COUNTY OF UNION

DEPARTMENT OF ENGINEERING, PUBLIC WORKS & FACILITIES MANAGEMENT
Joseph A. Graziano Sr., Director

BOARD OF CHOSEN FREEHOLDERS

SERGIO GRANADOS
Chairman

BETTE JANE KOWALSKI
Vice Chairman

BRUCE H. BERGEN

LINDA CARTER

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CHRISTOPHER HUDAK

MOHAMED S. JALLOH

ALEXANDER MIRABELLA

EDWARD T. OATMAN
County Manager

AMY C. WAGNER
Deputy County Manager

ROBERT E. BARRY, ESQ.
County Counsel

JAMES E. PELLETTIERE, RMC
Clerk of the Board

THOMAS O. MINEO, P.E.
County Engineer, Director, Division of Engineering

MEMO TO: **TO ALL PROSPECTIVE BIDDERS**

FROM: Thomas O. Mineo, P.E.
County Engineer

DATE: March 28, 2018

RE: **CLARIFICATION NUMBER 1**
BA#10-2018 – 2018 ROAD RESURFACING PROJECT
VARIOUS MUNICIPALITIES, COUNTY OF UNION, NEW JERSEY
UNION COUNTY ENGINEERING PROJECT #2016-045

This is in response to questions received for the above referenced project:

1. Q. When the item day milling and day paving are to be used what are the working hours?

   A. 7:00 a.m. to 4:00 p.m., as per Section 108.7 of the Contract specifications (Page T-21).

2. Q. The paving section of the specifications reference the use of an MTV. Is it required?

   A. No.

3. Q. Can you provide us with more information in regard to item number 35, Inlet Type A, 5 units and item number 36, Inlet Type B, 35 units, being installed on this project? The plans do not indicate the depths of the existing inlets that are to be replaced nor the type of and number of pipes going into each inlet, no details were provided in the plans. In order to properly bid these items we will need the required installation depths and existing pipe information.

   A. Assume Inlets Type A and B are all four (4) feet in depth.

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Clerk of the Board

THOMAS O. MINEO, P.E.
County Engineer,
Director, Division of Engineering

MEMO TO: **TO ALL PROSPECTIVE BIDDERS**

FROM: Thomas O. Mineo, P.E.
County Engineer

DATE: March 23, 2018

RE: **ADDENDUM NUMBER 1**
BA#10-2018 – 2018 ROAD RESURFACING PROJECT
VARIOUS MUNICIPALITIES, COUNTY OF UNION, NEW JERSEY
UNION COUNTY ENGINEERING PROJECT #2016-045

Attached is Addendum Number 1 dated March 23, 2018 for the above referenced project.

Bidders must acknowledge receipt of this Addendum and submit with original bid submission packet. (Copy of Acknowledgement of Addendum Number 1 dated March 23, 2018 is attached)

DIVISION OF ENGINEERING
2325 South Avenue *Scotch Plains, NJ 07076* *(908)789-3690* *fax(908)789-3674* www.ucnj.org
We're Connected to You!

ACKNOWLEDGMENT OF ADDENDUM

COUNTY OF UNION

ADDENDUM NUMBER 1
MARCH 23, 2018

2018 ROAD RESURFACING PROJECT
VARIOUS MUNICIPALITIES
COUNTY OF UNION, NEW JERSEY

(Name of Construction /Public Works Project)

BA#10-2018
UC ENGINEERING PROJECT #2016-045

(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.

Local Unit Reference Number or Title of Addendum/Revision	How Received (mail, fax, pick-up, etc.)	Date Received
ADDENDUM NUMBER 1: **Bid Sheets:** **Replace Bid Sheet Page B-38 "Time of Completion" with Revised Bid sheet Page B-38 "Time of Completion"**		

ACKNOWLEDGMENT BY BIDDER:

NAME OF BIDDER: _____

ORIGINAL SIGNATURE: _____

PRINTED NAME AND TITLE: _____

DATE: _____

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 **Two Hundred Ten (210) 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

SPECIFICATIONS

FOR

2018 RESURFACING PROJECT

VARIOUS MUNICIPALITIES

COUNTY OF UNION, NEW JERSEY

BA#10-2018; UNION COUNTY ENGINEERING PROJECT #2016-045

MARCH 2018

UNION COUNTY OFFICIALS
BOARD OF CHOSEN FREEHOLDERS

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

CLERK OF THE BOARD
James E. Pellettiere, RMC

COUNTY MANAGER
Edmund T. Oatman

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 ENGINEERS, INC.
One Harmon Place, Suite 210
Secaucus, New Jersey 07094
T: 201-624-2137
www.rve.com

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 April 5, 2018, at 10:30 a.m., prevailing time, in the 3rd Floor Conference Room, U.C. Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey for:

2018 RESURFACING PROJECT
VARIOUS MUNICIPALITIES
COUNTY OF UNION, NEW JERSEY
BA#10-2018; UNION COUNTY ENGINEERING PROJECT #2016-045

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 in accordance with the New Jersey Local Public Contracts Law.

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.A.C. 17:27.

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

UNION COUNTY BOARD
OF CHOSEN FREEHOLDERS

We're Connected to You!

2018 RESURFACING PROJECT
VARIOUS MUNICIPALITIES
COUNTY OF UNION, NEW JERSEY
BA#10-2018; Union County Engineering Project #2016-045

TABLE OF CONTENTS

Cover Sheet: County Officials
NB-1: Notice to Bidders

GENERAL SPECIFICATIONS
Definitions

Section 1: BID FORM
Section 2: WITHDRAWAL OF BID DUE TO MISTAKE
Section 3: QUALIFICATIONS OF BIDDERS AND REQUIRED SUBMISSIONS
Section 4: INTERPRETATIONS AND ADDENDA
Section 5: OBLIGATION OF BIDDER TO INSPECT SITE AND CONTRACT DOCUMENTS
Section 6: BID AND PERFORMANCE GUARANTEE
Section 7: COMMENCEMENT AND COMPLETION
Section 8: BIDDER AFFIDAVIT
Section 9: BID SECURITY
Section 10: LABOR AND MATERIALS
Section 11: INSURANCE REQUIREMENTS
Section 12: INDEMNIFICATION REQUIREMENTS
Section 13: ROYALTIES AND PATENTS
Section 14: PLANS AND SPECIFICATIONS
Section 15: GUARANTEE AGAINST DEFECTIVE WORK
Section 16: TRAFFIC AND STREET MAINTENANCE
Section 17: CONTRACTOR'S EMPLOYEES
Section 18: OWNERSHIP DISCLOSURES REQUIRED
Section 19: NON-COLLUSION AFFIDAVIT
Section 20: EQUAL EMPLOYMENT OPPORTUNITY COMPLIANCES
Section 21: COMPLIANCE WITH NEW JERSEY PREVAILING WAGE ACT
Section 22: BRAND NAME OR EQUAL
Section 23: LINES AND GRADES
Section 24: NUMBER OF WORKING DAYS
Section 25: PROMPT PAYMENT OF CONSTRUCTION CONTRACTS (NJ Prompt Payment Act)
Section 26: STOPPING WORK ON ACCOUNT OF BAD WEATHER
Section 27: ACCESS FOR OTHER CONTRACTORS
Section 28: CONDEMNED MATERIALS AND WORK
Section 29: STORAGE
Section 30: FINAL CLEAN UP
Section 31: SUB-LETTING OF WORK
Section 32: SAFETY
Section 33: QUALITY, SAFETY AND PERFORMANCE STANDARDS
Section 34: MATTERS NOT MENTIONED IN CONTRACT DOCUMENTS
Section 35: PERMITS
Section 36: CONTRACTOR TO PROVIDE PROOF OF PAYMENT
Section 37: CHANGE ORDERS
Section 38: SUPPLEMENTAL WORK
Section 39: FORM OF CONTRACT
Section 40: PROGRESS PAYMENTS
Section 41: INSPECTION
Section 42: DAMAGES
Section 43: LIQUIDATED DAMAGES
Section 44: AFFIRMATIVE ACTION REQUIREMENTS
Section 45: INVESTMENT ACTIVITES WITH IRAN

GENERAL SPECIFICATIONS CONTINUED

Section 46: COMPLIANCE WITH THE PUBLIC WORKS CONTRACTOR REGISTRATION ACT (N.J.S.A. 34:11-56.48 et seq)
Section 47: UTILITIES
Section 48: MATERIAL COMPLIANCE AND SHOP DRAWINGS
Section 49: PRECONSTRUCTION
Section 50: DISPUTES UNDER THE CONTRACT
Section 51: CONTRACTOR BUSINESS REGISTRATION CERTIFICATE (New Mandatory Requirement – Effective 1/18/2010
Section 52: BID PROTEST - LEGAL FEES AND COSTS
Section 53: AMERICAN GOODS AND PRODUCTS WHERE POSSIBLE
Section 54: NEW JERSEY PAY-TO-PLAY REQUIREMENTS
Section 55: STATEMENT OF EQUIPMENT TO BE USED IN CONSTRUCTION
Section 56: NEW JERSEY SALES AND USE TAX REQUIREMENTS

BIDDING DOCUMENTS

Bid Document Submission Checklist
Bidding Documents
Bid Form
Consent of Surety
Bidder Signature Page
Bidder Disclosure Statement
Subcontractor Identification Statement: List of Subcontractors
Subcontractor Identification Certification
Acknowledgement of Addendum
Contractor Business Registration Certificate
Affirmative Action Requirement
Experience Statement
Certificate of Bidder Showing Ability to Perform Contract
Non-Collusion Affidavit
Contractor Registration Advisement
Americans with Disabilities Act
Statement of Bidder's Qualifications
Contractor Performance Record
Affidavit Regarding List of Disbarred, Suspended or Disqualified Bidders
Prior Negative Experience Questionnaire-Certification
Contractor's Certification of Compliance - New Jersey Prevailing Wage Act
Uncompleted Contracts Affidavit
Certificate of Insurance Statement
Collection of Use Tax on Sales to Local Governments Statement
Time of Completion
Disclosure of Investment Activities in Iran

STANDARD SPECIFICATION FORM - SS-1

PROJECT TECHNICAL SPECIFICATIONS

NEW JERSEY PREVAILING WAGE DETERMINATION DOCUMENTS

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, 6th Floor
10 Elizabethtown Plaza
Elizabeth, New Jersey 07207

ADDRESS BIDS AND SUBMIT TO:
Union County Division of Purchasing
UC Administration Building, 3rd 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: **2018 Resurfacing Project**
Various Municipalities, County of Union, New Jersey
BA#10-2018; Union County Engineering Project #2016-045

BIDDER: Bidder shall be a single overall contract bidder

ENGINEER: **Remington Vernick Engineers**
One Harmon Place, 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

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 Contactor'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.

Requests for Information (RFI's) must be received by **Wednesday, March 21, 2018, at 4:00 P.M**.

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. 34:11-56.25 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 N.J.S.A. 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 N.J.S.A. 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 N.J.S.A. 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 N.J.S.A. 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 N.J.S.A. 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 Workforce Development 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 N.J.S.A. 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. l7:27-7.2; 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. l7:27-7.2. 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:

(l) 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 contactor 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 l0 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 N.J.S.A. 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 - (N.J.S.A. 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 Workforce Development 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 <u>not</u> 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 <u>registered</u> 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 N.J.S.A. 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 N.J.S.A. 19:44A-1 et seq. are NOT REQUIRED to be provided with the bids.

55. STATEMENT OF EQUIPMENT TO BE USED IN CONSTRUCTION

Pursuant to N.J.S.A. 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,” (N.J.S.A. 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).

Bidder's Name_____

EDWARD T. OATMAN
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 SUBMITED 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 and Workforce Development – 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 Certification 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

Bidder's Name_____

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

2018 RESURFACING PROJECT
VARIOUS MUNICIPALITIES
COUNTY OF UNION, NEW JERSEY
BA#10-2018; UNION COUNTY ENGINEERING PROJECT #2016-045

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
1	4	UN	PORTABLE VARIABLE MESSAGE SIGN	$		$
2	2	UN	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	$		$
3	1500	HR	TRAFFIC DIRECTOR, FLAGGER	$		$
4	1	LS	TRAFFIC CONTROL MEASURES	$		$
5	4	UN	FLOODLIGHTS FOR NIGHTTIME OPERATIONS	$		$
6	ALLOWANCE	ALLOWANCE	TRAFFIC DIRECTOR, UNIFORM POLICE	$500,000.00		$500,000.00
7	0	-	NO ITEM	$0.00		$ 0.00
8	ALLOWANCE	ALLOWANCE	FUEL PRICE ADJUSTMENT	$14,000.00		$14,000.00
9	ALLOWANCE	ALLOWANCE	ASPHALT PRICE ADJUSTMENT	$23,000.00		$23,000.00
10	200	CY	EXCAVATION, UNCLASSIFIED	$		$
11	2000	CY	DENSE-GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS	$		$

Bidder's Name_____

ITEM	CONTRACT QUANTITY	UNITS	DESCRIPTION	UNIT PRICE		AMOUNT
12	422895	SY	HMA MILLING, 3" OR LESS	$		$
13	100	SY	HMA MILLING, MORE THAN 3" TO 6"	$		$
14	4787	SY	HOT MIX ASPHALT PAVEMENT REPAIR	$		$
15	10000	LF	SAWING AND SEALING JOINTS IN HOT MIX ASPHALT OVERLAY	$		$
16	50990	TON	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	$		$
17	500	TON	HOT MIX ASPHALT 9.5M64 LEVELING COURSE	$		$
18	200	SY	DIAMOND GRINDING, CONCRETE DECK SURFACE	$		$
19	200	SY	MEMBRANE WATERPROOFING	$		$
20	1500	SF	SAWCUT GROOVED DECK SURFACE	$		$
21	100	SF	REPAIR OF CONCRETE DECK, TYPE B	$		$
22	100	SF	REPAIR OF CONCRETE DECK, TYPE C	$		$
23	20	LF	15″ REINFORCED CONCRETE PIPE, CLASS V	$		$
24	160	UN	RESET EXISTING CASTING	$		$
25	15	UN	SET INLET TYPE B CASTING	$		$
26	100	LF	SAWING AND SEALING CRACKS, CONCRETE DECK SURFACE	$		$
27	0	-	NO ITEM	$0.00		$ 0.00

Bidder's Name_____

ITEM	CONTRACT QUANTITY	UNITS	DESCRIPTION	UNIT PRICE		AMOUNT
28	98	UN	SET MANHOLE CASTING	$		$
29	40	UN	SET MANHOLE CASTING, SUPPLIED BY OTHERS	$		$
30	0	-	NO ITEM	$0.00		$ 0.00
31	30	UN	RECONSTRUCTED INLET, TYPE B, USING EXISTING CASTING	$		$
32	5	UN	RECONSTRUCTED INLET, TYPE E, USING EXISTING CASTING	$		$
33	10	UN	RECONSTRUCTED INLET, TYPE B USING NEW CASTING	$		$
34	5	CY	CONCRETE HEADWALL	$		$
35	5	UN	INLET, TYPE A	$		$
36	40	UN	INLET, TYPE B	$		$
37	10	UN	INLET TRAP	$		$
38	0	-	NO ITEM	$0.00		$ 0.00
39	0	-	NO ITEM	$0.00		$ 0.00
40	5	UN	RECONSTRUCTED MANHOLE, USING EXISTING CASTINGS	$		$
41	2	UN	RECONSTRUCTED BALTIMORE INLET WITH MANHOLE CASTING	$		$
42	0	-	NO ITEM	$0.00		$ 0.00

Bidder's Name_____

ITEM	CONTRACT QUANTITY	UNITS	DESCRIPTION	UNIT PRICE		AMOUNT
43	110	UN	BICYCLE SAFE GRATE	$		$
44	60	UN	CURB PIECE	$		$
45	25	SY	HOT MIX ASPHALT SIDEWALK, 4" THICK	$		$
46	6340	SY	CONCRETE SIDEWALK, 4" THICK	$		$
47	426	SY	DETECTABLE WARNING SURFACE	$		$
48	600	SF	RESET PAVERS	$		$
49	6825	LF	10" X 20" CONCRETE VERTICAL CURB	$		$
50	50	LF	BELGIAN BLOCK CURB	$		$
51	350	LF	12" X 13" CONCRETE SLOPING CURB	$		$
52	219930	LF	TRAFFIC STRIPES, THERMOPLASTIC, 4"	$		$
53	14370	LF	TRAFFIC STRIPES, THERMOPLASTIC, 8"	$		$
54	6680	LF	TRAFFIC STRIPES, THERMOPLASTIC, 12"	$		$
55	6155	LF	TRAFFIC STRIPES, THERMOPLASTIC, 24"	$		$
56	7470	SF	TRAFFIC MARKINGS, THERMOPLASTIC	$		$
57	1050	UN	RPM, MONO-DIRECTIONAL, WHITE LENS	$		$
58	250	UN	RPM, MONO-DIRECTIONAL, AMBER LENS	$		$
59	2400	UN	RPM, BI-DIRECTIONAL, AMBER LENS	$		$

Bidder's Name_____

ITEM	CONTRACT QUANTITY	UNITS	DESCRIPTION	UNIT PRICE		AMOUNT
60	40	UN	FLEXIBLE DELINEATOR, GROUND MOUNTED	$		$
61	100	SF	STREET NAME SIGN, TYPE DF, BREAKAWAY SUPPORT	$		$
62	100	SF	ACCESSORY PANEL, TYPE DF	$		$
63	10	UN	RELOCATE SIGN	$		$
64	3000	LF	LOOP DETECTOR	$		$
65	10	UN	IMAGE DETECTOR	$		$
66	10	UN	RESET JUNCTION BOX CASTING	$		$
67	2500	SY	TOPSOILING, 4" THICK	$		$
68	2500	SY	FERTILIZING AND SEEDING, TYPE A-3	$		$
69	110	SF	REGULATORY AND WARNING SIGNS	$		$
70	0	-	NO ITEM	$0.00		$ 0.00
71	5	DAY	DAYTIME MILLING	$		$
72	5	DAY	DAYTIME PAVING	$		$

TOTAL BASE BID ITEMS:

_____

_____ _____

Written Figures

Bidder's Name_____

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

ONE HUNDRED FIFTY THOUSAND DOLLARS AND NO CENTS	**$150,000.00**
Written	Figures

TOTAL BASE BID ITEMS 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's Name_____

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**)

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

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

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

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

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

Please list the names and addresses of each stockholder, partner or member owning a 10 percent or greater interest in any corresponding corporation, partnership and/or limited liability company (LLC) listed in Part II **other than for any publicly traded parent entities referenced above**. The disclosure shall be continued until names and addresses of every 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 that 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 **NAME OF BIDDER**

_____

Date _____

_____

ADDRESS

By: _____

ORIGINAL SIGNATURE ONLY

_____

_____

PRINT NAME AND TITLE

Bidder's Name_____

ACKNOWLEDGMENT OF ADDENDUM

COUNTY OF UNION

_____ _____

(Name of Construction /Public Works Project) **(Project or Bid Number)**

Pursuant to N.J.S.A. 40A:11-23.1a., the undersigned bidder, hereby acknowledges receipt of the following notices, revisions, or addenda to the bid advertisement, specifications or bid documents. By indicating date of receipt, bidder acknowledges the submitted bid takes into account the provisions of the notice, revision or addendum. Note that the 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.

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

ACKNOWLEDGMENT BY BIDDER:

NAME OF BIDDER: _____

ORIGINAL SIGNATURE: _____

PRINTED NAME AND TITLE:_____

DATE: _____

Bidder's Name_____

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. 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 <u>not</u> 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 <u>registered</u> 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

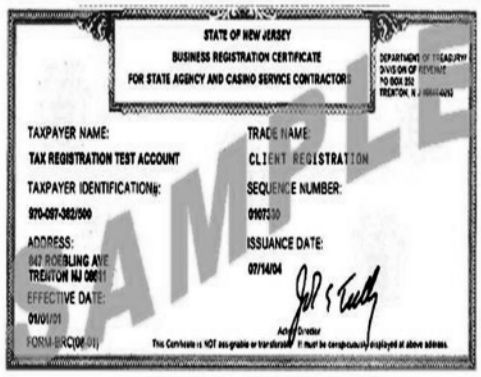
Mandatory Requirement

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.

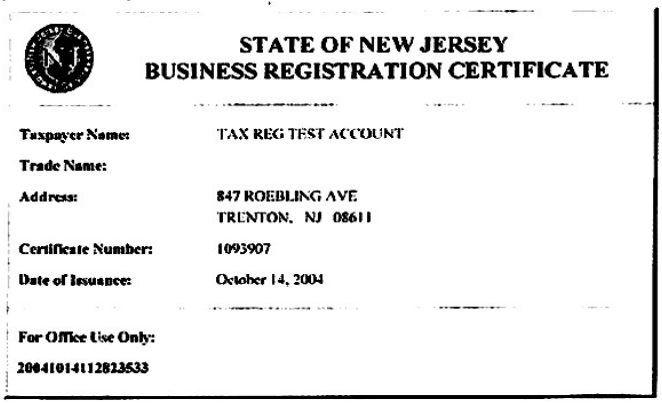
Proof of business registration shall be:

- 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
TRADE NAME:
CLIENT REGISTRATION
TAXPAYER IDENTIFICATION#:
970-007-382/000
SEQUENCE NUMBER:
ADDRESS:
847 ROEBLING AVE
TRENTON NJ 08611
ISSUANCE DATE:
07/14/04
EFFECTIVE DATE:
01/01/01

SAMPLE


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:
20041014112823533

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

Bidder's Name_____

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.

Bidder's Name_____

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 _____, 20____.

_____
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.

Bidder's Name_____

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 and Workforce Development. 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 and Workforce Development
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

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 US.C. S12101 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?

    _____

    _____

Bidder's Name_____

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? _____

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.

19. 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.

Bidder's Name_____

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.

   _____
   _____
   _____
   _____

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.

   _____
   _____
   _____
   _____

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.

   _____
   _____
   _____
   _____

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 contact for goods or services with a public entity?

   _____ yes _____ no If yes, please provide full, detailed explanation.

   _____
   _____
   _____
   _____

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 SOUCE (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 and Fifty (150) 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

Bidder's Name_____

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

Solicitation Number: _____ Vendor/Bidder: _____

PART 1

CERTIFICATION
VENDOR/BIDDER MUST COMPLETE PART 1 BY CHECKING ONE OF THE BOXES
FAILURE TO CHECK ONE OF THE BOXES WILL RENDER THE PROPOSAL NON-RESPONSIVE

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 neither the person nor entity, nor any of its parents, subsidiaries, or affiliates, is identified on the State of New Jersey, Department of the Treasury's Chapter 25 list as a person or entity engaged in investment activities in Iran. The Chapter 25 list is found on the Department's website at http://www.state.nj.us/treasury/pdf/Chapter25List.pdf. Vendors/Bidders **must** review this list prior to completing the below certification. **Failure to complete the certification will render a Vendor's/Bidder's proposal non-responsive.** If the Director of the Division of Purchase and Property finds a person or entity to be in violation 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 party.

CHECK THE APPROPRIATE BOX

☐ A. I certify, pursuant to Public Law 2012, c.25, that neither the Vendor/Bidder listed above nor any of its parents, subsidiaries, or affiliates is listed on the N.J. Department of Treasury's list of entities determined to be engaged in prohibited activities in Iran pursuant to P.L. 2012, c. 25 ("Chapter 25 List"). Disregard Part 2 and complete and sign the Certification below.

OR

☐ B. I am unable to certify as above because the Vendor/Bidder and/or one or more of its parents, subsidiaries, or affiliates is listed on the Department's Chapter 25 list. I will provide a detailed, accurate and precise description of the activities in Part 2 below and sign and complete the Certification below. Failure to provide such information will result in the proposal being rendered as non-responsive and appropriate penalties, fines and/or sanctions will be assessed as provided by law.

PART 2

PLEASE PROVIDE ADDITIONAL INFORMATION RELATED TO INVESTMENT ACTIVITIES IN IRAN

If you checked Box "B" above, provide a detailed, accurate and precise description of the activities of the Vendor/Bidder, or one of its parents, subsidiaries or affiliates, engaged in investment activities in Iran by completing the information below.

ENTITY NAME: _____
RELATIONSHIP TO VENDOR/BIDDER: _____
DESCRIPTION OF ACTIVITIES: _____
DURATION OF ENGAGEMENT: _____
ANTICIPATED CESSATION DATE: _____
VENDOR/BIDDER CONTACT NAME: _____
VENDOR/BIDDER CONTACT PHONE#: _____
Attach Additional Sheets If Necessary

CERTIFICATION

I, the undersigned, certify that I am authorized to execute this certification on behalf of the Vendor/Bidder, that the foregoing information and any attachments hereto, to the best of my knowledge are true and complete. I acknowledge that the County of Union, New Jersey is relying on the information contained herein, and that the Vendor/Bidder is under a continuing obligation from the date of this certification through the completion of any contract(s) with the 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. If I do so, I will be subject to criminal prosecution under the law, and it will constitute a material breach of my agreement(s) with the County of Union, permitting the County of Union to declare any contract(s) resulting from this certification void and unenforceable.

_____ _____
Signature Date

_____
Print Name and Title

Revised 10/19/17

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 2018 County Aid Resurfacing Project consists of the resurfacing of 16.42 miles of roadway within Union County. The specific roads are as listed below:

- Mountain Avenue from Horseshoe Road/Snyder Avenue to Diamond Hill Road
- Martine Avenue Extension and Lake Avenue from Raritan Road to Oak Ridge Road
- North Avenue and Midway Avenue from Terrill Road to E. Broad Street
- Liberty Avenue from Conant Street to Hillside Avenue
- Wood Avenue from Raritan Road to Route 27
- Summit Road from Route 78 to Route 22
- South Street from Springfield Avenue to Mountain Avenue
- E. 7th Street from Park Avenue to Terrill Road
- Lawrence Street from E. Grand Avenue to Woodbridge Road
- W. and E. Grand Avenue from Route 27 to Routes 1 and 9
- River Road from County Line/Bridge to JFK Parkway
- Stuyvesant Avenue from Vaux Hall Road to Essex County Line

The work will include, but will not be limited to, the milling and resurfacing of each roadway and the following associated work:

- Construction of accessible curb ramps
- Upgrade of stormwater drainage inlets
- Replacement and/or resetting of manhole castings
- Bridge deck repair and sawcutting of grooved surface
- Replacement or upgrade of traffic signal loop detectors
- Upgrade or installation of street name signs
- Replacement of striping and pavement markings

Work along the roadside, including curb ramp, inlet and signage will be performed during the day. The remaining work, including milling, manhole work and paving will performed at night unless directed otherwise by the County. A contract pay item is included in the project for costs to perform the milling and paving during the day in lieu of milling and paving at night.

Accessible curb ramps and existing non-compliant curb ramps will be constructed and/or reconstructed in compliance with ADA and PROWAG standards as needed. Belgian block curb will be replaced to the extent practical, but concrete curb will be constructed along the part of the curb ramp that is flush with the roadway pavement. The pavement along the curb ramps will be reconstructed in accordance with Union County standards prior to milling and paving. A detectable warning surface will be installed on all newly constructed and non-compliant existing curb ramps.

In compliance with NJDEP stormwater management regulations, Type B and D inlet curb pieces will be upgraded as needed to ensure the curb openings meet standards. All stream flow and concave grates and those with square openings will be replaced with bicycle-safe grates.

The pavement resurfacing will include milling to an average depth of two inches and resurfacing with hot-mix asphalt (HMA) 9.5M64 surface course of the same thickness. The 9.5M64 mix will also be used as a leveling course where necessary. Isolated base pavement repair prior to resurfacing will be

performed as determined necessary by the County or our inspectors after milling. The County's standard pavement section will be used for base repair and curb restoration, including an HMA 19M64 base course six inches in thickness and a dense-graded aggregate base course four inches in thickness.

Worn manhole castings will be replaced as needed and manhole castings that do not correspond to the final roadway surface elevation will be reset using concrete in accordance with Union County standards.

Membrane waterproofing may be applied to selected concrete bridge decks. Crack sealing and deck repair will be performed as needed prior to the overlay operations. Any existing "Black Beauty" material will be removed from bridge decks that are to remain exposed. Grooves will be sawcut into exposed bridge decks in accordance with NJDOT standards.

Traffic signal loop detectors impacted by the project will be upgraded to video detection systems if feasible or replaced in kind as needed.

Street name signs will be installed or replaced at each intersection to upgrade the signs to meet Union County standards. Municipal standards meeting the County's approval will be used for street name signs in certain municipalities, such as the City of Summit.

Upon completion of the resurfacing operations, thermoplastic traffic markings will be installed along with plowable raised pavement markers.

Prior to construction, the contractor will perform a walk-through with the Engineer to confirm and verify project pavement limits, and location of miscellaneous pavement and curb repairs, ADA ramps, striping and other proposed improvements. Roadway, curb and drainage repair areas including the resetting of castings shall be performed prior to the placement of final HMA overlay. Milled areas adjacent to manholes and inlets within the roadway travel way shall provide a ramped HMA treatment to the satisfaction of the engineer to improve ride-ability to motorist to the greatest extent practical. Milled areas shall not remain exposed for more than 48 hours unless approved by the engineer.

All project roadways shall be closed to traffic throughout the milling and resurfacing operations unless otherwise directed by the engineer. All milling and resurfacing operations and other activities that require closure of travel through lanes will be performed during nighttime operations within the stipulated working hours.

Road closures for County roadways will be allowed between 9:00 PM and 6:00 AM. Road closure limitations for any NJDOT roadways will be conditional upon any applicable NJDOT permit restrictions.

Work that does not impact the travel way such as inlet, curb and sidewalk work shall be performed during daytime hours unless directed by the Engineer. Daytime work hours are from 7:00 a.m. to 4:00 p.m., Monday through Friday, excluding holidays.

Work within any portion of NJDOT Right-Of-Way (R.O.W.) including off-ramps closures, will be permitted between 9:00 AM and 3:00 PM, Monday through Friday. Additionally, any lane closures (within the NJDOT right of way) resulting from adjacent work, and or maneuvering space for construction equipment, shall be restricted to the above mentioned times. For nighttime closures of NJDOT roadways, NJDOT restricts the hours of operation between 10:00 PM and 6:00 AM. The Contractor is made aware of the different time restrictions for County and NJDOT roadways. The Contractor shall review any applicable NJDOT permits for further restrictions. These times indicate

the road closure & opening times, respectively. Therefore, the contractor shall have all equipment and materials out of the NJDOT right of way and terminate all construction operations at the appropriate time (with adequate time for cleanup, material cooling, drying, curing, etc.), in order for the roads to be opened to traffic by the specified time. The County of Union will secure all NJDOT permits, where necessary, prior to construction. Other items to be installed including accessible curb ramps, street name signs, pavement reflectors, loop detectors and curb ramp delineation, shall be performed while traffic is maintained.

Note a closed road shall be open to traffic prior to initiating work requiring full closure on another road that is part of its detour route.

No construction equipment & material shall be stored within the County right-of-way. Resurfacing operations shall be terminated at the appropriate time (with adequate time for cleanup, material cooling, drying, curing, etc.), in order for the roads to be opened to traffic by the conclusion of the stipulated working hours. No work will be permitted on Saturdays, Sundays or Union County holidays.

Approximately 16.42 miles of County roads will be improved under this Program as follows:

Municipality	Street	From	To	Length (Miles)
Berkeley Heights	Mountain Avenue	Horseshoe Rd./Snyder Ave.	Diamond Hill Road	1.09
Clark/Scotch Plains	Martine Ave. Ext. & Lake Ave.	Raritan Road	Oak Ridge Road	1.36
Fanwood/Scotch Plains/Westfield	North Ave. & Midway Ave.	Terrill Road	E. Broad Street	2.81
Hillside	Liberty Avenue	Conant Street	Hillside Avenue	0.89
Linden/Roselle	Wood Ave.	Raritan Road	Route 27	0.71
Mountainside/Springfield	Summit Road	Route 78	Route 22	0.71
New Providence	South Street	Springfield Avenue	Mountain Avenue	1.39
Plainfield	E. 7th Street	Park Avenue	Terrill Road	1.93
Rahway	Lawrence Street	E. Grand Avenue	Woodbridge Road	0.71
Rahway	W. & E. Grand Avenue	Route 27	Routes 1 & 9	1.39
Summit	River Road	County Line/Bridge	JFK Parkway	1.22
Union	Stuyvesant Avenue	Vaux Hall Road	Essex County Line	1.23
			Total:	16.42

A map showing the areas and extent of work are found on the cover sheet of the plan set.

Deviations from the standard curb-to-curb milling & resurfacing will be identified in field by the Engineer prior to construction.

The item described as: Dense Graded Aggregate Base Course, Variable thickness, shall be used on unpaved shoulder areas adjacent to the edge of pavement where drop-offs greater than 1.5 inches exist or will be created. Specific locations will be field verified by the Engineer prior to construction.

Accessible curb ramps shall be constructed prior to commencement of the milling and resurfacing operations. All curb ramps shall be constructed in accordance with the details shown herein. **Adjacent along newly constructed curb and or sidewalk shall be restored to the satisfaction of the Engineer, and in accordance with these Specifications, at no cost to the County of Union. The construction details identify the restoration requirements. All materials, labor and costs associated with this restoration including sawcutting, excavation, dense graded aggregate base course and hot mix asphalt base course, shall be the sole responsibility of the contractor.** Detectable warning surfaces shall be installed at all newly constructed ramps.

Resetting inlets and manholes to finished grade elevations is part of this contract. Castings, grates, curb pieces and covers that are broken shall be replaced as part of this contract at direction of the engineer as shown on the plans or as directed. In the areas where existing curb type inlets do not have adjacent curbing, new concrete curbing will be constructed on either side of said inlet.

All striping and pavement markings shall be replaced prior to the road being opened to traffic. Should this not be possible due to material and or manufacturer's specifications, temporary striping shall be installed in the interim, prior to the road being opened to traffic. Additionally, any and all pre-marking for permanent markings shall be completed prior to the close of each resurfacing operation day & prior to the road being opened to traffic. Permanent striping & markings shall then be installed within 24 hours of the roadway being resurfaced (and or originally opened to traffic). Temporary striping shall also be applied to all milled surfaces prior to the road being open to traffic. Separate payment will not be made for any temporary striping/markings. The costs thereof shall be included in the various pay items of the overall contract bid.

At the pre-construction meeting, the County shall provide the Contractor with the appropriate electrical and striping plans for the various signalized intersections within the project limits. ***In the event that the County does not have available striping plans for these areas, it will be the Contractor's responsibility to perform any & all field inventory, to confirm locations prior to milling operations.*** The Contractor will be responsible for **notifying *Ralph Lewis, Assistant Regional Electrical Supervisor, NJDOT Region North*** for all State Signalized Intersections. He can be reached at 973-648-2781.

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

Detours, work zone traffic control and all Maintenance and Protection of Traffic for full road closures will be planned, implemented and maintained by the County of Union. However, the Contractor shall be responsible for the Maintenance & Protection of Traffic for any construction operation performed at any time other than when the road is fully closed to traffic. These operations include the construction of curb & sidewalk; restoration associated with the various pay items; striping & pavement markings; the various raised pavement markings. Any loop detector operations not performed during the various operations where the road in question is fully closed, will also require the Contractor to perform any associated maintenance & protection of traffic. The County will perform construction inspection and materials testing.

The required time of completion for this project is <u>150 calendar days</u> from the Notice to Proceed.

In addition to the standard resurfacing operations performed along each road (milling, resurfacing, striping & markings, raised pavement markings & street name signage), other items of miscellaneous work may also be warranted and will be described elsewhere in these specifications and the various construction details found in the contract plans. These items include: accessible curb ramps, loop detectors, miscellaneous inlet & manhole improvements, sidewalk, bridge deck repairs and installation of waterproof membranes and detectable warning surfaces.

Due to the size of this Program, 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 delete or substitute roads to be milled and paved under this contract. The County also 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.

Utility companies shall reset their valves, meters and manholes prior to construction. The Contractor shall make all necessary arrangements with the respective utility companies, to confirm that the appropriate number of each type of valve sleeves, covers, etc., are on-site. All work concerning these resets shall be in accordance with Sections: 105 & 650 as amended herein; except that this item will not be measured, and any/all payment associated with it shall be made part of the overall price bid for the project. No separate payment will be made for the resetting of utility valve boxes.

UNDER NO CIRCUMSTANCES WILL THE CONTRACTOR BE PERMITTED TO COMMENCE WITH THE RESURFACING OPERATIONS UNTIL ALL UTILITY VALVES HAVE BEEN RESET.

All roads under this contract requiring milling will be milled to a depth of two (2) inches. "To be constructed boxes" on the contract plans identify the estimated amount of material for each road. In cases where the road must be re-profiled, the locations will be pointed out to the contractor, who shall make the necessary adjustments to the milling machine to obtain said changes.

The contractor's attention is directed to the following signalized intersections, although the contractor shall be responsible for his/her own recognizance and site visits and this list shall not be considered comprehensive.

Municipality	Street	Signalized intersections
Berkley Heights	Mountain Avenue	Horseshoe Road/Snyder Avenue, Diamond Hill Road
Clark/Scotch Plains	Martine Ave. Extension & Lake Ave.	Raritan Road, Country Club Blvd., Goodman's Crossing N., Cellar Ave./Goodman's Crossing, Oak Ridge Road
Fanwood/Scotch Plains/Westfield	North Avenue & Midway Avenue	Martine Ave., Hetfield Ave., Edgewood Ave., E. Broad Street
Hillside	Liberty Avenue	Conant Avenue, Ryan Street, Bloy Street, Princeton Avenue, Long Avenue, Hillside Avenue
Linden/Roselle	Wood Avenue	Raritan Road, Route 27
Mountainside/Springfield	Summit Road	High Point Drive, Summit Lane
New Providence	South Street	Springfield Avenue, Central Avenue, Mountain Avenue
Plainfield	E. 7th Street	Berckman Street, Woodland Avenue, Leland Avenue, Terrill Road
Rahway	Lawrence Street	Grand Avenue, Monroe Street, Route 1-9, E. Hazelwood
Rahway	W. & E. Grand Avenue	Route 27, Whittier/Irving, Elizabeth Avenue, Lawrence Street, Bond Street, Route 1-9
Summit	River Road	Morris Avenue
Union	Stuyvesant Avenue	Vauxhall Road, Tyler Street/Long Terrace, Oakland Avenue, Stanley Terrace

Other structures exist along the roadways, including bridges, culverts, storm drainage facilities, sanitary sewers and utilities. It will be the sole responsibility of the Contractor to investigate & use due care when operating in their vicinity.

SPECIAL PROVISIONS

AUTHORIZATION OF CONTRACT

The Contract is authorized by the provisions of Title 40 of the New Jersey Statutes and their enacting regulations.

SPECIFICATIONS TO BE USED

The bound version of 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 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 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.

GENERAL

All awards shall be made subject to the approval of the New Jersey Department of Transportation. No construction shall start before approval of said award by the New Jersey Department of Transportation. Prior to the start of construction the contractor must submit a Material Questionnaire (SA-11) listing all sources of materials. Any materials used on the project from a non-approved New Jersey Department of Transportation source will be considered non-participating. The contractor is also notified that the District Office, Division of Local Aid and Economic Development must be notified of the construction commencement date at least five (5) calendar days prior to the start of construction.

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

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 a reference to page number is made, unless otherwise noted, it refers to the bound version of the *New Jersey Department of Transportation 2007 Standard Specifications for Road and Bridge Construction*, as amended herein.

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. Two (2) copies shall be furnished to the Owner, one (1) copy of which shall be sent to the NJDOT District Office, Bureau of Local Government Services through the Owner, 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 that 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 the General Specifications herein.

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: The County of Union.

RE, Resident Engineer, or Engineer: A representative of the County of Union.

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 payment for a differing site condition unless the resulting change in cost exceeds $7,500, unless 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. In this case 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 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, oil, lubrication, supplies, attachments, 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 five (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 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:

Table 105.05 1 - Working Drawing Submission Category

Certified	Approved
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	Pre-fabricated Modular Walls
Sign Support Structures	Stay-In-Place Forms
Structural Steel Fabrication	Temporary Sheeting and Cofferdams
	Temporary Shielding
	Temporary Structures
	Value Engineering Plans

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

F. 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 Utilities 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 preconstruction 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.

105.07.01 Working in the Vicinity of Utilities

C. Protection of Utilities.

THE FOURTH PARAGRAPH IS CHANGED TO:

Access within railroad right-of-way is restricted. Before beginning work within the railroad ROW or on railroad facilities, obtain the railroad's written approval for access, the method of construction, and the schedule of the work. Provide a copy of the submittal and approval to the RE. Comply with the railroad's requirements for working within the railroad right-of-way.

Mr. Vincent Milano (856-231-2049) of Conrail shall be contacted regarding the work within CONRAIL's ROW along Liberty Avenue, including coordination of CONRAIL's flaggers, if necessary.

THE FOLLOWING IS ADDED TO THE SIXTH PARAGRAPH:

Ensure that the work is performed following the railroad's access and safety restrictions.

SECTION 106 - CONTROL OF MATERIAL

106.07 CERTIFICATION OF COMPLIANCE

THE FOLLOWING IS ADDED:

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 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 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 precast 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 precast plant. If the precast concrete item is not inspected by ME, submit a Certification of Compliance for the precast 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 precast 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

1. Risks of Loss or Damage to the Permanent Construction.

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 eyewitnesses; 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 FIRST PARAGRAPH IS CHANGED TO:

1. Values and Quantities. The total value of the work subcontracted may not exceed 50 percent of the Total Contract Price.

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 a lump sum 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:

<u>Weekdays (Monday through Friday)</u>
Day Time 7:00 am to 4:00 pm
Night Time 9:00 pm to 6:00 am

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 that industrial & commercial driveway access must be temporarily denied, as in the scenario where the milling and paving operations will restrict passage, the Contractor shall provide written notice to the Engineer and property owner at least five (5) working days in advance of the driveway closing.***

When vehicular traffic is to be maintained within the scope of the Project, the **County** shall plan and implement the work to provide for the safe and convenient passage of such traffic. The **Contractor** shall cooperate in every way with County forces to ensure the safe and proper passage of said traffic.

HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING & MAINTAINING ALL WORK ZONES FOR THE CONSTRUCTION OF HANDICAP RAMPS, MISCELLANEOUS CONCRETE SIDEWALK & CURB, VARIOUS STRIPING & PAVEMENT MARKINGS, AND REMOVAL & INSTALLATION OF RAISED PAVEMENT MARKINGS. ALL TRAFFIC CONTROL DEVICES & MANPOWER NECESSARY TO MAINTAIN SUCH WORK ZONES SHALL BE SUPPLIED, IMPLEMENTED AND REMOVED AT THE APPROPRIATE TIME BY THE CONTRACTOR, IN ACCORDANCE WITH THE 2009 EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS WITH REVISIONS 1 AND 2, DATED MAY 2012.

108.07.02 Changes to the Traffic Control Plan (TCP)

THIS ENTIRE SUB-SECTION IS CHANGED TO READ AS FOLLOWS:

The **County** shall be responsible for establishing and maintaining the proposed detour routes, and work zones (not including work zones for the construction of miscellaneous concrete work, manhole and inlet work, striping, & raised pavement markings), as well as the work area(s) itself, insofar as it relates to maintenance and protection of traffic operations. The Contractor shall provide Union County with a minimum of 48-hour notice of proposed roadway closures for milling and resurfacing operations.

Neither the Contractor nor his forces shall alter the detour route and associated traffic control devices place by the County in any way, unless otherwise directed by the Engineer. In this event, such alterations shall take place only in the presence of the Engineer, or duly appointed representative. ***The Contractor shall notify the Engineer at least five (5) business days in advance of each proposed alteration.***

The Contractor shall receive a copy of the detour and traffic control plans proposed by the County. However, under no circumstances shall the Contractor implement any changes without prior approval from the Engineer. Standard NJDOT traffic control details are included in the bid plans.

The Traffic Control Plan is based on the requirements provided in the latest edition of the ***Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD).*** The Contractor shall work in

accordance with the provisions of the traffic control or detour plan and shall only deviate from the plan as directed by the Engineer.

Additional traffic control plans may be added by the Engineer that better suits the type and nature of the work being performed. In this case, the Contractor shall follow the revised or new plan accordingly. The revised plan(s) shall be implemented as part of this item without additional compensation.

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 snowplows 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 & other material on the road, prior to milling 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.

For delays caused by Railroads, delays up to 30 percent of the estimated availability specified in 105.07 are considered non-excusable.

2. Excusable, Non-Compensable Delays.

b. Utilities.

THE FOLLOWING IS ADDED:

For delays caused by Railroads, when the availability to access is reduced by more than 30 percent greater than the estimated availability specified in 105.07.

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 AND PAYMENT BOND

151.04 MEASUREMENT AND PAYMENT

THIS SUBSECTION IS DELETED AND REPLACED WITH THE FOLLOWING:

No separate payment will be made for performance bond and payment bond. All costs thereof shall be included in the various items of the proposal.

SECTION 152 - INSURANCE

152.03.02 Railroad Protective Liability Insurance

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

Ensure the policy is endorsed to include per project aggregate.

Procure and maintain insurance coverage for the following railroad(s) at the specified amount:

Consolidated Rail Corporation (CONRAIL)

- Rail Road Protective Liability (RRP) Insurance

  - Not less than $2,000,000.00 per occurrence, as a combined single limit for bodily injury and/or property damage

  - $6,000,000.00 per annual agreement for damages arising out of more than one (1) occurrence.

It is estimated that less than 1% percent of the Project cost is located within or adjacent to the railroad right-of-way.

152.04 MEASUREMENT AND PAYMENT

THIS SUBSECTION IS DELETED AND REPLACED WITH THE FOLLOWING:

No separate payment will be made for insurance. All costs thereof shall be included in the various items of the proposal.

SECTION 153 - PROGRESS SCHEDULE

153.03.02 CPM Progress Schedule Updates

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.

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. Additionally, the RE may require the Contractor to submit for approval a recovery schedule showing how the Contractor proposes to meet the directed acceleration.

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:

153.04 MEASUREMENT AND PAYMENT

THE LIST OF PAY ITEMS IS DELETED AND REPLACED WITH THE FOLLOWING:

No separate payment will be made for schedule preparation. All costs thereof shall be included in the various items of the proposal.

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.

157.04 MEASUREMENT AND PAYMENT

THIS SUBSECTION IS DELETED AND REPLACED WITH THE FOLLOWING:

No separate payment will be made for construction layout. All costs thereof shall be included in the various items of the proposal.

SECTION 159 - TRAFFIC CONTROL

THE FOLLOWING IS ADDED:

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

When vehicular traffic is to be maintained within the scope of the Project, the **County** shall plan and implement the work to provide for the safe and convenient passage of such traffic. The **Contractor** shall cooperate in every way with County forces to ensure the safe and proper passage of said traffic.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING & MAINTAINING ALL WORK ZONES FOR THE CONSTRUCTION OF CURB RAMPS, SIDEWALK, CURB, MANHOLE AND INLET WORK, STRIPING, PAVEMENT MARKINGS AND RAISED PAVEMENT MARKINGS. ALL TRAFFIC CONTROL DEVICES WITHIN WORK ZONES SHALL BE ESTABLISHED IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS. ALL TRAFFIC CONTROL MEASURES SHALL BE SUPPLIED, IMPLEMENTED AND REMOVED AT THE APPROPRIATE TIME BY THE CONTRACTOR.

Contractor shall be responsible for notifying all property owners fronting his work area for any work not associated with the County's closure for milling and resurfacing operations. In the case of the milling and resurfacing operations, the County will notify the property owners. Contractor shall notify property owners a minimum of seven (7) days in advance of the proposed work. A sample project notice shall be provided to the Engineer for review and approval prior to mailing.

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 – 3rd 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 edition of the ***Manual of Uniform Traffic Control Devices for Streets and Highways*** and the ***Manual of Standard Highway Signs published by the Federal Highway Administration***. ***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. ***It should be***

noted that at the conclusion of the workday, any detour routes will be discontinued and the area under construction reopened to traffic until the start of the following workday. Therefore, the Contractor shall ensure that all of his equipment and materials are removed from the roadway, the road clear of debris and all raised manholes, inlets and other appurtenances have traffic control devices (i.e., drums) placed over them. In this case the County may supply the traffic control devices to the Contractor and it shall be the Contractor's responsibility to place them where necessary.

In the event that the manhole, inlet or other appurtenance is within the traveled way and the placement of a traffic device would impede the flow of traffic, the manhole, inlet or other appurtenance shall 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 for Streets and Highways, OSHA, ANSI and Title 39 of the New Jersey Statutes (the 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 shall:

- Provide that all the Contractor's 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 respect to the maintenance and protection of traffic;
- Reposition traffic control devices displaced by traffic or construction equipment;
- Notify 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 maintain 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://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/

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.

THE FOLLOWING SUBSECTION IS ADDED:

8. Portable Construction Light Tower

The Contractor shall at the request of the RE provide Portable Construction Light Towers to assist Union County in establishing nighttime traffic control measures or for other purposes. The light towers shall provide sufficient illumination to meet night-time operations per Section 108.06. Portable tower shall provide a vehicular hitch for quick transport and removal. Contractor shall consult with Union County regarding hitch requirements for traffic control vehicles owned by the County.

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 ± 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 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 for police will be made from the allowance for the item Traffic Director, Uniform Police. The Contractor shall be required to produce proof of both payment & hours worked for each officer and flagger, 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.

If CONRAIL requires flaggers for the work at Liberty Avenue Rail Road grade crossing, reimbursement shall be made to the contractor under the Traffic Director, Uniform Police Allowance pay item as a direct pass through with no contractor markup.

B. Police.

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

The Contractor shall coordinate with local police department from the impacted municipalities as to their requirements or compliance with State Law for police presence during working hours based on the proposed work activities. Contractor shall be responsible for scheduling all work and notifications with the local police to comply with local ordinance or police presences when work zones are required. 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 SUBSECTION IS DELETED IN ITS ENTIRETY AND CHANGED TO THE FOLLOWING:

Item	*Pay Unit*
PORTABLE VARIABLE MESSAGE SIGN	UNIT
TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT
TRAFFIC DIRECTOR, FLAGGER	HOUR
TRAFFIC CONTROL MEASURES	LUMP SUM
FLOODLIGHTS FOR NIGHTTIME OPERATIONS	UNIT
TRAFFIC DIRECTOR, UNIFORM POLICE	DOLLAR (ALLOWANCE)

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 various municipalities 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.

The Engineer shall direct the Contractor as to the number of traffic directors required per roadway. Under the circumstances 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 schedules more traffic directors than that which is directed by the Engineer, the additional directors will not be reimbursed and such payments will be the direct responsibility of the Contractor. In addition, if the Contractor cancels any work without prior notice to the affected Police

Department and the Engineer, then any costs incurred from the respective Police Departments shall become the Contractor's responsibility. Police traffic director manpower not approved by the Engineer will not be reimbursed and shall become the Contractor's sole responsibility. The Contractor shall be responsible for establishing any and all escrow accounts that may be required by the various municipal Police Departments. The Contractor shall confirm specific details of hiring Traffic Directors with each respective Police Department.

Once the traffic directors are on the job, the County will direct the Contractor as to the dismissal time for such Traffic Directors. There will be no additional cost payment for Traffic Control Coordinator all costs for this work shall be paid in the various bid pay items.

Separate payment will not be made for relocating traffic control devices and the lighting systems used for nighttime operations 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 lighting for nighttime operations, but all costs thereof shall be included in the prices bid for the various Bid Pay Items. Union County has included the bid pay item Floodlights for Nighttime Operations to assist County in setting Traffic Control devices at night when directed. ***Separate payment will not be made for traffic control coordinator but all costs thereof shall be included in the bid pay item "Traffic Control Measures."*** Separate payment will not be made for relocating temporary crash cushions as required or as directed. 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 THEN THOSE STIPULATED TO BE PAID UNDER A SEPARATE BID PAY ITEM SHALL BE SUPPLIED, IMPLEMENTED AND REMOVED AT THE APPROPRIATE TIME BY THE CONTRACTOR. THE COST OF SUCH TRAFFIC CONTROL DEVICES, ANY RELOCATION OF SUCH, AND ASSOCIATED MANPOWER WILL BE PAID UNDER THE BID PAY ITEM "TRAFFIC CONTROL MEASURES."

Separate payment will not be made for traffic control and safety devices for those pay items not specifically identified for payment. All costs shall be included in the Bid Pay Item "Traffic Control Measures." Payment for Traffic Control Measures will be made based on an estimated percent complete of the project subject to approval by the RE.

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 25TH 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 Department will determine the weight of asphalt binder for price adjustment by multiplying the percentage of new asphalt binder in the approved job mix formula by the weight of the item containing asphalt binder. If a Hot Mix Asphalt item has a payment unit other than ton, the Department will apply an appropriate conversion factor to determine the number of tons used.

THE FOURTH PARAGRAPH IS CHANGED AS FOLLOWS:

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

160.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED TO THIS SUB-SECTION:

Allowances for *Asphalt Price Adjustment* and *Fuel Price Adjustment* have been established in the bid proposal. The allowance amount will be adjusted based on the formulas established in the specifications for calculating price adjustments as needed.

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

SECTION 201 - CLEARING SITE

201.04 MEASUREMENT AND PAYMENT

THE SUB-SECTION IS DELETED AND REPLACED WITH THE FOLLOWING:

Separate payment will not be made for Stripping, Clearing Site, 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 (RPMs); the removal of various striping & marking material; the removal of loop detectors or loop detector leads; and the removal of existing signs to be replaced and or upgraded, unless otherwise provided in these supplementary specifications. All costs thereof shall be included in the various items of the proposal.

SECTION 202 - EXCAVATION

202.01 DESCRIPTION

THE FOLLOWING IS ADDED:

***Excavation, Unclassified* shall be used to correct any unforeseen poor sub-grade as revealed by the milling and or resurfacing operations below 12 inches from finished grade which is the proposed depth of the HMA Pavement Repair. Excavations within 12 inches from finished grade shall be included in the cost for Hot Mix Asphalt Pavement Repair. The 12-inch depth is equivalent to a 2 inch milled surface and a 10-inch depth as specified under the item for Hot Mix Asphalt Pavement Repair. For roads specified not to be milled, the 10-inch depth shall be measured as specified in Section 401.03.01.D, amended herein.**

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:

The Department, as the generator, is solely responsible for the designation of excavated material. Unclassified excavation consists of excavation and management of material of whatever nature encountered, except for regulated material, pavement removal and acid producing soil.

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 is deleted from the list of pay items:

Item	*Pay Unit*
REMOVAL OF PAVEMENT	SQUARE YARD

THE FOLLOWING IS ADDED:

A nominal amount of cubic yards of this item has been included in the Bidding Sheets to establish a unit price. However, this amount does not reflect any material that may or may not be used. Payment for the item Excavation, Unclassified, will be the quantity as above described, at the price bid per cubic yard bid for the item **EXCAVATION, UNCLASSIFIED** in the Bidding Sheets.

The Excavation, Unclassified item shall include all work necessary to restore roadway shoulders, as indicated by the Engineer.

The removal of concrete base courses, concrete surface courses, & joints; i.e., sidewalks, driveways, curbs, roadway material, etc., will not be measured. Payment for such will be included under the various pay items in the Bidding Sheets.

Other material necessary for the restoration procedures will be paid for under various items in the Bidding Sheets. No separate payment will be made for shoulder restoration or restoration as a result of curb removal/installation.

Disposal of asphalt and concrete 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.

SECTION 302 - AGGREGATE BASE COURSE

302.01 DESCRIPTION

THE FOLLOWING IS ADDED:

Dense Graded Aggregate shall be used as base material in the roadway and as a surface course in shoulder areas as directed by the Engineer. This item may also be used for fill areas associated with Excavation, Unclassified.

Dense Graded Aggregate shall also be used in areas of uncurbed road sections where the edge of pavement drop-off is 1.5 inches or greater. DGA used for shoulder grading shall be produced by mixing RAP conforming to Sub-Section 901.05.04 of the Standard Specifications. The mixture shall be 50% Dense Graded Aggregate and 50% Recycled Asphalt Product (RAP) as defined by Section 901.10.03

302.04 MEASUREMENT AND PAYMENT.

THE FOLLOWING IS ADDED:

Payment for Dense Graded Aggregate, Variable Thickness will be made in Pavement Repairs Areas that exceed the pavement repair thickness, as set forth in the Hot Mix Asphalt Pavement Repair Detail provided in the contract plans.

No additional payment will be made for any materials used when restoring the roadway as a result of construction procedures involving curb and sidewalk installation.

RAP used in DGA as noted above will not be measured and no separate payment will be made. All costs thereof shall be included in the cost for Dense Graded Aggregate, Variable Thickness.

Payment for all material, preparation, grading, compaction, labor & placement shall be included in the overall price bid for the item Dense Graded Aggregate Base Course, Variable Thickness.

SECTION 401 - HOT MIX ASPHALT (HMA) COURSES

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.

401.03.01 Preparing Existing Pavement

401.03.01. A Milling of HMA.

THE FOLLOWING IS ADDED AFTER THE FOURTH PARAGRAPH:

Sawcut at the limit of paving in driveways and at other limits requiring a neat edge between new and existing HMA.

THE LAST PARAGRAPH is changed to:

Milled areas shall not be left unpaved for longer than 24 hours, unless approved by the Engineer.

D. Repairing HMA Pavement.

THE ENTIRE TEXT IS CHANGED TO:

The item Hot Mixed Asphalt Pavement Repair will be used on those sections of roadway that require excavation due to unforeseen underlying conditions that are revealed after milling operations or prior to overlaying and, in the opinion of the Engineer, are unsuitable for the direct placement of the surface course. Hot Mixed Asphalt Pavement Repair shall also be used along new curb construction including areas with proposed accessible curb ramps.

Any debris created by this work shall be removed at the end of each workday and disposed of according to Subsection 201.03.09.

Note all labor, material & equipment necessary to construct Hot Mixed Asphalt Pavement Repair are included in this pay item. This work shall include all excavation/disposal up to 12 inches below finish grade, 4" of DGA and 6" of Hot Mixed Asphalt 19M64. Any excavation beyond twelve inches below finish grade shall be paid for separately under the appropriate pay item. Actual quantities per street shall be determined upon completion of milling for each street. Roadway construction shall be determined upon inspection by the Engineer and the contractor shall only provide work for this pay item as approved by the Engineer.

If potholes are discovered, notify the RE immediately. The RE may immediately direct repairs of small areas. The RE may require further evaluation of a large area to determine the need for additional milling and paving.

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

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

Apply polymerized joint adhesive or tack coat to the vertical surfaces of the openings. Spread and grade Hot Mix Asphalt in the opening as directed by the RE. Ensure that the temperature of the HMA when placed is at least 250 °F, and compact as specified in 401.03.03.F. Compact areas not accessible to rollers with a flat face compactor. Compact until the top of the patch is flush with the adjacent pavement surface.

Reuse removed material as specified in 202.03.07.A.

401.03.02 Tack Coat and Prime Coat

TABLE 401.03.02-1 IS CHANGED TO:

Table 401.03.02-1 Tack Coat Application

Material	Spraying Temp, °F	Gallons per Square Yard	Season
Cut-Back Asphalt:			
RC-70	120 to 190	0.05 to 0.15	Oct 15 to Apr 15
Emulsified Asphalt:			
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:

Table 401.03.02-2 Prime Coat Application

Cut-Back Asphalt	Spraying Temp, °F	Gallons per Square Yard	Season
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
Emulsified Asphalt:			
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.

THE THIRD PARAGRAPH IS CHANGED TO:

Use an MTV for the construction of surface course in the traveled way. Ensure that the MTV independently delivers HMA from the HMA trucks to the HMA paver. Operate the MTV to ensure that the axle loading does not damage structures, roadway, or other infrastructure.

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 ⅛ 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 luted 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.

H. Air Void Requirements.

THE FOLLOWING IS ADDED TO THE THIRD PARAGRAPH:

Inside shoulders less than 6 feet in width will not be included in other lots unless requested by the RE.

THE FOLLOWING IS ADDED AFTER THE THIRD PARAGRAPH:

If areas of existing shoulders are found to be insufficient to support the proposed HMA pavement and the required compaction cannot be achieved, notify the RE immediately. The RE may either direct additional milling and paving to provide a suitable base to pave the proposed HMA, or waive coring and air void requirements in such shoulder areas.

J. Ride Quality Requirements

THIS SUBSECTION IS REPLACED WITH THE FOLLOWING:

Ride quality will be acceptable if the surface course is in substantial conformity with 1/8 inch in 10 feet surface tolerance. Should the surface be found not in conformity, the RE may direct paving operations be discontinued until mutually acceptable paving methods or equipment is utilized. Additional compensation, extension of contract time, or other concession will not be permitted because of revised methods or equipment necessary to produce an HMA surface in substantial conformity with a 1/8 inch in 10 feet surface tolerance.

