96.32	W62.64 B35.98 T98.62
Journeyman	W54.62 B31.39 T86.01	W55.93 B32.13 T88.06

**Craft: Electrician**

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	Yearly	40%	49%	58%	68%	80%		of Jour	neyman	Wage
Benefit	40%	49%	58%	68%	80%		of Jour	neyman	Benefit	Rate

**Ratio of Apprentices to Journeymen - 2:3**

**Craft: Electrician**

**COMMENTS/NOTES**

THESE RATES ALSO APPLY TO THE FOLLOWING:

- All burglar and fire alarm work.
- All fiber optic work.
- Teledata work in new construction.
- Teledata work involving 16 Voice/Data Lines or more.

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

**FOREMAN REQUIREMENTS:**

- On any job where there are 1 to 10 Journeymen electricians, 1 shall be designated a Foreman.

**SHIFT DIFFERENTIALS:**

- Shift work must run for a minimum of 5 consecutive workdays.
- 2nd Shift (4:30 PM to 12:30 AM) shall receive 8 hours pay for 7.5 hours work + an additional 10% of the regular rate, per hour, inclusive of benefits.
- 3rd Shift (12:30 AM to 8:00 AM) shall receive 8 hours pay for 7 hours work + an additional 15% of the regular rate, per hour, inclusive of benefits.

**OVERTIME:**

Hours in excess of 8 per day, or outside of 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.

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

**County - UNION**

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

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

County - UNION

Craft: Electrician - Teledata (15 Voice/Data Lines & Less)

PREVAILING WAGE RATE

	11/01/16
Master Technician/General Foreman	W52.18 B28.69 T80.87
Senior Technician/Lead Foreman (21-30 Workers on Job)	W47.77 B26.26 T74.03
Technician A/Foreman (11-20 Workers on Job)	W45.76 B25.16 T70.92
Technician B/Working Foreman (4-10 Workers on Job)	W43.75 B24.06 T67.81
Technician C/Journeyman (1-3 Workers on Job)	W40.14 B22.07 T62.21

Craft: Electrician - Teledata (15 Voice/Data Lines & Less)

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
6 Months	20.14	21.48	23.72	26.41	29.54	32.23	35.36	38.49		
Benefits	7.85	8.38	9.25	10.29	11.52	12.56	13.79	15.01		

Ratio of Apprentices to Journeymen - 2:3

Craft: Electrician - Teledata (15 Voice/Data Lines & Less)

COMMENTS/NOTES

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM AFTER 10-31-14:

INTERVAL	PERIOD AND RATES									
6 Months	17.90	19.25	21.48	24.17	27.30	29.99	33.12	36.26		
Benefits	6.98	7.51	8.38	9.42	10.65	11.69	12.92	14.13		

NOTES:

- These rates are for service, maintenance, moves, and/or changes affecting 15 Voice/Data (teledata) lines or less. These rates may NOT be used for any teledata work in new construction (including additions) or any fiber optic work.
- The number of Teledata workers on the jobsite is the determining factor for which Foreman category applies.

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

SHIFT DIFFERENTIALS:

- Shift work must run for a minimum of 5 consecutive workdays.

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

**County - UNION**

- 2nd Shift (4:30 PM to 12:30 AM) shall receive 8 hours pay for 7.5 hours work + an additional 10% of the regular rate, per hour, inclusive of benefits.
- 3rd Shift (12:30 AM to 8:00 AM) shall receive 8 hours pay for 7 hours work + an additional 15% of the regular rate, per hour, inclusive of benefits.

**OVERTIME:**

Hours in excess of 8 per day, or outside of 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, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day.



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

County - UNION

Craft: Electrician - Teledata (16 Instruments & More)

PREVAILING WAGE RATE

See "Electrician" Rates

Craft: Electrician - Teledata (16 Instruments & More)

COMMENTS/NOTES

\*\*\*See ELECTRICIAN Rates\*\*\*

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

County - UNION

Craft: Electrician- Outside Commercial

**PREVAILING WAGE RATE**

	05/29/17	05/28/18
Cable Splicer	W60.37 B34.24 T94.61	W61.82 B35.06 T96.88
Certified Welder	W57.62 B32.68 T90.30	W59.01 B33.47 T92.48
Equipment Operator	W54.88 B31.13 T86.01	W56.20 B31.88 T88.08
Foreman (1-10 Journeyman workers on job)	W61.47 B34.86 T96.33	W62.94 B35.70 T98.64
Foreman (11-20 Journeyman workers on job)	W63.11 B35.79 T98.90	W64.63 B36.66 T101.29
General Foreman (21-30 Journeyman workers on job)	W64.76 B36.73 T101.49	W66.32 B37.61 T103.93
General Foreman (31-60 Journeyman workers on job)	W70.25 B39.84 T110.09	W71.94 B40.80 T112.74
General Foreman (61+ Journeyman workers on job)	W71.34 B40.46 T111.80	W73.06 B41.44 T114.50
Groundman	W32.93 B18.68 T51.61	W33.72 B19.13 T52.85
Journeyman Lineman/Technician	W54.88 B31.13 T86.01	W56.20 B31.88 T88.08
Sub-Foreman	W61.47 B34.86 T96.33	W62.94 B35.70 T98.64

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

County - UNION

Craft: Electrician- Outside Commercial

**APPRENTICE RATE SCHEDULE**

<b>INTERVAL</b>	<b>PERIOD AND RATES</b>									
1000 Hours	60%	65%	70%	75%	80%	85%	90%			
Benefits	56.4% of	Journey	man	wage	+.01					

Craft: Electrician- Outside Commercial

**COMMENTS/NOTES**

EFFECTIVE 5-30-16- The apprentice benefit rate shall be 56.7% + \$.01.

EFFECTIVE 5-29-17- The apprentice benefit rate shall be 56.7% + \$.01.

EFFECTIVE 5-28-18- The apprentice benefit rate shall be 56.7% + \$.01.

\* FOR UTILITY WORK PLEASE SEE STATEWIDE RATES

The regular worday shall be 8 hours, between 8:00 AM and 4:30 PM.

**FOREMAN REQUIREMENTS:**

On jobs where there are 2 Journeymen, one shall be a Foreman. The following number of Foreman, General Foreman, Assistant General Foreman and Sub-Foreman shall be required with respect to number of Journeymen on site:

2-10 Journeymen ( 1 Foreman)

11-20 Journeymen (1 Foreman and 1 Sub-Foreman)

21-30 Journeymen (1 Foreman and 2 Sub-Foremen)

**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 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.

**OVERTIME:**

Hours in excess of 8 per day, or outside of 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, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day and Christmas Day.

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

County - UNION

Craft: Electrician-Utility Work (North)

**PREVAILING WAGE RATE**

Rates are located in the "Statewide" rate package

Craft: Electrician-Utility Work (North)

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
6 Months	60%	65%	70%	75%	80%	85%	90%			
Benefits	62.5% 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.

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

County - UNION

Craft: Electrician-Utility Work (South)

**PREVAILING WAGE RATE**

Rates are located in the "Statewide" rate package

Craft: Electrician-Utility Work (South)

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
6 Months	27.37	29.65	31.93	34.21	36.49	38.77	41.05			
Benefits	24.01	25.34	26.73	28.09	29.43	30.80	32.18			

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 - UNION

**Craft: Elevator Constructor                      PREVAILING WAGE RATE**

	03/17/17	03/17/18
Journeyman	W62.64 B41.56 T104.20	W64.48 B43.36 T107.84

**Craft: Elevator Constructor                      APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	27.95	34.45	40.72	46.98						
Benefits	33.31	34.46	36.04	37.61						

**Ratio of Apprentices to Journeymen - 1:1**

**Craft: Elevator Constructor                      COMMENTS/NOTES**

The regular workday shall consist of either 7 or 8 hours to be established at the beginning of the project, between 7:00 AM and 4:30 PM.

**OVERTIME:**

For all hours worked before or after the regular workday, Monday through Friday, and all hours on Saturday and Sunday, shall be paid at double the hourly rate. Holiday pay is one days wages (8 hours) plus double the hourly rate for all hours worked.

**RECOGNIZED HOLIDAYS:** New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day and the day after, Christmas Day. Saturday holidays shall be observed on the previous Friday and Sunday holidays shall be observed on the following Monday.

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

County - UNION

Craft: Elevator Modernization & Service

**PREVAILING WAGE RATE**

	03/17/17	03/17/18
Journeyman	W49.14	W50.49
	B39.91	B41.66
	T89.05	T92.15

Craft: Elevator Modernization & Service

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	27.95	27.03	31.94	36.86						
Benefits	33.23	33.57	34.97	36.37						

Ratio of Apprentices to Journeymen - 1:1

Craft: Elevator Modernization & Service

**COMMENTS/NOTES**

MODERNIZATION (addition, replacement, refurbishing, relocation, or changes in design or appearance, of elevator equipment in existing buildings):

- The regular workday consists of 8 hours, between 7:00 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 Saturday and Sunday shall be paid at time and one-half the hourly rate. Holiday pay is one days wages (8 hours) plus time and one-half the hourly rate for all hours worked.

SERVICE (repair or replacement of parts for the purpose of maintaining elevator equipment in good operating condition):

- The regular workday consists of 8 hours, between 6:00 AM and 6:00 PM.

- Overtime:

Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and all hours on Saturday shall be paid at time and one-half the hourly rate. All hours on Sunday and holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS (Modernization and Service): New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day and the day after, Christmas Day. Saturday holidays shall be observed on the previous Friday and Sunday holidays shall be observed on the following Monday.

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

County - UNION

**Craft: Glazier                      PREVAILING WAGE RATE**

	05/25/17	05/01/18	05/01/19
Foreman	W48.81 B23.62 T72.43	W50.81 B23.62 T74.43	W52.81 B23.62 T76.43
General Foreman	W50.81 B23.75 T74.56	W52.81 B23.75 T76.56	W54.81 B23.75 T78.56
Journeyman	W44.81 B23.36 T68.17	W46.81 B23.36 T70.17	W48.81 B23.36 T72.17

**Craft: Glazier                      APPRENTICE RATE SCHEDULE**

<b>INTERVAL</b>	<b>PERIOD AND RATES</b>									
6 Months	50%	55%	60%	65%	70%	75%	80%	90%		
Benefits	8.85	8.85	11.46	11.46	12.88	12.88	16.37	16.37		

**Ratio of Apprentices to Journeymen - 1:4**

**Craft: Glazier                      COMMENTS/NOTES**

Hazard/Height Pay: +\$1.00 per hour

**FOREMAN REQUIREMENTS:**

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

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

**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.

**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.

**RECOGNIZED HOLIDAYS:** New Year's Day, Memorial Day, July 4th, Labor Day, General 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 - UNION

Craft: Heat & Frost Insulator

**PREVAILING WAGE RATE**

	10/17/16
Foreman	W52.52 B30.17 T82.69
General Foreman	W55.07 B31.28 T86.35
Journeyman	W51.24 B29.61 T80.85

Craft: Heat & Frost Insulator

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	Yearly	23.77	28.19	34.05	39.96					
Benefits	17.83	21.08	23.21	25.16						

Ratio of Apprentices to Journeymen - 1:3

Craft: Heat & Frost Insulator

**COMMENTS/NOTES**

NOTE: These rates apply to the installing of insulation on hot and cold mechanical systems.

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 consecutive workdays.
- Second Shift shall work 7.5 hours and receive 8 hours pay, at the regular rate, plus 25% per hour.
- Third Shift shall work 7 hours and receive 8 hours pay, at the regular rate, plus 30% per hour.

**OVERTIME:**

The first 2 hours in excess of 8 per day, hours outside of the regular workday Monday through Friday that are not shift work, and the first 10 hours on Saturday, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours in excess of 10 per day, and all hours on Sunday 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, President's Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Presidential Election Day, Thanksgiving Day and Christmas Day. Sunday holidays observed the following Monday.

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

County - UNION

**Craft: Heat & Frost Insulator - Asbestos Worker**

**PREVAILING WAGE RATE**

	10/17/16
Asbestos Helper Abatement	W33.52 B22.69 T56.21
Firestop/Hazmat	W26.93 B9.25 T36.18
Foreman	W52.52 B30.17 T82.69

**Craft: Heat & Frost Insulator - Asbestos Worker**

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	SEE	HEAT &	FROST	INSULAT OR						

**Ratio of Apprentices to Journeymen - 1:3**

**Craft: Heat & Frost Insulator - Asbestos Worker**

**COMMENTS/NOTES**

NOTE: These rates apply only to the removal of insulation materials/asbestos from mechanical systems, including containment erection and demolition, and placing material in appropriate containers.

The regular workday shall be 8 hours between 8:00 AM and 4:30 PM.

**SHIFT DIFFERENTIALS:**

- Shift work must run for a minimum of 5 consecutive workdays.
- The second shift shall work 7.5 hours and receive 8 hours pay at the regular rate, plus 25% per hour.
- The third shift shall work 7 hours and receive 8 hours pay at the regular rate, plus 30% per hour.

**OVERTIME:** The first 2 hours in excess of 8 per day, hours outside of the regular workday Monday through Friday that are not shift work, and the first 10 hours on Saturday, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours in excess of 10 per day, and all hours on Sunday 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, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Presidential Election Day, Thanksgiving Day and Christmas Day. Sunday holidays observed the following Monday.

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

County - UNION

**Craft: Ironworker**

**PREVAILING WAGE RATE**

	07/01/17
Rod /Fence Foreman	W43.49 B45.02 T88.51
Rod/Fence Journeyman	W40.49 B45.02 T85.51
Structural Foreman	W45.54 B45.02 T90.56
Structural Journeyman	W42.54 B45.02 T87.56

**Craft: Ironworker**

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	50%	60%		Yearly	70%	80%	90%			
6 Months										

**Ratio of Apprentices to Journeymen - 1:4**

**Craft: Ironworker**

**COMMENTS/NOTES**

**HAZARDOUS WASTE WORK:** On hazardous waste removal work on a state or federally designated hazardous waste site where the Ironworker is required to wear Level A,B, or C personal protection: + \$3.00 per hour

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

**FOREMAN REQUIREMENTS:**

When there are 2 or more Ironworkers on a job, 1 shall be designated a Foreman.

**SHIFT DIFFERENTIALS:**

- When a 2 shift schedule 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 15%.
- 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 15%, and the third shift shall receive the regular rate plus 20%.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis.
- When an irregular shift is established for the Ironworker (Structural) classification, the rate shall be paid at time and one-half the regular rate, inclusive of benefits. When an irregular shift is established for the Rod/Fence classification, the shift shall be established on an 8 hour basis and receive the regular rate, plus 20%.

**OVERTIME:**

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

**County - UNION**

- All hours in excess of 8 per day, or before or after an established shift 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 hourly rate, inclusive of benefits. Saturday may be used as a make-up day for a day lost to inclement weather. If Saturday is not a make-up day, all hours on Saturday shall be paid at time and one-half 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 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, 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.

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

County - UNION

**Craft: Laborer - Asbestos & Hazardous Waste Removal**

**PREVAILING WAGE RATE**

	01/26/17
Journeyman (Handler)	W30.88 B21.91 T52.79

**Craft: Laborer - Asbestos & Hazardous Waste Removal**

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
Yearly	18.53	21.62	24.70	27.79						
Benefits	20.26	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 (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, Good Friday, Easter, Memorial Day, July 4th, Labor Day, Presidential Election 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 - UNION

**Craft: Laborer - Building**

**PREVAILING WAGE RATE**

	05/01/17	11/01/17	05/01/18
Class A Journeyman	W32.30 B27.37 T59.67	W0.00 B0.00 T60.72	W0.00 B0.00 T62.57
Class B Journeyman	W31.80 B27.37 T59.17	W0.00 B0.00 T60.22	W0.00 B0.00 T62.07
Class C Journeyman	W27.03 B27.37 T54.40	W0.00 B0.00 T55.60	W0.00 B0.00 T57.45
Foreman	W36.34 B27.37 T63.71	W0.00 B0.00 T64.63	W0.00 B0.00 T66.48
General Foreman	W40.38 B27.37 T67.75	W0.00 B0.00 T68.55	W0.00 B0.00 T70.40

**Craft: Laborer - Building**

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
	60%	70%	80%	90%						
6 Months										
Benefit	24.12	24.12	24.12	24.12						

**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 (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 - UNION**

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%.

**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, 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 - UNION

Craft: Laborer - Heavy & General

PREVAILING WAGE RATE

Rates are located in the  
"Statewide" rate package

Craft: Laborer - Heavy & General

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
1000 Hours	60%	70%	80%	90%						
Benefit	19.53	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 - UNION

**Craft: Laborer-Residential and Modular Construction**

**PREVAILING WAGE RATE**

	04/01/17
* Skilled Tradesman (only applies to Modular Construction)	W25.55 B5.45 T31.00
Foreman (person directing crew, regardless of his skill classification)	W25.55 B5.45 T31.00
Laborer	W21.55 B5.45 T27.00
Laborer (for single family and stand-alone duplex owned by single owner)	W17.05 B2.95 T20.00

**Craft: Laborer-Residential and Modular Construction**

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	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, including basement levels. Please note the construction must be residential in nature for ALL FLOORS at an elevation of no more than FOUR (4) FLOORS, INCLUDING BASEMENT. 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 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 in nature for ALL STORIES at an elevation of no more than FOUR (4) STORIES. 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,

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

**County - UNION**

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 - UNION

Craft: Millwright

**PREVAILING WAGE RATE**

	05/01/17
Foreman	W54.48 B32.20 T86.68
Journeyman	W47.37 B28.08 T75.45

Craft: Millwright

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
6 Months	40%	45%	50%	55%	60%	65%	70%	75%	85%	95%
Benefits	58% of	Appren	tice	Wage	Rate	for all	intervals	+.60		

Ratio of Apprentices to Journeymen - 1:3

Craft: Millwright

**COMMENTS/NOTES**

**FOREMAN REQUIREMENTS:**

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

The regular workday shall consist of 8 hours, starting between 7:00 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 15%, 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 15% and the third shift shall receive the regular rate plus 20%, 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 15% and the third shift shall receive the regular rate plus 20%, 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 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, 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 - UNION

Craft: Operating Engineer                      PREVAILING WAGE RATE

Rates are located in the  
"Statewide" rate package

Craft: Operating Engineer                      APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	60%	70%	80%	90%						

Ratio of Apprentices to Journeymen - \*

\* 1 apprentice for each piece of heavy equipment. At least 10 pieces of heavy equipment or a minimum of 5 Operating Engineers must be on site.

Craft: Operating Engineer                      COMMENTS/NOTES

Operating Engineer rates are located in the "Statewide" rate package.

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

County - UNION

Craft: Operating Engineer - Field Engineer

PREVAILING WAGE RATE

Rates are located in the  
"Statewide" rate package

Craft: Operating Engineer - Field Engineer

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
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 - UNION

Craft: Painter - Bridges

**PREVAILING WAGE RATE**

	05/04/17
Foreman	W59.13 B27.67 T86.80
General Foreman	W61.13 B27.67 T88.80
Journeyman	W54.13 B27.67 T81.80

Craft: Painter - Bridges

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	40%	50%			60%	70%		80%	90%	
6 Months										
Benefits	Intervals	1 to 2 =	8.88	Intervals	3 to 4 =	10.81	Intervals	5 to 6 =	13.48	

Ratio of Apprentices to Journeymen - 1:4

Craft: Painter - Bridges

**COMMENTS/NOTES**

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.
- 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, 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 - UNION

**Craft: Painter - Line Striping**

**PREVAILING WAGE RATE**

	12/29/16
Apprentice (1st year)	W24.45 B10.75 T35.20
Apprentice (2nd year)	W28.45 B16.80 T45.25
Foreman (Charge Person)	W36.60 B17.08 T53.68
Journeyman 1 (at least 1 year of working exp. as a journeyman)	W32.33 B17.08 T49.41
Journeyman 2 (at least 2 years of working exp. as a journeyman)	W36.10 B17.08 T53.18

**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 - UNION

Craft: Painter - New Construction

**PREVAILING WAGE RATE**

	05/26/17
Foreman	W43.18 B23.26 T66.44
General Foreman	W47.10 B23.51 T70.61
Journeyman	W39.25 B21.90 T61.15

Craft: Painter - New Construction

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	30%	40%	50%	60%	70%	75%	80%	85%	90%	
4 Months										
Benefits							11.00	11.00	11.00	

Ratio of Apprentices to Journeymen - 1:4

Craft: Painter - New Construction

**COMMENTS/NOTES**

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM ON 5-1-14:

INTERVAL	PERIOD AND RATES							
6 Months	40%	45%	55%	65%	70%	75%	80%	90%
Benefits	8.00	8.00	10.00	10.00	11.00	11.00	14.00	14.00

Spraying, sandblasting, lead abatement, work on tanks or stacks, 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.



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

**County - UNION**

- 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 - UNION

**Craft: Painter - Repainting**

**PREVAILING WAGE RATE**

	05/26/17
Foreman	W31.95 B19.38 T51.33
General Foreman	W34.86 B19.51 T54.37
Journeyman	W29.05 B19.26 T48.31

**Craft: Painter - Repainting**

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	SEE	PAINTER	NEW	CONSTR UC	TION					

**Ratio of Apprentices to Journeymen - 1:4**

**Craft: Painter - Repainting**

**COMMENTS/NOTES**

NOTE: These rates may only be used on jobs where no major alterations (only doing painting and carpeting with nothing else being changed in the office or on the project) occur, and where not more than 3 other trades are present on the job, but may NOT, under any circumstances, be used for work on bridges, stacks, elevated tank, or generating stations.

Spraying, sandblasting, lead abatement, work on tanks or stacks, 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.

**OVERTIME:**

- Hours in excess of 8 per day and 40 per week 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.
- Four 10-hour days may be worked, at straight time, Monday through Sunday.

**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 - UNION

Craft: Painter- Containment

PREVAILING WAGE RATE

	05/04/17
Journeyman	W35.18 B24.75 T59.93

Craft: Painter- Containment

COMMENTS/NOTES

NOTE: These rates shall require no painting, but used in a supporting capacity only, such as wrapping, boxing, fencing, etc. on tanks.

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..  
- 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, 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 - UNION

**Craft: Painter-Elevated Water Tanks**

**PREVAILING WAGE RATE**

	05/04/17
Foreman	W48.92 B24.92 T73.84
General Foreman	W50.92 B24.92 T75.84
Journeyman	W43.92 B24.92 T68.84

**Craft: Painter-Elevated Water Tanks**

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	SEE	PAINTER	BRIDGES							

**Craft: Painter-Elevated Water Tanks**

**COMMENTS/NOTES**

These rates apply to: All new and repaint elevated 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.
- 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, 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 - UNION

Craft: Painter-Structural Steel

**PREVAILING WAGE RATE**

	05/04/17
Foreman	W47.87 B25.27 T73.14
General Foreman	W49.87 B25.27 T75.14
Journeyman	W42.87 B25.27 T68.14

Craft: Painter-Structural Steel

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	SEE	PAINTER	BRIDGES							

Craft: Painter-Structural Steel

**COMMENTS/NOTES**

These rates apply to: All work in power plants (any aspect). On steeples, on dams, on hangers, transformers, substations, etc. and on open steel, whether new or repaint. All new work (excluding traditional commercial painting work) 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.
- 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, 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 - UNION

**Craft: Paperhanger - New Construction**

**PREVAILING WAGE RATE**

	05/26/17
Foreman	W44.20 B23.33 T67.53
Journeyman	W40.19 B23.07 T63.26

**Craft: Paperhanger - New Construction**

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
4 Months	30%	40%	50%	60%	70%	75%	80%	85%	90%	
Benefits							11.00	11.00	11.00	

**Ratio of Apprentices to Journeymen - 1:4**

**Craft: Paperhanger - New Construction**

**COMMENTS/NOTES**

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM ON 5-1-14:

INTERVAL	PERIOD AND RATES							
6 Months	40%	45%	55%	65%	70%	75%	80%	90%
Benefits	8.00	8.00	10.00	10.00	11.00	11.00	14.00	14.00

**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 - UNION

Craft: Paperhanger - Renovation

**PREVAILING WAGE RATE**

	05/26/17
Foreman	W32.80 B19.42 T52.22
Journeyman	W29.82 B19.29 T49.11

Craft: Paperhanger - Renovation

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
	SEE	PAPER-	HANGER	NEW	CONSTR UC	TION				

Ratio of Apprentices to Journeymen - 1:4

Craft: Paperhanger - Renovation

**COMMENTS/NOTES**

NOTE: These rates may only be used on jobs where no major alterations occur, and where not more than 3 other trades are present on the job, but may NOT, under any circumstances, be used for work on bridges, stacks, elevated tanks, or generating stations.

**FOREMEN REQUIREMENTS:**

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

**OVERTIME:**

- Hours in excess of 8 per day and 40 per week shall be paid at time and one-half the regular rate.
- Four 10-hour days may be worked, at straight time, Monday through Sunday.

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

County - UNION

Craft: Pipefitter

**PREVAILING WAGE RATE**

	05/01/17	05/01/18	05/01/19
Foreman	W52.26	W0.00	W0.00
	B41.12	B0.00	B0.00
	T93.38	T95.60	T97.82
Journeyman	W48.51	W0.00	W0.00
	B38.18	B0.00	B0.00
	T86.69	T88.91	T91.13

Craft: Pipefitter

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	35%	45%	55%	65%	75%					
Benefit	16.14	19.95	23.75	26.05	28.45					

**Ratio of Apprentices to Journeymen - 1:5**

Craft: Pipefitter

**COMMENTS/NOTES**

**FOREMAN REQUIREMENTS:**

- When there are 2 or more Journeyman Pipefitters on a job, 1 shall be designated a Foreman.
- There shall be a Foreman for every 8 Journeyman Pipefitters on a job.

The regular workday shall be 8 hours between 7:00 AM and 3:30 PM.

**SHIFT DIFFERENTIAL:**

- 2nd Shift (3:30 PM-11:30 PM) shall work 7.5 hours and receive 8 hours pay at the regular rate, plus 25% per hour.
- 3rd Shift (11:30 PM-7:00 AM) shall work 7 hours and receive 8 hours pay at the regular rate, plus 30% per hour.

**OVERTIME:**

- All hours worked in excess of 8 per day, Monday through Friday, and all hours worked on Saturday, shall be paid at time and one-half, inclusive of benefits. All hours on Sunday and holidays shall be paid at double time, inclusive of benefits.
- By mutual agreement, employees may work four 10-hour days, Monday to Thursday, at straight time rate. Friday may be used as a make-up day for a day lost to inclement weather, and may be paid at straight time. If Friday is not a make-up day, the first 8 hours shall be paid at time and one-half, inclusive of benefits; hours in excess of 8 shall be paid at double time, inclusive of benefits.

**SHIFT DIFFERENTIAL (Maintenance Work Only):**

- 2nd Shift (3:30 PM-11:30 PM) shall work 7.5 hours and receive 8 hours pay at the regular rate, plus 10% per hour.
- 3rd Shift (11:30 PM-7:00 AM) shall work 7 hours and receive 8 hours pay at the regular rate, plus 15% per hour.

**OVERTIME (Maintenance Work Only):**

- All hours in excess of 8 per day, Monday through Saturday, shall be paid at time and one-half, inclusive of benefits. All hours on Sundays and holidays shall be paid at double time, inclusive of benefits.

NOTE: Maintenance work is work to repair, restore, or improve the efficiency of existing facilities. This does NOT apply to



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

**County - UNION**

ANY new construction.

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 are observed the following Monday.

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

County - UNION

Craft: Plasterer

PREVAILING WAGE RATE

See Bricklayer, Stone Mason Rates

Craft: Plasterer

COMMENTS/NOTES

\*\*\*See BRICKLAYER, STONE MASON Rates\*\*\*

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

County - UNION

**Craft: Plumber**

**PREVAILING WAGE RATE**

	05/01/17
Foreman	W56.87 B33.84 T90.71
General Foreman	W60.56 B33.84 T94.40
Journeyman	W52.66 B33.84 T86.50

**Craft: Plumber**

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	30%	45%	55%	65%	75%					
Yearly										
Benefits	10.15	15.23	18.61	22.00	25.38					

**Ratio of Apprentices to Journeymen - \***

\* Employers may employ 1 apprentice on any job where 1 or 2 journeymen are employed. Thereafter, 1 apprentice may be employed for every 4 journeymen.

**Craft: Plumber**

**COMMENTS/NOTES**

**FOREMAN REQUIREMENTS:**

- On any job having 2 or more Plumbers, 1 must be designated a Foreman.
- On any job having 9 or more Plumbers, 2 shall be designated as Foremen.

The regular workday shall consist of 8 hours between 7:00 AM and 4:30 PM.

**SHIFT DIFFERENTIALS:**

- Shift work must continue for a minimum of 5 consecutive workdays.
- When two shifts are worked, the second shift shall work 7.5 hours and receive 8 hours pay, at a rate equal to the hourly rate plus 10%, inclusive of benefits.
- When a third shift is worked, the third shift shall work 7 hours and receive 8 hours pay, at a rate equal to the hourly rate plus 15%, inclusive of benefits.

**OVERTIME:**

- All 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 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 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 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, 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.

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

County - UNION

**Craft: Roofer                      PREVAILING WAGE RATE**

	06/02/17
Foreman	W37.02 B25.78 T62.80
Journeyman	W36.02 B25.78 T61.80

**Craft: Roofer                      APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
6 Months	14.40	18.01	21.61	25.21	28.82	32.42				
Benefits	2.13	2.13	23.03	23.03	23.03	23.03				

**Ratio of Apprentices to Journeymen - \***

- \* A) For roofing jobs that are of the 1 or single ply nature: 1:2 or fraction thereof
- B) For roofing jobs on new built up roofs: 1:3 or fraction thereof
- C) For roofing jobs that are of a tear-off nature: 1:2 or fraction thereof
- D) For roofing jobs {not requiring complete removal of existing systems, installation done over existing roof}: 1:3 or fraction thereof

**Craft: Roofer                      COMMENTS/NOTES**

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM AFTER 4-1-17:

INTERVAL	PERIOD AND RATES								
6 Months	14.40	18.01	21.61	23.41	25.21	27.01	28.82	32.42	
Benefits	2.13	2.13	23.03	23.03	23.03	23.03	23.03	23.03	

Pitch: +.50 per hour  
Mop Man: +.30 per hour

The regular workday consists of 8 hours between 8:00 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 regular rate.

**RECOGNIZED HOLIDAYS:** New Year's Day, Good Friday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day.

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

County - UNION

Craft: Sheet Metal Sign Installation

**PREVAILING WAGE RATE**

	04/13/17	10/01/17
Foreman	W34.79	W34.79
	B32.13	B32.89
	T66.92	T67.68
Journeyman	W33.54	W33.54
	B32.13	B32.89
	T65.67	T66.43

Craft: Sheet Metal Sign Installation

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%
1000 hours										
Benefits	10.44	11.89	13.34	14.82	16.68	18.17	19.66	21.16	22.65	24.14

Ratio of Apprentices to Journeymen - 1:3

Craft: Sheet Metal Sign Installation

**COMMENTS/NOTES**

**FOREMAN REQUIREMENT:**

When there are 6 or more Sheet Metal Sign Installers on a job, 1 shall be designated a Foreman.

The regular workday consists of 8 hours, between 7:00 AM and 3:30 PM.

**OVERTIME:**

Hours before or after the regular workday, Monday through Friday, and all hours worked on Saturday shall be paid at time and one-half the hourly rate. All hours on Sunday and holidays shall be paid at double the hourly rate.

Four(4) 10 hour days may be worked, Monday through Friday, at straight time, for projects lasting at least one week in duration. The fifth day may be used as a make-up day at straight time for a day lost due to inclement weather. However, if the fifth day is not a make-up day, all hours worked will be paid at time and one-half the hourly rate.

**RECOGNIZED HOLIDAYS:** New Year's Day, Presidents' Day, Good Friday, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day and the 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 - UNION

Craft: Sheet Metal Worker

**PREVAILING WAGE RATE**

	07/07/17
Foreman	W49.95 B41.27 T91.22
General Foreman	W50.95 B41.27 T92.22
Journeyman	W46.45 B41.27 T87.72

Craft: Sheet Metal Worker

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	35%	45%	55%	65%	of	Journey	man	Wage	Rate	
Benefit	35%	45%	55%	65%	of	Journey	man	Benefit	Rate	

**Ratio of Apprentices to Journeymen - 1:4**

Craft: Sheet Metal Worker

**COMMENTS/NOTES**

**FOREMAN REQUIREMENTS:**

- When there are 2 or more Sheet Metal Workers on a project, 1 must be designated a Foreman.
- When there are 17 or more Sheet Metal Workers on a project, 1 must be designated a General Foreman.
- When there is only 1 Sheet Metal Worker (1 Journeyman) on a project, he/she shall receive \$1.00 more than the regular Journeyman's rate.

The regular workday is 8 hours between 7:00 AM and 4:30 PM.

**SHIFT DIFFERENTIAL:**

- 2nd Shift (3:30 PM - 12:00 AM) : +17% of regular hourly rate
- Shift work must run for a minimum of 5 consecutive workdays.

**OVERTIME:**

- Hours in excess of 8 per day, or before or after the regular workday, that are not shift work, and the first 10 hours on Saturdays shall be paid at time and one-half of the regular rate, inclusive of benefits. Hours in excess of 10 per day on Saturday, and all hours on Sundays and holidays shall be at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Friday, at straight time, with hours in excess of 10 per day, and hours in excess of 40 per week paid at the overtime rates listed above.

**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. Sunday holidays will be observed the following Monday.

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

County - UNION

Craft: Sprinkler Fitter

**PREVAILING WAGE RATE**

	07/01/17	01/01/18	07/01/18	01/01/19
Foreman	W63.93	W64.38	W66.63	W66.08
	B27.12	B26.67	B26.67	B27.22
	T91.05	T91.05	T93.30	T93.30
General Foreman	W67.01	W67.38	W69.63	W69.08
	B27.12	B26.67	B26.67	B27.22
	T94.13	T94.05	T96.30	T96.30
Journeyman	W59.83	W60.28	W62.53	W61.98
	B27.12	B26.67	B26.67	B27.22
	T86.95	T86.95	T89.20	T89.20

Craft: Sprinkler Fitter

**APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	9.50	11.25	50%	55%	60%	65%	70%	75%	80%	85%
1000 Hours	9.50	11.25	50%	55%	60%	65%	70%	75%	80%	85%
Benefits	10.67	10.67	21.22	21.22	21.22	21.22	Intervals	7 to 10	Jourymn	Ben.

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES REGISTERED AS OF 7-1-13:

INTERVAL	PERIOD AND RATES									
1000 hours	25%	30%	40%	45%	55%	60%	70%	75%	85%	90%
Benefits	10.67	10.67	21.22	21.22	21.22	21.22	Intervals	7 to 10	receive	Journeyman Ben.

Craft: Sprinkler Fitter

**COMMENTS/NOTES**

The regular workday consists of 8 consecutive hours between 6:00 AM and 4:30 PM.

**FOREMAN REQUIREMENTS:**

- The first Sprinkler Fitter on the job must be designated a Foreman.
- On any job having 12 or more Sprinkler Fitters, one must be designated a General Foreman.

**SHIFT DIFFERENTIALS:**

- Shift work must run for a minimum of 2 consecutive workdays.
- 2nd and 3rd shift shall receive an additional 15% of the regular rate, per hour.
- Any "off hours" shift starting at 8:00 PM or later shall receive an additional 25% of the regular rate, per hour.

**OVERTIME:**

The first 2 hours in excess of 8 per day, after the regular workday that are not shift work, Monday through Friday, shall be paid at time and one-half the regular rate. Hours worked in excess of 10 per day, Monday through Friday, and all hours on Saturday, Sunday and holidays, shall be paid double the regular rate.  
Four 10 hour days may be worked, Monday through Friday, at straight-time.

**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.

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

County - UNION

**Craft: Tile Finisher-Marble**

**PREVAILING WAGE RATE**

	07/01/17	01/01/18
Finisher	W46.32 B33.44 T79.76	W46.66 B34.18 T80.84

**Craft: Tile Finisher-Marble**

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
750 Hours	50%	55%	65%	70%	75%	85%	90%	95%		

**Ratio of Apprentices to Journeymen - 1:4**

**Craft: Tile Finisher-Marble**

**COMMENTS/NOTES**

**OVERTIME:**

Hours in excess of 7 per day, Monday through Friday, and the first 7 hours on Saturdays shall be paid at time and one half the regular rate, inclusive of benefits. Hours in excess of 7 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, Good Friday, Memorial Day, July 4th, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day and the day after, Christmas Day. Sunday holidays observed the following Monday.



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

County - UNION

Craft: Tile Setter - Ceramic

**PREVAILING WAGE RATE**

	07/25/17
Finisher	W43.67 B29.50 T73.17
Setter	W56.65 B32.76 T89.41

Craft: Tile Setter - Ceramic

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
750 Hours	35%	40%	50%	55%	60%	65%	70%	75%	80%	90%

Ratio of Apprentices to Journeymen - 1:4

Craft: Tile Setter - Ceramic

**COMMENTS/NOTES**

**OVERTIME:**

Hours in excess of 7 per day, and the first 10 hours on Saturdays shall be paid at time and one-half the hourly rate. All hours on Saturdays after 10 hours shall be paid double the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.

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

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

County - UNION

Craft: Tile Setter - Marble

**PREVAILING WAGE RATE**

	07/01/17	01/01/18
Tile Setter	W58.18 B35.27 T93.45	W58.53 B36.37 T94.90

Craft: Tile Setter - Marble

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
750 Hours	50%	55%	65%	70%	75%	85%	90%	95%		

Ratio of Apprentices to Journeymen - 1:4

Craft: Tile Setter - Marble

**COMMENTS/NOTES**

**OVERTIME:**

Hours in excess of 7 per day, Monday through Friday, and the first 7 hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. Hours in excess of 7 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, Good Friday, Memorial Day, July 4th, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day and the day after, Christmas Day. Sunday holidays observed the following Monday.

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

County - UNION

Craft: Tile Setter - Mosaic & Terrazzo

**PREVAILING WAGE RATE**

	07/25/17
Grinder or Assistant	W53.03 B34.36 T87.39
Mechanic	W54.63 B34.38 T89.01

Craft: Tile Setter - Mosaic & Terrazzo

**APPRENTICE RATE SCHEDULE**

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
750 Hours	35%	40%	50%	55%	60%	65%	70%	75%	85%	95%

Ratio of Apprentices to Journeymen - 1:5

Craft: Tile Setter - Mosaic & Terrazzo

**COMMENTS/NOTES**

The regular workday consists of 7 hours, between 8:00 AM and 3:30 PM.

**OVERTIME:**

- Hours in excess of 7 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 hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.

**RECOGNIZED HOLIDAYS:** New Year's Day, Presidents' Day, Good Friday, Monday after Easter, Memorial Day, July 4th, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day and the day after, Christmas Day. Sunday holidays observed the following Monday.

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

County - UNION

Craft: Truck Driver

**PREVAILING WAGE RATE**

	05/01/17	11/01/17	05/01/18	11/01/18
Bucket, Utility, Pick-up, Fuel Delivery trucks	W36.83 B33.78 T70.61	W36.83 B34.58 T71.41	W37.26 B35.40 T72.66	W37.66 B35.80 T73.46
Dump truck, Asphalt Distributor, Tack Spreader	W36.83 B33.78 T70.61	W36.83 B34.58 T71.41	W37.26 B35.40 T72.66	W37.66 B35.80 T73.46
Euclid-type vehicles (large, off-road equipment)	W36.98 B33.78 T70.76	W36.98 B34.58 T71.56	W37.41 B35.40 T72.81	W37.81 B35.80 T73.61
Helper on Asphalt Distributor truck	W36.83 B33.78 T70.61	W36.83 B34.58 T71.41	W37.26 B35.40 T72.66	W37.66 B35.80 T73.46
Slurry Seal, Seeding/Fertilizing/ Mulching truck	W36.83 B33.78 T70.61	W36.83 B34.58 T71.41	W37.26 B35.40 T72.66	W37.66 B35.80 T73.46
Straight 3-axle truck	W36.88 B33.78 T70.66	W36.88 B34.58 T71.46	W37.31 B35.40 T72.71	W37.71 B35.80 T73.51
Tractor Trailer (all types)	W36.98 B33.78 T70.76	W36.98 B34.58 T71.56	W37.41 B35.40 T72.81	W37.81 B35.80 T73.61
Vacuum or Vac-All truck (entire unit)	W36.83 B33.78 T70.61	W36.83 B34.58 T71.41	W37.26 B35.40 T72.66	W37.66 B35.80 T73.46
Winch Trailer	W37.08 B33.78 T70.86	W37.08 B34.58 T71.66	W37.51 B35.40 T72.91	W37.91 B35.80 T73.71

Craft: Truck Driver

**COMMENTS/NOTES**

**BLENDED RATE:**

When a truck driver is performing work on the 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.

**HAZARDOUS WASTE REMOVAL:**

- On hazardous waste removal work on a State designated hazardous waste site where the driver is in direct contact with hazardous materials and when personal protective equipment is required for respiratory, skin, and eye protection, the driver shall receive an additional \$3.00 per hour (with or without protective gear).
- A hazardous waste related certified worker at a designated hazardous waste site who is not working in a zone requiring level A, B or C personal protection shall receive an additional \$1.00 per hour.

**TRUCK FOREMAN:** \$.75 cents per hour above regular rate. Overtime shall be increased accordingly.

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

**County - UNION**

The regular workday shall be 8 hours, starting between 6:00 AM and 8:00 AM.

**SHIFT DIFFERENTIAL:**

- Shifts starting at 4:00 PM (2nd Shift): + \$2.50 per hour.
- Shifts starting at 12:00 AM (midnight/3rd Shift): time and one-half the hourly rate.
- Shifts starting at a time other than from 6:00 AM to 8:00 AM, when such hours are mandated by the project owner: + \$2.50 per hour.

**OVERTIME:**

- Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, 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.
- Employees may work four 10-hour days at straight time, Monday through Thursday, with Friday used as a make-up day for a lost day. If Friday is not a make-up day, then 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 (Decoration Day), July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday. The day after Thanksgiving may be substituted for Veterans' Day.

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

County - UNION

Craft: Truck Driver-Material Delivery Driver

PREVAILING WAGE RATE

	05/01/12
Driver	W22.90 B10.17 T33.07

Craft: Truck Driver-Material Delivery Driver

COMMENTS/NOTES

BLENDING RATE:

When a truck driver is performing work on the site and also serving as a material delivery driver, the driver shall be paid a "blended rate". See the "Truck Driver" craft for the blended rates.

Truck Foreman/Shop Steward: +\$0.25 per hour

SHIFT DIFFERENTIALS:

- 2nd Shift shall receive an additional \$0.50 per hour
- 3rd Shift shall receive time and one-half the hourly rate.

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 Saturday shall be paid at time and one-half the hourly rate. All hours on Sunday and holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day (Decoration Day), July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday. The day after Thanksgiving may be substituted for Veterans' Day.

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

County - UNION

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 : 03/31/2020

{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 4:30 PM.

**SHIFT DIFFERENTIALS:**

- Shift work must run for 5 consecutive workdays.
- When 2 shifts are worked, the second shift shall receive an additional 10% of the regular rate inclusive of benefits, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the regular rate inclusive of benefits, per hour. The third shift shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the regular rate inclusive of benefits, per hour.
- When such hours are mandated by the project owner, a shift that starts between 8:00 PM and midnight and ends by 6:00 AM Saturday, or that starts after 8:00 PM on Sunday, provided there are consecutive hours of work within the shift, shall receive an additional 15% of the regular rate, inclusive of benefits.
- On Highway, Road, Street, and Sewer projects irregular shifts starting between 5:00 PM and 12:00 AM may be worked Monday through Friday, and shall receive an additional 15% of the regular rate, inclusive of benefits. When working with other trades that receive a higher irregular shift rate, the Operating Engineer shall also receive the higher irregular shift 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 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.
- 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 Veteran's Day.

On hazardous waste removal work or asbestos removal work, on a state or federally designated hazardous waste site, where the operating engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin, and eye protection, the operating engineer shall receive an additional 20% of the hourly wage, per hour.

TERRITORY  
ENTIRE STATE

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

OPERATING ENGINEERS    Rates Expiration Date : 03/31/2020

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
48.98	30.70	79.68	80.68	82.03	83.03	85.38

**CLASSIFICATIONS:**

A-Frame

Backhoe (combination)

Boom Attachment on loaders (Except pipehook)

Boring & Drilling Machine

Brush Chopper, Brush Shredder, Tree Shredder

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 (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)

Hydraulic Crane (10 tons & under)

Hydro-Axe

Hydro-Blaster

Jack (screw, air hydraulic, power-operated unit, or console type, Except hand jack or pile load test type)

Log Skidder

TERRITORY  
ENTIRE STATE

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

OPERATING ENGINEERS     Rates Expiration Date : 03/31/2020

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
48.98	30.70	79.68	80.68	82.03	83.03	85.38

**CLASSIFICATIONS:**

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)

Vacuum Truck

Whiphammer

Winch Truck (hoisting)

**OPERATING ENGINEERS**    Rates Expiration Date : 03/31/2020

**Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
47.07	30.70	77.77	78.77	80.12	81.12	83.47

**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 : 03/31/2020**

**Effective Dates:**

	07/01/2017		01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
47.07	30.70	77.77	78.77	80.12	81.12	83.47

**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

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)

Laddervator

OPERATING ENGINEERS    Rates Expiration Date : 03/31/2020

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
47.07	30.70	77.77	78.77	80.12	81.12	83.47

**CLASSIFICATIONS:**

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)

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

Tug Captains

Tug Master (Power Boats)

TERRITORY  
ENTIRE STATE

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

**OPERATING ENGINEERS** Rates Expiration Date : 03/31/2020

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
47.07	30.70	77.77	78.77	80.12	81.12	83.47

**CLASSIFICATIONS:**

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:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
43.73	30.70	74.43	75.43	76.78	77.78	80.13

**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

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
41.15	30.70	71.85	72.85	74.20	75.20	77.55

**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 : 03/31/2020

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
51.31	30.70	82.01	83.01	84.36	85.36	87.71

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (minimum)



**OPERATING ENGINEERS**    Rates Expiration Date : 03/31/2020

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
50.57	30.70	81.27	82.27	83.62	84.62	86.97

**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
- 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
- Pavement & Concrete Breaker (Superhammer & Hoe Ram)

TERRITORY  
ENTIRE STATE

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

OPERATING ENGINEERS     Rates Expiration Date : 03/31/2020

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
50.57	30.70	81.27	82.27	83.62	84.62	86.97

**CLASSIFICATIONS:**

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

**OPERATING ENGINEERS**    **Rates Expiration Date : 03/31/2020**

**Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
45.44	30.70	76.14	77.14	78.49	79.49	81.84

**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

**TERRITORY**  
**ENTIRE STATE**

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

**OPERATING ENGINEERS**    **Rates Expiration Date : 03/31/2020**

**Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
45.44	30.70	76.14	77.14	78.49	79.49	81.84

**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:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
52.39	30.70	83.09	84.09	85.44	86.44	88.79

**CLASSIFICATIONS:**

Helicopter Pilot/Engineer

**Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
57.07	30.70	87.77	88.77	90.12	91.12	93.47

**CLASSIFICATIONS:**

Cranes, Derricks, Pile Driver (all types), over 100 tons and TOWER CRANE with boom (including jib and/or leads) 140 ft. and over

**Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
56.07	30.70	86.77	87.77	89.12	90.12	92.47

**CLASSIFICATIONS:**

Cranes, Derricks, Pile Driver (all types), over 100 tons and TOWER CRANE with boom (including jib and/or leads) from 100 ft. to 139 ft.

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PREVAILING WAGE RATE DETERMINATION

**OPERATING ENGINEERS**      Rates Expiration Date : 03/31/2020

**Effective Dates:**

	07/01/2017		01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
52.57	30.70	83.27	84.27	85.62	86.62	88.97

**CLASSIFICATIONS:**

Cranes, Derricks, Pile Driver (all types) , under 100 tons with a boom (including jib and/or leads) 140 ft. and over

**Effective Dates:**

	07/01/2017		01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
55.07	30.70	85.77	86.77	88.12	89.12	91.47

**CLASSIFICATIONS:**

Cranes, Derricks, Pile Driver (all types), over 100 tons and TOWER CRANE with a boom (including jib and/or leads) under 100 ft.

**Effective Dates:**

	07/01/2017		01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
51.57	30.70	82.27	83.27	84.62	85.62	87.97

**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 : 03/31/2020

{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 4:30 PM.

**SHIFT DIFFERENTIALS:**

- Shift work must run for 5 consecutive workdays.
- When 2 shifts are worked, the second shift shall receive an additional 10% of the regular rate inclusive of benefits, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the regular rate inclusive of benefits, per hour. The third shift shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the regular rate inclusive of benefits, per hour.
- When such hours are mandated by the project owner, a shift that starts between 8:00 PM and midnight and ends by 6:00 AM Saturday, or that starts after 8:00 PM on Sunday, provided there are consecutive hours of work within the shift, shall receive an additional 15% of the regular rate, inclusive of benefits.
- On Highway, Road, Street, and Sewer projects irregular shifts starting between 5:00 PM and 12:00 AM may be worked Monday through Friday, and shall receive an additional 15% of the regular rate, inclusive of benefits. When working with other trades that receive a higher irregular shift rate, the Operating Engineer shall also receive the higher irregular shift 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 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.
- 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 Veteran's Day.

On hazardous waste removal work or asbestos removal work, on a state or federally designated hazardous waste site, where the operating engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin, and eye protection, the operating engineer shall receive an additional 20% of the hourly wage, per hour.

**Effective Dates:**

	07/01/2017		01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
54.20	30.70	84.90	85.90	87.25	88.25	90.60

**CLASSIFICATIONS:**

Helicopter Pilot or Engineer

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**STRUCTURAL STEEL ERECTION**    **Rates Expiration Date : 03/31/2020**

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
50.14	30.70	80.84	81.84	83.19	84.19	86.54

**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

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
47.48	30.70	78.18	79.18	80.53	81.53	83.88

**CLASSIFICATIONS:**

Aerial Platform Used On Hoists

Apprentice Engineer/Oiler with Compressor or Welding Machine

Captain (Power Boats)

Compressor (2 or 3 in battery)

Conveyor or Tugger Hoist

Elevator or House Car

Fireman

Forklift

Generator (2 or 3)

Maintenance Utility Man

Tug Master (Power Boats)

Welding Machines, Gas or Electric Converters on any type-2 or 3 in battery including diesels

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**STRUCTURAL STEEL ERECTION** Rates Expiration Date : 03/31/2020

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
45.95	30.70	76.65	77.65	79.00	80.00	82.35

CLASSIFICATIONS:

Compressor (Single)

Generators

Welding Machines, Gas, Diesel, Or Electric Converters of any type-single

Welding System, Multiple (Rectifier Transformer Type)

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
44.19	30.70	74.89	75.89	77.24	78.24	80.59

CLASSIFICATIONS:

Assistant Engineer/Oiler

Drillers Helper

Field Engineer - Transit/Instrument Man

Maintenance Apprentice (Deckhand)

Maintenance Apprentice (Oiler)

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
51.76	30.70	82.46	83.46	84.81	85.81	88.16

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (Minimum)

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
41.15	30.70	71.85	72.85	74.20	75.20	77.55

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman



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**STRUCTURAL STEEL ERECTION** Rates Expiration Date : 03/31/2020

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
50.90	30.70	81.60	82.60	83.95	84.95	87.30

**CLASSIFICATIONS:**

Field Engineer-Chief of Party

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
59.09	30.70	89.79	90.79	92.14	93.14	95.49

**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) over 100 tons and Tower Cranes.

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
57.43	30.70	88.13	89.13	90.48	91.48	93.83

**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), over 100 tons and Tower Crane.

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
54.59	30.70	85.29	86.29	87.64	88.64	90.99

**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:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
52.93	30.70	83.63	84.63	85.98	86.98	89.33

**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.

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STRUCTURAL STEEL ERECTION Rates Expiration Date : 03/31/2020

Effective Dates:

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
54.59	30.70	85.29	86.29	87.64	88.64	90.99

CLASSIFICATIONS:

Helicopter Co-Pilot

Helicopter Communications Engineer

**TEST BORING PRELIMINARY TO CONSTRUCTION-SOUTH/WEST**    **Rates Expiration Date : 03/31/2020**

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 4:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must run for 5 consecutive workdays.
- When 2 shifts are worked, the second shift shall receive an additional 10% of the regular rate inclusive of benefits, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the regular rate inclusive of benefits, per hour. The third shift shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the regular rate inclusive of benefits, per hour.
- When such hours are mandated by the project owner, a shift that starts between 8:00 PM and midnight and ends by 6:00 AM Saturday, or that starts after 8:00 PM on Sunday, provided there are consecutive hours of work within the shift, shall receive an additional 15% of the regular rate, inclusive of benefits.
- On Highway, Road, Street, and Sewer projects irregular shifts starting between 5:00 PM and 12:00 AM may be worked Monday through Friday, and shall receive an additional 15% of the regular rate, inclusive of benefits. When working with other trades that receive a higher irregular shift rate, the Operating Engineer shall also receive the higher irregular shift 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 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.
- 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 Veteran's Day.

