



COUNTY OF UNION

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

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COUNTY COMMISSIONERS

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Clerk of the Board

RICARDO S. MATIAS
PE, CME, CFM
County Engineer
Director, Division of Engineering

DATE: March 22, 2022

FROM: Ricardo S. Matias, PE, CME, CFM
County Engineer

TO: All Potential Bidders

RE: CLARIFICATION 1
2022 Road Resurfacing Project
BA#1-2022; UC Engineering Project #2020-010
Various Municipalities, Union County

Below please see questions posed by a bidding contractor that requires clarification. The contractor's questions are shown in italics, and responses are shown in bold:

Question 1. The plans on the above-mentioned project indicate that we are now going back into each and every intersection. This is a major change from prior specifications in the previous years. Is this the intent of the project?

Response 1. Yes, this is the intent of the project. As shown on the plans, the contractor shall be responsible to mill and pave around the return at the intersecting streets. The final limit of paving shall be determined in the field in conjunction with the County's Construction Manager.

Question 2. After reviewing your asphalt compaction and rideability specifications it appears that these will be hard to meet without a material transfer vehicle (MTV). Is a MTV required for this project?

Response 2. It should be noted that the project specifications are the 2019 NJDOT Standard Specifications for Road and Bridge Construction inclusive of the amendments within the Special Provisions as included with the technical specifications of the bid documents. The compaction and rideability specifications are based on said specification as required by the NJDOT due to the project

DIVISION OF ENGINEERING

2325 South Avenue

Scotch Plains, NJ 07076

(908)789-3675

fax(908)789-3674

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COUNTY OF UNION

DEPARTMENT OF ENGINEERING, PUBLIC WORKS & FACILITIES MANAGEMENT

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RICARDO S. MATIAS
PE, CME, CFM
County Engineer
Director, Division of Engineering

being partially funded through NJDOT County Aid Grant. The means and methods of construction are the responsibility of the contractor. Should the contractor feel that a MTV is required to meet the requirements of the specifications then they should incorporate that within their price. No specific payment will be made for a MTV or any other specific equipment that the contractor requires to carry out the scope of the project, unless the payment is specifically included within the proposal page of the bid documents.

DIVISION OF ENGINEERING

2325 South Avenue

Scotch Plains, NJ 07076

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SPECIFICATIONS

FOR

**2022 Road Resurfacing Project, Various
Municipalities,
Union County, New Jersey**

BA#1-2022; UNION COUNTY ENGINEERING PROJECT #2020-010

March 2022

**UNION COUNTY
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**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**
Ricardo Matias, PE, CME, CFM

Prepared by:

Neglia Engineering Associates
200 Central Avenue, Suite 102
Mountainside, New Jersey 07092

**COUNTY OF UNION
NOTICE TO BIDDERS**

Sealed bids will be received by the assistant director of the Division of Purchasing, or her designee, at the County of Union, New Jersey on **March 31, 2022 at 11:30 a.m.**, prevailing time, in the **3rd Floor Conference Room**, U.C. Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey for:

**2022 Road Resurfacing Project, Various Municipalities,
Union County, New Jersey
BA#1-2022; UNION COUNTY ENGINEERING PROJECT #2020-010**

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.

***Public access to the County of Union Administration Building is currently restricted during the statewide public health emergency. Accordingly there will not be an in-person public opening but instead will be conducted live and streamed via the County of Union live streaming platform which will feature both audio and video capabilities. A link will be provided on the day of the opening at <https://ucnj.org/>.

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. Hand delivery of proposals are strongly discouraged due to public restrictions. If delivered by hand, you will not receive confirmation of delivery. **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.

***Entire bid packages received will be scanned and available for public inspection on the portal, <http://ucnj.org/itb>, as they would be available for public inspection after an in-person bid opening. Bidders are reminded to review their submissions for any information they consider to be confidential. The County will not be responsible for the release of any information contained in the bid package which may be subject to confidentiality.

MICHELLE HAGOPIAN, ASSISTANT DIRECTOR OF PURCHASING

**Union County Board of County
Commissioners**

We're Connected to You!

**2022 Road Resurfacing Project, Various Municipalities,
Union County, New Jersey
BA#1-2022; UNION COUNTY ENGINEERING PROJECT #2020-010**

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- 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
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NEW JERSEY PREVAILING WAGE DETERMINATION DOCUMENTS

PROJECT TECHNICAL SPECIFICATIONS

**UNION COUNTY BOARD OF COUNTY COMMISSIONERS
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 County Commissioners
UC Administration Building, 6th Floor
10 Elizabethtown Plaza
Elizabeth, New Jersey 07207

ADDRESS INQUIRIES TO:

Union County Division of Purchasing
UC Administration Building, 3rd Floor
10 Elizabethtown Plaza
Elizabeth, NJ 07207
Attn: Michelle Hagopian, Assistant Director, Division of Purchasing
Telephone: 908-527-4130
Facsimile: 908-558-2548
ucbids@ucnj.org

ADDRESS BIDS AND SUBMIT TO:

Union County Division of Purchasing
UC Administration Building, 3rd Floor
10 Elizabethtown Plaza
Elizabeth, NJ 07207
Attn: Michelle Hagopian, Assistant Director, Division of Purchasing
Telephone: 908-527-4130
Facsimile: 908-558-2548
ucbids@ucnj.org

TITLE OF PROJECT: 2022 Road Resurfacing Project, Various Municipalities,
Union County, New Jersey
BA#1-2022; UNION COUNTY ENGINEERING PROJECT #2020-010

BIDDER: Bidder shall be a single overall contract bidder

ENGINEER: Neglia Engineering Associates

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

COUNTY ENGINEER:

Ricardo S. Matias, PE, CME, CFM, Director/ Division of Engineering

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 minor informalities or non-material exceptions in the bids.

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 Michele Hagopian, Assistant 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, Michele Hagopian, Assistant 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 Assistant Director, Division of Purchasing at ucbids@ucnj.org 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 Assistant Director, Division of Purchasing at ucbids@ucnj.org, the discovery of any apparent ambiguity, inconsistency, error,

discrepancy, omission in the Contract Documents for interpretation and correction at least ten (10) working days before opening of bids with the exception of Saturdays, Sundays and holidays.

All Addenda issued through the Office of the Division of Purchasing 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 Assistant Director, Division of Purchasing 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 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 will return all certified checks or cashier's checks after the proposals have been opened, tabulated and reviewed except those of the three (3) bidders lowest responsible bidders. 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 an 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. 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.

10. 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 County Commissioners, 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 County Commissioners, 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.

11. 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, defend, 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."

12. 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.

13. 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”.

14. 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.

15. 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.

16. 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.

17. OWNERSHIP DISCLOSURES REQUIRED

Pursuant to P.L. 2016, c. 43, codified as N.J.S.A. 52:25-24.2, no corporation, partnership, or limited liability company shall be awarded any contract nor shall any agreement be entered into for the performance of any work or the furnishing of any materials or supplies the County unless prior to the receipt of the bid or accompanying the bid, of said corporation, said partnership, or said limited liability company there is submitted a statement setting forth the names and addresses of all stockholders in the corporation who own ten percent (10%) or more of its stock, of any class, or of all individual partners in the partnership who own a ten percent (10%) or greater interest therein, or of all members in the limited liability company who own a ten percent (10%) or greater interest therein, as the case may be. If one or more such stockholder or partner or member is itself a corporation or partnership or limited liability company, the stockholders holding ten percent (10%) or more of that corporation's stock, or the individual partners owning ten percent (10%) or greater interest in that partnership, or the members owning ten percent (10%) or greater interest in that limited liability company, as

the case may be, shall also be listed. The disclosure shall be continued until names and addresses of every non corporate stockholder, and individual partner, and member, exceeding the ten percent (10%) ownership criteria has been listed.

To comply with this section, a bidder with any direct or indirect parent entity which is publicly traded may submit the name and address of each publicly traded entity and the name and address of each person that holds a ten percent (10%) or greater beneficial interest in the publicly traded entity as of the last annual filing with the federal Securities and Exchange Commission (“SEC”) or the foreign equivalent, and, if there is any person that holds a ten percent (10%) or greater beneficial interest, also shall submit links to the websites containing the last annual filings with the federal SEC or the foreign equivalent and the relevant page numbers of the filings that contain the information on each person that holds a ten percent (10%) or greater beneficial interest.

(See forms attached)

18. 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.

19. 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.

20. 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 Workforce Development 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 County Commissioners on May 8, 2014. The resolution is furnished in Section 56 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)

21. 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.

22. 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.

23. 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.

24. 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.

25. 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.

26. 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.

27. 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.

28. 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.

29. 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.

30. 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.

31. 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 shall be observed.

32. 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.

33. 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.

34. PERMITS

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

35. 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.

36. CHANGE ORDERS

The applicability of change orders and change order procedures shall comply with *N.J.S.A. 40A:11-16.7* and *N.J.A.C. 5:30-11.1 et seq.*, "Change Orders and Open End Contracts".

37. 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.

38. 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.

39. 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.

40. 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.

41. 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.

42. 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.

43. AFFIRMATIVE ACTION REQUIREMENTS

(REVISED 01/2022)

EXHIBIT B

MANDATORY EQUAL EMPLOYMENT OPPORTUNITY LANGUAGE

N.J.S.A. 10:5-31 et seq. (P.L.1975, c.127)

N.J.A.C. 17:27-1.1 et seq.

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, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Public Agency Compliance Officer setting forth provisions of this nondiscrimination clause.

The contractor or subcontractor, where applicable will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will

receive consideration for employment without regard to age, race, creed, color, national origin, ancestry, marital status, affectional or sexual orientation, gender identity or expression, disability, nationality or sex.

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

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

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. 17:27-7.2; provided, however, that the Dept. of LWD, Construction EEO Monitoring Program, may, in its discretion, exempt a contractor or subcontractor from compliance with the good faith procedures prescribed by the following provisions, A, B, and C, as long as the Dept. of LWD, Construction EEO Monitoring Program is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Dept. of LWD, Construction EEO Monitoring Program, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. 17:27-7.2. The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

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

subcontractor agrees to be prepared to provide such opportunities to minority and women workers directly, consistent with this chapter, by complying with the hiring or scheduling procedures prescribed under (B) below; and the contractor or subcontractor further agrees to take said action immediately if it determines that the union is not referring minority and women workers consistent with the equal employment opportunity goals set forth in this chapter.

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

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

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

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

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

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

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

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

(ii) If said individuals have never previously received any document or certification signifying a level of qualification lower than that required in

order to perform the work of the construction trade, the contractor or subcontractor shall in good faith determine the qualifications of such individuals. The contractor or subcontractor shall hire or schedule those individuals who satisfy appropriate qualification standards in conformity with the equal employment opportunity and non-discrimination principles set forth in this chapter. However, a contractor or subcontractor shall determine that the individual at least possesses the requisite skills, and experience recognized by a union, apprentice program or a referral agency, provided the referral agency is acceptable to the Dept. of LWD, Construction EEO Monitoring Program. If necessary, the contractor or subcontractor shall hire or schedule minority and women workers who qualify as trainees pursuant to these rules. All of the requirements, however, are limited by the provisions of (C) below.

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

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

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

(C) The contractor or subcontractor agrees that nothing contained in (B) above shall preclude the contractor or subcontractor from complying with the union hiring hall or apprenticeship policies in any applicable collective bargaining agreement or union hiring hall arrangement, and, where required by custom or agreement, it shall send journeymen and trainees to the union for referral, or to the apprenticeship program for admission, pursuant to such agreement or arrangement. However, where the practices of a union or

apprenticeship program will result in the exclusion of minorities and women or the failure to refer minorities and women consistent with the targeted county employment goal, the contractor or subcontractor shall consider for employment persons referred pursuant to (B) above without regard to such agreement or arrangement; provided further, however, that the contractor or subcontractor shall not be required to employ women and minority advanced trainees and trainees in numbers which result in the employment of advanced trainees and trainees as a percentage of the total workforce for the construction trade, which percentage significantly exceeds the apprentice to journey worker ratio specified in the applicable collective bargaining agreement, or in the absence of a collective bargaining agreement, exceeds the ratio established by practice in the area for said construction trade. Also, the contractor or subcontractor agrees that, in implementing the procedures of (B) above, it shall, where applicable, employ minority and women workers residing within the geographical jurisdiction of the union.

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

The contractor agrees to cooperate with the public agency in the payment of budgeted funds, as is necessary, for on-the-job and/or off-the-job programs for outreach and training of minorities and women. (D) The contractor and its subcontractors shall furnish such reports or other documents to the Dept. of LWD, Construction EEO Monitoring Program as may be requested by the Dept. of LWD, Construction EEO Monitoring Program from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Dept. of LWD, Construction EEO Monitoring Program for conducting a compliance investigation pursuant to N.J.A.C. 17:27-1.1 et seq.

44. INVESTMENT ACTIVITIES IN IRAN

Pursuant to *N.J.S.A. 52:32-55 et seq.*, prohibits State and local public contracts with persons or entities engaging in certain investment activities in energy or finance sectors of Iran.

45. 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.

46. 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.

47. 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.

48. 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.

49. 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.

50. CONTRACTOR BUSINESS REGISTRATION CERTIFICATE

Pursuant to N.J.S.A. 52:32-44, the County of Union is prohibited from entering into a contract with an entity unless the bidder/proposer/contractor, and each subcontractor that is required by law to be named in a bid/proposal/contract has a valid Business Registration Certificate on file with the Division of Revenue and Enterprise Services within the Department of the Treasury.

Prior to contract award or authorization, the contractor shall provide the County of Union with its proof of business registration and that of any named subcontractor(s).

Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the County of Union prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

Proof of registration 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.

During the course of contract performance:

- 1) the contractor shall not enter into a contract with a subcontractor unless the subcontractor first provides the contractor with a valid proof of business registration.
- 2) the contractor shall maintain and submit to the County of Union a list of subcontractors and their addresses that may be updated from time to time.
- 3) the contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall collect and remit to the Director of the Division of Taxation in the Department of the Treasury, the use tax due pursuant to the Sales and Use Tax Act, (N.J.S.A. 54:32B-1 et seq.) on all sales of tangible personal property delivered into the State. Any questions in this regard can be directed to the Division of Taxation at (609)292-6400. Form NJ-REG can be filed online at <http://www.state.nj.us/treasury/revenue/busregcert.shtml>.

Before final payment is made under the contract, the contractor shall submit to the County of Union a complete and accurate list of all subcontractors used and their addresses.

Pursuant to N.J.S.A. 54:49-4.1, a business organization that fails to provide a copy of a business registration as required, or that provides false business registration information, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000, for each proof of business registration not properly provided under a contract with a contracting agency.

51. 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.

52. 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.

53. 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.

54. 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.

55. 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).

56. RESOLUTION NO. 2014-408

WHEREAS, the County of Union recognizes there is a need to ensure that all work on significant public construction and maintenance contracts is performed by responsible, qualified firms that maintain the capacity, expertise, personnel, and other qualifications and resources necessary to successfully perform public contracts in a timely, reliable, and cost-effective manner; and

WHEREAS, in order to effectuate the purpose of selecting responsible contractors for significant public contracts and to protect Union County's capital investments in such contracts prospective contractors and subcontractors should be required to meet pre-established, clearly-defined, minimum standards relating to contractor responsibility, including retirements and criteria concerning qualifications, competency) expertise, adequacy of resources, including equipment, financial and personnel, and satisfactory records regarding past project performance, safety, legal compliance and business integrity; and

WHEREAS, the County has a compelling interest in assuring that its Public Works Projects meet the highest standard of safety and quality; and

WHEREAS, due to the critical impact that skilled construction craft labor has on public works projects, and due to the limited availability of skilled construction craft labor and imminent craft labor skill shortages, it is necessary to require contractors and subcontractors to participate in established, formal apprenticeship training programs for the purpose of both promoting successful project delivery and ensuring future workforce development; and

WHEREAS, an apprenticeship program is a structured system of training designed to prepare individuals for occupations and lifelong careers in skilled trades and crafts by providing a wage-paying job that incorporates extensive workplace and classroom training under the supervision of experienced workers, in preparation for highly skilled occupations; and

WHEREAS, apprenticeship programs are a critical component in public safety, by ensuring that workers on public projects are properly trained, able, competent and capable craftsmen, and provide assurance of compliance with the County's bid specifications and achieve high quality standards; and

WHEREAS, for an apprenticeship program to be fully effective, the public and private sectors must recognize its value and commit to supporting its mission; and

WHEREAS, Union County has long recognized the value of apprenticeship programs through its support of the Union County Vocational-Technical Schools, which offer training programs to help ensure that Union County will continue to produce a skilled and educated work force in the trade specialties, and thus, strengthen Union County's economy by fostering the development of highly paid trade and craft careers; and

WHEREAS, the use of apprenticeship programs or apprenticeship trained employees on Union County Public Works Projects will serve the dual goal of providing the County with assurance that its public works projects are completed with a well-trained workforce, in a highly skilled and timely fashion, while creating opportunities for careers in the skilled trades and craft industry for County residents; and

WHEREAS, the County of Union also recognizes that it is beneficial to their employees to utilize fair business, employment, and training practices that have a positive impact on local communities affected by such contracts:

NOW, THEREFORE, BE IT RESOLVED by the Board of Chosen Freeholders of the County of Union as follows:

1. The County of Union shall require compliance with the provisions of this Resolution by business entities seeking to provide services to the County of Union as specified herein. The requirements of this Resolution are intended to supplement, not replace, existing contractor qualifications and performance standards or criteria currently required by law, public policy or contracting documents, including but not limited to Union County's DPMC classification and Project Labor Agreement policies
2. All contractors and subcontractors that perform significant work on any public facility or public works project, including construction, alteration, renovation, repair, service, or maintenance work, shall meet the requirements of this Resolution. For purposes of this Resolution, the term "significant work" shall be defined as any work or activity covered under the New Jersey Prevailing Wage Act, N.J.S.A. 34:11-56.25 et seq.
3. All firms engaged in contracts covered by this Resolution shall be qualified responsible contractors or subcontractors that have sufficient capabilities in all respects to successfully perform contracts on which they

are engaged, including the necessary experience, equipment, technical skills and qualifications and organizational, financial and personnel resources. Firms bidding on public contracts shall also be required to have a satisfactory past performance record and a satisfactory record of legal compliance, integrity and business ethics. Compliance with these standards shall be established by compliance with the requirements set forth in paragraph 8 of this Resolution.

4. As a condition of performing work on public works contracts over the public works threshold, the general contractor shall provide certification that he and each subcontractor working on the project shall have at least one (1) employee who has successfully completed the OSHA 10-hour construction safety and health course. As a condition of performing work on public works contracts of \$500,000.00 or more total cost of project, the general contractor shall provide certification that each subcontractor working on the project shall have at least one (1) employee who has successfully completed the OSHA 30-hour construction safety and health course.

5. All contractors and subcontractors that perform significant work on any public facility or public works project shall be required to affirmatively provide evidence of and confirm compliance with proof of participation in an Apprenticeship Program currently registered and approved by the United States Department of Labor ("USDOL"), the New Jersey Department of Labor ("NJDOL") or any state having equal to or higher requirements as either the USDOL or NJDOL apprenticeship programs. Additionally, Apprenticeship Programs shall meet the criteria set forth in Section 8(i) of this Resolution.

6. As a condition of performing work on public works contracts subject to this Resolution, a general contractor seeking award of a contract shall submit a Contractor Responsibility Certification at the time it submits its bid for contract.

7. The Contractor Responsibility Certification shall be completed on a form provided by the Union County Purchasing Department and shall reference the project for which a bid is being submitted by name and contract or project number.

8. In the Contractor Responsibility Certification, general contractors and subcontractors shall certify the following facts regarding their past performance and work history and its current qualifications and

performance capabilities:

- a. The firm has all valid, effective licenses, registrations or certificates required by federal, state, county, or local law, including, but not limited to, licenses, registrations, certificates required to: (1) do business in the designated locale; and (2) perform the contract work it seeks to perform. These shall include, but not be limited to, licenses, registrations or certificates for any type of trade work or specialty work, which the firm proposes to self-perform.
- b. The firm meets the bonding requirements for the contract, as required by applicable law or contract specifications and any insurance requirements, as required by applicable law or contract specifications, including general liability insurance, workers compensation insurance and unemployment requirements.
- c. The firm has not been debarred by any federal, state or local government agency or authority in the past three (3) years.
- d. The firm has not defaulted on any project in the past three (3) years.
- e. The firm has not had any type of business, contracting or trade license, registration, or other certification suspended or revoked in the past three (3) years.
- f. The firm has not been cited and found guilty for a willful violation of federal or state safety laws in the past three (3) years.
- g. The firm and/or its owners have not been convicted of any crime relating to the contracting business by a final decision of a court or government agency in the past three (3) years.
- h. The firm will pay all craft employees that it employs on the project the current wage rates and benefits as required under applicable Federal or State prevailing wage laws.
- i. The firm participates in an Apprenticeship Program that is currently registered with the USDOL, the NJDOL or any state having equal to or higher requirements as either the USDOL or

NJDOL apprenticeship programs, for each craft or trade in which it apprentices. The firm shall provide proof of meeting this qualification standard by submitting appropriate documentation as an attachment to this Certification. The firm shall continue to participate in applicable apprenticeship programs for the full duration of the contract work. The apprenticeship program in which the firm participates shall have graduated at least one (1) enrollee in each of the past three (3) years.

9. The County of Union may conduct any additional inquiries to verify that the prospective awardee and its subcontractors have the technical qualifications and performance capabilities necessary to successfully perform the contract and that the firms have a sufficient record of legal compliance and business integrity to justify the award of a public contract. In conducting such inquiries, the County of Union may seek relevant information from the firm, its prior clients or customers, its subcontractors or any other relevant source.

10. If any provision of this Resolution shall be held to be invalid or unenforceable by a court of competent jurisdiction, any such holding shall not invalidate any other provisions of this Resolution and all remaining provisions shall remain in full force and effect.

NOW, THEREFORE, BE IT RESOLVED by the Board of Chosen Freeholders of the County of Union that it hereby establishes and adopts the Responsible Contractor Policy, and it hereby authorizes the County Manager to sign any and all documents necessary to make said Policy effective immediately.

57. FEDERAL TERMS

TERMS AND CONDITIONS APPLICABLE TO ALL CONTRACTS/PURCHASES FUNDED, IN WHOLE OR IN PART, BY FEDERAL FUNDS.

The provisions set forth below apply to all contracts funded, in whole or in part, by Federal funds as required by 2 CFR 200.317.

1. CONTRACTING WITH SMALL AND MINORITY BUSINESSES, WOMEN'S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS

Pursuant to 2 CFR 200.321, the State must take all necessary affirmative steps to assure that minority businesses, women's business enterprises,

and labor surplus area firms are used when possible. Accordingly, if subawards are to be made the Contractor shall:

- (1) Include qualified small and minority businesses and women's business enterprises on solicitation lists;
- (2) Assure that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- (3) Divide total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;
- (4) Establish delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and,
- (5) Use the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

2. DOMESTIC PREFERENCE FOR PROCUREMENTS

Pursuant to 2 CFR 200.322, where appropriate, the State has a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). If subawards are to be made the Contractor shall include a preference for the purchase, acquisition, or use of goods, products, or materials produced in the United States (including but not limited to iron, aluminum, steel, cement, and other manufactured products). For purposes of this section:

- (1) "Produced in the United States" means, for iron and steel products, that all manufacturing processes, from the initial melting stage through the application of coatings, occurred in the United States.
- (2) "Manufactured products" means items and construction materials composed in whole or in part of nonferrous metals such as aluminum; plastics and polymer-based products such as polyvinyl chloride pipe; aggregates such as concrete; glass, including optical fiber; and lumber.

3. PROCUREMENT OF RECOVERED MATERIALS

Where applicable, in the performance of contract, pursuant to 2 CFR 200.323, the contractor must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR Part 247 that contain the highest percentage of recovered materials

practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$ 10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

To the extent that the scope of work or specifications in the contract requires the contractor to provide recovered materials the scope of work or specifications are modified to require that as follows.

- i. In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired—
 1. Competitively within a timeframe providing for compliance with the contract performance schedule;
 2. Meeting contract performance requirements; or
 3. At a reasonable price.
- ii. Information about this requirement, along with the list of EPA-designated items, is available at EPA's Comprehensive Procurement Guidelines web site, <https://www.epa.gov/smm/comprehensive-procurement-guideline-cpg-program>.
- iii. The Contractor also agrees to comply with all other applicable requirements of Section 6002 of the Solid Waste Disposal Act."

4. EQUAL EMPLOYMENT OPPORTUNITY

Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3 must include the equal opportunity clause provided under 41 CFR 60-1.4(b), in accordance with Executive Order 11246, "Equal Employment Opportunity" (30 FR 12319, 12935, 3 CFR Part, 1964-1965 Comp., p. 339), as amended by Executive Order 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," and implementing regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor." See, 2 CFR Part 200, Appendix II, para. C.

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

- (1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion,

sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- (2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.
- (3) The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.
- (4) The contractor will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- (5) The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
- (6) The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his/her books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
- (7) In the event of the contractor's noncompliance with the

nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

- (8) The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, That if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

5. DAVIS-BACON ACT, 40 U.S.C. 3141-3148, AS AMENDED

When required by Federal program legislation, all prime construction contracts in excess of \$2,000 shall be done in compliance with the Davis-Bacon Act (40 U.S.C. 3141- 3144, and 3146-3148) and the requirements of 29 C.F.R. pt. 5 as may be applicable. The contractor shall comply with 40 U.S.C. 3141-3144, and 3146-3148 and the requirements of 29 C.F.R. pt. 5 as applicable. Contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. Additionally, contractors are required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

6. COPELAND ANTI-KICKBACK ACT

Where applicable, the Contractor must comply with Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants

from the United States").

- a. Contractor. The Contractor shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into the OGS centralized contract.
- b. Subcontracts. The Contractor or subcontractor shall insert in any subcontracts the clause above and such other clauses as FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all of these contract clauses.
- c. Breach. A breach of the clauses above may be grounds for termination of the OGS centralized contract, and for debarment as a Contractor and subcontractor as provided in 29 C.F.R. § 5.12.

7. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT, 40 U.S.C. 3701-3708

Where applicable, all contracts awarded by the non-Federal entity in excess of \$ 100,000 that involve the employment of mechanics or laborers must comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5).

- (1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
- (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$27 for each calendar day on which such individual was required or permitted to work in excess of

- the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.
- (3) Withholding for unpaid wages and liquidated damages. The unauthorized user shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.
- (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

8. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT

If the Federal award meets the definition of "funding agreement" under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

9. CLEAN AIR ACT, 42 U.S.C. 7401-7671Q, AND THE FEDERAL WATER POLLUTION CONTROL ACT, 33 U.S.C. 1251-1387, AS AMENDED

Where applicable, Contracts and subgrants of amounts in excess of \$150,000, must comply with the following:

Clean Air Act

1. The contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq.
2. The contractor agrees to report each violation to the Division of Purchase and Property and understands and agrees that the Division of Purchase and Property will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
3. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

Federal Water Pollution Control Act

1. The contractor agrees to comply with all applicable standards, orders, or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq.
2. The contractor agrees to report each violation to the Division of Purchase and Property and understands and agrees that the Division of Purchase and Property will, in turn, report each violation as required to assure notification to the Federal Emergency Management Agency, and the appropriate Environmental Protection Agency Regional Office.
3. The contractor agrees to include these requirements in each subcontract exceeding \$150,000 financed in whole or in part with Federal assistance provided by FEMA.

10. DEBARMENT AND SUSPENSION (EXECUTIVE ORDERS 12549 AND 12689)

- (1) This contract is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the contractor is required to verify that none of the contractor's principals (defined at 2 C.F.R. § 180.995) or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).
- (2) The contractor must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.
- (3) This certification is a material representation of fact relied upon by the State or authorized user. If it is later determined that the contractor did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to the State or authorized

user, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

- (4) The bidder or proposer agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C while this offer is valid and throughout the period of any contract that may arise from this offer. The bidder or proposer further agrees to include a provision requiring such compliance in its lower tier covered transactions.

11. BYRD ANTI-LOBBYING AMENDMENT, 31 U.S.C. 1352

Contractors that apply or bid for an award exceeding \$100,000 must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. Such disclosures are forwarded from tier to tier up to the recipient who in turn will forward the certification(s) to the awarding agency.

12. PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT

- (a) Recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:
 - (1) Procure or obtain;
 - (2) Extend or renew a contract to procure or obtain; or
 - (3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115–232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).
- (i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and

other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).

(ii) Telecommunications or video surveillance services provided by such entities or using such equipment.

(iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

13. CONTRACTS FOR MORE THAN THE SIMPLIFIED ACQUISITION THRESHOLD

Contracts for more than the simplified acquisition threshold, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

14. TERMINATION FOR CONVENIENCE PROVISION

All contracts in excess of \$10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

15. BONDING REQUIREMENTS

For construction or facility improvement contracts or subcontracts exceeding the Simplified Acquisition Threshold, the Federal awarding agency or pass-through entity may accept the bonding policy and requirements of the non-Federal entity provided that the Federal awarding agency or pass-through entity has made a determination that the Federal interest is adequately protected. If such a determination has not been made, the minimum requirements must be as follows:

(a) A bid guarantee from each bidder equivalent to five percent of the bid price. The "bid guarantee" must consist of a firm commitment such as a bid

bond, certified check, or other negotiable instrument accompanying a bid as assurance that the bidder will, upon acceptance of the bid, execute such contractual documents as may be required within the time specified.

(b) A performance bond on the part of the contractor for 100 percent of the contract price. A “performance bond” is one executed in connection with a contract to secure fulfillment of all the contractor's requirements under such contract.

(c) A payment bond on the part of the contractor for 100 percent of the contract price. A “payment bond” is one executed in connection with a contract to assure payment as required by law of all persons supplying labor and material in the execution of the work provided for in the contract.

EDWARD T. OATMAN
COUNTY MANAGER

MICHELLE HAGOPIAN, ASSISTANT DIRECTOR
DIRECTOR / DIVISION OF PURCHASING

BID DOCUMENT SUBMISSION CHECKLIST

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

EACH BIDDER SHOULD COMPLETE THIS FORM AND INITIAL EACH ENTRY.

DATE COMPLETED: _____

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

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

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

_____ Security in the form of:

_____ Bid bond in an amount equal to 10% of the total amount of this bid not to exceed \$20,000.00; or

_____ Certified check or cashier's check in the amount of 10% of this bid not to exceed \$20,000.00

_____ Consent of Surety form signed by a Surety Company if the total amount of your Bid is over \$36,000.00.

If your bid is accepted, the Surety Company that provided the Consent shall be required to furnish a Performance, Labor and Materials Bond in the amount of 100% of the award of the contract.

The County of Union has provided its Consent of Surety form for your use. The use of this form by your Surety Company will expedite the bid review process and eliminate the possibility of having your bid rejected. If, however, you should need to use another form, please use language similar to that used on the Union County form and avoid making any additions or deletions to the Union County form language. In lieu of the Consent of Surety you may submit a Certified Check in the full amount of the bid.

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

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

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

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

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

_____ A copy of the State of New Jersey Department of the Treasury, Division of Revenue, **Business Registration Certificate ("BRC")** may be included with the bids to expedite the contract process because the bidder is required to provide the County of Union with its proof of business registration and that of any named subcontractor(s) prior to contract award or authorization.

_____ 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 may be included with the bid as the BRC(s) for each named or listed subcontractors in order to expedite the contract process. Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the County of Union prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

- _____ 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
- _____ Federal Non-Debarment Certification
- _____ BYRD Anti-Lobbying Amendment Certification
- _____ Certification regarding Lobbying
- _____ Disclosure of Lobbying Activities (LLL 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 THE DIVISION OF PURCHASING AT ucbids@ucnj.org.

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.**

BID FORM

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

**2022 Road Resurfacing Project, Various Municipalities,
Union County, New Jersey
BA#1-2022; UNION COUNTY ENGINEERING PROJECT #2020-010**

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 No.	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	AMOUNT
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT	4		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT	2		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT	4		
4	TRAFFIC DIRECTOR, FLAGGER <i>*Price Based On Current Prevailing Wage Rates</i>	HOUR	500	78.68*	39,340.00
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.	1	700,000.00	700,000.00
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	3,545		
7	HMA MILLING, 3" OR LESS	SY	457,935		
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	3,877		
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	3,460		
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	54,340		
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	1,033		
12	FUEL PRICE ADJUSTMENT	ALLOW.	1	20,900.00	20,900.00
13	ASPHALT PRICE ADJUSTMENT	ALLOW.	1	37,300.00	37,300.00
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY	1,000		

15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF	1,000		
16	CURB PIECE	UNIT	35		
17	BICYCLE SAFE GRATE	UNIT	35		
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	1,133		
19	RESET WATER VALVE BOX	UNIT	304		
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	38		
21	10"X20" CONCRETE VERTICAL CURB	LF	6,970		
22	GRANITE CURB	LF	1,750		
23	9" X 4" HOT MIX ASPHALT CURB	LF	400		
24	12" X 13" CONCRETE SLOPING CURB	LF	90		
25	CONCRETE SIDEWALK, 4" THICK	SY	6,595		
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	4,570		
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	514		
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY	385		
29	TRAFFIC STRIPES, 4"	LF	229,430		
30	TRAFFIC STRIPES, 8"	LF	38,810		
31	TRAFFIC MARKING, LINES, 12"	LF	36,540		
32	TRAFFIC MARKING, LINES, 24"	LF	3,595		
33	TRAFFIC MARKINGS, SYMBOLS	SF	9,340		

34	REGULATORY AND WARNING SIGN	SF	225		
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY	1,050		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF	225		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	1,815		
38	TOPSOIL SPREADING, 4" THICK	SY	2,560		
39	FERTILIZING AND SEEDING, TYPE A	SY	2,560		
40	STRAW MULCHING	SY	2,560		
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF	85,000		
42	CLEARING SITE	LS	1		
43	FINAL CLEANUP	LS	1		

Written _____

Figures _____

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

One Hundred Fifty Thousand Dollars and Zero Cents

Written

150,000.00

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.

CONSENT OF SURETY
TO ACCOMPANY PROPOSAL (BID)

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

NOTE:

Expiration date
Needed if Annual
Surety

NAME OF INSURANCE COMPANY

ADDRESS: _____

ORIGINAL SIGNATURE

ATTORNEY-IN-FACT FOR INSURANCE CO.

NOTE:

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

BIDDER SIGNATURE PAGE

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

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

NAME OF BIDDER

ADDRESS OF BIDDER

**ORIGINAL SIGNATURE
CORPORATE SECRETARY**

**PRINT NAME AND TITLE
CORPORATE SECRETARY**

TEL: _____
FAX: _____
E-Mail: _____

BY: _____
ORIGINAL SIGNATURE

Corporate Seal

PRINT OR TYPE NAME AND TITLE

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

STATEMENT OF OWNERSHIP DISCLOSURE

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

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

Name of Organization: _____

Organization Address: _____

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

Sole Proprietorship (skip Parts II and III, execute certification in Part IV)

Non-Profit Corporation (skip Parts II and III, execute certification in Part IV)

For-Profit Corporation (any type) Limited Liability Company (LLC)

Partnership Limited Partnership Limited Liability Partnership (LLP)

Other (be specific): _____

Part II

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

OR

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

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

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

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

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

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

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

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

Part IV Certification

I, being duly sworn upon my oath, hereby represent that the foregoing information and any attachments thereto to the best of my knowledge are true and complete. I acknowledge: that I am authorized to execute this certification on behalf of the bidder/proposer; that the **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:	

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)

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

Date _____

NAME OF BIDDER

ADDRESS

By: _____
ORIGINAL SIGNATURE ONLY

PRINT NAME AND TITLE

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: _____

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 not acceptable.

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

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

IN ADDITION:

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

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

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

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

BUSINESS REGISTRATION

Pursuant to N.J.S.A. 52:32-44, the County of Union is prohibited from entering into a contract with an entity unless the bidder/proposer/contractor, and each subcontractor that is required by law to be named in a bid/proposal/contract has a valid Business Registration Certificate on file with the Division of Revenue and Enterprise Services within the Department of the Treasury.

Prior to contract award or authorization, the contractor shall provide the County of Union with its proof of business registration and that of any named subcontractor(s).

Subcontractors named in a bid or other proposal shall provide proof of business registration to the bidder, who in turn, shall provide it to the County of Union prior to the time a contract, purchase order, or other contracting document is awarded or authorized.

Proof of registration 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.

During the course of contract performance:

- (1) the contractor shall not enter into a contract with a subcontractor unless the subcontractor first provides the contractor with a valid proof of business registration.
- (2) the contractor shall maintain and submit to the County of Union a list of subcontractors and their addresses that may be updated from time to time.
- (3) the contractor and any subcontractor providing goods or performing services under the contract, and each of their affiliates, shall collect and remit to the Director of the Division of Taxation in the Department of the Treasury, the use tax due pursuant to the Sales and Use Tax Act, (N.J.S.A. 54:32B-1 et seq.) on all sales of tangible personal property delivered into the State. Any questions in this regard can be directed to the Division of Taxation at (609)292-6400. Form NJ-REG can be filed online at <http://www.state.nj.us/treasury/revenue/busregcert.shtml>.

Before final payment is made under the contract, the contractor shall submit to the County of Union a complete and accurate list of all subcontractors used and their addresses.

Pursuant to N.J.S.A. 54:49-4.1, a business organization that fails to provide a copy of a business registration as required, or that provides false business registration information, shall be liable for a penalty of \$25 for each day of violation, not to exceed \$50,000, for each proof of business registration not properly provided under a contract with a contracting agency.

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: 010-007-382/000
SEQUENCE NUMBER: 0107510
ADDRESS: 847 ROEBLING AVE
TRENTON, NJ 08611
ISSUANCE DATE: 07/14/04

FORM-BRC(06/04) This Certificate is NOT assignable or transferable. It must be conspicuously displayed at above address.

STATE OF NEW JERSEY
BUSINESS REGISTRATION CERTIFICATE

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

For Office Use Only:
20041014112823533

ATTACH BRC HERE

AFFIRMATIVE ACTION REQUIREMENT

REQUIRED AFFIRMATIVE ACTION EVIDENCE

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

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

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

NAME OF BIDDER

ORIGINAL SIGNATURE

PRINT OR TYPE NAME AND TITLE

DATE THIS FORM IS COMPLETED

EXPERIENCE STATEMENT

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

Witness

Date

NAME OF BIDDER

ADDRESS

By: _____
ORIGINAL SIGNATURE ONLY

PRINT NAME AND TITLE

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

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 to before me
this _____ day of _____, 20__.

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

My Commission Expires _____, 20__.

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

Contractor Registration Advisement

For Public Works Projects

A new law, known as "The Public Works Contractor Registration Act" (P.L. 1999, c.238), became effective April 11, 2000. Under the Act, no contractor/subcontractor will be permitted to bid on or engage in any contract for public work, as defined in Section 2 of P.L. 1963, c.150 (C:34:11-56.26), unless that contractor/subcontractor is registered with the New Jersey Department of Labor 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

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 _____

STATEMENT OF BIDDER'S QUALIFICATIONS

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

1. _____
(Name of Bidder)
2. _____
(Permanent Main Office Address)
3. _____
(When Organized)
4. _____
(If a Corporation, where incorporated)
5. Number of years your organization has been engaged in construction or contracting business under present firm or trade name? _____
6. How many years of experience in construction work has your organization had (a) as a general contractor? And/or (b) As a subcontractor? _____
7. Contracts on hand: (Attach a list or table showing gross amounts of each Contract and the appropriate dates of completion) _____

8. General character of work performed by you. _____

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

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

STATEMENT OF BIDDER'S QUALIFICATIONS - (continued)

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

12. List your major equipment available for this Contract.

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

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

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

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

16. Bank Reference. (Name, Address, Phone, Representative) _____

17. Will you, upon request, fill out a detailed financial statement? _____

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.

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.

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__.

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 contract for goods or services with a public entity?

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

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.

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 to before me

this _____ day of _____, 20__.

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

My Commission Expires _____, 20__.

* 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.

UNCOMPLETED CONTRACTS AFFIDAVIT

(To be Submitted with DPMC Form 701)

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

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

TOTAL AMOUNT OF UNCOMPLETED CONTRACTS \$ _____

BIDDER:

(Signature)

(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.

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.

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.

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 **180 calendar days** from the date of the notice to proceed.

I, _____ of _____
NAME (Print or type) COMPANY

Agree to complete work in the time frame specified _____
SIGNATURE

SITE VISIT – GENERAL CONTRACTOR

I, _____ of _____
NAME (Print or type) COMPANY

Visited the site of the work on _____
SIGNATURE

COUNTY OF UNION NEW JERSEY
Division of Purchasing
DISCLOSURE OF INVESTMENT ACTIVITIES IN IRAN 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 BID DOCUMENT REFERENCE	
Name of Form:	FEDERAL NON-DEBARMENT CERTIFICATION
Statutory Reference:	N.J.S.A. 52:32-44.1 (P.L. 2019, c.406)
Description:	Meets statutory criteria for certification of non-debarment by a federal government agency.

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

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

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

CERTIFICATION OF NON-DEBARMENT
FOR FEDERAL GOVERNMENT CONTRACTS

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

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

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

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

PART II – CERTIFICATION OF NON-DEBARMENT: Individual or Organization			
<p>I hereby certify that the individual or organization listed above in Part I is not debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the 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 date of contract award by 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, 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 County of Union, permitting the County of Union to declare any contract(s) resulting from this certification void and unenforceable.</p>			
Full Name (Print):		Title:	
Signature:		Date:	

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

Section A (Check the Box that applies)

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

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

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

Section C – Part III Certification

Section C – Part III Certification

I hereby certify that no individual or organization that is debarred by the federal government from contracting with a federal agency owns greater than 50 percent of the **Organization listed above in Part I** or, if applicable, owns greater than 50 percent of a parent entity of **<name of organization>**

_____. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; 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 date of contract award by 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, 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 County of Union, permitting the County of Union to declare any contract(s) resulting from this certification void and unenforceable.

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

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

Section A



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

Name of Business Entity	Business Address

****Add additional sheets if necessary****

OR



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

Section B (skip if no business entities are listed in Section A of Part IV)			
<input type="checkbox"/>	Below are the names and addresses of any entities in which an entity listed in Part III A owns greater than 50 percent of the voting stock (corporation) or owns greater than 50 percent interest (partnership or limited liability company).		
Name of Business Entity Controlled by Entity Listed in Section A of Part IV		Business Address	
Add additional Sheets if necessary			
OR			
<input type="checkbox"/>	No entity listed in Part III A owns greater than 50 percent of the voting stock in any corporation or owns greater than 50 percent interest in any partnership or limited liability company.		
Section C – Part IV Certification			
<p>I hereby certify that the Organization listed above in Part I does not own greater than 50 percent of any entity that that is debarred by the federal government from contracting with a federal agency and, if applicable, does not own greater than 50 percent of any entity that in turns owns greater than 50 percent of any entity debarred by the federal government from contracting with a federal agency. I further acknowledge: that I am authorized to execute this certification on behalf of the above-named organization; that the 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 date of contract award by 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, 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 County of Union, permitting the County of Union to declare any contract(s) resulting from this certification void and unenforceable.</p>			
Full Name (Print):		Title:	
Signature:		Date:	

BYRD ANTI-LOBBYING AMENDMENT CERTIFICATION
(To be submitted with each bid, proposal or offer exceeding \$100,000)

The undersigned, [Company] _____ certifies, to the best of his or her knowledge, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form - LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31, U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The Contractor, [Company] _____, certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. § 3801 et seq., apply to this certification and disclosure, if any.

Signature of Contractor's Authorized Representative

Name and Title of Contractor's Authorized Representative

Date

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents of all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, United States Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Organization: _____

Street address: _____

City, State, Zip: _____

CERTIFIED BY: (type or print)

TITLE: _____

(signature)

(date)

DISCLOSURE OF LOBBYING ACTIVITIES (LLL Form)

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352 0348-0046

N/A – My agency does not engage in any lobbying activities

<p>1. Type of Federal Action:</p> <p><input type="checkbox"/> a. contract <input type="checkbox"/> b. grant <input type="checkbox"/> c. cooperative agreement <input type="checkbox"/> d. loan <input type="checkbox"/> e. loan guarantee <input type="checkbox"/> f. loan insurance</p>	<p>2. Status of Federal Action:</p> <p><input type="checkbox"/> a. bid/offer/application <input type="checkbox"/> b. Initial award <input type="checkbox"/> c. Post-award</p>	<p>3. Report Type:</p> <p><input type="checkbox"/> a. initial filing <input type="checkbox"/> b. material change</p> <p>For Material Change Only: year _____ quarter _____ date of last report _____</p>
<p>4. Name and Address of Reporting Entity:</p> <p><input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, if known:</p> <p>Congressional District, if known:</p>	<p>5. If Reporting Entity in NO.4 is a Subawardee, enter Name and Address of Prim:</p> <p>Congressional District, if known:</p>	
<p>6. Federal Department/Agency:</p>	<p>7. Federal Program Name/Description:</p> <p>CDFA NUMBER, if applicable _____</p>	
<p>8. Federal Action Number, if known:</p>	<p>9. Award Amount, if known:</p> <p>\$ _____</p>	
<p>10. a. Name and address of Lobbying Registrant <i>(if individual, last name, first name, MI):</i></p>	<p>b. Individuals Performing Services <i>(including address if different from No. 10a) (las name, first name, MI):</i></p>	
<p>11. Information request through this form is authorized by title 31 U.S.C. Section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.</p>	<p>Signature: _____ Print Name: _____ Title: _____ Telephone NO.: _____ Date: _____</p>	
<p>Federal Use Only:</p>		<p align="center">Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)</p>

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, state and zip code of the reporting entity include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is or expects to be a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, state and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number, Invitation for Bid (IFB) number, grant announcement number, the contract, grant, or loan award number, the application/proposal control number assigned by the Federal agency.) Include prefixes, e.g. "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. A) Enter the full name, address, city, state and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.
B) Enter the full names of the individual(s) performing services, and include full address if different from 10(a). Enter last name, first name and middle initial (MI).
11. The certifying official shall sign and date the form; print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-10046), Washington, DC 20503.

STANDARD SPECIFICATIONS

The Standard Specifications for Road and Bridge Construction of New Jersey Department of Transportation, 2019 Edition; is added to and/or amended elsewhere herein by the Notice to Contractors (Advertisement), Proposal, Information for Bidders, General Conditions, Supplemental Conditions, 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 Contractors (Advertisement), Proposal, General Conditions, Special Provisions, Project Plans and/or Supplementary 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 word "STATE" shall refer to and mean the professional engineering representative of the Owner as hereinbefore defined and the word "ENGINEER" 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 American Association of State Highway Official (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.



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

PREVAILING WAGE RATE DETERMINATION

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

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

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

Prevailing Wage Rate

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

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

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

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

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

Apprentice Rate Schedule

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

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

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

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

Comments/Notes

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

Public Works Contractor Registration

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

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

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

Snow Plowing

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

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

County - UNION

Craft: Air Conditioning & Refrigeration - Service and Repair

PREVAILING WAGE RATE

	03/03/21
Journeyman (Mechanic)	W41.48 B26.57 T68.05

Craft: Air Conditioning & Refrigeration - Service and Repair

APPRENTICE RATE SCHEDULE

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

Ratio of Apprentices to Journeymen - 1:4

Craft: Air Conditioning & Refrigeration - Service and Repair

COMMENTS/NOTES

THESE RATES MAY BE USED FOR THE FOLLOWING:

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

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

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

County - UNION

Craft: Boilermaker PREVAILING WAGE RATE

	01/01/22
Foreman	W53.13 B46.00 T99.13
General Foreman	W55.13 B47.05 T102.18
Journeyman	W48.13 B44.29 T92.42

Craft: Boilermaker APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	65%	70%	75%	80%	85%	90%	95%			
1000 Hours										
Benefit =	37.57	38.51	39.49	40.44	41.41	42.37	43.32			

Ratio of Apprentices to Journeymen - *

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

Craft: Boilermaker COMMENTS/NOTES

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

County - UNION

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

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

County - UNION

Craft: Boilermaker - Minor Repairs

PREVAILING WAGE RATE

	01/01/22
Foreman	W35.19 B17.67 T52.86
General Foreman	W35.69 B17.67 T53.36
Mechanic	W33.69 B17.67 T51.36

Craft: Boilermaker - Minor Repairs

COMMENTS/NOTES

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

OVERTIME:

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

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

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

County - UNION

Craft: Bricklayer, Stone Mason

PREVAILING WAGE RATE

	05/01/21
Deputy Foreman	W48.20 B33.73 T81.93
Foreman	W51.20 B33.73 T84.93
Journeyman	W45.20 B33.73 T78.93

Craft: Bricklayer, Stone Mason

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	40%	50%	55%	60%	65%	70%	75%	80%		
6 Months										
Benefits	4.00	5.00	5.50	6.00	22.17	23.66	25.14	26.62		

Ratio of Apprentices to Journeymen - 1:5

Craft: Bricklayer, Stone Mason

COMMENTS/NOTES

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

County - UNION

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

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

County - UNION

Craft: Carpenter PREVAILING WAGE RATE

	05/01/21
Foreman	W59.67 B34.56 T94.23
Journeyman	W51.89 B30.12 T82.01

Craft: Carpenter APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	40%	55%	65%	80%	90%					
Benefit	57% of	Appren	tice	Wage	for all	intervals	+ \$0.55			

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 6:00 AM and 9:00 AM.

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

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

County - UNION

Craft: Carpenter - Resilient Flooring

PREVAILING WAGE RATE

	05/01/21
Foreman	W59.67 B34.47 T94.14
Journeyman	W51.89 B30.03 T81.92

Craft: Carpenter - Resilient Flooring

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	40%	55%	65%	80%	90%					
Benefit	57%	of	Appren	tice	Wage	for all	intervals	+ \$0.46		

Ratio of Apprentices to Journeymen - *

* 1 apprentice shall be allowed to every 2 journeymen or major fraction thereof. No more than 3 apprentices on any one job or project.

Craft: Carpenter - Resilient Flooring

COMMENTS/NOTES

FOREMAN REQUIREMENTS:

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

FOR SYNTHETIC TURF INSTALLATION ONLY:

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

- Hours in excess of 8 per day or 40 per week, or before or after the regular workday, Monday through Friday, shall be paid at time and one-half the wage rate. Saturday may be used as a make-up day, at straight time, up to 8 hours, for hours lost to reasons beyond the control of the employer, up to a total of 40 hours per week; hours in excess of 8 on Saturday shall then be paid at time and one-half the wage rate. If Saturday is not a make-up day, all hours on Saturday shall be paid at time and one-half the wage rate. All hours on Sundays and holidays shall be paid at double the wage rate.
- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for hours lost to reasons beyond the control of the employer. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the wage rate.

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

County - UNION

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

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

County - 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: Commercial Painter

PREVAILING WAGE RATE

	08/10/21
Foreman	W46.37 B27.61 T73.98
General Foreman	W50.58 B28.10 T78.68
Journeyman	W42.15 B27.11 T69.26

Craft: Commercial Painter

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	40%	45%	55%	65%	70%	75%	80%	80%		
6 Months										
Benefits	8.40	8.40	10.40	10.40	11.40	11.40	14.15	14.15		

Ratio of Apprentices to Journeymen - 1:4

Craft: Commercial Painter

COMMENTS/NOTES

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

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

FOREMEN REQUIREMENTS:

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

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

County - UNION

Veterans' Day, Thanksgiving Day, Christmas Day.

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

County - UNION

Craft: Diver PREVAILING WAGE RATE

	05/07/21
Diver	W60.74 B48.97 T109.71
Tender	W49.00 B48.97 T97.97

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

SHIFT DIFFERENTIAL:

- 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 an additional 113% of the wage rate.
- When a three shift schedule is established, all three shifts shall be established on an 8 hour basis, but the second and third shifts shall receive an additional 113% of the wage rate.
- Benefits on shift work shall be paid at the straight-time rate.

OVERTIME:

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

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Presidential Election Day, Thanksgiving Day, Christmas Day. Veterans' Day may be switched with the day after Thanksgiving.

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

County - UNION

Craft: Dockbuilder PREVAILING WAGE RATE

	05/07/21
Foreman	W56.35 B48.97 T105.32
Foreman (Concrete Form Work)	W55.26 B35.61 T90.87
Journeyman	W49.00 B48.97 T97.97
Journeyman (Concrete Form Work)	W48.05 B35.61 T83.66

Craft: Dockbuilder APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
Yearly	19.60	24.50	31.85	39.20						
Benefit	32.37	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	19.22	24.03	31.23	38.44
Benefits	24.34	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.

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

County - UNION

SHIFT DIFFERENTIAL:

- 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 an additional 113% of the wage rate.
- When a three shift schedule is established, all three shifts shall be established on an 8 hour basis, but the second and third shifts shall receive an additional 113% of the wage rate.
- Benefits on shift work shall be paid at the straight-time rate.

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

	05/01/21
Foreman	W44.43 B27.68 T72.11
General Foreman	W46.45 B27.68 T74.13
Journeyman	W40.39 B27.68 T68.07

Craft: Drywall Finisher

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	40%	50%		60%	70%		80%	90%		
6 Months										
Benefits	Intervals	1 to 2 =	10.75	Intervals	3 to 4 =	13.52	Intervals	5 to 6 =	17.13	

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

	05/31/21
Cable Splicer	W64.51 B39.68 T104.19
Foreman (11-20 Journeymen)	W68.62 B42.21 T110.83
Foreman (1-3 Journeymen)	W64.51 B39.68 T104.19
Foreman (4-10 Journeymen)	W67.45 B41.49 T108.94
General Foreman (21-30 Journeymen)	W70.38 B43.29 T113.67
General Foreman (31-60 Journeymen)	W76.24 B46.90 T123.14
General Foreman (61+ Journeymen)	W77.41 B47.62 T125.03
Journeyman	W58.65 B36.08 T94.73
Sub-Foreman	W66.86 B41.13 T107.99

Craft: Electrician

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
	Yearly	40%	49%	58%	68%	80%		of Jour	neyman	Wage
Benefit	40%	49%	58%	68%	80%		of Jour	neyman	Benefit	Rate

Ratio of Apprentices to Journeymen - 2:3

Craft: Electrician

COMMENTS/NOTES

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

County - UNION

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:

- 1 to 3 Journeymen- 1 must be a Foreman (Foreman/1-3 Journeymen rate).
- 4 to 10 Journeymen- 1 must be a Foreman (Foreman/4-10 Journeymen rate).
- 11 to 20 Journeymen- 1 must be Foreman (Foreman/11-20 Journeymen rate) and 1 must be a Sub-Foreman.
- 21 to 30 Journeymen- 1 must be a General Foreman (General Foreman/21-30 Journeymen rate) and 2 must be a Sub-Foreman.
- 31 to 40 Journeymen- 1 must be a General Foreman (General Foreman/31-40 Journeymen rate) and 3 must be a Sub-Foreman.
- 41 to 50 Journeymen- 1 must be a General Foreman (General Foreman/31-60 Journeymen rate) and 4 must be a Sub-Foreman.
- 51 to 60 Journeymen- 1 must be a General Foreman (General Foreman/31-60 Journeymen rate) and 5 must be a Sub-Foreman.
- 61+ Journeymen- 1 must be a General Foreman (General Foreman/61+ Journeymen rate) and 6 must be a Sub-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

	12/10/21	11/28/22	12/04/23	12/02/24
Journeyman Technician (1-2 Workers on Job)	W44.50 B26.26 T70.76	W45.86 B27.05 T72.91	W47.08 B27.78 T74.86	W48.21 B28.45 T76.66
Master Tech/General Foreman (26 + Workers on Job)	W57.85 B34.14 T91.99	W59.62 B35.16 T94.78	W61.20 B36.12 T97.32	W62.67 B36.99 T99.66
Senior Technician/Lead Foreman (16-25 Workers on Job)	W52.96 B31.24 T84.20	W54.57 B32.19 T86.76	W56.03 B33.05 T89.08	W57.37 B33.86 T91.23
Technician A/Foreman (9-15 Workers on Job)	W50.73 B29.94 T80.67	W52.28 B30.84 T83.12	W53.67 B31.67 T85.34	W54.96 B32.43 T87.39
Technician B/Working Foreman (4-8 Workers on Job)	W48.51 B28.62 T77.13	W49.99 B29.48 T79.47	W51.32 B30.28 T81.60	W52.55 B31.01 T83.56
Technician C/Foreman (3 Workers on Job)	W46.28 B27.31 T73.59	W47.69 B28.14 T75.83	W48.96 B28.89 T77.85	W50.14 B29.59 T79.73

Craft: Electrician - Teledata (15 Voice/Data Lines & Less)

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
6 Months	35%	35%	40%	43%	48%	54%	61%	67%	74%	81%
Benefits	7.45	7.45	8.51	9.15	10.22	11.49	12.98	14.26	15.76	17.24

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 11-28-22:

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
6 Months	35%	35%	40%	43%	48%	54%	61%	67%	74%	81%
Benefits	7.67	7.67	8.76	9.43	10.52	11.84	13.38	14.69	16.22	17.76

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM AFTER 12-4-23:

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
6 Months	35%	35%	40%	43%	48%	54%	61%	67%	74%	81%
Benefits	7.88	7.88	9.00	9.68	10.80	12.15	13.73	15.09	16.66	18.23

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM AFTER 12-2-24:

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

County - UNION

INTERVAL	PERIOD AND RATES									
6 Months	35%	35%	40%	43%	48%	54%	61%	67%	74%	81%
Benefits	8.07	8.07	9.22	9.91	11.07	12.45	14.06	15.44	17.06	18.68

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 7:00 AM and 5:30 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 before or after 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. Hours in excess of 10 on Saturday and all hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.

- Four 10-hour days may be worked Monday through Friday, between the hours of 7:00 AM and 5:30 PM. A make-up day may be used for a day not being worked during the four 10-hour day schedule if a holiday occurs during the week or for any other conditions that prevent an employee from working the four 10-hour day schedule.

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. Saturday holidays will be observed the preceding Friday.

**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

	05/31/21
Cable Splicer	W64.81 B39.38 T104.19
Certified Welder	W61.87 B37.60 T99.47
Equipment Operator	W58.92 B35.80 T94.72
Foreman (1-3 Journeymen workers on job)	W64.81 B39.38 T104.19
Foreman (4-10 Journeymen workers on job)	W67.76 B41.17 T108.93
General Foreman (11-20 Journeymen workers on job)	W68.94 B41.89 T110.83
General Foreman (21-30 Journeymen workers on job)	W70.71 B42.97 T113.68
General Foreman (31-60 Journeymen workers on job)	W76.60 B46.54 T123.14
General Foreman (61+ Journeymen workers on job)	W77.78 B47.26 T125.04
Groundman	W35.35 B21.49 T56.84
Journeyman Lineman/Technician	W58.92 B35.80 T94.72
Sub-Foreman	W67.17 B40.83 T108.00

**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	60.75% of	Journey	man	wage	+	\$.01				

Craft: Electrician- Outside Commercial

COMMENTS/NOTES

* FOR UTILITY WORK PLEASE SEE STATEWIDE RATES

The regular worday shall be 8 hours, between 8:00 AM and 4:30 PM.

FOREMAN REQUIREMENTS:

- 1 to 3 Journeymen- 1 must be a Foreman (Foreman/1-3 Journeymen rate).
- 4 to 10 Journeymen- 1 must be a Foreman (Foreman/4-10 Journeymen rate).
- 11 to 20 Journeymen- 1 must be Foreman (Foreman/11-20 Journeymen rate) and 1 must be a Sub-Foreman.
- 21 to 30 Journeymen- 1 must be a General Foreman (General Foreman/21-30 Journeymen rate) and 2 must be a Sub-Foreman.
- 31 to 40 Journeymen- 1 must be a General Foreman (General Foreman/31-40 Journeymen rate) and 3 must be a Sub-Foreman.
- 41 to 50 Journeymen- 1 must be a General Foreman (General Foreman/31-60 Journeymen rate) and 4 must be a Sub-Foreman.
- 51 to 60 Journeymen- 1 must be a General Foreman (General Foreman/31-60 Journeymen rate) and 5 must be a Sub-Foreman.
- 61+ Journeymen- 1 must be a General Foreman (General Foreman/61+ Journeymen rate) and 6 must be a Sub-Foreman.

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	69% of	Appren	tice	Wage	Rate	for all	intervals			

Craft: Electrician-Utility Work (North)

COMMENTS/NOTES

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

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

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

County - 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	30.60	33.15	35.70	38.25	40.80	43.35	45.90			
Benefits	26.90	28.42	29.93	31.47	32.98	34.52	36.01			

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

	03/17/21	03/17/22	03/17/23
Journeyman	W72.29	W75.14	W77.49
	B42.92	B43.91	B45.57
	T115.21	T119.05	T123.06

Craft: Elevator Constructor

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	29.85	36.82	43.52	50.21						
Benefits	32.71	33.51	34.80	36.09						

Ratio of Apprentices to Journeymen - 1:1

Craft: Elevator Constructor

COMMENTS/NOTES

APPRENTICE RATE SCHEDULE AS OF 3-17-20:

INTERVAL	PERIOD AND RATES			
Yearly	31.03	38.26	45.21	52.17
Benefits	33.38	34.20	35.55	36.89

APPRENTICE RATE SCHEDULE AS OF 3-17-21:

INTERVAL	PERIOD AND RATES			
Yearly	32.27	39.76	46.99	54.22
Benefits	34.05	34.91	36.30	37.70

APPRENTICE RATE SCHEDULE AS OF 3-17-22:

INTERVAL	PERIOD AND RATES			
Yearly	33.56	41.33	48.84	56.36
Benefits	34.72	35.61	37.05	38.50

APPRENTICE RATE SCHEDULE AS OF 3-17-23:

INTERVAL	PERIOD AND RATES			
Yearly	34.60	42.62	50.37	58.12
Benefits	36.02	36.94	38.50	39.95

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

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

County - UNION

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

	03/17/21	03/17/22	03/17/23
Journeyman	W56.77	W59.09	W60.89
	B41.82	B42.79	B44.41
	T98.59	T101.88	T105.30

Craft: Elevator Modernization & Service

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	29.85	28.84	34.09	39.33						
Benefits	32.66	33.13	34.36	35.58						

Ratio of Apprentices to Journeymen - 1:1

Craft: Elevator Modernization & Service

COMMENTS/NOTES

APPRENTICE RATE SCHEDULE AS OF 3-17-20:

INTERVAL	PERIOD AND RATES			
Yearly	31.03	30.01	35.46	40.92
Benefits	33.33	33.82	35.09	36.36

APPRENTICE RATE SCHEDULE AS OF 3-17-21:

INTERVAL	PERIOD AND RATES			
Yearly	32.27	31.22	36.90	42.58
Benefits	34.00	34.50	35.83	37.15

APPRENTICE RATE SCHEDULE AS OF 3-17-22:

INTERVAL	PERIOD AND RATES			
Yearly	33.56	32.50	38.41	44.32
Benefits	34.67	34.20	35.20	37.94

APPRENTICE RATE SCHEDULE AS OF 3-17-23:

INTERVAL	PERIOD AND RATES			
Yearly	34.60	33.49	39.58	45.67
Benefits	35.97	36.53	37.95	39.38

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.

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

County - UNION

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

	05/07/21
* Leadman	W50.50 B27.86 T78.36
Foreman	W52.50 B28.10 T80.60
General Foreman	W54.50 B28.34 T82.84
Journeyman	W48.50 B27.62 T76.12

Craft: Glazier APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
	50%	55%	60%	65%	70%	75%	80%	90%		
6 Months										
Benefits	9.75	9.75	12.36	12.36	13.60	13.60	17.02	17.02		

Ratio of Apprentices to Journeymen - 1:4

Craft: Glazier COMMENTS/NOTES

Hazard/Height Pay: +\$1.00 per hour

* When there are three (3) men working on a jobsite for three (3) days or longer, 1 Journeyman may be designated as a Leadman for the duration of the job, provided he has his OSHA certification.

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

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

County - UNION

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

	09/28/21
Foreman	W59.97 B34.97 T94.94
General Foreman	W62.31 B36.08 T98.39
Journeyman	W57.69 B34.41 T92.10

Craft: Heat & Frost Insulator

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	27.00	32.04	38.60	45.11						
Benefits	20.24	23.98	26.54	29.01						

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 7:00 AM and 3:30 PM. In addition, the regular workday may also be 8 hours between 6:00 AM and 2:30 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

	09/28/21
Asbestos Helper	W36.89
Abatement	B24.97
	T61.86

Craft: Heat & Frost Insulator - Asbestos Worker

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	SEE	HEAT &	FROST	INSULAT OR						

Ratio of Apprentices to Journeymen - 1:3

Craft: Heat & Frost Insulator - Asbestos Worker

COMMENTS/NOTES

NOTE: These rates apply only to the removal of insulation materials/asbestos from mechanical systems, including containment erection and demolition, and placing material in appropriate containers.

The regular workday shall be 8 hours between 7:00 AM and 3:30 PM. In addition, the regular workday may also be 8 hours between 6:00 AM and 2:30 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: Industrial Painter- Bridges

PREVAILING WAGE RATE

	02/11/21
Foreman	W62.18 B31.62 T93.80
General Foreman	W64.18 B31.62 T95.80
Journeyman	W57.18 B31.62 T88.80

Craft: Industrial Painter- Bridges

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	60%	70%	80%	90%						
6 Months										
Benefits	14.27	14.50	17.73	17.96						

Ratio of Apprentices to Journeymen - 1:4

Craft: Industrial Painter- Bridges

COMMENTS/NOTES

* Industrial Painters perform work on all industrial structures, such as bridges, water tanks, waste water facilities, refineries, any structural steel work, etc.

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

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

County - UNION

observed the following Monday.

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

County - UNION

Craft: Industrial Painter- Structural Steel

PREVAILING WAGE RATE

	02/11/21
Foreman	W50.92 B29.27 T80.19
General Foreman	W52.92 B29.27 T82.19
Journeyman	W45.92 B29.27 T75.19

Craft: Industrial Painter- Structural Steel

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	SEE	INDUST	RIAL	PAINTER	BRIDGES					

Ratio of Apprentices to Journeymen - 1:4

Craft: Industrial Painter- Structural Steel

COMMENTS/NOTES

* Industrial Painters perform work on all industrial structures, such as bridges, water tanks, waste water facilities, refineries, any structural steel work, etc.

These rates apply to: All work in power plants (any aspect). On steeples, on dams, on hangers, transformers, substations, on all open steel, in refineries, tank farms, water/sewerage treatment facilities and on pipelines.

FOREMEN REQUIREMENTS:

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays and Sundays shall be paid at time and one-half the regular rate. All hours on holidays shall be paid at double the regular rate.
- 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: Industrial Painter- Water Tanks

PREVAILING WAGE RATE

	02/11/21
Foreman	W51.97 B28.92 T80.89
General Foreman	W53.97 B28.92 T82.89
Journeyman	W46.97 B28.92 T75.89

Craft: Industrial Painter- Water Tanks

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
6 Months	50%	70%	90%							
Benefits	11.77	14.50	17.96							

Ratio of Apprentices to Journeymen - 1:4

Craft: Industrial Painter- Water Tanks

COMMENTS/NOTES

* Industrial Painters perform work on all industrial structures, such as bridges, water tanks, waste water facilities, refineries, any structural steel work, etc.

These rates apply to: All new and repaint water tanks (interior and exterior).

FOREMEN REQUIREMENTS:

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, and all hours on Saturdays and Sundays shall be paid at time and one-half the regular rate. All hours on holidays shall be paid at double the regular rate.
- 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: Industrial Painter-Containment

PREVAILING WAGE RATE

	02/11/21
Journeyman	W38.23 B28.67 T66.90

Craft: Industrial 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.
- 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, 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, 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: Ironworker PREVAILING WAGE RATE

	07/08/21
Rod /Fence Foreman	W47.14 B48.17 T95.31
Rod/Fence Journeyman	W44.14 B48.17 T92.31
Structural Foreman	W49.44 B48.17 T97.61
Structural Journeyman	W46.44 B48.17 T94.61

Craft: Ironworker APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
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:

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

County - UNION

- All hours in excess of 8 per day, or before or after an established shift that are not shift work, and all hours on Saturday, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the hourly rate, inclusive of benefits. Saturday may be used as a make-up day for a day lost to inclement weather. If Saturday is not a make-up day, all hours on Saturday shall be paid at time and one-half the hourly rate, inclusive of benefits.

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

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

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

County - UNION

Craft: Laborer - Asbestos & Hazardous Waste Removal

PREVAILING WAGE RATE

	10/20/20
Journeyman (Handler)	W32.98 B23.66 T56.64

Craft: Laborer - Asbestos & Hazardous Waste Removal

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	19.79	23.09	26.38	29.68						
Benefits	21.51	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, Easter, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. (Holidays start at 12:00 am).

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

County - UNION

Craft: Laborer - Building

PREVAILING WAGE RATE

	05/07/21
Class A Journeyman	W35.25 B30.62 T65.87
Class B Journeyman	W34.50 B30.62 T65.12
Class C Journeyman	W29.33 B30.62 T59.95
Foreman	W39.66 B30.62 T70.28
General Foreman	W44.06 B30.62 T74.68

Craft: Laborer - Building

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
	60%	70%	80%	90%						
6 Months										
Benefit	27.37	27.37	27.37	27.37						

Ratio of Apprentices to Journeymen - *

* Ratio of apprentices to journeymen shall not be more than one apprentice for the first journeyman and no more than (1) apprentice for each additional three (3) journeymen.

Craft: Laborer - Building

COMMENTS/NOTES

CLASS A: Specialist laborer including mason tender or concrete pour crew; scaffold builder (scaffolds up to 14 feet in height); operator of forklifts, Bobcats (or equivalent machinery), jack hammers, tampers, motorized tampers and compactors, vibrators, street cleaning machines, hydro demolition equipment, riding motor buggies, conveyors, burners; and nozzle men on gunite work.

CLASS B: Basic laborer - includes all laborer work not listed in Class A or Class C.

CLASS C: Janitorial-type light clean-up work associated with the TURNOVER of a project, or part of a project, to the owner. All other clean-up work is Class B.

The regular workday shall be 8 hours between 6:00 AM and 6:00 PM.

SHIFT DIFFERENTIALS:

- Shift work must run for a minimum of 5 consecutive workdays.
- When a 2-shift schedule is worked, including a day shift, both shifts shall be established on the basis of 8 hours pay for 8 hours worked. The second shift shall receive the regular rate plus an additional 10%.
- When a 3-shift schedule is worked, the day shift shall be established on the basis of 8 hours pay for 8 hours worked, the second shift shall be established on the basis of 8 hours pay for 7.5 hours worked, and the third shift shall be established

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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, 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	22.48	for	all	intervals						

Ratio of Apprentices to Journeymen - *

* No more than 1 apprentice for the first journeyman and no more than 1 apprentice for each additional 3 journeymen.

Craft: Laborer - Heavy & General

COMMENTS/NOTES

Heavy & General Laborer rates are located in the "Statewide" rate package.

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

County - UNION

Craft: Laborer-Residential and Modular Construction

PREVAILING WAGE RATE

	11/12/21	04/01/22	04/01/23
* Skilled Tradesman (only applies to Modular Construction)	W27.20 B5.45 T32.65	W27.55 B5.45 T33.00	W27.90 B5.45 T33.35
Foreman (person directing crew, regardless of his skill classification)	W31.20 B5.45 T36.65	W31.55 B5.45 T37.00	W31.90 B5.45 T37.35
Laborer (for single family and stand-alone duplex owned by single owner)	W17.15 B2.95 T20.10	W17.50 B2.95 T20.45	W17.85 B2.95 T20.80
Residential and Modular Construction Laborer	W23.20 B5.45 T28.65	W23.55 B5.45 T29.00	W23.90 B5.45 T29.35

Craft: Laborer-Residential and Modular Construction

APPRENTICE RATE SCHEDULE

<u>INTERVAL</u>	<u>PERIOD AND RATES</u>									
	As shown	800 hours	600 hours	600 hours						
wage & benefits	70%	80%	90%							

Ratio of Apprentices to Journeymen-

One (1) apprentice shall be allowed for the first journeyman on site and no more than one (1) additional apprentice for each additional three (3) journeymen on site.

Craft: Laborer-Residential and Modular Construction

COMMENTS/NOTES

* SKILLED TRADESMAN- any worker doing work not typically done by a Building Laborer. Some examples are installing interior doors, sheet rock, hooking up appliances, installing light fixtures, installing railing systems, etc. Please note where local building codes require that certain work be performed under the supervision of a licensed tradesman (i.e. Plumber, Electrician, etc.) Laborers shall work under such supervision.

RESIDENTIAL CONSTRUCTION- All residential construction (not commercial), single-family, stand-alone duplex houses, townhouses and multi-family buildings of not more than four (4) floors. Each housing unit must be fully and independently functional; each housing unit must have its own kitchen and bathroom. The definition includes all incidental items such as site work, parking areas, utilities, streets and sidewalks. Please note the construction must be Residential in nature. A First Floor at or below grade may contain commercial space not to exceed 50% square footage of the floor; at least 50% of the First Floor must contain living accommodations or related nonresidential uses (e.g. laundry space, recreation/hobby rooms, and/or corridor space). Basement stories below grade used for storage, parking, mechanical systems/equipment, etc., are considered basement stories which are not used in determining the building's height. An attic is an unfinished space located immediately below the roof. Such space is not used in determining a building's height even if used for storage purposes. In addition, barracks and dormitories are not considered residential projects.

MODULAR RESIDENTIAL CONSTRUCTION- all aspects of modular residential construction (not commercial) at the site of installation of structures of no more than four (4) stories, including all excavation and site preparation, footings and

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County - UNION

foundation systems whether poured on-site or prefabricated, all underground waterproofing, underground utilities, concrete slabs, sidewalks, driveways, paving, hardscape and landscaping. Please note the construction must be Residential as defined above. All work performed by the Set Crew (the crew of workers who set the modular boxes on the foundation), including the rigging, setting, attaching and assembly of all modules and structural members, preparation of the foundation to accept modules, such as sill plates, connection of all in-module and under-module connections including, but not limited to, plumbing, electrical, HVAC, fire suppression, CATS, telephone, television/internet, and fiber optic, the building or installation of any porches or decks regardless of material or method of construction, the on-site installation of, or completion of any roof system, doors, windows and fenestrations, including flashing, gutter and soffit systems, waterproofing, insulation and interior and exterior trim work, and painting. Please note that modular construction does not include on-site stick built construction, tip up construction or panel built construction.

The regular workday shall be 8 hours between 6:00 AM and 6:00 PM.

OVERTIME:

Hours worked in excess of 8 per day/40 per week, Monday through Saturday, and all hours worked on Sunday and holidays shall be paid at time and one-half the hourly rate.

RECOGNIZED HOILDAYS:

New Year's Day, Martin Luther King Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day and Christmas Day.

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

County - UNION

Craft: Millwright PREVAILING WAGE RATE

	05/01/21
Foreman	W59.87 B35.32 T95.19
Journeyman	W52.06 B30.79 T82.85

Craft: Millwright APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
6 Months	40%	55%	65%	80%	90%					
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.

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

SHIFT DIFFERENTIALS:

- When a 2 shift schedule (including a day shift) is established, the day shift shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular rate plus 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.
- When an irregular shift must be established, this shift shall receive the regular rate plus 15%, inclusive of benefits.

OVERTIME:

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

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

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

County - 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 - Line Striping

PREVAILING WAGE RATE

	02/03/22
Apprentice (1st year)	W28.35 B13.80 T42.15
Apprentice (2nd year)	W32.35 B24.75 T57.10
Foreman (Charge Person)	W41.00 B25.53 T66.53
Journeyman 1 (at least 1 year of working exp. as a journeyman)	W36.23 B25.53 T61.76
Journeyman 2 (at least 2 years of working exp. as a journeyman)	W40.00 B25.53 T65.53

Craft: Painter - Line Striping

COMMENTS/NOTES

OVERTIME:

Hours in excess of 8 per day, Monday through Saturday, and all hours on Sundays and holidays shall be paid at time and one-half the hourly rate.

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

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

County - UNION

Craft: Paperhanger PREVAILING WAGE RATE

	01/06/22
Foreman	W51.07 B27.11 T78.18
Journeyman	W46.37 B27.11 T73.48

Craft: Paperhanger APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
	SEE	COMME R	CIAL	PAINTER						

Craft: Paperhanger COMMENTS/NOTES

FOREMEN REQUIREMENTS:

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

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

SHIFT DIFFERENTIALS:

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

OVERTIME:

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

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

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

County - UNION

Craft: Pipefitter

PREVAILING WAGE RATE

	10/07/21
Foreman	W56.48 B46.98 T103.46
Journeyman	W52.23 B43.45 T95.68

Craft: Pipefitter

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	35%	45%	55%	65%	75%					
Benefit	23.27	26.00	28.69	31.42	34.14					

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 10% per hour on the total rate.
- 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 on the total rate.

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 on the total rate.
- 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 on the total rate.

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

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

County - UNION

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.

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

County - UNION

Craft: Plasterer

PREVAILING WAGE RATE

See Bricklayer, Stone Mason Rates

Craft: Plasterer

COMMENTS/NOTES

See BRICKLAYER, STONE MASON Rates

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

County - UNION

Craft: Plumber PREVAILING WAGE RATE

	05/05/21
Foreman	W61.77 B38.82 T100.59
General Foreman	W65.77 B38.82 T104.59
Journeyman	W57.19 B38.82 T96.01

Craft: Plumber APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
Yearly	30%	45%	55%	65%	75%					
Benefits	16.17	22.06	23.99	25.95	27.87					

Ratio of Apprentices to Journeymen - *

* Employers may employ 1 apprentice on any job where 1 or 2 journeymen are employed. Thereafter, 1 apprentice may be employed for every 4 journeymen.

Craft: Plumber COMMENTS/NOTES

FOREMAN REQUIREMENTS:

- On any job having 2 or more Plumbers, 1 must be designated a Foreman.
- On any job having 9 or more Plumbers, 2 shall be designated as Foremen.

The regular workday shall consist of 8 hours between 7:00 AM and 4:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must continue for a minimum of 5 consecutive workdays.
- When two shifts are worked, the second shift shall work 7.5 hours and receive 8 hours pay, at a rate equal to the hourly rate plus 10%, inclusive of benefits.
- When a third shift is worked, the third shift shall work 7 hours and receive 8 hours pay, at a rate equal to the hourly rate plus 15%, inclusive of benefits.

OVERTIME:

- All hours in excess of 8 per day, or before or after the regular workday that are not shift work, Monday through Friday, and all hours on Saturday, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays, shall be paid at double the hourly rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday to Thursday, at straight time. Friday may be used as a make-up day for a day lost due to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half, inclusive of benefits.

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

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

County - UNION

Craft: Roofer PREVAILING WAGE RATE

	06/29/21
Foreman	W44.27 B28.81 T73.08
Journeyman	W41.27 B28.81 T70.08

Craft: Roofer APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
6 Months	16.50	20.63	24.76	26.82	28.89	30.95	33.01	37.14		
Benefits	2.16	2.16	26.06	26.06	26.06	26.06	26.06	26.06		

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

Pitch: +.50 per hour

Mop Man: +.30 per hour

The regular workday consists of 8 hours between 8:00 AM and 4:30 PM.

OVERTIME:

Hours in excess of 8 per day, or before or after the regular workday, Monday through Friday, and all hours on Saturdays, Sundays, and holidays shall be paid at time and one-half the regular rate.

RECOGNIZED HOLIDAYS: New Year's Day, Good Friday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day.

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

County - UNION

Craft: Sheet Metal Sign Installation

PREVAILING WAGE RATE

	04/05/21
Foreman	W39.79 B37.29 T77.08
Journeyman	W38.04 B37.29 T75.33

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	12.61	14.38	16.14	17.92	20.14	21.94	23.75	25.58	27.38	29.18

Ratio of Apprentices to Journeymen - 1:3

Craft: Sheet Metal Sign Installation

COMMENTS/NOTES

FOREMAN REQUIREMENT:

When there are 6 or more Sheet Metal Sign Installers on a job, 1 shall be designated a Foreman.

The regular workday consists of 8 hours, between 7:00 AM and 3:30 PM.

OVERTIME:

Hours before or after the regular workday, Monday through Friday, and all hours worked on Saturday shall be paid at time and one-half the hourly rate. All hours on Sunday and holidays shall be paid at double the hourly rate.

Four(4) 10 hour days may be worked, Monday through Friday, at straight time, for projects lasting at least one week in duration. The fifth day may be used as a make-up day at straight time for a day lost due to inclement weather. However, if the fifth day is not a make-up day, all hours worked will be paid at time and one-half the hourly rate.

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

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

County - UNION

Craft: Sheet Metal Worker

PREVAILING WAGE RATE

	06/29/21
Foreman	W54.85 B48.17 T103.02
General Foreman	W55.85 B48.17 T104.02
Journeyman	W51.35 B48.17 T99.52

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

	01/01/22
Foreman	W67.63 B34.19 T101.82
General Foreman	W70.98 B34.19 T105.17
Journeyman	W63.38 B34.19 T97.57

Craft: Sprinkler Fitter

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
1000 Hours									80%	85%
Benefits							Intervals	9 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	12.65	12.65	26.65	26.65	26.65	26.65	Intervals	7 to 10	receive	Journeyman Ben.

Craft: Sprinkler Fitter

COMMENTS/NOTES

APPRENTICE RATE SCHEDULE AS OF 1-1-22:

Apprentice rate schedule for those apprentices registered prior to 7-1-13-

Interval	Period and Rates									
1000 Hours									80%	85%
Benefits								Intervals	9 and 10	Journeyman Ben.

Apprentice rate schedule for those apprentices registered as of 7-1-13:

Interval	Period and Rates									
1000 Hrs.	25%	30%	40%	45%	55%	60%	70%	75%	85%	90%
Ben.	13.09	13.09	27.19	27.19	27.19	27.19	Intervals	7-10	Journy.	Ben.

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.

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

County - UNION

- 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

	01/03/22
Finisher	W48.97 B35.91 T84.88

Craft: Tile Finisher-Marble

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
750 Hours	40%	45%	50%	55%	60%	65%	70%	75%	85%	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

	12/06/21
Finisher	W47.18 B31.95 T79.13
Setter	W61.44 B35.13 T96.57

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

	01/03/22
Tile Setter	W62.17 B38.42 T100.59

Craft: Tile Setter - Marble

APPRENTICE RATE SCHEDULE

INTERVAL	PERIOD AND RATES									
750 Hours	40%	45%	50%	55%	60%	65%	70%	75%	85%	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

	01/01/22
Grinder or Assistant	W57.60 B38.18 T95.78
Mechanic	W59.21 B38.19 T97.40
Terrazzo Resinous Worker	W49.46 B30.91 T80.37

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 AFTER 7-1-17:

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

	07/27/21
Bucket, Utility, Pick-up, Fuel Delivery trucks	W40.21 B38.78 T78.99
Dump truck, Asphalt Distributor, Tack Spreader	W40.21 B38.78 T78.99
Euclid-type vehicles (large, off-road equipment)	W40.31 B38.78 T79.09
Helper on Asphalt Distributor truck	W40.21 B38.78 T78.99
Slurry Seal, Seeding/Fertilizing/ Mulching truck	W40.21 B38.78 T78.99
Straight 3-axle truck	W40.21 B38.78 T78.99
Tractor Trailer (all types)	W40.31 B38.78 T79.09
Vacuum or Vac-All truck (entire unit)	W40.21 B38.78 T78.99
Winch Trailer	W40.41 B38.78 T79.19

Craft: Truck Driver

COMMENTS/NOTES

BLENDED RATE:

When a truck driver is performing work on the site and also serving as a material delivery driver, the driver shall be paid a "blended rate" which shall be 80% of the above-listed wage rates, plus the full benefit rate. This rate shall be used when the driver "round robins" for a minimum of 6 hours during the work day.