401.03.05 Core Samples

THE LAST SENTENCE OF THE 2ND PARAGRAPH IS CHANGED TO THE FOLLOWING:

Apply an even coating of tack coat to sides of the hole. Place HMA in maximum lifts of 4 inches in the hole and compact each lift. Ensure that the final surface is 1/4 inch above the surrounding pavement surface.

401.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED TO THE LIST OF PAY ITEMS:

Item	Pay Unit
HOT MIX ASPHALT 9.5 M 64 LEVELING COURSE	TON
DAYTIME MILLING	DAY
DAYTIME PAVING	DAY

THE FOLLOWING IS DELETED FROM THE LIST OF PAY ITEMS:

Item	Pay Unit
POLYMERIZED JOINT ADHESIVE	LINEAR FOOT
TACK COAT	GALLON
PRIME COAT	GALLON
SAWING AND SEALING JOINTS IN HOT MIX ASPHALT OVERLAY	LINEAR FOOT

THE FOLLOWING IS ADDED TO THIS SUBSECTION:

The pay items Daytime Milling and Daytime Paving will be paid based on the increase cost of paving and milling during the day in lieu of milling and paving at night on a Day unit basis.

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

Pay Adjustment = Q x BP x 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:

Pay Adjustment = Q x BP x 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

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 millings will be disposed. Disposal of the millings 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.

HMA 19M64 Base Course shall be stone mix. Payment for HMA Base Course will be included under the item HMA Pavement Repair, and will be measured by the actual square yards of asphalt installed at the appropriate depth indicated on the detail sheets.

An estimated amount of Hot Mix Asphalt Pavement Repair per has been included in the bid proposal. This pay item shall cover excavation and disposal up to 12 inches below finish grade, 4” of DGA and 6” of HMA 19M64 Base Course. However, this amount does not reflect any material that may or may not be used. Actual locations and quantities on each street will be determined by the Engineer upon completion of milling and inspection of the roadway base.

Where necessary & as directed by the Engineer, HMA 9.5M64 Mix will also be used as a Leveling Course, as specified in Section 902.

A ***prime coat*** will be applied to dense graded aggregate base prior to placement of hot mix asphalt pavement. Separate payment will not be made for prime coat.

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 tack coat.

Sawing and sealing of joints in HMA overlays along bridge decks will not be measured for payment. All costs thereof shall be included in the price bid for HMA Surface Course.

SECTION 504 - STRUCTURAL CONCRETE

504.03 Construction

THE FOLLOWING IS ADDED:

504.03.04 Membrane Waterproofing

Verify approved membrane waterproofing products from the "Bureau of Material's Approved List" on the following NJDOT website:

http://www.state.nj.us/transportation/eng/technology/materials

Utilize either spray applied waterproofing or sheet membrane waterproofing on the bridge deck.

1. Spray applied membrane waterproofing. For spray-applied membrane, supply an elastomeric coating system. Apply a thickness that is no less than then thickness to which the manufacturer's independent testing was conducted. Prior to the application, provide a primer that is approved by the manufacturer. Spray applied membrane waterproofing products that may be used are as follows:

   Spray Applied Waterproofing Membrane

   Bridge Preservation L.L.C.
   Contact Information:
   R. J. Watson, Inc. Attn: Joe Bilotti
   Bridge and Structural Engineered Systems
   78 Glenn Drive
   Amherst, NY 14228
   Telephone: (203) 858-9515

   PmB Bridgedeck Waterproofing System
   Con-Serv, Inc.
   Contact Information:
   Richard W. Drummond, President
   Airport Industrial Park, 685 Aviation Blvd.
   Georgetown, SC 29440
   Telephone: (860) 666-5008

   Royston System
   Royston Membrane No. 10A and Royston Membrane Primer 713A as manufactured by Royston Laboratories, Inc.
   Pittsburg, PA 15238
   Telephone: 412-828-1500

   Protecto Wrap System
   M-400A Membrane, No. 80 Primer, and 160H Mastic as manufactured by Protecto Wrap Co.
   2255 South Delaware Street
   Denver, CO 80223
   Telephone: 303-777-3001

W.R. Grace System
Bituthene 5000, Bituthene Primer, and Bituthene Mastic as manufactured by W.R. Grace Co.
62 Whittemore Avenue
Cambridge, MA 02140
Telephone: 617-976-1400

Other suppliers of spray applied membrane waterproofing may be used given adherence to these specifications.

2. **Installation of sheet membrane waterproofing on bridge decks.** Prior to applying a primer recommended by the manufacturer of the sheet membrane, thoroughly clean the surface of the bridge deck and the sides of the curb for a height of 1 inch above the top of the surface course and ensure that surfaces are free of all foreign material such as grease, clay, dust, salt deposits, etc. Remove all loose and/or adhering foreign material from the deck using air jets, sandblasting, mechanical sweepers, hand broom or other approved methods. Correct any unusually sharp concrete edges on the deck surface which would puncture the sheet membrane in a manner satisfactory to the County prior to the installation of the sheet membrane waterproofing.

   Do not apply the primer or install the sheet membrane during wet weather conditions or when the deck and ambient temperature are below the prescribed minimum temperature for the application of the hot mix asphalt (HMA) surface course. Thoroughly clean the deck surface and ensure it is visibly dry prior to and during application of the primer.

   Apply the primer uniformly with a squeegee, brush or roller and work it thoroughly into the concrete surface at a rate prescribed or recommended by the manufacturer. Apply the sheet membrane as recommended by the manufacturer, provided that the primed surface does not become contaminated with foreign matter or moisture.

   After the primer has dried, apply one layer of sheet membrane. Remove the release paper, protecting the tacky surface of the membrane from the sheet membrane and roll the sheet membrane with the tacky side face down so as to bond to the primed deck surface. Apply the sheet membrane by hand methods or mechanical applicators. Overlaps must be a minimum of 4 inches at the edges and ends of each strip and shall be made in a manner to provide a shingling effect toward the low side of the deck. Seal overlaps in accordance with the manufacturer's recommended procedure. Use hand rollers or other satisfactory pressure apparatus at the barrier face to insure that the sheet membrane is uniformly adhered to the concrete. Ensure that the entire sheet membrane is free of wrinkles, air bubbles and other placement defects.

   Place sheet membrane waterproofing at inlets, vertical concrete surfaces and roadway joints in accordance with the details shown on the Plans or as directed by the County. At concrete curbs, barriers and other vertical concrete surfaces adjacent to areas of the bridge deck surfacing, install a sheet membrane flashing strip in the manner detailed on the Plans or as directed and in accordance with the manufacturer's recommendations.

   Patch any torn or cut areas or narrow overlaps by coating the area with primer and then placing sections of the sheet membrane over the defective area in such a manner that the patch extends at least 6 inches beyond the defect in all directions. Roll the patch or otherwise firmly press into the surface.

   Install sheet membrane waterproofing in continuous sheets. Cutting sheet membrane waterproofing, thereby leaving temporary openings around spall and deck repairs, will not be permitted.

After the sheet membrane waterproofing has been completed, cut the sheet membrane at all deck drain pipes with two (2) right angle cuts. Make the cuts to the inside diameter of the drain pipe. Turn down the corners of the membrane waterproofing, made by the cutting, into the drains and laid in a coating of primer.

Rubber tired vehicles, including paving equipment, may be allowed on the bare membrane only at such time and in such manner as approved by the County.

504.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

Item	*Pay Unit*
MEMBRANE WATERPROOFING	SQUARE YARD

SECTION 507 - CONCRETE BRIDGE DECK AND APPROACHES

507.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED TO THE LIST OF PAY ITEMS**:**

Item	**Pay Unit**
SAWCUT GROOVED DECK SURFACE	SQUARE FOOT

DIVISION 550 - STRUCTURE REHABILITATION

SECTION 551 - BRIDGE DECK REHABILITATION

551.03 CONSTRUCTION

551.03.01 Deck Condition Survey

THE FOLLOWING IS ADDED BEFORE THE FIRST PARAGRAPH:

Remove HMA and "Black Beauty" overlay material by diamond grinding in accordance with Section 455.

THE FOLLOWING SUBPART IS ADDED:

E. Crack Sealing. Make a 1/4 –inch to 3/8-inch **s**awcut along existing bridge cracks if & where directed and clean with compressed air to remove loose material. Seal cracks with Sikasil 728 RCS or approved equal in accordance with manufacturer's recommendations.

551.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

Item	*Pay Unit*
DIAMOND GRINDING, CONCRETE DECK SURFACE	SQUARE YARD
SAWING AND SEALING CRACKS, CONCRETE DECK SURFACE	SQUARE YARD

SECTION 602 - DRAINAGE STRUCTURE

602.01 Description

THE FOLLOWING IS ADDED:

Contractor shall be responsible for reconstruction of inlets in the field as directed by the Engineer. Reconstruction shall include but not be limited to the reconstruction of inlet walls, backfilling, compaction, repair of all adjacent roadway and all else necessary and incidental thereto for the complete reconstruction of said inlets.

The County's Division of Public Works will inform the Contractor which inlets and/or manholes are to be reset and or replaced.

602.02 MATERIALS

602.03.03 Setting Castings, Resetting Castings, and Reconstructing Inlets and Manholes

THE FOLLOWING IS **ADDED**:

> ***All manhole & inlet casting designated for setting or resetting shall be reset in Class B concrete to the appropriate grade or as specified by the Engineer.*** For a single course resurfacing, a 36-inch minimum circular ramp of hot mix HMA concrete will be placed about the periphery of the manhole leaving 1/2 inch of the head exposed. In the case where the Contractor uses cold mix asphalt concrete for convenience; it will be removed prior to placing the hot mix asphalt surface course.
>
> For inlet or manhole castings to be reset that are determined to be broken, worn or otherwise unsuitable, the pay item **Set Inlet Type __ Casting** shall be used to compensate the Contractor for supplying the new casting and installing it to grade. The Contractor is to supply a complete new unit for inlet castings (i.e., frame, bicycle safe grate, 6 or 8-inch curb piece, associated bolt pads, back-plate, etc.). All curb pieces shall be furnished with nameplate "Dump No Waste Drains to River" and 2D Brook Trout Design on both sides.
>
> Any curb type inlet grates encountered within the project limits not consisting of the following opening configurations: bicycle safe or flat oval openings, shall be removed, & replaced with the item **Bicycle Safe Grates.** This item will also be used to replace any worn, broken or otherwise unacceptable inlet grate.
>
> All inlet grates within the project limits not deemed to be bicycle safe will be replaced. If the frame & grate are damaged by construction operations so they cannot be used, they shall be replaced without additional compensation.

If the manholes to be reset are broken, worn or otherwise unsuitable, then the pay item **Set Manhole Castings** will be used to compensate the Contractor for supplying the new casting and installing it to grade. The Contractor is to supply a complete new unit for manholes (i.e., frame & cover). ***Note that all manhole specified herein are stormwater manholes and therefore, all covers shall be manufactured with pick-holes and vent holes.*** The pay item **Set Manhole Casting Supplied By Others** shall be used to compensate the Contractor for obtaining new castings provided by municipalities or other agencies and installing them to grade.

Castings that are removed or replaced under this contract shall be delivered to the Union County Division of Public Works, located at 2371 South Avenue, Scotch Plains, NJ.

In areas of irregular pavement, it may be necessary to adjust the grade of existing inlets and manholes. In the event, that the Engineer considers the existing castings to be unsafe, the item **Reset Existing Casting** will be used. This Item will also be utilized:

- Where it is necessary to replace existing inlets and manholes, with material supplied by others. In this scenario, the Contractor will be responsible for the removal of the existing frame and cover, replacement with new material and the transport of such refuse material to a staging area. Staging areas for each road will be discussed at the preconstruction meeting. The supplier of the new material utilized will be responsible for the removal of the refuse material, from the staging area; &
- ***Where it is necessary to repair damaged or unacceptable manhole and or inlet walls to a depth of 12 inches below the bottom of the casting. Masonry of existing structures shall be repaired as necessary, or as directed by the Engineer.***

For manhole and inlet castings, the following ***Campbell Foundry Company*** Catalog Nos. or approved equivalents shall be used: Manhole, 1202B (frame, and cover); Extension Frame for Curb Type Inlets, 2701; Type B Inlet, Type 2618, casting, Type N- & Type J-ECO curb, back plate and bicycle grate.

Provided that the materials and dimensions are approved equivalent to the specified manhole and inlet models, (also refer to the Standard Construction Detail), such material can also be obtained from the following:

* Neenah Foundry Company - Telephone (920) 725-7000
  P.O. Box 729, Neenah, Wisconsin, 54957

* Bridgestate Foundry Corporation - Telephone (609) 346-4300
  Suite 201N, 20 East Clementon Road, Gibbsboro, New Jersey 08026

All cast iron inlet curb pieces not conforming to current NJDEP Stormwater Regulations shall be removed & replaced. Curb piece replacements shall be accompanied by replacement of the adjacent curbs to each of the nearest joints in order to properly set the curb-piece. No separate payment shall be made for this curb work and shall be included in the overall price bid on the castings.

Baltimore inlets (granite slabs with curb openings and manholes) shall be reconstructed by removing the inlet wall to the depth necessary to reset the granite slab flush with the top of pavement elevation with mortar. Install an additional inlet and pipe along the inlet as indicated on the plans and details. Set a new manhole casting over the existing manhole opening to the required elevation and construct concrete curb and sidewalk along the structure and over the structure. All costs thereof except for the inlet and pipe shall be included in the unit price for "RECONSTRUCTED BALTIMORE INLET WITH MANHOLE CASTING."

602.03.05 Extension Frames and Rings

The following is **added**:

Inlet and manhole extension frames may be used to raise existing inlet castings a maximum of 3-1/2". When existing castings are required to be raised more than 3-1/2", the item reset castings shall be used. The item reset castings shall also be used to alter grades and elevations up to 12".

602.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

Item	*Pay Unit*
SET MANHOLE CASTING, SUPPLIED BY OTHERS	UNIT
RECONSTRUCTED BALTIMORE INLET WITH MANHOLE CASTING	UNIT

The unit price bid for resetting castings shall include furnishing & placement of the concrete, as well as, protection of the castings in a manner satisfactory to the Engineer, during the time they are exposed to traffic. Separate payment will not be made for extension rings and frames. All costs thereof shall be included in the unit price bid for reset castings.

In the event that the If & Where quantities for castings, curb pieces and grates are not used, the County of Union shall not be responsible for reimbursement or storage of material. Any balance of new material shall be returned to the Contractor at no cost to the County of Union. All existing inlet & manhole castings, curb pieces & grates removed as salvage shall be delivered to the Union County Division of Public Works Facility located at 2371 South Avenue, Scotch Plains, NJ. The Contractor is advised that unless directed by the Engineer, the Union County Public Works Facility will not be available for storing materials & equipment.

SECTION 606 - SIDEWALKS, DRIVEWAYS, AND ISLANDS

606.01 Description.

THE FOLLOWING IS ADDED

Concrete sidewalk and ADA ramps shall be constructed prior to the milling and resurfacing phases of the project. All ADA ramps will be constructed in accordance with types specified on the plans and as directed and by the Engineer. Final ADA ramps location will be field delineated prior to the start of construction. Areas of new concrete sidewalk outside the areas of new ramps maybe requested by the Engineer as If and Where Directed.

Detectable warning surfaces shall be installed at all newly constructed handicap ramps & all existing ramps within the project limits, as specified herein. Detectable warning surfaces shall be installed in accordance with the **Americans with Disabilities Act Accessibility Guidelines (ADAAG)**, as approved by the FHWA Office of Management & Budget (OMB), on June 25, 2004, and as amended herein. Truncated Domes are the only detectable warning surfaces allowed by the ADAAG. Grooves & exposed aggregate will not be acceptable. Specifications in Section 406.8 of ADA Standards address the area that these warnings are to cover at the specified locations. For the Bidders convenience, Section 406.8 is summarized herein, however, Bidders are strongly urged to reference the full text, available online at http://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/ada-standards/single-file-version. Details depicting truncated dome layout & spacing are provided in the construction details of the contract plan set.

606.02.01 Materials.

THE FOLLOWING IS ADDED:

Materials for Detectable Warning Surfaces shall be Brick Red in color, and shall be abrasion, chemical, environmental and UV resistant. ***The product used must be able to withstand all snow removal procedures.*** All materials used shall be in compliance with ADAAG requirements for Detectable Warning Products. Material Compliance Documentation will be necessary for all detectable warning products, prior to the pre-construction meeting. When cured and or completed, the delineation shall be a truncated dome warning, slip resistant non-porous surface. All Cast-In-Place Detectable Warning Products shall be covered prior to applying appropriate curing compounds for new concrete sidewalk. Upon drying of curing material, detectable warning surfaces shall be uncovered for use.

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 handicap ramps, 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.

Care should be exercised when excavating for the construction of sidewalk & curb that have Area Fire Alarm Actuators (Pull Boxes), and at signalized intersections. These areas may have direct burial electrical leads and or conduit. Since the actual locations of these materials are unknown, the Contractor is strongly advised to contact the respective Fire Department for additional information, and or use extreme caution when excavating these areas. ***Any damage to existing conduit, buried electrical material, and or other buried material, while excavating for curb and handicap ramp items, shall be the sole responsibility of the Contractor to restore and or replace, to the satisfaction of the Engineer. No separate payment will be made for these repairs.***

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.

A detailed listing of handicap ramps & detectable warning surfaces including specific curb and sidewalk quantities, have been incorporated into these specifications, and can be found at the rear of the Technical (T pages) Specifications. However, for the contractor's information, all ramps within the project limits new or otherwise shall be delineated with Detectable Warning Surfaces. The Contractor shall field visit and verify all locations for handicap ramp delineation with the Engineer prior to beginning work. 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 208, 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.

This work shall also consist of applying a color contrast and a slip resistant surface on Portland cement concrete sidewalks for the installation of detectable warning surfaces.

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 two (2) concrete cylinders field cured according to AASHTO T 23.

THE FOLLOWING SUBSECTION IS ADDED:

J. Accessible Curb Ramps

All Accessible Curb Ramp areas shall be constructed using concrete, unless otherwise specified in these specifications. All new handicap ramps shall be applied with Detectable Warning Surfaces – Cast-In-Place Type. All existing ramps shall use the Detectable Warning Surfaces – Retrofit Type. Detectable Warning Surfaces shall be classified as follows:

a) Cast In Place Tile - shall be installed in the concrete in accordance with manufacturer's specifications. The cast in place tile shall be used for all new curb ramp construction.

b) Retrofit Surface Mount Tile - shall be installed on the surface of existing concrete curb ramps in accordance with manufacturer's specifications. This product must be able to withstand snow removal procedures. The manufacturer of such product shall provide documentation supporting such.

606.03.03 Detectable Warning Surfaces

THE FOLLOWING IS ADDED:

All pre-existing delineation materials must be removed prior to installing Detectable Warning Surfaces. The installation of Detectable Warning Surfaces shall be according to the corresponding construction details and the manufacturer's recommendation. All areas determined to have been damaged or not to be in conformance with the Specifications or the Plans shall be removed and replaced at no additional compensation to the State.

The item Detectable Warning Surfaces of the various types will be measured in units, based on the actual amount installed. Each unit installed shall be approximately 4 feet (ramp width) by 2 feet (running slope). The unit price bid for the item Detectable Warning Surfaces, shall include all material, equipment, labor & any grinding/removal procedures of any previous ramp delineation that may exist on the ramp to be treated. There will be no difference in price between the various products.

606.04 MEASUREMENT AND PAYMENT

THE FOLLOWING ITEMS ARE ADDED:

Item	*Pay Unit*
RESET PAVERS	SQUARE FOOT

SECTION 607 - CURB

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 accessible curb ramps. 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.

The Contractor's attention is directed to the construction detail entitled "10 x 20 Concrete Curb." This detail identifies the typical pavement section necessary when restoring County Roads. The Contractor shall be responsible for improving all gutterlines within two (2) feet of proposed curb construction. Should the Contractor damage the roadway outside of these limits while excavating/installing adjacent curb, sidewalk and or ramps, the above-referenced detail shall be used for restoration procedures. The Contractor will be responsible for all material & labor necessary to improve the gutterline as directed by the Engineer AND to restore the damaged road section. No additional payment will be made for any material & labor involved with said work.

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.

607.05 Granite Curb

THIS SUBSECTION HAS BEEN RENAMED AS FOLLOWS:

607.05 Belgian Block Curb

607.04 Measurement and Payment

THE FOLLOWING ITEMS ARE ADDED:

Item	*Pay Unit*
BELGIAN BLOCK CURB	LINEAR FOOT
10” x 20” CONCRETE VERTICAL CURB	LINEAR FOOT

The Contractor shall include the cost of all curb removal, excavation, material disposal, expansion joint material, curing material, adjacent site and pavement 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.

The construction of cheek walls associated with the installation of accessible curb ramps, as shown on the Construction Details for the various types, shall be paid for as 10” x 20” Concrete Vertical Curb.

SECTION 610 - TRAFFIC STRIPES, TRAFFIC MARKINGS AND RUMBLE STRIPS

610.01 Description

THE FOLLOWING IS ADDED TO THIS SECTION:

This item shall consist of furnishing and installing white & yellow pavement lines to HMA or Portland cement concrete surface. Thermoplastic Long-Life material shall be used for all permanent lines on hot mix asphalt concrete or Portland cement concrete surfaces, in accordance with these provisions and in conformance to the dimensions and locations shown on the plans or as established by the Engineer.

The Contractor shall replace all existing striping as shown on the plans in-kind or based on As-Built plans provided by the County unless otherwise directed by the engineer or as shown on the plans. Available As-Built traffic signal plans for County owned traffic signal will be provided at the pre-construction meeting. The Contractor shall be responsible for obtain traffic signal plans for NJDOT traffic signals from NJDOT Documents Unit. A list of traffic signal agency jurisdiction will be provided at the pre-construction meeting.

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.

Under this contract, there may be locations in which existing striping conflicts with the proposed permanent striping. In this case, the Contractor or Sub-Contractor shall remove the existing striping as directed by the Engineer, and shall be considered as part of this item. No separate payment will be made for the removal of stripes or pavement markings.

Installation of various Two-Way Plowable Pavement Reflectors & Castings, include removal of existing pavement reflectors and castings, and disposal of such, including the lenses when still intact.

Materials used on this project shall meet all manufacturers' specifications.

610.02.01 Materials

THE FOLLOWING MATERIALS ARE RENAMED TO:

Traffic Stripes.....912.03.01
Traffic Markings.....912.03.02

610.02.02 Equipment.

The following is added:

The equipment for applying thermoplastic material shall be capable of providing continuous mixing and agitation of the material. The parts of the equipment conveying the material between the main reservoir and the shaping die shall be so constructed to prevent accumulation and clogging. The mixing and conveying parts and the shaping dies or spray gun shall be capable of maintaining the material at optimum plastic temperature. The equipment shall be so constructed to ensure continuous uniformity in the dimensions of the entire stripe or marking. The kettle provided for the melting and heating of the thermoplastic material shall be equipped with an automatic thermostat control device and heated by a controlled heat-transfer liquid rather than by a direct flame. The heating kettle and applicator shall be equipped and arranged to meet the National Board of Fire Underwriters and State and Federal regulations. The parts of the equipment that come in contact with the material shall be easily accessible for cleaning and maintenance.

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 SUBPART HEADING AND THE ENTIRE TEXT IS CHANGED TO:

610.03.01 Traffic Stripes

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 ± 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.

610.03.02 Thermoplastic Traffic Markings

THE SUBPART HEADING AND THE ENTIRE TEXT IS CHANGED TO:

610.03.02 Traffic Markings

A. Marking Plan. At least 20 days before beginning the work, submit to the RE for approval a marking plan that includes:

1. Schedule of operations for applying traffic markings,
2. Number and type of equipment,
3. Manufacturer's recommendations for use of the materials, including mixing ratios and application temperatures.
4. Details on the means and methods for surface preparation
5. Details on the means and methods for premarking

B. Surface Preparation. Immediately before marking the pavement surface, clean the surface of dirt, oil, grease, and foreign material, including curing compound on new concrete. Clean the surface 2 inches beyond the perimeter of the marking to be placed.

C. Applying Traffic Markings. Place preformed thermoplastic or hot extruded thermoplastic traffic markings on thoroughly dry surfaces and during dry weather conditions. Apply using equipment and procedures that produce markings of the specified color, width, and thickness with well-defined edges, uniform retroreflectivity, and proper bonding to the pavement. Apply the thermoplastic material as follows:

1. Preformed Thermoplastic. Melt the preformed thermoplastic tape to bond the traffic markings permanently in position according to the manufacturer's recommendations.

Meet the minimum initial retroreflectance value, as specified in 610.03.01.D for thermoplastic tape, by applying additional glass beads to the hot-wet material in a uniform pattern as necessary.

2. Extruded Thermoplastic. Uniformly heat the thermoplastic material. When the ambient and surface temperatures are at least 50 °F, apply the melted material at a temperature of between 400 and 425 °F. Extrude the thermoplastic traffic markings on the HMA or concrete pavement ensuring a thickness of 90 ± 1 mils.

Immediately after, or in conjunction with the thermoplastic extrusion, uniformly apply glass beads to the wet material at a minimum rate of 10 pounds per 100 square feet of markings. Apply glass beads by mechanical means only.

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 for Streets and Highways (MUTCD)** for size, color, shape and placement. Unless otherwise specified, striping widths and patterns shall be as follows:

All stop bars shall be 24" wide white lines. All longitudinal lines, broken or dashed, shall be installed as follows: 10-foot solid line with a 30-foot gap. All shoulder lines shall be 4" wide white line; lane lines at intersections shall be 8" wide white lines; crosswalk lines (perimeter) shall be 8" wide white lines.

Crosswalk cross hatching shall be 12" wide white at 3' center to center, utilizing the ladder type, regardless of the existing cross hatching width; crosswalk hatching shall be installed parallel to the road centerline and <u>not</u> perpendicular to the crosswalk. Traffic island gore hatching shall either be 24" wide white or yellow line, regardless of existing width. All crosswalks shall be 8 feet in width, with white perimeter lines as described above

All centerline markings shall be a four-inch wide double yellow line for the entire length of these roads. 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 four (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.

610.03.03 Raised Pavement Markings (RPM)

THE FOLLOWING HAS BEEN ADDED:

This specification covers a type of snow-plowable, durable, abrasion-resistant, retroreflective raised pavement marker designed for lane marking and delineation. The markers shall be designed to provide highly effective, long-life nighttime visibility.

All work associated with the installation of reflectors and castings, including road preparation, sand blasting, and use of epoxy and priming agents, etc., shall be included in the overall unit price bid for these items.

The marker shall be manufactured from an engineering thermoplastic polymer (polycarbonate) meeting ASTM Standard Specification for Plowable, Raised Retroreflective Pavement Markers D4383-96 and designed for superior impact resistance and weatherability. The marker shall incorporate an abrasion resistant ceramer hardcoat, microcube corner optics retroreflective lens, and pressure sensitive adhesive pad (excludes Model 194). These features are designed to provide long-lasting nighttime visibility by

resisting breakage, providing optimal angularity, and adhering firmly to the casting. These markers are intended for application in a nodular iron holder (casting) with an adhesive.

The markers shall be durable, impact-resistant, abrasion-resistant, snow-plowable, raised, and retroreflective. The designed application of the marker is for longitudinal and gore markings on new and existing roads in snowplow regions.

All markers shall be applied in accordance with the manufacturer's recommendations.

Marker configurations shall be installed in accordance with NJDOT Standard Details as shown in the Contract Plans.

610.03.04 Removal of RPMs

THE ENTIRE TEXT IS CHANGED TO:

> Remove RPMs as directed by the RE. Dispose of RPMs as specified in 201.03.09. If directed by the RE, fill the hole with HMA patch as specified in 159.03.07 except sawcutting is not required.

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 ITEM IS DELETED:

Item	*Pay Unit*
REMOVAL OF RPM	UNIT

THE FOLLOWING ITEMS ARE ADDED:

Item	*Pay Unit*
TRAFFIC STRIPES, THERMOPLASTIC __"	LINEAR FOOT
TRAFFIC MARKINGS, THERMOPLASTIC	SQUARE FOOT

THE FOLLOWING IS ADDED AT THE END OF THE SUBSECTION:

It shall be the responsibility of the Contractor performing this work to provide a breakdown of materials and footage applied at the end of each workday to the County. In the event of a discrepancy between the County and the Contractor's as-built quantity, both the County and the Contractor will re-measure all roads to resolve their differences. This will take place before final contract payment occurs.

In the event of a discrepancy between the County and the Contractor's as-built quantity, both the County and the Contractor will re-measure all roads to resolve their differences. This will take place before final contract payment occurs.

Removal of RPM's when directed by the RE shall be included in the bid pay items of the various RPM's types.

The quantity shown in the Bidding Sheets represents the total 4-inch line equivalent for the Traffic Markings, Lines.

Traffic markings of the various types and materials for words, arrows or other pavement symbols will be measured by square feet.

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 MARKINGS, LINES.

Pavement markings of the various types will be paid for at the contract bid price per square foot that shall be full compensation for cleaning and preparing the pavement surface, furnishing and installing all materials and for all materials, labor, tools, equipment and incidentals necessary to complete the work.

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 612 - SIGNS

612.03.02 Type GA Breakaway and Non-Breakaway Support Guide Signs

THE SUBPART HEADING IS CHANGED TO:

612.03.02 Type GA Breakaway Support Guide Signs

C. Constructing Pedestals

THE SUBPART IS CHANGED TO:

Place reinforcement steel as specified in 504.03.01 before placing the concrete. Ensure that concrete placement complies with the limitations as specified in 504.03.02.C. Place concrete as specified in 504.03.02.D. Cure concrete as specified in 504.03.02.F.

D. Erecting Posts

THE SUBPART IS CHANGED TO:

Erect posts as specified in 512.03.01.G.

THE FOLLOWING IS ADDED:

F. Constructing Anchor, Hinge, Bracket and Coupling Assemblies. At least 10 days before beginning the work, submit the manufacturer's installation guide and installer's certification to the RE.

Ensure that the installer is certified by the manufacturer.

Ensure that the manufacturer's representative is present during the foundation pour and the installation of the first sign. Install anchor, hinge, bracket and coupling assemblies according to the manufacturer's recommendations. The RE may require the system manufacturer's representative to be present at all times during the installation to provide on-site technical support.

THE SUBPART IS ADDED:

612.03.03 Relocate Signs

This item of work will consist of the relocation and resetting of existing signs as directed by the Engineer. Existing signs to be relocated or reset shall be carefully cataloged, removed without damage, stored and reinstalled as directed by Engineer. The Contractor shall to the greatest extent practical salvage and reuse existing sign posts. Signs and sign posts damaged shall be replaced at no cost to the County. This work shall also include setting of sign posts in concrete to the satisfaction of the Engineer.

612.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS PAY ITEM IS ADDED:

Item	*Pay Unit*
RELOCATE SIGN	UNIT

THE FOLLOWING IS ADDED:

Payment for Guide Sign Supports of various types and associated appurtenances shall be paid under the bid pay item REGULATORY AND WARNING SIGNS.

THE FOLLOWING SECTION IS ADDED:

SECTION 612A - STREET SIGNS

612A.01 Description

This section describes the requirements for street signs within the project limits. The project will include salvaging existing signs supports and placement of new bracket and signs or the complete replacement of existing street signs.

All signs shall conform to the *2003 Manual of Uniform Traffic Control Devices*; and the *U.S.D.O.T. Manual of Standard Highway Signs*.

612A.02 Materials

All sign materials shall conform to material specifications of Section 612 of the NJDOT Standard Specifications for Road and Bridge Construction as amended as follows:

All signs shall be manufactured with, or incorporate diamond grade material. Alternate material meeting the requirements of ASTM TYPE 11 RETROREFLECTIVE SHEETING may be used, only when approved by the Engineer. All signs shall be aluminum, with a thickness of 0.100 inches.

Street Sign shall be approximately 10 inches in height and up to 36 inches in length depending on the amount of letters in each street name. Each sign shall also be double faced. All signs shall be green with white lettering. Six-inch Highway Gothic B font shall be used for all lettering. The street name sign identifying the County road shall be the primary sign, and therefore mounted at the top of the signpost. All top posts shall be 2-inch x 2-inch square, 16 gauge galvanized solid surface steel with a 0.100 minimum wall thickness. All posts shall be a minimum of 8 feet in length, base posts shall be a minimum of 3 feet in length.

612A.03 Construction

All sign construction methods shall conform to specifications of Section 612 of the NJDOT Standard Specifications for Road and Bridge Construction as amended as follows:

All posts & mounting brackets will need approval of the Engineer prior to installation.

Double-faced signs are designated as Type DF.

All salvage sign material other than posts shall be delivered to the Union County Bureau of Traffic Safety & Maintenance, at 2325 South Avenue, Scotch Plains, NJ.

Removal of the existing sign in its entirety, including any concrete footing, and restoration of the existing area, shall be included in the overall unit price bid for the above referenced items. A detailed listing of specific locations where each sign is to be installed is included in these specifications

Ground mounted Street Name Signs with Breakaway Supports shall be installed along the County Roads being resurfaced in the following manner:

* At 4-way intersections, install 1 post at the far side of ***each*** approach (County road only);
* At 3-way intersections, install 1 post at the far side of the County road approach, adjacent to the side street.

Accessory Panels - shall include signs, brackets & and other hardware.

Breakaway Signs - The breakaway system shall be installed at least 30 inches below grade. A listing of the signs in question has been provided in these specifications. The list includes street names as required to be identified on the signs & the amount of signs and posts.

612A.04 MEASUREMENT AND PAYMENT

The County will measure and make payment for items as follows:

Item	*Pay Unit*
STREET NAME SIGN, TYPE DF, BREAKAWAY SUPPORT	SQUARE FOOT
ACCESSORY PANEL, TYPE DF	SQUARE FOOT

Payment for Street Name Signs, Type DF with Breakaway Supports, and Accessory Panels, Type DF, will be made for the quantity of material actually installed, at the unit price bid per square foot.

Street signs with new breakaway supports shall include all equipment, materials (posts, nuts, bolts, brackets, hardware, etc.) & labor necessary to fabricate, furnish, assemble & erect signs; removal and disposal of all existing street name signs encountered, along the County roads in question; installation of signs in a concrete foundation; and restoration to adjacent areas.

The unit price bid for this item shall include all necessary excavation for the removal of existing signs, restoration, posts & other materials as described above.

SECTION 651 - WATER

651.04 Measurement and Payment

THIS SUB-SECTION IS CHANGED AS FOLLOW:

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 FOLLOW:

The item *Reset Gas Valve Box* shall not be measured and no separate payment will be made.

SECTION 702 - TRAFFIC SIGNALS

702.03.09 Loop Detectors

THE FOLLOWING IS ADDED:

Loop detectors shall be installed only by certified Contractors qualified to perform this work. Prior to construction, the Contractor shall provide the name(s) of the individual(s) and/or firm that will be performing this work for review and approval by the Engineer. Installation of loop detectors shall only be done in the presence of the Engineer, or his duly appointed representative. Loop detectors shall be saw cut, placed and sealed in the milled surface prior to the new hot mix asphalt concrete surface course being placed.

Loop inductance readings shall be made prior to sealing the loop trench. In the event the loops are sealed before the inductance readings are made, reviewed and accepted by the Engineer, the Contractor shall reopen the trench and adjust the number of turns to achieve the required inductance. This shall be done without additional compensation.

Loop detector wire shall conform to IMSA Specifications No. 51-5-1984 and the size shall be No. 14 AWG. When installing loop wire in the conduit stub through the curb, its location shall be marked by Saw-cutting the curb at its actual location.

THE FOLLOWING SUBPARTS ARE ADDED:

702.03.13 Video Detection System with Modem

One video detector assembly shall be installed opposite each intersection approach under this contract. This item shall consist of furnishing and installing the video detector assembly on a traffic signal mast arm, mounting hardware, the drilling of the traffic signal mast arm, installing the grommet, video pigtail cable with round locking-type military style connector from the video detector assembly to the base of the traffic signal assembly and be incorporated into a video detection system as described hereafter. All assemblies shall be enclosed in weather tight aluminum housing.

All mounting brackets and hardware shall be finished to match the color of the single member arm and shaft assemblies upon which they will be mounted.

702.03.13 Resetting Junction Box Castings

Where indicated or directed, reset existing junction box castings by removing the castings, removing the junction box walls as needed and setting the casting to the required grade with mortar.

702.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDE D TO THE LIST OF PAY ITEMS:

Item	*Pay Unit*
RESET JUNCTION BOX CASTING	UNIT

THE FOLLOWING IS ADDED AT THE END OF THE SUBSECTION:

The unit price for Image Detector shall include providing wiring connections to the controller cabinet, using cable supplied by the manufacture. No separate payment for this wire will be made. Payment for this item will be made on a unit basis per intersection furnished and installed at the unit price bid for the items IMAGE DETECTOR in the bidding sheets. Separate payment will not be made for image detection controller units installed in the signal control cabinet. All costs thereof shall be included in the unit price bid for IMAGE DETECTOR.

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:

Table 902.02.02-2 Additional Fine Aggregate Requirements for HMA

Tests	Test Method	Minimum Percent
Uncompacted Void Content of Fine Aggregate	AASHTO T 304, Method A	45
Sand Equivalent	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 two (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:

Table 902.05.02-2 SMA Mixtures Volumetric For Design and Plant Production

Property	Production Control Tolerances	Requirement
Air Voids	±1%	4.0%
Voids in Mineral Aggregate (VMA)	–	17.0% minimum
VCA_{mix}	–	Less than VCA_{dry}
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 Chemical Admixtures.

903.02.05 Corrosion Inhibitor Admixture

THE FOLLOWING IS ADDED:

Corrosion inhibitor products that are to be used in the fabrication of concrete items shall be as follows:

903.07 Quick-Setting Patch Materials

Use quick-setting patch material that is listed on the qualified products list (QPL) and is ready for mixing according to the manufacturer's recommendations. Follow the manufacturer's recommendations regarding the required water demand for the patching material. Use patching material that is concrete gray in color and contains no calcium chloride or other ingredients that cause corrosion to steel reinforcement. If adding coarse aggregate to patching material, use broken stone conforming to 901.03.01. Ensure that the material is quick-setting for use in concrete patching where fast setting, rapid strength gain, non-shrink, and high bond strength characteristics are needed. The materials engineer (ME) will add products to the QPL only after testing and evaluation in the field, after service for 1 year.

The classifications for quick-setting patch materials are as follows:

1. **Type 1A.** Suitable for use above water. Type 1A products have manufacturer specified mix proportions with aggregates that would preclude it from being classified as a Type 1. The ME will approve the mix proportions before adding the material to the QPL. The manufacturer shall provide mixing proportions, including the required type and size of aggregate and the proportion of patching material, aggregate/sand, and water. At least 10 days before the start of placement, propose aggregates for verification trial batching based on the manufacturer's pre-approved proportions. The ME will verify that the proposed quick setting patch mixture meets the required physical properties.

2. **Type 1B.** Suitable for use above water. Type 1B products are those products that have course aggregate, sand, or both pre-packaged with the cementitious material. The ME will test this material, including a field trial, prior to adding it to the QPL. The manufacturer shall designate the amount of aggregate and shall maintain the total aggregate within ±10 percent of this stated amount. The ME will randomly test the aggregate to ensure that the overall percentage of aggregate is within ±10 percent of the total and that the gradation on individual sieves does not vary more than ±10 percent from the gradation of the originally approved sample. The manufacturer shall use an aggregate supplier that is listed on the QPL. The ME will disapprove quick-setting patch material that fails to comply with the aggregate consistency requirements. If the manufacturer makes any changes to the formulation, the ME will require that the material be resubmitted for approval. Do not add additional aggregate in the field.

If liquid activator, other additives, adhesive, or bonding agents are integral to the performance of the patch material, the manufacturer shall provide the material so that 1 package of additive, activator, adhesive or bonding agent is required for 1 package of patch material. Mix patch material as specified in 903.03.04.

Use quick setting patch material that meets the requirements in Table 903.07-1 when tested according to NJDOT C-2. Mix quick-setting patch according to the manufacturer's recommendations.

Table 903.07-1 Requirements for Quick Setting Patch Material

	Type 1A and 1B
Bond Strength	
7-day (minimum)	1000 psi
28-day (minimum)	2000 psi
Expansion/ Shrinkage	
Cured in Water (maximum)	+0.20%
Cured in Air (maximum)	−0.20%
Difference (maximum)	0.30%
Durability	
Retained strength at 50 cycles (minimum)	90%
Visual condition rating at 50 cycles (maximum)	3
Permeability (maximum chloride content at 2 inches)	2.5 lbs/yd^3
Compressive Strength	
3-hour (minimum)	2000 psi
1-day (minimum)	3000 psi
7-day (minimum)	4000 psi
28-day (minimum)	4500 psi
Time of Set in minutes (minimum)	15

THE FOLLOWING IS ADDED:

903.11 Membrane Waterproofing

As per the Manufacturer's Specifications

(NOT FOR USE WITH COLORED CONCRETE PRODUCTS)

Calcium Nitrite Based as produced by
W.R. Grace & Company
2133 85th Street
North Bergen, NJ 07047
Telephone: 201-869-5220

Calcium Nitrite Based as produced by
The Euclid Chemical Company
5 Joanna Court
East Brunswick, NJ 08816
Telephone: 732-390-9770

Calcium Nitrite Based as produced by
Master Builders Inc.
798 Welsh Road
Huntingdon Valley, PA 19006
Telephone: 215-938-7501

Calcium Nitrite Based as produced by
SIKA Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
Telephone: 800 - 933 - SIKA (7452)

Calcium Nitrite Based as produced by
Great Eastern Technologies, LLC
"Chem Strong CI"
515 Route 528
P. O. Box 3015
Lakewood, NJ 08701
Telephone: 888 - 452 – 9348

SECTION 911 - SIGNS, SIGN SUPPORTS, AND DELINEATORS

911.02.02 Breakaway Sign Supports for Ground Mounted Signs

THE ENTIRE SUBPART IS CHANGED TO:

Fabricate and construct breakaway sign supports for ground-mounted signs using materials conforming to the requirements in Table 911.02.02-1.

Table 911.02.02-1 Materials for Breakaway Sign Supports

Item	Test Method	Type or Grade	Galvanizing
Aluminum Materials (other than bracket)	911.01.01		
Bracket	B308	6061-T6	
Structural steel shapes	ASTM A709	Grade 36	ASTM A123
Steel Sheet	ASTM A1011	Grade 36	ASTM A 653
Bolts (except special bolt for coupling)	ASTM A325		ASTM A153
Special bolt for coupling	ASTM A449		ASTM A153
Cap Screw	ASTM A307		ASTM A153
Lock Washer	ANSI B18-21-1		ASTM A153
Nut	ASTM A563	Grade DH	ASTM A153
Coupling	AMS 6378 F		ASTM A153
Steel Hinge Plate	AISI 4130		ASTM 123
Anchor Rod	AISI 1045		
Anchor Coil	AISI 1008		
Anchor Washer	908.04		
Anchor Ferrule	908.04		

Submit mill certificates for the component materials.

SECTION 912 - PAINTING, COATINGS, TRAFFIC STRIPES AND TRAFFIC MARKINGS

912.03.01 Epoxy Traffic Stripes

THE SUBPART HEADING IS CHANGED TO:

912.03.01 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 SUBPART HEADING IS CHANGED TO:

912.03.02 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:

Component	**Percent by weight**
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:

Component	**Percent by weight**
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.***

912.03.03 Raised Pavement Markers (RPM)

THE FOLLOWING SUBSECTION HAS BEEN REPLACED IN ITS ENTIRETY AS FOLLOWS:

1.0 REQUIREMENTS

The marker shall meet the following specified requirements:

1.1 Color

1.1.1 The marker body shall be produced in black. The color of the retroreflective lens shall be white, yellow, red, or as specified.

1.2 Dimensions

1.2.1 The typical dimensions of the marker shall be:

Model	190		194		198	
Height	0.4 in.	(10 mm)	0.52 in.	(13 mm)	0.4 in.	(10 mm)
Width	1.9 in.	(48 mm)			1.65 in.	(42 mm)
Length	3.95 in.	(100 mm)	3.9 in.	(99 mm)	3.95 in.	(100 mm)
Face Angle	30°		35°		30 °	
Pad Thickness	.04 in.	(1.0 mm)			.04 in.	(1.0 mm)
Footprint			0.23 in.	(5.8 mm)		

1.3 Test Conditions

1.3.1 Unless otherwise specified, all test specimens shall be conditioned for 24 hours at 73.4° F ± 3.6° F (23.0° C ± 2.0° C)

1.4 Type Retroreflectance

1.4.1 Type retroreflectance refers to marker luminance measured using simplified viewing conditions as convenient means of describing uniformity of marker characteristics for quality control purposes when specifying a unique marker type. The white, yellow/amber, red, blue, or green markers shall have initial minimum retroreflectance values specified as the product of Tables 1 and 2 when measured in accordance with ASTM E809. The photometric quantity to be measured is the coefficient of retroreflected luminous intensity (R_I), expressed as millicandelas per lux (mcd/lx). One candela per lux equals 10.76 candelas per footcandle.

Table 1, Minimum R_I Values

Entrance angle ($\beta_2 = \beta_1 = 0°$)	0°	±20°
Observation angle:	.2°	.2°
Minimum R_I (cd/ftcd)	3.0	1.2
Minimum R_I (mcd/lx)	279	112

Table 2, Color Multiplying Factors

Color	White	Yellow/Amber	Red	Blue	Green
Multiplying Factor	1	0.6	0.25	0.1	0.33

Performance Retroreflectance: Performance retroreflectance refers to marker luminance as viewed by the driver under standardized road and vehicle conditions. This property is often called "Driver Geometry Retroreflection." Measurement under simulated use conditions ensures that all geometric viewing angles are taken into account during testing, including the rotation angle, which is an important consideration when evaluating markers with prismatic retroreflective lenses. The markers shall have initial minimum retroreflectance values specified as the product of Table 2 and Table 3 when measured in accordance with ASTM E809. The photometric quantity to be

measured is the coefficient of retroreflected luminous intensity (R_I), expressed as millicandelas per lux (mcd/lx). One candela per lux equals 10.76 candelas per footcandle.

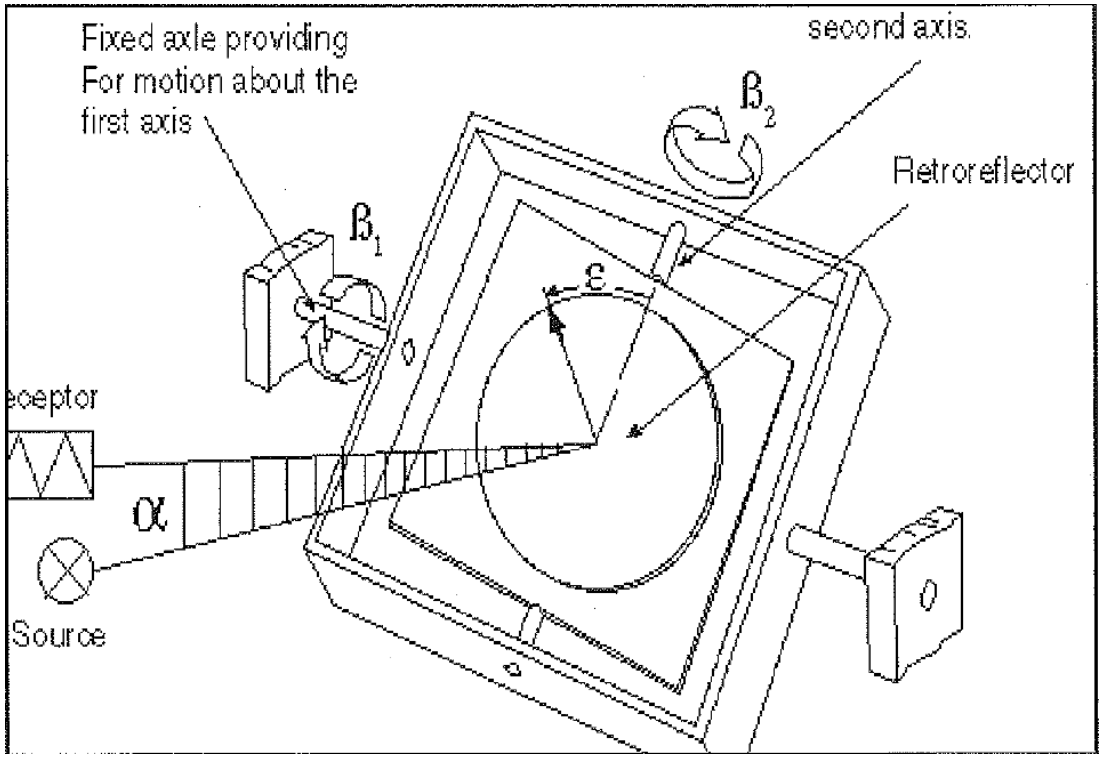
In Table 3, the angles referenced correspond to the entrance, rotation, and observation geometry for a driver in a standard vehicle with pavement markers placed on a lane line to the left of the vehicle. The measured value at each simulated distance is the sum of the marker coefficient of retroreflected luminous intensity from when illuminated by the simulated left and right headlights. Test set up and measurement geometry is illustrated in Figure 1.

Table 3, R_I "Driver Geometry"

Simulated Distance		Headlight	Observation Angle (α) (degrees)	Rotation Angle (ε) (degrees)	Entrance Angle (b)		Minimum R_I (mcd/lux) left + right
Feet	Meters				β_1	β_2	
100	30	Left	0.95	19	-2.0	-1.6	40
		Right	2.91	-72	4.6	-2.9	
300	91	Left	0.35	24	-0.7	-0.5	350
		Right	0.90	-69	1.4	-1.0	
500	152	Left	0.22	24	-0.4	-0.3	600
		Right	0.53	-68	0.8	-0.6	

Note: In laboratory testing Entrance Angles ß$_1$ and ß$_2$ are set to equal 0° and Left/Right Rotation Angles ε are set to 20°/-70° as an approximation with little loss of accuracy.

Figure 1, Driver Geometry (CIE Notation)



1.5 Retroreflected Color

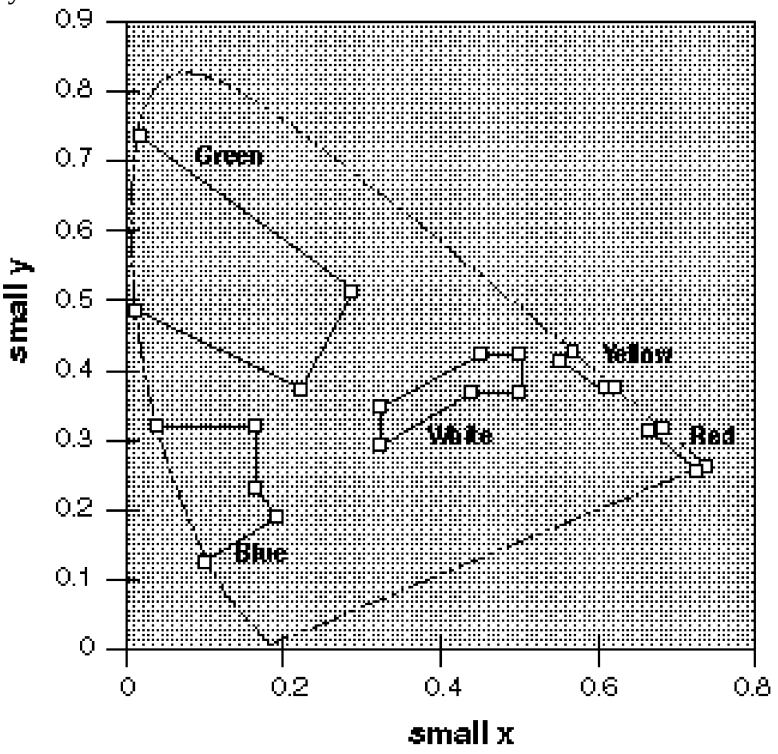
1.5.1 The retroreflected color of the markers shall lie within the respective retroreflected color gamut coordinates, plotted on the 1931 CIE Chromaticity (*x, y*) diagram, described in Table 3 and Figure 1 when tested in accordance with ASTM E811 using CIE Illuminant Source A and viewing conditions of 0.2° observation angle, 0° entrance angle. The source and receptor angular apertures shall each be 6 minutes of arc.

Table 4, Retroreflected Color Gamut Coordinates

	White		Yellow		Red		Green		Blue	
Point Number	x	y	x	y	x	y	x	y	x	y
1	0.310	0.348	0.545	0.424	0.650	0.330	0.009	0.733	0.039	0.320
2	0.453	0.440	0.599	0.439	0.668	0.330	0.288	0.520	0.160	0.320
3	0.500	0.440	0.609	0.390	0.734	0.265	0.209	0.395	0.160	0.240
4	0.500	0.380	0.597	0.390	0.721	0.259	0.012	0.494	0.183	0.218
5	0.440	0.380	-	-	-	-	-	-	0.088	0.142
6	0.310	0.283	-	-	-	-	-	-	-	-

If two points lie on the spectrum locus line, they must not be connected by a straight line, but rather should, in this case, be joined by the boundary of the spectrum locus.

Figure 1, CIE 1931 Chromaticity Chart



1.6 Adhesive Bond Strength

1.6.1 The adhesive bond strength for replacement markers (not installed in holders) will not be less than .08 MPa (12 psi) when measured in accordance with ASTM D4383.

1.7 Compressive Strength

1.7.1 The marker shall support a load of 2721kg (6,000 lbs) without breakage or significant deformation of the marker when tested in accordance with ASTM D4383. It is understood that significant deformation of the marker shall be 0.13 in. (3.2 mm).

a. Scratch Resistance

1.8.1 The marker shall meet ASTM D 4383-96 scratch resistance test. The coefficient of retroreflected luminous intensity of the markers shall be measured after subjecting the entire lens surface to 100 rubs with a 1 in. (25.4 mm) diameter flat pad of No. 3 coarse steel wool conforming to Federal Specification FF-W-1825A. A load of 50 ± 0.5 lb. (22 ± 2.0 kg.) is applied to the steel wool pad during testing. The markers shall meet the minimum retroreflective values specified as the product of values shown in Tables 1&2 and Tables 3&2.

1.9 Abrasion Resistance

1.9.1 The coefficient of retroreflected luminous intensity of the markers shall be measured after subjecting the entire lens surface to 100 grams per square centimeter of falling silica carbide per ASTM D968. The markers shall meet the minimum retroreflective values specified as the product of values shown in Tables 1&2 and Tables 3&2. Note: the marker will require indexing across the test plate to ensure all areas of the lens are subjected to the falling silica carbide.

a. **Temperature Resistance**

2.0.1 The marker shall comply with the initial minimum brightness requirements as specified as the product of values shown in Tables 1&2 after conditioning for 12 hours at 145°F ± 5°F (62.7°C ± 2.5°C).

b. Impact Resistance

2.1.1 The marker shall pass both Level 1 and Level 2 tests for meeting the high performance impact resistance standard to insure a long life marker.

2.1.1.1 Level 1 Impact Test: Standard Specification. The marker shall meet ASTM D4383-96 impact resistance test minimum requirement.

2.1.1.2 Level 2 Impact Test: Performance Specification.

The marker body shall display no cracking or breakage outside the impact area when tested according to ASTM D2444 Tup A, using a 1000 gm weight from a height of 1 meter. The marker shall be positioned in such a way that the Tup strikes top of the marker.

The marker lens shall display no cracking outside the impact area greater than ¼" (0.635 cm) when tested according to ASTM D2444 Tup A, using a 1000 gm weight from a height of 1 meter. The marker shall be placed in a fixture designed to hold the marker lens horizontal and positioned such that the TUP strikes the center of the lens.

2.2 Resistance to Penetration of Water

2.2.1 The markers shall be conditioned for 10 minutes at 145°F ± 5°F (62.7°C ± 2.5°C) and then immediately submerged in a water bath at 70°F ± 5°F (21°C ± 2.5°C) for 10 minutes. The markers should then be removed from the water bath, wiped dry with a soft cloth, visually inspected for penetration of water behind the lens, and measured for reflectivity in accordance with ASTM E809. The markers shall meet the initial minimum retroreflectance specified as the product of values shown values in Tables 1 & 2.

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 ± 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 ± 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 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.

SECTION 1108 - DETECTABLE WARNING SURFACES

1108.1 General.

Detectable warnings shall consist of a surface of truncated domes aligned in a square grid pattern and shall comply with 1108.

1108.1.1 Dome Size.

Truncated domes in a detectable warning surface shall have a base diameter of 0.9 inches (23 mm) minimum to 1.4 inches (36 mm) maximum, a top diameter of 50% of the base diameter minimum to 65% of the base diameter maximum, and a height of 0.2 inches (5 mm).

1108.1.2 Dome Spacing.

Truncated domes in a detectable warning surface shall have a center-to-center spacing of 1.6 inches (41 mm) minimum and 2.4 inches (61 mm) maximum, and a base-to-base spacing of 0.65 inches (16 mm) minimum, measured between the most adjacent domes on square grid.

1108.1.3 Contrast.

Detectable warning surfaces shall contrast visually with adjacent walking surfaces either light on dark or dark-on-light.

1108.1.4 Size.

Detectable warning surfaces shall extend 24 inches (610 mm) minimum in the direction of travel and the full width of the curb ramp, landing, or blended transition.

1108.2.1 Curb Ramps and Blended Transitions.

The detectable warning surface shall be located so that the edge nearest the curb line is 6 inches (150 mm) minimum and 8 inches (205 mm) maximum from the curb line.

THE FOLLOWING IS ADDED TO THIS SECTION:

1) Material - The DWS panel is to be a homogenous glass and carbon composite which is colorfast and UC stable. Truncated domes are to be fiberglass reinforced. The DWS panel color is to be uniform throughout and shall not rely on any type of paint coating to achieve color stability.

2) Physical Characteristics:

Compressive Strength	28,900 psi	ASTM D 695
Flexural Strength	29,300 psi	ASTM D 790
Water Absorption	.07%	ASTM D 570
Slip Resistance	1.18 Dry/1.05 Wet	ASTM C 1028
Flame Spread Index	20	ASTM E 84
Salt Spray	No Change (200 hours)	ASTM B 117
Chemical Stain Testing	No Deterioration	ASTM 1308
Abrasion Resistance	549	ASTM C 501
Accelerated Weathering	Delta E < 5.0 (2,000 hours)	ASTM G 155
Tensile Strength	11,600 psi	ASTM D 638
Adhesion to Concrete (20° -180°)	No Delamination or Degradation	ASTM C 903
Freeze/Thaw/Heat	No Disintegration	ASTM C 1026

END TECHNICAL SPECIFICATIONS

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

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

PREVAILING WAGE RATE DETERMINATION

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

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

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

Prevailing Wage Rate

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

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

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

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

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

Apprentice Rate Schedule

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

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

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

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

Comments/Notes

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

Public Works Contractor Registration

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

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

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

Snow Plowing

Snow plowing contracts are <u>not</u> 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**

	03/01/18
Journeyman (Mechanic)	W37.98 B23.93 T61.91

Craft: Air Conditioning & Refrigeration - Service and Repair **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
As Shown	Mo. 1-3	Mo. 4-12	2nd Year	3rd Year	4th Year	5th Year		Wage = %	of Jnymn	Wage
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**

	01/01/18
Foreman	W49.50 B42.52 T92.02
General Foreman	W51.50 B43.50 T95.00
Journeyman	W44.50 B40.92 T85.42

Craft: Boilermaker **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
1000 Hours	65%	70%	75%	80%	85%	90%	95%			
Benefit =	34.83	35.70	36.58	37.44	38.32	39.19	40.05			

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, hoilday 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.

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**

	01/01/18
Foreman	W33.54 B16.17 T49.71
General Foreman	W34.04 B16.17 T50.21
Mechanic	W32.04 B16.17 T48.21

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**									
6 Months	40%	50%	55%	60%	65%	70%	75%	80%		
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

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**

	11/01/17	05/01/18	11/01/18
Foreman	W55.11 B31.41 T86.52	W0.00 B0.00 T87.29	W0.00 B0.00 T88.54
Journeyman	W47.92 B27.31 T75.23	W0.00 B0.00 T76.48	W0.00 B0.00 T77.73

Craft: Carpenter **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
Yearly	40%	55%	65%	80%	90%					
Benefit	57% of	Appren	tice	Wage Rate	for all	intervals				

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**

	11/01/17	05/01/18	11/01/18
Foreman	W55.11 B31.41 T86.52	W0.00 B0.00 T87.29	W0.00 B0.00 T88.54
Journeyman	W47.92 B27.31 T75.23	W0.00 B0.00 T76.48	W0.00 B0.00 T77.73

Craft: Carpenter - Resilient Flooring **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
Yearly	40%	55%	65%	80%	90%					
Benefit	57%	of	Appren	tice	Wage Rate	for all	intervals			

Ratio of Apprentices to Journeymen - *

* 1 apprentice shall be allowed to every 2 journeymen or major fraction therof. 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.