On hazardous waste removal work or asbestos removal work, on a state or federally designated hazardous waste site, where the operating engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin, and eye protection, the operating engineer shall receive an additional 20% of the hourly wage, per hour.

Effective Dates:

	07/01/2017		01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
50.57	30.70	81.27	82.27	83.62	84.62	86.97

CLASSIFICATIONS:

Driller

Effective Dates:

	07/01/2017		01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
43.73	30.70	74.43	75.43	76.78	77.78	80.13

CLASSIFICATIONS:

Driller's Helper

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FREE AIR TUNNEL JOBS    Rates Expiration Date : 08/31/2017

{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 \$2.50 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:**

03/01/2017

Rate	Fringe	Total
41.50	29.03	70.53

**CLASSIFICATIONS:**

Walking Boss & Superintendent

**Effective Dates:**

03/01/2017

Rate	Fringe	Total
41.20	29.03	70.23

**CLASSIFICATIONS:**

Heading Foreman, Shaft Foreman, Rod Foreman, Electrician Foreman, Rigging Foreman

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**FREE AIR TUNNEL JOBS** Rates Expiration Date : 08/31/2017

**Effective Dates:**

03/01/2017

Rate	Fringe	Total
40.70	29.03	69.73

**CLASSIFICATIONS:**

Iron Foreman, Caulking Foreman, Form Foreman, Cement Finishing Foreman, Concrete Foreman, Track Foreman, Cleanup Foreman, Grout Foreman

**Effective Dates:**

03/01/2017

Rate	Fringe	Total
43.20	29.03	72.23

**CLASSIFICATIONS:**

Blaster

**Effective Dates:**

03/01/2017

Rate	Fringe	Total
40.15	29.03	69.18

**CLASSIFICATIONS:**

Top Labor Foreman

**Effective Dates:**

03/01/2017

Rate	Fringe	Total
39.80	29.03	68.83

**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:**

03/01/2017

Rate	Fringe	Total
39.65	29.03	68.68

**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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FREE AIR TUNNEL JOBS    Rates Expiration Date : 08/31/2017

Effective Dates:

03/01/2017

Rate	Fringe	Total
39.15	29.03	68.18

**CLASSIFICATIONS:**

All Others (including Powder Watchman, Change House Attendant, Top Laborer)

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DRILL FOR GROUND WATER SUPPLY    Rates Expiration Date : 03/31/2020

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:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
49.32	30.70	80.02	81.02	82.37	83.37	85.72

**CLASSIFICATIONS:**

Driller

**Effective Dates:**

07/01/2017			01/01/2018	07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total	Total
42.48	30.70	73.18	74.18	75.53	76.53	78.88

**CLASSIFICATIONS:**

Driller's Helper

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

**OPERATING ENGINEERS MARINE-DREDGING**    **Rates Expiration Date : 09/30/2018**

NOTE: 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:**

10/01/2016			10/01/2017
Rate	Fringe	Total	Total
37.25	13.78	51.03	52.51

**CLASSIFICATIONS:**

Lead Dredgerman, Operator, Leverman

Licensed Tug Operator (over 1000 HP)

**Effective Dates:**

10/01/2016			10/01/2017
Rate	Fringe	Total	Total
32.22	13.38	45.60	46.95

**CLASSIFICATIONS:**

Derrick Operator, Spider/Spill Barge Operator

Engineer, Electrician, Chief Welder, Chief Mate

Fill Placer, Operator II

Licensed Boat Operator

Maintenance Engineer

**Effective Dates:**

10/01/2016			10/01/2017
Rate	Fringe	Total	Total
30.33	13.23	43.56	44.86

**CLASSIFICATIONS:**

Certified Welder



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OPERATING ENGINEERS MARINE-DREDGING      Rates Expiration Date : 09/30/2018

Effective Dates:

	10/01/2016		10/01/2017	
Rate	Fringe	Total	Total	
29.50	12.86	42.36	43.64	

CLASSIFICATIONS:

Mate, Drag Barge Operator, Steward, Assistant Fill Placer

Welder

Effective Dates:

	10/01/2016		10/01/2017	
Rate	Fringe	Total	Total	
28.54	12.78	41.32	42.58	

CLASSIFICATIONS:

Boat Operator

Effective Dates:

	10/01/2016		10/01/2017	
Rate	Fringe	Total	Total	
23.71	12.10	35.81	36.92	

CLASSIFICATIONS:

Shoreman, Deckhand, Rodman, Scowman

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MICROSURFACING/SLURRY SEAL    Rates Expiration Date : 02/28/2018

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

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PREVAILING WAGE RATE DETERMINATION

MICROSURFACING/SLURRY SEAL      Rates Expiration Date : 02/28/2018

Effective Dates:

03/01/2017

Rate	Fringe	Total
30.30	21.27	51.57

CLASSIFICATIONS:

Cleaner, Taper

**ASPHALT LABORERS - SOUTH**    Rates Expiration Date : 08/31/2017

"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 \$2.50 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:**

**03/01/2017**

Rate	Fringe	Total
41.00	29.03	70.03

**CLASSIFICATIONS:**

Paving Foreman

**Effective Dates:**

**03/01/2017**

Rate	Fringe	Total
39.55	29.03	68.58

**CLASSIFICATIONS:**

Head Raker

**Effective Dates:**

**03/01/2017**

Rate	Fringe	Total
39.40	29.03	68.43

**CLASSIFICATIONS:**

Raker, Screedman, Luteman

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

ASPHALT LABORERS - SOUTH    Rates Expiration Date : 08/31/2017

Effective Dates:

03/01/2017

Rate	Fringe	Total
39.15	29.03	68.18

CLASSIFICATIONS:

Tampers, Smoothers, Kettlemen,  
Painters, Shovelers, Roller Boys

Effective Dates:

03/01/2017

Rate	Fringe	Total
39.25	29.03	68.28

CLASSIFICATIONS:

Milling Controller

Effective Dates:

03/01/2017

Rate	Fringe	Total
39.45	29.03	68.48

CLASSIFICATIONS:

Traffic Control Coordinator

TERRITORY  
ENTIRE STATE

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

TEST BORING PRELIMINARY TO CONSTRUCTION-NORTH    Rates Expiration Date : 10/16/2018

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 \$1.00 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 10% 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:

11/01/2016			10/17/2017
Rate	Fringe	Total	Total
30.96	24.76	55.72	57.17

CLASSIFICATIONS:

Helper (4th year helper)

Effective Dates:

11/01/2016			10/17/2017
Rate	Fringe	Total	Total
38.82	24.76	63.58	65.24

CLASSIFICATIONS:

Driller

Effective Dates:

11/01/2016			10/17/2017
Rate	Fringe	Total	Total
44.64	24.76	69.40	71.28

CLASSIFICATIONS:

Foreman

TERRITORY  
ENTIRE STATE

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

**HEAVY & GENERAL LABORERS - NORTH** Rates Expiration Date : 08/31/2017

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 \$2.50 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:**

**03/01/2017**

Rate	Fringe	Total
38.75	29.03	67.78

**CLASSIFICATIONS:**

**"D" Rate:**

basic, landscape, asphalt, slurry seal, or railroad track laborer; utility meter installer; traffic director/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:**

**03/01/2017**

Rate	Fringe	Total
39.45	29.03	68.48

**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

TERRITORY  
ENTIRE STATE

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

**HEAVY & GENERAL LABORERS - NORTH**     Rates Expiration Date : 08/31/2017

**Effective Dates:**

03/01/2017

Rate	Fringe	Total
39.70	29.03	68.73

**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:**

03/01/2017

Rate	Fringe	Total
43.25	29.03	72.28

**CLASSIFICATIONS:**

"A" Rate:

blaster

**Effective Dates:**

03/01/2017

Rate	Fringe	Total
41.00	29.03	70.03

**CLASSIFICATIONS:**

"FOREMAN" Rate:

labor foreman, asphalt foreman, drill foreman, pipe foreman, grade foreman, finisher foreman, concrete foreman

**Effective Dates:**

03/01/2017

Rate	Fringe	Total
42.00	29.03	71.03

**CLASSIFICATIONS:**

"GENERAL FOREMAN" Rate



TERRITORY

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

ENTIRE STATE

PREVAILING WAGE RATE DETERMINATION

HEAVY & GENERAL LABORERS - SOUTH Rates Expiration Date : 08/31/2017

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 \$2.50 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:

03/01/2017

Rate	Fringe	Total
38.75	29.03	67.78

CLASSIFICATIONS:

basic, landscape, or railroad track laborer; utility meter installer; traffic director/flagman; salamander tender; pitman; dumpman; rakers or tampers on cold patch work; wrappers or coaters of pipe; waterproofers

tree cutter, timberman

Effective Dates:

03/01/2017

Rate	Fringe	Total
39.45	29.03	68.48

CLASSIFICATIONS:

wagon drill or drill master helper; powder carrier; magazine tender; signal man

TERRITORY  
ENTIRE STATE

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

HEAVY & GENERAL LABORERS - SOUTH      Rates Expiration Date : 08/31/2017

Effective Dates:

03/01/2017

Rate	Fringe	Total
39.45	29.03	68.48

**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:

03/01/2017

Rate	Fringe	Total
39.45	29.03	68.48

**CLASSIFICATIONS:**

wagon or directional drill operator; drill master

Effective Dates:

03/01/2017

Rate	Fringe	Total
43.25	29.03	72.28

**CLASSIFICATIONS:**

blaster

Effective Dates:

03/01/2017

Rate	Fringe	Total
41.00	29.03	70.03

**CLASSIFICATIONS:**

labor foreman, drill foreman, pipe foreman, grade foreman, finisher foreman, concrete foreman

Effective Dates:

03/01/2017

Rate	Fringe	Total
42.00	29.03	71.03

**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 : 08/31/2017

Effective Dates:

03/01/2017

Rate	Fringe	Total
39.70	29.03	68.73

**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 : 06/03/2018

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: \$42.50; Pipeline Journeyman Welder: \$102.50; and Pipeline Helper: \$42.50. 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:

06/05/2017

Rate	Fringe	Total
54.58	28.97	83.55

CLASSIFICATIONS:

Pipeline Journeyman Welder

TERRITORY  
ENTIRE STATE

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

PIPELINE - MAINLINE TRANSMISSION      Rates Expiration Date : 06/03/2018

Effective Dates:

06/05/2017

Rate	Fringe	Total
54.58	28.97	83.55

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

06/05/2017

Rate	Fringe	Total
33.27	19.97	53.24

CLASSIFICATIONS:

Pipeline Helper

TERRITORY  
ENTIRE STATE

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

PIPELINE - GAS DISTRIBUTION    Rates Expiration Date : 10/31/2017

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:**

**11/01/2016**

Rate	Fringe	Total
57.58	21.55	79.13

**CLASSIFICATIONS:**

Pipeline Journeyman Welder

**Effective Dates:**

**11/01/2016**

Rate	Fringe	Total
57.58	21.55	79.13

**CLASSIFICATIONS:**

Pipeline Journeyman

**Effective Dates:**

**11/01/2016**

Rate	Fringe	Total
37.16	15.74	52.90

**CLASSIFICATIONS:**

Pipeline Helper

TERRITORY  
ENTIRE STATE

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

ASPHALT LABORERS- NORTH    Rates Expiration Date : 08/31/2017

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 \$2.50 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:

03/01/2017

Rate	Fringe	Total
41.00	29.03	70.03

CLASSIFICATIONS:

Asphalt Foreman

Effective Dates:

03/01/2017

Rate	Fringe	Total
39.70	29.03	68.73

CLASSIFICATIONS:

Asphalt Screedman

Effective Dates:

03/01/2017

Rate	Fringe	Total
39.45	29.03	68.48

CLASSIFICATIONS:

Asphalt Raker or Lute Man

TERRITORY  
ENTIRE STATE

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

ASPHALT LABORERS- NORTH     Rates Expiration Date : 08/31/2017

**Effective Dates:**

03/01/2017

Rate	Fringe	Total
38.75	29.03	67.78

**CLASSIFICATIONS:**

Asphalt Laborer



TERRITORY  
ENTIRE STATE

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

ELECTRICIAN- UTILITY WORK (NORTH)    Rates Expiration Date : 12/03/2017

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 7:00 AM and 6:30 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:**

12/04/2016

Rate	Fringe	Total
52.26	35.01	87.27

**CLASSIFICATIONS:**

Chief Lineman

**Effective Dates:**

12/04/2016

Rate	Fringe	Total
49.31	33.03	82.34

**CLASSIFICATIONS:**

Journeyman Lineman

TERRITORY  
ENTIRE STATE

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

ELECTRICIAN- UTILITY WORK (NORTH)      Rates Expiration Date : 12/03/2017

**Effective Dates:**

12/04/2016

Rate	Fringe	Total
49.31	33.03	82.34

**CLASSIFICATIONS:**

Special License Operator

**Effective Dates:**

12/04/2016

Rate	Fringe	Total
48.81	32.70	81.51

**CLASSIFICATIONS:**

Transit Man

**Effective Dates:**

12/04/2016

Rate	Fringe	Total
47.33	31.71	79.04

**CLASSIFICATIONS:**

Line Equipment Operator

**Effective Dates:**

12/04/2016

Rate	Fringe	Total
41.42	27.75	69.17

**CLASSIFICATIONS:**

Dynamite Man

**Effective Dates:**

12/04/2016

Rate	Fringe	Total
58.18	38.98	97.16

**CLASSIFICATIONS:**

General Foreman

**Effective Dates:**

12/04/2016

Rate	Fringe	Total
56.70	37.98	94.68

**CLASSIFICATIONS:**

Assistant General Foreman

TERRITORY  
ENTIRE STATE

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

ELECTRICIAN- UTILITY WORK (NORTH)    Rates Expiration Date : 12/03/2017

Effective Dates:

12/04/2016

Rate	Fringe	Total
55.22	36.99	92.21

CLASSIFICATIONS:

Line Foreman

Effective Dates:

12/04/2016

Rate	Fringe	Total
39.94	26.75	66.69

CLASSIFICATIONS:

Straight Light Mechanical Leader

Effective Dates:

12/04/2016

Rate	Fringe	Total
37.97	25.43	63.40

CLASSIFICATIONS:

Groundman Winch Operator

Effective Dates:

12/04/2016

Rate	Fringe	Total
37.97	25.43	63.40

CLASSIFICATIONS:

Groundman Truck Operator

Effective Dates:

12/04/2016

Rate	Fringe	Total
37.47	25.10	62.57

CLASSIFICATIONS:

Straight Light Mechanic

Effective Dates:

12/04/2016

Rate	Fringe	Total
37.47	25.10	62.57

CLASSIFICATIONS:

Line Equipment Mechanic

TERRITORY  
ENTIRE STATE

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

ELECTRICIAN- UTILITY WORK (NORTH)    Rates Expiration Date : 12/03/2017

Effective Dates:

12/04/2016

Rate	Fringe	Total
32.05	21.47	53.52

**CLASSIFICATIONS:**

Groundman 2nd Year

Effective Dates:

12/04/2016

Rate	Fringe	Total
29.58	19.81	49.39

**CLASSIFICATIONS:**

Groundman 1st Year

Effective Dates:

12/04/2016

Rate	Fringe	Total
48.81	32.70	81.51

**CLASSIFICATIONS:**

Line Equipment Foreman

TERRITORY  
ENTIRE STATE

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

ELECTRICIAN- UTILITY WORK (SOUTH)    Rates Expiration Date : 12/02/2017

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:**

12/04/2016

Rate	Fringe	Total
58.38	45.19	103.57

**CLASSIFICATIONS:**

General Foreman

TERRITORY  
ENTIRE STATE

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

ELECTRICIAN- UTILITY WORK (SOUTH)     Rates Expiration Date : 12/02/2017

Effective Dates:

12/04/2016

Rate	Fringe	Total
52.00	41.37	93.37

**CLASSIFICATIONS:**

Foreman

Effective Dates:

12/04/2016

Rate	Fringe	Total
49.26	39.74	89.00

**CLASSIFICATIONS:**

Small Job Foreman

Effective Dates:

12/04/2016

Rate	Fringe	Total
45.61	37.54	83.15

**CLASSIFICATIONS:**

Heavy Equipment Operator

Effective Dates:

12/04/2016

Rate	Fringe	Total
45.61	37.54	83.15

**CLASSIFICATIONS:**

Cable Splicer

Effective Dates:

12/04/2016

Rate	Fringe	Total
45.61	37.54	83.15

**CLASSIFICATIONS:**

Journeyman Lineman

Effective Dates:

12/04/2016

Rate	Fringe	Total
45.61	37.54	83.15

**CLASSIFICATIONS:**

Journeyman Welder

TERRITORY  
ENTIRE STATE

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

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date : 12/02/2017

Effective Dates:

12/04/2016

Rate	Fringe	Total
45.61	37.54	83.15

**CLASSIFICATIONS:**

Journeyman Painter

Effective Dates:

12/04/2016

Rate	Fringe	Total
36.49	32.08	68.57

**CLASSIFICATIONS:**

Light Equipment Operator

Effective Dates:

12/04/2016

Rate	Fringe	Total
31.93	29.37	61.30

**CLASSIFICATIONS:**

Groundman Truck Driver

Effective Dates:

12/04/2016

Rate	Fringe	Total
29.65	27.99	57.64

**CLASSIFICATIONS:**

Groundman 3rd Year

Effective Dates:

12/04/2016

Rate	Fringe	Total
27.37	26.66	54.03

**CLASSIFICATIONS:**

Groundman 2nd Year

Effective Dates:

12/04/2016

Rate	Fringe	Total
25.09	25.29	50.38

**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 : 12/02/2017

Effective Dates:

12/04/2016

Rate	Fringe	Total
20.07	22.27	42.34

**CLASSIFICATIONS:**

Flagman



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 : 08/31/2017

**\*\*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 \$2.50 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:**

**03/01/2017**

Rate	Fringe	Total
62.25	29.03	91.28

**CLASSIFICATIONS:**

Walking Boss & Superintendent

**Effective Dates:**

**03/01/2017**

Rate	Fringe	Total
61.80	29.03	90.83

**CLASSIFICATIONS:**

Heading Foreman, Shaft Foreman, Rod Foreman, Electrical Foreman, Rigging Foreman

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 : 08/31/2017

Effective Dates:

03/01/2017

Rate	Fringe	Total
61.05	29.03	90.08

CLASSIFICATIONS:

Iron Foreman, Caulking Foreman, Form Foreman, Cement Finishing Foreman, Concrete Foreman, Track Foreman, Clean-up Foreman, Grout Foreman

Effective Dates:

03/01/2017

Rate	Fringe	Total
64.80	29.03	93.83

CLASSIFICATIONS:

Blaster

Effective Dates:

03/01/2017

Rate	Fringe	Total
60.23	29.03	89.26

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

03/01/2017

Rate	Fringe	Total
59.70	29.03	88.73

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:

03/01/2017

Rate	Fringe	Total
59.48	29.03	88.51

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 : 08/31/2017

Effective Dates:

03/01/2017

Rate	Fringe	Total
58.73	29.03	87.76

**CLASSIFICATIONS:**

All others (including Powder Watchman, Change House Attendant, Top Laborer, Job Steward)





## State of New Jersey

DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT  
PO BOX 389  
TRENTON, NEW JERSEY 08625-0389

July 20, 2017

### LISTED CONTRACTORS AND SUBCONTRACTORS

#### PURSUANT TO N.J.S.A 34:11-56.37 AND 34:11-56.38 OF THE PREVAILING WAGE ACT

NO PUBLIC WORKS CONTRACT MAY BE AWARDED TO ANY OF THE FOLLOWING CONTRACTORS AND SUBCONTRACTORS OR TO ANY FIRM, CORPORATION OR PARTNERSHIP IN WHICH THEY HAVE AN INTEREST UNTIL THE EXPIRATION DATE GIVEN.

<u>CONTRACTORS AND SUBCONTRACTORS</u>	<u>ADDRESS</u>	<u>EXPIRATION DATE</u>
Jersey Heavy Drywall Ruben Gonzalez, Owner	107 Jefferson Street, Passaic, NJ 07055 107 Jefferson Street, Passaic, NJ 07055	07/04/2020
360 Golf, LLC Michael Lenec, Partner Devin Lemere, Partner	300 Mamaroneck Avenue, #733, White Plains, NY 10605 300 Mamaroneck Ave, White Plains, NJ 10605 300 Mamaroneck Ave, # 133, White Plains, NY 10605	06/29/2018
A.V. Construction, Inc. Michael Verduci, President	12 Verduci Dr., Newtown, PA 18940 12 Verduci Drive, Newtown, PA 18940	05/25/2018
Ackerson Contracting Inc. Denise Ackerson, President	182 Van Dyke Road, Hopewell, NJ 08525 182 Van Dyke Road, Hopewell, NJ 08525	03/05/2020
Advantage Contracting & Entertainment Services Inc John H. Madara, President	319 Terrace Street, Rahway, NJ 07065 319 Terrace St, Rahway, NJ 07065	05/07/2018
Advantage Sport USA, Inc. Maurice Guariglia, Owner / Officer	1 Tigan Street, Winooski, VT 05404 494 North Barbor Road, Colchester, VT 05446	01/19/2019
All Jersey Fence Co. Charles Viola, President Agostino Ducato, Vice-President	10 Route 46 West, Clifton, NJ 07011 266 Columbus Avenue, Hasbrouck Heights, NJ 07604 223 Spring Valley Road, Paramus, NJ 07652	09/14/2019
American Eagle Contractor, Inc. Agustin Zuniga, President	420 Broadway, Long Branch, NJ 07740 420 Broadway, Long Branch, NJ 07740	08/11/2017
Anchor Marine of Toms River Lawarence Koos, Owner	1991 Rte-9, Toms River, NJ 08755 1391 White Oak Botton Rd, Tom River, NJ 08755	12/18/2019
Antiveros Construction, Inc. Donnie Antiveros, President Olga Conteras, Vice-President	677 Old Highway 64, Etowah, NC 28729 677 Old Highway 64, Etowah, NC 28729 677 Old Highway 64, Etowah, NC 28729	10/19/2018
Apex Tower Services, Inc. Richard Pluese, Vice-President	245 Sharp Road, Marlton, NJ 08053 66 E Cedar Avenue, Marlton, NJ 08053	02/09/2019

<u>CONTRACTORS AND SUBCONTRACTORS</u>	<u>ADDRESS</u>	<u>EXPIRATION DATE</u>
<b>Area Fuel</b>	207 Butler Ave, Staten Island, NY 10307	02/17/2018
Paul Grillo, Owner	207 Bulter Ave, St. Island, NY	
Paul Grillo, Owner	207 Butlerr Ave, Staten Island, NY 10307	
<b>Arete Development Inc.</b>	<b>20 Industrial Road, Fairfield, NJ 07004</b>	<b>01/04/2019</b>
<b>Arete Development Inc.</b>		
Justin Ettore, Vice-President	52 Brass Castle Road, Washington, NJ 07882	
John Ettore, Owner	1453 Tooz Place, South Plainfield, NJ 07080	
Matthew Ettore, Vice-President	8 Brookside Drive, Warren, NJ 07059	
Jonathan Ettore, President	7 Craig Road, Readington, NJ 08853	
<b>Aztech Management, Inc.</b>	<b>86 Christopher Street, Montclair, NJ 07042</b>	<b>11/17/2019</b>
<b>Aztech Management, Inc.</b>		
Constantine Vivian, President	86 Christopher Street, Montclair, NJ 07042	
<b>Barzzini Construction</b>	<b>65 Fern St, Browns Mills, NJ 08015</b>	<b>09/15/2017</b>
John Sorrentino, Owner	65 Fern St, Browns Mills, NJ 08015	
<b>Bogert Millwork Company, Inc.</b>	<b>105 Johnson Ave., Hackensack, NJ 07601</b>	<b>06/08/2019</b>
Anthony Yaniero, Vice-President	848 Bogert Road, River Edge, NJ 07661	
Susan Yaniero, Owner	848 Bogert Road, River Edge, NJ 07661	
<b>Brian Patterson Mechanical Contracting, Inc.</b>	<b>5 Cindy Lane, Ocean, NJ 07712</b>	<b>03/29/2018</b>
Brian Patterson, President	11 Arlene Drive, West Long Branch, NJ 07764	
<b>Brothers Landscaping</b>	<b>169 Robertsville Rd., Freehold, NJ 07728</b>	<b>01/05/2018</b>
<b>J.H. Brothers Inc.</b>		
Brad J. Moini, President	101 Buttonwood Lane, Freehold, NJ 07728	
<b>Build Rite LLC</b>	<b>16 Darlington Drive, Wayne, NJ 07470</b>	<b>01/17/2020</b>
Louis Pacelli, Manager	16 Darlington Drive, Wayne, NJ 07470	
<b>C &amp; E Contracting, Inc.</b>	<b>PO Box 690, Boonton, NJ 07005</b>	<b>12/15/2018</b>
Donald Fleming, President	340 Reservoir Road, Boonton, NJ 07005	
<b>CAM Contractors Inc.</b>	<b>179-15 Route 46 West, Suite 135, Rockaway, NJ 07866</b>	<b>12/06/2019</b>
Michelle Gamache-Caravella, President	179-15 Route 46, Suite 135, Rockaway, NJ 07866	
Joseph Caravella, Manager	179-15 Route 46, Rockaway, NJ 07866	
<b>Cam Flooring Installations LLC</b>	<b>26 Washington Street, Long Branch, NJ 07718</b>	<b>08/31/2019</b>
Jose Fernandes Da Silva, Owner	26 Washington St., Long Branch, NJ 07718	
<b>Camelot Roofing, LLC</b>	<b>1455 St. George Ave., Roselle, NJ 07203</b>	<b>02/17/2018</b>
Juan J. Barquero, Owner	533 South 5th Street, Elizabeth, NJ 07206	
<b>CertaPro Painters of South Jersey LLC</b>	<b>910 Cedar Street, Millville, NJ 08332</b>	<b>02/03/2019</b>
Mark Kahn, Owner	910 Cedar Street, Millville, NJ 08332	
<b>Chanez Landscaping, LLC</b>	<b>PO Box 5646, New Brunswick, NJ 08903</b>	<b>09/23/2017</b>
Noe Chanez, Principal	55 Miller Ave., Somerset, NJ 08873	
<b>Cityline Contracting Inc.</b>	<b>556 Humboldt Street, Brooklyn, NY 11222</b>	<b>08/03/2017</b>
Dorothy Dobiecka, President	556 Humboldt Street, Brooklyn, NY 11222	
Andrzej Citak, Vice-President	556 Humboldt St, Brooklyn, NY 11222	
<b>CJC Builders Corp.</b>	<b>220 Mount Pleasant Ave., Newark, NJ 07104</b>	<b>01/07/2019</b>
Curillo Guaman, Owner	197 Broad Street, Newark, NJ 07104	
<b>Cobra Communications &amp; Installations, LLC</b>	<b>26 Spencer Place, Garfield, NJ 07026</b>	<b>12/10/2017</b>
Giovanny Bustos, Owner	26 Spencer Place, Garfield, NJ 07026	
<b>Conex Construction Corp.</b>	<b>265 Wilson Avenue, Kearny, NJ 07032</b>	<b>01/19/2019</b>
Armando Piedade, President	265 Wilson Avenue, Kearny, NJ 07032	

**CONTRACTORS AND SUBCONTRACTORS****ADDRESS****EXPIRATION DATE**

<b>Confortini Plumbing &amp; Heating, LLC</b> Andrew Confortini, Vice-President Anthony Confortini, Owner	491 West County Drive, Somerville, NJ 08876 491 West County Drive, Somerville, NJ 08876 41 Bunnvale Road, Clifton, NJ 07830	07/05/2019
<b>Coons Construction, LLC</b> William Coons, Owner	23178 Summer View Circle, Three Springs, PA 17264 23178 Summer View Circle, Three Springs, PA 17264	04/06/2018
<b>Cougar Power and Electric, LLC</b> Kevin F. Mandel, Owner	126 Fountain Avenue, Piscataway, NJ 08854 186 Sunshine Drive, Piscataway, NJ 08854	01/05/2020
<b>CPS Mechanical Contractors, Inc.</b> Margaret Sherman, President	203 Woods Ave, Bergenfield, NJ 07621 203 Woods Avenue, Bergenfield, NJ 07621	12/15/2017
<b>CRC Concrete Raising of South Jersey, Inc.</b> Theresa Frajdenberg, President	110 South Harding Highway, Landisville, NJ 08326 110 South Harding Highway, Landisville, NJ 08326	02/01/2019
<b>Cunhas Construction Inc.</b> Nuno Cunha, Owner	35 Carmen Ct, Floor-1, Newark, NJ 07105 35 Carmen Ct., Newark, NJ 07105	10/22/2017
<b>D &amp; S Oil Co., Inc.</b> Dean V. Severino, Sr., President	58 Borough Street, Rutherford, NJ 07070 136 Hackett Place, Rutherford, NJ 07070	07/17/2020
<b>Dane DeForest Demolition, Inc.</b> Dane DeForest, President	1508 Beaver Dam Road, Point Pleasant, NJ 08742 2406 Herbertsville Road, Point Pleasant, NJ 08742	02/15/2019
<b>DAS Industrial, LLC</b> <b>DAS Industrial Limited Liability Company</b> Vincent Manganiello, Managing Member	41 Pine Street, Rockaway, NJ 07866 2 Perona Road, Andover, NJ 07821	01/08/2020
<b>DCI Signs &amp; Awnings Inc.</b> Danny Castillo, President	110 Riverside Avenue, Newark, NJ 07104 645 Bancroft Road, Brick, NJ 08724	04/10/2020
<b>DG Construction &amp; Renovations LLC</b> Dean Gallo, Owner Harry Gallo, Secretary	245 Emanuel St., Trenton, NJ 08610 245 Emanuel Street, Trenton, NJ 08610 245 Emanuel Street, Trenton, NJ 08610	04/04/2019
<b>DM Fernandes Contracts LLC</b> Hugo Fernandes, Owner	551 North Broad St, Elizabeth, NJ 07208 90 Willow Street, Carteret, NJ 07008	01/27/2018
<b>DVS Trucking Co., Inc.</b> <b>Dean V. Severino Sr.</b> Dean V. Severino Sr., President Dean Severino, Jr., Vice-President	58 Borough Street, Rutherford, NJ 07070 136 Hackett Place, Rutherford, NJ 07070 136 Hackett Place, Rutherford, NJ 07070	07/17/2020
<b>E &amp; S Enterprises, LLC</b> Helen Henriquez, Owner	P. O. Box 2050, Vineland, NJ 08360 101 South Orchard Road, Vineland, NJ 08360	01/27/2019
<b>East Coast Touch Enterprises LLC</b> Frank Loureier, Vice-President Nelson DeOliveira, President	152 Jackson St., Newark, NJ 07105 152 Jefferson St., Newark, NJ 07105 276 Highland Ave, Kearney, NJ 07032	08/11/2017
<b>Eddy Drywall, LLC</b> Eddy Rodriguez, Member	1100 W. 7th St., Apt. A9, Plainfield, NJ 07060 1100 W. 7th. St., Apt. A9, Plainfield, NJ 07063	05/13/2018
<b>Elite Demolition, LLC</b> Stephen DiFilippi, Owner	120 Springbrook Trail, Sparta, NJ 07871 120 Springbrook Trail, Sparta, NJ 07871	04/10/2020
<b>Elite Terrazzo Flooring, Inc.</b> Christopher Picinic, Owner	185 Fifth Ave., Paterson, NJ 07524 164 President Blvd, Washington Township, NJ 07676	10/18/2019
<b>Everest Masonry Construction, Inc.</b> Rafael Ramos, President	163 E Main Street, Suite 311, Little Falls, NJ 07424 120 Cantello Street, Union City, NJ 07087	11/08/2018
<b>Everest Masonry Constructors, Inc.</b> Mark Rodrigues, President	1 Orient Way, Suite 226, Rutherford, NJ 07070 523 Hamilton Avenue, Kingston, PA 18704	11/08/2018

<u>CONTRACTORS AND SUBCONTRACTORS</u>	<u>ADDRESS</u>	<u>EXPIRATION DATE</u>
<b>Felipe Villagomez</b> owner Felipe Villagomez, Owner	160 Lincoln Street, Bridgeton, NJ 08302 160 Lincoln Street, Bridgeton, NJ 08302	03/08/2019
<b>Fittin Construction, LLC</b> Sheree Severini-Fittin, Member Thomas Fittin, Owner / Officer	2243 Edgar Rd, Point Pleasant Beach, NJ 08742 2243 Edgar Rd., Point Pleasant Beach, NJ 08742 2243 Edgar Rd, Point Pleasant Beach, NJ 08742	02/23/2019
<b>G.F.I. Siteworks, Inc.</b> <b>G.F.I. Siteworks, Inc.</b> James DiLorenzo, Vice-President Salvatore A Casella III, President	P.O. Box 296, Clarksboro, NJ 08020 440 Mantua Avenue, Paulsboro, NJ 08066 362 Friendship Road, Clarksboro, NJ 08020	02/02/2019
<b>Galindo Const. LLC</b> Gabino Galindo, Owner	1025 E. 23rd St. #1, Paterson, NJ 07513 1025 E. 23rd St. #1, Paterson, NJ 07513	08/06/2018
<b>Gen II Contracting Co. Inc.</b> Jaimie-Lyn Knight, President	395 A Millstone Road, Clarksburg, NJ 08510 395 Millstone Road, Clarksburg, NJ 08510	11/20/2019
<b>Griffin Sign, Inc.</b> Michelle Angerame, President	464 North Randolph Avenue, Cinnaminson, NJ 08077 12 Pendleton Court, Medford, NJ 08055	03/13/2019
<b>GST Power Service Group Inc.</b> Lauchland Roberts, President	2801 Remington Street, Suite #3, Fort Collins, CO 80525 2801 Remington Street, Suite 3, Fort Collins, CO 80526	05/03/2018
<b>Guiliano Environmental, LLC</b> Christopher Guiliano, Managing Member Robert Fix, Managing Member	P. O. Box 1124, Sayreville, NJ 08871 9 Cobblestone Ct, Holmdel, NJ 07733 338 Florence Road, Middletown, NJ 07748	07/17/2020
<b>Harold Arenberg Inc.</b> Jeffrey Arenberg, President Daniel Arenberg, Vice-President	1711 Route 9 North, Swainton, NJ 08210 741 Dias Creek Road, Cape May Court House, NJ 08210 1711 Route 9 North, Swainton, NJ 08210	12/29/2019
<b>Heritage Hills Estates</b> Frank Carpine, Owner	3730 S. Delsea Dr, Vineland, NJ 08360 100 Liberty Dr, Millville, NJ 08332	01/03/2019
<b>HFC Painting</b> Hugo Canabe, CEO	696 Elm Street, Kearny, NJ 07032 696 Elm St, Kearny, NJ 07032	03/17/2018
<b>HFM Labor Ready LLC</b> <b>HFM Labor Ready LLC</b> Keith Ludwig, Member	459 Rt 38 West, Maple Shade, NJ 08052 459 Rt 38 West, Maple Shade, NJ 08052	01/05/2018
<b>High Mountain Construction, Inc.</b>	296 Oakwood Avenue, North Haledon, NJ 07508	04/09/2020
<b>Highway Safety Systems Inc.</b> William J. Doyle, President	200 Pine Road, Hammonton, NJ 08037 200 Pine Rd., Hammonton, NJ 08037	12/16/2017
<b>Install It All. LLC</b> Laurence Koos, Owner	575 Prospect Street, Unit 261 B, Lakewood, NJ 08701 1391 White Oak Bottom Rd., Toms River, NJ 08755	12/18/2018
<b>Interstate Home Service Inc.</b> <b>Interstate Home Service Inc.</b> Maurice Rolando, Owner	165 Heights Avenue, Fair Lawn, NJ 07410 165 Height's Ave., Fair Lawn, NJ 07410	08/16/2018
<b>J &amp; B Plumbing LLC</b> Joseph Battista, Owner	644 Cross Street, Lakewood, NJ 08701 11 Hummingbird Way, Jackson, NJ 08527	05/03/2018
<b>J G Roofing, LLC</b> Manuel Chaguan, Owner	85 Prospect Ave. Apt.1, Irvington, NJ 07111 85 Prospect Ave., Irvington, NJ 07111	04/25/2019
<b>J&amp;D Plumbing &amp; Heating Inc.</b> John J. Benedetti Jr., President	193 Natrona Avenue, Mercerville, NJ 08619 193 Natrona Avenue, Mercerville, NJ 08619	11/01/2018
<b>J. MOTA Construction, LLC</b>	1016 Highway 33, Freehold, NJ 07728	11/30/2019



**CONTRACTORS AND SUBCONTRACTORS****ADDRESS****EXPIRATION DATE**

<b>J.C. Maintenance &amp; Repair</b> Emanuel Cucco, Owner	6725 13th Avenue, Brooklyn, NY 11219 1435 71st Street, Brooklyn, NY 11228	03/14/2019
<b>J.D.S Electric, Inc.</b> Joe DeSalvo, Jr., Owner	149 Montross Ave., Rutherford, NJ 07070 149 Montross Ave., Rutherford, NJ 07070	01/06/2018
<b>Jack Mack Commercial Roofing, Inc.</b> Gregorio Soto, Owner	768 Courtlandt St., Perth Amboy, NJ 08861 153 Lewis Street, Perth Amboy, NJ 08861	03/17/2018
<b>Jamali Developers, LLC</b> <b>SUSPENDED PENDING DEBARMENT</b> Hussain Burhanpurwala, Member	238 Fresh Ponds Road, Suite 100, Monroe, NJ 08816 553 Marc Drive, North Brunswick, NJ 08902	SUSPENDED
<b>JB Contracting, Inc.</b> William Allan Crayne, Partner Stanley Kapusta, President	12 Commodore Drive, Lake Hopatcong, NJ 07849 178 Espanong Road, Lake Hopatcong, NJ 07849 12 Commodore Drive, Lake Hopatcong, NJ 07849	05/17/2020
<b>JC Builders</b> James Chaney, President	610 County Meadows Rd., Nicholls, GA 31554 610 County Meadows Rd., Nicholls, GA 31554	08/10/2018
<b>JD Scaffold Inc.</b> Randy Garciga, Owner	13353 NE 17th Ave, North Miami, FL 33181 13353 NE 17th Avenue, North Miami, FL 33181	08/24/2017
<b>Jerzee Container Corp.</b> <b>SUSPENDED PENDING DEBARMENT</b> Jon Whelan, Vice-President Sandra Morizzo, Member Thomas Whelan, President Joseph Filoon Jr, Manager	123 Bartlett Avenue, West Creek, NJ 08092 48 8th Avenue, New York, NY 10014 165 Oak Ave, West Creek, NJ 08092 PO Box 155, Spring Lake, NJ 07762 195 Lakeshore Dr, Manahawkin, NJ 08050	SUSPENDED
<b>Jesus Aparicio-Santos, LLC</b> Jesus Aparicio-Santos, Owner	26 Sunset Street, South River, NJ 08882 26 Sunset Street, South River, NJ 08882	05/14/2020
<b>Joe Antonaccio Electric</b> Joseph Antonaccio, President	167 2nd St., Keyport, NJ 07735 167 2nd St., Keyport, NJ 07735	06/07/2019
<b>Johnson Tree Transplanting LLC</b> Nathan Johnson, Owner Jessica Johnson, Member	1340 LeJack Circle, Forest, VA 24551 5352 Lake Road, Newfield, NJ 08344 5352 Lake Road, Newfield, NJ 08344	07/14/2019
<b>JTG Scaffolding &amp; Hoisting LLC</b> Randy Garciga, Owner	309 West Elizabeth Avenue, Linden, NJ 07036 13353 NE 17th Avenue, Miami, FL 33181	10/22/2017
<b>K &amp; J Drywall Contractor, Inc.</b> Jonny Ayala, Owner	705 Taft Avenue, North Plainfield, NJ 07063 68 Westervelt Avenue, Plainfield, NJ 07060	03/16/2019
<b>K &amp; S Fabrication &amp; Welding, LLC</b> Simon Walcott, Owner	23 North Street, Bergenfield, NJ 07621 43 Fairview Avenue, Bergenfield, NJ 07621	01/12/2018
<b>Kitchen Crafters Plus d/b/a B&amp;B Custom Cabinets</b> Albert Brisebois, Owner	1 Suydam Place, Aberdeen, NJ 07747 1 Suydam Place, Aberdeen, NJ 07747	05/31/2018
<b>Kosakowski Plumbing &amp; Heating Inc.</b> Edward Kosakowski, Owner	27 Center Avenue, Morristown, NJ 07960 27 Center Avenue, Morristown, NJ 07960	07/12/2020
<b>KS Exteriors, LLC</b> <b>KS Exteriors, LLC</b> Kris Brezinska, Owner	650 Ohio Ave., Trenton, NJ 08638 650 Ohio Ave., Trenton, NJ 08638	03/08/2019
<b>Lab Construction Inc.</b> Lee Barnes, President	607 Jackson Road, Williamstown, NJ 08094 607 Jackson Road, Williamstown, NJ 08094	06/14/2020
<b>Latz Construction Services LLC</b> <b>SUSPENDED PENDING DEBARMENT</b> Glen Latz, COO	202 Edison Rd, Barnegat, NJ 08005 70 Adams Street, Norwood, NJ 07648	SUSPENDED

<u>CONTRACTORS AND SUBCONTRACTORS</u>	<u>ADDRESS</u>	<u>EXPIRATION DATE</u>
<b>Lombardi Enterprises, Inc.</b> Alan Lombardi, President Ann Lombardi, Secretary	<b>2901 South Clinton Avenue, South Plainfield, NJ 07080</b> 26 Whispering Way, Berkeley Hights., NJ 07922 26 Whispeiring Way, Berkelely Hights, NJ 07922	<b>12/09/2017</b>
<b>Low Bid, Inc.</b> George McNulty, President	<b>125 East Broadway, Suite 507, Long Beach, NY 11561</b> 125 East Broadway, Suite 507, Long Beach, NY 11561	<b>08/18/2019</b>
<b>M.E. Group, LLC</b> Segundo E. Llivicota, Member Manuel Quito, Member	<b>164 Polk St., Apt. 1, Newark, NJ 07105</b> 164 Polk Street, Apt. #1, Newark, NJ 07105 164 Polk Street, Apt. 1, Newark, NJ 07105	<b>06/29/2018</b>
<b>Ma Na Lu Transportation Corporation</b> Blanca Segarra, President	<b>799 Kearny Avenue, Apt #1, Kearny, NJ 07032</b> 799 Kearny Ave., Apt 1, Kearny, NJ 07032	<b>06/07/2019</b>
<b>Matos Construction, LLC</b> Wagner Matos Nimali Matos, Owner Wagner Matos, Owner	<b>77 Williamson Court, Bridgewater, NJ 08807</b> 77 Williamson Court, Bridgewater, NJ 08807 77 Williamson Court, Bridgewater, NJ 08807	<b>01/12/2020</b>
<b>Mattina Construction LLC</b> Vincent Mattina, Owner	<b>22 Toms River Road, Jackson, NJ 08527</b> 22 Toms River Rd, Jackson, NJ 08527	<b>12/14/2017</b>
<b>McArthur Park, Inc./ dba Bleacherman</b> Louis R. McArthur Jr., Owner / Officer	<b>105 Mill Street, Corinth, NY 12822</b> 13 Luzerne Place, Hadley, NY 12835	<b>11/01/2019</b>
<b>McGarrigle's Carpet, LLC</b> David McGarrigle, Owner	<b>1500 Carlene Street, Langhorne, PA 19047</b> 1500 Carlene St., Langhorne, PA 19047	<b>07/05/2020</b>
<b>Metal Fab Atlantic LLC</b> John Dever, Owner	<b>353 Zion Road, Egg Harbor Township, NJ 08234</b> 1086 Mays Landing Road, Somers Point, NJ 08234	<b>01/21/2018</b>
<b>Metroplex Products Co. Inc.</b> Peter Herring, President	<b>377 Deans Rhode Hall Road, Monroe, NJ 08831</b> 164 South Moetz Drive, Milltown, NJ 08850	<b>01/06/2018</b>
<b>Metropolitan Stone &amp; Tile, LLC</b> Margaret Farina, Owner	<b>102 Richards Ave, Dover, NJ 07801</b> 30 Monsisnor Deluca Plaza, Nutley, NJ 07110	<b>09/23/2018</b>
<b>MG Topflight</b> Ashish Thomas, Owner	<b>6 Spruce Meadows Dr., Monroe, NJ 08831</b> 6 Spruce Meadows Dr., Monroe, NJ 08831	<b>07/28/2017</b>
<b>Midwest Construction, Inc.</b> George Antonas, President	<b>114 Brace Road, Cherry Hill, NJ 08034</b> 114 Brace Road, Cherry Hill, NJ 08034	<b>07/23/2017</b>
<b>MNC General Contracting Inc.</b> Maria Abreu, President	<b>PO Box 503, Oakhurst, NJ 07755</b> 2 Beach Haven Way, Waretown, NJ 08758	<b>01/02/2020</b>
<b>Mullen &amp; Sons Contractors, Inc.</b> John Mullen, Sr, President John Mullen, Jr., Owner	<b>PO Box 773, West Caldwell, NJ 07006</b> 45 Fairfield Place, West Caldwell, NJ 07006 45 Fairfield Place, West Caldwell, NJ 07006	<b>02/28/2019</b>
<b>NDA &amp; Construction, LLC</b> Nester Torres, Owner	<b>161 Thomas St, Unit 1, Newark, NJ 07114</b> 161 Thomas St, Unit 1, Newark, NJ 07114	<b>12/10/2017</b>
<b>New Jersey State Flooring, Inc.</b> Roy C. Apgar, President Cheryl Apgar, Vice-President	<b>109 Greentree Road, Brick, NJ 08724</b> 109 Greentree Road, Brick, NJ 08724 109 Greentree Road, Brick, NJ 08724	<b>02/10/2019</b>
<b>Niceta Electric</b> Joseph Niceta, Owner	<b>2119 Merritt Drive, Northfield, NJ 08225</b> 2119 Merritt Drive, Northfield, NJ 08225	<b>10/19/2018</b>
<b>NT&amp;P Construction Inc.</b> Nicola Pengue, President	<b>105 White Oak Lane, Old Bridge, NJ 08857</b> 4 Camelot Avenue, Monroe Township, NJ 08831	<b>11/22/2018</b>

**CONTRACTORS AND SUBCONTRACTORS****ADDRESS****EXPIRATION DATE**

<b>Ocean Blue Builders LLC</b>	711 Carol Avenue, Oakhurst, NJ 07755	11/05/2017
John Riley Jr, Managing Member	140 Harrison Avenue, Fair Haven, NJ 07704	
<b>OCM Construction</b>	203 Main Street, #204, Flemington, NJ 08822	08/11/2017
<b>OCM Construction, LLC</b>		
William Mitchell, Owner	22 Greenwood Place, Flemington, NJ 08822	
<b>Octagon Construction</b>	10 Jeanette Street, Carteret, NJ 07008	03/02/2018
<b>Octagon Construction</b>		
Wojciech Puchajda, Owner	10 Jeanette St., Carteret, NJ 07008	
<b>Ohana Metal &amp; Iron Works Inc.</b>	60 Miller Road, Montgomery, NY 12549	08/05/2017
Erezy Ohana, Owner	60 Miller Road, Montgomery, NY 12549	
<b>Old World Construction, Inc.</b>	P.O Box 35, Pennington, NJ 08534	02/10/2018
Krzysztof Oprzadek, President	19 Woodville Rd, Hopewell, NJ 08525	
Stanislaw Dziuba, Vice-President	69 West Shore Drive, Pennington, NJ 08534	
<b>OTS-NJ, LLC</b>	21 Traxler Street, Butler, OH 44822	07/04/2019
<b>OTS of New Jersey, LLC</b>		
James T. O'Connor, Managing Member	707 Main Street, Avon-by-the-Sea, NJ 07717	
<b>Palazzo Fence Co</b>	96 Taylor Dr, Levittown, PA 19054	06/26/2019
Troy Palazzo, Owner	96 Taylor Dr, Levittown, PA 19054	
<b>Patrick Concrete Constructors Inc.</b>	2455 State Route 21, Canandaigua, NY 14424	06/13/2020
John Bell, President	2455 State Route 21, Canandaigua, NY 14424	
<b>Paul F. Roscitt Electric, Inc.</b>	262 Harmon Avenue, Fort Lee, NJ 07024	11/08/2018
Paul F Roscitt, President	262 Harmon Avenue, Fort Lee, NJ 07024	
<b>Pax Construction Corp.</b>	67 Highway 36, West Long Branch, NJ 07764	10/16/2017
Antonio Pereira, President	159 Locust Avenue, West Long Branch, NJ 07764	
Julio Pereira, Vice-President	304 Crimson Circle, Oakhurst, NJ 07755	
<b>PER Construction LLC</b>	67 State Route 36, Suite #4, West Long Branch, NJ 07764	10/16/2017
Manuel Pereira, Owner	194 Monmouth Ave., Long Branch, NJ 07740	
<b>Perfection Erectors, LLC</b>	349 West Prospect Avenue, Keyport, NJ 07735	02/23/2019
<b>Perfection Erectors, LLC</b>		
Marianne Cammarata, Manager	349 W. Prospect Ave., Keyport, NJ 07735	
Vincent Frank Cammarata, Owner	349 W. Prospect Avenue, Keyport, NJ 07735	
<b>Perrone Trucking LLC</b>	74 Glen Roy Road East, Fairfield, NJ 07004	10/27/2018
James Perrone, Owner	74 Glenroy Road East, Fairfield, NJ 07004	
<b>Peter Vincent</b>	129 Highland Ave, Jersey City, NJ 07306	04/26/2018
Peter Vincent, Owner	129 Highland Ave, Jersey City, NJ 07306	
<b>Petric &amp; Associates, Inc.</b>	1162 Greenpond Road, Newfoundland, NJ 07435	06/07/2018
Ellen Petric, President	1162 Greenpond Road, Newfoundland, NJ 07435	
Steven Petric, Vice-President	1162 Greenpond Road, Newfoundland, NJ 07435	
<b>PSM Rojas Construction, LLC</b>	161 E. 16th St, Paterson, NJ 07524	12/06/2019
Mikey Rojas, Operating Agent	161 East 16th St., Paterson, NJ 07524	
<b>Quality Plus Builders, Inc.</b>	P.O. Box 1040, Weirsdale, FL 32195	01/26/2020
Gerry G. Smith, President	16320 SE 162nd Ct., Weirsdale, FL 32195	
Laurie M. Smith, Vice-President	16320 SE 162nd Ct., Weirsdale, FL 32195	
<b>R &amp; B Construction</b>	2008 Carmel Road, Millville, NJ 08332	06/10/2018
Roxanne Lloyd, President	2008 Carmel Road, Millville, NJ 08332	
<b>Real Construction LLC</b>	1984 Whitesville Rd, Toms River, NJ 08757	11/23/2017
Arkadiusz Chwedczuk, Owner	716 11th Avenue, Toms River, NJ 08757	