HAZARDOUS WASTE REMOVAL:

- On hazardous waste removal work on a State designated hazardous waste site where the driver is in direct contact with hazardous materials and when personal protective equipment is required for respiratory, skin, and eye protection, the driver shall receive an additional \$3.00 per hour (with or without protective gear).
- A hazardous waste related certified worker at a designated hazardous waste site who is not working in a zone requiring level A, B or C personal protection shall receive an additional \$1.00 per hour.

TRUCK FOREMAN: \$.75 cents per hour above regular rate. Overtime shall be increased accordingly.

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

County - UNION

The regular workday shall be 8 hours, starting between 6:00 AM and 8:00 AM.

SHIFT DIFFERENTIAL:

- Shifts starting at 4:00 PM (2nd Shift): + \$3.00 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: + \$3.00 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.
- Benefits on overtime shall be \$38.53.

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

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

County - UNION

Craft: Truck Driver-Material Delivery Driver

PREVAILING WAGE RATE

	07/27/21
Driver	W32.52 B38.78 T71.30

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, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays will be observed the following Monday. The day after Thanksgiving may be substituted for Veterans Day.

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

County - UNION

Craft: Welder PREVAILING WAGE RATE

Welder

Craft: Welder COMMENTS/NOTES

Welders rate is the same as the craft to which the welding is incidental .

STATEWIDE RATES

OPERATING ENGINEERS **Rates Expiration Date :**

{For apprentice rates refer to "Operating Engineers" apprentice rates in any county rate package}

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must be established for 5 consecutive workdays.
- Any work started outside of the allowed start time, 6:00 AM to 9:00 AM, except for * tidal work, shall be considered an irregular shift and paid at straight time, plus 15% for the first eight hours, inclusive of benefits.
- * FOR TIDAL WORK- a contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work), providing the eight hour shift is completed between the hours of 5:00 AM and 6:30 PM.
- All time worked in excess of an established shift (an established shift is a shift that is determined at the time of the bid) shall be paid at the applicable overtime rate. When a portion of an established shift works into Saturday, Sunday or a holiday, that time worked shall be paid at the established shift rate.
- When working with other trades who receive a higher irregular shift differential, these employees shall also receive the higher differential rate.

OVERTIME:

- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veterans Day.

For projects bid after April 1, 2020, on hazardous waste removal work of any kind, including a state or federally designated site, where the operating engineer is required to wear level A, B, or C personal protection, the operating engineer shall receive an hourly wage rate of his regular hourly wage plus \$5.00 per hour.

- An operating engineer working at a hazardous waste removal project or site at a task requiring hazardous waste related certification, but who is not working in a zone requiring level A, B, or C personal protection, shall receive an hourly wage rate of his regular rate plus \$1.00 per hour.

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
54.43	35.60	90.03	92.28

CLASSIFICATIONS:

A-Frame

Backhoe (combination)

Boom Attachment on loaders (Except pipehook)

Boring & Drilling Machine

Brush Chopper, Brush Shredder, Tree Shredder, Tree Shearer

Bulldozer, finish grade

Cableway

Carryall

Concrete Pump

Concrete Pumping System (Pumpcrete & similar types)

Conveyor, 125 feet or longer

Drill Doctor (Duties include dust collector and maintenance)

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

Grader, finish

Groove Cutting Machine (ride-on type)

Heater Planer

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

Hydraulic Crane (10 tons & under)

Hydraulic Dredge

Hydro-Axe

Hydro-Blaster

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
54.43	35.60	90.03	92.28

CLASSIFICATIONS:

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

Log Skidder

Pan

Paver, concrete

Plate & Frame Filter Press

Pumpcrete (unit type)

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

Scraper

Side Boom

Straddle Carrier (Ross and similar types)

Whiphammer

Winch Truck (hoisting)

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2021		07/01/2022	
Rate	Fringe	Total	Total
52.52	35.60	88.12	90.37

CLASSIFICATIONS:

- Asphalt Curbing Machine
- Asphalt Plant Engineer
- Asphalt Spreader
- Autograde Curb Trimmer & Sidewalk Shoulder Slipform (CMI & similar types)
- Autograde Curecrete Machine (CMI & similar types)
- Autograde Tube Finisher & Texturing Machine (CMI & similar types)
- Bar Bending Machines (Power)
- Batcher, Batching Plant, & Crusher [On Site]
- Belt Conveyor System
- Boom-Type Skimmer Machine
- Bridge Deck Finisher
- Bulldozer (all sizes)
- Captain (Power Boats)
- Car Dumper (railroad)
- Compressor & Blower unit for loading/unloading of concrete, cement, fly ash, or similar type materials (used independently or truck-mounted)
- Compressor (2 or 3 battery)
- Concrete Breaking Machine
- Concrete Cleaning/Decontamination Machine
- Concrete Finishing Machine
- Concrete Saw or Cutter (ride-on type)
- Concrete Spreader (Hetzl, Rexomatic & similar types)
- Concrete Vibrator

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
52.52	35.60	88.12	90.37

CLASSIFICATIONS:

- Conveyors - under 125 feet
- Crane Signalman
- Crushing Machine
- Directional Boring Machine
- Ditching Machine - Small (Ditchwitch, Vermeer or similar types)
- Dope Pot - Mechanical (with or without pump)
- Dumpster
- Elevator
- Fireman
- Fork Lift (Economobile, Lull & similar types)
- Front End Loader (1 cu. yd. and over but less than 2 cu. yds.)
- Generator (2 or 3 battery)
- Giraffe Grinder
- Goldhofer/Hydraulic Jacking Trailer
- Grader & Motor Patrols
- Grout Pump
- Gunnite Machine (Excluding nozzle)
- Hammer - Vibratory (in conjunction with generator)
- Heavy Equipment Robotics - Operator/Technician
- Hoist (roof, tigger, aerial platform hoist, house car)
- Hopper
- Hopper Doors (power operated)
- Ladder (motorized)

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2021		07/01/2022	
Rate	Fringe	Total	Total
52.52	35.60	88.12	90.37

CLASSIFICATIONS:

Laddervator

Locomotive (Dinky-type)

Maintenance Utility Man

Master Environmental Maintenance Technician

Mechanic

Mixer (Except paving mixers)

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

Pavement Breaker - maintenance of compressor or hydraulic unit

Pipe Bending Machine (power)

Pitch Pump

Plaster Pump (regardless of size)

Post Hole Digger (post pounder, auger)

Rod Bending Machines

Roller (black top)

Scale (power)

Seamen Pulverizing Mixer

Shoulder Widener

Silo

Skimmer Machine (boom type)

Steel Cutting Machine (service & maintenance)

Tamrock Drill

Tractor

Transfer Machines

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
52.52	35.60	88.12	90.37

CLASSIFICATIONS:

Tug Captains

Tug Master (Power Boats)

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

Vacuum Blasting Machine - Operator/Maintenance Technician

Vibrating Plant (used with unloading)

Welder & Repair Mechanic

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
49.18	35.60	84.78	87.03

CLASSIFICATIONS:

Assistant Engineer/Oiler

Driller's Helper

Field Engineer - Transit man or Instrument man

Maintenance Apprentice (Deckhand)

Maintenance Apprentice (Oiler)

Mechanic's Helper

Off Road Back Dump

Tire Repair & Maintenance

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
46.60	35.60	82.20	84.45

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman

TERRITORY
ENTIRE STATE

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

OPERATING ENGINEERS Rates Expiration Date :

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
56.76	35.60	92.36	94.61

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (minimum)

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2021		07/01/2022	
Rate	Fringe	Total	Total
56.02	35.60	91.62	93.87

CLASSIFICATIONS:

- Autograde Pavement Profiler (CMI & similar types)
- Autograde Pavement Profiler - Recycle Type (CMI & similar types)
- Autograde Placer/Trimmer/Spreader Combination (CMI & similar types)
- Autograde Slipform Paver (CMI & similar types)
- Backhoe (Excavator)
- Central Power Plant
- Concrete Paving Machine
- Cranes, Derricks, Pile Drivers (all types), under 100 tons with a boom (including jib and/or leads) under 100 ft.
- Draglines
- Drill, Bauer, AMI and similar types
- Drillmaster, Quarrymaster
- Drillmaster/Quarrymaster (down-the-hole drill), rotary drill, self-propelled hydraulic drill, self-powered drill
- Elevator Grader
- Field Engineer-Chief of Party
- Front End Loader (5 cu. yards or larger)
- Gradall
- Grader, Rago
- Helicopter Co-Pilot
- Helicopter Communications Engineer
- Juntann Pile Driver
- Locomotive (large)
- Mucking Machine

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
56.02	35.60	91.62	93.87

CLASSIFICATIONS:

Pavement & Concrete Breaker (Superhammer & Hoe Ram)

Pile Driver

Prentice Truck

Roadway Surface Grinder

Scooper (loader & shovel)

Shovel (Excavator)

Trackhoe (Excavator)

Tree Chopper with boom

Trenching Machine (cable plow)

Tunnel Boring Machine

Vacuum Truck

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2021		07/01/2022	
Rate	Fringe	Total	Total
50.89	35.60	86.49	88.74

CLASSIFICATIONS:

- Chipper
- Compressor (single)
- Concrete Spreader (small type)
- Conveyor Loader (Except elevator graders)
- Engines, Large Diesel (1620 HP) & Staging Pump
- Farm Tractor
- Fertilizing Equipment (operation & maintenance)
- Fine Grade Machine (small type)
- Form Line Grader (small type)
- Front End Loader (under 1 cubic yard)
- Generator (single)
- Grease, Gas, Fuel, & Oil Supply Trucks
- Heaters (Nelson or other type)
- Lights - portable generating light plant
- Mixer, Concrete (small)
- Mulching Equipment (operation & maintenance)
- Power Broom or Sweeper
- Pump (diesel engine & hydraulic - regardless of power)
- Pump (larger than 2 inch suction, including submersible pumps)
- Road Finishing Machine (small type)
- Roller - grade, fill, or stone base
- Seeding Equipment (operation & maintenance)
- Sprinkler & Water Pump Trucks

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
50.89	35.60	86.49	88.74

CLASSIFICATIONS:

Steam Generator or Boiler

Stone Spreader

Tamping Machine (vibrating ride-on type)

Temporary Heating Plant (Nelson or other type, including propane, natural gas, and flow-type units)

Water or Sprinkler Truck

Welding Machine (gas, diesel, or electric convertor, of any type)

Welding System - Multiple (rectifier transformer type)

Wellpoint Systems (including installation by bull gang and maintenance)

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
57.84	35.60	93.44	95.69

CLASSIFICATIONS:

Helicopter Pilot/Engineer

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
62.52	35.60	98.12	100.37

CLASSIFICATIONS:

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

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
61.52	35.60	97.12	99.37

CLASSIFICATIONS:

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

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
58.02	35.60	93.62	95.87

CLASSIFICATIONS:

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

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
60.52	35.60	96.12	98.37

CLASSIFICATIONS:

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

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
57.02	35.60	92.62	94.87

CLASSIFICATIONS:

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

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

{For apprentice rates refer to "Operating Engineers" apprentice rates in any county rate package}

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must be established for 5 consecutive workdays.
- Any work started outside of the allowed start time, 6:00 AM to 9:00 AM, except for * tidal work, shall be considered an irregular shift and paid at straight time, plus 15% for the first eight hours, inclusive of benefits.
- * FOR TIDAL WORK- a contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work), providing the eight hour shift is completed between the hours of 5:00 AM and 6:30 PM.
- All time worked in excess of an established shift (an established shift is a shift that is determined at the time of the bid) shall be paid at the applicable overtime rate. When a portion of an established shift works into Saturday, Sunday or a holiday, that time worked shall be paid at the established shift rate.
- When working with other trades who receive a higher irregular shift differential, these employees shall also receive the higher differential rate.

OVERTIME:

- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veterans Day.

For projects bid after April 1, 2020, on hazardous waste removal work of any kind, including a state or federally designated site, where the operating engineer is required to wear level A, B, or C personal protection, the operating engineer shall receive an hourly wage rate of his regular hourly wage plus \$5.00 per hour.

- An operating engineer working at a hazardous waste removal project or site at a task requiring hazardous waste related certification, but who is not working in a zone requiring level A, B, or C personal protection, shall receive an hourly wage rate of his regular rate plus \$1.00 per hour.

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
59.65	35.60	95.25	97.50

CLASSIFICATIONS:

Helicopter Co-Pilot & Communications Engineer

TERRITORY
ENTIRE STATE

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

STRUCTURAL STEEL ERECTION Rates Expiration Date :

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
55.59	35.60	91.19	93.44

CLASSIFICATIONS:

A-Frame

Cherry Picker -10 tons or less (Over 10 tons use crane rate)

Hoist (all types Except Chicago-boom)

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

Side Boom

Straddle Carrier

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
52.93	35.60	88.53	90.78

CLASSIFICATIONS:

- Aerial Platform Used On Hoists
- Apprentice Engineer/Oiler with Compressor or Welding Machine
- Captain (Power Boats)
- Compressor (2 or 3 in battery)
- Concrete Cleaning/Decontamination Machine Operator
- Conveyor or Tugger Hoist
- Directional Boring Machine
- Elevator or House Car
- Fireman
- Forklift
- Generator (2 or 3)
- Heavy Equipment Robotics, Operator/Technician
- Maintenance Utility Man
- Master Environmental Maintenance Technician
- Tug Master (Power Boats)
- Ultra High Pressure Waterjet Cutting Tool System Operator/Maintenance Technician
- Vacuum Blasting Machine Operator/Maintenance Technician
- Welding Machines, Gas or Electric Converters on any type-2 or 3 in battery including diesels

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
51.40	35.60	87.00	89.25

CLASSIFICATIONS:

Compressor (Single)

Generators

Welding Machines, Gas, Diesel, Or Electric Converters of any type-single

Welding System, Multiple (Rectifier Transformer Type)

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
49.64	35.60	85.24	87.49

CLASSIFICATIONS:

Assistant Engineer/Oiler

Drillers Helper

Field Engineer - Transit/Instrument Man

Maintenance Apprentice (Deckhand)

Maintenance Apprentice (Oiler)

Off Road Back Dump

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
57.21	35.60	92.81	95.06

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (Minimum)

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
46.60	35.60	82.20	84.45

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
56.35	35.60	91.95	94.20

CLASSIFICATIONS:

Field Engineer-Chief of Party

Vacuum Truck

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
64.54	35.60	100.14	102.39

CLASSIFICATIONS:

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

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
62.88	35.60	98.48	100.73

CLASSIFICATIONS:

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

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
60.04	35.60	95.64	97.89

CLASSIFICATIONS:

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

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
58.38	35.60	93.98	96.23

CLASSIFICATIONS:

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

TERRITORY
ENTIRE STATE

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

STRUCTURAL STEEL ERECTION Rates Expiration Date :

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
60.04	35.60	95.64	97.89

CLASSIFICATIONS:

Helicopter Pilot & Engineer

TEST BORING PRELIMINARY TO CONSTRUCTION-SOUTH/WEST Rates Expiration Date :

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Hunterdon, Mercer, Monmouth, Ocean, Salem, Sussex, Warren

The regular workday consists of 8 hours, Monday to Friday, between 6:00 AM and 5:30 PM.

SHIFT DIFFERENTIALS:

- Shift work must be established for 5 consecutive workdays.
- Any work started outside of the allowed start time, 6:00 AM to 9:00 AM, except for * tidal work, shall be considered an irregular shift and paid at straight time, plus 15% for the first eight hours, inclusive of benefits.
- * FOR TIDAL WORK- a contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work), providing the eight hour shift is completed between the hours of 5:00 AM and 6:30 PM.
- All time worked in excess of an established shift (an established shift is a shift that is determined at the time of the bid) shall be paid at the applicable overtime rate. When a portion of an established shift works into Saturday, Sunday or a holiday, that time worked shall be paid at the established shift rate.
- When working with other trades who receive a higher irregular shift differential, these employees shall also receive the higher differential rate.

OVERTIME:

- Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, that are not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sunday and holidays shall be paid at double the regular rate, inclusive of benefits.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with all hours on Friday paid at time and one-half the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. When all trades on a particular job site agree, the day after Thanksgiving may be substituted for Veterans Day.

For projects bid after April 1, 2020, on hazardous waste removal work of any kind, including a state or federally designated site, where the operating engineer is required to wear level A, B, or C personal protection, the operating engineer shall receive an hourly wage rate of his regular hourly wage plus \$5.00 per hour.

- An operating engineer working at a hazardous waste removal project or site at a task requiring hazardous waste related certification, but who is not working in a zone requiring level A, B, or C personal protection, shall receive an hourly wage rate of his regular rate plus \$1.00 per hour.

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
56.02	35.60	91.62	93.87

CLASSIFICATIONS:

Driller

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
49.18	35.60	84.78	87.03

CLASSIFICATIONS:

Driller's Helper

FREE AIR TUNNEL JOBS **Rates Expiration Date :**

{For apprentice rates refer to "Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$3.00/hr
- other Hazardous Waste site: + \$1.00/hr

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
47.05	33.73	80.78	83.53	86.03

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
46.75	33.73	80.48	83.23	85.73

CLASSIFICATIONS:

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

FREE AIR TUNNEL JOBS **Rates Expiration Date :**

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
46.25	33.73	79.98	82.73	85.23

CLASSIFICATIONS:

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

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
48.75	33.73	82.48	85.23	87.73

CLASSIFICATIONS:

Blaster

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
45.70	33.73	79.43	82.18	84.68

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
45.35	33.73	79.08	81.83	84.33

CLASSIFICATIONS:

Skilled Men (including Caulker, Powder Carrier, all other skilled men)

Skilled Men (including Miner, Drill Runner, Iron Man, Conveyor Man, Manintenance Man, Safety Miner, Rigger, Block Layer, Cement Finisher, Tod Man)

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
45.20	33.73	78.93	81.68	84.18

CLASSIFICATIONS:

Semi-Skilled Men (including Bell or Signal Man Top or Bottom, Form Worker & Mover, Concrete Worker, Shaft Man, Tunnel Laborer, Caulker's Helper, all other semi-skilled)

Semi-Skilled Men (including Miner's Helper, Chuck Tender, Track Man, Nipper, Brake Man, Derail Man, Cable Man, Hose Man, Gravel Man, Form Man)

TERRITORY
ENTIRE STATE

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

FREE AIR TUNNEL JOBS Rates Expiration Date :

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
44.80	33.73	78.53	81.28	83.78

CLASSIFICATIONS:

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

DRILL FOR GROUND WATER SUPPLY **Rates Expiration Date :**

The well driller and/or helper may perform all work relative to the construction, finishing, and servicing of wells, pumps and borings for ground water supply. The present methods of well drilling entailing as they do, many diverse job operations calling for drilling, pump discharge, piping, and the operation of various types of related power equipment, shall all be within the job duties and functions of the well driller and/or helper. In the event that an extension of work should occur beyond water well drilling functions, into the field of general construction work, such extension of work would come under the appropriate rates listed elsewhere in this wage determination.

- For Work Hours, Shift Differentials, Overtime Rates, and Recognized Holidays see the "Operating Engineers" section of this wage determination.

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
54.77	35.60	90.37	92.62

CLASSIFICATIONS:

Driller

Effective Dates:

07/01/2021			07/01/2022
Rate	Fringe	Total	Total
47.93	35.60	83.53	85.78

CLASSIFICATIONS:

Driller's Helper

OPERATING ENGINEERS MARINE-DREDGING **Rates Expiration Date :**

NOTE: These wage rates only apply to dredging and other marine construction activities occurring in navigable waters and their tributaries.

Boat crews carrying explosive material (dynamite, pourfex, and other similar materials) shall be paid at 120% of the hourly wage rate for hours engaged in handling of said materials. Employees required to possess a Hazardous Material Certification as a condition of employment shall be compensated at 120% of the hourly wage rate.

OVERTIME:

Hours in excess of 40 per week, and all hours on Saturdays and Sundays, shall be paid at time and one-half the hourly rate. All hours on holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Martin Luther King Day, Good Friday, Memorial Day, July 4th, Labor Day, Veterans Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday.

Effective Dates:

10/18/2021			10/01/2022	10/01/2023
Rate	Fringe	Total	Total	Total
42.66	14.01	56.67	58.48	60.48

CLASSIFICATIONS:

Lead Dredgerman, Operator, Leverman

Licensed Tug Operator (over 1000 HP)

Effective Dates:

10/18/2021			10/01/2022	10/01/2023
Rate	Fringe	Total	Total	Total
36.89	13.66	50.55	52.18	53.93

CLASSIFICATIONS:

Derrick Operator, Spider/Spill Barge Operator

Engineer, Electrician, Chief Welder, Chief Mate

Fill Placer, Operator II

Licensed Boat Operator

Maintenance Engineer

Effective Dates:

10/18/2021			10/01/2022	10/01/2023
Rate	Fringe	Total	Total	Total
34.73	13.53	48.26	49.82	51.47

CLASSIFICATIONS:

Certified Welder

OPERATING ENGINEERS MARINE-DREDGING **Rates Expiration Date :**

Effective Dates:

10/18/2021			10/01/2022	10/01/2023
Rate	Fringe	Total	Total	Total
33.78	13.18	46.96	48.53	50.14

CLASSIFICATIONS:

Mate, Drag Barge Operator, Steward, Assistant Fill Placer

Welder

Effective Dates:

10/18/2021			10/01/2022	10/01/2023
Rate	Fringe	Total	Total	Total
32.69	13.11	45.80	47.34	48.91

CLASSIFICATIONS:

Boat Operator

Effective Dates:

10/18/2021			10/01/2022	10/01/2023
Rate	Fringe	Total	Total	Total
27.16	12.58	39.74	41.30	42.63

CLASSIFICATIONS:

Shoreman, Deckhand, Rodman, Scowman

Effective Dates:

10/18/2021			10/01/2022	10/01/2023
Rate	Fringe	Total	Total	Total
38.02	13.73	51.75	53.41	55.20

CLASSIFICATIONS:

Crane Operator

MICROSURFACING/SLURRY SEAL Rates Expiration Date :

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem

IN ALL OTHER COUNTIES use the Heavy and General Laborers - North "Slurry Seal Laborer" rates.

SHIFT DIFFERENTIALS:

Any shift starting at 3:30 PM or later shall receive an additional \$0.35/hr

OVERTIME:

Hours in excess of 8 per day or 40 per week shall be paid at time and one-half the hourly rate. All hours on holidays shall be paid at double the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Washington's Birthday, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day.

Effective Dates:

03/01/2017

Rate	Fringe	Total
36.50	21.27	57.77

CLASSIFICATIONS:

Foreman

Effective Dates:

03/01/2017

Rate	Fringe	Total
33.80	21.27	55.07

CLASSIFICATIONS:

Box man

Effective Dates:

03/01/2017

Rate	Fringe	Total
31.75	21.27	53.02

CLASSIFICATIONS:

Microsurface/Slurry Preparation

Effective Dates:

03/01/2017

Rate	Fringe	Total
31.75	21.27	53.02

CLASSIFICATIONS:

Squeegee man

TERRITORY
ENTIRE STATE

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

MICROSURFACING/SLURRY SEAL Rates Expiration Date :

Effective Dates:

03/01/2017

Rate	Fringe	Total
30.30	21.27	51.57

CLASSIFICATIONS:

Cleaner, Taper

ASPHALT LABORERS - SOUTH **Rates Expiration Date :**

"THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY: Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$5.00/hr
- other Hazardous Waste site: + \$1.00/hr

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
46.55	33.73	80.28	84.03	87.53

CLASSIFICATIONS:

Paving Foreman

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
45.10	33.73	78.83	81.58	84.08

CLASSIFICATIONS:

Head Raker

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
45.25	33.73	78.98	81.73	84.23

CLASSIFICATIONS:

Screedman

ASPHALT LABORERS - SOUTH **Rates Expiration Date :**

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
44.70	33.73	78.43	81.18	83.68

CLASSIFICATIONS:

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

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
44.80	33.73	78.53	81.28	83.78

CLASSIFICATIONS:

Milling Controller

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
45.00	33.73	78.73	81.48	83.98

CLASSIFICATIONS:

Traffic Control Coordinator

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
44.95	33.73	78.68	81.43	83.93

CLASSIFICATIONS:

Raker, Luteman

TEST BORING PRELIMINARY TO CONSTRUCTION-NORTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:
Bergen, Essex, Hudson, Middlesex, Morris, Passaic, Somerset, Union

SHIFT DIFFERENTIAL:

Employees on a shift other than between the hours of 8:00 AM and 5:00 PM shall receive an additional \$2.00 per hour.

OVERTIME:

Hours in excess of 8 per day, Monday through Friday, and all hours on Saturday shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular rate.

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

Hazardous Waste Pay (for Levels A, B, and C): an additional 15% of the hourly rate, per hour.

A newly hired Helper with no experience in the industry shall be paid as follows:

- 1st year on the job - 70% of Helper wage rate
- 2nd year on the job - 80% of Helper wage rate
- 3rd year on the job - 90% of Helper wage rate
- All helpers receive full fringe benefit rate.

Effective Dates:

10/18/2021			10/18/2022
Rate	Fringe	Total	Total
33.47	30.70	64.17	65.92

CLASSIFICATIONS:

Helper (4th year helper)

Effective Dates:

10/18/2021			10/18/2022
Rate	Fringe	Total	Total
42.54	30.70	73.24	75.24

CLASSIFICATIONS:

Driller

Effective Dates:

10/18/2021			10/18/2022
Rate	Fringe	Total	Total
48.58	30.70	79.28	81.28

CLASSIFICATIONS:

Foreman

HEAVY & GENERAL LABORERS - NORTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, Warren

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$5.00/hr
- other Hazardous Waste site: + \$1.00/hr

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
44.30	33.73	78.03	80.78	83.28

CLASSIFICATIONS:

"D" Rate:

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

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
45.00	33.73	78.73	81.48	83.98

CLASSIFICATIONS:

"C" Rate:

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

HEAVY & GENERAL LABORERS - NORTH **Rates Expiration Date :**

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
45.25	33.73	78.98	81.73	84.23

CLASSIFICATIONS:

"B" Rate:

concrete finisher; setter of brick or stone pavers; stone cutter; form setter; manhole, catch basin, or inlet builder; asphalt screedman; rammer; hardscaping; gunite nozzle man

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
48.80	33.73	82.53	85.28	87.78

CLASSIFICATIONS:

"A" Rate:

blaster

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
46.55	33.73	80.28	84.03	87.53

CLASSIFICATIONS:

"FOREMAN" Rate:

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

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
47.55	33.73	81.28	85.03	88.53

CLASSIFICATIONS:

"GENERAL FOREMAN" Rate

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Atlantic, Burlington, Camden, Cape May, Cumberland, Gloucester, Mercer, Ocean, Salem

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$5.00/hr
- other Hazardous Waste site: + \$1.00/hr

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
44.30	33.73	78.03	80.78	83.28

CLASSIFICATIONS:

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

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
44.30	33.73	78.03	80.78	83.28

CLASSIFICATIONS:

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

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date :**

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
45.00	33.73	78.73	81.48	83.98

CLASSIFICATIONS:

pipe layer; laser man; conduit or duct line layer; operator of jack hammer, chipping hammer, pavement breaker, concrete cutter, asphalt cutter, sheet hammer, or walk-behind saw cutter; sandblaster; acetylene cutting or burning

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
45.00	33.73	78.73	81.48	83.98

CLASSIFICATIONS:

wagon or directional drill operator; drill master

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
48.80	33.73	82.53	85.28	87.78

CLASSIFICATIONS:

blaster

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
46.55	33.73	80.28	84.03	87.53

CLASSIFICATIONS:

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

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
47.55	33.73	81.28	85.03	88.53

CLASSIFICATIONS:

general foreman

TERRITORY
ENTIRE STATE

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

HEAVY & GENERAL LABORERS - SOUTH **Rates Expiration Date :**

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
45.25	33.73	78.98	81.73	84.23

CLASSIFICATIONS:

concrete finisher; setter of brick or stone pavers; stone cutter; form setter; manhole, catch basin, or inlet builder; rammer; gunite nozzle man

PIPELINE - MAINLINE TRANSMISSION Rates Expiration Date :

These rates apply to the following: welding on Transportation Mainline pipe lines (cross-country pipe lines, or any segments thereof, transporting coal, gas, oil, water or other transportable materials, vapors or liquids, including portions of such pipe lines within private property boundaries up to the final metering station or connection - the point where a valve, consumer connection, or town border station divides mainline transmission lines or higher pressure lateral and branch lines from lower pressure distribution systems).

PER DIEM PAYMENT:

In addition to the total wage rate paid for each craft, the following per diem (per day) amounts must also be paid - Pipeline Journeyman: \$80.50; Pipeline Journeyman Welder: \$140.50; and Pipeline Helper: \$64.50. Note: in order to receive the per diem payment an employee must work a minimum of 8 hours in a 24 hour period.

NOTES:

- Journeymen employed as "stringer bead" welders and journeymen who are regularly employed as "hot-pass" welders shall receive \$1.00 per hour more than other journeymen.
- Welders running "stringer bead" or "hot-pass" on "cutouts" or "tie-ins" on a production basis shall be paid \$1.00 per hour above the journeymen rate.
- Whenever a welder helper is employed using a power buffer or power grinder immediately behind the stringer bead and/or hot-pass welders, and the pipe gang is set on a production basis, the helper shall be paid \$2.00 per hour above the helper rate.
- If back welding is performed inside a pipe under either or both of the following conditions, the welder engaged in the welding will receive \$3.00 per hour above the regular rate for the job only for the days on which such back welding is performed:
 - The employer elects, as a regular procedure, to back weld each line-up. This condition is not intended to apply to occasional back welding performed by the pipe gang to repair a bead, to rectify a "high-lo" condition or wall thickness, etc.
 - A welder is required to back weld a completed weld behind the firing line.
- If the welder helper is required to go inside the pipe for the purpose of brushing, buffing and grinding the weld, they shall receive a wage rate \$1.00 per hour above the regular helper rate for the days involved.
- Welders working on "hot work" shall be paid \$2.00 per hour above the regular rate for each day engaged in such work. "Hot work" is defined as work on lines in service where there is the danger of fire or explosion.

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

OVERTIME:

Hours in excess of 8 per day, and all hours on Sundays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on holidays shall be paid at double the regular rate, inclusive of benefits.

RECOGNIZED HOLIDAYS: New Year's Day, July 4th, Labor Day, Thanksgiving Day, and Christmas Day. Sunday holidays observed the following Monday.

Effective Dates:

06/15/2021

Rate	Fringe	Total
54.64	33.55	88.19

CLASSIFICATIONS:

Pipeline Journeyman Welder

TERRITORY
ENTIRE STATE

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

PIPELINE - MAINLINE TRANSMISSION Rates Expiration Date :

Effective Dates:

06/15/2021

Rate	Fringe	Total
54.64	33.55	88.19

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

06/15/2021

Rate	Fringe	Total
33.84	23.17	57.01

CLASSIFICATIONS:

Pipeline Helper

PIPELINE - GAS DISTRIBUTION **Rates Expiration Date :**

These rates apply to the following: welding on gas line distribution systems (that portion of the gas distribution system placed in streets, roads, subways, tunnels, viaducts, highways and easements which serves the users of gas).

SHIFT DIFFERENTIALS:

An "irregular" shift may start any time from 5:00 PM to 12:00 AM, Monday through Friday, and shall receive an additional 15% of the regular rate per hour, inclusive of benefits.

OVERTIME:

Hours in excess of forty per week, and all hours on Saturdays shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

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

Effective Dates:

11/09/2021			11/01/2022
Rate	Fringe	Total	Total
62.50	28.73	91.23	93.73

CLASSIFICATIONS:

Pipeline Journeyman Welder

Effective Dates:

11/09/2021			11/01/2022
Rate	Fringe	Total	Total
62.50	28.73	91.23	93.73

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

11/09/2021			11/01/2022
Rate	Fringe	Total	Total
39.96	21.05	61.01	62.68

CLASSIFICATIONS:

Pipeline Helper

ASPHALT LABORERS- NORTH **Rates Expiration Date :**

THESE RATES APPLY IN THE FOLLOWING COUNTIES ONLY:

Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Passaic, Somerset, Sussex, Union, Warren

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$5.00/hr
- other Hazardous Waste site: + \$1.00/hr

FOR TIDE WORK (pertains to tidal water): A contractor can start their job according to tide schedules (tide schedules are the various high and low tides related to this work) providing the eight (8) hour shift is completed between the hours of 5:00 AM and 6:30 PM.

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
46.55	33.73	80.28	84.03	87.53

CLASSIFICATIONS:

Asphalt Foreman

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
45.25	33.73	78.98	81.73	84.23

CLASSIFICATIONS:

Asphalt Screedman

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
45.00	33.73	78.73	81.48	83.98

CLASSIFICATIONS:

Asphalt Raker or Lute Man

TERRITORY
ENTIRE STATE

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

ASPHALT LABORERS- NORTH Rates Expiration Date :

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
44.30	33.73	78.03	80.78	83.28

CLASSIFICATIONS:

Asphalt Laborer

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date :**

Electrician-Utility Work (North)

(For apprentice rates refer to Electrician-Utility Work (North) in any county rate package).

These rates apply to work contracted for by the following utility companies:

Public Service Electric & Gas Co. of NJ, GPU Energy, Borough of Madison Electric Department, Sussex Rural Electric Cooperative, Rockland Utilities, and Butler Municipal Electric Co.

These rates do not apply to work on substations or switching stations.

For Utility work contracted for by a utility company other than those listed above or those listed under "Electrician-Utility Work (South), see the "Outside Commercial Rates" for the county in which the jobsite is located.

* FOR OUTSIDE COMMERCIAL RATES PLEASE SEE COUNTY RATES

The regular workday is 8 hours, between 6:00 AM and 6:00 PM.

FOR EMERGENCY WORK ONLY: (emergency work is defined as work caused by storm, catastrophe, act of god, and circumstances beyond the control of the employer)-all hours of work shall be paid at double the hourly rate.

SHIFT DIFFERENTIALS:

Shift work must run for a minimum of 5 consecutive workdays.

2nd shift (between the hours of 4:30 PM and 1:00 AM): 8 hours of work + 17.3% of the regular rate, inclusive of benefits.

3rd shift (between the hours of 12:30 AM and 9:00 AM): 8 hours of work + 31.4% of the regular rate per hour, inclusive of benefits.

OVERTIME:

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

Four 10-hour days may worked, at straight time, between 6:00 AM and 6:00 PM, Monday through Thursday.

RECOGNIZED HOLIDAYS:

New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day and Christmas Day, or day on which they are legally observed.

Effective Dates:

	12/05/2021		12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
59.18	40.83	100.01	103.20	106.36	109.56

CLASSIFICATIONS:

Chief Lineman

Effective Dates:

	12/05/2021		12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
55.83	38.52	94.35	97.36	100.35	103.36

CLASSIFICATIONS:

Journeyman Lineman

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date :**

Effective Dates:

	12/05/2021		12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
55.83	38.52	94.35	97.36	100.35	103.36

CLASSIFICATIONS:

Special License Operator

Effective Dates:

	12/05/2021		12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
55.27	38.13	93.40	96.38	99.35	102.32

CLASSIFICATIONS:

Transit Man

Effective Dates:

	12/05/2021		12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
53.60	36.98	90.58	93.47	96.33	99.21

CLASSIFICATIONS:

Line Equipment Operator

Effective Dates:

	12/05/2021		12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
46.90	32.36	79.26	81.77	84.29	86.81

CLASSIFICATIONS:

Dynamite Man

Effective Dates:

	12/05/2021		12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
69.79	48.15	117.94	121.69	125.44	129.20

CLASSIFICATIONS:

General Foreman

Effective Dates:

	12/05/2021		12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
64.20	44.29	108.49	111.96	115.41	118.85

CLASSIFICATIONS:

Assistant General Foreman

ELECTRICIAN- UTILITY WORK (NORTH) Rates Expiration Date :

Effective Dates:

	12/05/2021		12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
62.53	43.14	105.67	109.03	112.40	115.76

CLASSIFICATIONS:

Line Foreman

Effective Dates:

	12/05/2021		12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
45.22	31.20	76.42	78.85	81.28	83.72

CLASSIFICATIONS:

Street Light Mechanical Leader

Effective Dates:

	12/05/2021		12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
42.99	29.66	72.65	74.96	77.26	79.58

CLASSIFICATIONS:

Groundman Winch Operator

Effective Dates:

	12/05/2021		12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
42.99	29.66	72.65	74.96	77.26	79.58

CLASSIFICATIONS:

Groundman Truck Operator

Effective Dates:

	12/05/2021		12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
42.43	29.27	71.70	73.98	76.26	78.55

CLASSIFICATIONS:

Street Light Mechanic

Effective Dates:

	12/05/2021		12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
42.43	29.27	71.70	73.98	76.26	78.55

CLASSIFICATIONS:

Line Equipment Mechanic

ELECTRICIAN- UTILITY WORK (NORTH) **Rates Expiration Date :**

Effective Dates:

12/05/2021			12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
36.29	25.04	61.33	63.29	65.23	67.17

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

12/05/2021			12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
33.50	23.11	56.61	58.42	60.21	62.02

CLASSIFICATIONS:

Groundman 1st Year

Effective Dates:

12/05/2021			12/04/2022	12/03/2023	12/01/2024
Rate	Fringe	Total	Total	Total	Total
55.27	38.13	93.40	96.38	99.35	102.32

CLASSIFICATIONS:

Line Equipment Foreman

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date :

Electrician-Utility Work (South)

(For apprentice rates refer to Electrician-Utility Work (South) in any county rate package).

These rates apply to work contracted for by the following utility company:

Atlantic City Electric.

These rates do not apply to work on substations or switching stations.

For utility work contracted for by a utility company other than the one listed above or those listed under "Electrician-Utility Work (North), see the "Outside Commercial Rates" for the county in which the jobsite is located.

* FOR OUTSIDE COMMERCIAL RATES PLEASE SEE COUNTY RATES

The regular workday is 8 hours, between 7:00 AM and 4:30 PM.

FOR EMERGENCY WORK ONLY: (emergency work is defined as work caused by storm, catastrophe, act of god, and circumstances beyond the control of the employer)- all hours of work shall be paid at double the hourly rate.

SHIFT DIFFERENTIALS:

Shift work must run for a minimum of 5 consecutive workdays.

When two (2) or three (3) shifts are worked the following shall apply:

1st shift (between the hours of 8:00 AM and 4:30 PM)

2nd shift (between the hours of 4:30 PM and 12:30 AM): 8 hours of work + 10% of the regular rate of pay for 7.5 hours worked.

3rd shift (between the hours of 12:30 AM and 8:00 AM): 8 hours of work + 15% of the regular rate of pay for 7 hours worked.

OVERTIME:

Hours in excess of 8 per day, or before or after the regular workday Monday through Friday, that is not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate. All hours on Sundays and Holidays shall be paid double the hourly rate.

Four 10-hour days may be worked, at straight time, between 6:00 AM and 6:00 PM, Monday through Thursday with Friday used as a make-up day.

RECOGNIZED HOLIDAYS:

New Year's Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day or on days celebrated.

WORKING RULES:

There shall be a Foreman in charge of each work crew. No crews are to exceed twelve (12) men, including Foremen.

There shall be a General Foreman designated for transmission work when three (3) or more crews are on the same job and for distribution work where there are more than twenty (20) employees on site.

A small job crew shall consist of five (5) or less employees, one (1) of the Journeyman Linemen in the crew shall be designated as a Small Job Foreman.

Work performed from ladders and/or mechanical lift equipment shall be the work of Linemen and/or Apprentices.

On new construction, fitting and framing poles, towers or structures may be done by Journeymen and/or Apprentices. Groundmen may assist, but may not perform any work which would be performed by Linemen if assembled in the air.

There shall be a Journeyman Lineman in each pole setting, erection, grounding, wire and cable-pulling crew of more than three (3) men.

Effective Dates:

12/05/2021

Rate	Fringe	Total
65.28	53.00	118.28

CLASSIFICATIONS:

General Foreman

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date :

Effective Dates:

12/05/2021

Rate	Fringe	Total
58.14	48.74	106.88

CLASSIFICATIONS:

Foreman

Effective Dates:

12/05/2021

Rate	Fringe	Total
55.08	46.90	101.98

CLASSIFICATIONS:

Small Job Foreman

Effective Dates:

12/05/2021

Rate	Fringe	Total
51.00	44.47	95.47

CLASSIFICATIONS:

Heavy Equipment Operator

Effective Dates:

12/05/2021

Rate	Fringe	Total
51.00	44.47	95.47

CLASSIFICATIONS:

Cable Splicer

Effective Dates:

12/05/2021

Rate	Fringe	Total
51.00	44.47	95.47

CLASSIFICATIONS:

Journeyman Lineman

Effective Dates:

12/05/2021

Rate	Fringe	Total
51.00	44.47	95.47

CLASSIFICATIONS:

Journeyman Welder

ELECTRICIAN- UTILITY WORK (SOUTH) **Rates Expiration Date :**

Effective Dates:

12/05/2021

Rate	Fringe	Total
51.00	44.47	95.47

CLASSIFICATIONS:

Journeyman Painter

Effective Dates:

12/05/2021

Rate	Fringe	Total
40.80	38.24	79.04

CLASSIFICATIONS:

Light Equipment Operator

Effective Dates:

12/05/2021

Rate	Fringe	Total
35.70	35.33	71.03

CLASSIFICATIONS:

Groundman Truck Driver

Effective Dates:

12/05/2021

Rate	Fringe	Total
33.15	33.82	66.97

CLASSIFICATIONS:

Groundman 3rd Year

Effective Dates:

12/05/2021

Rate	Fringe	Total
30.60	32.30	62.90

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

12/05/2021

Rate	Fringe	Total
28.05	30.77	58.82

CLASSIFICATIONS:

Groundman 1st Year

TERRITORY
ENTIRE STATE

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

ELECTRICIAN- UTILITY WORK (SOUTH) Rates Expiration Date :

Effective Dates:

12/05/2021

Rate	Fringe	Total
21.78	27.02	48.80

CLASSIFICATIONS:

Flagman

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS **Rates Expiration Date :**

****THESE RATES APPLY TO CONSTRUCTION ON NEW TRANS HUDSON TUNNELS ONLY****

{For apprentice rates refer to "Laborer - Heavy & General" apprentice rates in any county rate package}

The regular workday consists of 8 hours, starting at 7:00 AM or 8:00 AM.

SHIFT DIFFERENTIALS:

- Shifts must start at 3:00 PM, 4:00 PM, 12:00 AM, or 1:00 AM, to be considered shift work, except when the project owner mandates special hours of work in the job specifications, in which case those hours may be considered shift work.
- When such hours are mandated by the project owner, a shift that begins before midnight on Friday and ends on Saturday morning, or that begins at or after 8:00 PM on Sunday and ends on Monday morning may be paid at the shift differential rate.
- Shifts shall receive an additional \$3.00 per hour.

OVERTIME:

- Hours in excess of 8 per day, Monday through Friday, or outside of the regular workday that are not shift work, and all hours on Saturdays, shall be paid at time and one-half the hourly rate. All hours on Sundays and holidays shall be paid at double the hourly rate.
- Four 10-hour days may be worked, Monday through Thursday, at straight time, with Friday used as a make-up day for a day lost to inclement weather. If Friday is not a make-up day, all hours on Friday shall be paid at time and one-half the hourly rate.

RECOGNIZED HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. Sunday holidays observed the following Monday. Veterans Day may be substituted for the day after Thanksgiving. However, in the trading of Veterans Day for the day after Thanksgiving, if overtime is worked on Veterans Day, it shall be paid at double the hourly rate.

Hazardous Waste Work:

- where Level A, B, or C protection is required: + \$3.00/hr
- other Hazardous Waste site: + \$1.00/hr

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
70.58	33.73	104.31	107.86	111.19

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

	09/01/2021		03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
70.13	33.73	103.86	107.41	110.74

CLASSIFICATIONS:

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

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS **Rates Expiration Date :**

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
69.38	33.73	103.11	106.66	109.99

CLASSIFICATIONS:

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

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
73.13	33.73	106.86	110.41	113.74

CLASSIFICATIONS:

Blaster

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
68.55	33.73	102.28	105.83	109.16

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
68.03	33.73	101.76	105.31	108.64

CLASSIFICATIONS:

Skilled Men (including Caulker, Powder Carrier, all other skilled men)

Skilled Men (including Miner, Drill Runner, Iron Man, Conveyor Man, Maintenance Man, Safety Miner, Rigger, Block Layer, Cement Finisher, Rod Man)

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
67.80	33.73	101.53	105.08	108.41

CLASSIFICATIONS:

Semi-Skilled Men (including Bell or Signal Man top or bottom, Form Worker & Mover, Concrete Worker, Shaft Man, Tunnel Laborer, Caulker's Helper, all other semi-skilled)

Semi-Skilled Men (including Miner's Helper, Chuck Tender, Track Man, Nipper, Brake Man, Derail Man, Cable Man, Hose Man, Gravel Man, Form Man)

TERRITORY
ENTIRE STATE

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

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS Rates Expiration Date :

Effective Dates:

09/01/2021			03/01/2022	03/01/2023
Rate	Fringe	Total	Total	Total
67.20	33.73	100.93	104.48	107.81

CLASSIFICATIONS:

All others (including Powder Watchman, Change House Attendant, Top Laborer, Job Steward)

TECHNICAL SPECIFICATIONS

CONDITIONS SPECIFIC TO THIS PROJECT

The 2022 County Aid Resurfacing Project consists of the resurfacing of 18.41 miles of roadway within Union County. The specific roads are as listed below:

- Cedar Brook Park Drive (from approximately 130 ft east of Lake View Terrace to Park Ave);
- Central Avenue (from East Broad Street to South Avenue);
- Chestnut Avenue (from Hillside Avenue to Irvington Boundary Line);
- Echo Lake Park Drive (from Mountain Avenue to Mill Lane);
- Hillside Avenue (from Springfield Avenue to Mountain Avenue);
- Meisel Avenue (from South Springfield Avenue to 280 ft north of Wabeno Avenue);
- Michigan Avenue (from West Colfax Avenue/Roselle Park Boundary Line to Route 22);
- Morris Avenue (from Westfield Avenue to North Avenue);
- North Broad Street (from Newark Avenue to Bailey Avenue/Newark Boundary Line);
- Orchard Street (from Cherry Street to Morris Avenue);
- Orchard Street / Shunpike Road (from Morris Avenue to Route 78);
- Park Drive (from Springfield Avenue to Terminus);
- Pearl Street (from Route 271/Rahway Avenue to Clarkson Avenue);
- Plainfield Avenue (from 360 ft south of Huntington Avenue to Fifth Street);
- Raritan Road (from Walnut Street to Centennial Avenue);
- South Avenue (from Westfield Circle to Centennial Avenue);
- Stiles Street (from Linden Avenue to Valley Road);
- Summit Avenue (from Morris Avenue to Route 24); and
- West Hazelwood Avenue (from Saint Georges Avenue to Fulton Street).

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

- Pavement repair prior to resurfacing;
- 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 damaged traffic signal loop detectors;
- Upgrade or installation of street name signs; and
- 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.

Milling, manhole work, and paving will be performed during the day on the following roads:

- Park Drive (from Springfield Avenue to Terminus) (Township of Cranford)
- Raritan Road (from Walnut Street to Centennial Avenue) (Township of Cranford)

Accessible curb ramps and existing non-compliant curb ramps will be constructed and/or reconstructed in compliance with ADA and PROWAG standards as needed. Granite 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 and NJPDES 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 rideability 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-ramp 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 and 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 and 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 18.41 miles of County roads will be improved under this Program as follows:

Municipality	Street	From	To	Length (Miles)
Plainfield	Cedar Brook Park Dr.	Approx. 130 ft. east of Lake View Terr.	Park Ave.	0.37
Westfield	Central Ave.	East Broad St.	South Ave	0.33
Hillside	Chestnut Ave.	Hillside Ave.	Irvington Line	0.39
Mountainside	Echo Lake Park Dr.	Mountain Ave.	Mill Ln.	0.98
Springfield	Hillside Ave.	Springfield Ave.	Mountain Ave.	0.38
Springfield	Meisel Ave.	S. Springfield Ave.	280 ft. north of Wabeno Ave.	1.19
Kenilworth	Michigan Ave.	W. Colfax Ave./ Roselle Park	Route 22	1.82
Elizabeth, Union	Morris Ave.	Westfield Ave.	North Ave.	0.74
Elizabeth, Hillside	North Broad St.	Newark Ave.	Bailey Avenue/ Newark Line	1.86
Elizabeth	Orchard St.	Cherry St.	Morris Ave.	0.17
Springfield, Summit	Orchard St./ Shunpike Rd.	Morris Ave.	Route 78	0.64
Cranford	Park Dr.	Springfield Ave.	Terminus	0.31
Elizabeth	Pearl St.	Route 27/Rahway Ave.	Clarkson Ave.	0.95
Plainfield	Plainfield Ave.	360 ft. south of Huntington Ave.	5 th St.	0.93
Cranford	Raritan Rd.	Walnut St.	Centennial Ave.	1.14

Municipality	Street	From	To	Length (Miles)
Westfield, Garwood, Cranford	South Ave.	Westfield Circle	Centennial Ave.	2.69
Linden	Stiles St.	Linden Ave.	Valley Rd.	1.53
Summit	Summit Ave.	Morris Ave.	Route 24	1.48
Rahway	W. Hazelwood Ave.	St. Georges Ave.	Fulton St.	0.51
Total Mileage				18.41

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 and 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 pavement 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 and prior to the road being opened to traffic. Permanent striping and 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 and 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 and 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 and sidewalk; restoration associated with the various pay items; striping and 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 and protection of traffic. The County will perform construction inspection and materials testing.

The required time of completion for this project is 180 (one hundred and eighty) calendar days from the Notice to Proceed.

In addition to the standard resurfacing operations performed along each road (milling, resurfacing, striping and markings, raised pavement markings and 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 and 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 and 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. Quantities Tables 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
Plainfield	Cedar Brook Park Dr.	Park Ave.
Westfield	Central Ave.	South Ave., North Ave., East Broad St.
Hillside	Chestnut Ave.	Hillside Ave.
Springfield	Hillside Ave.	Springfield Ave., Mountain Ave.
Springfield	Meisel Ave.	Milltown Rd.
Kenilworth	Michigan Ave.	W. Colfax Ave., Fairfield Ave., Boulevard
Elizabeth, Union	Morris Ave.	North Ave., Cherry St., Orchard St./Irvington Ave., Westfield Ave.
Elizabeth, Hillside	North Broad St.	Newark Ave., North Ave., Wilder St., King St., Lexington Pl., Lower Rd., Hollywood Ave., Central Ave./Evans Terminal Rd., Hillside Ave., Mertz Ave.
Elizabeth	Orchard St.	Cherry St., Morris Ave.
Springfield, Summit	Orchard St./ Shunpike Rd.	Morris Ave.
Elizabeth	Pearl St.	Washington Ave., S. Broad St., Bridge St., South St.
Plainfield	Plainfield Ave.	W. 7 th St.
Cranford	Raritan Rd.	Walnut Ave., Centennial Ave./N. Stiles St.
Westfield, Garwood, Cranford	South Ave.	Summit Ave., Central Ave., Center St., East St., Lincoln Ave. W., S. Union Ave., Walnut Ave., High St., Centennial Ave.
Linden	Stiles St.	Linden Ave., W. Elizabeth Ave., Keep St., W. St. Georges Ave., Forest Dr., Princeton Rd., Valley Rd.
Summit	Summit Ave.	Morris Ave., Broad St., Springfield Ave., Deforest Ave., Morris Tpk.
Rahway	W. Hazelwood Ave.	St. Georges Ave., Pierpont St., Jaques Ave.

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 and use due care when operating in their vicinity.

SPECIAL PROVISIONS
2022 ROAD RESURFACING PROJECT
VARIOUS MUNICIPALITIES
COUNTY OF UNION

AUTHORIZATION OF CONTRACT

The contract for this project is authorized by the provisions of local public contracts law, NJSA 40A: 11-1 et seq.

SPECIFICATIONS TO BE USED

The 2019 Standard Specifications for Road and Bridge Construction, of the New Jersey Department of Transportation as amended herein will govern the construction of this Project. However, the Contractor is advised that with respect to bidding requirements and conditions, as well as the award and execution of contract, the requirements established within the Instructions to Bidders, General Conditions, and Bid Documents sections provided elsewhere within this specifications package shall prevail over the 2019 Standard Specifications for Road and Bridge Construction, of the New Jersey Department of Transportation.

These Special Provisions consist of the following:

Pages 1 to 14 inclusive.

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

Attachment A – Additional Technical Specifications for Non-NJDOT Payment Items

WAGE RATES

The contractor shall pay the minimum wage rates determined by the New Jersey Department of Labor.

State wage rates may be obtained from the New Jersey Department of Labor (Telephone: 609-292-2259) or by accessing the Department of Labor'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 will be made a part of this Contract, pursuant to Chapter 150, Laws of 1963 (NJSA 34:11-56.25, *et seq.*).

In the event it is found that any employee of the contractor or any subcontractor covered by the contract, has been paid a rate of wages less than the minimum wage required to be paid by the contract, the contracting agency may terminate the contractor's or subcontractor's right to proceed with the work, or such part of the work, as to which there has been a failure to pay required wages and to prosecute the work to completion or otherwise. The contractor and his sureties shall be liable to the contracting agency for any excess costs occasioned thereby.

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 three (3) calendar days prior to the start of construction.

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

Payment for a pay item in the proposal includes all the compensation that will be made for the work of that item as described in the contract documents unless the "measurement and 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 20047 Standard Specifications unless otherwise noted.

Whenever reference to page number is made, it is construed to refer to the 20047 Standard Specifications unless otherwise noted.

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

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

DIVISION 100 – GENERAL PROVISIONS

SECTION 101 – GENERAL INFORMATION

101.03 TERMS

THE FOLLOWING TERMS ARE CHANGED OR ADDED:

Commissioner. The term “Commissioner” means the Mayor of the municipality when the Contract is to be executed by a municipality, either as created by law, acting or through his duly authorized representatives, such representative acting within the scope of the particular duties delegated to them.

Department. The term “Department” means the Owner where the Contract is to be executed.

Department Laboratory. The term “Department Laboratory” means the testing laboratory retained by the Owner, or as the Owner may designate.

Engineer. The term “Engineer” means the Owner’s Engineer, acting directly or through his duly authorized representatives, such representatives acting within the scope of the particular duties delegated to them.

R.E. The abbreviation “R.E” means the Owner’s field representative having direct supervision of the administration of the Contract as designed by each Municipal Engineer in the Cooperative.

Contracting Agency. The term “contracting agency” means the public entity who issues the Master Contract. The Contracting Agency is the County of Union.

101.04 INQUIRIES REGARDING THE PROJECT

SUBSECTION 1 IS MODIFIED AS FOLLOWS

1. **Before Award of Contract.** Submit inquiries to the following individual:

David R. Atkinson, P.E., P.P., C.M.E.
Neglia Engineering Associates
200 Central Avenue, Suite 102, Mountainside, NJ 07092
Email: datkinson@negliaengineering.com
Telephone: (201) 939-8805

2. **After Award of Contract.**

David R. Atkinson, P.E., P.P., C.M.E.
Neglia Engineering Associates
200 Central Avenue, Suite 102, Mountainside, NJ 07092
Email: datkinson@negliaengineering.com
Telephone: (201) 939-8805

THE FOLLOWING SECTIONS ARE REMOVED

SECTION 102 – BIDDING REQUIREMENTS AND CONDITIONS

SECTION 103 – AWARD AND EXECUTION OF CONTRACT

THE FOLLOWING IS ADDED WITH RESPECT TO THE AFOREMENTIONED REMOVED SECTIONS:

With respect to bidding requirements and conditions, as well as the award and execution of contract, the Contractor shall comply with the requirements established within the Instructions to Bidders, General Conditions, and Bid

Documents sections provided elsewhere within this specifications package. The County’s contract requirements shall prevail over the 2019 NJDOT Standard Specifications with respect to the same.

SECTION 105 – CONTROL OF WORK

105.07.01 Working in the Vicinity of Utilities

A. Initial Notice.

THE FOLLOWING IS ADDED

A listing of respective utility purveyors is provided within the contract plans. The Contractor shall be responsible for contacting the respective utilize purveyors prior to construction commencement to acquire utility mark-outs.

SECTION 105 – CONTROL OF MATERIAL

106.03 FOREIGN MATERIALS

THE FOLLOWING IS ADDED AFTER PARAGRAPH 4

The Contractor’s attention is directed to all existing Federal and State statutes and regulations which prohibit on any Public Work, the use of materials produced or manufactured outside of the United States of America. Exceptions to this prohibition, upon the findings of the R.E., are allowed only where such enforcement would be inconsistent with public interest or where the materials is not produced or manufactured in the United States in commercial quantities and of sufficient quality.

If the R.E. finds that in performance of the Contract there has been a failure to comply with the provisions relative to foreign materials, the R.E. shall make public such 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 (3) years after such findings is made public.

When the use of foreign material is allowed by the R.E. such material shall be furnished in accordance with the following requirements:

1. Materials manufactured or produced outside the United State shall be delivered to a location, approved by the R.E., where they shall be retained until examination can be completed.
2. The Contractor shall arrange, at his expense, any testing which the R.E. feels necessary to ascertain the acceptability of the material.
3. Each lot of foreign material shall be accompanied by a Certificate of Compliance. In addition, certified mill test 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 information as previously described above.

On project utilizing Federal funds, the Contractor’s particular attention is directed to the Federal Statutes and regulations which establish the “Buy American” requirements applicable to the project. The Contractor must comply with these requirements in addition to those provided under applicable State Law.

SECTION 107 – LEGAL RELATIONS

107.11 RISKS ASSUMED BY THE CONTRACTOR

107.11.02 General Insurance

SUBSECTIONS A AND B OF THIS SECTION ARE REMOVED AND REPLACED WITH THE FOLLOWING

The Contractor (i) shall purchase from a company or companies lawfully authorized to do business in the jurisdiction in which the project is located, and shall carry, the insurance described in subparagraphs A through D below, in the minimum limits shown, for the purpose of protecting the Contractor and, under the insurance described in subparagraphs B through D below, its Additional Insureds, including the Owner (County of Union) the Engineer (Neglia Engineering Associates) each of the municipalities in which the on-site Work is to be performed, as well as their respective agents, officers and employees, from claims (including claims for damages for bodily injury, including accidental or wrongful death, as well as claims for property damage) which may arise out of or result from the Contractor’s operations under the Contract and for which the Contractor may be legally liable, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable; (ii) shall obtain and deliver to the Owner the Certificates of Insurance required by subparagraph E below; (iii) shall also ensure that all of its Subcontractors carry the coverages described in subparagraphs A through E below, in the minimum limits shown, it being understood, however, that a Subcontractor shall be excused from carrying any of such insurance only if such Subcontractor is named an Additional Insured under the Contractor’s policy or policies; and (iv) shall obtain and deliver to the Owner copies of Certificates of Insurance from all such Subcontractors confirming the existence of their required insurance coverage:

(A) Worker’s Compensation Insurance

The Contractor shall carry Worker’s Compensation Insurance in accordance with the Statutes of The State of New Jersey. Under Coverage A, Worker’s Compensation, such coverage will be Statutory. Under Coverage B, Employers’ Liability, such coverage will be unlimited as respects employees subject to the New Jersey Workers’ Compensation Law, and not less than \$1,000,000 for other employments or exposures.

(B) Commercial General Liability Insurance

The Contractor shall carry Commercial General Liability Insurance equal in form to that offered under the latest version of Standard ISO (Insurance Services Office) Form CG0001, as filed with and approved by the New Jersey Department of Banking and Insurance. The coverage under the Commercial General Liability Insurance policy may not be restricted by any endorsement attached thereto. The policy limits shall not be less than:

\$1,000,000	Each Occurrence.
\$100,000	Fire Legal Liability.
\$1,000,000	Personal and Advertising Injury Liability.
\$2,000,000	General Aggregate**.
\$2,000,000	Completed Operations/Products Liability/Aggregate.

** The General Aggregate shall apply separately for each project or location of the Contractor.

The Owner (County of Union), the Engineer (Neglia Engineering Associates) and each of the municipalities in which the on-site Work is to be performed, as well as their respective agents, officers and employees, will (through the use of ISO Endorsement Form CG 20 10 07 04, Additional Insured - Owners, Lessees or Contractors) all be named as Additional Insureds under the Contractor’s policy.

(C) Business Auto Liability Insurance

The Contractor shall carry Business Auto Liability Insurance coverage under the latest version of Standard ISO Form CA0001, as filed with and approved by the New Jersey Department of Banking and Insurance. The coverage shall be provided for either Symbol 1 (“Any Auto”) or Symbol 7 (“All Scheduled Vehicles”) plus Symbol 8 (“Hired Vehicles”) plus Symbol 9 (“Non-Owned Vehicles”). This coverage shall be not less

than \$1,000,000 Each Occurrence; and the Owner, the Engineer and each of the municipalities in which the on-site work is to be performed, as well as their respective agents, officers and employees, shall be named as Additional Insureds.

(D) **Umbrella Liability Insurance**

For a Contract for **more than \$250,000**, the Contractor shall carry Umbrella Liability Insurance in a limit **not less than \$5,000,000** Each Occurrence and Annual Aggregate.

For a Contract for **\$250,000 or less**, the Contractor shall carry Umbrella Liability Insurance in a limit **not less than \$1,000,000** Each Occurrence and Annual Aggregate.

No such Umbrella Liability Insurance policy shall be more restrictive than the coverage provided for under the above-described primary policies.

Any such Umbrella Liability Insurance policy shall contain a clause stating that, in the event the primary coverage is impaired or exhausted, such policy shall take effect (drop down) and act as primary coverage until the exhaustion of its limits.

(E) **Certificates of Insurance: If the Contractor has submitted a Consent of Insurance as part of his submission, then in that event, after the Bid of the Contractor has been accepted by the Owner, but simultaneously with the Contractor's entry into a Contract with the Owner, the Contractor shall obtain from its insurer(s) and deliver to the Owner copies of Certificate[s] of insurance (i) confirming that all of the above-described coverage is in full force and effect, (ii) stating the limits of liability and the expiration dates of each policy and type of coverage, (iii) listing all required Additional Insureds, and (iv) stating that the Owner will receive not less than 30 days' advance written notice of either a cancellation of any coverage prior to the expiration date of any policy or any non-renewal (as of the expiration date of any policy) of any insurance coverage. Renewal Certificates covering the renewals of all policies expiring during the life of the Contract shall be filed with the Owner not less than 10 days before the expiration of all such policies.**

The insurance required above shall be written for not less than the limits of liability specified therein. Coverages, whether written or an occurrence or claims-made basis, shall be maintained without interpretation from date of commencement of the Work until the date of final payment and the termination of any coverage required to be maintained after final payment.

The forms and/or amounts of insurance to be furnished by the Contractor and each of its Subcontractors shall not in any way operate to relieve or limit the liability of the Contractor or any Subcontractor under the Contract or any other of the Contract Documents.

The Contractor shall not commence work under the Contract until all insurance required of the Contractor has been obtained and has been approved by the Owner, nor shall the Contractor allow any Subcontractor to commence work on its subcontract until all similar insurance required of the Subcontractor has been obtained and approved by the Owner. Approval of such insurance by the Owner shall not relieve or decrease the liability of the Contractor under the Contract or the Contract Documents.

The Contractor and each of its Subcontractors shall purchase from and maintain insurance with companies which, as of the time of the Bid (in the case of the Contractor) and as of the time of the purchase (in the case of the Subcontractor), have at the very least an A Minus rating by A.M. Best & Company.

All of the insurance to be provided shall be considered to be primary insurance as respects the Owner, the Engineer and the municipalities in which the on-site Work is to be performed. The Contractor will save harmless, indemnify and defend the Owner, the Engineer and the municipalities in which the on-site Work is to be performed, as well as their respective agents, officers and employees, from any and all claims arising out of the Contractor's performance.

THE FOLLOWING SECTION IS REMOVED

SECTION 108 – PROSECUTION AND COMPLETION

With respect to the prosecution and completion of the contract, the Contractor shall comply with the requirements established within the Instructions to Bidders, General Conditions, and Bid Documents sections provided elsewhere within this specifications package. The County's contract requirements shall prevail over the 2019 NJDOT Standard Specifications with respect to the same.

DIVISION 150 – CONTRACT REQUIREMENTS

SECTION 157 – CONSTRUCTION LAYOUT AND MONUMENT

157.04 MEASUREMENT AND PAYMENT

THE FOLLOWING PAY ITEM IS REMOVED

<i>Item</i>	<i>Pay Unit</i>
CONSTRUCTION LAYOUT	DOLLAR

THE FOLLOWING IS ADDED:

No specific payment will be made for construction layout and the cost thereof shall be included in the prices bid for the various items within the bid proposal.

SECTION 159 – TRAFFIC CONTROL

159.02.02 Equipment

THE FOLLOWING IS ADDED TO THE LIST OF EQUIPMENT REFERENCES:

Portable Variable Message Sign w/Remote Communication.....	1001.04
Portable Trailer Mounted CCTV Camera Assembly.....	1001.05

159.03.01 Traffic Control Coordinator

THE FIRST PARAGRAPH BEFORE THE LIST IS CHANGED TO:

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

159.03.02 Traffic Control Devices

THE FIRST PARAGRAPH IS CHANGED TO:

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

2. Construction Barrier Curb.

THE SECOND PARAGRAPH IS CHANGED TO:

At least 30 days before delivering construction barrier curb to the Project Limits, provide the RE notice that the barrier curb is available for inspection. Ensure the barrier curb is not stacked for this inspection. The RE will inspect the barrier curb, along with a Contractor representative, to determine what pieces are

not approved for delivery to the Project Limits. Final determination of construction barrier approval will be made at the time of placement at the Project.

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

159.03.08 Traffic Direction

B. Police.

THE SECOND PARAGRAPH PART 2 IS CHANGED TO:

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

159.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED AFTER THE SECOND PARAGRAPH:

The Department will measure TRAFFIC STRIPES, LATEX and TRAFFIC MARKINGS LINES, LATEX by the linear foot for each specified width of stripe. The Department will not measure gaps in striping.

SECTION 160 – PRICE ADJUSTMENTS

160.03.01 Fuel Price Adjustment

THE FIFTH PARAGRAPH IS CHANGED TO:

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

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

Where:

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

THE SEVENTH PARAGRAPH IS CHANGED TO:

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

160.03.02 Asphalt Price Adjustment

THE THIRD PARAGRAPH IS CHANGED TO:

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

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

Where:

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

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

THE SIXTH PARAGRAPH IS CHANGED TO:

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

DIVISION 200 – EARTHWORK

SECTION 201 – CLEARING SITE

201.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

The payment for the Item CLEARING SITE shall include the following, as required:

- A. Under this item the Contractor shall remove and dispose of the existing asphalt pavement, existing curb ramps, sidewalks, dirt, stones, and all debris as needed within project limits; the removal of which is required for carrying out the work of this project, shall be removed and disposed of off-site.
- B. The Contractor shall remove and dispose of any reinforced concrete pavement, bituminous pavement, castings and curb pieces as necessary for the project. He shall remove and reset street any road signs, remove and reset any shrubs and fences, remove and reset to grade manhole and catch basin frames, gas and water valves, and complete all other removals and relocations required for the work and not specifically covered elsewhere for payment.
- C. The Contractors are advised to make a site visit, check the existing site conditions, and determine the detail scope of work for the site clearing before the bidding of this project.
- D. Removal of debris, disposal of materials, and all else necessary therefore, incidental thereto and included herein.
- E. In addition to the above, this Item includes the furnishing of all materials, labor and equipment and all else necessary therefore and incidental thereto as required for the site clearing and all incidental work necessary.

DIVISION 400 – PAVEMENTS

SECTION 401 – HOT MIX ASPHALT (HMA) COURSES

401.03.07 HMA Courses

A. Paving Plan.

PART (4) IS CHANGED TO:

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

C. Test Strip

REPLACE THE FIRST PARAGRAPH OF THIS SECTION WITH THE FOLLOWING:

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

D. Transportation and Delivery of HMA.

THE SECOND SENTENCE OF THE FIRST PARAGRAPH IS CHANGED TO:

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

G. Opening to Traffic.

THE FOLLOWING IS ADDED AFTER THE LAST PARAGRAPH:

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

H. Air Void Requirements

FOR LOCAL AID PROJECTS, THIS SUBSECTION IS REPLACED BY THE FOLLOWING.

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

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

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

The Laboratory will determine air voids from 5 (Five) 6 inch diameter cores taken from each lot in random locations within the traveled way and at least one core in each travel lane. The [HMA Core Sampling Plan form](#) provided on the [Local Aid Website](#) must be utilized by the Laboratory to determine the random locations of the cores. The Laboratory may rerun the random location functions on the HMA Core Sampling Plan form to resolve any conflicts generated by the HMA Core Sampling Plan form and physical limitations of the HMA lot, such as utility conflicts,

or the specifications defined herein. The coring locations must be designated by a station and offset, and offsets are taken from the left edge of the pavement in the direction of travel within the lane lines. The Laboratory must disclose the contents of the HMA Core Sampling Plan with the Contractor to assist in the schedule of construction.

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

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

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

The Laboratory will calculate pay adjustments based on the following:

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

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

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

2. Quality Index (Q).

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

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

3. Percent Defective (PD). Using NJDOT ST for the appropriate sample size, the Laboratory will determine PD_L and PD_U associated with Q_L and Q_U , respectively. $PD = PD_L + PD_U$

4. **Reduction Per Lot.** Calculate the reduction per lot as specified in Table 401.03.07-3:

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

5. **Outlier Detection.** If $PD < 10$, the Laboratory will not screen for outliers. If $PD \geq 10$, the Laboratory will screen acceptance cores for outliers using a statistically valid procedure. The following procedure applies only for a sample size of 5 or 10.

- The Laboratory will arrange the core results in ascending order, in which X_1 represents the smallest value and X_N represents the largest value.
- If X_N is suspected of being an outlier, the Laboratory will calculate:

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

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

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

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

If an outlier is detected for $N = 5$ and no retest is warranted, the Contractor may replace that core by taking an additional core at the same offset and within 5 feet of the original station. If an outlier is detected and a retest is justified, take a replacement core for the outlier at the same time as the 5 additional retest cores are taken. If the outlier replacement core is not taken within 15 days, the Laboratory will use the initial core results to determine reduction per lot.

If an outlier is detected for $N = 10$, the Contractor may replace that core by taking an additional core at the same offset and within 5 feet of the original station. If the outlier replacement core is not taken within 15 days, the Laboratory will use the initial core results to determine the reduction per lot.

6. **Retest.** If the initial series of 5 cores produces a percent defective value of $PD \geq 30$ for mainline or ramp lots, or $PD \geq 50$ for other pavement lots, the Contractor may elect to take an additional set of 5 cores at random locations chosen by the HMA Core Sampling Plan form. Take the additional cores within 15 days of receipt of the initial core results. If the additional cores are not taken within the 15 days, the Laboratory will use the initial core results to determine the PPA. If the additional cores are taken, the Laboratory will recalculate the reduction per lot using the combined results from the 10 cores.
7. **Removal and Replacement.** If the final lot $PD \geq 75$ (based on the combined set of 10 cores or 5 cores if the Contractor does not take additional cores), remove and replace the lot and all overlying work. The replacement work is subject to the same requirements as the initial work.

For shoulder lots, the Department will assess the calculated reduction per lot instead of removal and replacement. Fog seal the lot as specified in 422.03.01.

I. Thickness Requirements

DELETE THIS SUBSECTION AND REPLACE THIS SUBSECTION'S CONTENTS WITH THE FOLLOWING:
This subsection is deleted. In no instance will a compacted average thickness of less than 1.25 inches be acceptable.

J. Ride Quality Requirements.

The Department will evaluate the ride quality of the final riding surface of all constructed pavement on the project, for routes designated as National Highway System (NHS) and routes under NJDOT jurisdiction, using the International Roughness Index (IRI) according to ASTM E 1926. All NHS roadways are listed on the Department's website [here](#). The Department may evaluate ride quality of other routes not designated as NHS or under NJDOT jurisdiction. The final riding surface is defined as the last lift of the pavement structure where traffic will be allowed. The pavement will be evaluated using the current average IRI (C) to select the target IRI (T) from Table 401.03.07-8. The current average IRI (C) is defined as the preconstruction ride quality measured not more than two years from the start of the project pavement construction.

The RE will designate an independent testing agency to perform the ride quality testing and analysis. The testing agency is required to comply with testing and certification requirements according to NJDOT R-1. If the current average IRI (C) is not available, then the testing agency will test, analyze and report ride quality before pavement construction to measure current average IRI (C). The testing agency will use and submit to the RE the [IRI Testing Summary Report form](#) provided from The Local Aid District Office and verify manually the pay adjustment calculation.

Current IRI data for paving routes designated NHS or NJDOT jurisdiction can be made available by request by contacting Simon Nwachukwu at Simon.Nwachukwu@dot.nj.gov.

For projects paving routes designated NHS or NJDOT jurisdiction on mainline travel lanes equal to or greater than 2,500 feet length and any lane within the project of at least 1,000 feet length, the Department will evaluate the ride quality of the final riding surface of the mainline travel lanes using IRI. The Department will use the measured IRI to calculate the pay adjustment (PA) using pay adjustment equation (PAE) type PA1 as specified in Table 401.03.07-7. PA will be based on lots of 0.01 mile length. The PA will be zero for acceptable quality and negative for inferior quality work.

For projects paving routes designated NHS or NJDOT jurisdiction on mainline travel lanes of less than 2,500 feet length, the RE will visually inspect the final riding surface. Based on visual inspection, if the RE determines that the work may not conform to the ride quality requirements, then the Department will evaluate the ride quality of the final riding surface using IRI. Visual inspection by the RE is considered sufficient grounds for such evaluation. The Department will use the measured IRI to calculate the PA using pay equation type PA1 as specified in Table 401.03.07-7.

For paving on ramps and shoulders, the RE will visually inspect the final riding surface. Based on visual inspection, if the RE determines that the work may not conform to the ride quality requirements, then the

Department will evaluate the ride quality of the final riding surface using IRI. Visual inspection by the RE is considered sufficient grounds for such evaluation. The Department will use the measured IRI to calculate the pay adjustment using pay equation type PA2 as specified in Table 401.03.07-7.

When paving over bridge structures on NHS or NJDOT jurisdiction roadways, the Department will use the measured IRI to calculate the pay adjustment using pay equation type PA3 as specified in Table 401.03.07-7.

For paving on Local roadways other than NHS and NJDOT jurisdiction on mainline travel lanes equal to or greater than 2,500 feet length and any lane within the project of at least 1,000 feet length, the Department may evaluate the ride quality of the final riding surface of the mainline travel lanes using IRI. Local roadways are defined as municipal and county roads that are not designated as part of the NHS. The Department will use the measured IRI to calculate the pay adjustment (PA) using pay adjustment equation (PAE) type PA4 as specified in Table 401.03.07-7.

1. **Smoothness Measurement.** The Department will test the longitudinal profile of the final riding surface for ride quality with a Class 1 Inertial Profiling System according to NJDOT R-1. If project conditions preclude the use of the Class 1 Inertial Profiling System, the Department will use a Class 1 Walking Profiler or lightweight profiler.
2. **Quality Control Testing.** Perform quality control testing during lift placement to ensure compliance with the ride quality requirements specified in Table 401.03.07-8.
3. **Preparation for IRI Testing.** Notify the RE when all paving is complete and the RE will request IRI testing by independent testing agency. Provide traffic control when the independent testing agency performs IRI testing. Perform mechanical sweeping of the surface before IRI testing. To facilitate auto triggering on laser profilers, place a single line of temporary pavement marking tape perpendicular to the roadway baseline at the beginning and end of each lane, shoulder, and ramp to be tested or as per direction of the independent testing agency. Submit the actual stationing for each temporary pavement marking tape location to the RE.
4. **Quality Acceptance.** The Department will determine acceptance and provide PA based on the following:
 - a. **Pay Adjustment.** The acceptable IRI for the roadway pavement will be the target IRI (T) from Table 401.03.07-8 rounded to the nearest whole number for which full payment will be made and will be determined using the latest available current average IRI (C) data. The number of lots for final pay adjustment will be reduced by the number of lots excluded for each segment shown in Table 401.03.07-7. Lots excluded from final PA will be those with the highest recorded IRI numbers for respective roadway and bridge deck segments. A single average IRI value and the corresponding PA for each 0.01 mile lot will be reported. IRI units are in inches per mile.

Table 401.03.07-7 Pay Adjustment Equations (PAE) for Ride Quality			
Pay Equation Type	Exclusions	Pay Equations	
PA1	As shown in the Special Provisions Table 401.03.07-7A	IRI < T	PA1 = 0 ²
		T ≤ IRI ≤ 170	PA1 = PAE
		IRI > 170	PA1 = -A or Corrective action
PA2	Will include, if tested	IRI ≤ 120	PA2 = 0 ²
		120 < IRI ≤ 170	PA2 = (IRI - 120) x (-\$5.00)
		IRI > 170	Maximum Negative Pay or Corrective action
PA3	Will include, if tested	IRI ≤ 120	PA3 = 0 ²
		120 < IRI ≤ 170	PA3 = PAE
		IRI > 170	PA3 = -A or Corrective action
PA4	Will include, if tested	IRI ≤ T	PA4 = 0 ²

		T < IRI ≤ T+80 or 170 whichever is higher	PA4 = (IRI - T) x (-\$1.25)
		IRI > T+80 or 170 whichever is higher	Maximum Negative Pay or Corrective action

$$PAE = \frac{A}{-37.75347 \times \log_e(T) + 194.87} - \frac{A}{-37.75347 \times \log_e(IRI) + 194.87}$$

$$A = 1267.2 \left[\frac{M}{9} + \frac{PD}{150} \right]$$

P = Bid price of last lift of the pavement structure to be evaluated or price listed in table 401.03.07-7B, whichever is higher, per Ton

D^l = Design thickness of last lift to be evaluated, Inch

M = Bid price of Milling, per Square Yard

T = Target IRI

- For various design thicknesses of last lift to be evaluated within a segment, calculate the thickness using the following equation:

$$\text{Design thickness of last lift to be evaluated (D)} = \frac{D_1 N_1 + D_2 N_2 + \dots + D_N N_N}{N_1 + N_2 + N_3 + \dots + N_N}$$

Where:

D_N = Design thickness of the last lift to be evaluated of N sections having same mix, Inch

N_N = Number of lots of N section with design thickness D_N of last lift to be evaluated

- Positive pay adjustment will be used to offset negative pay adjustment. Total pay adjustment will not be greater than zero.

Table 401.03.07-7B Minimum Value of P

Surface Course Mix	P
Hot Mix Asphalt (Dense Graded) with PG 64-22 binder	\$60.00
Hot Mix Asphalt (Dense Graded) with PG 64E-22 binder	\$70.00
Stone Matrix Asphalt, High Performance Thin Overlay, Ultra-Thin Friction Course, Open Graded or Gap Graded Mixes not specified in this table	\$80.00
Bridge Deck Waterproof Surface Course	\$250.00

Table 401.03.07-8 Target IRI for Resurfacing or Reconstruction (T)³

Roadway Type	Current average IRI (C)	New Construction or Reconstruction	Number of Operation for other than New Construction or Reconstruction ⁵			
			One ⁴	Two ⁴	Three ⁴	Four or More ⁴
Target IRI (T)						
NHS & NJDOT Freeways or Limited Access Highways	≤ 60	50	50	50	50	50
	61 to ≤95		53	50	50	50
	96 to ≤170		55	53	50	50
	171 to ≤200		0.64C ⁷	55	53	50
	201 to ≤285			58	55	50
	>286 ⁸			60	58	53
NHS & NJDOT Roadways other than Freeways or Limited Access Highways with speed limit > 35 MPH	≤ 60	60	60	60	60	60
	61 to ≤95		63	60	60	60
	96 to ≤170		66	63	60	60
	171 to ≤200		0.64C ⁷	66	63	60
	201 to ≤285			69	66	60
	>286 ⁸			72	69	63
NHS & NJDOT Roadways other than Freeways or Limited Access Highways with speed limit ≤ 35 MPH	≤ 60	70	70	70	70	70
	61 to ≤95		74	70	70	70
	96 to ≤170		77	74	70	70
	171 to ≤200		0.64C ⁷	77	74	70
	201 to ≤285			81	77	70
	>286 ⁸			84	81	74
Local Roadway with Posted Speed ≥45 MPH	C	80	0.7C or 80 whichever is higher	0.49C or 80 whichever is higher	0.34C or 80 whichever is higher	0.24C or 80 whichever is higher
Local Roadway with Posted Speed <45 MPH	C	100	0.84C or 100 whichever is higher	0.59C or 100 whichever is higher	0.41C or 100 whichever is higher	0.29C or 100 whichever is higher

- The Department will determine target IRI (T) of roadways containing multiple speed limits of greater than 35 MPH and less than or equal to 35 MPH based on the following equation:

$$\text{Target IRI of a roadway consists of N Roadway type (T)} = \frac{T_1 L_1 + T_2 L_2 + \dots + T_N L_N}{L_1 + L_2 + L_3 + \dots + L_N}$$

Where T_N is the Target IRI of N section and L_N is the length of N section in miles to the nearest 0.01 mile

- Current average IRI (C) is the average of the latest available preconstruction IRI data.
- The target IRI (T) is selected or calculated from the table and rounded to the nearest whole number.
- Multiply T with 1.05 for HMA over Concrete, if total HMA after proposed treatment is less than 8 inch thick.
- Milling is one operation. Paving each layer of asphalt mix is an individual operation unless plans specify paving a mix in two lifts. In such case, each lift is considered as an operation.
- Construction or reconstruction of full pavement box on subgrade is new construction or reconstruction.
- Use Pay Equation as below:

IRI ≤ T	PA = 0
IRI > T	PA = PAE
- For paving over rubblized concrete, use C > 286 to determine target IRI, then multiply T with 1.05 if total HMA after proposed treatment is less than 8-inch thick.
- Paving in one lift with no corrective work such as milling, grinding or pre-levelling of at least 25 percent of surface area of existing pavement is one operation.

- b. **Corrective Action.** The Department may require corrective action or assess the maximum negative pay adjustment as computed in Table 401.03.07-7, if the average IRI after testing is performed of NHS or NJDOT jurisdiction roadway is greater than 170 inches per mile, or average IRI local roadway is greater than T+80 or 170 whichever is higher. If the Department requires corrective action submit a plan for corrective action. If the plan for corrective action is approved and the lot is corrected, the Department will retest and evaluate the corrected area as a new lot that must meet the same requirements as the initial work. If the plan for corrective action is not approved, the Department may require removal and replacement. The replacement work is subject to the same requirements as the initial work.