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**

	12/13/17	05/01/18	11/01/18
Diver	W57.54 B45.57 T103.11	W0.00 B0.00 T104.36	W0.00 B0.00 T105.61
Tender	W45.80 B45.57 T91.37	W0.00 B0.00 T92.62	W0.00 B0.00 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**

	12/13/17	05/01/18	11/01/18
Foreman	W52.67 B45.57 T98.24	W0.00 B0.00 T99.24	W0.00 B0.00 T100.49
Foreman (Concrete Form Work)	W51.87 B32.46 T84.33	W0.00 B0.00 T85.35	W0.00 B0.00 T86.60
Journeyman	W45.80 B45.57 T91.37	W0.00 B0.00 T92.62	W0.00 B0.00 T93.87
Journeyman (Concrete Form Work)	W45.10 B32.46 T77.56	W0.00 B0.00 T78.81	W0.00 B0.00 T80.06

Craft: Dockbuilder **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
Yearly	18.32	22.90	29.77	36.64						
Benefit	30.57	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**

APPRENTICE RATE SCHEDULE FOR CONCRETE FORM WORK ONLY:

INTERVAL PERIOD AND RATES
Yearly 18.04 22.55 29.32 36.08
Benefits 22.46 for all intervals

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.

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**

INTERVAL	**PERIOD AND RATES**									
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	Rate
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.

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**

	11/15/17	10/29/18	10/28/19	11/02/20
Master Technician/General Foreman	W53.52 B29.43 T82.95	W54.86 B30.17 T85.03	W56.16 B30.89 T87.05	W57.42 B31.58 T89.00
Senior Technician/Lead Foreman (21-30 Workers on Job)	W48.99 B26.94 T75.93	W50.22 B27.62 T77.84	W51.41 B28.27 T79.68	W52.56 B28.91 T81.47
Technician A/Foreman (11-20 Workers on Job)	W46.93 B25.81 T72.74	W48.11 B26.46 T74.57	W49.25 B27.08 T76.33	W50.35 B27.69 T78.04
Technician B/Working Foreman (4-10 Workers on Job)	W44.88 B24.67 T69.55	W46.00 B25.30 T71.30	W47.09 B25.90 T72.99	W48.15 B26.47 T74.62
Technician C/Journeyman (1-3 Workers on Job)	W41.17 B22.64 T63.81	W42.20 B23.21 T65.41	W43.20 B23.76 T66.96	W44.17 B24.29 T68.46

Craft: Electrician - Teledata (15 Voice/Data Lines & Less) **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
6 Months					66%	72%	79%	86%		
Benefits					11.81	12.89	14.14	15.40		

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	35%	35%	40%	43%	48%	54%	61%	67%	74%	81%
Benefits	6.76	6.76	7.16	7.70	8.59	9.66	10.82	11.99	13.25	14.51

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.

- 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**

INTERVAL	PERIOD AND RATES									
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**

INTERVAL	PERIOD AND RATES									
* 6 Months	60%	65%	70%	75%	80%	85%	90%			
Benefits	67% of	Appren	tice	Wage	Rate	for all	intervals			

Craft: Electrician-Utility Work (North) **COMMENTS/NOTES**

Electrician-Utility Work (North) rates are located in the "Statewide" rate package.

* The apprentice wage rate is paid at the percentage of the Journeyman Lineman wage rate located in the "Statewide" rate package.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - 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**

INTERVAL	PERIOD AND RATES									
6 Months	28.24	30.60	32.95	35.30	37.66	40.01	42.36			
Benefits	24.29	25.67	27.03	28.40	29.77	31.13	32.51			

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**

INTERVAL	PERIOD AND RATES									
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 B39.91 T89.05	W50.49 B41.66 T92.15

Craft: Elevator Modernization & Service **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
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**

INTERVAL	PERIOD AND RATES									
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**

	09/27/17
Foreman	W53.77 B31.17 T84.94
General Foreman	W56.32 B32.28 T88.60
Journeyman	W52.49 B30.61 T83.10

Craft: Heat & Frost Insulator **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
Yearly	24.40	28.94	34.95	40.96						
Benefits	18.33	21.68	23.89	25.96						

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**

	09/27/17
Asbestos Helper Abatement	W34.42 B23.37 T57.79

Craft: Heat & Frost Insulator - Asbestos Worker **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	SEE	HEAT &	FROST	INSULATOR						

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**									
6 Months	50%	60%		Yearly	70%	80%	90%			

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:

- 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**

	11/01/17	05/01/18
Class A Journeyman	W32.90 B28.02 T60.92	W0.00 B0.00 T62.57
Class B Journeyman	W32.40 B28.02 T60.42	W0.00 B0.00 T62.07
Class C Journeyman	W27.54 B28.02 T55.56	W0.00 B0.00 T57.45
Foreman	W37.01 B28.02 T65.03	W0.00 B0.00 T66.48
General Foreman	W41.13 B28.02 T69.15	W0.00 B0.00 T70.40

Craft: Laborer - Building **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
6 Months	60%	70%	80%	90%						
Benefit	24.77	24.77	24.77	24.77						

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 nozzlemen 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

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**

INTERVAL	PERIOD AND RATES									
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**

As of 3-1-18, benefits shall be $20.23.
As of 9-1-18, benefits shall be $20.28.
As of 3-1-19, benefits shall be $21.03.
As of 3-1-20, benefits shall be $21.78.

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, includimg 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,

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**

	11/01/17
Foreman	W55.21 B32.62 T87.83
Journeyman	W48.01 B28.44 T76.45

Craft: Millwright **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
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**

INTERVAL	PERIOD AND RATES									
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**

INTERVAL	PERIOD AND RATES									
Yearly	70%	75%	of Rod/	Chainman	Wage					
Yearly			80%	90%	Transit/	Instrument	man	Wage		

Ratio of Apprentices to Journeymen - *

* No more than 1 Field Engineer Apprentice per Survey Crew.

Craft: Operating Engineer - Field Engineer **COMMENTS/NOTES**

Operating Engineer - Field Engineer rates are located in the "Statewide" rate package.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - 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**									
6 Months	40%	50%			60%	70%		80%	90%	
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**

	12/01/17
Apprentice (1st year)	W25.45 B11.00 T36.45
Apprentice (2nd year)	W29.45 B18.00 T47.45
Foreman (Charge Person)	W37.60 B18.17 T55.77
Journeyman 1 (at least 1 year of working exp. as a journeyman)	W33.33 B18.17 T51.50
Journeyman 2 (at least 2 years of working exp. as a journeyman)	W37.10 B18.17 T55.27

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**

	08/03/17
Foreman	W43.18 B23.26 T66.44
General Foreman	W47.10 B23.51 T70.61
Journeyman	W39.25 B23.01 T62.26

Craft: Painter - 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: 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.

- 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**

INTERVAL	PERIOD AND RATES									
	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 B41.12 T93.38	W0.00 B0.00 T95.60	W0.00 B0.00 T97.82
Journeyman	W48.51 B38.18 T86.69	W0.00 B0.00 T88.91	W0.00 B0.00 T91.13

Craft: Pipefitter **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
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

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.

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									
Yearly	30%	45%	55%	65%	75%					
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 of 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**

INTERVAL	PERIOD AND RATES									
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**

	10/01/17
Foreman	W34.79 B32.89 T67.68
Journeyman	W33.54 B32.89 T66.43

Craft: Sheet Metal Sign Installation **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
1000 hours	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%
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 though 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**

INTERVAL	**PERIOD AND RATES**									
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**

	01/23/18
Foreman	W63.38 B27.67 T91.05
General Foreman	W66.39 B27.67 T94.06
Journeyman	W59.28 B27.67 T86.95

Craft: Sprinkler Fitter **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
1000 Hours	10.50	12.25	50%	55%	60%	65%	70%	75%	80%	85%
Benefits	11.27	11.27	22.67	22.67	22.67	22.67	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	11.27	11.27	22.67	22.67	22.67	22.67	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**

	01/01/18
Finisher	W46.66 B34.18 T80.84

Craft: Tile Finisher-Marble **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
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**

	12/04/17
Finisher	W44.14 B29.76 T73.90
Setter	W57.27 B33.02 T90.29

Craft: Tile Setter - Ceramic **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
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**

	01/01/18
Tile Setter	W58.53 B36.37 T94.90

Craft: Tile Setter - Marble **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
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**

	01/01/18
Grinder or Assistant	W53.45 B34.90 T88.35
Mechanic	W55.05 B34.92 T89.97
Terrazzo Resinous Worker	W45.90 B28.27 T74.17

Craft: Tile Setter - Mosaic & Terrazzo **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
750 Hours	50%	55%	60%	65%	70%	75%	85%	95%	100%	

Ratio of Apprentices to Journeymen - 1:5

Craft: Tile Setter - Mosaic & Terrazzo **COMMENTS/NOTES**

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM ON OR AFTER 1-1-18:

INTERVAL PERIOD AND RATES
1500 Hours 35% 45% 60% 70% 80% 90% 100%

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**

	11/01/17	05/01/18	11/01/18
Bucket, Utility, Pick-up, Fuel Delivery trucks	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 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 B34.58 T71.56	W37.41 B35.40 T72.81	W37.81 B35.80 T73.61
Helper on Asphalt Distributor truck	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 B34.58 T71.41	W37.26 B35.40 T72.66	W37.66 B35.80 T73.46
Straight 3-axle truck	W36.88 B34.58 T71.46	W37.31 B35.40 T72.71	W37.71 B35.80 T73.51
Tractor Trailer (all types)	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 B34.58 T71.41	W37.26 B35.40 T72.66	W37.66 B35.80 T73.46
Winch Trailer	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.

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**

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". 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.

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

TERRITORY
ENTIRE STATE

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

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.

OPERATING ENGINEERS **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
48.98	31.70	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, Tree Shearer

Bulldozer, finish grade

Cableway

Carryall

Concrete Pump

Concrete Pumping System (Pumpcrete & similar types)

Conveyor, 125 feet or longer

Drill Doctor (Duties include dust collector and maintenance)

Front End Loader (2 cu. yds. but less than 5 cu. yds.)

Grader, finish

Groove Cutting Machine (ride-on type)

Heater Planer

Hoist: Outside Material Tower Hoist (all types including steam, gas, diesel, electric, air hydraulic, single and double drum, concrete, brick shaft caisson, snorkle roof, and other similar types, Except Chicago-boom type) * receives an addtional $1.00 per hour on 100 ft. up to 199 ft. total height, and an additional $2.00 per hour on 200 ft. and over total height.

Hydraulic Crane (10 tons & under)

Hydraulic Dredge

Hydro-Axe

Hydro-Blaster

OPERATING ENGINEERS **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
48.98	31.70	80.68	82.03	83.03	85.38

CLASSIFICATIONS:

Jack (screw, air hydraulic, power-operated unit, or console type, Except hand jack or pile load test type)

Log Skidder

Pan

Paver, concrete

Plate & Frame Filter Press

Pumpcrete (unit type)

Pumpcrete, Squeezecrete, or Concrete Pumping machine (regardless of size)

Scraper

Side Boom

Straddle Carrier (Ross and similar types)

Whiphammer

Winch Truck (hoisting)

OPERATING ENGINEERS **Rates Expiration Date : 03/31/2020**

Effective Dates:

	01/01/2018		**07/01/2018**	**01/01/2019**	**07/01/2019**
Rate	Fringe	Total	Total	Total	Total
47.07	31.70	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 (Hetzel, Rexomatic & similar types)

Concrete Vibrator

OPERATING ENGINEERS **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
47.07	31.70	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

Goldhofer/Hydraulic Jacking Trailer

Grader & Motor Patrols

Grout Pump

Gunnite Machine (Excluding nozzle)

Hammer - Vibratory (in conjunction with generator)

Heavy Equipment Robotics - Operator/Technician

Hoist (roof, tugger, aerial platform hoist, house car)

Hopper

Hopper Doors (power operated)

Ladder (motorized)

OPERATING ENGINEERS **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
47.07	31.70	78.77	80.12	81.12	83.47

CLASSIFICATIONS:

Laddervator

Locomotive (Dinky-type)

Maintenance Utility Man

Master Environmental Maintenance Technician

Mechanic

Mixer (Except paving mixers)

Pavement Breaker (truck-mounted or small self-propelled ride-on type)

Pavement Breaker - maintenance of compressor or hydraulic unit

Pipe Bending Machine (power)

Pitch Pump

Plaster Pump (regardless of size)

Post Hole Digger (post pounder, auger)

Rod Bending Machines

Roller (black top)

Scale (power)

Seamen Pulverizing Mixer

Shoulder Widener

Silo

Skimmmer Machine (boom type)

Steel Cutting Machine (service & maintenance)

Tamrock Drill

Tractor

Transfer Machines

OPERATING ENGINEERS **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
47.07	31.70	78.77	80.12	81.12	83.47

CLASSIFICATIONS:

Tug Captains

Tug Master (Power Boats)

Ultra High Pressure Waterjet Cutting Tool System - Operator/Maintenance Technician

Vacuum Blasting Machine - Operator/Maintenance Technician

Vibrating Plant (used with unloading)

Welder & Repair Mechanic

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
43.73	31.70	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

Tire Repair & Maintenance

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
41.15	31.70	72.85	74.20	75.20	77.55

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman

OPERATING ENGINEERS **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
51.31	31.70	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:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
50.57	31.70	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

Cranes, Derricks, Pile Drivers (all types), under 100 tons with a boom (including jib and/or leads) under 100 ft.

Draglines

Drill, Bauer, AMI and similar types

Drillmaster, Quarrymaster

Drillmaster/Quarrymaster (down-the-hole drill), rotary drill, self-propelled hydraulic drill, self-powered drill

Elevator Grader

Field Engineer-Chief of Party

Front End Loader (5 cu. yards or larger)

Gradall

Grader, Rago

Helicoptor Co-Pilot

Helicoptor Communications Engineer

Juntann Pile Driver

Locomotive (large)

Mucking Machine

OPERATING ENGINEERS **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
50.57	31.70	82.27	83.62	84.62	86.97

CLASSIFICATIONS:

Pavement & Concrete Breaker (Superhammer & Hoe Ram)

Pile Driver

Prentice Truck

Roadway Surface Grinder

Scooper (loader & shovel)

Shovel (Excavator)

Trackhoe (Excavator)

Tree Chopper with boom

Trenching Machine (cable plow)

Tunnel Boring Machine

Vacuum Truck

OPERATING ENGINEERS **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
45.44	31.70	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

OPERATING ENGINEERS **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
45.44	31.70	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 proprane, 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:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
52.39	31.70	84.09	85.44	86.44	88.79

CLASSIFICATIONS:

Helicoptor Pilot/Engineer

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
57.07	31.70	88.77	90.12	91.12	93.47

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), 100 tons and over and TOWER CRANE with boom (including jib and/or leads) 140 ft. and over

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
56.07	31.70	87.77	89.12	90.12	92.47

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), 100 tons and over and TOWER CRANE with boom (including jib and/or leads) from 100 ft. to 139 ft.

OPERATING ENGINEERS **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
52.57	31.70	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:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
55.07	31.70	86.77	88.12	89.12	91.47

CLASSIFICATIONS:

Cranes, Derricks, Pile Driver (all types), 100 tons and over and TOWER CRANE with a boom (including jib and/or leads) under 100 ft.

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
51.57	31.70	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:

01/01/2018			**07/01/2018**	**01/01/2019**	**07/01/2019**
Rate	Fringe	Total	Total	Total	Total
54.20	31.70	85.90	87.25	88.25	90.60

CLASSIFICATIONS:

Helicopter Co-Pilot & Communications Engineer

STRUCTURAL STEEL ERECTION **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
50.14	31.70	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

STRUCTURAL STEEL ERECTION **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
47.48	31.70	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)

Concrete Cleaning/Decontamination Machine Operator

Conveyor or Tugger Hoist

Directional Boring Machine

Elevator or House Car

Fireman

Forklift

Generator (2 or 3)

Heavy Equipment Robotics, Operator/Technician

Maintenance Utility Man

Master Environmental Maintenance Technician

Tug Master (Power Boats)

Ultra High Pressure Waterjet Cutting Tool System Operator/Maintenance Technician

Vacuum Blasting Machine Operator/Maintenance Technician

Welding Machines, Gas or Electric Converters on any type-2 or 3 in battery including diesels

STRUCTURAL STEEL ERECTION **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
45.95	31.70	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:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
44.19	31.70	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)

Off Road Back Dump

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
51.76	31.70	83.46	84.81	85.81	88.16

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (Minimum)

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
41.15	31.70	72.85	74.20	75.20	77.55

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman

STRUCTURAL STEEL ERECTION **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
50.90	31.70	82.60	83.95	84.95	87.30

CLASSIFICATIONS:

Field Engineer-Chief of Party

Vacuum Truck

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
59.09	31.70	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) 100 tons and over and Tower Cranes.

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
57.43	31.70	89.13	90.48	91.48	93.83

CLASSIFICATIONS:

Cranes (all cranes, land or floating with booms including jib, less than 140 ft. abovr ground), Derricks (all derricks. land, floating or Chicago Boom type with booms including jib, less than 140 ft. above ground), Pile Drivers (all types), 100 tons and over and Tower Crane.

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
54.59	31.70	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:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
52.93	31.70	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.

STRUCTURAL STEEL ERECTION **Rates Expiration Date : 03/31/2020**

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
54.59	31.70	86.29	87.64	88.64	90.99

CLASSIFICATIONS:

Helicopter Pilot & 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:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
50.57	31.70	82.27	83.62	84.62	86.97

CLASSIFICATIONS:

Driller

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
43.73	31.70	75.43	76.78	77.78	80.13

CLASSIFICATIONS:

Driller's Helper

FREE AIR TUNNEL JOBS **Rates Expiration Date : 02/28/2021**

{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

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Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
42.00	29.73	71.73	73.03	75.78	78.28

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
41.70	29.73	71.43	72.73	75.48	77.98

CLASSIFICATIONS:

Heading Foreman, Shaft Foreman, Rod Foreman, Electrician Foreman, Rigging Foreman

FREE AIR TUNNEL JOBS **Rates Expiration Date : 02/28/2021**

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
41.20	29.73	70.93	72.23	74.98	77.48

CLASSIFICATIONS:

Iron Foreman, Caulking Foreman, Form Foreman, Cement Finishing Foreman, Concrete Foreman, Track Foreman, Cleanup Foreman, Grout Foreman

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
43.70	29.73	73.43	74.73	77.48	79.98

CLASSIFICATIONS:

Blaster

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
40.65	29.73	70.38	71.68	74.43	76.93

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
40.30	29.73	70.03	71.33	74.08	76.58

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:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
40.15	29.73	69.88	71.18	73.93	76.43

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)

FREE AIR TUNNEL JOBS **Rates Expiration Date : 02/28/2021**

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
39.75	29.73	69.48	70.78	73.53	76.03

CLASSIFICATIONS:

All Others (including Powder Watchman, Change House Attendant, Top Laborer)

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:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
49.32	31.70	81.02	82.37	83.37	85.72

CLASSIFICATIONS:

Driller

Effective Dates:

01/01/2018			07/01/2018	01/01/2019	07/01/2019
Rate	Fringe	Total	Total	Total	Total
42.48	31.70	74.18	75.53	76.53	78.88

CLASSIFICATIONS:

Driller's Helper

OPERATING ENGINEERS MARINE-DREDGING **Rates Expiration Date : 09/30/2018**

NOTE: These wage rates only apply to dredging and other marine construction activities occurring in navigable waters and their tributaries.
Boat crews carrying explosive material (dynamite, pourfex, and other similar materials) shall be paid at 120% of the hourly wage rate for hours engaged in handling of said materials. Employees required to possess a Hazardous Material Certification as a condition of employment shall be compensated at 120% of the hourly wage rate.
OVERTIME:
Hours in excess of 40 per week, and all hours on Saturdays and Sundays, shall be paid at time and one-half the hourly rate. All hours on holidays shall be paid at double the hourly rate.
RECOGNIZED HOLIDAYS: New Year's Day, Martin Luther King Day, Good Friday, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

Effective Dates:

10/01/2017

Rate	Fringe	Total
38.18	14.33	52.51

CLASSIFICATIONS:

Lead Dredgerman, Operator, Leverman

Licensed Tug Operator (over 1000 HP)

Effective Dates:

10/01/2017

Rate	Fringe	Total
33.03	13.92	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:

10/01/2017

Rate	Fringe	Total
31.09	13.77	44.86

CLASSIFICATIONS:

Certified Welder

OPERATING ENGINEERS MARINE-DREDGING **Rates Expiration Date : 09/30/2018**

Effective Dates:

10/01/2017

Rate	Fringe	Total
30.24	13.40	43.64

CLASSIFICATIONS:

Mate, Drag Barge Operator, Steward, Assistant Fill Placer

Welder

Effective Dates:

10/01/2017

Rate	Fringe	Total
29.26	13.32	42.58

CLASSIFICATIONS:

Boat Operator

Effective Dates:

10/01/2017

Rate	Fringe	Total
24.30	12.62	36.92

CLASSIFICATIONS:

Shoreman, Deckhand, Rodman, Scowman

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

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 : 02/28/2021**

"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:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
41.50	29.73	71.23	72.53	75.28	77.78

CLASSIFICATIONS:

Paving Foreman

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
40.05	29.73	69.78	71.08	73.83	76.33

CLASSIFICATIONS:

Head Raker

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
39.90	29.73	69.63	70.93	73.68	76.18

CLASSIFICATIONS:

Raker, Screedman, Luteman

ASPHALT LABORERS - SOUTH **Rates Expiration Date : 02/28/2021**

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
39.65	29.73	69.38	70.68	73.43	75.93

CLASSIFICATIONS:

Tampers, Smoothers, Kettlemen,
Painters, Shovelers, Roller Boys

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
39.75	29.73	69.48	70.78	73.53	76.03

CLASSIFICATIONS:

Milling Controller

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
39.95	29.73	69.68	70.98	73.73	76.23

CLASSIFICATIONS:

Traffic Control Coordinator

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:

10/17/2017

Rate	Fringe	Total
31.62	25.55	57.17

CLASSIFICATIONS:

Helper (4th year helper)

Effective Dates:

10/17/2017

Rate	Fringe	Total
39.69	25.55	65.24

CLASSIFICATIONS:

Driller

Effective Dates:

10/17/2017

Rate	Fringe	Total
45.73	25.55	71.28

CLASSIFICATIONS:

Foreman

HEAVY & GENERAL LABORERS - NORTH **Rates Expiration Date : 02/28/2021**

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:

	03/01/2018		**09/01/2018**	**03/01/2019**	**03/01/2020**
Rate	Fringe	Total	Total	Total	Total
39.25	29.73	68.98	70.28	73.03	75.53

CLASSIFICATIONS:

"D" Rate:
basic, landscape, asphalt, slurry seal, or railroad track laborer; utility meter installer; flagman; salamander tender; pitman; dumpman; rakers or tampers on cold patch work; wrappers or coaters of pipe; waterproofer; timberman; wagon drill or drill master helper; powder carrier; magazine tender; signal man; power buggy operator; tree cutter; operator of basic power tools

Effective Dates:

	03/01/2018		**09/01/2018**	**03/01/2019**	**03/01/2020**
Rate	Fringe	Total	Total	Total	Total
39.95	29.73	69.68	70.98	73.73	76.23

CLASSIFICATIONS:

"C" Rate:
pipe layer; laser man; conduit or duct line layer; operator of jack hammer, chipping hammer, pavement breaker, concrete cutter, asphalt cutter, sheet hammer, or walk-behind saw cutter; sandblaster; acetylene cutting or burning; wagon drill, directional drill, or hydraulic drill operator; drill master; core driller; traffic control coordinator; asphalt raker or lute man

HEAVY & GENERAL LABORERS - NORTH **Rates Expiration Date : 02/28/2021**

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
40.20	29.73	69.93	71.23	73.98	76.48

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:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
43.75	29.73	73.48	74.78	77.53	80.03

CLASSIFICATIONS:

"A" Rate:
blaster

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
41.50	29.73	71.23	72.53	75.28	77.78

CLASSIFICATIONS:

"FOREMAN" Rate:
labor foreman, asphalt foreman, drill foreman, pipe foreman, grade foreman, finisher foreman, concrete foreman

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
42.50	29.73	72.23	73.53	76.28	78.78

CLASSIFICATIONS:

"GENERAL FOREMAN" Rate

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date : 02/28/2021**

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:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
39.25	29.73	68.98	70.28	73.03	75.53

CLASSIFICATIONS:

basic, landscape, or railroad track laborer; utility meter installer; flagman; salamander tender; pitman; dumpman; rakers or tampers on cold patch work; wrappers or coaters of pipe; waterproofers; tree cutter, timberman

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
39.25	29.73	68.98	70.28	73.03	75.53

CLASSIFICATIONS:

wagon drill or drill master helper; powder carrier; magazine tender; signal man

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date : 02/28/2021**

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
39.95	29.73	69.68	70.98	73.73	76.23

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:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
39.95	29.73	69.68	70.98	73.73	76.23

CLASSIFICATIONS:

wagon or directional drill operator; drill master

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
43.75	29.73	73.48	74.78	77.53	80.03

CLASSIFICATIONS:

blaster

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
41.50	29.73	71.23	72.53	75.28	77.78

CLASSIFICATIONS:

labor foreman, drill foreman, pipe foreman, grade foreman, finisher foreman, concrete foreman

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
42.50	29.73	72.23	73.53	76.28	78.78

CLASSIFICATIONS:

general foreman

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date : 02/28/2021**

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
40.20	29.73	69.93	71.23	73.98	76.48

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

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

PIPELINE - GAS DISTRIBUTION **Rates Expiration Date : 10/31/2020**

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:

11/05/2017			11/01/2018	11/01/2019
Rate	Fringe	Total	Total	Total
58.83	22.55	81.38	82.96	84.63

CLASSIFICATIONS:

Pipeline Journeyman Welder

Effective Dates:

11/05/2017			11/01/2018	11/01/2019
Rate	Fringe	Total	Total	Total
58.83	22.55	81.38	82.96	84.63

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

11/05/2017			11/01/2018	11/01/2019
Rate	Fringe	Total	Total	Total
37.68	16.74	54.42	56.00	57.67

CLASSIFICATIONS:

Pipeline Helper

ASPHALT LABORERS- NORTH **Rates Expiration Date : 02/28/2021**

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:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
41.50	29.73	71.23	72.53	75.28	77.78

CLASSIFICATIONS:

Asphalt Foreman

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
40.20	29.73	69.93	71.23	73.98	76.48

CLASSIFICATIONS:

Asphalt Screedman

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
39.95	29.73	69.68	70.98	73.73	76.23

CLASSIFICATIONS:

Asphalt Raker or Lute Man

ASPHALT LABORERS- NORTH **Rates Expiration Date : 02/28/2021**

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
39.25	29.73	68.98	70.28	73.03	75.53

CLASSIFICATIONS:

Asphalt Laborer

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date : 11/30/2021**

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 wokday 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:

12/05/2017			**12/02/2018**	**12/01/2019**	**11/29/2020**
Rate	Fringe	Total	Total	Total	Total
53.70	35.97	89.67	92.06	94.45	96.84

CLASSIFICATIONS:

Chief Lineman

Effective Dates:

12/05/2017			**12/02/2018**	**12/01/2019**	**11/29/2020**
Rate	Fringe	Total	Total	Total	Total
50.66	33.94	84.60	86.85	89.11	91.36

CLASSIFICATIONS:

Journeyman Lineman

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date : 11/30/2021**

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
50.66	33.94	84.60	86.85	89.11	91.36

CLASSIFICATIONS:

Special License Operator

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
50.16	33.60	83.76	85.98	88.22	90.44

CLASSIFICATIONS:

Transit Man

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
48.64	32.58	81.22	83.38	85.53	87.70

CLASSIFICATIONS:

Line Equipment Operator

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
42.56	28.51	71.07	72.96	74.84	76.73

CLASSIFICATIONS:

Dynamite Man

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
63.33	42.43	105.76	108.56	111.38	114.19

CLASSIFICATIONS:

General Foreman

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
58.26	39.03	97.29	99.88	102.47	105.05

CLASSIFICATIONS:

Assistant General Foreman

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date : 11/30/2021**

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
56.74	38.01	94.75	97.27	99.79	102.32

CLASSIFICATIONS:

Line Foreman

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
41.04	27.49	68.53	70.35	72.17	73.99

CLASSIFICATIONS:

Street Light Mechanical Leader

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
39.01	26.13	65.14	66.88	68.62	70.34

CLASSIFICATIONS:

Groundman Winch Operator

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
39.01	26.13	65.14	66.88	68.62	70.34

CLASSIFICATIONS:

Groundman Truck Operator

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
38.51	25.80	64.31	66.01	67.71	69.43

CLASSIFICATIONS:

Street Light Mechanic

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
38.51	25.80	64.31	66.01	67.71	69.43

CLASSIFICATIONS:

Line Equipment Mechanic

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date : 11/30/2021**

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
32.93	22.06	54.99	56.46	57.91	59.38

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
30.40	20.36	50.76	52.12	53.47	54.80

CLASSIFICATIONS:

Groundman 1st Year

Effective Dates:

12/05/2017			12/02/2018	12/01/2019	11/29/2020
Rate	Fringe	Total	Total	Total	Total
50.16	33.60	83.76	85.98	88.22	90.44

CLASSIFICATIONS:

Line Equipment Foreman

ELECTRICIAN- UTILITY WORK (SOUTH) **Rates Expiration Date : 12/04/2021**

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 wokday 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 are more than twenty (20) employees on site.
A small job crew shall consist of five (5) or less employees, one (1) of the Journeyman Linemen in the crew shall be designated as a Small Job Foreman.
Work performed from ladders and/or mechanical lift equipment shall be the work of Linemen and/or Apprentices.
On new construction, fitting and framing poles, towers or structures may be done by Journeymen and/or Apprentices. Groundmen may assist, but may not perform any work which would be performed by Linemen if assembled in the air.
There shall be a Journeyman Lineman in each pole setting, erection, grounding, wire and cable-pulling crew of more than three (3) men.

Effective Dates:

12/03/2017

Rate	Fringe	Total
60.25	46.05	106.30

CLASSIFICATIONS:

General Foreman

ELECTRICIAN- UTILITY WORK (SOUTH) **Rates Expiration Date : 12/04/2021**

Effective Dates:

12/03/2017

Rate	Fringe	Total
53.66	42.21	95.87

CLASSIFICATIONS:

Foreman

Effective Dates:

12/03/2017

Rate	Fringe	Total
50.84	40.58	91.42

CLASSIFICATIONS:

Small Job Foreman

Effective Dates:

12/03/2017

Rate	Fringe	Total
47.07	38.39	85.46

CLASSIFICATIONS:

Heavy Equipment Operator

Effective Dates:

12/03/2017

Rate	Fringe	Total
47.07	38.39	85.46

CLASSIFICATIONS:

Cable Splicer

Effective Dates:

12/03/2017

Rate	Fringe	Total
47.07	38.39	85.46

CLASSIFICATIONS:

Journeyman Lineman

Effective Dates:

12/03/2017

Rate	Fringe	Total
47.07	38.39	85.46

CLASSIFICATIONS:

Journeyman Welder

ELECTRICIAN- UTILITY WORK (SOUTH) **Rates Expiration Date : 12/04/2021**

Effective Dates:

12/03/2017

Rate	Fringe	Total
47.07	38.39	85.46

CLASSIFICATIONS:

Journeyman Painter

Effective Dates:

12/03/2017

Rate	Fringe	Total
37.66	32.92	70.58

CLASSIFICATIONS:

Light Equipment Operator

Effective Dates:

12/03/2017

Rate	Fringe	Total
32.95	30.18	63.13

CLASSIFICATIONS:

Groundman Truck Driver

Effective Dates:

12/03/2017

Rate	Fringe	Total
30.60	28.82	59.42

CLASSIFICATIONS:

Groundman 3rd Year

Effective Dates:

12/03/2017

Rate	Fringe	Total
28.24	27.44	55.68

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

12/03/2017

Rate	Fringe	Total
25.89	26.08	51.97

CLASSIFICATIONS:

Groundman 1st Year

ELECTRICIAN- UTILITY WORK (SOUTH) **Rates Expiration Date : 12/04/2021**

Effective Dates:

12/03/2017

Rate	Fringe	Total
20.71	23.07	43.78

CLASSIFICATIONS:

Flagman

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS **Rates Expiration Date : 02/28/2021**

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:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
63.00	29.73	92.73	94.41	97.91	101.16

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
62.55	29.73	92.28	93.96	97.46	100.71

CLASSIFICATIONS:

Heading Foreman, Shaft Foreman, Rod Foreman, Electrical Foreman, Rigging Foreman

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS **Rates Expiration Date : 02/28/2021**

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
61.80	29.73	91.53	93.21	96.71	99.96

CLASSIFICATIONS:

Iron Foreman, Caulking Foreman, Form Foreman, Cement Finishing Foreman, Concrete Foreman, Track Foreman, Clean-up Foreman, Grout Foreman

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
65.55	29.73	95.28	96.96	100.46	103.71

CLASSIFICATIONS:

Blaster

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
60.98	29.73	90.71	92.38	95.88	99.13

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
60.45	29.73	90.18	91.86	95.36	98.61

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:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
60.23	29.73	89.96	91.63	95.13	98.38

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 : 02/28/2021**

Effective Dates:

03/01/2018			09/01/2018	03/01/2019	03/01/2020
Rate	Fringe	Total	Total	Total	Total
59.63	29.73	89.36	91.03	94.53	97.78

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

March 6, 2018

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.

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	EXPIRATION_DATE
360 Golf, LLC	**300 Mamaroneck Avenue, #733, White Plains, NY 10605**	**06/29/2018**
Michael Lenec, Partner	300 Mamaroneck Ave, White Plains, NJ 10605	
Devin Lemere, Partner	300 Mamaroneck Ave, # 133, White Plains, NY 10605	
A P Roofing & Siding, LLC **A. Perin Roofing & Siding, LLC**	**259 Main Street, Chester, NJ 07930**	**12/20/2020**
Adelino Perin, President	12 Valley Place, Chester, NJ 07930	
A.V. Construction, Inc.	**12 Verduci Dr., Newtown, PA 18940**	**05/25/2018**
Michael Verduci, President	12 Verduci Drive, Newtown, PA 18940	
Ackerson Contracting Inc.	**182 Van Dyke Road, Hopewell, NJ 08525**	**03/05/2020**
Denise Ackerson, President	182 Van Dyke Road, Hopewell, NJ 08525	
Advantage Contracting & Entertainment Services Inc	**319 Terrace Street, Rahway, NJ 07065**	**05/07/2018**
John H. Madara, President	319 Terrace St, Rahway, NJ 07065	
Advantage Sport USA, Inc.	**1 Tigan Street, Winooski, VT 05404**	**01/19/2019**
Maurice Guarigilia, Owner / Officer	494 North Barbor Road, Colchester, VT 05446	
All Jersey Fence Co.	**10 Route 46 West, Clifton, NJ 07011**	**09/14/2019**
Charles Viola, President	266 Columbus Avenue, Hasbrouck Heights, NJ 07604	
Agostino Ducato, Vice-President	223 Spring Valley Road, Paramus, NJ 07652	
Anchor Marine of Toms River	**1991 Rte-9, Toms River, NJ 08755**	**12/18/2019**
Lawarence Koos, Owner	1391 White Oak Botton Rd, Tom River, NJ 08755	
Antiveros Construction, Inc.	**677 Old Highway 64, Etowah, NC 28729**	**10/19/2018**
Donnie Antiveros, President	677 Old Highway 64, Etowah, NC 28729	
Olga Conteras, Vice-President	677 Old Highway 64, Etowah, NC 28729	
Apex Tower Services, Inc.	**245 Sharp Road, Marlton, NJ 08053**	**02/09/2019**
Richard Pluese, Vice-President	66 E Cedar Avenue, Marlton, NJ 08053	
Aracon Mechanical LLC	**136 Ocean Ave, Monmouth Beach, NJ 07750-0775**	**09/18/2020**
Alexander Arcadia, Principal	136 Ocean Avenue, Monmouth Beach, NJ 07750-0775	

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	EXPIRATION_DATE
Arete Development Inc.	**20 Industrial Road, Fairfield, NJ 07004**	**01/04/2019**
Arete Development Inc.		
Justin Ettere, Vice-President	52 Brass Castle Road, Washington, NJ 07882	
John Ettere, Owner	1453 Tooz Place, South Plainfield, NJ 07080	
Matthew Ettere, Vice-President	8 Brookside Drive, Warren, NJ 07059	
Jonathan Ettere, President	7 Craig Road, Readington, NJ 08853	
Aztech Management, Inc.	**86 Christopher Street, Montclair, NJ 07042**	**11/17/2019**
Aztech Management, Inc.		
Constantine Vivian, President	86 Christopher Street, Montclair, NJ 07042	
Bogert Millwork Company, Inc.	**105 Johnson Ave., Hackensack, NJ 07601**	**06/08/2019**
Anthony Yaniero, Vice-President	848 Bogert Road, River Edge, NJ 07661	
Susan Yaniero, Owner	848 Bogert Road, River Edge, NJ 07661	
Bravo General Contractors Inc	**72 Charlotte Drive, Churchville, PA 18966**	**11/20/2020**
John Hunsecker, Vice-President	72 Charlotte Drive, Churchville, PA 18966	
Brian Parker, LLC	**115 Ardmore Avenue, Haddonfield, NJ 08033**	**08/06/2020**
Brian Parker, Owner	115 Ardmore Avenue, Haddonfield, NJ 08033	
Brian Patterson Mechanical Contracting, Inc.	**5 Cindy Lane, Ocean, NJ 07712**	**03/29/2018**
Brian Patterson, President	11 Arlene Drive, West Long Branch, NJ 07764	
Build Rite LLC	**16 Darlington Drive, Wayne, NJ 07470**	**01/17/2020**
Louis Pacelli, Manager	16 Darlington Drive, Wayne, NJ 07470	
C & E Contracting, Inc.	**PO Box 690, Boonton, NJ 07005**	**12/15/2018**
Donald Fleming, President	340 Reservoir Road, Boonton, NJ 07005	
CAM Contractors Inc.	**179-15 Route 46 West, Suite 135, Rockaway, NJ 07866**	**12/06/2019**
Michelle Gamache-Caravella, President	179-15 Route 46, Suite 135, Rockaway, NJ 07866	
Joseph Caravella, Manager	179-15 Route 46, Rockaway, NJ 07866	
Cam Flooring Installations LLC	**26 Washington Street, Long Branch, NJ 07718**	**08/31/2019**
Jose Fernandes Da Silva, Owner	26 Washington St., Long Branch, NJ 07718	
CBC Enterprises LLC	**424 Commerce Lane, West Berlin, NJ 08091**	**03/05/2021**
Leo Baiocco, President	2383 Atco Avenue, Atco, NJ 08004	
CertaPro Painters of South Jersey LLC	**910 Cedar Street, Millville, NJ 08332**	**02/03/2019**
Mark Kahn, Owner	910 Cedar Street, Millville, NJ 08332	
CJC Builders Corp.	**220 Mount Pleasant Ave., Newark, NJ 07104**	**01/07/2019**
Curillo Guaman, Owner	197 Broad Street, Newark, NJ 07104	
Clifford Pool Tile & Coping LLC	**84 Tecumseh Trail, Medford Lakes, NJ 08055**	**08/16/2020**
Clifford Alphonso, Owner	84 Tecumseh Trail, Medford Lakes, NJ 08055	
Conex Construction Corp.	**265 Wilson Avenue, Kearny, NJ 07032**	**01/19/2019**
Armando Piedade, President	265 Wilson Avenue, Kearny, NJ 07032	
Confortini Plumbing & Heating, LLC	**491 West County Drive, Somerville, NJ 08876**	**07/05/2019**
Andrew Confortini, Vice-President	491 West County Drive, Somerville, NJ 08876	
Anthony Confortini, Owner	41 Bunnvale Road, Clifton, NJ 07830	
Coons Construction, LLC	**23178 Summer View Circle, Three Springs, PA 17264**	**04/06/2018**
William Coons, Owner	23178 Summer View Circle, Three Springs, PA 17264	
Cougar Power and Electric, LLC	**126 Fountain Avenue, Piscataway, NJ 08854**	**01/05/2020**
Kevin F. Mandel, Owner	186 Sunshine Drive, Piscataway, NJ 08854	
CRC Concrete Raising of South Jersey, Inc.	**110 South Harding Highway, Landisville, NJ 08326**	**02/01/2019**
Theresa Frajdenberg, President	110 South Harding Highway, Landisville, NJ 08326	

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	EXPIRATION_DATE
Dane DeForest Demolition, Inc.	**1508 Beaver Dam Road, Point Pleasant, NJ 08742**	**02/15/2019**
Dane DeForest, President	2406 Herbertsville Road, Point Pleasant, NJ 08742	
DAS Industrial, LLC **DAS Industrial Limited Liability Company**	**41 Pine Street, Rockaway, NJ 07866**	**01/08/2020**
Vincent Manganiello, Managing Member	2 Perona Road, Andover, NJ 07821	
Dawkins Plumbing & Construction LLC.	**1057 Haddon Ave, Camden, NJ 08103**	**01/01/2021**
Michael Dawkins, Manager	1057 Haddon Avenue, Camden, NJ 08103	
DCI Signs & Awnings Inc.	**110 Riverside Avenue, Newark, NJ 07104-0710**	**04/10/2020**
Danny Castillo, President	645 Bancroft Road, Brick, NJ 08724	
DG Construction & Renovations LLC	**245 Emanuel St., Trenton, NJ 08610**	**04/04/2019**
Dean Gallo, Owner	245 Emanuel Street, Trenton, NJ 08610	
Harry Gallo, Secretary	245 Emanuel Street, Trenton, NJ 08610	
DiClemente Contractors, Inc. **DiClemente Contractors, Inc.**	**1515 10th Street, Fort Lee, NJ 07024**	**12/27/2020**
Gail Maiello, President	1515 10th Street, Fort Lee, NJ 07024	
Discovery Floor Covering LLC	**658 Pennsylvania Ave, Elizabeth, NJ 07201**	**02/05/2021**
Segundo Gallegos, Owner	528 Linden Ave, Suite 2, Elizabeth, NJ 07202	
Arianna Rengito Miranda, Owner	658 Pennsylvania Ave, Apt 4, Elizabeth, NJ 07201	
E & S Enterprises, LLC	**P. O. Box 2050, Vineland, NJ 08360**	**01/27/2019**
Helen Henriquez, Owner	101 South Orchard Road, Vineland, NJ 08360	
Eddy Drywall, LLC	**1100 W. 7th St., Apt. A9, Plainfield, NJ 07060**	**05/13/2018**
Eddy Rodriguez, Member	1100 W. 7th. St., Apt. A9, Plainfield, NJ 07063	
EDM Contracting, Inc	**270 Crescent Place, Yonkers, NY 10704**	**10/01/2020**
John Makris, Jr., President	270 Crescent Place, Yonkers, NY 10704	
Efficient Electric LLC **Efficient Electric LLC**	**c/o Malachi Velez, 6 Hampton Court, Jersey City, NJ 07302**	**02/05/2021**
Malachi Velez, Member	6 Hampton Court, Jersey City, NJ 07302	
Elite Demolition, LLC	**120 Springbrook Trail, Sparta, NJ 07871**	**04/10/2020**
Stephen DiFilippi, Owner	120 Springbrook Trail, Sparta, NJ 07871	
Elite Terrazzo Flooring, Inc.	**185 Fifth Ave., Paterson, NJ 07524**	**10/18/2019**
Christopher Picinic, Owner	164 President Blvd, Washington Township, NJ 07676	
Empire Construction	**560 Mountain Ave, North Caldwell, NJ 07006**	**09/06/2020**
Louis Malfitano, Owner	560 Mountain Ave, North Caldwell, NJ 07006	
Everest Masonry Construction, Inc.	**163 E Main Street, Suite 311, Little Falls, NJ 07424**	**11/08/2018**
Rafael Ramos, President	120 Cantello Street, Union City, NJ 07087	
Everest Masonry Constructors, Inc.	**1 Orient Way, Suite 226, Rutherford, NJ 07070**	**11/08/2018**
Mark Rodrigues, President	523 Hamilton Avenue, Kingston, PA 18704	
Felipe Villagomez **owner**	**160 Lincoln Street, Bridgeton, NJ 08302**	**03/08/2019**
Felipe Villagomez, Owner	160 Lincoln Street, Bridgeton, NJ 08302	
Fittin Construction, LLC	**2243 Edgar Rd, Point Pleasant Beach, NJ 08742**	**02/23/2019**
Sheree Severini-Fittin, Member	2243 Edgar Rd., Point Pleasant Beach, NJ 08742	
Thomas Fittin, Owner / Officer	2243 Edgar Rd, Point Pleasant Beach, NJ 08742	
G.F.I. Siteworks, Inc. **G.F.I. Siteworks, Inc.**	**P.O. Box 296, Clarksboro, NJ 08020**	**02/02/2019**
James DiLorenzo, Vice-President	440 Mantua Avenue, Paulsboro, NJ 08066	
Salvatore A Casella III, President	362 Friendship Road, Clarksboro, NJ 08020	

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	EXPIRATION_DATE
Galindo Const. LLC	**1025 E. 23rd St. #1, Paterson, NJ 07513**	**08/06/2018**
Gabino Galindo, Owner	1025 E. 23rd St. #1, Paterson, NJ 07513	
Gen II Contracting Co. Inc.	**395 A Millstone Road, Clarksburg, NJ 08510**	**11/20/2019**
Jaimie-Lyn Knight, President	395 Millstone Road, Clarksburg, NJ 08510	
Griffin Sign, Inc.	**464 North Randolph Avenue, Cinnaminson, NJ 08077**	**03/13/2019**
Michelle Angerame, President	12 Pendleton Court, Medford, NJ 08055	
GST Power Service Group Inc.	**2801 Remington Street, Suite #3, Fort Collins, CO 80525**	**05/03/2018**
Lauchland Roberts, President	2801 Remington Street, Suite 3, Fort Collins, CO 80526	
Harold Arenberg Inc.	**1711 Route 9 North, Swainton, NJ 08210**	**12/29/2019**
Jeffrey Arenberg, President	741 Dias Creek Road, Cape May Court House, NJ 08210	
Daniel Arenberg, Vice-President	1711 Route 9 North, Swainton, NJ 08210	
Heritage Hills Estates	**3730 S. Delsea Dr, Vineland, NJ 08360**	**01/03/2019**
Frank Carpine, Owner	100 Liberty Dr, Millville, NJ 08332	
Hernandez Drywall Construction, Inc.	**421 N. Warrick Road, Magnolia, NJ 08049**	**09/24/2020**
Oscar Hernandez, President	421 N. warrick Road, Magnolia, NJ 08049	
HFC Painting	**696 Elm Street, Kearny, NJ 07032**	**03/17/2018**
Hugo Canabe, CEO	696 Elm St, Kearny, NJ 07032	
High Mountain Construction, Inc.	**296 Oakwood Avenue, North Haledon, NJ 07508**	**04/09/2020**
Infinity Flooring **Infinity Performance Inc.**	**7002 N. Park Ave., Indianapolis, IN 46220**	**01/08/2021**
George Atkinson, President	6735 N. Meridian St., Indianapolis, IN 46260	
Install It All. LLC	**575 Prospect Street, Unit 261 B, Lakewood, NJ 08701**	**12/18/2018**
Laurence Koos, Owner	1391 White Oak Bottom Rd., Toms River, NJ 08755	
Interstate Home Service Inc. **Interstate Home Service Inc.**	**165 Heights Avenue, Fair Lawn, NJ 07410**	**08/16/2018**
Maurice Rolando, Owner	165 Height's Ave., Fair Lawn, NJ 07410	
J & B Plumbing LLC	**644 Cross Street, Lakewood, NJ 08701**	**05/03/2018**
Joseph Battista, Owner	11 Hummingbird Way, Jackson, NJ 08527	
J G Roofing, LLC	**85 Prospect Ave. Apt.1, Irvington, NJ 07111**	**04/25/2019**
Manuel Chaguan, Owner	85 Prospect Ave., Irvington, NJ 07111	
J&D Plumbing & Heating Inc.	**193 Natrona Avenue, Mercerville, NJ 08619**	**11/01/2018**
John J. Benedetti Jr., President	193 Natrona Avenue, Mercerville, NJ 08619	
J. MOTA Construction, LLC	**1016 Highway 33, Freehold, NJ 07728**	**11/30/2019**
J.C. Maintenance & Repair	**6725 13th Avenue, Brooklyn, NY 11219**	**03/14/2019**
Emanuel Cucco, Owner	1435 71st Street, Brooklyn, NY 11228	
Jack Mack Commercial Roofing, Inc.	**768 Courtlandt St., Perth Amboy, NJ 08861**	**03/17/2018**
Gregorio Soto, Owner	153 Lewis Street, Perth Amboy, NJ 08861	
Jamali Developers, LLC	**238 Fresh Ponds Road, Suite 100, Monroe, NJ 08816**	**03/26/2020**
Hussain Burhanpurwala, Member	553 Marc Drive, North Brunswick, NJ 08902	
JB Contracting, Inc.	**12 Commodore Drive, Lake Hopatcong, NJ 07849**	**05/17/2020**
William Allan Crayne, Partner	178 Espanong Road, Lake Hopatcong, NJ 07849	
Stanley Kapusta, President	12 Commodore Drive, Lake Hopatcong, NJ 07849	
JC Builders	**610 County Meadows Rd., Nicholls, GA 31554**	**08/10/2018**
James Chaney, President	610 County Meadows Rd., Nicholls, GA 31554	
Jersey Heavy Drywall	**107 Jefferson Street, Passaic, NJ 07055**	**07/04/2020**
Ruben Gonzalez, Owner	107 Jefferson Street, Passaic, NJ 07055	

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	EXPIRATION_DATE
Jerzee Container Corp. **SUSPENDED PENDING DEBARMENT**	**123 Bartlett Avenue, West Creek, NJ 08092**	**SUSPENDED**
Jon Whelan, Vice-President	48 8th Avenue, New York, NY 10014	
Sandra Morizzo, Member	165 Oak Ave, West Creek, NJ 08092	
Thomas Whelan, President	PO Box 155, Spring Lake, NJ 07762	
Joseph Filoon Jr, Manager	195 Lakeshore Dr, Manahawkin, NJ 08050	
Jesus Aparicio-Santos, LLC	**26 Sunset Street, South River, NJ 08882**	**05/14/2020**
Jesus Aparicio-Santos, Owner	26 Sunset Street, South River, NJ 08882	
Joe Antonaccio Electric	**167 2nd St., Keyport, NJ 07735**	**06/07/2019**
Joseph Antonaccio, President	167 2nd St., Keyport, NJ 07735	
Johnson Tree Transplanting LLC	**1340 LeJack Circle, Forest, VA 24551**	**07/14/2019**
Nathan Johnson, Owner	5352 Lake Road, Newfield, NJ 08344	
Jessica Johnson, Member	5352 Lake Road, Newfield, NJ 08344	
K & J Drywall Contractor, Inc.	**705 Taft Avenue, North Plainfield, NJ 07063**	**03/16/2019**
Jonny Ayala, Owner	68 Westervelt Avenue, Plainfield, NJ 07060	
K Hanrahan Enterprises, Inc. **K Hanrahan Enterprises, Inc.**	**20-21 Wagaraw Road, Bldg 36, Fair Lawn, NJ 07410**	**12/26/2020**
Kevin Hanrahan, President	17 Oakwood Drive, Ringwood, NJ 07456-0745	
Kitchen Crafters Plus d/b/a B&B Custom Cabinets	**1 Suydam Place, Aberdeen, NJ 07747**	**05/31/2018**
Albert Brisebois, Owner	1 Suydam Place, Aberdeen, NJ 07747	
Kosakowski Plumbing & Heating Inc.	**27 Center Avenue, Morristown, NJ 07960**	**07/12/2020**
Edward Kosakowski, Owner	27 Center Avenue, Morristown, NJ 07960	
KS Exteriors, LLC **KS Exteriors, LLC**	**650 Ohio Ave., Trenton, NJ 08638**	**03/08/2019**
Kris Brezinska, Owner	650 Ohio Ave., Trenton, NJ 08638	
Lab Construction Inc.	**607 Jackson Road, Williamstown, NJ 08094**	**06/14/2020**
Lee Barnes, President	607 Jackson Road, Williamstown, NJ 08094	
Low Bid, Inc.	**125 East Broadway, Suite 507, Long Beach, NY 11561**	**08/18/2019**
George McNulty, President	125 East Broadway, Suite 507, Long Beach, NY 11561	
M.E. Group, LLC	**164 Polk St., Apt. 1, Newark, NJ 07105**	**06/29/2018**
Segundo E. Llivicota, Member	164 Polk Street, Apt. #1, Newark, NJ 07105	
Manuel Quito, Member	164 Polk Street, Apt. 1, Newark, NJ 07105	
Ma Na Lu Transportation Corporation	**799 Kearny Avenue, Apt #1, Kearny, NJ 07032**	**06/07/2019**
Blanca Segarra, President	799 Kearny Ave., Apt 1, Kearny, NJ 07032	
Matos Construction, LLC **Wagner Matos**	**77 Williamson Court, Bridgewater, NJ 08807**	**01/12/2020**
Nimali Matos, Owner	77 Williamson Court, Bridgewater, NJ 08807	
Wagner Matos, Owner	77 Williamson Court, Bridgewater, NJ 08807	
Matrix Management Const. LLC	**2 New Castle Lane, Willingboro, NJ 08046**	**11/28/2020**
Kenneth Hicks, Owner	2 New CAstle Lane, Willingboro, NJ 08046	
McArthur Park, Inc./ dba Bleacherman	**105 Mill Street, Corinth, NY 12822**	**11/01/2019**
Louis R. McArthur Jr., Owner / Officer	13 Luzerne Place, Hadley, NY 12835	
McGarrigle's Carpet, LLC	**1500 Carlene Street, Langhorne, PA 19047**	**07/05/2020**
David McGarrigle, Owner	1500 Carlene St., Langhorne, PA 19047	
Metropolitan Stone & Tile, LLC	**102 Richards Ave, Dover, NJ 07801**	**09/23/2018**
Margaret Farina, Owner	30 Monsisnor Deluca Plaza, Nutley, NJ 07110	
MNC General Contracting Inc.	**PO Box 503, Oakhurst, NJ 07755**	**01/02/2020**
Maria Abreu, President	2 Beach Haven Way, Waretown, NJ 08758	

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	EXPIRATION_DATE
Mullen & Sons Contractors, Inc.	**PO Box 773, West Caldwell, NJ 07006**	**02/28/2019**
John Mullen, Sr, President	45 Fairfield Place, West Caldwell, NJ 07006	
John Mullen, Jr., Owner	45 Fairfield Place, West Caldwell, NJ 07006	
New Jersey State Flooring, Inc.	**109 Greentree Road, Brick, NJ 08724**	**02/10/2019**
Roy C. Apgar, President	109 Greentree Road, Brick, NJ 08724	
Cheryl Apgar, Vice-President	109 Greentree Road, Brick, NJ 08724	
Niceta Electric	**2119 Merritt Drive, Northfield, NJ 08225**	**10/19/2018**
Joseph Niceta, Owner	2119 Merritt Drive, Northfield, NJ 08225	
NT&P Construction Inc.	**105 White Oak Lane, Old Bridge, NJ 08857**	**11/22/2018**
Nicola Pengue, President	4 Camelot Avenue, Monroe Township, NJ 08831	
OTS-NJ, LLC **OTS of New Jersey, LLC**	**21 Traxler Street, Butler, OH 44822**	**07/04/2019**
James T. O'Connor, Managing Member	707 Main Street, Avon-by-the-Sea, NJ 07717	
Paint-Pro, Inc.	**P.O. Box 1288, East Windsor, NJ 08520**	**08/21/2020**
George Demetriades, President	125 Heritage St., Robbinsville, NJ 08691	
Palazzo Fence Co	**96 Taylor Dr, Levittown, PA 19054**	**06/26/2019**
Troy Palazzo, Owner	96 Taylor Dr, Levittown, PA 19054	
Patrick Concrete Constructors Inc.	**2455 State Route 21, Canandaigua, NY 14424**	**06/13/2020**
John Bell, President	2455 State Route 21, Canandaigua, NY 14424	
Paul F. Roscitt Electric, Inc.	**262 Harmon Avenue, Fort Lee, NJ 07024**	**11/08/2018**
Paul F Roscitt, President	262 Harmon Avenue, Fort Lee, NJ 07024	
Perfection Erectors, LLC **Perfection Erectors, LLC**	**349 West Prospect Avenue, Keyport, NJ 07735**	**02/23/2019**
Marianne Cammarata, Manager	349 W. Prospect Ave., Keyport, NJ 07735	
Vincent Frank Cammarata, Owner	349 W. Prospect Avenue, Keyport, NJ 07735	
Perrone Trucking LLC	**74 Glen Roy Road East, Fairfield, NJ 07004**	**10/27/2018**
James Perrone, Owner	74 Glenroy Road East, Fairfield, NJ 07004	
Peter Vincent	**129 Highland Ave, Jersey City, NJ 07306**	**04/26/2018**
Peter Vincent, Owner	129 Highland Ave, Jersey City, NJ 07306	
Petric & Associates, Inc.	**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	
Pin Tribal Construction, LLC	**50 Drift Avenue, Lawrence, NJ 08648**	**01/29/2021**
Mark W. Holmes Sr., President	50 Drift Avenue, Lawrence, NJ 08648	
PL&J Construction Corp.	**73 Chestnut St., West Orange, NJ 07052**	**11/28/2020**
Luis Palaguachi, Owner	73 Chestnut Street, West Orange, NJ 07052	
PSM Rojas Construction, LLC	**161 E. 16th St, Paterson, NJ 07524**	**12/06/2019**
Mikey Rojas, Operating Agent	161 East 16th St., Paterson, NJ 07524	
Quality Plus Builders, Inc. **Quality Plus Builders, Inc.**	**PO 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	
R & B Construction	**2008 Carmel Road, Millville, NJ 08332**	**06/10/2018**
Roxanne Lloyd, President	2008 Carmel Road, Millville, NJ 08332	
Remcon Enterprises LLC	**25 Pine Street, Suite 9, Rockaway, NJ 07866**	**02/12/2020**
Joshua Jackson, President	4 Lynn Dr., Andover, NJ 07821	
Jon Warbeck, Vice-President	680 Pine Brook Road, Lincoln Park, NJ 07035	