<u>CONTRACTORS AND SUBCONTRACTORS</u>	<u>ADDRESS</u>	<u>EXPIRATION DATE</u>
<b>Remcon Enterprises LLC</b> Joshua Jackson, President Jon Warbeck, Vice-President	25 Pine Street, Suite 9, Rockaway, NJ 07866 4 Lynn Dr., Andover, NJ 07821 680 Pine Brook Road, Lincoln Park, NJ 07035	02/12/2020
<b>Resco, LLC</b> <b>Hallmark Electric, LLC</b> David Peckham, Owner	P.O. Box 806, Old Saybrook, CT 06475 15 Elm Street, Old Saybrook, CT 06475	10/21/2018
<b>Retail Store Painting</b> John Thomas, President	202 Karen Drive, Scranton, PA 18505 202 Karen Drive, Scranton, PA 18505	01/12/2018
<b>Riano Brothers, LLC.</b> <b>Atanasia Lazo Gutierrez</b> Luis Riano, President	13 Poppy Ave., Neptune, NJ 07753 13 Poppy Ave., Neptune, 07753	02/25/2018
<b>Rizzo New York Inc.</b> <b>Rizzo New York Inc.</b> Rizwan Ahmad, President	109-02 Jamaica Avenue, Richmond Hill, NY 11418 9157 97th St, Wood Haven, NY 11421	01/19/2019
<b>Robert M. Mesmer, LLC</b> Robert Mesmer, Managing Member	24 Sand Bridge Rd., Elmer, NJ 08318 24 Sand Bridge Road, Elmer, NJ 08318	12/11/2017
<b>Roncone Construction, L.L.C.</b> <b>Roncone Construction, L.L.C.</b> Leonardo Marques Roncone, Managing Member	275 Chestnut St., Store B #113, Newark, NJ 07114 192 Emmet St., Newark, NJ 07105	02/02/2018
<b>RW Assembly &amp; Install LLC</b> <b>Richard Weiling</b> Richard Weiling, Owner	110 Stevens Avenue, Cedar Grove, NJ 07009 110 Stevens Avenue, Cedar Grove, NJ 07009	07/12/2020
<b>S &amp; S Electric, LLC</b> Al Shan, President	108 Oak Glen Road, Toms River, NJ 08753 108 Oak Glen Road, Toms River, NJ 08753	01/12/2018
<b>Sandora &amp; Spina Contracting Inc.</b> Edward Sandora, President	15 North Branch River Rd., Branchburg, NJ 08876 15 North Branch River Rd., Branchburg, NJ 08876	06/28/2018
<b>SDT Transport LLC</b> Stephen Tripodi, Owner	12 Clifford Rd, Wanaque, NJ 07465 12 Clifford Rd, Wanaque, NJ 07465	08/25/2019
<b>Seminole Construction, L.L.C.</b> <b>SUSPENDED PENDING DEBARMENT</b> Sandra Morizzo, Managing Member Joseph Filoon Jr., Manager	128 Bartlett Ave, West Creek, NJ 08092 165 Oak Ave., West Creek, NJ 08092 195 Lakeshore Dr, Manahawkin, NJ	SUSPENDED
<b>Southern State Contracting Services LLC</b> Joseph F. Gleason Jr., President	51 Pine Dr S., Brick, NJ 08723 51 Pine Dr. S, Brick, NJ 08724	06/26/2019
<b>Squillace Steel Fabricators, LLC</b> <b>Squillace Steel Fabricators, LLC</b> Rachel Squillace, Manager Richard Squillace, President	771 Amsterdam Avenue, Roselle, NJ 07203 771 Amsterdam Ave., Roselle Park, NJ 07203 771 Amsterdam Avenue, Roselle Park, NJ 07203	05/31/2019
<b>Steven Keares, Inc.</b> <b>Keares Electrical Contractor, Inc.</b> Steven P. Keares, CEO	633 Jeffers Circle, Exton, PA 19341 211 Downing Road, Downingtown, PA 19335	02/02/2020
<b>Steven Trucking Corp</b> Fabian Martinez, President	47 Railroad Ave, Netcong, NJ 07857 28 Bowlby Street, Dover, NJ 07801	10/17/2019
<b>Structural Building Supplies, LLC.</b> <b>SUSPENDED PENDING DEBARMENT</b> Glen Latz, COO	202 Edison Road, Barnegat, NJ 08005 70 Adams Street, Norwood, NJ 07648	SUSPENDED
<b>Super Stars Construction Inc</b> Juan Riano, Owner	58 Steiner Ave, Neptune City, NJ 07753 58 Steiner Ave., Neptune City, NJ 07753	08/11/2017

**CONTRACTORS AND SUBCONTRACTORS****ADDRESS****EXPIRATION DATE**

<b>Superior Environmental Development Corp.</b>	859 Route 130, Unit 117, East Windsor, NJ 08520	09/12/2019
Eric T. McCully, Owner	859 Rt. 130 , Unit 117, East Windsor, 08520	
<b>Terra-Tech Construction, Inc.</b>	265 Woodward Rd, Suite A, Manalapan, NJ 07726	03/17/2018
Tania Gaga, Vice-President	121 Diamond Lane, Manalapan, NJ 07726	
Nicole Lucas, President	12 Red Fox Run, Manalapan, NJ 08857	
<b>Thomas Clark Fiberglass, LLC</b>	145 Old Halfway Road, Barnegat, NJ 08005	10/22/2017
Thomas Clark, Owner / Officer	145 Old Halfway Rd., Barnegat, NJ 08005	
<b>Timster Trucking Inc.</b>	128 Bartlett Avenue, West Creek, NJ 08092	SUSPENDED
<b>SUSPENDED PENDING DEBARMENT</b>		
Sandra Morizzo, Partner	165 Oak Ave, West Creek,	
Joseph Filoon Jr., President	165 Oak Avenue, West Creek, NJ 08092	
<b>TJB Air Conditioning And Heating</b>	2305 Garry Rd. Suite A, Cinnaminson, NJ 08077	02/28/2019
Timothy Babbitt, Owner	2305 Garry Rd. Suite A, Cinnaminson, NJ 08077	
<b>Todd Cable Construction, LLC</b>	151 Old State Rd., Newport, NY 13416	04/26/2018
Todd E. Warmingham, Owner	P.o. Box 215, Newport, NY 13416	
<b>Top Notch Tree &amp; Landscape, LLC</b>	70 East Allendale Rd., Saddle River, NJ 07458	12/06/2018
James Van Wyckhouse, Owner	46 Tam O Shanter Rd, Mahwah, NJ 07430	
<b>TQM Construction Corporation</b>	21 Patriot Xing, Rockaway, NJ 07866-4826	03/22/2019
Balwant DeVre, President	21 Patriot Crossing, Rockaway, NJ 07866	
<b>Trinity Paving, LLC</b>	245 Clayton Road, Monroeville, NJ 08343-2652	10/20/2017
Michele Doyle, Member	115 Millstone Way, Monroeville, NJ 08343	
<b>Turf Services Express LLC</b>	26 North Broad Street, Medford, NJ 08055	03/26/2018
Sharleen Poppalardo, Managing Member	11 Muirfield Court, Medford, NJ 08055	
<b>Turfscapes LLC</b>	PO Box 950, Williamstown, NJ 08094	08/22/2019
Jeffrey Grize, Owner	3477 S. Blackhorse Pike, Williamstown, NJ 08094	
<b>Twin Industries</b>	15 Lewis Street, Eatontown, NJ 07724	04/04/2019
Jeanne Crispino, Vice-President	15 Lewis Street, Eatontown, NJ 07724	
<b>Ultimate Roofing, LLC</b>	1013 Grandview Avenue, Union, NJ 07083	12/12/2019
Paige Moriarty, Member	1013 Grandview Avenue, Union, NJ 07083	
<b>Unique Contractors</b>	3606 Academy Road, Philadelphia, PA 19154	01/11/2020
<b>Unique Contractors</b>	3606 Academy Road, Philadelphia, PA 19154	
Juan Garro, Owner	3606 Academy Road, Philadelphia, PA 19154	
<b>Van Peenen Landscape Contractors, Inc.</b>	555 Preakness Avenue,, Suite 210, Totowa, NJ 07512	11/22/2018
<b>Van Peenen Landscape Contractors, Inc.</b>	3 Gates Place, Wayne, NJ 07470	
Raymond Van Peenen, President	3 Gates Place, Wayne, NJ 07470	
<b>Wallmasters Modular Inc.</b>	226 Mutual Avenue, Winchester, KY 40391	07/28/2017
Timothy Morrison, President	2745 SR668N, Junction City, OH 43748	
<b>Warbeck Construction Group LLC</b>	63 Beaver Brook Road, Suite 305, Lincoln Park, NJ 07035	02/28/2019
Jon J Warbeck, President	680 West Pine Brook Road, Lincoln Park, NJ 07035	
<b>Warren Contractors LLC</b>	85 Tracey Station Road, Manalapan, NJ 07726	06/14/2020
Joseph Zawada, Manager	211 Brewers Bridge Road, Jackson, NJ 08527	
<b>Weather Tight Foam Insulation, Inc.</b>	1156 Livingston Avenue, North Brunswick, NJ 08902	04/10/2020
Mohamed A. Abdou, Owner / Officer	1156 Livingston Avenue, N. Brunswick, NJ 08902	
Tariq Adma, Owner / Officer	222 Sanford Street, New Brunswick, NJ 08901	
<b>YP Construction Inc.</b>	1582 Route 27, Edison, NJ 08817	06/29/2020
Yun Ping Zheng, President	1582 Route 27, Edison, NJ 08817	

## SUSPENDED PENDING DEBARMENT:

<u>CONTRACTORS AND SUBCONTRACTORS</u>	<u>ADDRESS</u>	<u>SUSPEND DATE</u>
<b>Jamali Developers, LLC</b> Hussain Burhanpurwala, Member	238 Fresh Ponds Road, Monroe, NJ 08816 553 Marc Drive, North Brunswick, NJ 08902	01/11/2016
<b>Jerzee Container Corp.</b> Sandra Morizzo, Member Jon Whelan, Vice-President Joseph Filoon Jr, Manager Thomas Whelan, President	123 Bartlett Avenue, West Creek, NJ 08092 165 Oak Ave, West Creek, NJ 08092 48 8th Avenue, New York, NY 10014 195 Lakeshore Dr, Manahawkin, NJ 08050 PO Box 155, Spring Lake, NJ 07762	09/23/2016
<b>Latz Construction Services LLC</b> Glen Latz, COO	202 Edison Rd, Barnegat, NJ 08005 70 Adams Street, Norwood, NJ 07648	05/09/2017
<b>Seminole Construction, L.L.C.</b> Sandra Morizzo, Managing Member Joseph Filoon Jr., Manager	128 Bartlett Ave, West Creek, NJ 08092 165 Oak Ave., West Creek, NJ 08092 195 Lakeshore Dr, Manahawkin, NJ	09/23/2016
<b>Structural Building Supplies, LLC.</b> Glen Latz, COO	202 Edison Road, Barnegat, NJ 08005 70 Adams Street, Norwood, NJ 07648	05/09/2017
<b>Timster Trucking Inc.</b> Joseph Filoon Jr., President Sandra Morizzo, Partner	128 Bartlett Avenue, West Creek, NJ 08092 165 Oak Avenue, West Creek, NJ 08092 165 Oak Ave, West Creek,	09/23/2016

**LIST OF DEBARRED OWNERS/OFFICERS**

7/20/2017

**Owners/ Officers**

**Address**

**Company Name**

Mohamed A. Abdou, Owner / Officer	1156 Livingston Avenue, N. Brunswick, NJ 08902	Weather Tight Foam Insulation, Inc.
Maria Abreu, President	2 Beach Haven Way, Waretown, NJ 08758	MNC General Contracting Inc.
Denise Ackerson, President	182 Van Dyke Road, Hopewell, NJ 08525	Ackerson Contracting Inc.
Tariq Adma, Owner / Officer	222 Sanford Street, New Brunswick, NJ 08901	Weather Tight Foam Insulation, Inc.
Rizwan Ahmad, President	9157 97th St, Wood Haven, NY 11421	Rizzo New York Inc.
		Rizzo New York Inc.
		Griffin Sign, Inc.
Michelle Angerame, President	12 Pendleton Court, Medford, NJ 08055	Antiveros Construction, Inc.
Donnie Antiveros, President	677 Old Highway 64, Etowah, NC 28729	Joe Antonaccio Electric
Joseph Antonaccio, President	167 2nd St., Keyport, NJ 07735	Midwest Construction, Inc.
George Antonas, President	114 Brace Road, Cherry Hill, NJ 08034	Jesus Aparicio-Santos, LLC
Jesus Aparicio-Santos, Owner	26 Sunset Street, South River, NJ 08882	New Jersey State Flooring, Inc.
Roy C. Apgar, President	109 Greentree Road, Brick, NJ 08724	New Jersey State Flooring, Inc.
Cheryl Apgar, Vice-President	109 Greentree Road, Brick, NJ 08724	Harold Arenberg Inc.
Daniel Arenberg, Vice-President	1711 Route 9 North, Swainton, NJ 08210	Harold Arenberg Inc.
Jeffrey Arenberg, President	741 Dias Creek Road, Cape May Court House, NJ 08210	K & J Drywall Contractor, Inc.
Jonny Ayala, Owner	68 Westervelt Avenue, Plainfield, NJ 07060	TJB Air Conditioning And Heating
Timothy Babbitt, Owner	2305 Garry Rd. Suite A, Cinnaminson, NJ 08077	Lab Construction Inc.
Lee Barnes, President	607 Jackson Road, Williamstown, NJ 08094	Camelot Roofing, LLC
Juan J. Barquero, Owner	533 South 5th Street, Elizabeth, NJ 07206	J & B Plumbing LLC
Joseph Battista, Owner	11 Hummingbird Way, Jackson, NJ 08527	Patrick Concrete Constructors Inc.
John Bell, President	2455 State Route 21, Canandaigua, NY 14424	J&D Plumbing & Heating Inc.
John J. Benedetti Jr., President	193 Natrona Avenue, Mercerville, NJ 08619	KS Exteriors, LLC
Kris Brezinska, Owner	650 Ohio Ave., Trenton, NJ 08638	KS Exteriors, LLC
		Kitchen Crafters Plus d/b/a B&B Custom Cabinets
Albert Brisebois, Owner	1 Suydam Place, Aberdeen, NJ 07747	Jamali Developers, LLC
Hussain Burhanpurwala, Member	553 Marc Drive, North Brunswick, NJ 08902	SUSPENDED PENDING DEBARMENT
		Cobra Communications & Installations, LLC
Giovanny Bustos, Owner	26 Spencer Place, Garfield, NJ 07026	Perfection Erectors, LLC
Marianne Cammarata, Manager	349 W. Prospect Ave., Keyport, NJ 07735	Perfection Erectors, LLC
		Perfection Erectors, LLC
Vincent Frank Cammarata, Owner	349 W. Prospect Avenue, Keyport, NJ 07735	HFC Painting
		CAM Contractors Inc.
Hugo Canabe, CEO	696 Elm St, Kearny, NJ 07032	Heritage Hills Estates
Joseph Caravella, Manager	179-15 Route 46, Rockaway, NJ 07866	G.F.I. Siteworks, Inc.
Frank Carpine, Owner	100 Liberty Dr, Millville, NJ 08332	G.F.I. Siteworks, Inc.
Salvatore A Casella III, President	362 Friendship Road, Clarksboro, NJ 08020	DCI Signs & Awnings Inc.
		J G Roofing, LLC
Danny Castillo, President	645 Bancroft Road, Brick, NJ 08724	JC Builders
Manuel Chaguan, Owner	85 Prospect Ave., Irvington, NJ 07111	Chanez Landscaping, LLC
James Chaney, President	610 County Meadows Rd., Nicholls, GA 31554	Real Construction LLC
Noe Chanez, Principal	55 Miller Ave., Somerset, NJ 08873	Cityline Contracting Inc.
Arkadiusz Chwedczuk, Owner	716 11th Avenue, Toms River, NJ 08757	Thomas Clark Fiberglass, LLC
Andrzej Citak, Vice-President	556 Humboldt St, Brooklyn, NY 11222	Confortini Plumbing & Heating, LLC
Thomas Clark, Owner / Officer	145 Old Halfway Rd., Barnegat, NJ 08005	Confortini Plumbing & Heating, LLC
Andrew Confortini, Vice-President	491 West County Drive, Somerville, NJ 08876	Antiveros Construction, Inc.
Anthony Confortini, Owner	41 Bunnvale Road, Clifton, NJ 07830	Coons Construction, LLC
Olga Conteras, Vice-President	677 Old Highway 64, Etowah, NC 28729	JB Contracting, Inc.
William Coons, Owner	23178 Summer View Circle, Three Springs, PA 17264	Twin Industries
William Allan Crayne, Partner	178 Espanong Road, Lake Hopatcong, NJ 07849	
Jeanne Crispino, Vice-President	15 Lewis Street, Eatontown, NJ 07724	

<u>Owners/ Officers</u>	<u>Address</u>	<u>Company Name</u>
Emanuel Cucco, Owner	1435 71st Street, Brooklyn, NY 11228	J.C. Maintenance & Repair
Nuno Cunha, Owner	35 Carmen Ct., Newark, NJ 07105	Cunhas Construction Inc.
Jose Fernandes Da Silva, Owner	26 Washington St., Long Branch, NJ 07718	Cam Flooring Installations LLC
Dane DeForest, President	2406 Herbertsville Road, Point Pleasant, NJ 08742	Dane DeForest Demolition, Inc.
Nelson DeOliveira, President	276 Highland Ave, Kearney, NJ 07032	East Coast Touch Enterprises LLC
Joe DeSalvo, Jr., Owner	149 Montross Ave., Rutherford, NJ 07070	J.D.S Electric, Inc.
John Dever, Owner	1086 Mays Landing Road, Somers Point, NJ 08234	Metal Fab Atlantic LLC
Balwant DeVre, President	21 Patriot Crossing, Rockaway, NJ 07866	TQM Construction Corporation
Stephen DiFilippi, Owner	120 Springbrook Trail, Sparta, NJ 07871	Elite Demolition, LLC
James DiLorenzo, Vice-President	440 Mantua Avenue, Paulsboro, NJ 08066	G.F.I. Siteworks, Inc.
		G.F.I. Siteworks, Inc.
Dorothy Dobiecka, President	556 Humboldt Street, Brooklyn, NY 11222	Cityline Contracting Inc.
Michele Doyle, Member	115 Millstone Way, Monroeville, NJ 08343	Trinity Paving, LLC
William J. Doyle, President	200 Pine Rd., Hammonton, NJ 08037	Highway Safety Systems Inc.
Agostino Ducato, Vice-President	223 Spring Valley Road, Paramus, NJ 07652	All Jersey Fence Co.
Stanislaw Dziuba, Vice-President	69 West Shore Drive, Pennington, NJ 08534	Old World Construction, Inc.
Justin Ettore, Vice-President	52 Brass Castle Road, Washington, NJ 07882	Arete Development Inc.
		Arete Development Inc.
John Ettore, Owner	1453 Tooz Place, South Plainfield, NJ 07080	Arete Development Inc.
		Arete Development Inc.
Matthew Ettore, Vice-President	8 Brookside Drive, Warren, NJ 07059	Arete Development Inc.
		Arete Development Inc.
Jonathan Ettore, President	7 Craig Road, Readington, NJ 08853	Arete Development Inc.
		Arete Development Inc.
Margaret Farina, Owner	30 Monsignor Deluca Plaza, Nutley, NJ 07110	Metropolitan Stone & Tile, LLC
Hugo Fernandes, Owner	90 Willow Street, Carteret, NJ 07008	DM Fernandes Contracts LLC
Joseph Filoon Jr, Manager	195 Lakeshore Dr, Manahawkin, NJ 08050	Jerzee Container Corp.
		SUSPENDED PENDING DEBARMENT
Joseph Filoon Jr., President	165 Oak Avenue, West Creek, NJ 08092	Timster Trucking Inc.
		SUSPENDED PENDING DEBARMENT
Joseph Filoon Jr., Manager	195 Lakeshore Dr, Manahawkin, NJ	Seminole Construction, L.L.C.
		SUSPENDED PENDING DEBARMENT
Thomas Fittin, Owner / Officer	2243 Edgar Rd, Point Pleasant Beach, NJ 08742	Fittin Construction, LLC
Robert Fix, Managing Member	338 Florence Road, Middletown, NJ 07748	Guiliano Environmental, LLC
Donald Fleming, President	340 Reservoir Road, Boonton, NJ 07005	C & E Contracting, Inc.
Theresa Frajdenberg, President	110 South Harding Highway, Landisville, NJ 08326	CRC Concrete Raising of South Jersey, Inc.
Tania Gaga, Vice-President	121 Diamond Lane, Manalapan, NJ 07726	Terra-Tech Construction, Inc.
Gabino Galindo, Owner	1025 E. 23rd St. #1, Paterson, NJ 07513	Galindo Const. LLC
Dean Gallo, Owner	245 Emanuel Street, Trenton, NJ 08610	DG Construction & Renovations LLC
Harry Gallo, Secretary	245 Emanuel Street, Trenton, NJ 08610	DG Construction & Renovations LLC
Michelle Gamache-Caravella, President	179-15 Route 46, Suite 135, Rockaway, NJ 07866	CAM Contractors Inc.
Randy Garciga, Owner	13353 NE 17th Avenue, Miami, FL 33181	JTG Scaffolding & Hoisting LLC
Randy Garciga, Owner	13353 NE 17th Avenue, North Miami, FL 33181	JD Scaffold Inc.
Juan Garro, Owner	3606 Academy Road, Philadelphia, PA 19154	Unique Contractors
		Unique Contractors
Joseph F. Gleason Jr., President	51 Pine Dr. S, Brick, NJ 08724	Southern State Contracting Services LLC
Ruben Gonzalez, Owner	107 Jefferson Street, Passaic, NJ 07055	Jersey Heavy Drywall
Paul Grillo, Owner	207 Butlerr Ave, Staten Island, NY 10307	Area Fuel
Paul Grillo, Owner	207 Bulter Ave, St. Island, NY	Area Fuel
Jeffrey Grize, Owner	3477 S. Blackhorse Pike, Williamstown, NJ 08094	Turfscapes LLC
Curillo Guaman, Owner	197 Broad Street, Newark, NJ 07104	CJC Builders Corp.
Maurice Guariglia, Owner / Officer	494 North Barbor Road, Colchester, VT 05446	Advantage Sport USA, Inc.
Christopher Guiliano, Managing Member	9 Cobblestone Ct, Holmdel, NJ 07733	Guiliano Environmental, LLC



<u>Owners/ Officers</u>	<u>Address</u>	<u>Company Name</u>
Helen Henriquez, Owner	101 South Orchard Road, Vineland, NJ 08360	E & S Enterprises, LLC
Peter Herring, President	164 South Moetz Drive, Milltown, NJ 08850	Metroplex Products Co. Inc.
Joshua Jackson, President	4 Lynn Dr., Andover, NJ 07821	Remcon Enterprises LLC
Jessica Johnson, Member	5352 Lake Road, Newfield, NJ 08344	Johnson Tree Transplanting LLC
Nathan Johnson, Owner	5352 Lake Road, Newfield, NJ 08344	Johnson Tree Transplanting LLC
Mark Kahn, Owner	910 Cedar Street, Millville, NJ 08332	CertaPro Painters of South Jersey LLC
Stanley Kapusta, President	12 Commodore Drive, Lake Hopatcong, NJ 07849	JB Contracting, Inc.
Steven P. Keares, CEO	211 Downing Road, Downingtown, PA 19335	Steven Keares, Inc. Keares Electrical Contractor, Inc. Gen II Contracting Co. Inc.
Jaimie-Lyn Knight, President	395 Millstone Road, Clarksburg, NJ 08510	Anchor Marine of Toms River
Lawrence Koos, Owner	1391 White Oak Bottom Rd, Tom River, NJ 08755	Install It All. LLC
Laurence Koos, Owner	1391 White Oak Bottom Rd., Toms River, NJ 08755	Kosakowski Plumbing & Heating Inc.
Edward Kosakowski, Owner	27 Center Avenue, Morristown, NJ 07960	Latz Construction Services LLC SUSPENDED PENDING DEBARMENT
Glen Latz, COO	70 Adams Street, Norwood, NJ 07648	Structural Building Supplies, LLC. SUSPENDED PENDING DEBARMENT
Glen Latz, COO	70 Adams Street, Norwood, NJ 07648	360 Golf, LLC
Devin Lemere, Partner	300 Mamaroneck Ave, # 133, White Plains, NY 10605	360 Golf, LLC
Michael Lenec, Partner	300 Mamaroneck Ave, White Plains, NJ 10605	M.E. Group, LLC
Segundo E. Llivicota, Member	164 Polk Street, Apt. #1, Newark, NJ 07105	R & B Construction
Roxanne Lloyd, President	2008 Carmel Road, Millville, NJ 08332	Lombardi Enterprises, Inc.
Alan Lombardi, President	26 Whispering Way, Berkeley Hights., NJ 07922	Lombardi Enterprises, Inc.
Ann Lombardi, Secretary	26 Whispeiring Way, Berkeley Hights, NJ 07922	East Coast Touch Enterprises LLC
Frank Loureier, Vice-President	152 Jefferson St., Newark, NJ 07105	Terra-Tech Construction, Inc.
Nicole Lucas, President	12 Red Fox Run, Manalapan, NJ 08857	HFM Labor Ready LLC HFM Labor Ready LLC
Keith Ludwig, Member	459 Rt 38 West, Maple Shade, NJ 08052	Advantage Contracting & Entertainment Services I
John H. Madara, President	319 Terrace St, Rahway, NJ 07065	Cougar Power and Electric, LLC
Kevin F. Mandel, Owner	186 Sunshine Drive, Piscataway, NJ 08854	DAS Industrial, LLC
Vincent Manganiello, Managing Member	2 Perona Road, Andover, NJ 07821	DAS Industrial Limited Liability Company
Fabian Martinez, President	28 Bowlby Street, Dover, NJ 07801	Steven Trucking Corp
Nimali Matos, Owner	77 Williamson Court, Bridgewater, NJ 08807	Matos Construction, LLC Wagner Matos
Wagner Matos, Owner	77 Williamson Court, Bridgewater, NJ 08807	Matos Construction, LLC Wagner Matos
Vincent Mattina, Owner	22 Toms River Rd, Jackson, NJ 08527	Mattina Construction LLC
Louis R. McArthur Jr., Owner / Officer	13 Luzerne Place, Hadley, NY 12835	McArthur Park, Inc./ dba Bleacherman
David McGarrigle, Owner	1500 Carlene St., Langhorne, PA 19047	McGarrigle's Carpet, LLC
George McNulty, President	125 East Broadway, Suite 507, Long Beach, NY 11561	Low Bid, Inc.
Robert Mesmer, Managing Member	24 Sand Bridge Road, Elmer, NJ 08318	Robert M. Mesmer, LLC
William Mitchell, Owner	22 Greenwood Place, Flemington, NJ 08822	OCM Construction OCM Construction, LLC
Brad J. Moini, President	101 Buttonwood Lane, Freehold, NJ 07728	Brothers Landscaping J.H. Brothers Inc.
Paige Moriarty, Member	1013 Grandview Avenue, Union, NJ 07083	Ultimate Roofing, LLC
Sandra Morizzo, Partner	165 Oak Ave, West Creek,	Timster Trucking Inc. SUSPENDED PENDING DEBARMENT
Sandra Morizzo, Member	165 Oak Ave, West Creek, NJ 08092	Jerzee Container Corp. SUSPENDED PENDING DEBARMENT
Sandra Morizzo, Managing Member	165 Oak Ave., West Creek, NJ 08092	Seminole Construction, L.L.C.  SUSPENDED PENDING DEBARMENT
Timothy Morrison, President	2745 SR668N, Junction City, OH 43748	Wallmasters Modular Inc.
John Mullen, Jr., Owner	45 Fairfield Place, West Caldwell, NJ 07006	Mullen & Sons Contractors, Inc.

<u>Owners/ Officers</u>	<u>Address</u>	<u>Company Name</u>
John Mullen, Sr, President	45 Fairfield Place, West Caldwell, NJ 07006	Mullen & Sons Contractors, Inc.
Joseph Niceta, Owner	2119 Merritt Drive, Northfield, NJ 08225	Niceta Electric
James T. O'Connor, Managing Member	707 Main Street, Avon-by-the-Sea, NJ 07717	OTS-NJ, LLC
Erezy Ohana, Owner	60 Miller Road, Montgomery, NY 12549	OTS of New Jersey, LLC
Krzysztof Oprzadek, President	19 Woodville Rd, Hopewell, NJ 08525	Ohana Metal & Iron Works Inc.
Louis Pacelli, Manager	16 Darlington Drive, Wayne, NJ 07470	Old World Construction, Inc.
Troy Palazzo, Owner	96 Taylor Dr, Levittown, PA 19054	Build Rite LLC
Brian Patterson, President	11 Arlene Drive, West Long Branch, NJ 07764	Palazzo Fence Co
David Peckham, Owner	15 Elm Street, Old Saybrook, CT 06475	Brian Patterson Mechanical Contracting, Inc.
Nicola Pengue, President	4 Camelot Avenue, Monroe Township, NJ 08831	Resco, LLC
Julio Pereira, Vice-President	304 Crimson Circle, Oakhurst, NJ 07755	Hallmark Electric, LLC
Antonio Pereira, President	159 Locust Avenue, West Long Branch, NJ 07764	NT&P Construction Inc.
Manuel Pereira, Owner	194 Monmouth Ave., Long Branch, NJ 07740	Pax Construction Corp.
James Perrone, Owner	74 Glenroy Road East, Fairfield, NJ 07004	Pax Construction Corp.
Ellen Petric, President	1162 Greenpond Road, Newfoundland, NJ 07435	PER Construction LLC
Steven Petric, Vice-President	1162 Greenpond Road, Newfoundland, NJ 07435	Perrone Trucking LLC
Christopher Picinic, Owner	164 President Blvd, Washington Township, NJ 07676	Petric & Associates, Inc.
Armando Piedade, President	265 Wilson Avenue, Kearny, NJ 07032	Petric & Associates, Inc.
Richard Pluese, Vice-President	66 E Cedar Avenue, Marlton, NJ 08053	Elite Terrazzo Flooring, Inc.
Sharleen Poppalardo, Managing Member	11 Muirfield Court, Medford, NJ 08055	Conex Construction Corp.
Wojciech Puchajda, Owner	10 Jeanette St., Carteret, NJ 07008	Apex Tower Services, Inc.
Manuel Quito, Member	164 Polk Street, Apt. 1, Newark, NJ 07105	Turf Services Express LLC
Rafael Ramos, President	120 Cantello Street, Union City, NJ 07087	Octagon Construction
Luis Riano, President	13 Poppy Ave., Neptune, 07753	Octagon Construction
Juan Riano, Owner	58 Steiner Ave., Neptune City, NJ 07753	M.E. Group, LLC
John Riley Jr, Managing Member	140 Harrison Avenue, Fair Haven, NJ 07704	Everest Masonry Construction, Inc.
Lauchland Roberts, President	2801 Remington Street, Suite 3, Fort Collins, CO 80526	Riano Brothers, LLC.
Mark Rodrigues, President	523 Hamilton Avenue, Kingston, PA 18704	Atanasia Lazo Gutierrez
Eddy Rodriguez, Member	1100 W. 7th. St., Apt. A9, Plainfield, NJ 07063	Super Stars Construction Inc
Mikey Rojas, Operating Agent	161 East 16th St., Paterson, NJ 07524	Ocean Blue Builders LLC
Maurice Rolando, Owner	165 Height's Ave., Fair Lawn, NJ 07410	GST Power Service Group Inc.
Leonardo Marques Roncone, Managing	192 Emmet St., Newark, NJ 07105	Everest Masonry Constructors, Inc.
Paul F Roscitt, President	262 Harmon Avenue, Fort Lee, NJ 07024	Eddy Drywall, LLC
Edward Sandora, President	15 North Branch River Rd., Branchburg, NJ 08876	PSM Rojas Construction, LLC
Blanca Segarra, President	799 Kearny Ave., Apt 1, Kearny, NJ 07032	Interstate Home Service Inc.
Sheree Severini-Fittin, Member	2243 Edgar Rd., Point Pleasant Beach, NJ 08742	Interstate Home Service Inc.
Dean V. Severino Sr., President	136 Hackett Place, Rutherford, NJ 07070	Roncone Construction, L.L.C.
Dean Severino, Jr., Vice-President	136 Hackett Place, Rutherford, NJ 07070	Roncone Construction, L.L.C.
Dean V. Severino, Sr., President	136 Hackett Place, Rutherford, NJ 07070	Paul F. Roscitt Electric, Inc.
Al Shan, President	108 Oak Glen Road, Toms River, NJ 08753	Sandora & Spina Contracting Inc.
Margaret Sherman, President	203 Woods Avenue, Bergenfield, NJ 07621	Ma Na Lu Transportation Corporation
Gerry G. Smith, President	16320 SE 162nd Ct., Weirsdale, FL 32195	Fittin Construction, LLC
Laurie M. Smith, Vice-President	16320 SE 162nd Ct., Weirsdale, FL 32195	DVS Trucking Co., Inc.
John Sorrentino, Owner	65 Fern St, Browns Mills, NJ 08015	Dean V. Severino Sr.
Gregorio Soto, Owner	153 Lewis Street, Perth Amboy, NJ 08861	DVS Trucking Co., Inc.
		Dean V. Severino Sr.
		D & S Oil Co., Inc.
		S & S Electric, LLC
		CPS Mechanical Contractors, Inc.
		Quality Plus Builders, Inc.
		Quality Plus Builders, Inc.
		Barzzini Construction
		Jack Mack Commercial Roofing, Inc.

<u>Owners/ Officers</u>	<u>Address</u>	<u>Company Name</u>
Richard Squillace, President	771 Amsterdam Avenue, Roselle Park, NJ 07203	Squillace Steel Fabricators, LLC Squillace Steel Fabricators, LLC
Rachel Squillace, Manager	771 Amsterdam Ave., Roselle Park, NJ 07203	Squillace Steel Fabricators, LLC Squillace Steel Fabricators, LLC
Eric T. McCully, Owner	859 Rt. 130 , Unit 117, East Windsor, 08520	Superior Environmental Development Corp.
John Thomas, President	202 Karen Drive, Scranton, PA 18505	Retail Store Painting
Ashish Thomas, Owner	6 Spruce Meadows Dr., Monroe, NJ 08831	MG Topflight
Nester Torres, Owner	161 Thomas St, Unit 1, Newark, NJ 07114	NDA & Construction, LLC
Stephen Tripodi, Owner	12 Clifford Rd, Wanaque, NJ 07465	SDT Transport LLC
Raymond Van Peenen, President	3 Gates Place, Wayne, NJ 07470	Van Peenen Landscape Contractors, Inc. Van Peenen Landscape Contractors, Inc.
James Van Wyckhouse, Owner	46 Tam O Shanter Rd, Mahwah, NJ 07430	Top Notch Tree & Landscape, LLC
Michael Verduci, President	12 Verduci Drive, Newtown, PA 18940	A.V. Construction, Inc.
Felipe Villagomez, Owner	160 Lincoln Street, Bridgeton, NJ 08302	Felipe Villagomez owner
Peter Vincent, Owner	129 Highland Ave, Jersey City, NJ 07306	Peter Vincent
Charles Viola, President	266 Columbus Avenue, Hasbrouck Heights, NJ 07604	All Jersey Fence Co.
Constantine Vivian, President	86 Christopher Street, Montclair, NJ 07042	Aztech Management, Inc. Aztech Management, Inc.
Simon Walcott, Owner	43 Fairview Avenue, Bergenfield, NJ 07621	K & S Fabrication & Welding, LLC
Jon Warbeck, Vice-President	680 Pine Brook Road, Lincoln Park, NJ 07035	Remcon Enterprises LLC
Jon J Warbeck, President	680 West Pine Brook Road, Lincoln Park, NJ 07035	Warbeck Construction Group LLC
Todd E. Warmingham, Owner	P.o. Box 215, Newport, NY 13416	Todd Cable Construction, LLC
Richard Weling, Owner	110 Stevens Avenue, Cedar Grove, NJ 07009	RW Assembly & Install LLC Richard Weiling
Thomas Whelan, President	PO Box 155, Spring Lake, NJ 07762	Jerzee Container Corp. SUSPENDED PENDING DEBARMENT
Jon Whelan, Vice-President	48 8th Avenue, New York, NY 10014	Jerzee Container Corp. SUSPENDED PENDING DEBARMENT
Anthony Yaniero, Vice-President	848 Bogert Road, River Edge, NJ 07661	Bogert Millwork Company, Inc.
Susan Yaniero, Owner	848 Bogert Road, River Edge, NJ 07661	Bogert Millwork Company, Inc.
Joseph Zawada, Manager	211 Brewers Bridge Road, Jackson, NJ 08527	Warren Contractors LLC
Yun Ping Zheng, President	1582 Route 27, Edison, NJ 08817	YP Construction Inc.
Agustin Zuniga, President	420 Broadway, Long Branch, NJ 07740	American Eagle Contractor, Inc.





# COUNTY OF UNION

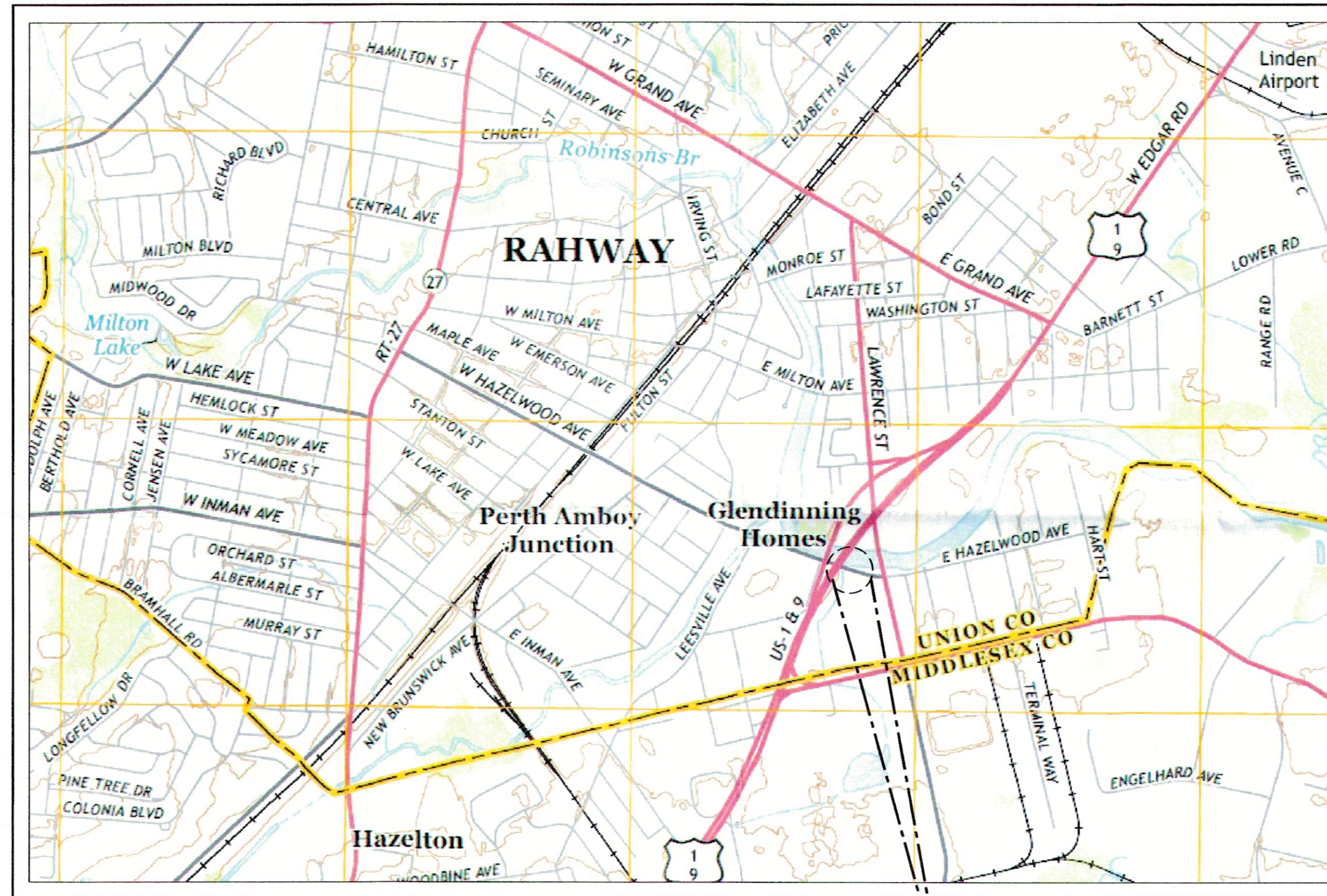
## BOARD OF CHOSEN FREEHOLDERS

### REHABILITATION OF EAST HAZELWOOD AVENUE MINOR BRIDGE Ra-69

APRIL 2017  
CITY OF RAHWAY

UNION COUNTY PROJECT NO. 2013 - 009

PUBLIC UTILITIES
COMCAST CABLEVISION OF NJ 800 RAHWAY AVENUE UNION CITY, NEW JERSEY 07083 ATTN: BOB KNOEPFEL
LEVEL 3 COMMUNICATIONS 1025 ELDORADO BOULEVARD BROOMFIELD, CO 80021 ATTN: RICK MILLER, PROJECT MANAGE, OSP RELOCATIONS ATTN: JEFFREY PENNEY
FIBERTECH NETWORKS ATTN: ROBERT S. TARZIAN, OPERATIONS MANAGER, NJ
2COM GROUP (RETAINED BY ZAYO GROUP) 102 DORSA AVENUE LIVINGSTON, NJ 07039 ATTN: RICHARD R. HEYS
VERIZON COMMUNICATION 175 WEST MAIN STREET FREEHOLD, NJ 07728 ATTN: WILLIAM SCHNEIDER
ELIZABETHTOWN GAS 520 GREEN LANE UNION, NEW JERSEY 07083 ATTN: GREGORY J. BALINT, PROJECT ENGINEER
RAHWAY VALLEY SEWAGE AUTHORITY 1050 EAST HAZELWOOD AVENUE RAHWAY, NJ 07065 ATTN: JOHN BUONOCORE, PE
PSE&G 80 PARK PLAZA, T-12 NEWARK, NJ 07102 ATTN: JOHN M. GRABENSTEIN
RAHWAY CITY DEPARTMENT OF PUBLIC WORKS 1 CITY HALL PLAZA, RAHWAY, NJ 07065 ATTN: MIKE SMALLING, CPWM, CRP, DIRECTOR/SUPERINTENDENT
SUEZ WATER RAHWAY 1045 WESTFIELD AVENUE RAHWAY, NEW JERSEY 07065 ATTN: KEVIN BAMBURAK, PROJECT MANAGER



PROJECT SITE: EAST HAZELWOOD AVENUE

INDEX OF SHEETS	
SHEET No.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATE OF QUANTITIES
3	EXISTING CONDITIONS PLAN
4	CONSTRUCTION PLAN
5	ROADWAY PROFILE
6	UTILITY PLAN
7	CROSS SECTIONS - 8+00 TO 10+00
8	CROSS SECTIONS - 10+50 TO 12+00
9	SOIL EROSION & SEDIMENT CONTROL ENVIRONMENTAL PLAN
10	SOIL EROSION & SEDIMENT CONTROL NOTES
11	SOIL EROSION & SEDIMENT CONTROL DETAILS
12	GENERAL PLAN, ELEVATION, & SECTION
13	WINGWALL REHABILITATION
14	ABUTMENT 1 REHABILITATION ELEVATION
15	ABUTMENT 2 REHABILITATION ELEVATION
16	PRECAST SLAB DETAILS
17	PARAPET DETAILS - PLAN & SECTION
18	UTILITY AND CONSTRUCTION DETAILS
19	MAINTENANCE & PROTECTION OF TRAFFIC - STAGE 1
20	MAINTENANCE & PROTECTION OF TRAFFIC - STAGE 2
21	MAINTENANCE & PROTECTION OF TRAFFIC - STAGE 3
22-23	BRIDGE CONSTRUCTION STAGING SECTIONS & NOTES
24	REINFORCEMENT BAR SCHEDULE

THE CONTRACTOR SHALL CONTACT NJ ONE CALL AT 811 OR 1-800-272-1000 FOR FIELD LOCATION OF UNDERGROUND UTILITIES PRIOR TO THE START OF CONSTRUCTION.

#### NOTES

NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2007 WITH AMENDMENTS THERETO TO GOVERN

STANDARD ROADWAY CONSTRUCTION/TRAFFIC CONTROL/ BRIDGE CONSTRUCTION DETAILS BOOKLET, 2007 AND STANDARD ELECTRICAL DETAILS BOOKLET, 2007 ARE APPLICABLE TO THIS PROJECT EXCEPT FOR THOSE DETAILS CONTAINED HEREIN.

#### APPROVALS

RECOMMENDED FOR APPROVAL BY		7/12/17
	JACQUELINE FOUSHEE, P.E., C.M.E., CITY ENGINEER	DATE
APPROVED BY		7/12/17
	SAMSON STEGMANN, RAHWAY CITY MAYOR	DATE
RECOMMENDED FOR APPROVAL BY		7/31/17
	THOMAS O. MINEO, P.E., COUNTY ENGINEER	DATE
APPROVED BY		7/20/17
	ALFRED J. FAELLA, COUNTY MANAGER	DATE

NO.	REVISION	DATE	BY	CHK. BY
<b>TITLE SHEET</b>				
REHABILITATION OF EAST HAZELWOOD AVE. MINOR BRIDGE Ra-69 CITY OF RAHWAY, UNION COUNTY, NEW JERSEY				
DATE:		DATE: 7/31/17		
<b>RICHARD G. ARANGO</b> NJ PROFESSIONAL ENGINEER LIC. NO. 38882		<b>FRANK J. SENEY JR.</b> NJ PROFESSIONAL ENGINEER LIC. No. 35321		
<b>REMINGTON, VERNICK &amp; ARANGO ENGINEERS</b> ONE HARMON PLAZA, SUITE 210, SECAUJUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM Certificate of Authorization: 24 GA 28003800				
SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.
DWG. NO. 2000X016		SHEET. NO. 1 OF 24		
DWG FILE PATH/NAME m:\transportation\bridge\union county\2000\016 - hazelwood avenue bridge replacement\000_bridg rehabilitation plans\V-2000016-01.dwg				

# ESTIMATE OF QUANTITIES

## GENERAL NOTES

## BRIDGE GENERAL NOTES

ROADWAY PAY ITEMS					
PAY ITEM NO.	DESCRIPTION	UNITS	PLAN QUANTITY	IF & WHERE DIRECTED	CONTRACT QUANTITY
1	MOBILIZATION	L.S.	1	0	1
2	SILT FENCE	L.F.	206	24	230
3	HAYBALE (IF AND WHERE DIRECTED)	UNIT	0	15	15
4	FLOATING TURBIDITY BARRIER, TYPE 2	L.F.	50	15	65
5	SEDIMENT CONTROL BAG	S.F.	450	450	900
6	INLET FILTER TYPE 2, 2 X 4	UNIT	7	0	7
7	BREAKAWAY BARRICADE	UNIT	25	5	30
8	DRUM	UNIT	20	10	30
9	TRAFFIC CONE	UNIT	25	25	50
10	CONSTRUCTION SIGNS	S.F.	232	68	300
11	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW	50000	0	50000
12	CONSTRUCTION BARRIER CURB	L.F.	480	50	530
13	TEMPORARY CRASH CUSHION, QUADGUARD 3 BAYS X 24" WIDE	UNIT	2	0	2
14	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT	2	0	2
15	PORTABLE VARIABLE MESSAGE SIGN	UNIT	2	0	2
16	FUEL PRICE ADJUSTMENT	L.S.	1	0	1
17	ASPHALT PRICE ADJUSTMENT	L.S.	1	0	1
18	NO ITEM	-	0	0	0
19	EXCAVATION, UNCLASSIFIED	C.Y.	975	125	1100
20	I-9 SOIL AGGREGATE	C.Y.	135	45	180
21	DENSE-GRADED AGGREGATE BASE COURSE, 4" THICK	S.Y.	1752	148	1900
22	TACK COAT	GAL.	270	30	300
23	PRIME COAT	GAL.	630	30	660
24	HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK	TON	210	20	230
25	HOT MIX ASPHALT 25M64 BASE COURSE, 6" THICK	TON	620	40	660
26	NON VEGETATIVE SURFACE, HOT MIX ASPHALT	S.Y.	153	27	180
27	RECONSTRUCTED INLET, TYPE B USING NEW CASTING	UNIT	6	1	7
28	RESET CASTING (IF AND WHERE DIRECTED)	UNIT	0	2	2
29	CONCRETE SIDEWALK, 4" THICK	S.Y.	167	23	190
30	10" x 20" CONCRETE VERTICAL CURB	L.F.	232	28	260
31	BEAM GUIDE RAIL	L.F.	219	31	250
32	BEAM GUIDE RAIL ELEMENT	L.F.	75	25	100
33	THREE BEAM GUIDE RAIL, BRIDGE	L.F.	42	0	42
34	FLARED GUIDE RAIL TERMINAL	UNIT	1	0	1
35	TANGENT GUIDE RAIL TERMINAL	UNIT	2	0	2
36	TRAFFIC MARKINGS, THERMOPLASTIC	S.F.	160	40	200
37	TRAFFIC STRIPES, LONG-LIFE, EPOXY RESIN, 4"	L.F.	1250	50	1300
38	TOPSOILING, 6" THICK	S.Y.	178	22	200
39	TOPSOIL STABILIZATION, TYPE 2 MAT	S.Y.	178	22	200
40	STRAW MULCHING	S.Y.	178	22	200
41	FERTILIZING AND SEEDING, TYPE A-3	S.Y.	178	22	200
42	EXCAVATION TEST PITS (IF & WHERE DIRECTED)	C.Y.	0	100	100

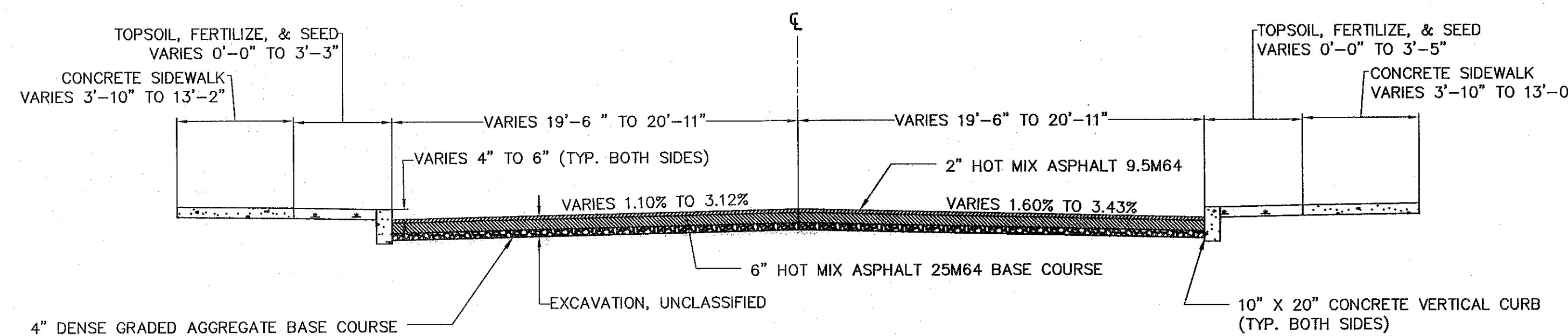
BRIDGE PAY ITEMS					
PAY ITEM NO.	DESCRIPTION	UNITS	PLAN QUANTITY	IF & WHERE DIRECTED	CONTRACT QUANTITY
43	CLEARING SITE - BRIDGE	L.S.	1	0	1
44	TEMPORARY COFFERDAM	L.S.	1	0	1
45	NO ITEM	0	0	0	0
46	REINFORCEMENT STEEL, EPOXY-COATED	POUND	3218	322	3540
47	CONCRETE SPALL REPAIR, 2" TO 6" DEEP	S.F.	982	318	1300
48	CONCRETE SPALL REPAIR, OVER 6" DEEP	S.F.	122	78	200
49	NO ITEM	0	0	0	0
50	UTILITY GROUT REPAIR	C.Y.	3	2	5
51	PRESSURE INJECTION, CONCRETE CRACKS	L.F.	108	27	135
52	CONCRETE CORING FOR 12" WATER MAIN RELOCATION	L.S.	1	0	1
53	PRE-CAST REINFORCED CONCRETE STRUCTURAL SLAB	L.S.	1	0	1
54	CONCRETE BRIDGE PARAPET W/ARCHITECTURAL FINISH	L.F.	72	3	75
55	CONCRETE BRIDGE SIDEWALK	C.Y.	6	1	7
56	DATE PANEL	UNIT	2	0	2

- DESIGN CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. ANY ERRORS OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
- LOCATION OF EXISTING UTILITIES ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL USE EXCAVATED MATERIALS FOR BACKFILL UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- ALL PAVED AND CONCRETE AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION AT LEAST EQUAL TO THAT WHICH EXISTED PRIOR TO THE START OF CONSTRUCTION AND SEEDED.
- ALL GRASSED OR WOODED AREAS DISTURBED DURING CONSTRUCTION SHALL BE TOPSOILED.
- ALL FILL SHALL BE PLACED IN 8" LOOSE LAYERS, AND COMPACTION OF MATERIAL SHALL BE 95% PROCTOR DENSITY (ASTM D1557). IF BORROW FILL IS REQUIRED, IT SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF UNDERGROUND SURFACE UTILITIES AND STRUCTURES AT OR ADJACENT TO THE SITE OF CONSTRUCTION AND IT SHALL BE AT THEIR OWN EXPENSE TO REPAIR OR REPLACE ANYTHING THAT THEY DAMAGE.
- BASELINES HAVE BEEN PROVIDED ON THE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE THE BASELINE AS SHOWN ON THE PLAN.
- ALL CONSTRUCTION DETAILS NOT SHOWN SHALL BE IN ACCORDANCE WITH N.J.D.O.T. STANDARDS AS DETAILS IN "STANDARD ROADWAY CONSTRUCTION/TRAFFIC CONTROL/BRIDGE CONSTRUCTION DETAILS."