401.03.08 Core Samples

REPLACE THIS SUBSECTION WITH THE FOLLOWING:

The LPA will designate an independent testing agency (Laboratory) to perform the quality assurance sampling, testing and analysis. The Laboratory is required to be accredited by the AASHTO Accreditation Program (www.amrl.net). The Laboratory's accreditation must include AASHTO T 166 and AASHTO T 209. The Laboratory Technician who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

Upon completion of an HMA lot, the Laboratory shall drill cores at random locations at least 12 hours after paving. Take cores in the presence of the RE. The Laboratory will determine air voids from 5 (Five) 6 inch diameter cores taken from each lot in random locations within the traveled way and at least one core in each travel lane. The [HMA Core Sampling Plan](#) form provided on the [Local Aid Website](#) must be utilized by the Laboratory to determine the random locations of the cores. The Laboratory may rerun the random location functions on the HMA Core Sampling Plan form to resolve any conflicts generated by the HMA Core Sampling Plan form and physical limitations of the HMA lot, such as utility conflicts, or the specifications defined herein. The Laboratory must disclose the contents of the HMA Core Sampling Plan with the Contractor to assist in the schedule of construction.

The Laboratory shall use drilling equipment with a water-cooled, diamond-tipped masonry drill bit that produces 6 inch nominal diameter cores for the full depth of the pavement. The Laboratory shall remove the core from the pavement without damaging it. After the Laboratory removes the core, the Laboratory shall remove all water from the hole. The Laboratory shall apply an even coating of tack coat to sides of the hole. The Laboratory shall place cold patching material or HMA in maximum lifts of 4 inches in the hole and compact each lift. If cold patching material is utilized to fill the coring hole, then it is not necessary to apply tack coat to the sides of the hole. The Laboratory shall ensure that the final surface is 1/4 inch above the surrounding pavement surface.

HMA cores are to be taken from the HMA lot for quality assurance sampling, testing and analysis within seven (7) days of completing the HMA lot. For test strip lots and the first traveled way lot, the Laboratory shall deliver cores from the field to the testing Laboratory within 48 hours of completing the lot. The Laboratory shall deliver all other acceptance cores within 7 days of completing the lot.

After each air void lot is placed, the Laboratory shall drill cores so that the full depth of the course is recovered for air void acceptance testing. If thickness acceptance testing is required as specified in 401.03.07.I, the Laboratory shall drill the surface course air void cores for the full depth of pavement.

The Laboratory shall utilize a tamper proof core sample box for core storage and transportation. The Laboratory shall ensure that the core sample box can be locked and sealed and is tamper proof in such a manner that it cannot be opened without removing the seals. The Laboratory shall ensure that the core sample box provides protection for the cores from being disturbed or damaged during transit. The Laboratory shall mark the assigned core number on the side of the sample. The Laboratory shall place core samples in the core sample box. The Laboratory shall transport the sealed core sample boxes to the testing Laboratory.

The Laboratory will not accept damaged core samples for testing. If the core sample box exhibits indications of tampering, the core samples will be rejected. If any core samples are rejected, drill a replacement core at the same offset and within 5 feet of the original station and deliver to the Laboratory as specified above within 48 hours.

If the project is utilizing quality control cores, the Laboratory shall provide the results of the quality control core testing to the Contractor in a timely manner which will not unnecessarily impede construction.

401.04 Measurement and Payment

REPLACE THIS SUBSECTION WITH THE FOLLOWING:

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

<i>Item</i>	<i>Pay Unit</i>
HMA MILLING, 3" OR LESS	SQUARE YARD
HMA MILLING, MORE THAN 3" TO 6"	SQUARE YARD
CONCRETE MILLING	SQUARE YARD
MICRO-MILLING	SQUARE YARD
HMA PROFILE MILLING	SQUARE YARD
HOT MIX ASPHALT PAVEMENT REPAIR	SQUARE YARD
SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LINEAR FOOT
POLYMERIZED JOINT ADHESIVE	LINEAR FOOT
TACK COAT	GALLON
TACK COAT 64-22	GALLON
POLYMER MODIFIED TACK COAT	GALLON
PRIME COAT	GALLON
HOT MIX ASPHALT _____ SURFACE COURSE	TON
HOT MIX ASPHALT _____ SURFACE COURSE HIGH RAP	TON
HOT MIX ASPHALT _____ INTERMEDIATE COURSE	TON
HOT MIX ASPHALT _____ INTERMEDIATE COURSE HIGH RAP	TON
HOT MIX ASPHALT _____ BASE COURSE	TON
HOT MIX ASPHALT _____ BASE COURSE HIGH RAP	TON

The specified depth of the milling is measured from the original surface to the top of the high spots of the textured surface.

The RE will measure HOT MIX ASPHALT PAVEMENT REPAIR before overlay by the square yard of area bounded by the sawcuts.

The RE will measure TACK COAT, TACK COAT 64-22, PRIME COAT, and POLYMER MODIFIED TACK COAT by the volume delivered, converted to the number of gallons at 60 °F as calculated by the temperature-volume correction factors specified in 902.01.

The RE will measure HOT MIX ASPHALT _____ SURFACE COURSE, HOT MIX ASPHALT _____

_____ INTERMEDIATE COURSE, and HOT MIX ASPHALT _____ BASE COURSE by the ton as indicated on the certified weigh tickets, excluding unused material. When nominal maximum aggregate size 3/8 inch HMA surface course is directed for use in transition (run out) areas, the Department will include this weight with the weight for HOT MIX ASPHALT _____ SURFACE COURSE.

The Department will not include payment for polymerized joint adhesive in the various paving Items. The Department will make payment for polymerized joint adhesive under POLYMERIZED JOINT ADHESIVE.

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

$$\text{Pay Adjustment Per HMA Lot} = - Q \times \text{BP} \times \text{Reduction Per Lot (\%)}$$

Where:

- BP = Bid Price of HMA
- Q = Quantity of HMA in lot receiving payment adjustment
- Reduction Per Lot (%) = Air void Reduction (%) per lot as specified in 401.03.07.H.

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

$$\text{Pay Adjustment Per HMA Lot} = - Q \times \text{BP} \times \text{Percent Reduction (\%)}$$

Where:

BP = Bid Price of HMA

Q = Quantity of HMA in lot receiving payment adjustment

Percent Reduction (%) = Thickness Percent Reduction (%) per lot as specified in 401.03.07.I.

The Department will make a payment adjustment for HMA ride quality, as specified in 401.03.07.J.

DIVISION 600 – MISCELLANEOUS CONSTRUCTION

SECTION 602 – DRAINAGE STRUCTURES

607.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

Payment for the Item RESET EXISTING CASTING shall include resetting of all existing drainage manholes and structures (including inlet curb pieces and grates).

SECTION 606 – SIDEWALKS, DRIVEWAYS, AND ISLANDS

606.01 DESCRIPTION

THE FOLLOWING IS ADDED:

This Section also describes the requirements for the remove of existing pavers and the re-use following leveling and reconstruction of base.

606.03 CONSTRUCTION

606.03.02 Concrete Sidewalks, Driveways, and Islands

THE FOLLOWING IS SUBSECTION IS ADDED:

J. **Subgrade.** All sidewalks and driveways shall contain ¾” clean crushed stone subgrade, as illustrated on the construction details provided within the contract plans. Clean crushed stone shall be uniform in texture and quality and shall conform to the Section 901.03.

THE FOLLOWING SECTION IS ADDED:

606.03.04 RESET BRICK PAVERS

A. **Underlayer Preparation.** Excavate as specified in 202.03.03. Obtain RE approval before finishing excavation. If the RE determines that the bottom of the excavation is unstable, undercut, backfill, and compact as directed by the RE.

B. **Subgrade.** All paver areas shall contain compacted sand setting bed, geotextile/filter fabric barrier, concrete subbase, and aggregate base, as illustrated on the construction details provided within the contract plans.

C. **Placing Pavers.** Pavers shall be placed on approved subbase and compacted appropriately.

D. **Installing Joints.** Polymeric sand to be broom swept and compacted into joints after all cobbles are set. Additional polymeric sand to be applied as needed to fill joints after initial compaction. Clean extra sand from surface of cobbles, then hose down area with water to activate polymeric sand.

E. All pavers shall be constructed in strict conformance with manufacturer specification and in accordance with ADA Standards.

606.04 MEASUREMENT AND PAYMENT

THE FOLLOWING PAYMENT ITEM IS ADDED:

<i>Item</i>	<i>Pay Unit</i>
RESET BRICK PAVERS	SY

THE FOLLOWING IS ADDED:

Payment for the Item RESET BRICK PAVER shall include the removal of existing pavers and the re-use following leveling and reconstruction of base, and all else necessary to construct and/or reconstruct the pavers, as shown on the plans, or directed by the Engineer.

Payment for the Items CONCRETE SIDEWALK, 4” THICK, CONCRETE SIDEWALK; CONCRETE SIDEWALK, REINFORCED, 6” THICK; and CONCRETE DRIVEWAY, REINFORCED, 6” THICK shall include the all required excavation and disposal, subgrade, backfill, steel mesh reinforcement, reinforcement joints, replacement/reconstruction of all existing roof leaders, all materials, labor, sawcutting, equipment, and all else necessary to construct and/or reconstruct the sidewalk and driveway aprons, as shown on the plans, or directed by the County Engineer.

SECTION 607 – CURB

607.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

Payment for the Items 10” x 20” CONCRETE VERTICAL CURB and GRANITE CURB shall include the cost of sawcutting, curb & driveway, backfill, construction of curbs and headers, removal of existing curbs, all work included in the two foot repair strip pay limit as shown in the detail, inclusive of the 6-inch dense graded aggregate section and 4-inch hot mix asphalt base course 19M64 section, to include disturbed striping and signage, and cleaning pavement in connection therewith, all materials, labor and equipment necessary to construct concrete curb, as shown on the plans or as directed by the engineer. No specific payment shall be made for curb replacement due to broken or damaged curb outside of the project limits resulting from contractor error. No separate payment will be made for the reconnection of the sump pump outlets or roof leaders and should be accounted for in the bid items. Locations of proposed portions of curb reconstruction shall be field verified by the County Engineer prior to construction commencement.

SECTION 610 – TRAFFIC STRIPES, TRAFFIC MARKINGS, AND RUMBLE STRIPS

610.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

All traffic stripes and markings installed as part of this project shall be thermoplastic.

610.03.03 RPMs (Raised Pavement Markers)

THE FOLLOWING IS ADDED AFTER THE LAST PARAGRAPH:

Ensure that RPMs are installed within 14 days of opening each day’s surface paving to traffic.

610.03.07 Rumble Strip

Route	Weigh-in-Motion (WIM) Systems Midpoint Station

THE FOLLOWING IS ADDED AFTER THE LAST PARAGRAPH:

Ensure that rumble strips are constructed within 14 days of opening each day’s surface paving to traffic.

SECTION 902 – ASPHALT

902.02.03 MIX DESIGN

THE FOLLOWING IS ADDED TO THE FIRST PARAGRAPH:

UNLESS OTHERWISE APPROVED BY THE ENGINEER, ONLY ONE SOURCE OF SUPPLY FOR HOT MIX ASPHALT SURFACE COURSE MAY BE USED ON THE PROJECT.

902.02.04 SAMPLING AND TESTING

ADD THE FOLLOWING TO 902.02.04:

- F. Acceptance of HMA.** The Department may accept the HMA as specified in 902.02.04.A through 902-02.04.E by employing staff or an independent testing agency at the HMA plant during production. The inspector who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 2.

Alternatively, the Department may accept the HMA by Certification of Compliance according to 106.07.

Baseline Document Changes

Baseline Document Change (BDC) Announcements are notices that a Baseline Document has been modified in part or in whole. A Baseline document is defined as any official document that has gone through an initial approval process and was approved for use as intended. Thus a BDC is an alteration to or rewriting of any officially approved document. New documents are also announced with a BDC.

For additional BDC's to the 2019 specs that are not covered in this document:

<http://www.state.nj.us/transportation/eng/documents/BDC/>

ADDITIONAL TECHNICAL SPECIFICATIONS FOR NON-NJDOT
PARTICIPATORY ITEMS

SKID RESISTANT, HIGH FRICTION BONDED OVERLAY

DESCRIPTION

This work shall consist of installing a textured friction surface in areas as designated on the plans, and/or as directed in the field, in accordance with the plans and specifications.

MATERIALS

Use Safe-T-Grip® 2:1 as manufactured by Epoplex, 1000 East Park Avenue, Maple Shade, New Jersey 08052, a two-part modified exothermic epoxy resin binder treatment, containing an epoxy/amine binder covered with natural or pigmented aggregate, or an approved equal.

METHODS OF CONSTRUCTION

The two-part modified epoxy binder material shall not be applied on a wet surface, or when the ambient and/or surface temperature is below 40°F or above 105°F, or when the anticipated weather conditions would prevent the proper application of the surface treatment as determined by the manufacturer.

Existing surfaces shall be cleaned by use of mechanical sweepers, high pressure air, or other methods approved by the Engineer prior to the installation. Receiving surfaces must be clean, dry and free of all dust, oil, debris and any other material that might interfere with the bond between the epoxy binder material and existing surfaces. Surfaces may need to be washed with a mild detergent, rinsed and dried using a hot compressed air lance. Remove any existing pavement markings as deemed necessary by the manufacturer. Adequate cleaning of all surfaces will be determined by the Engineer and/or manufacturer's representative. Cover and protect all existing pavement markings and utilities prior to placement. Clean and fill all inadequately sealed joints and cracks greater than 1/4" with a manufacturer's approved crack sealant.

A manufacturer's representative can be on site to provide technical assistance during the start-up operations and as necessary during the surface preparation, material installation and during any necessary remedial work. Place the surface treatment in accordance with manufacturer's recommended methods at the thicknesses and details as shown in the contract documents.

The two-part modified epoxy binder utilized in the high friction surface application can be hand applied, or by a self-contained plural component pumping system. The binder is mixed at a 2:1 ratio by volume.

If using a self-contained plural component pumping system, the system must be capable of continually mixing and delivering the components on demand via multiple spray guns. The unit needs to be capable of heating the components to the proper application temperature. Mechanically applied distributing equipment shall include accurate measuring devices and/or calibrated containers and thermometers for measuring the binder temperature and pressure prior to placement. The capacity of the system will be at a minimum of 500 gallons with a minimum spraying capability of 4 gallons per minute.

For application by hand, the material should be applied utilizing a notch squeegee to ensure uniform thickness and correct rate of coverage. The material should be squeegeed out and back rolled, using a medium nap roller. It is imperative to ensure that proper thickness is achieved. The goal thickness is 60 mils for most applications.

The two-part modified epoxy binder shall be uniformly distributed over the pavement section that is to be treated. The material shall be applied within the temperature range specified. Operations shall proceed in such a manner that will not allow the epoxy material to chill, set up, dry or otherwise impair retention of the covered aggregate.

The mixed components must be applied onto the cleaned surface at a minimum coverage rate of 0.36 gallons/square yard (25 square feet/gallon). Immediately apply the aggregate onto the installed two-part modified epoxy binder, at a rate of approximately 15-18 lbs. per square yard coverage (coverage of

both the liquids and the aggregate is highly dependent on surface porosity. Contact the project engineer and/or the material manufacturer for specific project coverage).

Two-part epoxy materials not meeting the mixing ratio and specific gravity requirements will not be allowed. A notarized certificate of compliance shall be supplied upon request from the two-part modified epoxy resin manufacturer.

Utilities, drainage structures, curbs and any other structure within/adjacent to the treatment location shall be protected against the application of the surface treatment materials.

Allow the treatment to cure in accordance with manufacturer recommendations, approximately 2 hours at an ambient temperature of 75°F and rising. Remove the excess aggregate by mechanical means or suction sweeping truck before opening to traffic. Excess aggregate can be reused on the following day's installation. The aggregate must be clean, uncontaminated and dry.

QUANTITY AND PAYMENT

The quantity of Skid Resistant, High Friction Bonded Overlay for which payment will be made will be on a square yard basis for the item "SKID RESISTANT, HIGH FRICTION BONDED OVERLAY" in the Proposal, which price shall include the cost of any and all materials, labor and equipment and all else necessary and incidental thereto.

RESET BRICK PAVERS

DESCRIPTION

This item shall include the careful removal and stockpiling existing pavers during construction on adjacent concrete, replacement of any damaged pavers, and resetting of existing pavers in their original location after adjacent concrete work is completed.

MATERIALS

2019 NJDOT Standard Specifications. The Contractor shall coordinate with the Engineer, Township, and the individual property Owner for the specific type of brick pavers for replacement of any damaged pavers.

METHOD OF CONSTRUCTION

The Contractor shall carefully remove and stockpile existing pavers during construction on adjacent concrete. The Contractor shall replace any damaged pavers, cost to be included in the unit pricing of this item, and resetting of existing pavers in their original location after adjacent concrete work is completed.

QUANTITY AND PAYMENT

Payment for Reset Brick Pavers will be made on a per square yard basis at the unit price bid for the item "RESET BRICK PAVER (IF & WHERE DIRECTED)".



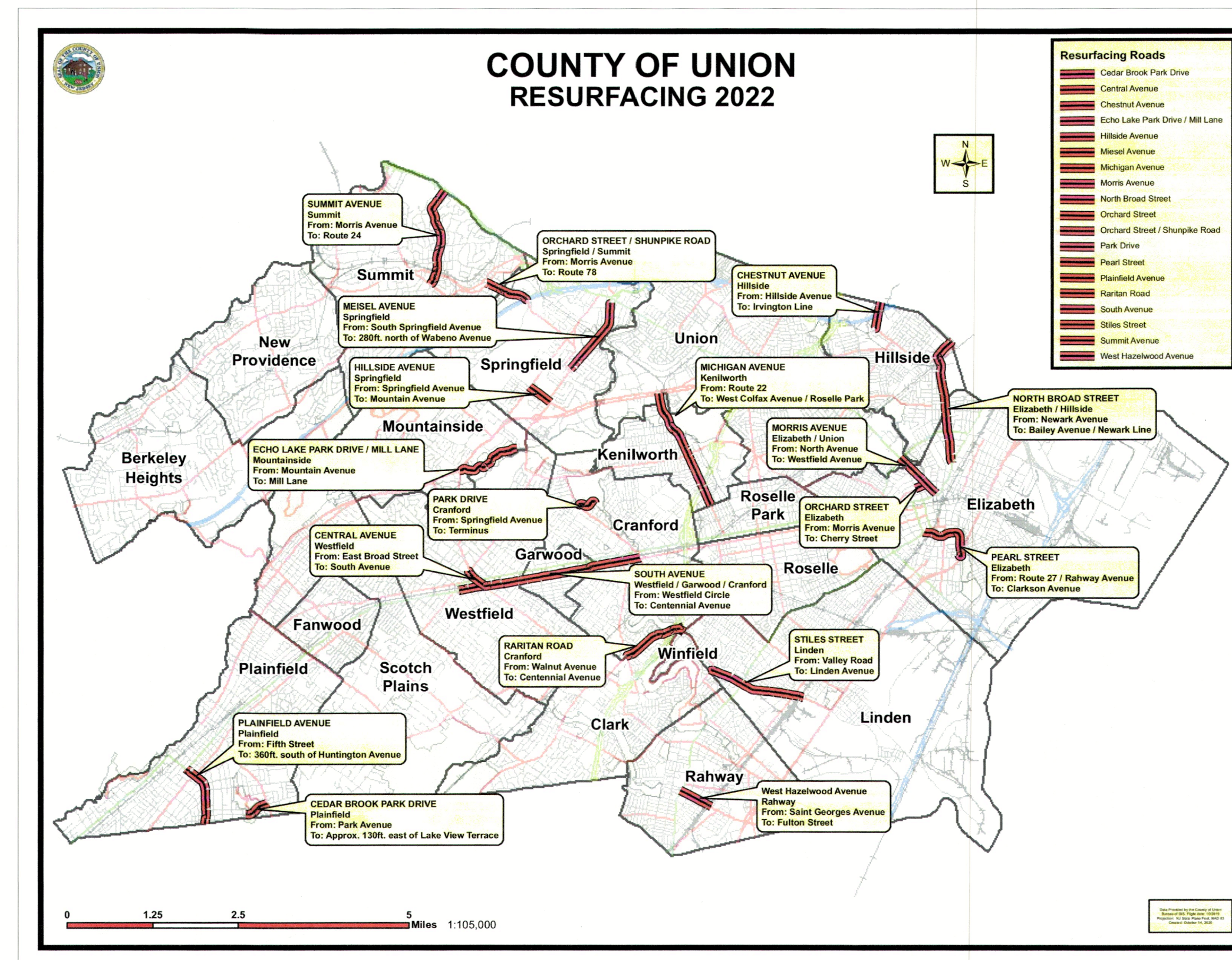
**COUNTY OF UNION
BOARD OF COUNTY COMMISSIONERS
2022 ROAD RESURFACING PROJECT
(CA-2021)**

**TOWN OF WESTFIELD, TOWNSHIP OF HILLSIDE, BOROUGH OF MOUNTAINSIDE, TOWNSHIP OF
SPRINGFIELD, BOROUGH OF KENILWORTH, CITY OF ELIZABETH, CITY OF SUMMIT, TOWNSHIP OF CRANFORD
CITY OF PLAINFIELD, BOROUGH OF GARWOOD, CITY OF LINDEN, CITY OF RAHWAY**

UNION COUNTY, NEW JERSEY

JULY, 2021

UTILITY COMPANY CONTACTS	
COMPANY	ADDRESS
P.S.E. & G. - GAS	472 WESTON CANAL ROAD SOMERSET, NJ (732) 764 - 3067
ELIZABETH GAS COMPANY	520 GREEN LANE UNION, NJ (908) 662 - 8321
J.C.P. & L.	P.O. BOX 1911 MORRISTOWN, NJ (973) 401 - 8521
P.S.E. & G. - ELECTRIC	80 PARK PLAZA T-12 NEWARK, NJ (973) 297 - 2128
NEW JERSEY AMERICAN WATER	1341 NORTH AVENUE PLAINFIELD, NJ (973) 564 - 5701
VERIZON	175 WEST MAIN STREET FREEHOLD, NJ (732) 357 - 2313



**KEY MAP
SOURCE: UNION COUNTY G.I.S.
SCALE: AS SHOWN**

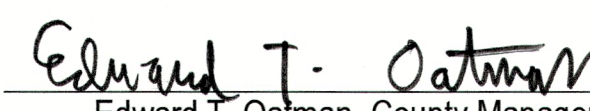
-NOTICE-

LOCATION OF UTILITIES AS SHOWN ON THESE PLANS ARE PLOTTED FROM AVAILABLE DATA ON FILE WITH THE UTILITY COMPANIES AND IS NOT GUARANTEED AS TO EXACTNESS. THE CONTRACTOR IS TO CONTACT UTILITY COMPANIES 72 HOURS PRIOR TO CONSTRUCTION TO DETERMINE EXACT LOCATION AND DEPTH OF ALL UTILITIES IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL USE THE UTILITY LOCATIONS AS AN AID IN DETERMINING EXACT LOCATIONS.

**NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS
FOR ROAD AND BRIDGE CONSTRUCTION 2019 TO GOVERN.**

SHEET INDEX	
DRAWING NO.	DRAWING TITLE
1.00	COVER SHEET / KEY MAP
2.00	GENERAL NOTES & STANDARD LEGEND
3.00	QUANTITY TABLE & TYPICAL ROAD SECTION
4.00 - 4.01	CEDAR BROOK PARK DRIVE
5.00 - 5.01	CENTRAL AVENUE
6.00 - 6.01	CHESTNUT AVENUE
7.00 - 7.02	ECHO LAKE PARK DRIVE
8.00 - 8.01	HILLSIDE AVENUE
9.00 - 9.02	MEISEL AVENUE
10.00 - 10.04	MICHIGAN AVENUE
11.00 - 11.02	MORRIS AVENUE
12.00 - 12.04	NORTH BROAD STREET
13.00 - 13.01	ORCHARD STREET
14.00 - 14.01	ORCHARD STREET/SHUNPIKE ROAD
15.00 - 15.01	PARK DRIVE
16.00 - 16.02	PEARL STREET
17.00 - 17.02	PLAINFIELD AVENUE
18.00 - 18.02	RARITAN ROAD
19.00 - 19.05	SOUTH AVENUE
20.00 - 20.03	STILES STREET
21.00 - 21.04	SUMMIT AVENUE
22.00 - 22.01	WEST HAZELWOOD AVENUE
23.00 - 23.02	TRAFFIC CONTROL DETAILS I - III
24.00 - 24.02	NJDOT CURB RAMP DETAILS I - III
25.00 - 25.02	CONSTRUCTION DETAILS I - III

RECOMMENDED FOR APPROVAL BY 
Bernice L. Dieter, P.E., Assistant County Engineer

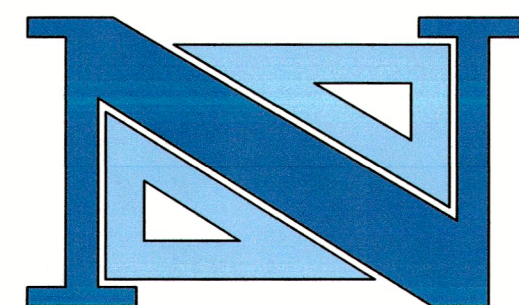
APPROVED BY 
Edward T. Oatman, County Manager



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CERTIFICATE OF AUTHORIZATION (N.J.S.A. 45:8-56) 24GA27927000

REVISIONS			DRAWN	DESIGNED	CHECKED
NO.	DATE	DESCRIPTION			



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PROFESSIONAL LAND SURVEYOR N.J. LICENSE NO. 38604
PROFESSIONAL PLANNER N.J. LICENSE NO. 33LJ00569800

**COVER SHEET / KEY MAP
2022 ROAD RESURFACING PROJECT
(CA-2021)
VARIOUS MUNICIPALITIES
UNION COUNTY NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: N.T.S.	UNIOCTY21.010	1.00
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

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GENERAL NOTES:

A. Legal

- A1. The most current editions of The Standard Specifications for Road and Bridge Construction, Standard Inputs, and Standard Details, as published by the New Jersey Department of Transportation (NJDOT), the Plans, Technical Specifications, Advertisement, Contractor's Proposal and including but not limited to the amendments contained hereinafter shall comprise the Contract Documents. The Contractor shall read and understand the project specifications prior to construction. The municipality is under the jurisdiction of the state central law and the government.
- A2. The Contractor shall visit the site and familiarize himself with the existing conditions prior to submitting his bid. Any discrepancies between these plans and the actual conditions at the site shall be immediately reported to the Professional Engineer responsible for the design (Project Manager, PE).
- A3. The Contractor shall comply with all laws, ordinances, rules, orders and regulations relating to the performance of the work, the protection of adjacent property and the maintenance of passageways.
- A4. The Contractor's attention is directed to the safety requirements as outlined in the General Conditions of the Construction Specifications. Neither the Engineer nor the Owner shall be held responsible and/or liable for the safety of the work site. The Contractor is responsible for maintaining a safe work site at all times.
- A5. The Contractor is responsible to obey all the safety and health regulations. The Owner assumes no responsibility for the health and safety of the work performed.

B. Site Clearing and Construction

- B1. The Contractor shall obtain all required local, County, State, Federal opening permits and shall bare the cost of all accompanying fees. All permits must be secured prior to the commencement of work.
- B2. Whenever a question arises regarding the specifications or drawings or any supplementary drawings or instructions of the Field Engineer, same shall be immediately brought to the attention of the Professional Engineer responsible for the design.
- B3. One copy of the approved construction plans and specifications furnished to the Contractor must be kept on the project site. All work and materials necessary for the completion of the work according to the intent and meaning of the Contract Documents, shall be furnished, performed and done in accordance with the specifications and plans. Any conflict or inconsistency between the plans and specifications, or any discrepancy between the figures and scale of drawings shall be submitted by the Contractor to the Engineer, whose decision thereon shall be final. The decision of the Engineer as to which specification will govern will be final.
- B4. The Contractor is responsible to construct the project in accordance with the contract documents. All proposed field changes must be approved in writing by the Professional Engineer responsible for the design (Project Manager, PE) prior to the construction of any field changes.
- B5. All information shown or noted for existing facilities, grades, roadways and materials is approximate. The Contractor shall be responsible to verify all information which may affect his work.
- B6. All disturbed shrubs, fencing, walkways, signs, mailboxes, driveways, etc., shall be restored to their original condition and to the satisfaction of the Engineer and/or the Owner. No separate payment shall be made for this restoration work unless same is clearly specified elsewhere in the construction documents. The Contractor shall take prudent measures to protect all existing property evidence (monuments, iron pipe, pins, etc.) during construction.
- B7. All property corners or monuments removed or damaged during construction shall be replaced by a NJ Licensed Land surveyor at no additional cost to the Owner.
- B8. Reconstructed curb shall be installed to match existing curb elevations and alignment unless otherwise specified on grading plans, profiles or cross sections. Separate payment will not be made for removal of existing curb in reconstructed areas. Payment for the removal of existing curb shall be included in the unit price bid for the Curb line item.
- B9. The Contractor shall sawcut and repair the pavement adjacent to newly constructed curb prior to proceeding on to subsequent stages of work. Curb trenches will not be left open overnight in areas where the roadway is to be opened to traffic. No separate payment will be given for such said sawcutting and restoration, the cost of which shall be included in the unit price bid for the Curb line item.
- B10. All asphalt material removed from the project must be transported to an approved recycling center and the tonnage certified to the Owner. No separate payment will be made for this work but shall be included in the various items in the proposal.
- B11. The Contractor shall be responsible for the disposal of all excess materials excavated, whatever nature, at his own expense. The Owner is not obligated to supply a disposal site. The Contractor must not deposit the excess materials within the municipal limits without express permission of the Professional Engineer. Excavated material may not be stored on site and shall be removed at the end of each day.
- B12. All excavated materials are to be disposed of in accordance with approved NJDOT/NJDEP methods and means, or transported at the direction of the Owner.
- B13. All disturbed areas outside the project limits or not intended to be included in this project, shall be restored to their original condition, and to the satisfaction of the Owner. No separate payment shall be made for this restoration, unless specified elsewhere.
- B14. The Contractor must provide a smooth sawcut edge in all cases where proposed pavement of whatever nature, concrete curbs or concrete sidewalks abut existing pavements, curbs or sidewalks. No separate payment will be made for sawcutting. The cost shall be included in the various items in the proposal.
- B15. The Contractor may discover that existing roadway may contain existing concrete base or cobble stone and shall make all necessary requirements for its removal where required. The cost for this work shall be included in the cost of Roadway Excavation, Unclassified.
- B16. The replacement of any sidewalk within the project area may require that sidewalk slabs be sawcut from the surrounding concrete walk. No specific payment for saw cutting will be made and therefore shall be included under prices bid for concrete sidewalk items in the proposal.
- B17. As part of this Contract, the Contractor is required to prepare the existing pavement and seal all cracks and joints per Section 404 of the NJDOT Specifications prior to resurfacing. This work shall include, but is not limited to, all labor, materials and equipment necessary to clean cracks prior to the installation of surface course and apply a sealant as outlined in the NJDOT Specification. Prior to commencement, the Contractor shall obtain approval from the Professional Engineer as to the intended methods and materials that will be used for this project. This item shall not be measured for payment, but the cost thereof shall be included in the unit price bids for the Hot Mix Asphalt Surface Course line item.
- B18. No construction, maintenance or utility work on, under or above the project road that will obstruct, interfere with and/or detour traffic on the road, shall be performed before the hour of 9:00 AM or after 4:00 PM. The Contractor's work hours shall conform to local Ordinance requirements.
- B19. All trenches in the existing pavement shall be saw cut. No separate payment will be made for saw cutting and the cost thereof shall be included under prices bid for various items in the proposal.
- B20. The Contractor shall be responsible for restoration and maintenance of all access driveways at all times during construction at no additional cost to the Owner.
- B21. All sediment and soil erosion control practices are to be installed in conformance with Soil Conservation District standards prior to any major soil disturbances. All work shall be completed in proper sequence and all erosion control devices shall be maintained until permanent protection is established.
- B22. Contractor shall maintain access to all properties at all times during construction.
- B23. The Contractor shall take all necessary measures to maintain dust control as required or directed by the Professional Engineer. All vehicles shall be clean and all roadways shall be maintained as directed by the Field Engineer.
- B24. Contractor shall keep the site clean at all times and sweep the street at the end of each work day.

B. Site Clearing and Construction/Cont.

- B25. All material encountered within the work zone area that must be removed to construct the project as directed by the Field Engineer, shall be included in the unit price bid for Clearing Site. This is inclusive of but not limited to the removal of all curbed edging and concrete gutter.
- B26. All trees are to be saved and protected from harm during construction with the exception of the trees marked with an X on the construction plans. If any trees are damaged during construction, the Contractor will be responsible for the removal and replacement as determined by the Municipality.
- B27. The Contractor shall install protective blocking, bracing or sheeting to support any exposed gas, water, sanitary, telecommunications, or electric utilities in accordance with the respective utility company's regulations.
- B28. The Contractor shall be responsible for tapering proposed work to meet existing conditions in a uniform manner.

C. Utility Permits

- C1. Prior to the start of construction, the Contractor shall have all underground utilities located and physically marked out within the limits of the project (call 1-800-272-1000). The Contractor shall provide test holes in areas of possible conflict to verify the depth and location of the utility. No separate payment shall be made for delays that may be necessary to relocate utilities or the proposed location of underground utilities. No separate payment will be made for test pits but the cost shall be included in the various items in the proposal.
- C2. Location and depth of existing utilities are only indicated to bring attention to possible conflicts. Any damage to utilities shall be the sole responsibility of the Contractor and all costs for repairs shall be borne by the Contractor.
- C3. Any damage to utilities shall be the sole responsibility of the Contractor and all costs for repair shall be borne by the Contractor. All disturbed or damaged walkways, signs, curbing, trees, hydrants, utilities, paved surfaces, driveways, building facades, etc. shall be restored to their original condition and to the satisfaction of the Owner. No separate payment will be made for this restoration unless specified elsewhere in the Contract.
- C4. The locations of utilities shown are approximate. The Contractor is responsible for verifying the exact locations of the utilities prior to the start of construction.
- C5. All gas and water valves and various manholes to remain shall be reset to finish grade.
- C6. The Contractor shall coordinate his work with the public utility companies. Electric, telephone, gas & cable utility manhole castings and valve box covers shall be reset by the respective utility companies.
- C7. All utility companies, private or public, whose facilities might be impacted or altered. Said contract must be performed prior to start of construction.
- C8. Water service valve boxes, gas service valve boxes, junction boxes, electric boxes, basement vault doors and all other appurtenances located in the sidewalk area shall be reset to the new sidewalk elevation. The cost for resetting any and all of these castings shall not be paid separately but shall be included in the various concrete sidewalk line items in the proposal.
- C9. The Contractor is responsible for accurately locating existing traffic signal loop detector and leads. The Contractor will only be compensated for the replacement of loop detectors and leads which have been removed at the direction of the Professional Engineer. The Contractor shall not remove loop detectors and leads unless he is directed to do so by the Professional Engineer.
- C10. Trenches shall be backfilled without delay. Open excavations shall be kept to a minimum and made safe at all times. All trenches shall be adequately compacted by approved methods and with materials approved by the Field Engineer. Any trench settlement shall be immediately brought to grade and temporary paving shall be placed where required. No trench (including curbs) shall be left open overnight.
- C11. The Contractor shall provide and maintain temporary ramps around all exposed utility castings, both public and private which have been uncovered during construction.

D. Drainage

- D1. All roof leaders and curb drains are to remain free flowing, during construction.
- D2. All roof drain pipes in curbs/sidewalk area to be maintained and reconnected, and shall be extended under the sidewalk and through the curb.
- D3. All inlets, manholes and vault castings to be reset shall be reset to the proposed finished grade as directed by the Field Engineer. These castings must be reset flush to the proposed grade and the new pavement shall not be mounded up or feathered down to meet these castings. All castings reset to the improper grade or not to the satisfaction of the Field Engineer shall be reset to the new grade at no additional expense to the Owner.
- D4. Existing grates are the property of the Municipality or utility authority and will be delivered, at no additional cost to the Owner, to the local Department of Public Works or utility authority yard. Payment will not be made for new grates unless the existing grates are returned to the Owner.
- D5. All open drainage excavations shall be backfilled at the end of each day and protected from pedestrian and vehicular traffic.
- D6. The Contractor will be responsible for maintaining positive drainage during and after construction. If a situation arises where water will pond at a particular location, the Professional Engineer responsible for the design must be notified immediately in order to make corrective measures in writing.
- D7. The Contractor is fully responsible for verifying that all proposed storm sewer connections are to the existing storm sewer systems.

E. Traffic Control

- E1. The Contractor shall be responsible for coordination of traffic control measures.
- E2. Maintenance and Protection of Pedestrian Traffic Control must conform to NJDOT and MUTCD standards along with the requirements of the municipality. Police Traffic Directors shall be coordinated with the municipality, as needed.
- E3. The Contractor shall be responsible to prepare a detour plan as needed or required by the Owner and/or local Police department for review and approval prior to starting work.

F. Signs

- F1. Any signs located within the sidewalk areas should be reset/relocated in accordance with the standard NJDOT Standard Details. Separate payment will not be made for resetting objects located in the sidewalk. The cost shall be included in the unit price bid for the replacement of sidewalks, unless payment for such work is specified in the proposal.
- F2. The Contractor shall relocate/reset signs as shown on the plans or directed by the Professional Engineer. No separate payment will be made for this work but the cost shall be included in the various items in the proposal.
- F3. Signs for parking prohibition must be posted at least 48 hours in advance of construction. Contractor shall coordinate, obtain and place signs as directed by the Owner.

G. Survey

- G1. Layout of all work shall be adjusted in the field to meet site conditions as approved in writing by the Professional Engineer responsible for the design.
- G2. The Contractor is responsible to layout all new work prior to construction for Field Engineer's approval. Any locations not approved by the Field Engineer and installed by the Contractor shall be removed and replaced as per the Field Engineer's instructions at no additional cost to the Owner.
- G3. All layout work shall be done by a New Jersey Licensed Land Surveyor.
- G4. All existing locations taken from a survey prepared by Neglia Engineering Associates.

H. Trees

- H1. Contractor must retain a certified tree expert for tree evaluation where necessary. No additional payment will be made for tree expert; price to be included in site clearing.
- H2. All trees that have roots that encroach into the proposed curbs or pavement and are to be saved shall be evaluated by the Contractor's certified tree expert. All evaluations shall be in writing and shall accurately identify the tree in question by station and offset (left or right). All evaluations shall be submitted to the Professional Engineer for review and consultation with the Municipality's tree experts prior to cutting any roots. No separate payment will be made for this work but the cost thereof shall be included in the clearing site item.
- H3. Trees that are to be saved, where it is determined that root cutting may severely damage the tree, shall have a curb break and steel curb face plates installed as shown on the details.
- H4. The Contractor is responsible for the timely evaluation of all trees and there will not be change orders for delays resulting from root cutting.
- H5. In areas where the roots encroach into the curb line, the full pavement section shall be removed prior to removing the curb. Then the existing curb shall be removed by pulling it away from the tree towards the roadway to minimize root damage during the removal of the existing curb. No separate payment shall be made for this work but the cost thereof shall be included in the Clearing Site line item.

J. ADA Requirements

- J1. The Contractor shall be fully responsible for complying with NJDOT and ADA requirements related to the installation of handicap accessible ramps and the associated slopes. The ramps and alignments illustrated on these plans shall be used for schematic purposes only. The Contractor shall be fully responsible for proper construction and alignment in the field.
- J2. It is the Contractor's responsibility to verify that the proposed drop curb ramps meet current NJDOT and ADA Standards. Those ramps that do not meet standards, once constructed, shall be replaced to meet said standards at no additional cost to the owner.
- J3. The Contractor is responsible for determining the extent of improvements required for those ramp locations identified and completing said work to ensure ramps are in conformance with current NJDOT and ADA Standards.
- J4. Contractor shall not begin site clearing operations on a ramp until he verifies that ramp can be constructed to comply with applicable standards. The Contractor shall be responsible for all corrections to a ramp should he proceed with demolition prior to confirmation of constructability at no additional cost to the owner.

STANDARD PLAN LEGEND

EXISTING CONDITIONS

	WATER VALVE		INLET
	GAS VALVE		JUNCTION BOX
	CLEAN OUT		UTILITY POLE
	MANHOLE		FIRE HYDRANT
	SANITARY MANHOLE		CURB LINE
	DRAINAGE MANHOLE		DEPRESSED CURB
	TREE		RAILROAD TIE CURB OR WALL
	SHRUB		GAS MAIN
	ROOF DRAIN AT CURB		WATER MAIN
	EDGE OF PAVEMENT		UNDERGROUND ELECTRIC LINE
	LANDSCAPED AREA		UNDERGROUND TELEPHONE LINE
			UNDERGROUND FIBER OPTIC LINE
			SANITARY SEWER / STORM PIPE

PROPOSED CONDITIONS

	RESET VALVES & CLEANOUTS
	RESET MANHOLE CASTING
	RESET INLET
	PROPOSED CURB
	LIMIT OF CONSTRUCTION

PROPOSED HATCHING

	MILLING AND RESURFACING
	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY
	CONCRETE SIDEWALK
	REMOVAL OF FULL-DEPTH PAVEMENT CROSS-SECTION

PAVEMENT MARKING STANDARD

UNLESS OTHERWISE SHOWN, PAVEMENT MARKINGS SHOULD CONFORM TO THE FOLLOWING:

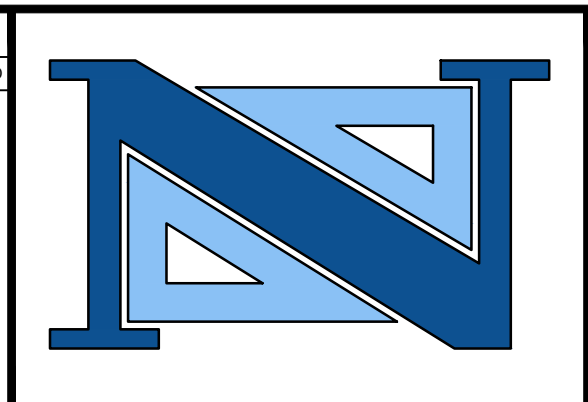
- CENTER LINES _____ 4" WIDE DOUBLE YELLOW LINE
- LANE LINE _____ 4" WIDE WHITE LINE
- CROSSWALK LINES _____ 8" WIDE WHITE LINE
- STOP LINE _____ 24" WIDE WHITE LINE
- HATCHING _____ 24" WIDE WHITE LINE
- PARKING STALL _____ 4" WIDE WHITE LINE
- HANDICAP STALL _____ 4" WIDE BLUE LINE

NOTE:
ALL TRAFFIC CONTROL DEVICES SHALL CONFORM TO THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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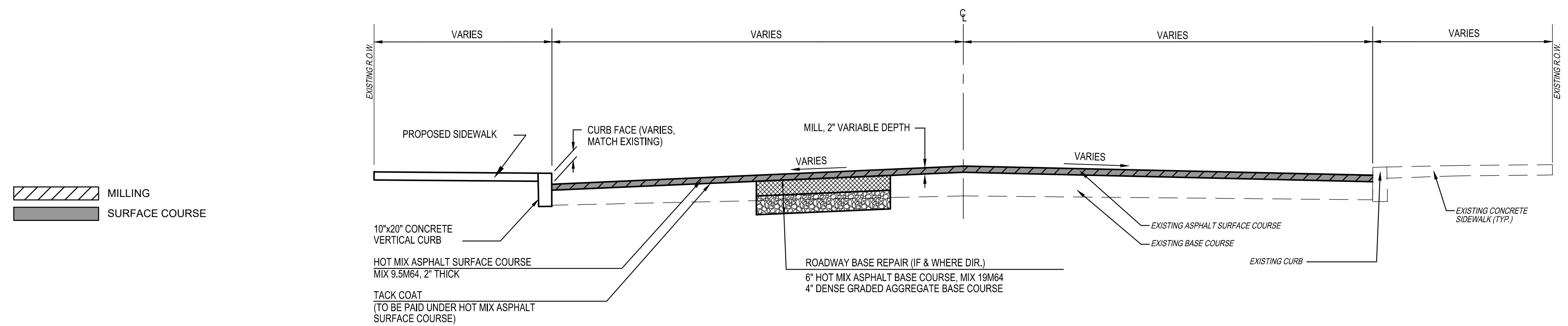
**GENERAL NOTES AND STANDARD LEGEND
 2022 ROAD RESURFACING PROJECT
 (CA-2021)
 VARIOUS MUNICIPALITIES
 UNION COUNTY NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO.:	SHEET NO.:
DESIGNED BY: VH	SCALE: N.T.S.	UNIOCTY21.010	2.00
FIELD BOOK NO.:	PAGE:	DATE: JULY 16, 2021	

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ESTIMATE OF QUANTITIES

ITEM	DESCRIPTION	UNIT	PLAN QUANTITY	IF & WHERE DIRECTED
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT	4	
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT	2	
3	FLOODLIGHTS FOR NIGHT TIME OPERATION	UNIT	4	
4	TRAFFIC DIRECTOR, FLAGGER	HR	500	
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.	1	
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	3,545	
7	HMA MILLING, 3" OR LESS	SY	457,935	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	3,877	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	3,460	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	54,340	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	1,033	
12	FUEL PRICE ADJUSTMENT	ALLOW.	1	
13	ASPHALT PRICE ADJUSTMENT	ALLOW.	1	
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY	1,000	
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF	1,000	
16	CURB PIECE	UNIT	35	
17	BICYCLE SAFE GRATE	UNIT	35	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	1,133	
19	RESET WATER VALVE BOX	UNIT	304	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	38	
21	10"x20" CONCRETE VERTICAL CURB	LF	6,970	
22	GRANITE CURB	LF	1,750	
23	9" X 4" HOT MIX ASPHALT CURB	LF	400	
24	12" X 13" CONCRETE SLOPING CURB	LF	90	
25	CONCRETE SIDEWALK, 4" THICK	SY	6,595	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	4,570	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	514	
28	RESET BRICK PAVEMENT (IF & WHERE DIRECTED)	SY	385	
29	TRAFFIC STRIPES, 4"	LF	229,430	
30	TRAFFIC STRIPES, 8"	LF	38,810	
31	TRAFFIC MARKING, LINES, 12"	LF	36,540	
32	TRAFFIC MARKING, LINES, 24"	LF	3,595	
33	TRAFFIC MARKINGS, SYMBOLS	SF	9,340	
34	REGULATORY AND WARNING SIGN	SF	215	
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY	1,050	
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF	225	
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	1,815	
38	TOPSOIL SPREADING, 4" THICK	SY	2,560	
39	FERTILIZING AND SEEDING, TYPE A	SY	2,560	
40	STRAW MULCHING	SY	2,560	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF	85,000	
42	CLEARING SITE	LS	1	
43	FINAL CLEANUP	LS	1	



TYPICAL ROAD SECTION

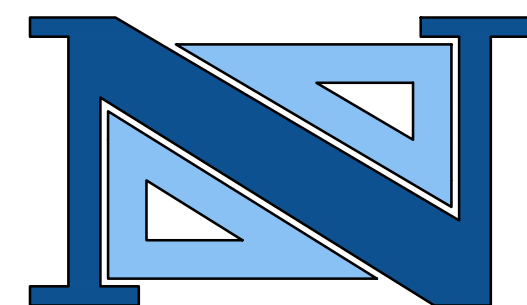
NOT TO SCALE

- NOTES:
- NO SEPARATE PAYMENT WILL BE MADE FOR TACK COAT AND PRIME COAT. THE COST FOR ALL LABOR, EQUIPMENT, AND MATERIALS ASSOCIATED THEREWITH SHALL BE INCLUDED IN THE UNIT PRICE FOR VARIOUS BITUMINOUS PAYMENT ITEMS. TACK COAT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 401.03.05 OF THE 2019 NJDOT SPECIFICATIONS. PRIME COAT SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 401.03.06 OF THE 2019 NJDOT SPECIFICATIONS.
 - WHERE PROPOSED PAVEMENT ABUTS EXISTING PAVEMENT, A CLEAN JOINT SHALL BE PROVIDED USING SAWCUTTING METHODS AND APPROPRIATE BUTT JOINTS. THE COSTS FOR THIS WORK SHALL BE INCLUDED IN THE VARIOUS ITEMS IN THE PROPOSAL.
 - ASPHALT DRIVEWAYS SHALL CONSIST OF 2" HOT MIX ASPHALT SURFACE COURSE AND 4" HOT MIX ASPHALT BASE COURSE. THE COSTS FOR THIS WORK SHALL BE INCLUDED IN THE UNIT PRICE BID FOR HOT MIX ASPHALT DRIVEWAY REPAIR.
 - CONTRACTOR TO COORDINATE CURB GRADES WITH DESIGN ENGINEER DURING CONSTRUCTION.

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QUANTITIES & TYPICAL ROAD SECTION
2022 ROAD RESURFACING PROJECT
(CA-2021)
VARIOUS MUNICIPALITIES
UNION COUNTY NEW JERSEY

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: N.T.S.	UNIOCTY21.010	3.00
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

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STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES							
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE	CONC. SIDEWALK, 4" THICK	
22+70	RT	7				X	15					10	2	10
22+70	LT	7				X	25					10	2	10
23+30	RT	7				X	25	10				10	2	10
23+30	LT	7				X	20	10				15	2	10

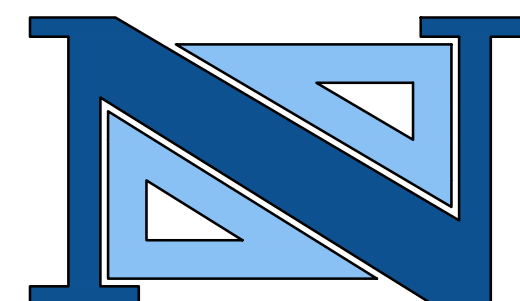
STATION	OFFSET (LT/RT)	INLET TYPES & LOCATIONS					
		EXISTING INLET TYPE	QUANTITY				
			BYCYCLE SAFE GRATE	CURB PIECE	PLATE	RESET	
07+00	LT	A					X
13+00	RT	A					X
13+10	LT	A					X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	UNIT		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	UNIT		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	100	
7	HMA MILLING, 3" OR LESS	SY	9,430	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	100	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	85	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1,120	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	25	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	1	
17	BICYCLE SAFE GRATE	UNIT	1	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	9	
19	RESET WATER VALVE BOX	UNIT		
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	1	
21	10" X 20" CONCRETE VERTICAL CURB	LF	85	
22	GRANITE CURB	LF	20	
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	40	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	50	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	8	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF	3,900	
30	TRAFFIC STRIPES, 8"	LF	130	
31	TRAFFIC MARKING, LINES, 12"	LF	125	
32	TRAFFIC MARKING, LINES, 24"	LF	25	
33	TRAFFIC MARKINGS, SYMBOLS	SF	60	
34	REGULATORY AND WARNING SIGN	SF		
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	45	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	20	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	20	
40	STRAW MULCHING	S.Y.	20	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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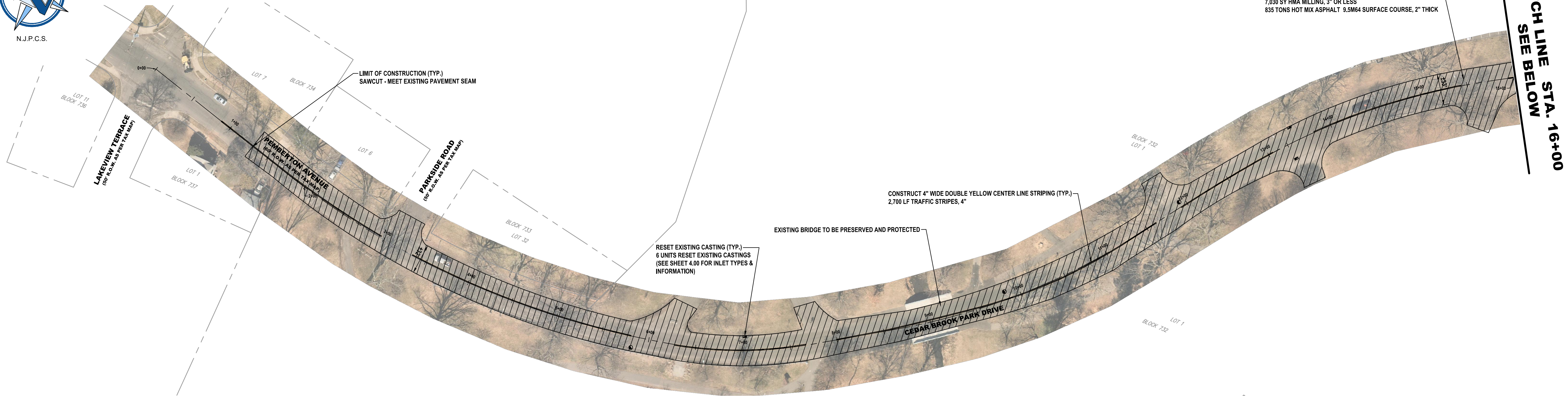
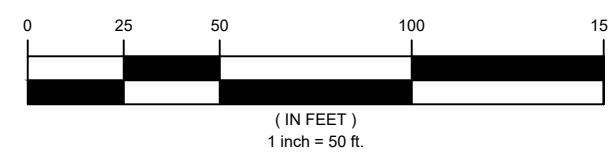
CEDAR BROOK PARK DRIVE QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF PLAINFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: N.T.S.	UNIOCTY21.010	4.00
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

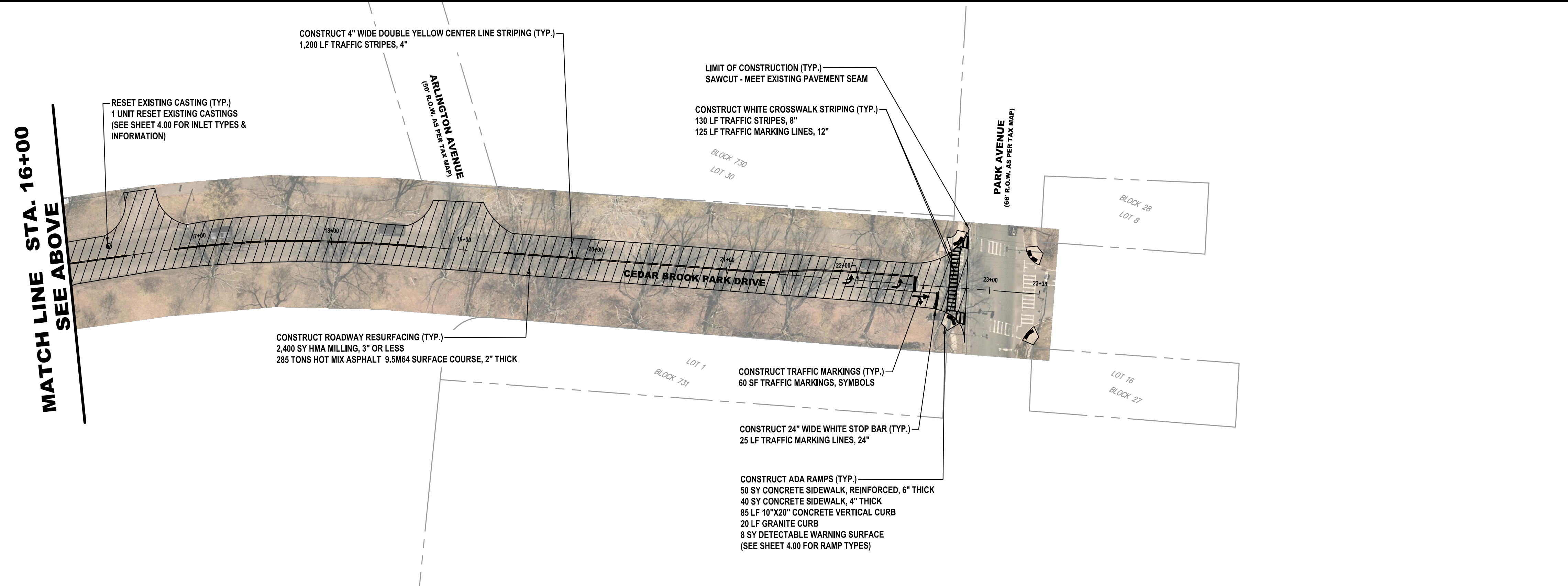
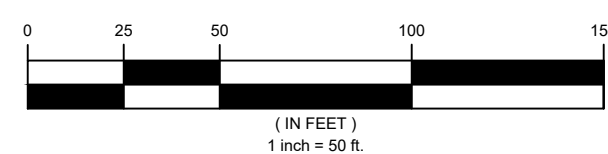
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GRAPHIC SCALE



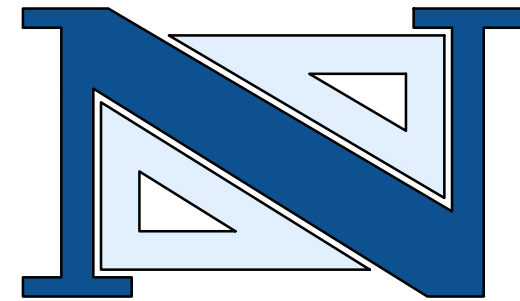
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PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

**CEDAR BROOK PARK DRIVE I
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF PLAINFIELD
UNION COUNTY NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: 1"=50'	UNIOCTY21.010	4.01
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

I:\unicon_county\uniocty21_010_2022_road_resurfacing\project\roads\final\post\blair04_00_cedar_brook_park_dr.dwg, Plotted: Friday, February 25, 2022, 3:50:33 PM

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STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES							
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE	CONC. SIDEWALK, 4" THICK	
07+20	LT	1			X		20	10				15	1	35
07+25	RT	7	X				10	10				10	1	35
07+80	LT	7			X		15	10				10	1	35
08+80	RT	7			X		20	10				10	1	35
09+20	LT	7				X	20	10				20	2	35
09+50	RT	7				X	30	10				30	2	35
10+20	LT	7			X		10	10				10	1	35
16+70	RT	7			X		10	10				10	1	30
17+10	LT	1			X		10	10				10	1	30

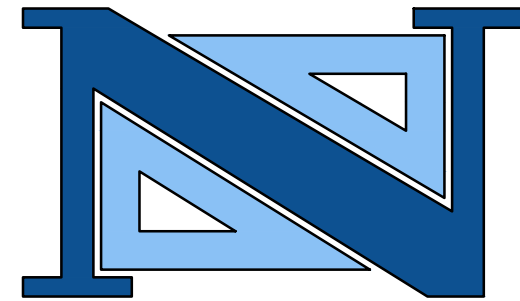
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	INLET TYPES & LOCATIONS			
			BYCYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
01+70	LT	B				X
02+80	RT	B				X
03+35	LT	B				X
07+35	RT	B				X
13+40	LT	B				X
13+45	RT	B				X
13+90	RT	B				X
14+40	LT	B				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	HOURL		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	70	
7	HMA MILLING, 3" OR LESS	SY	9,300	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	70	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	85	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1,150	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	30	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	1	
17	BICYCLE SAFE GRATE	UNIT	1	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	35	
19	RESET WATER VALVE BOX	UNIT	12	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	1	
21	10" X 20" CONCRETE VERTICAL CURB	LF	450	
22	GRANITE CURB	LF	100	
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	305	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	50	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	12	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF	3,950	
30	TRAFFIC STRIPES, 8"	LF	1,140	
31	TRAFFIC MARKING, LINES, 12"	LF	810	
32	TRAFFIC MARKING, LINES, 24"	LF	220	
33	TRAFFIC MARKINGS, SYMBOLS	SF	500	
34	REGULATORY AND WARNING SIGN	SF	20	
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	35	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	45	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	45	
40	STRAW MULCHING	S.Y.	45	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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CERTIFICATE OF AUTHORIZATION (N.J.S.A. 45:8-56) 24GA27927000

REVISIONS			DRAWN	DESIGNED	CHECKED
NO.	DATE	DESCRIPTION			



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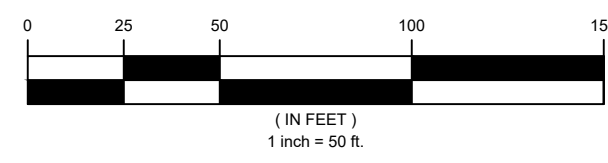
CENTRAL AVENUE QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
TOWN OF WESTFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: VH CHECKED BY: EMJ PROJECT NO.: UNIOCTY21.010 SHEET NO.: 5.00
DESIGNED BY: VH SCALE: N.T.S. DATE: JULY 16, 2021
FIELD BOOK NO.: PAGE:

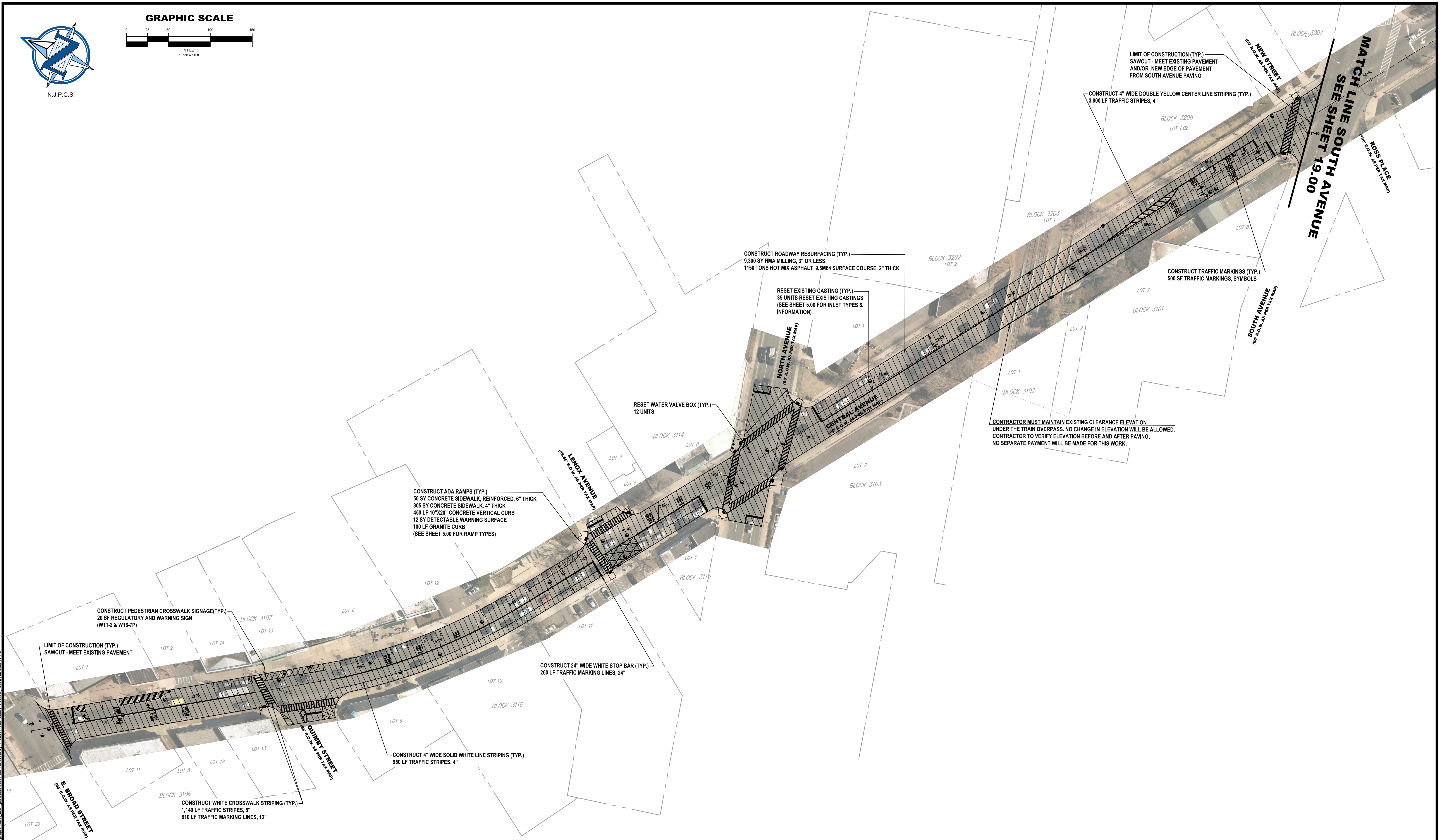


N.J.P.C.S.

GRAPHIC SCALE



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LIMIT OF CONSTRUCTION (TYP.)
SAWCUT - MEET EXISTING PAVEMENT
AND/OR NEW EDGE OF PAVEMENT
FROM SOUTH AVENUE PAVING

CONSTRUCT 4" WIDE DOUBLE YELLOW CENTER LINE STRIPING (TYP.)
3,000 LF TRAFFIC STRIPES, 4"

CONSTRUCT ROADWAY RESURFACING (TYP.)
9,300 SY HMA MILLING, 3" OR LESS
1150 TONS HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK

RESET EXISTING CASTING (TYP.)
35 UNITS RESET EXISTING CASTINGS
(SEE SHEET 5.00 FOR INLET TYPES &
INFORMATION)

RESET WATER VALVE BOX (TYP.)
12 UNITS

CONSTRUCT ADA RAMP (TYP.)
50 SY CONCRETE SIDEWALK, REINFORCED, 6" THICK
305 SY CONCRETE SIDEWALK, 4" THICK
450 LF 10"X20" CONCRETE VERTICAL CURB
12 SY DETECTABLE WARNING SURFACE
100 LF GRANITE CURB
(SEE SHEET 5.00 FOR RAMP TYPES)

CONSTRUCT PEDESTRIAN CROSSWALK SIGNAGE(TYP.)
20 SF REGULATORY AND WARNING SIGN
(W11-2 & W16-7P)

LIMIT OF CONSTRUCTION (TYP.)
SAWCUT - MEET EXISTING PAVEMENT

CONSTRUCT 24" WIDE WHITE STOP BAR (TYP.)
260 LF TRAFFIC MARKING LINES, 24"

CONSTRUCT 4" WIDE SOLID WHITE LINE STRIPING (TYP.)
950 LF TRAFFIC STRIPES, 4"

CONSTRUCT WHITE CROSSWALK STRIPING (TYP.)
1,140 LF TRAFFIC STRIPES, 8"
810 LF TRAFFIC MARKING LINES, 12"

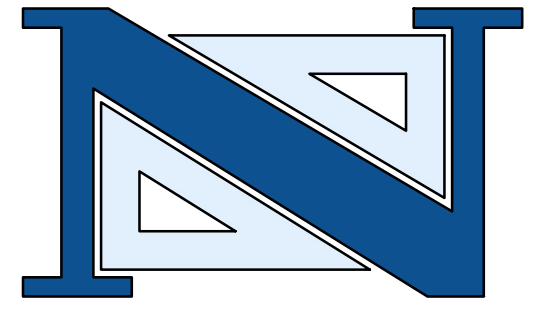
CONTRACTOR MUST MAINTAIN EXISTING CLEARANCE ELEVATION
UNDER THE TRAIN OVERPASS. NO CHANGE IN ELEVATION WILL BE ALLOWED.
CONTRACTOR TO VERIFY ELEVATION BEFORE AND AFTER PAVING.
NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.

MATCH LINE SOUTH AVENUE
SEE SHEET 19.00

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N.J. LICENSE NO. 45506

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 PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

**CENTRAL AVENUE I
 2022 ROAD RESURFACING PROJECT
 (CA-2021)
 TOWN OF WESTFIELD
 UNION COUNTY NEW JERSEY**

PROJECT NO.: UNIOCTY21.010 SHEET NO.: 5.01
 DATE: JULY 16, 2021

ADA RAMPS													
STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES						
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE	CONC. SIDEWALK, 4" THICK
00+00	RT	7			X		15	10				1	25
00+50	RT	1				X	25	10				2	25
00+70	LT	1	X				10	10				1	25
18+00	LT	7			X		15	10				1	20
18+60	LT	7			X		15	10				1	20

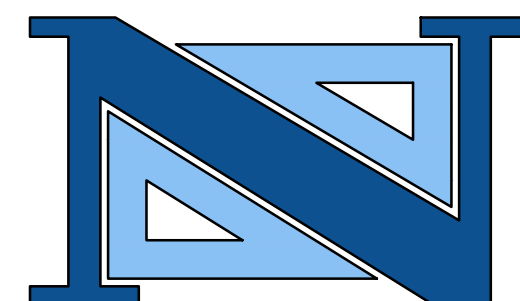
INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BYCYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
00+05	RT	B				X
00+50	RT	B				X
00+70	LT	B				X
00+75	RT	B				X
02+50	LT	A				X
03+30	LT	E				X
03+35	RT	A				X
04+50	LT	A				X
04+90	LT	A				X
06+10	LT	E				X
06+15	RT	A				X
09+50	RT	B				X
09+90	RT	E				X
10+70	LT	B				X
11+30	LT	B				X
11+90	RT	A				X
15+20	LT	B				X
15+80	RT	B				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	HOURL		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	80	
7	HMA MILLING, 3" OR LESS	SY	9,310	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	80	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	95	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1,105	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	25	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	2	
17	BICYCLE SAFE GRATE	UNIT	2	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	31	
19	RESET WATER VALVE BOX	UNIT	20	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	2	
21	10" X 20" CONCRETE VERTICAL CURB	LF	100	
22	GRANITE CURB	LF	60	
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	115	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	55	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	6	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF	4,150	
30	TRAFFIC STRIPES, 8"	LF	520	
31	TRAFFIC MARKING, LINES, 12"	LF	500	
32	TRAFFIC MARKING, LINES, 24"	LF	160	
33	TRAFFIC MARKINGS, SYMBOLS	SF	230	
34	REGULATORY AND WARNING SIGN	SF		
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	45	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	25	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	25	
40	STRAW MULCHING	S.Y.	25	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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REVISIONS			
NO.	DATE	DESCRIPTION	



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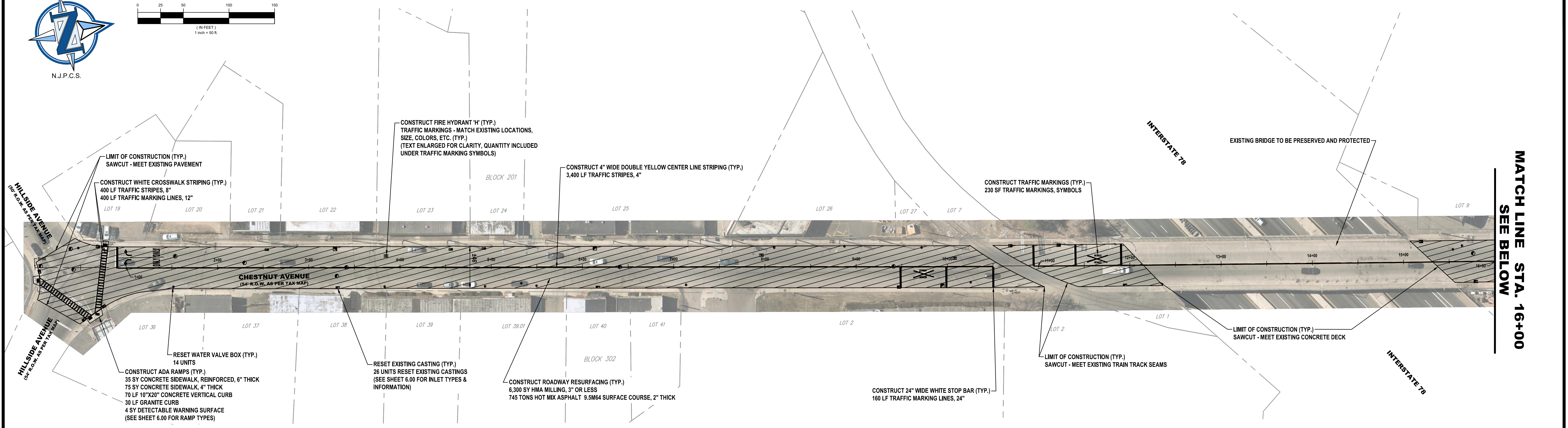
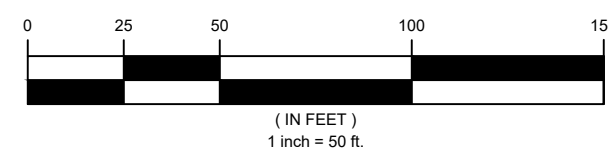
CHESTNUT AVENUE QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
TOWNSHIP OF HILLSIDE
UNION COUNTY NEW JERSEY

PROJECT NO.: UNIOCTY21.010 SHEET NO.: 6.00
DATE: JULY 16, 2021

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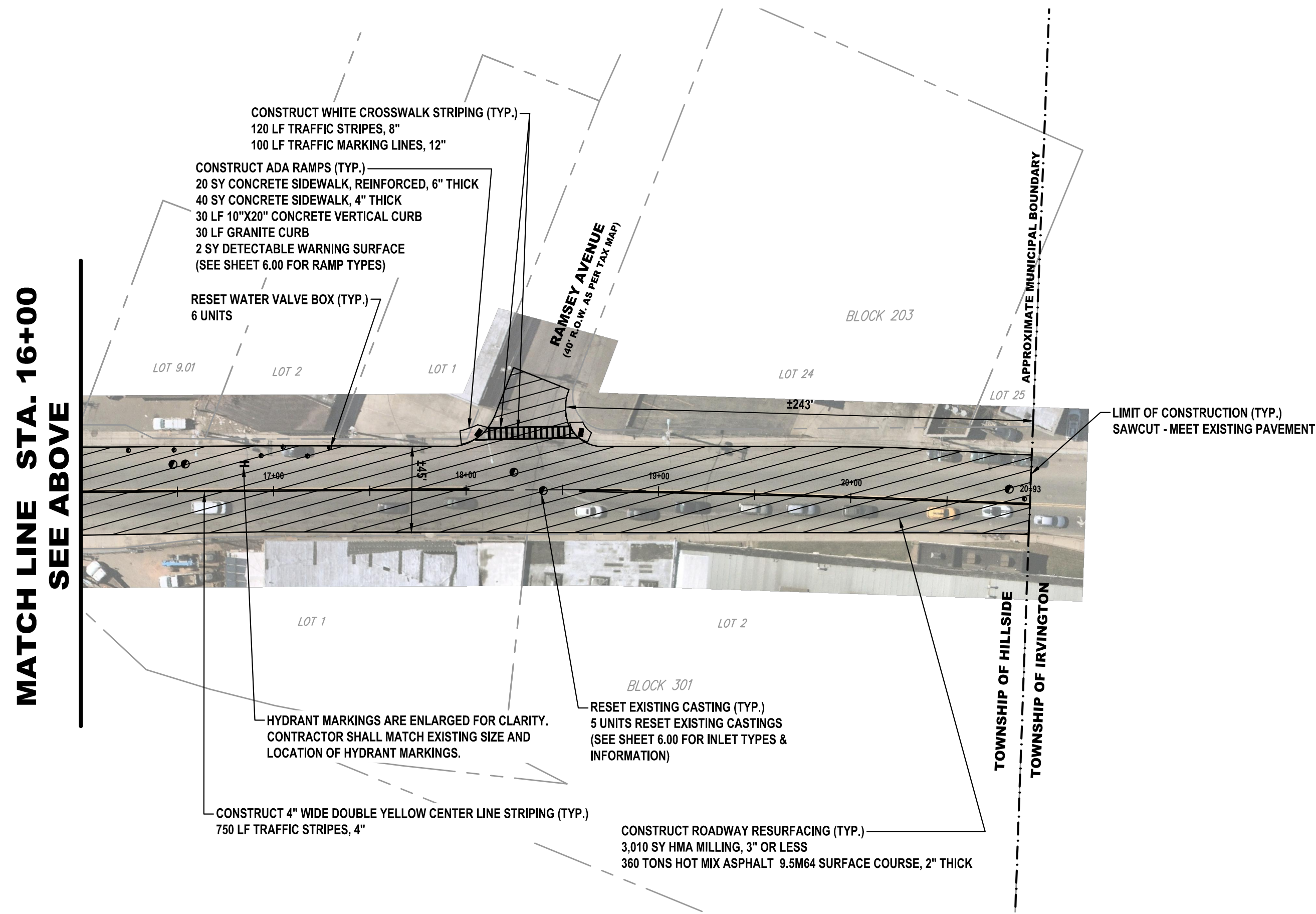
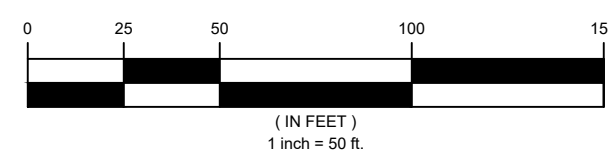
GRAPHIC SCALE



**MATCH LINE STA. 16+00
SEE BELOW**



GRAPHIC SCALE

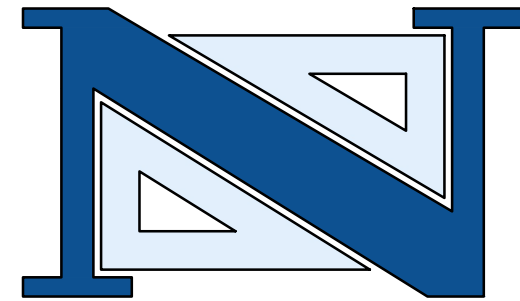


**MATCH LINE STA. 16+00
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NO.	DATE	DESCRIPTION			



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**CHESTNUT AVENUE I
2022 ROAD RESURFACING PROJECT
(CA-2021)
TOWNSHIP OF HILLSIDE
UNION COUNTY NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: 1" = 50'	UNIOCTY21.010	6.01
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

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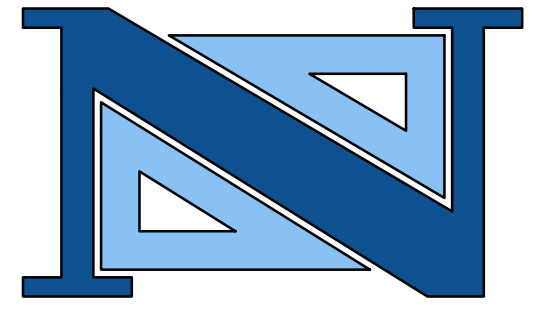
INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BYCYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
01+80	LT	B				X
13+50	LT	A				X
18+60	RT	A				X
24+90	LT	A				X
37+50	RT	A				X
42+10	LT	A				X
44+20	RT	A				X
44+20	LT	A				X
50+40	RT	A				X
50+40	LT	A				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	HOURL		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	190	
7	HMA MILLING, 3" OR LESS	SY	17,700	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	190	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	20	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2,090	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	42	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	1	
17	BYCYCLE SAFE GRATE	UNIT	1	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	17	
19	RESET WATER VALVE BOX	UNIT		
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	1	
21	10" X 20" CONCRETE VERTICAL CURB	LF		
22	GRANITE CURB	LF		
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY		
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY		
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY		
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF	21,160	
30	TRAFFIC STRIPES, 8"	LF	300	
31	TRAFFIC MARKING, LINES, 12"	LF	580	
32	TRAFFIC MARKING, LINES, 24"	LF	20	
33	TRAFFIC MARKINGS, SYMBOLS	SF	360	
34	REGULATORY AND WARNING SIGN	SF	80	
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	105	
38	TOPSOIL SPREADING, 4" THICK	S.Y.		
39	FERTILIZING AND SEEDING, TYPE A	S.Y.		
40	STRAW MULCHING	S.Y.		
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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NO.	DATE	DESCRIPTION	



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N.J. LICENSE NO. 45506

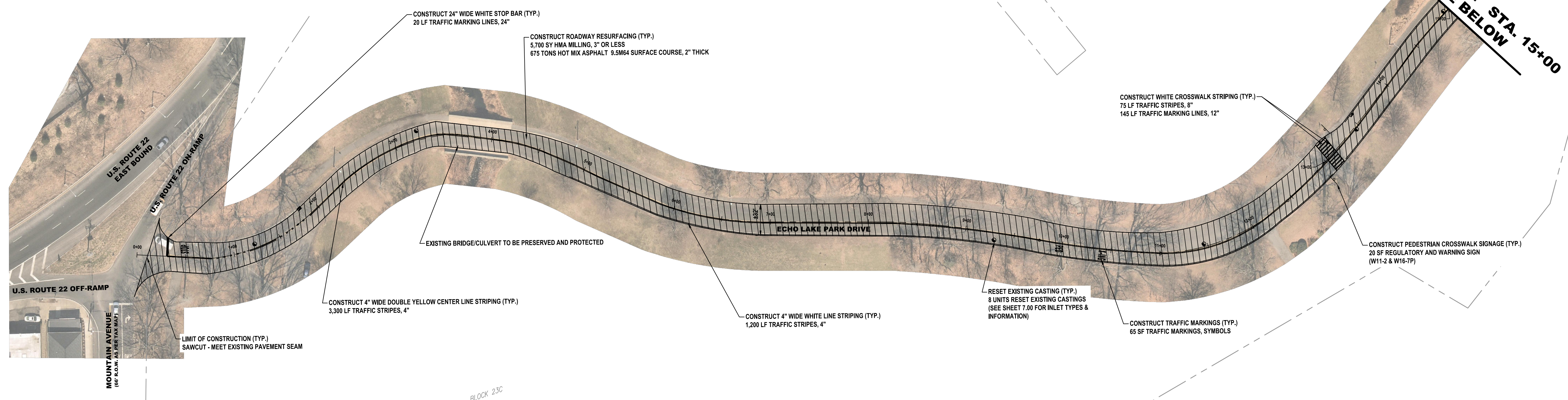
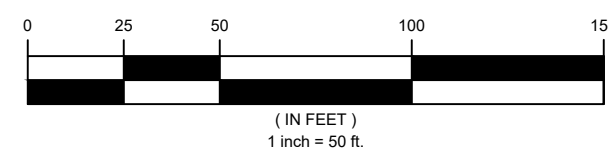
A PROJECT OF
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LYNDHURST FAX: 201-939-0846 E-MAIL: NEA@NEGLIAENGINEERING.COM
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ECHO LAKE PARK DRIVE QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
BOROUGH OF MOUNTAINSIDE
UNION COUNTY NEW JERSEY

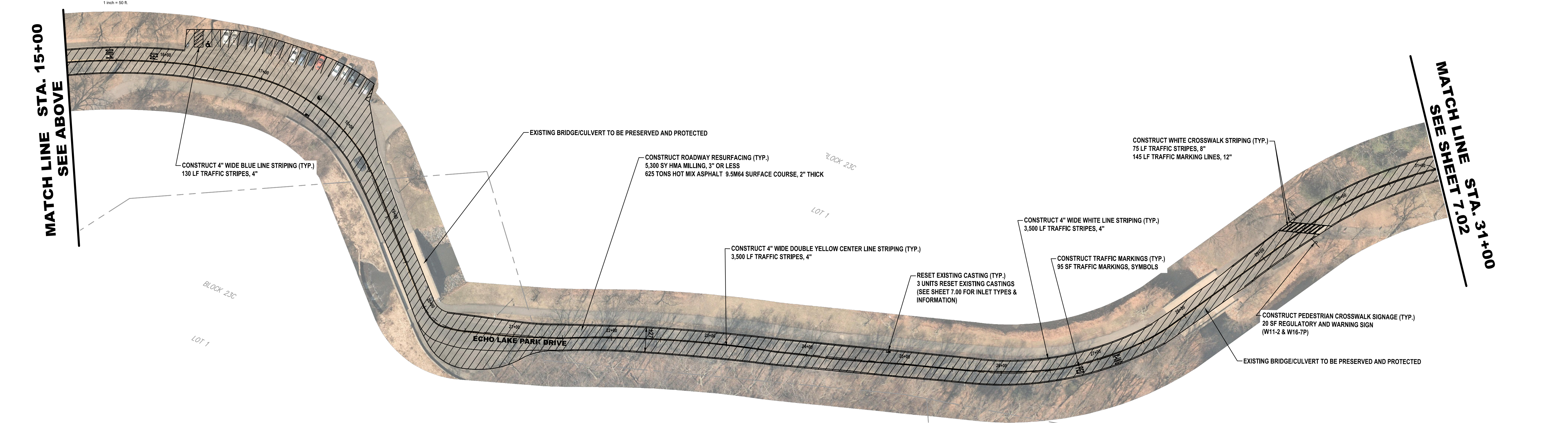
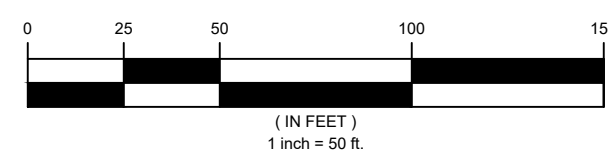
DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: N.T.S.	UNIOCTY21.010	7.00
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	