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	EXPIRATION_DATE
Resco, LLC **Hallmark Electric, LLC**	**P.O. Box 806, Old Saybrook, CT 06475**	**10/21/2018**
David Peckham, Owner	15 Elm Street, Old Saybrook, CT 06475	
Ricky Plumbing LLC **Ricky Plumbing LLC**	**1792 Margarets Walk Road, Fleming Island, FL 32033**	**09/17/2020**
Enrique Trabal, Managing Member	1792 Margarets Walk Road, Fleming Island, FL 32003	
Rizzo New York Inc. **Rizzo New York Inc.**	**109-02 Jamaica Avenue, Richmond Hill, NY 11418**	**01/19/2019**
Rizwan Ahmad, President	9157 97th St, Wood Haven, NY 11421	
Robert Foss Electric, LLC	**1084 Bethlehem Pike, Montgomeryville, PA 18936**	**12/27/2019**
Caroline Foss, Owner	1344 Meadow Lane, Perkasie, PA 18944	
Robert Foss, Vice-President	1344 Meadow Lane, Perkasie, PA 18944	
RW Assembly & Install LLC	**110 Stevens Avenue, Cedar Grove, NJ 07009**	**07/12/2020**
Richard Weling, Owner	110 Stevens Avenue, Cedar Grove, NJ 07009	
Sandora & Spina Contracting Inc.	**15 North Branch River Rd., Branchburg, NJ 08876**	**06/28/2018**
Edward Sandora, President	15 North Branch River Rd., Branchburg, NJ 08876	
SDT Transport LLC	**12 Clifford Rd, Wanaque, NJ 07465**	**08/25/2019**
Stephen Tripodi, Owner	12 Clifford Rd, Wanaque, NJ 07465	
Seminole Construction, L.L.C. **.** **SUSPENDED PENDING DEBARMENT**	**128 Bartlett Ave, West Creek, NJ 08092**	**SUSPENDED**
Sandra Morizzo, Managing Member	165 Oak Ave., West Creek, NJ 08092	
Joseph Filoon Jr., Manager	195 Lakeshore Dr, Manahawkin, NJ	
Somerset Electrical Services	**48 Junction Rd., Flemington, NJ 08822**	**02/05/2021**
Ralph Epright, Owner	48 Junction Rd., Flemington, NJ 08822	
Southern State Contracting Services LLC	**51 Pine Dr S., Brick, NJ 08723**	**06/26/2019**
Joseph F. Gleason Jr., President	51 Pine Dr. S, Brick, NJ 08724	
Squillace Steel Fabricators, LLC **Squillace Steel Fabricators, LLC**	**771 Amsterdam Avenue, Roselle, NJ 07203**	**05/31/2019**
Rachel Squillace, Manager	771 Amsterdam Ave., Roselle Park, NJ 07203	
Richard Squillace, President	771 Amsterdam Avenue, Roselle Park, NJ 07203	
Steven Keares, Inc. **Keares Electrical Contractor, Inc.**	**633 Jeffers Circle, Exton, PA 19341**	**02/02/2020**
Steven P. Keares, CEO	211 Downing Road, Downingtown, PA 19335	
Steven Trucking Corp	**47 Railroad Ave, Netcong, NJ 07857**	**10/17/2019**
Fabian Martinez, President	28 Bowlby Street, Dover, NJ 07801	
Terra-Tech Construction, Inc.	**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	
Timster Trucking Inc. **SUSPENDED PENDING DEBARMENT**	**128 Bartlett Avenue, West Creek, NJ 08092**	**SUSPENDED**
Sandra Morizzo, Partner	165 Oak Ave, West Creek,	
Joseph Filoon Jr., President	165 Oak Avenue, West Creek, NJ 08092	
TJB Air Conditioning And Heating	**2305 Garry Rd. Suite A, Cinnaminson, NJ 08077**	**02/28/2019**
Timothy Babbitt, Owner	2305 Garry Rd. Suite A, Cinnaminson, NJ 08077	
Todd Cable Construction, LLC	**151 Old State Rd., Newport, NY 13416**	**04/26/2018**
Todd E. Warmingham, Owner	P.o. Box 215, Newport, NY 13416	
Top Notch Tree & Landscape, LLC	**70 East Allendale Rd., Saddle River, NJ 07458**	**12/06/2018**
James Van Wyckhouse, Owner	46 Tam O Shanter Rd, Mahwah, NJ 07430	

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	EXPIRATION_DATE
TQM Construction Corporation	**21 Patriot Xing, Rockaway, NJ 07866-4826**	**03/22/2019**
Balwant DeVre, President	21 Patriot Crossing, Rockaway, NJ 07866	
Tropical Landscaping LLC	**3 Christopher Street, Sayerville, NJ 08872**	**10/23/2020**
Marcos De Oliveira, Managing Member	3 Christopher Street, Sayerville, NJ 08872	
Turf Services Express LLC	**26 North Broad Street, Medford, NJ 08055**	**03/26/2018**
Sharleen Poppalardo, Managing Member	11 Muirfield Court, Medford, NJ 08055	
Turfscapes LLC	**PO Box 950, Williamstown, NJ 08094**	**08/22/2019**
Jeffrey Grize, Owner	3477 S. Blackhorse Pike, Williamstown, NJ 08094	
Twin Industries	**15 Lewis Street, Eatontown, NJ 07724**	**04/04/2019**
Jeanne Crispino, Vice-President	15 Lewis Street, Eatontown, NJ 07724	
Ultimate Roofing, LLC	**1013 Grandview Avenue, Union, NJ 07083**	**12/12/2019**
Paige Moriarty, Member	1013 Grandview Avenue, Union, NJ 07083	
Ultra Construction LLC **Ultra Construction Limited Liability Company**	**2303 Owen Court, Toms River, NJ 08755**	**12/14/2020**
Christopher Zimmermann, Manager	2303 Owen Court, Toms River, NJ 08755	
Suzanne Zimmermann, Member	2303 Owen Court, Toms River, NJ 08755	
Unique Contractors **Unique Contractors**	**3606 Academy Road, Philadelphia, PA 19154**	**01/11/2020**
Juan Garro, Owner	3606 Academy Road, Philadelphia, PA 19154	
Van Peenen Landscape Contractors, Inc. **Van Peenen Landscape Contractors, Inc.**	**555 Preakness Avenue,, Suite 210, Totowa, NJ 07512**	**11/22/2018**
Raymond Van Peenen, President	3 Gates Place, Wayne, NJ 07470	
Vision Construction Group, Inc. **Vision Construction Group, Inc.**	**10 Liberty Street, Edison, NJ 08837**	**08/27/2020**
Andrew Bello, President	2341 Achilles Street, Port Charlotte, FL 33980	
Gerard Chiusolo, Member	674 Edgewood Place, North Brunswick, NJ 08902	
Warbeck Construction Group LLC	**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	
Warren Contractors LLC	**85 Tracey Station Road, Manalapan, NJ 07726**	**06/14/2020**
Joseph Zawada, Manager	211 Brewers Bridge Road, Jackson, NJ 08527	
Weather Tight Foam Insulation, Inc.	**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	
YP Construction Inc.	**1582 Route 27, Edison, NJ 08817**	**06/29/2020**
Yun Ping Zheng, President	1582 Route 27, Edison, NJ 08817	

SUSPENDED PENDING DEBARMENT:

CONTRACTORS AND SUBCONTRACTORS	ADDRESS	SUSPEND DATE
Jerzee Container Corp.	**123 Bartlett Avenue, West Creek, NJ 08092**	**09/23/2016**
Sandra Morizzo, Member	165 Oak Ave, West Creek, NJ 08092	
Thomas Whelan, President	PO Box 155, Spring Lake, NJ 07762	
Jon Whelan, Vice-President	48 8th Avenue, New York, NY 10014	
Joseph Filoon Jr, Manager	195 Lakeshore Dr, Manahawkin, NJ 08050	
Seminole Construction, L.L.C.	**128 Bartlett Ave, West Creek, NJ 08092**	**09/23/2016**
Sandra Morizzo, Managing Member	165 Oak Ave., West Creek, NJ 08092	
Joseph Filoon Jr., Manager	195 Lakeshore Dr, Manahawkin, NJ	
Timster Trucking Inc.	**128 Bartlett Avenue, West Creek, NJ 08092**	**09/23/2016**
Joseph Filoon Jr., President	165 Oak Avenue, West Creek, NJ 08092	
Sandra Morizzo, Partner	165 Oak Ave, West Creek,	

LIST OF DEBARRED OWNERS/OFFICERS

3/6/2018

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.
Clifford Alphonso, Owner	84 Tecumseh Trail, Medford Lakes, NJ 08055	Clifford Pool Tile & Coping LLC
Michelle Angerame, President	12 Pendleton Court, Medford, NJ 08055	Griffin Sign, Inc.
Donnie Antiveros, President	677 Old Highway 64, Etowah, NC 28729	Antiveros Construction, Inc.
Joseph Antonaccio, President	167 2nd St., Keyport, NJ 07735	Joe Antonaccio Electric
Jesus Aparicio-Santos, Owner	26 Sunset Street, South River, NJ 08882	Jesus Aparicio-Santos, LLC
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	New Jersey State Flooring, Inc.
Alexander Arcadia, Principal	136 Ocean Avenue, Monmouth Beach, NJ 07750-0775	Aracon Mechanical LLC
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	Harold Arenberg Inc.
George Atkinson, President	6735 N. Meridian St., Indianapolis, IN 46260	Infinity Flooring Infinity Performance Inc.
Jonny Ayala, Owner	68 Westervelt Avenue, Plainfield, NJ 07060	K & J Drywall Contractor, Inc.
Timothy Babbitt, Owner	2305 Garry Rd. Suite A, Cinnaminson, NJ 08077	TJB Air Conditioning And Heating
Leo Baiocco, President	2383 Atco Avenue, Atco, NJ 08004	CBC Enterprises LLC
Lee Barnes, President	607 Jackson Road, Williamstown, NJ 08094	Lab Construction Inc.
Joseph Battista, Owner	11 Hummingbird Way, Jackson, NJ 08527	J & B Plumbing LLC
John Bell, President	2455 State Route 21, Canandaigua, NY 14424	Patrick Concrete Constructors Inc.
Andrew Bello, President	2341 Achilles Street, Port Charlotte, FL 33980	Vision Construction Group, Inc. Vision Construction Group, Inc.
John J. Benedetti Jr., President	193 Natrona Avenue, Mercerville, NJ 08619	J&D Plumbing & Heating Inc.
Kris Brezinska, Owner	650 Ohio Ave., Trenton, NJ 08638	KS Exteriors, LLC KS Exteriors, LLC
Albert Brisebois, Owner	1 Suydam Place, Aberdeen, NJ 07747	Kitchen Crafters Plus d/b/a B&B Custom Cabinets
Hussain Burhanpurwala, Member	553 Marc Drive, North Brunswick, NJ 08902	Jamali Developers, 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	Perfection Erectors, LLC Perfection Erectors, LLC
Hugo Canabe, CEO	696 Elm St, Kearny, NJ 07032	HFC Painting
Joseph Caravella, Manager	179-15 Route 46, Rockaway, NJ 07866	CAM Contractors Inc.
Frank Carpine, Owner	100 Liberty Dr, Millville, NJ 08332	Heritage Hills Estates
Salvatore A Casella III, President	362 Friendship Road, Clarksboro, NJ 08020	G.F.I. Siteworks, Inc. G.F.I. Siteworks, Inc.
Danny Castillo, President	645 Bancroft Road, Brick, NJ 08724	DCI Signs & Awnings Inc.
Manuel Chaguan, Owner	85 Prospect Ave., Irvington, NJ 07111	J G Roofing, LLC
James Chaney, President	610 County Meadows Rd., Nicholls, GA 31554	JC Builders
Gerard Chiusolo, Member	674 Edgewood Place, North Brunswick, NJ 08902	Vision Construction Group, Inc. Vision Construction Group, Inc.
Andrew Confortini, Vice-President	491 West County Drive, Somerville, NJ 08876	Confortini Plumbing & Heating, LLC
Anthony Confortini, Owner	41 Bunnvale Road, Clifton, NJ 07830	Confortini Plumbing & Heating, LLC
Olga Conteras, Vice-President	677 Old Highway 64, Etowah, NC 28729	Antiveros Construction, Inc.
William Coons, Owner	23178 Summer View Circle, Three Springs, PA 17264	Coons Construction, LLC
William Allan Crayne, Partner	178 Espanong Road, Lake Hopatcong, NJ 07849	JB Contracting, Inc.
Jeanne Crispino, Vice-President	15 Lewis Street, Eatontown, NJ 07724	Twin Industries

Owners/ Officers	Address	Company Name
Emanuel Cucco, Owner	1435 71st Street, Brooklyn, NY 11228	J.C. Maintenance & Repair
Jose Fernandes Da Silva, Owner	26 Washington St., Long Branch, NJ 07718	Cam Flooring Installations LLC
Michael Dawkins, Manager	1057 Haddon Avenue, Camden, NJ 08103	Dawkins Plumbing & Construction LLC.
Marcos De Oliveira, Managing Member	3 Christopher Street, Sayerville, NJ 08872	Tropical Landscaping LLC
Dane DeForest, President	2406 Herbertsville Road, Point Pleasant, NJ 08742	Dane DeForest Demolition, Inc.
George Demetriades, President	125 Heritage St., Robbinsville, NJ 08691	Paint-Pro, Inc.
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.
Agostino Ducato, Vice-President	223 Spring Valley Road, Paramus, NJ 07652	All Jersey Fence Co.
Ralph Epright, Owner	48 Junction Rd., Flemington, NJ 08822	Somerset Electrical Services
Justin Ettere, Vice-President	52 Brass Castle Road, Washington, NJ 07882	Arete Development Inc.
John Ettere, Owner	1453 Tooz Place, South Plainfield, NJ 07080	Arete Development Inc. Arete Development Inc. Arete Development Inc.
Matthew Ettere, Vice-President	8 Brookside Drive, Warren, NJ 07059	Arete Development Inc. Arete Development Inc. Arete Development Inc.
Jonathan Ettere, President	7 Craig Road, Readington, NJ 08853	Arete Development Inc. Arete Development Inc. Arete Development Inc.
Margaret Farina, Owner	30 Monsisnor Deluca Plaza, Nutley, NJ 07110	Metropolitan Stone & Tile, LLC
Joseph Filoon Jr, Manager	195 Lakeshore Dr, Manahawkin, NJ 08050	Jerzee Container Corp.
Joseph Filoon Jr., President	165 Oak Avenue, West Creek, NJ 08092	SUSPENDED PENDING DEBARMENT Timster Trucking Inc.
Joseph Filoon Jr., Manager	195 Lakeshore Dr, Manahawkin, NJ	SUSPENDED PENDING DEBARMENT Seminole Construction, L.L.C. .
Thomas Fittin, Owner / Officer	2243 Edgar Rd, Point Pleasant Beach, NJ 08742	SUSPENDED PENDING DEBARMENT Fittin Construction, LLC
Donald Fleming, President	340 Reservoir Road, Boonton, NJ 07005	C & E Contracting, Inc.
Robert Foss, Vice-President	1344 Meadow Lane, Perkasie, PA 18944	Robert Foss Electric, LLC
Caroline Foss, Owner	1344 Meadow Lane, Perkasie, PA 18944	Robert Foss Electric, LLC
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
Segundo Gallegos, Owner	528 Linden Ave, Suite 2, Elizabeth, NJ 07202	Discovery Floor Covering 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.
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
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 Guarigilia, Owner / Officer	494 North Barbor Road, Colchester, VT 05446	Advantage Sport USA, Inc.
Kevin Hanrahan, President	17 Oakwood Drive, Ringwood, NJ 07456-0745	K Hanrahan Enterprises, Inc. K Hanrahan Enterprises, Inc.
Helen Henriquez, Owner	101 South Orchard Road, Vineland, NJ 08360	E & S Enterprises, LLC
Oscar Hernandez, President	421 N. warrick Road, Magnolia, NJ 08049	Hernandez Drywall Construction, Inc.
Kenneth Hicks, Owner	2 New CAstle Lane, Willingboro, NJ 08046	Matrix Management Const. LLC
Mark W. Holmes Sr., President	50 Drift Avenue, Lawrence, NJ 08648	Pin Tribal Construction, LLC
John Hunsecker, Vice-President	72 Charlotte Drive, Churchville, PA 18966	Bravo General Contractors 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

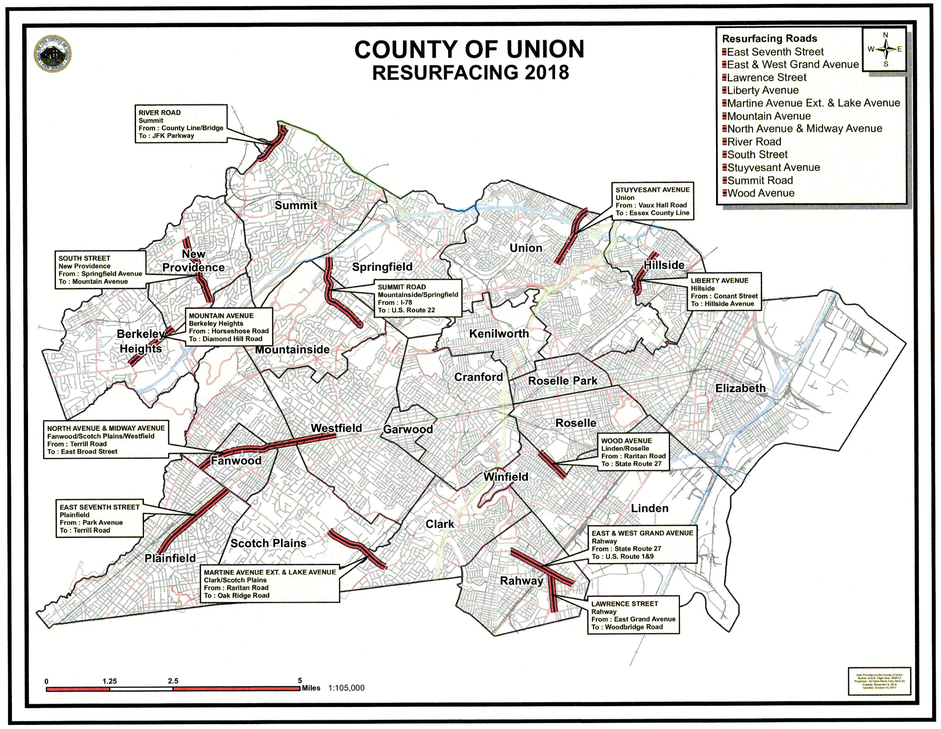
Owners/ Officers	Address	Company Name
Mark Kahn, Owner	910 Cedar Street, Millville, NJ 08332	CertaPro Painters of South Jersey LLC
Stanley Kapusta, President	12 Commodore Drive, Lake Hopatcong, NJ 07849	JB Contracting, Inc.
Steven P. Keares, CEO	211 Downing Road, Downingtown, PA 19335	Steven Keares, Inc. Keares Electrical Contractor, Inc.
Jaimie-Lyn Knight, President	395 Millstone Road, Clarksburg, NJ 08510	Gen II Contracting Co. Inc.
Lawarence Koos, Owner	1391 White Oak Botton Rd, Tom River, NJ 08755	Anchor Marine of Toms River
Laurence Koos, Owner	1391 White Oak Bottom Rd., Toms River, NJ 08755	Install It All. LLC
Edward Kosakowski, Owner	27 Center Avenue, Morristown, NJ 07960	Kosakowski Plumbing & Heating Inc.
Devin Lemere, Partner	300 Mamaroneck Ave, # 133, White Plains, NY 10605	360 Golf, LLC
Michael Lenec, Partner	300 Mamaroneck Ave, White Plains, NJ 10605	360 Golf, LLC
Segundo E. Llivicota, Member	164 Polk Street, Apt. #1, Newark, NJ 07105	M.E. Group, LLC
Roxanne Lloyd, President	2008 Carmel Road, Millville, NJ 08332	R & B Construction
Nicole Lucas, President	12 Red Fox Run, Manalapan, NJ 08857	Terra-Tech Construction, Inc.
John H. Madara, President	319 Terrace St, Rahway, NJ 07065	Advantage Contracting & Entertainment Services Inc
Gail Maiello, President	1515 10th Street, Fort Lee, NJ 07024	DiClemente Contractors, Inc. DiClemente Contractors, Inc.
John Makris, Jr., President	270 Crescent Place, Yonkers, NY 10704	EDM Contracting, Inc
Louis Malfitano, Owner	560 Mountain Ave, North Caldwell, NJ 07006	Empire Construction
Kevin F. Mandel, Owner	186 Sunshine Drive, Piscataway, NJ 08854	Cougar Power and Electric, LLC
Vincent Manganiello, Managing Member	2 Perona Road, Andover, NJ 07821	DAS Industrial, LLC 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
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.
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
John Mullen, Jr., Owner	45 Fairfield Place, West Caldwell, NJ 07006	Mullen & Sons Contractors, Inc.
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 OTS of New Jersey, LLC
Louis Pacelli, Manager	16 Darlington Drive, Wayne, NJ 07470	Build Rite LLC
Luis Palaguachi, Owner	73 Chestnut Street, West Orange, NJ 07052	PL&J Construction Corp.
Troy Palazzo, Owner	96 Taylor Dr, Levittown, PA 19054	Palazzo Fence Co
Brian Parker, Owner	115 Ardmore Avenue, Haddonfield, NJ 08033	Brian Parker, LLC
Brian Patterson, President	11 Arlene Drive, West Long Branch, NJ 07764	Brian Patterson Mechanical Contracting, Inc.
David Peckham, Owner	15 Elm Street, Old Saybrook, CT 06475	Resco, LLC Hallmark Electric, LLC
Nicola Pengue, President	4 Camelot Avenue, Monroe Township, NJ 08831	NT&P Construction Inc.
Adelino Perin, President	12 Valley Place, Chester, NJ 07930	A P Roofing & Siding, LLC A. Perin Roofing & Siding, LLC
James Perrone, Owner	74 Glenroy Road East, Fairfield, NJ 07004	Perrone Trucking LLC
Ellen Petric, President	1162 Greenpond Road, Newfoundland, NJ 07435	Petric & Associates, Inc.
Steven Petric, Vice-President	1162 Greenpond Road, Newfoundland, NJ 07435	Petric & Associates, Inc.
Christopher Picinic, Owner	164 President Blvd, Washington Township, NJ 07676	Elite Terrazzo Flooring, Inc.

Owners/ Officers	Address	Company Name
Armando Piedade, President	265 Wilson Avenue, Kearny, NJ 07032	Conex Construction Corp.
Richard Pluese, Vice-President	66 E Cedar Avenue, Marlton, NJ 08053	Apex Tower Services, Inc.
Sharleen Poppalardo, Managing Member	11 Muirfield Court, Medford, NJ 08055	Turf Services Express LLC
Manuel Quito, Member	164 Polk Street, Apt. 1, Newark, NJ 07105	M.E. Group, LLC
Rafael Ramos, President	120 Cantello Street, Union City, NJ 07087	Everest Masonry Construction, Inc.
Arianna Rengito Miranda, Owner	658 Pennsylvania Ave, Apt 4, Elizabeth, NJ 07201	Discovery Floor Covering LLC
Lauchland Roberts, President	2801 Remington Street, Suite 3, Fort Collins, CO 80526	GST Power Service Group Inc.
Mark Rodrigues, President	523 Hamilton Avenue, Kingston, PA 18704	Everest Masonry Constructors, Inc.
Eddy Rodriguez, Member	1100 W. 7th. St., Apt. A9, Plainfield, NJ 07063	Eddy Drywall, LLC
Mikey Rojas, Operating Agent	161 East 16th St., Paterson, NJ 07524	PSM Rojas Construction, LLC
Maurice Rolando, Owner	165 Height's Ave., Fair Lawn, NJ 07410	Interstate Home Service Inc.
		Interstate Home Service Inc.
Paul F Roscitt, President	262 Harmon Avenue, Fort Lee, NJ 07024	Paul F. Roscitt Electric, Inc.
Edward Sandora, President	15 North Branch River Rd., Branchburg, NJ 08876	Sandora & Spina Contracting Inc.
Blanca Segarra, President	799 Kearny Ave., Apt 1, Kearny, NJ 07032	Ma Na Lu Transportation Corporation
Sheree Severini-Fittin, Member	2243 Edgar Rd., Point Pleasant Beach, NJ 08742	Fittin Construction, LLC
Laurie M. Smith, Vice-President	16320 SE 162nd Ct., Weirsdale, FL 32195	Quality Plus Builders, Inc.
		Quality Plus Builders, Inc.
Gerry G. Smith, President	16320 SE 162nd Ct., Weirsdale, FL 32195	Quality Plus Builders, Inc.
		Quality Plus Builders, Inc.
Gregorio Soto, Owner	153 Lewis Street, Perth Amboy, NJ 08861	Jack Mack Commercial Roofing, Inc.
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
Enrique Trabal, Managing Member	1792 Margarets Walk Road, Fleming Island, FL 32003	Ricky Plumbing LLC
		Ricky Plumbing 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
Malachi Velez, Member	6 Hampton Court, Jersey City, NJ 07302	Efficient Electric LLC
		Efficient Electric 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.
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
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.
Suzanne Zimmermann, Member	2303 Owen Court, Toms River, NJ 08755	Ultra Construction LLC
		Ultra Construction Limited Liability Company
Christopher Zimmermann, Manager	2303 Owen Court, Toms River, NJ 08755	Ultra Construction LLC
		Ultra Construction Limited Liability Company

COUNTY OF UNION
BOARD OF CHOSEN FREEHOLDERS
2018 COUNTY AID RESURFACING PROJECT (CA-2017)
JANUARY 2018

BA NO. 10-2018 UNION COUNTY PROJECT NO. 2016-045

LIST OF UTILITIES AND EMERGENCY CONTACT INFORMATION	
POLICE DEPARTMENT:	**UNION COUNTY, SHERIFF'S OFFICE** JOSEPH CRYAN, SHERIFF 10 ELIZABETHTOWN PLAZA ELIZABETH, NJ 07207 908-527-4450
PUBLIC WORKS:	**UNION COUNTY, DIVISION OF PUBLIC WORKS** JOSEPH J. POLICAY, CPWM DIRECTOR 2325 SOUTH AVENUE SCOTCH PLAINS, NJ 07076 908-789-3660
WATER:	**NJ AMERICAN WATER** SCOTT SCHREIBER 1341 NORTH AVENUE PLAINFIELD, NJ 07061 973-564-5701 **UNITED WATER** KEVIN J. BAMBURAK 1045 WESTFIELD AVENUE RAHWAY, NJ 07065 201-986-4982
ELECTRIC:	**JERSEY CENTRAL POWER & LIGHT COMPANY** JANIS LEWANDOWSKI 331 NEWMAN SPRINGS ROAD RED BANK, NJ 07701
CABLE:	**COMCAST CABLEVISION OF NJ** RICH GUGULSKI 800 RAHWAY AVENUE UNION CITY, NJ 07083
GAS:	**ELIZABETHTOWN GAS** GREGORY J. BALINT, PROJECT ENGINEER 520 GREEN LANE UNION CITY, NJ 07083 732-713-2581 **PSE&G- GAS ASSET INTEGRATION** LORI MATHEWS 80 PARK PLAZA, T-12 NEWARK, NJ 07102
TELEPHONE:	**VERIZON COMMUNICATION HIGHLANDS DISTRICT** SHAWN CROSS 6000 HADLEY STREET SOUTH PLAINFIELD, NJ 07080 **VERIZON COMMUNICATIONS** EASTERN SHORE DISTRICT BILL SCHNEIDER 175 W. MAIN STREET FREEHOLD, NJ 07728
RAILROAD:	**CONRAIL EMERGENCY** 1-800-799-0994



Municipality	Street Name	From	To	Length (Miles)
Berkeley Heights	Mountain Avenue	Horseshoe Road / Snyder Avenue	Diamond Hill Road	1.09
Clark/Scotch Plains	Martine Avenue Ext & Lake Avenue	Raritan Road (CR 611)	Oak Ridge Road	1.36
Fanwood/Scotch Plains/Westfield	North Avenue & Midway Avenue	Terrill Road (CR 611)	E. Broad Street	2.81
Hillside	Liberty Avenue	Conant Street	Hillsive Avenue	0.91
Linden/Roselle	Wood Avenue	Raritan Road	Route 27	0.71
Mountainside / Springfield	Summit Road	Route 78	Route 22	1.69
New Providence	South Street	Springfield Avenue	Mountain Avenue	1.39
Plainfield	E. 7th Street	Park Avenue	Terrill Road	1.93
Rahway	Lawrence Street	E. Grand Avenue	Woodbridge Road	0.78
Rahway	W. & E. Grand Avenue	Route 27	Route 1 & 9	1.39
Summit	River Road	County Line/Bridge	JFK Parkway	1.22
Union	Stuyvesant Avenue	Vaux Hall Road	Essex County Line	1.23
			Total	**16.51**

TOWNSHIP OF BERKELEY HEIGHTS
TOWNSHIP OF CLARK
TOWNSHIP OF FANWOOD
TOWNSHIP OF HILLSIDE
CITY OF LINDEN
BOROUGH OF MOUNTAINSIDE
BOROUGH OF NEW PROVIDENCE
CITY OF PLAINFIELD
CITY OF RAHWAY
BOROUGH OF ROSELLE
TOWNSHIP OF SCOTCH PLAINS
TOWNSHIP OF SPRINGFIELD
CITY OF SUMMIT
TOWNSHIP OF UNION
TOWN OF WESTFIELD

SHEET INDEX	
SHEET #	DESCRIPTION
CP-1	TITLE SHEET
CP-2	ESTIMATE & DISTRIBUTION OF QUANTITES
CP-3	LEGEND
CP-4	GENERAL NOTES & TYPICAL SECTION
CP-5 TO CP-6	CONSTRUCTION PLAN - MOUNTAIN AVENUE
CP-7 TO CP-8	CONSTRUCTION PLAN - MARTINE AVENUE
CP-9 TO CP-12	CONSTRUCTION PLAN - NORTH AND MIDWAY AVENUES
CP-13 TO CP-15	CONSTRUCTION PLAN - LIBERTY STREET
CP-16 TO CP-17	CONSTRUCTION PLAN - WOOD AVENUE
CP-18 TO CP-21	CONSTRUCTION PLAN - SUMMIT ROAD
CP-22 TO CP-23	CONSTRUCTION PLAN - SOUTH STREET
CP-24 TO CP-26	CONSTRUCTION PLAN - E. 7th STREET
CP-27 TO CP-28	CONSTRUCTION PLAN - LAWRENCE STREET
CP-29 TO CP-30	CONSTRUCTION PLAN - GRAND AVENUE
CP-31 TO CP-32	CONSTRUCTION PLAN - RIVER ROAD
CP-33 TO CP-35	CONSTRUCTION PLAN - STUYVESANT AVENUE
D-1 TO D-7	CONSTRUCTION DETAILS
MPT-1 TO MPT-12	MAINTENANCE & PROTECTION OF TRAFFIC DETAILS

APPROVALS

RECOMMENDED FOR APPROVAL BY _____ DATE 2/6/18
THOMAS O. MINEO, P.E., COUNTY ENGINEER

APPROVED BY _____ DATE 2/9/18
ALFRED J. FAELLA, COUNTY MANAGER

New Jersey One Call
CALL BEFORE YOU DIG
811 or 1-800-272-1000
IT'S THE LAW

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT NJ ONE CALL PRIOR TO THE START OF CONSTRUCTION. CALL FOR MARKOUTS THREE (3) FULL BUSINESS DAYS IN ADVANCE AND BEGIN EXCAVATION WITHIN 10 DAYS. ALL CONTRACTORS ON-SITE MUST HAVE THEIR OWN MARKOUT.

THE BOUND VERSION OF THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF 2007 (U.S. CUSTOMARY ENGLISH UNITS) AND ALL AMENDMENTS IN THE CONTRACT SUPPLEMENTAL SPECIFICATION SHALL GOVERN.

THE NEW JERSEY DEPARTMENT OF TRANSPORTATION "STANDARD ROADWAY CONSTRUCTION\TRAFFIC CONTROL\BRIDGE CONSTRUCTION DETAILS" BOOKLET DATED 2007 AND "ELECTRICAL BUREAU STANDARD DETAILS, 2007" SHALL GOVERN, EXCEPT FOR THOSE DETAILS CONTAINED HEREIN.

RVE 1901
REMINGTON & VERNICK ENGINEERS
ONE HARMON PLAZA, SUITE 210
SECAUCUS, NJ 07094
(201) 624-2137, FAX (201) 624-2136
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
–ENGINEERING EXCELLENCE–

DATE: 3·12·18
FRANK J. SENEY JR.
NJ PROFESSIONAL ENGINEER LIC. No. 35321

PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID.

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No.	REVISION	DATE	BY	CHK

TITLE SHEET

UNION COUNTY
2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)
VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
P.A.W.		F.J.S.	AS NOTED
DATE		SHEET No.	
DECEMBER 2017		1 of 54	
JOB No.			
2000F010			

CP-1
CP-35

\\RVCH-FS1\JOBS\2F\transportation_bridge\union county\2000f010 - 2018 resurfacing\drawings\tit-2000f010.dwg, 3/12/2018 9:10:05 AM

#	DESCRIPTION	UNITS	MOUNTAIN AVE	MARTINE AVE / LAKE AVE	NORTH AVE / MIDWAY AVE	LIBERTY AVE	WOOD AVE	SUMMIT RD	SOUTH ST	7TH ST	LAWRENCE ST	GRAND AVE	RIVER RD	STUYVESANT AVE	PLAN QUANTITY	IF & WHERE DIRECTED	BID QUANTITY	AS BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UN	-	-	-	-	-	-	-	-	-	-	-	-	4	0	4	
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UN	-	-	-	-	-	-	-	-	-	-	-	-	2	0	2	
3	TRAFFIC DIRECTOR, FLAGGER	HR	-	-	-	-	-	-	-	-	-	-	-	-	1500	0	1500	
4	TRAFFIC CONTROL MEASURES	LS	-	-	-	-	-	-	-	-	-	-	-	-	1	0	1	
5	FLOODLIGHTS FOR NIGHTTIME OPERATIONS	UN	-	-	-	-	-	-	-	-	-	-	-	-	4	0	4	
6	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOWANCE	-	-	-	-	-	-	-	-	-	-	-	-	ALLOWANCE	ALLOWANCE	ALLOWANCE	
7	NO ITEM	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	
8	FUEL PRICE ADJUSTMENT	ALLOWANCE	-	-	-	-	-	-	-	-	-	-	-	-	ALLOWANCE	ALLOWANCE	ALLOWANCE	
9	ASPHALT PRICE ADJUSTMENT	ALLOWANCE	-	-	-	-	-	-	-	-	-	-	-	-	ALLOWANCE	ALLOWANCE	ALLOWANCE	
10	EXCAVATION, UNCLASSIFIED	CY	-	-	-	-	-	-	-	-	-	-	-	-	0	200	200	
11	DENSE-GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS	CY	-	-	-	-	-	-	40	-	-	-	-	-	40	1960	2000	
12	HMA MILLING, 3" OR LESS	SY	21880	34061	67335	24617	20028	37993	32710	42885	16739	32246	32685	29221	392400	30495	422895	
13	HMA MILLING, MORE THAN 3" TO 6"	SY	-	-	-	-	-	-	-	-	-	-	-	-	0	100	100	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	59	71	343	163	227	21	2385	133	112	245	557	68	4384	403	4787	
15	SAWING AND SEALING JOINTS IN HOT MIX ASPHALT OVERLAY	LF	-	-	-	-	-	-	-	-	-	-	-	-	0	10000	10000	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2530	3986	7711	2882	2344	4448	3950	5020	1957	3772	3770	3423	45793	5197	50990	
17	HOT MIX ASPHALT 9.5M64 LEVELING COURSE	TON	-	-	-	-	-	-	-	-	-	-	-	-	0	500	500	
18	DIAMOND GRINDING, CONCRETE DECK SURFACE	SY	-	-	-	-	-	-	145	-	-	-	-	-	145	55	200	
19	MEMBRANE WATERPROOFING	SY	-	-	-	-	-	-	145	-	-	-	-	-	145	55	200	
20	SAWCUT GROOVED DECK SURFACE	SF	-	-	-	-	-	-	-	-	-	-	-	-	0	1500	1500	
21	REPAIR OF CONCRETE DECK, TYPE B	SF	-	-	-	-	-	-	-	-	-	-	-	-	0	100	100	
22	REPAIR OF CONCRETE DECK, TYPE C	SF	-	-	-	-	-	-	-	-	-	-	-	-	0	100	100	
23	15" REINFORCED CONCRETE PIPE, CLASS V	LF	-	-	-	-	-	-	10	-	-	-	-	-	10	10	20	
24	RESET EXISTING CASTING	UN	10	-	1	53	12	20	7	18	-	9	3	1	134	26	160	
25	SET INLET TYPE B CASTING	UN	2	-	2	-	2	-	-	-	-	-	5	-	11	4	15	
26	SAWING AND SEALING CRACKS, CONCRETE DECK SURFACE	LF	-	-	-	-	-	-	-	-	-	-	-	-	0	100	100	
27	NO ITEM	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	
28	SET MANHOLE CASTING	UN	1	-	-	3	-	9	2	31	16	12	3	4	81	17	98	
29	SET MANHOLE CASTING, SUPPLIED BY OTHERS	UN	-	-	-	10	-	6	-	-	-	-	3	-	19	21	40	
30	NO ITEM	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	
31	RECONSTRUCTED INLET, TYPE B, USING EXISTING CASTING	UN	2	-	3	-	-	8	9	-	-	-	3	-	25	5	30	
32	RECONSTRUCTED INLET, TYPE E, USING EXISTING CASTING	UN	-	-	-	-	-	1	-	-	-	-	-	-	1	4	5	
33	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING	UN	-	-	5	-	-	-	1	-	-	-	-	-	6	4	10	
34	CONCRETE HEADWALL	CY	-	-	-	-	-	-	4	-	-	-	-	-	4	1	5	
35	INLET, TYPE A	UN	-	-	2	-	-	-	-	-	-	-	-	-	2	3	5	
36	INLET, TYPE B	UN	-	-	15	2	-	-	-	17	-	-	-	-	34	6	40	
37	INLET TRAP	UN	-	-	-	-	-	-	-	-	-	-	-	-	0	10	10	
38	NO ITEM	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	
39	NO ITEM	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	
40	RECONSTRUCTED MANHOLE, USING EXISTING CASTINGS	UN	-	-	-	-	-	-	1	-	-	-	-	1	2	3	5	
41	RECONSTRUCTED BALTIMORE INLET WITH MANHOLE CASTING	UN	-	-	-	-	-	-	-	-	-	-	-	-	0	2	2	
42	NO ITEM	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	
43	BICYCLE SAFE GRATE	UN	-	-	3	20	7	8	1	36	3	13	-	2	93	17	110	
44	CURB PIECE	UN	1	-	1	17	-	1	-	2	4	13	4	2	45	15	60	
45	HOT MIX ASPHALT SIDEWALK, 4" THICK	SY	-	-	-	-	-	-	-	-	-	-	-	-	0	25	25	
46	CONCRETE SIDEWALK, 4" THICK	SY	321	262	378	835	570	60	394	756	345	1064	144	625	5754	586	6340	
47	DETECTABLE WARNING SURFACE	SY	25	23	34	49	32	3	31	67	24	64	16	35	403	23	426	
48	RESET PAVERS	SF	-	385	-	33	80	-	-	-	-	-	-	-	498	102	600	
49	10" X 20" CONCRETE VERTICAL CURB	LF	300	-	370	1180	815	75	425	452	453	1158	200	790	6218	607	6825	
50	BELGIAN BLOCK CURB	LF	-	-	-	-	-	-	-	-	-	-	5	-	5	45	50	
51	12" X 13" CONCRETE SLOPING CURB	LF	-	-	-	-	-	-	-	-	45	256	-	-	301	49	350	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	18895	14423	38012	8980	5416	31908	23459	18888	7527	12886	9502	10070	199966	19964	219930	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	1780	666	1315	1334	415	320	615	1343	1039	892	1963	1166	12848	1522	14370	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	-	412	-	1050	153	178	-	1430	1145	556	488	736	6148	532	6680	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	540	319	1150	517	49	66	1200	266	388	96	587	387	5565	590	6155	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	190	340	2330	332	152	116	550	312	310	104	1860	150	6746	724	7470	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	126	102	170	132	6	135	125	18	29	24	70	-	937	113	1050	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	-	12	40	20	-	44	10	15	8	6	49	-	204	46	250	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	130	83	235	94	41	87	90	1190	43	92	31	64	2180	220	2400	
60	FLEXIBLE DELINEATOR, GROUND MOUNTED	UN	-	-	-	-	30	-	-	-	-	-	-	-	30	10	40	
61	STREET NAME SIGN, TYPE DF, BREAKAWAY SUPPORT	SF	-	3	-	25.2	4.2	-	3	-	-	-	-	-	35.4	64.6	100	
62	ACCESSORY PANEL, TYPE DF	SF	-	4	-	25.2	-	-	3	-	-	-	-	-	32.2	67.8	100	
63	RELOCATE SIGN	UN	-	-	-	-	-	-	-	-	1	-	-	-	1	9	10	
64	LOOP DETECTOR	LF	-	-	-	-	-	-	-	-	-	-	-	-	0	3000	3000	
65	IMAGE DETECTOR	UN	-	-	-	-	-	-	-	-	-	-	-	-	0	10	10	
66	RESET JUNCTION BOX CASTING	UN	-	-	-	7	-	-	-	-	-	-	-	-	7	3	10	
67	TOPSOILING, 4" THICK	SY	170	100	190	120	340	35	260	300	100	200	80	140	2035	465	2500	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	170	100	190	120	340	35	260	300	100	200	80	140	2035	465	2500	
69	REGULATORY AND WARNING SIGNS	SF	-	-	-	59.5	-	-	-	-	-	-	-	-	59.5	50.5	110	
70	NO ITEM	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	
71	DAYTIME MILLING	DAY	-	-	-	3	-	-	-	-	-	-	-	-	3	2	5	
72	DAYTIME PAVING	DAY	-	-	-	3	-	-	-	-	-	-	-	-	3	2	5	

RVE 1901
REMINGTON & VERNICK ENGINEERS
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SECAUCUS, NJ 07094
(201) 624-2137, FAX (201) 624-2136
WEB SITE ADDRESS : WWW.RVE.COM
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No.	REVISION	DATE	BY	CHK

ESTIMATE AND DISTRIBUTION OF QUANTITIES

UNION COUNTY
2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)
VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY :	DESIGN BY :	CHECKED BY :	SCALE :
P.A.W.		F.J.S.	AS NOTED
DATE : DECEMBER 2017		SHEET No. : 2 of 54	
JOB No. : 2000F010			

S:\Work Set Signed\Transportation_Bridges\Union County\2000F010 - 2018 Resurfacing\Drawings\K-2000F010.dwg 3/12/2018 10:43:20 AM

STANDARD LEGEND

NOTE: ALL SYMBOLS MAY NOT BE USED

UTILITIES

ITEM	DESCRIPTION	EXISTING	PROPOSED
	OVERHEAD WIRE	OHW	
	SANITARY FORCE MAIN PIPE	FM	FM
	STORM SEWER PIPE ≤12"	D	D
	STORM SEWER PIPE >12"	(SIZE & TYPE)	(SIZE & TYPE)
	GAS SERVICE	G	G
	SANITARY SEWER PIPE ≤12"	S	S
	SANITARY SEWER PIPE >12"	(SIZE & TYPE)	(SIZE & TYPE)
	ELECTRIC SERVICE	E	E
	FIBER OPTIC SERVICE	FO	FO
	TELEPHONE SERVICE	T	T
	COMMUNICATIONS SERVICE	C	C
	IRRIGATION PIPE	IRR	IRR
	WATER SERVICE	W	W
	WATER SHUT-OFF		
	WATER METER		
	WATER VALVE		NEW RESET
	WATER HYDRANT		NEW RESET
	WELL		
	YARD HYDRANT		
	METER PIT		
	GAS SHUT-OFF		
	GAS METER		
	GAS VALVE		NEW RESET
	GAS LINE MARKER		
	CLEANOUT		
	SEWER VENT		
	INLET TYPE A		NEW RESET/SET RECONSTRUCT
	INLET TYPE B		NEW RESET/SET RECONSTRUCT
	INLET TYPE E		NEW RESET/SET RECONSTRUCT
	AREA DRAIN		
	MANHOLES	SANITARY, DRAINAGE, TELEPHONE, WATER, CATV, UNDERDRAIN, ELECTRIC, GAS, UNKNOWN	NEW RESET RECONSTRUCT
	IRRIGATION CONTROL VALVE		NEW RESET
	IRRIGATION BOX		
	IRRIGATION CONTROL BOX		
	SPRINKLER HEAD		
	UNKNOWN VALVE		
	COMMUNICATIONS PEDESTAL		
	COMMUNICATIONS LINE MARKER		
	TELEPHONE PEDESTAL		
	TELEPHONE LINE MARKER		
	ELEC. BOX		
	ELEC. METER		
	ELEC. TRANSFORMER PAD		
	ELEC. VAULT		
	ELEC. LINE MARKER		
	UTILITY POLE	STANDARD, W/ LIGHT, W/ SOLAR	
	GUY ANCHOR		
	ELEC. OUTLET		
	LIGHTS	POLE, AREA	
	VENT		
	VENT PIPE		

SURVEY

ITEM	DESCRIPTION	EXISTING	PROPOSED
	CROWS FOOT		
	AERIAL TARGET		
	CONCRETE MONUMENT		(SET)
	PK / MAG NAIL DRILL HOLE SPIKE		(SET)
	DRILL HOLE W/ WINGS		
	STAKE		(SET)
	HUB		(SET)
	PIN W/ CAP IRON PIPE IRON PIN		(SET)
	CROSS CUT		(SET)
	DISK		
	STONE		
	REBAR		
	BASELINE	7+00	8+00
	CENTERLINE		
	EASEMENT		
	RIGHT-OF-WAY		
	PROPERTY BOUNDARY		
	ADJACENT PROPERTY BOUNDARY		
	RAILROAD TRACKS		
	STATE BOUNDARY		
	MUNICIPAL / COUNTY BOUNDARY		

ENVIRONMENTAL

DESCRIPTION	EXISTING	PROPOSED
BORING LOCATION	B-#	B-#
MONITORING WELL LOCATION	MW-#	MW-#
TEST PIT LOCATION	TP-#	TP-#
FRESHWATER WETLAND FLAG	FW-#	
FRESHWATER WETLAND LINE		
FRESHWATER WETLAND BUFFER		
EDGE OF WATER		
STREAM CENTERLINE		

LANDSCAPING

DESCRIPTION	EXISTING	PROPOSED
GRASS/SOD		
DECIDUOUS TREE		SHADE ORNAMENTAL
SHRUBS / BUSH		
EVERGREENS		
STUMP		
WOODS / TREE LINE		
WIRE FENCE		
SPLIT RAIL FENCE		
WOOD / VINYL FENCE		
CHAIN-LINK FENCE		

GRADING

DESCRIPTION	EXISTING	PROPOSED
TOP OF BANK / DITCH	TB	
BOTTOM OF BANK / DITCH	BB	
CONTOUR (MAJOR)		
CONTOUR (MINOR)		
FLOW LINE / SWALE		
TIME OF CONCENTRATION		
SPOT GRADE	x 3.48	x3.48
ROADWAY GRADE	TC 5.45 GL 4.95	TC 5.45 GL 4.95
DRAINAGE FLOW		

SITE & ROADWORK

DESCRIPTION	EXISTING	PROPOSED
EDGE OF PAVEMENT		
CURB		
PAVEMENT / CONC. / SIDEWALK	BITUMINOUS/ASPHALT, CONCRETE, BRICK/PAVERS, STONE	ASPHALT DRIVEWAY, CONCRETE, BRICK/PAVERS, STONE, MILLING
LIMIT OF EXCAVATION		
GUIDE RAIL		
BOLLARD		
MAILBOX		
SIGNS		
FLAG POLE		
BENCH		
PILE		
DETECTABLE WARNING SURFACE		
TYPICAL STRIPING		
ADA STRIPING		
TRAFFIC CONTROL BOX		
TRAFFIC LIGHT		(ARM TO SCALE)
DEPT. OF TRANSPORTATION MANHOLE		
STATE HIGHWAY DEPARTMENT	MANHOLE, BOX	
RAILROAD CROSSING BEACON		
CALL BOX		
OIL FILL		
UNDERGROUND STORAGE TANK LID	UST	
RISER PIPE		
RAISED PAVEMENT MARKER		

MISC.

DESCRIPTION	EXISTING	PROPOSED
BBQ GRILL		
WATER FOUNTAIN		
KIOSK		
AIR CONDITIONER		
PARKING METER		
FIRE CONTROL VALVE		
BARRICADE		

GENERAL

DESCRIPTION	EXISTING	PROPOSED
PHOTO LOCATION		
BENCHMARK LOCATION	BM X	
TYPICAL SECTION ARROW		A
MATCH LINE		
TYPICAL NORTH ARROW	NAD-1983	

NORTH POINT TO BE USED ON STANDARD CONSTRUCTION SHEETS WHERE BEARINGS REFER TO STATE PLANE COORDINATE SYSTEM.

ABBREVIATIONS

APR.	APRON	E.B., W.B., N.B., S.B.	EASTBOUND, WESTBOUND, NORTHBOUND, SOUTHBOUND	PC	POINT OF CURVATURE	S.H.D.	STATE HIGHWAY DEPARTMENT
BL	BASELINE	G	GUTTER	PI	POINT OF INFLECTION	SHLD.	SHOULDER
BM	BENCH MARK	GR	GRATE	PT	POINT OF TANGENCY	STY.	STORY
BIT.	BITUMINOUS	HW	HEADWALL	PK	PARKER KAYLON MASONRY NAIL	T.B.A.	TO BE ABANDONED
BLDG.	BUILDING	H.D.P.E.	HIGH DENSITY POLYETHYLENE PIPE	PROP.	PROPOSED	T.B.R.	TO BE REMOVED
CL	CENTERLINE	INV.	INVERT	P.V.C.	POLYVINYL CHLORIDE PIPE	TC	TOP OF CURB
C.I.P.	CAST IRON PIPE	IP	IRON PIN	PVC	POINT OF VERTICAL CURVATURE	TEL	TELEPHONE
CONC.	CONCRETE	J.B.	JUNCTION BOX	PVI	POINT OF VERTICAL INTERSECTION	TEMP.	TEMPORARY
C.M.P.	CORRUGATED METAL PIPE	L.S.T.	LANDSCAPE TIE	PVT	POINT OF VERTICAL TANGENCY	TYP.	TYPICAL
CULV.	CULVERT	L.O.M.	LIMIT OF MILLING	R	RADIUS	U.D.	UNDERDRAIN
D.C.	DEPRESSED CURB	L.O.P.	LIMIT OF PAVING	R.C.P.	REINFORCED CONCRETE PIPE	U.P.	UTILITY POLE
DH	DRILL HOLE	MB	MAILBOX	RMC	RIGID METALLIC OCNDUIT	VAR.	VARIES
DIA.	DIAMETER	MAX.	MAXIMUM	R.O.W.	RIGHT OF WAY	WM	WATER METER
DWY	DRIVEWAY	MIN.	MINIMUM	R.R.	RAILROAD		
D.I.P.	DUCTILE IRON PIPE	NO.	NUMBER	RTE.	ROUTE		
EL.	ELEVATION	N.T.S.	NOT TO SCALE	SAN.	SANITARY		
EX.	EXISTING	PERF.	PERFORATED	SWK.	SIDEWALK		

CP-3

CP-35

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No.	REVISION	DATE	BY	CHK

LEGEND

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
P.A.W.	D.M.M.	F.J.S.	AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 3 of 54

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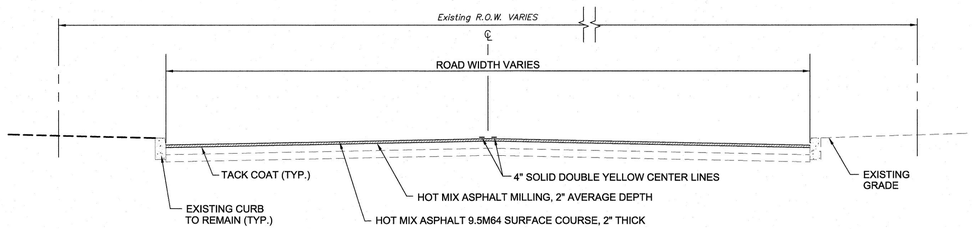
GENERAL NOTES:

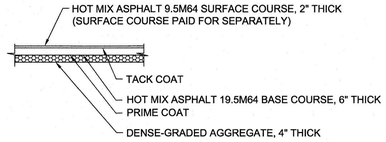
1. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD PRIOR TO THE START OF THE CONSTRUCTION, ANY ERRORS OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
2. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.
3. THE CONTRACTOR SHALL USE EXCAVATED MATERIALS FOR BACKFILL UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
4. ALL PAVED AND CONCRETE AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITION AT LEAST EQUAL TO THAT WHICH EXISTED PRIOR TO THE START OF CONSTRUCTION.
5. ALL GRASSED OR WOODED AREAS DISTURBED DURING CONSTRUCTION SHALL BE TOPSOILED AND SEEDED.
6. ALL FILL SHALL BE PLACED IN 12" LAYERS AND THOROUGHLY COMPACTED TO THE SATISFACTION OF THE ENGINEER. IF BORROW FILL IS REQUIRED, IT SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF THE UNDERGROUND AND SURFACE UTILITIES AND STRUCTURES AT OR ADJACENT TO THE SITE OF CONSTRUCTION AND IT SHALL BE AT HIS OWN EXPENSE TO REPAIR OR REPLACE ANYTHING THAT HE DAMAGES.
8. ALL CONSTRUCTION DETAILS NOT SHOWN SHALL BE IN ACCORDANCE WITH N.J.D.O.T. STANDARDS AS DETAILED IN:
   - "STANDARD ROADWAY CONSTRUCTION/TRAFFIC CONTROL/BRIDGE CONSTRUCTION DETAILS, 2007.
   - "ELECTRICAL BUREAU STANDARD DETAILS: 2001."

   INCLUDING ALL APPLICABLE BASELINE DOCUMENT CHANGES AND APPENDICES. THESE DETAILS MAY BE PURCHASED THROUGH THE N.J.D.O.T. PLANS AND SPECIFICATION CENTER AT:

   1035 PARKWAY AVENUE,
   TRENTON, NJ
   08625-0600
   (TELEPHONE: 1-609-530-2098)
9. SEPARATE PAYMENT WILL NOT BE MADE FOR SAW CUTTING OF ANY KIND, BUT THE COST SHALL BE INCIDENTAL TO PAVEMENT ITEMS.
10. PAYMENT FOR JOINT MATERIAL FOR ALL CONCRETE WORK WILL NOT BE MEASURED BUT SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE PROPOSAL.
11. ALL GRASS AND WOODED AREAS DISTURBED DURING CONSTRUCTION SHALL BE BACKFILLED AS DIRECTED.
12. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN ALL EXISTING CONCRETE CURB NOT SHOWN TO BE REMOVED. THE CONTRACTOR WILL BE RESPONSIBLE FOR COMPLETE REMOVAL AND REPLACEMENT OF ANY DAMAGED CURB NOT DOCUMENTED PRIOR TO THE START OF CONSTRUCTION AT NO ADDITIONAL COST TO THE OWNER.
13. ALL UNUSED MATERIAL EXCAVATED FROM THE PROJECT SITE ARE TO BE DISPOSED OF AT AN APPROVED FACILITY.
14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED IN THE PLANS AND SPECIFICATIONS. SEPARATE PAYMENT FOR ALL ASSOCIATED COSTS WILL NOT BE MADE, BUT SHALL BE INCLUDED UNDER VARIOUS ITEMS OF THE PROPOSAL.
15. CONTRACTOR IS RESPONSIBLE TO ENSURE POSITIVE DRAINAGE ALONG ALL ROADWAYS TO BE RESURFACED. THE CONTRACTOR SHALL PROVIDE ELEVATIONS AT ALL DEPRESSED CURB LOCATIONS ASSOCIATED WITH THE ADA RAMPS TO ENSURE POSITIVE DRAINAGE ADJACENT TO THE RAMP AND AT OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. SEPARATE PAYMENT WILL NOT BE MADE FOR PROVIDING PROPOSED ELEVATIONS BUT ALL COSTS SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE PROPOSAL.
16. CONTRACTOR SHALL RESTORE ALL EXISTING FEATURES DISTURBED DURING CONSTRUCTION (I.E. MAILBOXES, IRRIGATION SYSTEMS, LANDSCAPING AND ANY OTHER PHYSICAL FEATURES). ALL COSTS SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE PROPOSAL.
17. SEPARATE PAYMENT WILL NOT BE MADE FOR RESETTING EXISTING UTILITY METERS, VALVE BOXES, VENTS, CLEANOUTS AND SPRINKLER HEADS REQUIRED FOR THE CONSTRUCTION BEYOND THE ROADWAY CARTWAY. HOWEVER, ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE PROPOSAL.
18. AT ALL LIMITS OF PAVING (L.O.P.), THE CONTRACTOR SHALL SAWCUT, TACK COAT AND SEAL TO MATCH EXISTING PAVEMENT. SEPARATE MEASUREMENT AND PAYMENT FOR ALL THIS WORK SHALL NOT BE MADE AND ALL COSTS SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE PROPOSAL.



TYPICAL SECTION
N.T.S.



HOT MIX ASPHALT PAVEMENT REPAIR
N.T.S.

NOTE: ALL MATERIALS EXCEPT THE HMA SURFACE COURSE ARE INCLUDED IN THE PAY ITEM.