INCLUDING ALL APPLICABLE BASELINE DOCUMENT CHANGES AND APPENDICES. THESE DETAILS MAY BE PURCHASED THROUGH THE N.J.D.O.T. PLANS AND SPECIFICATION DISTRIBUTION CENTER AT: 1035 PARKWAY AVENUE, TRENTON, NJ 08625-0600 (TELEPHONE: 1-609-530-2096).

- A MINIMUM OF ONE (1) FOOT OF PAVING SHALL BE REMOVED AROUND THE PERIMETER OF ALL EXISTING MANHOLE AND INLET CASTINGS TO ENSURE A MINIMUM OF TWO (2) INCHES OF SURFACE COURSE IS PROVIDED AROUND THEM. THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR "HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK".
- NO SEPARATE PAYMENT WILL BE MADE FOR CLEARING AND GRUBBING. ALL COSTS THEREOF SHALL BE INCLUDED IN THE PRICE BID FOR THE ITEM "CLEARING SITE, BRIDGE".
- NO SEPARATE PAYMENT WILL BE MADE FOR FILTER FABRIC WHEN NOTED. ALL COSTS THEREOF SHALL BE INCLUDED IN THE PRICES BID FOR THE VARIOUS ITEMS SCHEDULED WITHIN THE PROPOSAL.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH FEDERAL, STATE, COUNTY, AND MUNICIPAL LAWS, ORDINANCES, AND REGULATIONS.
- THE CONTRACTOR SHALL FURNISH, PLACE, AND MAINTAIN SHEETING, BRACING, SHORING, AND OTHER SUPPORTS REQUIRED BY THE WORK. NO SEPARATE PAYMENT WILL BE MADE FOR PROVIDING SHEETING, BRACING, SHORING, AND OTHER SUPPORT SYSTEMS FOR THE WORK. COSTS THEREOF ARE TO BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS OF THE PROPOSAL.
- ALL UTILITY CASTINGS, VALVE BOXES, AND CURB BOXES SHALL BE RESET TO THE FINISHED GRADE. THE COST OF RESETTING AND THE COORDINATION WITH UTILITY COMPANIES FOR RESETTING EXISTING UTILITY CASTINGS, VALVE BOXES, AND CURB BOXES SHALL BE INCLUDED IN THE COST OF THE VARIOUS PAY ITEMS FOR THE PROPOSAL.
- ALL CONCRETE REPAIR LOCATIONS AND QUANTITIES ARE APPROXIMATE; RESIDENT ENGINEER SHALL DETERMINE THE EXACT LOCATION OF REQUIRED REPAIR.

- DESIGN SPECIFICATIONS: 2012 A.A.S.H.T.O. LRFD STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES (WITH INTERIMS), SECTIONS 3 AND 29 (WITH INTERIMS) OF THE 2009 NJDOT BRIDGE AND STRUCTURES DESIGN MANUAL, AS MODIFIED BY THE SUPPLEMENTAL SPECIFICATIONS.
- CONSTRUCTION AND MATERIAL SPECIFICATIONS: 2007 NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION BOUND VERSION AS MODIFIED BY THE CONTRACT SUPPLEMENTARY SPECIFICATIONS.
- DESIGN LOADING:
  - LIVE LOAD 3.1.1. AASHTO LRFD HL-93 VEHICULAR LIVE LOAD
  - DEAD LOAD 3.2.1. DEAD LOAD SHALL INCLUDE 25 PSF FUTURE WEARING SURFACE
- CONCRETE DESIGN STRESSES:
  - SPECIFIED COMPRESSIVE STRENGTH  $f'_c$  (IN ACCORDANCE WITH NJDOT STANDARD SPECIFICATIONS AS MAY BE MODIFIED BY THE SUPPLEMENTAL SPECIFICATIONS)
    - CLASS A = 4,000 PSI (CAST-IN-PLACE PARAPET AND SIDEWALK)
    - CLASS B = 3,000 PSI (CAST-IN-PLACE FOOTINGS AND WINGWALLS)
    - CLASS P = 5,000 PSI (PRECAST REINFORCED STRUCTURAL SLAB)
  - CLASS DESIGN STRENGTHS (IN ACCORDANCE WITH TABLE 903.03.06-3 OF THE NJDOT STANDARD SPECIFICATIONS)
    - CLASS A = 4,600 PSI
    - CLASS B = 3,700 PSI
    - CLASS P = 5,500 PSI
- REINFORCEMENT STEEL:
  - ASMT A615 (GRADE 60), ALLOWABLE TENSILE STRESS,  $F_s = 24,000$  PSI.
  - ALL REINFORCING STEEL SHALL BE EPOXY COATED.
- BORINGS:
  - INDICATED LOCATION OF BORINGS, DENOTED AS LOG NO.  $\oplus$ -#
  - BORING LOGS ARE INCLUDED IN THE CONTRACT SPECIFICATIONS.
- EXISTING STRUCTURE:
  - THE EXISTING SUPERSTRUCTURE AND OTHER STRUCTURAL ELEMENTS SHALL BE REMOVED IN THEIR ENTIRETY AS REQUIRED TO SATISFACTORILY COMPLETE THE WORK.
  - THE DEMOLITION AND REMOVAL OF TOP PORTION OF EXISTING CONCRETE STEMS TO CREATE A FLUSH SURFACE FOR THE INSTALLATION OF THE PRECAST SLAB AT THE REQUIRED ELEVATION SHALL BE PAID FOR UNDER "CLEARING SITE, BRIDGE".
- FOUNDATION PREPARATION:
  - ALL FOUNDATION SITE PREPARATION SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.
- SUPERSTRUCTURE
  - DRAWING SHALL INCLUDE DETAILS OF ALL PERTINENT ATTACHMENTS. NO PRECAST ATTACHMENTS SHALL BE EXPOSED.
  - ANCHOR BOLTS SHALL CONFORM TO CURRENT ASTM DESIGNATION A36. TIE RODS, SLEEVES, ANCHOR BOLTS AND INSERTS SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A153.
  - NON SHRINK GROUT, DOWEL BARS, POST TENSIONING STRANDS, AND ELASTOMERIC MATERIAL SHALL BE INCIDENTAL TO THE PRECAST REINFORCED CONCRETE STRUCTURAL SLABS.
  - THE USE OF LONGITUDINAL POST-TENSIONING TIES FOR THE PRECAST REINFORCED CONCRETE STRUCTURAL SLABS ARE REQUIRED. PROVISIONS SHALL BE MADE TO ACCOMMODATE POST-TENSIONING THE BRIDGE UNIT IN THREE STAGES. LONGITUDINAL TIES THAT ARE USED TO TIE THE PRECAST UNITS TOGETHER SHALL BE 3/4" DIAMETER HIGH TENSILE STRENGTH STEEL BARS CONFORMING TO AASHTO M275 (ASTM A722). POST-TENSIONING HAS TO BE STAGED (SPliced AS TO MANUFACTURER); 1/2" x 7 STRAND WIRE CANNOT BE SPliced, IT SHOULD BE REMOVED. BARS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 (ASTM A153). ALL HARDWARE ASSOCIATED WITH END ANCHORAGE SYSTEMS SHALL BE GALVANIZED. END ANCHORAGES (NUTS, WASHER AND ANCHOR PARTS) SHALL BE COMPATIBLE WITH THE TIE ROD SYSTEM AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M232 (ASTM A153). EACH TIE ROD SHALL BE STRESSED TO A TENSION OF 30 KIPS. AFTER TENSIONING, THE EXPOSED ENDS OF THE TIES SHALL BE REMOVED SO THAT NO PART OF THE TIES OR END FITTINGS EXTEND BEYOND 1" INSIDE THE ANCHORAGE POCKET. AFTER TENSIONING IS COMPLETED, EXPOSED PARTS OF END FITTINGS SHALL BE COATED WITH TWO COATS OF BITUMINOUS PAINT.
  - THE MANUFACTURER MUST BE A MEMBER OF THE PRECAST/PRESTRESSED CONCRETE INSTITUTE (P.C.I.).
  - SEPARATE PAYMENT WILL NOT BE MADE FOR THE WATERSTOPS, BUT THE COST SHALL BE INCLUDED IN VARIOUS ITEMS OF THE PROPOSAL.
- CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" X 3/4" UNLESS OTHERWISE NOTED.



TYPICAL ROADWAY SECTION  
(LOOKING UPSTATION)  
SCALE: 1" = 5'-0"

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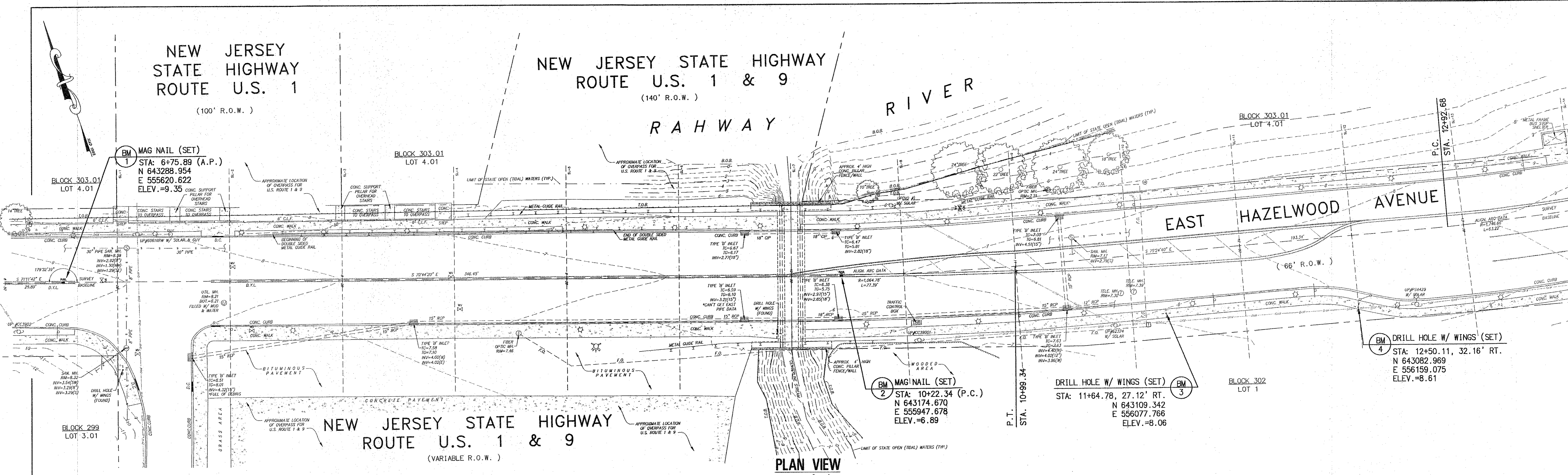
PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID.

NO.	REVISION	DATE	BY	CHK. BY
ESTIMATE OF QUANTITIES, GENERAL NOTES, & TYPICAL SECTION				
REHABILITATION OF EAST HAZELWOOD AVE. MINOR BRIDGE Rd-69 CITY OF RAHWAY, UNION COUNTY, NEW JERSEY				
DATE:	DATE:		DATE:	
<b>RICHARD G. ARANGO</b> NJ PROFESSIONAL ENGINEER LIC. NO. 38882	<b>FRANK J. SENEY JR.</b> NJ PROFESSIONAL ENGINEER LIC. NO. 35321			
<b>REMINGTON &amp; ARANGO ENGINEERS</b> ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM Certificate of Authorization: 24 GA 28003800				
SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.
DWG. NO.	SHEET. NO.			
2000X016	2 OF 24			
DWC FILE PATH/NAME M:\Transportation\Bridge\Union County\2000X016 - Hazelwood Avenue Bridge Replacement\000_Bridge Rehabilitation Plans\0-2020016-01.dwg				

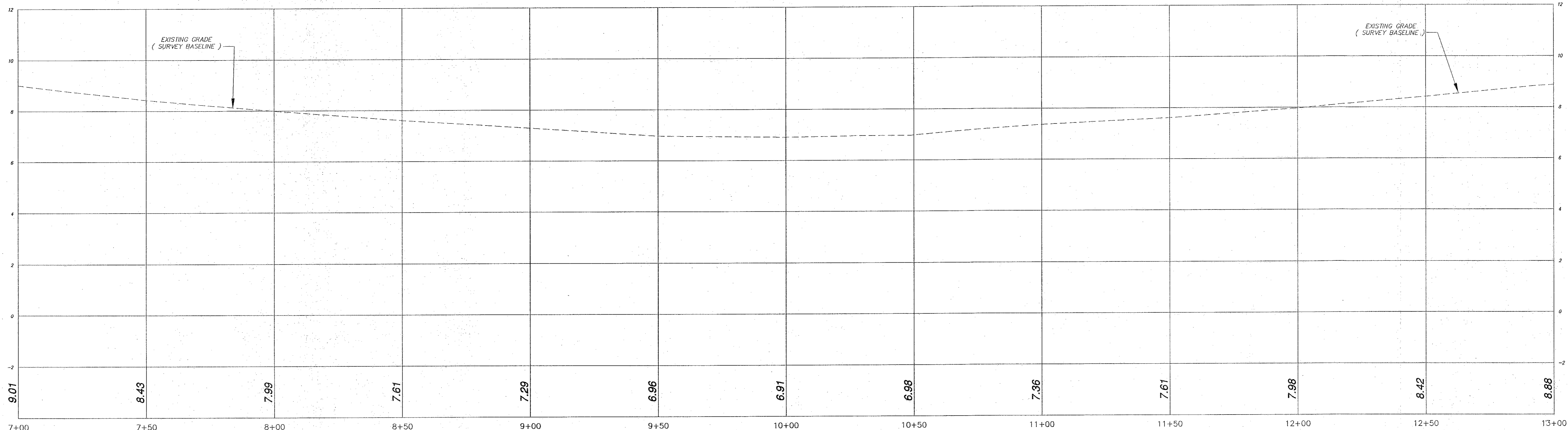
NEW JERSEY STATE HIGHWAY ROUTE U.S. 1  
(100' R.O.W.)

NEW JERSEY STATE HIGHWAY ROUTE U.S. 1 & 9  
(140' R.O.W.)  
RAHWAY RIVER

EAST HAZELWOOD AVENUE  
(66' R.O.W.)



PLAN VIEW  
SCALE: 1" = 20'



PROFILE  
SCALE: 1" = 2' VERT.  
SCALE: 1" = 20' HORIZ.

**SURVEY NOTES & REFERENCES:**

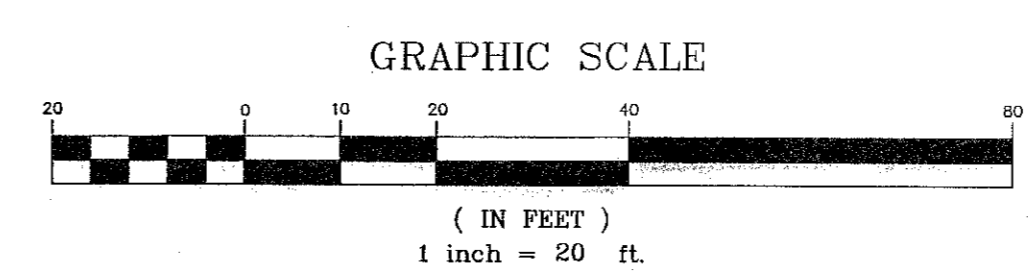
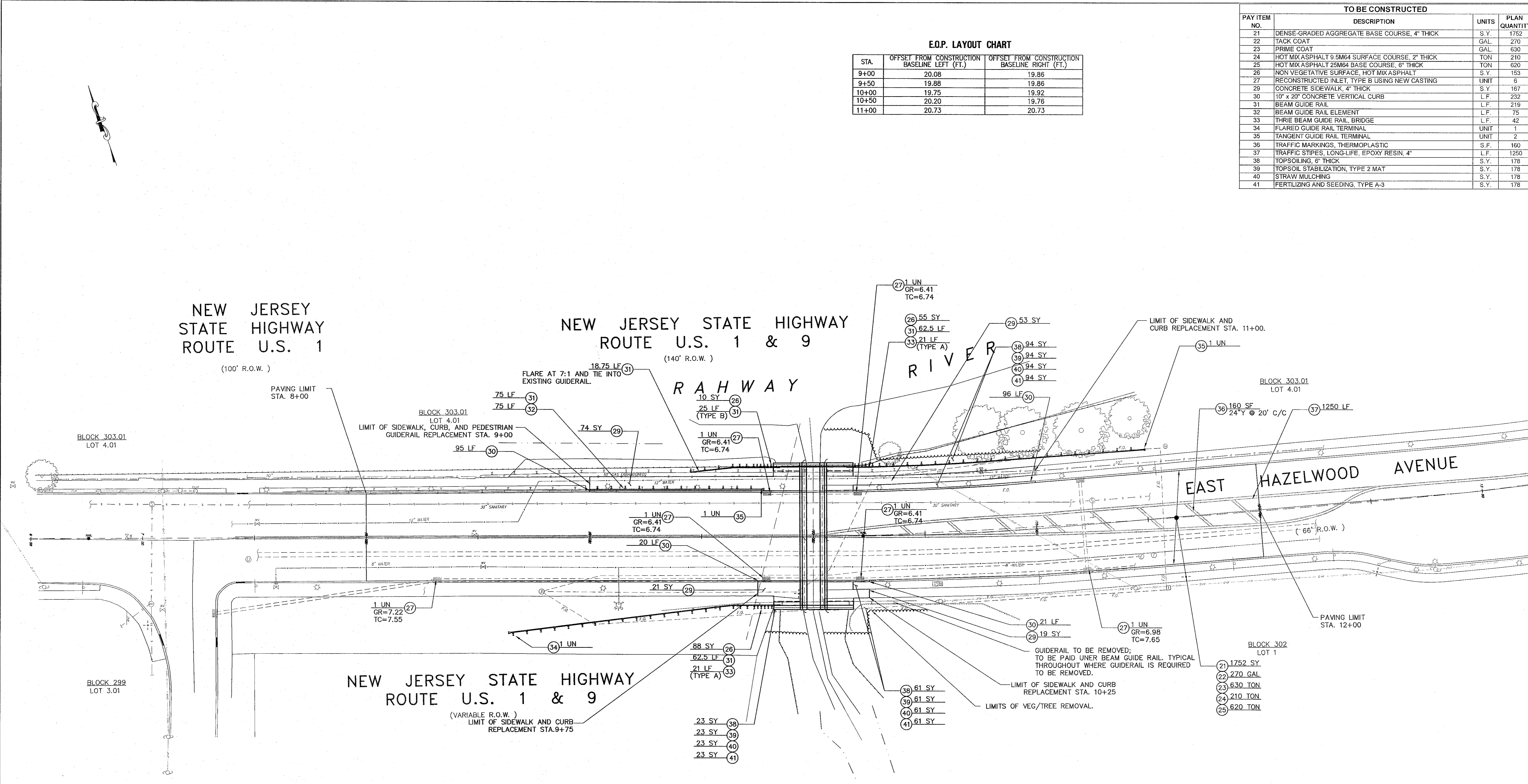
- THE HORIZONTAL DATUM IS BASED ON NAD-1983 (GRID COORDINATES) AND THE VERTICAL DATUM IS BASED ON NAVD-1988 (ADD 1.06' TO THESE ELEVATIONS TO CONVERT TO NGVD-1929 DATUM)
- BLOCK AND LOT NUMBERS LINES SHOWN ON THESE PLANS ARE BASED ON THE CURRENT TAX MAPS OF THE CITY OF RAHWAY, UNION COUNTY, NEW JERSEY.
- EXISTING TOPOGRAPHIC CONDITIONS WERE SURVEYED BY REMINGTON & VERNICK ENGINEERS UNDER THE SUPERVISION OF CHARLES E. ADAMSON, N.J.P.L.S. LICENSE NO. 42627. THE SURVEY WORK WAS COMPLETED ON APRIL 8, 2015.
- RECORD DEED FOR BLOCK 299, LOT 3.01 AS RECORDED IN UNION COUNTY IN DEED BOOK 5409, PAGE 257.
- RECORD DEED FOR BLOCK 302, LOT 1 AS RECORDED IN UNION COUNTY IN DEED BOOK 5448, PAGE 338.
- RECORD DEED FOR BLOCK 302, LOT 1 AS RECORDED IN UNION COUNTY IN DEED BOOK 184, PAGE 294.
- NEW JERSEY DEPARTMENT OF TRANSPORTATION - GENERAL PROPERTY PARCEL MAP, ROUTE U.S. 1 AND 9 (1953) SECTION 3, MIDDLESEX COUNTY LINE TO LINDEN / ELIZABETH LINE, SHOWING EXISTING RIGHT OF WAY AND PARCELS TO ACQUIRED IN THE CITY OF RAHWAY AND THE CITY OF LINDEN.

NO.	REVISION	DATE	BY	CHK. BY
EXISTING CONDITIONS PLAN REHABILITATION OF EAST HAZELWOOD AVE. MINOR BRIDGE Ra-69 CITY OF RAHWAY, UNION COUNTY, NEW JERSEY				
<i>Charles E. Adamson</i>				DATE: 5/23/17
<b>CHARLES E. ADAMSON</b> PROFESSIONAL LAND SURVEYOR LIC. NO. 42627				
<b>REMINGTON, VERNICK &amp; ARANGO ENGINEERS</b> ONE HARMONY PLAZA, SUITE 210, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM Certificate of Authorization: 24 GA 28003500				
SCALE 1"=20'	DATE 04/21/2015	DRAWN BY J.S.	DSGN. BY C.F.A.	CHK'D. BY C.F.A.
DWG. NO. 200X016	SHEET NO. 3 OF 24	DWC FILE PATH/NAME Y:\Survey Projects\New Jersey\Union County\Rahway City\2000X016 - HAZELWOOD AVENUE BRIDGE\DWG\2000X016 HAZELWOOD Plan Profile.dwg		

TO BE CONSTRUCTED			
PAY ITEM NO.	DESCRIPTION	UNITS	PLAN QUANTITY
21	DENSE-GRADED AGGREGATE BASE COURSE, 4" THICK	S.Y.	1752
22	TACK COAT	GAL.	270
23	PRIME COAT	GAL.	630
24	HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK	TON	210
25	HOT MIX ASPHALT 25M64 BASE COURSE, 6" THICK	TON	620
26	NON VEGETATIVE SURFACE, HOT MIX ASPHALT	S.Y.	153
27	RECONSTRUCTED INLET, TYPE B USING NEW CASTING	UNIT	6
29	CONCRETE SIDEWALK, 4" THICK	S.Y.	167
30	10" x 20" CONCRETE VERTICAL CURB	L.F.	232
31	BEAM GUIDE RAIL	L.F.	219
32	BEAM GUIDE RAIL ELEMENT	L.F.	75
33	THREE BEAM GUIDE RAIL, BRIDGE	L.F.	42
34	FLARED GUIDE RAIL TERMINAL	UNIT	1
35	TANGENT GUIDE RAIL TERMINAL	UNIT	2
36	TRAFFIC MARKINGS, THERMOPLASTIC	S.F.	160
37	TRAFFIC STRIPES, LONG-LIFE, EPOXY RESIN, 4"	L.F.	1250
38	TOPSOILING, 6" THICK	S.Y.	178
39	TOPSOIL STABILIZATION, TYPE 2 MAT	S.Y.	178
40	STRAW MULCHING	S.Y.	178
41	FERTILIZING AND SEEDING, TYPE A-3	S.Y.	178

**E.O.P. LAYOUT CHART**

STA.	OFFSET FROM CONSTRUCTION BASELINE LEFT (FT.)	OFFSET FROM CONSTRUCTION BASELINE RIGHT (FT.)
9+00	20.08	19.86
9+50	19.88	19.86
10+00	19.75	19.92
10+50	20.20	19.76
11+00	20.73	20.73



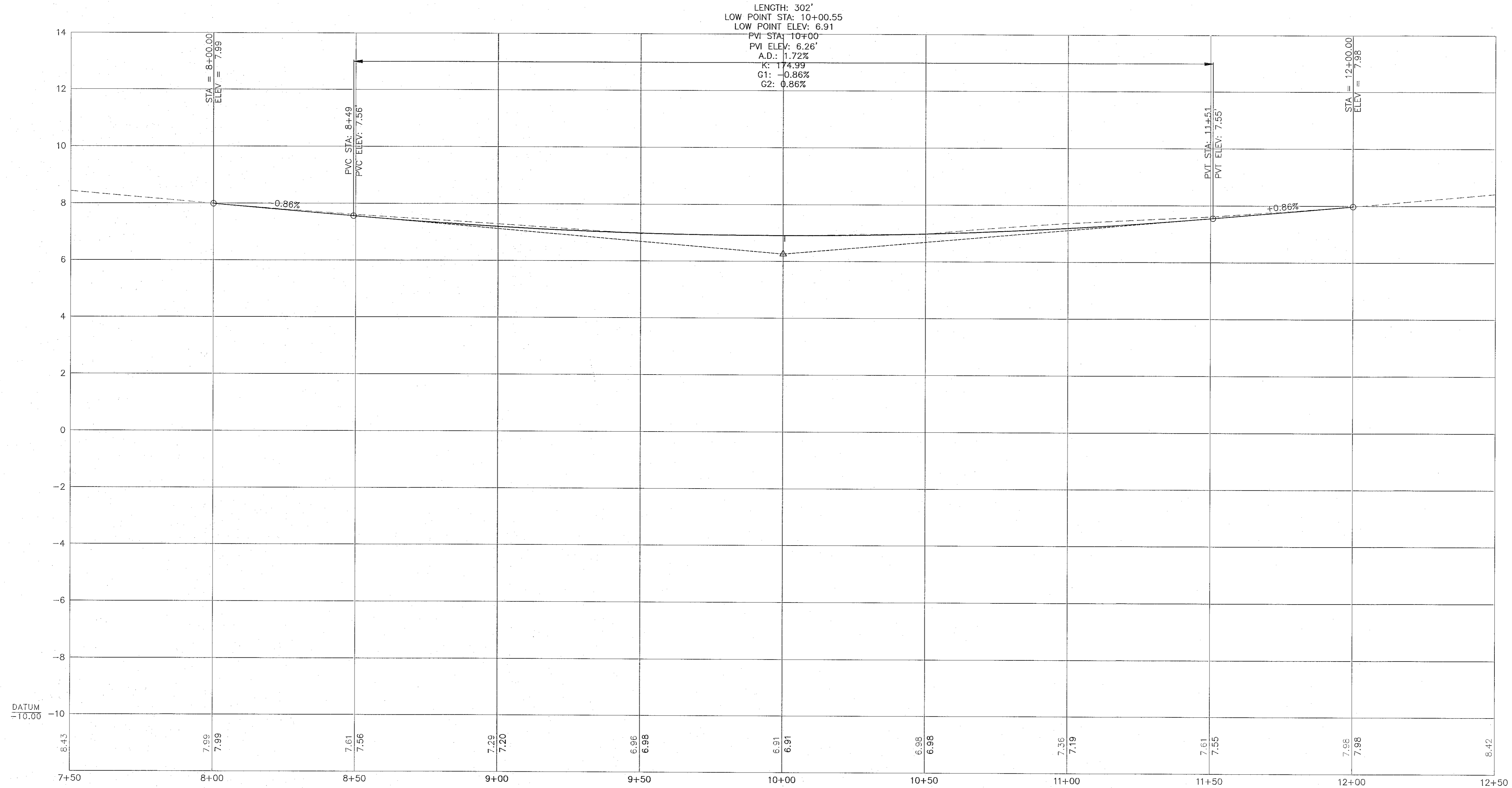
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PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID.

NO.	REVISION	DATE	BY	CHK. BY
<b>CONSTRUCTION PLAN</b>				
<b>REHABILITATION OF EAST HAZELWOOD AVE.</b>				
<b>MINOR BRIDGE Ra-69</b>				
<b>CITY OF RAHWAY, UNION COUNTY, NEW JERSEY</b>				
DATE:		DATE: <b>3/31/17</b>		
<b>RICHARD G. ARANGO</b> NJ PROFESSIONAL ENGINEER LIC. NO. 38882		<b>FRANK J. SENEY JR.</b> NJ PROFESSIONAL ENGINEER LIC. NO. 35321		
<b>REMINGTON, VERNICK &amp; ARANGO ENGINEERS</b>				
ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM Certificate of Authorization: 24 CA 28003800				
SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.
DWG FILE PATH/NAME	SHEET NO.			
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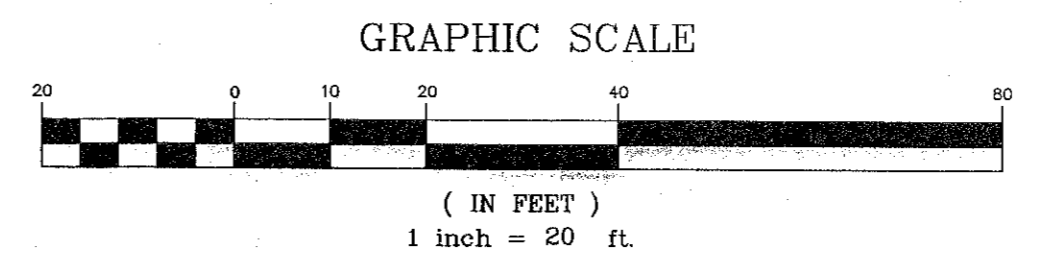




LENGTH: 302'  
 LOW POINT STA: 10+00.55  
 LOW POINT ELEV: 6.91  
 PVI STA: 10+00  
 PVI ELEV: 6.26'  
 A.D.: 1.72%  
 K: 174.99  
 G1: -0.86%  
 G2: 0.86%

**PROFILE**

SCALE: 1" = 20' (HORIZONTAL)  
 1" = 2' (VERTICAL)



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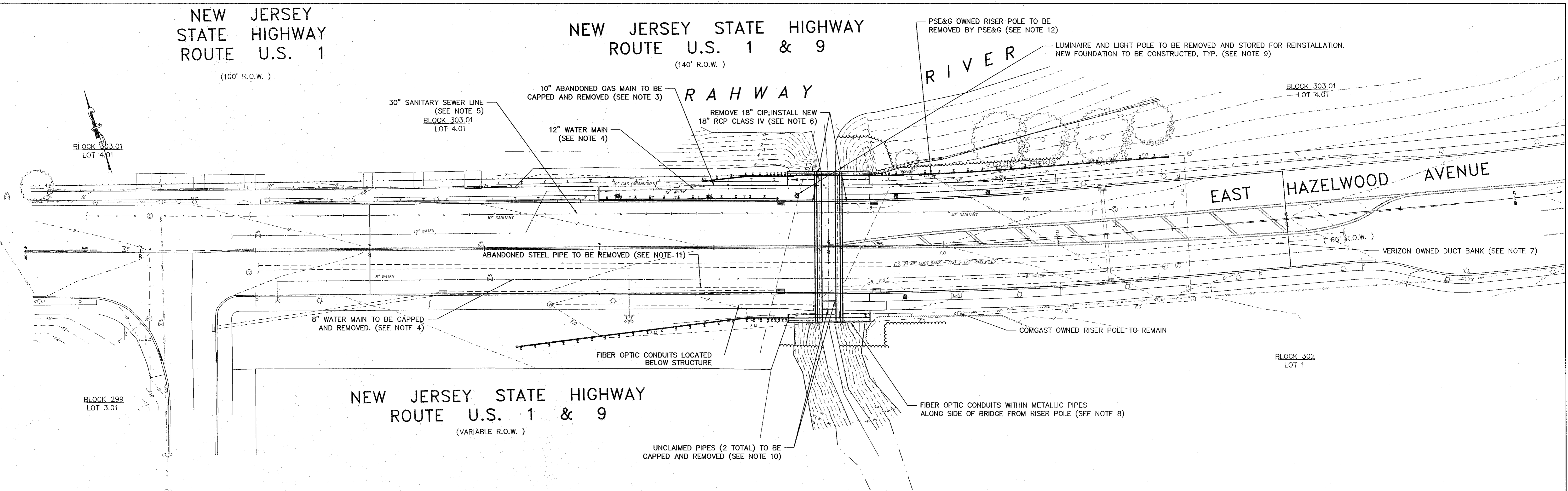
NO.	REVISION	DATE	BY	CHK.	BY
<b>ROADWAY PROFILE</b>					
<b>REHABILITATION OF EAST HAZELWOOD AVE.</b>					
<b>MINOR BRIDGE Ra-69</b>					
<b>CITY OF RAHWAY, UNION COUNTY, NEW JERSEY</b>					
DATE:		DATE: 3/31/17			
<b>RICHARD G. ARANGO</b>		<b>FRANK J. SENEY JR.</b>			
NJ PROFESSIONAL ENGINEER LIC. NO. 38882		NJ PROFESSIONAL ENGINEER LIC. No. 35321			
<b>REMINGTON, VERNICK &amp; ARANGO ENGINEERS</b>					
<small>ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM Certificate of Authorization: 24 GA 28003900</small>					
SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY	DWG. NO.
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.	2000X016
DWC FILE PATH/NAME					SHEET. NO.
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NEW JERSEY STATE HIGHWAY ROUTE U.S. 1

(100' R.O.W.)

NEW JERSEY STATE HIGHWAY ROUTE U.S. 1 & 9

(140' R.O.W.)

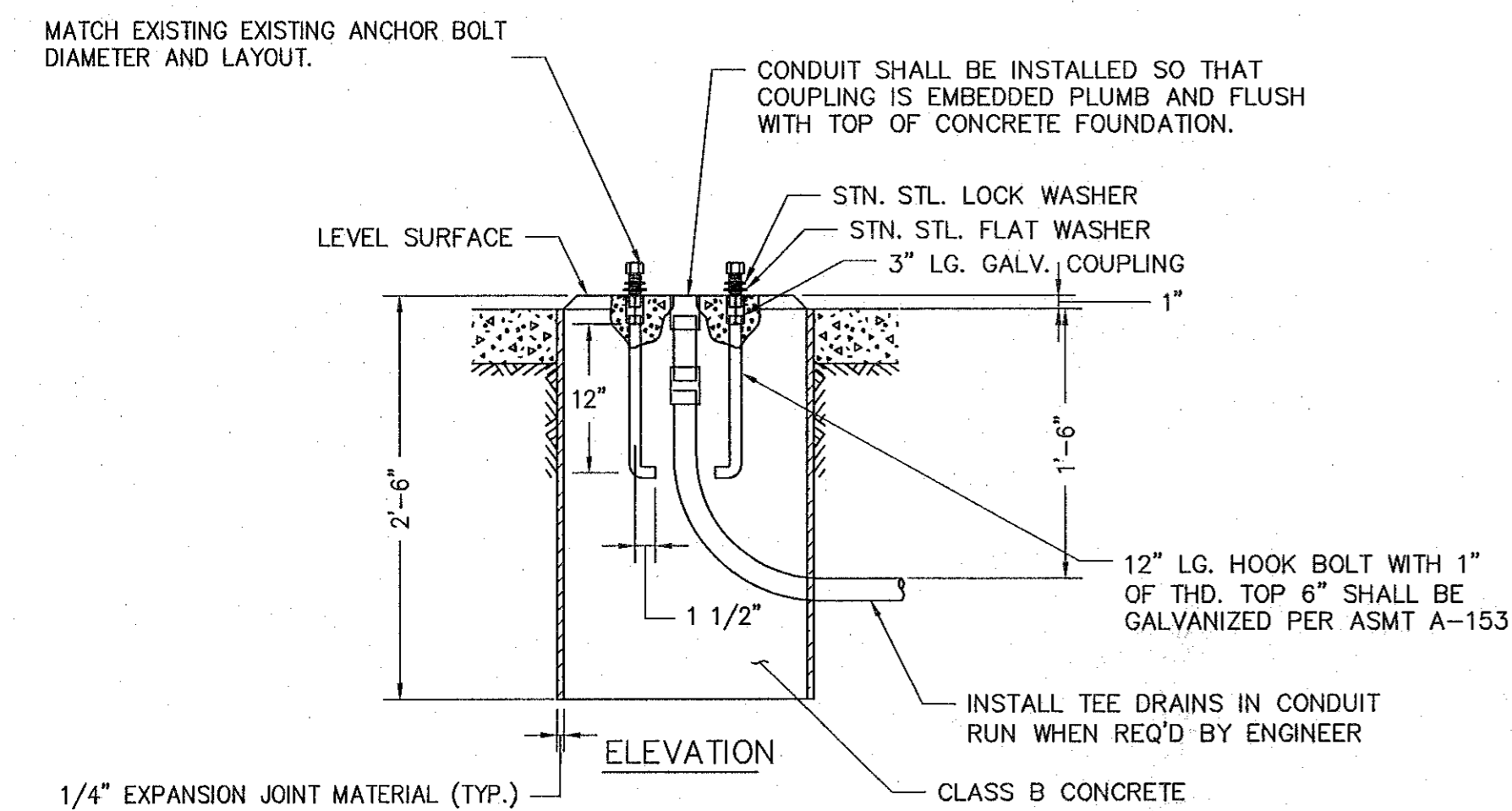
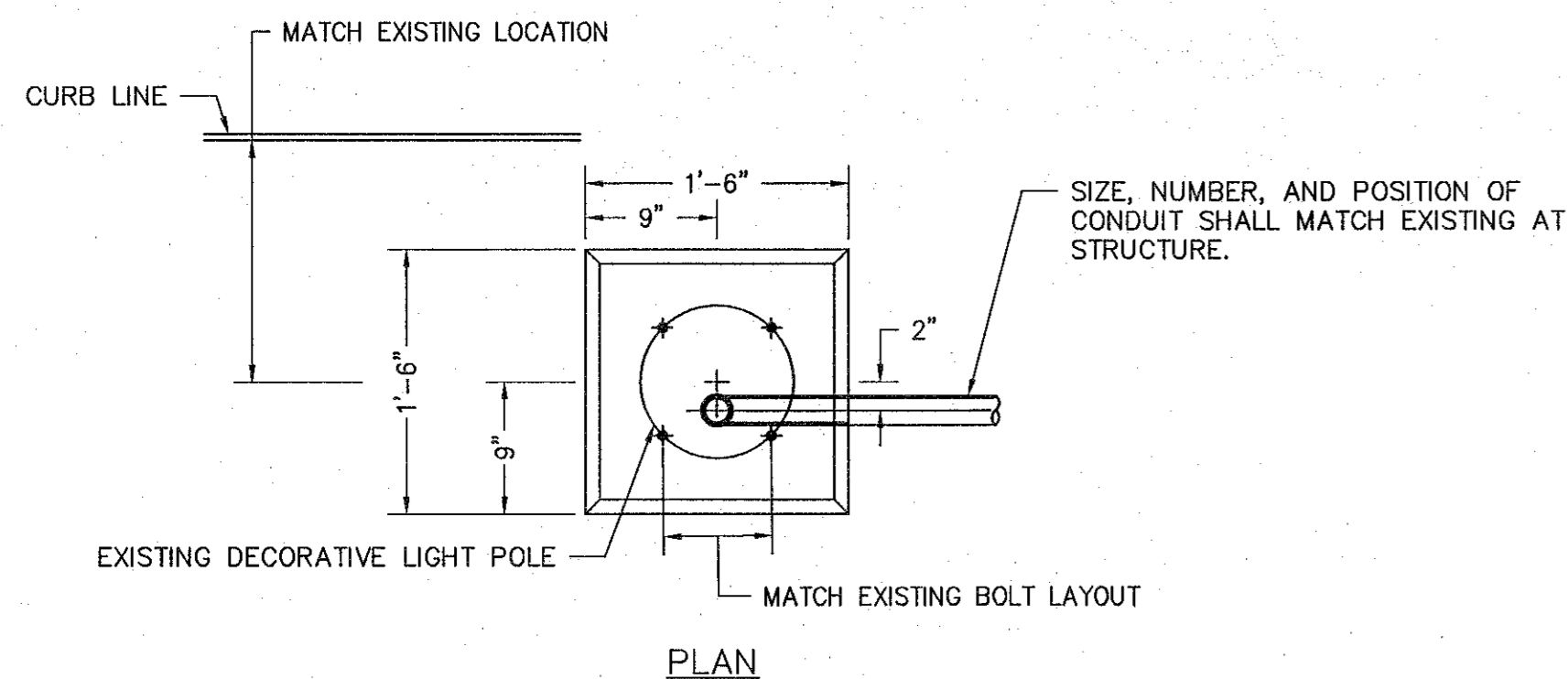


UTILITY PLAN

SCALE: 1" = 20'

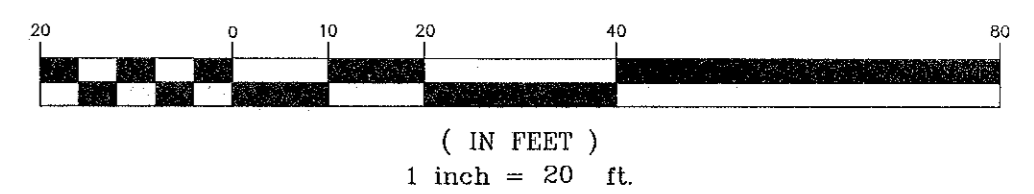
UTILITY NOTES

1. ALL UTILITY WORK INCLUDING COMPLETE REINSTALLATION OF LIGHT POLES SHALL BE INCLUDED IN THE COST OF THE VARIOUS PAY ITEMS FOR THE BID AND NO SEPARATE PAYMENT WILL BE MADE. THE ONLY EXCEPTIONS ARE AS FOLLOWS:
  - 1.1. THE RELOCATION OF THE 12" WATER MAIN, ITS SLEEVE CONSTRUCTION, AND NON-SHRINK GROUT FOR THE REPAIR WILL BE PAID FOR UNDER THE BID ITEM "CONCRETE CORING FOR 12" WATER MAIN RELOCATION".
  - 1.2. FILLING UTILITY PENETRATIONS WITH NON SHRINK GROUT WITHIN THE STRUCTURE LIMITS IS PAID FOR UNDER THE BID ITEM "UTILITY GROUT REPAIR".
2. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTHS OF ALL UTILITIES PRIOR TO CONSTRUCTION.
3. ABANDONED 10" GAS MAIN OWNED BY ELIZABETHTOWN GAS
  - 3.1. THE CONTRACTOR SHALL CAP AND REMOVE THE GAS MAIN TO THE STRUCTURE LIMITS; THE GAS MAIN RUNS UNDER THE NORTH SIDEWALK. THE HOLE PENETRATING THE ABUTMENT STEM SHALL BE FILLED WITH NON-SHRINK GROUT WITHIN THE STRUCTURE LIMITS.
4. 12" AND 8" WATER MAINS OWNED BY SUEZ WATER (FORMERLY UNITED WATER OF RAHWAY)
  - 4.1. SUEZ WATER'S CONTRACTOR, FLETCHER CREAMER, SHALL CAP AND REMOVE THE 12" AND 8" WATER MAINS WITHIN 50' OF THE STRUCTURE PRIOR TO THE START OF CONSTRUCTION.
  - 4.2. THE HOLE FOR THE 8" WATER MAIN WHICH PENETRATES THE ABUTMENT SHALL BE FILLED WITH NON-SHRINK GROUT WITHIN THE STRUCTURE LIMITS BY THE CONTRACTOR.
  - 4.3. FLETCHER CREAMER SHALL PROVIDE THE CONTRACTOR A 18" CASING PIPE FOR THE NEW 12" WATER MAIN TO RUN THROUGH.
  - 4.4. THE CONTRACTOR SHALL CORE A 20" HOLE FOR THE 18" CASING PIPE. THIS PENETRATION WILL BE LOWER THAN THE CURRENT PENETRATION. THE CONTRACTOR WILL PLACE THE 18" CASING PIPE INTO THE CORED HOLE AND GROUT AROUND IT IN THE ABUTMENT WALLS. SEE SHEET 18 FOR DETAILS.
  - 4.5. CONTRACTOR SHALL BACKFILL TO THE ELEVATION OF THE PIPE BEDDING SO FLETCHER CREAMER CAN INSTALL AND RUN THE NEW PIPE THROUGH THE CASING.
  - 4.5.1. FLETCHER CREAMER SHALL CONNECT THE EXISTING 12" WATER MAINS.
  - 4.6. THE CONTRACTOR SHALL COORDINATE WITH FLETCHER CREAMER PRIOR TO THE BEGINNING OF WORK.
5. 30" SANITARY SEWER LINE OWNED BY RAHWAY VALLEY SEWAGE AUTHORITY
  - 5.1. SEWER LINE SHALL REMAIN IN SERVICE AND BE SUPPORTED AS NECESSARY THROUGHOUT CONSTRUCTION BY THE CONTRACTOR.
  - 5.2. RAHWAY VALLEY SEWAGE AUTHORITY SHALL REVIEW THE CONTRACTOR'S PLANS AND SHOP DRAWINGS FOR SUPPORTING THE PIPE BEFORE REPAIRS BEGIN.
  - 5.3. CONTRACTOR SHALL NOTIFY RAHWAY VALLEY SEWAGE AUTHORITY IN ADVANCE OF REPAIRS TO THE PIPE PENETRATION.
  - 5.4. RAHWAY VALLEY SEWAGE AUTHORITY SHALL BE PRESENT ON SITE WHEN REPAIRS ARE OCCURRING TO THE PIPE PENETRATION.
6. TYPE B STORMWATER INLETS
  - 6.1. INLETS WILL BE IMPACTED BY THE CONSTRUCTION STAGING AND SHALL BE TEMPORARILY CONVERTED TO TYPE E INLETS TO ALLOW FOR CONSTRUCTION STAGING.
7. 24" X 9" VERIZON OWNED FIBER OPTIC DUCT BANK SHALL REMAIN IN SERVICE. THE CONTRACTOR SHALL SUPPORT THE UTILITY THROUGHOUT CONSTRUCTION.
8. 5 METAL CONDUITS RUNNING ALONG THE SIDE OF THE BRIDGE FROM THE COMCAST OWNED RISER POLE AT THE SOUTHEAST SIDEWALK. VARIOUS COMPANIES ARE PRESENT IN THESE CONDUITS.
  - 8.1. THE UTILITIES SHALL REMAIN IN SERVICE AND SHALL BE SUPPORTED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION.
  - 8.2. THE CONTRACTOR SHALL SECURE THE UTILITIES TO THE STRUCTURE FOLLOWING REPAIRS. MATCH THE EXISTING CONNECTION TYPE TO THE STRUCTURE.
9. STREET LIGHTS OWNED BY RAHWAY CITY DEPARTMENT OF PUBLIC WORKS AND ENGINEERING.
  - 9.1. STREET LIGHT POLES IMPACTED BY CONSTRUCTION SHALL BE REMOVED AND STORED BY THE CONTRACTOR.
  - 9.2. EXISTING WIRING RUNNING UNDERGROUND FOR THESE LIGHT POLES SHALL BE REMOVED BY THE CONTRACTOR, AND NEW 2" RIGID NON METALLIC CONDUIT SHALL BE INSTALLED BY THE CONTRACTOR. THE CONTRACTOR SHALL INSTALL A BUTT JOINT COUPLING AT THE ENDS OF THE EXISTING WIRE WHERE THE NEW CONDUIT WIRE WILL BE INSTALLED.
  - 9.3. POLES SHALL BE INSTALLED BY THE CONTRACTOR IN THEIR ORIGINAL LOCATION, AND A NEW FOUNDATION SHALL BE CONSTRUCTED BY THE CONTRACTOR.
10. UNCLAIMED PIPES (2 TOTAL, EACH 12") BELOW THE SOUTH SIDEWALK PENETRATING THE ABUTMENT WALLS SHALL BE CAPPED AND REMOVED BY THE CONTRACTOR TO THE STRUCTURE LIMITS. THE HOLE PENETRATING THE ABUTMENT STEM SHALL BE FILLED WITH NON-SHRINK GROUT WITHIN THE STRUCTURE LIMITS.
11. ABANDONED STEEL PIPE NEXT TO 8" WATER MAIN SHALL BE CAPPED AND REMOVED BY THE CONTRACTOR TO THE STRUCTURE LIMITS. THE HOLE PENETRATING THE ABUTMENT STEM SHALL BE FILLED WITH NON-SHRINK GROUT WITHIN THE STRUCTURE LIMITS.
12. OVERHEAD UTILITIES WITHIN THE VICINITY OF CONSTRUCTION ON THE EAST SIDE OF THE BRIDGE SHALL BE REMOVED BY PSE&G AND SHALL CONSIST OF THE REMOVAL OF A UTILITY POLE ON THE NORTHEAST CORNER OF THE BRIDGE AS IT IS NO LONGER IN SERVICE.