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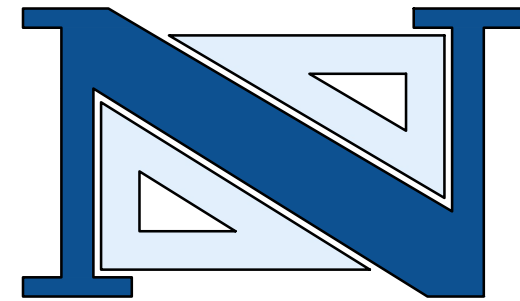
GRAPHIC SCALE



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PROFESSIONAL PLANNER
N.J. LICENSE NO. 33LI00569800

**ECHO LAKE PARK DRIVE I
2022 ROAD RESURFACING PROJECT
(CA-2021)
BOROUGH OF MOUNTAINSIDE
UNION COUNTY
NEW JERSEY**

DRAWN BY: VH
DESIGNED BY: VH
FIELD BOOK NO:

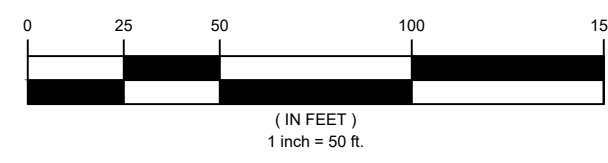
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PROJECT NO.: UNIOCTY21.010
SHEET NO.: 7.01
DATE: JULY 16, 2021

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GRAPHIC SCALE



MATCH LINE STA. 31+00
SEE SHEET 7.01

CONSTRUCT 4" WIDE YELLOW LINE STRIPING (TYP.)
100 LF TRAFFIC STRIPES, 4"

CONSTRUCT 4" WIDE BLUE LINE STRIPING (TYP.)
200 LF TRAFFIC STRIPES, 4"

CONSTRUCT 4" WIDE WHITE LINE STRIPING (TYP.)
3,700 LF TRAFFIC STRIPES, 4"

CONSTRUCT ROADWAY RESURFACING (TYP.)
5,300 SY HMA MILLING, 3" OR LESS
625 TONS HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK

CONSTRUCT 4" WIDE DOUBLE YELLOW CENTER LINE STRIPING (TYP.)
3,000 LF TRAFFIC STRIPES, 4"

RESET EXISTING CASTING (TYP.)
4 UNITS RESET EXISTING CASTINGS
(SEE SHEET 7.00 FOR INLET TYPES & INFORMATION)

CONSTRUCT WHITE CROSSWALK STRIPING (TYP.)
75 LF TRAFFIC STRIPES, 8"
145 LF TRAFFIC MARKING LINES, 12"

CONSTRUCT TRAFFIC MARKINGS (TYP.)
145 SF TRAFFIC MARKINGS, SYMBOLS

CONSTRUCT PEDESTRIAN CROSSWALK SIGNAGE (TYP.)
20 SF REGULATORY AND WARNING SIGN
(W11-2 & W16-7P)

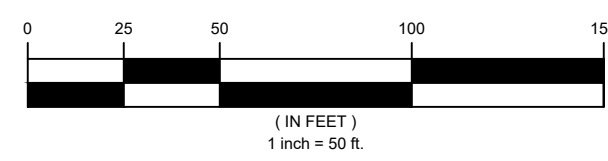
MATCH LINE STA. 47+00
SEE BELOW

BLOCK 23C

LOT 1



GRAPHIC SCALE



MATCH LINE STA. 47+00
SEE ABOVE

CONSTRUCT 4" WIDE BLUE LINE STRIPING (TYP.)
130 LF TRAFFIC STRIPES, 4"

CONSTRUCT TRAFFIC MARKINGS (TYP.)
55 SF TRAFFIC MARKINGS, SYMBOLS

CONSTRUCT PEDESTRIAN CROSSWALK SIGNAGE (TYP.)
20 SF REGULATORY AND WARNING SIGN
(W11-2 & W16-7P)

CONSTRUCT 4" WIDE DOUBLE YELLOW CENTER LINE STRIPING (TYP.)
900 LF TRAFFIC STRIPES, 4"

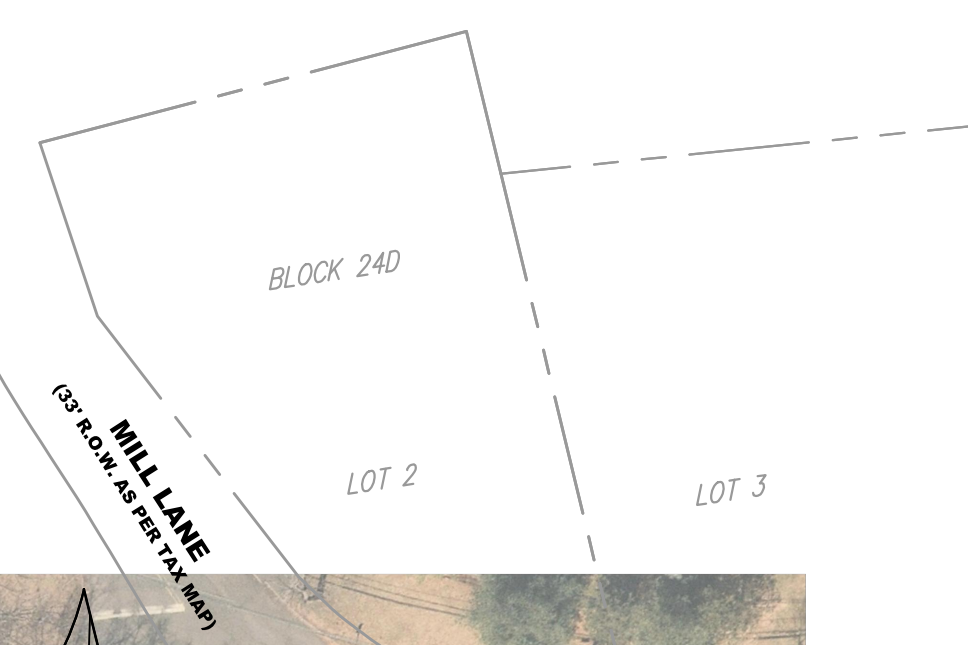
CONSTRUCT 4" WIDE WHITE LINE STRIPING (TYP.)
1,500 LF TRAFFIC STRIPES, 4"

CONSTRUCT ROADWAY RESURFACING (TYP.)
1,400 SY HMA MILLING, 3" OR LESS
165 TONS HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK

RESET EXISTING CASTING (TYP.)
2 UNITS RESET EXISTING CASTINGS
(SEE SHEET 7.00 FOR INLET TYPES & INFORMATION)

LIMIT OF CONSTRUCTION (TYP.)
SAWCUT - MEET EXISTING PAVEMENT SEAM

CONSTRUCT WHITE CROSSWALK STRIPING (TYP.)
75 LF TRAFFIC STRIPES, 8"
145 LF TRAFFIC MARKING LINES, 12"

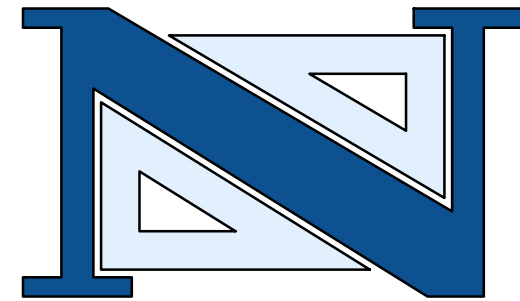


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m:\union_county\uniocty21_010_2022_road_resurfacing\project\road_resurfacing\plan\07_00_echo_lake_park_drive.dwg, Plotted: Wednesday, February 23, 2022 2:17:09 PM

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NO.	DATE	DESCRIPTION			



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**ECHO LAKE PARK DRIVE II
 2022 ROAD RESURFACING PROJECT
 (CA-2021)
 BOROUGH OF MOUNTAINSIDE
 UNION COUNTY
 NEW JERSEY**

PROJECT NO.: UNIOCTY21.010
 SHEET NO.: 7.02
 DATE: JULY 16, 2021

DRAWN BY: VH
 DESIGNED BY: VH
 FIELD BOOK NO:

CHECKED BY: EMJ
 SCALE: 1"=50'
 PAGE:

ADA RAMPS												
STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES					
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE
12+20	LT	6			X		10	10		10	1	10
12+65	LT	6			X		10	10		10	1	10
19+60	RT	7				X	25	10		20	2	15
19+60	LT	7				X	25	10		20	2	15

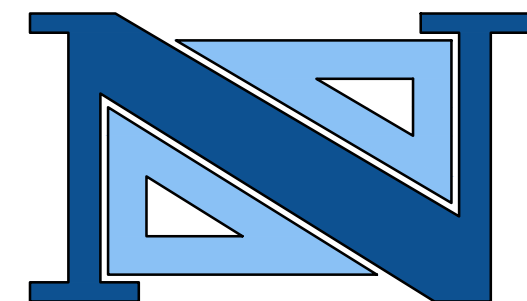
INLET TYPES & LOCATIONS							
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY				
			BYCYCLE SAFE GRATE	CURB PIECE	PLATE	RESET	
12+00	RT	B					X
12+55	RT	B					X
13+05	LT	B					X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	HOURL		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	75	
7	HMA MILLING, 3" OR LESS	SY	9,990	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	75	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	10	
10	HOT MIX ASPHALT 9.5M84 SURFACE COURSE	TON	1,185	
11	HOT MIX ASPHALT 9.5M84 INTERMEDIATE COURSE	TON	25	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT		
17	BICYCLE SAFE GRATE	UNIT		
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	20	
19	RESET WATER VALVE BOX	UNIT	3	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT		
21	10" X 20" CONCRETE VERTICAL CURB	LF	70	
22	GRANITE CURB	LF	40	
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	50	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	60	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	6	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF	4,000	
30	TRAFFIC STRIPES, 8"	LF	340	
31	TRAFFIC MARKING, LINES, 12"	LF	460	
32	TRAFFIC MARKING, LINES, 24"	LF	65	
33	TRAFFIC MARKINGS, SYMBOLS	SF	150	
34	REGULATORY AND WARNING SIGN	SF		
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	40	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	20	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	20	
40	STRAW MULCHING	S.Y.	20	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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NO.	DATE	DESCRIPTION	



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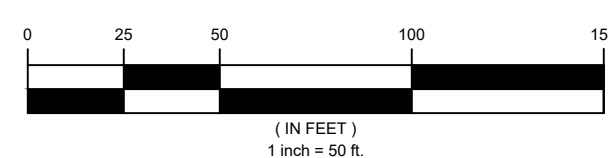
HILLSIDE AVENUE QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
TOWNSHIP OF SPRINGFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO.:	SHEET NO.:
DESIGNED BY: VH	SCALE: N.T.S.	UNIOCTY21.010	8.00
FIELD BOOK NO.:	PAGE:	DATE: JULY 16, 2021	

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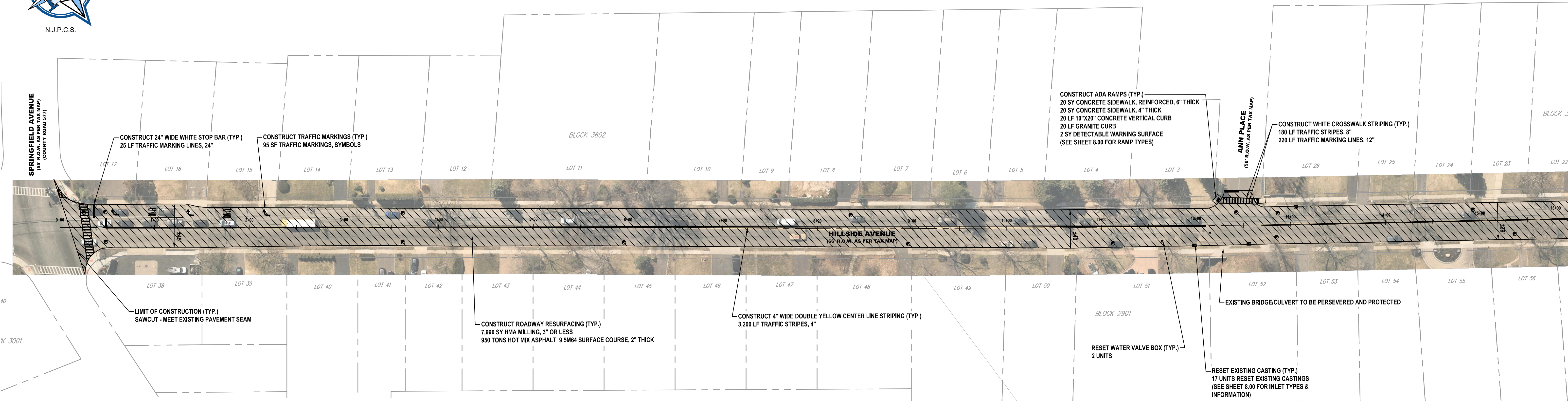


GRAPHIC SCALE



N.J.P.C.S.

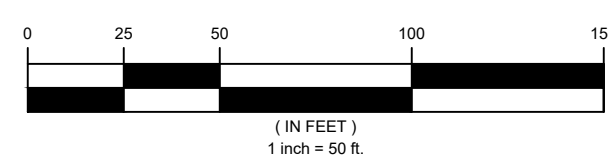
SPRINGFIELD AVENUE
(SP. P.O.W. AS PER TAX MAP)
(COUNTY ROAD 577)



MATCH LINE STA. 16+00
SEE BELOW

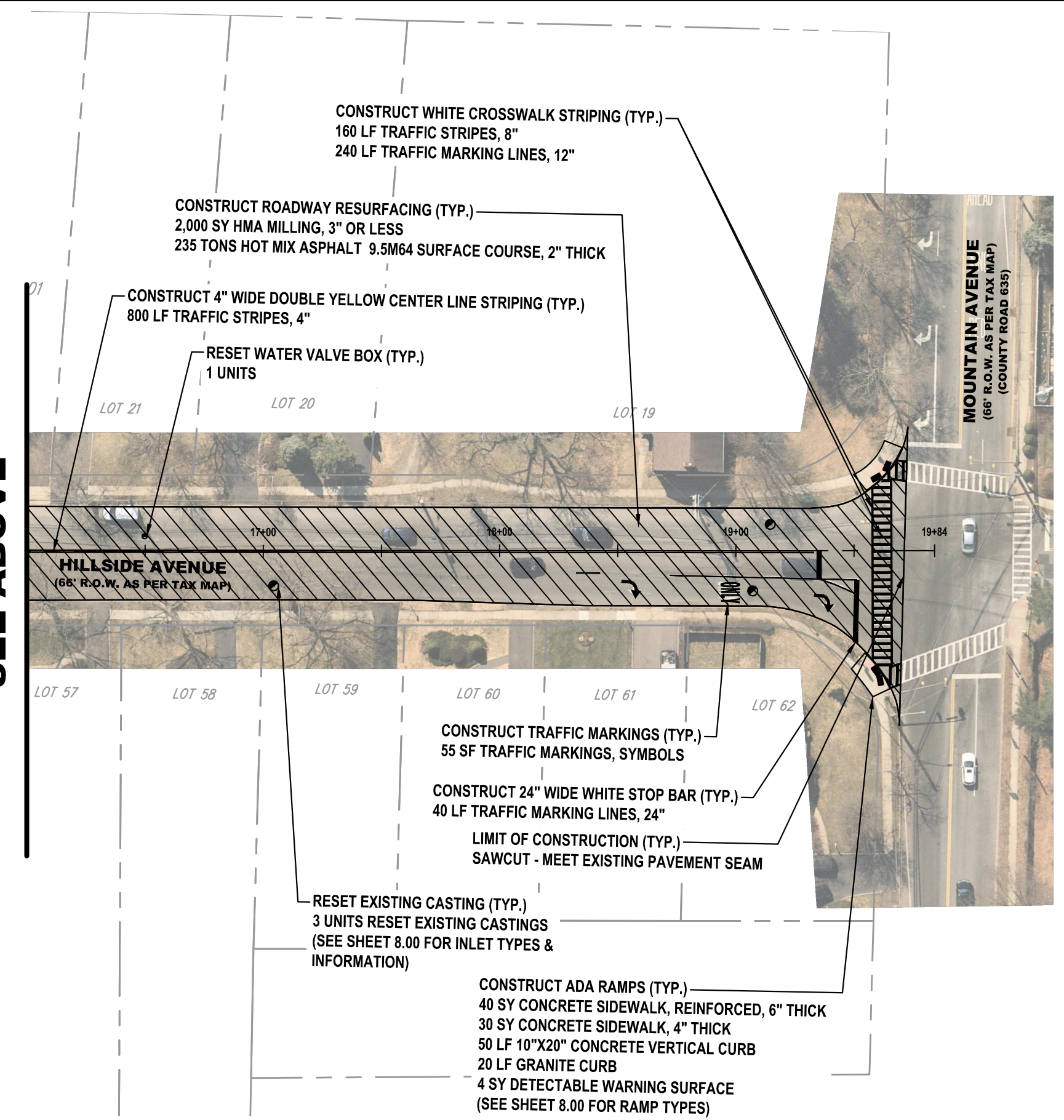


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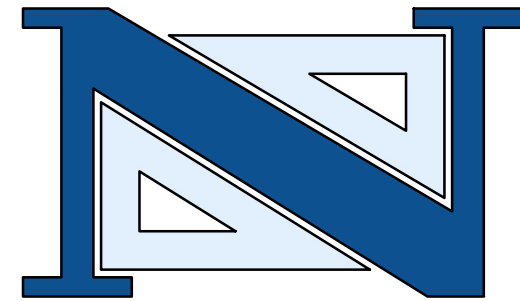
MATCH LINE STA. 16+00
SEE ABOVE



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**HILLSIDE AVENUE I
2022 ROAD RESURFACING PROJECT
(CA-2021)
TOWNSHIP OF SPRINGFIELD
UNION COUNTY NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: 1" = 50'	UNIOCTY21.010	8.01
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

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ADA RAMP												
STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES					
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE
04+60	RT	7			X		10	20		15	1	15
12+05	RT	3	X				25	20		15	2	15
12+70	LT	3			X		25	15		15	1	15
22+25	RT	4	X				10	15		10	1	15
22+70	RT	6	X				20	10		15	1	15
51+90	LT	5	X				10			5	1	10
52+45	LT	5	X				10			5	1	10
53+40	RT	6	X				10	10		10	1	15
53+80	RT	5	X				10			5	1	10
59+20	LT	7	X				10			5	1	15
59+50	LT	6	X				20			10	1	10

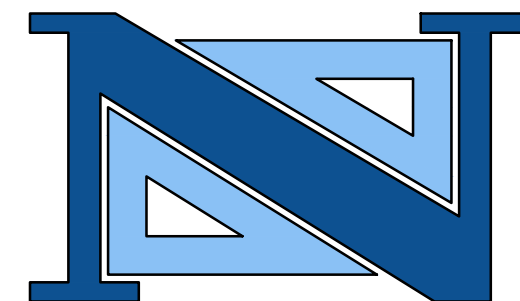
INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BYCYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
07+85	RT	B				X
07+95	LT	B				X
08+00	RT	B				X
25+90	RT	B				X
25+95	LT	B				X
27+20	RT	B				X
27+20	LT	B				X
38+15	RT	B				X
38+15	LT	B				X
53+10	RT	B				X
56+85	RT	B				X
56+85	LT	B				X
57+35	LT	B				X
57+50	RT	B				X
60+10	LT	B				X
60+25	RT	B				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	HOUR		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	230	
7	HMA MILLING, 3" OR LESS	SY	30,165	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	230	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	25	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	3,565	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	50	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	1	
17	BICYCLE SAFE GRATE	UNIT	1	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	75	
19	RESET WATER VALVE BOX	UNIT	23	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	1	
21	10" X 20" CONCRETE VERTICAL CURB	LF	160	
22	GRANITE CURB	LF	90	
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	175	
26	CONCRETE SIDEWALK, REINFORCED 8" THICK	SY	130	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	14	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF	21,600	
30	TRAFFIC STRIPES, 8"	LF	750	
31	TRAFFIC MARKING, LINES, 12"	LF	955	
32	TRAFFIC MARKING, LINES, 24"	LF	40	
33	TRAFFIC MARKINGS, SYMBOLS	SF	85	
34	REGULATORY AND WARNING SIGN	SF	20	
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	125	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	55	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	55	
40	STRAW MULCHING	S.Y.	55	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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REVISIONS			
NO.	DATE	DESCRIPTION	



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PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

MEISEL AVENUE QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
TOWNSHIP OF SPRINGFIELD
UNION COUNTY NEW JERSEY

PROJECT NO.: UNIOCTY21.010 SHEET NO.: 9.00
DATE: JULY 16, 2021

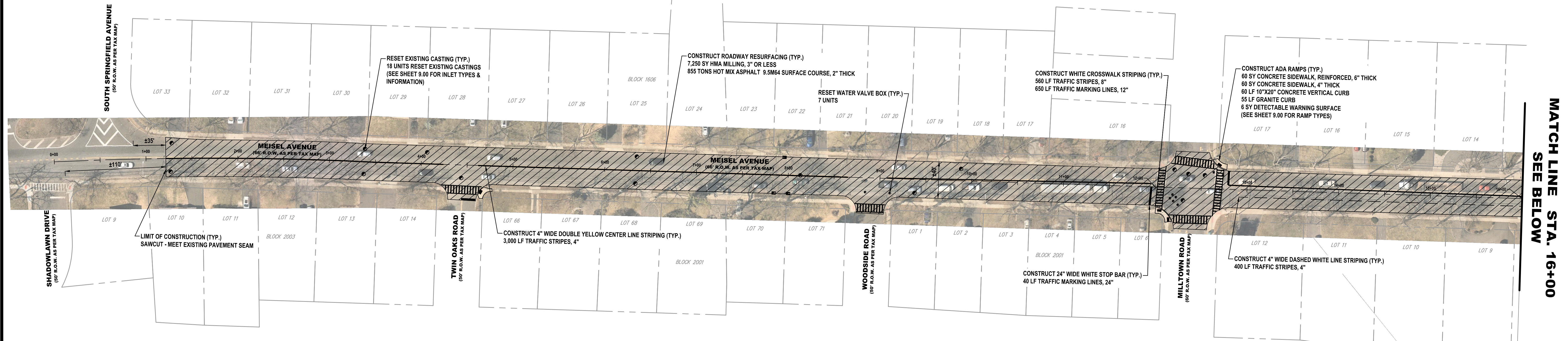
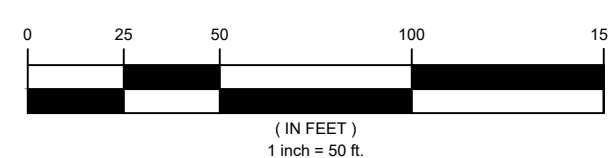
DRAWN BY: VH CHECKED BY: EMJ
DESIGNED BY: VH SCALE: N.T.S.
FIELD BOOK NO.: PAGE

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N.J.P.C.S.

GRAPHIC SCALE

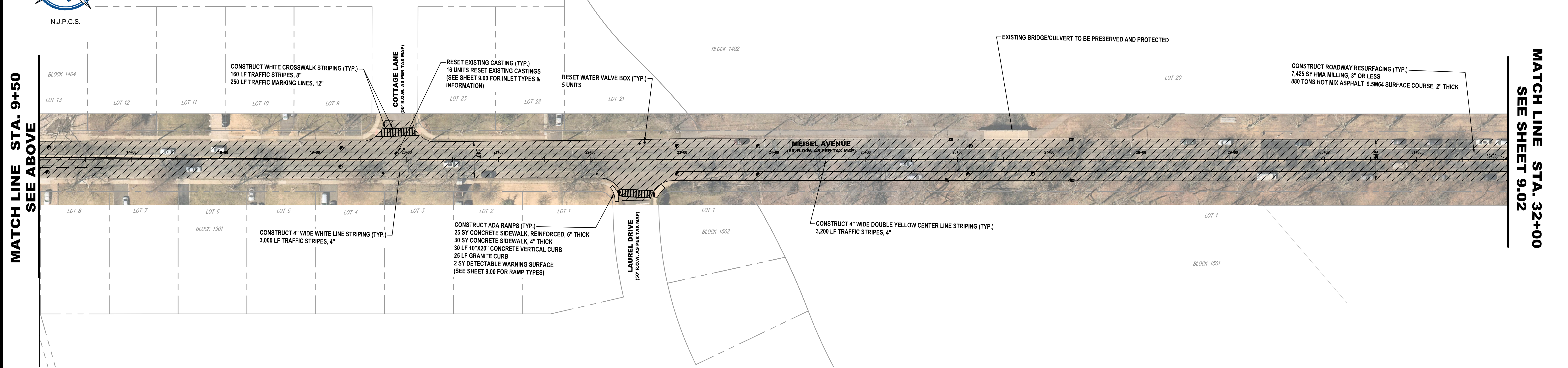
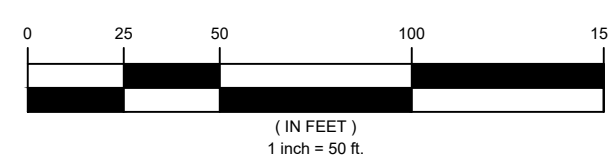


MATCH LINE STA. 16+00
SEE BELOW



N.J.P.C.S.

GRAPHIC SCALE



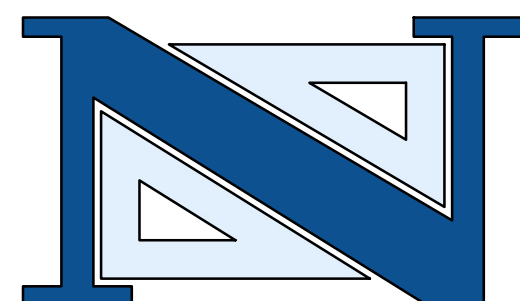
MATCH LINE STA. 9+50
SEE ABOVE

MATCH LINE STA. 32+00
SEE SHEET 9.02

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REVISIONS				NO.	DATE	DESCRIPTION	DRAWN	DESIGNED	CHECKED



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**MEISEL AVENUE I
 2022 ROAD RESURFACING PROJECT
 (CA-2021)
 TOWNSHIP OF SPRINGFIELD
 UNION COUNTY NEW JERSEY**

DRAWN BY: VH
 DESIGNED BY: VH
 FIELD BOOK NO:

CHECKED BY: EMJ
 SCALE: 1" = 50'
 PAGE:

PROJECT NO:
UNIOCTY21.010

SHEET NO:
9.01

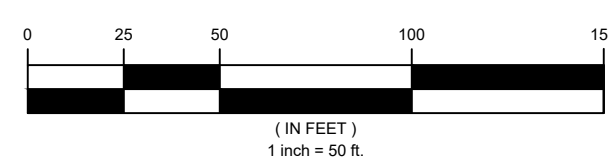
DATE: JULY 16, 2021

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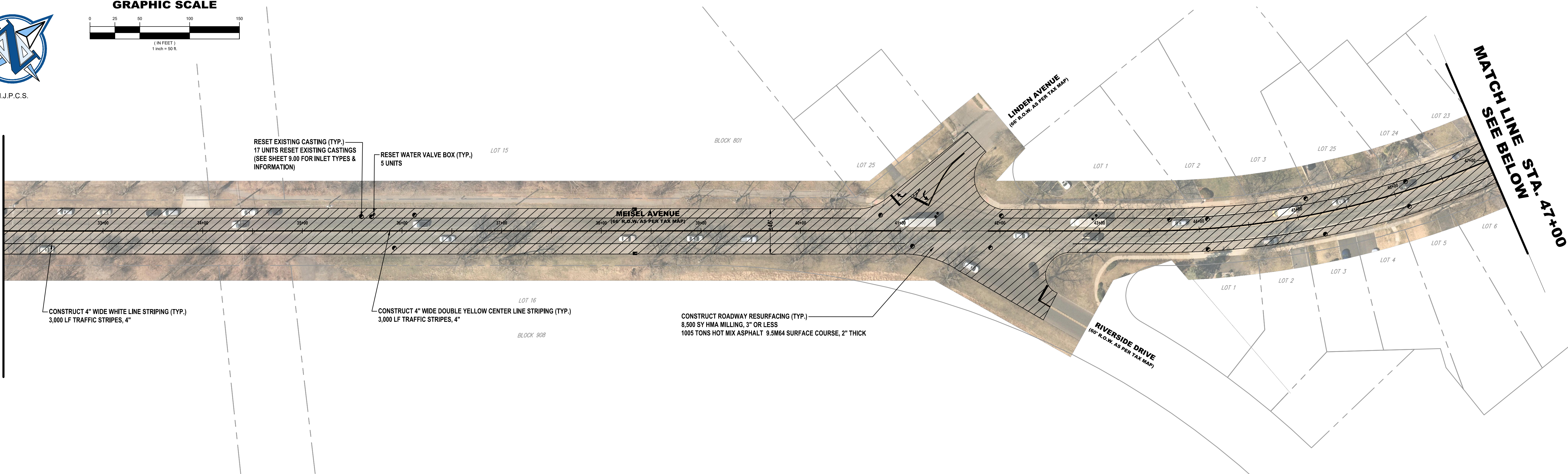


N.J.P.C.S.

GRAPHIC SCALE



MATCH LINE STA. 32+00
SEE SHEET 9.01

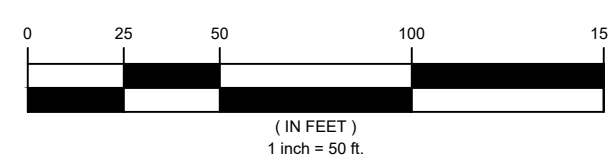


MATCH LINE STA. 47+00
SEE BELOW

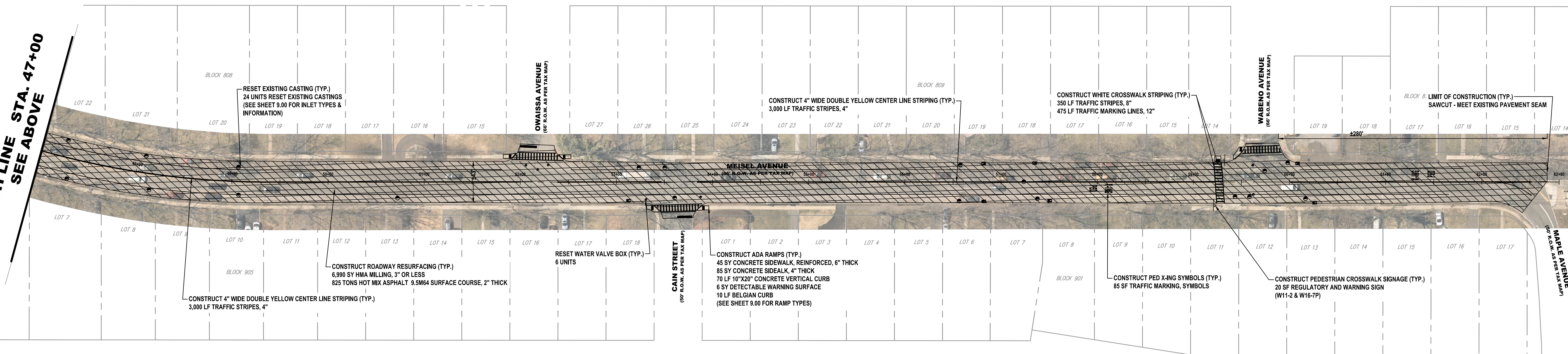


N.J.P.C.S.

GRAPHIC SCALE



MATCH LINE STA. 47+00
SEE ABOVE

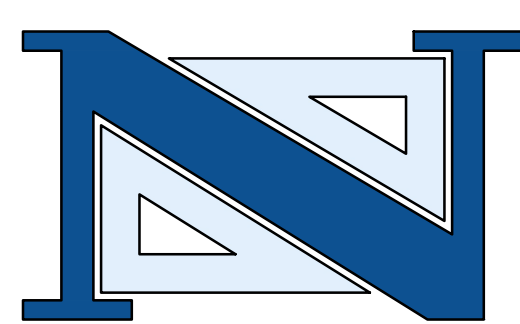


BLOCK 8: LIMIT OF CONSTRUCTION (TYP.)
SAWCUT - MEET EXISTING PAVEMENT SEAM

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NO.	DATE	DESCRIPTION				



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**MEISEL AVENUE II
2022 ROAD RESURFACING PROJECT
(CA-2021)
TOWNSHIP OF SPRINGFIELD
UNION COUNTY
NEW JERSEY**

DESIGNED BY: VH
CHECKED BY: EMJ
FIELD BOOK NO.:
SCALE: 1"=50'
PAGE:
PROJECT NO.: UNIOCTY21.010
SHEET NO.: 9.02
DATE: JULY 16, 2021

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STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				ADA RAMPS								
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	QUANTITIES								
							10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE	CONC. SIDEWALK, 4" THICK		
10+50	RT	5			X		15	10				10	1		
10+50	LT	5	X				10	10				10	1		10
11+90	RT	1				X	20					15	2		15
11+90	LT	1				X	25	10				15	2		15
12+95	RT	1			X		10					10	1		10
13+40	RT	5					10	10				10	1		10
15+50	RT	5			X		15	10				10	1		15
15+90	RT	5					20	10				10	1		15
21+40	LT	6	X		X		10	10				10	1		10
21+80	LT	6	X				10	10				10	1		15
22+90	RT	6				X	25	10				15	2		10
22+90	LT	5				X	25	10				15	2		10
23+50	RT	7				X	25	15				15	2		10
23+50	LT	7				X	25	15				15	2		10
25+50	RT	7			X		20	15				15	1		10
25+50	LT	7			X		10	15				10	1		10
26+00	RT	7				X	20	15				15	2		10
26+00	LT	7				X	25	15				20	2		10
27+90	LT	7			X		10	15				10	1		10
28+50	RT	7				X	15	15				10	1		15
28+50	LT	5	X				25	15				15	2		10
30+40	LT	7			X		10	15				10	1		10
30+90	LT	7			X		10	15				10	1		10
33+00	RT	5				X	10	10				10	2		10
33+00	LT	5				X	15	15				15	2		15
33+40	RT	5				X	15	15				15	2		10
33+40	LT	5				X	10	15				10	2		10
35+50	RT	5			X		10	15				10	2		10
35+50	LT	5			X		15	15				15	2		10
35+90	RT	5			X		10	15				10	2		10
35+90	LT	5			X		15	15				15	2		10
38+00	RT	5			X		10	15				10	2		10
38+00	LT	5			X		10	10				10	2		10
38+40	RT	5			X		10	10				10	1		10
38+40	LT	5			X		10	10				10	1		10
38+60	RT	1			X		10	10				10	1		10
38+60	LT	1			X		10	10				10	1		10
40+50	RT	7				X	25	10				25	2		20
40+50	LT	6			X		10	10				10	1		10
40+90	RT	7				X	15	15				15	2		20
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46+20	RT	5			X		15	10				10	1		10
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49+20	LT	7			X		10	10				10	1		10
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68+60	LT	5			X		10	10				10	1		10
69+20	LT	5			X		10	10				10	1		10
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80+20	LT	7	X				20	10				10	1		

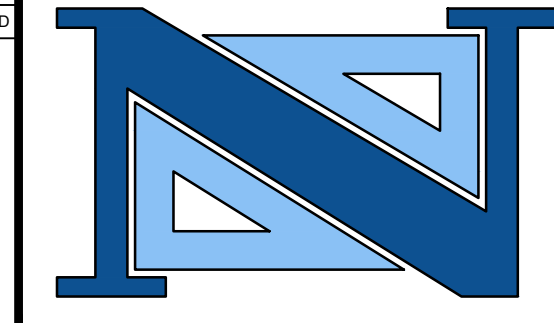
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
00+90	RT	E				X
03+35	LT	B				X
03+40	RT	B				X
05+55	RT	B				X
05+70	LT	B				X
06+45	LT	B				X
06+50	RT	B				X
07+00	LT	B				X
07+30	LT	B				X
07+70	LT	B				X
08+00	RT	B				X
09+10	LT	B				X
09+10	RT	B				X
11+05	LT	B				X
19+95	LT	B				X
20+35	RT	B				X
21+00	LT	B				X
21+00	RT	B				X
23+70	RT	B				X
26+05	RT	B				X
27+90	LT	B				X
28+50	LT	B				X
28+60	RT	B				X
28+65	RT	B				X
30+20	LT	B				X
30+20	RT	B				X
32+90	LT	B				X
32+90	RT	B				X
33+55	RT	B				X
35+40	LT	B				X
35+40	RT	B				X
36+05	LT	B				X
60+40	LT	B				X
60+45	RT	B				X
60+60	RT	B				X
60+80	LT	B				X
61+30	RT	B				X
61+35	RT	B				X
61+45	LT	B				X
61+55	LT	B				X
77+50	RT	B				X
77+50	LT	B				X
83+45	RT	E				X
83+45	LT	B				X
88+90	RT	B				X
88+90	LT	B				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	HOURL		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	360	
7	HMA MILLING, 3" OR LESS	SY	50,315	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	360	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	470	
10	HOT MIX ASPHALT 9.5M84 SURFACE COURSE	TON	5,955	
11	HOT MIX ASPHALT 9.5M84 INTERMEDIATE COURSE	TON	110	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	4	
17	BICYCLE SAFE GRATE	UNIT	4	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	90	
19	RESET WATER VALVE BOX	UNIT	37	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	4	
21	10" X 20" CONCRETE VERTICAL CURB	LF	765	
22	GRANITE CURB	LF		
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	565	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	635	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	75	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF	29,000	
30	TRAFFIC STRIPES, 8"	LF	8,240	
31	TRAFFIC MARKING, LINES, 12"	LF	4,870	
32	TRAFFIC MARKING, LINES, 24"	LF	175	
33	TRAFFIC MARKINGS, SYMBOLS	SF	1,270	
34	REGULATORY AND WARNING SIGN	SF	60	
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	195	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	270	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	270	
40	STRAW MULCHING	S.Y.	270	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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REVISIONS				DRAWN	DESIGNED	CHECKED
NO.	DATE	DESCRIPTION				



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LYNDHURST NEW JERSEY
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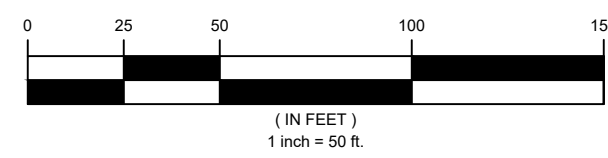
MICHIGAN AVENUE QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
BOROUGH OF KENILWORTH
UNION COUNTY
NEW JERSEY

PROJECT NO.: UNIOCTY21.010
SHEET NO.: 10.00
DATE: JULY 16, 2021

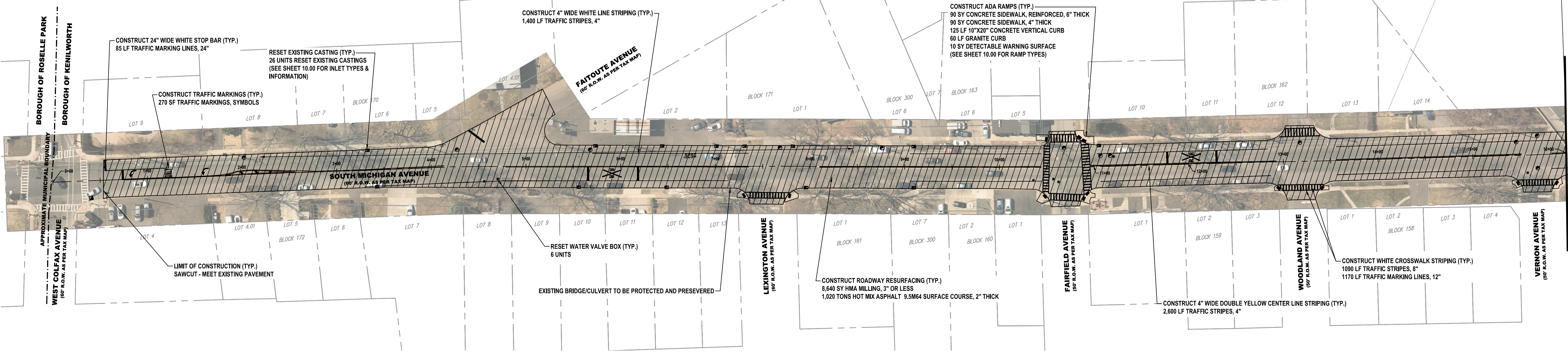
DRAWN BY: VH
DESIGNED BY: VH
FIELD BOOK NO.:
CHECKED BY: EMJ
SCALE: N.T.S.
PAGE:
PROJECT NO.: UNIOCTY21.010
SHEET NO.: 10.00
DATE: JULY 16, 2021



GRAPHIC SCALE



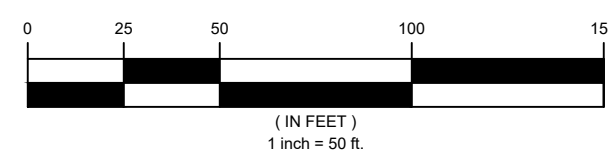
BOROUGH OF ROSELLE PARK
BOROUGH OF KENILWORTH
APPROXIMATE MUNICIPAL BOUNDARY
WEST COLFAX AVENUE (60' R.O.W. AS PER TAX MAP)
FAITOUTE AVENUE (60' R.O.W. AS PER TAX MAP)
LEXINGTON AVENUE (60' R.O.W. AS PER TAX MAP)
FAIRFIELD AVENUE (60' R.O.W. AS PER TAX MAP)
WOODLAND AVENUE (60' R.O.W. AS PER TAX MAP)
VERNON AVENUE (60' R.O.W. AS PER TAX MAP)



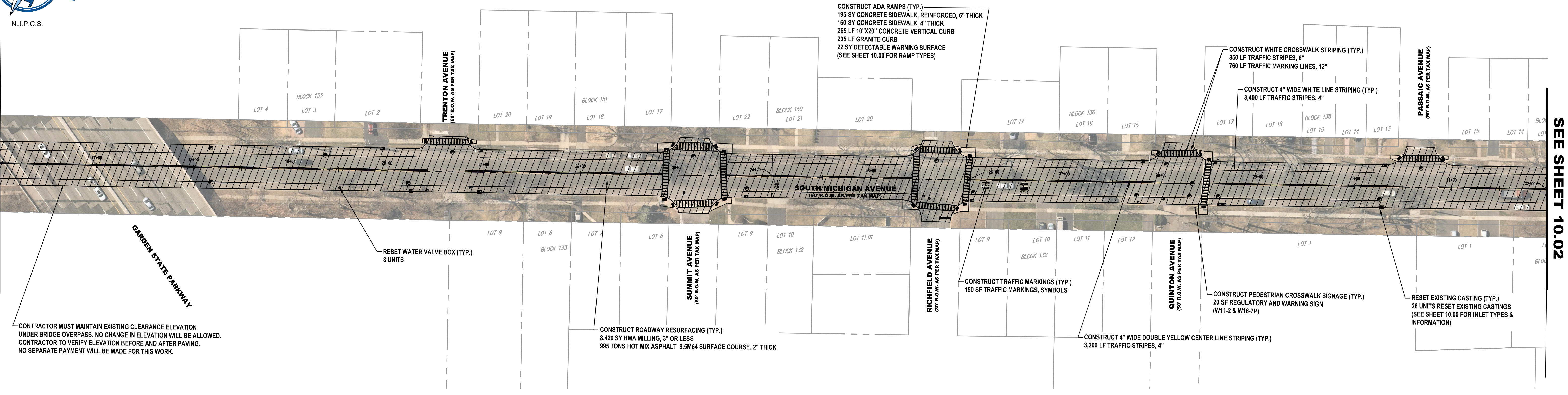
MATCH LINE STA. 16+00
SEE BELOW



GRAPHIC SCALE



MATCH LINE STA. 16+00
SEE ABOVE



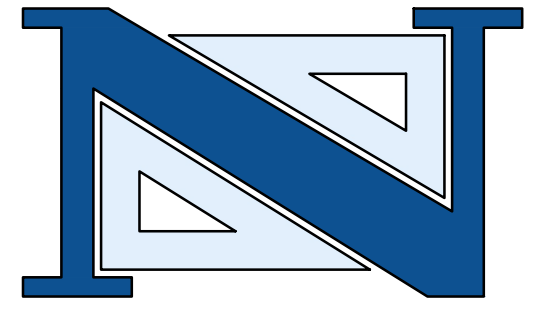
MATCH LINE STA. 32+00
SEE SHEET 10.02

CONTRACTOR MUST MAINTAIN EXISTING CLEARANCE ELEVATION UNDER BRIDGE OVERPASS. NO CHANGE IN ELEVATION WILL BE ALLOWED. CONTRACTOR TO VERIFY ELEVATION BEFORE AND AFTER PAVING. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.

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N.J. LICENSE NO. 38604

PROFESSIONAL PLANNER
N.J. LICENSE NO. 33LI00569800

**MICHIGAN AVENUE I
2022 ROAD RESURFACING PROJECT
(CA-2021)**

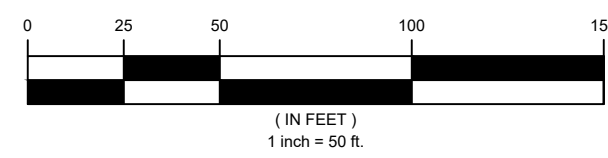
**BOROUGH OF KENILWORTH
UNION COUNTY
NEW JERSEY**

PROJECT NO.: UNIOCTY21.010
SHEET NO.: 10.01
DATE: JULY 16, 2021

DRAWN BY: VH
DESIGNED BY: VH
FIELD BOOK NO.:
CHECKED BY: EMJ
SCALE: 1" = 50'
PAGE:
PROJECT NO.: UNIOCTY21.010
SHEET NO.: 10.01
DATE: JULY 16, 2021

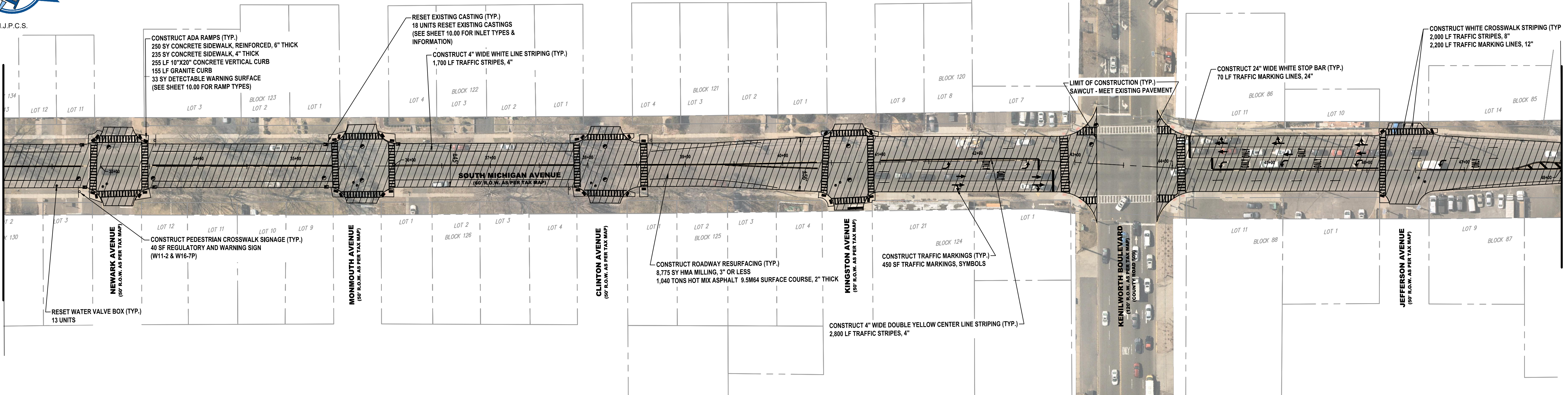


GRAPHIC SCALE



N.J.P.C.S.

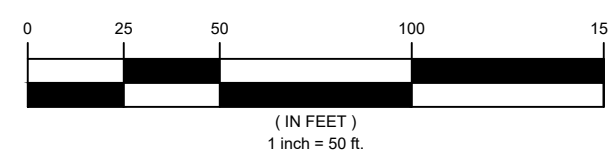
**MATCH LINE STA. 32+00
SEE SHEET 10.01**



**MATCH LINE STA. 48+00
SEE BELOW**

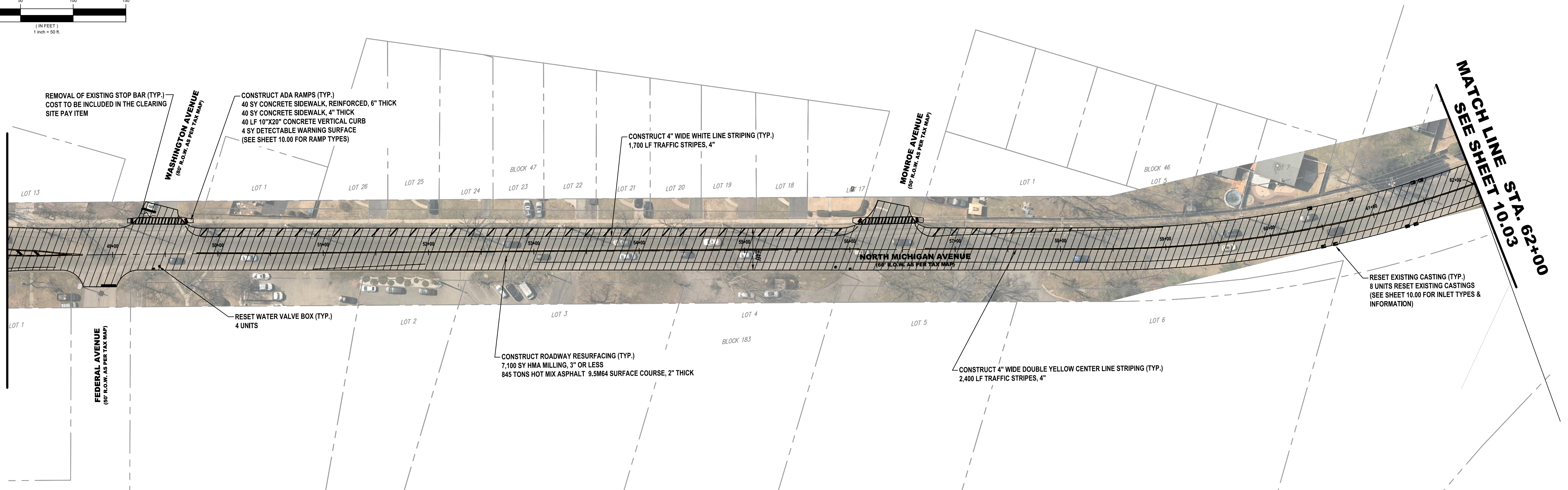


GRAPHIC SCALE



N.J.P.C.S.

**MATCH LINE STA. 48+00
SEE ABOVE**



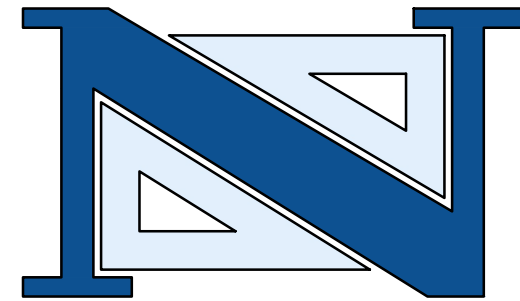
**MATCH LINE STA. 62+00
SEE SHEET 10.03**

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NO.	DATE	DESCRIPTION	DRAWN	DESIGNED	CHECKED



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N.J. LICENSE NO. 33L00569800

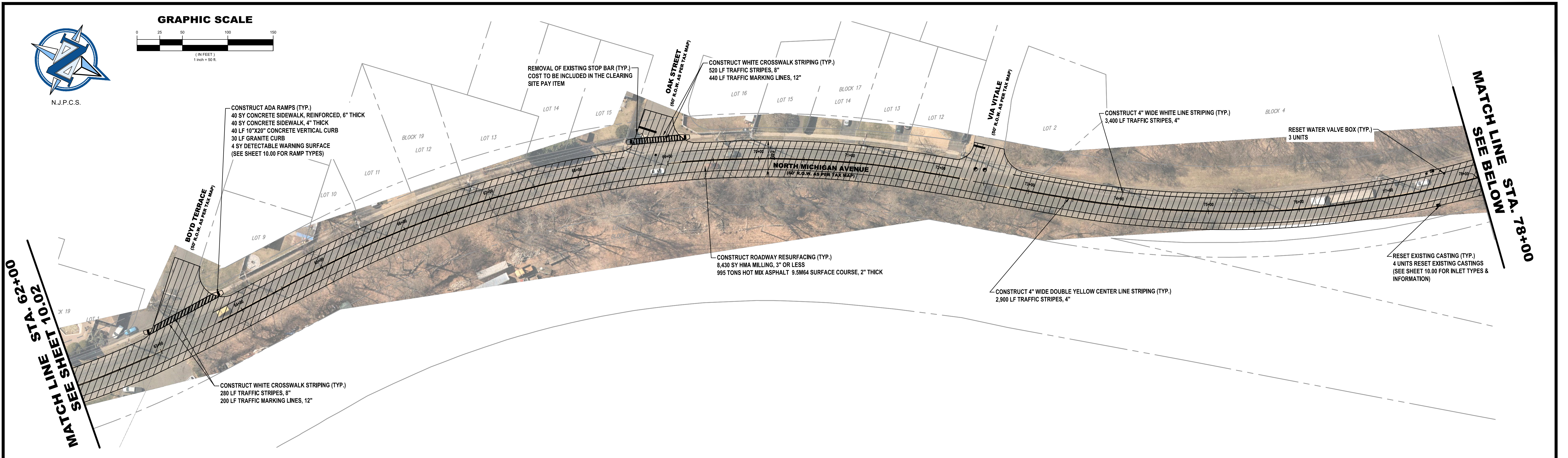
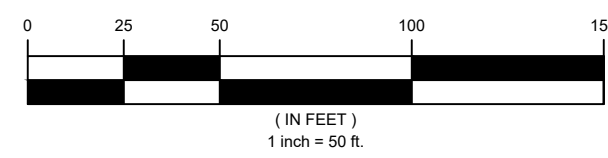
**MICHIGAN AVENUE II
2022 ROAD RESURFACING PROJECT
(CA-2021)
BOROUGH OF KENILWORTH
UNION COUNTY
NEW JERSEY**

DRAWN BY: VH CHECKED BY: EMJ PROJECT NO: UNIOCTY21.010 SHEET NO: 10.02
DESIGNED BY: VH SCALE: 1"=50' FIELD BOOK NO: DATE: JULY 16, 2021

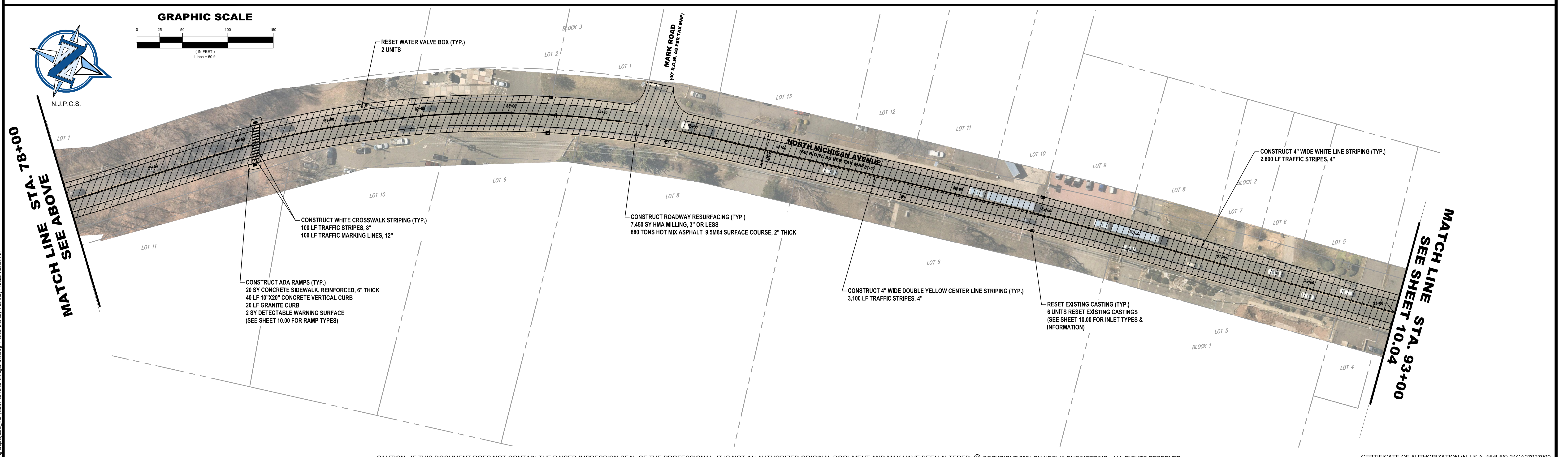
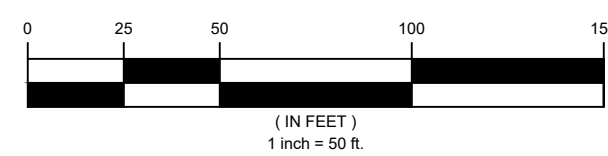
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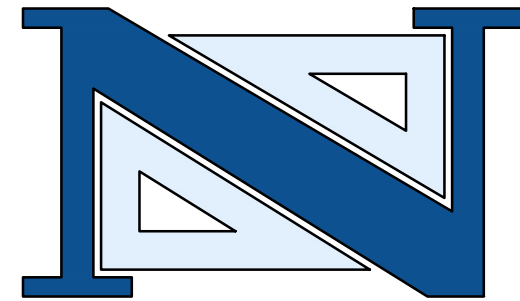
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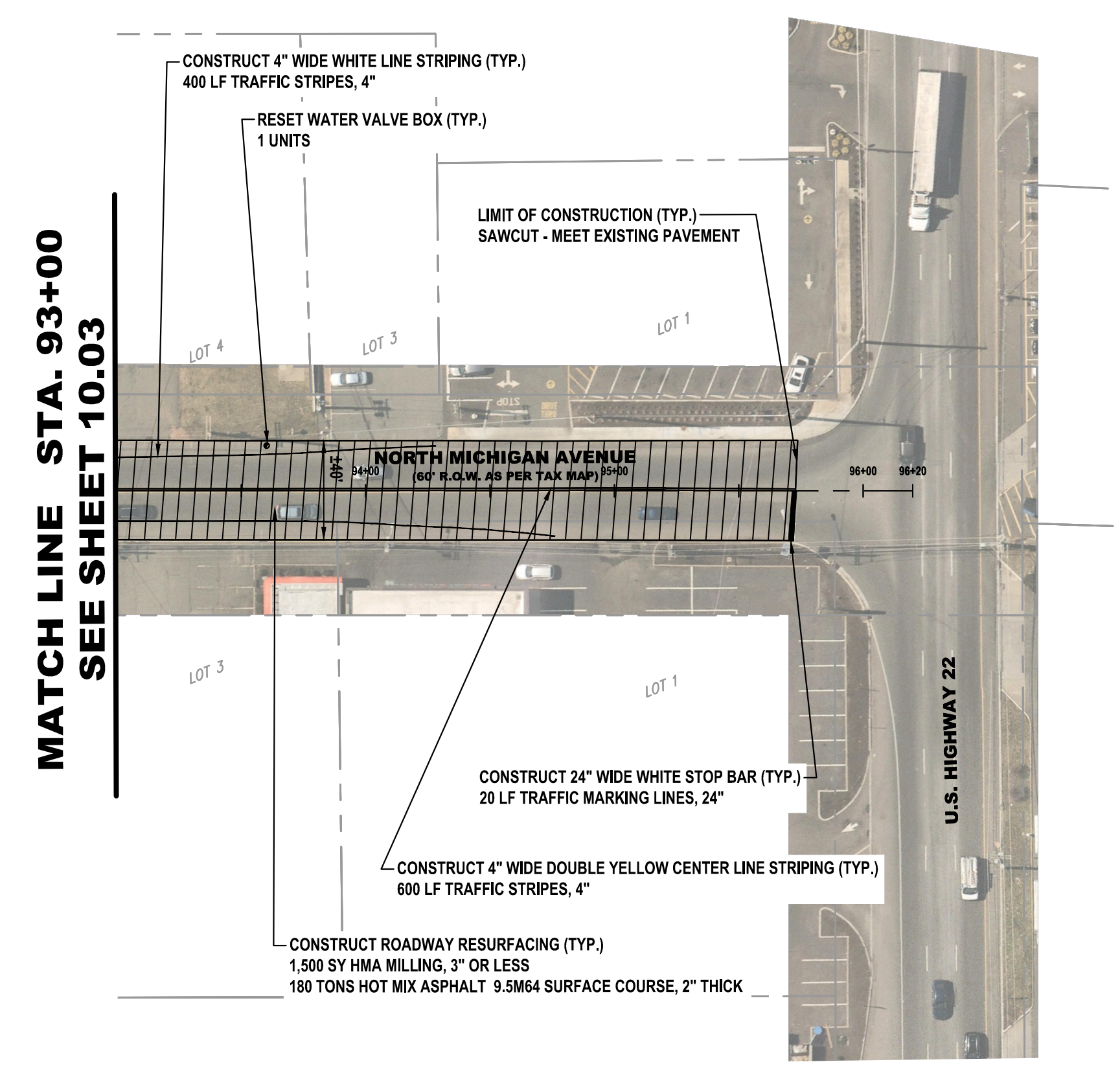
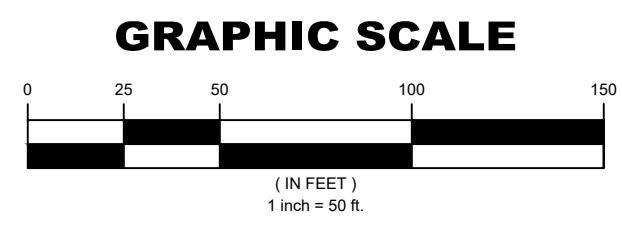
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**MICHIGAN AVENUE III
2022 ROAD RESURFACING PROJECT
(CA-2021)
BOROUGH OF KENILWORTH
UNION COUNTY
NEW JERSEY**

PROJECT NO.: UNIOCTY21.010
SHEET NO.: 10.03
DATE: JULY 16, 2021

DRAWN BY: VH CHECKED BY: EMJ
DESIGNED BY: VH SCALE: 1"=50' PAGE:
FIELD BOOK NO.:

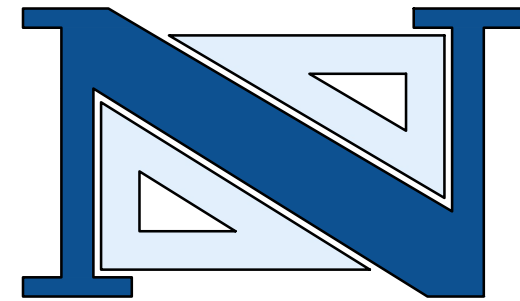


MATCH LINE STA. 93+00
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NO.	DATE	DESCRIPTION			



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**MICHIGAN AVENUE IV
2022 ROAD RESURFACING PROJECT
(CA-2021)
BOROUGH OF KENILWORTH
UNION COUNTY NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: 1"=50'	UNIOCTY21.010	10.04
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

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STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES						
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE	CONC. SIDEWALK, 4" THICK
00+25	RT	1			X		10			10		1	25
00+25	RT	1			X		10			10		1	25
00+30	LT	1			X		10			10		1	25
01+40	RT	1			X		10			10		1	25
02+00	RT	1			X		10			10		1	30
07+60	LT	6			X		15			10		1	20
08+00	LT	7			X		20	10	10	15		1	20
10+20	RT	7				X	25		10	25		2	20
10+80	RT	7				X	30		10	30		2	20
15+35	RT	1	X				10		15	10		1	15
15+40	LT	7			X		15		10	15		1	20
16+90	LT	7			X		25	10	10	20		1	15
19+30	RT	1	X				10		10	10		1	15
19+40	LT	7				X	25		10	20		2	20
19+90	LT	7			X		15		10	15		1	20
23+70	LT	1	X				10		10	10		1	15
23+70	RT	7				X	20		10	10		2	15
24+00	RT	7	X				25		10	10		1	15
29+30	RT	1	X				10		10	10		1	15
29+30	LT	7			X		10	10	10	10		1	15
30+00	LT	7			X		25	10	10	15		1	20
30+10	RT	1			X		10		10	10		1	15
30+90	RT	7			X		25		10	10		1	10
33+00	LT	7			X		15	10	10	10		1	10
33+00	RT	5			X		25	10	10	20		1	15
33+40	LT	5			X		15		10	10		1	10
33+60	RT	7			X		25	10	10	15		1	10
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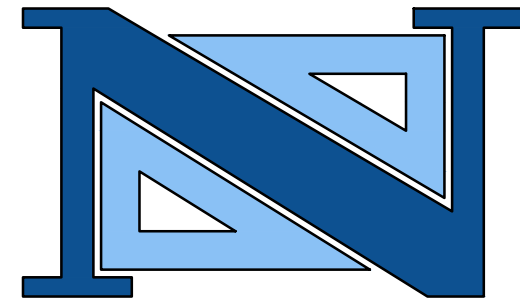
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
00+60	RT	B				X
02+10	RT	B				X
05+90	RT	B				X
05+90	LT	B				X
07+10	RT	B				X
07+20	LT	B				X
08+30	LT	B				X
15+90	LT	B				X
19+40	RT	B				X
20+00	LT	B				X
21+35	RT	E				X
21+60	RT	E				X
24+35	RT	B				X
29+10	LT	B				X
32+40	LT	B				X
32+50	RT	B				X
32+60	LT	B				X
33+70	RT	B				X
35+30	RT	B				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	HOURLY		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	145	
7	HMA MILLING, 3" OR LESS	SY	21,765	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	145	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	205	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2,580	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	50	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	2	
17	BICYCLE SAFE GRATE	UNIT	2	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	69	
19	RESET WATER VALVE BOX	UNIT	2	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	2	
21	10" X 20" CONCRETE VERTICAL CURB	LF	500	
22	GRANITE CURB	LF	90	
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	130	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	130	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	35	
28	RESET BRICK PAVEMENT (IF & WHERE DIRECTED)	SY	355	
29	TRAFFIC STRIPES, 4"	LF	7,900	
30	TRAFFIC STRIPES, 8"	LF	2,130	
31	TRAFFIC MARKING, LINES, 12"	LF	2,160	
32	TRAFFIC MARKING, LINES, 24"	LF	160	
33	TRAFFIC MARKINGS, SYMBOLS	SF	240	
34	REGULATORY AND WARNING SIGN	SF		
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	75	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	145	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	145	
40	STRAW MULCHING	S.Y.	145	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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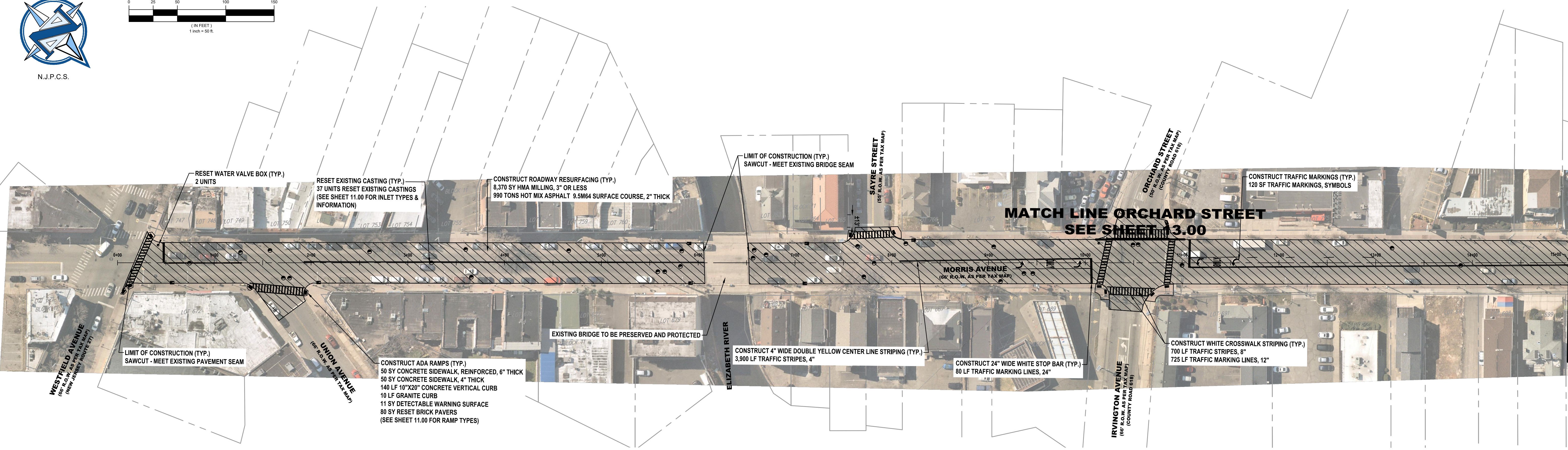
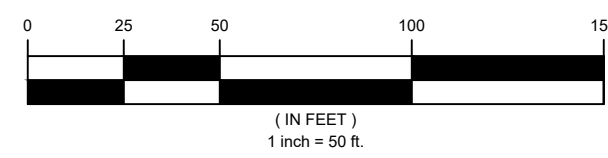
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PROFESSIONAL PLANNER N.J. LICENSE NO. 33L000569800

MORRIS AVENUE QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
TOWNSHIP OF UNION/CITY OF ELIZABETH
UNION COUNTY NEW JERSEY

DESIGNED BY: VH CHECKED BY: EMJ PROJECT NO.: UNIOCTY21.010 SHEET NO.: 11.00
SCALE: N.T.S. DATE: JULY 16, 2021



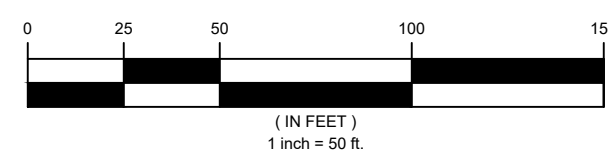
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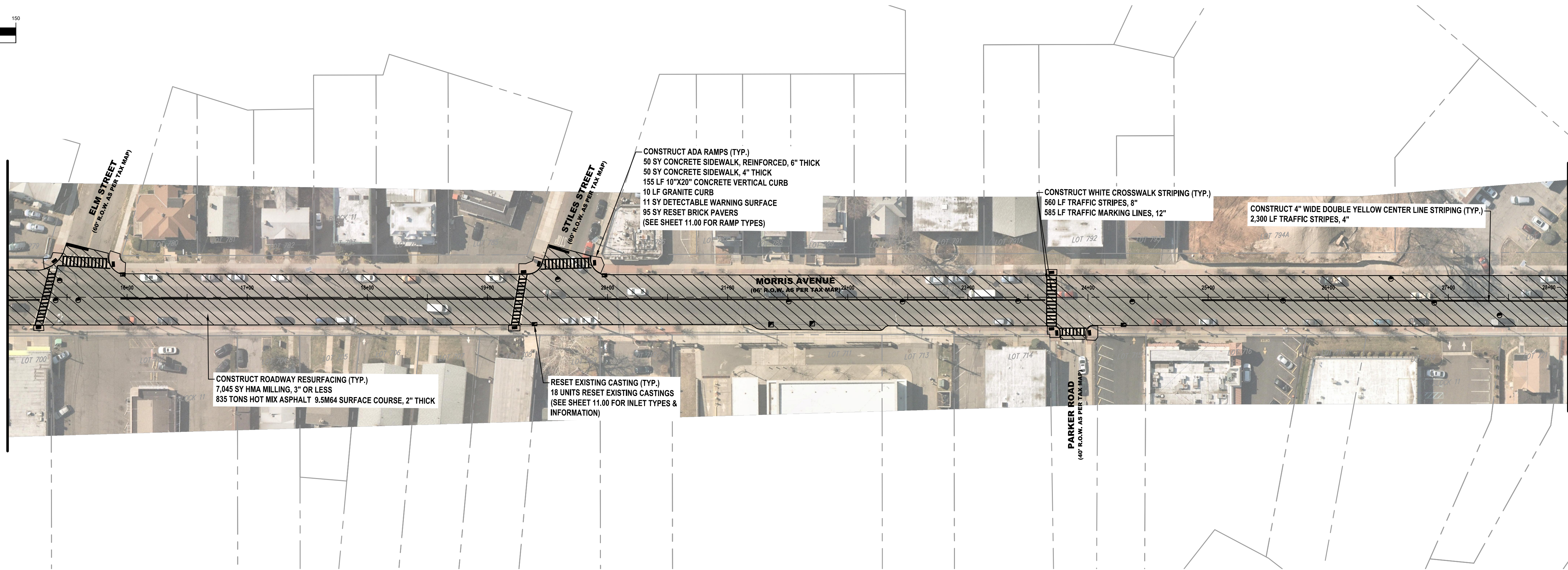
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SEE ABOVE

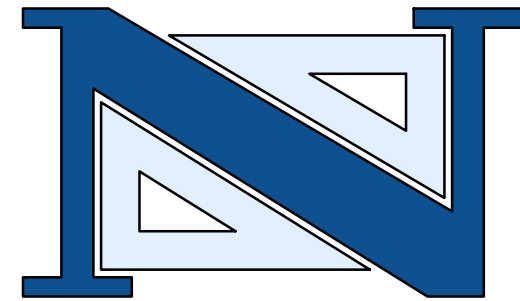


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**MORRIS AVENUE I
2022 ROAD RESURFACING PROJECT
(CA-2021)
TOWNSHIP OF UNION/CITY OF ELIZABETH
UNION COUNTY NEW JERSEY**

PROJECT NO.: UNIOCTY21.010 SHEET NO.: 11.01
DATE: JULY 16, 2021

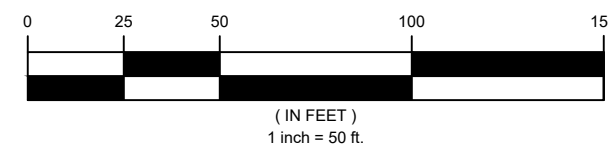
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DESIGNED BY: VH SCALE: 1" = 50' PAGE:
FIELD BOOK NO.: DATE:

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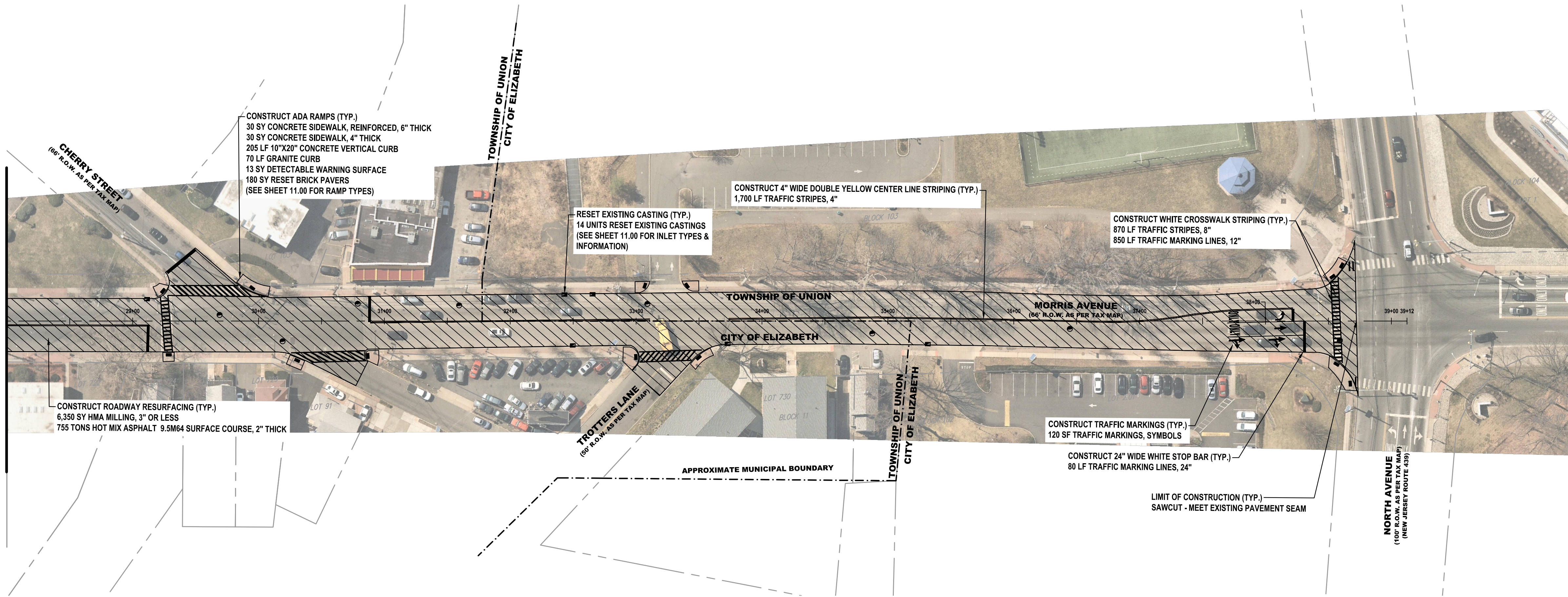


N.J.P.C.S.