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No.	REVISION	DATE	BY	CHK

NOTES AND TYPICAL SECTION

UNION COUNTY
2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)
VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
P.A.W.		F.J.S.	AS NOTED
DATE: DECEMBER 2017		SHEET No.: 4 of 54	
JOB No.: 2000F010			

CP-4
CP-35

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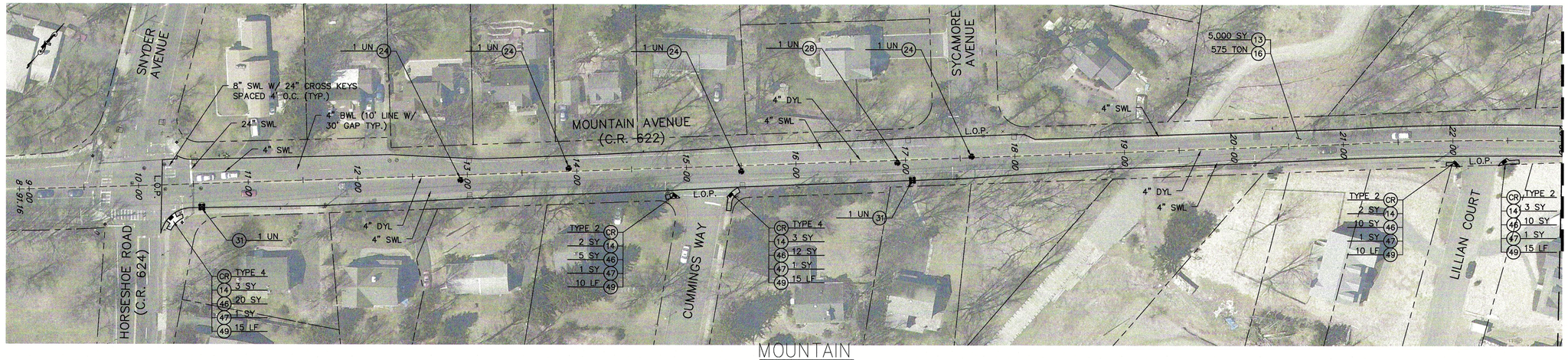
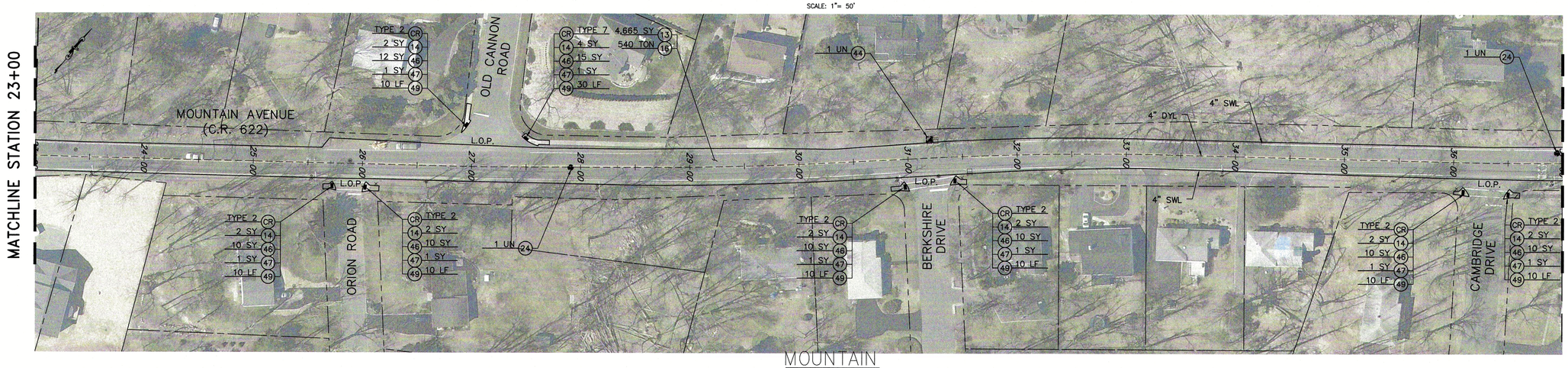


MOUNTAIN AVENUE

SCALE: 1"= 50'



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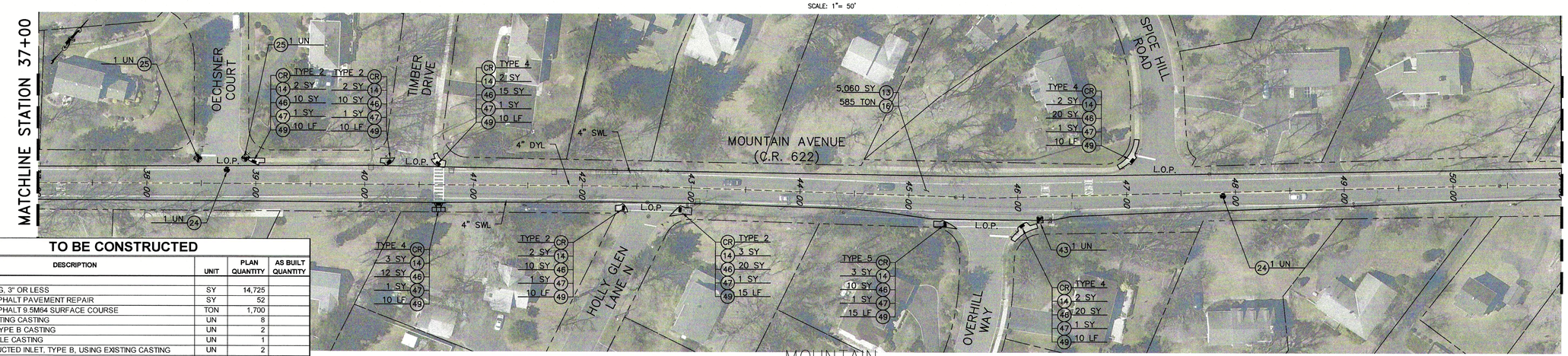

MOUNTAIN AVENUE

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	14,725	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	52	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1,700	
24	RESET EXISTING CASTING	UN	8	
25	SET INLET TYPE B CASTING	UN	2	
28	SET MANHOLE CASTING	UN	1	
31	RECONSTRUCTED INLET, TYPE B, USING EXISTING CASTING	UN	2	
44	CURB PIECE	UN	1	
46	CONCRETE SIDEWALK, 4" THICK	SY	271	
47	DETECTABLE WARNING SURFACE	SY	22	
49	10" X 20" CONCRETE VERTICAL CURB	LF	265	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	14,245	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	820	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	250	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	95	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	90	
67	TOPSOILING, 4" THICK	SY	150	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	150	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-5

CP-35

REMINGTON & VERNICK ENGINEERS
232 KINGS HIGHWAY EAST
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Certification of Authorization: 24 GA 28003300
–ENGINEERING EXCELLENCE–

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NO.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - MOUNTAIN AVENUE

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
J.L.G.	D.M.M.		AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 5 of 54

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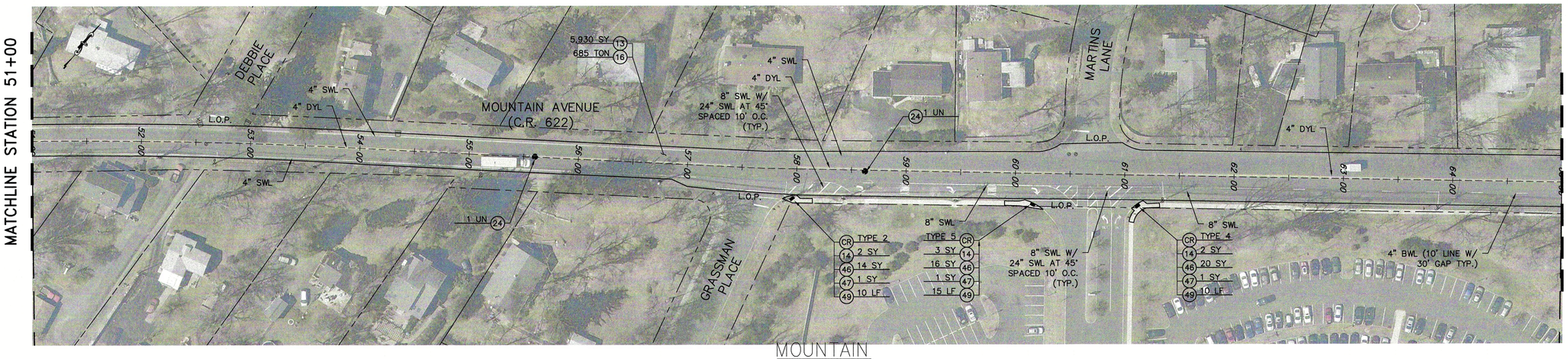
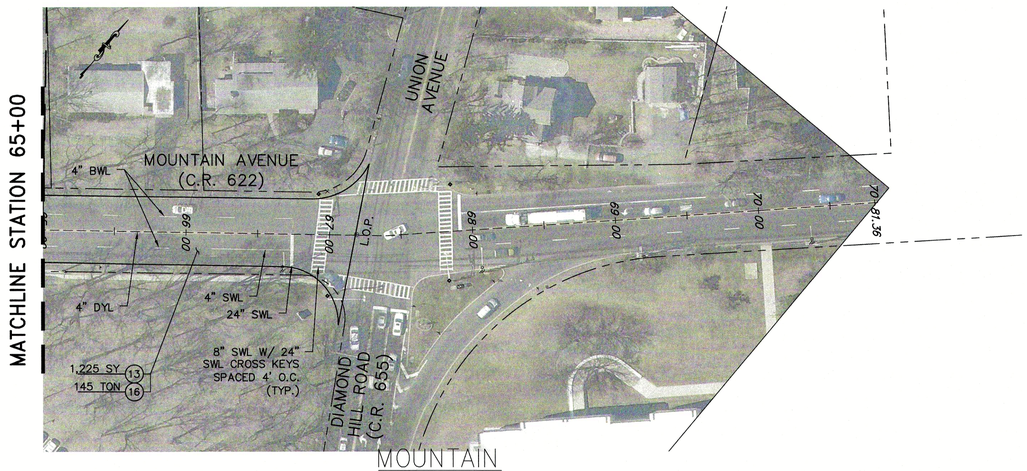


MOUNTAIN AVENUE

SCALE: 1"= 50'



MOUNTAIN AVENUE

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	7,155	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	7	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	830	
24	RESET EXISTING CASTING	UN	2	
46	CONCRETE SIDEWALK, 4" THICK	SY	50	
47	DETECTABLE WARNING SURFACE	SY	3	
49	10" X 20" CONCRETE VERTICAL CURB	LF	35	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	4,650	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	960	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	290	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	190	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	30	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	40	
67	TOPSOILING, 4" THICK	SY	20	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	20	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-6

CP-35

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CONSTRUCTION PLAN - MOUNTAIN AVENUE

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY :	DESIGN BY :	CHECKED BY :	SCALE :
J.L.G.	D.M.M.		AS NOTED
DATE : DECEMBER 2017			SHEET No. 6 of 54
JOB No. : 2000F010			

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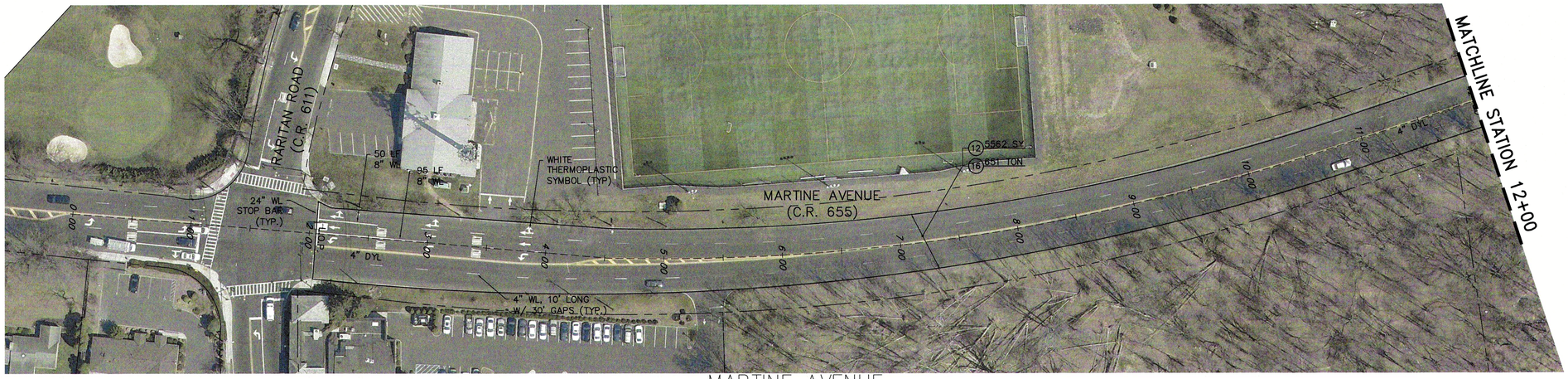

MARTINE AVENUE

SCALE: 1"= 50'

MARTINE AVENUE

SCALE: 1"= 50'

MARTINE AVENUE

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	19412	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2272	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	9418	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	336	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	128	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	132	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	264	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	99	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	6	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	45	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-7

CP-35

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - MARTINE AVENUE

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

UNION COUNTY — NEW JERSEY

VARIOUS MUNICIPALITIES — UNION COUNTY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
S.J.S.	D.M.M.		AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 7 of 54

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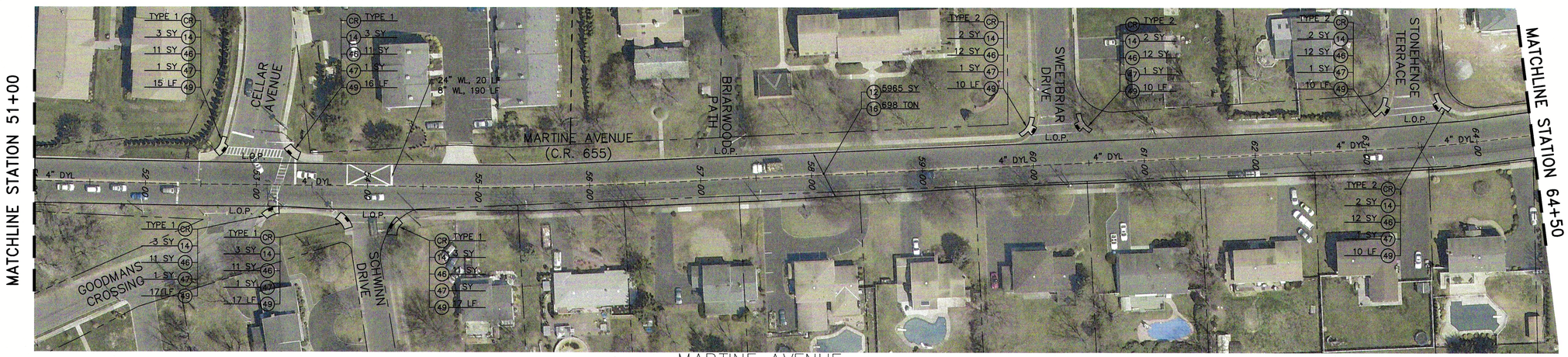
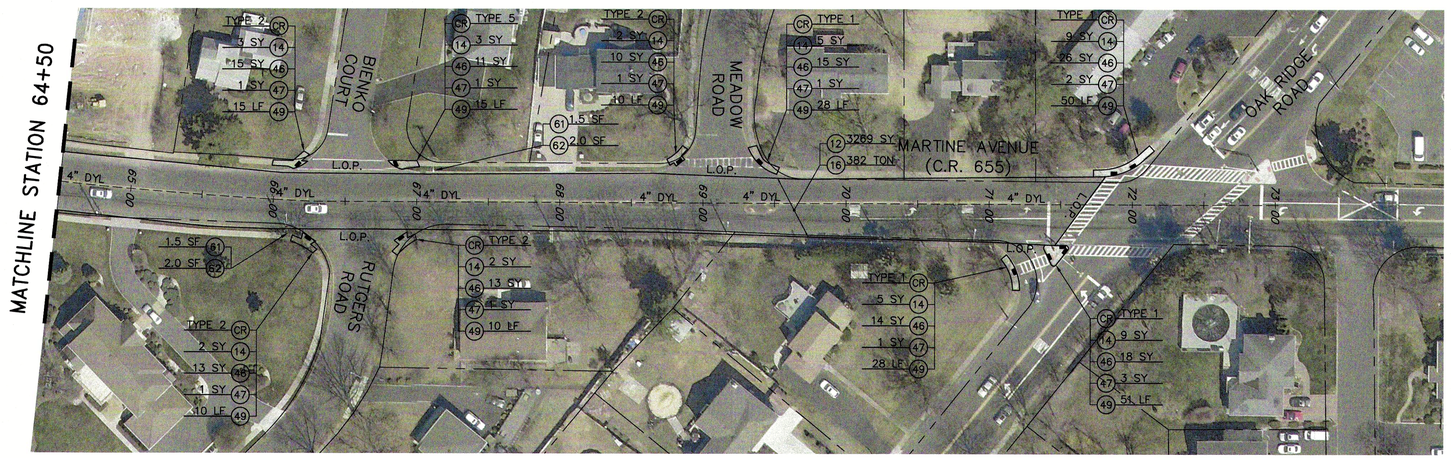
MARTINE AVENUE

SCALE: 1"= 50'



MARTINE AVENUE

SCALE: 1"= 50'



MARTINE AVENUE

SCALE: 1"= 50'

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	14649	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	71	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1714	
46	CONCRETE SIDEWALK, 4" THICK	SY	262	
47	DETECTABLE WARNING SURFACE	SY	23	
49	10" X 20" CONCRETE VERTICAL CURB	LF	385	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	5005	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	330	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	284	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	187	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	76	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	3	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	6	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	38	
61	STREET NAME SIGN, TYPE DF, BREAKAWAY SUPPORT	SF	3.0	
62	ACCESSORY PANEL, TYPE DF	SF	4.0	
67	TOPSOILING, 4" THICK	SY	100	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	100	

RVE 1901
REMINGTON & VERNICK **ENGINEERS**
232 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033
(856) 795-9595, FAX (856) 795-1882
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~

DATE: 3.12.18

FRANK J. SENEY JR.
NJ PROFESSIONAL ENGINEER LIC. No. 35321

PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID.

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No.	REVISION	DATE	BY

CONSTRUCTION PLAN - MARTINE AVENUE

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
S.J.S.	D.M.M.		AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 8 of 54

CP-8

CP-35

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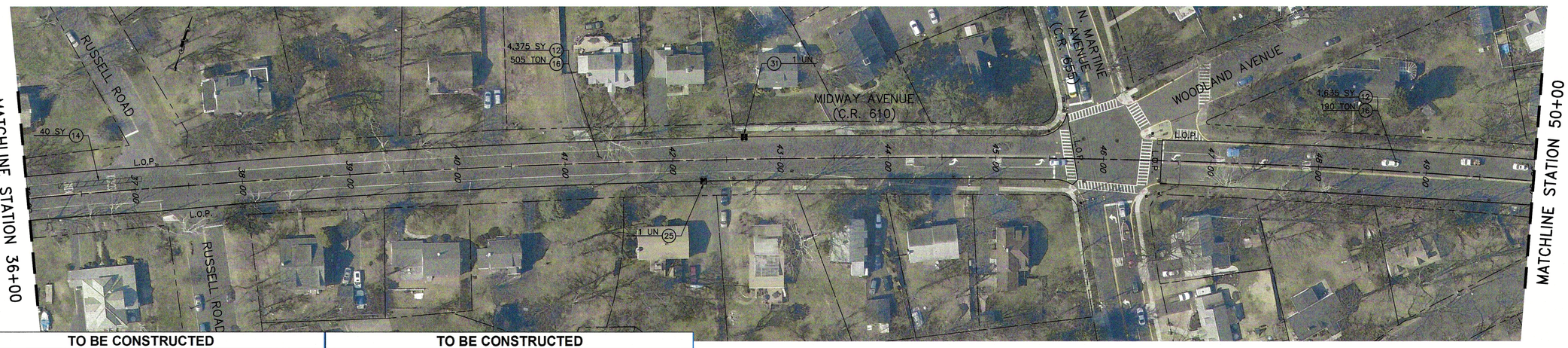
MIDWAY AVENUE

SCALE: 1"= 50'

MIDWAY AVENUE

SCALE: 1"= 50'



MIDWAY AVENUE

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	17,625	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	236	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2,035	
25	SET INLET TYPE B CASTING	UN	2	
31	RECONSTRUCTED INLET, TYPE B, USING EXISTING CASTING	UN	1	
33	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING	UN	2	
46	CONCRETE SIDEWALK, 4" THICK	SY	87	
47	DETECTABLE WARNING SURFACE	SY	8	
49	10" X 20" CONCRETE VERTICAL CURB	LF	80	

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	12,135	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	345	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	205	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	810	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	80	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	90	
67	TOPSOILING, 4" THICK	SY	50	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	50	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

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~ENGINEERING EXCELLENCE~

DATE: 3·12·18

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - NORTH AND MIDWAY AVENUES

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
J.L.G.	J.L.G.		AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 9 of 54

CP-9

CP-35

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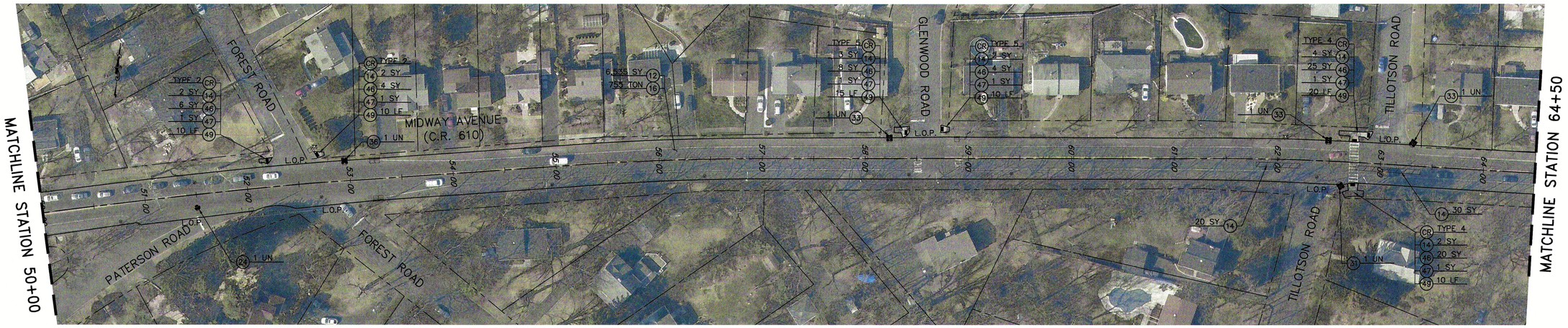
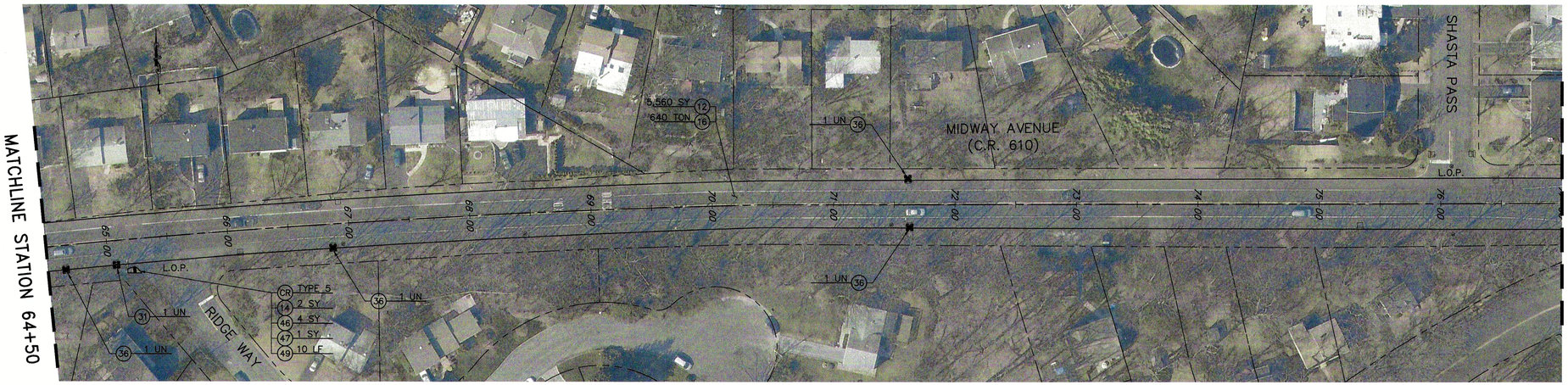


MIDWAY AVENUE

SCALE: 1"= 50'



MIDWAY AVENUE

SCALE: 1"= 50'

NORTH AVENUE

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	17,815	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	67	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2,005	
24	RESET EXISTING CASTING	UN	1	
31	RECONSTRUCTED INLET, TYPE B, USING EXISTING CASTING	UN	2	
33	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING	UN	3	
36	INLET, TYPE B	UN	6	
46	CONCRETE SIDEWALK, 4" THICK	SY	71	
47	DETECTABLE WARNING SURFACE	SY	7	
49	10" X 20" CONCRETE VERTICAL CURB	LF	85	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	11,845	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	140	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	180	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	340	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	60	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	15	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	50	
67	TOPSOILING, 4" THICK	SY	40	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	40	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-10

CP-35

RVE 1901
REMINGTON & VERNICK ENGINEERS
232 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033
(856) 795-9595, FAX (856) 795-1882
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Certification of Authorization: 24 GA 28003300
–ENGINEERING EXCELLENCE–

DATE: 3.12.18

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No	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - NORTH AND MIDWAY AVENUES

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

UNION COUNTY — VARIOUS MUNICIPALITIES

UNION COUNTY — NEW JERSEY

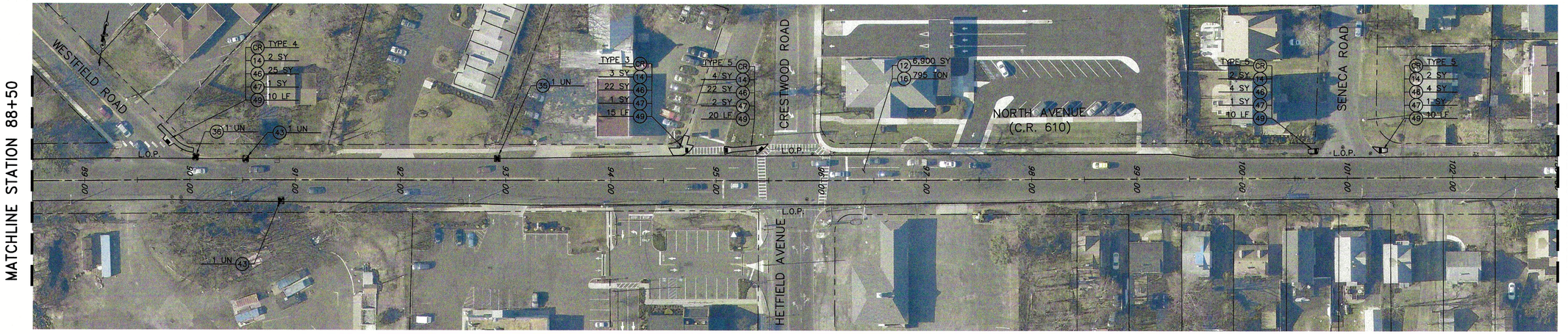
DRAWN BY	DESIGN BY	CHECKED BY	SCALE
J.L.G.	D.M.M.		AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

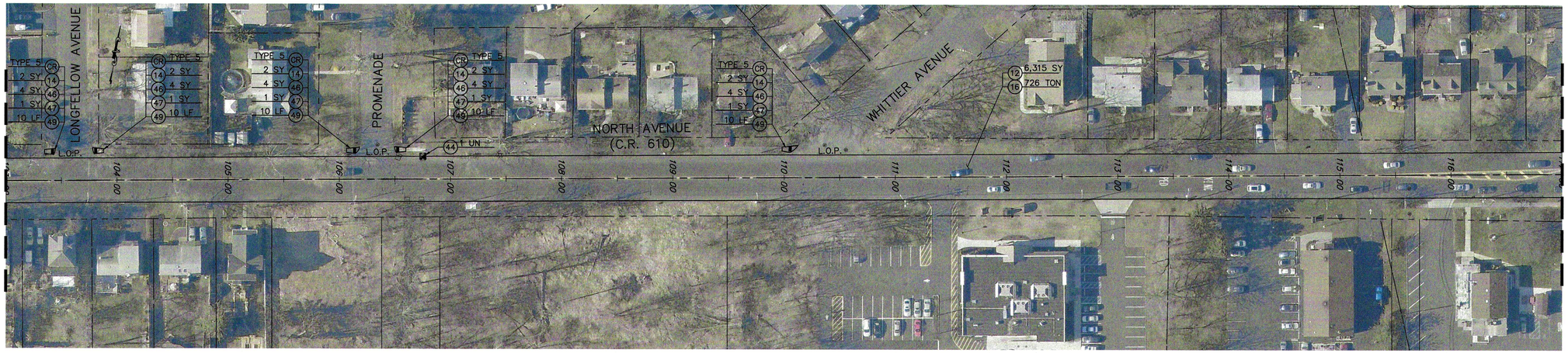
SHEET No.: 10 of 54

I:\RVE\PROJ\UNION\2000F010\engineering\cad\dgn\construction\2000f010-18sht-mainline.dgn(Layout: Layout1)(Default) by Mooney Ave eng. 3/12/2018 8:30:00 AM



NORTH AVENUE

SCALE: 1"= 50'



NORTH AVENUE

SCALE: 1"= 50'

NORTH AVENUE

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	19,515	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	27	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2,246	
35	INLET, TYPE A	UN	1	
36	INLET, TYPE B	UN	4	
43	BICYCLE SAFE GRATE	UN	2	
44	CURB PIECE	UN	1	
46	CONCRETE SIDEWALK, 4" THICK	SY	127	
47	DETECTABLE WARNING SURFACE	SY	13	
49	10" X 20" CONCRETE VERTICAL CURB	LF	135	

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	7,997	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	570	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	415	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	620	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	15	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	15	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	55	
67	TOPSOILING, 4" THICK	SY	70	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	70	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-11

CP-35

RVE 1901
REMINGTON & VERNICK ENGINEERS
232 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033
(856) 795-9595, FAX (856) 795-1882
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~ENGINEERING EXCELLENCE~

DATE: 3.12.18

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No.	REVISION	DATE	BY CHK

CONSTRUCTION PLAN - NORTH AND MIDWAY AVENUES

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
J.L.G.	D.M.M.		AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 11 of 54

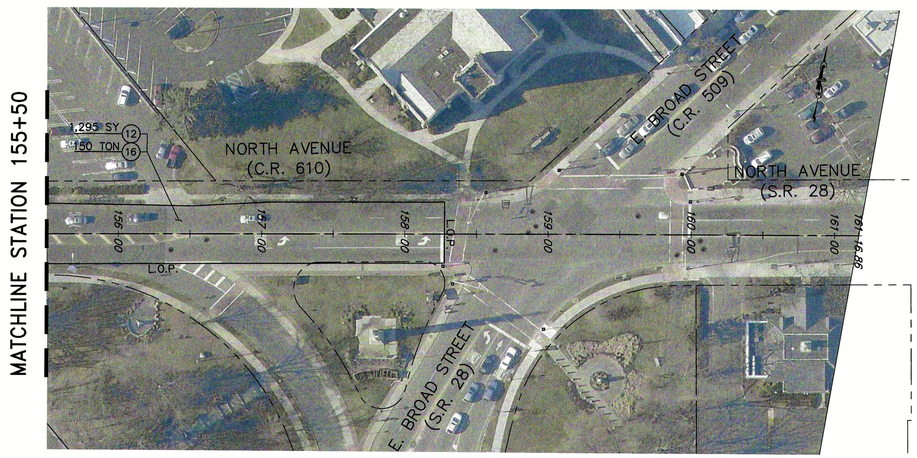
W:\2000F010\ROAD\PS\transportation_projects\union county\2000f010 - 2018 resurfacing\drawings\2000f010-North & Midway Ave.dwg, 3/12/2018 9:20:20 AM

NORTH AVENUE

SCALE: 1"= 50'

NORTH AVENUE

SCALE: 1"= 50'



NORTH AVENUE

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	12,380	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	13	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1,425	
35	INLET, TYPE A	UN	1	
36	INLET, TYPE B	UN	5	
43	BICYCLE SAFE GRATE	UN	1	
46	CONCRETE SIDEWALK, 4" THICK	SY	93	
47	DETECTABLE WARNING SURFACE	SY	6	
49	10" X 20" CONCRETE VERTICAL CURB	LF	70	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	6,035	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	260	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	350	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	560	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	15	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	10	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	40	
67	TOPSOILING, 4" THICK	SY	30	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	30	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-12

CP-35

REMINGTON & VERNICK ENGINEERS
232 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033
(856) 795-9595, FAX (856) 795-1882
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No.	REVISION	DATE	BY

CONSTRUCTION PLAN - NORTH AND MIDWAY AVENUES

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY :	DESIGN BY :	CHECKED BY :	SCALE :
J.L.G.	D.M.M.		AS NOTED
DATE : DECEMBER 2017			SHEET No. : 12 of 54
JOB No. : 2000F010			

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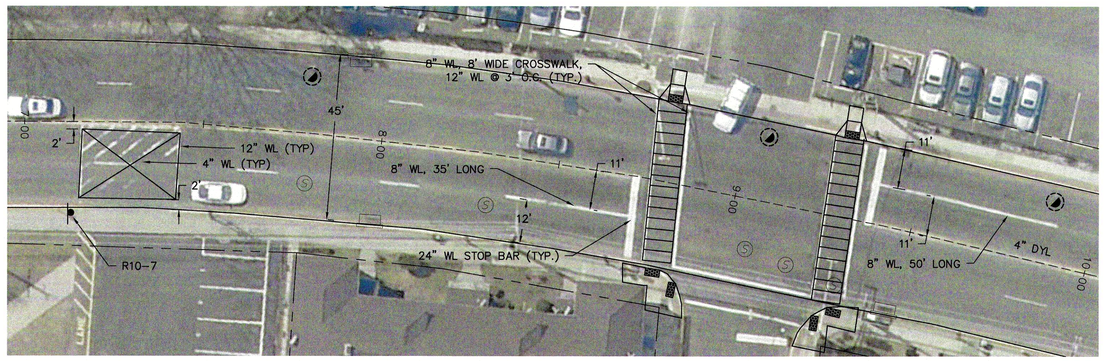
LIBERTY AVENUE

SCALE: 1"= 50'



STRIPING PLAN – LIBERTY AVENUE AND RYAN STREET

SCALE: 1"= 20'

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	7907	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	26	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	925	
24	RESET EXISTING CASTING	UN	18	
28	SET MANHOLE CASTING	UN	2	
29	SET MANHOLE CASTING, SUPPLIED BY OTHERS	UN	8	
43	BICYCLE SAFE GRATE	UN	7	
44	CURB PIECE	UN	8	
46	CONCRETE SIDEWALK, 4" THICK	SY	215	
47	DETECTABLE WARNING SURFACE	SY	12	
48	RESET PAVERS	SF	25	
49	10" X 20" CONCRETE VERTICAL CURB	LF	300	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	3310	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	375	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	330	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	44	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	116	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	58	
61	STREET NAME SIGN, TYPE DF, BREAKAWAY SUPPORT	SF	6.3	
62	ACCESSORY PANEL, TYPE DF	SF	6.3	
66	RESET JUNCTION BOX CASTING	UN	6	
67	TOPSOILING, 4" THICK	SY	10	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	10	
69	REGULATORY AND WARNING SIGNS	SF	2.5	
71	DAYTIME MILLING	DAY	1	
72	DAYTIME PAVING	DAY	1	

RVE 1901
REMINGTON & VERNICK ENGINEERS
ONE HARMON PLAZA, SUITE 210
SECAUCUS, NJ 07094
(201) 624-2137, FAX (201) 624-2136
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
–ENGINEERING EXCELLENCE–

DATE: 3·12·18

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - LIBERTY AVENUE

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

UNION COUNTY — VARIOUS MUNICIPALITIES

UNION COUNTY — NEW JERSEY

DRAWN BY :	DESIGN BY :	CHECKED BY :	SCALE :
C.O.G.	D.M.M.	F.J.S.	AS NOTED
DATE : DECEMBER 2017		SHEET No : 13 of 54	
JOB No : 2000F010			

CP-13

CP-35

\\RVE-FS01\GRD\JOBS\jobs\construction_projects\union county\2000f010\2018 resurfacing\planset\plan\C-2000f010-Liberty Ave.dwg 3/12/2018 9:32:40 AM

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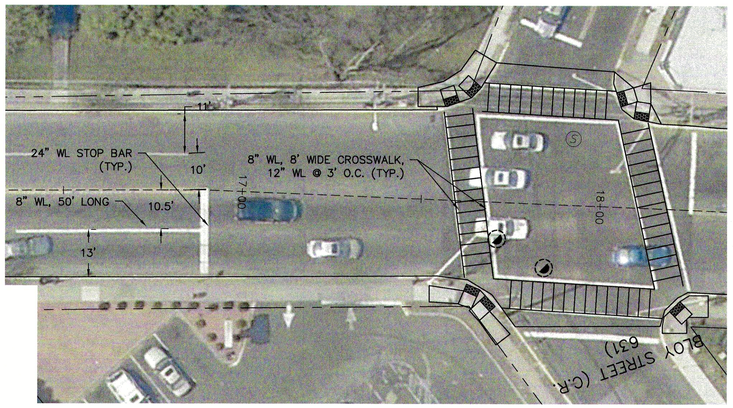
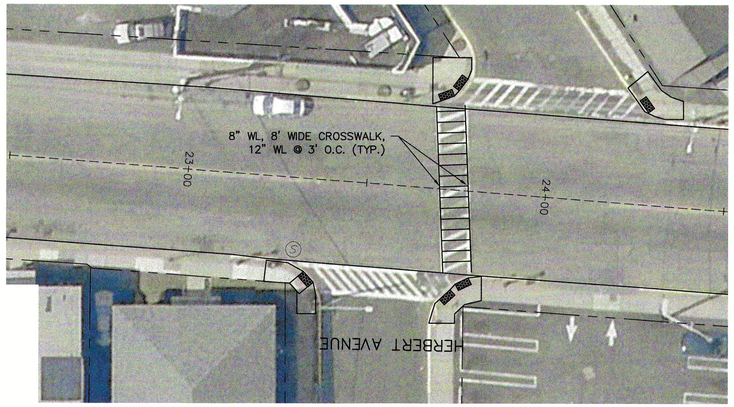
MATCHLINE STATION 30+50

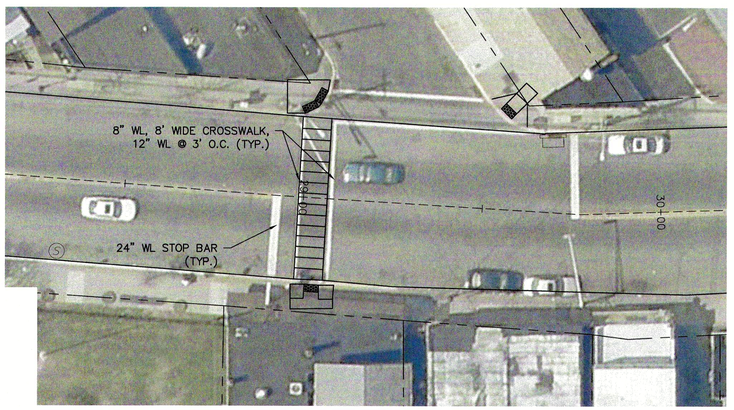
LIBERTY AVENUE
SCALE: 1"= 50'



STRIPING PLAN – LIBERTY AVENUE AND BLOY STREET
SCALE: 1"= 20'



STRIPING PLAN – LIBERTY AVENUE AND HERBERT AVENUE
SCALE: 1"= 20'



STRIPING PLAN – LIBERTY AND PRINCETON AVENUE
SCALE: 1"= 20'

GRAPHIC SCALE
20 0 10 20
(IN FEET)
1 inch = 20 ft.

GRAPHIC SCALE
50 0 25 50
(IN FEET)
1 inch = 50 ft.

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	8010	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	41	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	938	
24	RESET EXISTING CASTING	UN	13	
43	BICYCLE SAFE GRATE	UN	2	
44	CURB PIECE	UN	2	
46	CONCRETE SIDEWALK, 4" THICK	SY	330	
47	DETECTABLE WARNING SURFACE	SY	21	
48	RESET PAVERS	SF	5	
49	10" X 20" CONCRETE VERTICAL CURB	LF	500	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	2370	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	594	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	720	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	96	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	6	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	19	
61	STREET NAME SIGN, TYPE DF, BREAKAWAY SUPPORT	SF	8.4	
62	ACCESSORY PANEL, TYPE DF	SF	8.4	
67	TOPSOILING, 4" THICK	SY	50	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	50	
69	REGULATORY AND WARNING SIGNS	SF	50	
71	DAYTIME MILLING	DAY	1	
72	DAYTIME PAVING	DAY	1	

RVE 1901
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WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~

DATE: 3.12.18
FRANK J. SENEY JR.
NJ PROFESSIONAL ENGINEER LIC. No. 35321

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No.	REVISION	DATE	BY

CONSTRUCTION PLAN - LIBERTY AVENUE

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES — UNION COUNTY — UNION COUNTY — NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY	SCALE:
C.O.G.	D.M.M.	F.J.S.	AS NOTED
DATE: DECEMBER 2017		SHEET No.: 14 of 54	
JOB No.: 2000F010			

CP-14
CP-35

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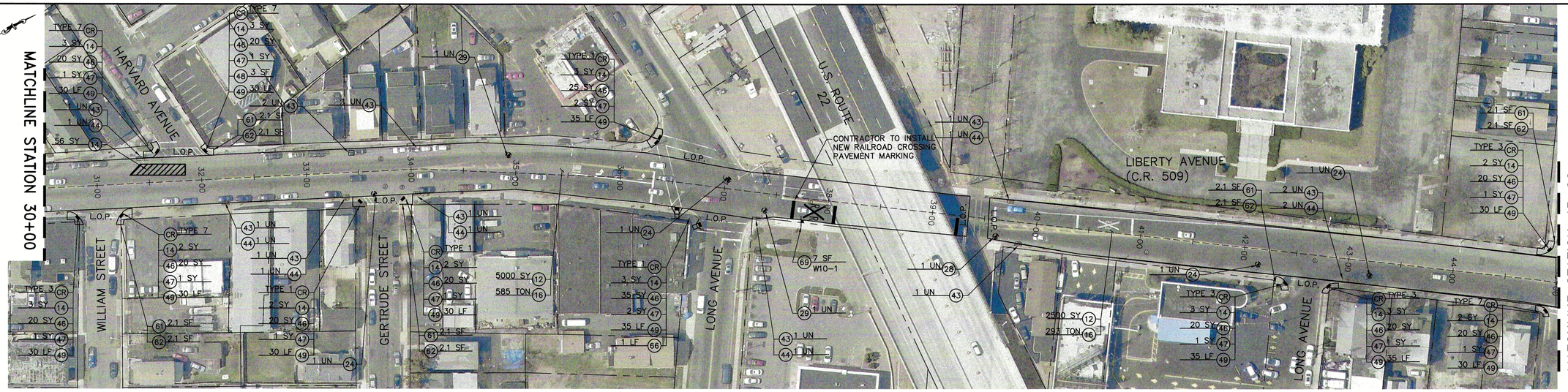
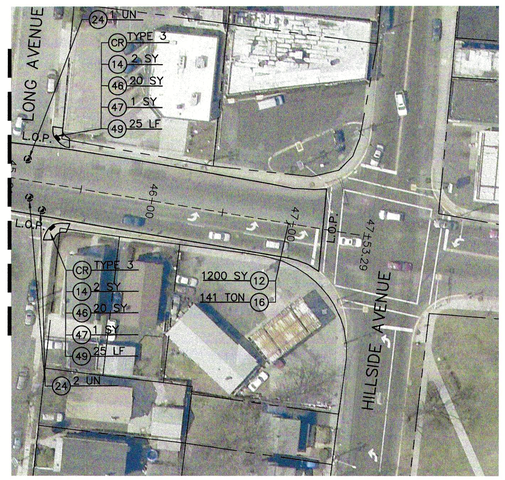


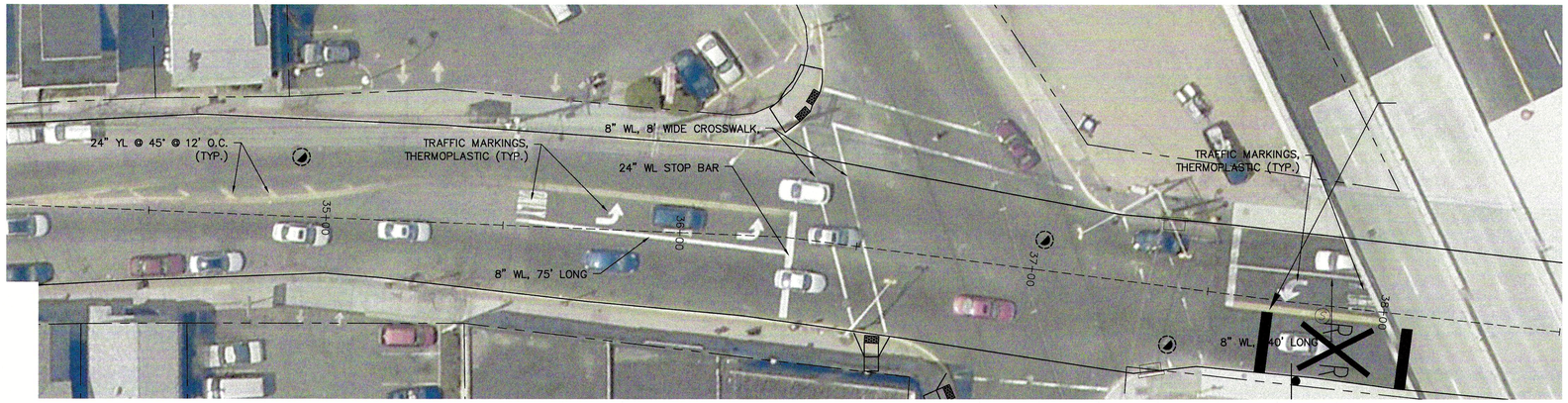
LIBERTY AVENUE

SCALE: 1"= 50'



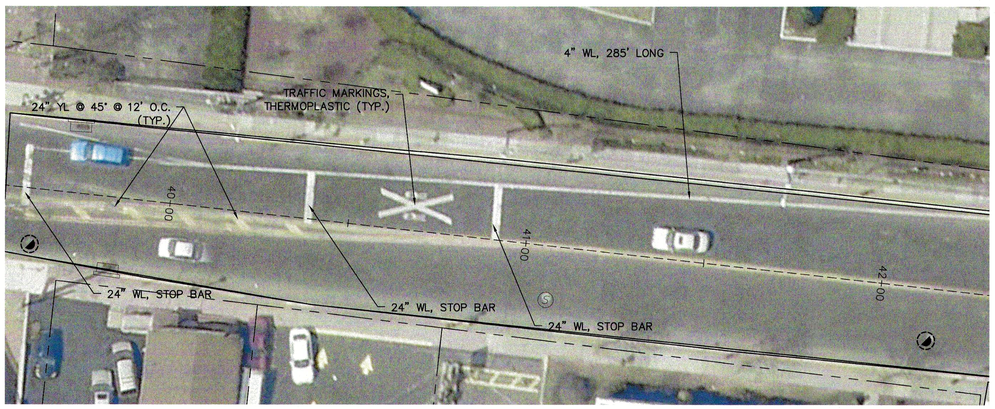
LIBERTY AVENUE

SCALE: 1"= 50'



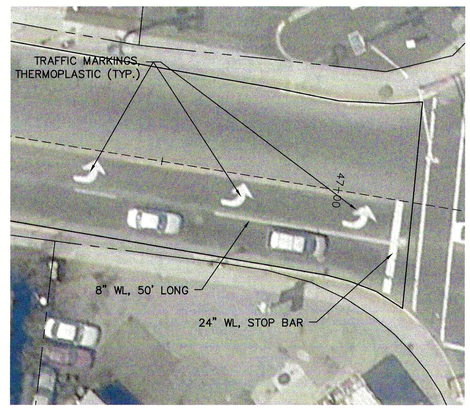
STRIPING PLAN – LIBERTY AVENUE AND LONG AVENUE

SCALE: 1"= 20'



STRIPING PLAN – LIBERTY AVENUE RAILROAD GRADE CROSSING

SCALE: 1"= 20'



STRIPING PLAN – LIBERTY AVENUE AND HILLSIDE AVENUE

SCALE: 1"= 20'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	8700	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	96	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1019	
24	RESET EXISTING CASTING	UN	22	
28	SET MANHOLE CASTING	UN	1	
29	SET MANHOLE CASTING, SUPPLIED BY OTHERS	UN	2	
43	BICYCLE SAFE GRATE	UN	11	
44	CURB PIECE	UN	7	
46	CONCRETE SIDEWALK, 4" THICK	SY	290	
47	DETECTABLE WARNING SURFACE	SY	16	
48	RESET PAVERS	SF	3	
49	10" X 20" CONCRETE VERTICAL CURB	LF	380	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	3300	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	365	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	377	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	332	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	10	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	20	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	17	
61	STREET NAME SIGN, TYPE DF, BREAKAWAY SUPPORT	SF	10.5	
62	ACCESSORY PANEL, TYPE DF	SF	10.5	
66	RESET JUNCTION BOX CASTING	UN	1	
67	TOPSOILING, 4" THICK	SY	60	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	60	
69	REGULATORY AND WARNING SIGNS	SF	7	
71	DAYTIME MILLING	DAY	1	
72	DAYTIME PAVING	DAY	1	

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-15

CP-35

RVE 1901

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Certification of Authorization: 24 GA 28003300
–ENGINEERING EXCELLENCE–

DATE: 3·12·18

FRANK J. SENEY JR.
NJ PROFESSIONAL ENGINEER LIC. No. 35321

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - LIBERTY AVENUE

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
C.O.G.	D.M.M.	F.J.S.	AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 15 of 54

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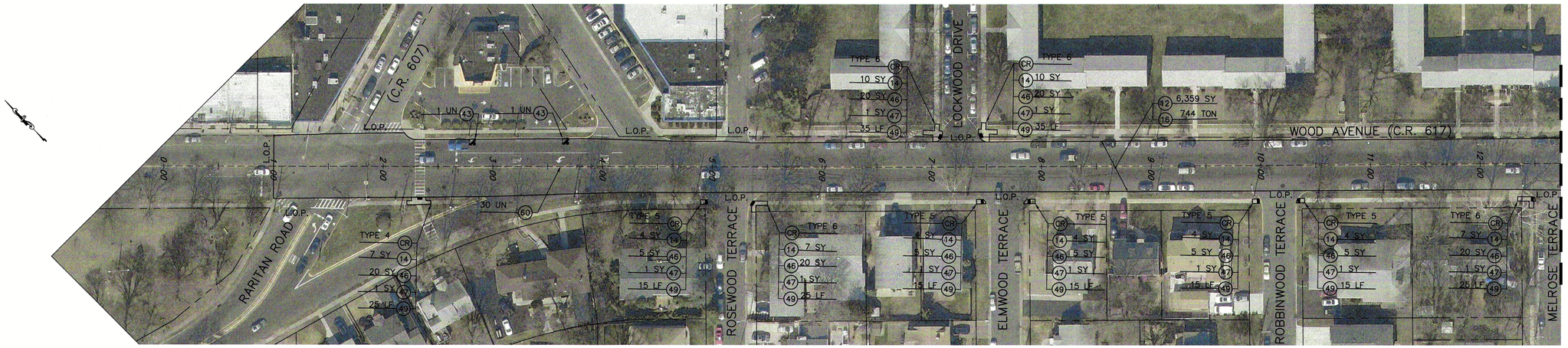
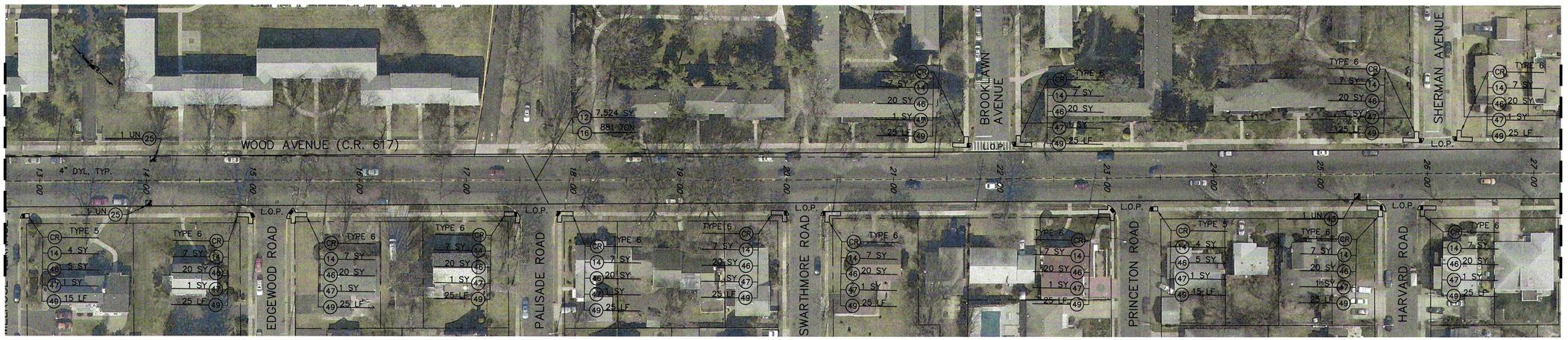


WOOD AVENUE

SCALE: 1"= 50'



WOOD AVENUE

SCALE: 1"= 50'

GRAPHIC SCALE

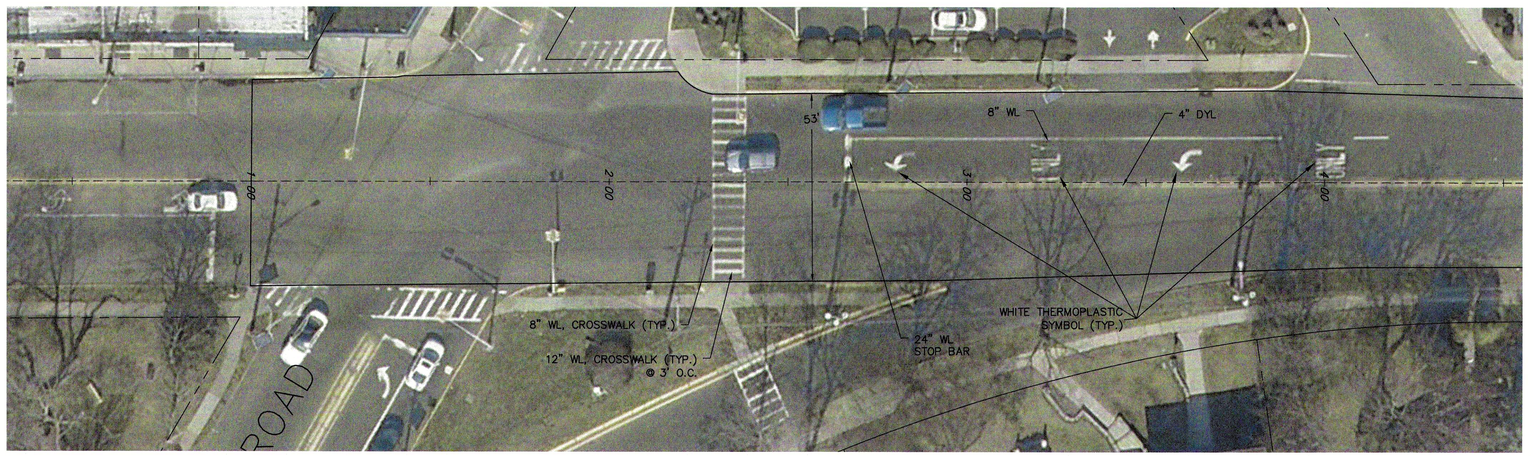
50 0 25 50

(IN FEET)

1 inch = 50 ft.

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	13,883	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	160	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1,625	
24	RESET EXISTING CASTING	UN	6	
25	SET INLET TYPE B CASTING	UN	2	
43	BICYCLE SAFE GRATE	UN	3	
46	CONCRETE SIDEWALK, 4" THICK	SY	395	
47	DETECTABLE WARNING SURFACE	SY	23	
49	10" X 20" CONCRETE VERTICAL CURB	LF	575	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	3,504	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	237	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	153	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	25	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	76	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	3	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	27	
60	FLEXIBLE DELINEATOR, GROUND MOUNTED	UN	30	
67	TOPSOILING, 4" THICK	SY	250	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	250	



STRIPING PLAN – WOOD AVENUE AND RARITAN ROAD

SCALE: 1"= 20'

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

CP-16

CP-35

RVE 1901
REMINGTON & VERNICK ENGINEERS
232 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033
(856) 795-9595, FAX (856) 795-1882
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Certification of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~

DATE: 3.12.18

FRANK J. SENEY JR.
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No.	REVISION	DATE	BY

CONSTRUCTION PLAN - WOOD AVENUE

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES

UNION COUNTY

NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
JLG	JLG	DMM	AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 16 of 54

W:\CH1\PS1\GRO\UP\Remington&Vernick\Engineering\2000F010\Wood Rd.dwg, 3/12/2018 8:25:19 AM

MATCHLINE STATION 27+25

WOOD AVENUE

SCALE: 1"= 50'

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	6,145	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	67	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	719	
24	RESET EXISTING CASTING	UN	6	
43	BICYCLE SAFE GRATE	UN	4	
46	CONCRETE SIDEWALK, 4" THICK	SY	175	
47	DETECTABLE WARNING SURFACE	SY	9	
48	RESET PAVERS	SF	80	
49	10" X 20" CONCRETE VERTICAL CURB	LF	240	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	1,912	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	178	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	24	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	76	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	3	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	14	
61	STREET NAME SIGN, TYPE DF, BREAKAWAY SUPPORT	SF	4.2	
67	TOPSOILING, 4" THICK	SY	90	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	90	

STRIPING PLAN – WOOD AVENUE AND ROUTE 27

SCALE: 1"= 20'

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

CP-17

CP-35

RVE 1901

REMINGTON & VERNICK **ENGINEERS**

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HADDONFIELD, NJ 08033
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No	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - WOOD AVENUE

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY

UNION COUNTY NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
JLG	JLG	DMM	AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No. 17 of 54

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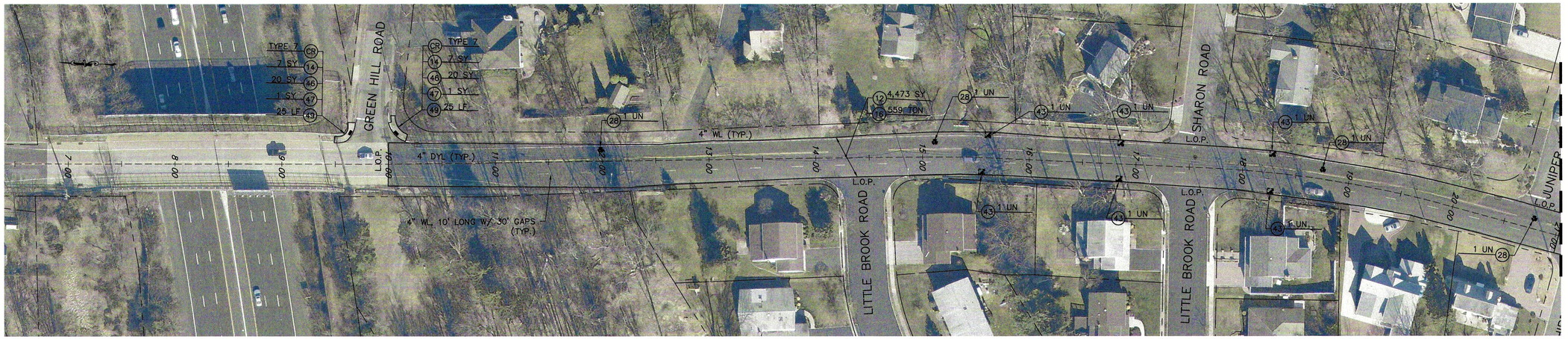

MATCHLINE STATION 21+00

SUMMIT ROAD

SCALE: 1"= 50'

SUMMIT ROAD

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	10,163	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	14	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1,190	
24	RESET EXISTING CASTING	UN	2	
28	SET MANHOLE CASTING	UN	8	
43	BICYCLE SAFE GRATE	UN	6	
46	CONCRETE SIDEWALK, 4" THICK	SY	40	
47	DETECTABLE WARNING SURFACE	SY	2	
49	10" X 20" CONCRETE VERTICAL CURB	LF	50	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	8,653	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	154	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	48	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	51	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	31	
67	TOPSOILING, 4" THICK	SY	20	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	20	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-18

CP-35

RVE 1901
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DATE 3.2.18

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - SUMMIT ROAD

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
E.V.O.			AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 18 of 54

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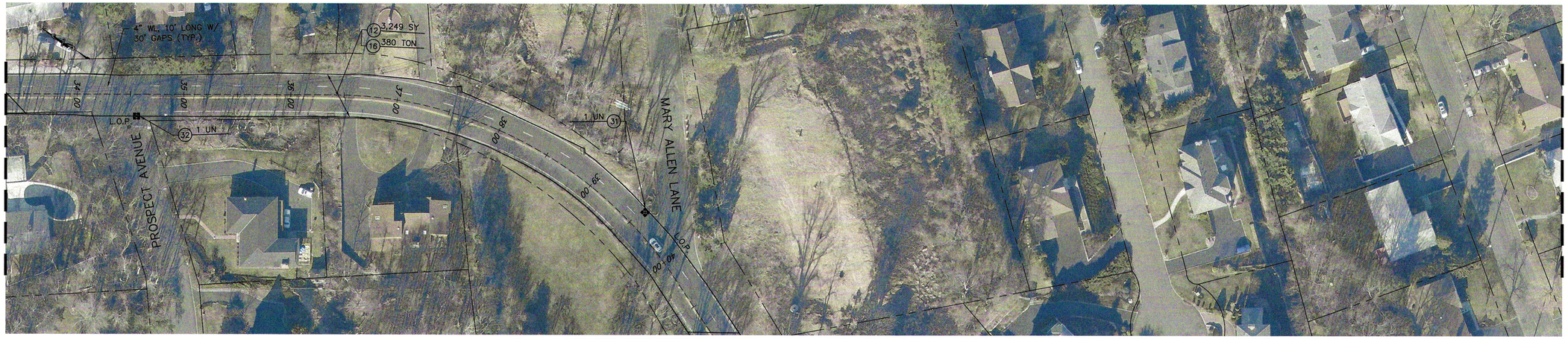

SUMMIT ROAD

SCALE: 1"= 50'

SUMMIT ROAD

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	9,509	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1,113	
24	RESET EXISTING CASTING	UN	6	
28	SET MANHOLE CASTING	UN	1	
31	RECONSTRUCTED INLET, TYPE B, USING EXISTING CASTING	UN	2	
32	RECONSTRUCTED INLET, TYPE E, USING EXISTING CASTING	UN	1	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	8,706	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	54	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	44	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-19

CP-35

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - SUMMIT ROAD

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

UNION COUNTY

VARIOUS MUNICIPALITIES

UNION COUNTY

NEW JERSEY

DRAWN BY :	DESIGN BY :	CHECKED BY :	SCALE :
E.V.O.			AS NOTED
DATE : DECEMBER 2017			SHEET No. : 19 of 54
JOB No. : 2000F010			

W:\CH-FS1\GROUP\Drawings\plans_prep\union county\2000f010 - 2018 resurfacing\Drawings\C-2000f010 Summit Rd.dwg, 3/12/2018 9:37:37 AM

SUMMIT ROAD

SCALE: 1"= 50'

SUMMIT ROAD

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	12,924	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1,513	
24	RESET EXISTING CASTING	UN	9	
29	SET MANHOLE CASTING, SUPPLIED BY OTHERS	UN	3	
31	RECONSTRUCTED INLET, TYPE B, USING EXISTING CASTING	UN	6	
43	BICYCLE SAFE GRATE	UN	2	
44	CURB PIECE	UN	1	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	10,528	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	166	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	178	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	116	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	30	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	43	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-20

CP-35

RVE 1901
REMINGTON & VERNICK **ENGINEERS**
232 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033
(856) 795-9595, FAX (856) 795-1882
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~

DATE: 3.12.18

FRANK J. SENEY JR.
NJ PROFESSIONAL ENGINEER LIC. No. 35321

PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - SUMMIT ROAD

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
E.V.O.			AS NOTED
DATE			SHEET No.
DECEMBER 2017			20 of 54
JOB No.			
2000F010			

\\NYCHFPSYSROUP\Transportation_Engineering\Projects\2000F010 - 2018 Resurfacing\Drawings\Plan\2000F010-Summit Rd.dwg 3/12/2018 9:37:59 AM

MATCHLINE STATION 84+30

SUMMIT ROAD

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	5,397	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	7	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	632	
24	RESET EXISTING CASTING	UN	2	
29	SET MANHOLE CASTING, SUPPLIED BY OTHERS	UN	3	
46	CONCRETE SIDEWALK, 4" THICK	SY	20	
47	DETECTABLE WARNING SURFACE	SY	1	
49	10" X 20" CONCRETE VERTICAL CURB	LF	25	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	4,018	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	18	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	13	
67	TOPSOILING, 4" THICK	SY	15	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	15	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-21

CP-35

RVE 1901
REMINGTON & VERNICK **ENGINEERS**
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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - SUMMIT ROAD