LIGHT POLE FOUNDATION DETAIL  
NOT TO SCALE

GRAPHIC SCALE



NO.	REVISION	DATE	BY	CHK. BY

UTILITY PLAN

REHABILITATION OF EAST HAZELWOOD AVE.  
MINOR BRIDGE Ra-69  
CITY OF RAHWAY, UNION COUNTY, NEW JERSEY

DATE: **RICHARD G. ARANGO**  
NJ PROFESSIONAL ENGINEER LIC. NO. 38882

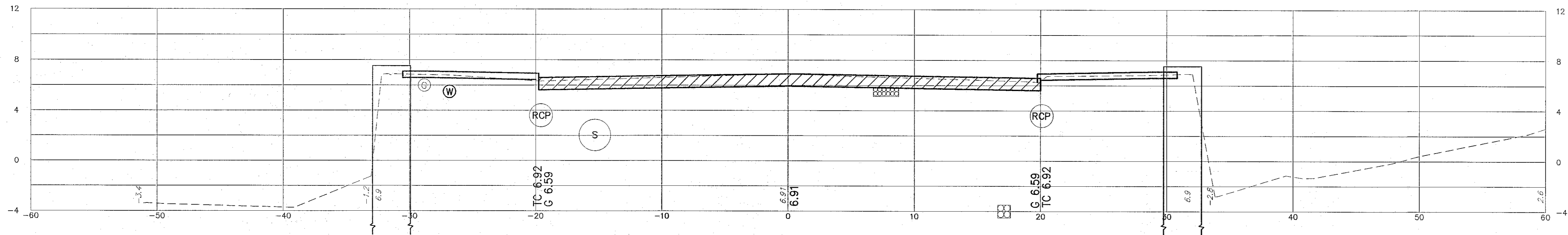
DATE: **FRANK J. SENEY JR.**  
NJ PROFESSIONAL ENGINEER LIC. No. 35321

**REMINGTON, VERNICK & ARANGO ENGINEERS**  
ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094  
(201) 624-2137, FAX (201) 624-2138, WEB SITE ADDRESS: WWW.RVE.COM  
Certificate of Authorization: 24 CA 28003800

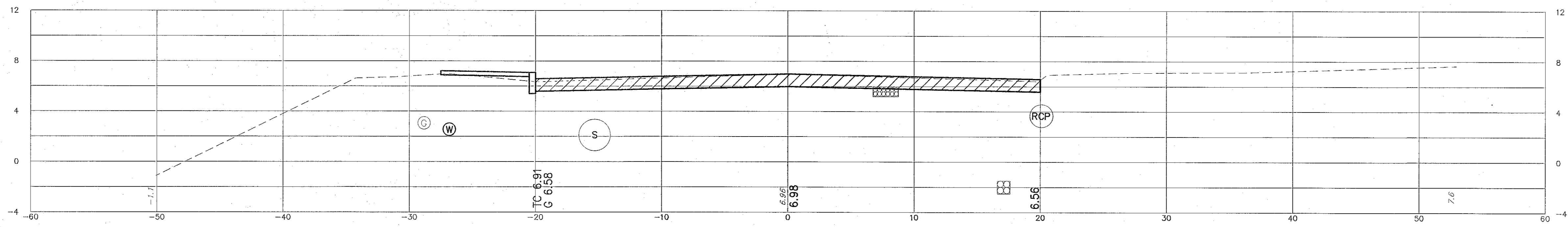
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AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.	2000X016	6 OF 24

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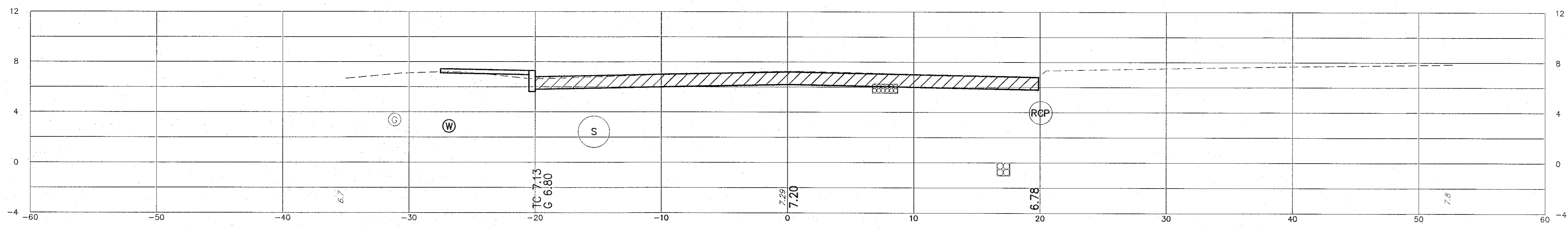
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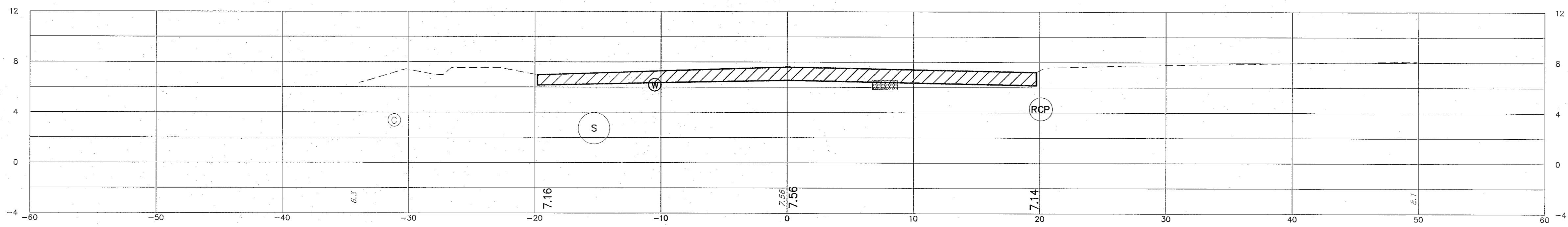
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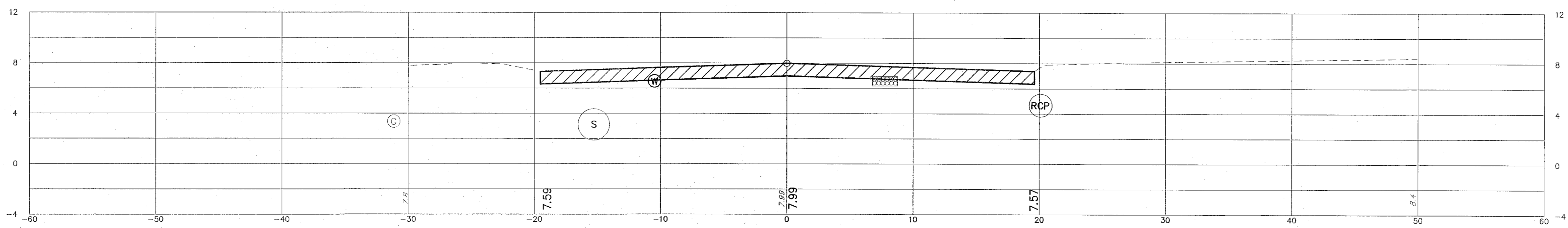
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CROSS SECTIONS  
SCALE: 1" = 5'-0"

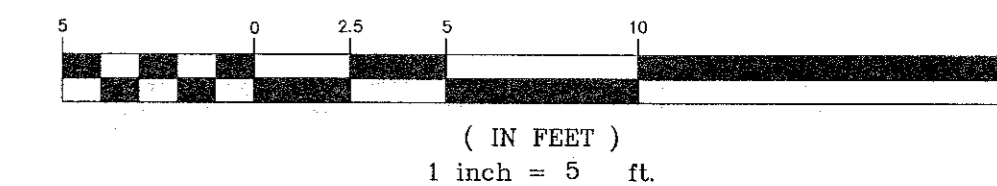
LEGEND

- EXISTING REINFORCED CONCRETE PIPE
- EXISTING 24" x 9" DUCT BANK WITH (12) 3 1/4" IRON PIPES
- EXISTING 30" SANITARY SEWER PIPE
- EXISTING 12" WATER MAIN
- EXISTING ABANDONED GAS MAIN
- EXISTING FIBER OPTIC DUCT BANK

NOTE:

1. REFER TO SHEET 6 OF 27, UTILITY PLAN, FOR THE REMOVAL AND RELOCATION OF ALL EXISTING UTILITIES.
2. THE LOCATIONS OF THE UTILITIES SHOWN ARE BASED UPON INFORMATION PROVIDED BY THE UTILITY COMPANIES. THE ACTUAL LOCATION OF THE UTILITIES MAY DIFFER AND THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.

GRAPHIC SCALE



NO.	REVISION	DATE	BY	CHK. BY		
<b>CROSS SECTIONS - 8+00 TO 10+00</b>						
<b>REHABILITATION OF EAST HAZELWOOD AVE.</b>						
<b>MINOR BRIDGE Ra-69</b>						
<b>CITY OF RAHWAY, UNION COUNTY, NEW JERSEY</b>						
DATE:		DATE: <i>7-31-17</i>				
<b>RICHARD G. ARANGO</b> NJ PROFESSIONAL ENGINEER LIC. NO. 38882		<b>FRANK J. SENEY JR.</b> NJ PROFESSIONAL ENGINEER LIC. No. 35321				
<b>REMINGTON, VERNICK &amp; ARANGO ENGINEERS</b>						
<small>ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVLE.COM Certificate of Authorization: 24 CA 28003800</small>						
SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY	DWG. NO.	SHEET NO.
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.	2000X016	7 OF 24
DWG FILE PATH/NAME <small>m:\transportation\bridge\union county\2000\016 - hazelwood avenue bridge replacement\000\bridge rehabilitation plans\X-2000016-02.dwg</small>						

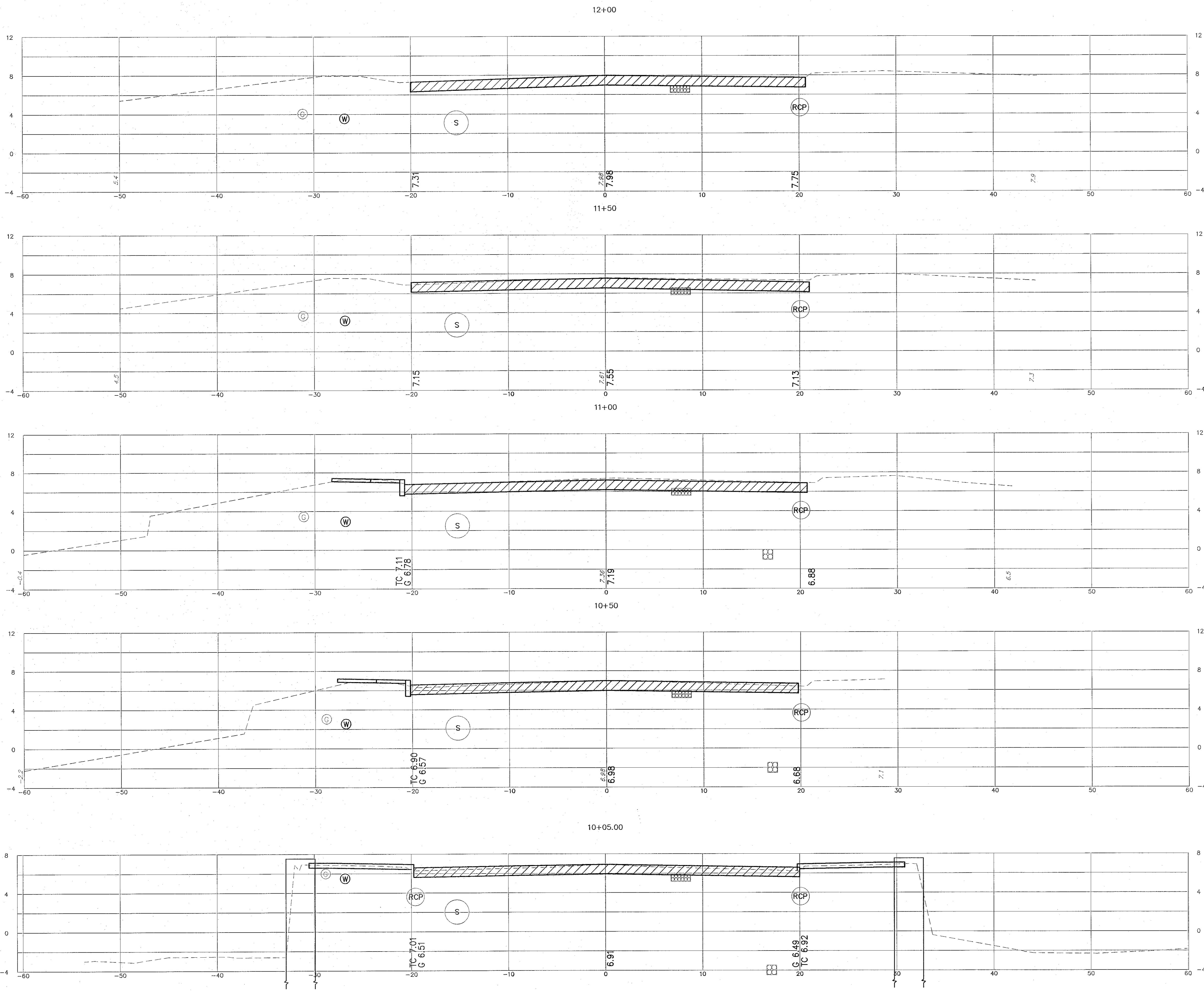
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ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY REMINGTON & VERNICK ENGINEERS FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO REMINGTON & VERNICK ENGINEERS, AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS REMINGTON & VERNICK ENGINEERS FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID.

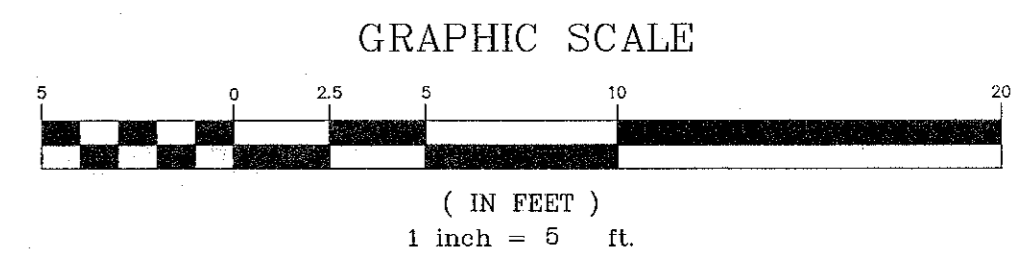
EARTHWORK SUMMARY

STATION	AREAS Square Feet		VOLUMES Cubic Yards		CUMULATIVE VOLUMES Cubic Yards	
	CUT	FILL	CUT	FILL	CUT	FILL
8+00	39.16	0	0	0	0	0
8+50	39.09	0	72.48	0	72.28	0
9+00	40.54	0.56	73.73	0.52	146.01	0.52
9+50	35.62	0.85	70.52	1.30	216.53	1.82
9+95.00	37.00	0	61.19	0.72	277.72	2.54
PROPOSED BRIDGE						
10+05.00	40.56	0.25	0	0	0	0
10+50	37.96	0.49	64.71	0.62	342.42	3.16
11+00	45.50	0.11	77.28	1.00	419.70	4.16
11+50	41.98	0	81.00	0.10	500.70	4.26
12+00	40.65	0	76.51	0	577.21	4.26
TOTAL					577.21	4.26



- EXISTING REINFORCED CONCRETE PIPE
- EXISTING 24" x 9" DUCT BANK WITH (12) 3 1/2" IRON PIPES
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**CROSS SECTIONS**  
 SCALE: 1" = 5'-0"

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NO.	REVISION	DATE	BY	CHK. BY		
<b>CROSS SECTIONS - 10+50 TO 12+00</b>						
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<b>RICHARD G. ARANGO</b>	<b>FRANK J. SENEV JR.</b>					
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**UNION COUNTY SOIL EROSION AND SEDIMENT CONTROL NOTES**

1. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED IN WRITING 48 HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 30 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO NJ STATE STANDARDS.
4. PERMANENT VEGETATION SHALL BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS ESTABLISHED.
5. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NJ STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
6. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS OR PRELIMINARY GRADING.
7. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING ALL CRITICAL AREAS SUBJECT TO EROSION (I.E.: STEEP SLOPES, ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO THE NJ STATE STANDARDS.
8. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION PROCEEDS (I.E.: SLOPES GREATER THAN 3:1).
9. TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 50'X30'X6"PAD OF 1 1/2" OR 2"STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
10. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT PERMANENT VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
11. IN THAT N.J.S.A. 4:24-39 ET SEQ., REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL, HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES, ALL SITE WORK FOR SITE PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS, WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.
12. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
13. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT NJ STATE SOIL EROSION & SEDIMENT CONTROL STANDARDS.
14. THE SOMERSET-UNION SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED OF ANY CHANGES IN OWNERSHIP.
15. MULCHING TO THE NJ STANDARDS IS REQUIRED FOR OBTAINING A CONDITIONAL REPORT OF COMPLIANCE. CONDITIONALS ARE ONLY ISSUED WHEN THE SEASON PROHIBITS SEEDING.
16. CONTRACTOR IS RESPONSIBLE FOR KEEPING ALL ADJACENT ROADS CLEAR DURING LIFE OF CONSTRUCTION PROJECT.
17. THE DEVELOPER SHALL BE RESPONSIBLE FOR REMEDIATING ANY EROSION OR SEDIMENT PROBLEMS THAT ARISE AS A RESULT OF ONGOING CONSTRUCTION AT THE REQUEST OF THE SOMERSET-UNION SOIL CONSERVATION DISTRICT.
18. HYDRO SEEDING IS A TWO-STEP PROCESS. THE FIRST STEP INCLUDES SEED, FERTILIZER, LIME, ETC., ALONG WITH MINIMAL AMOUNTS OF MULCH TO PROMOTE CONSISTENCY, GOOD SEED TO SOIL CONTACT, AND GIVE A VISUAL INDICATION OF COVERAGE. UPON COMPLETION OF SEEDING OPERATION, HYDRO-MULCH SHOULD BE APPLIED AT A RATE OF 1500 LBS. PER ACRE IN SECOND STEP. THE USE OF HYDRO-MULCH, AS OPPOSED TO STRAW, IS LIMITED TO OPTIMUM SEEDING DATES AS LISTED IN THE NJ STANDARDS.
19. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SOIL TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.

**UNION COUNTY BASIN COMPACTION NOTES**

1. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" INCHES WHERE THERE HAS BEEN SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).
2. INSPECT SITE JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILED AND FIRMED IN ACCORDANCE WITH ABOVE.
3. IMMEDIATELY PRIOR TO TOPSOILING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" INCHES WHERE THERE HAS BEEN SOIL COMPACTION. THIS WILL HELP INSURE A GOOD BOND BETWEEN THE TOPSOIL AND SUBSOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).
4. SOIL COMPACTION RESULTING FROM LAND GRADING ACTIVITIES CAN IMPACT THE INFILTRATION RATE OF THE SOIL. RESTORATION OF COMPACTED SOILS THROUGH DEEP TILLAGE (6" TO 12") AND THE ADDITION OF ORGANIC MATTER MAY BE REQUIRED IN PLANNED PERVIOUS AREAS TO ENHANCE THE INFILTRATION RATE OF THE DISTURBED SOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLE, IRRIGATION SYSTEMS, ETC.).
5. TO PREVENT COMPACTION OF THE SUBSOIL WHICH WILL REDUCE ITS INFILTRATION CAPACITY, BASINS SHOULD BE EXCAVATED WITH LIGHT EARTH MOVING EQUIPMENT, PREFERABLY WITH TRACKS OR OVER-SIZED TIRES RATHER THAN THE NORMAL RUBBER TIRES. ONCE THE FINAL CONSTRUCTION PHASE IS REACHED, THE FLOOR OF THE BASIN SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW AND SMOOTHED OVER WITH A LEVELING DRAG OR EQUIVALENT GRADING EQUIPMENT.
6. FOR BASINS, ANNUAL TILLING OPERATIONS MAINTAIN INFILTRATION CAPACITY. THESE TILLED AREAS SHOULD BE RE-VEGETATED IMMEDIATELY TO PREVENT EROSION. DEEP TILLING CAN BE USED TO BREAKUP CLOGGED SURFACE LAYERS FOLLOWED BY REGRADING AND LEVELING. SAND OR ORGANIC MATTER CAN BE TILLED INTO THE BASIN FLOOR TO PROMOTE A RESTORED INFILTRATION CAPACITY. SEDIMENT REMOVAL PROCEDURES SHOULD NOT BE UNDERTAKEN UNTIL THE BASIN IS THOROUGHLY DRY. THE TOP LAYER SHOULD BE REMOVED BY LIGHT EQUIPMENT TO PREVENT COMPACTION. THE REMAINING SOIL CAN BE RETILED AND DISTURBED VEGETATION REPLANTED.

**METHOD AND MATERIALS- STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS**

1. LIMIT THE EXCAVATION AREA AND EXPOSURE TIME WHEN HIGH ACID PRODUCING SOILS ARE ENCOUNTERED.
2. TOPSOIL STRIPPED FROM THE SITE SHALL BE STORED SEPARATELY FROM TEMPORARILY STOCKPILED HIGH ACID PRODUCING SOILS.
3. STOCKPILES OF HIGH ACID PRODUCING SOIL SHOULD BE LOCATED ON LEVEL LAND TO MINIMIZE MOVEMENT, ESPECIALLY WHEN THIS MATERIAL HAS A HIGH CLAY CONTENT.
4. TEMPORARILY STOCKPILED HIGH ACID PRODUCING SOIL MATERIAL TO BE EXPOSED MORE THAN 30 DAYS SHOULD BE COVERED WITH PROPERLY ANCHORED, HEAVY GRADE SHEETS OF POLYETHYLENE WHERE POSSIBLE. IF NOT POSSIBLE, STOCKPILES SHALL BE COVERED WITH A MINIMUM OF 3 TO 6 INCHES OF WOOD CHIPS TO MINIMIZE EROSION OF THE STOCKPILE. SILT FENCE SHALL BE INSTALLED AT THE TOP OF SLOPE TO PREVENT WIND-DRIVEN SOIL FROM ESCAPING. TOPSOIL SHALL NOT BE APPLIED TO THE STOCKPILES TO PREVENT TOPSOIL CONTAMINATION WITH HIGH ACID PRODUCING SOILS.
5. HIGH ACID PRODUCING SOILS WITH A PH OF 4.0 OR LESS, OR CONTAINING IRON SULFIDE (INCLUDING BORROW FROM CUTS) SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 6 TONS PER ACRE (OR 275 POUNDS PER 1,000 SQUARE FEET OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12 INCHES OF SETTLED SOIL WITH A PH OF 5.0 OR MORE EXCEPT AS FOLLOWS:
  - a. AREAS WHERE TREES OR SHRUBS TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF 24 INCHES OF SOIL WITH A PH OF 5.0 OR MORE.
  - b. DISPOSAL AREAS SHALL NOT BE LOCATED WITHIN 24 INCHES OF ANY SURFACE OF A SLOPE OR BANK, SUCH AS BERMS, STREAM BANKS, DITCHES, AND OTHERS TO PREVENT POTENTIAL LATERAL LEACHING DAMAGES.
6. EQUIPMENT USED FOR MOVEMENT OF HIGH ACID PRODUCING SOILS SHOULD BE CLEANED AT THE END OF EACH WORK DAY TO PREVENT SPREADING OF HIGH ACID SOIL MATERIALS TO OTHER PARTS OF THE SITE, INTO STREAMS OR STORMWATER CONVEYANCES AND TO PROTECT MACHINERY FROM ACCELERATED RUSTING.
7. NON VEGETATIVE EROSION CONTROL PRACTICES (STONE TRACKING PADS, STRATEGICALLY PLACED LIMESTONE CHECK DAM, SILT FENCE, WOOD CHIPS) SHOULD BE INSTALLED TO LIMIT THE MOVEMENT OF HIGH ACID PRODUCING SOILS FROM, AROUND, OR OFF THE SITE.
8. FOLLOWING BURIAL OR MOVEMENT OF HIGH ACID PRODUCING SOIL, TOPSOILING AND SEEDING OF THE SITE, MONITORING SHOULD CONTINUE FOR APPROXIMATELY 6 TO 12 MONTHS TO ASSURE THERE IS ADEQUATE STABILIZATION AND THAT NO HIGH ACID SOIL PROBLEMS EMERGE. IF PROBLEMS STILL EXIST, THE AFFECTED AREA MUST BE TREATED AS INDICATED ABOVE TO CORRECT THE PROBLEM.
9. MONITORING OF AREAS WHERE HIGH ACID PRODUCING SOILS HAS BEEN PLACED OR BURIED SHOULD BE PERFORMED FOR AT LEAST 2 YEARS OR LONGER IF PROBLEMS OCCUR, TO ASSURE THERE IS NO MIGRATION OF POTENTIAL ACID LEACHATE.

**STANDARD FOR TOPSOILING**

**1. MATERIALS**

- A. TOPSOIL SHOULD BE FRIABLE, LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCE OR ADVERSE CHEMICAL OR PHYSICAL CONDITION THAT MAY BE HARMFUL TO PLANT GROWTH. SOLUBLE SALTS SHOULD NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0.5 MILLIMHOS PER CENTIMETER, MORE THAN 0.5 MILLIMHOS MAY DESICATE SEEDLINGS AND ADVERSELY IMPACT GROWTH). TOPSOIL HAULED IN FROM OFFSITE SHOULD HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC MATTER CONTENT MAY BE RAISED BY ADDITIVES.
- B. TOPSOIL SUBSTITUTE IS A SOIL MATERIAL WHICH MAY HAVE BEEN AMENDED WITH SAND, SILT, CLAY, ORGANIC MATTER, FERTILIZER OR LIME AND HAS THE APPEARANCE OF TOPSOIL. TOPSOIL SUBSTITUTES MAY BE UTILIZED ON SITES WITH INSUFFICIENT TOPSOIL FOR ESTABLISHING PERMANENT VEGETATION. ALL TOPSOIL SUBSTITUTE MATERIALS SHALL MEET THE REQUIREMENTS OF TOPSOIL NOTED ABOVE. SOIL TESTS SHALL BE PERFORMED TO DETERMINE THE COMPONENTS OF SAND, SILT, CLAY, ORGANIC MATTER, SOLUBLE SALTS AND PH LEVEL.

**2. STRIPPING AND STOCKPIILING**

- A. FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.
- B. STRIPPING SHOULD BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA.
- C. WHERE FEASIBLE, LIME MAY BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BRING THE SOIL PH TO APPROXIMATELY 6.5. IN LIEU OF SOIL TESTS, SEE LIME RATE GUIDE IN SEEDBED PREPARATION FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, PG. 4-1.
- D. A 4-6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL.
- E. STOCKPILES OF TOPSOIL SHOULD BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.
- F. STOCKPILES SHOULD BE VEGETATED IN ACCORDANCE WITH STANDARDS PREVIOUSLY DESCRIBED HEREIN; SEE STANDARDS FOR PERMANENT (PG. 4-1) OR TEMPORARY (PG.7-1) VEGETATIVE COVER FOR SOIL STABILIZATION. WEEDS SHOULD NOT BE ALLOWED TO GROW ON STOCKPILES.

**3. SITE PREPARATION**

- A. GRADE AT THE ONSET OF THE OPTIMAL SEEDING PERIOD SO AS TO MINIMIZE THE DURATION AND AREA OF EXPOSURE OF DISTURBED SOIL TO EROSION. IMMEDIATELY PROCEED TO ESTABLISH VEGETATIVE COVER IN ACCORDANCE WITH THE SPECIFIED SEED MIXTURE. TIME IS THE ESSENCE.
- B. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. SEE THE STANDARD FOR LAND GRADING, PG. 19-1.
- C. AS GUIDANCE FOR IDEAL CONDITIONS, SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT. LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL TO A PH OF APPROXIMATELY 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
- D. IMMEDIATELY PRIOR TO TOPSOILING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN SOIL COMPACTION. THIS WILL HELP INSURE A GOOD BOND BETWEEN THE TOPSOIL AND SUBSOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).
- E. EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENTATION BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.

**4. APPLYING TOPSOIL**

- A. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE; I.E., LESS THAN FIELD CAPACITY (SEE GLOSSARY).
- B. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS RECOMMENDED. SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE, IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOIL (PG. 1-1).

**SPECIAL NOTES**

1. TEMPORARY STABILIZATION - ALL EXPOSED AREAS NOT TO BE CONSTRUCTED UPON WITHIN 30 DAYS SHOULD RECEIVE TEMPORARY STABILIZATION, ACCORDING TO THE TEMPORARY VEGETATIVE COVER SPECIFICATIONS.
2. PERMANENT STABILIZATION - ALL EXPOSED AREAS WHICH ARE TO BE PERMANENTLY VEGETATED SHOULD BE SEEDED WITHIN 10 DAYS OF FINAL GRADING, ACCORDING TO THE PERMANENT SEEDING SPECIFICATIONS.

TOTAL AREA OF DISTURBANCE: 0.060 ACRE

**PROPOSED SEQUENCE OF DEVELOPMENT**

1. CONTACT THE SOMERSET-UNION COUNTY SOIL CONSERVATION DISTRICT AT 908-526-2701 A MINIMUM OF 72 HOURS PRIOR TO ANY SOIL DISTURBANCE TO ARRANGE A PRECONSTRUCTION MEETING.
2. THE ORIGINAL SOMERSET-UNION COUNTY SOIL CONSERVATION DISTRICT CERTIFICATION AND PLANS MUST BE AVAILABLE AT THE SITE AT ALL TIMES.
3. INSTALL THE STABILIZED CONSTRUCTION ENTRANCE.
4. DISTURB ONLY THE MINIMUM AREA NEEDED TO INSTALL SILT FENCE AND TREE PROTECTION FENCE AT THE DRIPLINE OF ALL TREES SHOWN TO REMAIN. NO CONSTRUCTION ACCESS OR STORAGE SHALL BE PERMITTED WITHIN THESE PROTECTION AREAS.
5. CLEAR AND GRUB ALL TREES IN THE IMMEDIATE AREAS OF CONSTRUCTION. ALL VEGETATION TO REMAIN SHALL BE PROPERLY PROTECTED. STRIP TOPSOIL AND STOCKPILE WHERE SHOWN. TEMPORARILY STABILIZE STOCKPILE WITH SEED.
6. GENERAL AND PRELIMINARY GRADE THOSE AREAS TO BE DEVELOPED.
7. CONSTRUCT PROPOSED STRUCTURES AND STORMWATER RETENANCES.
8. INSTALL SUB-BASE COURSE IMMEDIATELY FOLLOWING PRELIMINARY GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE PAVEMENT AREA.
9. FINE GRADE ALL PAVEMENT AREAS AND INSTALL SURFACE COURSE PAVEMENT.
10. STABILIZE THE SITE WITH PERMANENT VEGETATIVE COVER AND LANDSCAPING.
11. REMOVE TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES.
12. CONTACT SOMERSET-UNION SOIL CONSERVATION DISTRICT FOR FINAL INSPECTION.

**NOTE:**

ALL CONDUIT OUTLET PROTECTION SHALL BE STABILIZED AS PER THE CERTIFIED PLAN PRIOR TO BECOMING OPERATIONAL.

**ADDITIONAL NOTES**

1. ALL SEDIMENT TRACKED ONTO ANY PAVED SURFACE SHALL BE SWEEP CLEAN AT THE END OF EACH DAY.
2. WHEN IT BECOMES NECESSARY, THE OWNER SHALL INFORM THE CONTRACTORS OF UNSATISFACTORY CONDITIONS OF EROSION AND SEDIMENT DEVICES. AT SUCH TIME THE CONTRACTOR SHALL IMPROVE THE CONDITIONS OF SAID DEVICE TO MEET WITH THE APPROVAL OF THE OWNER.
3. SHOULD UNFORESEEN EROSION CONDITION DEVELOP DURING CONSTRUCTION THE CONTRACTOR SHALL TAKE ACTION TO REMEDY SUCH CONDITIONS AND TO PREVENT DAMAGE TO ADJACENT PROPERTIES AS A RESULT OF INCREASED RUN-OFF AND/OR SEDIMENT REPLACEMENT.
4. SEEDED AREAS THAT HAVE WASHED AWAY SHALL BE FILLED AND GRADED AS NECESSARY AND THEN RE-SEED. THIS PROCEDURE SHALL BE REPEATED AFTER EACH STORM OR UNTIL NO MORE SIGNS OF EROSION ARE EVIDENT.
5. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF SOIL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION AND WHILE THE SURETY BOND IS IN EFFECT, UPON EXPIRATION OF THE SURETY BOND, THE COUNTY OF UNION WILL ASSUME RESPONSIBILITY FOR MAINTENANCE OF PERMANENT SOIL EROSION AND SEDIMENT CONTROL MEASURES.

**PERMANENT VEGETATIVE MIXTURES AND PLANTING RATES**

ERNMX-178 (RIPARIAN BUFFER MIX)

TABLE 4-3

PERCENT	SEE MIXTURE	SCIENTIFIC NAME
20%	Virginia Wildrye, PA Ecotype	<i>(Bymus virginicus, PA Ecotype)</i>
16%	Indiangrass, PA Ecotype	<i>(Sorghastrum nutans, PA Ecotype)</i>
16%	Deertongue, 'Toga' (Panicum clandestinum (Dichanthium c.), 'Toga')	
12.5%	Big Bluestem, 'Najara' (Andropogon gerardi, 'Najara')	
9%	Sw. Itchgrass, 'Carthage', NC Ecotype (Panicum virgatum, 'Carthage', NC Ecotype)	
6%	Partridge Pea, PA Ecotype (Chamaecrista fasciculata (Cassia T.), PA Ecotype)	
4%	Autumn Bergamot, PA Ecotype (Ageratum perennans, PA Ecotype)	
4%	Blue Vervain, PA Ecotype (Verbena hastata, PA Ecotype)	
3%	Backsloped Susan, Coastal Plain NC Ecotype (Rudbeckia hirta, Coastal Plain NC Ecotype)	
3%	Oxeye Sunflower, PA Ecotype (Helopsis helianthoides, PA Ecotype)	
2.3%	New England Aster, PA Ecotype (Aster novae-angliae (Symphyotrichum n.), PA Ecotype)	
2%	Soft Rush (Juncus effusus)	
1%	Boneset, PA Ecotype (Eupatorium perfoliatum, PA Ecotype)	
1%	Joe Pye Weed, PA Ecotype (Eupatorium fistulosum, PA Ecotype)	
1%	Blue False Indigo, Southern WV Ecotype (Baptisia australis, Southern WV Ecotype)	
1%	New York Ironweed, PA Ecotype (Veronica noveboracensis, PA Ecotype)	
0.5%	Great Blue Lobelia, PA Ecotype (Lobelia siphilitica, PA Ecotype)	
0.5%	Wild Bergamot, PA Ecotype (Monarda fistulosa, PA Ecotype)	
0.2%	Grassleaf Goldenrod, PA Ecotype (Euthamia graminifolia (Soldado g.), PA Ecotype)	
<b>Total: 100%</b>		

1. RECOMMENDED SEEDING PERIODS ARE 2/15 TO 4/30 AND 8/15 TO 10/30.
2. SUMMER SEEDING SHALL BE PERFORMED ONLY IF ADEQUATE IRRIGATION IS PROVIDED TO ENSURE SUCCESSFUL GERMINATION.
3. SEEDING RATE: TWO (2) POUNDS PER 1,000 SQUARE FEET.

**STANDARD FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION**

**METHODS AND MATERIALS**

**1. SITE PREPARATION**

- A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING.
- B. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.
- C. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.
- D. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.
- E. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE-STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

**2. SEEDBED PREPARATION**

- A. UNIFORMLY APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION SOIL SAMPLE MAKERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (HTTP://NAES.RUTGERS.EDU/COUNTY/). FERTILIZER SHALL BE APPLIED AT A RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 100 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.
- B. WORK LINE SHOULD BE NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
- C. HIGH ACID PRODUCING SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.

**3. SEEDING**

- A. SEED MIXTURE IS SHOWN IN TABLE 4-3 OR YOU A MIXTURE RECOMMENDED BY RUTGERS COOPERATIVE EXTENSION OR NATURAL RESOURCES CONSERVATION SERVICE WHICH IS APPROVED BY THE SOIL CONSERVATION DISTRICT. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. NO SEED SHALL BE ACCEPTED WITH A GERMINATION TEST DATE MORE THAN 12 MONTHS OLD UNLESS RETESTED.
1. SEEDING RATES SPECIFIED ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO A REPORT OF COMPLIANCE INSPECTION. THESE RATES APPLY TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS BOX VEGETATIVE COVERAGE WITH THE SPECIFIED SEED MIXTURE FOR THE SEEDING AREA AND MOWED ONCE.
2. WARM-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT HIGH TEMPERATURES, GENERALLY 85° F. AND ABOVE. PLANTING RATES FOR WARM-SEASON GRASSES SHALL BE THE AMOUNT OF PURE LIVE SEED (PLS) AS DETERMINED BY GERMINATION TESTING RESULTS.
3. COOL-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT TEMPERATURES BELOW 85° F. DRY SEEDS BECOME ACTIVE AT 65° F. ADJUSTMENT OF PLANTING RATES TO COMPENSATE FOR THE AMOUNT OF PLS IS NOT REQUIRED FOR COOL-SEASON MIXTURES.
- B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDER OR CULTIPACKER SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE-TEXTURED SOIL.
- C. AFTER SEEDING, FIRMS THE SOIL WITH A CORRUGATED ROLLER WHICH ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD, WHEN PERFORMED ON THE CONTOUR SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK, OR TRAILER-MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED. SHORT-FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4-MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH.

**4. MULCHING**

MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

- A. STRAW OR HAY, UNRETDED SMALL GRAIN STRAW, HAY FREE OF SEEDS, TO BE APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED. APPLICATION SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT AT LEAST 80% OF THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION. ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS.

1. PEG AND TWINE DRIVE 8 TO 10 INCH WOODEN PEGS TO SURFACE TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL WITHIN 2 BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
2. MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
3. CRIMPER (MULCH ANCHORING COULTER TOOL) - A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
4. LIQUID MULCH-BINDERS - MAY BE USED TO ANCHOR SALT HAY, HAY OR STRAW MULCH.
  - a. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.
  - b. USE ONE OF THE FOLLOWING:
    - (1) ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER-BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOLOGIC EFFECT OR IMPROVE GROWTH. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.
    - (2) SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND, FOLLOWING APPLICATION OF MULCH, DRYING AND CURING, SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. BINDER SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

- B. WOOD-FIBER OR PAPER-FIBER MULCH - SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 POUNDS PER ACRE (OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER) AND MAY BE APPLIED BY A HYDROSEEDER. MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.
- C. PELLETED MULCH - COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-OPERATION, TACKIFIERS, FERTILIZERS, AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDING AREA AND WATERED, FORM A MULCH MAT. PELLETED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 80-75 LBS/1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS, SEEDED AREAS WHERE WEEDSEED FREE MULCH IS DESIRED, OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE. APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

5. IRRIGATION (WHERE FEASIBLE)
 

IF SOIL MOISTURE IS DEFICIENT SUPPLY NEW SEEDING WITH ADEQUATE WATER (A MINIMUM OF 1/4 INCH APPLIED UP TO TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.

**6. TOPDRESSING**

SINCE SOIL ORGANIC MATTER CONTENT AND SLOW RELEASE NITROGEN FERTILIZER (WATER INSOLUBLE) ARE PRESCRIBED IN SECTION 2A - SEEDBED PREPARATION IN THIS STANDARD, NO FOLLOW-UP OF TOPDRESSING IS MANDATORY. AN EXCEPTION MAY BE MADE WHERE GROSS NITROGEN DEFICIENCY EXISTS IN THE SOIL TO THE EXTENT THAT TURF FAILURE MAY DEVELOP. IN THAT INSTANCE, TOPDRESS WITH 10-10-10 OR EQUIVALENT AT 300 POUNDS PER ACRE OR 7 POUNDS PER 1,000 SQUARE FEET EVERY 3 TO 5 WEEKS UNTIL THE GROSS NITROGEN DEFICIENCY IN THE TURF IS AMELIORATED.

**7. ESTABLISHING PERMANENT VEGETATIVE STABILIZATION**

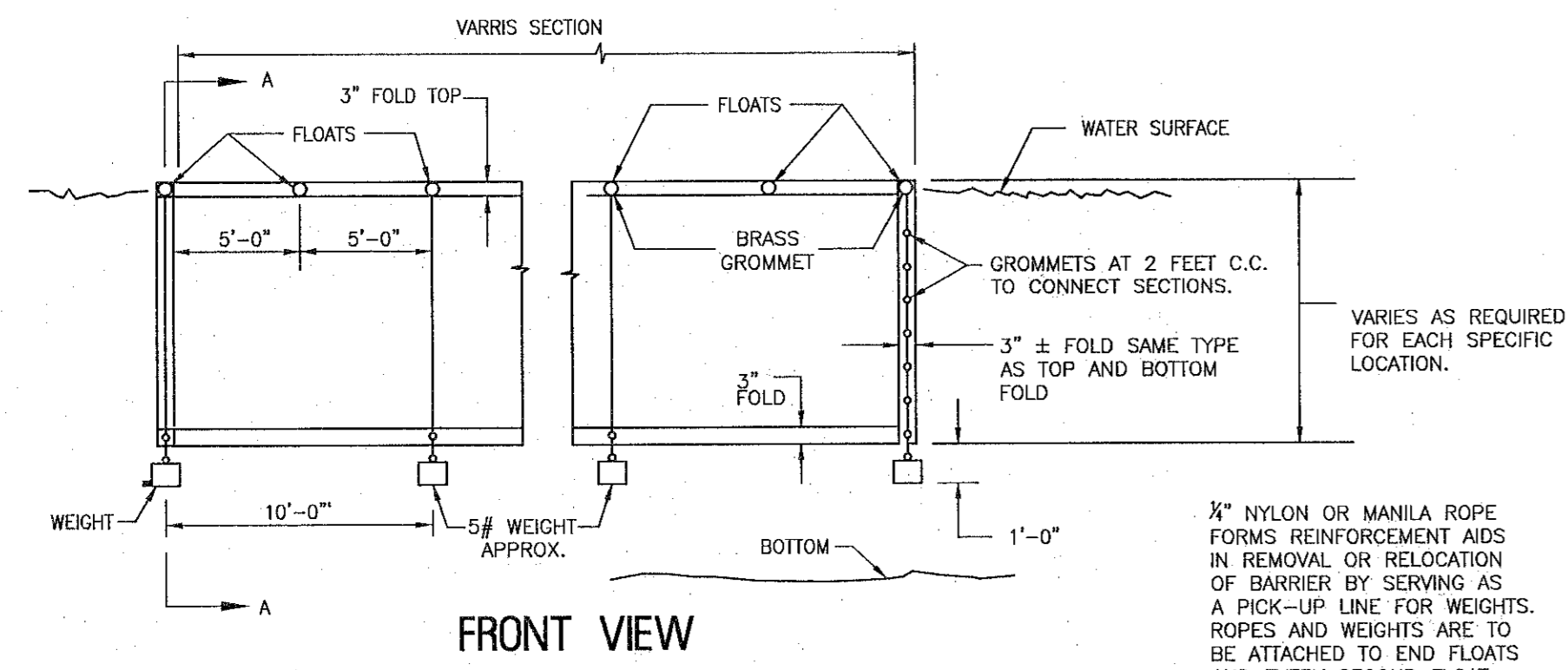
THE QUALITY OF PERMANENT VEGETATION RESTS WITH THE CONTRACTOR. THE TIMING OF SEEDING, PREPARING THE SEEDBED, APPLYING NUTRIENTS, MULCH AND OTHER MANAGEMENT ARE ESSENTIAL. THE SEED APPLICATION RATES IN TABLE 4-3 ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN APPLICATION RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO REQUESTING A REPORT OF COMPLIANCE FROM THE DISTRICT. THESE RATES APPLY TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS BOX VEGETATIVE COVER (OF THE SEEDED SPECIES) AND MOWED ONCE. NOTE THIS DESIGNATION OF MOWED ONCE DOES NOT GUARANTEE THE PERMANENCY OF THE TURF SHOULD OTHER MAINTENANCE FACTORS BE NEGLECTED OR OTHERWISE MISMANAGED.

**7. ESTABLISHING PERMANENT VEGETATIVE STABILIZATION**

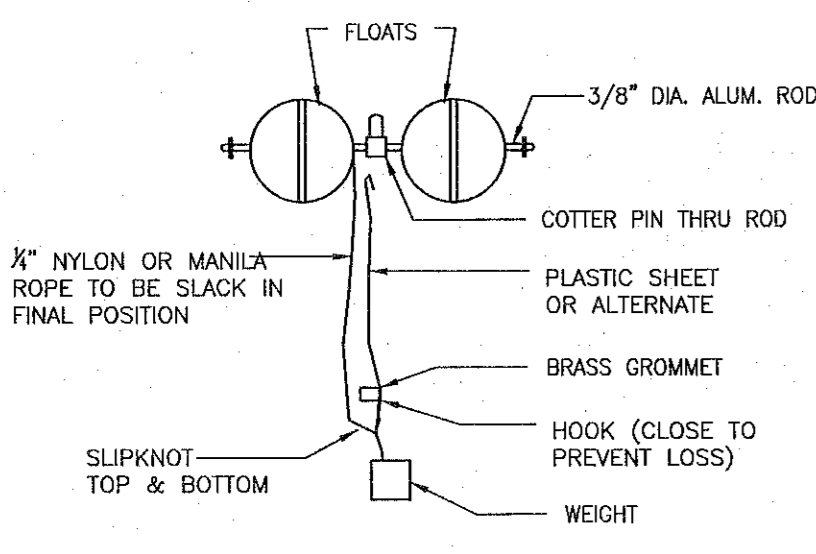
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**7. ESTABLISHING PERMANENT VEGETATIVE STABILIZATION**

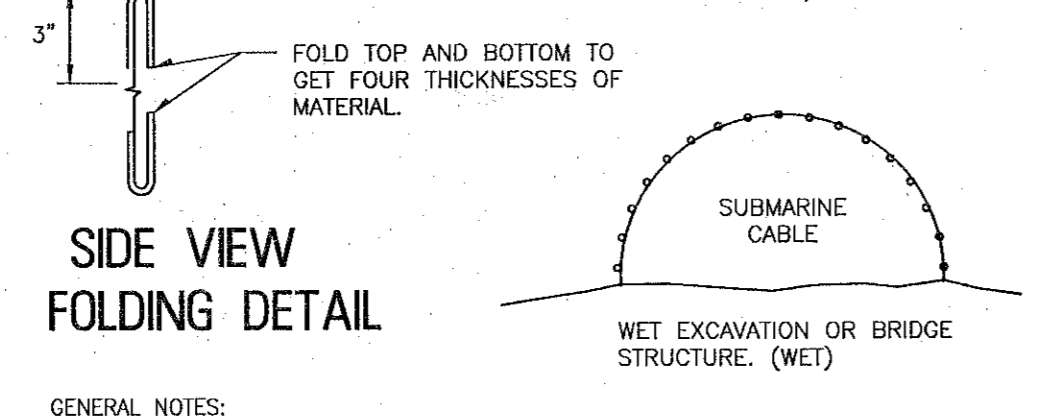
THE QUALITY OF PERMANENT VEGETATION RESTS WITH THE CONTRACTOR. THE TIMING OF SEEDING, PREPARING THE SEEDBED, APPLYING NUTRI



FRONT VIEW



SECTION A-A



SIDE VIEW FOLDING DETAIL

GENERAL NOTES:

PLACE SILT BARRIER TO PREVENT DRIFTING OF SILT CAUSED BY DISCHARGE OF STORM SEWERS DURING CONSTRUCTION, DREDGING OR FILLING OPERATIONS.

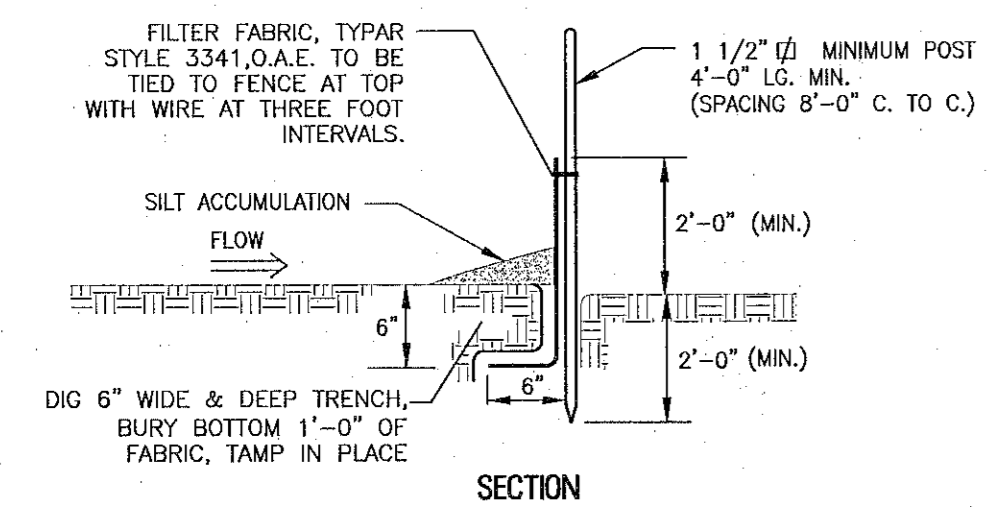
EXACT PLACEMENT OF SILT BARRIER SHALL BE SO AS TO EFFECTIVELY CONTROL SILT DISPERSION UNDER THE CONDITIONS PRESENT ON A PARTICULAR PROJECT.

THE DETAILS SHOWN ON THIS SHEET ARE SUGGESTED METHODS. ONLY ALTERNATE SOLUTION AND USAGE OF MATERIALS MAY BE USED AS APPROVED.

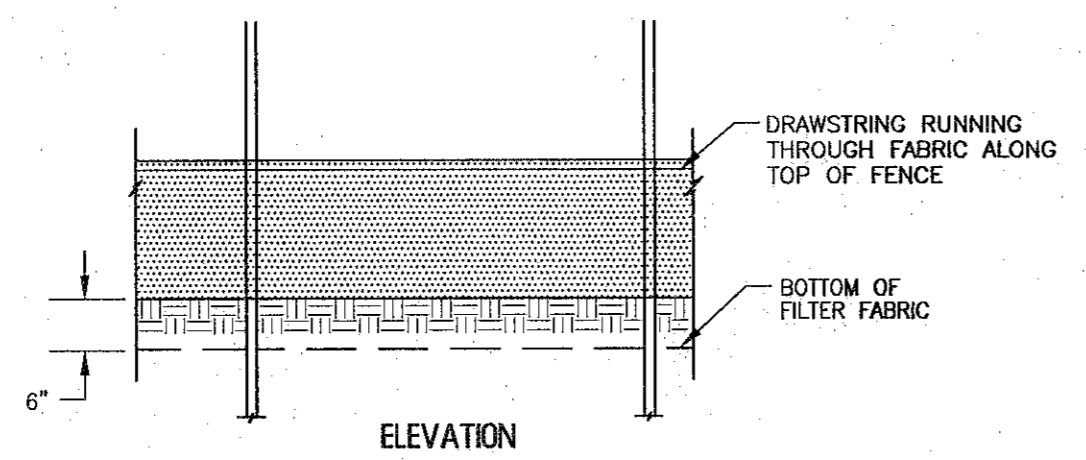
10 MIL POLYETHYLENE PLASTIC SHEET OR SUITABLE ALTERNATE TO FIT EXISTING CONDITION AS APPROVED BY THE ENGINEER.

FLOATING TURBIDITY BARRIER

N.T.S.



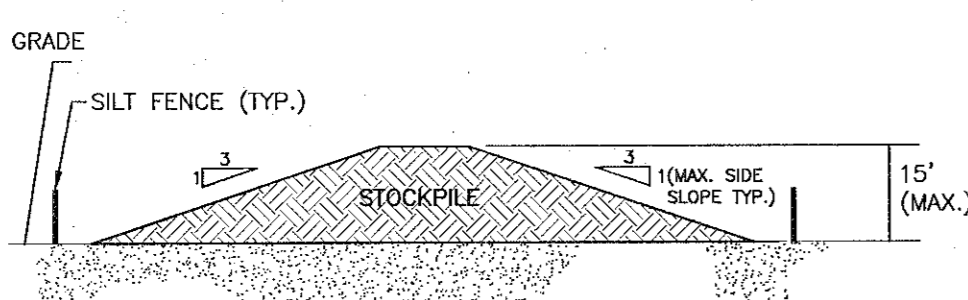
SECTION



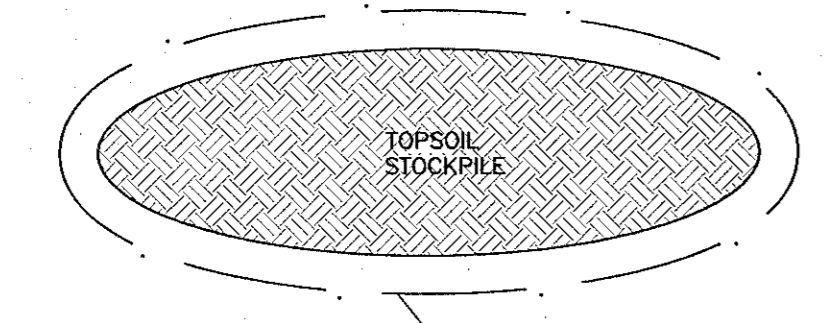
ELEVATION

SILT FENCE

N.T.S.