GRAPHIC SCALE



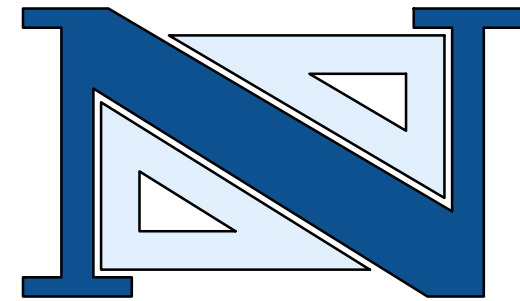
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 (CA-2021)
 TOWNSHIP OF UNION/CITY OF ELIZABETH
 UNION COUNTY
 NEW JERSEY**

PROJECT NO.: UNIOCTY21.010
 SHEET NO.: 11.02
 DATE: JULY 16, 2021

DRAWN BY: VH
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 FIELD BOOK NO.:
 CHECKED BY: EMJ
 SCALE: 1"=50'
 PAGE:
 PROJECT NO.: UNIOCTY21.010
 SHEET NO.: 11.02
 DATE: JULY 16, 2021

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STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES						
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10'X20' CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE	CONC. SIDEWALK, 4" THICK
00+50	RT		X				20					1	25
00+50	LT		X				10					1	40
05+30	RT				X		15	10				1	25
05+80	RT				X		15					1	25
14+30	RT				X		10	10				1	15
14+60	RT				X		10	10				1	15
17+50	LT		X				10	10				1	15
17+90	LT		X				10	10				1	15
18+90	RT				X		10	10				1	15
19+40	RT		X				10					1	15
21+20	LT		X				10	10				1	15
21+60	LT		X				15	10				1	15
25+70	LT				X		25	20				1	15
25+80	RT				X		15	15				1	20
34+00	LT		X				15	10				1	15
34+50	LT					X	30	10				2	15
34+10	RT		X				10	10				1	15
35+30	RT		X				15	10				1	15
35+80	RT		X				20	15				1	15
38+60	LT		X				15					1	10
39+15	LT				X		10	10				1	15
39+15	RT		X				10	10				1	30
41+00	LT				X		10	10				1	15
41+40	LT					X	20					2	15
41+40	RT		X				10					1	15
44+00	RT				X		10					1	15
44+40	RT				X		10					1	25
46+50	RT		X				20					1	35
46+90	RT		X				10					1	30
48+40	LT		X				15					1	25
48+70	LT				X		20					1	25
49+10	LT		X				10					1	15
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58+60	RT		X				10	10				1	15
70+25	RT		X				10	20				1	20
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75+60	RT					X	30					2	20
75+70	LT					X	10	10				1	20
81+90	LT					X	10					1	20
82+50	LT					X	10					2	
84+10	RT		X				10		40			1	30
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84+70	LT					X	15					1	30
93+90	LT					X	15					1	15
94+30	LT					X	15					1	15
97+50	LT					X	15	10				1	15
98+00	LT					X	15	10				1	15

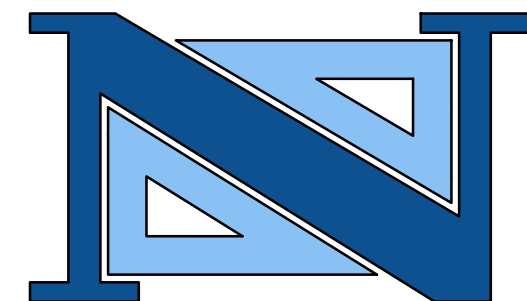
STATION	OFFSET (LT/RT)	INLET TYPES & LOCATIONS					
		EXISTING INLET TYPE	BYCYCLE SAFE GRATE	QUANTITY			
				CURB PIECE	PLATE	RESET	
01+10	LT	B					X
01+20	LT	B					X
01+60	RT	B					X
02+80	RT	A					X
06+10	RT	B					X
06+20	RT	B					X
07+50	RT	B					X
09+20	RT	B					X
10+80	RT	B					X
11+30	LT	B					X
11+60	RT	B					X
14+90	RT	B					X
15+10	LT	B					X
15+10	RT	B					X
15+40	LT	B					X
15+50	LT	B					X
18+00	LT	B					X
18+90	RT	B					X
19+30	LT	B					X
19+40	RT	B					X
21+60	LT	B					X
31+60	LT	B					X
31+70	RT	B					X
34+00	LT	B					X
34+50	LT	B					X
35+20	RT	A					X
37+55	RT	B					X
42+50	RT	B					X
44+00	RT	B					X
46+50	RT	B					X
49+10	LT	B					X
49+15	RT	B					X
49+70	RT	E					X
76+00	RT	B					X
76+10	LT	B					X
82+90	LT	B					X
83+80	RT	B					X
83+80	LT	B					X
84+90	LT	B					X
86+50	RT	B					X
87+00	LT	B					X
90+80	LT	B					X
91+10	RT	B					X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	HOUR		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	360	
7	HMA MILLING, 3" OR LESS	SY	51,630	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	360	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	485	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	6,110	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	115	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	4	
17	BIICYCLE SAFE GRATE	UNIT	4	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	122	
19	RESET WATER VALVE BOX	UNIT	43	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	4	
21	10" X 20" CONCRETE VERTICAL CURB	LF	950	
22	GRANITE CURB	LF	270	
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	1,035	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	700	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	64	
28	RESET BRICK PAVEMENT (IF & WHERE DIRECTED)	SY	10	
29	TRAFFIC STRIPES, 4"	LF	17,620	
30	TRAFFIC STRIPES, 8"	LF	5,520	
31	TRAFFIC MARKING, LINES, 12"	LF	5,570	
32	TRAFFIC MARKING, LINES, 24"	LF	470	
33	TRAFFIC MARKINGS, SYMBOLS	SF	790	
34	REGULATORY AND WARNING SIGN	SF	20	
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	95	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	285	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	285	
40	STRAW MULCHING	S.Y.	285	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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NO.	DATE	DESCRIPTION				



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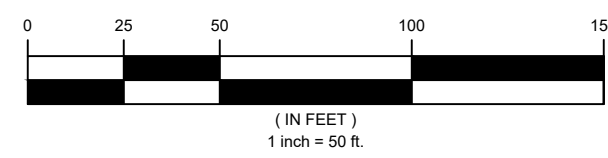
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2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF ELIZABETH/TOWNSHIP OF HILLSIDE
UNION COUNTY NEW JERSEY

DRAWN BY: VH CHECKED BY: EMJ PROJECT NO.: UNIOCTY21.010 SHEET NO.: 12.00
DESIGNED BY: VH SCALE: N.T.S. FIELD BOOK NO.: DATE: JULY 16, 2021

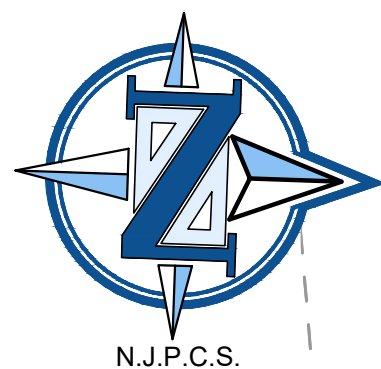
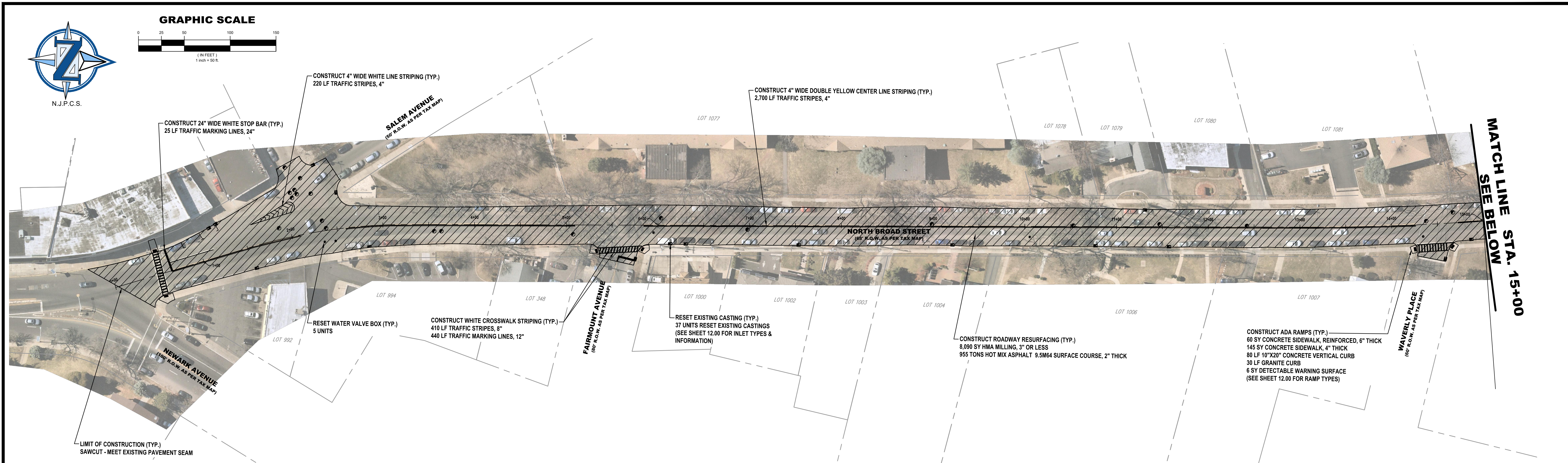
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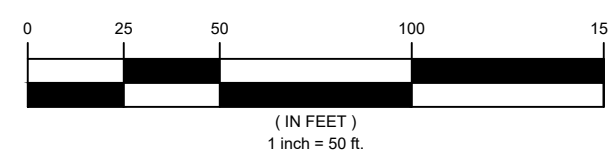
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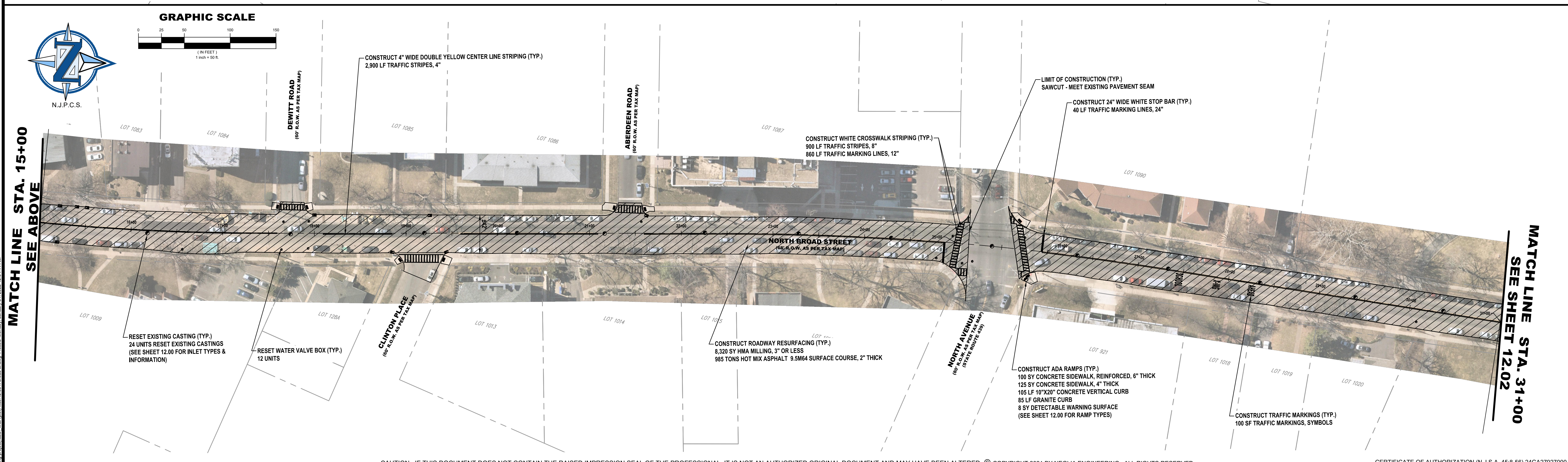
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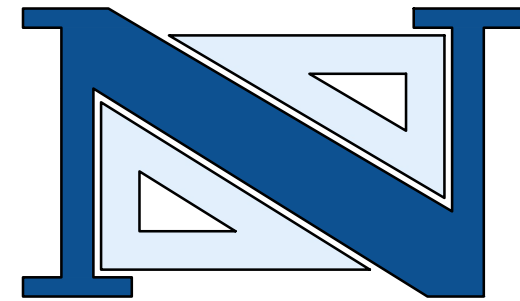
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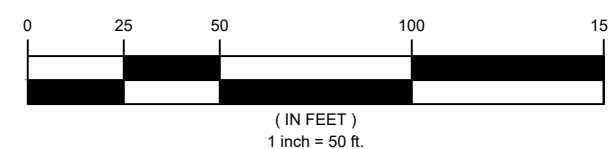
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2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF ELIZABETH/TOWNSHIP OF HILLSIDE
UNION COUNTY
NEW JERSEY**

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DESIGNED BY: VH	SCALE: 1" = 50'	UNIOCTY21.010	12.01
FIELD BOOK NO:	PAGE:		DATE: JULY 16, 2021

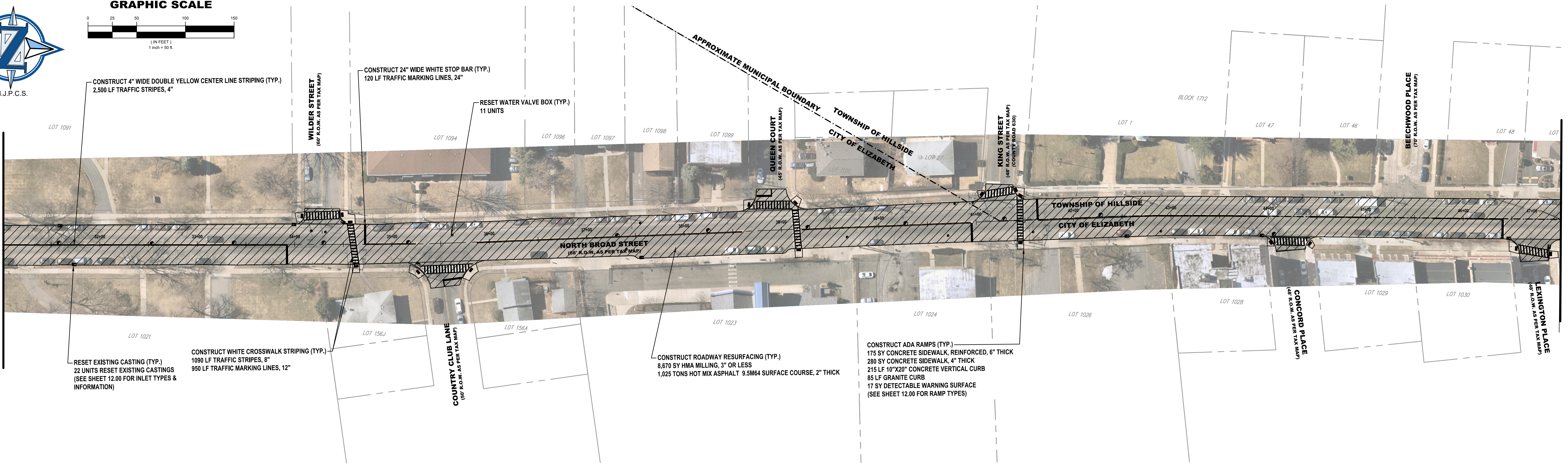
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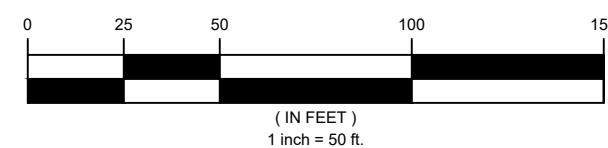
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SEE SHEET 12.01



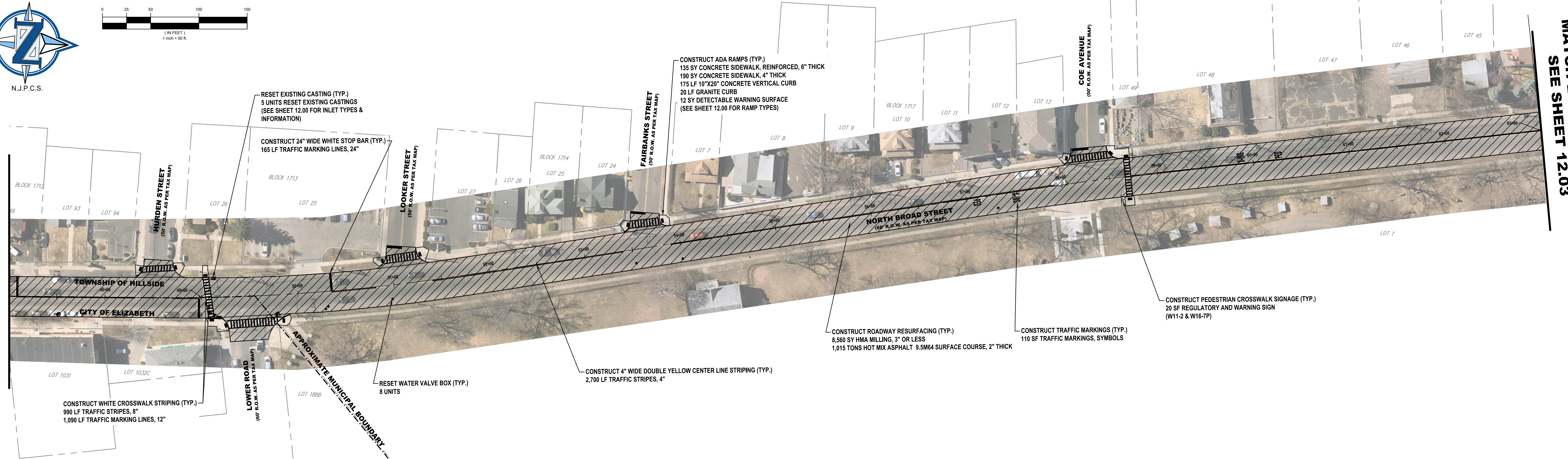
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SEE BELOW



GRAPHIC SCALE



MATCH LINE STA. 47+00
SEE ABOVE

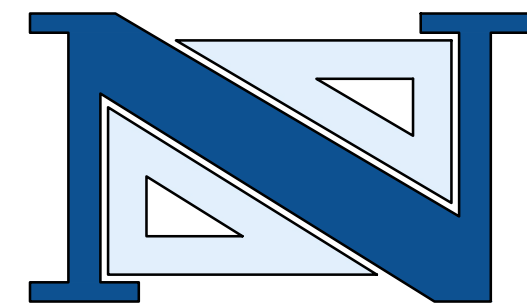


MATCH LINE STA. 63+00
SEE SHEET 12.03

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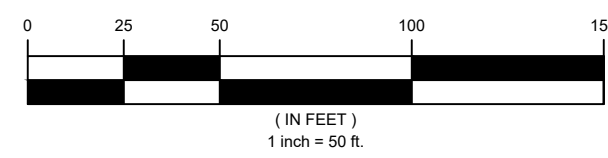
**NORTH BROAD STREET II
 2022 ROAD RESURFACING PROJECT
 (CA-2021)**
**CITY OF ELIZABETH/TOWNSHIP OF HILLSIDE
 UNION COUNTY
 NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: 1"=50'	UNIOCTY21.010	12.02
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

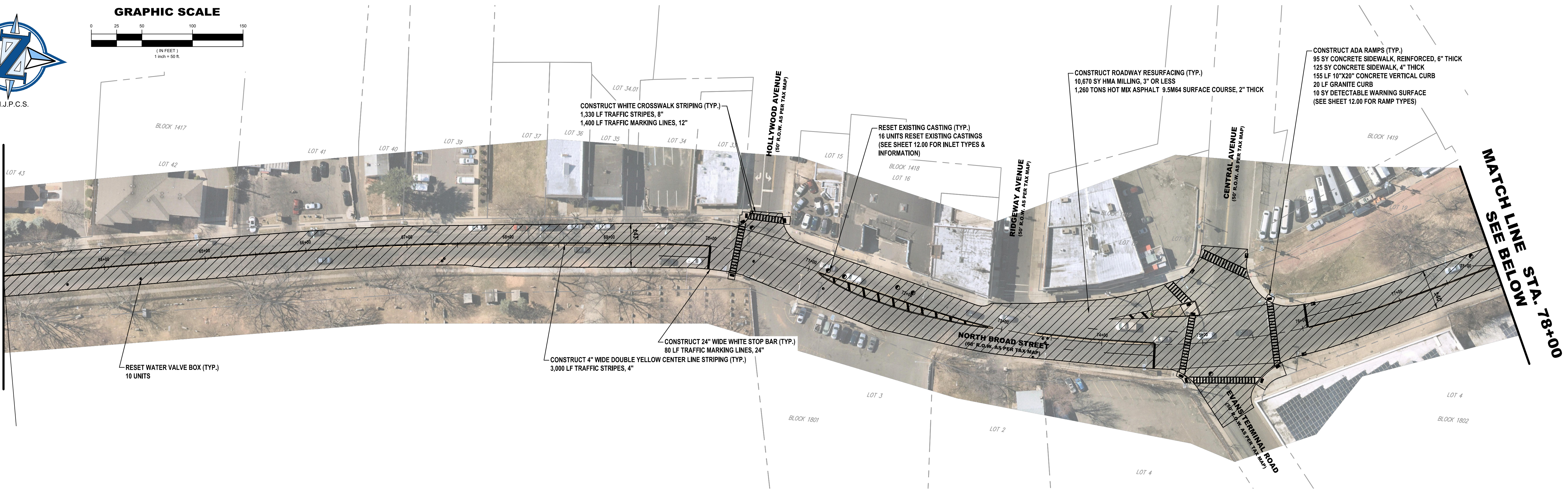
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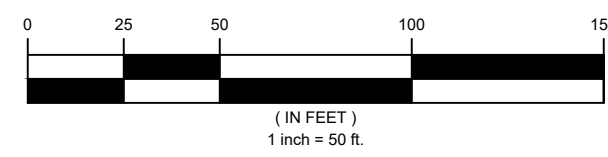
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SEE SHEET 12.02**



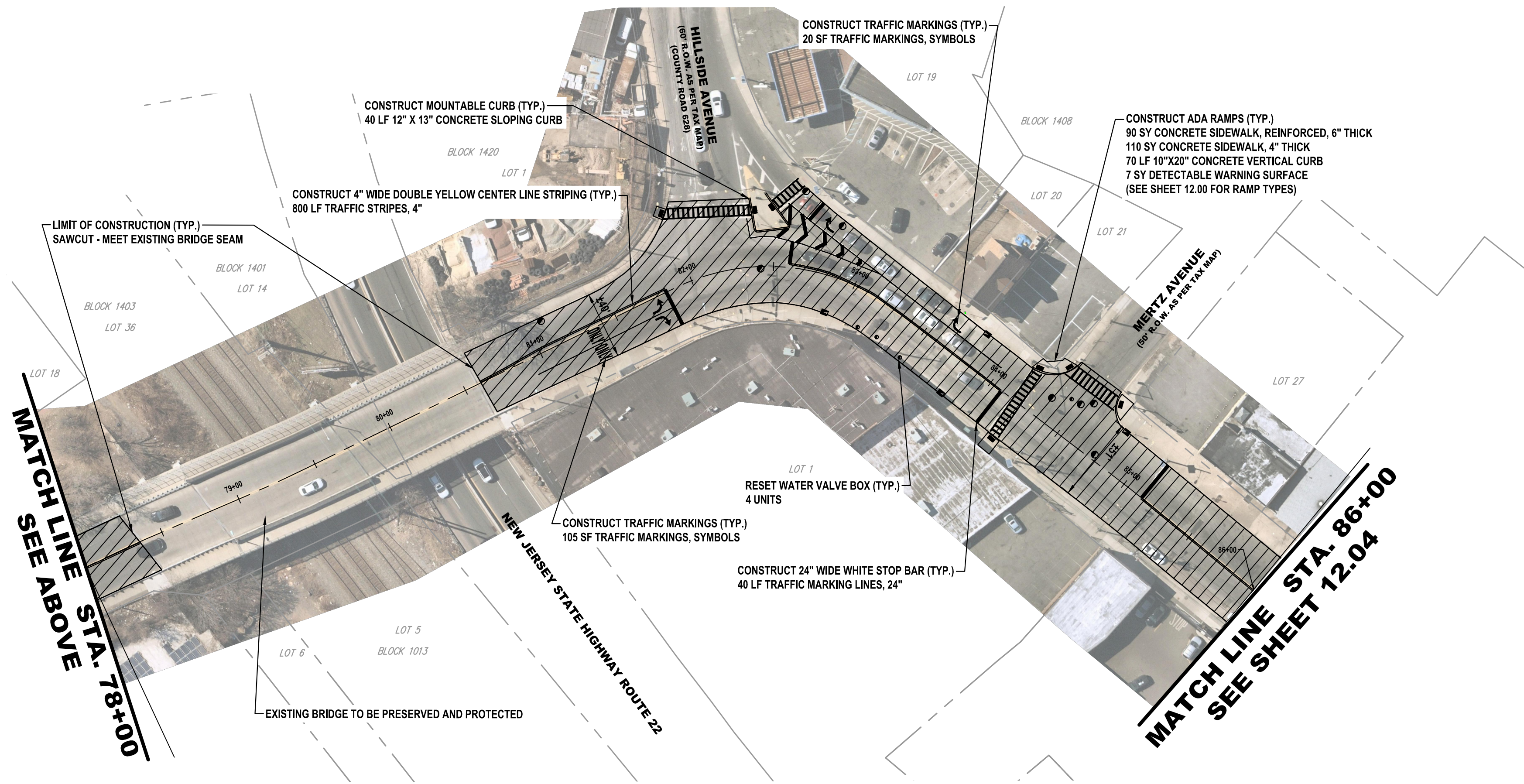
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STA. 78+00
SEE SHEET 12.01**



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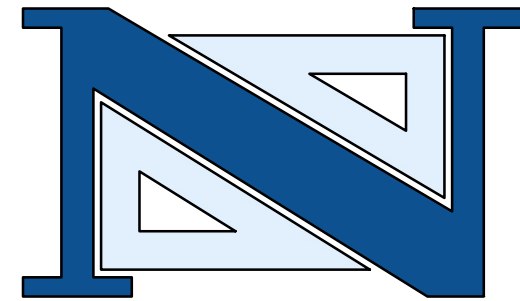
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STA. 78+00
SEE SHEET 12.01**



**MATCH LINE STA. 86+00
SEE SHEET 12.04**

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**NORTH BROAD STREET III
 2022 ROAD RESURFACING PROJECT
 (CA-2021)**

**CITY OF ELIZABETH/TOWNSHIP OF HILLSIDE
 UNION COUNTY
 NEW JERSEY**

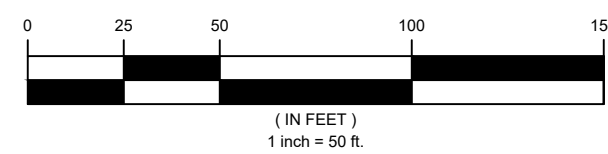
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FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

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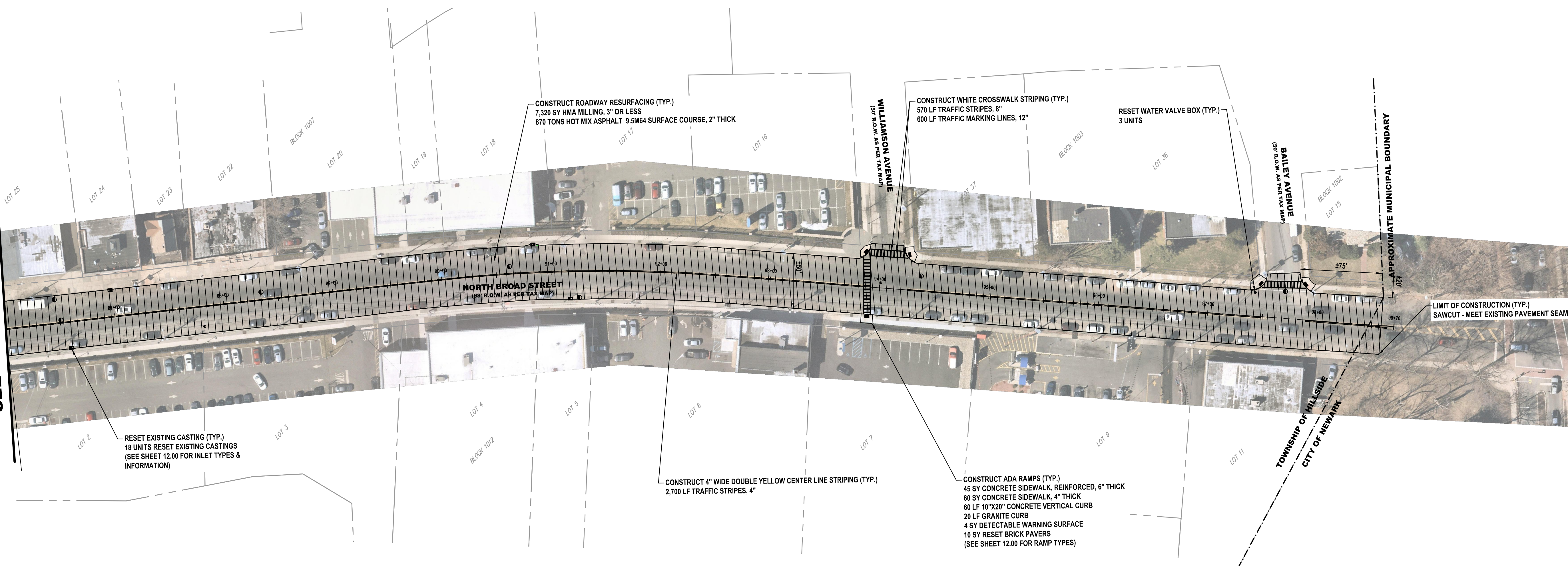


N.J.P.C.S.

GRAPHIC SCALE



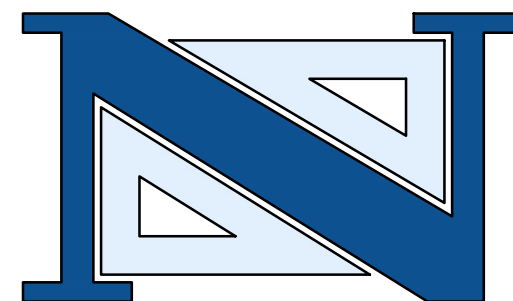
MATCH LINE STA. 86+00
SEE SHEET 12.03



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**NORTH BROAD STREET IV
2022 ROAD RESURFACING PROJECT
(CA-2021)**
**CITY OF ELIZABETH/TOWNSHIP OF HILLSIDE
UNION COUNTY NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: 1"=50'	UNIOCTY21.010	12.04
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

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STATION	OFFSET (LT/RT)	CURB RAMP TYPE	ADA RAMPS											
			CURB RAMP LAYOUT				QUANTITIES							
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE	CONC. SIDEWALK, 4" THICK	
00+70	LT	7				X	30					20	2	25
00+80	RT	7				X	30	10				15	2	25
09+30	LT	7			X		15	10	10			15	1	20
09+30	RT	7			X		20		10			20	1	15

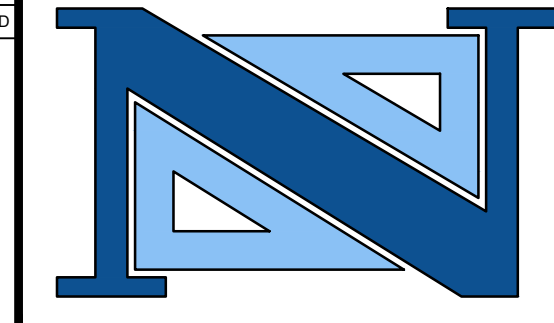
STATION	OFFSET (LT/RT)	INLET TYPES & LOCATIONS					
		EXISTING INLET TYPE	BICYCLE SAFE GRATE	QUANTITY			
				CURB PIECE	PLATE	RESET	
00+60	LT	B					X
00+70	RT	B					X
09+20	LT	B					X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT	
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT	
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT	
4	TRAFFIC DIRECTOR, FLAGGER	UNIT	
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.	
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	40
7	HMA MILLING, 3" OR LESS	SY	3,500
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	40
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	35
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	415
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	10
12	FUEL PRICE ADJUSTMENT	ALLOW.	
13	ASPHALT PRICE ADJUSTMENT	ALLOW.	
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY	
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF	
16	CURB PIECE	UNIT	
17	BICYCLE SAFE GRATE	UNIT	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	9
19	RESET WATER VALVE BOX	UNIT	1
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	
21	10" X 20" CONCRETE VERTICAL CURB	LF	140
22	GRANITE CURB	LF	20
23	8" X 4" HOT MIX ASPHALT CURB	LF	
24	12" X 13" CONCRETE SLOPING CURB	LF	
25	CONCRETE SIDEWALK, 4" THICK	SY	90
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	80
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	9
28	RESET BRICK PAVEMENT (IF & WHERE DIRECTED)	SY	20
29	TRAFFIC STRIPES, 4"	LF	2,100
30	TRAFFIC STRIPES, 8"	LF	280
31	TRAFFIC MARKING, LINES, 12"	LF	240
32	TRAFFIC MARKING, LINES, 24"	LF	40
33	TRAFFIC MARKINGS, SYMBOLS	SF	200
34	REGULATORY AND WARNING SIGN	SF	
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY	
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF	
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	20
38	TOPSOIL SPREADING, 4" THICK	S.Y.	20
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	20
40	STRAW MULCHING	S.Y.	20
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.	
42	CLEARING SITE	L.S.	
43	FINAL CLEANUP	L.S.	

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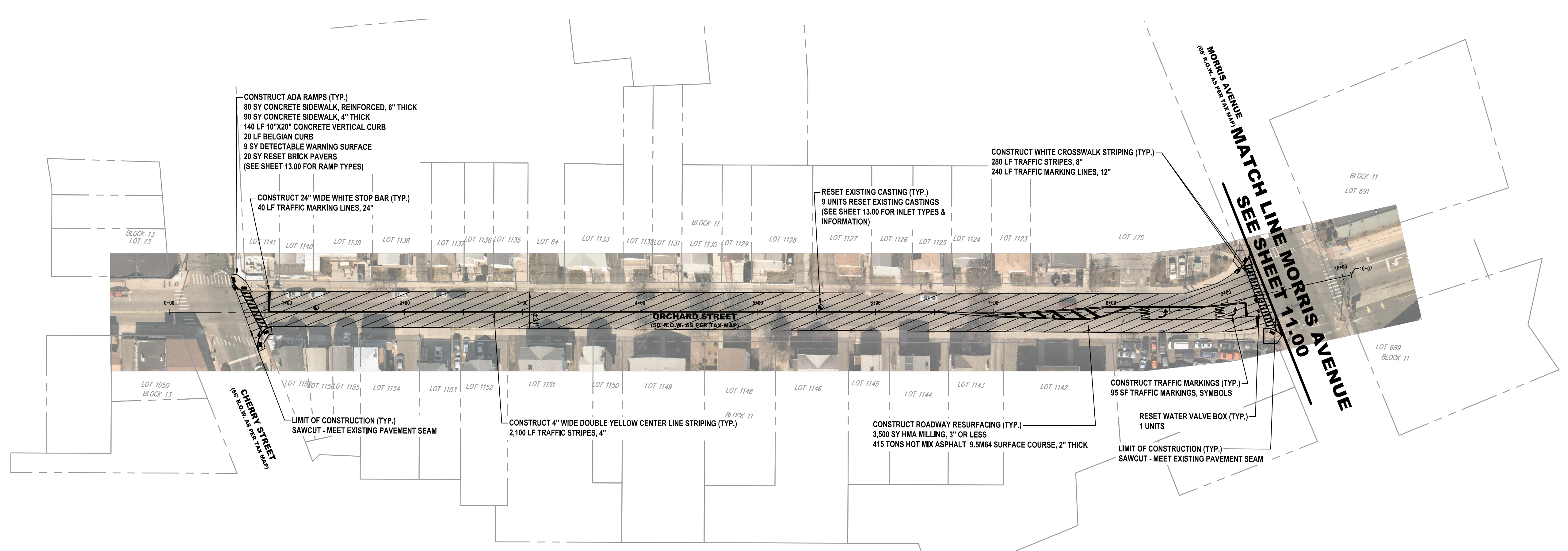
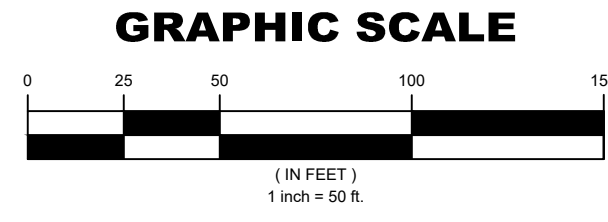
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PROFESSIONAL LAND SURVEYOR N.J. LICENSE NO. 38604
PROFESSIONAL PLANNER N.J. LICENSE NO. 33L00569800

ORCHARD STREET QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF ELIZABETH
UNION COUNTY NEW JERSEY

DESIGNED BY: VH CHECKED BY: EMJ PROJECT NO.: UNIOCTY21.010 SHEET NO.: 13.00
SCALE: N.T.S. DATE: JULY 16, 2021
FIELD BOOK NO.: PAGE:

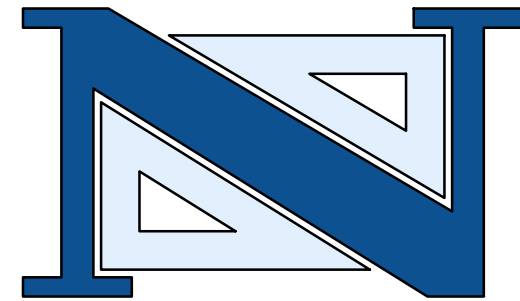
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CERTIFICATE OF AUTHORIZATION (N.J.S.A. 45:8-56) 24GA27927000

REVISIONS		DRAWN	DESIGNED	CHECKED
NO.	DATE	DESCRIPTION		



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**ORCHARD STREET I
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF ELIZABETH
UNION COUNTY NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: 1" = 50'	UNIOCTY21.010	13.01
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

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STATION	OFFSET (LT/RT)	CURB RAMP TYPE	ADA RAMPS																	
			CURB RAMP LAYOUT				QUANTITIES													
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE	CONC. SIDEWALK, 4" THICK							
02+80	RT	5			X		10	10				10								
03+30	RT	5			X		10	10				10		1		10				
06+40	RT	5			X		10	10				10		1		10				
06+80	RT	5			X		10	10				10		1		10				
09+90	RT	5			X		10	10				10		1		10				
10+40	RT	7				X	25	10				15		2						
10+50	LT	7				X	20	10				10		2		10				
11+00	LT	5			X		10	10				10		1		10				

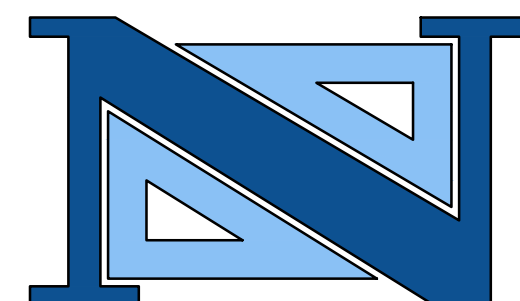
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BYCYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
			13+10	RT	B	
13+15	LT	B				X
13+90	RT	B				X
13+90	LT	B				X
16+10	RT	B				X
17+10	RT	B				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	UNIT		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	UNIT		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	120	
7	HMA MILLING, 3" OR LESS	SY	12,540	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	120	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	120	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1,485	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	30	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT		
17	BICYCLE SAFE GRATE	UNIT		
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	11	
19	RESET WATER VALVE BOX	UNIT	7	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT		
21	10" X 20" CONCRETE VERTICAL CURB	LF	105	
22	GRANITE CURB	LF	80	
23	9" X 4" HOT MIX ASPHALT CURB	LF	800	
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	70	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	85	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	10	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF	12,300	
30	TRAFFIC STRIPES, 8"	LF	430	
31	TRAFFIC MARKING, LINES, 12"	LF	540	
32	TRAFFIC MARKING, LINES, 24"	LF	125	
33	TRAFFIC MARKINGS, SYMBOLS	SF	120	
34	REGULATORY AND WARNING SIGN	SF		
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	65	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	40	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	40	
40	STRAW MULCHING	S.Y.	40	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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NO.	DATE	DESCRIPTION	



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ORCHARD ST/SHUNPIKE RD QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF SUMMIT/TOWNSHIP OF SPRINGFIELD
UNION COUNTY NEW JERSEY

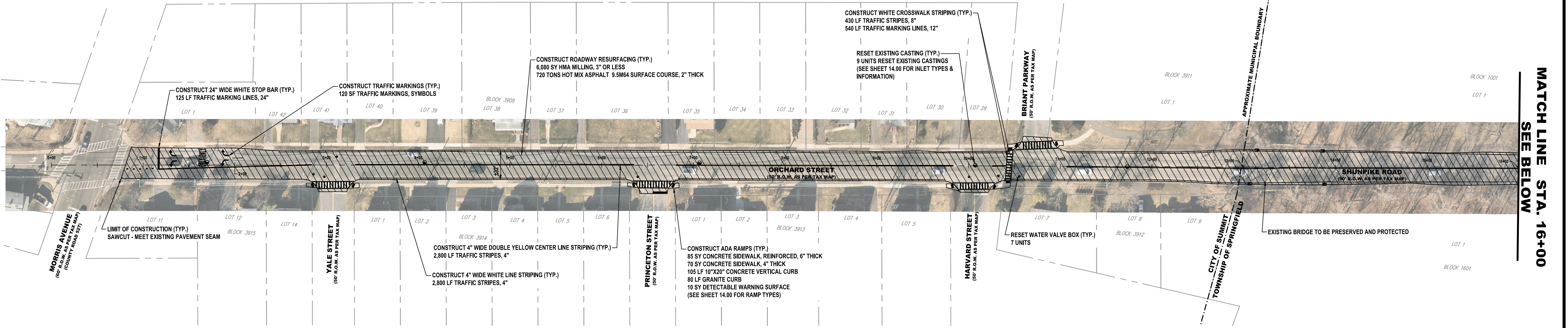
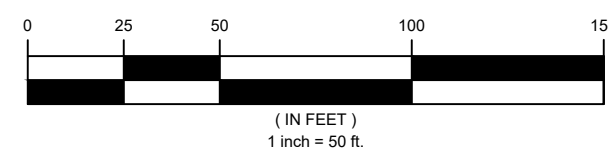
DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO.:	SHEET NO.:
DESIGNED BY: VH	SCALE: N.T.S.	UNIOCTY21.010	14.00
FIELD BOOK NO.:	PAGE:	DATE: JULY 16, 2021	

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N.J.P.C.S.

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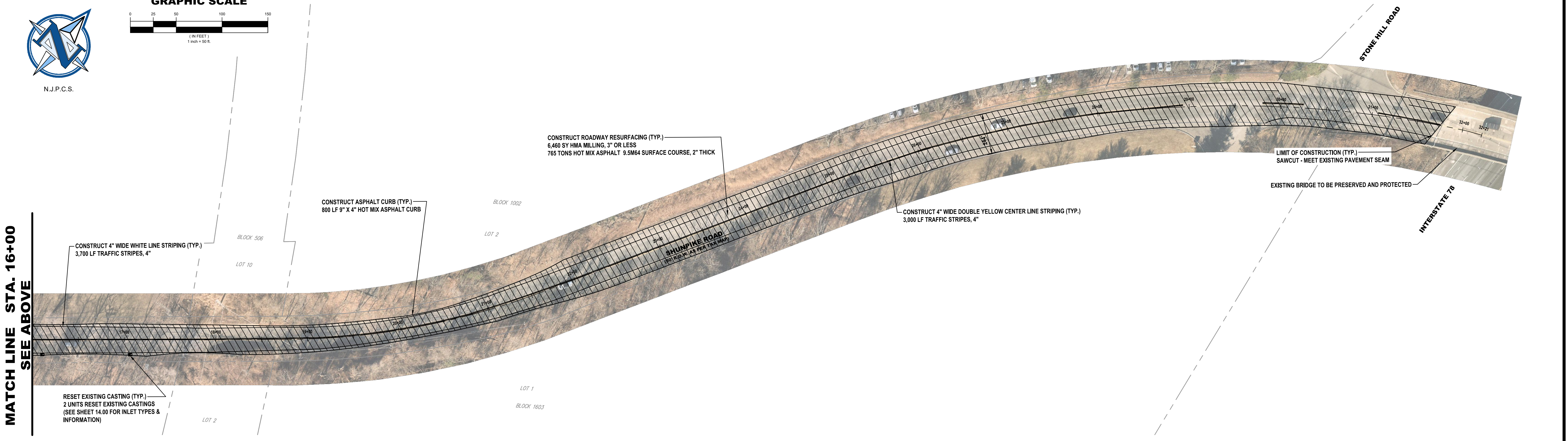
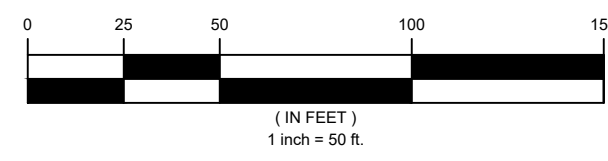


MATCH LINE STA. 16+00
SEE BELOW



N.J.P.C.S.

GRAPHIC SCALE

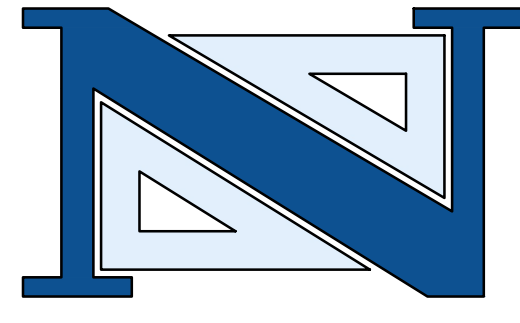


MATCH LINE STA. 16+00
SEE ABOVE

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**ORCHARD STREET/SHUNPIKE ROAD I
2022 ROAD RESURFACING PROJECT
(CA-2021)**
**CITY OF SUMMIT/TOWNSHIP OF SPRINGFIELD
UNION COUNTY
NEW JERSEY**

DRAWN BY: VH CHECKED BY: EMJ PROJECT NO: UNIOCTY21.010 SHEET NO: 14.01
DESIGNED BY: VH SCALE: 1" = 50' FIELD BOOK NO: PAGE DATE: JULY 16, 2021

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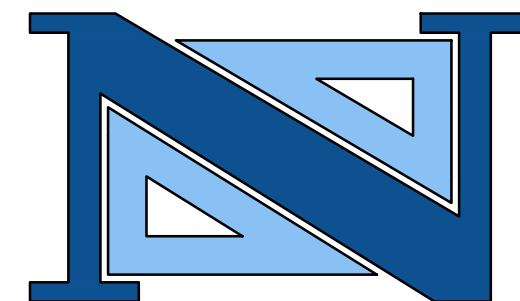
INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
05+80	LT	A				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT	
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT	
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT	
4	TRAFFIC DIRECTOR, FLAGGER	HOURL	
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.	
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	45
7	HMA MILLING, 3" OR LESS	SY	4,400
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	45
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	45
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	520
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	15
12	FUEL PRICE ADJUSTMENT	ALLOW.	
13	ASPHALT PRICE ADJUSTMENT	ALLOW.	
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY	
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF	
16	CURB PIECE	UNIT	
17	BICYCLE SAFE GRATE	UNIT	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	1
19	RESET WATER VALVE BOX	UNIT	3
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	
21	10" X 20" CONCRETE VERTICAL CURB	LF	
22	GRANITE CURB	LF	
23	9" X 4" HOT MIX ASPHALT CURB	LF	
24	12" X 13" CONCRETE SLOPING CURB	LF	
25	CONCRETE SIDEWALK, 4" THICK	SY	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY	
29	TRAFFIC STRIPES, 4"	LF	2,600
30	TRAFFIC STRIPES, 8"	LF	
31	TRAFFIC MARKING, LINES, 12"	LF	
32	TRAFFIC MARKING, LINES, 24"	LF	30
33	TRAFFIC MARKINGS, SYMBOLS	SF	
34	REGULATORY AND WARNING SIGN	SF	15
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY	
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF	
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	25
38	TOPSOIL SPREADING, 4" THICK	S.Y.	530
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	530
40	STRAW MULCHING	S.Y.	530
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.	
42	CLEARING SITE	L.S.	
43	FINAL CLEANUP	L.S.	

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REVISIONS			
NO.	DATE	DESCRIPTION	



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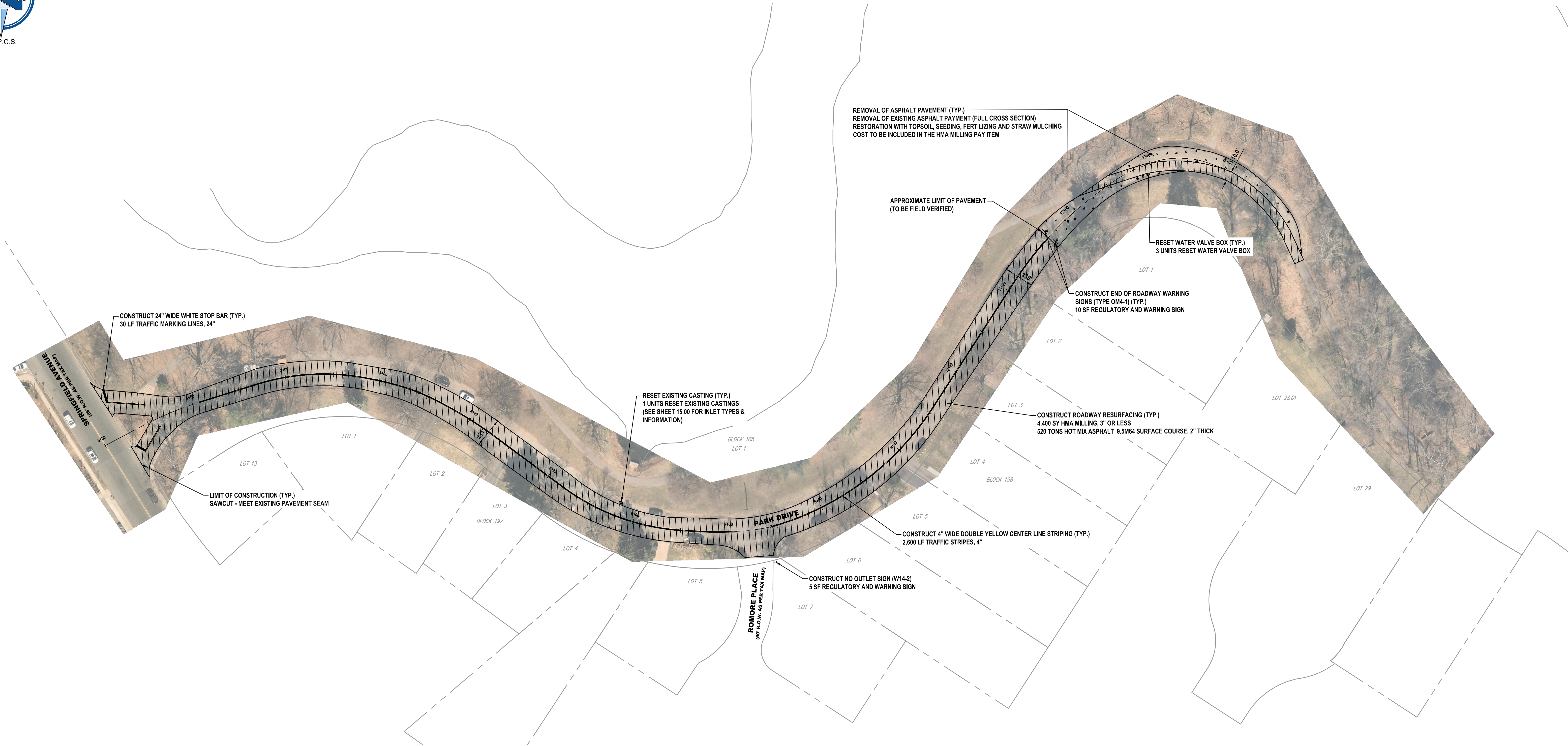
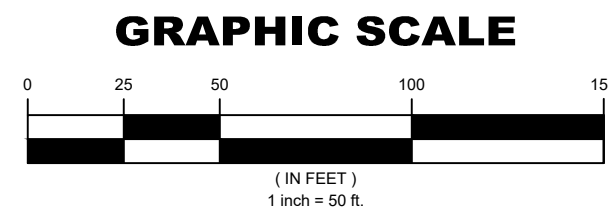
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PARK DRIVE QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
TOWNSHIP OF CRANFORD
UNION COUNTY NEW JERSEY

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: N.T.S.	UNIOCTY21.010	15.00
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

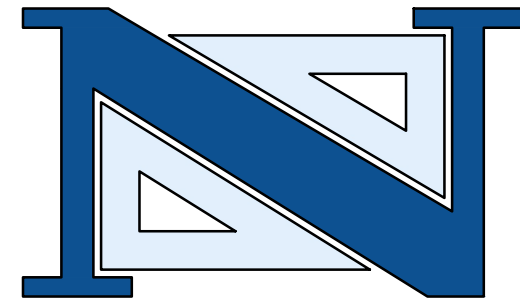
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NO.	DATE	DESCRIPTION			



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PROFESSIONAL PLANNER N.J. LICENSE NO. 33L00569800

**PARK DRIVE I
2022 ROAD RESURFACING PROJECT
(CA-2021)
TOWNSHIP OF CRANFORD
UNION COUNTY NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: 1" = 50'	UNIOCTY21.010	15.01
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

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ADA RAMP												
STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES					
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE
00+70	RT	7	X				20			10	1	15
00+70	LT	7	X				10			10	1	20
04+15	RT	7			X		15	10		10	1	10
04+60	RT	6			X		10	10		10	1	15
06+90	RT	6	X				10	20		10	1	15
07+20	RT	6	X				10			10	1	15
08+60	LT	7	X				10			10	1	20
08+60	RT	7	X				10			10	1	10
08+90	RT	7			X		10			10	1	10
09+40	RT	7	X				10			10	1	20
11+20	RT	7	X				10	10		10	1	15
11+50	RT	7	X				10	10		10	1	15
13+50	RT	7			X		10	10		10	1	15
14+00	RT	7			X		10	10		10	1	15
15+60	LT	7	X			X	10	10		10	1	25
15+60	RT	7				X	25	10		15	2	25
15+70	LT	7	X				10			10	1	25
16+40	RT	7	X				10			10	1	25
16+50	LT	7				X	20			10	2	25
16+50	RT	7			X		10			10	1	25
18+40	RT	7	X				10			10	1	25
19+00	RT	7	X				10	10		10	1	25
26+35	RT	7	X				10			10	1	25
26+95	RT	7	X				10			10	1	25
38+50	RT	7	X				10			10	1	25
39+00	RT	7	X				10			10	1	25
41+00	RT	7			X		10			10	1	25
41+50	RT	7			X		10			10	1	25

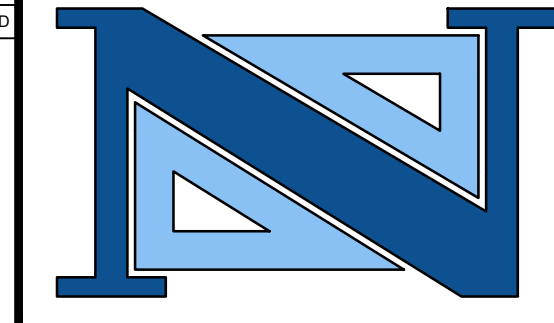
INLET TYPES & LOCATIONS							
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY				
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET	
2+29	LT	B					X
2+30	RT	B					X
3+50	LT	B					X
3+80	RT	B					X
5+30	LT	B					X
5+84	RT	B					X
6+00	LT	B					X
6+50	RT	B					X
6+70	LT	B					X
8+15	LT	B					X
8+40	RT	B					X
10+50	LT	B					X
10+70	RT	B					X
12+58	RT	B					X
15+45	LT	B					X
15+50	RT	B					X
15+65	LT	B					X
18+50	RT	B					X
18+55	LT	B					X
19+90	RT	B					X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	HOUR		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	175	
7	HMA MILLING, 3" OR LESS	SY	24,430	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	175	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	225	
10	HOT MIX ASPHALT 9.5M/64 SURFACE COURSE	TON	2,900	
11	HOT MIX ASPHALT 9.5M/64 INTERMEDIATE COURSE	TON	60	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	3	
17	BICYCLE SAFE GRATE	UNIT	3	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	104	
19	RESET WATER VALVE BOX	UNIT	11	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	3	
21	10" X 20" CONCRETE VERTICAL CURB	LF	320	
22	GRANITE CURB	LF	110	
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	560	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	285	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	30	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF	6,850	
30	TRAFFIC STRIPES, 8"	LF	2,190	
31	TRAFFIC MARKING, LINES, 12"	LF	2,130	
32	TRAFFIC MARKING, LINES, 24"	LF	345	
33	TRAFFIC MARKINGS, SYMBOLS	SF	1,200	
34	REGULATORY AND WARNING SIGN	SF		
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF	225	
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	95	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	140	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	140	
40	STRAW MULCHING	S.Y.	140	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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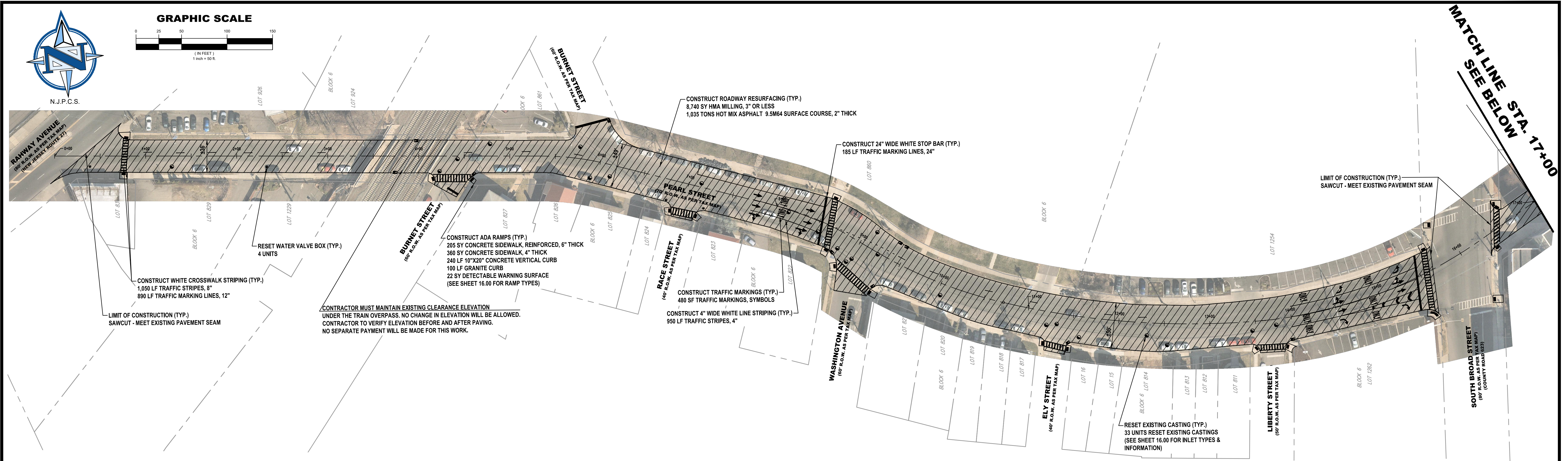
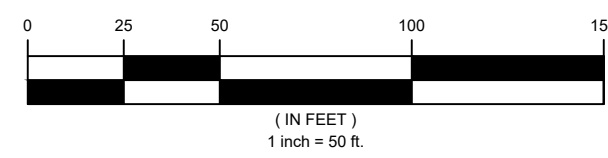
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PROFESSIONAL LAND SURVEYOR N.J. LICENSE NO. 38604
PROFESSIONAL PLANNER N.J. LICENSE NO. 33L000569800

PEARL STREET QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF ELIZABETH
UNION COUNTY NEW JERSEY

PROJECT NO.: UNIOCTY21.010 SHEET NO.: 16.00
DATE: JULY 16, 2021



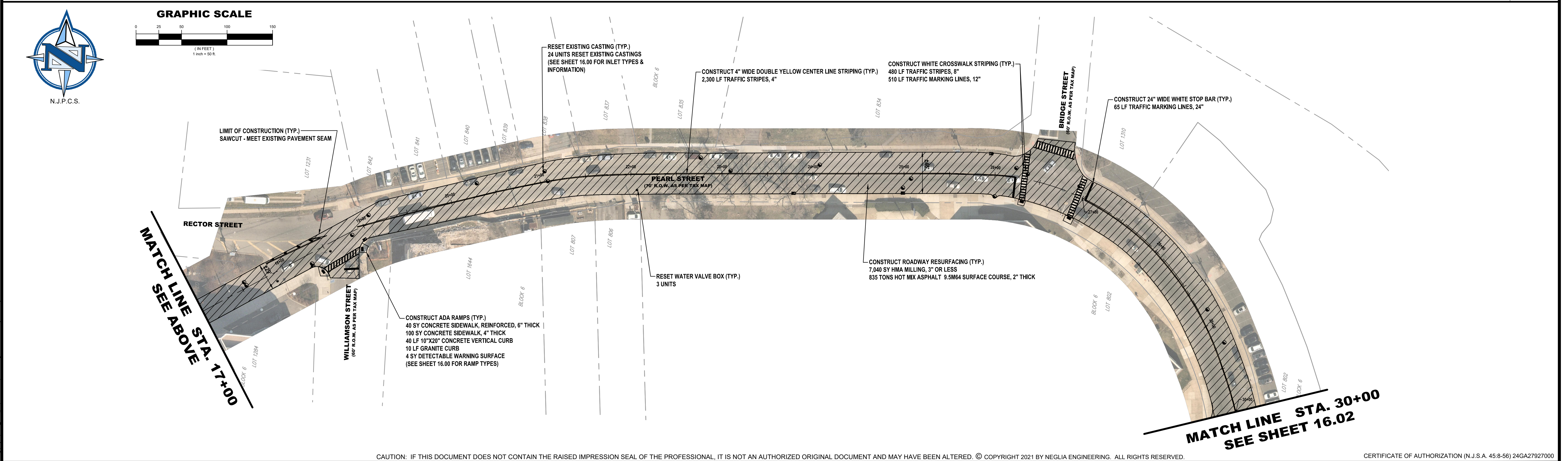
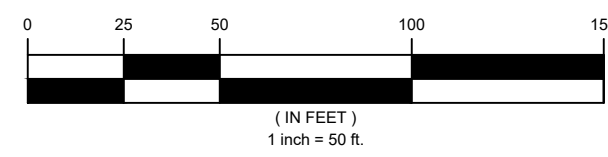
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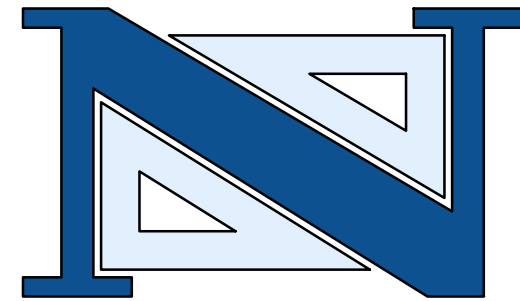
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MATCH LINE STA. 30+00
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**PEARL STREET I
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF ELIZABETH
UNION COUNTY NEW JERSEY**

DESIGNED BY: VH
FIELD BOOK NO: _____

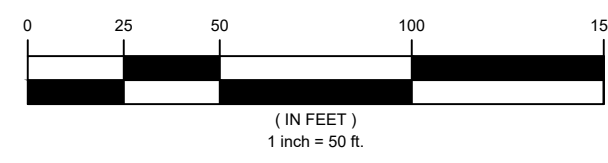
CHECKED BY: EMJ
SCALE: 1" = 50'
PAGE: _____

PROJECT NO: UNIOCTY21.010
SHEET NO: 16.01
DATE: JULY 16, 2021

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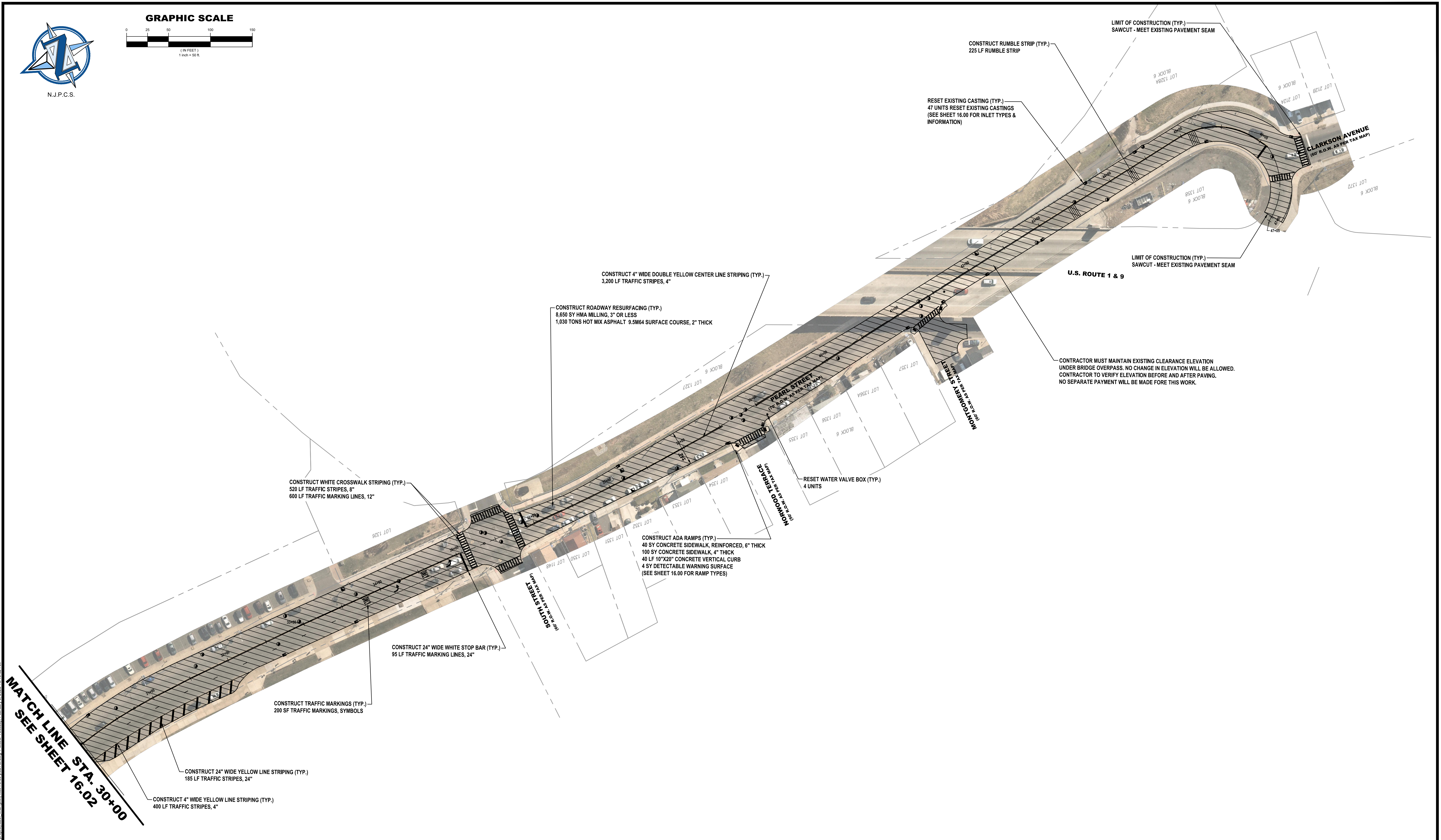
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MATCH LINE STA. 30+00
SEE SHEET 16.02

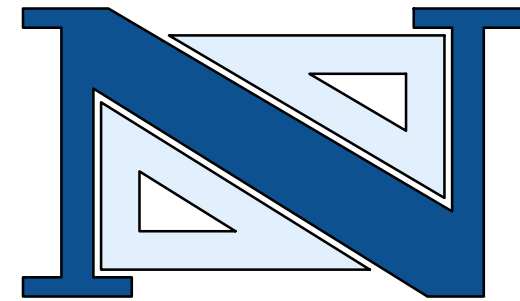
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**PEARL STREET II
 2022 ROAD RESURFACING PROJECT
 (CA-2021)
 CITY OF ELIZABETH
 UNION COUNTY NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO.:	SHEET NO.:
DESIGNED BY: VH	SCALE: 1"=50'	UNIOCTY21.010	16.02
FIELD BOOK NO.:	PAGE:	DATE: JULY 16, 2021	

STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				ADA RAMPS						
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	QUANTITIES						
							10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE	CONC. SIDEWALK, 4" THICK
07+00	LT	6	X				10	10				1	20
07+50	LT	6	X				20					1	20
09+60	LT	6	X				10	10				1	15
10+00	LT	6	X				10	10				1	10
10+60	RT	7	X				15					1	10
11+10	RT	7			X		20					1	15
14+30	RT	6	X				10	10				1	15
14+70	RT	5	X				15	10				1	10
20+70	LT	7			X		20	10				1	15
21+40	LT	7			X		20	10				1	20
25+90	LT	7				X	15					2	15
26+00	RT	7				X	25					2	15
26+50	LT	7				X	25	10				2	15
26+60	RT	7				X	15	10				2	15
31+30	RT	7				X	25	15				2	15
31+30	LT	7				X	25	10				2	15
31+80	LT	7				X	25	25				2	15
31+80	RT	7				X	25	25				2	15
35+40	LT	7				X	25	10				2	15
35+40	RT	7				X	25	10				2	15
35+90	LT	7				X	25					2	15
35+90	RT	7				X	25					2	15
40+80	RT	7				X	25	10				2	20
40+90	LT	7				X	25	10				2	20
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41+50	LT	7				X	25	10				2	20

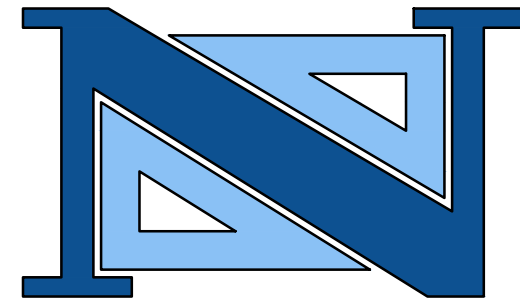
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BYCYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
03+30	RT	B				X
03+40	LT	B				X
03+90	LT	B				X
04+05	RT	B				X
04+10	RT	B				X
07+60	LT	B				X
07+60	RT	B				X
11+20	RT	B				X
14+80	RT	B				X
14+80	LT	B				X
17+60	RT	B				X
17+60	LT	B				X
21+50	RT	B				X
21+60	LT	B				X
23+60	RT	B				X
23+60	LT	B				X
26+60	LT	B				X
26+70	RT	B				X
28+90	RT	B				X
28+90	LT	B				X
33+60	RT	B				X
33+60	LT	B				X
35+50	RT	B				X
35+80	RT	B				X
35+90	RT	B				X
35+90	LT	B				X
35+90	LT	B				X
41+00	RT	B				X
41+45	RT	B				X
41+55	RT	B				X
41+70	LT	B				X
48+60	RT	B				X
48+70	LT	B				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	hour		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	180	
7	HMA MILLING, 3" OR LESS	SY	22,970	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	211	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	180	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2,730	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	50	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	2	
17	BICYCLE SAFE GRATE	UNIT	2	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	65	
19	RESET WATER VALVE BOX	UNIT	19	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	3	
21	10" X 20" CONCRETE VERTICAL CURB	LF	505	
22	GRANITE CURB	LF	175	
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	390	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	355	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	40	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF	11,300	
30	TRAFFIC STRIPES, 8"	LF	2,200	
31	TRAFFIC MARKING, LINES, 12"	LF	2,440	
32	TRAFFIC MARKING, LINES, 24"	LF	115	
33	TRAFFIC MARKINGS, SYMBOLS	SF		
34	REGULATORY AND WARNING SIGN	SF		
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	100	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	130	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	130	
40	STRAW MULCHING	S.Y.	130	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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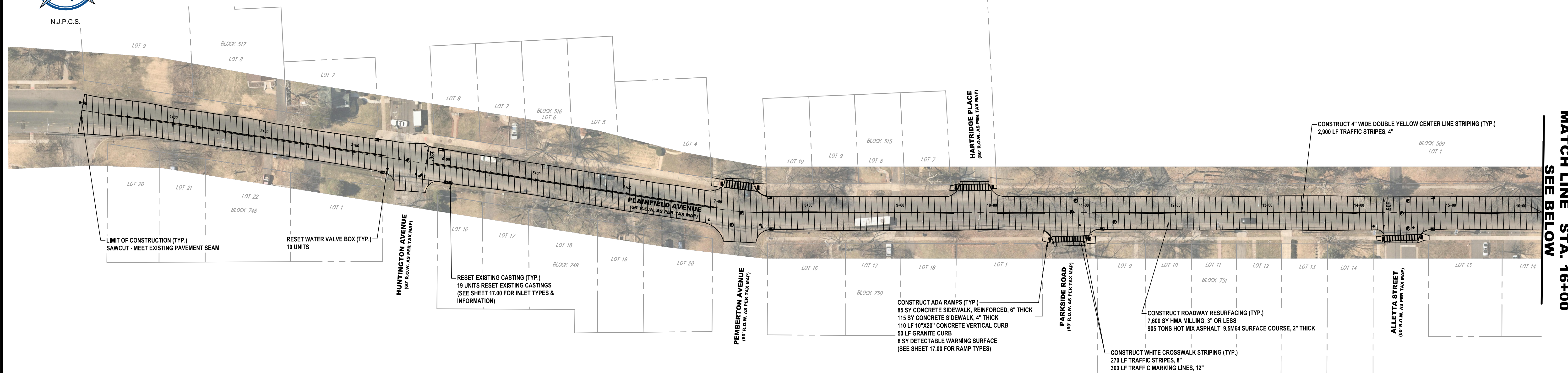
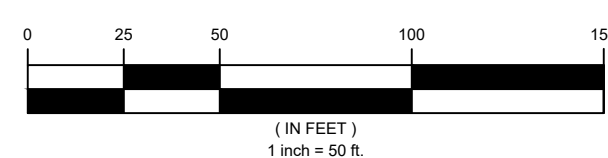
PLAINFIELD AVENUE QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF PLAINFIELD
UNION COUNTY NEW JERSEY

DESIGNED BY: VH CHECKED BY: EMJ PROJECT NO.: UNIOCTY21.010 SHEET NO.: 17.00
SCALE: N.T.S. DATE: JULY 16, 2021
FIELD BOOK NO.: PAGE:

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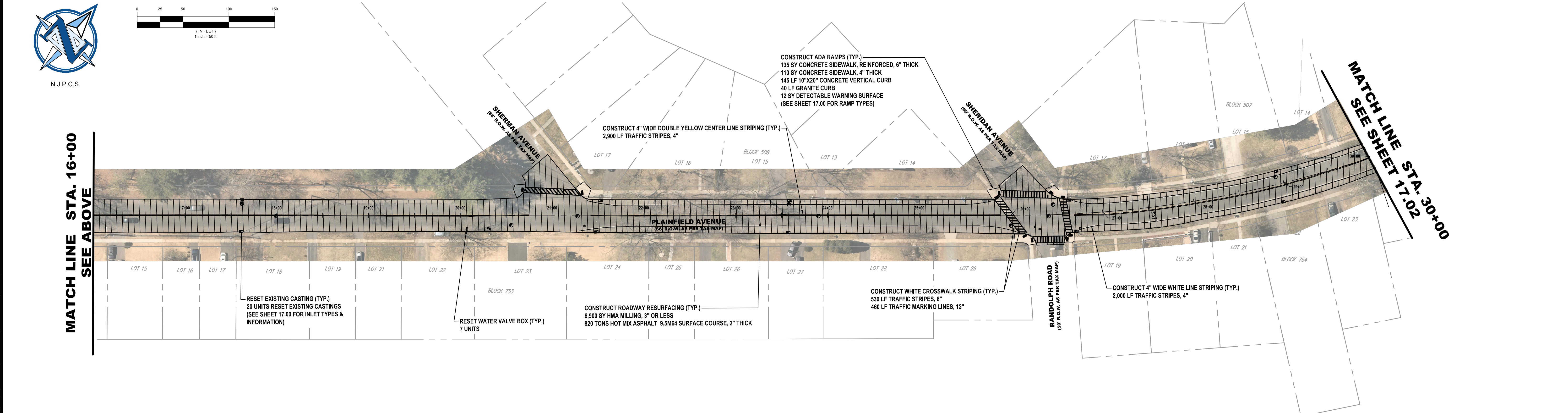
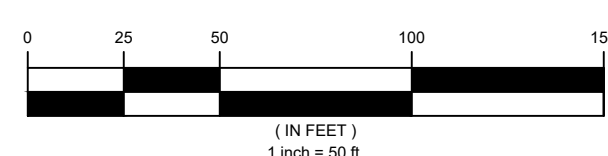
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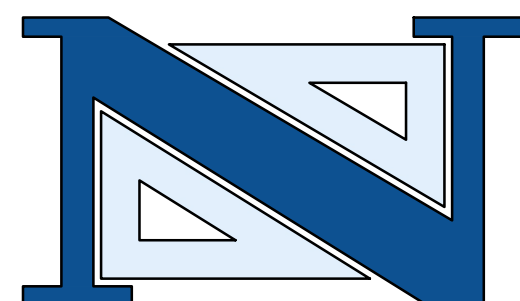
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 PROFESSIONAL PLANNER N.J. LICENSE NO. 33L00569800

**PLAINFIELD AVENUE I
 2022 ROAD RESURFACING PROJECT
 (CA-2021)
 CITY OF PLAINFIELD
 UNION COUNTY NEW JERSEY**

DRAWN BY: VH
 DESIGNED BY: VH
 FIELD BOOK NO:

CHECKED BY: EMJ
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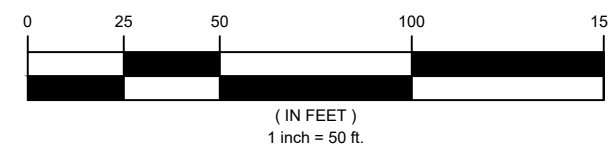
PROJECT NO: UNIOCTY21.010
 SHEET NO: 17.01
 DATE: JULY 16, 2021

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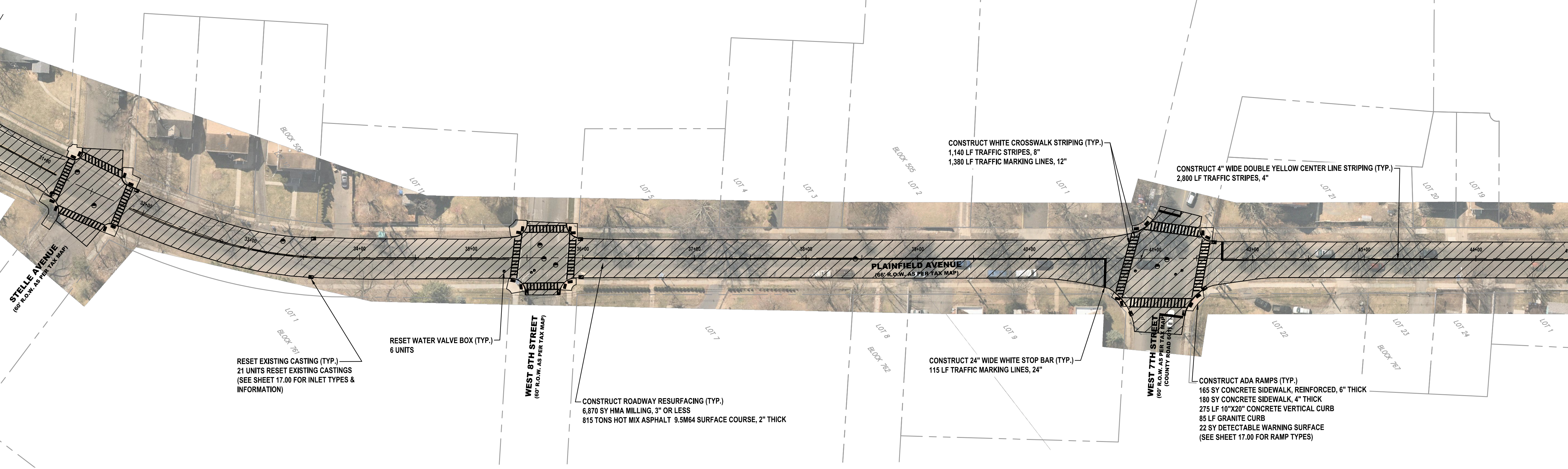


N.J.P.C.S.

GRAPHIC SCALE



**MATCH LINE STA. 30+00
SEE SHEET 17.01**

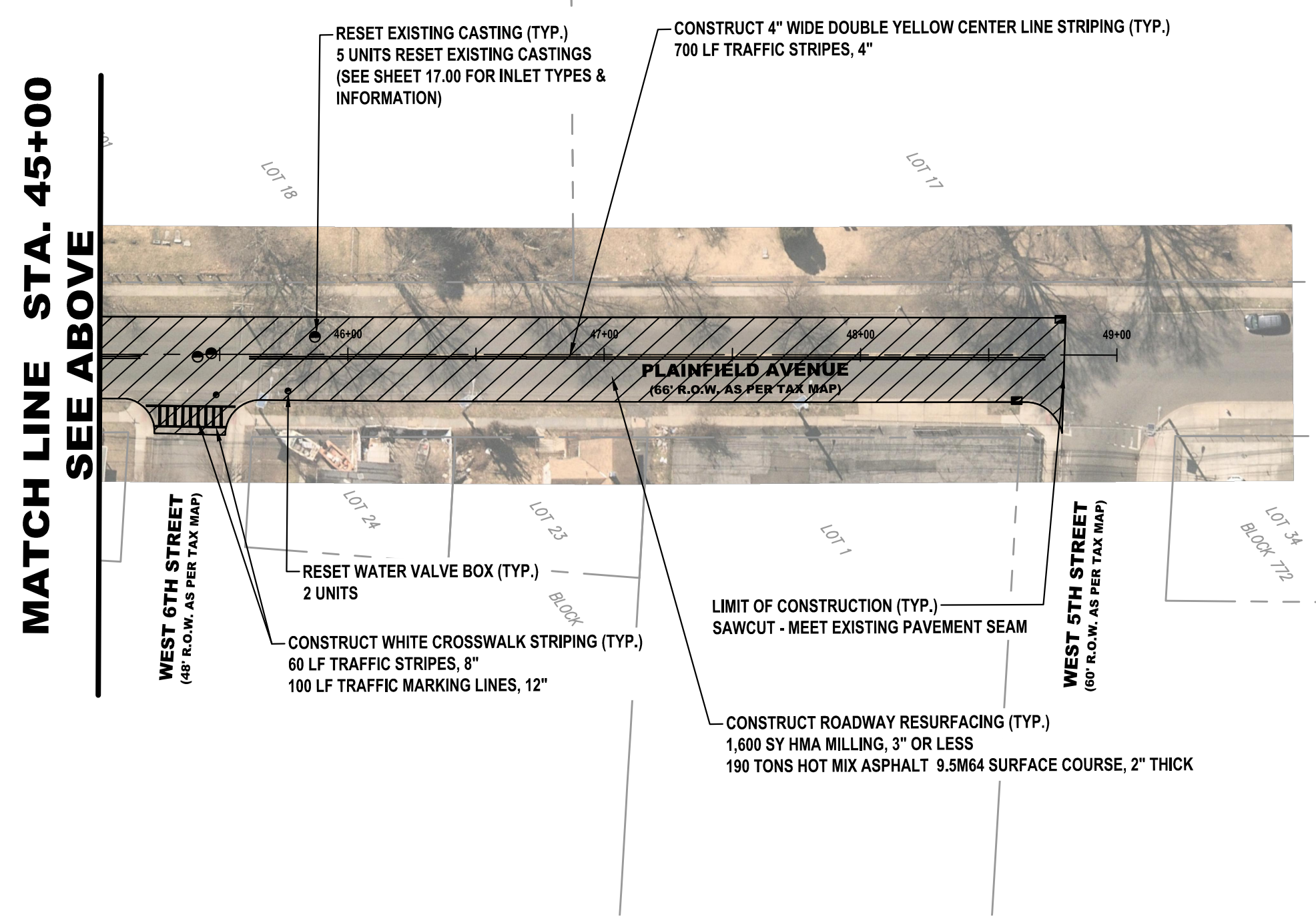
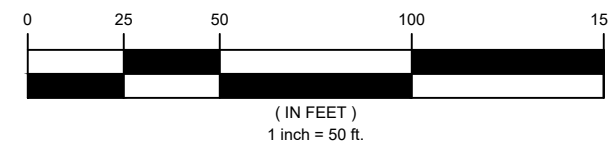


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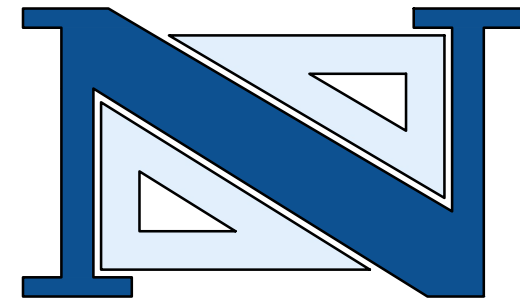


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**PLAINFIELD AVENUE II
 2022 ROAD RESURFACING PROJECT
 (CA-2021)
 CITY OF PLAINFIELD
 UNION COUNTY NEW JERSEY**

PROJECT NO.: UNIOCTY21.010 SHEET NO.: 17.02
 DATE: JULY 16, 2021

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ADA RAMPS												
STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES					
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE
00+20	RT	7				X	15	15		10	2	15
00+20	LT	7			X		10	15		10	1	15
00+40	LT	7	X				10	15		10	1	15
01+20	RT	7				X	25	15		15	2	15
01+30	LT	7	X				25			15	2	40
03+50	LT	7				X	20			10	1	10
03+50	RT	6				X	20	10		10	1	15
04+10	LT	7	X				25	10		10	2	10
04+10	RT	6	X				25			20	2	10
10+00	RT	6	X				20	10		10	1	10
10+50	RT	6	X				10	10		10	1	15
13+50	RT	6	X				10	15		10	1	10
13+50	LT	6	X				15	10		10	1	10
14+10	RT	6	X				15	15		10	1	10
14+10	LT	6	X				10	10		10	1	10
20+00	LT	6	X				15	10		10	1	10
20+60	LT	6	X				15	10		10	1	15
28+40	LT	6	X				10	10		10	1	10
29+00	LT	6	X				20	10		10	1	10
35+70	LT	7	X				10	10		10	1	10
36+30	LT	6	X				15	10		10	1	10
39+20	RT	6			X		20	10		10	1	10
39+80	RT	6				X	20	10		15	2	10
40+20	RT	6			X		20	10		10	1	
45+50	RT	7			X		15	10		10	1	15
46+00	RT	7			X		15	10		10	1	15

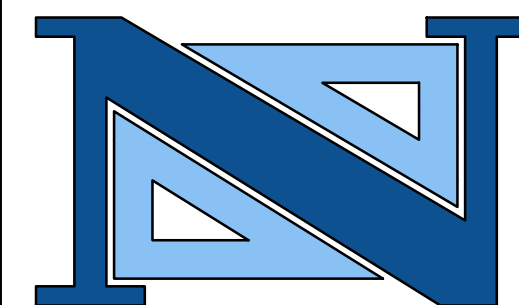
INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BYCYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
00+10	RT	B				X
01+30	RT	B				X
09+90	RT	B				X
09+90	LT	B				X
12+10	RT	B				X
12+10	LT	B				X
12+40	RT	B				X
12+40	LT	A				X
35+60	LT	B				X
36+40	LT	B				X
38+80	RT	B				X
38+80	LT	B				X
40+30	RT	B				X
41+20	LT	B				X
48+50	RT	B				X
48+80	LT	B				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	HOUR		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	185	
7	HMA MILLING, 3" OR LESS	SY	25,800	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	242	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	185	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	3,065	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	57	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	1	
17	BICYCLE SAFE GRATE	UNIT	1	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	34	
19	RESET WATER VALVE BOX	UNIT	10	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	1	
21	10" X 20" CONCRETE VERTICAL CURB	LF	460	
22	GRANITE CURB	LF	260	
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	360	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	305	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	34	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF	17,900	
30	TRAFFIC STRIPES, 8"	LF	2,100	
31	TRAFFIC MARKING, LINES, 12"	LF	1,840	
32	TRAFFIC MARKING, LINES, 24"	LF	285	
33	TRAFFIC MARKINGS, SYMBOLS	SF	610	
34	REGULATORY AND WARNING SIGN	SF		
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	100	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	130	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	130	
40	STRAW MULCHING	S.Y.	130	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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NO.	DATE	DESCRIPTION			



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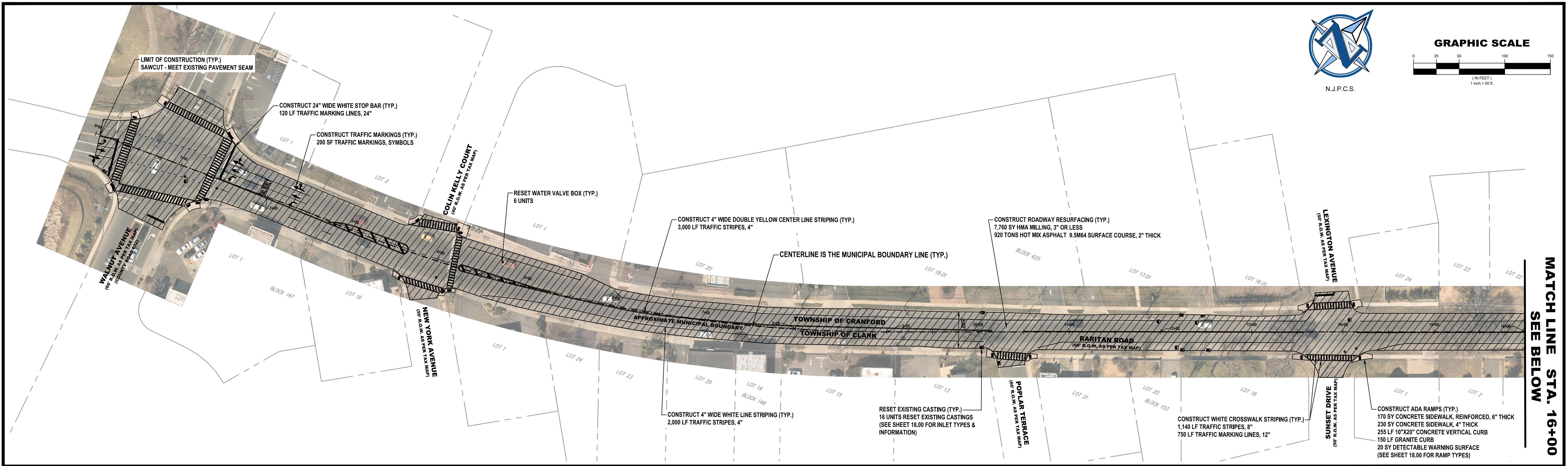
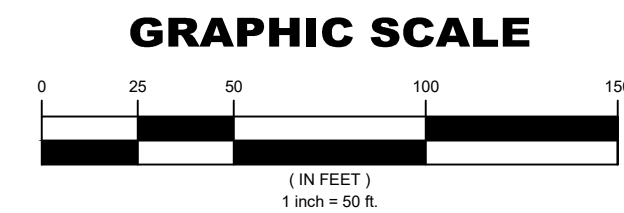
RARITAN ROAD QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
TOWNSHIP OF CRANFORD/TOWNSHIP OF CLARK
UNION COUNTY NEW JERSEY

DRAWN BY: VH CHECKED BY: EMJ PROJECT NO.: UNIOCTY21.010 SHEET NO.: 18.00
DESIGNED BY: VH SCALE: N.T.S. DATE: JULY 16, 2021
FIELD BOOK NO.: PAGE:

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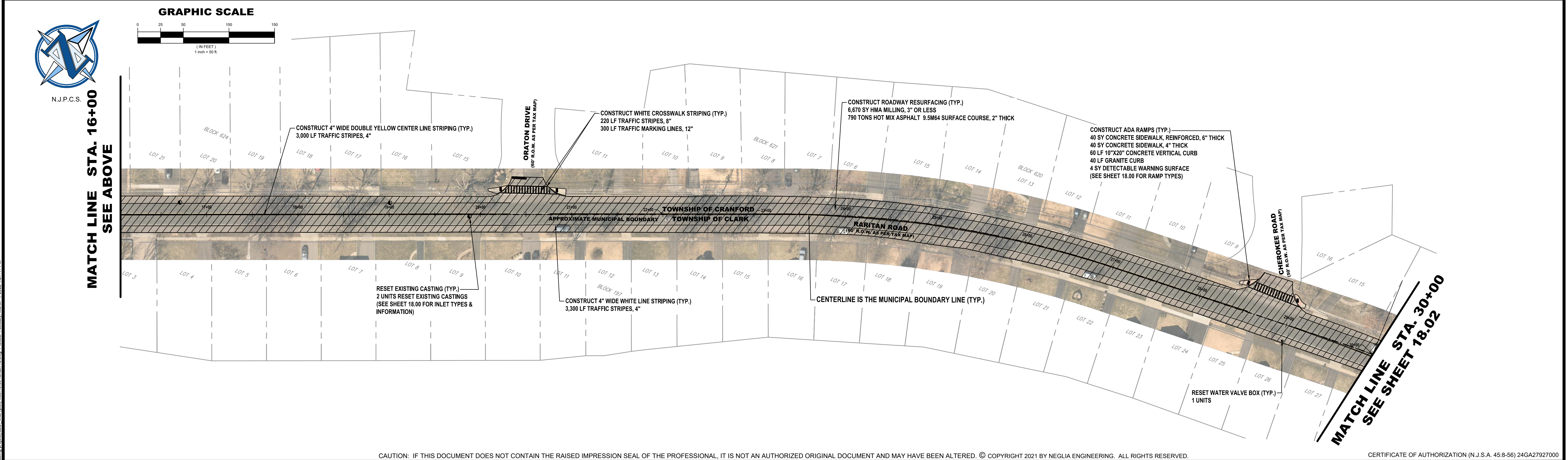
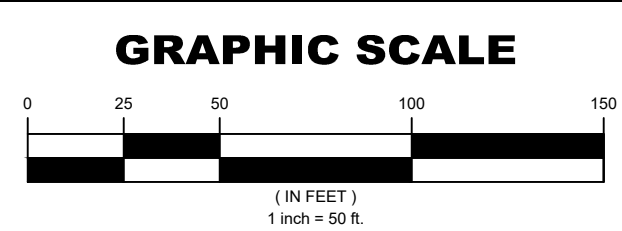
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N.J.P.C.S.