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY :	DESIGN BY :	CHECKED BY :	SCALE :
E.V.O.			AS NOTED
DATE : DECEMBER 2017			SHEET No. : 21 of 54
JOB No. : 2000F010			

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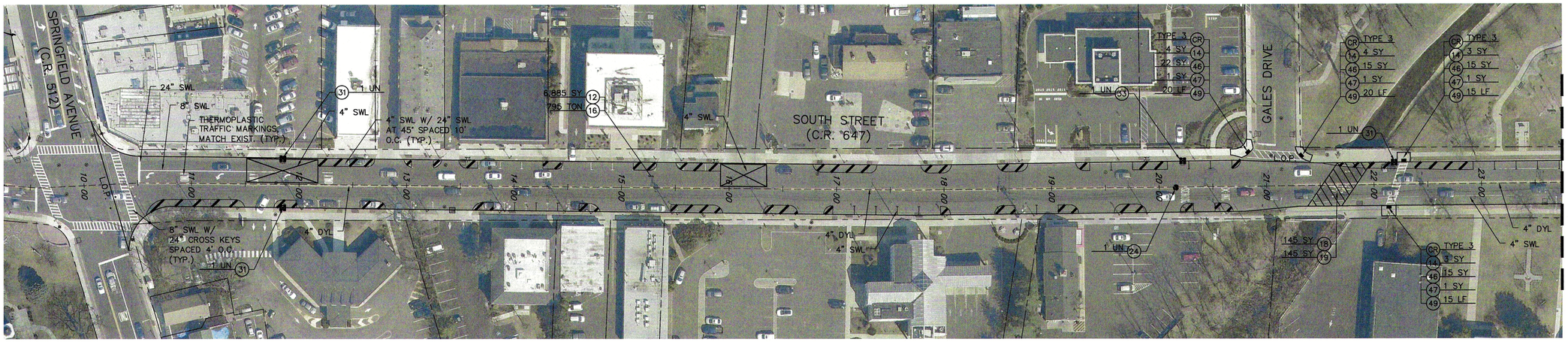
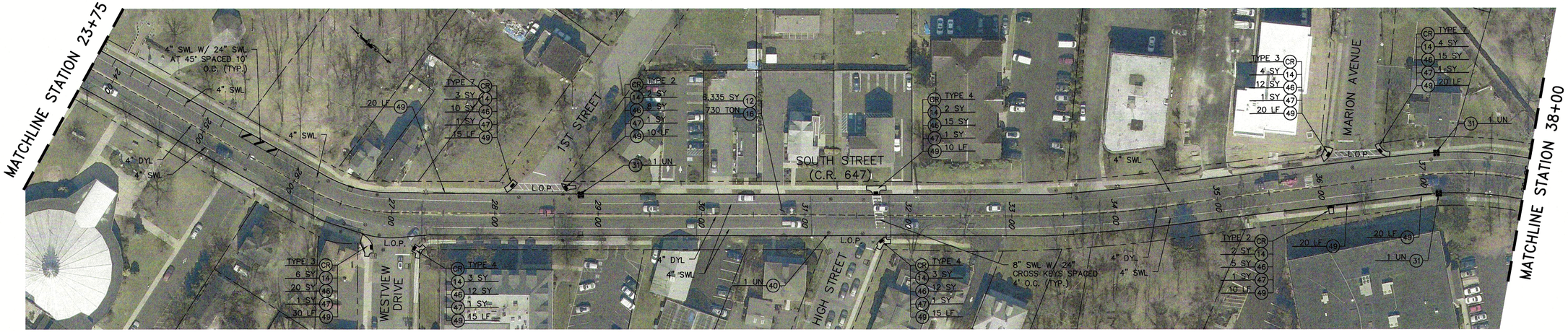


SOUTH STREET

SCALE: 1"= 50'



SOUTH STREET

SCALE: 1"= 50'

SOUTH STREET

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	17,570	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	61	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2,025	
18	DIAMOND GRINDING, CONCRETE DECK SURFACE	SY	145	
19	MEMBRANE WATERPROOFING	SY	145	
24	RESET EXISTING CASTING	UN	5	
28	SET MANHOLE CASTING	UN	1	
31	RECONSTRUCTED INLET, TYPE B, USING EXISTING CASTING	UN	8	
33	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING	UN	1	
40	RECONSTRUCTED MANHOLE, USING EXISTING CASTINGS	UN	1	
46	CONCRETE SIDEWALK, 4" THICK	SY	265	

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
47	DETECTABLE WARNING SURFACE	SY	19	
49	10" X 20" CONCRETE VERTICAL CURB	LF	305	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	12,524	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	430	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	960	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	85	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	45	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	50	
67	TOPSOILING, 4" THICK	SY	100	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	100	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-22

CP-35

RVE 1901
REMINGTON & VERNICK **ENGINEERS**
232 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033
(856) 795-9595, FAX (856) 795-1882
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~

DATE: 3.12.18

FRANK J. SENEY JR.
NJ PROFESSIONAL ENGINEER LIC. No. 35321

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No.	REVISION	DATE	BY CHK

CONSTRUCTION PLAN - SOUTH STREET

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY :	DESIGN BY :	CHECKED BY :	SCALE :
J.L.G.	D.M.M.		AS NOTED
DATE : DECEMBER 2017			SHEET No. 22 of 54
JOB No. : 2000F010			

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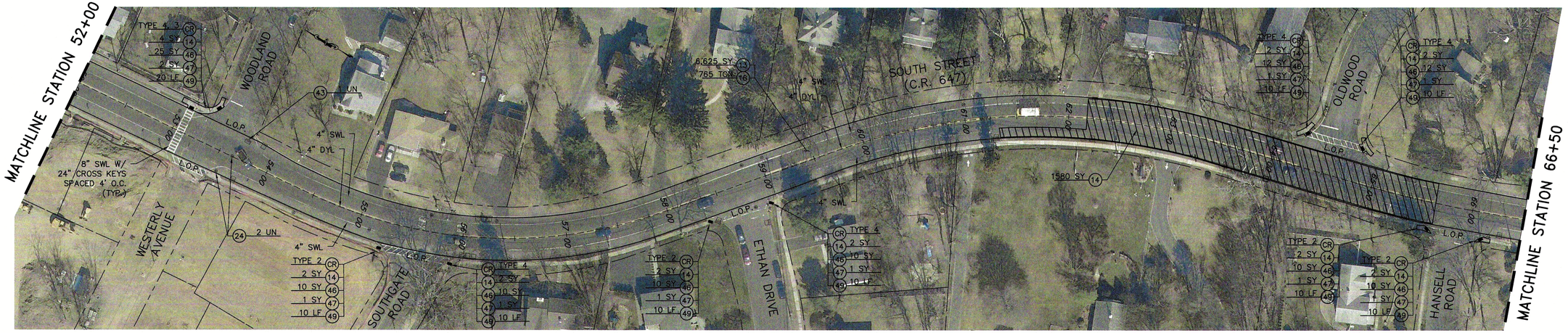
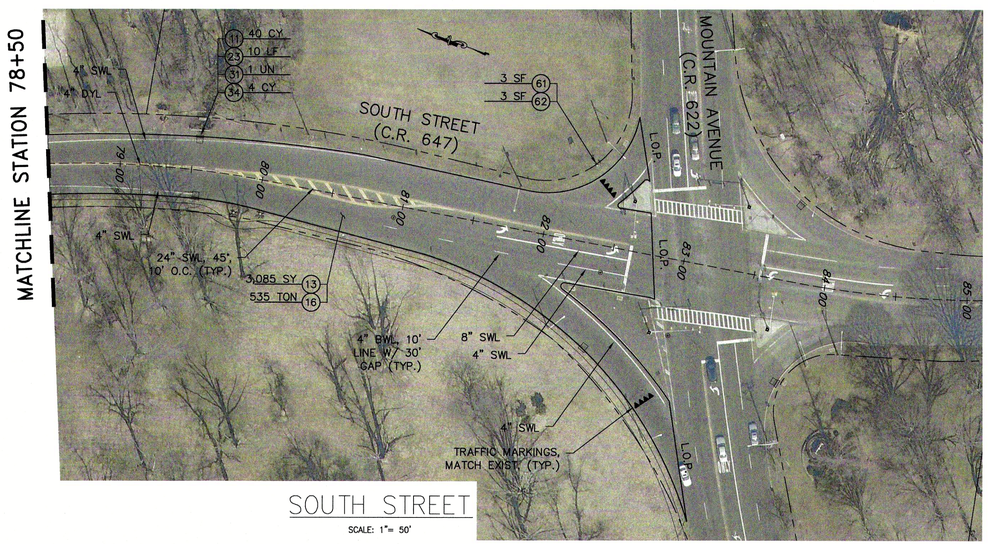


SOUTH STREET

SCALE: 1"= 50'

SOUTH STREET

SCALE: 1"= 50'



SOUTH STREET

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
11	DENSE-GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS	CY	40	
12	HMA MILLING, 3" OR LESS	SY	15,140	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	2,324	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1,925	
23	15" REINFORCED CONCRETE PIPE, CLASS V	LF	10	
24	RESET EXISTING CASTING	UN	2	
28	SET MANHOLE CASTING	UN	1	
31	RECONSTRUCTED INLET, TYPE B, USING EXISTING CASTING	UN	1	
34	CONCRETE HEADWALL	CY	4	
43	BICYCLE SAFE GRATE	UN	1	
46	CONCRETE SIDEWALK, 4" THICK	SY	129	
47	DETECTABLE WARNING SURFACE	SY	12	
49	10" X 20" CONCRETE VERTICAL CURB	LF	120	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	10,935	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	185	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	240	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	85	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	80	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	10	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	40	
61	STREET NAME SIGN, TYPE DF, BREAKAWAY SUPPORT	SF	3	
62	ACCESSORY PANEL, TYPE DF	SF	3	
67	TOPSOILING, 4" THICK	SY	160	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	160	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-23

CP-35

RVE 1901
REMINGTON & VERNICK ENGINEERS
232 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033
(856) 795-9595, FAX (856) 795-1882
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
–ENGINEERING EXCELLENCE–

DATE: 3.12.18

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NJ PROFESSIONAL ENGINEER LIC. No. 35321

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - SOUTH STREET

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
J.L.G.	D.M.M.		AS NOTED
DATE: DECEMBER 2017			SHEET No.: 23 of 54
JOB No.: 2000F010			

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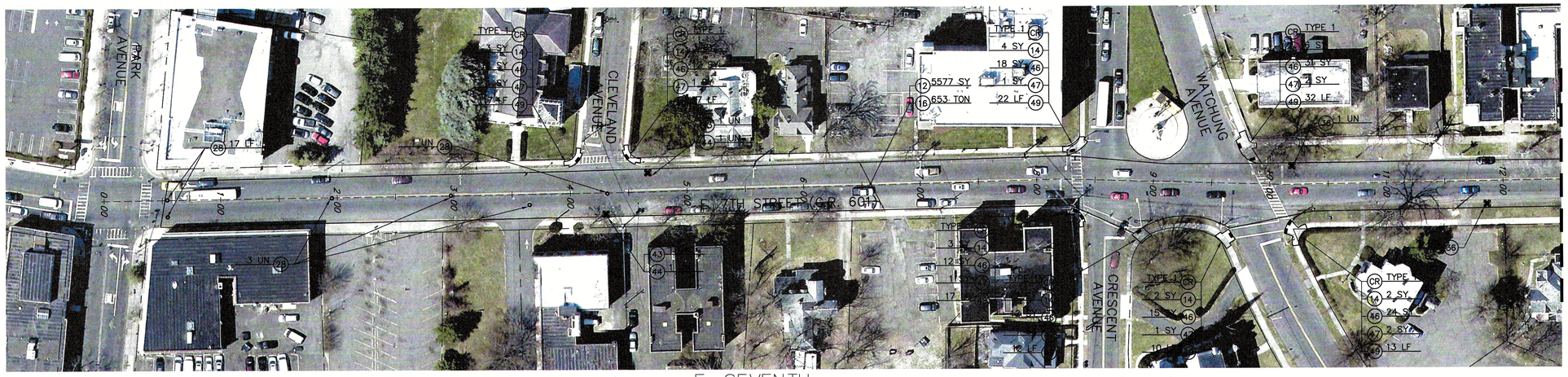

E. SEVENTH STREET

SCALE: 1"= 50'

E. SEVENTH STREET

SCALE: 1"= 50'

E. SEVENTH STREET

SCALE: 1"= 50'

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	15124	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	56	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1770	
24	RESET EXISTING CASTING	UN	10	
28	SET MANHOLE CASTING	UN	16	
36	INLET, TYPE B	UN	9	
43	BICYCLE SAFE GRATE	UN	2	
44	CURB PIECE	UN	2	
46	CONCRETE SIDEWALK, 4" THICK	SY	365	
47	DETECTABLE WARNING SURFACE	SY	29	
49	10" X 20" CONCRETE VERTICAL CURB	LF	324	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	6230	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	427	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	505	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	63	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	82	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	3	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	395	
67	TOPSOILING, 4" THICK	SY	100	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	100	

RVE 1901
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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - E. 7th STREET

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
S.J.S	D.M.M.		AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 24 of 54

CP-24
CP-35

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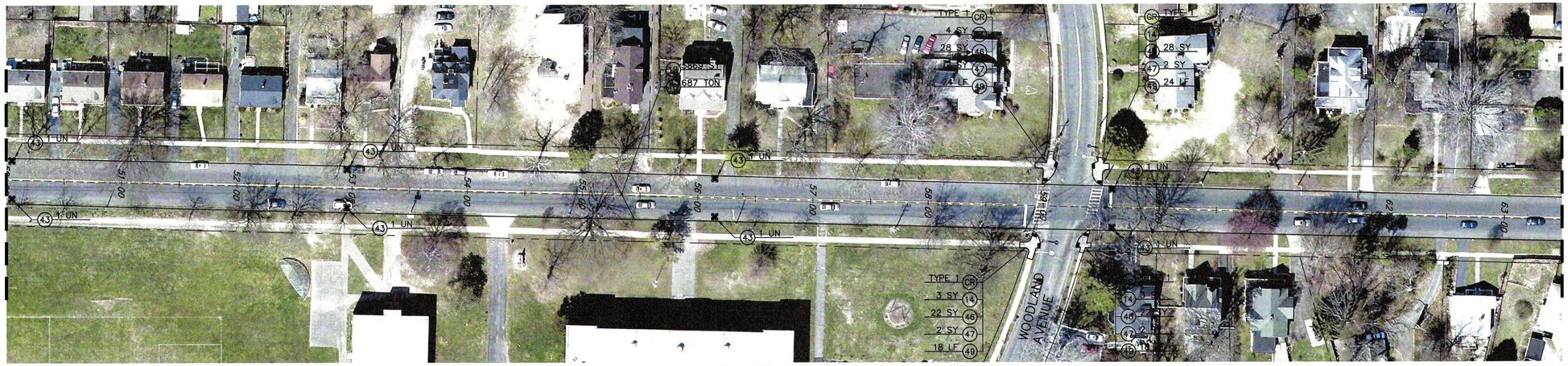
E. SEVENTH STREET

SCALE: 1"= 50'



E. SEVENTH STREET

SCALE: 1"= 50'

E. SEVENTH STREET

SCALE: 1"= 50'

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	16380	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	59	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1917	
24	RESET EXISTING CASTING	UN	5	
28	SET MANHOLE CASTING	UN	12	
36	INLET, TYPE B	UN	5	
43	BICYCLE SAFE GRATE	UN	17	
46	CONCRETE SIDEWALK, 4" THICK	SY	355	
47	DETECTABLE WARNING SURFACE	SY	32	
49	10" X 20" CONCRETE VERTICAL CURB	LF	344	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	7176	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	816	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	925	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	127	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	134	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	9	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	10	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	450	
67	TOPSOILING, 4" THICK	SY	100	

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - E. 7TH STREET

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
S.J.S.	D.M.M.		AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 25 of 54

CP-25

CP-35

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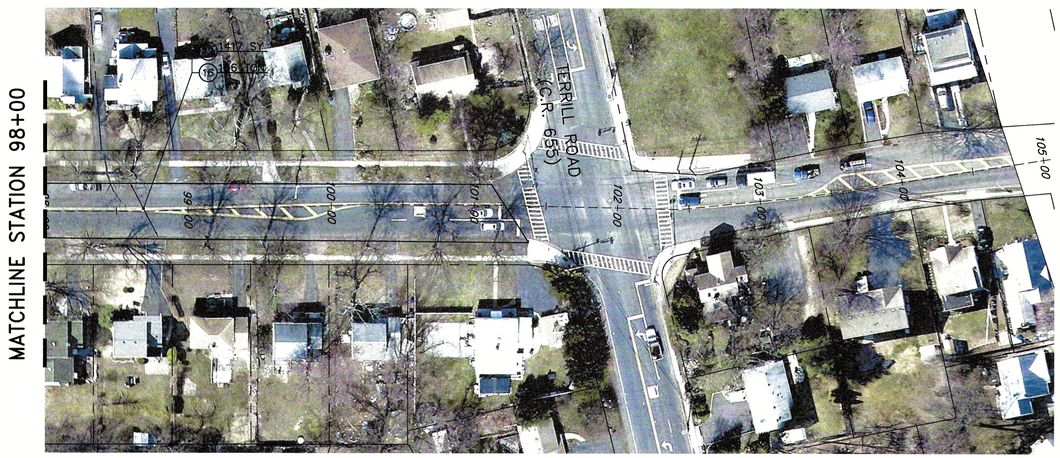
SCALE: 1"= 50'

SCALE: 1"= 50'



SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	11381	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	18	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1333	
24	RESET EXISTING CASTING	UN	3	
28	SET MANHOLE CASTING	UN	3	
36	INLET, TYPE B	UN	3	
43	BICYCLE SAFE GRATE	UN	17	
46	CONCRETE SIDEWALK, 4" THICK	SY	36	
47	DETECTABLE WARNING SURFACE	SY	6	
49	10" X 20" CONCRETE VERTICAL CURB	LF	108	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	5482	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	100	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	76	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	96	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	9	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	5	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	345	
67	TOPSOILING, 4" THICK	SY	100	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-26

CP-35

RVE 1901
REMINGTON & VERNICK ENGINEERS
232 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033
(856) 795-9595, FAX (856) 795-1882
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~

DATE: 3-12-18

FRANK J. SENEY JR.
NJ PROFESSIONAL ENGINEER LIC. No. 35321

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - E. 7th STREET

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
S.J.S.	D.M.M.		AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 26 of 54

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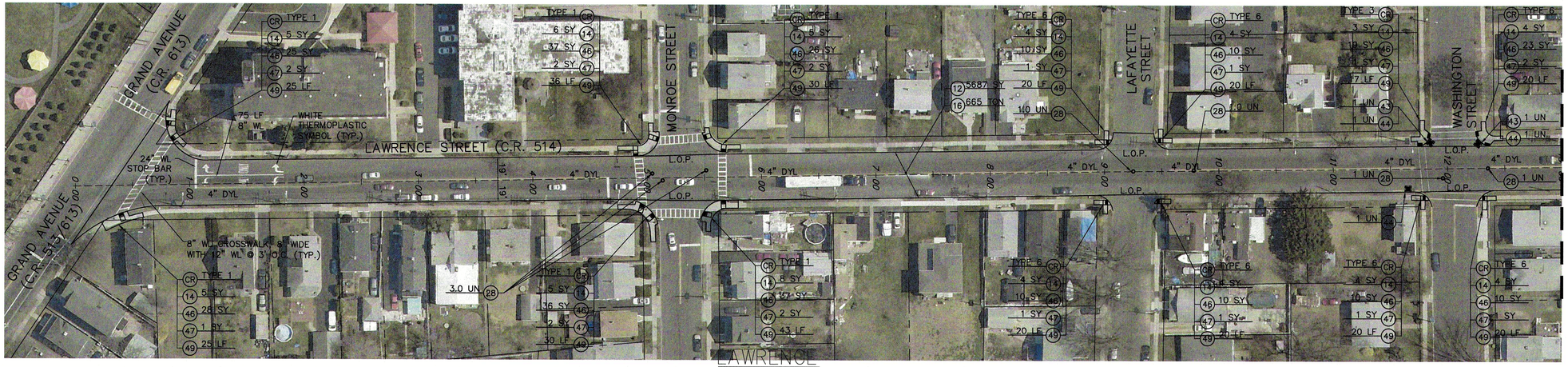
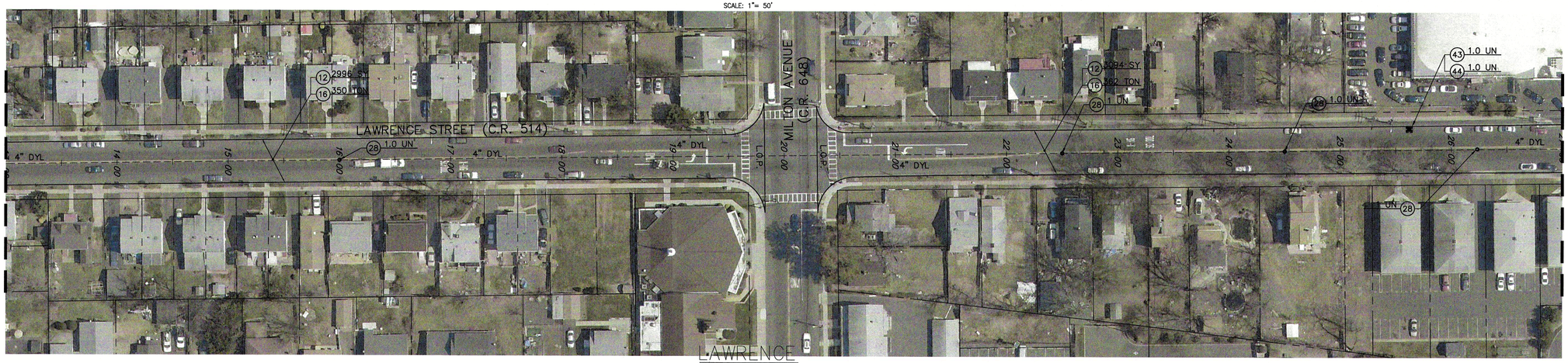


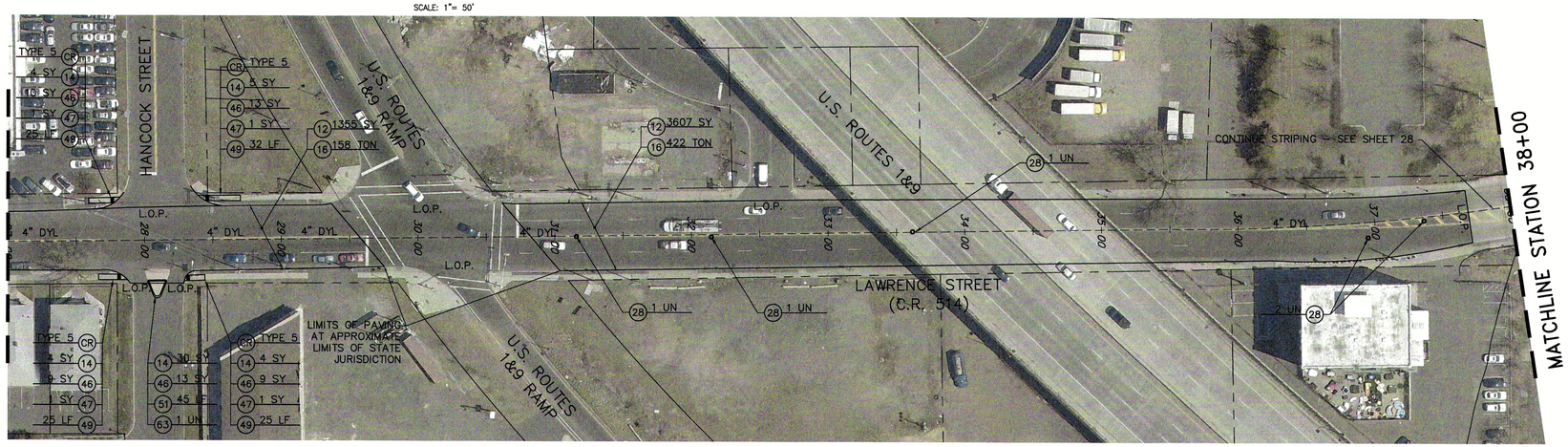
LAWRENCE STREET

SCALE: 1"= 50'



LAWRENCE STREET

SCALE: 1"= 50'



LAWRENCE STREET

SCALE: 1"= 50'

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	16739	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	112	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1957	
28	SET MANHOLE CASTING	UN	16	
43	BICYCLE SAFE GRATE	UN	3	
44	CURB PIECE	UN	4	
46	CONCRETE SIDEWALK, 4" THICK	SY	345	
47	DETECTABLE WARNING SURFACE	SY	24	
49	10" X 20" CONCRETE VERTICAL CURB	LF	453	
51	12" X 13" CONCRETE SLOPING CURB	LF	45	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	6807	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	915	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	1145	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	287	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	258	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	26	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	4	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	40	
63	RELOCATE SIGN	UN	1	
67	TOPSOILING, 4" THICK	SY	100	

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~ENGINEERING EXCELLENCE~

DATE: 3.12.18

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - LAWRENCE STREET

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
S.J.S.	S.J.S.	D.M.M.	AS NOTED
DATE: DECEMBER 2017		SHEET No.: 27 of 54	
JOB No.: 2000F010			

CP-27

CP-35

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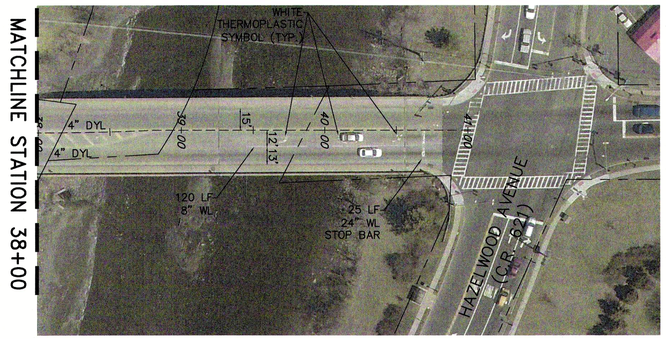
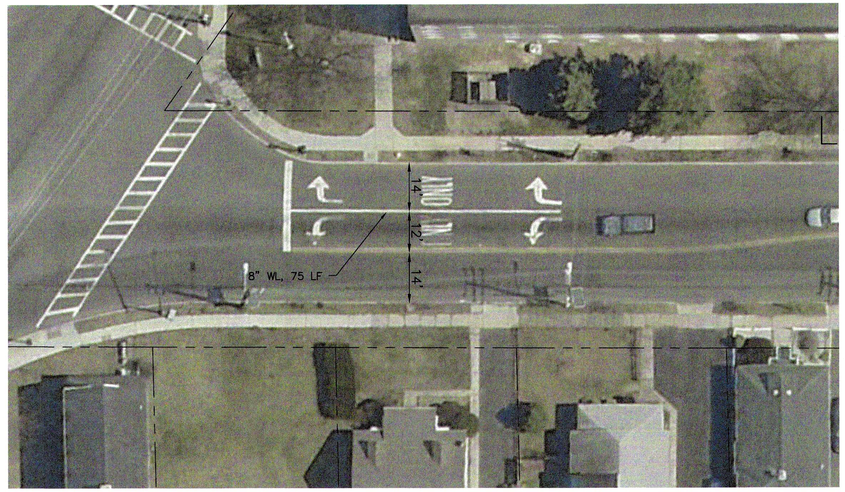


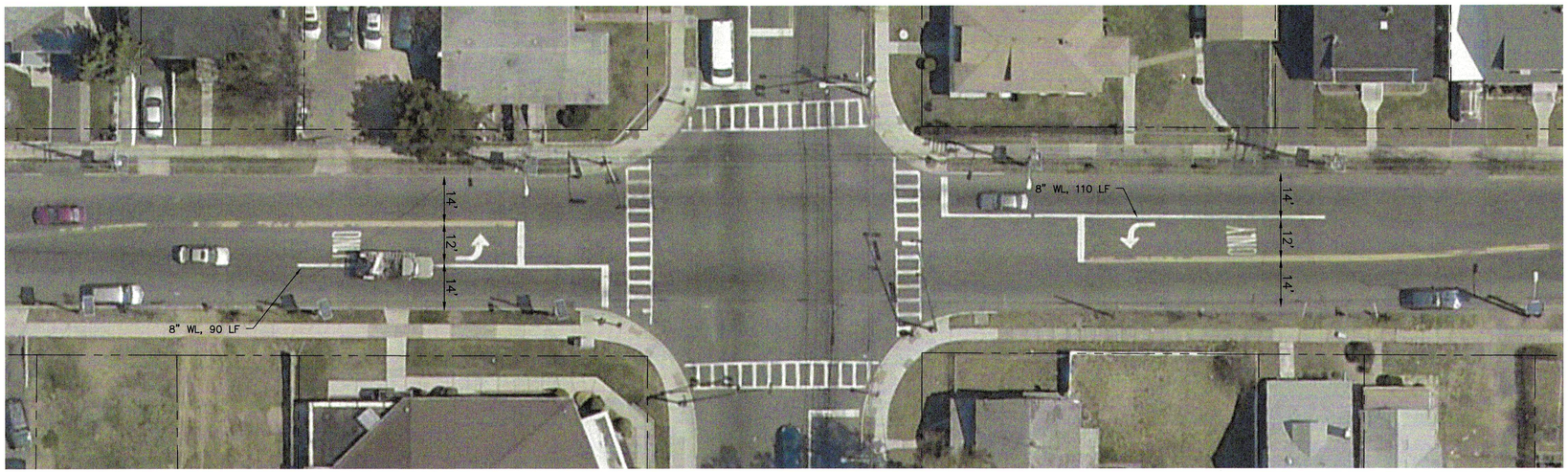
LAWRENCE STREET

SCALE: 1"= 50'



STRIPING PLAN – LAWRENCE STREET & GRAND AVENUE

SCALE: 1"= 20'



STRIPING PLAN – LAWRENCE STREET & GRAND AVENUE

SCALE: 1"= 20'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	720	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	124	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	101	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	52	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	3	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	4	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	3	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-28

CP-35

REMINGTON & VERNICK **ENGINEERS**
232 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033
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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - LAWRENCE STREET

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
S.J.S.	S.J.S.	D.M.M.	AS NOTED
DATE: DECEMBER 2017		SHEET No.:	28 of 54
JOB No.: 2000F010			

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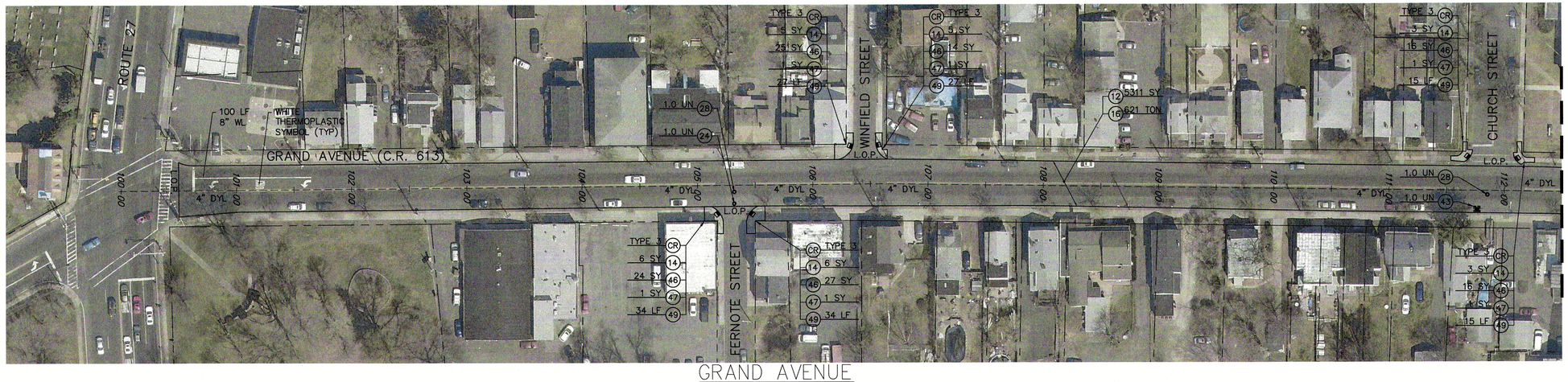
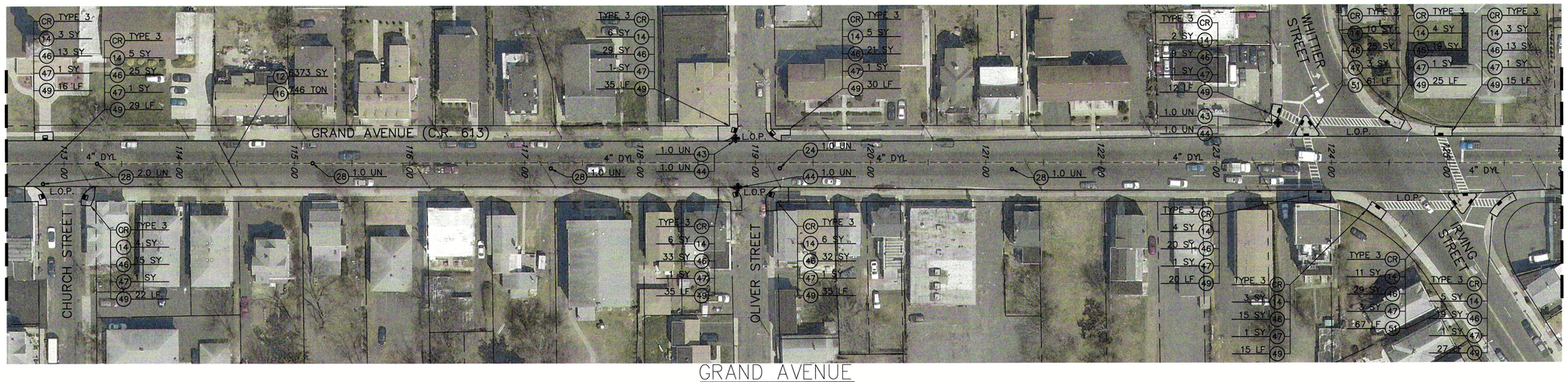


GRAND AVENUE

SCALE: 1"= 50'



GRAND AVENUE

SCALE: 1"= 50'

GRAND AVENUE

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	16123	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	125	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1886	
24	RESET EXISTING CASTING	UN	6	
28	SET MANHOLE CASTING	UN	9	
43	BICYCLE SAFE GRATE	UN	3	
44	CURB PIECE	UN	3	
46	CONCRETE SIDEWALK, 4" THICK	SY	531	
47	DETECTABLE WARNING SURFACE	SY	31	
49	10" X 20" CONCRETE VERTICAL CURB	LF	579	
51	12" X 13" CONCRETE SLOPING CURB	LF	128	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	6443	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	446	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	278	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	48	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	52	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	10	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	2	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	45	
61	STREET NAME SIGN, TYPE DF, BREAKAWAY SUPPORT	SF		
62	ACCESSORY PANEL, TYPE DF	SF		
67	TOPSOILING, 4" THICK	SY	100	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-29

CP-35

RVE 1901
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~ENGINEERING EXCELLENCE~

DATE: 3.12.18

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - GRAND AVENUE

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

UNION COUNTY — VARIOUS MUNICIPALITIES

UNION COUNTY — NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
SJS	SJS	DMM	AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 29 of 54

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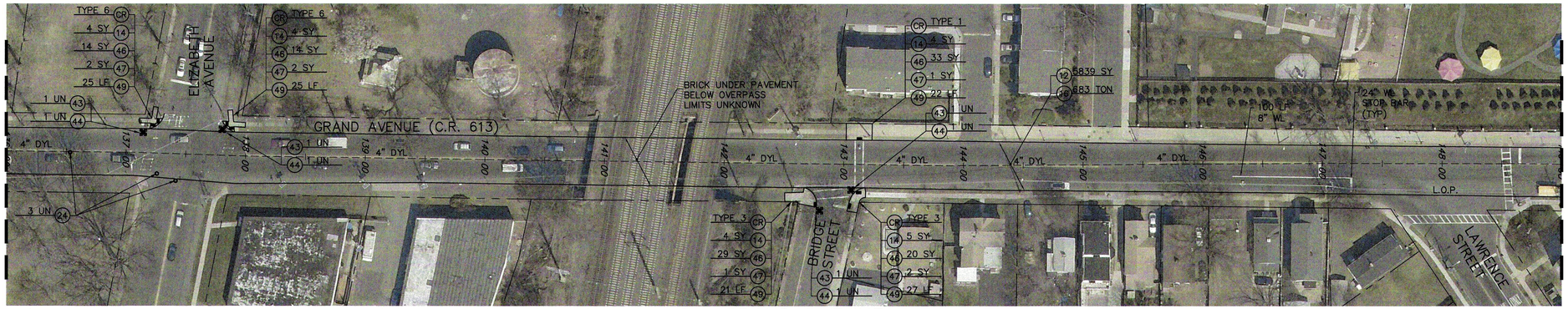

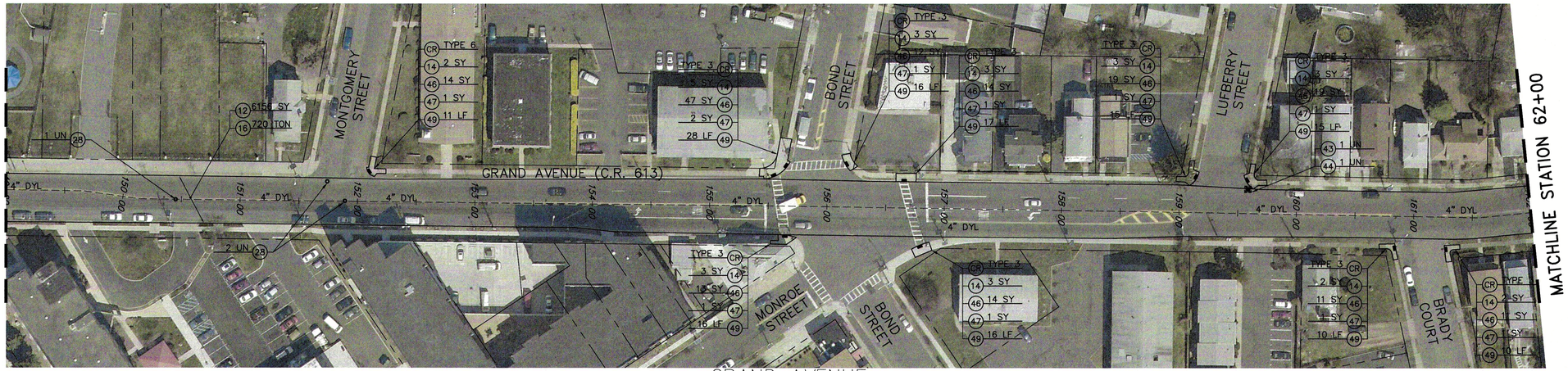

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	16123	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	120	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1886	
24	RESET EXISTING CASTING	UN	3	
28	SET MANHOLE CASTING	UN	3	
43	BICYCLE SAFE GRATE	UN	10	
44	CURB PIECE	UN	10	
46	CONCRETE SIDEWALK, 4" THICK	SY	533	
47	DETECTABLE WARNING SURFACE	SY	33	
49	10" X 20" CONCRETE VERTICAL CURB	LF	579	
51	12" X 13" CONCRETE SLOPING CURB	LF	128	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	6443	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	446	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	278	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	48	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	52	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	14	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	4	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	47	
67	TOPSOILING, 4" THICK	SY	100	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	100	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-30

CP-35

RVE 1901
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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - GRAND AVENUE

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
SJS	SJS	DMM	AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 30 of 54

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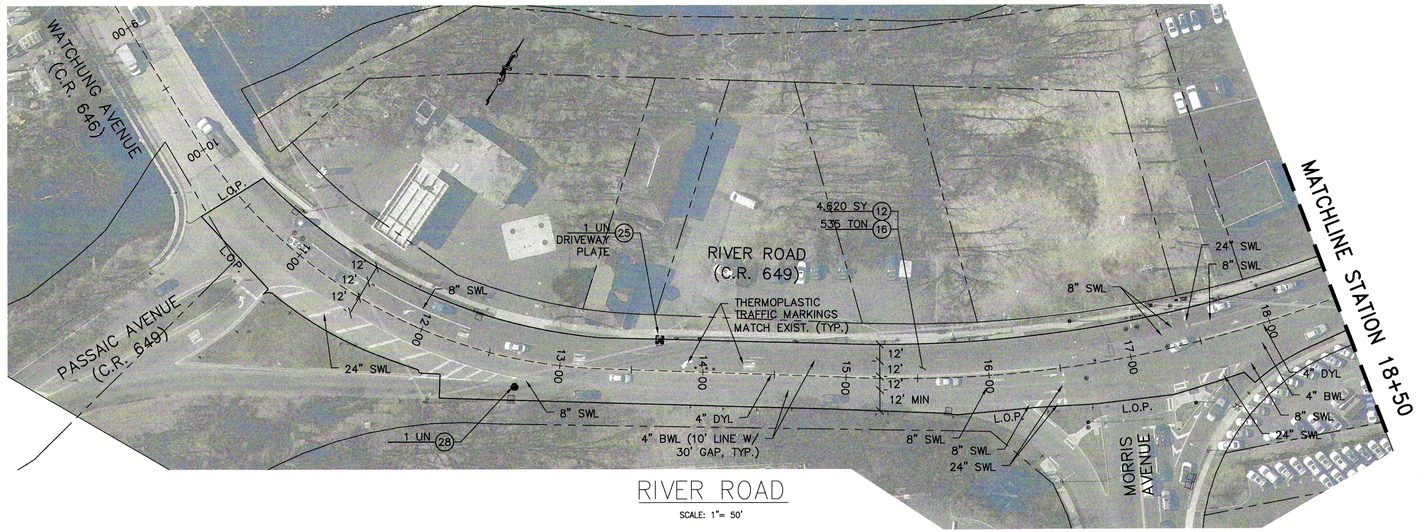
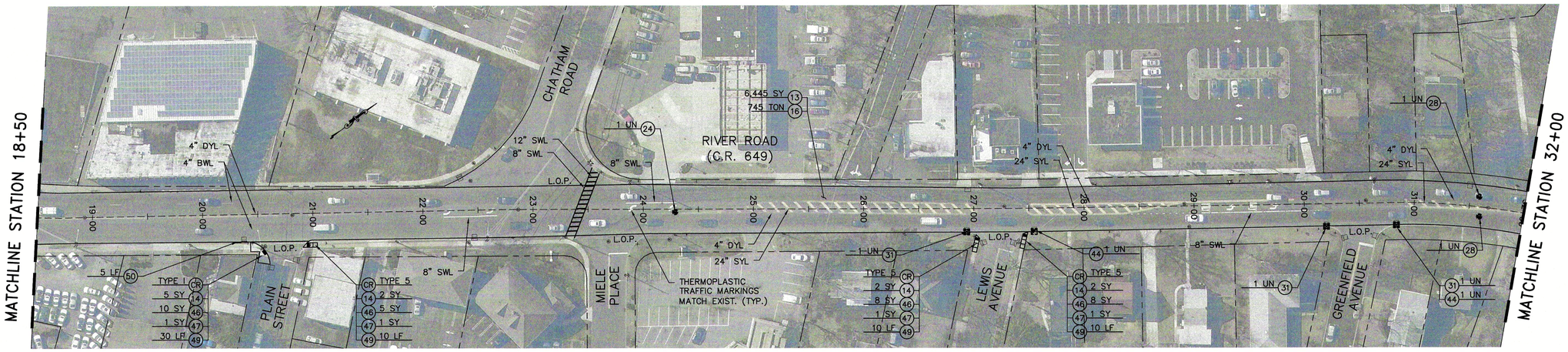


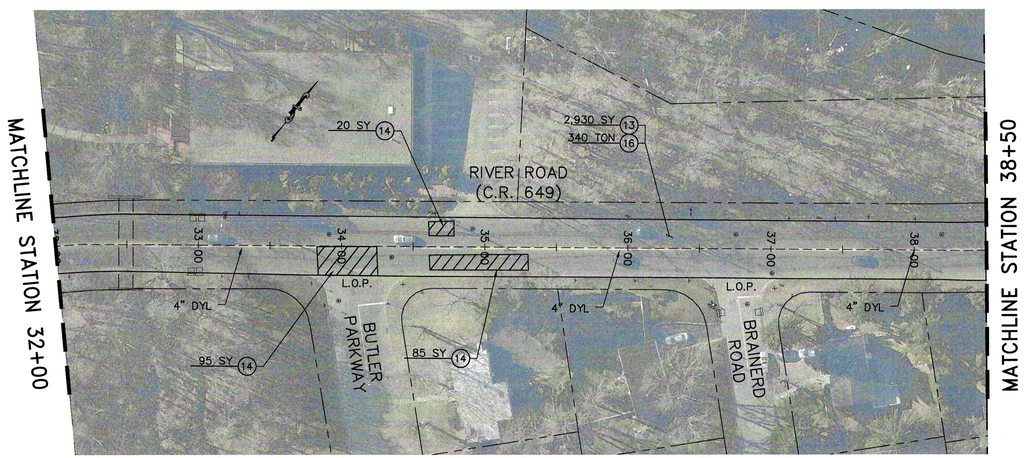
RIVER ROAD

SCALE: 1"= 50'



RIVER ROAD

SCALE: 1"= 50'



RIVER ROAD

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	13,995	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	211	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1,620	
24	RESET EXISTING CASTING	UN	1	
25	SET INLET TYPE B CASTING	UN	1	
28	SET MANHOLE CASTING	UN	3	
29	SET MANHOLE CASTING, SUPPLIED BY OTHERS	UN	3	
31	RECONSTRUCTED INLET, TYPE B, USING EXISTING CASTING	UN	3	
44	CURB PIECE	UN	2	
46	CONCRETE SIDEWALK, 4" THICK	SY	31	
47	DETECTABLE WARNING SURFACE	SY	4	
49	10" X 20" CONCRETE VERTICAL CURB	LF	60	
50	BELGIAN BLOCK CURB	LF	5	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	5,941	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	1,262	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	488	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	322	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	1,190	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	41	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	24	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	24	
67	TOPSOILING, 4" THICK	SY	30	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	30	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - RIVER ROAD

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
J.L.G.	D.M.M.		AS NOTED
DATE			SHEET No.
DECEMBER 2017			31 of 54
JOB No.			
2000F010			

CP-31

CP-35

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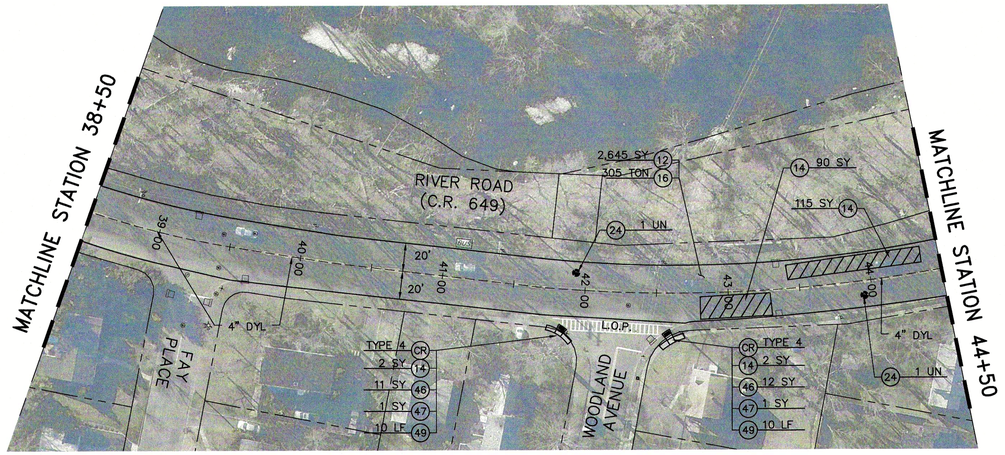
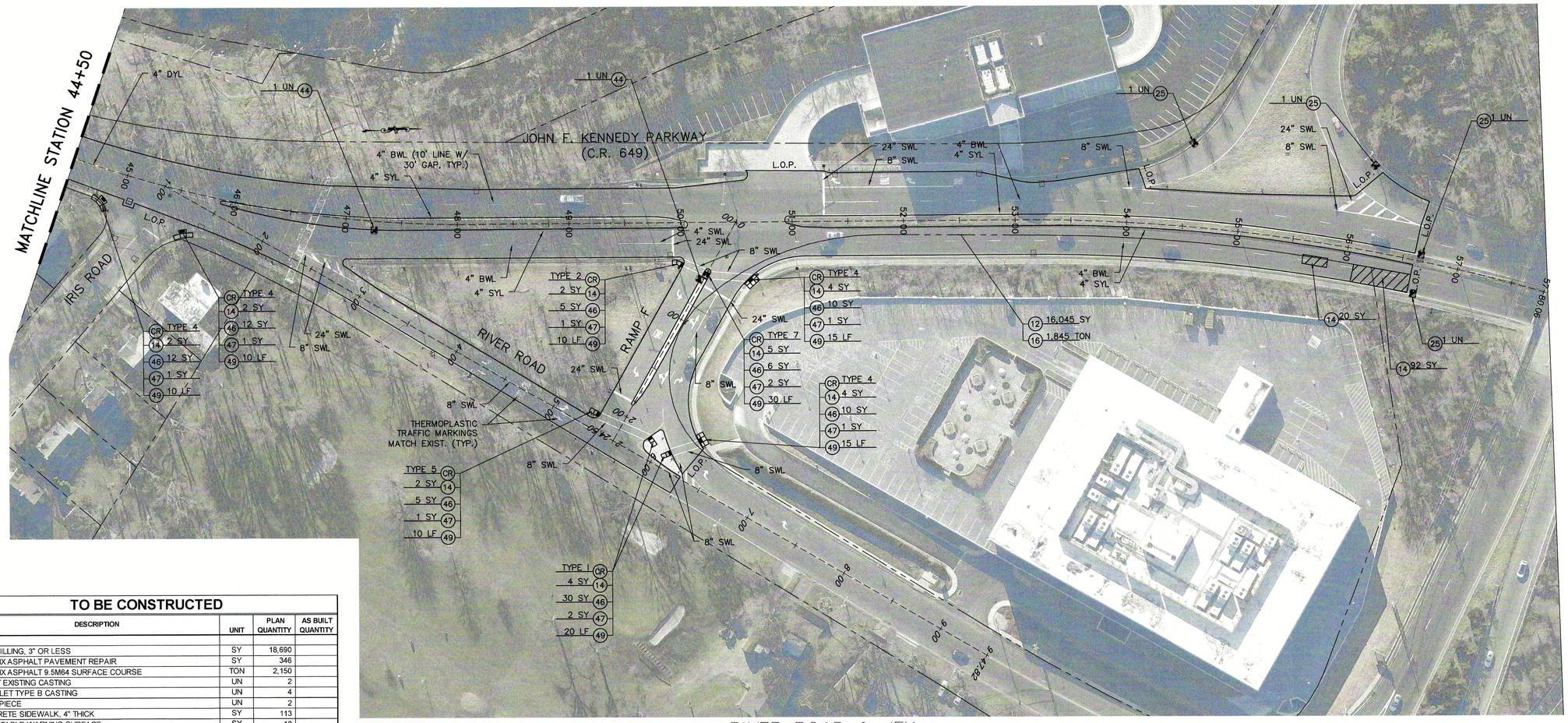


RIVER ROAD

SCALE: 1"= 50'



RIVER ROAD & JFK BOULEVARD

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	18,690	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	346	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2,150	
24	RESET EXISTING CASTING	UN	2	
25	SET INLET TYPE B CASTING	UN	4	
44	CURB PIECE	UN	2	
46	CONCRETE SIDEWALK, 4" THICK	SY	113	
47	DETECTABLE WARNING SURFACE	SY	12	
49	10" X 20" CONCRETE VERTICAL CURB	LF	140	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	3,560	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	700	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	265	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	670	
57	RPM, MONO-DIRECTIONAL, WHITE LENS	UN	29	
58	RPM, MONO-DIRECTIONAL, AMBER LENS	UN	25	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	7	
67	TOPSOILING, 4" THICK	SY	50	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	50	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

CP-32

CP-35

RVE 1901
REMINGTON & VERNICK **ENGINEERS**
232 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033
(856) 795-9595, FAX (856) 795-1882
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Certification of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~

DATE: 3.12.18

FRANK J. SENEY JR.
NJ PROFESSIONAL ENGINEER LIC. No. 35321

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - RIVER ROAD

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
J.L.G.	D.M.M.		AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 32 of 54

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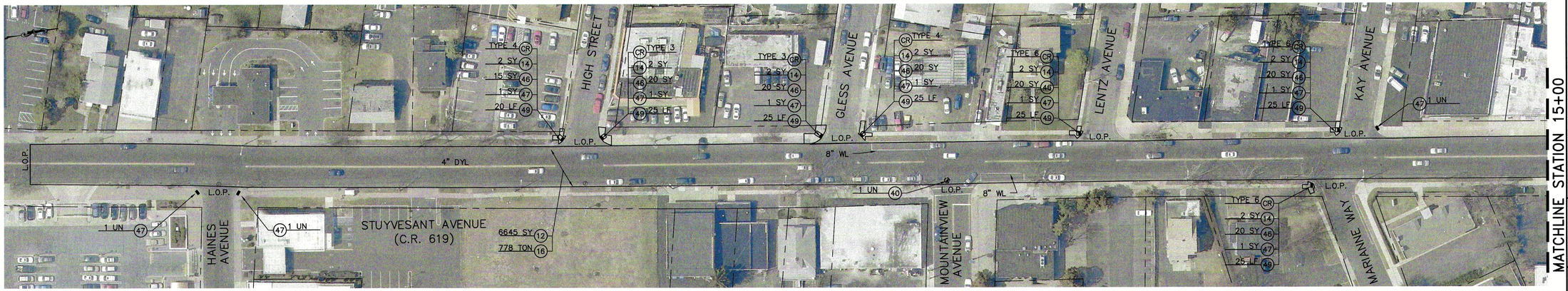
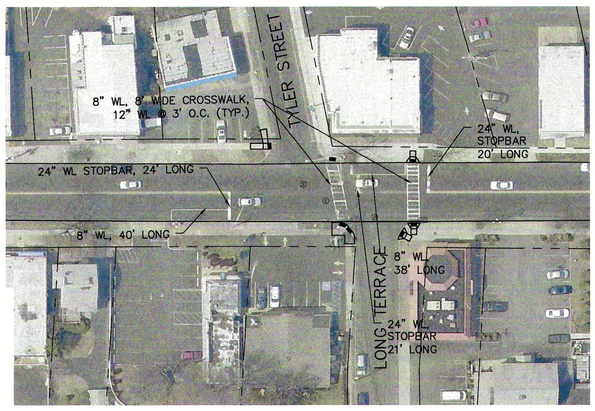


CONSTRUCTION PLAN

SCALE: 1"= 50'

CONSTRUCTION PLAN

SCALE: 1"= 50'



STRIPING PLAN – STUYVESANT AVENUE, TYLER STREET AND LONG TERRACE

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	12851	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	36	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1505	
40	RECONSTRUCTED MANHOLE, USING EXISTING CASTINGS	UN	1	
46	CONCRETE SIDEWALK, 4" THICK	SY	360	
47	DETECTABLE WARNING SURFACE	SY	21	
49	10" X 20" CONCRETE VERTICAL CURB	LF	445	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	4270	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	78	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	200	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	238	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	27	
67	TOPSOILING, 4" THICK	SY	80	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	80	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

RVE 1901
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CONSTRUCTION PLAN - STUYVESANT AVENUE

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
C.O.G.	D.M.M.	F.J.S.	AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 33 of 54

CP-33
CP-35

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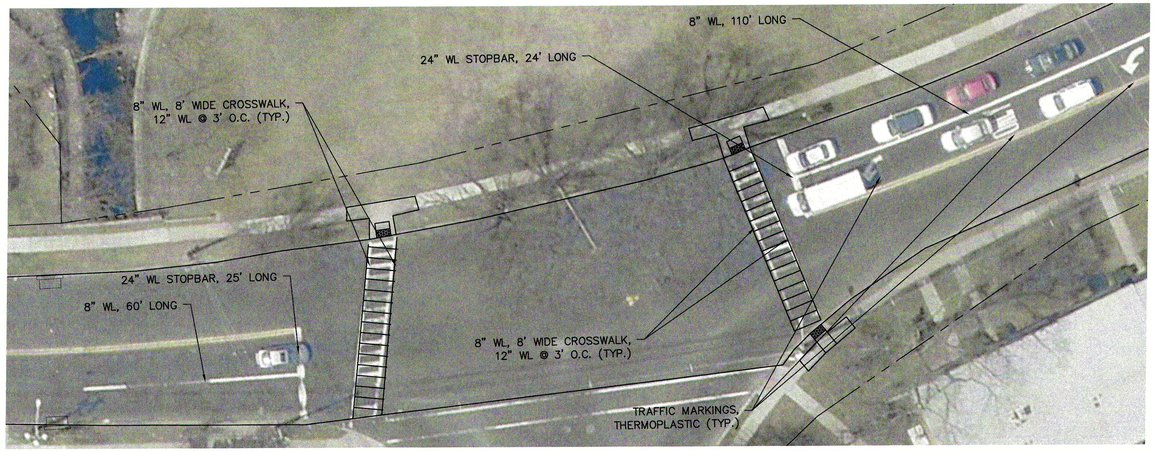
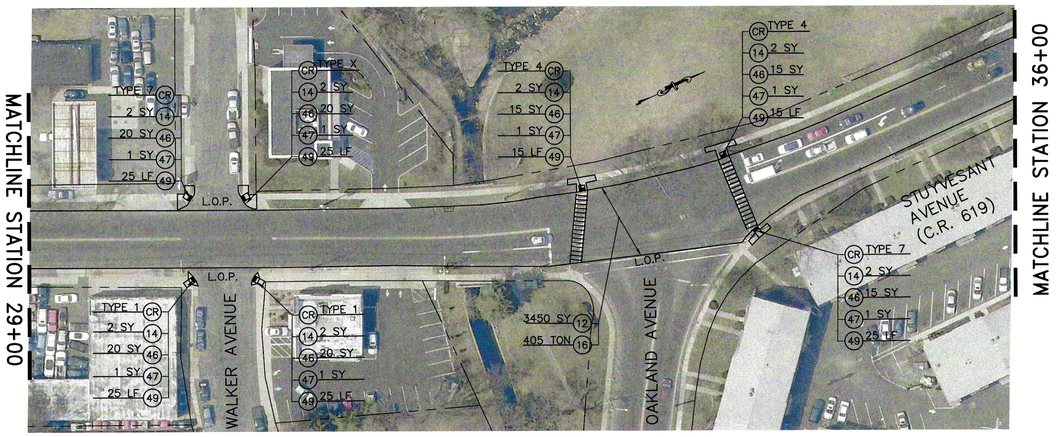
TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	9855	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	24	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1155	
28	SET MANHOLE CASTING	UN	3	
43	BICYCLE SAFE GRATE	UN	2	
44	CURB PIECE	UN	2	
46	CONCRETE SIDEWALK, 4" THICK	SY	205	
47	DETECTABLE WARNING SURFACE	SY	11	
49	10" X 20" CONCRETE VERTICAL CURB	LF	270	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	3270	
53	TRAFFIC STRIPES, THERMOPLASTIC, 8"	LF	1088	
54	TRAFFIC STRIPES, THERMOPLASTIC, 12"	LF	536	
55	TRAFFIC STRIPES, THERMOPLASTIC, 24"	LF	149	
56	TRAFFIC MARKINGS, THERMOPLASTIC	SF	150	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	21	
67	TOPSOILING, 4" THICK	SY	50	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	50	



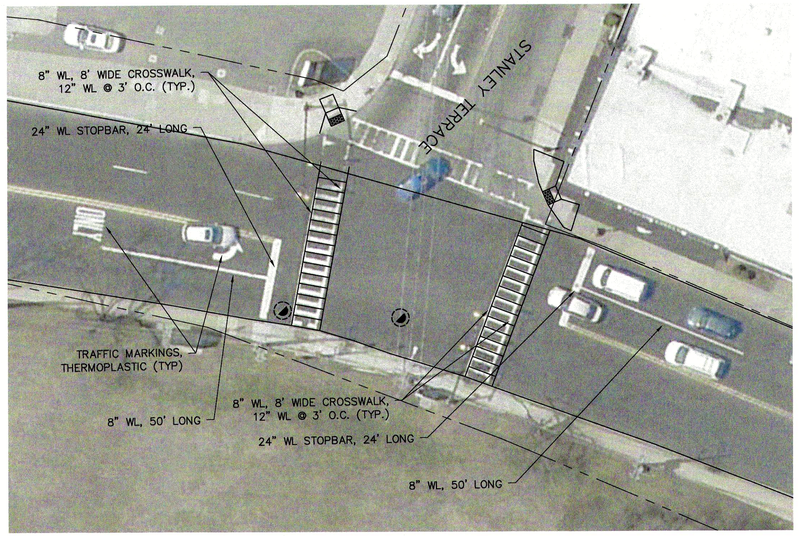
STRIPING PLAN – STUYVESANT AVENUE AND OAKLAND AVENUE

SCALE: 1"= 20'



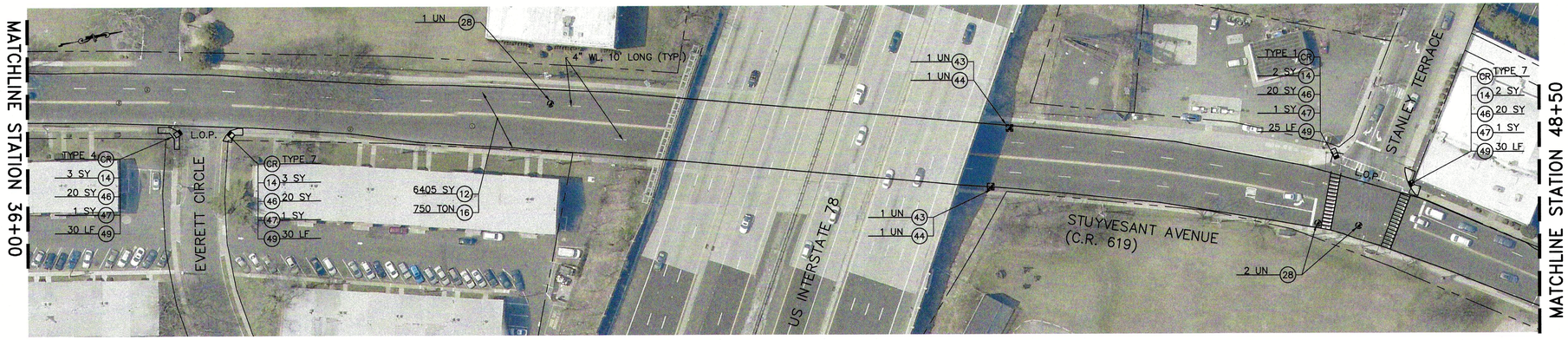
CONSTRUCTION PLAN

SCALE: 1"= 50'



STRIPING PLAN – STUYVESANT AVENUE AND STANLEY TERRACE

SCALE: 1"= 20'



CONSTRUCTION PLAN

SCALE: 1"= 50'

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

GRAPHIC SCALE

20 0 10 20

(IN FEET)

1 inch = 20 ft.