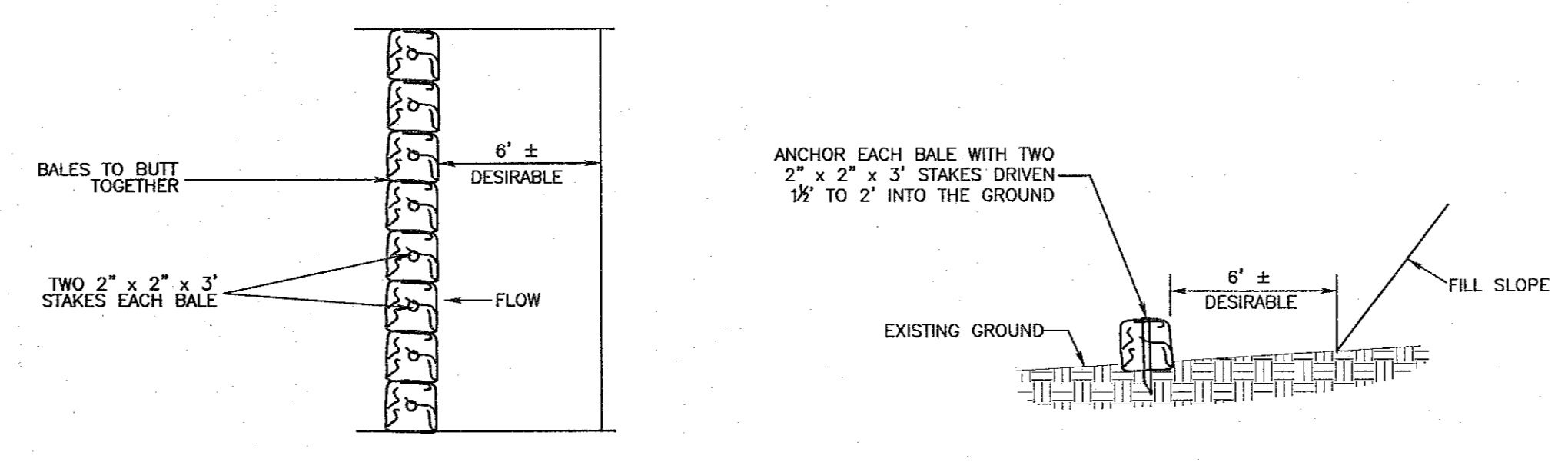
ELEVATION



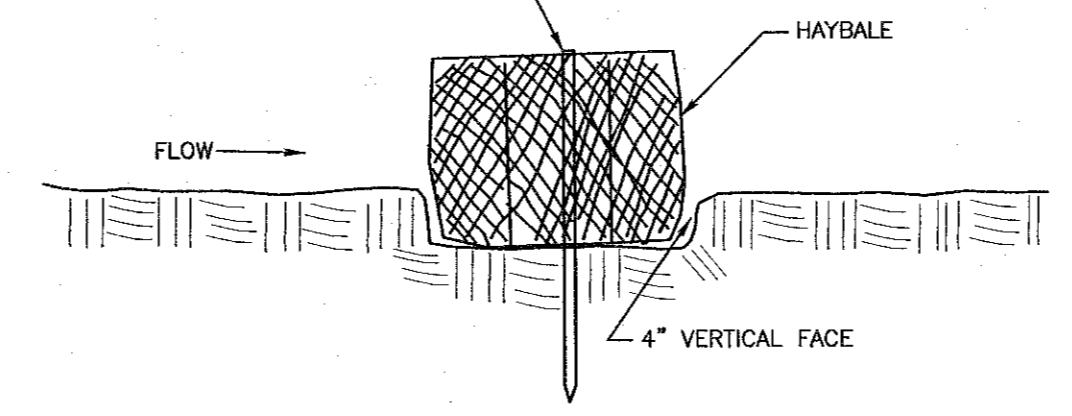
TOPSOIL STOCKPILE

N.T.S.

NOTE: STOCKPILE WILL BE STABILIZED WITH GRASS SEED COVERED WITH STRAW MULCH.



HAYBALE PLAN



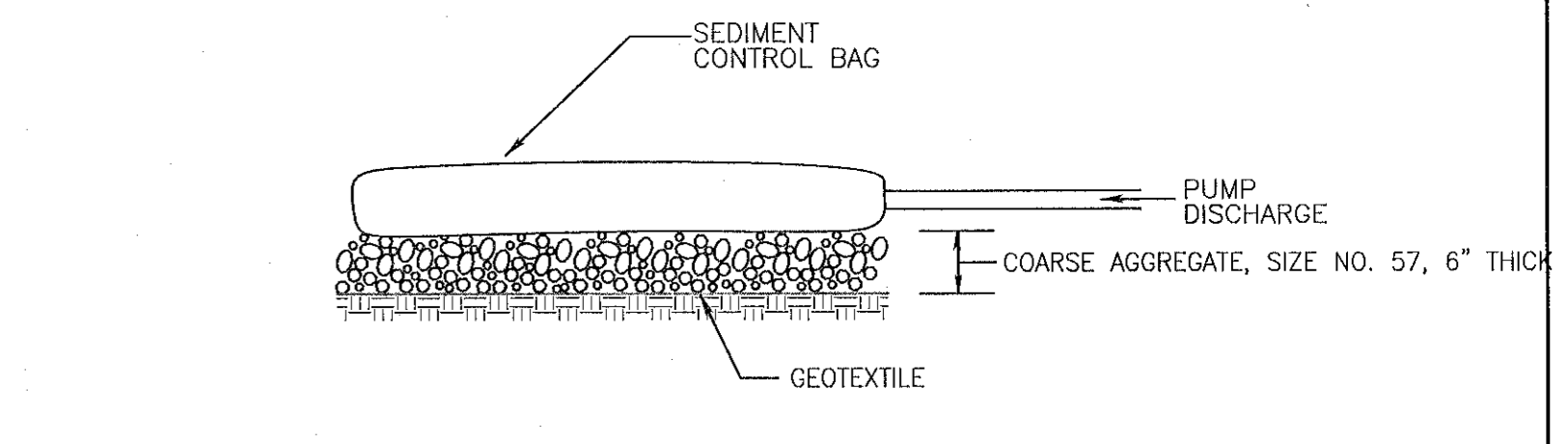
HAYBALE EMBEDMENT DETAIL

N.T.S.

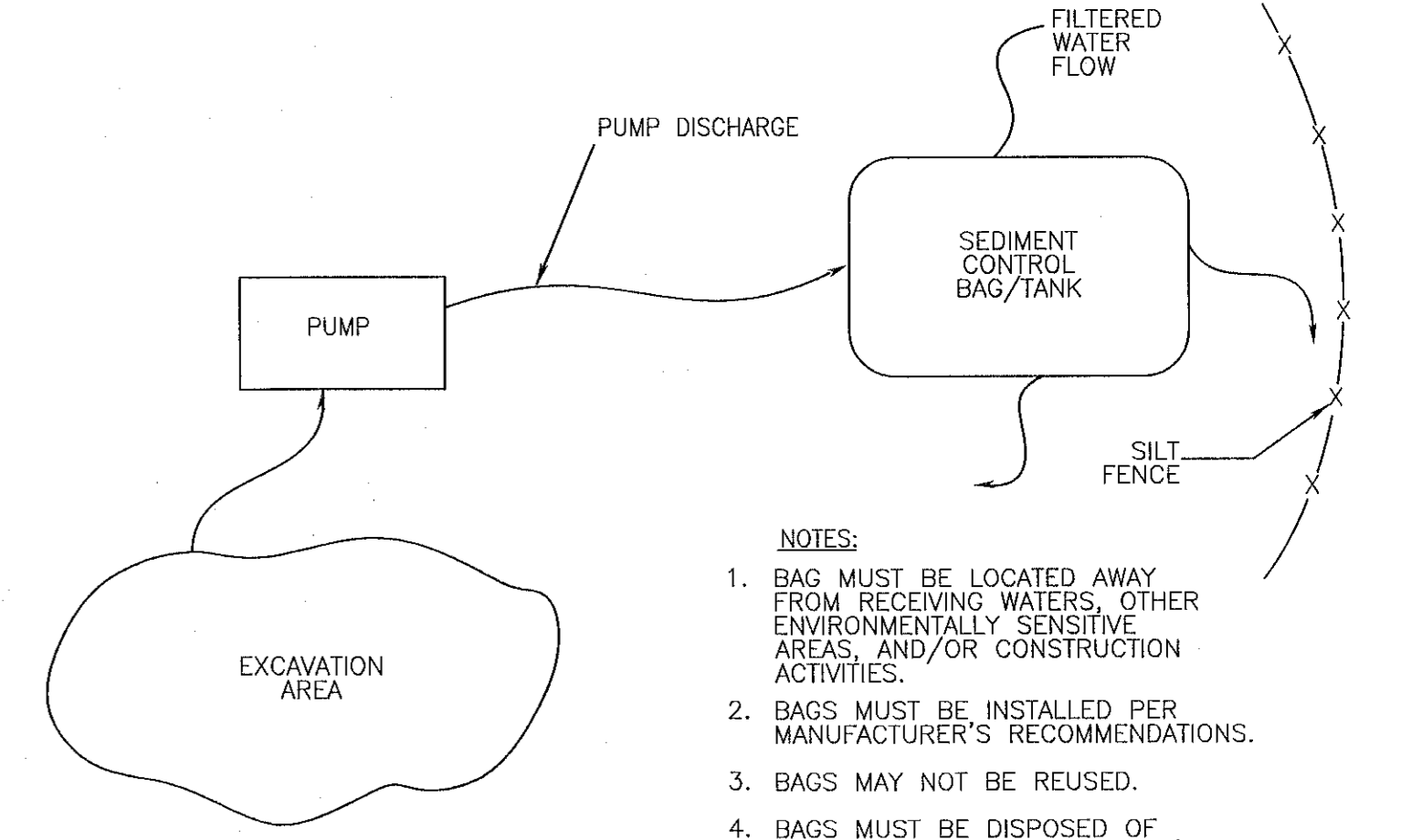
NOTES:

TO BE USED WHERE THE EXISTING GROUND SLOPES AWAY FROM THE HIGHWAY EMBANKMENT AS CALLED FOR ON PLANS.

EMBED BALES 4 INCHES TO 6 INCHES AND ANGLE THE FIRST STAKE TOWARD PREVIOUSLY LAID BALE.



ELEVATION- SEDIMENT CONTROL BAG



PLAN VIEW

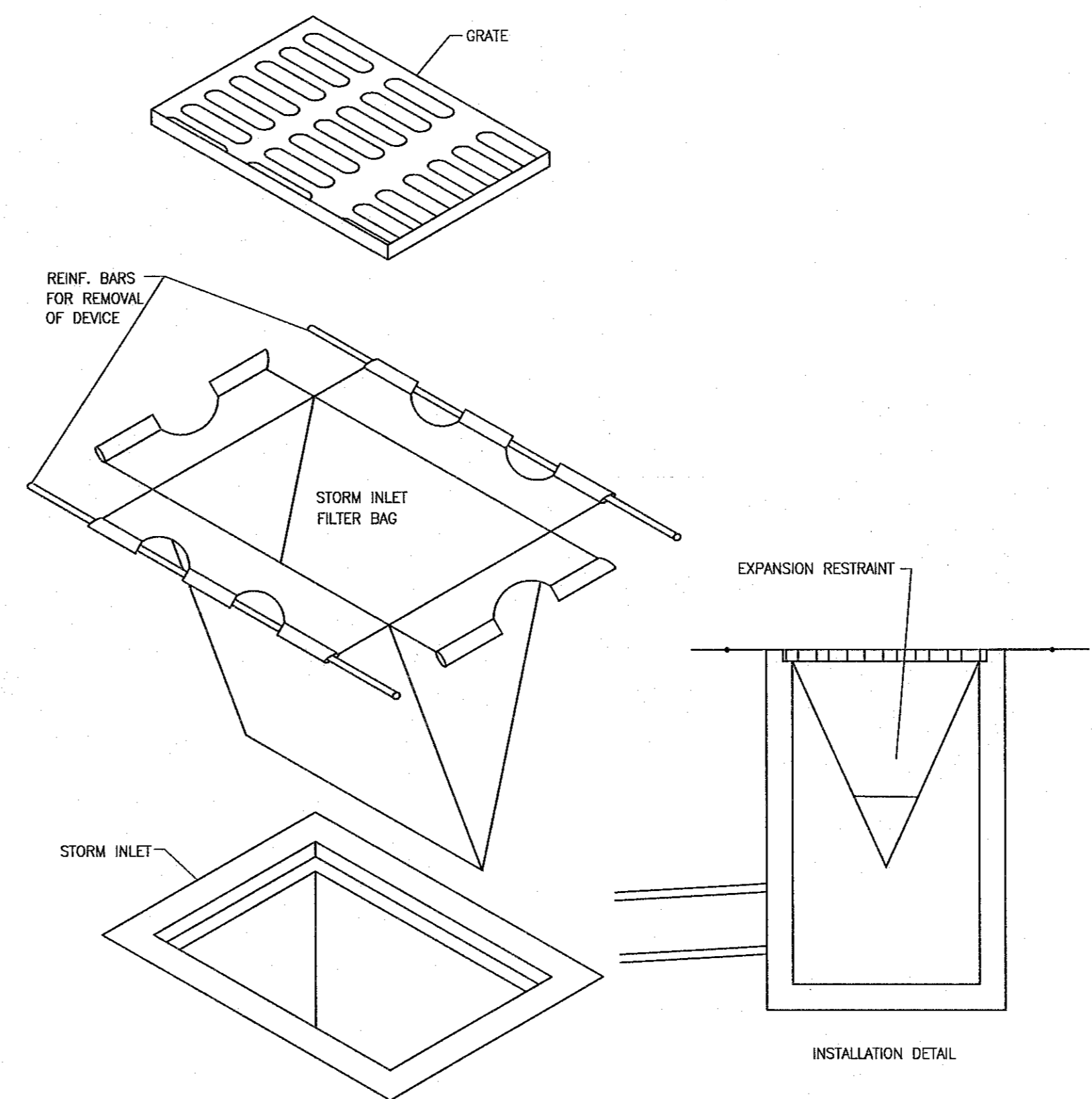
NOTES:

- BAG MUST BE LOCATED AWAY FROM RECEIVING WATERS, OTHER ENVIRONMENTALLY SENSITIVE AREAS, AND/OR CONSTRUCTION ACTIVITIES.
- BAGS MUST BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- BAGS MAY NOT BE REUSED.
- BAGS MUST BE DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

USE TURBIDITY BARRIER IF DISCHARGE MUST BE NEAR RECEIVING WATERS

SEDIMENT CONTROL BAG FOR DEWATERING

N.T.S.



STORM INLET FILTER BAG DETAIL

N.T.S.

NOTE: STORMWATER INLETS WHICH DO NOT DISCHARGE TO SEDIMENT TRAPS OR BASINS MUST BE PROTECTED UNTIL THE DRAINAGE AREAS ARE STABILIZED. THE STORM INLET FILTER BAGS SHALL BE EMPTIED ONTO TOPSOIL STOCKPILE WHEN APPROXIMATELY HALF (1/2) FULL AND REINSTALLED UNDEMANAGED; DAMAGED BAGS SHALL BE REPLACED WITH NEW BAGS. CONTRACTOR SHALL COMPLETE MAINTENANCE AND REPAIRS WITHIN ONE (1) DAY.

THIS PLAN TO BE USED FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY!

NO.	REVISION	DATE	BY	CHK. BY

SOIL EROSION & SEDIMENT CONTROL DETAILS  
REHABILITATION OF EAST HAZELWOOD AVE.  
MINOR BRIDGE Ra-69  
CITY OF RAHWAY, UNION COUNTY, NEW JERSEY

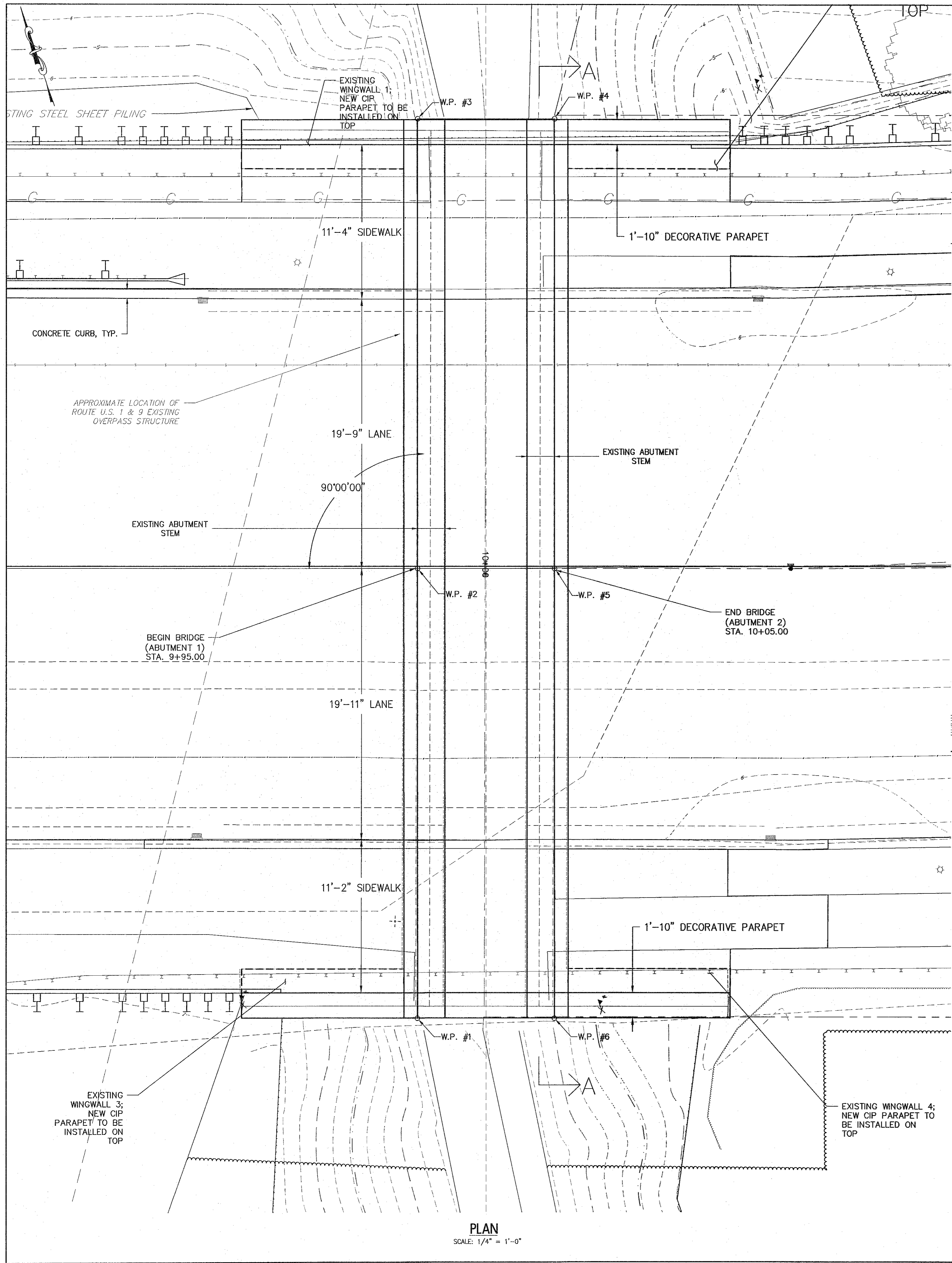
DATE: 9.31.17  
**RICHARD G. ARANGO**  
NJ PROFESSIONAL ENGINEER LIC. NO. 38882  
**FRANK J. SENEY JR.**  
NJ PROFESSIONAL ENGINEER LIC. No. 35321

**REMINGTON, VERNICK & ARANGO ENGINEERS**  
ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094  
(201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM  
Certificate of Authorization: 24 GA 28003800

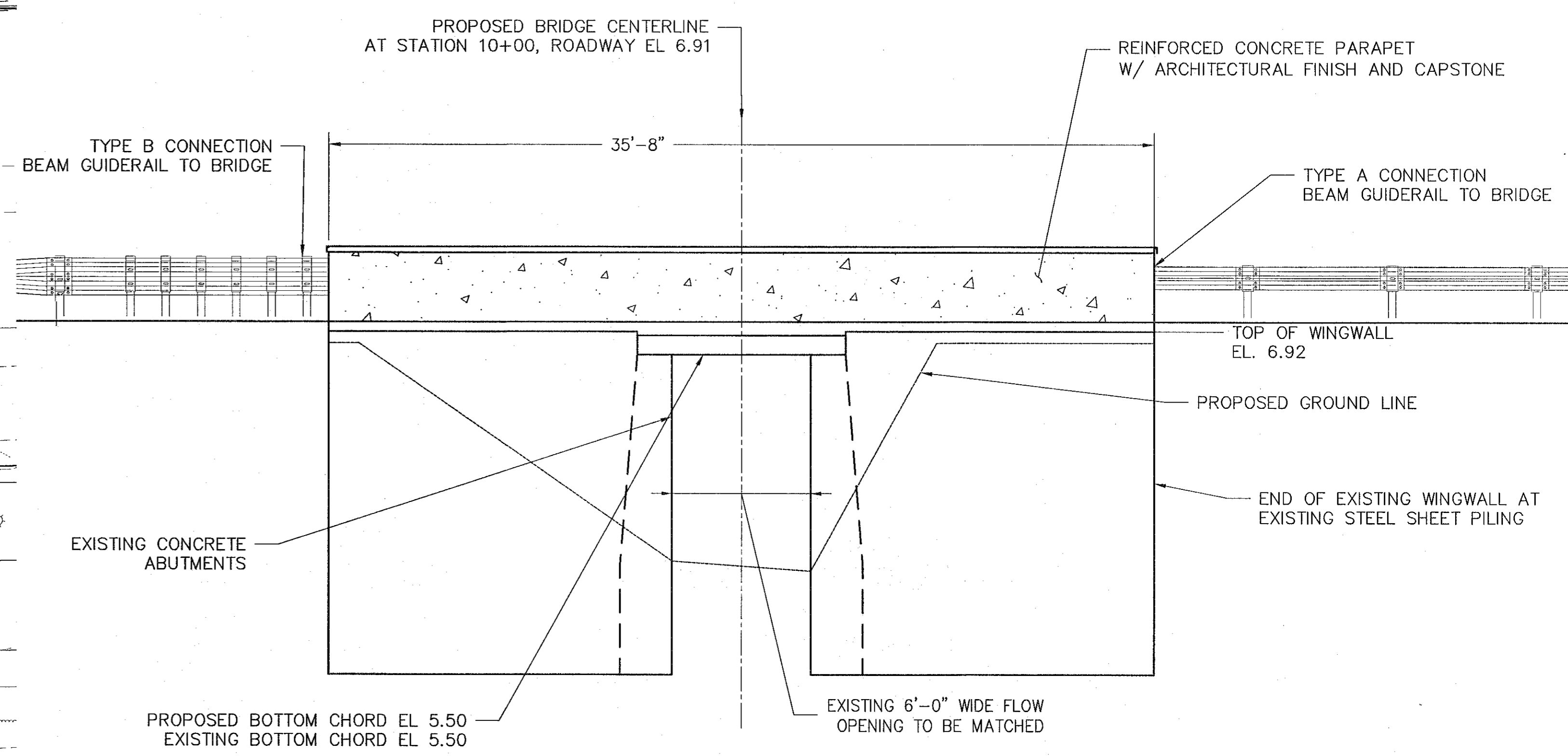
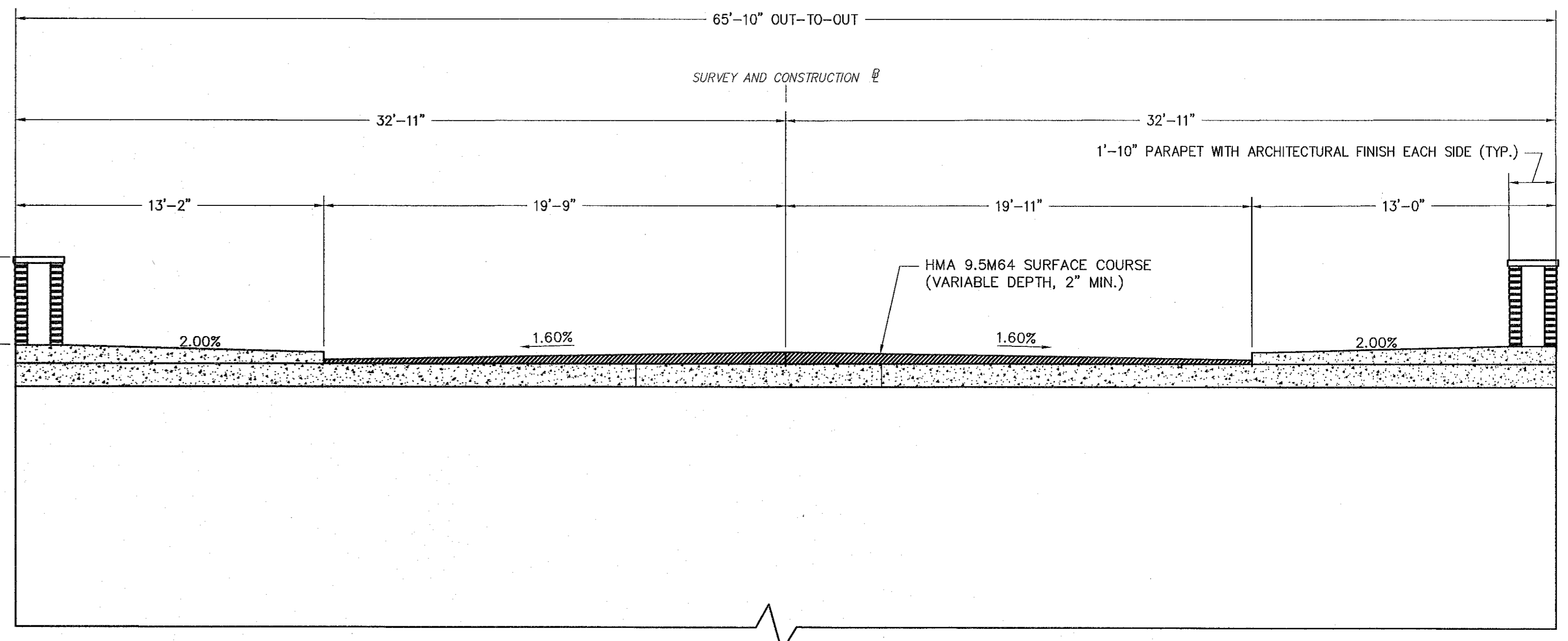
SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY	DWG. NO.	SHEET. NO.
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.	2000X016	11 OF 24

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PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID.



PLAN  
SCALE: 1/4" = 1'-0"



NORTH ELEVATION  
SCALE: 1/4" = 1'-0"

**WORKING POINT DATA**

W.P. NUMBER	@ STATION	OFFSET FROM @	COORDINATES		ELEVATION*
			NORTHING	EASTING	
1	9+95.00	32.92' RT.	643152.59	555911.08	6.33
2	9+95.00	0.00	643183.66	555921.95	6.33
3	9+95.00	32.92' LT.	643214.73	555932.83	6.33
4	10+05.00	32.92' LT.	643211.42	555942.27	6.33
5	10+05.00	0.00	643180.36	555931.39	6.33
6	10+05.00	32.92' RT.	643149.29	555920.51	6.33

\* ELEVATIONS ARE BASED ON TOP OF DECK SLAB

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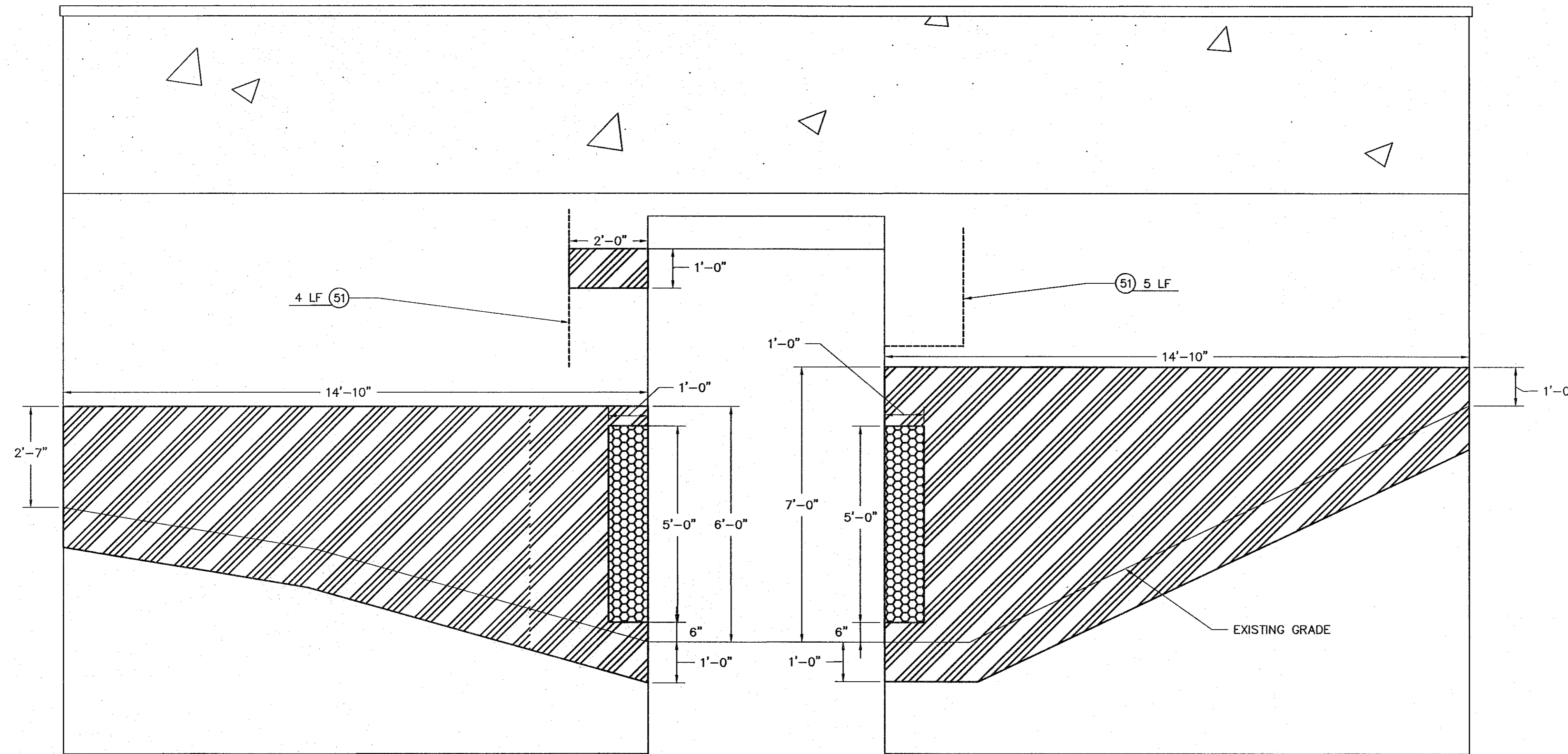
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PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID.

NO.	REVISION	DATE	BY	CHK. BY
GENERAL PLAN, ELEVATION & SECTION REHABILITATION OF EAST HAZELWOOD AVE. MINOR BRIDGE Ra-69 CITY OF RAHWAY, UNION COUNTY, NEW JERSEY				
DATE:		DATE: 09.31.17		
<b>RICHARD G. ARANGO</b> NJ PROFESSIONAL ENGINEER LIC. NO. 38882		<b>FRANK J. SENEY JR.</b> NJ PROFESSIONAL ENGINEER LIC. NO. 35321		
<b>REMINGTON, VERNICK &amp; ARANGO ENGINEERS</b> ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM Certificate of Authorization: 24 CA 28003800				
SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.
DWG. NO. 2000X016				SHEET NO. 12 OF 24
DWG FILE PATH/NAME m:\transportation\bridge\union county\2000x016 - hazelwood avenue bridge replacement\000_bridges_rehabilitation_plans\R-2000016-01.dwg				

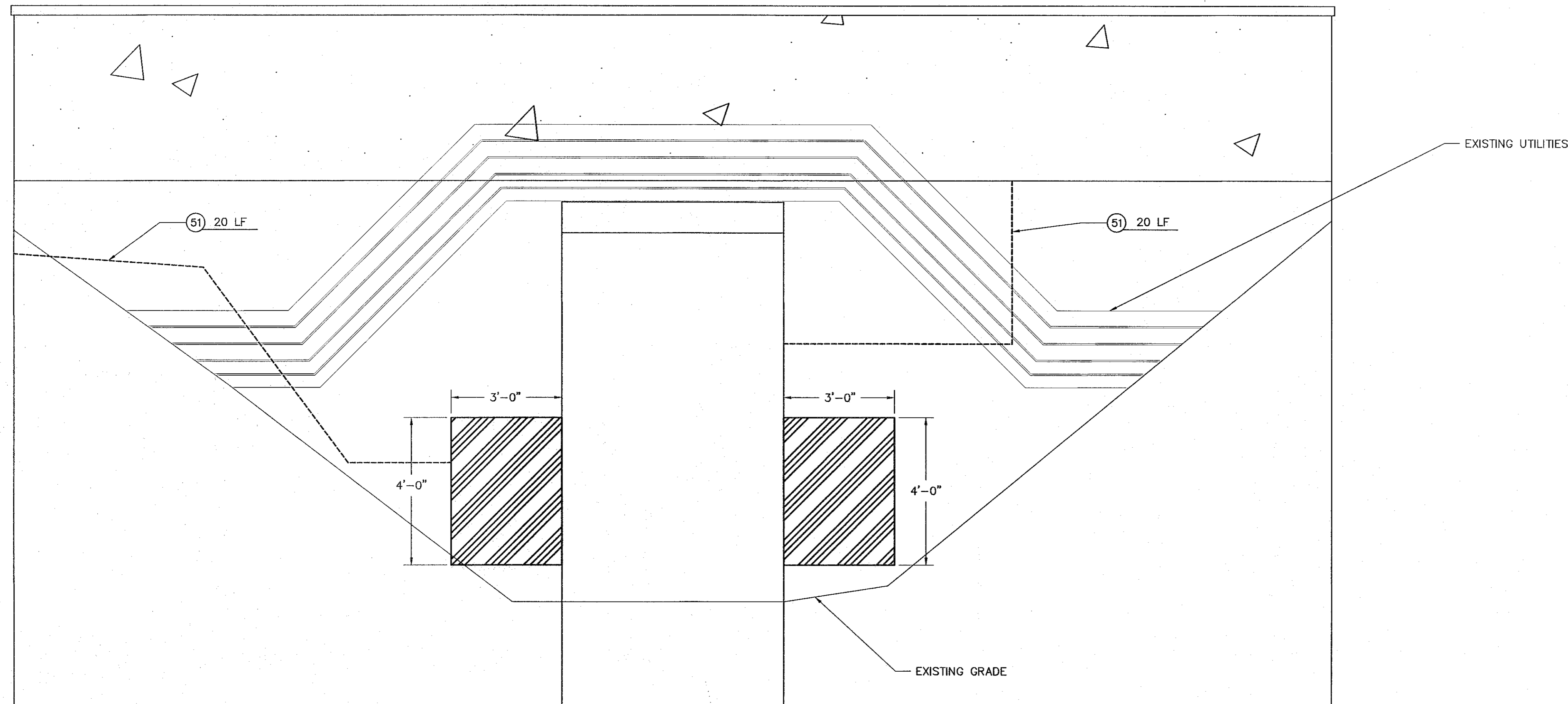


BRIDGE PAY ITEMS			
PAY ITEM NO.	DESCRIPTION	UNITS	PLAN QUANTITY
47	CONCRETE SPALL REPAIR, 2" TO 6" DEEP	S.F.	174
48	CONCRETE SPALL REPAIR, OVER 6" DEEP	S.F.	10
51	PRESSURE INJECTION, CONCRETE CRACKS	L.F.	49



**NORTH ELEVATION WINGWALL REHABILITATION**  
SCALE: 1" = 2'-0"

NOTES:  
1. SPALL REHABILITATION SHALL EXTEND TO A MINIMUM OF 1 FOOT BELOW EXISTING GRADE.



**SOUTH ELEVATION WINGWALL REHABILITATION**  
SCALE: 1" = 2'-0"

- = ITEM 47: CONCRETE SPALL REPAIR, 2" TO 6" DEEP
- = ITEM 48: CONCRETE SPALL REPAIR, OVER 6" DEEP

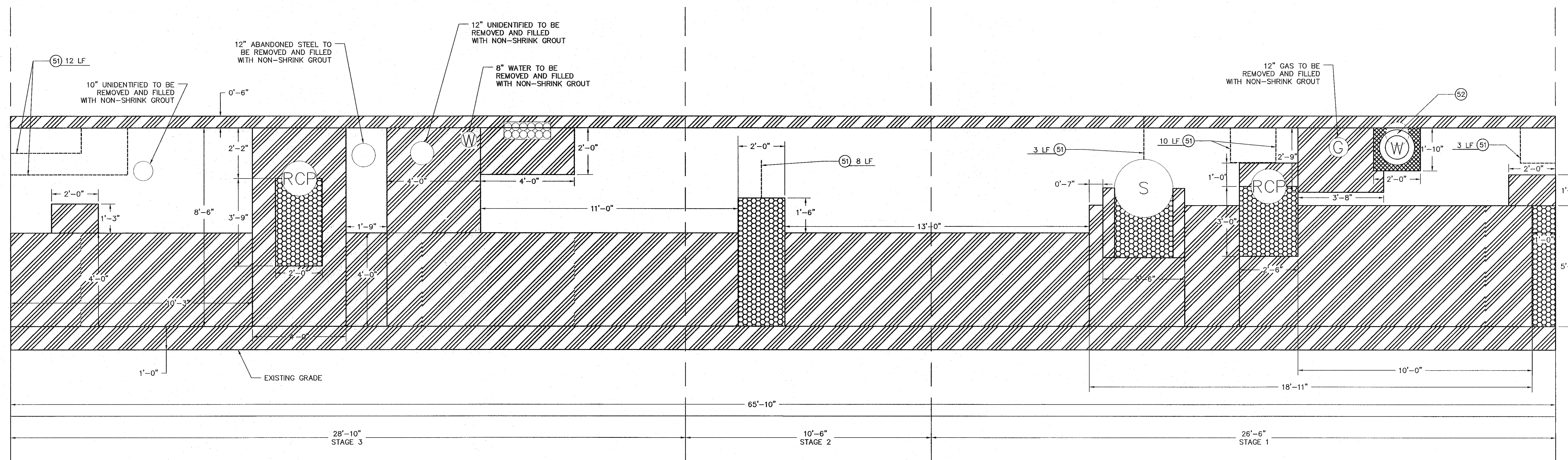
NO.	REVISION	DATE	BY	CHK. BY		
<b>WINGWALL REHABILITATION</b>						
<b>REHABILITATION OF EAST HAZELWOOD AVE.</b>						
<b>MINOR BRIDGE Ra-69</b>						
<b>CITY OF RAHWAY, UNION COUNTY, NEW JERSEY</b>						
DATE:		DATE: 07.31.17				
<b>RICHARD G. ARANGO</b> NJ PROFESSIONAL ENGINEER LIC. NO. 38882		<b>FRANK J. SENEY JR.</b> NJ PROFESSIONAL ENGINEER LIC. No. 35321				
<b>REMINGTON, VERNICK &amp; ARANGO ENGINEERS</b>						
<small>ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVVE.COM Certificate of Authorization: 24 CA 28903800</small>						
SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY	DWG. NO.	SHEET. NO.
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.	2000X016	13 OF 24
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BRIDGE PAY ITEMS			
PAY ITEM NO.	DESCRIPTION	UNITS	PLAN QUANTITY
47	CONCRETE SPALL REPAIR, 2" TO 6" DEEP	S.F.	415
48	CONCRETE SPALL REPAIR, OVER 6" DEEP	S.F.	36
50	UTILITY GROUT REPAIR	C.Y.	1.5
51	PRESSURE INJECTION, CONCRETE CRACKS	L.F.	36
52	CONCRETE CORING FOR 12" WATER MAIN RELOCATION	L.S.	1



ABUTMENT 1 PLAN (LOOKING DOWNSTATION)

SCALE: 1" = 2'-0"

= ITEM 47: CONCRETE SPALL REPAIR, 2" TO 6" DEEP

= ITEM 48: CONCRETE SPALL REPAIR, OVER 6" DEEP

= ITEM 52: 12" WATERMAIN RELOCATION

NOTES:  
1. FILLING OF UTILITY PENETRATIONS WITH NON-SHRINK GROUT TO BE PAID UNDER PAY ITEM 50: UTILITY GROUT REPAIR.

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NO.	REVISION	DATE	BY	CHK. BY

ABUTMENT 1 REHABILITATION ELEVATION  
REHABILITATION OF EAST HAZELWOOD AVE.  
MINOR BRIDGE Ra-69  
CITY OF RAHWAY, UNION COUNTY, NEW JERSEY

DATE: \_\_\_\_\_  
DATE: 7-31-17

**RICHARD G. ARANGO**  
NJ PROFESSIONAL ENGINEER LIC. NO. 38882

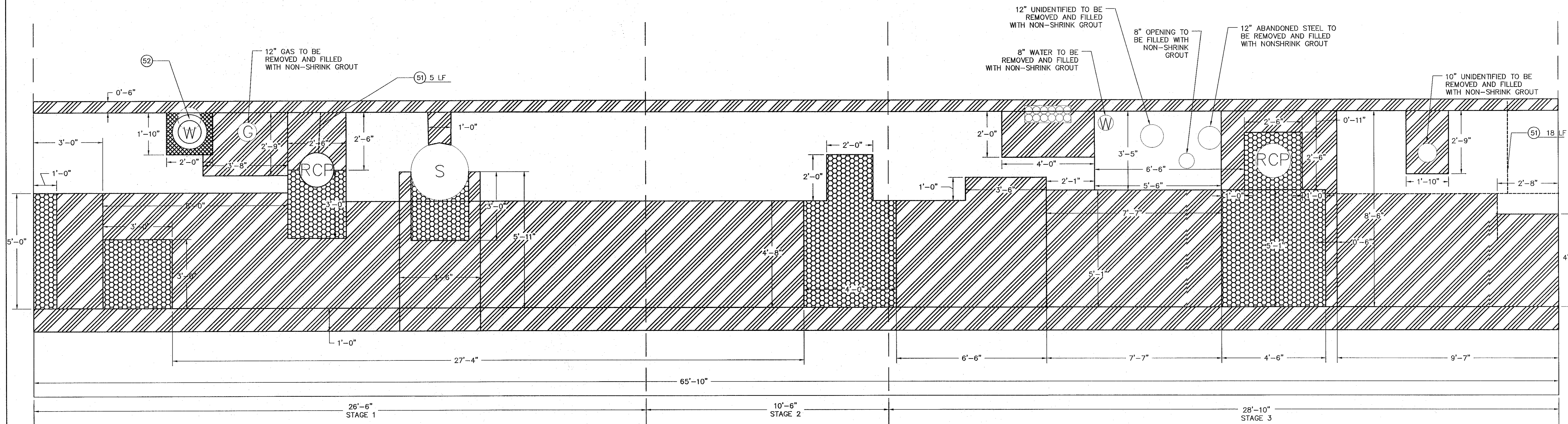
**FRANK J. SENEY JR.**  
NJ PROFESSIONAL ENGINEER LIC. NO. 35321

**RY & A** REMINGTON, VERNICK & ARANGO ENGINEERS  
ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094  
(201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RV.E.COM  
Certificate of Authorization: 24 GA 28003890

SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY	DWG. NO.	SHEET. NO.
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.	2000X016	14 OF 24

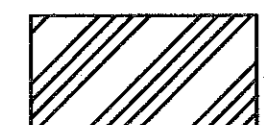
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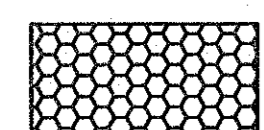
BRIDGE PAY ITEMS			
PAY ITEM NO.	DESCRIPTION	UNITS	PLAN QUANTITY
47	CONCRETE SPALL REPAIR, 2" TO 6" DEEP	S.F.	393
48	CONCRETE SPALL REPAIR, OVER 6" DEEP	S.F.	76
50	UTILITY GROUT REPAIR	C.Y.	1.5
51	PRESSURE INJECTION, CONCRETE CRACKS	L.F.	23
52	CONCRETE CORING FOR 12" WATER MAIN RELOCATION	L.S.	1




ABUTMENT 2 PLAN (LOOKING UPSTATION)

SCALE: 1" = 2'-0"

 = ITEM 47: CONCRETE SPALL REPAIR, 2" TO 6" DEEP

 = ITEM 48: CONCRETE SPALL REPAIR, OVER 6" DEEP

 = ITEM 52: 12" WATERMAIN RELOCATION

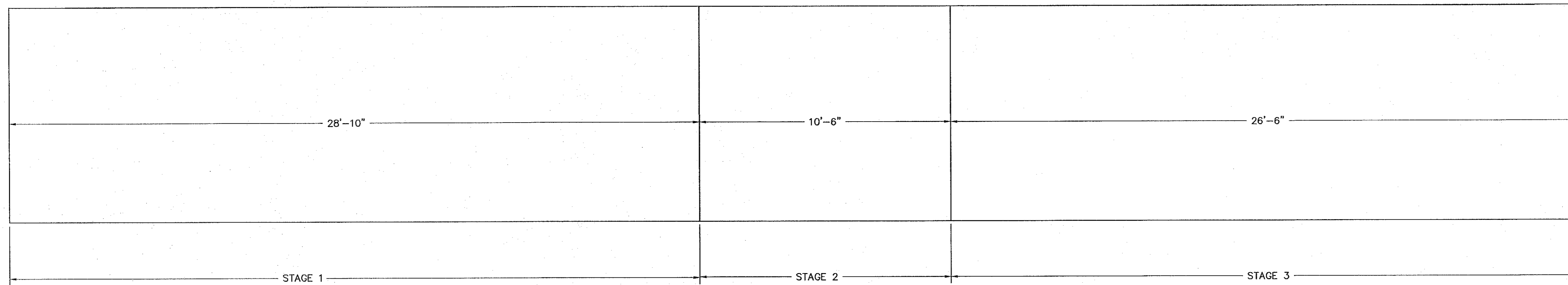
NOTES:  
1. FILLING OF UTILITY PENETRATIONS WITH NON-SHRINK GROUT TO BE PAID UNDER PAY ITEM 50: UTILITY GROUT REPAIR.

NO.	REVISION	DATE	BY	CHK. BY		
ABUTMENT 2 REHABILITATION ELEVATION						
REHABILITATION OF EAST HAZELWOOD AVE. MINOR BRIDGE Ra-69 CITY OF RAHWAY, UNION COUNTY, NEW JERSEY						
DATE:		DATE: 7-31-17				
<b>RICHARD G. ARANGO</b> NJ PROFESSIONAL ENGINEER LIC. NO. 38882		<b>FRANK J. SENEY JR.</b> NJ PROFESSIONAL ENGINEER LIC. No. 35321				
<b>REMINGTON, VERNICK &amp; ARANGO ENGINEERS</b> ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM Certificate of Authorization: 24-0A-28003800						
SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY	DWG. NO.	SHEET. NO.
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.	2000X016	15 OF 24
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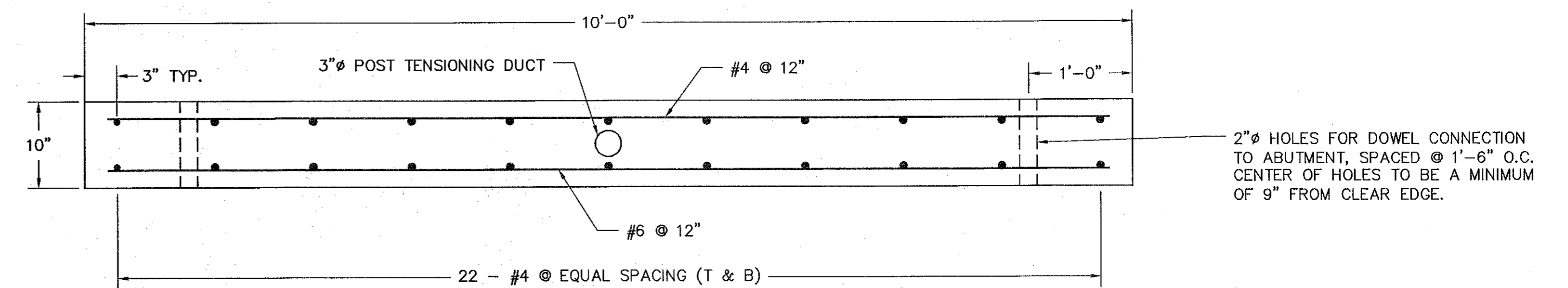
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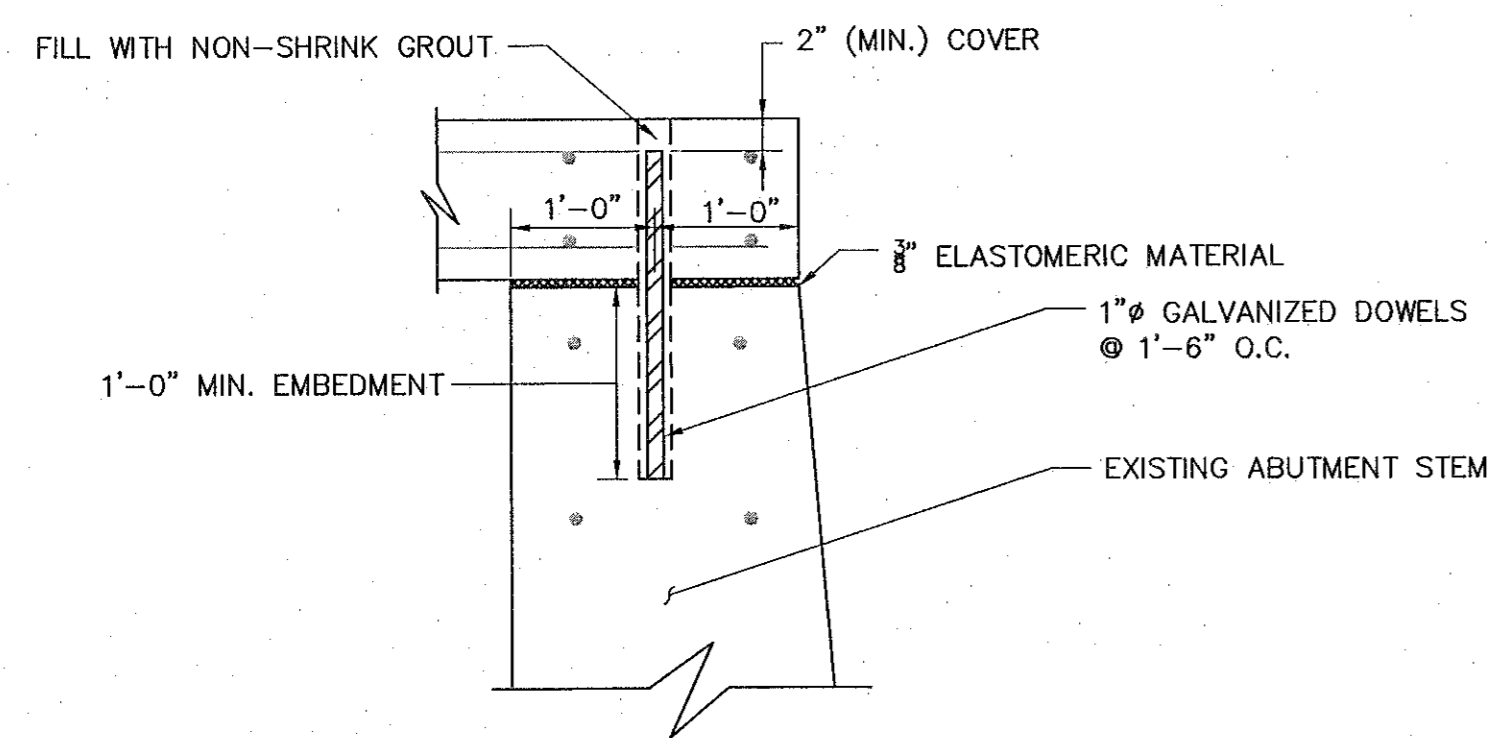
PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID.