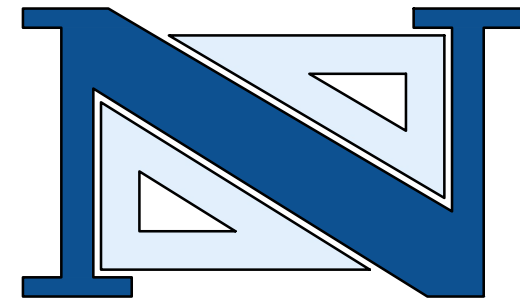
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MATCH LINE STA. 30+00
SEE SHEET 18.02

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PROFESSIONAL PLANNER N.J. LICENSE NO. 33L00569800

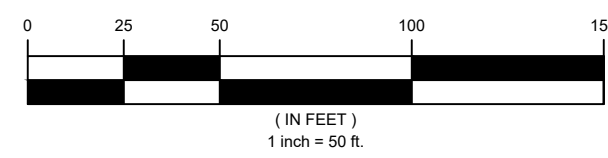
**RARITAN ROAD I
2022 ROAD RESURFACING PROJECT
(CA-2021)
TOWNSHIP OF CRANFORD/TOWNSHIP OF CLARK
UNION COUNTY
NEW JERSEY**

DESIGNED BY: VH
CHECKED BY: EMJ
SCALE: 1" = 50'
PAGE: []

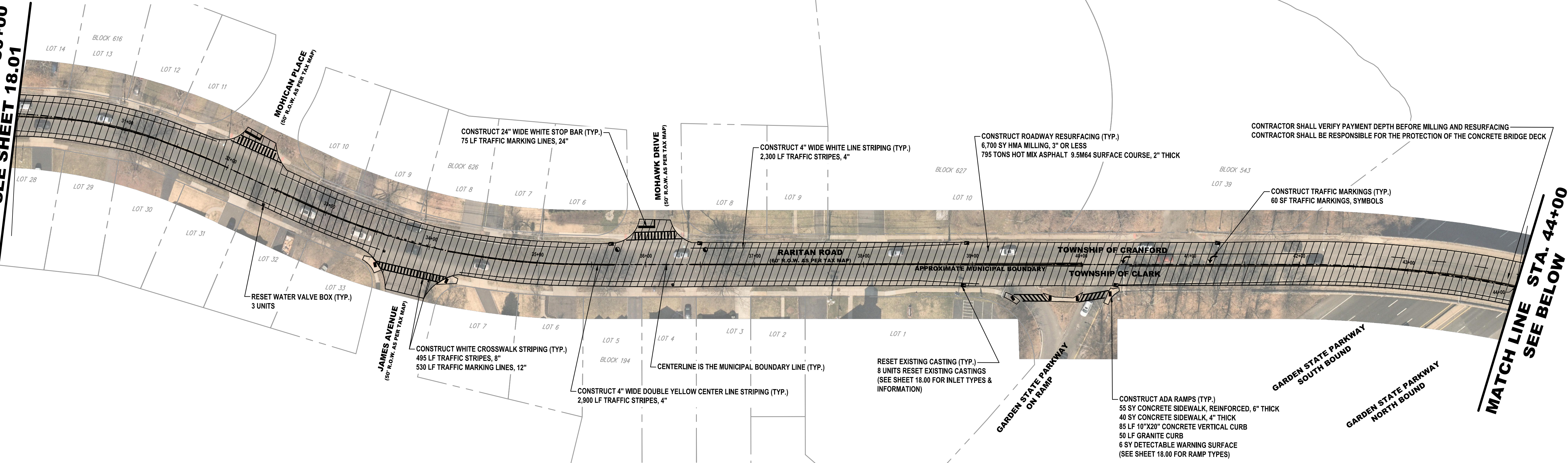
PROJECT NO.: UNIOCTY21.010
SHEET NO.: 18.01
DATE: JULY 16, 2021



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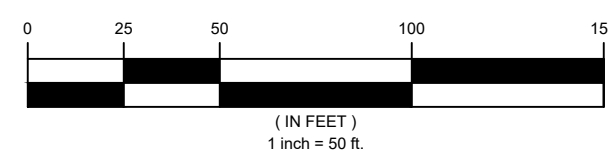
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SEE SHEET 18.01



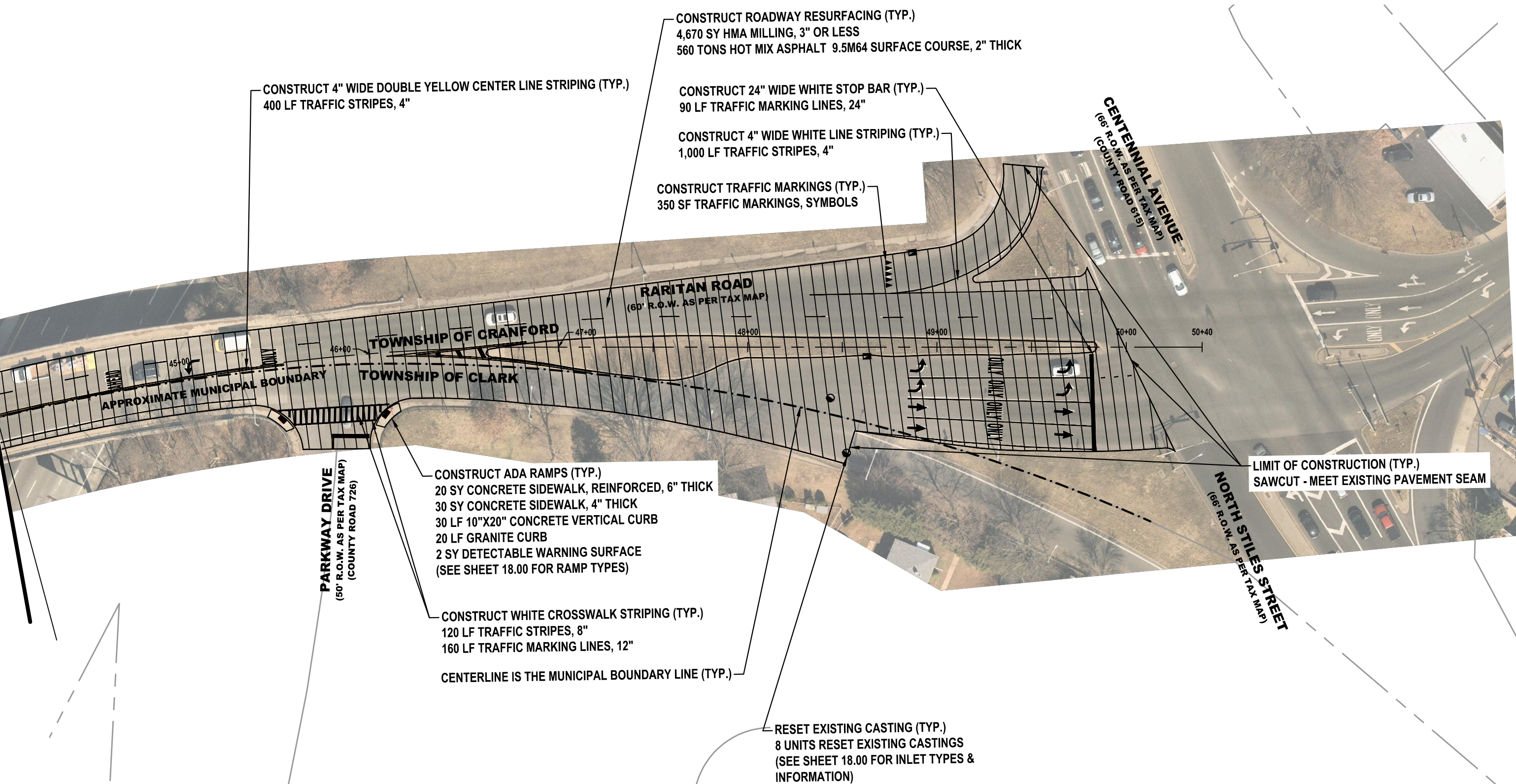
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SEE BELOW



GRAPHIC SCALE



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SEE ABOVE



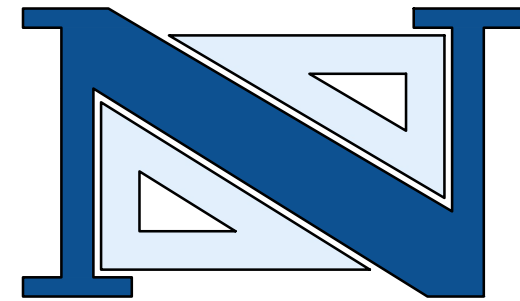
LIMIT OF CONSTRUCTION (TYP.)
SAWCUT - MEET EXISTING PAVEMENT SEAM

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PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

**RARITAN ROAD II
2022 ROAD RESURFACING PROJECT
(CA-2021)**
**TOWNSHIP OF CRANFORD/TOWNSHIP OF CLARK
UNION COUNTY
NEW JERSEY**

DESIGNED BY: VH CHECKED BY: EMJ PROJECT NO: UNIOCTY21.010 SHEET NO: 18.02
SCALE: 1"=50' DATE: JULY 16, 2021
FIELD BOOK NO: PAGE:

STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES						
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE	CONC. SIDEWALK, 4" THICK
01+20	LT	1	X				10	10	10			1	20
01+30	RT	1	X				15	10	10			1	20
05+80	LT	1	X				30		10			1	
05+90	RT	7			X		20					2	35
06+20	LT	7			X		15					1	10
06+50	RT	7	X				15		10			1	35
06+50	LT	7			X		15					1	10
06+90	LT	7			X		15		10			1	15
06+95	RT	3	X				10					1	30
10+65	RT	7				X	25					2	50
10+65	LT	7				X	25					2	10
10+90	LT	7	X				15					1	10
11+10	LT	1	X				10					1	10
11+20	RT	7			X		15	10				1	15
13+65	LT	7			X		20					1	10
14+10	LT	7	X				15					1	10
17+90	LT	7	X				10					2	25
17+90	RT	7				X	15					1	25
18+00	LT	7	X				10					1	15
18+50	RT	1			X		10					1	25
18+70	LT	1			X		10					1	30
19+10	RT	1			X		10					1	25
19+70	LT	1			X		10					1	25
20+00	RT	7			X		10	10				1	25
23+10	LT	5	X				10					1	15
23+50	LT	5	X				10					1	5
23+80	LT	5	X				10	10				1	5
24+40	LT	6	X				10					1	15
24+90	RT	6					10					1	15
25+50	RT	6					10					1	15
31+20	LT	6	X				10					1	15
31+20	RT	6			X		10	10				1	15
32+00	RT	7			X		10	10				1	15
54+35	RT	6	X				20					1	25
54+80	RT	7	X				10	10				1	15
62+00	RT	6	X				15					1	25
62+45	RT	7	X				10	10				1	15
69+50	LT	7				X	25					2	40
69+50	RT	7				X	15					2	40
70+20	LT	7				X	15					2	40
70+20	RT	7				X	20					2	40
77+30	LT	7				X	15					2	10
77+30	RT	7				X	20					2	15
77+80	LT	7				X	25					2	10
77+85	RT	7				X	15					2	15
85+00	RT	7	X				15					1	25
85+50	RT	7	X				15	10				1	25
92+60	RT	7			X		10					1	15
93+00	RT	7	X				20					1	10
101+20	RT	6	X				15	10				1	15
101+75	RT	6	X				15	10				1	15
106+80	LT	7	X				15					1	15
107+25	LT	7				X			50			3	
107+70	RT	7				X	20	10				2	15
108+25	LT	7			X		10					1	30
108+60	RT	7			X		15	10				1	15
118+20	RT	7			X		10					1	10
124+30	RT	7			X		10		15			1	
124+70	LT	7			X		10		15			1	
125+20	RT	7				X	15		15			2	
128+00	RT	7				X	25		20			2	
128+00	LT	7				X	25		20			2	
128+60	RT	7				X	25		20			2	
132+30	LT	7			X		10		10			1	10
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140+30	RT	7			X		25		10			1	

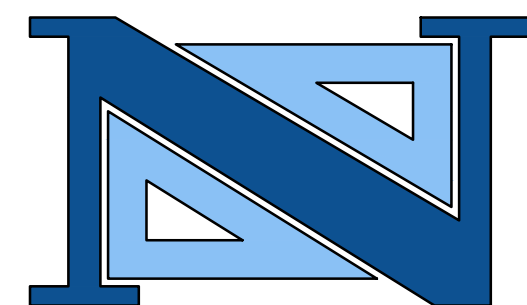
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BYCYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
01+75	LT	B				X
01+90	RT	B				X
07+45	RT	B				X
07+55	LT	E				X
12+00	RT	B				X
13+50	RT	B				X
18+45	LT	E				X
24+60	RT	B				X
24+85	RT	B				X
25+10	LT	B				X
26+15	RT	B				X
28+80	RT	B				X
30+65	LT	B				X
32+50	RT	B				X
45+45	LT	B				X
54+75	RT	B				X
54+95	LT	B				X
57+30	LT	B				X
59+10	LT	B				X
62+50	RT	B				X
62+85	LT	B				X
62+90	LT	E				X
62+90	RT	B				X
66+00	RT	B				X
66+00	LT	B				X
68+80	RT	B				X
69+00	LT	B				X
69+80	LT	B				X
78+40	LT	B				X
85+35	RT	B				X
85+35	LT	E				X
89+65	RT	B				X
89+65	LT	B				X
92+90	LT	B				X
92+90	RT	B				X
96+95	RT	B				X
100+85	LT	B				X
101+80	RT	B				X
102+50	LT	E				X
102+85	LT	A				X
103+35	LT	B				X
103+40	RT	B				X
124+10	LT	B				X
124+20	RT	B				X
124+70	LT	B				X
125+80	LT	B				X
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127+95	RT	B				X
132+00	LT	B				X
132+20	RT	B				X
132+50	LT	B				X
132+85	LT	E				X
132+90	RT	B				X
133+10	LT	B				X
139+80	RT	B				X
140+00	LT	B				X
140+30	RT	B				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	ALLOW.		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	520	
7	HMA MILLING, 3" OR LESS	SY	67,460	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	629	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	520	
10	HOT MIX ASPHALT 9.5M84 SURFACE COURSE	TON	8,035	
11	HOT MIX ASPHALT 9.5M84 INTERMEDIATE COURSE	TON	149	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	4	
17	BICYCLE SAFE GRATE	UNIT	4	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	172	
19	RESET WATER VALVE BOX	UNIT	38	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	5	
21	10" X 20" CONCRETE VERTICAL CURB	LF	1,055	
22	GRANITE CURB	LF		
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	1,215	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	665	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	83	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF	25,500	
30	TRAFFIC STRIPES, 8"	LF	5,270	
31	TRAFFIC MARKING, LINES, 12"	LF	5,610	
32	TRAFFIC MARKING, LINES, 24"	LF	225	
33	TRAFFIC MARKINGS, SYMBOLS	SF	2,160	
34	REGULATORY AND WARNING SIGN	SF		
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	280	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	330	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	330	
40	STRAW MULCHING	S.Y.	330	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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NO.	DATE	DESCRIPTION			



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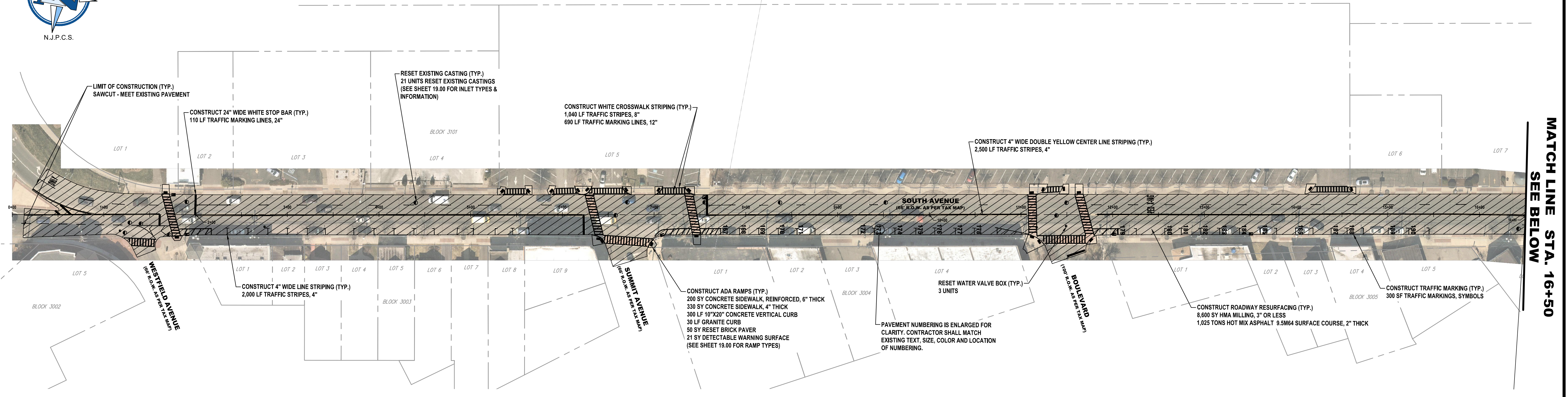
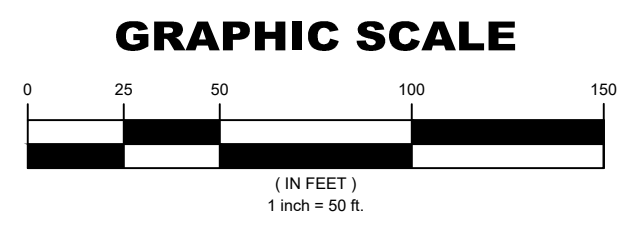
PROFESSIONAL PLANNER
N.J. LICENSE NO. 33L00569800

**SOUTH AVENUE QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)**
**TOWN OF WESTFIELD/TWP. OF GARWOOD/TWP. OF CRANFORD
UNION COUNTY NEW JERSEY**

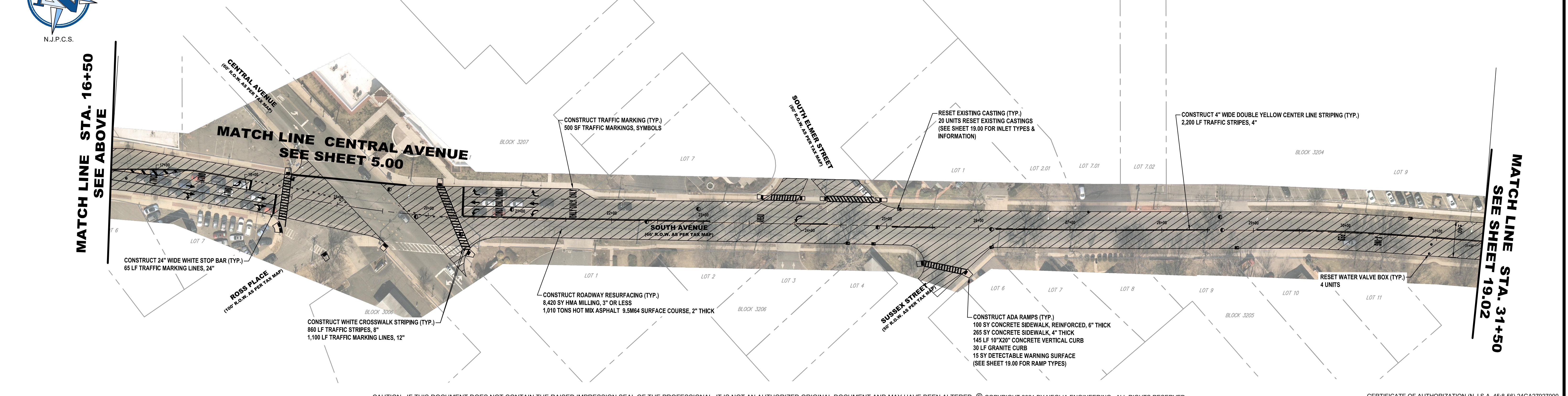
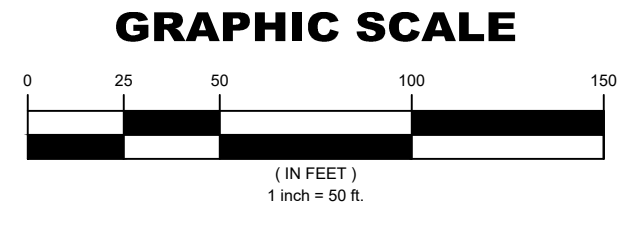
DRAWN BY: VH
DESIGNED BY: VH
FIELD BOOK NO:

CHECKED BY: EMJ
SCALE: N.T.S.
PAGE:

PROJECT NO.: UNIOCTY21.010
SHEET NO.: 19.00
DATE: JULY 16, 2021



MATCH LINE STA. 16+50
SEE BELOW



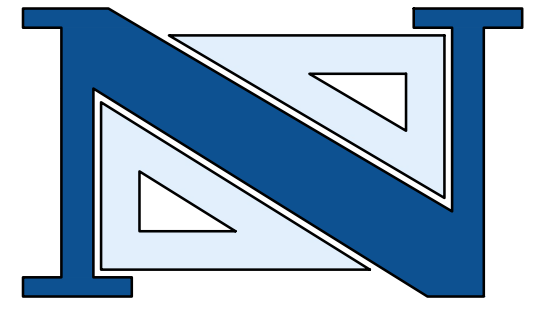
MATCH LINE STA. 16+50
SEE ABOVE

MATCH LINE STA. 31+50
SEE SHEET 19.02

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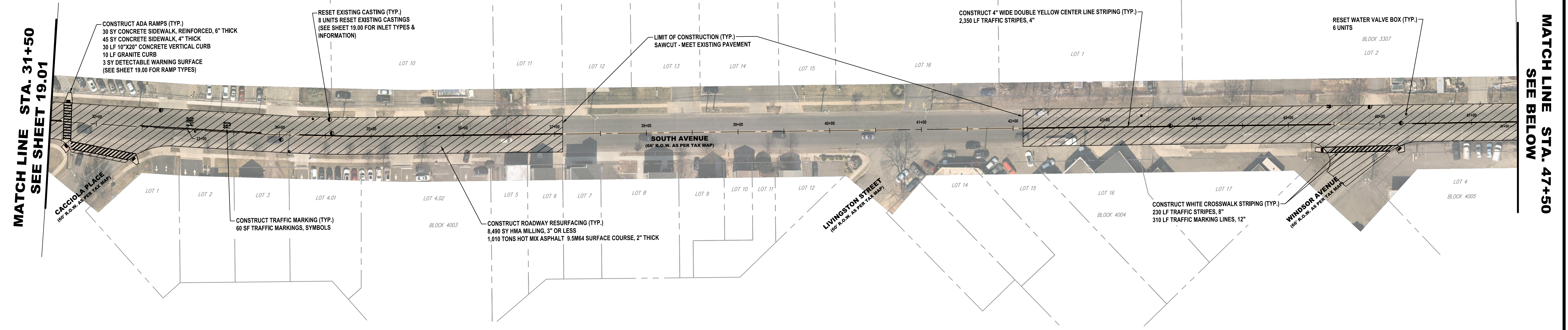
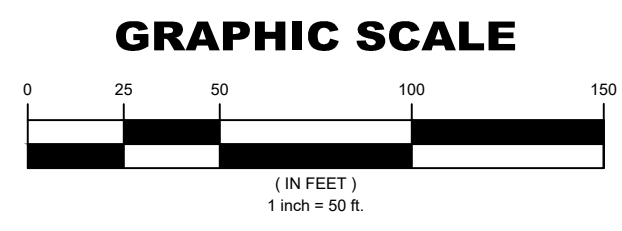
**SOUTH AVENUE I
2022 ROAD RESURFACING PROJECT
(CA-2021)**

**TOWN OF WESTFIELD/TWP. OF GARWOOD/TWP. OF CRANFORD
UNION COUNTY
NEW JERSEY**

PROJECT NO.: UNIOCTY21.010 SHEET NO.: 19.01
DATE: JULY 16, 2021

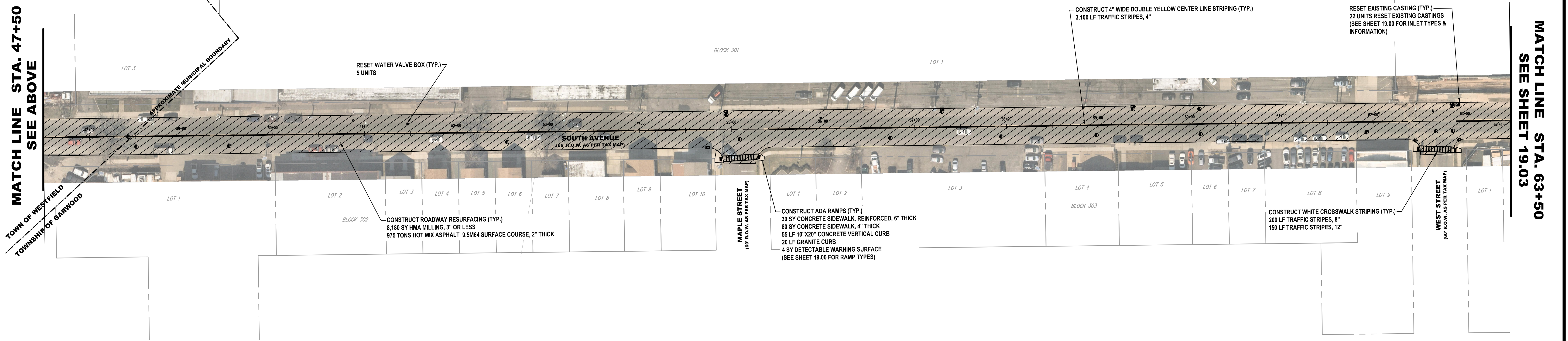
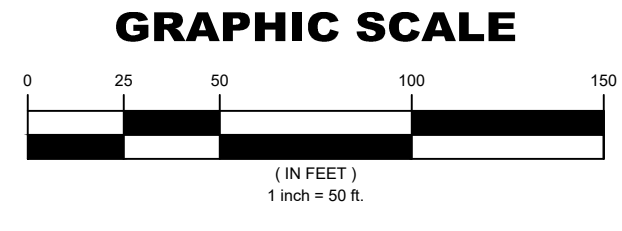
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DESIGNED BY: VH SCALE: 1" = 50' PAGE:
FIELD BOOK NO.:

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MATCH LINE STA. 31+50
SEE SHEET 19.01

MATCH LINE STA. 47+50
SEE BELOW



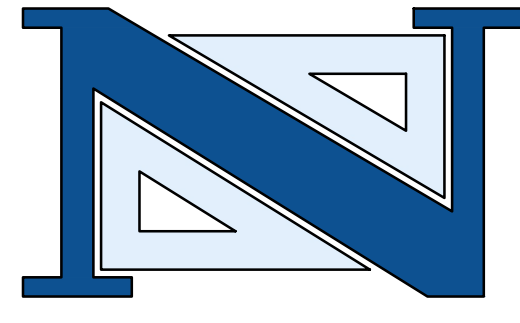
MATCH LINE STA. 47+50
SEE ABOVE

MATCH LINE STA. 63+50
SEE SHEET 19.03

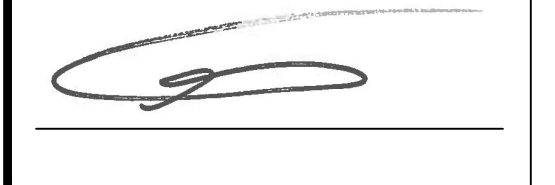
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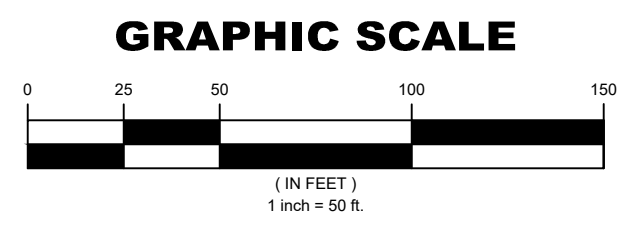
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**SOUTH AVENUE II
2022 ROAD RESURFACING PROJECT
(CA-2021)**

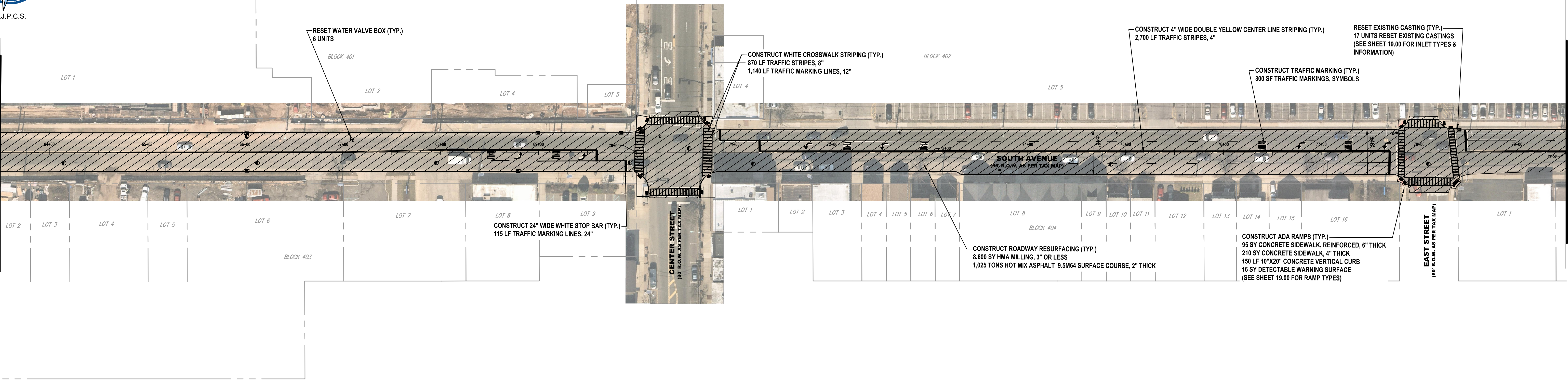
**TOWN OF WESTFIELD/TWP. OF GARWOOD/TWP. OF CRANFORD
UNION COUNTY
NEW JERSEY**

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DESIGNED BY: VH	SCALE: 1"=50'	UNIOCTY21.010	19.02
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

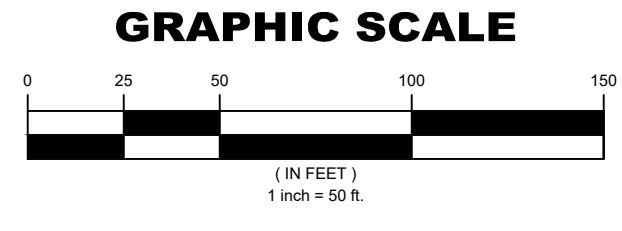
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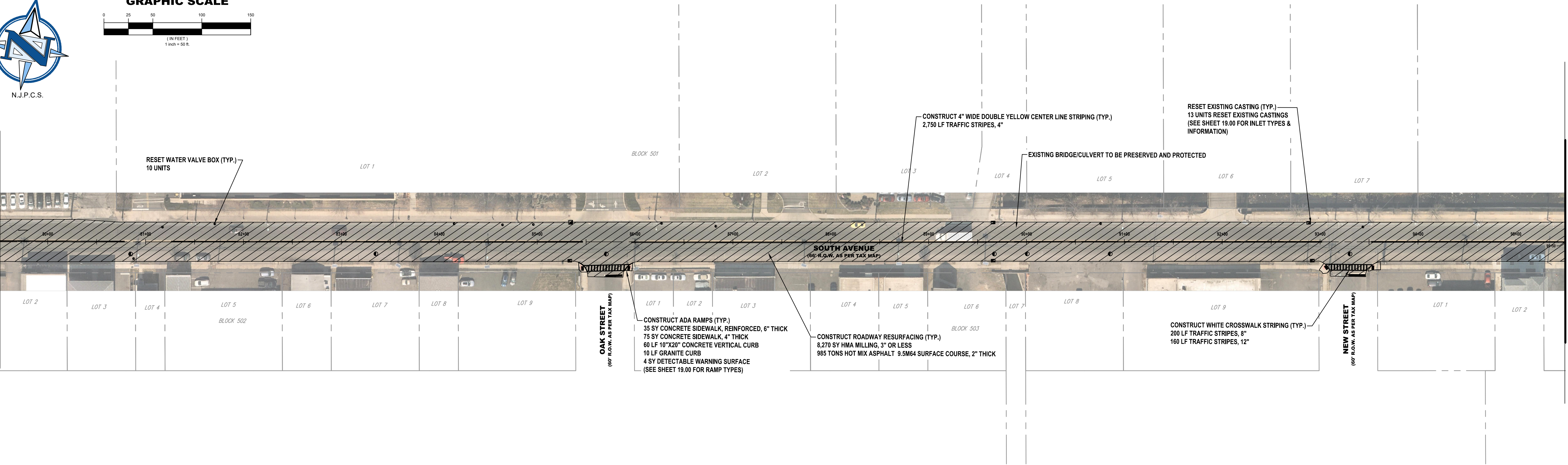
MATCH LINE STA. 63+50
SEE SHEET 19.02



MATCH LINE STA. 79+50
SEE BELOW



MATCH LINE STA. 79+50
SEE ABOVE

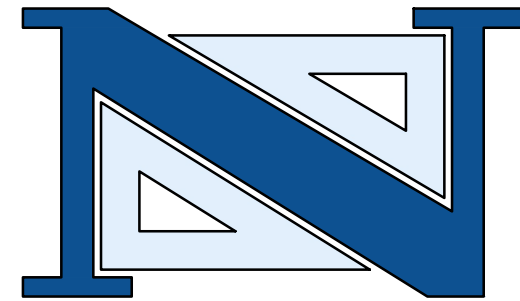


MATCH LINE STA. 95+50
SEE SHEET 19.04

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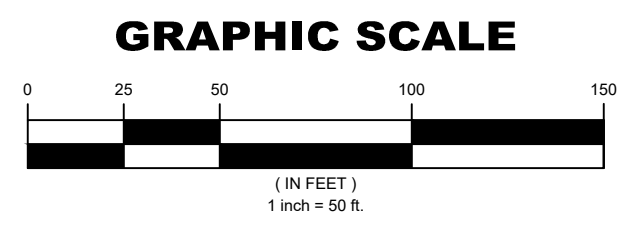
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PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

**SOUTH AVENUE III
2022 ROAD RESURFACING PROJECT
(CA-2021)**

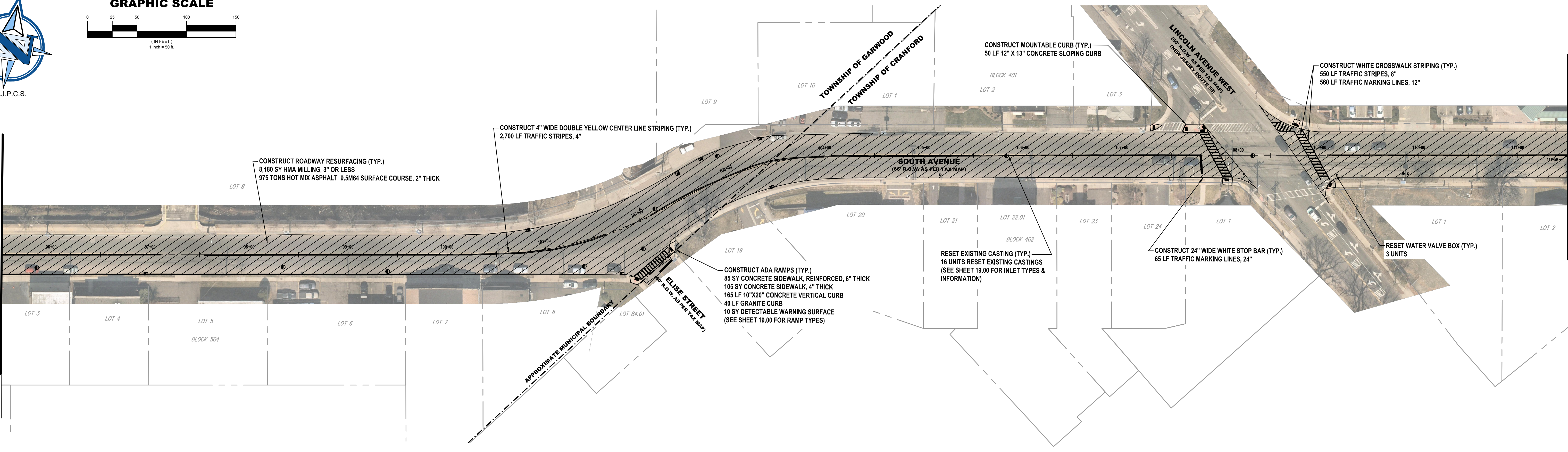
**TOWN OF WESTFIELD/TWP. OF GARWOOD/TWP. OF CRANFORD
UNION COUNTY
NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO.:	SHEET NO.:
DESIGNED BY: VH	SCALE: 1"=50'	UNIOCTY21.010	19.03
FIELD BOOK NO.:	PAGE:	DATE: JULY 16, 2021	

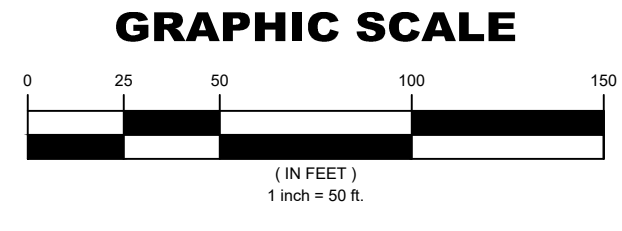
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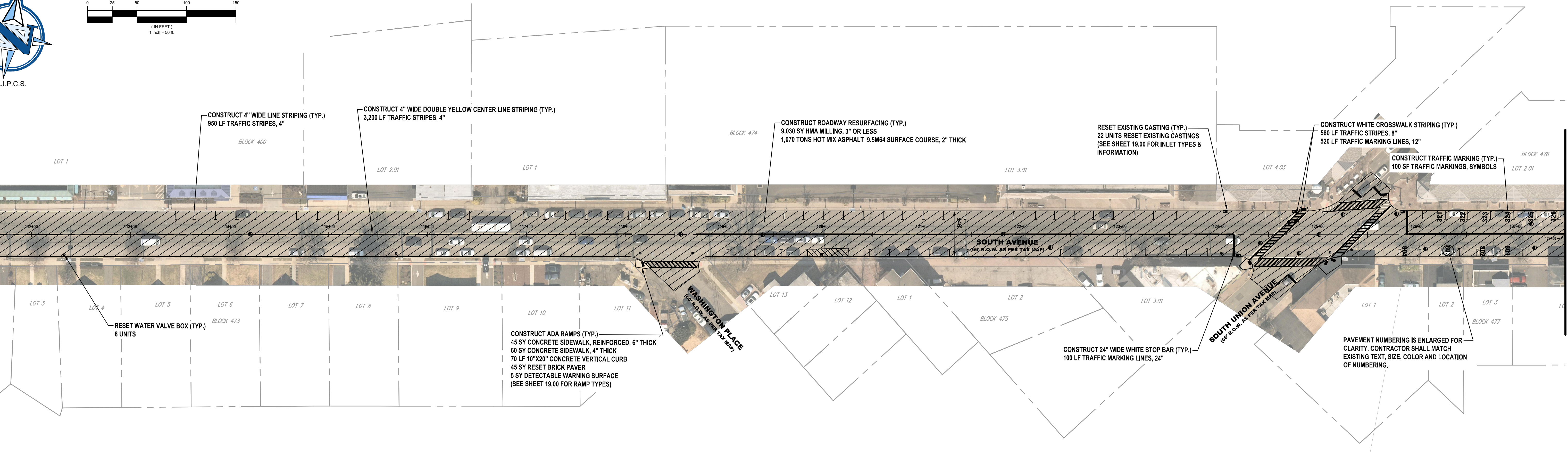
MATCH LINE STA. 95+50
SEE SHEET 19.03



MATCH LINE STA. 111+50
SEE BELOW



MATCH LINE STA. 111+50
SEE ABOVE

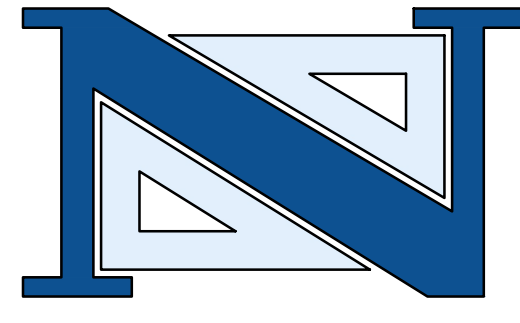


MATCH LINE STA. 127+50
SEE SHEET 19.05

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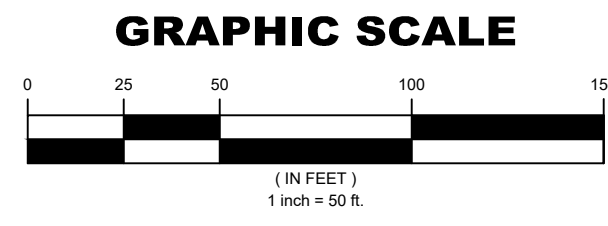
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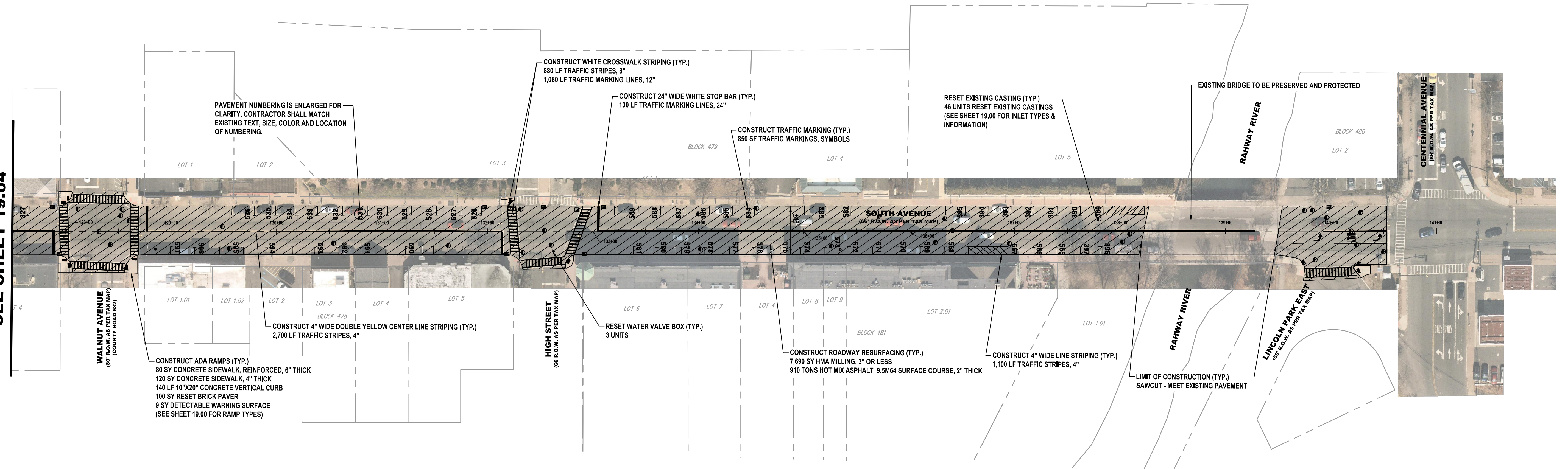
**SOUTH AVENUE IV
2022 ROAD RESURFACING PROJECT
(CA-2021)**
**TOWN OF WESTFIELD/TWP. OF GARWOOD/TWP. OF CRANFORD
UNION COUNTY
NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: 1"=50'	UNIOCTY21.010	19.04
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

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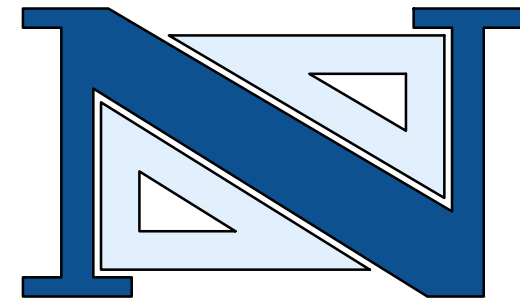
MATCH LINE STA. 127+50
SEE SHEET 19.04



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**SOUTH AVENUE V
2022 ROAD RESURFACING PROJECT
(CA-2021)**
TOWN OF WESTFIELD/TWP. OF GARWOOD/TWP. OF CRANFORD
UNION COUNTY
NEW JERSEY

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: 1"=50'	UNIOCTY21.010	19.05
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

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STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				ADA RAMP QUANTITIES						
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE	CONC. SIDEWALK, 4" THICK
00+40	RT	1				X	15				10	1	35
00+50	LT	1				X	30	15			25	2	35
01+10	RT	1				X	25	10			20	2	35
01+15	LT	1				X	25				20	2	35
17+40	RT	2			X		10				5	1	10
18+40	RT	6	X				10	10			10	1	15
21+15	RT	1			X		15	10			10	1	10
21+70	RT	1			X		20	10			15	1	10
23+80	RT	2	X				10	10			10	1	10
23+85	LT	5			X		20	15			10	1	10
24+30	LT	5			X		15	15			5	1	10
34+80	LT	3			X		10	10			5	1	15
35+70	LT	3			X		20	10			15	1	15
37+80	RT	7				X	25	15			20	2	15
37+85	LT	7			X		15	15			5	1	10
38+60	RT	7				X	20	15			10	2	10
38+60	LT	7				X	25	15			10	2	10
45+35	RT	5	X				10	10			5	1	10
45+80	RT	5	X				10	10			5	1	10
50+00	RT	7			X		15	10			10	1	20
59+70	RT	5			X		15	10			10	1	15
60+20	LT	5				X	10				10	1	15
60+25	RT	3	X				20				10	2	20
66+70	RT	3	X				10				10	1	15
66+70	LT	5			X		15				5	1	10
67+20	LT	5			X		15				10	1	10
67+20	RT	5	X				15				10	1	10
67+80	RT	5			X		20				10	1	10
67+80	LT	3	X				15				10	1	15
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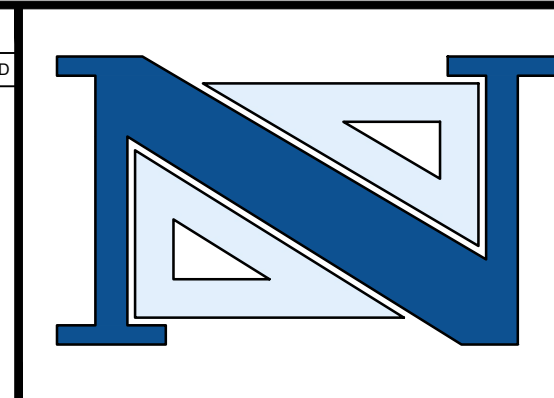
INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BYCYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
00+40	RT	B				X
00+50	LT	B				X
01+00	RT	B				X
01+10	LT	B				X
17+20	LT	B				X
17+35	RT	B				X
23+05	LT	E				X
25+60	RT	B				X
28+45	LT	B				X
28+45	RT	B				X
32+05	LT	B				X
32+20	RT	B				X
33+20	RT	B				X
34+70	LT	E				X
37+45	LT	B				X
37+70	RT	B				X
37+90	LT	E				X
38+60	RT	B				X
38+75	LT	B				X
42+00	RT	B				X
42+10	LT	B				X
45+40	LT	B				X
45+80	RT	B				X
49+85	LT	B				X
50+00	RT	B				X
51+00	RT	B				X
52+80	RT	B				X
58+90	LT	B				X
59+00	RT	B				X
59+15	RT	B				X
59+20	RT	B				X
59+40	LT	B				X
59+50	LT	B				X
59+55	RT	B				X
60+30	RT	B				X
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62+45	RT	B				X
65+05	RT	B				X
65+10	LT	B				X
66+75	RT	B				X
67+20	RT	B				X
67+60	LT	B				X
68+05	RT	B				X
69+55	RT	B				X
69+75	LT	B				X
73+40	RT	B				X
73+50	LT	B				X
75+45	C	B				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	HOUR		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	280	
7	HMA MILLING, 3" OR LESS	SY	36,060	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	339	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	280	
10	HOT MIX ASPHALT 9.5M84 SURFACE COURSE	TON	4,260	
11	HOT MIX ASPHALT 9.5M84 INTERMEDIATE COURSE	TON	80	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	4	
17	BICYCLE SAFE GRATE	UNIT	4	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	107	
19	RESET WATER VALVE BOX	UNIT	21	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	4	
21	10" X 20" CONCRETE VERTICAL CURB	LF	775	
22	GRANITE CURB	LF	235	
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	470	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	525	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	43	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF	22,200	
30	TRAFFIC STRIPES, 8"	LF	3,290	
31	TRAFFIC MARKING, LINES, 12"	LF	3,530	
32	TRAFFIC MARKING, LINES, 24"	LF	320	
33	TRAFFIC MARKINGS, SYMBOLS	SF	1,015	
34	REGULATORY AND WARNING SIGN	SF		
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	155	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	165	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	165	
40	STRAW MULCHING	S.Y.	165	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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NO.	DATE	DESCRIPTION				



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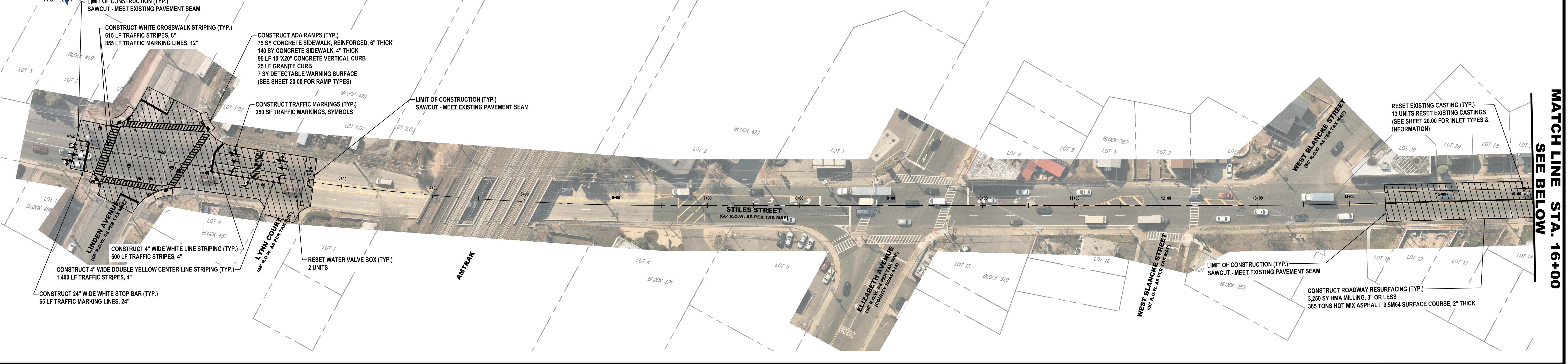
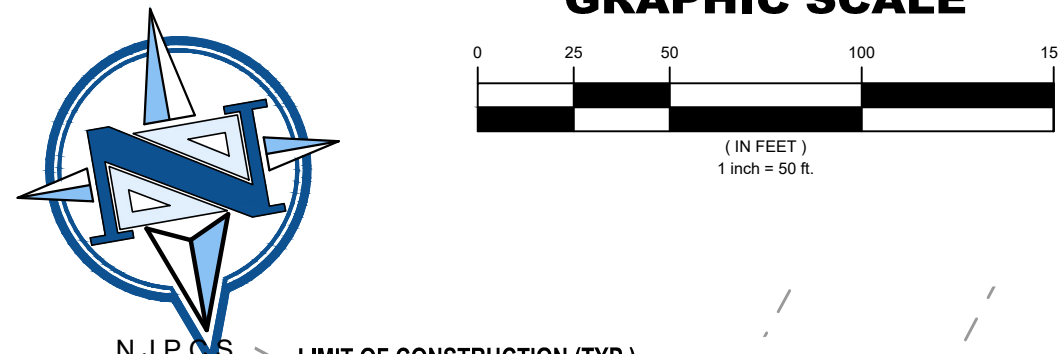
PROFESSIONAL LAND SURVEYOR
N.J. LICENSE NO. 38604

PROFESSIONAL PLANNER
N.J. LICENSE NO. 33LI00569800

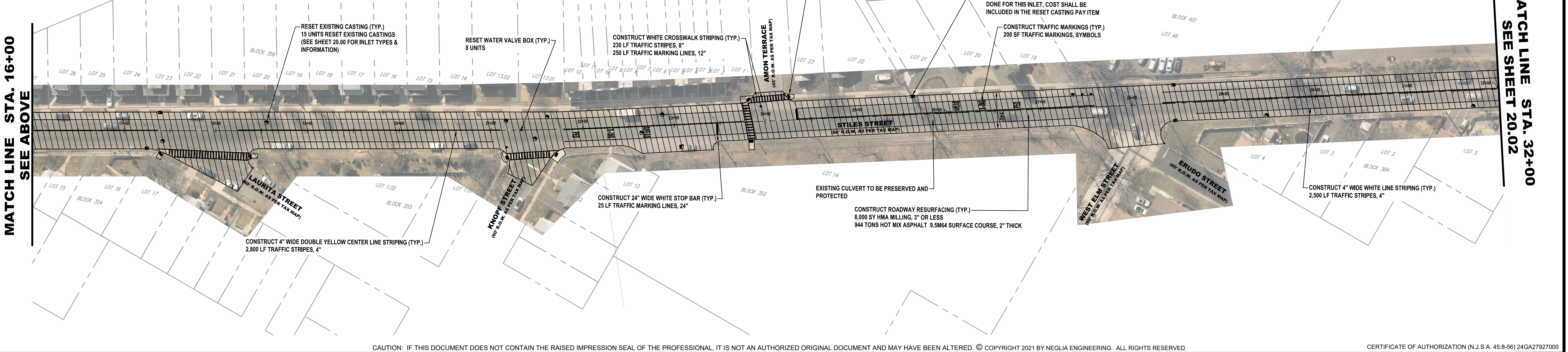
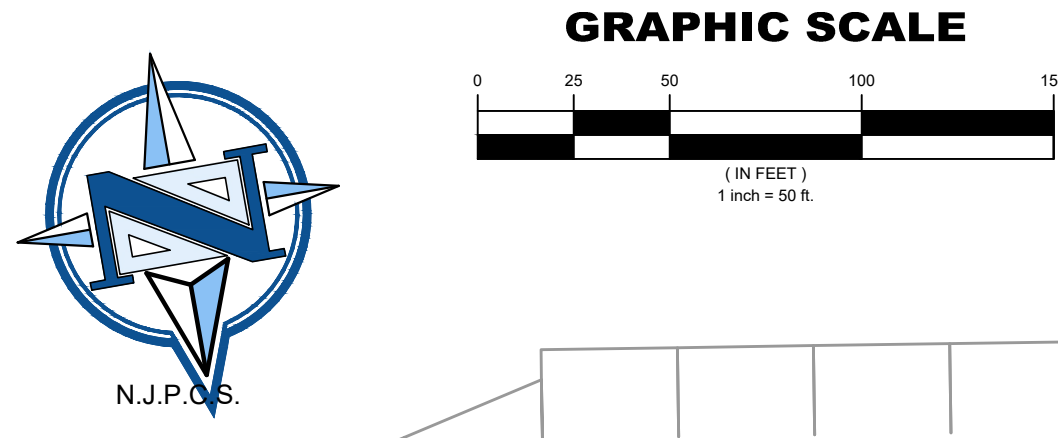
STILES STREET QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF LINDEN
UNION COUNTY NEW JERSEY

DRAWN BY: VH CHECKED BY: EMJ PROJECT NO.: UNIOCTY21.010 SHEET NO.: 20.00
DESIGNED BY: VH SCALE: N.T.S. DATE: JULY 16, 2021
FIELD BOOK NO.: PAGE:

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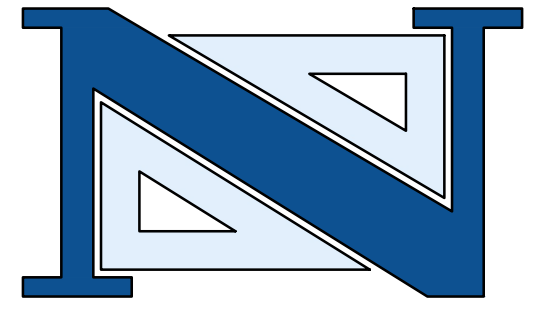
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DAVID R. ATKINSON, P.E., C.M.E.
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N.J. LICENSE NO. 45506

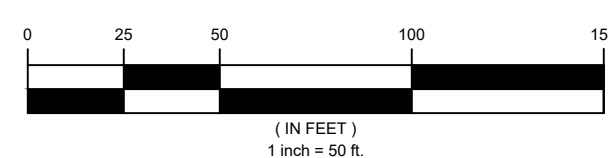
NEGLIA ENGINEERING ASSOCIATES
A PROJECT OF
34 PARK AVENUE
LYNDHURST, NEW JERSEY
TEL: 201-939-8805 FAX: 201-939-0846 E-MAIL: NEA@NEGLIAENGINEERING.COM
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PROFESSIONAL PLANNER N.J. LICENSE NO. 33L000569800

**STILES STREET I
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF LINDEN
UNION COUNTY NEW JERSEY**

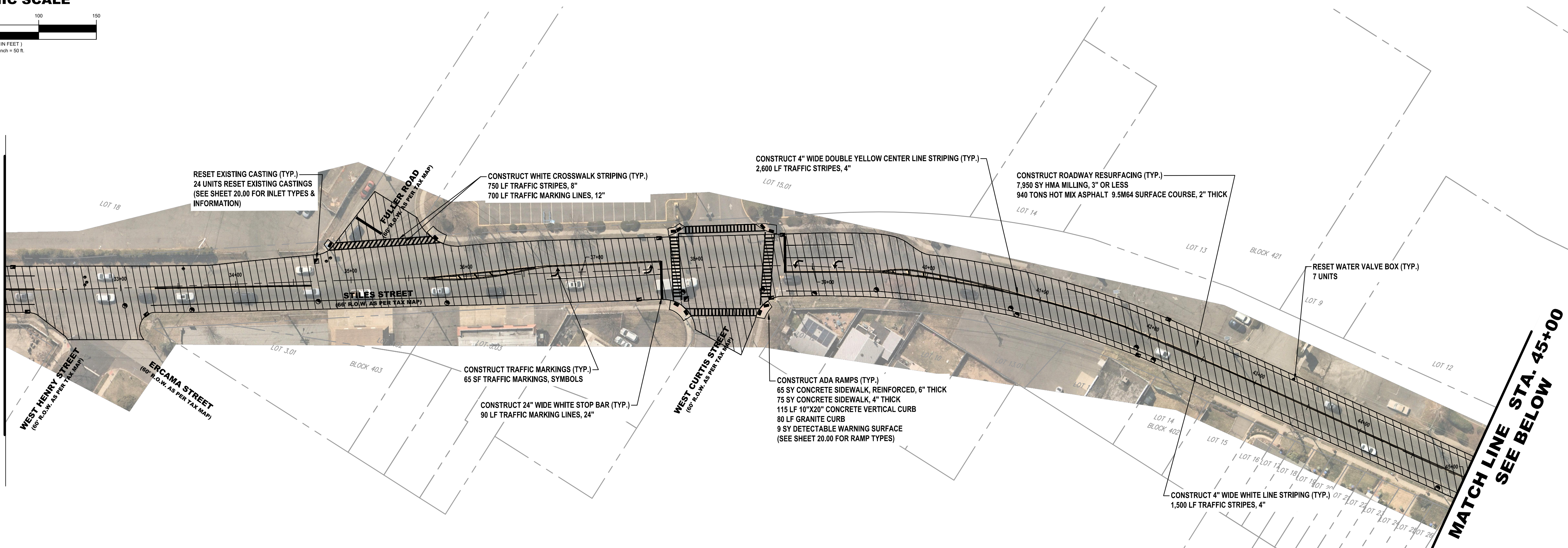
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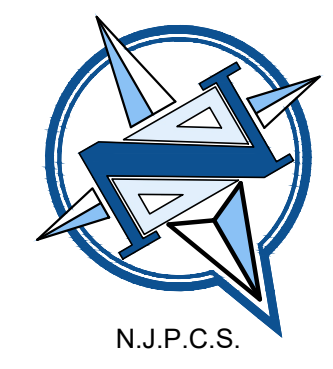
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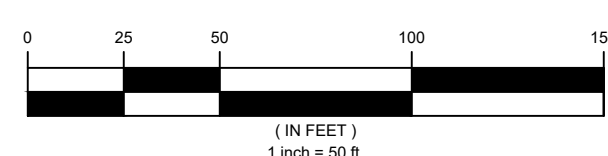
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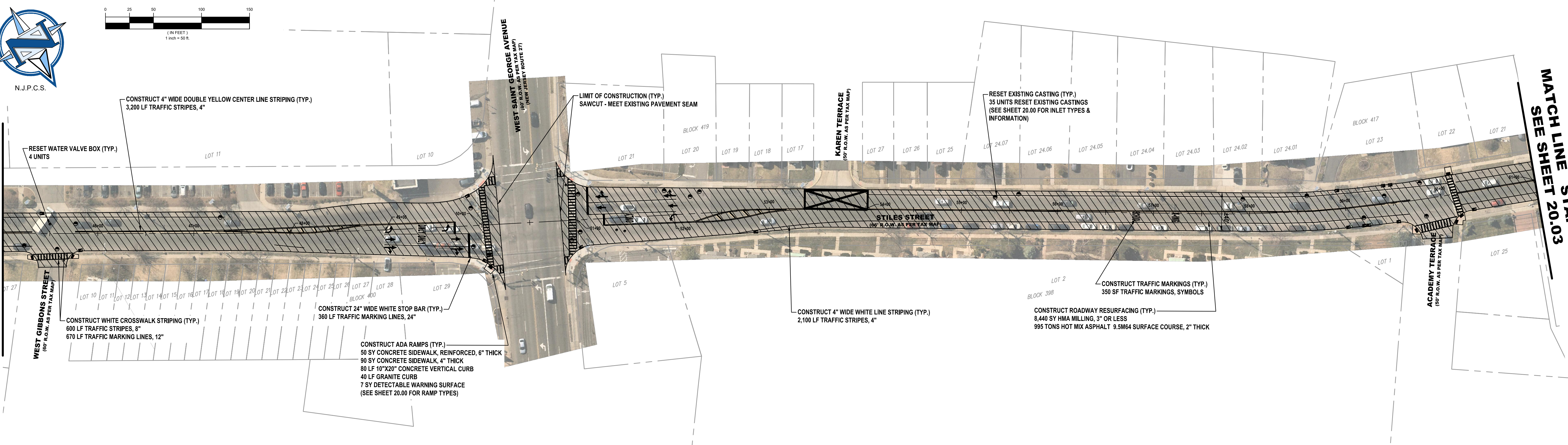
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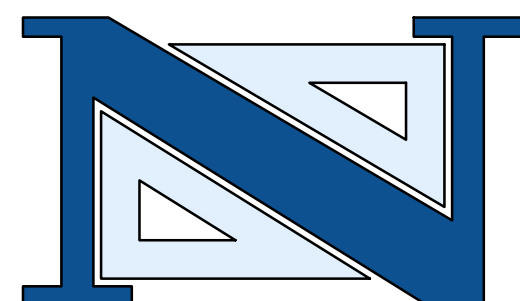


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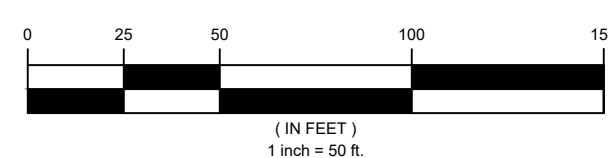
NEGLIA ENGINEERING ASSOCIATES
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STILES STREET II
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF LINDEN
UNION COUNTY NEW JERSEY

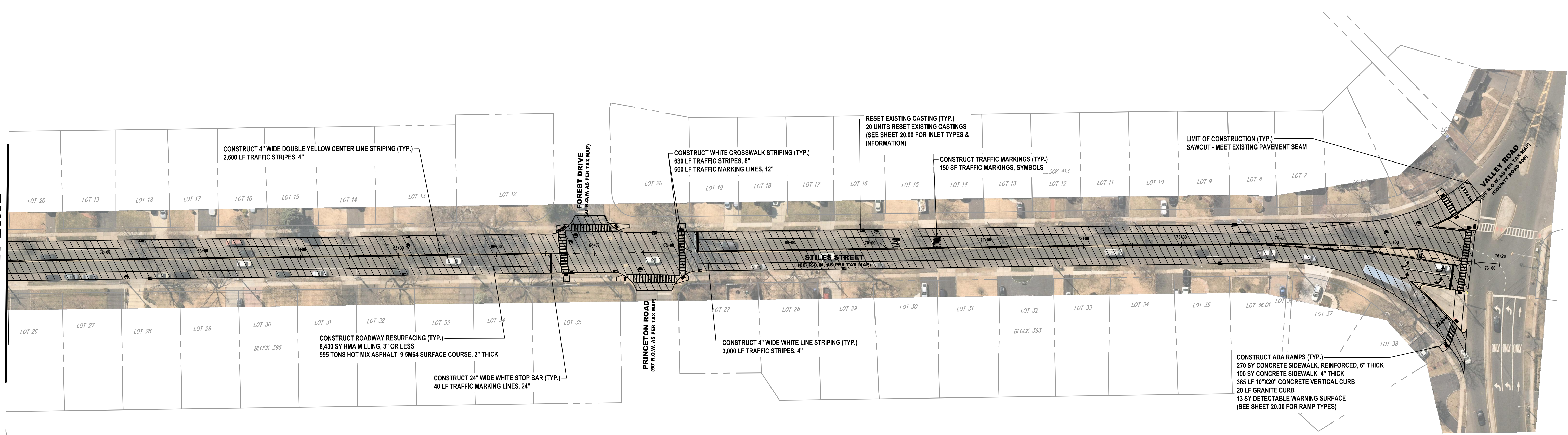
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DESIGNED BY: VH SCALE: 1" = 50' FIELD BOOK NO: PAGE: DATE: JULY 16, 2021



GRAPHIC SCALE



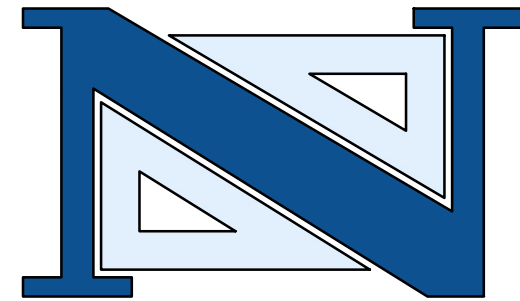
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SEE SHEET 20.02**



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PROFESSIONAL PLANNER N.J. LICENSE NO. 33L00569800

**STILES STREET III
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF LINDEN
UNION COUNTY NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: 1"=50'	UNIOCTY21.010	20.03
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

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STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES						
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE	CONC. SIDEWALK, 4" THICK
03+50	RT	7	X				10	10			10	1	15
04+10	LT	1			X		15	10			10	1	15
04+15	RT	7			X		10				10	2	35
11+10	LT	7			X		10				10	1	15
11+40	LT	7			X		10			5	1	15	
13+40	LT	1	X				10			5	1	15	
13+40	RT	7				X	30			25	2	35	
13+50	LT	7			X		10			5	1	15	
13+80	RT	7			X		10			10	1	35	
14+30	LT	7	X				15			10	1	20	
14+40	RT	1	X				10			10	1	20	
14+45	LT	7			X		15			10	1	35	
16+70	LT	7			X		10			10	1	35	
17+00	RT	7	X				10			10	1	35	
17+10	LT	7				X	10			10	1	35	
18+70	RT	1			X		25			15	1	35	
18+70	LT	7			X		25			15	1	35	
19+30	RT	7			X		25			15	1	35	
19+30	LT	7			X		20			15	1	35	
22+20	LT	1				X	10			10	1	35	
22+25	RT	7			X		10			15	1	35	
22+80	LT	1				X	20			15	2	35	
22+90	RT	7	X				10			15	1	35	
29+10	LT	7			X		10	10		10	1	15	
29+55	LT	7			X		10	10		10	1	10	
29+60	RT	7	X				10	10		10	1	15	
31+90	RT	7			X		10	10		10	1	15	
32+40	RT	1			X		10	10		10	1	15	
42+80	RT	5			X		10	10		10	1	15	
43+20	RT	6			X		15	10		15	1	10	
46+70	LT	6	X				10	10		10	1	10	
47+10	LT	6	X				10	10		10	1	10	
50+00	RT	5	X				10	10		10	1	10	
50+50	RT	5	X				10	10		10	1	10	
52+20	LT	5	X				10	10		10	1	10	
52+60	LT	7	X				15	10		10	1	15	

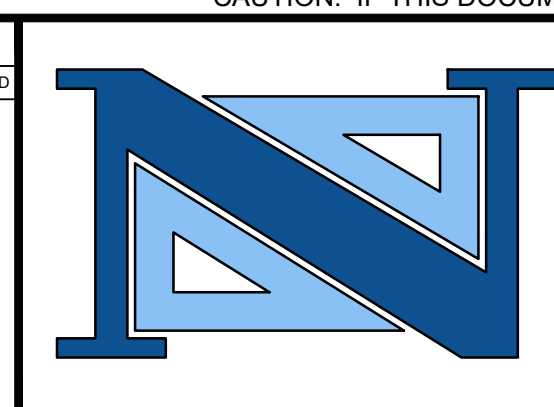
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BYCYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
00+70	RT	B				X
00+70	LT	B				X
03+80	LT	B				X
04+10	RT	B				X
13+25	LT	B				X
13+95	RT	B				X
14+70	LT	B				X
15+20	RT	B				X
15+65	LT	B				X
16+90	RT	B				X
17+05	LT	E				X
18+70	LT	E				X
19+30	LT	E				X
19+40	RT	B				X
22+55	RT	B				X
22+90	LT	B				X
26+10	RT	B				X
26+20	LT	B				X
29+40	RT	B				X
29+60	LT	B				X
32+70	RT	B				X
32+80	RT	B				X
42+70	RT	B				X
43+10	LT	B				X
47+55	LT	B				X
47+60	RT	B				X
49+90	RT	B				X
50+10	LT	B				X
52+00	LT	B				X
52+10	RT	B				X
52+30	LT	B				X
57+70	RT	B				X
57+70	LT	B				X
59+00	RT	B				X
61+85	RT	B				X
61+85	LT	B				X
69+45	RT	B				X
69+55	LT	B				X
72+85	RT	B				X
72+85	LT	B				X
77+80	RT	B				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	ALLOW.		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	UNIT		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	290	
7	HMA MILLING, 3" OR LESS	SY	36,880	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	343	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	290	
10	HOT MIX ASPHALT 9.5M84 SURFACE COURSE	TON	4,380	
11	HOT MIX ASPHALT 9.5M84 INTERMEDIATE COURSE	TON	81	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	4	
17	BYCYCLE SAFE GRATE	UNIT	4	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	114	
19	RESET WATER VALVE BOX	UNIT	48	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	5	
21	10" X 20" CONCRETE VERTICAL CURB	LF	470	
22	GRANITE CURB	LF	150	
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	925	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	400	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	39	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF	15,400	
30	TRAFFIC STRIPES, 8"	LF	2,840	
31	TRAFFIC MARKING, LINES, 12"	LF	2,660	
32	TRAFFIC MARKING, LINES, 24"	LF	485	
33	TRAFFIC MARKINGS, SYMBOLS	SF	300	
34	REGULATORY AND WARNING SIGN	SF		
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY	1,050	
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	160	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	180	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	180	
40	STRAW MULCHING	S.Y.	180	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF.		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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NO.	DATE	DESCRIPTION	



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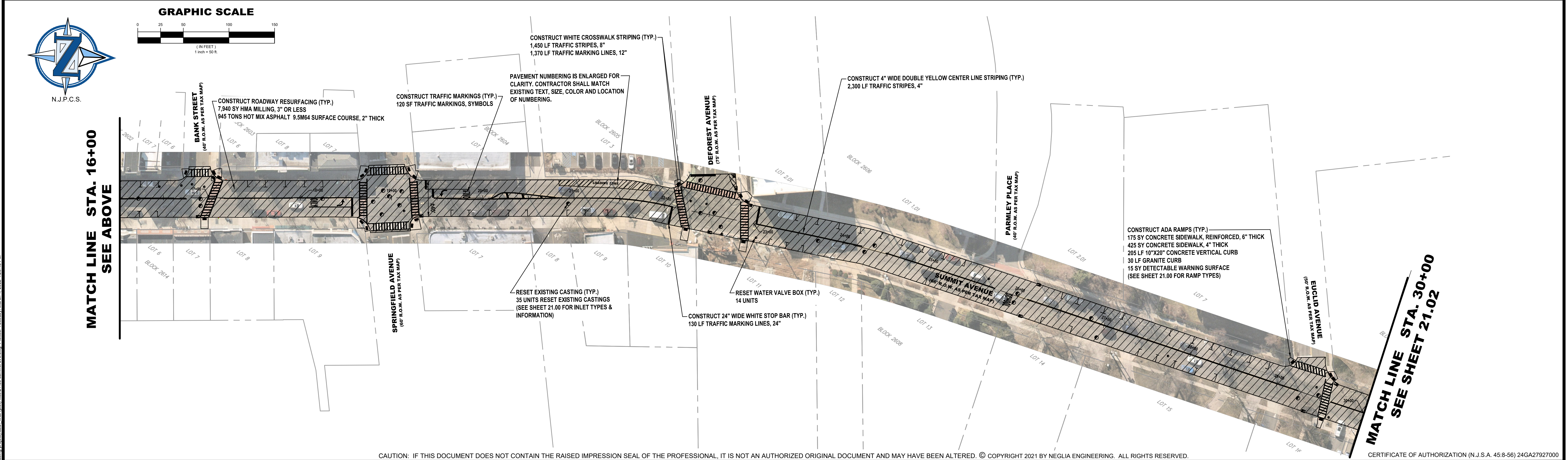
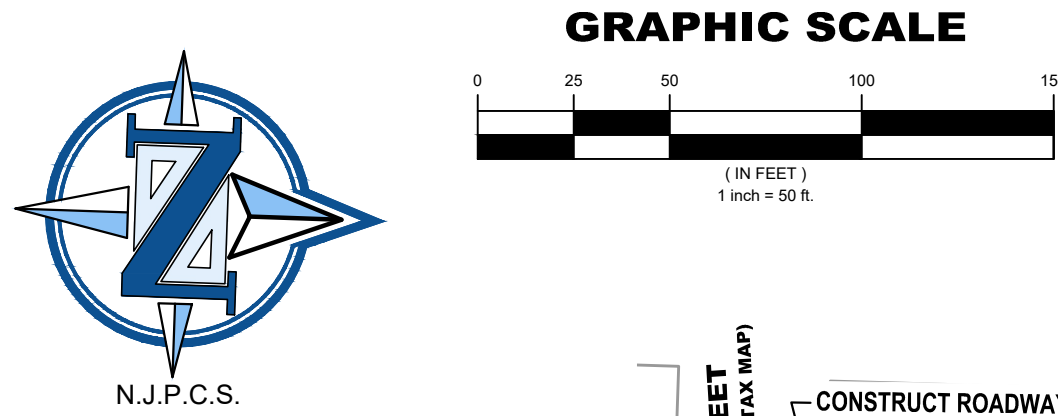
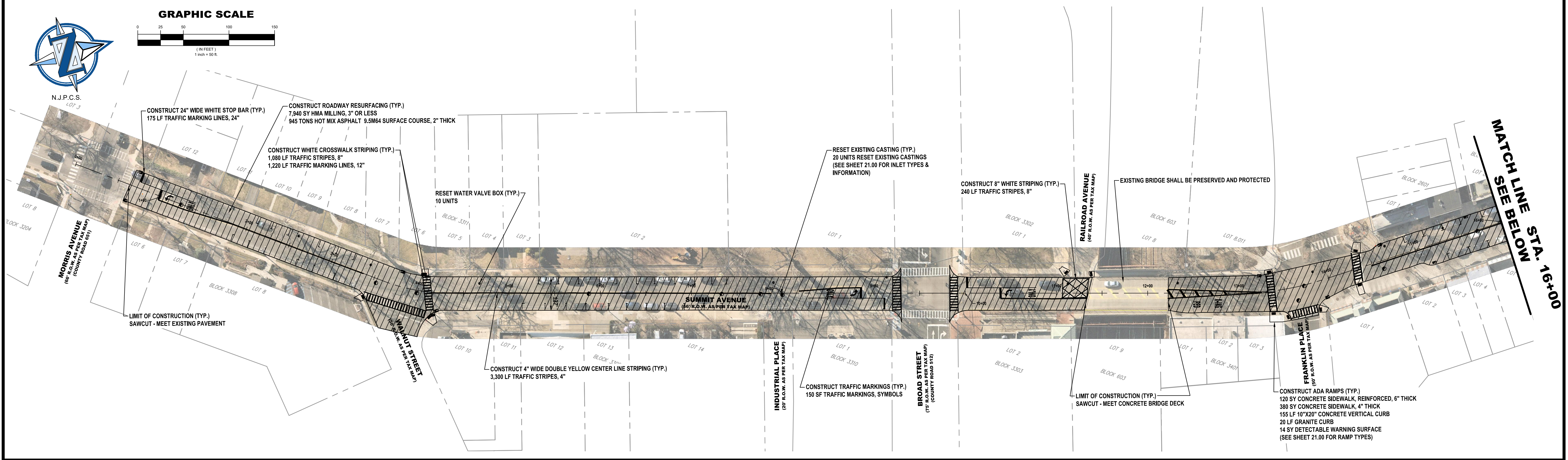
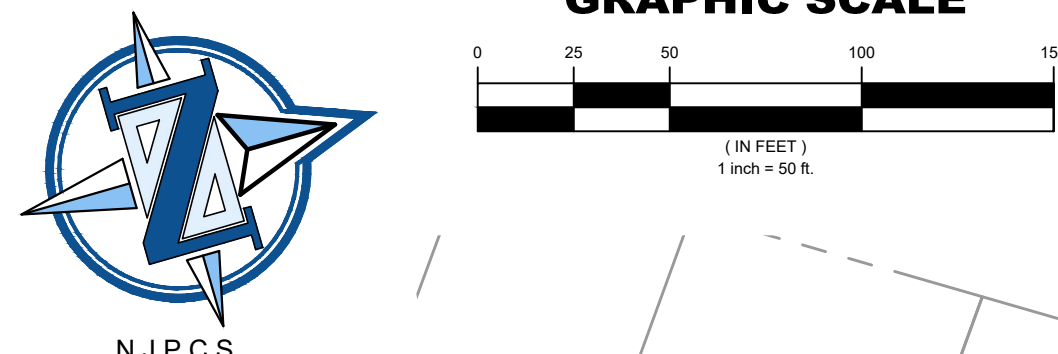
DAVID R. ATKINSON, P.E., C.M.E.
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PROFESSIONAL PLANNER N.J. LICENSE NO. 33L00569800

SUMMIT AVENUE QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF SUMMIT
UNION COUNTY NEW JERSEY

DESIGNED BY: VH	CHECKED BY: EMJ	PROJECT NO.:	SHEET NO.:
FIELD BOOK NO.:	SCALE: N.T.S.	UNIOCTY21.010	21.00
	PAGE:	DATE: JULY 16, 2021	



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**SUMMIT AVENUE I
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF SUMMIT
UNION COUNTY NEW JERSEY**

DRAWN BY: VH
DESIGNED BY: VH
FIELD BOOK NO:

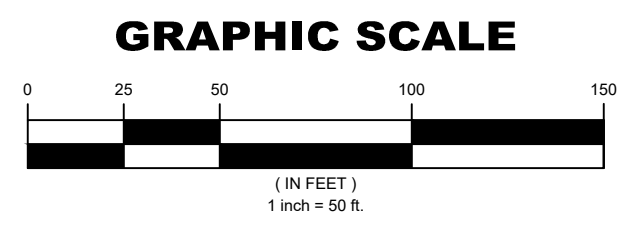
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UNIOCTY21.010

SHEET NO:
21.01

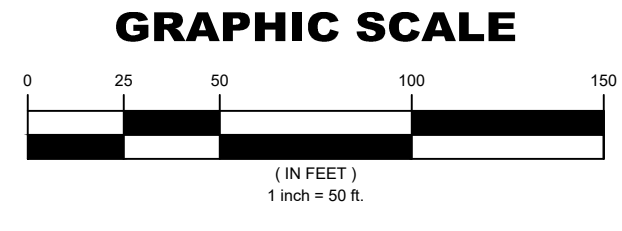
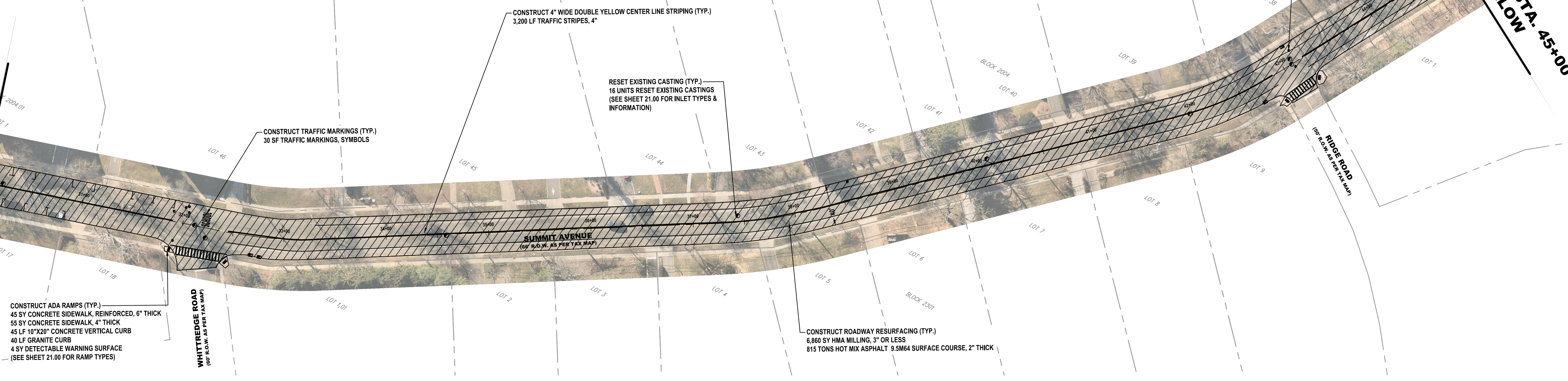
DATE: JULY 16, 2021

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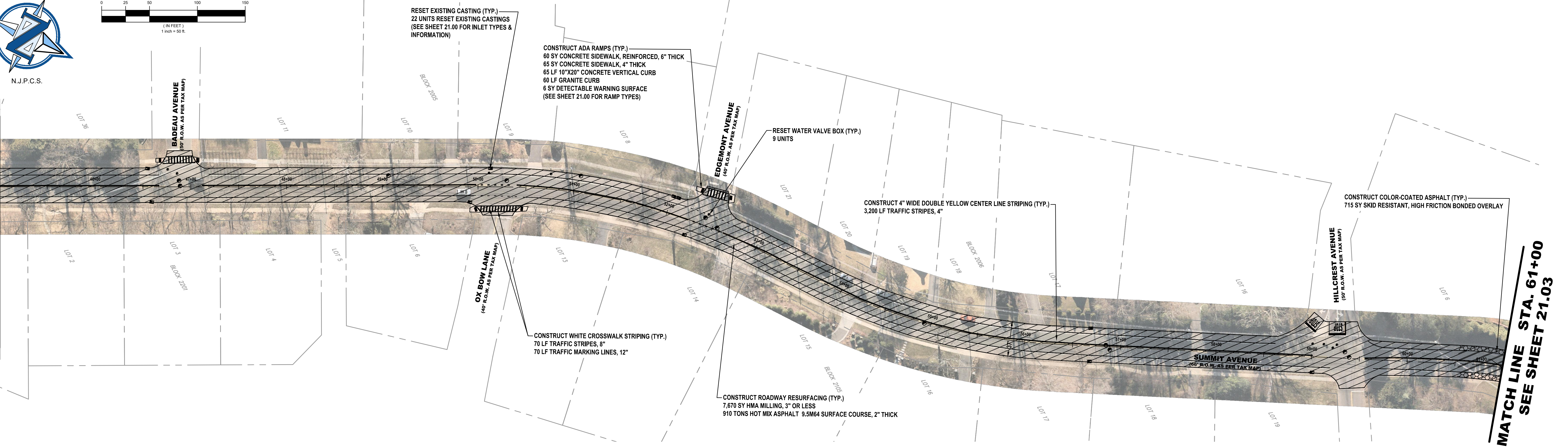
MATCH LINE STA. 30+00
SEE SHEET 21.01

MATCH LINE STA. 45+00
SEE BELOW



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SEE ABOVE

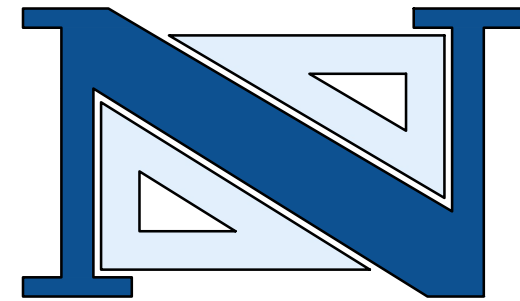
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**SUMMIT AVENUE II
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF SUMMIT
UNION COUNTY NEW JERSEY**

DRAWN BY: VH
DESIGNED BY: VH
FIELD BOOK NO:

CHECKED BY: EMJ
SCALE: 1"=50'
PAGE:

PROJECT NO:
UNIOCTY21.010

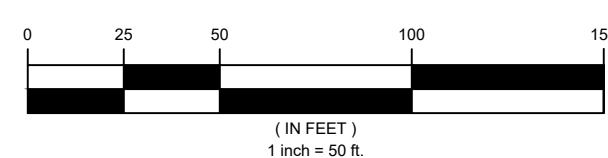
SHEET NO:
21.02

DATE: JULY 16, 2021



N.J.P.C.S.