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CONSTRUCTION PLAN - STUYVESANT AVENUE

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
C.O.G.	D.M.M.	F.J.S.	AS NOTED
DATE: DECEMBER 2017			SHEET No.: 34 of 54
JOB No.: 2000F010			

CP-34
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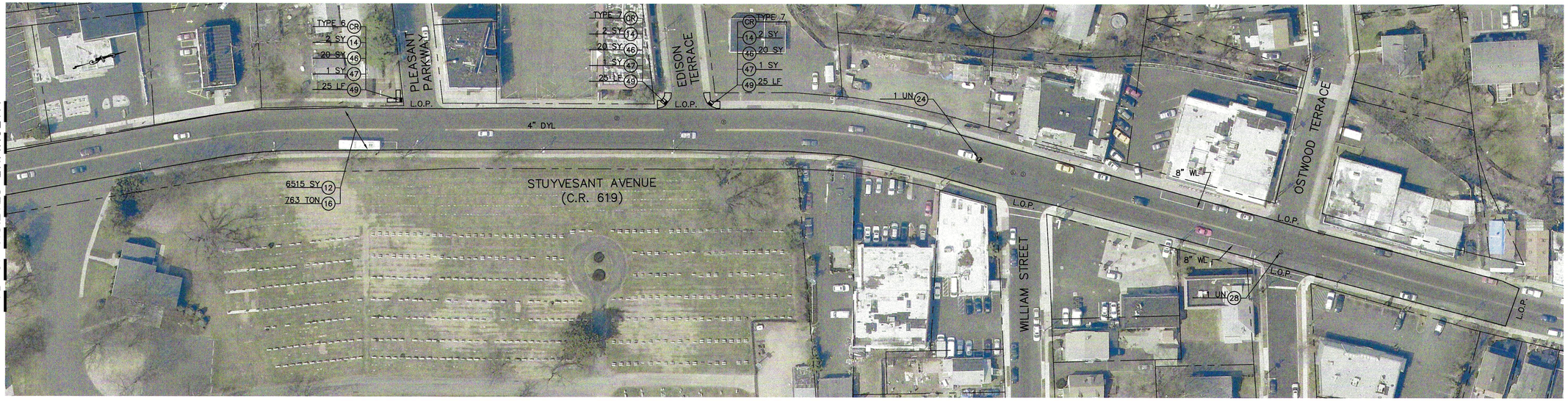

CONSTRUCTION PLAN

SCALE: 1"= 50'

TO BE CONSTRUCTED

ITEM NO.	DESCRIPTION	UNIT	PLAN QUANTITY	AS BUILT QUANTITY
12	HMA MILLING, 3" OR LESS	SY	6515	
14	HOT MIX ASPHALT PAVEMENT REPAIR	SY	8	
16	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	763	
24	RESET EXISTING CASTING	UN	1	
28	SET MANHOLE CASTING	UN	1	
46	CONCRETE SIDEWALK, 4" THICK	SY	60	
47	DETECTABLE WARNING SURFACE	SY	3	
49	10" X 20" CONCRETE VERTICAL CURB	LF	75	
52	TRAFFIC STRIPES, THERMOPLASTIC, 4"	LF	2530	
59	RPM, BI-DIRECTIONAL, AMBER LENS	UN	16	
67	TOPSOILING, 4" THICK	SY	10	
68	FERTILIZING AND SEEDING, TYPE A-3	SY	10	

GRAPHIC SCALE

50 0 25 50

(IN FEET)

1 inch = 50 ft.

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NO.	REVISION	DATE	BY	CHK

CONSTRUCTION PLAN - STUYVESANT AVENUE

UNION COUNTY
2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)
VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY	SCALE:
C.O.G.	D.M.M.	F.J.S.	AS NOTED
DATE: DECEMBER 2017		SHEET No.:	35 of 54
JOB No.: 2000F010			

CP-35
CP-35

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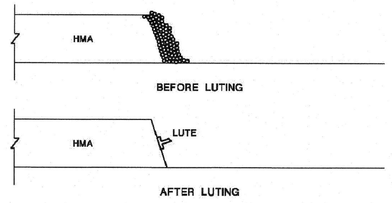
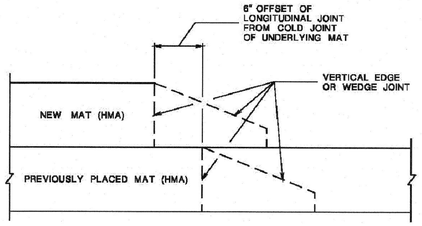
WEDGE JOINT
(NOTE 1) CD-401-2.6

CD-401-2.1



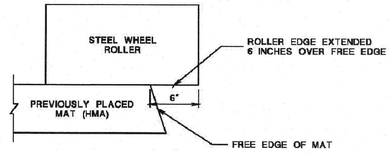
COMPACTION OF UNCONFINED VERTICAL EDGE
(NOTE 3) CD-401-2.6

CD-401-2.4



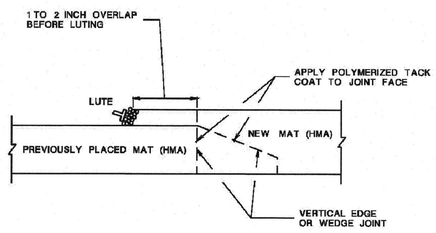
OFFSET OF JOINTS
(NOTE 2) CD-401-2.6

CD-401-2.2

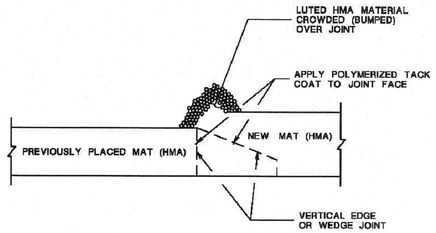


ROLLER PLACEMENT FOR COMPACTING ALONG THE UNCONFINED VERTICAL EDGE
(NOTE 6) CD-401-2.6

CD-401-2.5



OVERLAPPED HMA BEFORE LUTING
(NOTES 4 & 5) CD-401-2.6

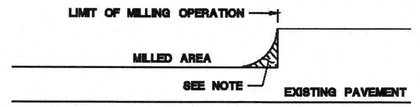


HMA AFTER LUTING
(NOTE 4)CD-401-2.6

HMA PAVEMENT

NOTES:

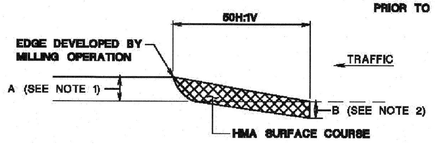
1. WHEN HMA LIFT THICKNESS IS GREATER THAN 2¼ INCHES AND WHEN TRAFFIC IS TO BE MAINTAINED, CONSTRUCT A WEDGE JOINT.
2. ENSURE THAT THE JOINT IN THE HMA SURFACE COURSE IS OFFSET FROM THE LANE LINES BY 6 INCHES. IN THE CENTERLINE OF A ROADWAY, ENSURE THAT THE JOINT FALLS BETWEEN THE DOUBLE YELLOW TRAFFIC STRIPE.
3. ENSURE THE LUTE OPERATOR MANUALLY BUMPS THE EDGE TO OBTAIN A TRUE VERTICAL AND DENSE UNCONFINED EDGE.
4. ENSURE THAT THE OVERLAPPED HMA MATERIAL AT THE JOINT IS TIGHTLY CROWDED (BUMPED) OVER THE JOINT ONTO THE NEWLY PLACED LANE LEAVING A SMALL MOUND OF MIX HUMPED UP FOR THE ROLLERS TO COMPACT.
5. FOR THE WEDGE JOINT, ENSURE THAT COARSE AGGREGATE PARTICLES ARE KEPT AWAY FROM THE POINT WHERE THE WEDGE MEETS THE SURFACE OF THE PREVIOUSLY PLACED LANE.
6. TO PREVENT LATERAL DISPLACEMENT OF THE UNCONFINED EDGE, ENSURE THAT THE EDGE OF THE ROLLER WHEEL EXTENDS OVER THE FREE EDGE OF THE HMA MAT BY AT LEAST 6 INCHES.

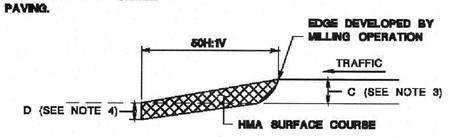


NOTE:
REMOVE THE HMA MATERIAL LEFT BY THE DRUM RADIUS AT THE LIMITS OF THE MILLING OPERATION. ENSURE THAT THE FACE IS CLEAN AND VERTICAL BY SAWCUTTING OR TRANSVERSE MILLING. THIS END TREATMENT IS NOT APPLICABLE TO TEMPORARY LIMITS OF MILLING (i.e. END OF WORKDAY). IT IS APPLICABLE TO ALL AREAS WHERE THE COMPLETED MILLING OPERATION MATCHES ANY EXISTING PAVEMENT INCLUDING BRIDGES.

END TREATMENT FOR MILLING OPERATIONS

HMA SURFACE COURSE TO BE REMOVED AND THE RADIUS CAUSED BY MILLING SQUARED PRIOR TO FINAL PAVING.





MILLING TRANSITIONS

NOTES:

1. **USE HMA SURFACE COURSE IN THE MILLING TRANSITION WHEN LEADING EDGE DEVELOPED BY MILLING OPERATION IS EQUAL TO OR GREATER THAN 1 INCH. NONE REQUIRED FOR EDGE LESS THAN 1 INCH.**
2. **ENSURE THAT THE THICKNESS OF THE HMA SURFACE COURSE IN THE MILLING TRANSITION IS NOT LESS THAN B. B IS EQUAL TO 2 INCHES OR A, WHICHEVER IS LESS.**
3. **USE HMA SURFACE COURSE IN THE MILLING TRANSITION WHEN TRAILING EDGE DEVELOPED BY MILLING OPERATION IS EQUAL TO OR GREATER THAN 1½ INCHES. NONE REQUIRED FOR EDGE LESS THAN 1½ INCHES.**
4. **ENSURE THAT THE THICKNESS OF THE HMA SURFACE COURSE IN THE MILLING TRANSITION IS NOT LESS THAN D. D IS EQUAL TO 2 INCHES OR C, WHICHEVER IS LESS.**

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION DETAILS

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

UNION COUNTY — VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
C.F.C.	D.M.M.		AS NOTED
DATE: DECEMBER 2017			SHEET No.: 36 of 54
JOB No.: 2000F010			

D-1
D-7

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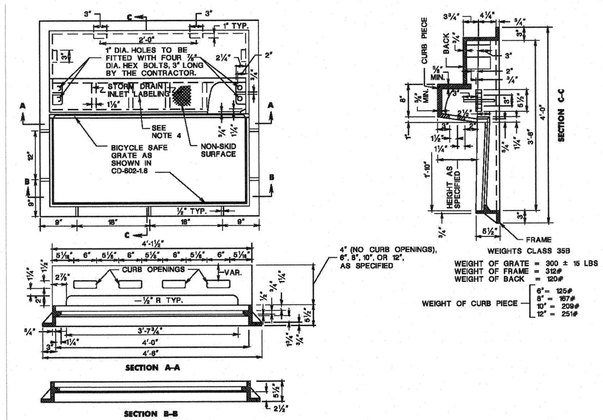
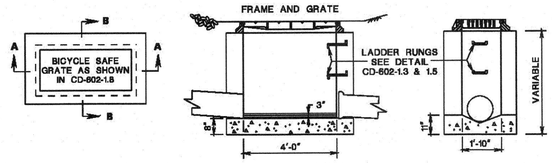


NOTES:

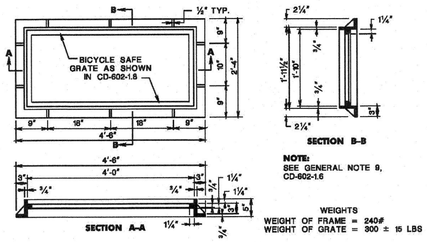
1. SEE ALTERNATE BACK PLATE DETAIL CD-602-2.5
2. SEE GENERAL NOTE 9, CD-602-1.6
3. THE CLEAR SPACE IN THE CURB OPENING OR EACH INDIVIDUAL CLEAR SPACE, IF THE CURB OPENING HAS TWO OR MORE CLEAR SPACES, MUST HAVE AN AREA OF NO MORE THAN SEVEN (7.0) SQUARE INCHES, OR BE NO GREATER THAN TWO (2.0) INCHES ACROSS THE SMALLEST DIMENSION.
4. STORM DRAIN INLET LABEL TO READ "NO DUMPING, DRAINS TO WATERWAYS" OR OTHERWISE APPROVED BY THE RE. INCLUDE FISH LOGOS ON BOTH SIDES OF THE LABEL.

INLET TYPE B AND TYPE C CASTING

CD-602-2.6



INLET TYPE A

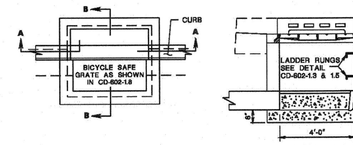


NOTE:
SEE GENERAL NOTE 9, CD-602-1.6

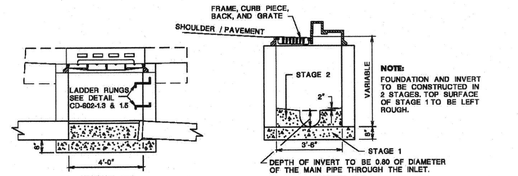
WEIGHTS
WEIGHT OF FRAME = 240#
WEIGHT OF GRATE = 300 ± 15 LBS

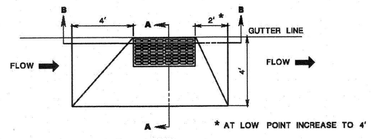
INLET TYPE A CASTING

CD-602-2.4



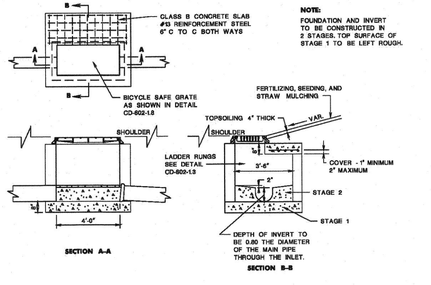
INLET TYPE B





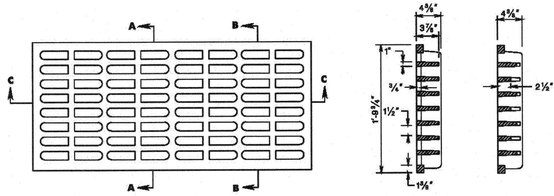
METHOD OF DEPRESSING INLETS AT SHOULDERS

CD-602-3.3

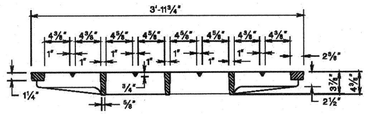


INLET, TYPE B MODIFIED

CD-602-3.1



WEIGHT 300 ± 15 LBS.



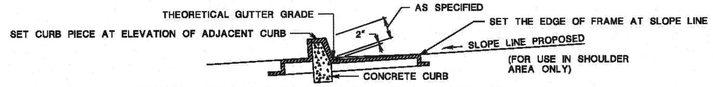
NOTE:
SEE GENERAL NOTE 9, CD-602-1.6

BICYCLE SAFE GRATE (CAST IRON)

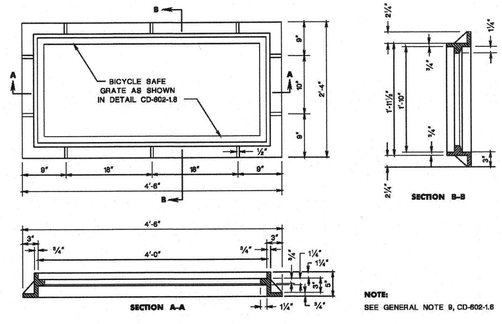
CD-602-1.8

NOTE:
LADDER RUNGS FACING TRAFFIC 12" C TO C

LADDER RUNG DETAIL

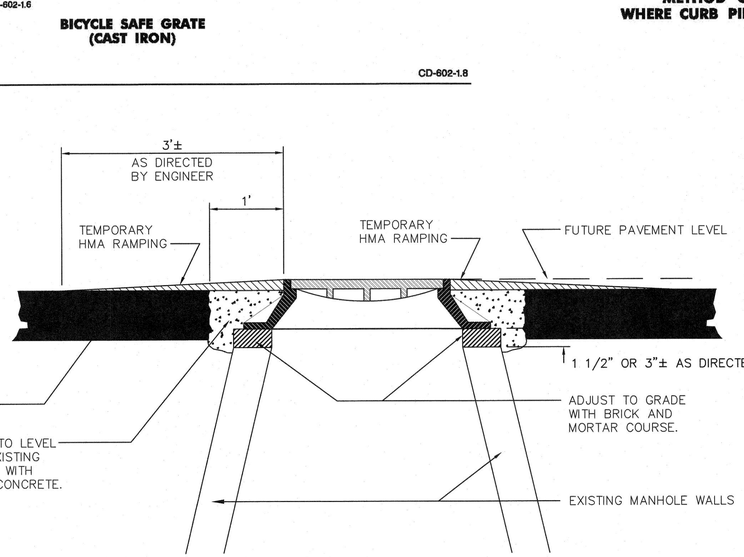


METHOD OF SETTING CASTING FOR B TYPE INLET WHERE CURB PIECE HEIGHT IS 2" GREATER THAN CURB FACE



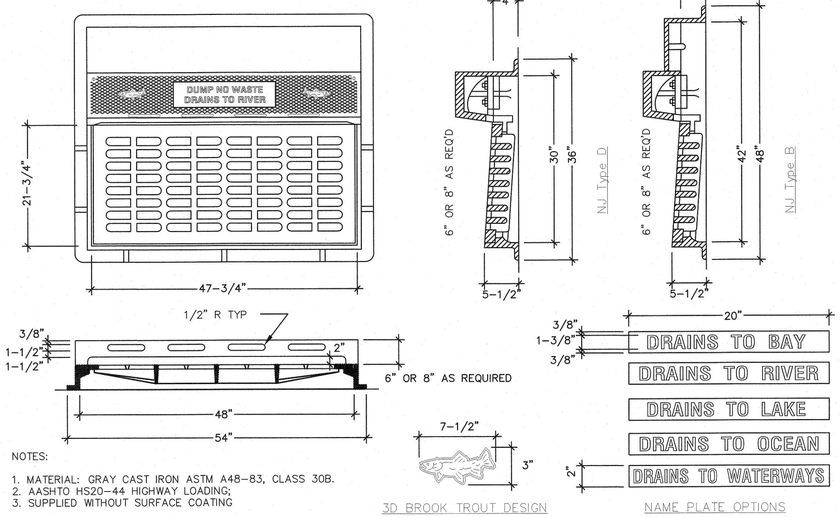
NOTE:
SEE GENERAL NOTE 9, CD-602-1.6

FRAME TO BE USED FOR INLET, TYPE B MODIFIED



RESET CASTINGS

N.T.S.



NOTES:

1. MATERIAL: GRAY CAST IRON ASTM A48–83, CLASS 30B.
2. AASHTO HS20–44 HIGHWAY LOADING;
3. SUPPLIED WITHOUT SURFACE COATING

3D BROOK TROUT DESIGN

NAME PLATE OPTIONS

CURB INLET WITH BICYCLE SAFE GRATE AND TYPE 'N-ECO CURB PIECE'

N.T.S.

RVE 1901
REMINGTON & VERNICK **ENGINEERS**
232 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033
(856) 795-9595, FAX (856) 795-1882
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~

DATE: 3.12.18

FRANK J. SENEY JR.
NJ PROFESSIONAL ENGINEER LIC. No. 35321

PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID.

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION DETAILS

UNION COUNTY
2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)
VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
C.F.C.	D.M.M.		AS NOTED
DATE: DECEMBER 2017			SHEET No.: 37 of 54
JOB No.: 2000F010			

D-2
D-7

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GENERAL NOTES:

1. MANHOLE MAY BE CONSTRUCTED OF BRICK, CONCRETE, CONCRETE BLOCK, OR PRECAST CONCRETE.
2. WHEN THE DEPTH OF A MANHOLE EXCEEDS 10 FEET AS MEASURED FROM TOP OF COVER TO INVERT, THE WALLS OF BRICK, CONCRETE, OR CONCRETE BLOCK BELOW A DEPTH OF 8 FEET TO BE 12 INCHES THICK. THE OVERALL HORIZONTAL DIMENSIONS TO BE INCREASED 12 INCHES AND THE DEPTH OF THE FOUNDATION INCREASED TO 12 INCHES. WHEN ROCK IS ENCOUNTERED, THE HORIZONTAL DIMENSION AND DEPTH OF THE FOUNDATION IS NOT TO BE INCREASED. THE THICKNESS OF PRECAST CONCRETE MANHOLE WALLS DOES NOT HAVE TO BE INCREASED IF THE DEPTH OF THE MANHOLE EXCEEDS 10 FEET.
3. ADJUST CASTINGS OF PRECAST MANHOLES TO GRADE WITH COURSES OF BRICK OR CONCRETE BLOCK, AS REQUIRED, 12 INCHES MAXIMUM.
4. AS AN ALTERNATE TO THE STANDARD MANHOLE FRAME AND COVER, A 39 INCH DIAMETER FRAME WITH 4 INCH FLANGE MAY BE FURNISHED WITH ALL OTHER DIMENSIONS AND WEIGHTS REMAINING THE SAME.
5. IN A BRICK, CONCRETE, OR CONCRETE BLOCK MANHOLE, CONSTRUCT THE INVERT IN TWO STAGES.
6. AS AN ALTERNATIVE, COPOLMYER POLYPROPYLENE PLASTIC LADDER RUNGS MAY BE FURNISHED IN PRECAST MANHOLES AND INLETS.

GENERAL NOTES:

1. INLETS MAY BE CONSTRUCTED OF BRICK, CONCRETE, CONCRETE BLOCK, OR PRECAST CONCRETE. WALLS TO BE 8 INCHES THICK IF BRICK AND 6 INCHES THICK IF CONCRETE, CONCRETE BLOCK, OR PRECAST CONCRETE. INLET FOUNDATIONS AND INVERTS TO BE CLASS B CONCRETE.
2. CORBELLING OF INLET WALLS WILL BE PERMITTED AT THE RATE OF ½ INCH PER 8 INCHES OF HEIGHT; MAXIMUM CORBEL 6 INCHES PER WALL.
3. EXCEPT FOR INLETS TYPE A AND C, FOUNDATIONS AND INVERTS TO BE CONSTRUCTED IN TWO STAGES, AND THE BOTTOM OF THE FOOTINGS TO BE 8 INCHES BELOW THE OUTER WALL OF THE LOWEST PIPE IN THE INLET.
4. WHEN THE DEPTH OF AN INLET THAT IS NOT PRECAST EXCEEDS 10 FEET AS MEASURED FROM TOP OF GRATE TO INVERT, WALLS BELOW A DEPTH OF 8 FEET TO BE 12 INCHES THICK AND THE DEPTH OF FOUNDATION INCREASED TO 12 INCHES. WHEN ROCK IS ENCOUNTERED, THE DEPTH OF THE FOUNDATION NOT TO BE INCREASED.
5. PLACE INLET FOUNDATIONS WHICH ARE PRECAST ON A 6 INCH THICK BED OF COMPACTED COARSE AGGREGATE #57. EXTEND THE COARSE AGGREGATE 6 INCHES BEYOND THE HORIZONTAL LIMITS OF THE INLET FOUNDATION.
6. ADJUST CASTINGS FOR PRECAST INLETS TO GRADE WITH COURSES OF BRICK, AS REQUIRED, 12 INCHES MAXIMUM.
7. WHEN THE DEPTH OF A PRECAST INLET EXCEEDS 10 FEET AS MEASURED FROM TOP OF GRATE TO INVERT, THE FOUNDATION IS TO BE INCREASED TO 12 INCHES. WHEN ROCK IS ENCOUNTERED, THE DEPTH OF THE FOUNDATION IS NOT TO BE INCREASED.
8. MINIMUM WALL REINFORCEMENT FOR PRECAST INLETS TYPES A, B, C, E, D-1, D-2, AND B MODIFIED:

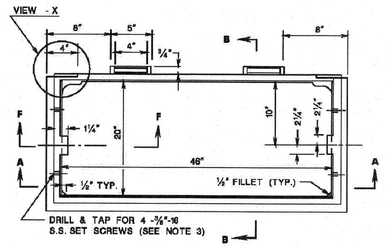
DEPTH BELOW TOP OF GRATE	HORIZONTAL REINF.	VERTICAL REINF.	WALL THK.
0' TO 10'-0"	#13 @ 10" C.C.	#13 @ 18" C.C.	6"
10'-1" TO 15'-0"	#13 @ 8" C.C.	#13 @ 18" C.C.	6"
15'-1" TO 20'-0"	#13 @ 6" C.C.	#13 @ 18" C.C.	6"

REINFORCING SHOWN FOR PRECAST INLETS IS THE MINIMUM REQUIRED. ADDITIONAL REINFORCING FOR HANDLING IS THE RESPONSIBILITY OF THE CONTRACTOR.

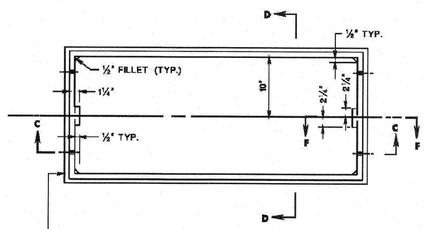
ALTERNATE REINFORCEMENT

DEPTH BELOW TOP OF GRATE	
0' TO 10'-0"	WWF 3 x 6 W6 WIRES SPACED AT 3" TO RUN HORIZONTAL IN ALL CASES.
10'-1" TO 15'-0"	WWF 3 x 6 W6 ADD #10 REINFORCEMENT STEEL @ 18" HORIZONTAL.
15'1" TO 20'0"	WWF 3 x 6 W6 ADD #10 REINFORCEMENT STEEL @ 9" HORIZONTAL OR ADD #13 REINFORCEMENT STEEL AT 15" HORIZONTAL.

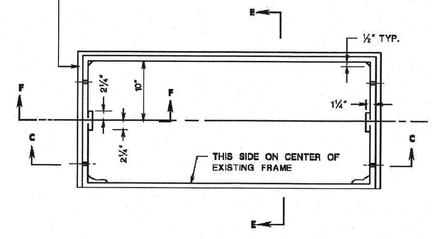
9. DIMENSIONS, WEIGHTS, AND OTHER CRITERIA SHOWN ON THESE DETAILS ARE FOR CLASS 35B CAST IRON.



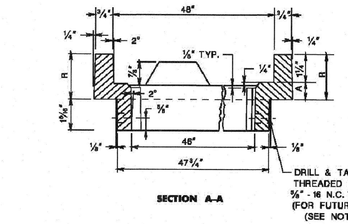
EXTENSION FRAMES FOR INLETS, TYPE B & C AND INLETS, TYPE D1 & D2



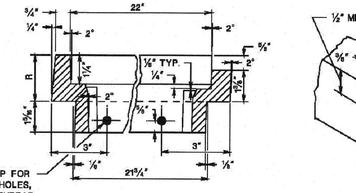
EXTENSION FRAMES FOR INLETS, TYPE A AND B MODIFIED



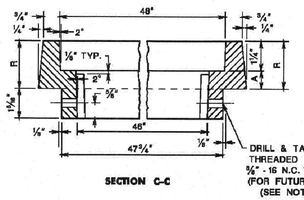
EXTENSION FRAMES FOR INLET, TYPE E (HALF ONLY)



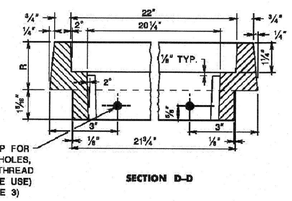
SECTION A-A



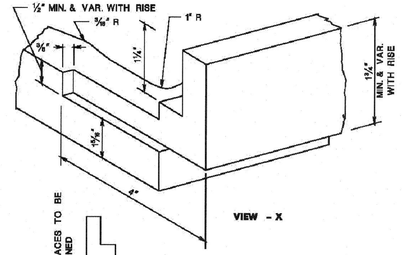
SECTION B-B



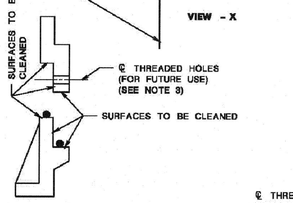
SECTION C-C



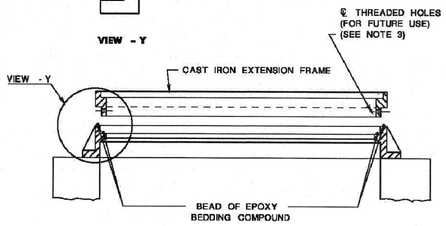
SECTION D-D



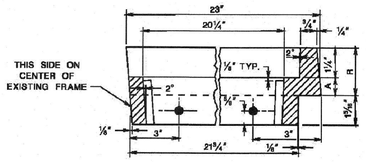
VIEW - X



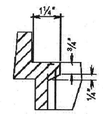
VIEW - Y



METHOD OF ATTACHING EXTENSION FRAMES



SECTION E-E

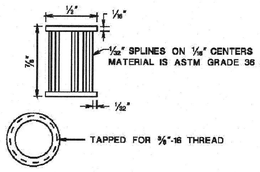


THIS LUG IS ONLY NECESSARY WHEN A BICYCLE SAFE GRATE (CAST IRON) IS USED

SECTION F-F

NOTES:

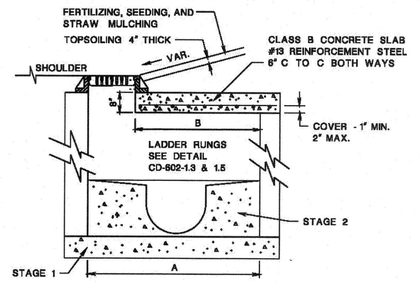
1. THE CONTRACTOR IS TO MEASURE THE EXISTING INLET FRAMES AND GRATES TO DETERMINE PROPER DIMENSIONS OF PROPOSED EXTENSION FRAMES BEFORE PLACING ORDER.
2. NOT TO BE USED WITH DISH GRATES.
3. A THREADED INSERT MAY BE USED AS AN ALTERNATE TO DRILLING AND TAPPING.
4. SEE GENERAL NOTE 9, CD-602-1.6



THREADED INSERT FOR EXTENSION FRAMES ALTERNATE

RISE = R	A
1¾"	½"
2"	¼"
2½"	1¼"
3"	1¾"
3½"	2¼"

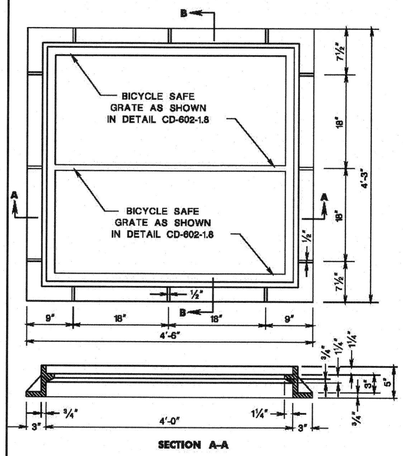
INLETS TYPE B1 MODIFIED OR TYPE B2 MODIFIED TO BE OF SAME CONSTRUCTION AND DIMENSIONS AS INLET TYPE B MODIFIED, EXCEPT AS OTHERWISE INDICATED BELOW



INLET TYPE	DIMENSION A	DIMENSION B
B1 MODIFIED	4'-8"	2'-8"
B2 MODIFIED	5'-8"	3'-8"

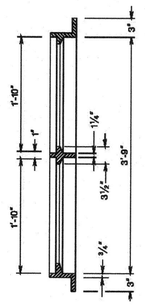
FOUNDATION AND INVERT TO BE CONSTRUCTED IN TWO STAGES. TOP SURFACE OF STAGE 1 TO BE LEFT ROUGH.

INLETS, TYPE B1 MODIFIED AND TYPE B2 MODIFIED



SECTION A-A

FRAME FOR INLET, TYPE E

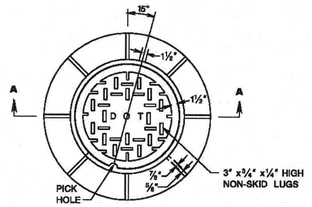


SECTION B-B

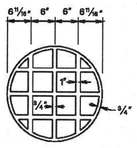
WEIGHT OF FRAME = 435#
WEIGHT OF EACH GRATE = 300 ± 15 LBS

NOTE:
SEE GENERAL NOTE 9, CD-602-1.6

CD-602-4.3

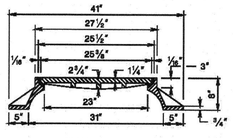


MINIMUM WEIGHTS
WEIGHT OF FRAME = 265#
WEIGHT OF COVER = 175#

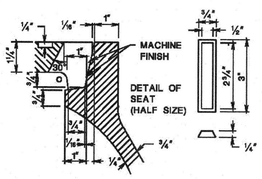


UNDERSIDE OF COVER

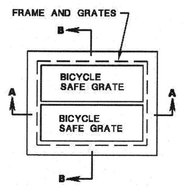
NOTE:
SEE GENERAL NOTE 9, CD-602-1.6

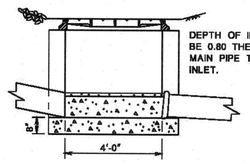


SECTION A-A

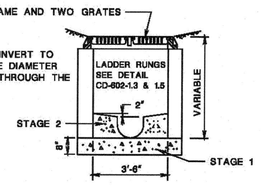


MANHOLE FRAME AND COVER





SECTION A-A



SECTION B-B

NOTE:
CONSTRUCT FOUNDATION AND INVERT IN 2 STAGES. LEAVE TOP SURFACE OF STAGE 1 ROUGH.

INLET, TYPE E

CD-602-4.2

RVE 1901
REMINGTON & VERNICK **ENGINEERS**
232 KINGS HIGHWAY EAST
HADDONFIELD, NJ 08033
(856) 795-9595, FAX (856) 795-1882
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~

DATE: 3.12.18

FRANK J. SENEY JR.
NJ PROFESSIONAL ENGINEER LIC. No. 35321

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NO.	REVISION	DATE	BY CHK

CONSTRUCTION DETAILS

UNION COUNTY
2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)
VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
C.F.C.	D.M.M.		AS NOTED
DATE: DECEMBER 2017			SHEET No.: 38 of 54
JOB No.: 2000F010			

D-3
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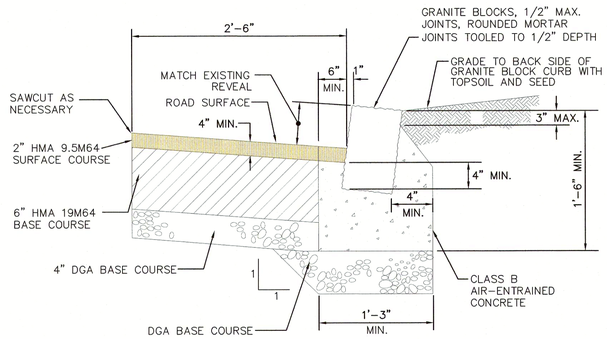
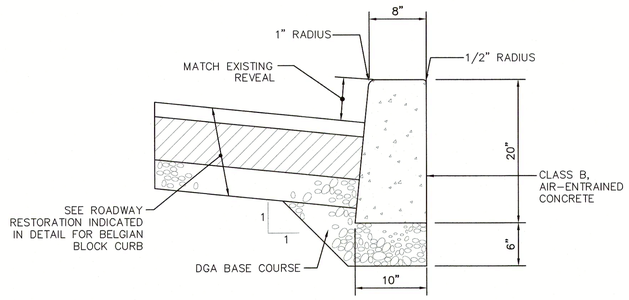


GRANITE BLOCK DIMENSIONS
HEIGHT: MIN. 10" TO 12" MAX.
THICKNESS + WIDTH: MIN. 5" TO 7" MAX.

TYPICAL ROADWAY EXCAVATION AT BELGIAN BLOCK CURB

N.T.S.

NOTES:
1. ROADWAY RESTORATION SECTION AND WIDTH APPLIES TO ALL TYPES OF CURB.
2. PAYMENT FOR THE EXCAVATION AND PAVEMENT RESTORATION INDICATED ABOVE SHALL BE INCLUDED IN THE PRICE OF THE "HOT MIX ASPHALT PAVEMENT REPAIR." PAYMENT FOR THE CURB AND SITE RESTORATION INDICATED ABOVE SHALL BE INCLUDED IN THE PRICE OF THE CURB.



NOTE: EXPANSION JOINTS TO BE SET AT 10' INCREMENTS.

10" x 20" CONCRETE VERTICAL CURB

N.T.S.

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DATE: DECEMBER 2017			SHEET No.: 39 of 54
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D-4
D-7

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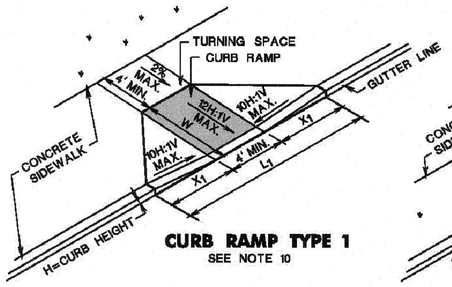
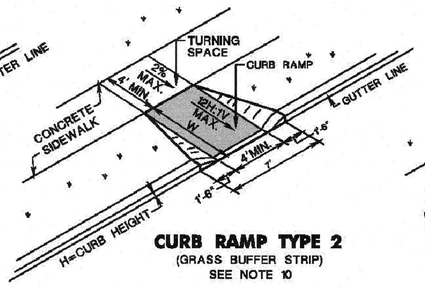
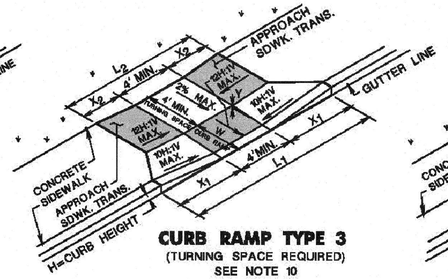


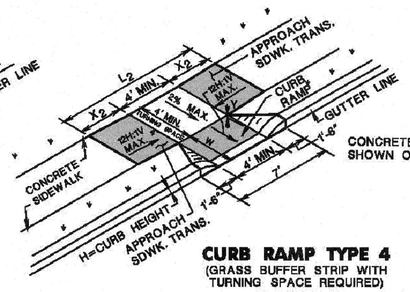
CURB RAMP TYPE 1
SEE NOTE 10



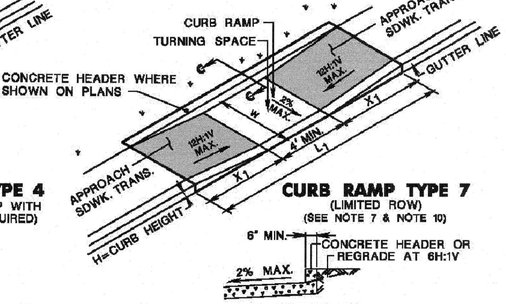
CURB RAMP TYPE 2
(GRASS BUFFER STRIP)
SEE NOTE 10



CURB RAMP TYPE 3
(TURNING SPACE REQUIRED)
SEE NOTE 10

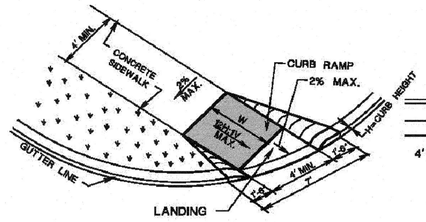


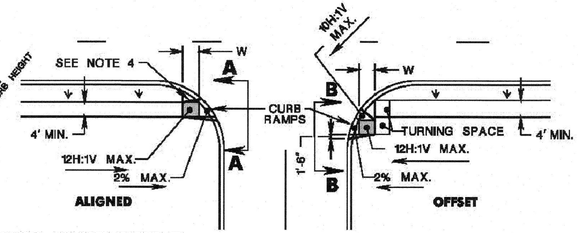
CURB RAMP TYPE 4
(GRASS BUFFER STRIP WITH TURNING SPACE REQUIRED)
SEE NOTE 10



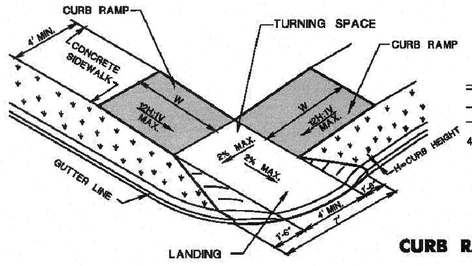
CURB RAMP TYPE 7
(LIMITED ROW)
(SEE NOTE 7 & NOTE 10)

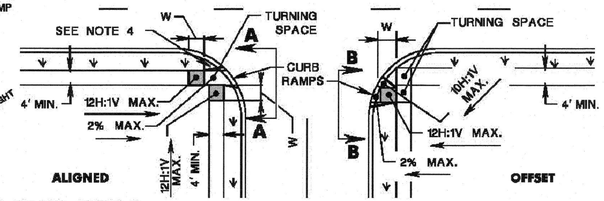
SECTION C-C



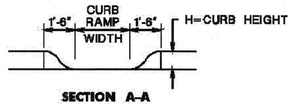


CURB RAMP TYPE 5

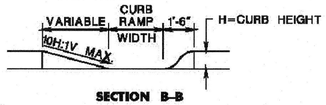




CURB RAMP TYPE 6

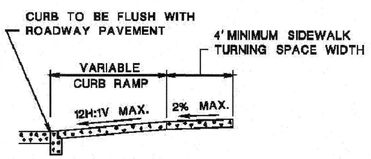


SECTION A-A

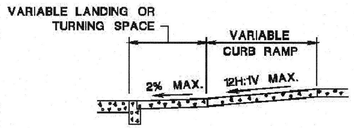


SECTION B-B

NOTE:
CURB RAMP OPENING TO BE FLUSH WITH ROADWAY PAVEMENT (CURB RAMP TYPES 5 & 6).



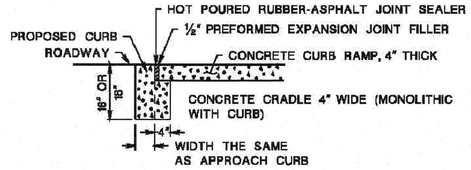
SECTION THROUGH CURB RAMPS 1 THROUGH 4



SECTION THROUGH CURB RAMPS 5 AND 6

NOTES:

1. KEEP TURNING SPACE, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP CLEAR OF OBSTRUCTIONS THAT PROTRUDE ABOVE THE SURFACE.
2. FOR DIMENSIONS SEE CD-606-3 AND CD-606-4
3. CURB (DROPPED CURB) GUTTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT THE ENTIRE WIDTH OF THE RAMP (4 FEET MIN.) AT ALL CURB RAMPS.
4. FOR CURB RAMP TYPES 5 AND 6, IF A GRASS BUFFER DOES NOT EXIST, SLOPE CURB TO EQUAL SLOPE OF ADJACENT CURB RAMP.
5. SIDEWALK AND CURB RAMP WITHIN AREA ENCLOSED BY HEAVY LINES INDICATES THE PAY LIMIT FOR CONCRETE SIDEWALK OF THE APPROPRIATE ADJACENT THICKNESS.
6. CURB AND HEADER WITHIN AREA ENCLOSED BY HEAVY LINES INDICATES THE PAY LIMIT FOR VERTICAL CURB OR SLOPING CURB OF THE APPROPRIATE ADJACENT SIZE AND KIND.
7. WHERE THE DISTANCE FROM THE GUTTER LINE TO THE OUTSIDE EDGE OF SIDEWALK IS 6 FEET OR LESS, USE CURB RAMP TYPE 7, INSTEAD OF CURB RAMP TYPE 1 THROUGH 4.
8. CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED. SEE PLANS.
9. THE 12H:1V MAX SLOPE IS THE RUNNING SLOPE FOR CURB RAMPS, BUT ONLY THE 12H:1V SLOPE MEASURED AS X_2 IS THE RUNNING SLOPE FOR TYPE 3 AND TYPE 4 CURB RAMPS. ENSURE THE RUNNING SLOPE OF CURB RAMPS DOES NOT REQUIRE ITS LENGTH TO EXCEED 15 FEET. THE RUNNING SLOPE MAY EXCEED THE 12H:1V MAX SLOPE SO AS NOT TO EXCEED THE 15 FEET MAXIMUM LENGTH.
10. CURB RAMP TYPE 1 THROUGH 7 ARE NORMALLY PLACED ON THE RADIUS RETURN AT THE INTERSECTION AND ON A TANGENT SECTION AS DRAWN.



DROPPED CURB AND CRADLE

CONCRETE SIDEWALK
(PUBLIC SIDEWALK CURB RAMP)
N.T.S.

RVE 1901
REMINGTON & VERNICK **ENGINEERS**
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DATE: DECEMBER 2017			SHEET No.: 40 of 54
JOB No.: 2000F010			

D-5
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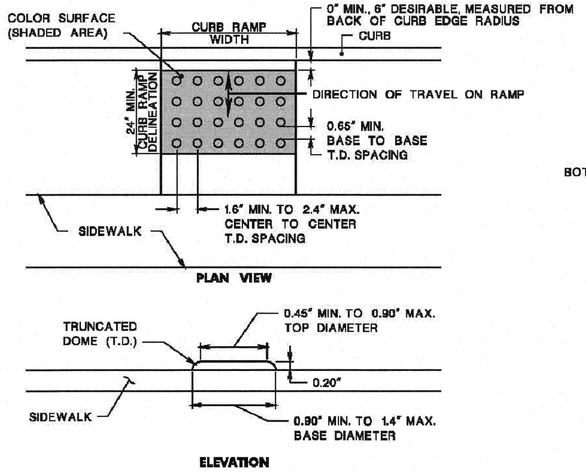
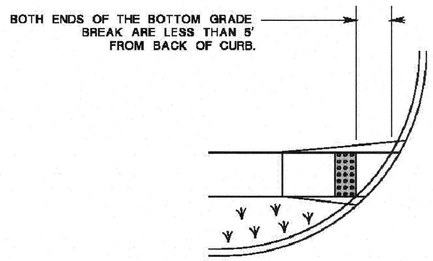
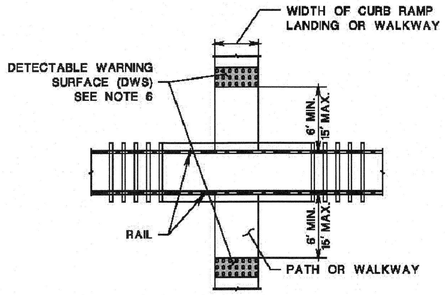
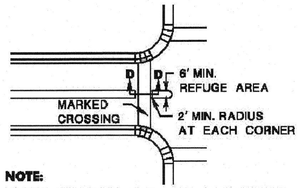


DETECTABLE WARNING SURFACE

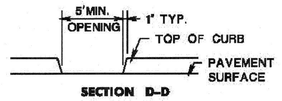




PEDESTRIAN RAILROAD CROSSING

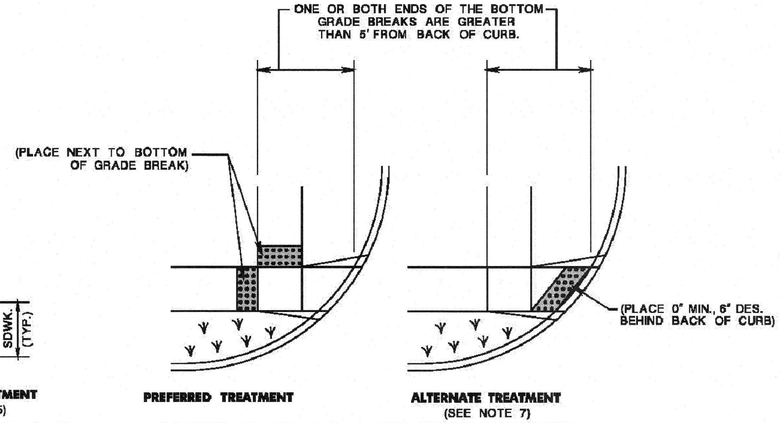


NOTE:
WHERE PRACTICAL, END LEFT TURN ISLAND OR DIVISIONAL ISLAND BEFORE CROSSWALK TO ELIMINATE CUT-THROUGH

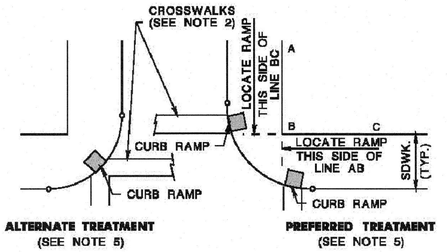


NOTE:
5'MIN. WIDE OPENING TO BE FLUSH WITH ROADWAY PAVEMENT

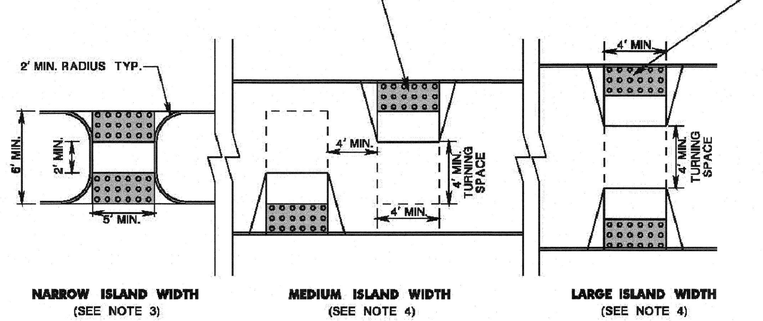
PEDESTRIAN REFUGE ISLAND WALKWAY OPENING AT INTERSECTIONS



PLACEMENT OF DETECTABLE WARNING SURFACE FOR CURB RAMP TYPE 5 AND 6



LOCATION OF CURB RAMP TYPES 1, 2, 3, 4, & 7 FOR CROSSING PARALLEL AND PERPENDICULAR TO HIGHWAY



PEDESTRIAN REFUGE ISLAND

NOTES:

1. KEEP TURNING SPACE, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP CLEAR OF OBSTRUCTIONS THAT PROTRUDE ABOVE THE SURFACE.
2. CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED, SEE PLANS.
3. FOR NARROW ISLAND WIDTH, SEE PEDESTRIAN REFUGE ISLAND WALKWAY OPENING AT INTERSECTIONS DETAIL.
4. FOR MEDIUM AND LARGE ISLAND WIDTH, SEE CURB RAMP TYPE 1 ON CD-806-1.
5. CONSTRUCT CURB RAMP TYPES 1, 2, 3, 4, & 7 PERPENDICULAR TO CURBLINE, AS SHOWN.
6. IF A CURB RAMP IS REQUIRED, THE LOCATION OF THE DETECTABLE WARNING SURFACE MUST BE AT THE BOTTOM OF THE RAMP AND WITHIN THE REQUIRED DISTANCE FROM THE RAIL.
7. A STANDARD DETECTABLE WARNING (DWS) SURFACE IS NOT AVAILABLE TO FIT THIS APPLICATION, AND THEREFORE ONE WILL NEED TO BE CUSTOMIZED. THE DWS SHOULD COVER THE ENTIRE WIDTH OF THE RAMP. THE ROWS OF DOMES ON THE DWS SHOULD FOLLOW THE DIRECTION OF TRAVEL OF THE RAMP, SO PEDESTRIANS WHO USE MOBILE DEVICES CAN TRACK BETWEEN THE DOMES.

DETECTABLE WARNING SURFACE

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JOB No.: 2000F010			

D-6
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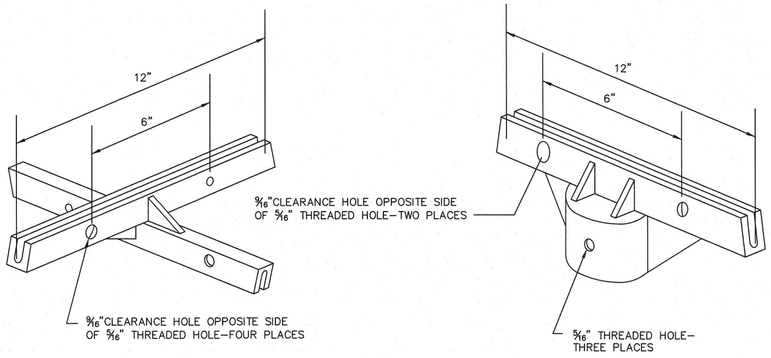


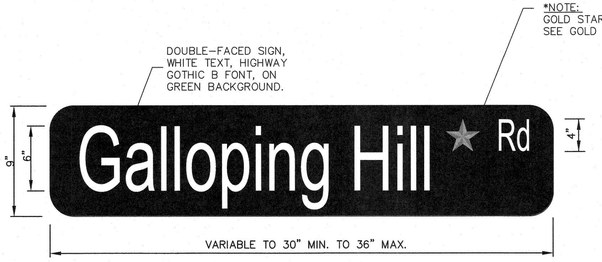
BOLT THRU CROSS

EACH HOLE SHALL BE DRILLED AND TAPPED TO ACCEPT A 5/16" STANDARD SET SCREW. VANDAL PROOF SET SCREWS SHALL BE USED IN PLACE OF THE STANDARD SET SCREW 9/16" CLEARANCE HOLE ON OPPOSITE SIDE FOR BOLT–THROUGH ALIGNMENT WITH VANDAL PROOF BOLTS.

STREET SIGN BOLT THRU BRACKETS

N.T.S.

FOR FLAT EXTRUDED SIGNS AND ROUND, SQUARE OR U–CHANNEL POSTS 12' BLADE HOLDER DRILLED AND TAPPED ON 6" CENTERS

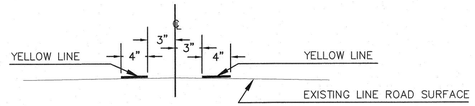


STREET NAME SIGN, TYPE DF (ALL MUNICIPALITIES EXCEPT SUMMIT CITY)

N.T.S.

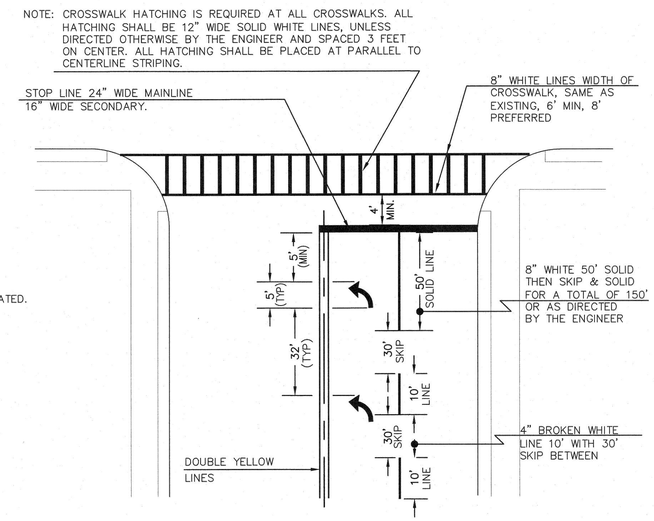
GOLD STAR

N.T.S.



ROAD SECTION
NO PASSING ZONE

NOTE: CROSSWALK HATCHING IS REQUIRED AT ALL CROSSWALKS. ALL HATCHING SHALL BE 12" WIDE SOLID WHITE LINES, UNLESS DIRECTED OTHERWISE BY THE ENGINEER AND SPACED 3 FEET ON CENTER. ALL HATCHING SHALL BE PLACED AT PARALLEL TO CENTERLINE STRIPING.



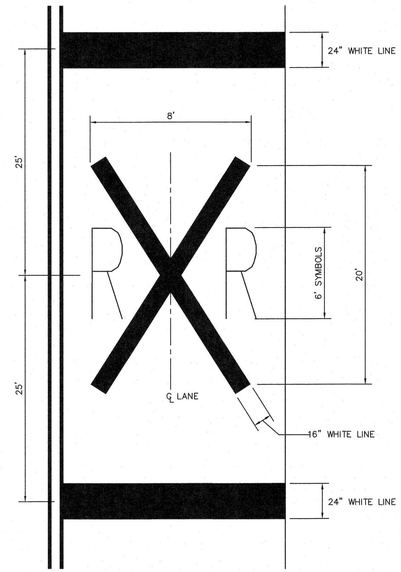
PLAN
APPROACH TO SIGNALIZED INTERSECTION

TRAFFIC STRIPING

N.T.S.

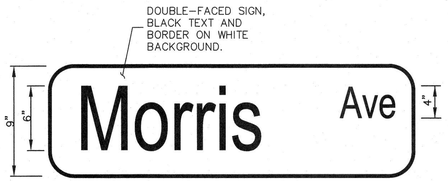
NOTES:

1. ALL TRAFFIC MARKINGS SHALL CONFORM TO THE M.U.T.C.D.
2. SYMBOL MARKINGS SHALL CONFORM TO THE STANDARD ALPHABET FOR HIGHWAY SIGNS & PAVEMENT MARKINGS.
3. ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC MATERIAL.



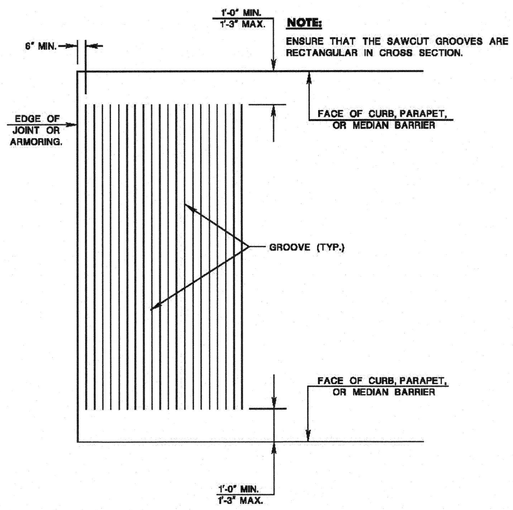
RAILROAD CROSSING PAVEMENT MARKING DETAIL

N.T.S.



STREET NAME SIGN, TYPE DF (SUMMIT CITY ONLY)

N.T.S.