**PRECAST SLABS LAYOUT**  
SCALE: 3/8" = 1'-0"

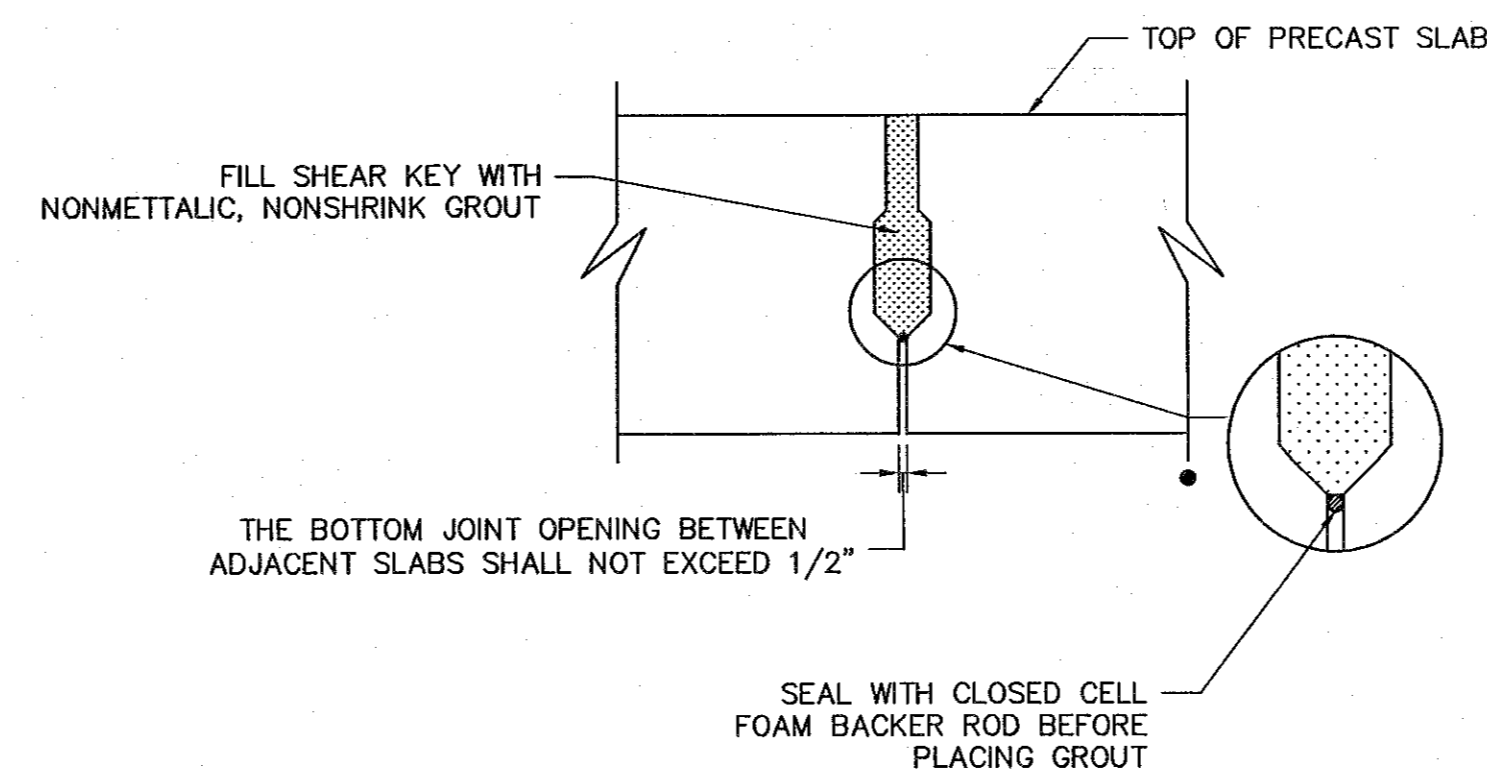


**PRECAST LONGITUDINAL SLAB BRIDGE SECTION**  
SCALE: 1" = 1'-0"

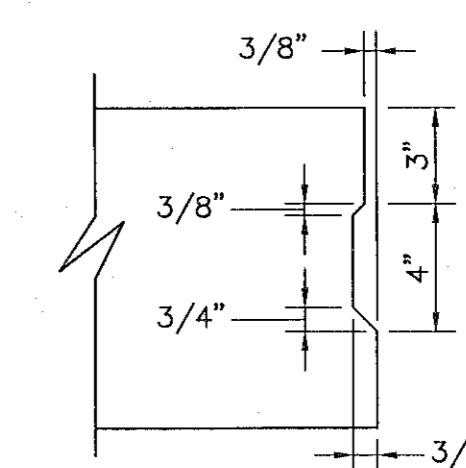


**SLAB TO ABUTMENT CONNECTION DETAIL**  
NOT TO SCALE

NOTE:  
DEMOLITION AND REMOVAL OF TOP PORTION OF EXISTING CONCRETE ABUTMENT STEMS TO CREATE A FLUSH SURFACE FOR THE INSTALLATION OF THE PRECAST SLAB AT THE REQUIRED ELEVATION SHALL BE PAID FOR UNDER "CLEARING SITE, BRIDGE".



**PRECAST SLAB KEYWAY DETAIL 2**  
NOT TO SCALE



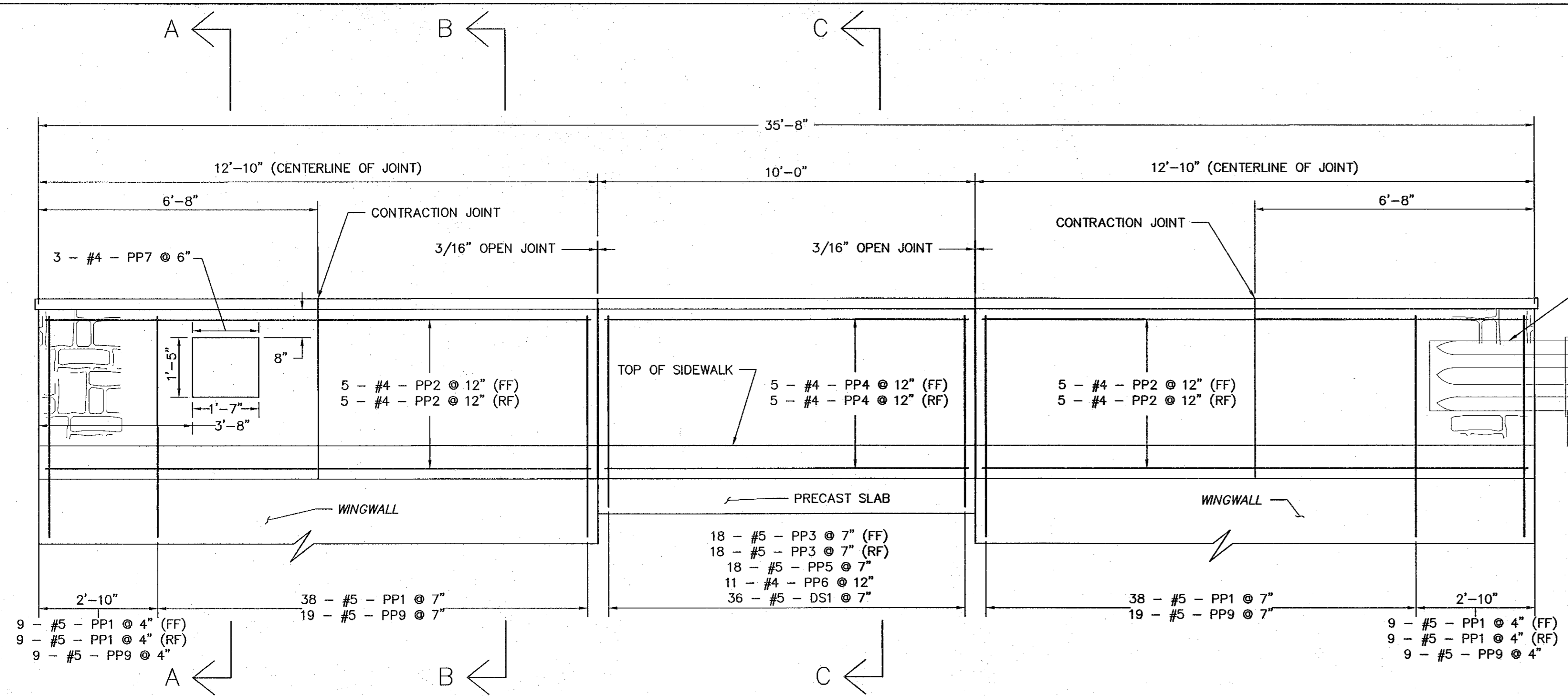
**PRECAST SLAB KEYWAY DETAIL 1**  
(OMIT ON FASCIA SIDE)  
SCALE: 2" = 1'-0"

NO.	REVISION	DATE	BY	CHK. BY		
<b>PRECAST SLAB DETAILS</b>						
<b>REHABILITATION OF EAST HAZELWOOD AVE.</b>						
<b>MINOR BRIDGE Ra-69</b>						
<b>CITY OF RAHWAY, UNION COUNTY, NEW JERSEY</b>						
DATE:		DATE: 09-31-17				
<b>RICHARD G. ARANGO</b> NJ PROFESSIONAL ENGINEER LIC. NO. 38882		<b>FRANK J. SENEY JR.</b> NJ PROFESSIONAL ENGINEER LIC. No. 35321				
<b>REMINGTON, VERNICK &amp; ARANGO ENGINEERS</b>						
<small>ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2138, WEB SITE ADDRESS: WWW.RV&amp;A.COM Certificate of Authorization: 24 GA 28003800</small>						
SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY	DWG. NO.	SHEET. NO.
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.	2000X016	16 OF 24
DWG FILE PATH/NAME						
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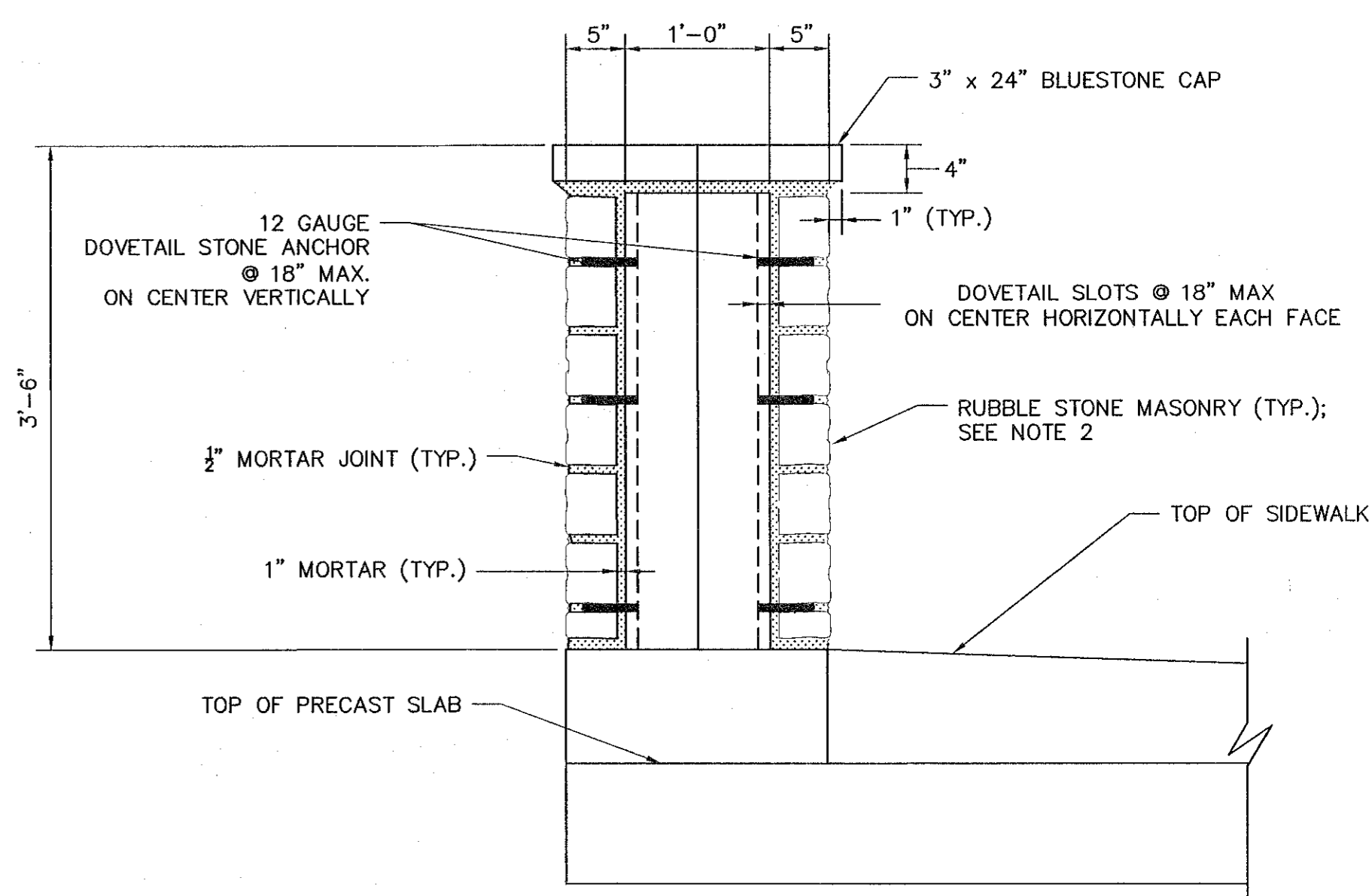
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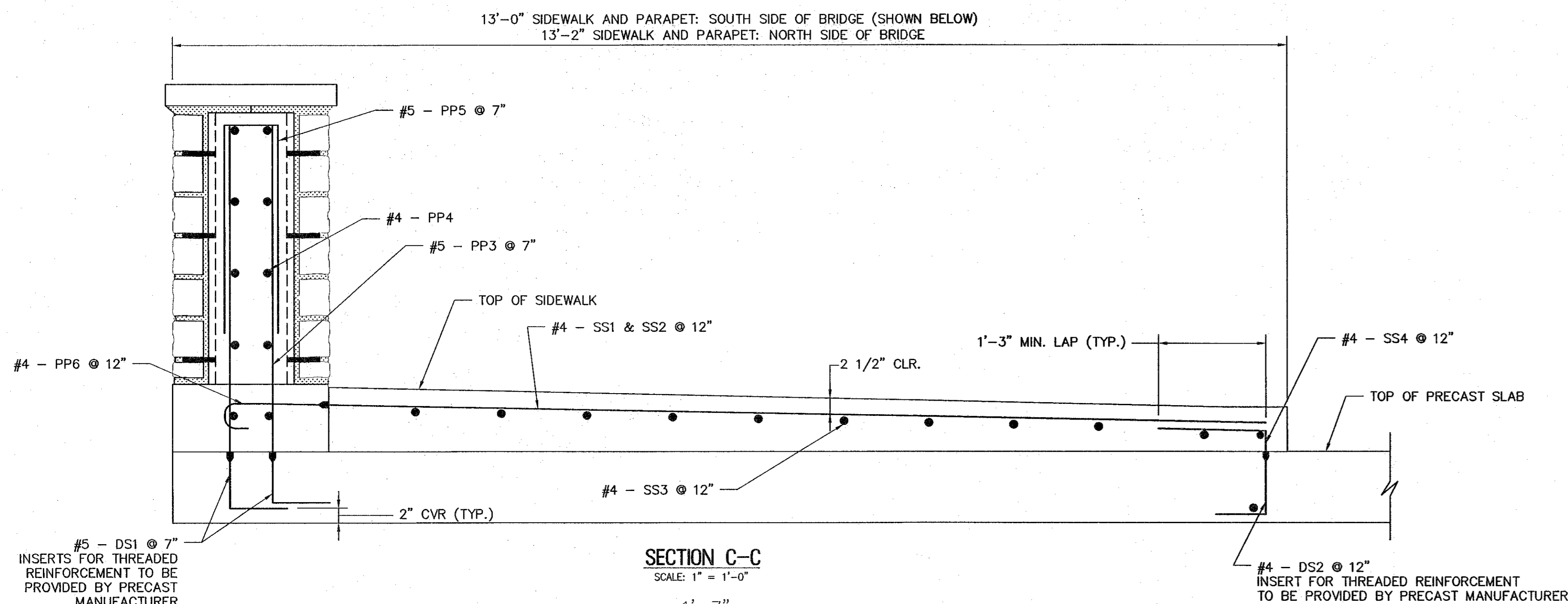
**PARAPET ELEVATION**

SCALE: 1/2" = 1'-0"



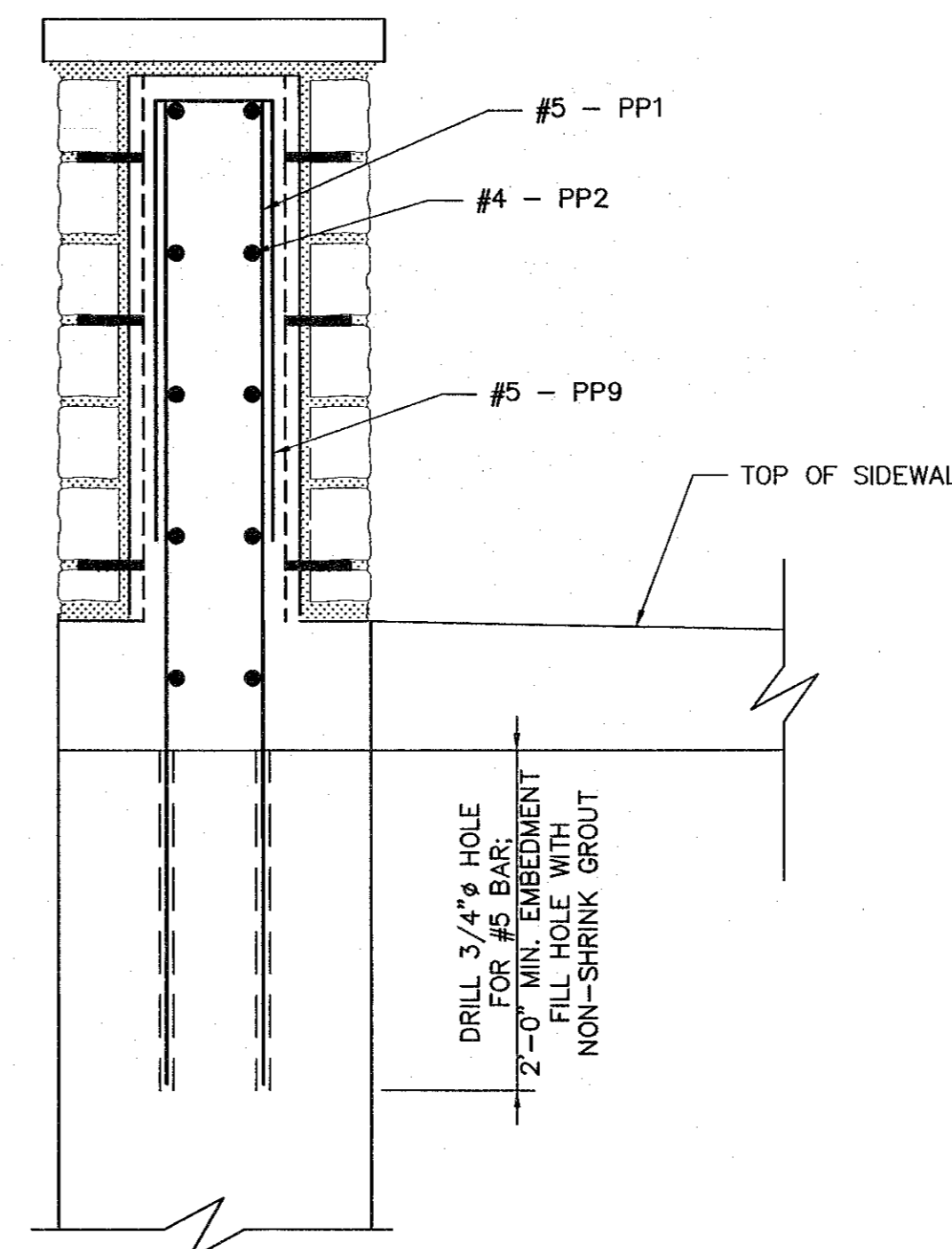
**PARAPET SECTION: ARCHITECTURAL DETAILS**

SCALE: 1" = 1'-0"



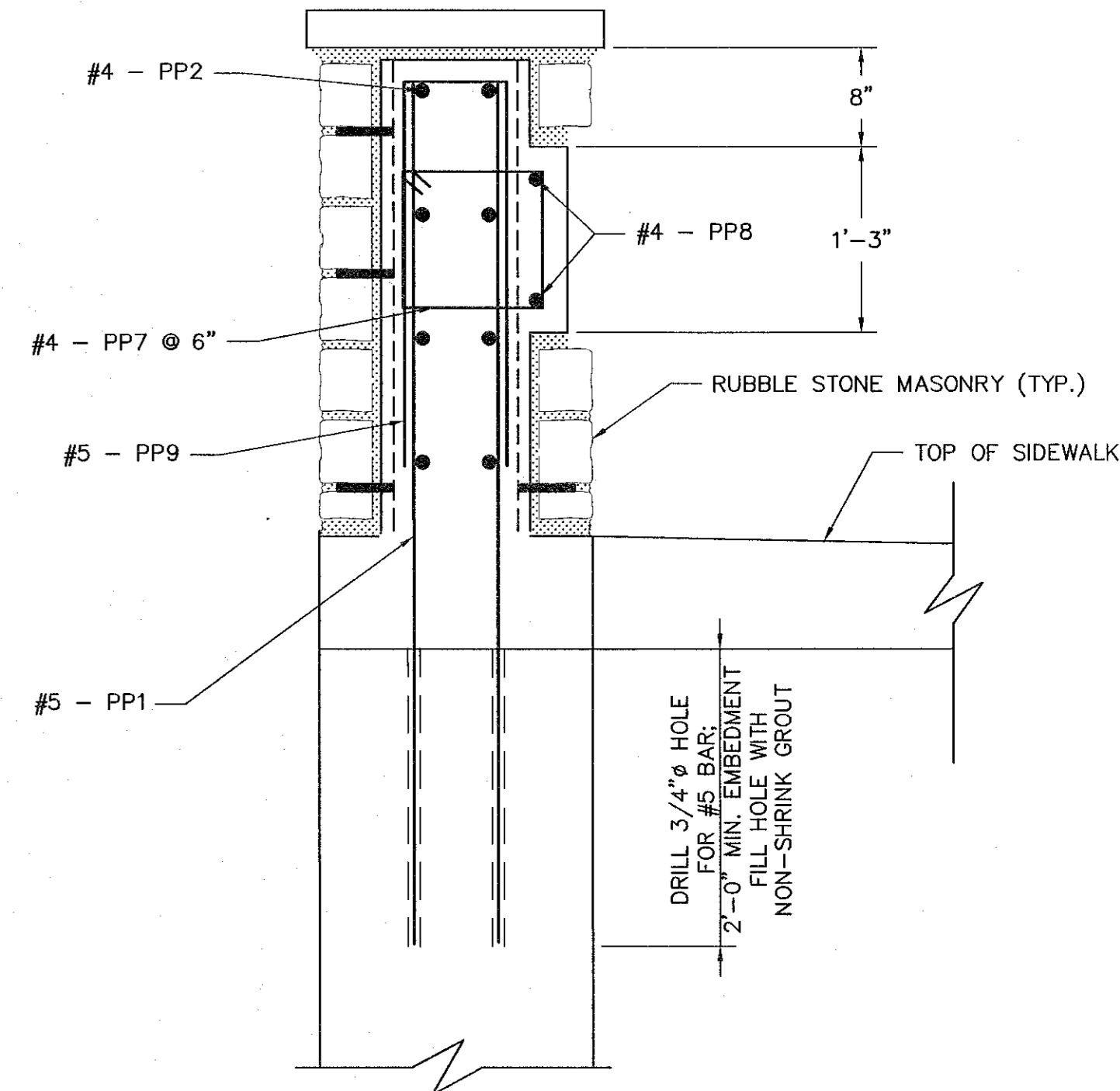
**SECTION C-C**

SCALE: 1" = 1'-0"



**SECTION B-B**

SCALE: 1" = 1'-0"



**SECTION A-A**

SCALE: 1" = 1'-0"

**NOTES:**

- BRONZE BRIDGE PLAQUE NOTES**
  - ONE BRONZE BRIDGE PLAQUE WILL BE LOCATED ON EACH PARAPET (2 TOTAL), INSIDE (ROADWAY) FACE. THE PLAQUES SHALL BE SET FLUSH IN THE PARAPET, AND TIED TO THE REINFORCEMENT.
  - CONTRACTOR MUST SUBMIT PROPOSED PLAQUE TEST (I.E. NAMES, DATES, TILES, ETC.) TO THE COUNTY FOR APPROVAL PRIOR TO FABRICATION.
  - CONTRACTOR MAY SUBMIT AN ALTERNATE ANCHORAGE SYSTEM TO THE COUNTY FOR APPROVAL.
- IT IS RECOMMENDED THE CONTRACTOR VISIT MONROE STREET BRIDGE (Ra-24) OVER THE RAHWAY RIVER FOR RUBBLE STONE MASONRY FACADE TO BE MIMICKED FOR THIS STRUCTURE

TEXT	SIZE
"UNION COUNTY" AND "2017"	5/8"
UNION COUNTY SEAL	2 3/4"
"BOARD OF CHOSEN FREEHOLDERS"	1/2"
CHOSEN FREEHOLDER NAMES	3/8"
COUNTY EMPLOYEE NAMES	1/4"

**UNION COUNTY**  
2017

**BOARD OF CHOSEN FREEHOLDERS**  
BRUCE H. BERGEN, CHAIRMAN  
SERGIO GRANADOS, VICE-CHAIRMAN

LINDA CARTER CHRISTOPHER HUDAK BETTE JANE KOWALSKI VERNELLE WRIGHT	ANGEL G. ESTRADA MOHAMED S. JALLOH ALEXANDER MIRABELLA
---	--

JAMES E. PELLETIERE, CLERK OF THE BOARD

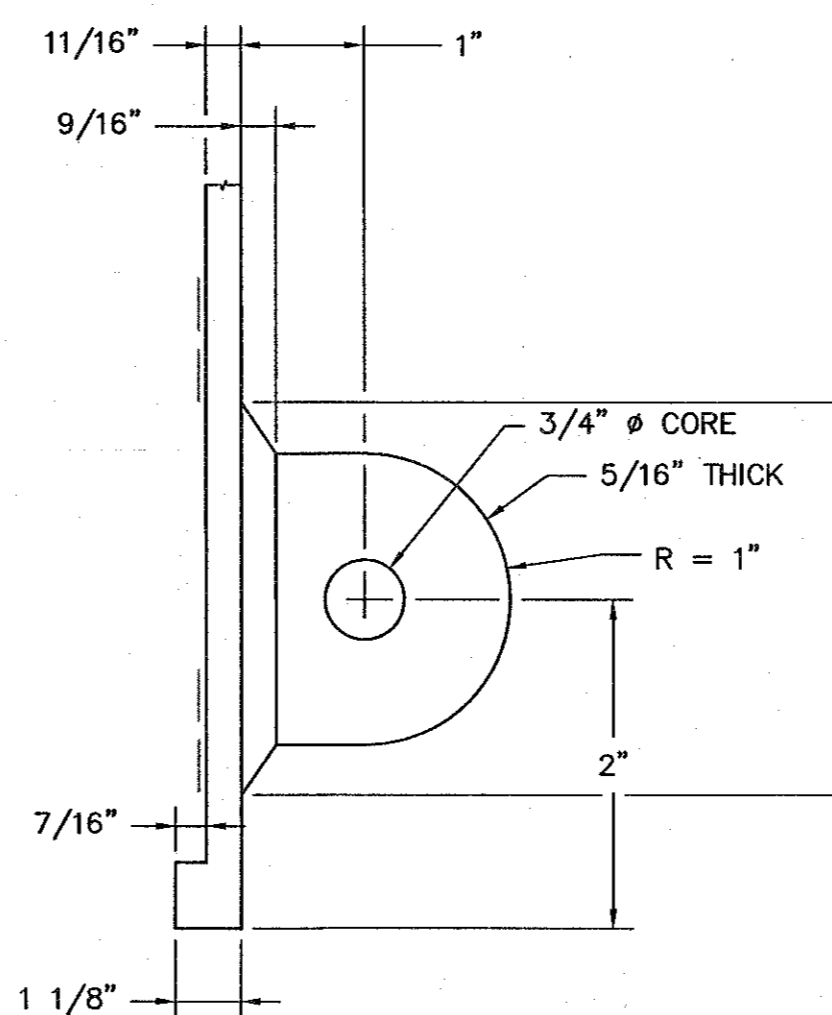
COUNTY MANAGER ALFRED J. FAELLA	THOMAS O. MINEO, P.E. COUNTY ENGINEER
------------------------------------	--

DESIGNED BY:  
REMINGTON, VERNICK & ARANGO ENGINEERS

CONSTRUCTED BY:  
(CONTRACTOR'S NAME)

**BRONZE BRIDGE PLAQUE DETAIL**

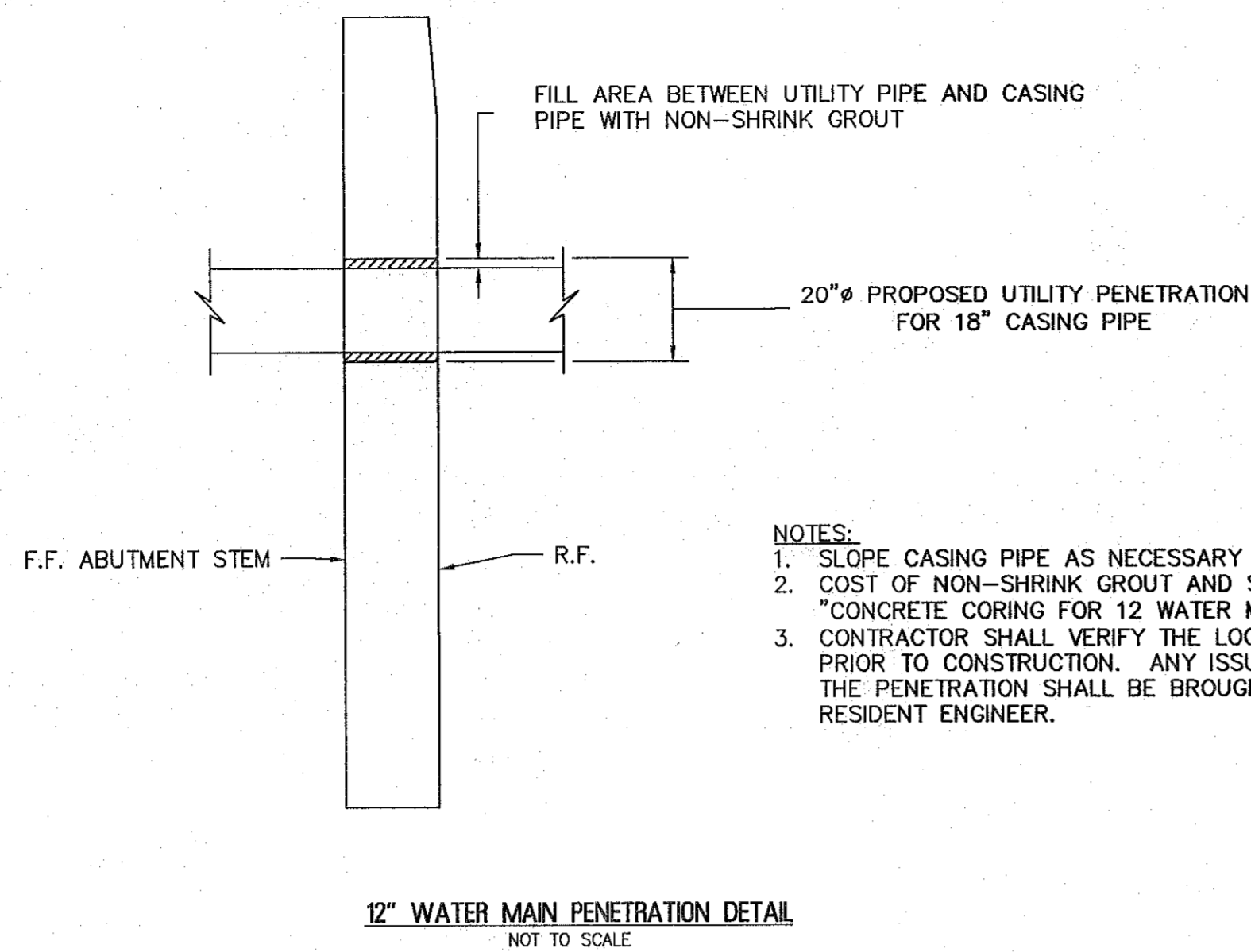
NOT TO SCALE



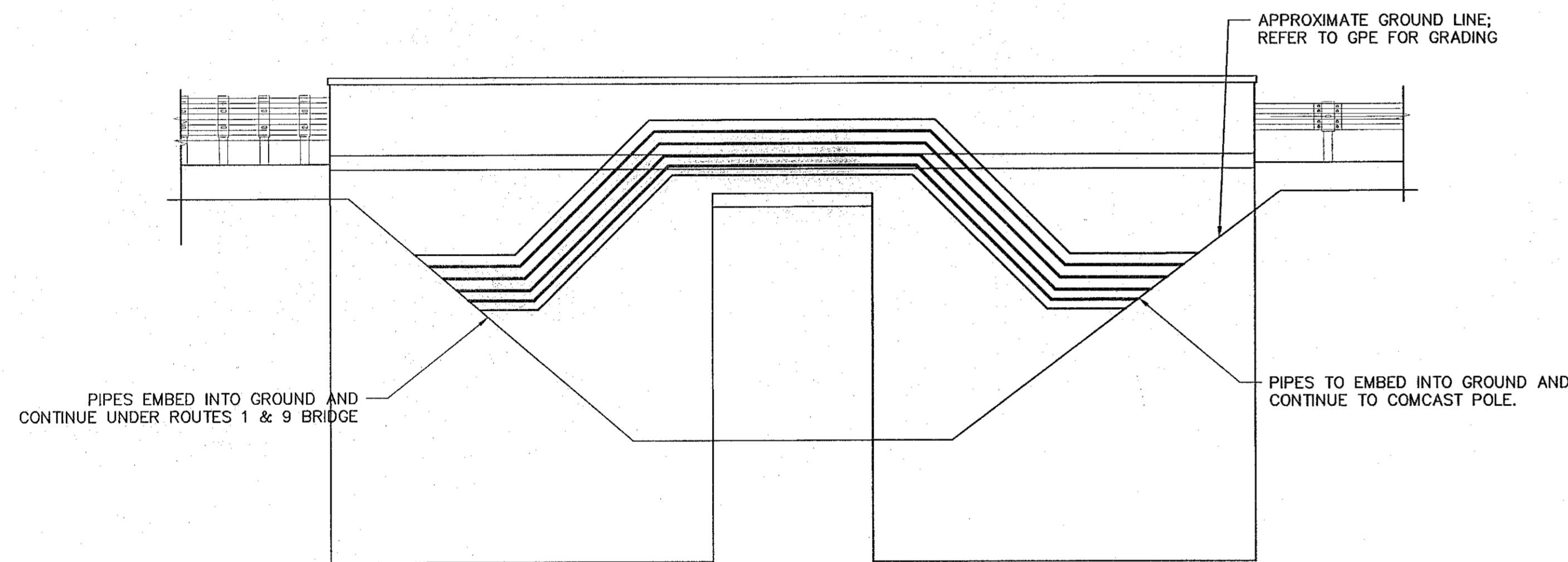
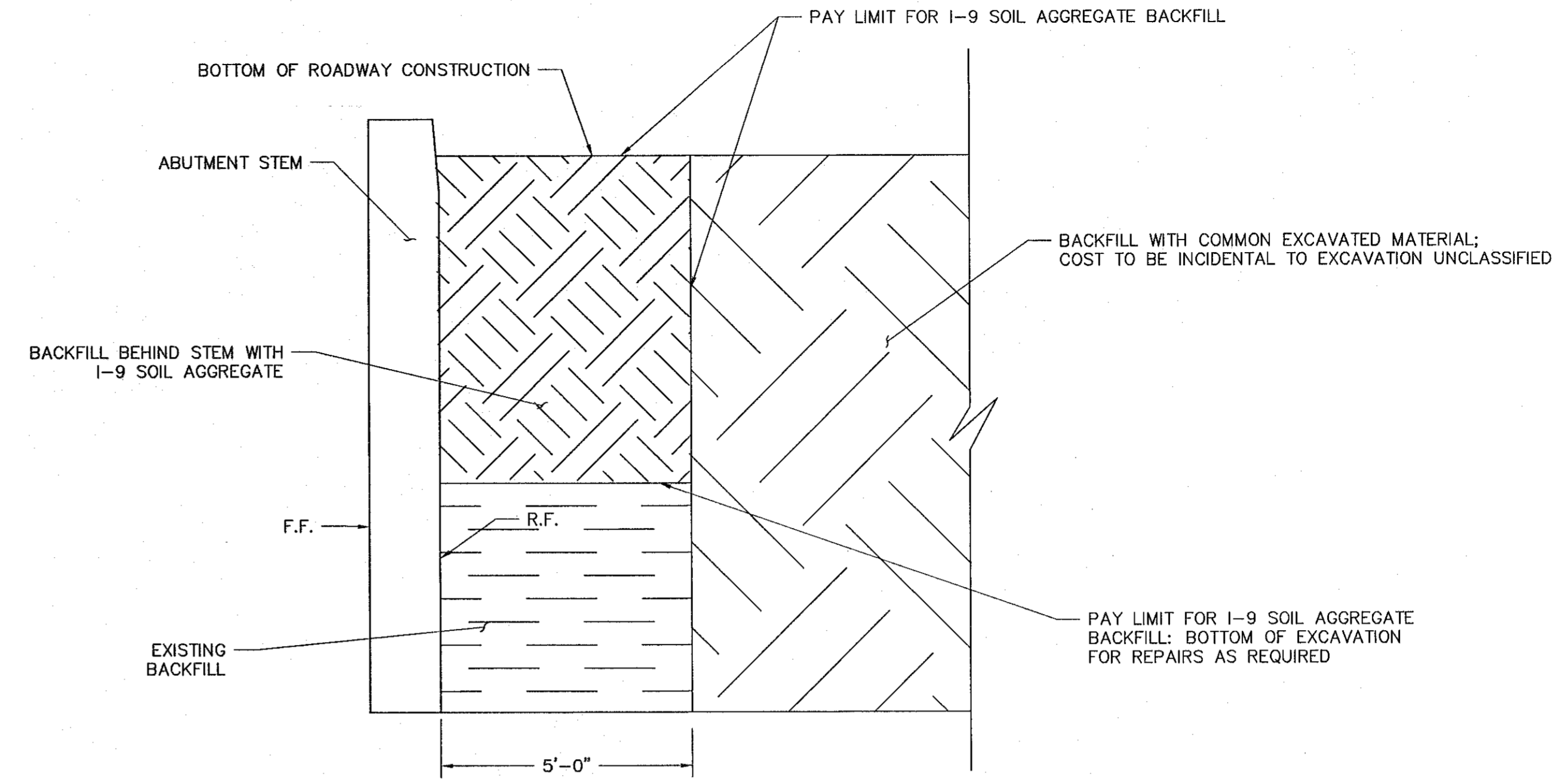
**BRIDGE PLAQUE BRACKET DETAIL**

NOT TO SCALE

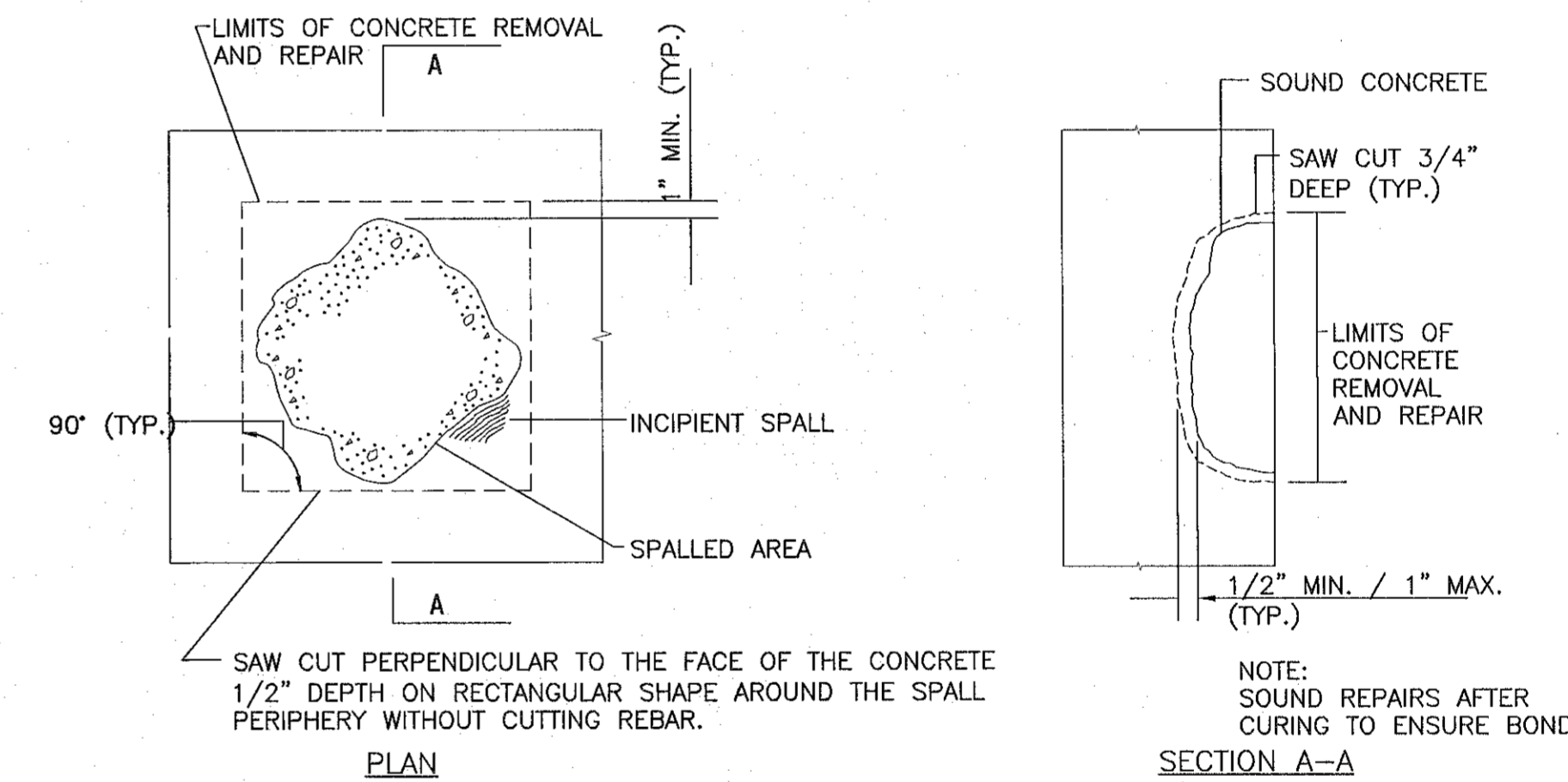
NO.	REVISION	DATE	BY	CHK. BY
<b>PARAPET DETAILS</b>				
<b>REHABILITATION OF EAST HAZELWOOD AVE.</b>				
<b>MINOR BRIDGE Ra-69</b>				
<small>CITY OF RAHWAY, UNION COUNTY, NEW JERSEY</small>				
DATE:		DATE: 7.31.17		
<b>RICHARD G. ARANGO</b> NJ PROFESSIONAL ENGINEER LIC. NO. 38882		<b>FRANK J. SENEY JR.</b> NJ PROFESSIONAL ENGINEER LIC. NO. 35321		
<b>REMINGTON, VERNICK &amp; ARANGO ENGINEERS</b>				
<small>ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM Certificate of Authorization: 24 04 28003800</small>				
DATE	DRAWN BY	DSGN. BY	CHK'D. BY	DWG. NO.
MAR-2017	S.F.B.	S.F.B.	F.J.S.	2000X016
DWG FILE PATH/NAME				SHEET. NO.
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- NOTES:
1. SLOPE CASING PIPE AS NECESSARY TO MATCH UTILITY.
  2. COST OF NON-SHRINK GROUT AND SLEEVE TO BE PAID UNDER "CONCRETE CORING FOR 12 WATER MAIN RELOCATION".
  3. CONTRACTOR SHALL VERIFY THE LOCATION AND DIMENSION OF UTILITY PRIOR TO CONSTRUCTION. ANY ISSUES REGARDING CONSTRUCTION OF THE PENETRATION SHALL BE BROUGHT TO THE ATTENTION OF THE RESIDENT ENGINEER.



- NOTES:
1. UTILITIES CURRENTLY ALONG SIDE OF BRIDGE ARE TO BE SECURED TO THE BRIDGE IN A SIMILAR FASHION FOLLOWING REHABILITATION. CONTRACTOR SHALL VERIFY ALL UTILITIES CURRENTLY ALONG SIDE OF BRIDGE AND SECURE THEM TO THE NEW STRUCTURE.
  2. PLACE BRACKETS TO SUPPORT UTILITIES ON PARAPET AND WINGWALLS ONLY. DO NOT CONNECT TO PRECAST SLAB.
  3. CONTRACTOR TO PROVIDE TEMPORARY SUPPORT OF UTILITY CONDUITS THROUGHOUT CONSTRUCTION.



**REPAIR DETAILS**

- NOTES:
1. THE SPALLED AREAS SHALL BE REPAIRED AS PER SPECIFICATIONS, DETAILS, AND AS PER THE FOLLOWING PROCEDURES.
    - 1.1. SAWCUT AND REMOVE THE EXISTING DETERIORATED AND HOLLOW SOUNDED CONCRETE TO SOUND CONCRETE OR AS DIRECTED BY THE ENGINEER. MINIMUM DEPTH OF CONCRETE REMOVAL SHALL BE ONE INCH.
    - 1.2. THE SURFACE OF THE REMAINING CONCRETE SHALL BE CLEANED OF LOOSE CONCRETE, DUST, AND OTHER FOREIGN MATERIAL. ADHERING CONCRETE SHALL BE REMOVED FROM REINFORCEMENT STEEL.
    - 1.3. FOR REPAIRS GREATER THAN FOUR INCHES IN DEPTH AND LARGER THAN 2 FEET BY 1 FEET IN SIZE, PROVIDE GALVANIZED OR EPOXY COATED WELDED WIRE MESH (4X4 - W2.0 X W2.0). WELDED WIRE MESH SHALL BE PAID FOR UNDER BID ITEM 49 "CONCRETE SPALL REPAIR, 4" TO 6"

NO.	REVISION	DATE	BY	CHK. BY

UTILITY & CONSTRUCTION DETAILS

REHABILITATION OF EAST HAZELWOOD AVE.  
MINOR BRIDGE Ra-69  
CITY OF RAHWAY, UNION COUNTY, NEW JERSEY

DATE: \_\_\_\_\_

DATE: 7.31.17

**RICHARD G. ARANGO**  
NJ PROFESSIONAL ENGINEER LIC. NO. 38882

**FRANK J. SENEY JR.**  
NJ PROFESSIONAL ENGINEER LIC. No. 35321

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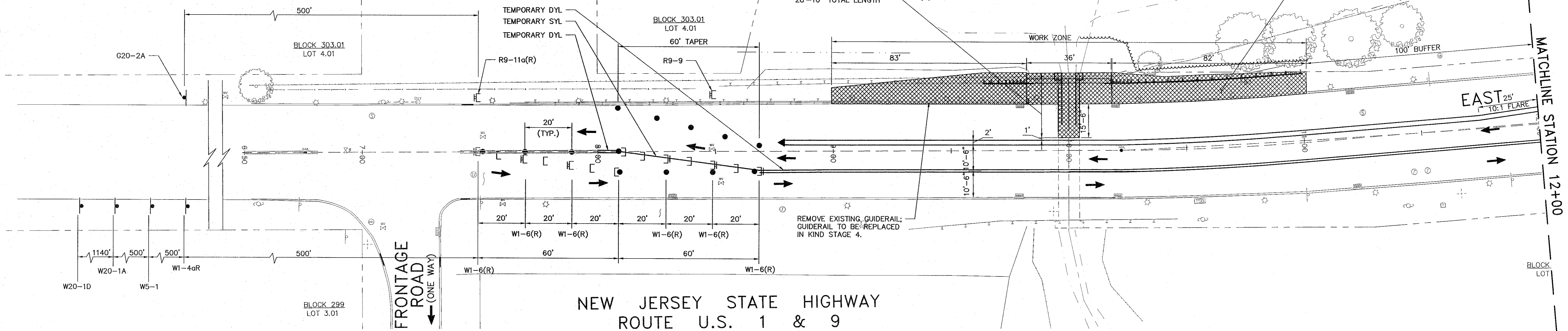
**REMININGTON, VERNICK & ARANGO ENGINEERS**  
ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094  
(201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM  
Certificate of Authorization: 24 GA 28003800

SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY	DWG. NO.	SHEET. NO.
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.	2000X016	18 OF 24

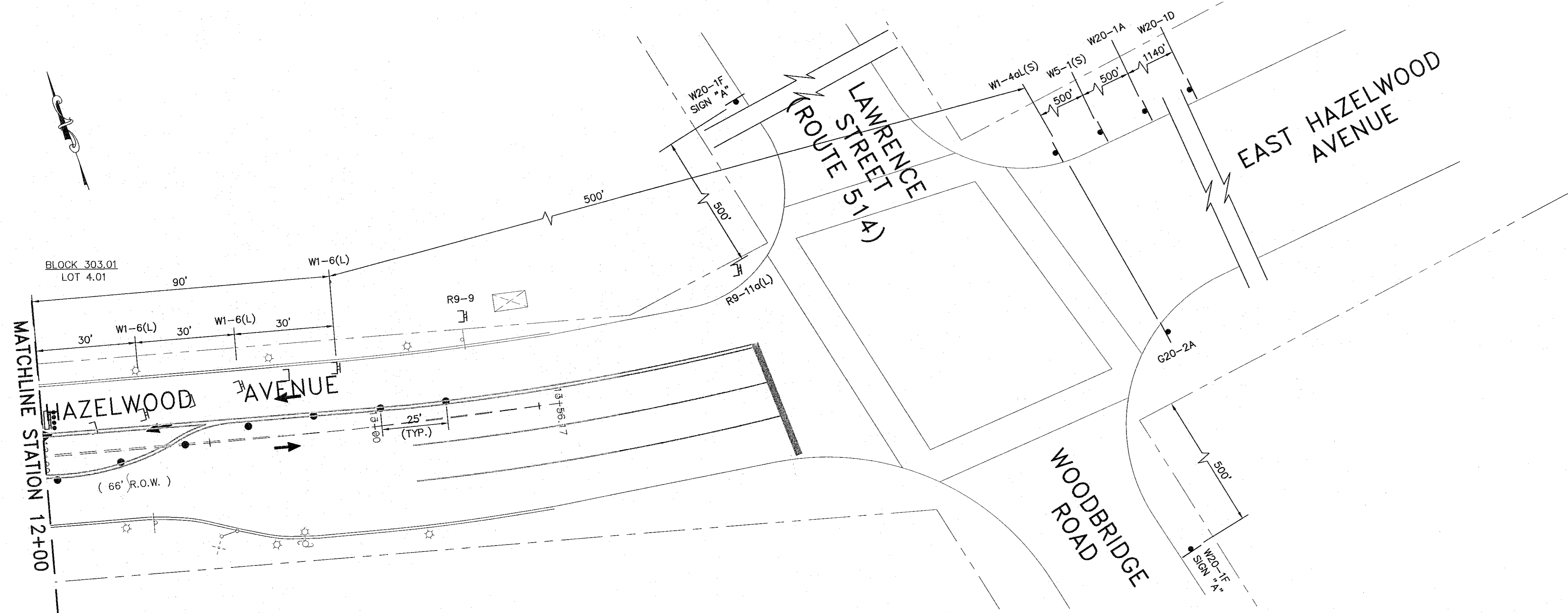
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NEW JERSEY STATE HIGHWAY ROUTE U.S. 1  
(100' R.O.W.)

NEW JERSEY STATE HIGHWAY ROUTE U.S. 1 & 9  
(140' R.O.W.)