GRAPHIC SCALE



RESET EXISTING CASTING (TYP.)
20 UNITS RESET EXISTING CASTINGS
(SEE SHEET 21.00 FOR INLET TYPES &
INFORMATION)

BLOCK 2102

LOT 3

LOT 2

LOT 1

BELLEVUE AVENUE
(45' R.O.W. AS PER TAX MAP)

RESET WATER VALVE BOX (TYP.)
6 UNITS

LOT 6

LOT 5

LOT 4

BLOCK 2102

LOT 3

CONSTRUCT ROADWAY RESURFACING (TYP.)
6,860 SY HMA MILLING, 3" OR LESS
815 TONS HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK

SUMMIT AVENUE
(65' R.O.W. AS PER TAX MAP)

CONSTRUCT COLOR-COATED ASPHALT (TYP.)
235 SY SKID RESISTANT, HIGH FRICTION BONDED OVERLAY

LOT 1

LOT 2

LOT 3
BLOCK 2104

LOT 4

LOT 5

WOODMERE DRIVE
(45' R.O.W. AS PER TAX MAP)

LOT 19

LOT 20

LOT 21

LOT 22
BLOCK 2103

LOT 23

CONSTRUCT 4" WIDE DOUBLE YELLOW CENTER LINE STRIPING (TYP.)
3,000 LF TRAFFIC STRIPES, 4"

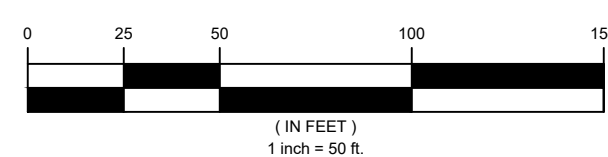
MATCH LINE STA. 61+00
SEE SHEET 21.02

MATCH LINE STA. 76+00
SEE BELOW



N.J.P.C.S.

GRAPHIC SCALE



CONSTRUCT 4" WIDE DOUBLE YELLOW CENTER LINE STRIPING (TYP.)
400 LF TRAFFIC STRIPES, 4"

RESET EXISTING CASTING (TYP.)
1 UNIT RESET EXISTING CASTINGS
(SEE SHEET 21.00 FOR INLET TYPES &
INFORMATION)

RESET WATER VALVE BOX (TYP.)
2 UNITS

LOT 2

LOT 1

MATCH LINE STA. 76+00
SEE ABOVE

SUMMIT AVENUE
(65' R.O.W. AS PER TAX MAP)

LOT 24

LOT 25

CONSTRUCT 24" WIDE WHITE STOP BAR (TYP.)
40 LF TRAFFIC MARKING LINES, 24"

LIMIT OF CONSTRUCTION (TYP.)
SAWCUT - MEET EXISTING PAVEMENT

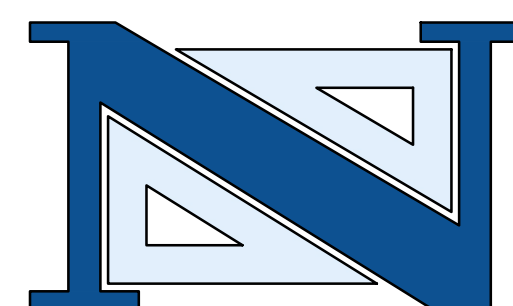
CONSTRUCT ROADWAY RESURFACING (TYP.)
900 SY HMA MILLING, 3" OR LESS
110 TONS HOT MIX ASPHALT 9.5M64 SURFACE COURSE, 2" THICK

NEW JERSEY ROUTE 124
NEW JERSEY ROUTE 24 (BELOW)

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REVISIONS			DRAWN	DESIGNED	CHECKED
NO.	DATE	DESCRIPTION			



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**SUMMIT AVENUE III
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF SUMMIT
UNION COUNTY NEW JERSEY**

DRAWN BY: VH	CHECKED BY: EMJ	PROJECT NO:	SHEET NO:
DESIGNED BY: VH	SCALE: 1"=50'	UNIOCTY21.010	21.03
FIELD BOOK NO:	PAGE:	DATE: JULY 16, 2021	

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STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES						
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	RESET BRICK PAVERS	12" X 13" CONCRETE SLOPING CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE	CONC. SIDEWALK, 4" THICK
13+10	RT	2			X		10	10			10	1	15
13+20	LT	2			X		10	10			10	1	15
13+60	RT	2			X		10	10			10	1	15
13+80	LT	2			X		10	10			10	1	15
25+10	RT	5	X				10	10			10	1	20
25+60	RT	5	X				10	10			10	1	20

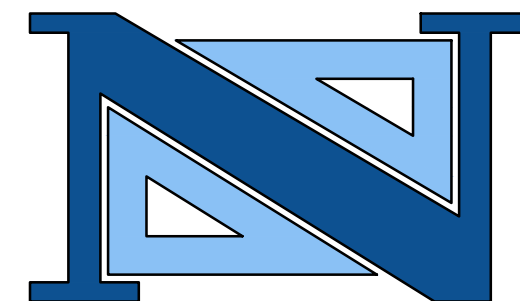
STATION	OFFSET (LT/RT)	INLET TYPES & LOCATIONS					
		EXISTING INLET TYPE	QUANTITY				
			BYCYCLE SAFE GRATE	CURB PIECE	PLATE	RESET	
10+40	RT	B					X
10+40	LT	B					X
13+60	RT	B					X
13+60	LT	E					X
15+90	RT	B					X
15+90	LT	B					X
22+30	RT	E					X
25+40	LT	B					X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT		
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT		
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT		
4	TRAFFIC DIRECTOR, FLAGGER	HOURLY		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	100	
7	HMA MILLING, 3" OR LESS	SY	14,290	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	123	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	100	
10	HOT MIX ASPHALT 9.5M84 SURFACE COURSE	TON	1,890	
11	HOT MIX ASPHALT 9.5M84 INTERMEDIATE COURSE	TON	29	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
15	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
16	CURB PIECE	UNIT	1	
17	BICYCLE SAFE GRATE	UNIT	1	
18	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	48	
19	RESET WATER VALVE BOX	UNIT	6	
20	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	1	
21	10" X 20" CONCRETE VERTICAL CURB	LF	60	
22	GRANITE CURB	LF	50	
23	9" X 4" HOT MIX ASPHALT CURB	LF		
24	12" X 13" CONCRETE SLOPING CURB	LF		
25	CONCRETE SIDEWALK, 4" THICK	SY	100	
26	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	60	
27	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	6	
28	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
29	TRAFFIC STRIPES, 4"	LF		
30	TRAFFIC STRIPES, 8"	LF	1,140	
31	TRAFFIC MARKING, LINES, 12"	LF	1,520	
32	TRAFFIC MARKING, LINES, 24"	LF	290	
33	TRAFFIC MARKINGS, SYMBOLS	SF	50	
34	REGULATORY AND WARNING SIGN	SF		
35	SKID RESISTANT, HIGH FRICTION BONDED OVERLAY	SY		
36	RUMBLE STRIP (IF & WHERE DIRECTED)	LF		
37	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	55	
38	TOPSOIL SPREADING, 4" THICK	S.Y.	30	
39	FERTILIZING AND SEEDING, TYPE A	S.Y.	30	
40	STRAW MULCHING	S.Y.	30	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	L.F.		
42	CLEARING SITE	L.S.		
43	FINAL CLEANUP	L.S.		

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NO.	DATE	DESCRIPTION	



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WEST HAZELWOOD AVENUE QUANTITY SHEET
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF RAHWAY
UNION COUNTY NEW JERSEY

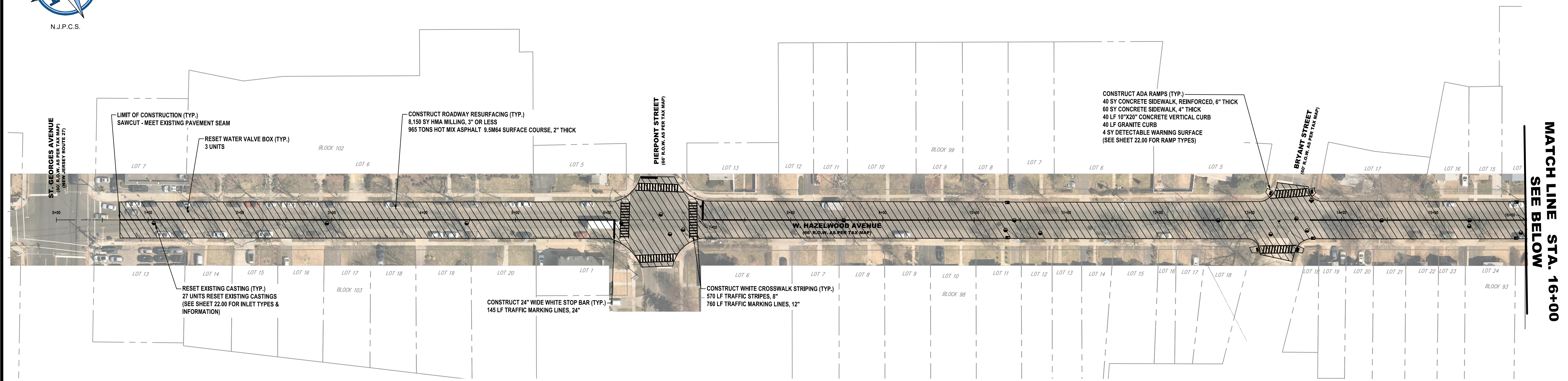
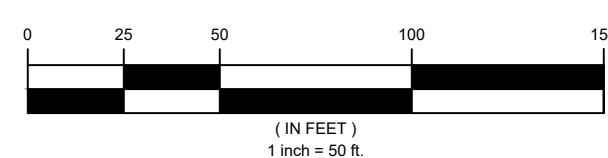
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DESIGNED BY: VH SCALE: N.T.S. DATE: JULY 16, 2021
FIELD BOOK NO.: PAGE:

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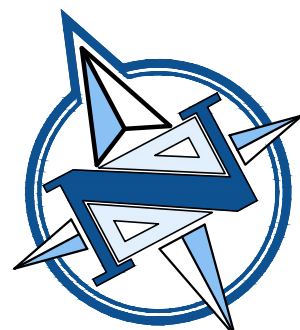


N.J.P.C.S.

GRAPHIC SCALE

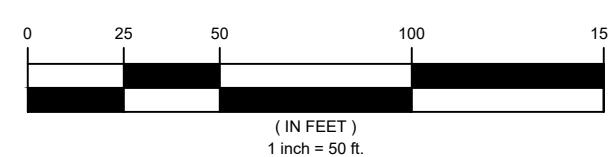


MATCH LINE STA. 16+00
SEE BELOW

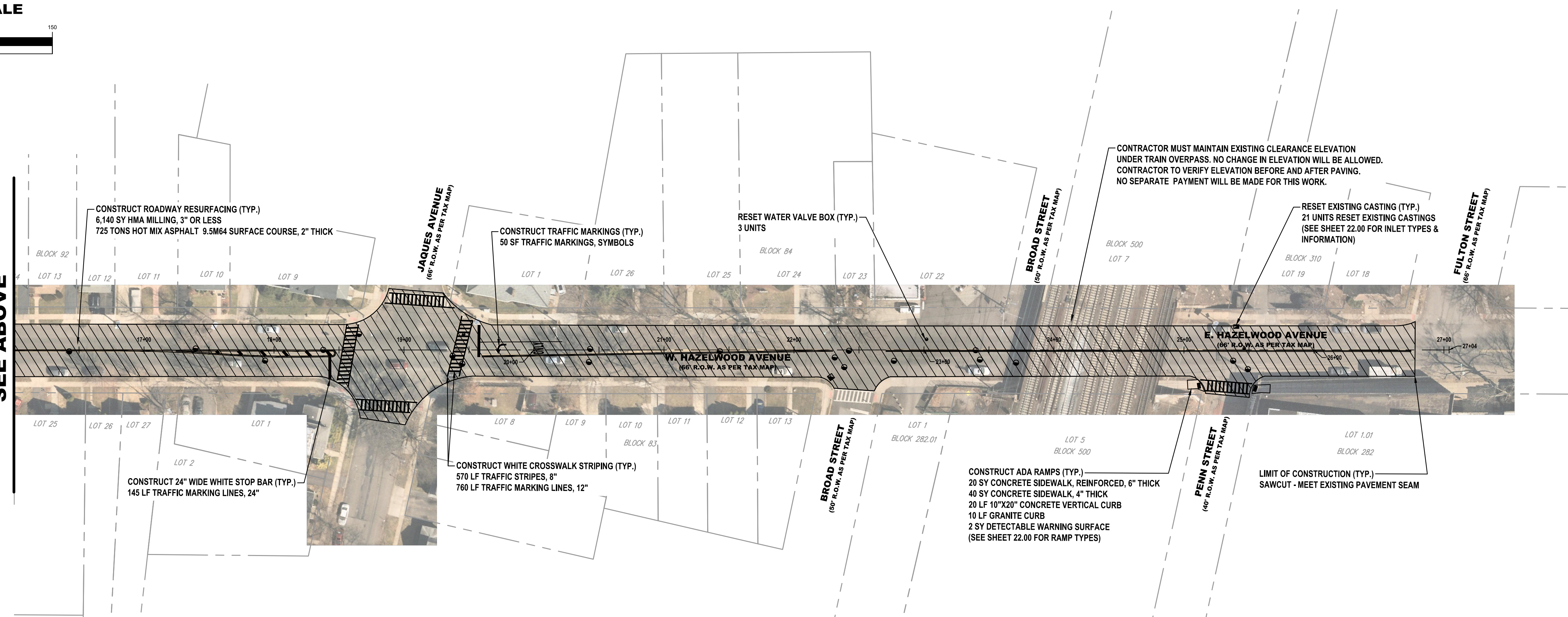


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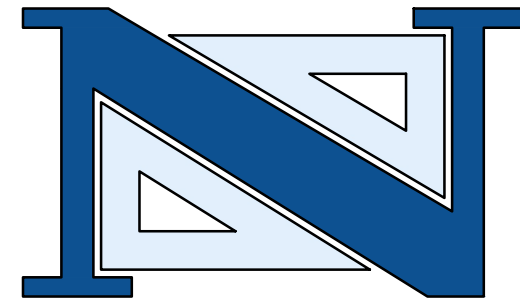
MATCH LINE STA. 16+00
SEE ABOVE



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**WEST HAZELWOOD AVENUE I
2022 ROAD RESURFACING PROJECT
(CA-2021)
CITY OF HARWAY
UNION COUNTY NEW JERSEY**

DRAWN BY: VH
DESIGNED BY: VH
FIELD BOOK NO:

CHECKED BY: EMJ
SCALE: 1" = 50'
PAGE:

PROJECT NO: UNIOCTY21.010
SHEET NO: 22.01
DATE: JULY 16, 2021

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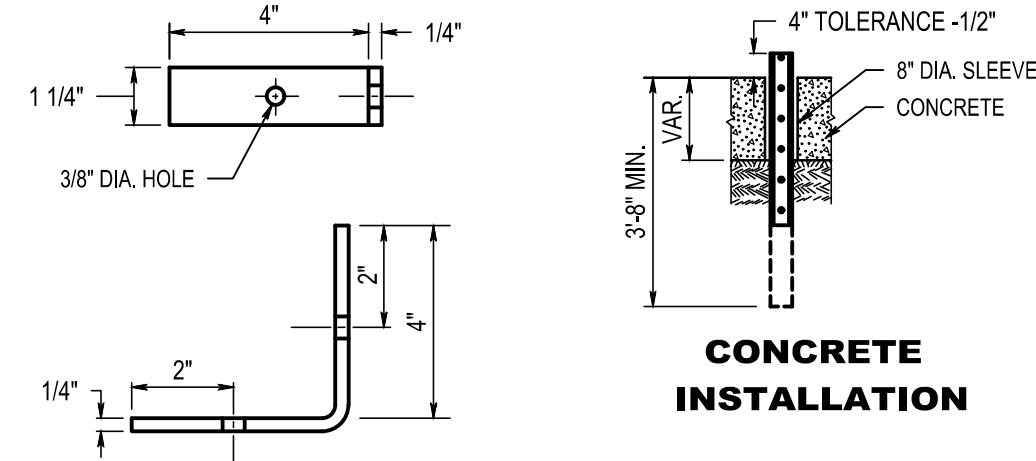
GENERAL NOTES:

- ALL POSTS SHALL BE OF ADEQUATE LENGTH TO MEET THE REQUIREMENTS FOR ERECTION AS STATED IN THE CURRENT "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" AND AS INDICATED BELOW.
- ALL SMALL SIGN SUPPORTS SHALL BE OF THE BREAKAWAY TYPE WITH EXCEPTION OF THOSE INSTALLED BEHIND GUIDE RAIL OR OTHER ROADSIDE BARRIER.
- ALL STEEL POSTS AND BRACKETS SHALL BE CUT, BENT, AND HOLES PUNCHED AND DRILLED BEFORE GALVANIZING. GALVANIZING SHALL BE IN CONFORMANCE WITH ASTM A123.
- ALL STEEL U-POST SIGN SUPPORTS MUST BE INSTALLED FACING THE PREDOMINANT TRAFFIC FLOW. A MOUNTING BRACKET SHOULD BE USED ON SIDE MOUNTED SIGNS SUCH AS "ONE WAY" SIGNS INSTALLED IN MEDIANS.
- SIGN PANEL SIZES SHALL DETERMINE POST TYPE AND NUMBER AS SHOWN ON THIS DETAIL.
- BOLTS SHALL NOT PROTRUDE MORE THAN 3/4" BEYOND THE NUT WHEN TIGHT, BUT SHALL ENGAGE ALL THREADS IN THE NUT.
- WHEN SIGNS ARE INSTALLED ON SLOPES 10H:1V OR FLATTER, THE MINIMUM VERTICAL CLEARANCE REQUIREMENTS FOR SIGNS ARE:
FOR SINGLE POST INSTALLATIONS - THE MINIMUM DISTANCE BETWEEN THE EDGE OF THE PAVEMENT AND THE BOTTOM OF ANY PANEL MUST BE 7 FEET, AND THE MINIMUM DISTANCE FROM EDGE OF PAVEMENT TO THE TOP OF ANY SIGN PANEL MUST BE 9 FEET.
FOR MULTI-POST INSTALLATIONS - THE MINIMUM DISTANCE BETWEEN THE EDGE OF PAVEMENT AND THE BOTTOM OF A MAIN SIGN PANEL MUST BE 7 FEET.
SECONDARY SIGN PANELS (LAND SERVICE HIGHWAYS) - THE MINIMUM DISTANCE BETWEEN THE EDGE OF PAVEMENT AND THE BOTTOM OF A SECONDARY SIGN PANEL IS 6 FEET.
SECONDARY SIGN PANELS (INTERSTATE AND FREEWAYS) - THE BOTTOM OF THE MAIN SIGN SHALL BE A MINIMUM OF 3 FEET AND THE SECONDARY SIGN PANEL A MINIMUM OF 5 FEET ABOVE THE EDGE OF PAVEMENT.
WHERE GRADING OF 10H:1V OR FLATTER CANNOT BE OBTAINED, OR WHERE CURB OR BERM IS GREATER THAN 4 INCHES, THE MINIMUM VERTICAL CLEARANCE WILL BE MEASURED FROM THE GROUND LINE TO THE BOTTOM OF THE SIGN.
- THE HORIZONTAL OFFSET FROM EDGE OF PAVEMENT TO EDGE OF SIGN IS DERIVED FROM SECTION 2A.19 OF THE MUTCD AS FOLLOWS:
FOR URBAN INSTALLATIONS - IN AREAS WHERE LATERAL OFFSETS ARE LIMITED, A MINIMUM LATERAL OFFSET OF 2 FEET IS DESIRABLE. A MINIMUM OFFSET OF 1 FOOT FROM THE FACE OF THE CURB MAY BE USED IN AREAS WHERE THE SIDEWALK WIDTH IS LIMITED OR WHERE EXISTING POLES ARE CLOSE TO THE CURB.
FOR RURAL INSTALLATIONS - 6 FEET MINIMUM DESIRABLE FROM EDGE OF SHOULDER, BUT 12 FEET MINIMUM DESIRABLE FROM EDGE OF TRAFFIC OR AUXILIARY LANE.
FOR INTERSTATE AND FREEWAY INSTALLATIONS - 6 FEET MINIMUM DESIRABLE FROM EDGE OF SHOULDER, BUT NOT LESS THAN 12 FEET FROM THE EDGE OF TRAFFIC OR AUXILIARY LANE.
FOR RAMP INSTALLATIONS - 6 FEET MINIMUM FROM EDGE OF ROAD.
WHERE BEHIND GUIDE RAIL - 4 FEET MINIMUM FROM BACK OF BEAM GUIDE RAIL ELEMENT TO SIGN POST.
- PERMANENT SIGN SUPPORTS SHOULD NOT BE INSTALLED ON SLOPES GREATER THAN 10H:1V, EXCEPT WHERE GRADING OF 10H:1V CANNOT BE OBTAINED OR THE SIGN SUPPORTS WILL BE BEHIND A TRAFFIC BARRIER. THE SLOPE SHALL EXTEND A MINIMUM OF 3 FEET BEYOND THE OUTSIDE EDGE OF SIGN (SEE GRADING DETAIL FOR SLOPE TREATMENT).
- EXTRUDED ALUMINUM SIGN PANELS ARE NOT PERMITTED FOR USE WITH STEEL U-POST SIGN SUPPORTS.
- STEEL U-POST SIGN SUPPORTS SHALL NOT BE PLACED IN FRONT OF GUIDE RAIL AND THE POSTS MUST NOT STRADDLE GUIDE RAIL.
- TO EXTEND THE HEIGHT OF A SIGN POST, A MAXIMUM OF ONE SPLICE MAY BE MADE AND MUST BE A MINIMUM OF 9 FEET FROM THE GROUNDLINE TO CENTER LINE OF SPLICE.

PANEL SIZE (W x H)	# OF POSTS	POST SIZE (LB/FT)
18" x 18"	1	2.5
18" x 24"	1	2.5
24" x 24"	1	2.5
24" x 30"	1	2.5
24" x 36"	1	2.5
30" x 24"	1	2.5
30" x 30"	1	2.5
36" x 12"	2	2.5
36" x 36"	2	2.5
30" x 36"	1	4.0

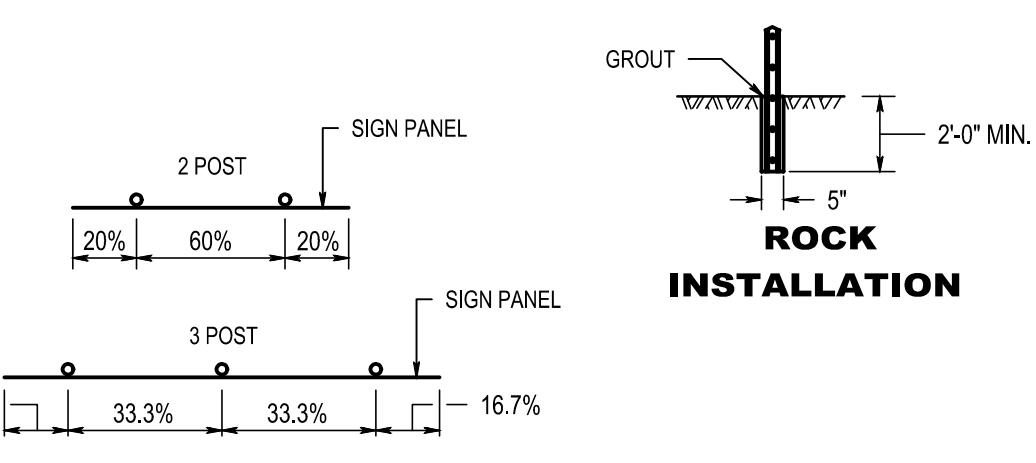
PANEL SIZE (W x H)	# OF POSTS	POST SIZE (LB/FT)
36" x 36"	2	2.5
36" x 48"	2	2.5
45" x 36"	2	2.5
48" x 24"	2	2.5
48" x 36"	2	2.5
48" x 48"	2	4.0
48" x 64" x 64"	2	2.5
60" x 36"	2	4.0
48" x 60"	2	4.0
60" x 30"	2	4.0

BREAKAWAY SIGN SUPPORT
U-POST SELECTION TABLE

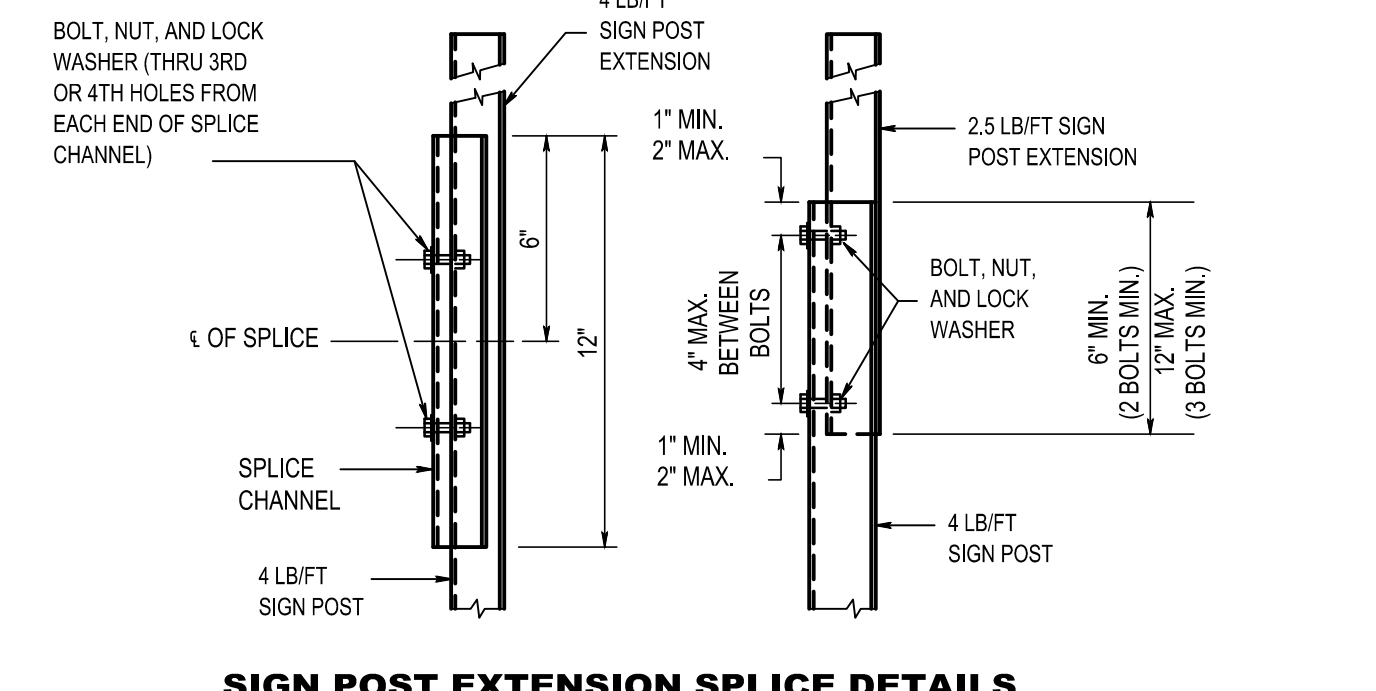
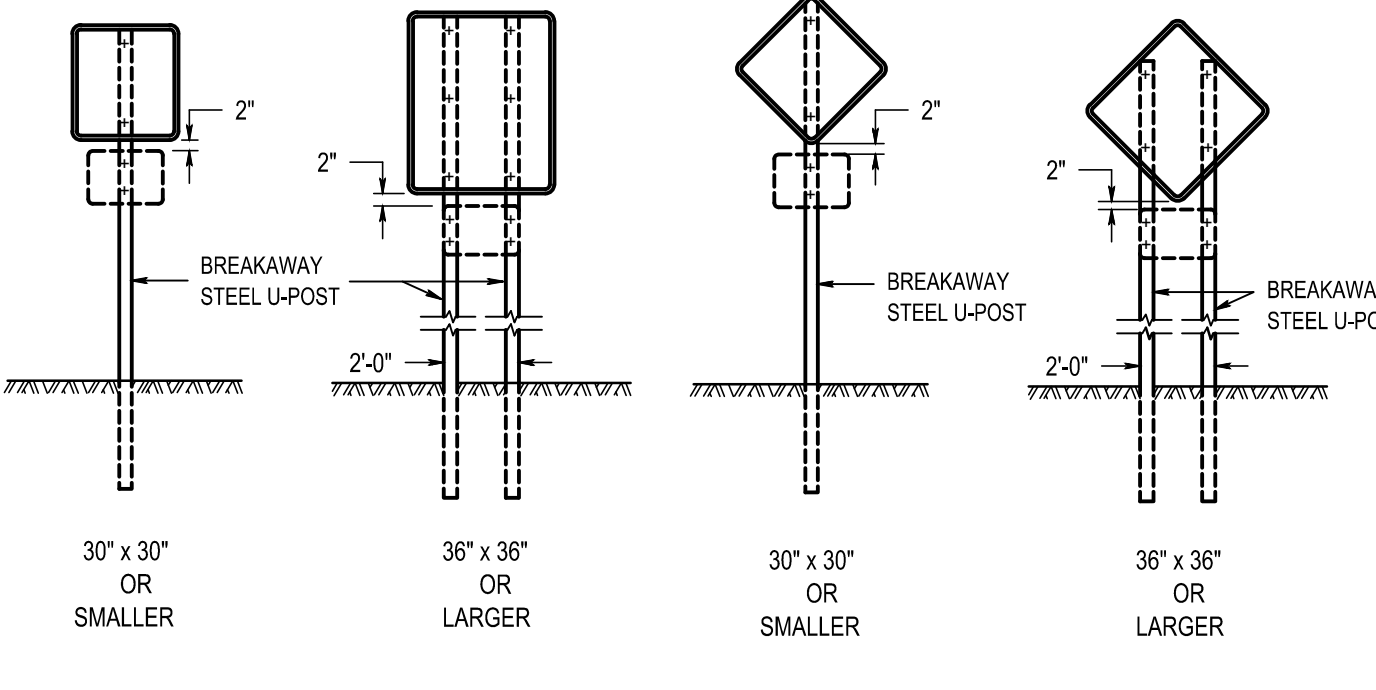


CONCRETE INSTALLATION

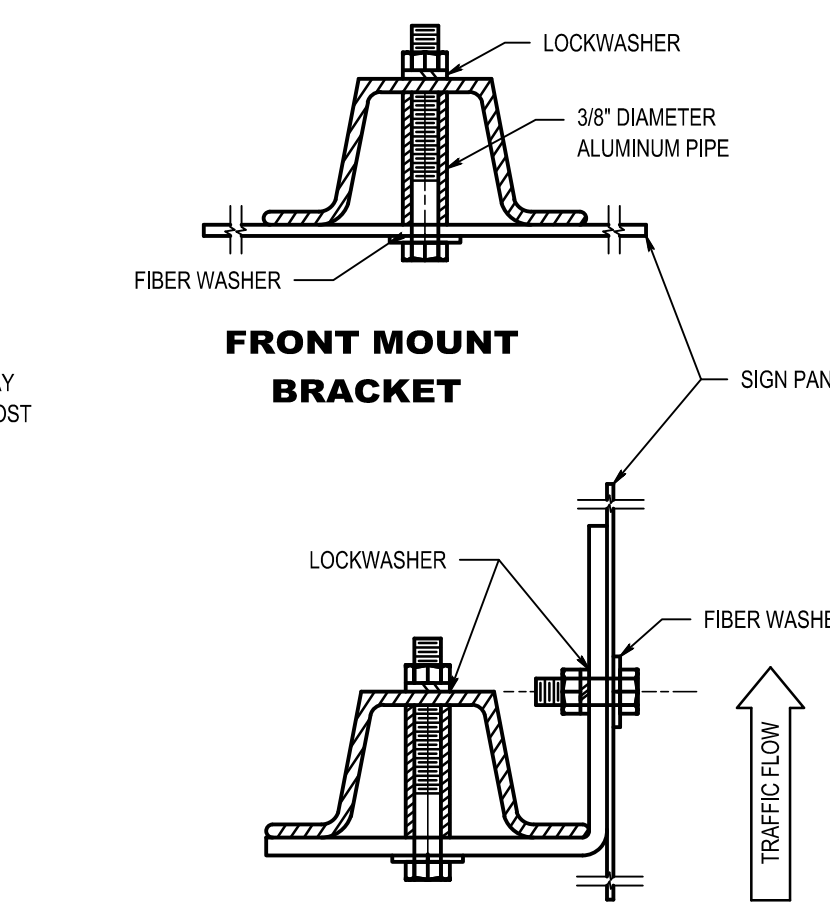
DETAIL OF BRACKET FOR SIDE MOUNTED SIGNS



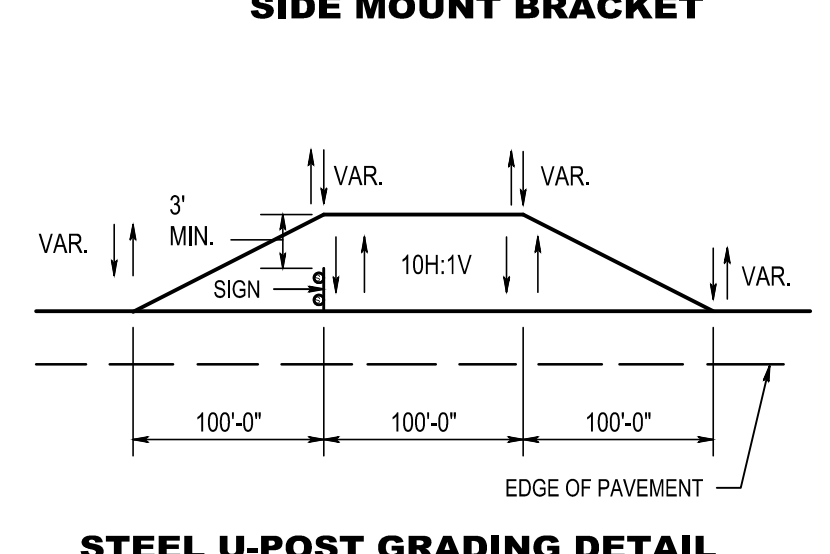
STEEL U-POST SPACING



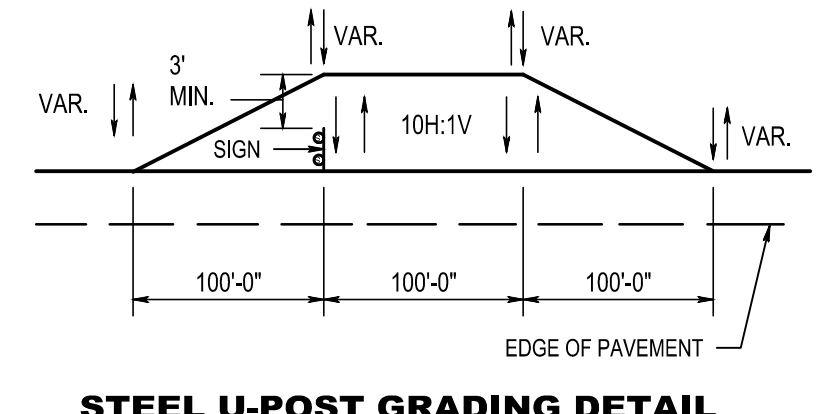
STEEL U-POST SIGN SUPPORTS
NOT TO SCALE
CD-612-4



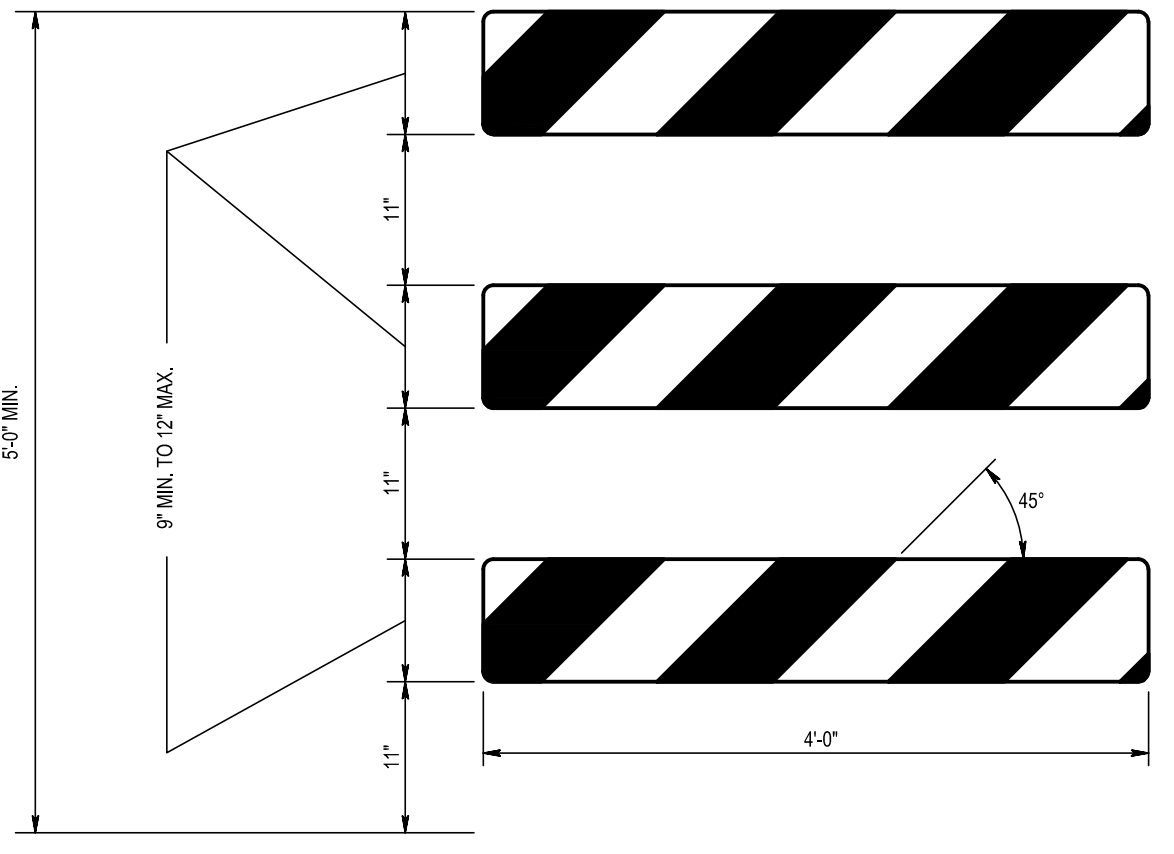
FRONT MOUNT BRACKET



SIDE MOUNT BRACKET



STEEL U-POST GRADING DETAIL



TYPE III BARRICADE - FRONT VIEW
NOT TO SCALE
CD-159-1.3

- NOTES:**
- THE 9" MIN. x 48" OR 12" MAX. x 48" BARRICADE RAILS SHALL BE FABRICATED FROM 0.125" MAX. PLASTIC SHEETING AND SHALL BE ATTACHED, 4 PER RAIL, WITH 1 INCH NO. 14 PAN HEAD METAL SCREWS OR PLASTIC RIVETS. ALL CORNERS SHALL BE ROUNDED.
 - ORANGE AND SILVER (WHITE) STRIPES SHALL BE RETROREFLECTIVE SHEETING, ASTM D 4956 TYPE III, AS SHOWN FOR CONSTRUCTION SIGNS. ALTERNATE ORANGE AND SILVER (WHITE) STRIPES 6" WIDE SLOPING DOWNWARD AT AN ANGLE OF 45 DEGREES IN THE DIRECTION TRAFFIC IS TO PASS.
 - IF NECESSARY, THE SANDBAGS SHALL BE FABRICATED AND PLACED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.
 - THE FRAMING FOR BARRICADE PANELS SHALL BE NCHRP-350 CRASHED TESTED AND FHWA APPROVED.

GENERAL NOTES FOR SIGNS:

- DIMENSIONS, COLORS AND DETAILS OF VARIOUS SIZE SIGNS, AND ACCESSORY PANELS TO FOLLOW STANDARDS IN THE CURRENT "STANDARD HIGHWAY SIGN PUBLICATION" AND THE CURRENT "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS".
- (S) REPRESENTS A SPECIAL SIZE SIGN.
- LETTERS AND NUMERALS SHALL CONFORM TO THE CURRENT MANUAL, "STANDARD ALPHABETS FOR HIGHWAY SIGNS" U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.
- THE CONTRACTOR SHALL OBTAIN THE APPROVAL OF THE ENGINEER FOR THE DISTANCE TO BE USED ON THE ADVANCE WARNING SIGNS, AND FOR THE SPEED LIMIT TO BE USED ON THE R2-1 SIGN.
- DISTANCE LEGEND SIGN NUMBER FOLLOWED BY

LETTER	DISTANCE
A	1500'
B	1000'
C	500'
D	MILE
E	MILES AHEAD
F	AHEAD

BACKING MATERIAL

- ALUMINUM SHALL BE FLAT SHEET OF ALLOY 5052-H38 OR 6061-T6 ALLOY, 0.100" GAUGE.

TEMPORARY SIGN SUPPORTS

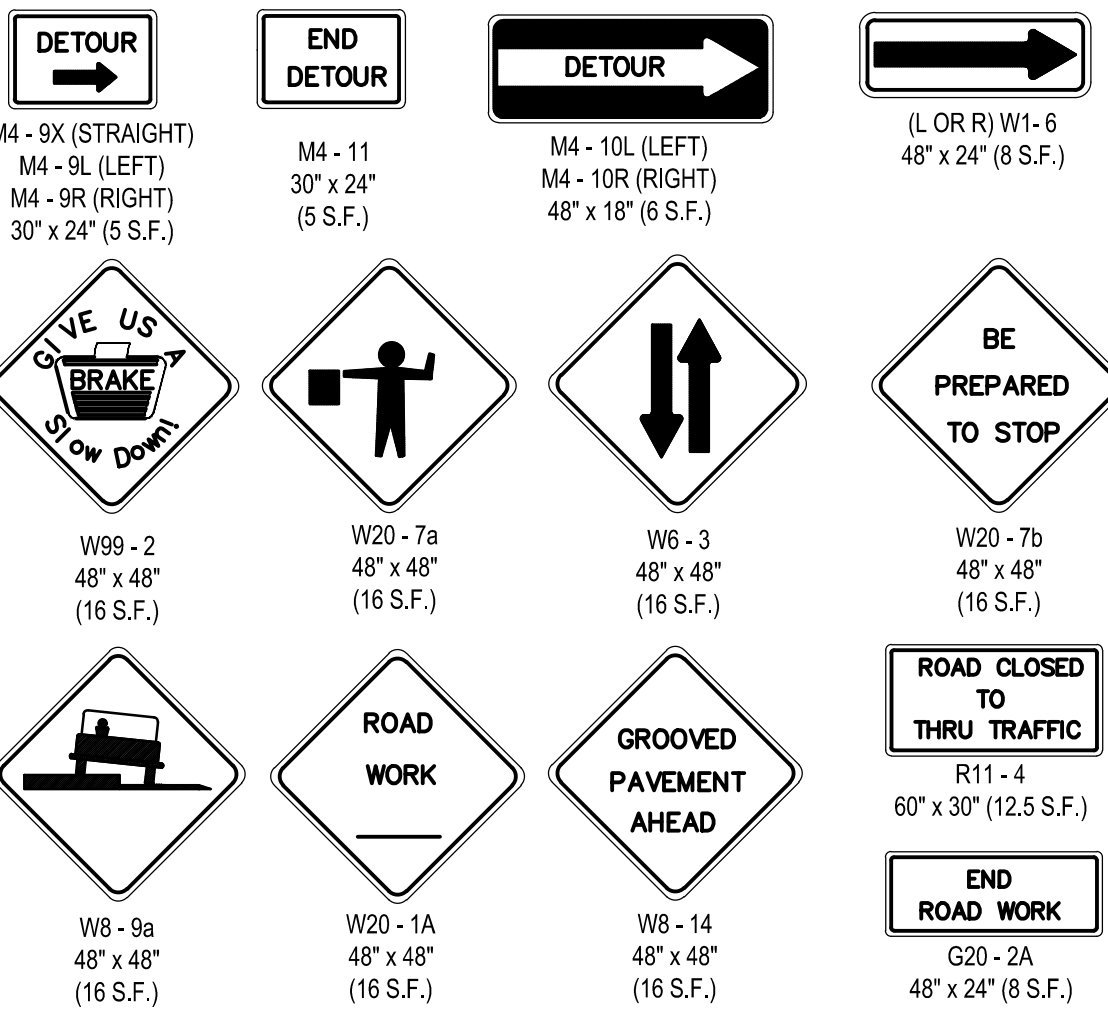
- SIGN SUPPORTS SHALL BE OF WELL SEASONED LUMBER, S4S, FREE OF SPLITS, KNOTS AND WARPS OR, OF STEEL COMPONENTS.
- WOOD POSTS SHALL HAVE A UNIFORM CROSS-SECTION AND SHALL NOT EXCEED THE FOLLOWING DIMENSIONS FOR:
SINGLE POST = 4" x 6"; TWO POSTS = 3" x 6" OR 4" x 5"; THREE POSTS = 3" x 5" OR 4" x 4"
4" x 6" WOOD POSTS SHALL BE MODIFIED BY DRILLING 1 1/2" DIAMETER HOLES 4" AND 16" ABOVE THE GROUND LINE AND PERPENDICULAR TO THE ROADWAY CENTERLINE.
- NO BRACING IS PERMITTED. VERTICAL CLEARANCES FOR SIGNS MOUNTED ON WOOD SUPPORTS SHALL BE 7" MINIMUM. EMBEDMENT DEPTH FOR THE WOOD POST SHALL NOT EXCEED 3.5'.
- STEEL POSTS SHALL BE IN ACCORDANCE WITH THE STANDARD DETAIL FOR U-POST SIGN SUPPORT.
- TEMPORARY SIGN SUPPORTS NOT MEETING THIS CRITERIA SHALL BE SHIELDED BY A LONGITUDINAL BARRIER OR CRASH CUSHIONS.

SIGN FACES

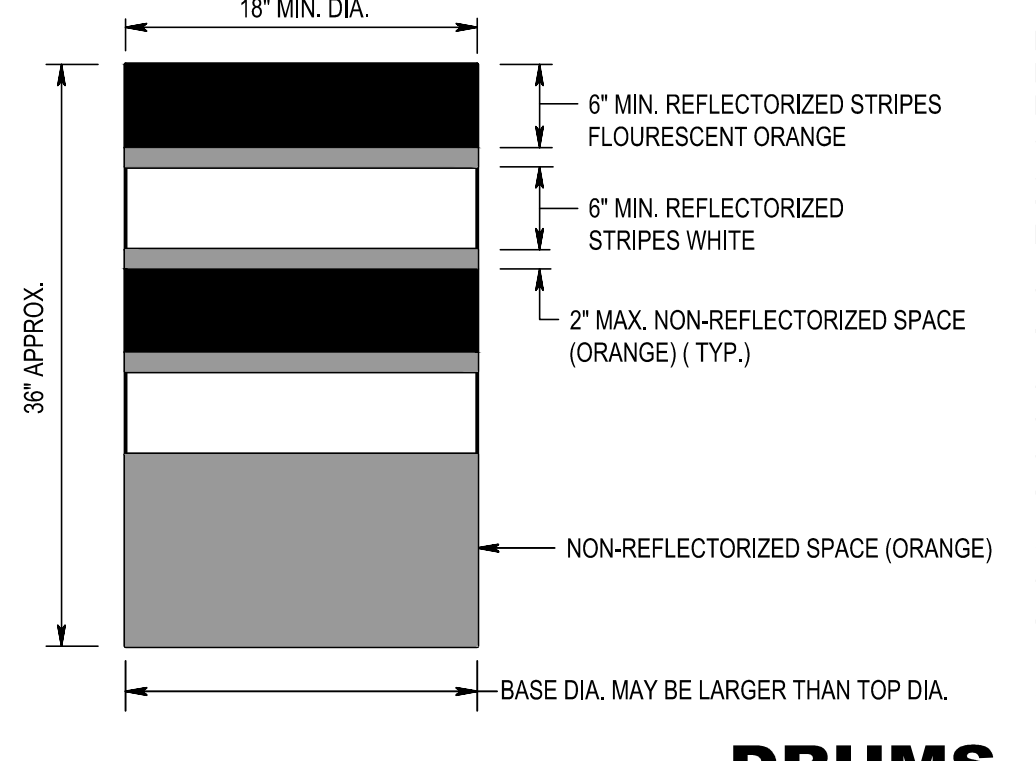
- SIGN FACES SHALL BE RETROREFLECTIVE SHEETING, TYPE II OR III, EXCEPT FOR THE W20 SERIES AND W4-2 SIGN FACES WHICH SHALL BE TYPE IV-B SHEETING.

FASTENING

- ALL SIGNS SHALL BE SECURELY FASTENED TO THEIR SUPPORTS WITH BOLTS, NUTS AND WASHERS IN ACCORDANCE WITH THE SPECIFICATIONS.

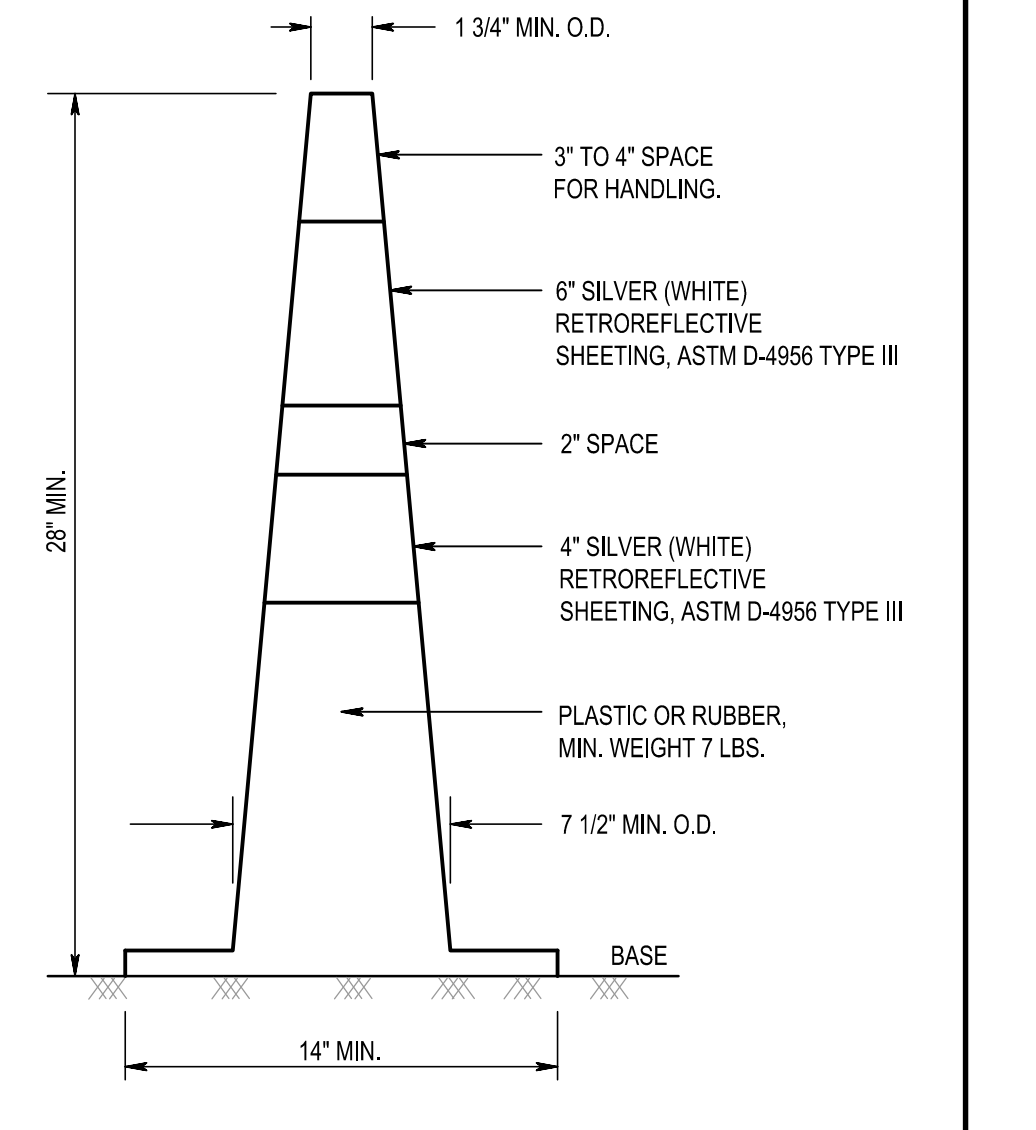


CONSTRUCTION SIGNS
NOT TO SCALE



DRUMS
NOT TO SCALE
CD-159-1.1

DRUMS SHALL BE MADE OF ORANGE PLASTIC WITH A MINIMUM OF FOUR ALTERNATE FLOURESCENT ORANGE AND WHITE RETROREFLECTIVE STRIPES. IF THERE ARE NON-REFLECTORIZED SPACES BETWEEN THE STRIPES, THEY SHALL BE NO MORE THAN 2" WIDE. RETROREFLECTIVE SHEETING FOR STRIPES SHALL CONFORM WITH ASTM D 4956 TYPE VII OR VIII WITH S2 REQUIREMENTS.
THE TOP OF THE DRUM SHALL NOT BE OPEN. DRUMS SHALL BE CONSTRUCTED TO INHIBIT ROLLING IF KNOCKED OVER.
THE REFLECTORIZED AREA OF DRUMS SHALL BE ROUND EXCEPT THAT OTHER SHAPES, WHICH PROVIDE THE SAME VISIBILITY AS AN 18 INCH DIAMETER ROUND DRUM REGARDLESS OF ORIENTATION, MAY BE USED.
WHEN BALLAST IS REQUIRED BY THE R.E., SAND SHALL BE USED. THE MAXIMUM WEIGHT OF THE BALLAST SHALL BE 50 LBS. AND BE LOCATED APPROXIMATELY AT GROUND LEVEL.
ALTERNATE TYPES OF BALLAST SHALL BE APPROVED BY THE R.E.



- NOTES:**
- TRAFFIC CONES SHALL BE PREDOMINATELY ORANGE IN COLOR.
 - BASES MAY BE OF BREAKAWAY BALLASTED TYPE.
 - MINOR MANUFACTURER'S VARIATIONS MAY BE ACCEPTABLE UPON APPROVAL OF THE ENGINEER.

TRAFFIC CONES
NOT TO SCALE
CD-159-1.2

GENERAL NOTES

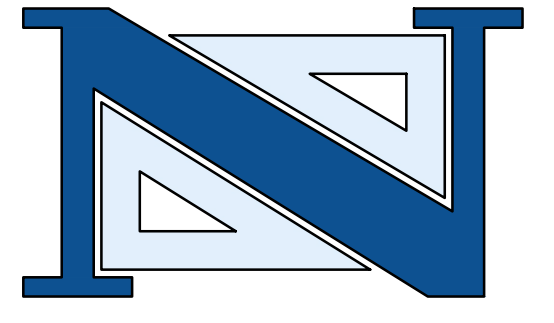
MAINTENANCE AND PROTECTION OF TRAFFIC

- All devices and procedures for the maintenance and protection of traffic shall be in accordance with the "Manual on Uniform Traffic Control Devices" for streets and highways. The contractor shall plan and carry out his work to provide for the convenient and safe passage of all vehicular and pedestrian traffic.
- Contractor to develop detailed maintenance and protection of traffic plan for review by the engineer prior to construction.
- The contractor shall follow the recommended traffic control procedures. If the contractor desires to change the procedure, he shall present his changes in writing to the engineer for review. There may be utility relocations, adjustments and improvements which are necessitated by the proposed construction. The contractor shall coordinate his work with each of the utility companies located within the project limits.
- The contractor is responsible for providing maintenance and protection of traffic throughout the duration of construction. The costs for the individual devices used to maintain and protect traffic shall be included in the lump sum price bid for maintenance and protection of traffic. No separate payments will be made for relocating the devices as required, or as directed by the municipality, during the course of construction.
- The contractor will not be permitted to close down the entire street. The contractor shall provide means of access at all times for pedestrians and vehicular traffic at all private driveways and occupied buildings affected by the work of this contract. During construction, in the vicinity of a driveway, the access width at the driveway entrance shall be plainly marked by lights, barricades or other such devices approved by the municipality.
- The contractor shall maintain at least one lane of traffic at all times.
- During construction, all roads shall be properly maintained to accommodate emergency vehicles at all times.
- All barricades shall be Type III breakaway barricades.
- Fill material for escape ramps shall be on-site material. All costs for storing, placing, moving and removing fill material shall be included in the price bid for the various items in the proposal.

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CERTIFICATE OF AUTHORIZATION (N.J.S.A. 45:8-56) 24GA2792000

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NO.	DATE	DESCRIPTION			



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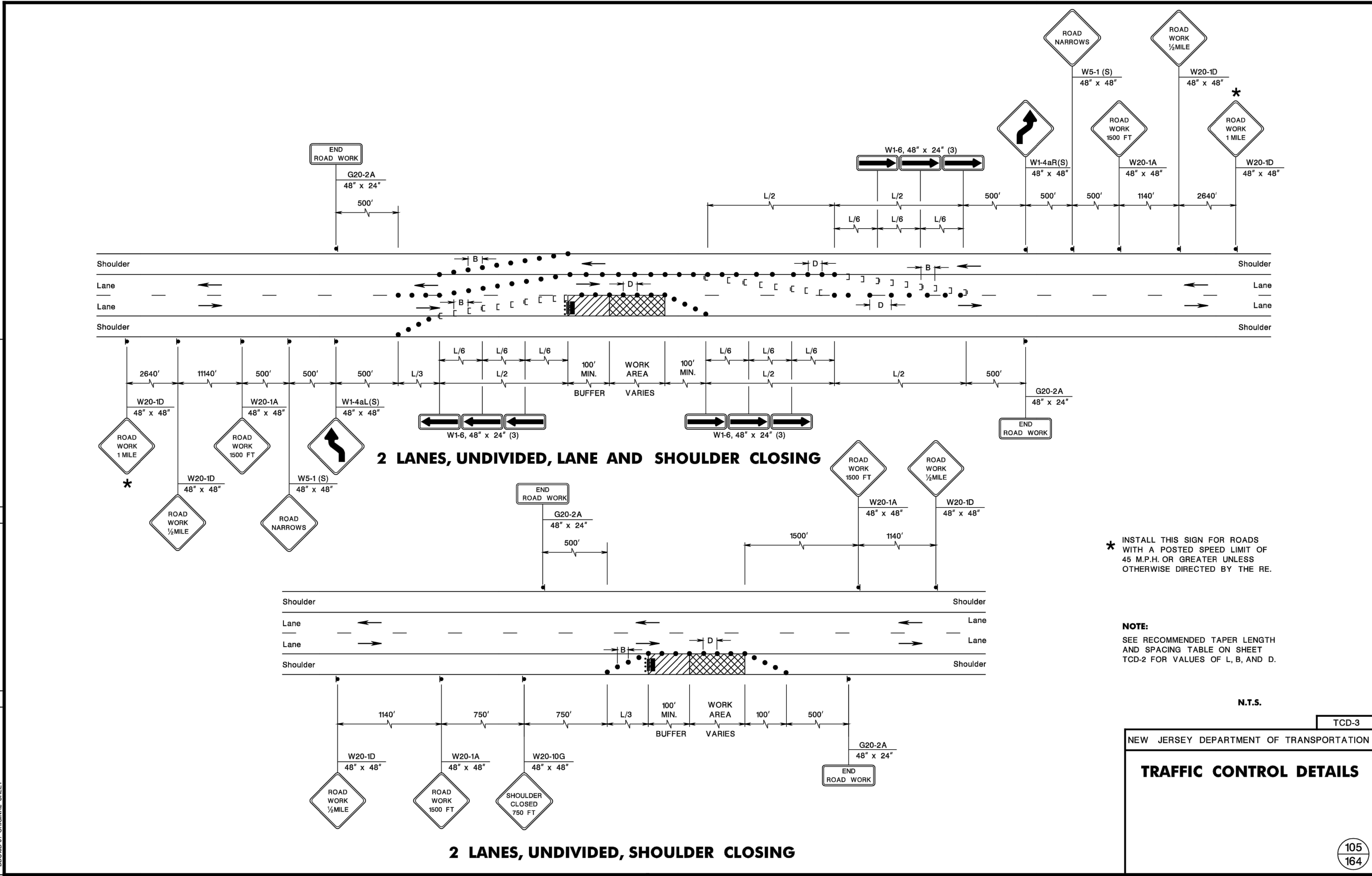
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PROFESSIONAL PLANNER
N.J. LICENSE NO. 33L00569800

TRAFFIC CONTROL DETAILS
2022 ROAD RESURFACING PROJECT
(CA-2021)
VARIOUS MUNICIPALITIES
UNION COUNTY
NEW JERSEY

DESIGNED BY: VH
CHECKED BY: EMJ
SCALE: N.T.S.
FIELD BOOK NO.:
PAGE:

PROJECT NO.: UNIOCTY21.010
SHEET NO.: 23.00
DATE: JULY 16, 2021



* INSTALL THIS SIGN FOR ROADS WITH A POSTED 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.

N.T.S.

TCD-3

NEW JERSEY DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL DETAILS

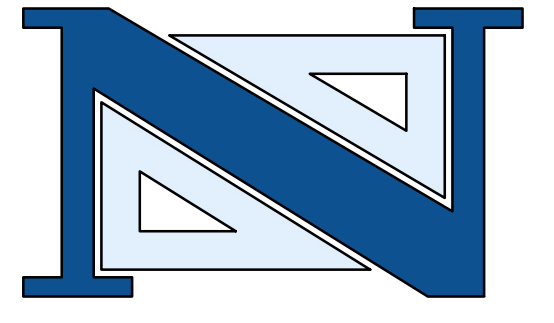
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164