SAWCUT GROOVING FOR BRIDGE DECKS

BCD-507-5.2

RVE 1901
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–ENGINEERING EXCELLENCE–

DATE: 3·12·18
FRANK J. SENEY JR.
NJ PROFESSIONAL ENGINEER LIC. No. 35321

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No.	REVISION	DATE	BY	CHK

CONSTRUCTION DETAILS

UNION COUNTY
2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)
VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY :	DESIGN BY :	CHECKED BY :	SCALE :
C.F.C.	D.M.M.		AS NOTED
DATE : DECEMBER 2017			SHEET No : 42 of 54
JOB No. : 2000F010			

D-7
D-7

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LEGEND

- BREAKAWAY BARRICADES
- BREAKAWAY BARRICADES WITH SIGN
- CONSTRUCTION SIGNS
- DRUMS
- CONE
- PRECAST CONCRETE CURB CONSTRUCTION BARRIER (TYPE SPECIFIED)
- DIRECTION OF TRAFFIC FLOW
- TRAFFIC DIRECTOR, FLAGGER
- TRAILER MOUNTED MOUNTED ARROW BOARD SHOWING CAUTION MODE
- ILLUMINATED FLASHING ARROW MOUNTED ON TOWING VEHICLE SHOWING ARROW PATTERN (Left, Right, Both)
  LEFT RIGHT BOTH
- TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING CAUTION MODE
- TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION AND ARROW BOARD SHOWING ARROW PATTERN (Left, Right, Both)
  LEFT RIGHT BOTH
- TEMPORARY CRASH CUSHION, INERTIAL BARRIER SYSTEM
- TEMPORARY CRASH CUSHION, (all other approved)
- BUFFER ZONE
- WORK AREA
- PAINT STRIPING TRUCK OR OTHER OPERATING VEHICLE

GENERAL NOTES:

1. ADVANCE WARNING SIGNS DISTANCES, AND TAPER LENGTHS MAY BE EXTENDED, AT DIRECTION OF THE DEPARTMENT, TO ADJUST FOR REDUCED VISIBILITY DUE TO HORIZONTAL AND VERTICAL CURVATURE OF THE ROADWAY.
2. THE APPROXIMATE LOCATIONS OF THE ILLUMINATED FLASHING ARROW BOARDS ARE SHOWN ON THE TRAFFIC CONTROL PLANS. THESE LOCATIONS MAY BE MODIFIED AS APPROVED BY RE TO ADJUST FOR VISIBILITY DUE TO HORIZONTAL OR VERTICAL CURVATURE OF THE ROADWAY OR TO POSITION AT A SAFER LOCATION. ILLUMINATED FLASHING ARROW BOARDS ARE TO BE USED FOR TEMPORARY LANE CLOSINGS AND AT LOCATIONS SHOWN ON THE TRAFFIC CONTROL PLANS.
3. PRIOR TO ANY ROAD CONSTRUCTION, TRAFFIC CONTROL SIGNS AND DEVICES SHALL BE IN PLACE.
4. RAMPS AND/OR SIDE STREETS ENTERING THE ROADWAY AFTER THE FIRST ADVANCE WARNING SIGN SHALL BE PROVIDED WITH AT LEAST ONE W20-IF SIGN (ROAD WORK AHEAD) AS A MINIMUM.
5. ALL EXISTING ROAD SIGNS, PAVEMENT MARKINGS AND/OR PLOWABLE PAVEMENT REFLECTORS WHICH CONFLICT WITH THE PROPOSED TRAFFIC CONTROL PLAN SHALL BE COVERED, REMOVED OR RELOCATED AS DIRECTED BY THE RE.
6. CONFLICTING OR NON-OPERATING SIGNAL INDICATIONS ON EITHER THE EXISTING, TEMPORARY,OR PROPOSED TRAFFIC SIGNAL SYSTEMS SHALL BE BAGGED OR COVERED.
7. MAINTENANCE AND PROTECTION OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES - PART VI "STANDARDS AND GUIDES FOR TRAFFIC CONTROL FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE, UTILITY, AND INCIDENT MANAGEMENT OPERATIONS", UNLESS OTHERWISE NOTED IN THE PLANS AND SPECIFICATIONS.
8. CONSTRUCTION SIGN W99-2 (GIVE US A BRAKE) SHALL BE LOCATED 200 FEET IN ADVANCE OF PROJECT LIMITS.
9. A W1-8 (ARROW) SIGN MOUNTED ON A BREAKAWAY BARRICADE AND CENTERED ON THE CLOSED WIDTH SHALL BE LOCATED 100 FEET BEYOND EACH INTERSECTION OR MAIN ACCESS POINT WITHIN THE AREA OF A LANE OR SHOULDER CLOSURE.
10. CONSTRUCTION SIGNS R11-4 (ROAD CLOSED TO THRU TRAFFIC) SHALL BE PLACED AT THE INTERSECTING STREETS WHICH ARE CLOSED TO TRAFFIC BECAUSE OF CONSTRUCTION.
11. CONSTRUCTION SIGNS W8-9A (SYMBOL FOR UNEVEN PAVEMENT) AND W8-14A (GROOVED PAVEMENT) SHALL BE USED WHEN SUCH PAVEMENT CONDITIONS EXIST. THE PLACEMENT OF THESE SIGNS SHALL BE AS DIRECTED BY THE RE.
12. MOVING WORK AREAS IN A LANE CLOSURE REQUIRE A TRAILER MOUNTED ILLUMINATED FLASHING ARROW TO REMAIN AT THE END OF THE TAPER, THE TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION THAT SHALL MOVE WITH THE WORK AREAS TO KEEP A 70 FEET MIN. AND 150 FEET MAX. BUFFER IN ADVANCE OF EACH WORK AREA.
13. THE CONTRACTOR SHALL SUBMIT A PLAN FOR THE SAFE ACCESS OF CONSTRUCTION VEHICLES THROUGHOUT THE WORK SITE WHERE SPACE CONSTRAINTS PREVENT THE USE OF LANE CLOSURES. THE PLAN SHALL BE SUBMITTED TO THE RE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.
14. ALL EXCAVATED AREAS WITHIN OR ADJACENT TO THE ROADWAY SHALL BE BACKFILLED AND PLACED ON AT LEAST 6H : 1V SLOPE BEFORE THE END OF EACH WORK DAY. OTHER EXCAVATED AREA WITHIN THE CLEAR ZONE SHALL BE BACKFILLED.
15. WHERE REQUIRED, THE CONTRACTOR SHALL MAKE PROVISIONS FOR MAINTAINING PEDESTRIAN CROSSING LOCATIONS AND TYPE AS DIRECTED BY THE RE.
16. BITUMINOUS CONCRETE PLACED DURING THE VARIOUS CONSTRUCTION STAGES SHALL BE TRANSITIONED ON A MINIMUM 20H : 1V SLOPE TO MEET THE ADJACENT EXISTING GRADE AT THE LONGITUDINAL AND TRANSVERSE LIMITS OF THE STAGE CONSTRUCTION AREAS UNLESS OTHERWISE NOTED ON THE STAGE CONSTRUCTION PLANS.
17. THE PLACEMENT AND OR RELOCATION OF PRECAST CONCRETE CURB, CONSTRUCTION BARRIER SHALL BE DONE DURING APPROVED OFF-PEAK HOURS WHEN TRAFFIC MAY BE REDUCED TO ONE LANE IN EACH DIRECTION.
18. CONSTRUCTION ZONE SPEED LIMIT WILL BE DETERMINED BY THE TRAFFIC SIGNAL & SAFETY ENGINEERING, REGIONAL TRAFFIC ENGINEER - WORK ZONE, AT THE TIME OF OR DURING CONSTRUCTION, AS REQUESTED BY THE R.E..
19. THE SPEED LIMIT, R2-1 (BLACK ON WHITE) WITH ADDED WORK ZONE PLATE (BLACK ON ORANGE) SIGNS SHALL BE LOCATED THROUGH WORK AREAS AS DIRECTED BY THE TRAFFIC SIGNAL & SAFETY ENGINEERING REGIONAL TRAFFIC ENGINEER - WORK ZONE.
20. THE REDUCED SPEED AHEAD SIGN, W3-5(S) (BLACK ON ORANGE) SHALL BE LOCATED IN ADVANCE OF SPEED LIMIT R2-1 SIGNS WHICH REDUCE THE NORMAL POSTED SPEED LIMIT THROUGH THE CONSTRUCTION ZONE.
21. TRAFFIC FINES DOUBLED IN WORK AREA R(NJ)5-17(S) , 4 FEET BY 2.5 FEET SIGN SHALL BE LOCATED 600 FEET AFTER THE FIRST ADVANCE WARNING SIGN, (W20 SERIES) AT EACH WORK AREA LOCATED WITHIN URBAN AREAS. THIS SIGN SHALL ALSO BE USED ON PROJECTS REQUIRING MOVING OPERATIONS IN WHICH CASE THE SIGN SHALL BE MOUNTED ON A SLOW MOVING CONSTRUCTION VEHICLE.
22. THE FINAL HMA SURFACE PAVEMENT SHALL NOT BE CONSTRUCTED UNTIL THE FINAL STAGE OF THE PROJECT UNLESS OTHERWISE DIRECTED BY THE RE OR INDICATED ON THE PLANS. MANHOLES AND INLETS SHALL BE SET TO FINISHED GRADE AND TEMPORARY PAVEMENT RAMPS ARE TO BE CONSTRUCTED AROUND THEM WITH A MINIMUM 20H : 1V SLOPE IN ALL DIRECTIONS USING HOT MIX ASPHALT PAVEMENT. THIS TEMPORARY MATERIAL WILL BE REMOVED IMMEDIATELY PRIOR TO PLACING THE SURFACE COURSE.
23. TRAFFIC CONTROL DEVICES FOR LANE CLOSURES INCLUDING SIGNS, CONES, BARRICADES, ETC. SHALL BE PLACED AS SHOWN ON PLANS. SIGNS SHALL NOT BE PLACED WITHOUT ACTUAL LANE CLOSURES AND SHALL BE IMMEDIATELY REMOVED UPON REMOVAL OF THE CLOSURES.
24. CONES MAY BE SUBSTITUTED FOR DRUMS AND INSTALLED UPON THE APPROVAL OF THE RE.
25. TRAFFIC IMPACT NOTICES AND CHANGES

A. TERMS:
WHEN THE FOLLOWING TERMS ARE USED, THE INTENT AND MEANING SHALL BE AS FOLLOWS:

i. IMPACTS TO NORMAL TRAFFIC FLOW - WORK THAT REQUIRES A PORTION OF THE PAVED ROADWAY BEING BLOCKED OR CLOSED WITH SAFETY DEVICES OR VEHICLES, INCLUDING, BUT NOT LIMITED TO, FULL OR PARTIAL LANE CLOSURES, FULL OR PARTIAL RAMP CLOSURES, SHOULDER CLOSURES, MOVING OPERATIONS SUCH AS TRAFFIC STRIPING OR SWEEPING, LANE SHIFTS, OR ALTERNATING TRAFFIC. THIS APPLIES EVEN WHEN DETOURS ARE PROVIDED.

ii. TEMPORARY LANE CLOSURES - WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH IS ROUTINELY SET UP AND REMOVED ON A DAILY BASIS.

iii. PERMANENT LANE CLOSURES - WORK DESCRIBED UNDER "IMPACTS TO NORMAL TRAFFIC FLOW" WHICH REMAINS IN PLACE CONTINUOUSLY FOR 24 HOURS OR MORE.

B. ADVANCE NOTICES

FOR THE INITIAL START OF WORK THAT REQUIRES "IMPACTS TO NORMAL TRAFFIC FLOW", THE CONTRACTOR SHALL NOTIFY THE RE IN WRITING, ON THE ADVANCE FORM TO-103 PROVIDED BY THE DEPARTMENT, OF THE PROPOSED DATE. THE NOTICE SHALL BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS, BUT NOT MORE THAN SIXTY CALENDAR DAYS, BEFORE THE PROPOSED DATE. START OF WORK THAT IMPACTS NORMAL TRAFFIC FLOW WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR SHALL CONFIRM, IN WRITING TO THE RE, THE PROPOSED DATE SEVEN (AND/OR FOURTEEN) CALENDAR DAYS BEFORE STARTING THE ESTABLISHMENT OF THE TRAFFIC CONTROL MEASURES FOR THE TRAFFIC IMPACT. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RE IF THE PROPOSED ESTABLISHMENT CAN NOT BE COMPLETED ON THE PROPOSED DATE.

FOR A "PERMANENT LANE CLOSURE", THE CONTRACTOR SHALL NOTIFY THE RE IN WRITING, ON ADVANCE FORM TO-103, OF THE PROPOSED DATE A NEW TRAFFIC PATTERN WILL BE ESTABLISHED. THE NOTICE SHALL BE SUBMITTED AT LEAST TWENTY-EIGHT CALENDAR DAYS, BUT NOT MORE THAN SIXTY CALENDAR DAYS, IN ADVANCE OF THE PROPOSED DATE. START OF A NEW TRAFFIC PATTERN WILL NOT BE PERMITTED PRIOR TO THE DATE STATED IN THE NOTICE. THE CONTRACTOR SHALL CONFIRM, IN WRITING TO THE RE, THE PROPOSED DATE OF THE NEW TRAFFIC PATTERN SEVEN (AND/OR FOURTEEN) DAYS BEFORE STARTING TRAFFIC CONTROL MEASURES FOR THE ESTABLISHMENT OF THE NEW PATTERN. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RE IF THE PROPOSED ESTABLISHMENT CAN NOT BE COMPLETED ON THE PROPOSED DATE.

STARTING THE ESTABLISHMENT OF A NEW PERMANENT TRAFFIC PATTERN SHALL BEGIN NO EARLIER THAN 11:00 PM FRIDAY AND SHALL BE COMPLETED AND READY FOR OPERATIONS BY 6:00 PM THE FOLLOWING SUNDAY. THE ESTABLISHMENT SHALL BE COMPLETED IN ACCORDANCE WITH THE LANE CLOSURE HOURS SPECIFIED IN THE CONTRACT.

ADVANCE NOTICES SENT PRIOR TO THE PRE-CONSTRUCTION MEETING SHALL BE ADDRESSED TO THE CONTACT PERSON AS SPECIFIED IN SUBSECTION 101.04 OF THE SPECIAL PROVISIONS.

C. PROGRESS NOTICES

ALL "IMPACTS TO NORMAL TRAFFIC FLOW" SCHEDULED FOR THE SEVEN DAY PERIOD STARTING ON THE FOLLOWING MONDAY SHALL BE SUBMITTED TO THE RE BY 9:00 AM OF EACH FRIDAY ON WEEKLY FORM TO-100 PROVIDED BY THE DEPARTMENT.

EACH DAY OF "TEMPORARY LANE CLOSURES" SHALL BE SUBMITTED TO THE RE BY 9:00 AM THE DAY IN ADVANCE OF THE START OF THOSE OPERATIONS ON DAILY FORM TO-101 PROVIDED BY THE DEPARTMENT.

"TEMPORARY LANE CLOSURES" FOR WEEKENDS SHALL BE SUBMITTED TO THE RE BY 9:00 AM ON THE IMMEDIATELY PRECEDING FRIDAY ON THE DAILY FORM TO-101 PROVIDED BY THE DEPARTMENT.

D. CHANGES TO THE SCHEDULED CLOSURES
REQUEST FOR A CHANGE TO THE TRAFFIC CONTROL REQUIREMENTS IN THE CONTRACT DOCUMENTS SHALL BE SUBMITTED IN WRITING TO THE RE AS FOLLOWS:

CHANGES TO THE SCHEDULED HOURS FOR "TEMPORARY LANE CLOSURES" SHALL BE SUBMITTED TO THE R.E. AT LEAST EIGHT CALENDAR DAYS IN ADVANCE OF WHEN THE CHANGE IS PROPOSED TO START.

OTHER PROPOSED CHANGES TO "TEMPORARY LANE CLOSURES" AND ALL CHANGES TO "PERMANENT LANE CLOSURES" SHALL BE SUBMITTED TO THE RE AS SPECIFIED IN THE SPECIFICATIONS.

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~ENGINEERING EXCELLENCE~

DATE: 3.12.18
FRANK J. SENEY JR.
NJ PROFESSIONAL ENGINEER LIC. No. 35321

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No.	REVISION	DATE	BY	CHK

MAINTENANCE & PROTECTION OF TRAFFIC DETAILS

UNION COUNTY
2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)
VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
C.F.C.	D.M.M.	F.J.S.	AS NOTED
DATE: DECEMBER 2017		SHEET No.: 43 of 54	
JOB NO.: 2000F010			

MPT-1
MPT-12

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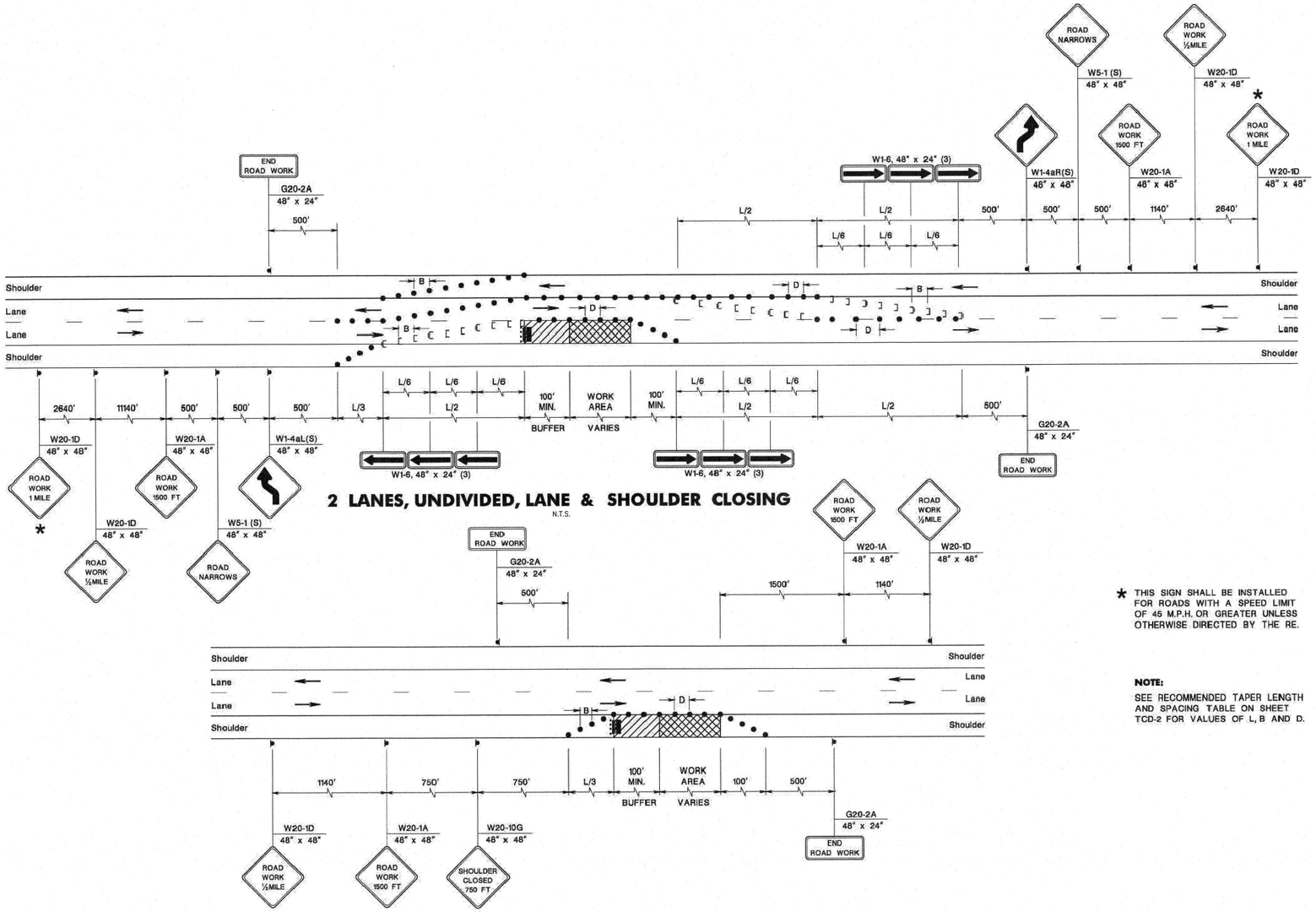

2 LANES, UNDIVIDED, LANE & SHOULDER CLOSING

N.T.S.

2 LANES, UNDIVIDED, SHOULDER CLOSING

N.T.S.

* THIS SIGN SHALL BE INSTALLED FOR ROADS WITH A SPEED LIMIT OF 45 M.P.H. OR GREATER UNLESS OTHERWISE DIRECTED BY THE RE.

NOTE:

SEE RECOMMENDED TAPER LENGTH AND SPACING TABLE ON SHEET TCD-2 FOR VALUES OF L, B AND D.

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DATE : DECEMBER 2017			SHEET No. : 44 of 54
JOB No. : 2000F010			

MPT-2
MPT-12

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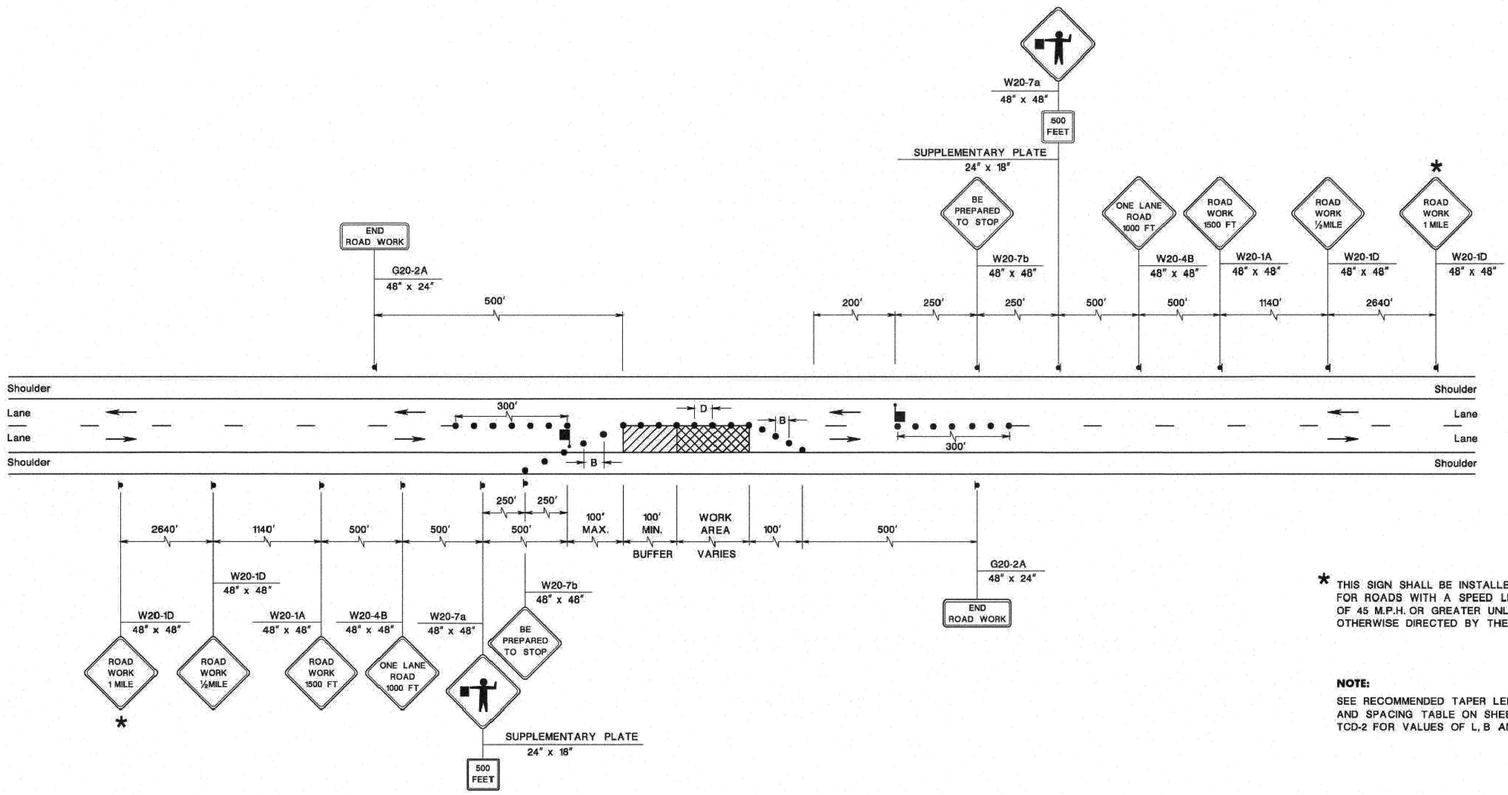

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2 LANES, UNDIVIDED, LANE & SHOULDER CLOSING W/FLAGGING

N.T.S.

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SHEET No.: 45 of 54

MPT-3
MPT-12

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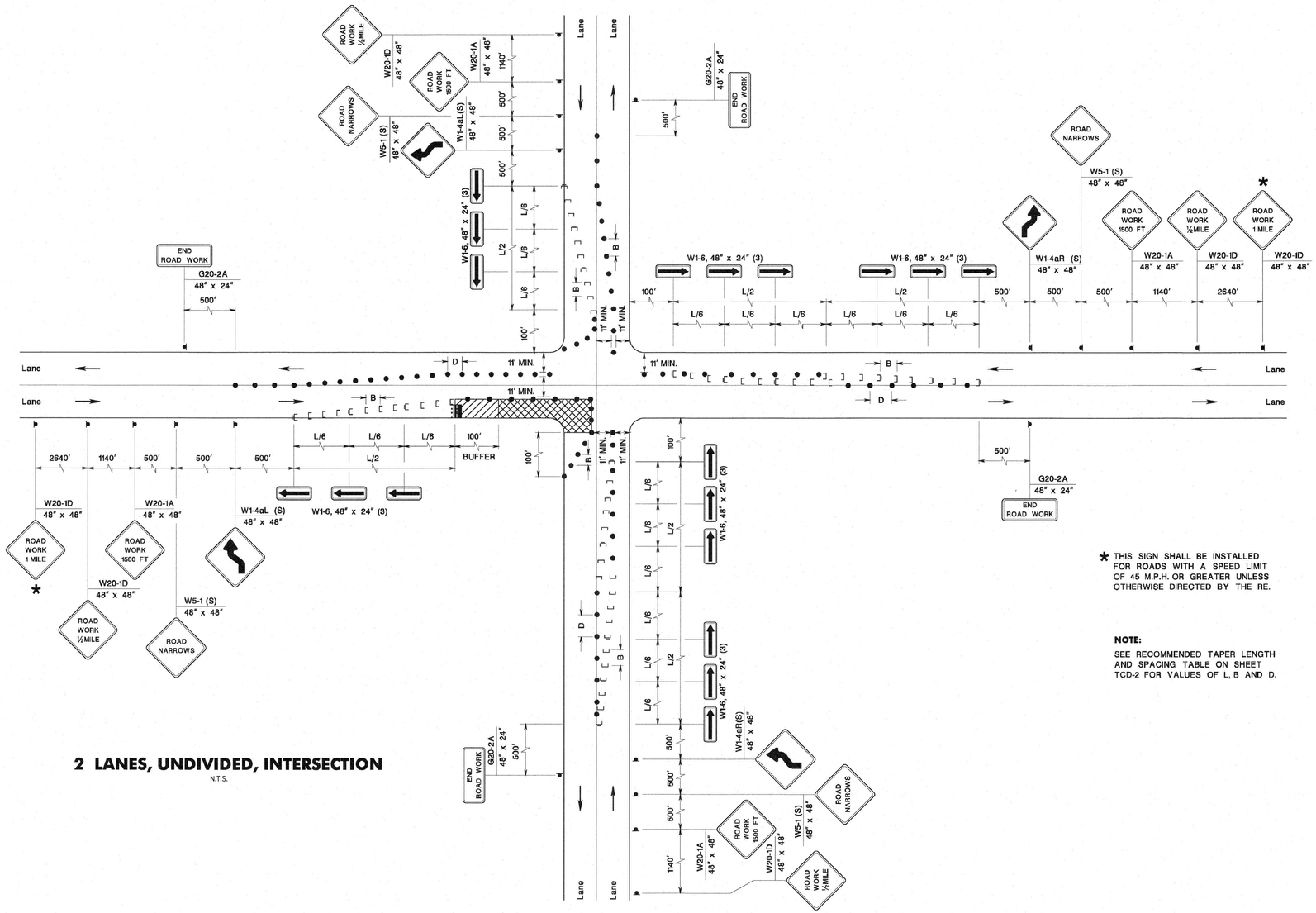

2 LANES, UNDIVIDED, INTERSECTION

N.T.S.

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JOB No.: 2000F010			

MPT-4
MPT-12

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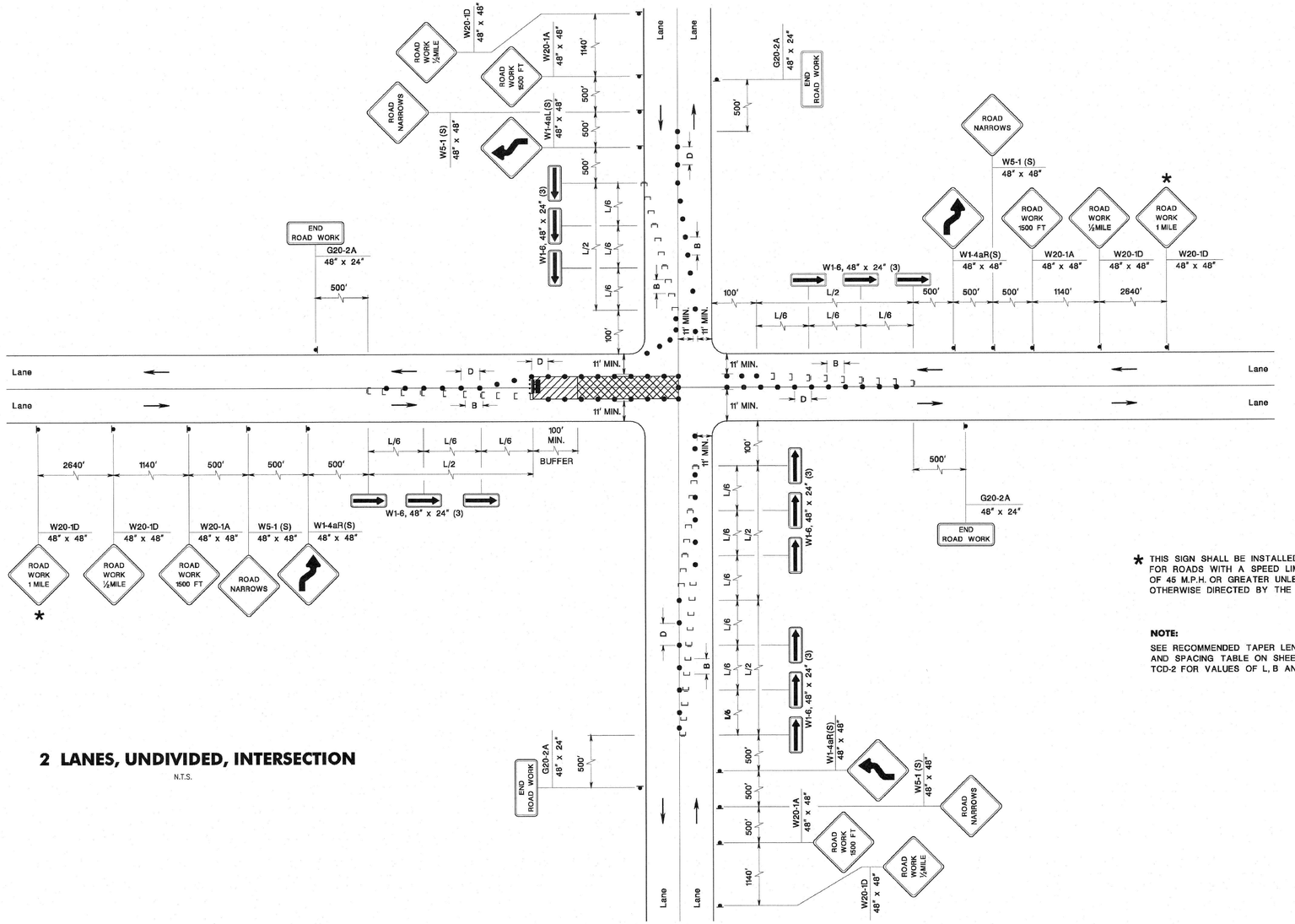

2 LANES, UNDIVIDED, INTERSECTION

N.T.S.

* THIS SIGN SHALL BE INSTALLED FOR ROADS WITH A SPEED LIMIT OF 45 M.P.H. OR GREATER UNLESS OTHERWISE DIRECTED BY THE RE.

NOTE:

SEE RECOMMENDED TAPER LENGTH AND SPACING TABLE ON SHEET TCD-2 FOR VALUES OF L, B AND D.

RVE 1901
REMINGTON & VERNICK **ENGINEERS**
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SECAUCUS, NJ 07094
(201) 624-2137, FAX (201) 624-2136
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~

DATE: 3-12-18

FRANK J. SENEY JR.
NJ PROFESSIONAL ENGINEER LIC. No. 35321

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No.	REVISION	DATE	BY	CHK

MAINTENANCE & PROTECTION OF TRAFFIC DETAILS

UNION COUNTY
2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)
VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
C.F.C.	D.M.M.	F.J.S.	AS NOTED

DATE: DECEMBER 2017
JOB No.: 2000F010
SHEET No.: 47 of 54

MPT-5
MPT-12

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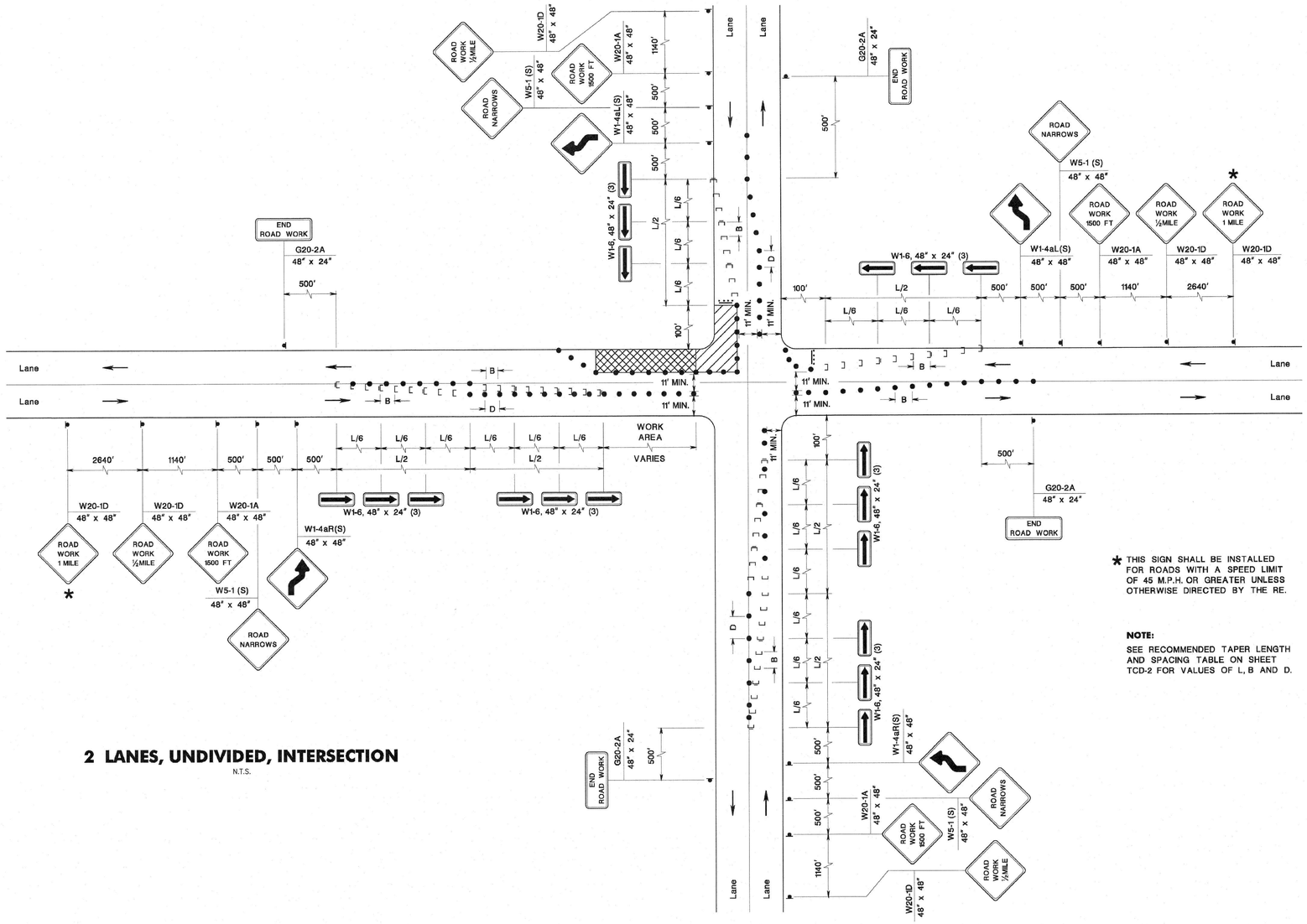

2 LANES, UNDIVIDED, INTERSECTION

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MAINTENANCE & PROTECTION OF TRAFFIC DETAILS

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
C.F.C.	D.M.M.	F.J.S.	AS NOTED

DATE: DECEMBER 2017

JOB No.: 2000F010

SHEET No.: 48 of 54

MPT-6
MPT-12

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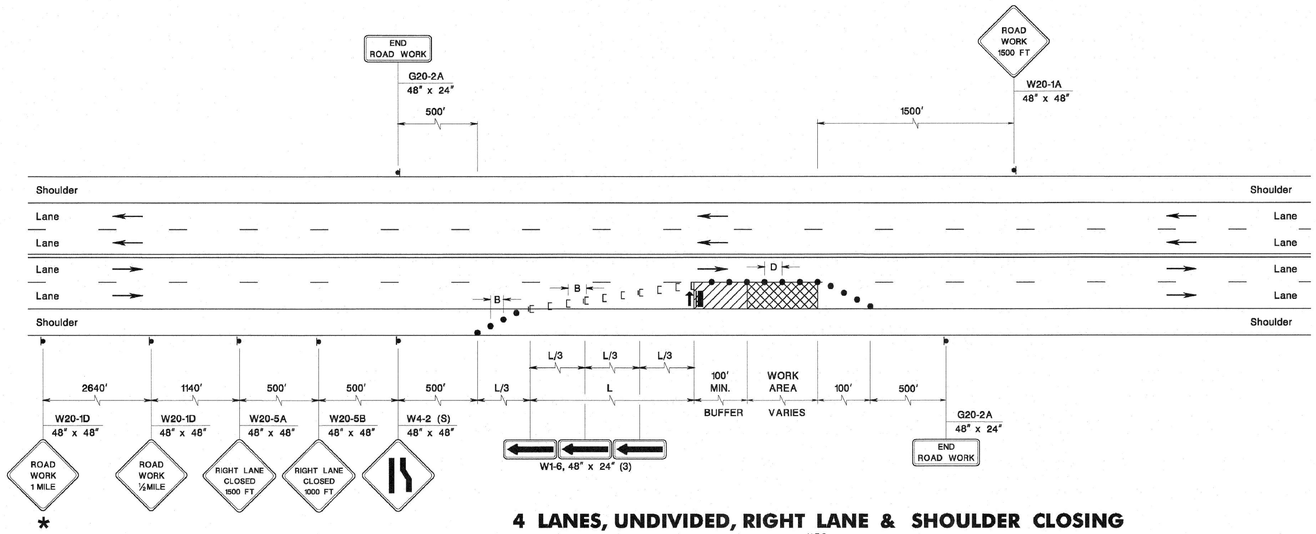
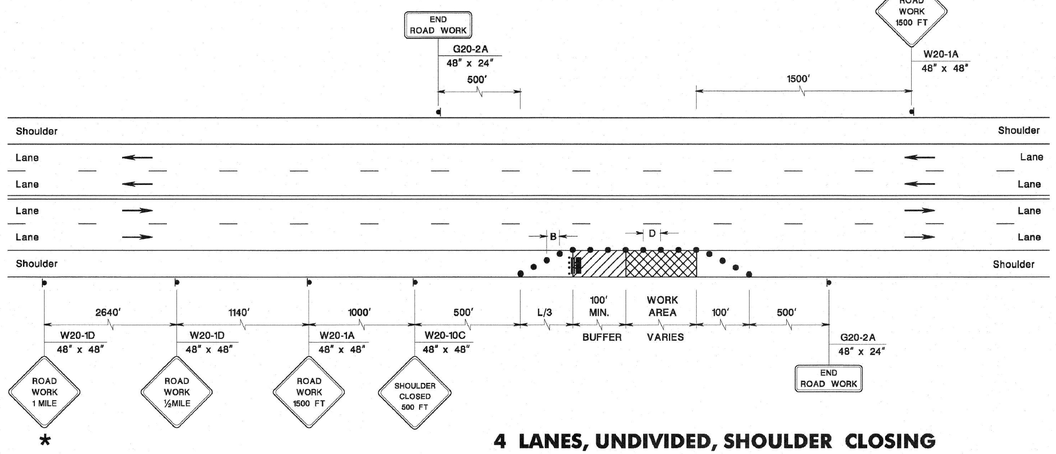


4 LANES, UNDIVIDED, RIGHT LANE & SHOULDER CLOSING

N.T.S.



4 LANES, UNDIVIDED, SHOULDER CLOSING

N.T.S.

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NOTE:

SEE RECOMMENDED TAPER LENGTH AND SPACING TABLE ON SHEET TCD-2 FOR VALUES OF L, B AND D.

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–ENGINEERING EXCELLENCE–

DATE: 3.9.18

FRANK J. SENEY JR.
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NO.	REVISION	DATE	BY	CHK

MAINTENANCE & PROTECTION OF TRAFFIC DETAILS

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY :	DESIGN BY :	CHECKED BY :	SCALE :
C.F.C.	D.M.M.	F.J.S.	AS NOTED
DATE : DECEMBER 2017			SHEET No : 49 of 54
JOB No. : 2000F010			

MPT-7
MPT-12

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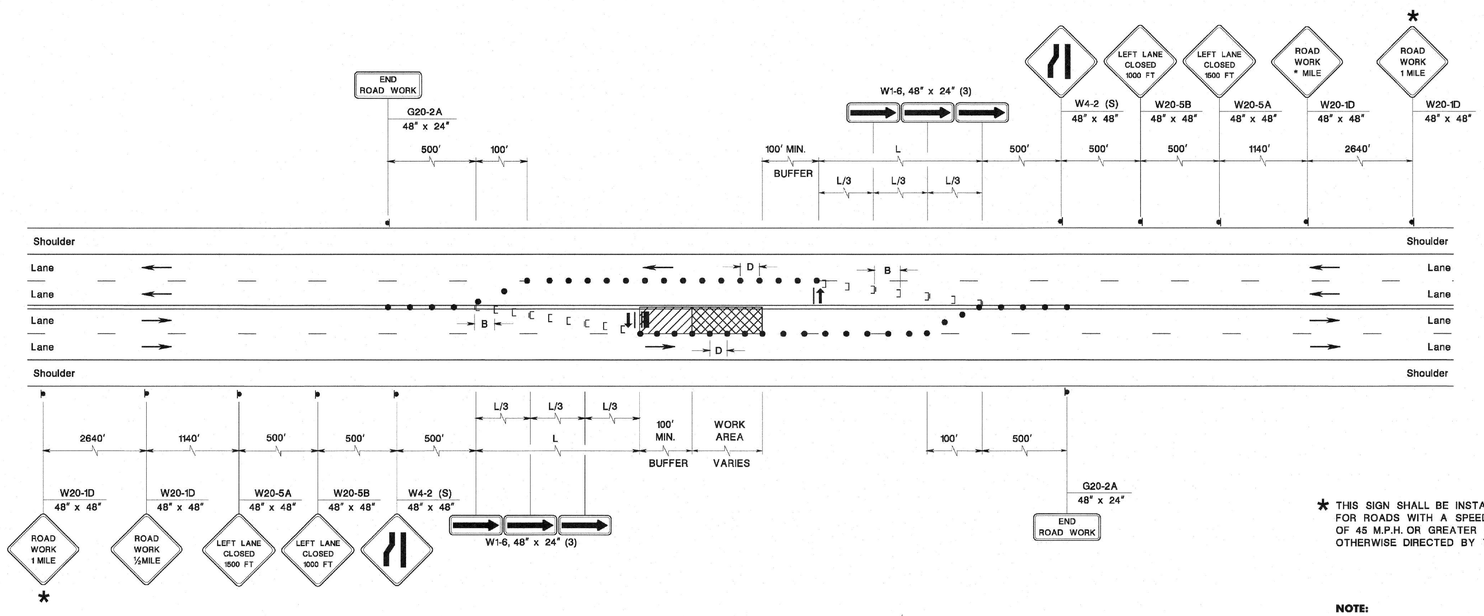

4 LANES, UNDIVIDED, LEFT LANE CLOSING

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UNION COUNTY
2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)
VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

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C.F.C.	D.M.M.	F.J.S.	AS NOTED

DATE : DECEMBER 2017
JOB No : 2000F010
SHEET No : 50 of 54

MPT-8
MPT-12

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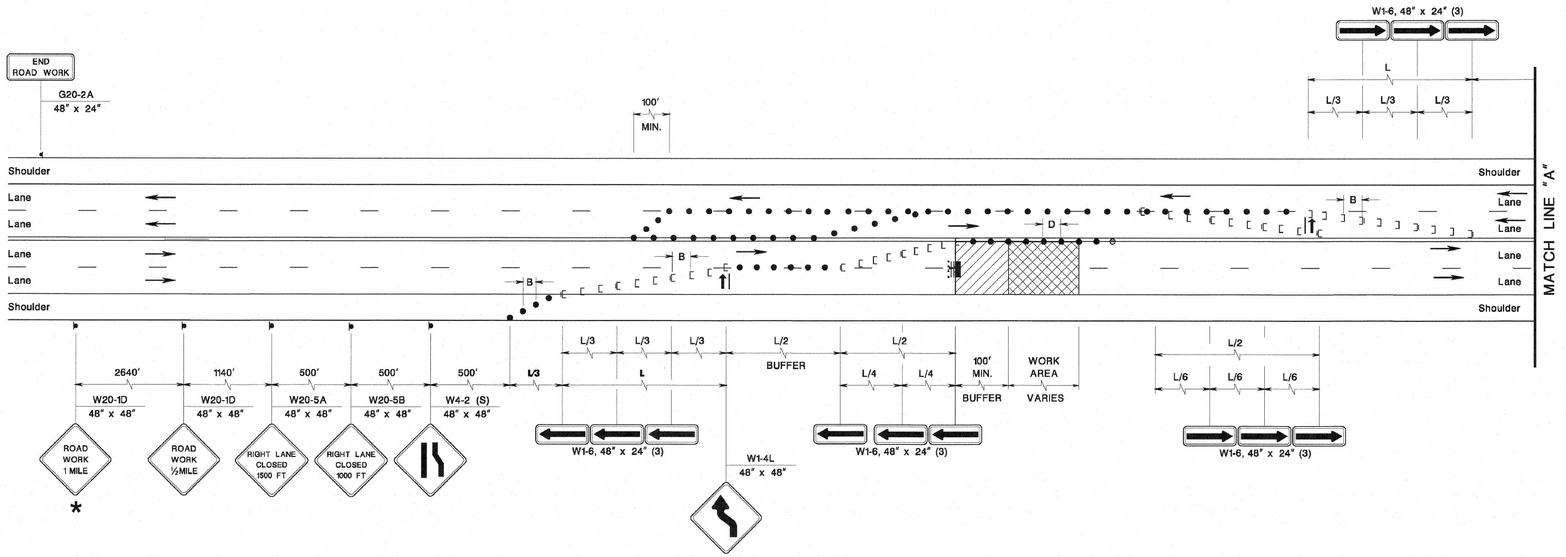

4 LANES, UNDIVIDED, 2 LANES & SHOULDER ONE DIRECTION CLOSING

N.T.S.

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VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY :	DESIGN BY :	CHECKED BY :	SCALE :
C.F.C.	D.M.M.	F.J.S.	AS NOTED
DATE : DECEMBER 2017			SHEET No : 51 of 54
JOB No : 2000F010			

MPT-9
MPT-12

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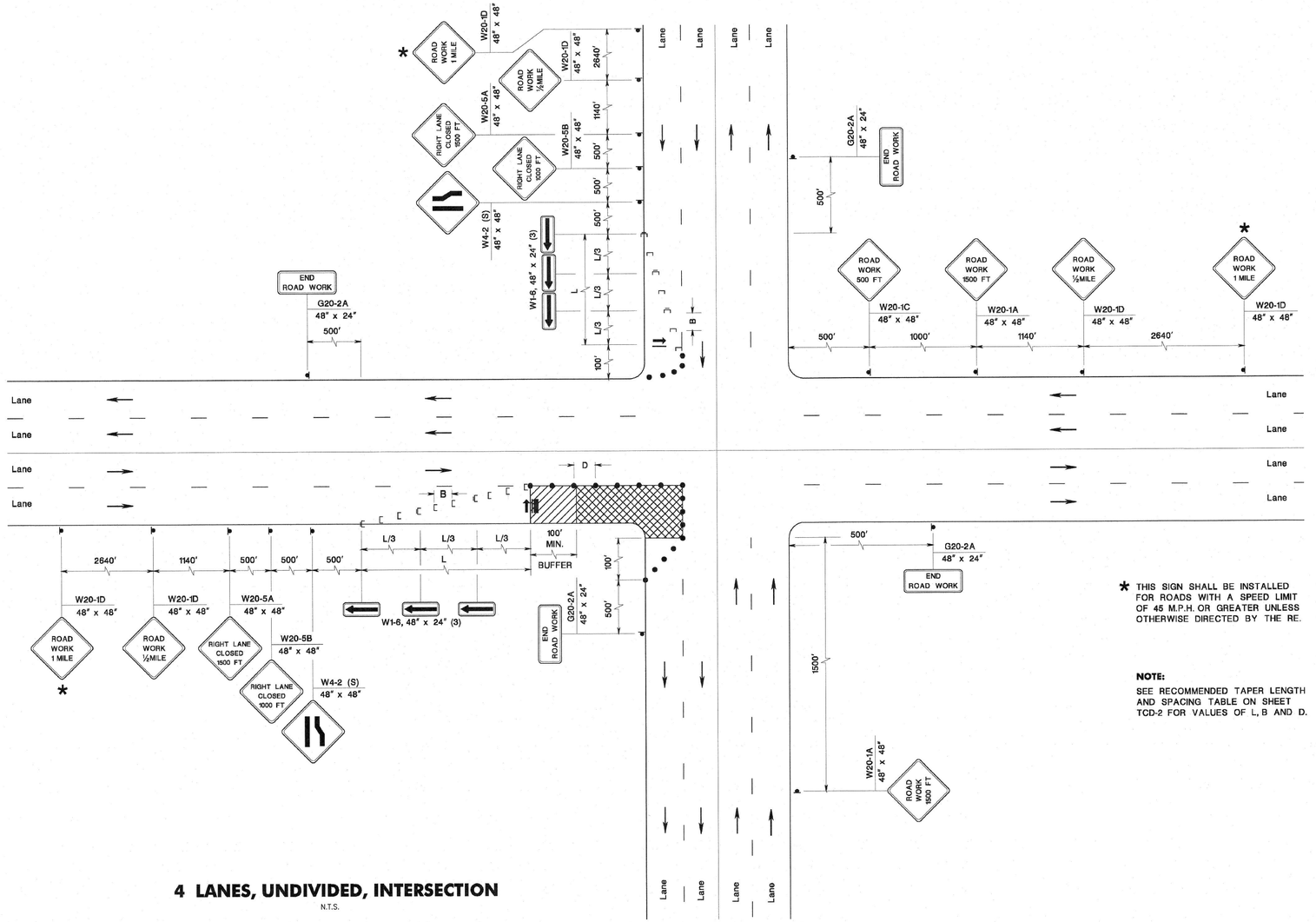

4 LANES, UNDIVIDED, INTERSECTION

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MAINTENANCE & PROTECTION OF TRAFFIC DETAILS

UNION COUNTY
2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)
VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

DRAWN BY :	DESIGN BY :	CHECKED BY :	SCALE :
C.F.C.	D.M.M.	F.J.S.	AS NOTED
DATE : DECEMBER 2017		SHEET No. : 52 of 54	
JOB No. : 2000F010			

MPT-10
MPT-12

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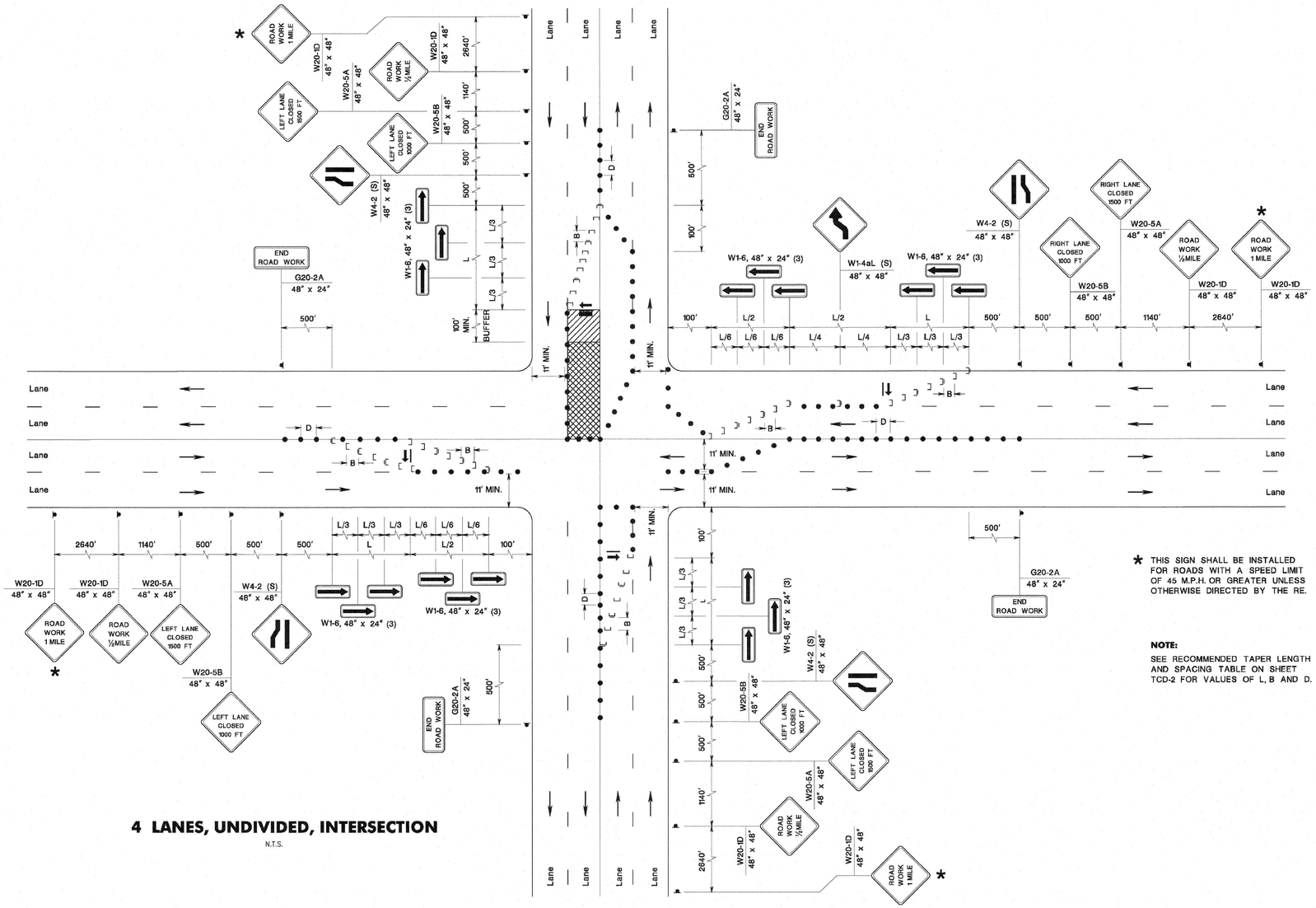

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MAINTENANCE & PROTECTION OF TRAFFIC DETAILS

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2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)
VARIOUS MUNICIPALITIES UNION COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
C.F.C.	D.M.M.	F.J.S.	AS NOTED
DATE: DECEMBER 2017		SHEET No.:	53 of 54
JOB No.: 2000F010			

MPT-11
MPT-12

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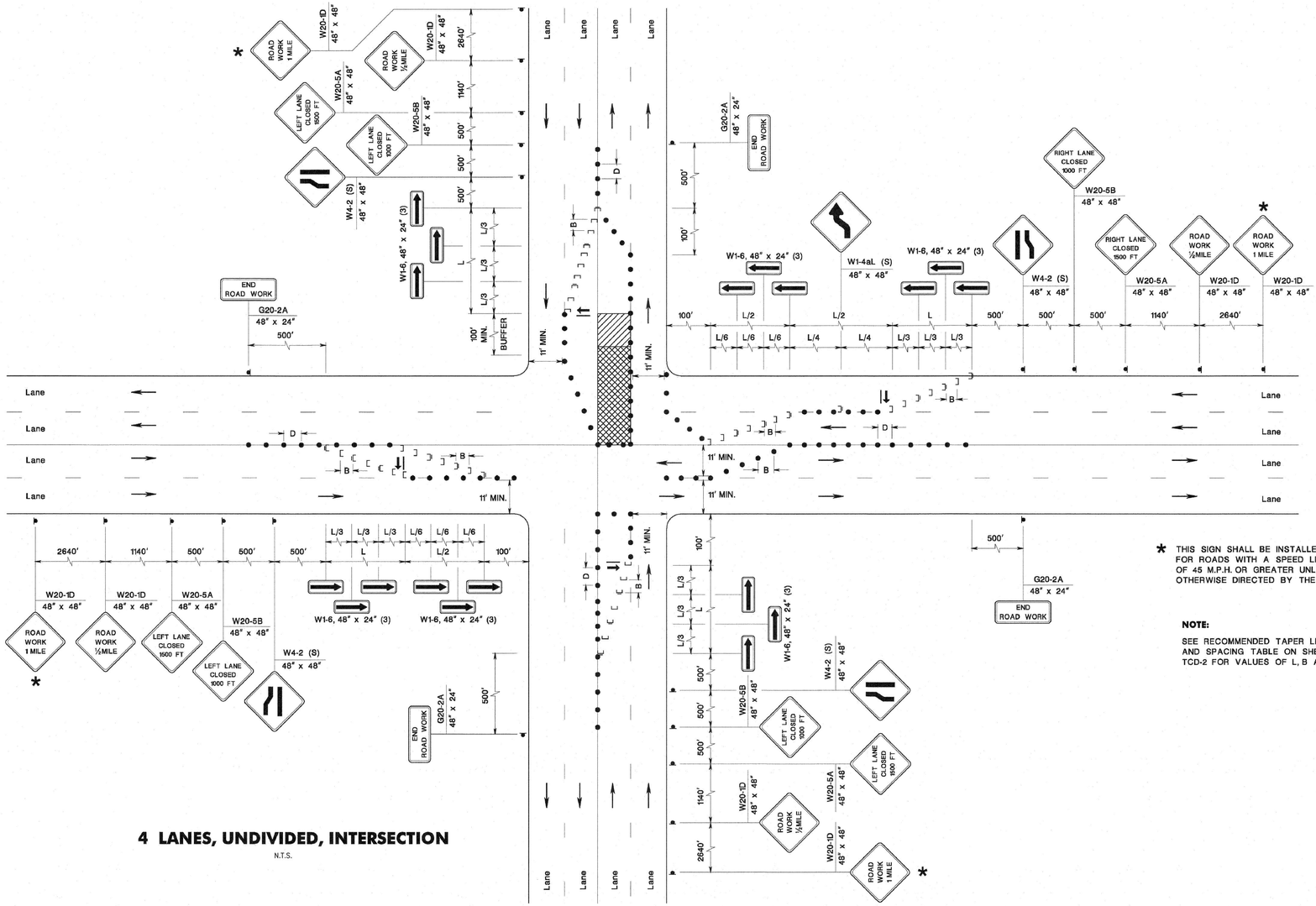

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MAINTENANCE & PROTECTION OF TRAFFIC DETAILS

UNION COUNTY

2018 COUNTY AID ROAD RESURFACING PROGRAM (CA-2017)

VARIOUS MUNICIPALITIES — UNION COUNTY — NEW JERSEY

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C.F.C.	D.M.M.	F.J.S.	AS NOTED

DATE : DECEMBER 2017

SHEET No. : 54 of 54

JOB No. : 2000F010

MPT-12
MPT-12

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