NEW JERSEY STATE HIGHWAY ROUTE U.S. 1 & 9

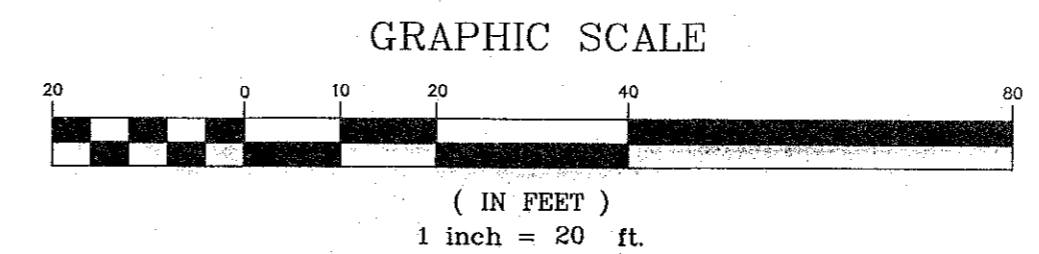


LEGEND			
SIGN DESIGNATION	MESSAGE	SIZE (IN. X IN.)	QUANTITY
R2-5A(S)	REDUCE SPEED AHEAD	24 x 30	2
R(N)5-17	TRAFFIC FINES DOUBLED IN WORK AREA	48 x 30	2
R2-1	SPEED LIMIT 25 MPH	48 x 30	2
R9-9	SIDEWALK CLOSED	24 x 12	2
R9-11a	SIDEWALK CLOSED, CROSS HERE	24 x 12	2
W1-4a (L)	SHIFT LEFT (SYMBOL)	48 x 48	1
W1-4a (R)	SHIFT RIGHT (SYMBOL)	48 x 48	1
W1-6 (L)	LEFT ARROW (SYMBOL)	48 x 24	3
W1-6 (R)	RIGHT ARROW (SYMBOL)	48 x 24	6
W5-1(S)	ROAD NARROWS	48 x 48	2
W13-1(S)	ADVISORY SPEED PLAQUE (25 MPH)	24 x 24	2
W20-1A	ROAD WORK 1500 FT	48 x 48	1
W20-1B	ROAD WORK 1000 FT	48 x 48	1
W20-1D	ROAD WORK 1/2 MILE	48 x 48	2
W20-1F	ROAD WORK AHEAD	48 x 48	4
G20-2A	END ROAD WORK	48 x 24	4
"A"	EAST HAZELWOOD AVENUE	36 x 12	2
"B"	SEE SIGN DETAIL	72 x 60	2

STAGE 1  
SCALE: 1" = 20'

LEGEND

	WORK ZONE		TEMPORARY CRASH CUSHION, TYPE II, WIDTH NARROW, QUADRAGUARD OR APPROVED EQUAL
	DRUM		BREAKAWAY BARRICADE TYPE III, P.V.C.
	PRECAST CONCRETE CURB CONSTRUCTION BARRIER, SEE TYPICAL SECTIONS, SHEET 23		TRAFFIC FLOW
	POST MOUNTED SIGN		BREAKAWAY BARRICADE TYPE III, P.V.C. W/W1-6 SIGN (L/R)
	SINGLE YELLOW LINE		TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING CAUTION PATTERN
	DOUBLE YELLOW LINE		



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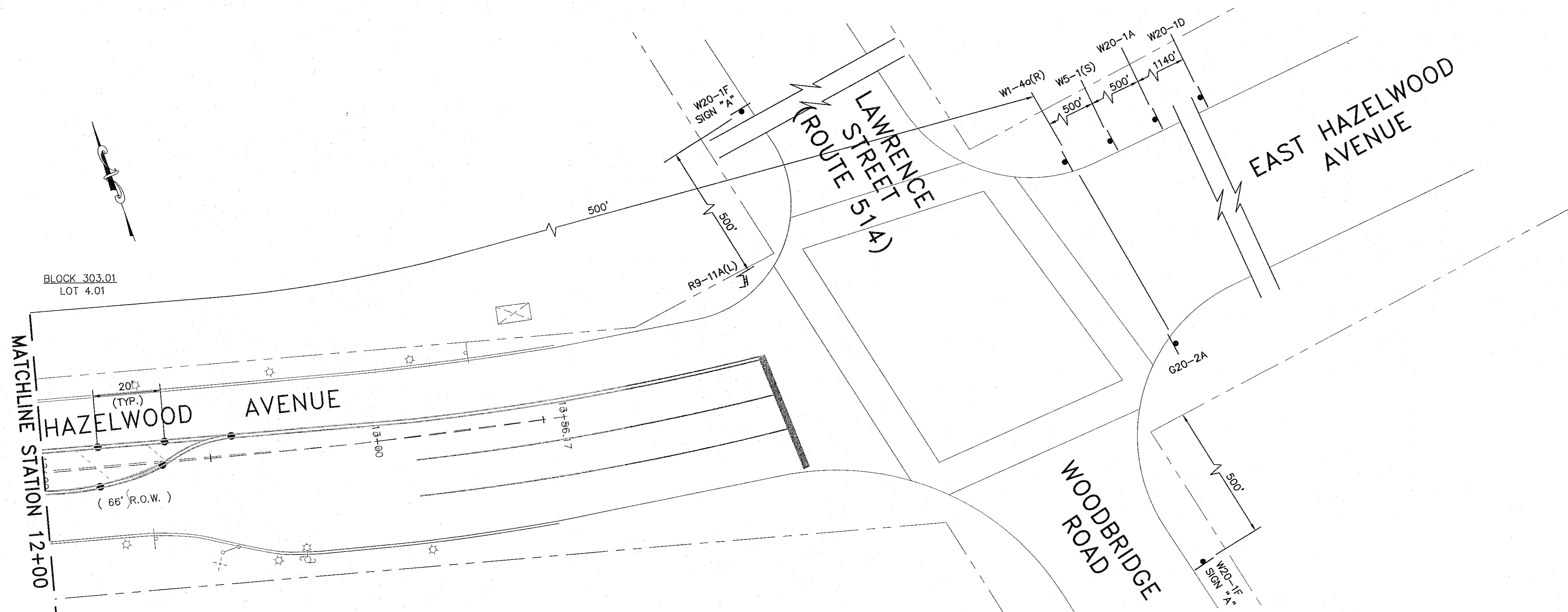
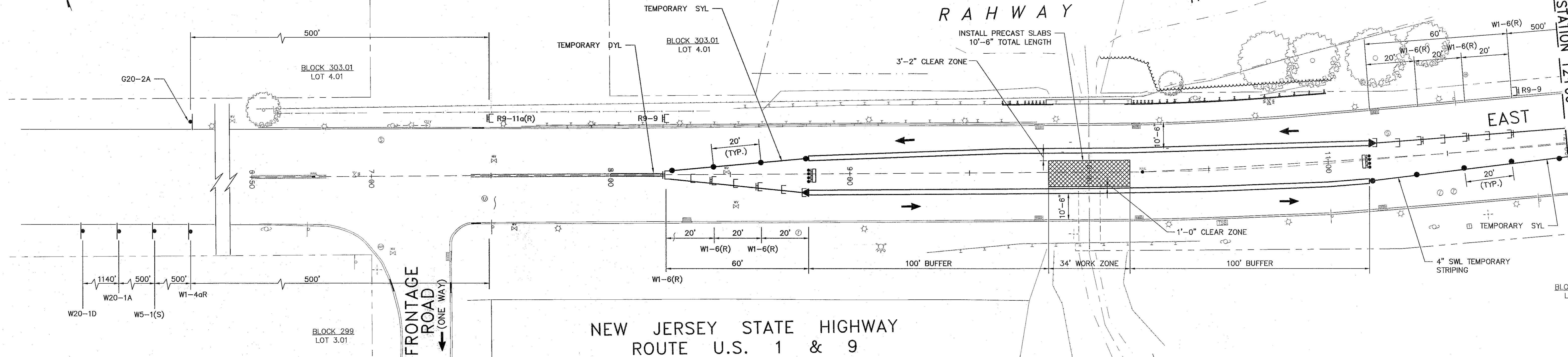
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NO.	REVISION	DATE	BY	CHK.	BY
MAINTENANCE & PROTECTION OF TRAFFIC - STAGE 1					
REHABILITATION OF EAST HAZELWOOD AVE. MINOR BRIDGE Ra-69 CITY OF RAHWAY, UNION COUNTY, NEW JERSEY					
DATE: 7/31/17		DATE: 7/31/17			
RICHARD G. ARANGO NJ PROFESSIONAL ENGINEER LIC. NO. 38882		FRANK J. SENEY JR. NJ PROFESSIONAL ENGINEER LIC. No. 35321			
<b>REMINGTON, VERNICK &amp; ARANGO ENGINEERS</b> ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM Certificate of Authorization: 24 CA 28003800					
SCALE	DATE	DRAWN BY	DESIGN BY	CHK'D BY	DWG. NO.
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.	2000X016
DWG FILE PATH/NAME					SHEET. NO.
m:\transportation_bridge\union_county\2000x016 - hazelwood avenue bridge replacement\000_bridge_rehabilitation_plans\100-2000x016-01.dwg					19 OF 24

NEW JERSEY STATE HIGHWAY ROUTE U.S. 1  
(100' R.O.W.)

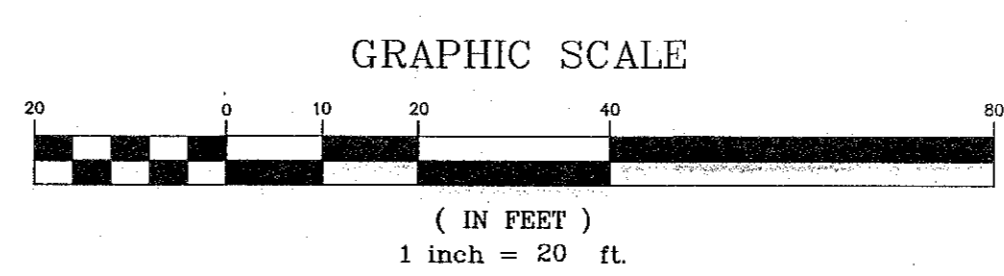
NEW JERSEY STATE HIGHWAY ROUTE U.S. 1 & 9  
(140' R.O.W.)



LEGEND			
SIGN DESIGNATION	MESSAGE	SIZE (IN. X IN.)	QUANTITY
R2-5A(S)	REDUCE SPEED AHEAD	24 x 30	2
R(N)5-17	TRAFFIC FINES DOUBLED IN WORK AREA	48 x 30	2
R2-1	SPEED LIMIT 25 MPH	48 x 30	2
R9-9	SIDEWALK CLOSED	24 x 12	2
R9-11a (L)	SIDEWALK CLOSED, CROSS HERE	24 x 12	2
W1-4a (L)	SHIFT LEFT (SYMBOL)	48 x 48	1
W1-4a (R)	SHIFT RIGHT (SYMBOL)	48 x 48	1
W1-6 (L)	LEFT ARROW (SYMBOL)	48 x 24	3
W1-6 (R)	RIGHT ARROW (SYMBOL)	48 x 24	6
W5-1(S)	ROAD NARROWS	48 x 48	2
W13-1(S)	ADVISORY SPEED PLAQUE (25 MPH)	24 x 24	2
W20-1A	ROAD WORK 1500 FT	48 x 48	1
W20-1B	ROAD WORK 1000 FT	48 x 48	1
W20-1D	ROAD WORK 1/2 MILE	48 x 48	2
W20-1F	ROAD WORK AHEAD	48 x 48	4
G20-2A	END ROAD WORK	48 x 24	4
"A"	EAST HAZELWOOD AVENUE	36 x 12	2
"B"	SEE SIGN DETAIL	72 x 60	2

LEGEND	
	WORK ZONE
	DRUM
	PRECAST CONCRETE CURB CONSTRUCTION BARRIER, SEE TYPICAL SECTIONS, SHEET 23
	POST MOUNTED SIGN
	SINGLE WHITE LINE
	SINGLE YELLOW LINE
	DOUBLE YELLOW LINE
	TEMPORARY CRASH CUSHION, INERTIAL BARRIER SYSTEM, 10 MODULES, OR APPROVED EQUAL
	BREAKAWAY BARRICADE TYPE III, P.V.C.
	TRAFFIC FLOW
	BREAKAWAY BARRICADE TYPE III, P.V.C. W/W1-6 SIGN (L/R)
	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING CAUTION PATTERN

STAGE 2  
SCALE: 1" = 20'



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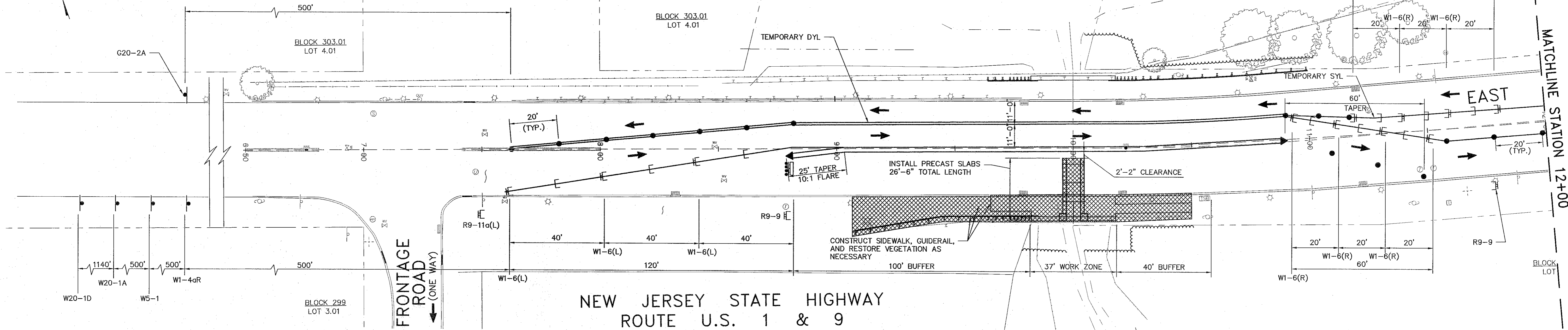
NO.	REVISION	DATE	BY	CHK. BY		
MAINTENANCE & PROTECTION OF TRAFFIC - STAGE 2						
REHABILITATION OF EAST HAZELWOOD AVE.						
MINOR BRIDGE Ra-69						
CITY OF RAHWAY, UNION COUNTY, NEW JERSEY						
DATE:			DATE: 7-31-17			
<b>RICHARD G. ARANGO</b> NJ PROFESSIONAL ENGINEER LIC. NO. 38882		<b>FRANK J. SENEY JR.</b> NJ PROFESSIONAL ENGINEER LIC. No. 35321				
<b>RY</b> REMINGTON, VERNICK & ARANGO ENGINEERS ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM Certificate of Authorization: 24 GA 28003800						
SCALE	DATE	DRAWN BY	DSGN. BY	CHKD. BY	DWG. NO.	SHEET. NO.
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.	2000X016	20 OF 24
DWG FILE PATH/NAME m:\transportation\bridge\union county\2000016 - hazelwood avenue bridge replacement\000_bridg rehabilitation plans\TC-2000016-01.dwg						



NEW JERSEY STATE HIGHWAY  
ROUTE U.S. 1  
(100' R.O.W.)

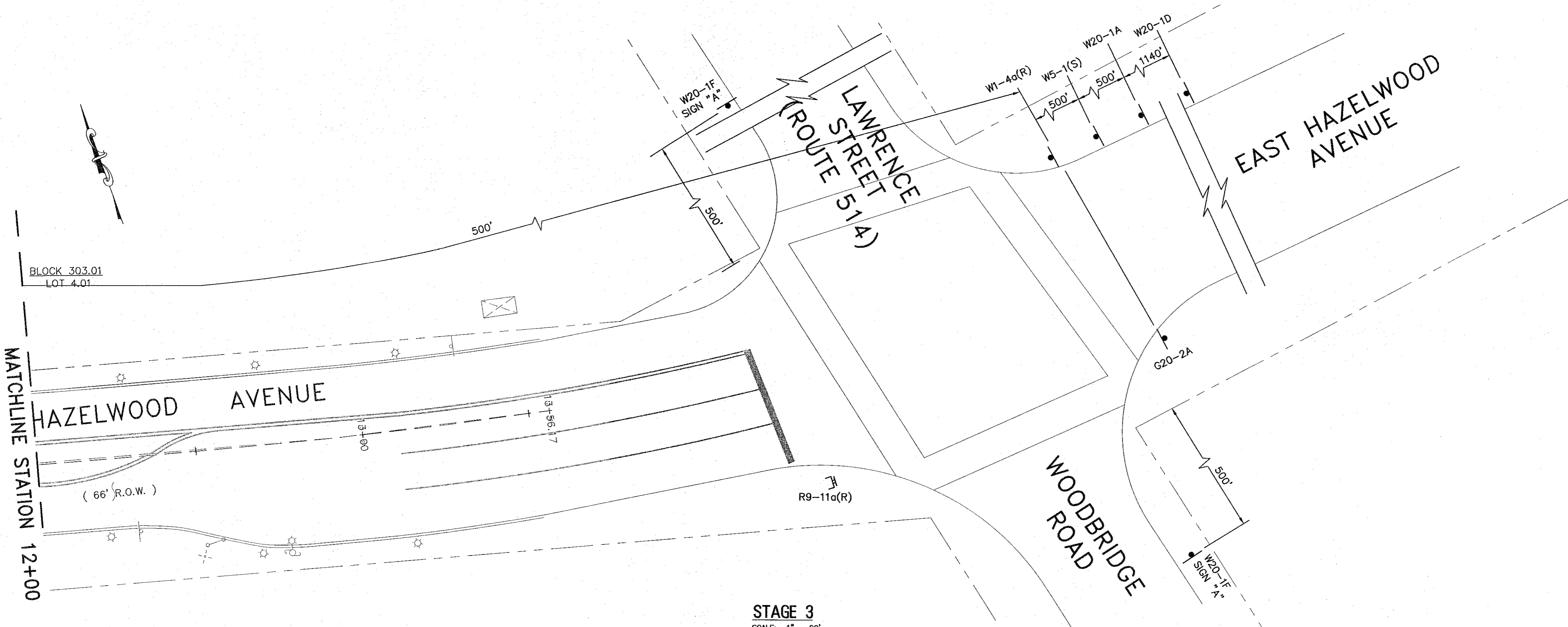
NEW JERSEY STATE HIGHWAY  
ROUTE U.S. 1 & 9  
(140' R.O.W.)

RAHWAY RIVER



**LEGEND**

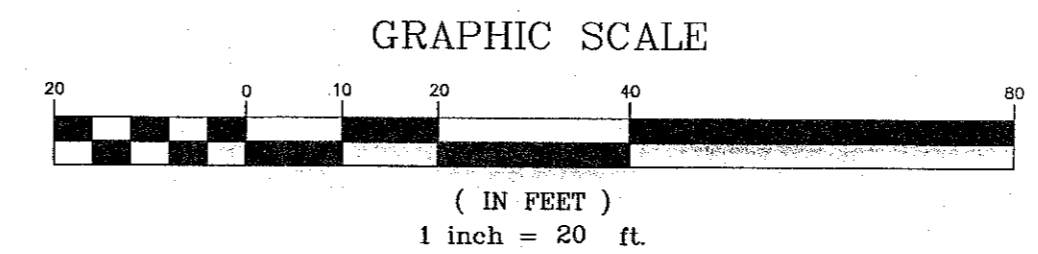
SIGN DESIGNATION	MESSAGE	SIZE (IN. X IN.)	QUANTITY
R2-5A(S)	REDUCE SPEED AHEAD	24 x 30	2
R(N)5-17	TRAFFIC FINES DOUBLED IN WORK AREA	48 x 30	2
R2-1	SPEED LIMIT 25 MPH	48 x 30	2
R9-9	SIDEWALK CLOSED	24 x 12	2
R9-11a	SIDEWALK CLOSED, CROSS HERE	24 x 12	2
W1-4a (L)	SHIFT LEFT (SYMBOL)	48 x 48	1
W1-4a (R)	SHIFT RIGHT (SYMBOL)	48 x 48	1
W1-6 (L)	LEFT ARROW (SYMBOL)	48 x 24	3
W1-6 (R)	RIGHT ARROW (SYMBOL)	48 x 24	6
W5-1(S)	ROAD NARROWS	48 x 48	2
W13-1(S)	ADVISORY SPEED PLAQUE (25 MPH)	24 x 24	2
W20-1A	ROAD WORK 1500 FT	48 x 48	1
W20-1B	ROAD WORK 1000 FT	48 x 48	1
W20-1D	ROAD WORK 1/2 MILE	48 x 48	2
W20-1F	ROAD WORK AHEAD	48 x 48	4
C20-2A	END ROAD WORK	48 x 24	4
"A"	EAST HAZELWOOD AVENUE	36 x 12	2
"B"	SEE SIGN DETAIL	72 x 60	2



STAGE 3  
SCALE: 1" = 20'

**LEGEND**

- WORK ZONE
- DRUM
- PRECAST CONCRETE CURB CONSTRUCTION BARRIER, SEE TYPICAL SECTIONS, SHEET 24
- POST MOUNTED SIGN
- SYL SINGLE YELLOW LINE
- DYL DOUBLE YELLOW LINE
- TEMPORARY CRASH CUSHION, INERTIAL BARRIER SYSTEM, 10 MODULES, OR APPROVED EQUAL
- BREAKAWAY BARRICADE TYPE III, P.V.C.
- TRAFFIC FLOW
- BREAKAWAY BARRICADE TYPE III, P.V.C. W/W1-6 SIGN (L/R)
- TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING CAUTION PATTERN

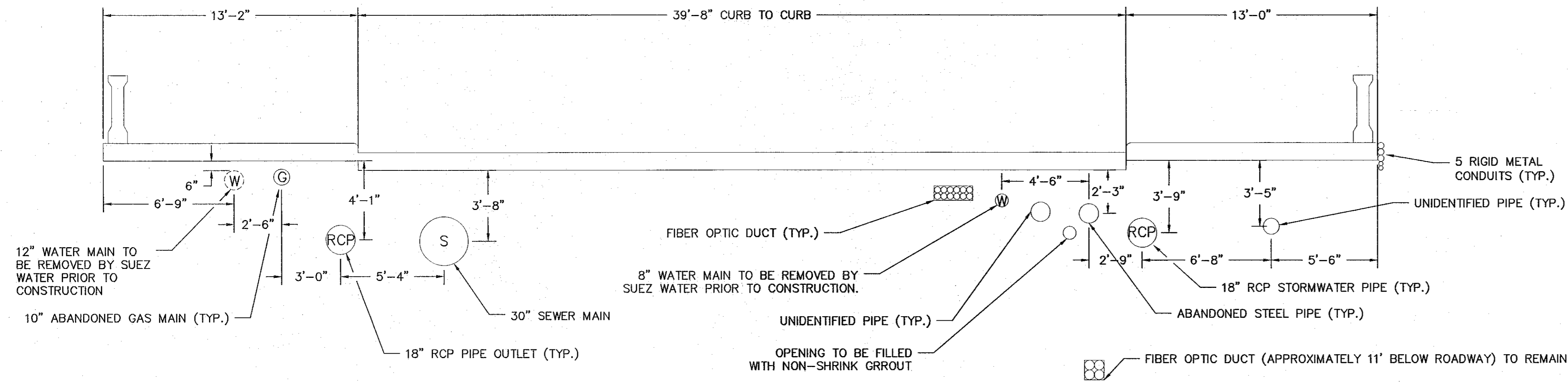


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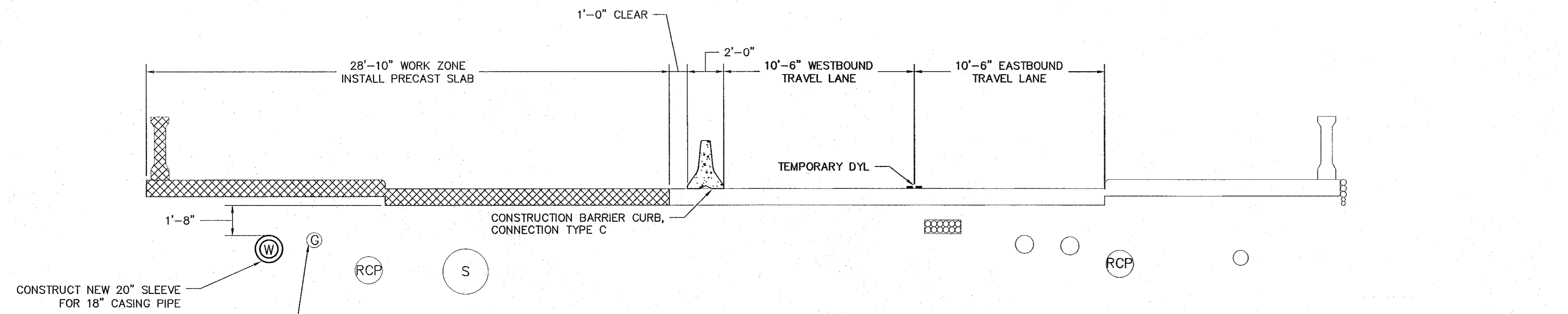
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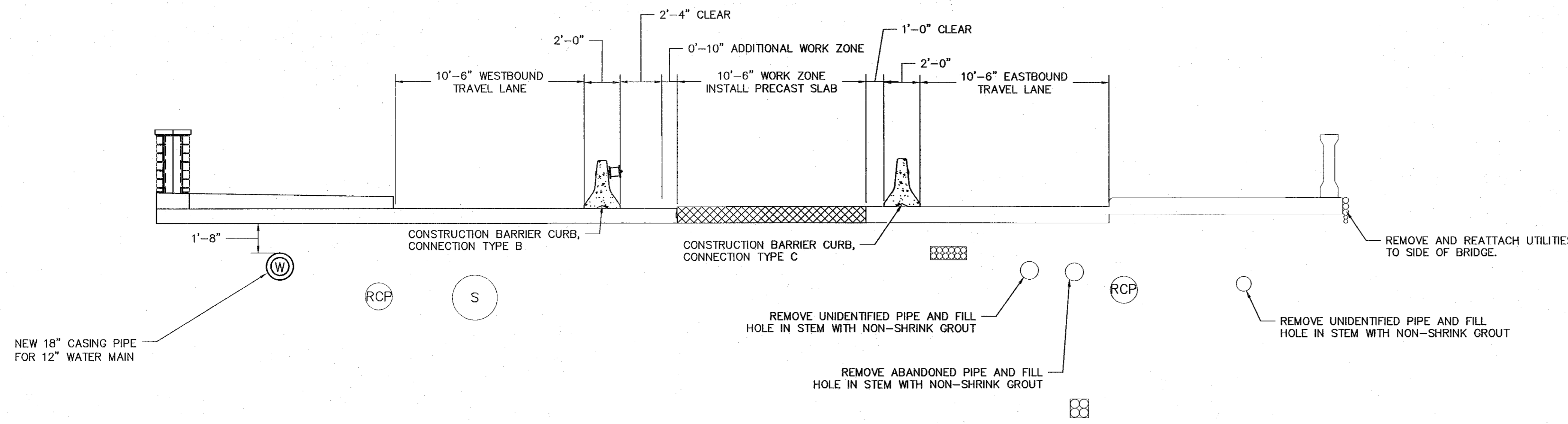
NO.	REVISION	DATE	BY	CHK. BY
MAINTENANCE & PROTECTION OF TRAFFIC - STAGE 3				
REHABILITATION OF EAST HAZELWOOD AVE. MINOR BRIDGE Ra-69 CITY OF RAHWAY, UNION COUNTY, NEW JERSEY				
DATE:	DATE: 07-31-17			
<b>RICHARD G. ARANGO</b> NJ PROFESSIONAL ENGINEER LIC. NO. 38882	<b>FRANK J. SENEY JR.</b> NJ PROFESSIONAL ENGINEER LIC. NO. 35321			
<b>REMINGTON, VERNICK &amp; ARANGO ENGINEERS</b> ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM Certificate of Authorization: 24-6A-28063800				
SCALE: AS NOTED	DATE: MAR-2017	DRAWN BY: S.F.B.	CHK'D BY: S.F.B.	DWG. NO.: 2000X016
DWC FILE PATH/NAME: r:\transportation_bridges\ra69\2000x016 - hazelwood avenue bridge replacement\000_bridg_rehabilitation_plans\TC-2000X016-01.dwg				SHEET NO.: 21 OF 24



**EXISTING CONDITIONS  
(LOOKING UPSTATION)**  
SCALE: 1/4" = 1'-0"



**CONSTRUCTION STAGE 1  
(LOOKING UPSTATION)**  
SCALE: 1/4" = 1'-0"



**CONSTRUCTION STAGE 2  
(LOOKING UPSTATION)**  
SCALE: 1/4" = 1'-0"

**LEGEND**

- (RCP) REINFORCED CONCRETE PIPE
- [Hatched Box] EXISTING 24" x 9" DUCT BANK WITH (12) 3 1/2" IRON PIPES
- (S) EXISTING 30" SANITARY SEWER PIPE
- (W) 18" CASING PIPE WITH 12" WATER MAIN INSIDE
- (G) EXISTING ABANDONED GAS MAIN
- [Hatched Box] EXISTING DUCT BANK WITH 16 - 1 1/4" CONDUITS
- [Cross-hatched Box] WORK/CONSTRUCTION ZONE

**INITIAL CONSTRUCTION NOTES:**

1. PRIOR TO STAGE 1, IMPLEMENT LANE AND SHOULDER CLOSURES WITH FLAGGING IN ACCORDANCE WITH NJDOT TCD-4; SUEZ WATER TO REMOVE AND CAP THE 12" AND 8" WATER MAINS PRIOR TO CONSTRUCTION. SEE SHEET 6 FOR DETAILS.
2. CONTRACTOR SHALL VERIFY THE DIMENSIONS AND LOCATIONS OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION.

**STAGE 1 CONSTRUCTION NOTES:**

1. THE FOLLOWING WILL BE PERFORMED IN STAGE 1:
  - A. INSTALL TRAFFIC CONTROL DEVICES AS INDICATED.
  - B. REMOVE/DEMOLISH EXISTING SIDEWALK, PARAPETS, AND STRUCTURE WHILE SUPPORTING 30" SEWER MAIN AND ANY OTHER UTILITIES, AS NEEDED.
  - C. REMOVE 10" ABANDONED GAS LINE.
  - D. CONSTRUCT SUBSTRUCTURE CONCRETE AND UTILITY REPAIRS, AND SUPERSTRUCTURE. DURING SUBSTRUCTURE CONSTRUCTION, CORE HOLE FOR 18" CASING PIPE (FOR 12" WATER MAIN) AND INSTALL CASING PIPE.
  - E. WATERPROOF TOP SLAB.
  - F. CONSTRUCT NEW PARAPET AND SIDEWALK.
  - G. CONSTRUCT SIDEWALK IN APPROACH AREAS TO RE-ESTABLISH FINAL CONDITIONS.
2. APPLY BLACK LINE MASKING TAPE TO COVER ALL CONFLICTING PAVEMENT MARKINGS ALONG THE BRIDGE APPROACHES AS NEEDED.
3. APPLY TEMPORARY PAVEMENT MARKINGS ALONG EAST HAZELWOOD AVENUE.
4. TRAFFIC CONTROL SIGNAGE AND DEVICE PLACEMENT SHALL CONFORM TO NEW JERSEY DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL STANDARD DETAILS.
5. ONE (1) THROUGH LANE ON EASTBOUND AND WESTBOUND EAST HAZELWOOD AVENUE MUST BE MAINTAINED AT ALL TIMES. THE EXISTING PEDESTRIAN SIDEWALK ON THE SOUTH SIDE OF THE BRIDGE WILL REMAIN OPEN DURING THIS STAGE.
6. THE CONSTRUCTION BARRIER CURB SHALL BE EQUIPPED WITH SLOTS TO ALLOW STORMWATER RUNOFF TO ENTER THE EXISTING INLETS.
7. MINIMUM LANE WIDTHS ALONG EAST HAZELWOOD AVENUE SHALL BE 10'-6".
8. ALL TAPER LENGTHS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION AND BASED ON A 25 M.P.H. DESIGN SPEED.

**STAGE 2 CONSTRUCTION NOTES:**

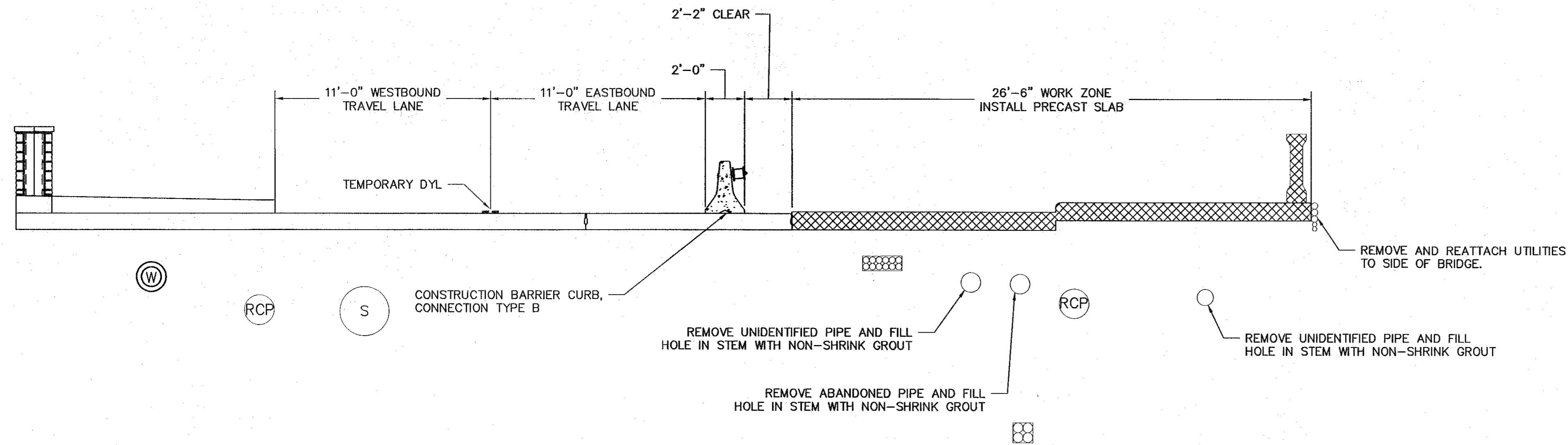
1. THE FOLLOWING WILL BE PERFORMED IN STAGE 2:
  - A. RELOCATE AND INSTALL TRAFFIC CONTROL DEVICES AS INDICATED.
  - B. DEMOLISH EXISTING STRUCTURE WHILE SUPPORTING UTILITIES AS NEEDED.
  - C. CONSTRUCT SUBSTRUCTURE CONCRETE AND UTILITY REPAIRS, AND SUPERSTRUCTURE.
  - D. WATERPROOF TOP SLAB.
  - E. CONSTRUCT HMA OVERLAY.
2. REMOVE ALL TEMPORARY PAVEMENT MARKINGS ALONG THE BRIDGE FROM STAGE 1 AND COVER ALL CONFLICTING STRIPES AND MARKING WITH REMOVABLE BLACK LINE MASKING TAPE.
3. APPLY TEMPORARY PAVEMENT MARKINGS ALONG EAST HAZELWOOD AVENUE.
4. TRAFFIC CONTROL SIGNAGE AND DEVICE PLACEMENT SHALL CONFORM TO NEW JERSEY DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL STANDARD DETAILS.
5. ONE (1) THROUGH LANE ON EASTBOUND AND WESTBOUND EAST HAZELWOOD AVENUE MUST BE MAINTAINED AT ALL TIMES. THE NORTH & SOUTH SIDE PEDESTRIAN SIDEWALK OF THE BRIDGE WILL REMAIN OPEN DURING THIS STAGE.
6. THE CONSTRUCTION BARRIER CURB SHALL BE EQUIPPED WITH SLOTS TO ALLOW STORMWATER RUNOFF TO ENTER THE EXISTING INLETS.
7. MINIMUM LANE WIDTHS ALONG EAST HAZELWOOD AVENUE SHALL BE 10'-6".
8. ALL TAPER LENGTHS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION AND BASED ON A 25 M.P.H. CONSTRUCTION SPEED LIMIT.

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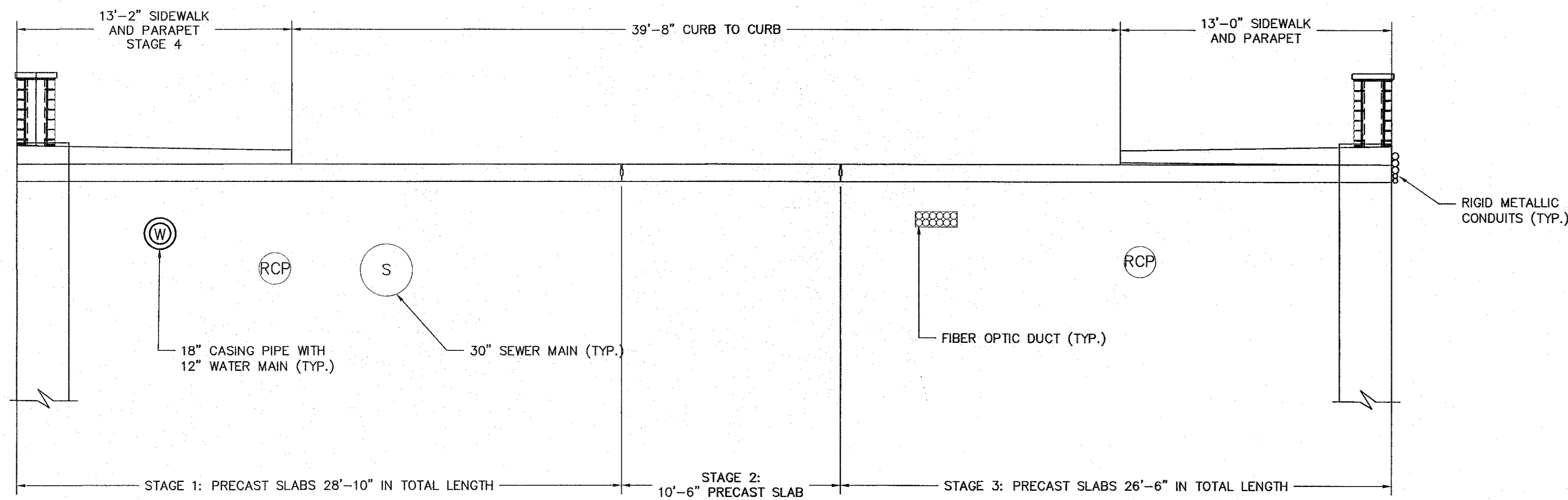
PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID.

NO.	REVISION	DATE	BY	CHK. BY
<b>BRIDGE CONSTRUCTION STAGING SECTIONS &amp; NOTES</b>				
<b>REHABILITATION OF EAST HAZELWOOD AVE.</b>				
<b>MINOR BRIDGE Ra-69</b>				
CITY OF RAHWAY, UNION COUNTY, NEW JERSEY				
DATE:				DATE:
<b>RICHARD G. ARANGO</b>				<b>FRANK J. SENEY JR.</b>
NJ PROFESSIONAL ENGINEER LIC. NO. 38882				NJ PROFESSIONAL ENGINEER LIC. NO. 35321
<b>RY &amp; V</b>				
<b>REMINGTON, VERNICK &amp; ARANGO ENGINEERS</b>				
ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094				
(201) 624-2137, FAX (201) 624-2138, WEB SITE ADDRESS: WWW.RVLE.COM				
Certificate of Authorization: 24-04-28000000				
SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.
DWG. NO.	2000X016	SHEET. NO.		22 OF 24
DWG FILE PATH/NAME				



**CONSTRUCTION STAGE 3  
(LOOKING UPSTATION)**

SCALE: 1/4" = 1'-0"



**FINAL CONDITION, TYPICAL SECTION  
(LOOKING UPSTATION)**

SCALE: 1/4" = 1'-0"

**STAGE 3 CONSTRUCTION NOTES:**

1. THE FOLLOWING WILL BE PERFORMED IN STAGE 3:
  - A. RELOCATE AND REMOVE TRAFFIC CONTROL DEVICES AS INDICATED.
  - B. REMOVE ABANDONED PIPE AND UNIDENTIFIED PIPES.
  - C. REMOVE/DEMOLISH REMAINING SIDEWALK, PARAPETS, UNIDENTIFIED PIPE, DUCTS AND STRUCTURE WHILE SUPPORTING 24"x9" FIBER OPTIC DUCT, UTILITIES ALONG SIDE OF BRIDGE, AND ANY OTHER UTILITIES, AS NEEDED.
  - E. CONSTRUCT SUBSTRUCTURE, CONCRETE AND UTILITY REPAIRS, AND SUPERSTRUCTURE.
  - F. ATTACH UTILITIES TO SOUTH SIDE OF THE BRIDGE
  - G. WATERPROOF TOP SLAB.
  - H. CONSTRUCT NEW PARAPET AND SIDEWALK.
  - I. CONSTRUCT SIDEWALK IN APPROACH AREAS TO RE-ESTABLISH FINAL CONDITIONS.
2. REMOVE ALL TEMPORARY PAVEMENT MARKINGS ALONG THE BRIDGE FROM STAGE 2 AND COVER ALL CONFLICTING STRIPES AND MARKING WITH REMOVABLE BLACK LINE MASKING TAPE.
3. APPLY TEMPORARY PAVEMENT MARKINGS ALONG EAST HAZELWOOD AVENUE.
4. TRAFFIC CONTROL SIGNAGE AND DEVICE PLACEMENT SHALL CONFORM TO NEW JERSEY DEPARTMENT OF TRANSPORTATION TRAFFIC CONTROL STANDARD DETAILS.
5. ONE (1) THROUGH LANE ON EASTBOUND AND WESTBOUND EAST HAZELWOOD AVENUE MUST BE MAINTAINED AT ALL TIMES. THE NORTH SIDE PEDESTRIAN SIDEWALK ON THE SIDE OF THE BRIDGE WILL REMAIN OPEN DURING THIS STAGE.
6. THE CONSTRUCTION BARRIER CURB SHALL BE EQUIPPED WITH SLOTS TO ALLOW STORMWATER RUNOFF TO ENTER THE EXISTING INLETS.
7. MINIMUM LANE WIDTHS ALONG EAST HAZELWOOD AVENUE SHALL BE 11'-0".
8. ALL TAPER LENGTHS SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 2009 EDITION AND BASED ON A 25 M.P.H. CONSTRUCTION SPEED LIMIT.
9. REMOVE BLACK LINE MASKING TAPE, CONSTRUCTION BARRIER CURB, AND INSTALL PERMANENT STRIPING IMMEDIATELY AFTER PAVING AND INSTALLATION OF PRECAST SLAB IS COMPLETED.
10. COORDINATE WITH SUEZ WATER TO REACTIVATE 12" WATER MAIN.

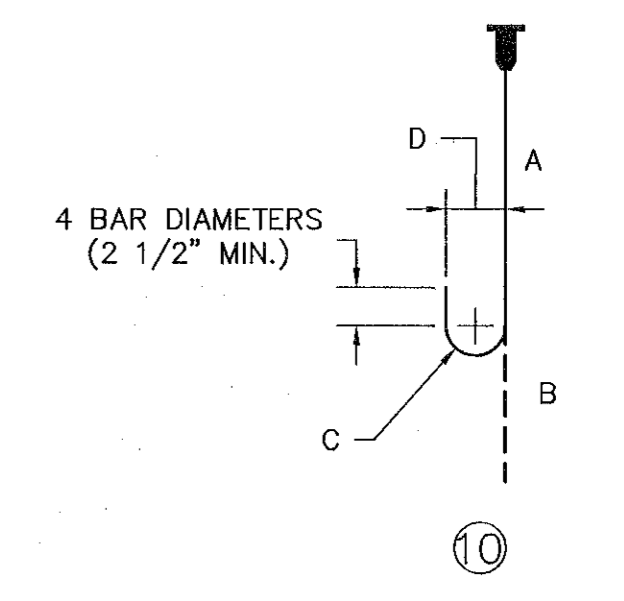
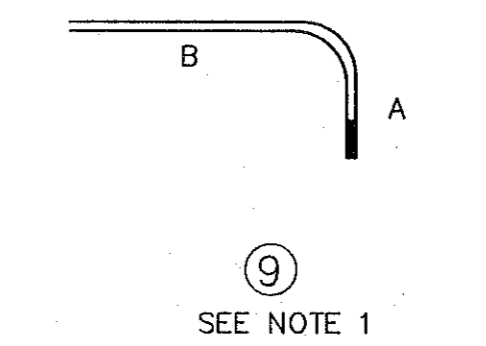
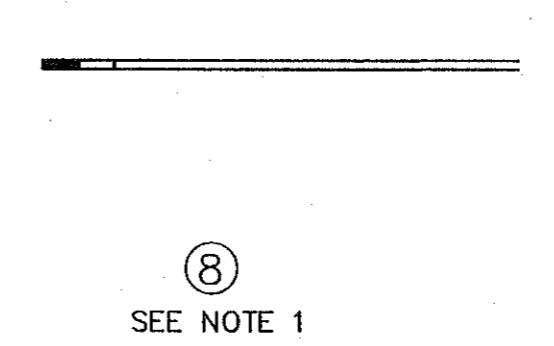
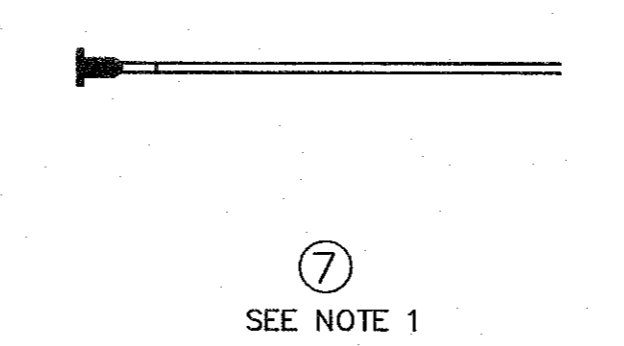
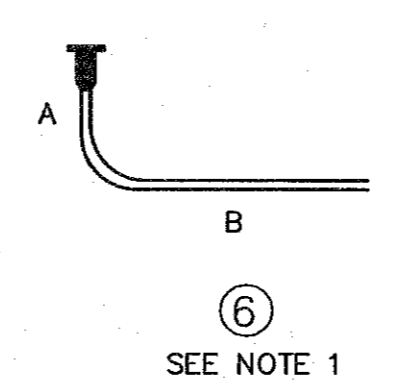
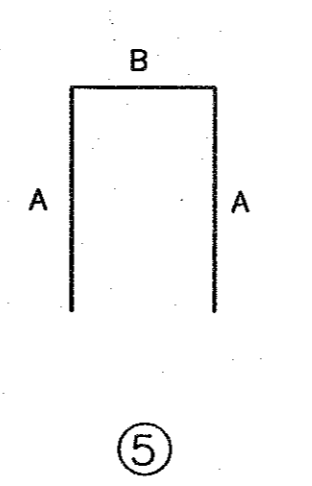
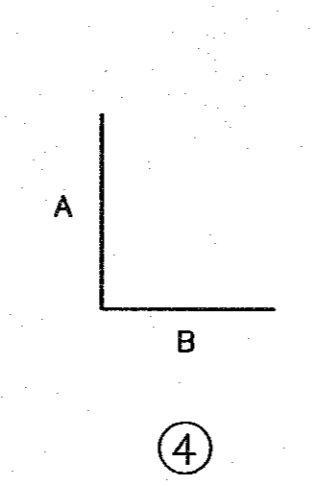
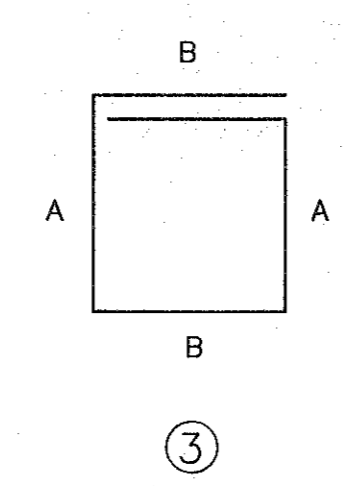
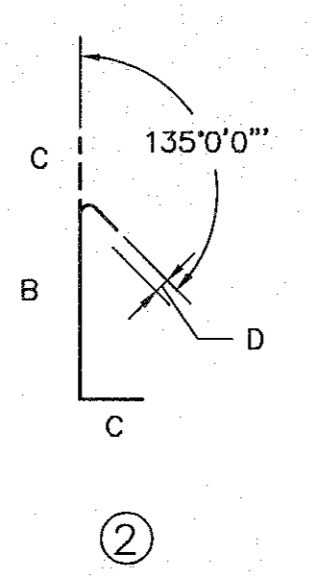
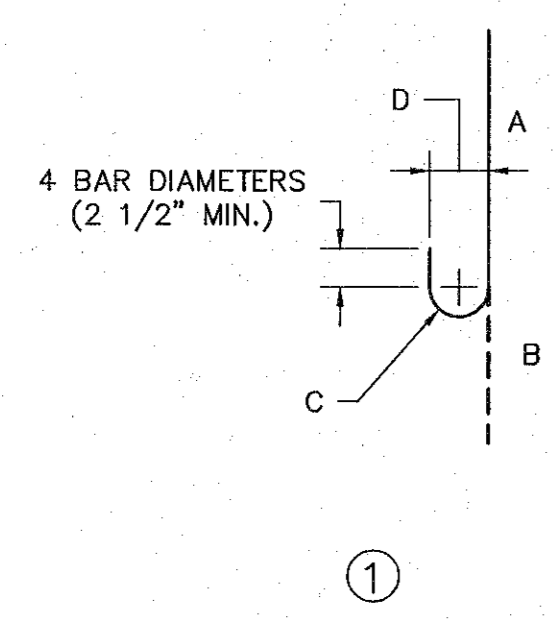
NO.	REVISION	DATE	BY	CHK. BY
BRIDGE CONSTRUCTION STAGING SECTIONS & NOTES				
REHABILITATION OF EAST HAZELWOOD AVE. MINOR BRIDGE Ra-69 CITY OF RAHWAY, UNION COUNTY, NEW JERSEY				
DATE: 07-31-17		DATE: 07-31-17		
RICHARD G. ARANGO NJ PROFESSIONAL ENGINEER LIC. NO. 38882		FRANK J. SENEY JR. NJ PROFESSIONAL ENGINEER LIC. No. 35321		
<b>REMINGTON, VERNICK &amp; ARANGO ENGINEERS</b> <small>ONE HARMON PLAZA, SUITE 210, SECAUCUS, NJ 07094 (201) 624-2137, FAX (201) 624-2136, WEB SITE ADDRESS: WWW.RVE.COM Certificate of Authorization: 24 DA 28203909</small>				
SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.
DWG. NO.	SHEET. NO.			
2000X016	23 OF 24			
DWG FILE PATH/NAME m:\transportation_bridge\union county\2000x016 - hazelwood avenue bridge replacement\000_bridg rehabilitation plans\R-2000x016-04.dwg				

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PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID.

REINFORCEMENT BAR SCHEDULE										
MARK	SIZE	TYPE	NO. REQ.	LENGTH (FT)	A	B	C	D	E	REMARKS
PARAPET AND SIDEWALK										
PP1	#5	STR.	224	5'-9"						PARAPET VERTICAL DOWEL IN BAR OVER WINGWALL
PP2	#4	STR.	40	12'-6"						PARAPET HORIZONTAL BAR OVER WINGWALL
PP3	#5	8	72	3'-7"						PARAPET OVER SLAB, VERTICAL DOWEL IN BARS
PP4	#4	STR.	20	9'-8"						PARAPET OVER SLAB, HORIZONTAL BARS
PP5	#5	5	36	5'-10"	2'-7"	0'-8"				PARAPET STIRRUP OVER SLAB
PP6	#4	10	22	1'-8"	1'-0"	0'-8"	0'-4 1/2"	0'-6"		HOOK FEMALE DOWEL SPLICER BAR TO SIDEWALK
PP7	#4	3	6	4'-11"	1'-1"	0'-11"				STIRRUP AT PLAQUE SUPPORT
PP8	#4	STR.	4	1'-5"						HORIZONTAL BAR AT PLAQUE SUPPORT
PP9	#5	5	112	3'-3"	2'-7"	0'-8"				PARAPET STIRRUP OVER WINGWALL
SS1	#4	8	11	11'-1"						DOWEL IN BAR, SOUTH SIDEWALK
SS2	#4	8	11	11'-3"						DOWEL IN BAR, NORTH SIDEWALK
SS3	#4	STR.	22	9'-8"						HORIZONTAL BAR IN SIDEWALK
SS4	#4	9	22	1'-7"	4"	1'-3"				DOWEL IN BAR, SIDEWALK
DS1	#5	6	72	1'-5"	5"	1'-0"				FEMALE DOWEL BAR IN PRECAST SLAB FOR PARAPET
DS2	#4	6	22	1'-2"	4"	0'-10"				FEMALE DOWEL BAR IN PRECAST SLAB FOR PARAPET



- NOTES:
- MECHANICAL REBAR SPLICES TO BE DAYTON SUPERIOR DOWEL BAR SPLICER SYSTEM, OR APPROVED EQUAL.
  - THE PRECAST FABRICATOR SHALL SUPPLY DOWEL BARS AND APPROPRIATE DOWEL-INS, CAST INTO THE PRECAST UNITS TO FACILITATE THE ATTACHMENT OF THE CAST-IN-PLACE SIDEWALKS AND PARAPETS, WHICH ARE TO BE CONSTRUCTED BY THE CONTRACTOR.
  - ALL REBAR IS TO BE EPOXY COATED.

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NO.	REVISION	DATE	BY	CHK. BY		
<b>REINFORCEMENT BAR SCHEDULE</b>						
<b>REHABILITATION OF EAST HAZELWOOD AVE.</b>						
<b>MINOR BRIDGE Ra-69</b>						
<b>CITY OF RAHWAY, UNION COUNTY, NEW JERSEY</b>						
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SCALE	DATE	DRAWN BY	DSGN. BY	CHK'D. BY	DWG. NO.	SHEET. NO.
AS NOTED	MAR-2017	S.F.B.	S.F.B.	F.J.S.	2000X016	24 OF 24
DWG FILE PATH/NAME <small>cc:\transportation\bridge\raha\com\00000016 - hazelwood avenue bridge replacement\000_bridg rehabilitation plus\B-2000016-REINFORCEMENT BAR SCHEDULE.dwg</small>						