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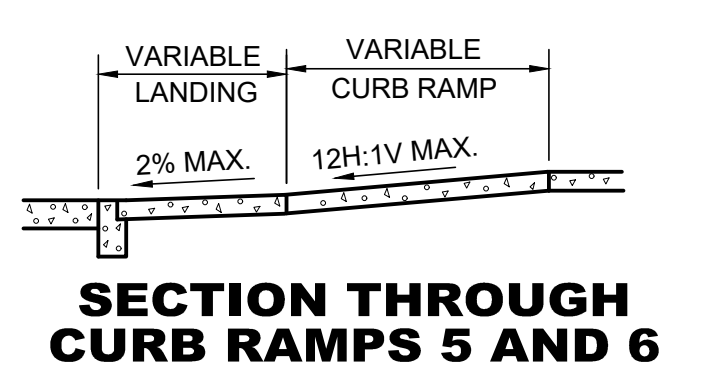
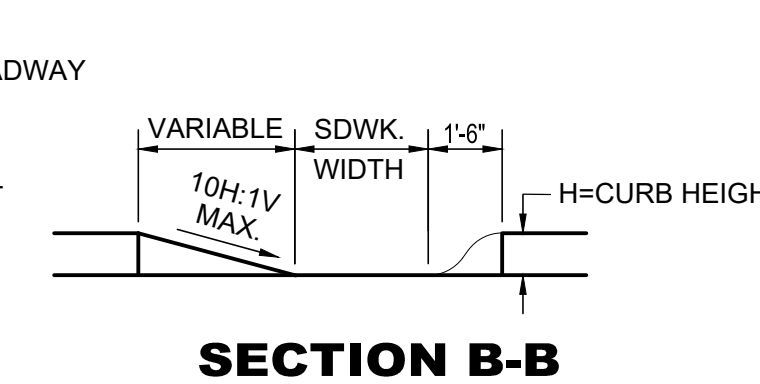
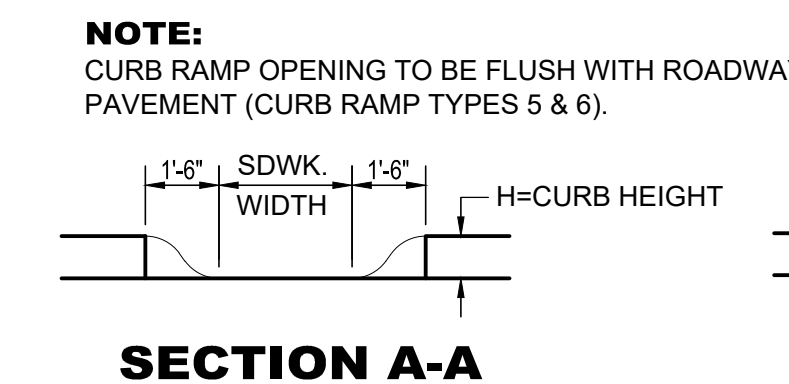
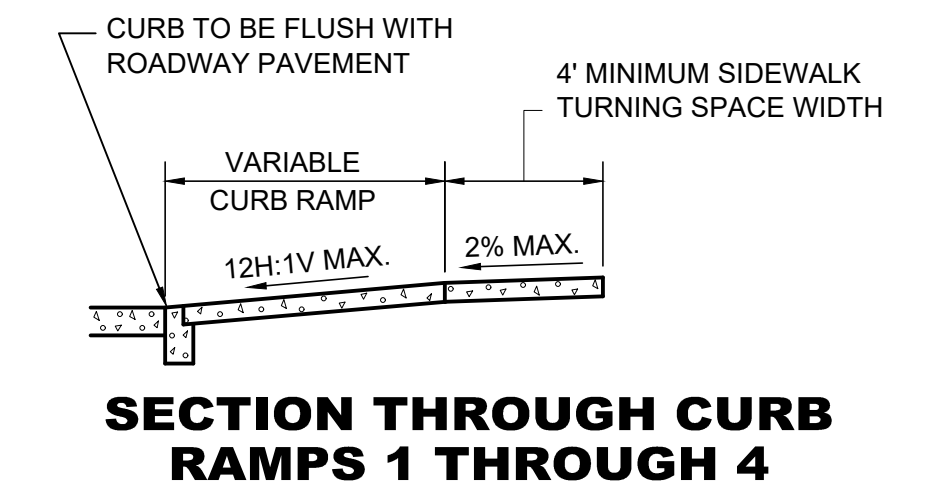
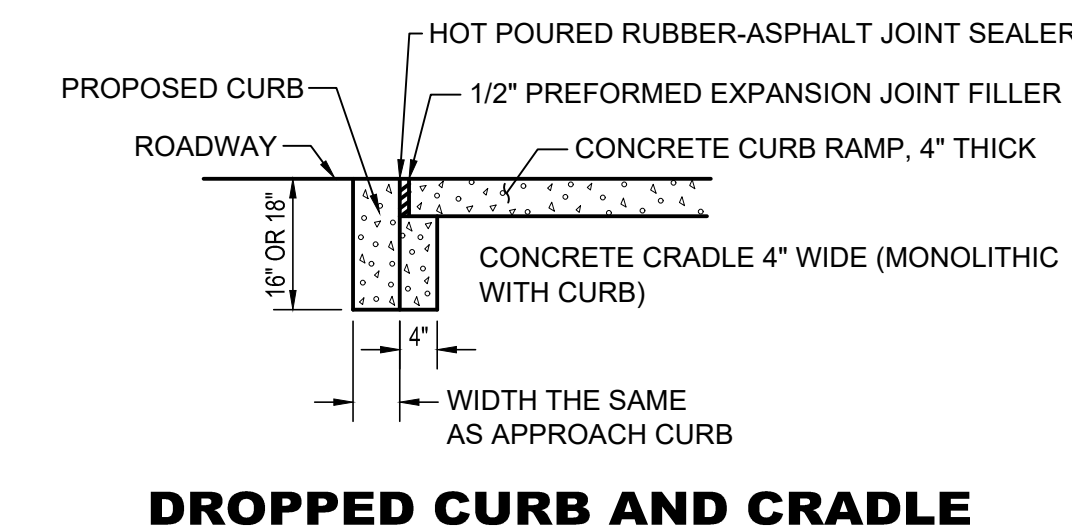
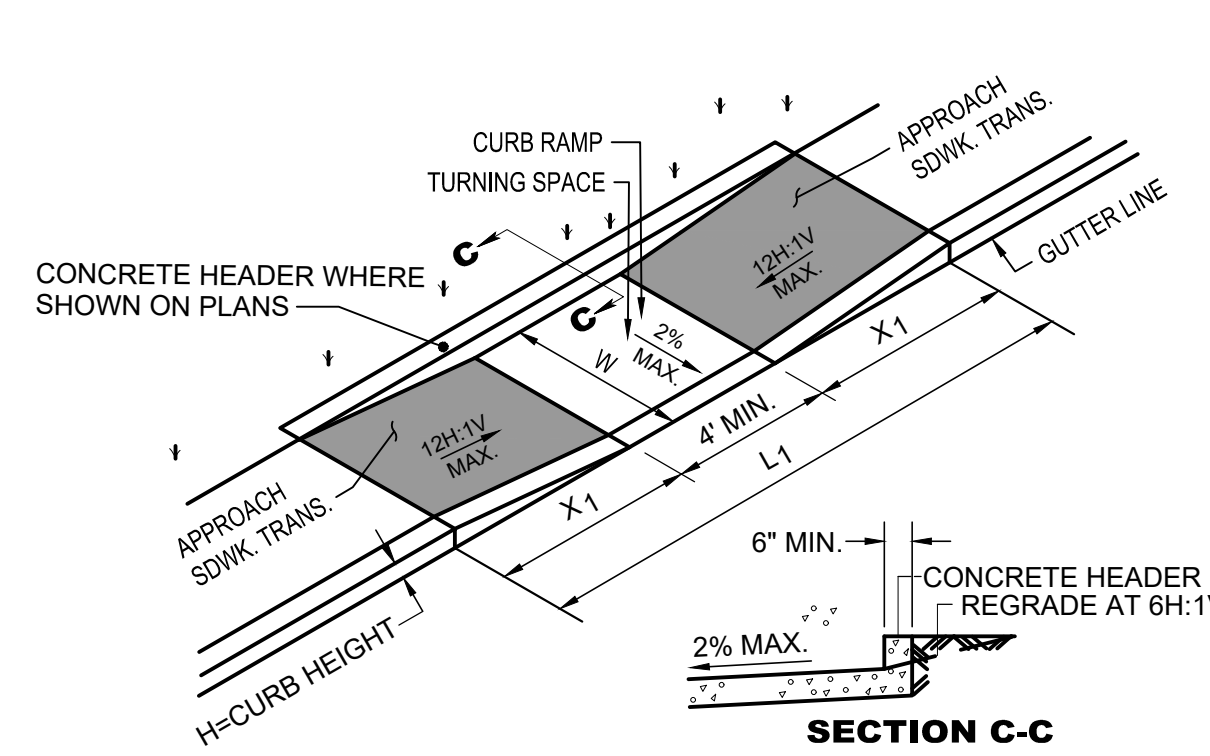
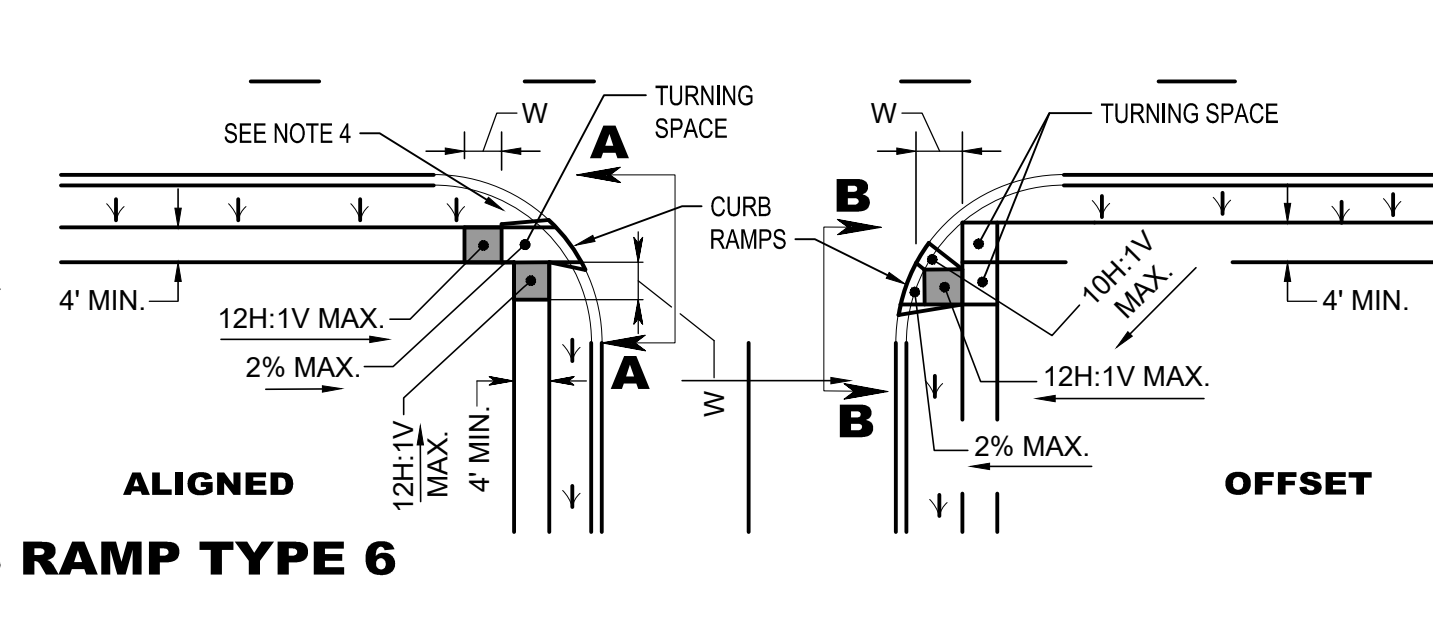
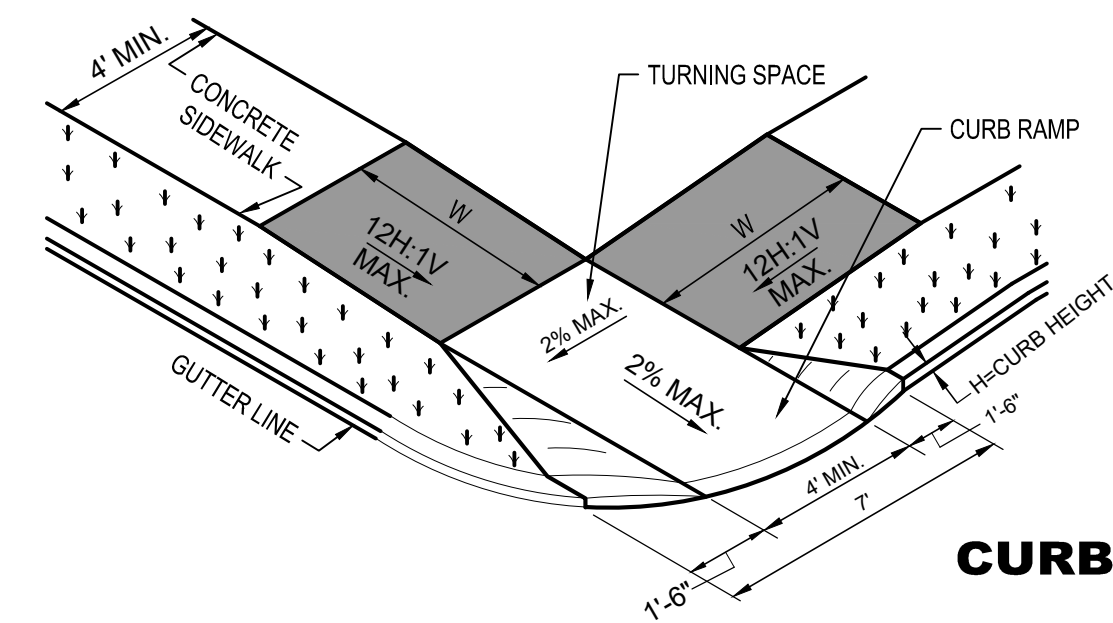
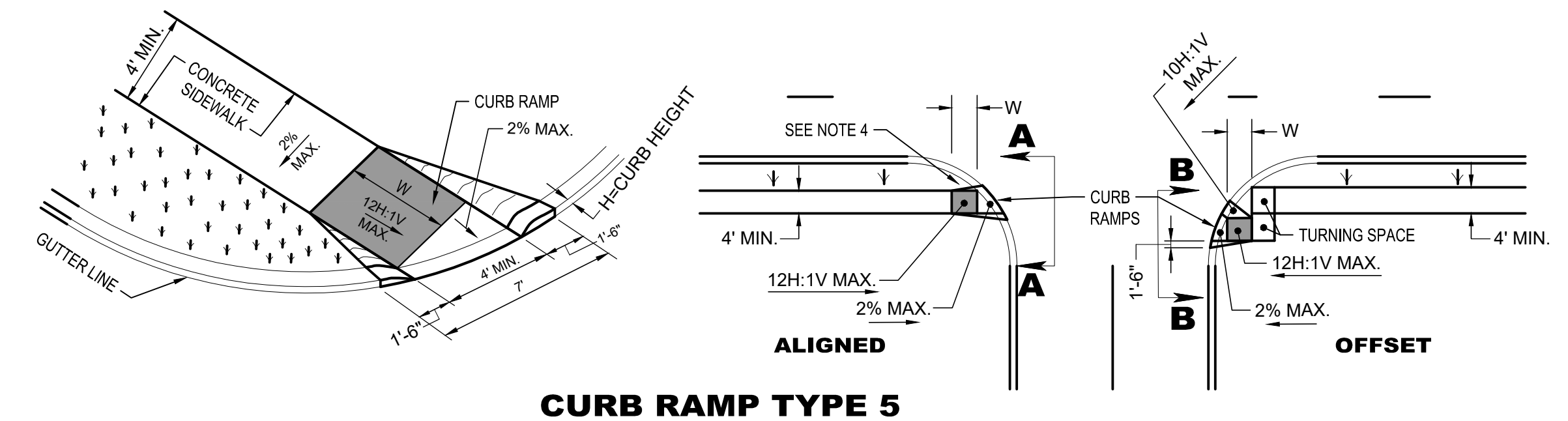
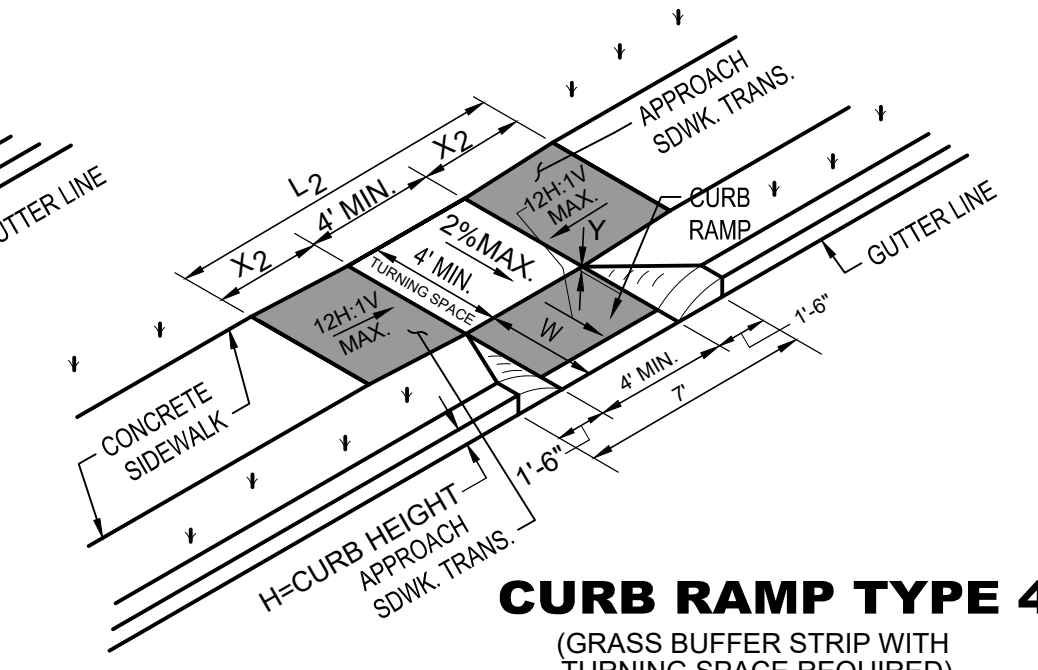
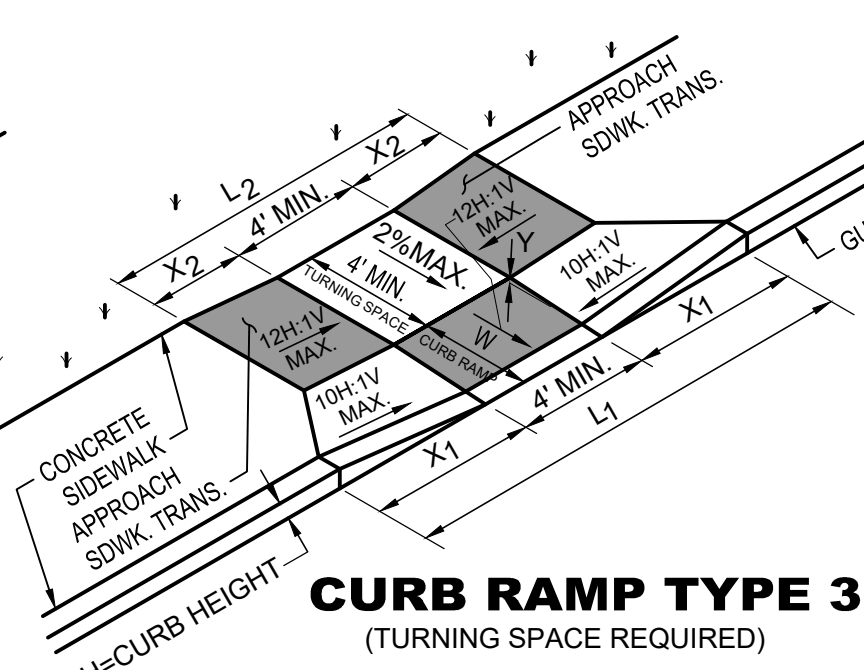
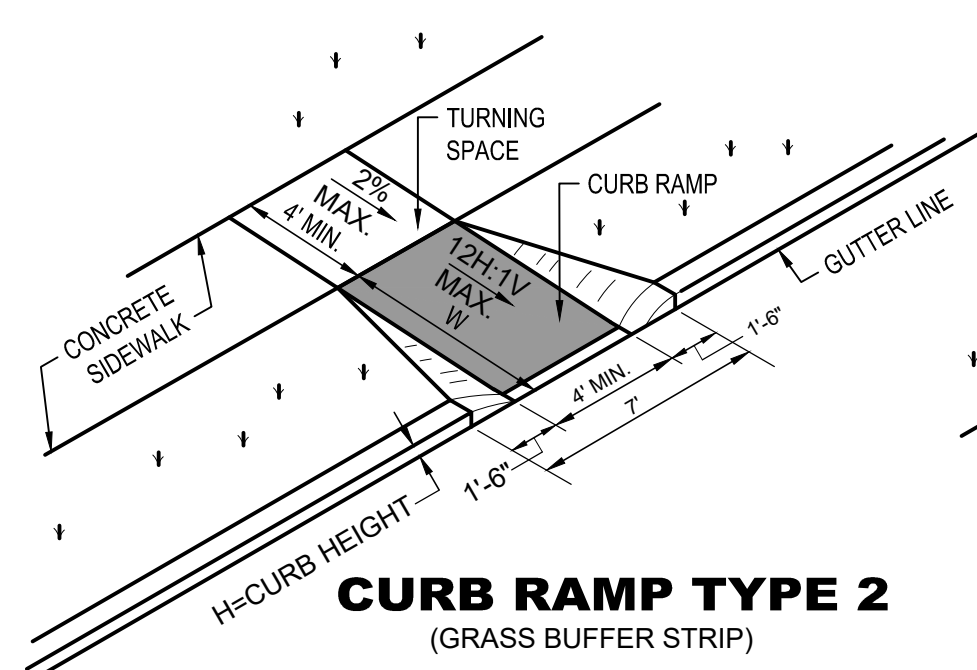
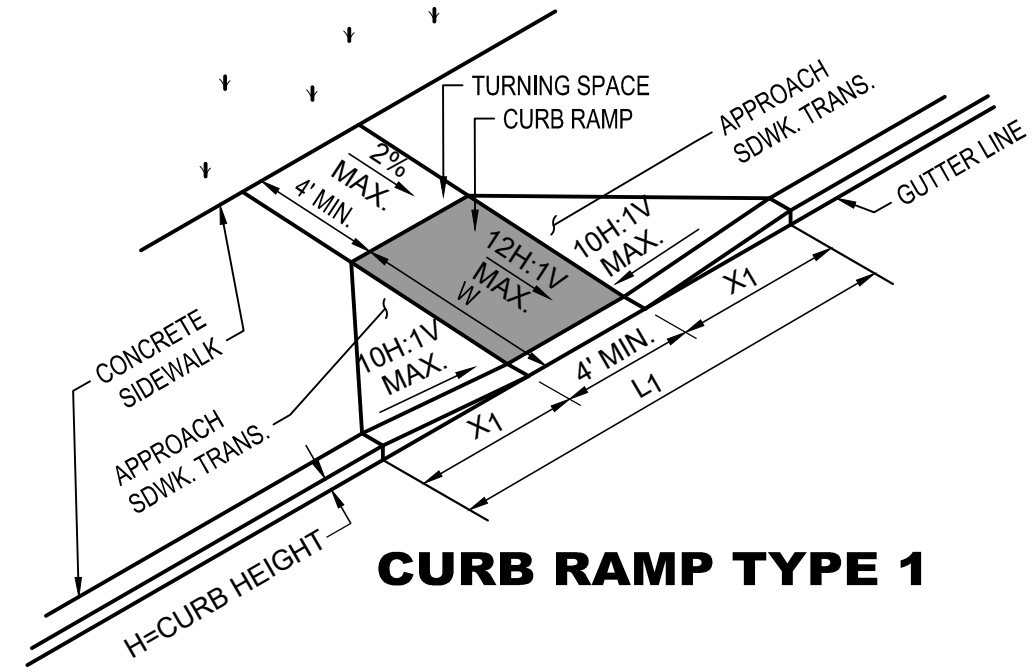
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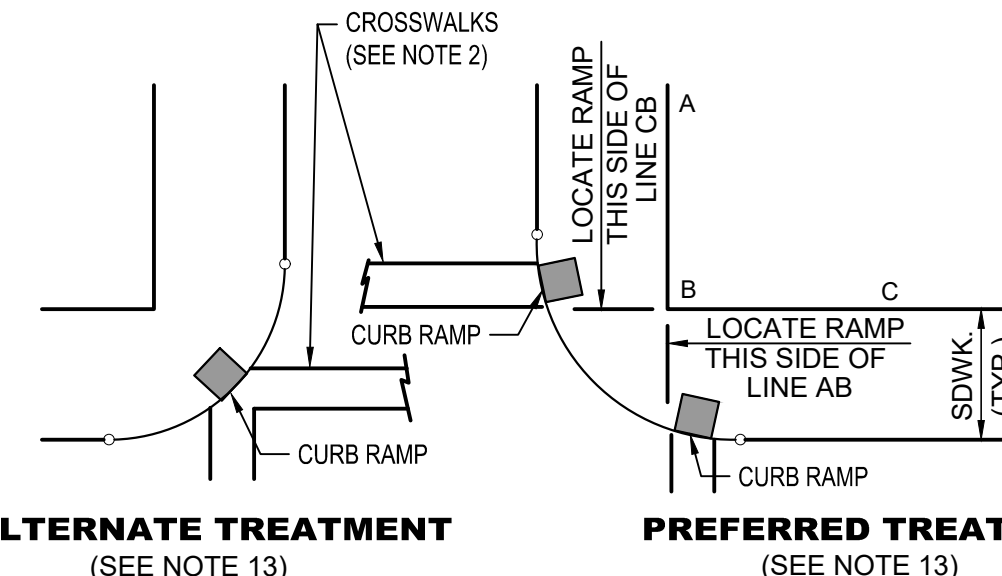
PROFESSIONAL PLANNER
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TRAFFIC CONTROL DETAILS II
2022 ROAD RESURFACING PROJECT
(CA-2021)
VARIOUS MUNICIPALITIES
UNION COUNTY
NEW JERSEY

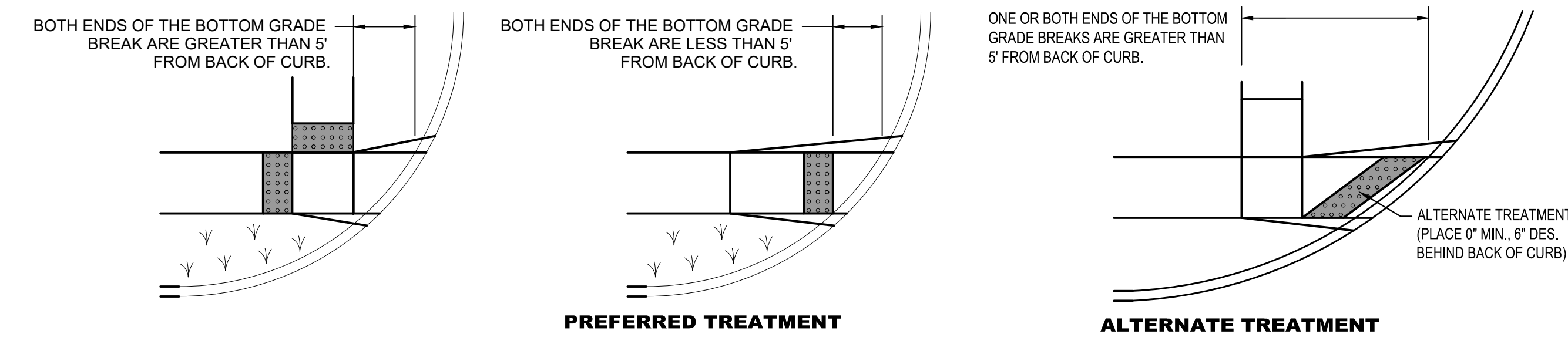
DESIGNED BY: VH CHECKED BY: EMJ PROJECT NO: UNIOCTY21.010 SHEET NO: 23.01
SCALE: N.T.S. DATE: JULY 16 2021
FIELD BOOK NO: PAGE



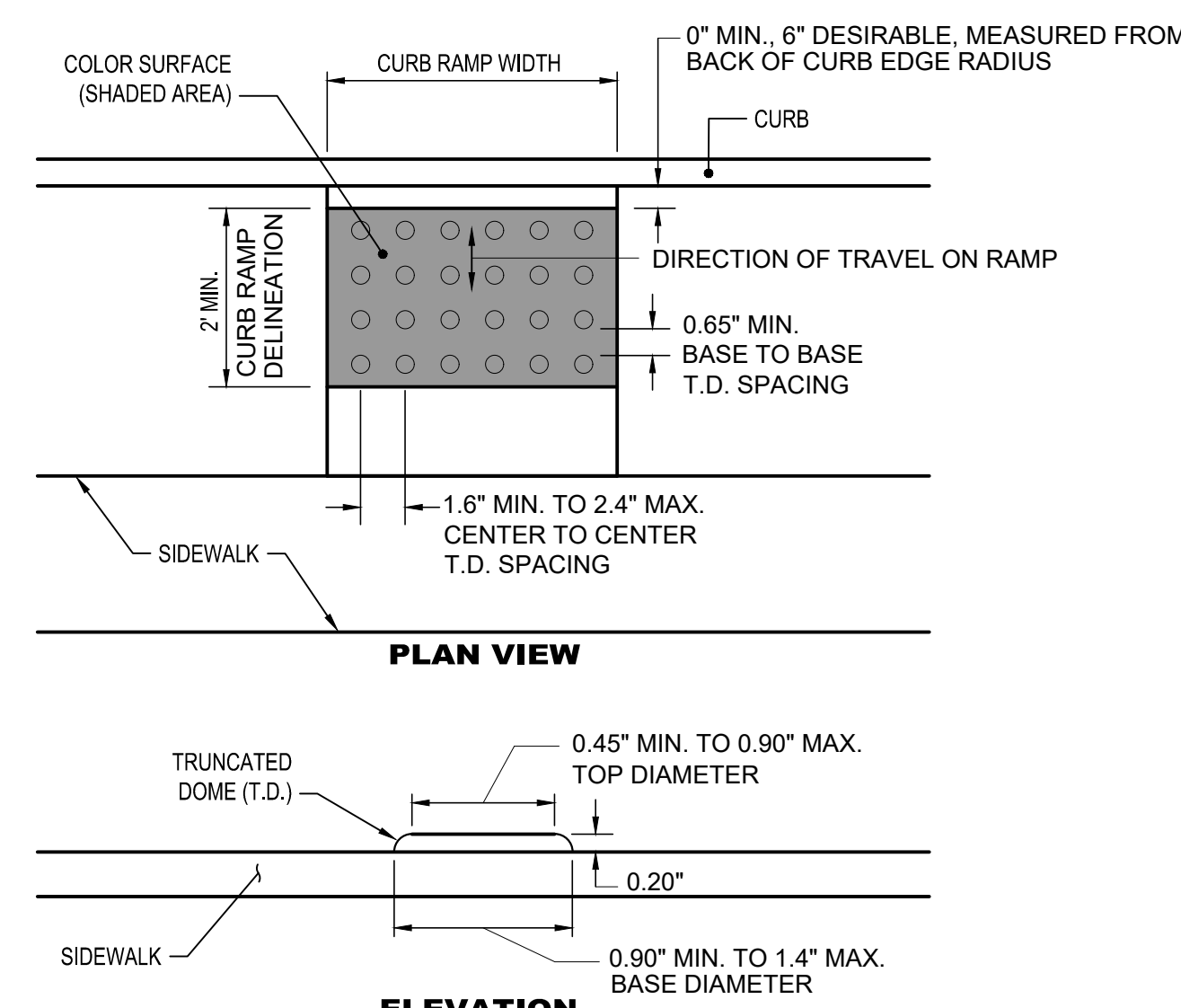
- NOTES:**
- KEEP TURNING SPACE, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP CLEAR OF OBSTRUCTIONS THAT PROTRUDE ABOVE THE SIDEWALK.
 - FOR DIMENSIONS SEE CD-606-1B AND CD-606-1C.
 - CURB (DROPPED CURB) GUTTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 4 FEET AT ALL CURB RAMPS.
 - FOR CURB RAMP TYPES 5 AND 6, IF A GRASS BUFFER DOES NOT EXIST, SLOPE CURB TO EQUAL SLOPE OF ADJACENT CURB RAMP.
 - SIDEWALK AND CURB RAMP WITHIN AREA ENCLOSED BY HEAVY LINES INDICATES THE PAY LIMIT FOR CONCRETE SIDEWALK OF THE APPROPRIATE ADJACENT THICKNESS.
 - 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.
 - 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.
 - CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED. SEE PLANS.
 - DIMENSIONS SHOWN IN TABLES ARE FOR 3 INCH TO 9 INCH CURB HEIGHTS. WHERE THE CURB HEIGHTS ARE OTHER THAN WHAT IS PROVIDED IN THE TABLES, THE DIMENSIONS OF THE RAMPS WILL HAVE TO BE CALCULATED BASED ON CROSS SLOPES SHOWN.
 - THE 12H:1V MAX SLOPE IS THE RUNNING SLOPE FOR CURB RAMPS, BUT ONLY THE 12H:1V SLOPE MEASURED AS X² 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.
 - FOR NARROW ISLAND WIDTH, SEE PEDESTRIAN REFUGE ISLAND WALKWAY OPENING AT INTERSECTIONS DETAIL.
 - FOR MEDIUM AND LARGE ISLAND WIDTH, SEE CURB RAMP TYPE 1 ON CD-606-1.
 - CONSTRUCT CURB RAMP TYPES 1, 2, 3, 4 & 7 PERPENDICULAR TO CURBLINE, AS SHOWN.
 - 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.
 - 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.



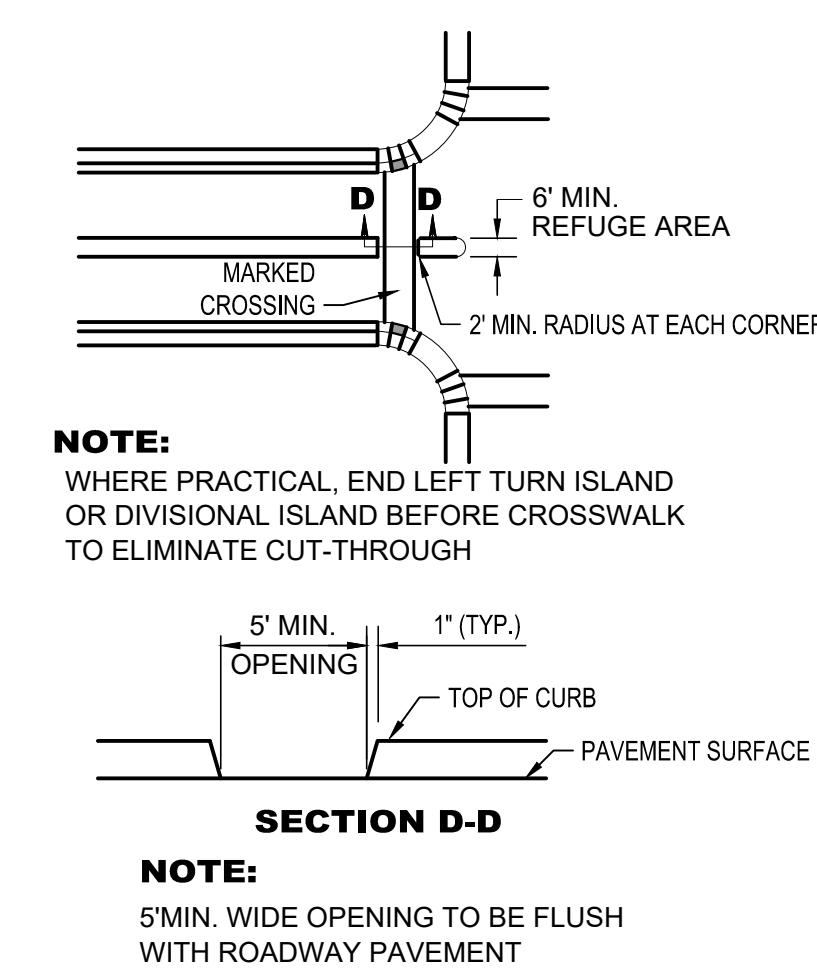
LOCATION OF CURB RAMP TYPES 1, 2, 3, 4 & 7 FOR CROSSING PARALLEL AND PERPENDICULAR TO HIGHWAY



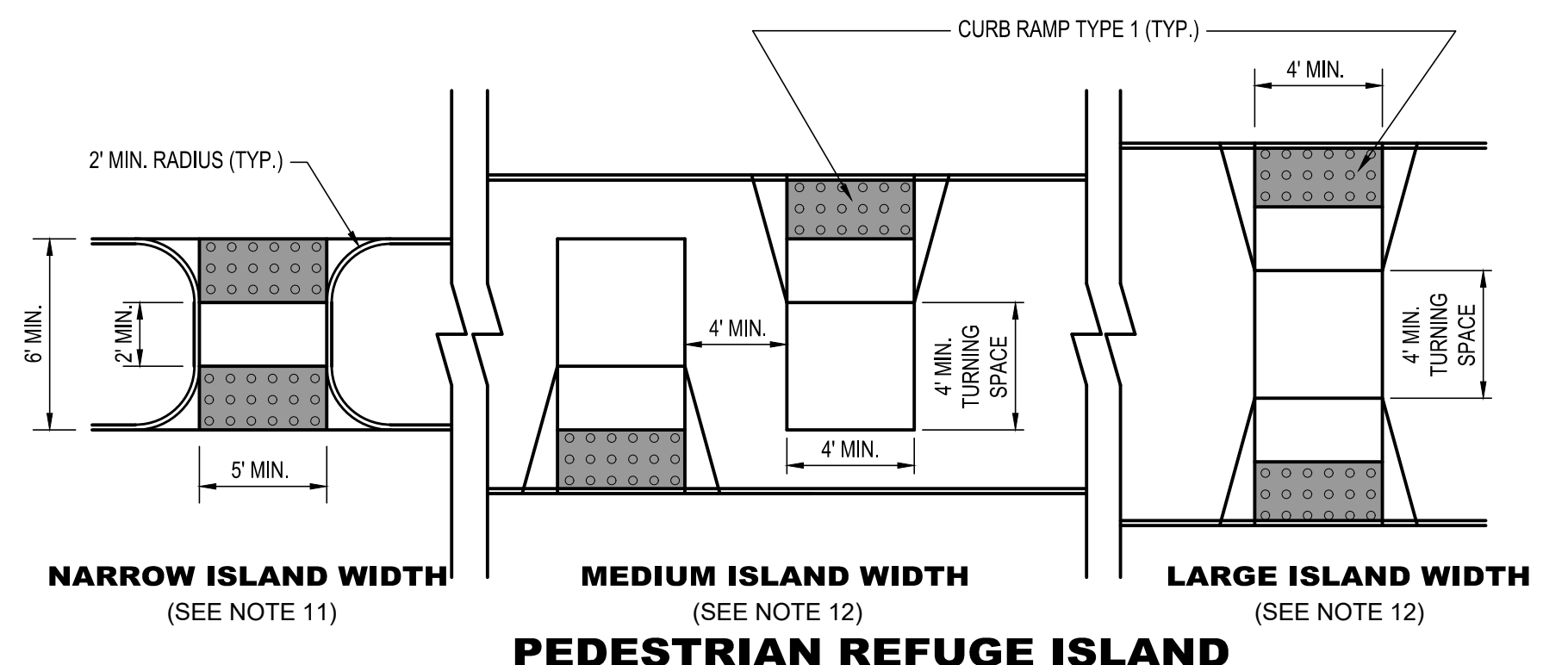
PLACEMENT OF DETECTABLE WARNING SURFACE FOR CURB RAMP TYPE 5 AND 6



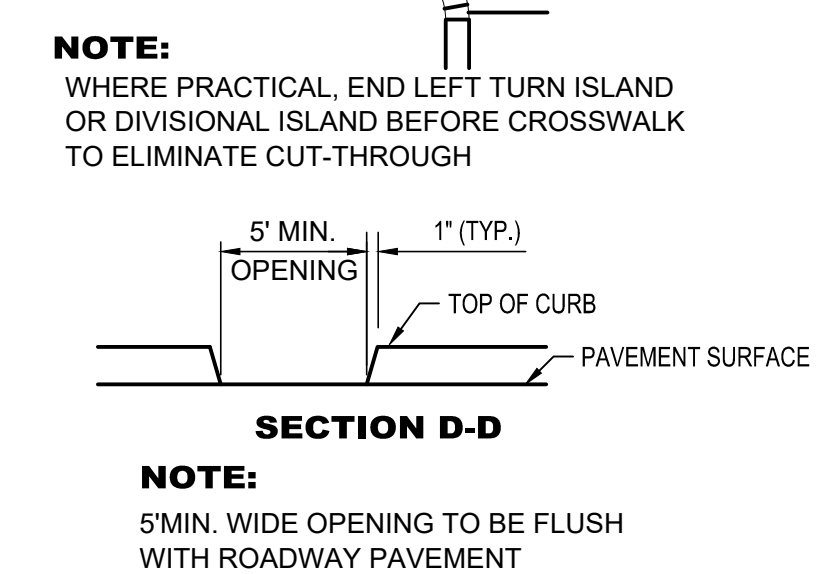
DETECTABLE WARNING SURFACE



PEDESTRIAN REFUGE ISLAND WALKWAY OPENING AT INTERSECTIONS



PEDESTRIAN REFUGE ISLAND

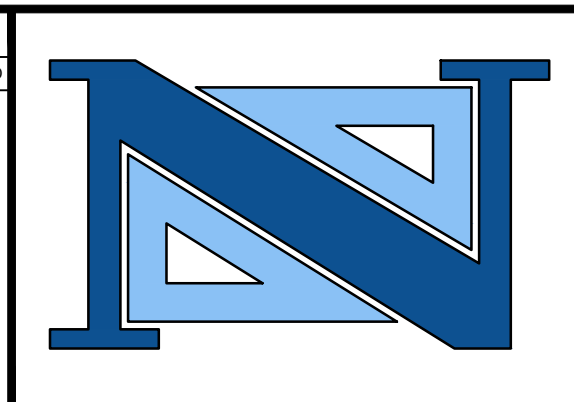


PEDESTRIAN RAILROAD CROSSING

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NJDOT CURB RAMP DETAILS I
2022 ROAD RESURFACING PROJECT
(CA-2021)
VARIOUS MUNICIPALITIES
UNION COUNTY
NEW JERSEY

DESIGNED BY: VH
FIELD BOOK NO.:
CHECKED BY: EMJ
SCALE: N.T.S.
PAGE:
PROJECT NO.: UNIOCTY21.010
SHEET NO.: 24.00
DATE: JULY 16, 2021

CURB RAMP TYPE 1

0.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	3	2.50	2.50	9.00
4	4	3.33	3.33	10.67
5	5	4.17	4.17	12.33
6	6	5.00	5.00	14.00
7	7	5.83	5.83	15.67
8	8	6.67	6.67	17.33
9	9	7.50	7.50	19.00

1.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	3	2.78	2.27	9.05
4	4	3.70	3.03	10.73
5	5	4.63	3.79	12.42
6	6	5.56	4.55	14.10
7	7	6.48	5.30	15.78
8	8	7.41	6.06	17.47
9	9	8.33	6.82	19.15

2.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	3	3.13	2.08	9.21
4	4	4.17	2.78	10.94
5	5	5.21	3.47	12.68
6	6	6.25	4.17	14.42
7	7	7.29	4.86	16.15
8	8	8.33	5.56	17.89
9	9	9.38	6.25	19.63

3.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	3	3.57	1.92	9.49
4	4	4.76	2.56	11.33
5	5	5.95	3.21	13.16
6	6	7.14	3.85	14.99
7	7	8.33	4.49	16.82
8	8	9.52	5.13	18.65
9	9	10.71	5.77	20.48

4.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	3	4.17	1.79	9.95
4	4	5.56	2.38	11.94
5	5	6.94	2.98	13.92
6	6	8.33	3.57	15.90
7	7	9.72	4.17	17.89
8	8	11.11	4.76	19.87
9	9	12.50	5.36	21.86

5.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	3	5.00	1.67	10.67
4	4	6.67	2.22	12.89
5	5	8.33	2.78	15.11
6	6	10.00	3.33	17.33
7	7	11.67	3.89	19.56
8	8	13.33	4.44	21.78
9	9	15.00	5.00	24.00

6.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	3	6.25	1.56	11.81
4	4	8.33	2.08	14.42
5	5	10.42	2.60	17.02
6	6	12.50	3.13	19.63
7	7	14.58	3.65	22.23
8	8	16.67	4.17	24.84
9	9	18.75	4.69	27.45

7.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	3	8.33	1.47	13.80
4	4	11.11	1.96	17.07
5	5	13.89	2.45	20.34
6	6	16.67	2.94	23.61
7	7	19.44	3.43	26.88
8	8	22.22	3.92	30.15
9	9	25.00	4.41	33.42

CURB RAMP TYPE 3

0.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET
3	3	2.50	2.50	9.00		0.91	0.91	5.82
4	4	3.33	3.33	10.67		1.91	1.91	7.82
5	5	4.17	4.17	12.33		2.91	2.91	9.82
6	6	5.00	5.00	14.00	2.75	3.91	3.91	11.83
7	7	5.83	5.83	15.67		4.91	4.91	13.83
8	8	6.67	6.67	17.33		5.91	5.91	15.83
9	9	7.50	7.50	19.00		6.91	6.91	17.83

1.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET
3	3	2.78	2.27	9.05		1.04	0.81	5.85
4	4	3.70	3.03	10.73		2.17	1.71	7.88
5	5	4.63	3.79	12.42		3.31	2.60	9.91
6	6	5.56	4.55	14.10	2.75	4.45	3.49	11.94
7	7	6.48	5.30	15.78		5.58	4.39	13.97
8	8	7.41	6.06	17.47		6.72	5.28	16.00
9	9	8.33	6.82	19.15		7.86	6.17	18.03

2.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET
3	3	3.13	2.08	9.21		1.20	0.73	5.93
4	4	4.17	2.78	10.94		2.52	1.54	8.06
5	5	5.21	3.47	12.68		3.83	2.35	10.18
6	6	6.25	4.17	14.42	2.75	5.15	3.16	12.30
7	7	7.29	4.86	16.15		6.47	3.96	14.43
8	8	8.33	5.56	17.89		7.78	4.77	16.55
9	9	9.38	6.25	19.63		9.10	5.58	18.67

3.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET
3	3	3.57	1.92	9.49		1.42	0.67	6.09
4	4	4.76	2.56	11.33		2.99	1.41	8.39
5	5	5.95	3.21	13.16		4.55	2.14	10.69
6	6	7.14	3.85	14.99	2.75	6.11	2.88	12.99
7	7	8.33	4.49	16.82		7.68	3.61	15.29
8	8	9.52	5.13	18.65		9.24	4.35	17.59
9	9	10.71	5.77	20.48		10.81	5.08	19.89

4.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET
3	3	4.17	1.79	9.95		1.72	1.72	7.44
4	4	5.56	2.38	11.94		2.72	2.72	9.44
5	5	6.94	2.98	13.92		3.72	3.72	11.45
6	6	8.33	3.57	15.90	3.0	4.72	4.72	13.45
7	7	9.72	4.17	17.89		5.72	5.72	15.45
8	8	11.11	4.76	19.87		6.72	6.72	17.45
9	9	12.50	5.36	21.86				

5.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET
3	3	5.00	1.67	10.67		1.96	1.96	7.92
4	4	6.67	2.22	12.89		2.96	2.96	9.93
5	5	8.33	2.78	15.11		3.96	3.96	11.93
6	6	10.00	3.33	17.33	4.0	4.96	4.96	13.93
7	7	11.67	3.89	19.56		5.96	5.96	15.93
8	8	13.33	4.44	21.78				
9	9	15.00	5.00	24.00				

6.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET
3	3	6.25	1.56	11.81		2.28	0.57	6.85
4	4	8.33	2.08	14.42		4.78	1.19	9.98
5	5	10.42	2.60	17.02		7.29	1.82	13.10
6	6	12.50	3.13	19.63	2.75	9.79	2.45	16.23
7	7	14.58	3.65	22.23		12.29	3.07	19.36
8	8	16.67	4.17	24.84		14.79	3.70	22.49
9	9	18.75	4.69	27.45		17.29	4.33	25.62

7.0 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET
3	3	8.33	1.47	13.80		2.58	0.42	7.00
4	4	11.11	1.96	17.07		6.16	1.00	11.16
5	5	13.89	2.45	20.34		9.73	1.58	15.31
6	6	16.67	2.94	23.61	3.0	13.31	2.16	19.47
7	7	19.44	3.43	26.88		16.90	2.75	23.62
8	8	22.22	3.92	30.15		20.48	3.33	27.77
9	9	25.00	4.41	33.42		24.07	3.91	31.92

CURB RAMP TYPE 2

0-8 % GUTTER LINE PROFILE

H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	3	1.50	1.50	7.00
4	4	1.50	1.50	7.00
5	5	1.50	1.50	7.00
6	6	1.50	1.50	7.00
7	7	1.50	1.50	7.00
8	8	1.50	1.50	7.00
9	9	1.50	1.50	7.00

NOTES:

- FOR CURB RAMP TYPES, SEE CD-606-1.
- THE ABOVE TABLES ARE BASED ON THE SPECIFIC GUTTER PROFILE REFERENCED. THEY DO NOT TAKE INTO ACCOUNT VARIATIONS IN THE GUTTER PROFILE. THE ABOVE TABLES TO BE USED BY THE DESIGNERS AND CONTRACTORS TO GET APPROXIMATE DIMENSIONS OF THE CURB RAMP AT EACH LOCATION. FINAL DIMENSIONS WILL BE DETERMINED BY ACTUAL MEASUREMENTS IN THE FIELD DURING CONSTRUCTION.
- THE 12H:1V MAX SLOPE IS THE RUNNING SLOPE FOR CURB RAMPS, BUT ONLY THE 12H:1V SLOPE MEASURED AS X 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. THE TABLES ALREADY APPLY THE 15 FEET RULE FOR THOSE CALCULATED LENGTHS WHICH EXCEED 15 FEET.
- DIMENSIONS SHOWN IN TABLES ARE FOR 3 INCH TO 9 INCH CURB HEIGHTS. WHERE THE CURB HEIGHTS ARE OTHER THAN WHAT IS PROVIDED IN THE TABLES, THE DIMENSIONS OF THE RAMPS WILL HAVE TO BE CALCULATED BASED ON CROSS SLOPES SHOWN.

CONCRETE SIDEWALK
(PUBLIC SIDEWALK CURB RAMP TABLES)
N.T.S.

LEGEND

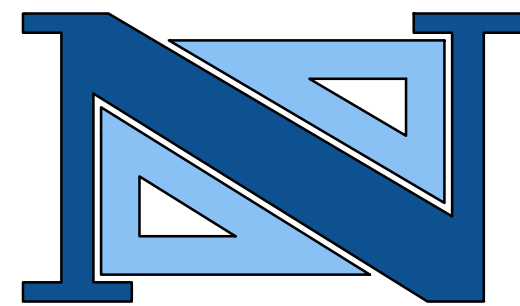
- U = UPPER SIDE OF GUTTER LINE PROFILE
- L = LOWER SIDE OF GUTTER LINE PROFILE
- FOR THE OTHER ABBREVIATIONS - REFER TO CD-606-1
- * TYPE 3 RAMP IS NOT APPLICABLE, USE TYPE 1
- ** TYPE 4 RAMP IS NOT APPLICABLE, USE TYPE 2

CD-606-3.1

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NO.	DATE	REVISIONS	DRAWN	DESIGNED	CHECKED
		DESCRIPTION			



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NJDOT CURB RAMP DETAILS II
2022 ROAD RESURFACING PROJECT
(CA-2021)
VARIOUS MUNICIPALITIES
UNION COUNTY
NEW JERSEY

DESIGNED BY: VH
CHECKED BY: EMJ
SCALE: N.T.S.
FIELD BOOK NO.:
PAGE:

PROJECT NO.: UNIOCTY21.010
SHEET NO.: 24.01
DATE: JULY 16, 2021

CURB RAMP TYPE 4

0.0 % GUTTER LINE PROFILE							
H INCHES	W FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET		
3	2.75	2.75	0.91	0.91	5.82		
4			1.91	1.91	7.82		
5			2.91	2.91	9.82		
6			3.91	3.91	11.82		
7			4.91	4.91	13.83		
8			5.91	5.91	15.83		
9			6.91	6.91	17.83		
3			3.0	3.0	**	**	**
4					1.72	1.72	7.44
5	2.72	2.72			9.44		
6	3.72	3.72			11.45		
7	4.72	4.72			13.45		
8	5.72	5.72			15.45		
9	6.72	6.72			17.45		
3	3.5	3.5			**	**	**
4					1.34	1.34	6.68
5			2.34	2.34	8.68		
6			3.34	3.34	10.69		
7			4.34	4.34	12.69		
8			5.34	5.34	14.69		
9			6.34	6.34	16.69		
3			4.0	4.0	**	**	**
4					**	**	**
5	1.96	1.96			7.92		
6	2.96	2.96			9.93		
7	3.96	3.96			11.93		
8	4.96	4.96			13.93		
9	5.96	5.96			15.93		

1.0 % GUTTER LINE PROFILE							
H INCHES	W FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET		
3	2.75	2.75	1.04	0.81	5.85		
4			2.17	1.71	7.88		
5			3.31	2.60	9.91		
6			4.45	3.49	11.94		
7			5.58	4.39	13.97		
8			6.72	5.28	16.00		
9			7.86	6.17	18.03		
3			3.0	3.0	0.82	0.64	5.46
4					1.96	1.54	7.49
5	3.09	2.43			9.52		
6	4.23	3.32			11.55		
7	5.37	4.22			13.58		
8	6.50	5.11			15.61		
9	7.64	6.00			17.64		
3	3.5	3.5			0.45	0.30	4.69
4					1.53	1.20	6.72
5			2.66	2.09	8.75		
6			3.80	2.98	10.78		
7			4.94	3.88	12.81		
8			6.07	4.77	14.84		
9			7.21	5.66	16.87		
3			4.0	4.0	**	**	**
4					1.09	0.86	5.95
5	2.23	1.75			7.98		
6	3.37	2.65			10.01		
7	4.50	3.54			12.04		
8	5.64	4.43			14.07		
9	6.78	5.32			16.10		

2.0 % GUTTER LINE PROFILE							
H INCHES	W FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET		
3	2.75	2.75	1.20	0.73	5.93		
4			2.52	1.54	8.06		
5			3.83	2.35	10.18		
6			5.15	3.16	12.30		
7			6.47	3.96	14.43		
8			7.78	4.77	16.55		
9			9.10	5.58	18.67		
3			3.0	3.0	0.95	0.58	5.53
4					2.27	1.39	7.65
5	3.58	2.20			9.78		
6	4.90	3.00			11.90		
7	6.22	3.81			14.02		
8	7.53	4.62			16.15		
9	8.85	5.42			18.27		
3	3.5	3.5			0.45	0.28	4.72
4					1.77	1.08	6.85
5			3.08	1.89	8.97		
6			4.40	2.70	11.09		
7			5.72	3.50	13.22		
8			7.03	4.31	15.34		
9			8.35	5.12	17.46		
3			4.0	4.0	**	**	**
4					1.27	0.78	6.04
5	2.58	1.58			8.16		
6	3.90	2.39			10.29		
7	5.22	3.20			12.41		
8	6.53	4.00			14.53		
9	7.85	4.81			16.66		

3.0 % GUTTER LINE PROFILE							
H INCHES	W FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET		
3	2.75	2.75	1.42	0.67	6.09		
4			2.99	1.41	8.39		
5			4.55	2.14	10.69		
6			6.11	2.88	12.99		
7			7.68	3.61	15.29		
8			9.24	4.35	17.59		
9			10.81	5.08	19.89		
3			3.0	3.0	1.13	0.53	5.66
4					2.69	1.27	7.96
5	4.25	2.00			10.26		
6	5.82	2.74			12.55		
7	7.38	3.47			14.85		
8	8.94	4.21			17.15		
9	10.51	4.94			19.45		
3	3.5	3.5			0.53	0.25	4.78
4					2.10	0.99	7.08
5			3.66	1.72	9.38		
6			5.22	2.46	11.68		
7			6.79	3.19	13.98		
8			8.35	3.93	16.28		
9			9.91	4.66	18.58		
3			4.0	4.0	**	**	**
4					1.50	0.71	6.21
5	3.07	1.44			8.51		
6	4.63	2.18			10.81		
7	6.19	2.91			13.11		
8	7.76	3.65			15.41		
9	9.32	4.38			17.71		

CURB RAMP TYPE 7

0.0 % GUTTER LINE PROFILE				
H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	4' MIN. 7' MAX.	3.00	3.00	10.00
4		4.00	4.00	12.00
5		5.00	5.00	14.00
6		6.00	6.00	16.00
7		7.00	7.00	18.01
8		8.00	8.00	20.01
9		9.00	9.00	22.01

4.0 % GUTTER LINE PROFILE				
H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	4' MIN. 7' MAX.	5.77	2.03	11.80
4		7.70	2.70	14.40
5		9.62	3.38	17.00
6		11.55	4.06	19.60
7		13.47	4.73	22.20
8		15.40	5.41	24.80
9		17.32	6.08	27.40

1.0 % GUTTER LINE PROFILE				
H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	4' MIN. 7' MAX.	3.41	2.68	10.09
4		4.55	3.57	12.12
5		5.68	4.47	14.15
6		6.82	5.36	16.18
7		7.96	6.25	18.21
8		9.10	7.15	20.24
9		10.23	8.04	22.27

5.0 % GUTTER LINE PROFILE				
H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	4' MIN. 7' MAX.	7.51	1.88	13.38
4		10.01	2.50	16.51
5		12.51	3.13	19.64
6		15.00	3.75	22.75
7		17.50	4.38	25.88
8		20.00	5.00	29.00
9		22.50	5.63	32.13

2.0 % GUTTER LINE PROFILE				
H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	4' MIN. 7' MAX.	3.95	2.42	10.37
4		5.27	3.23	12.49
5		6.58	4.03	14.62
6		7.90	4.84	16.74
7		9.22	5.65	18.86
8		10.53	6.45	20.99
9		11.85	7.26	23.11

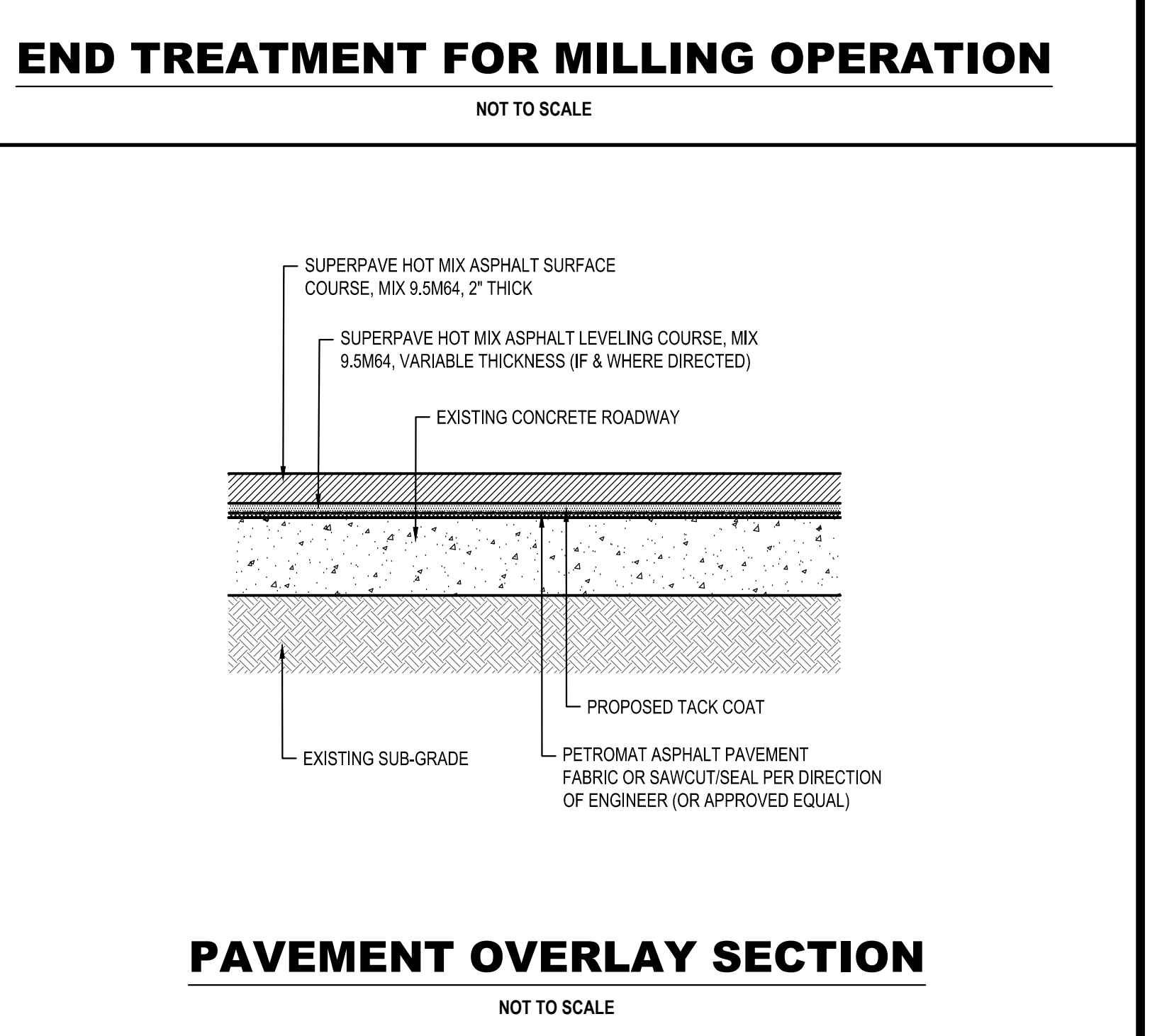
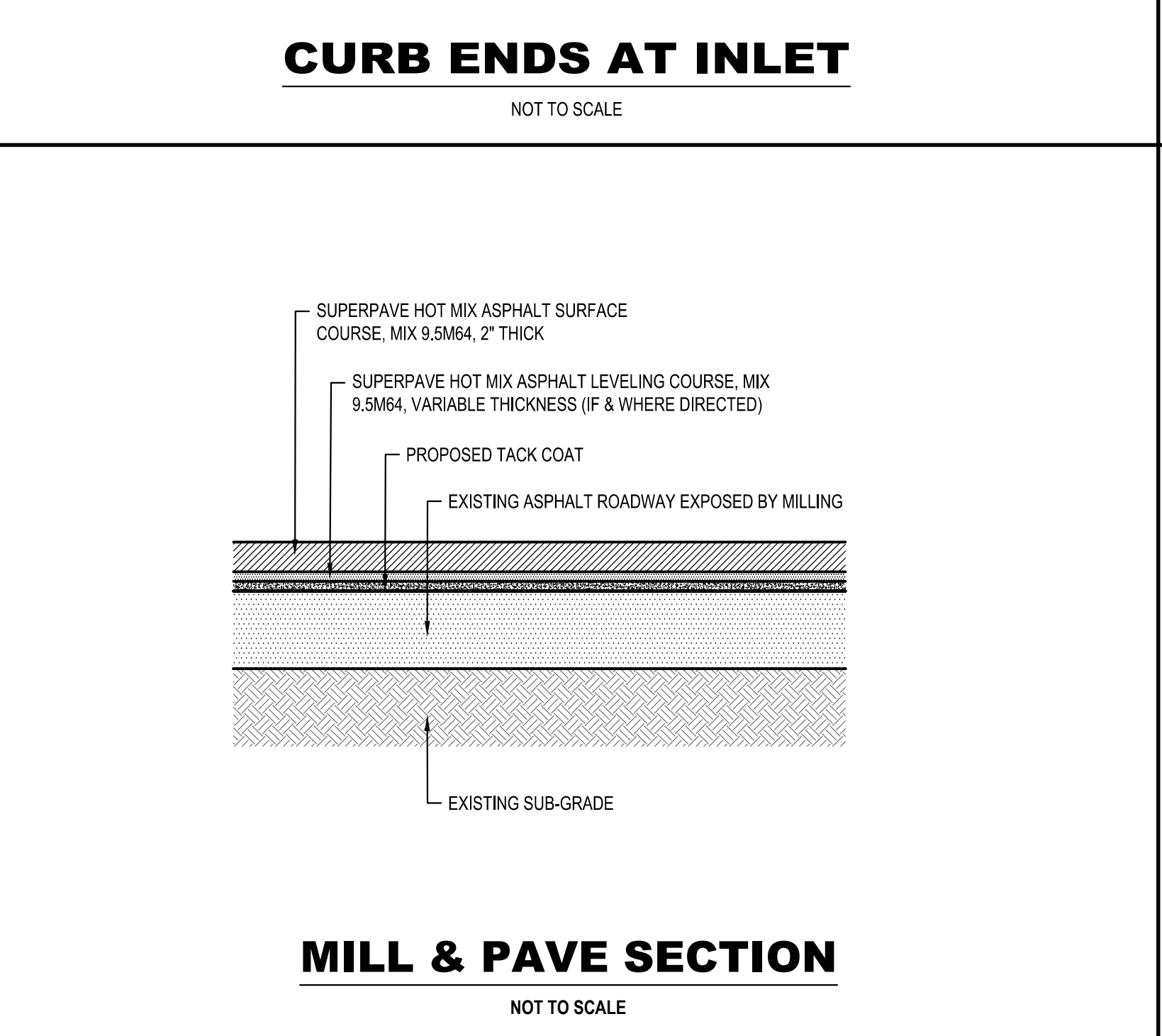
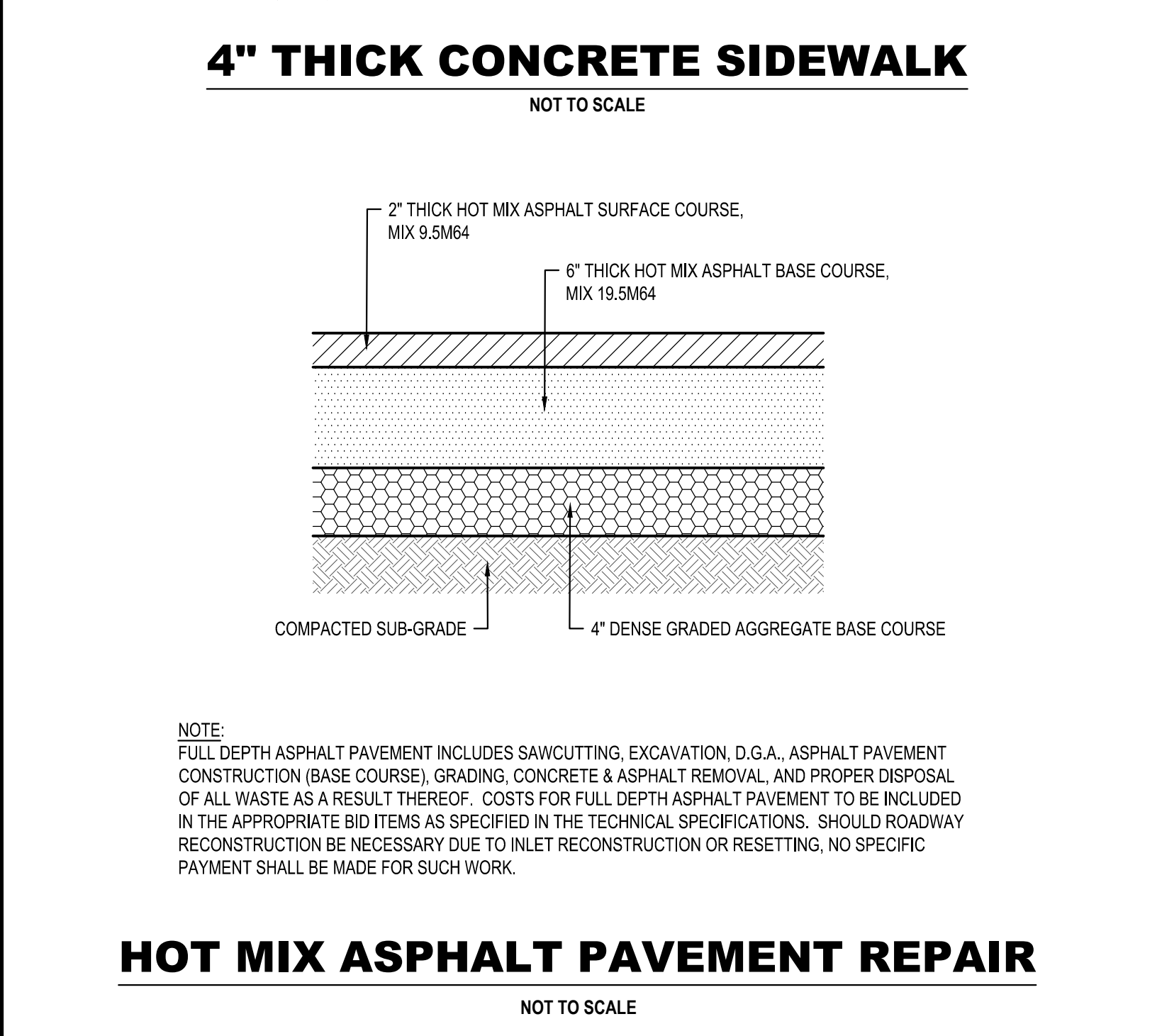
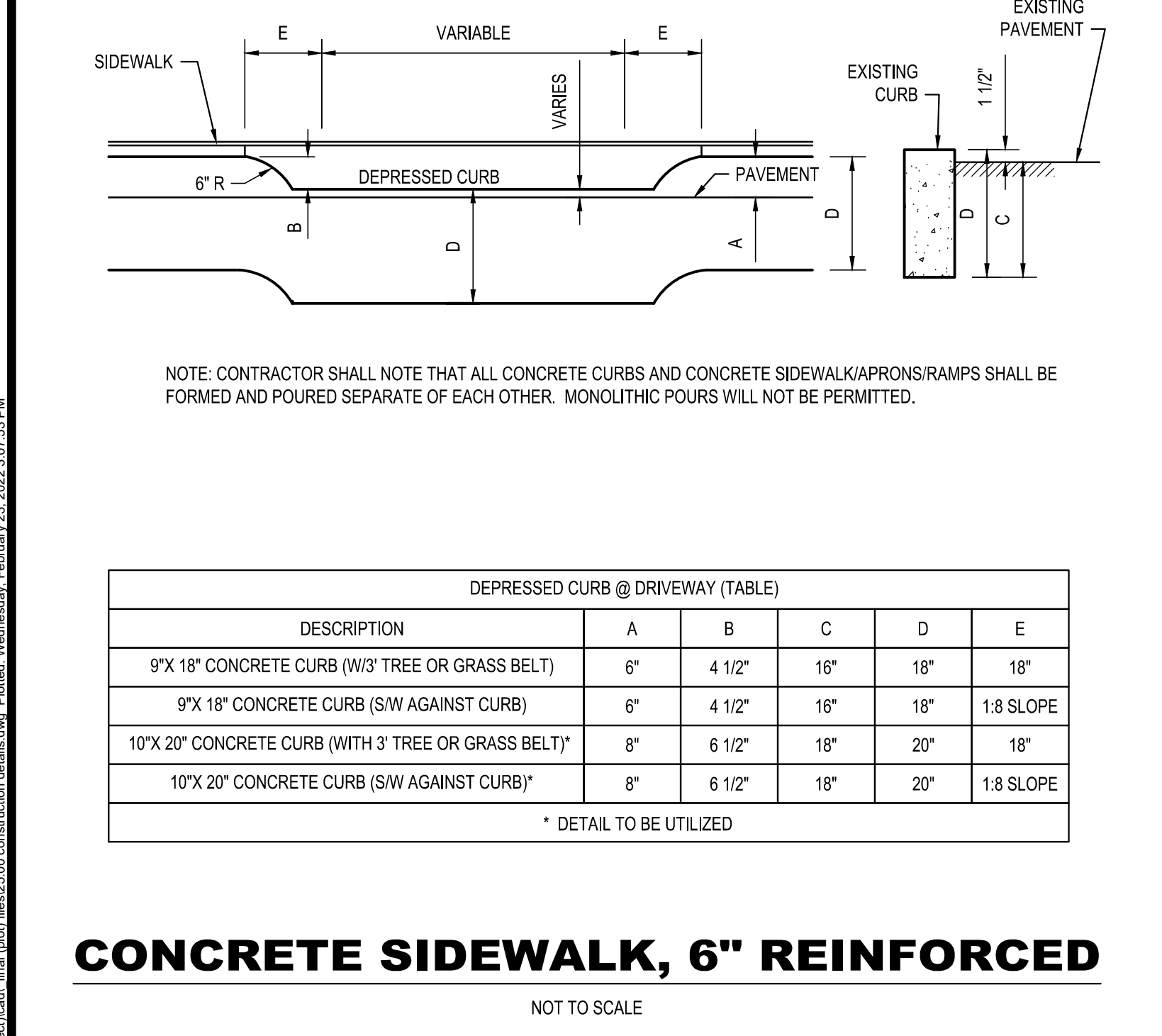
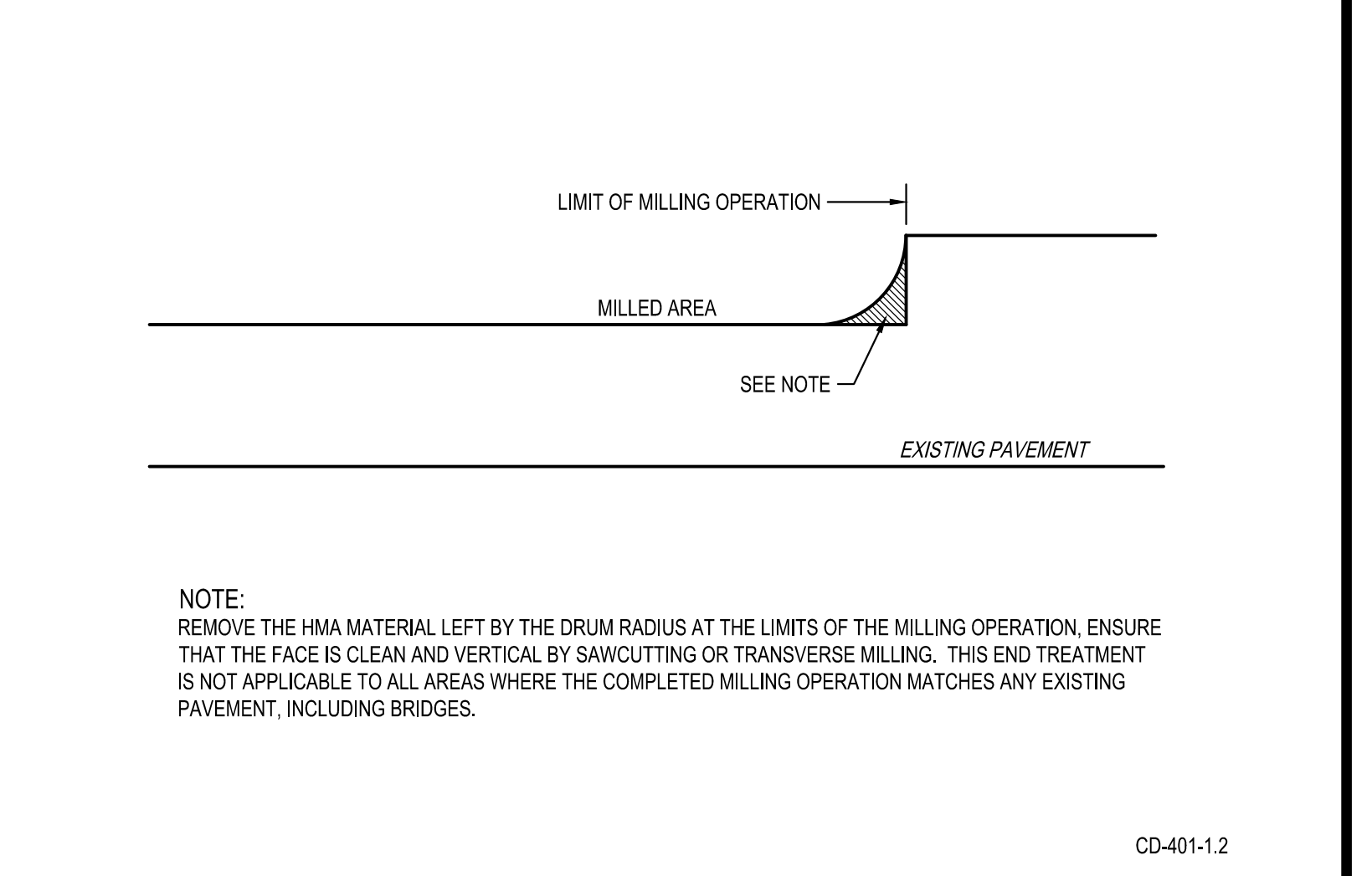
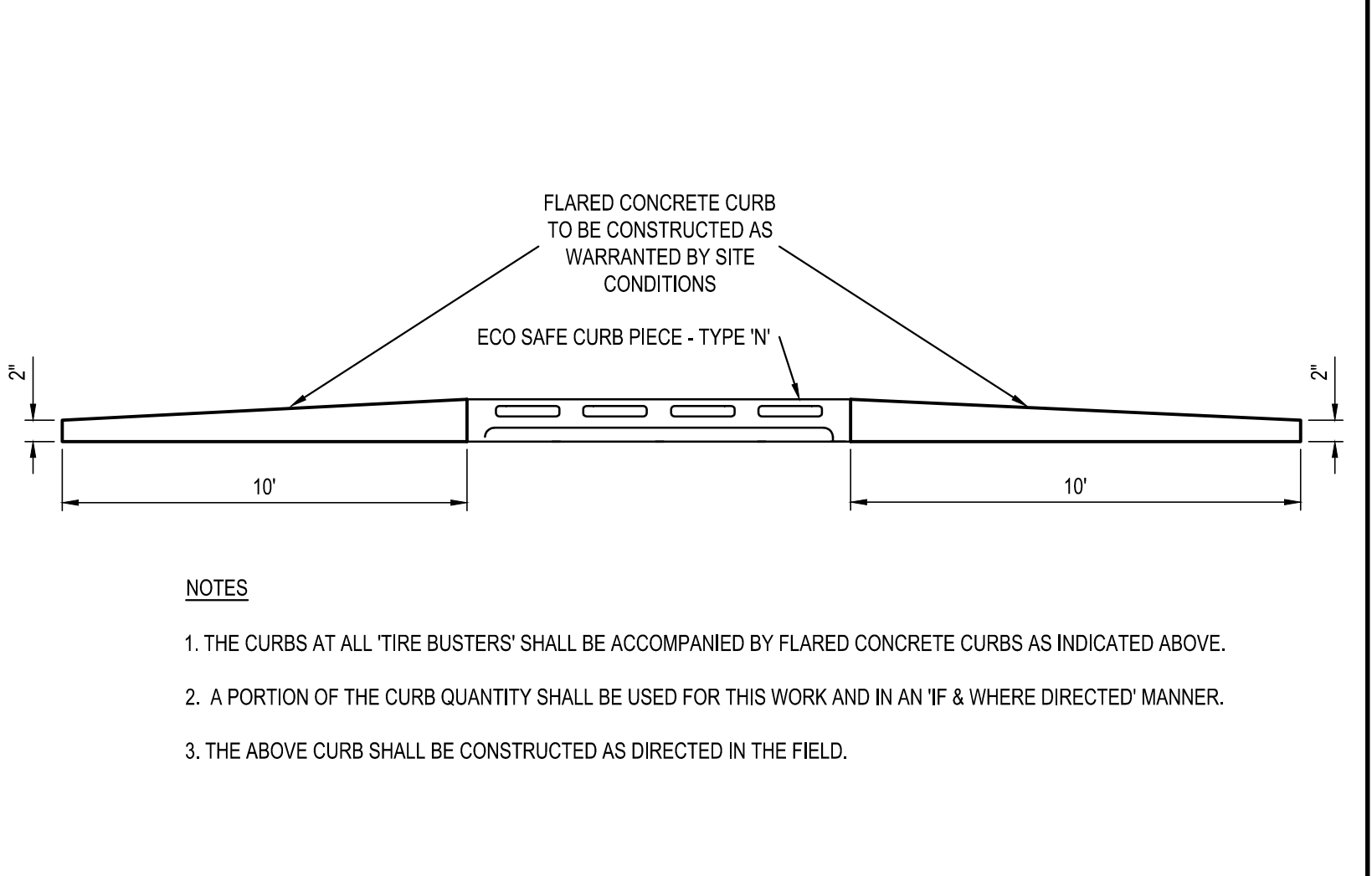
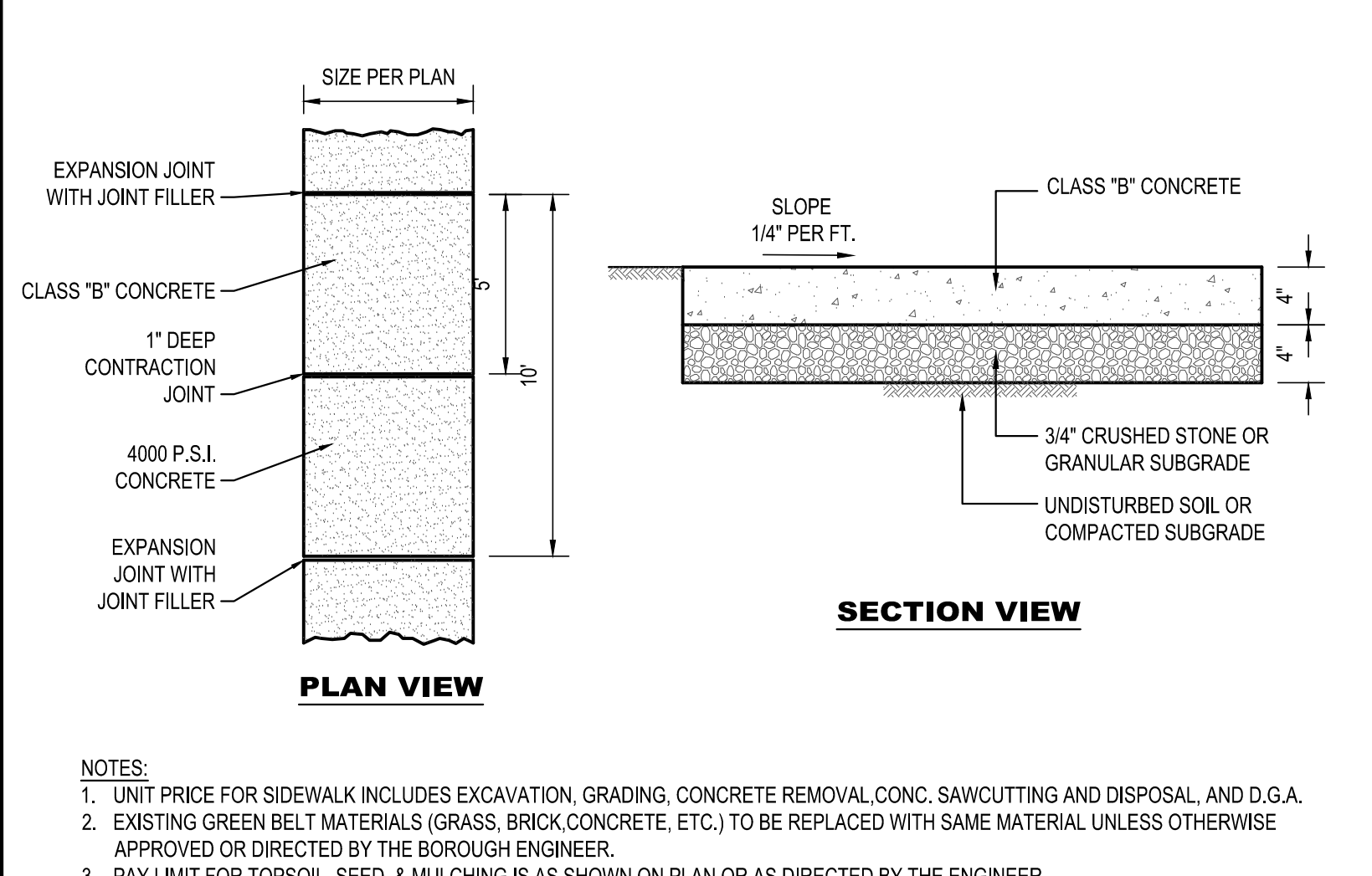
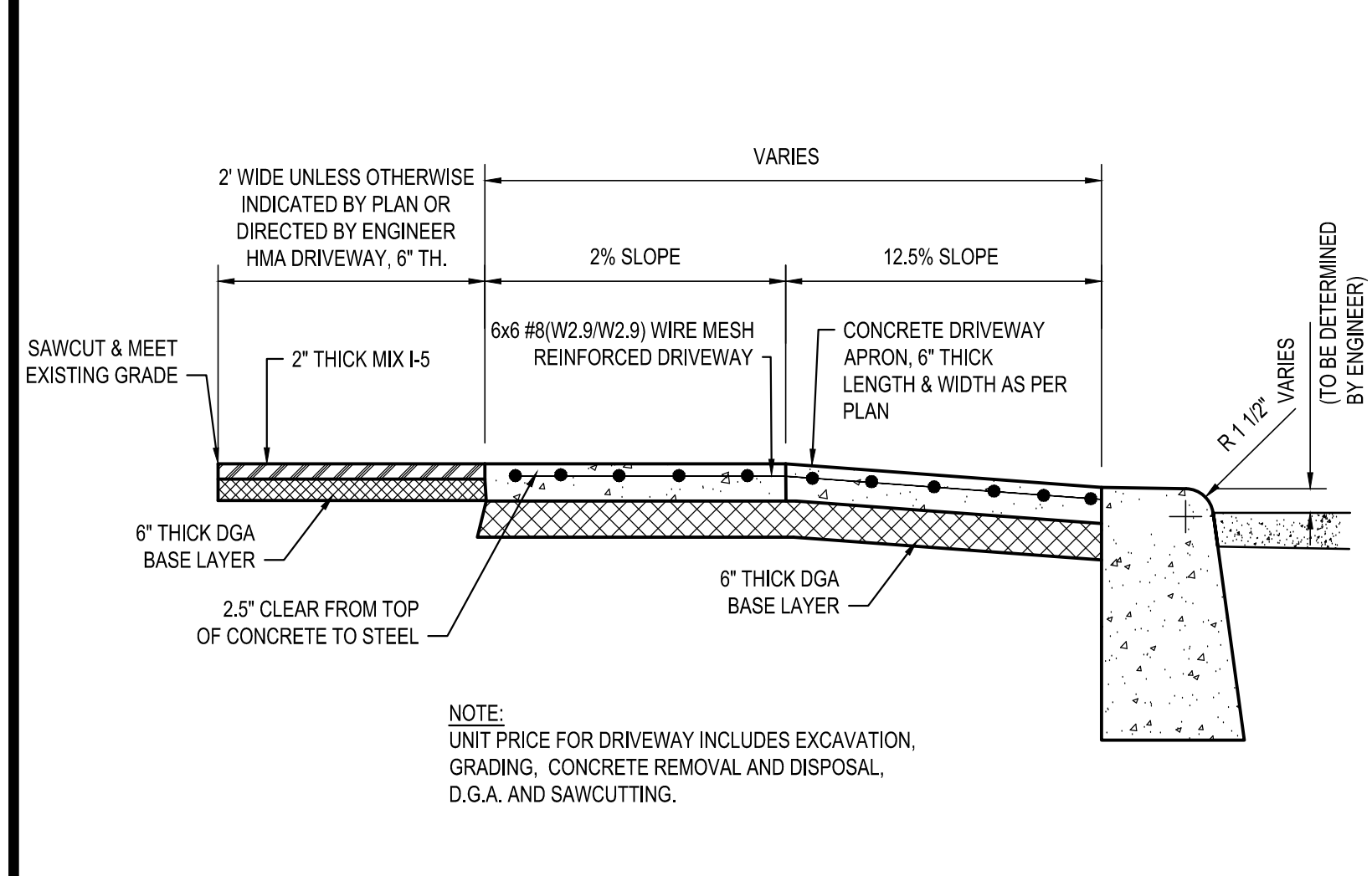
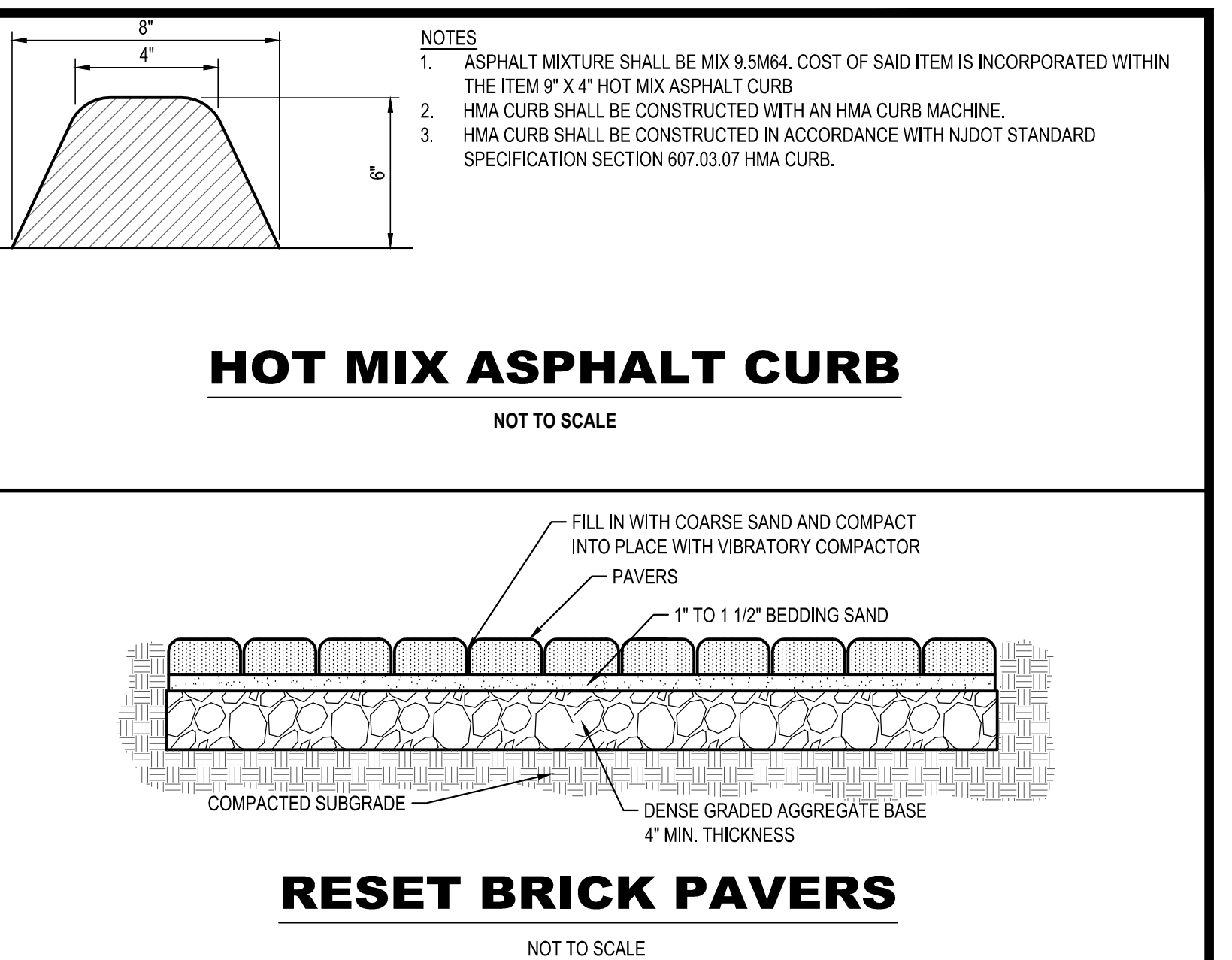
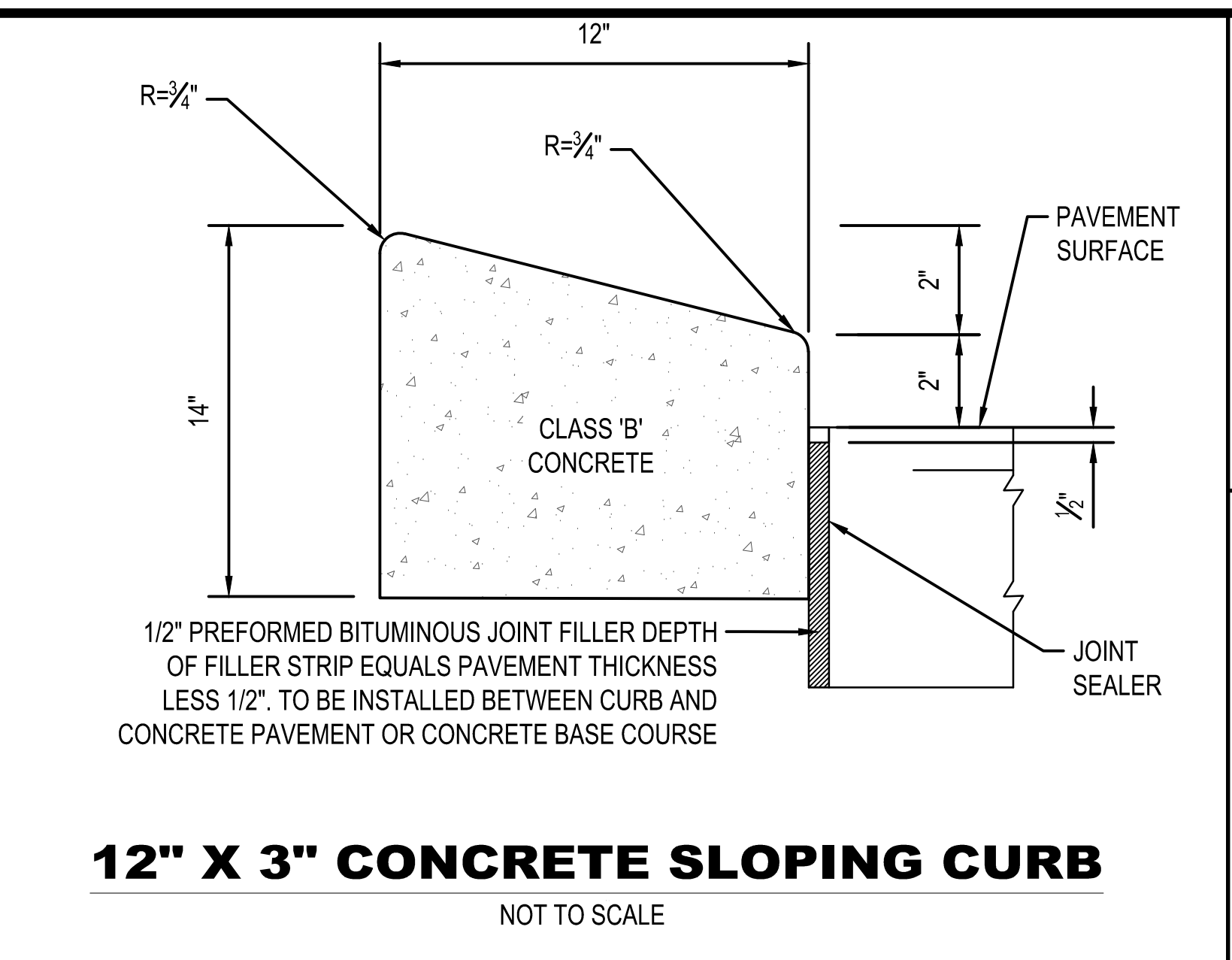
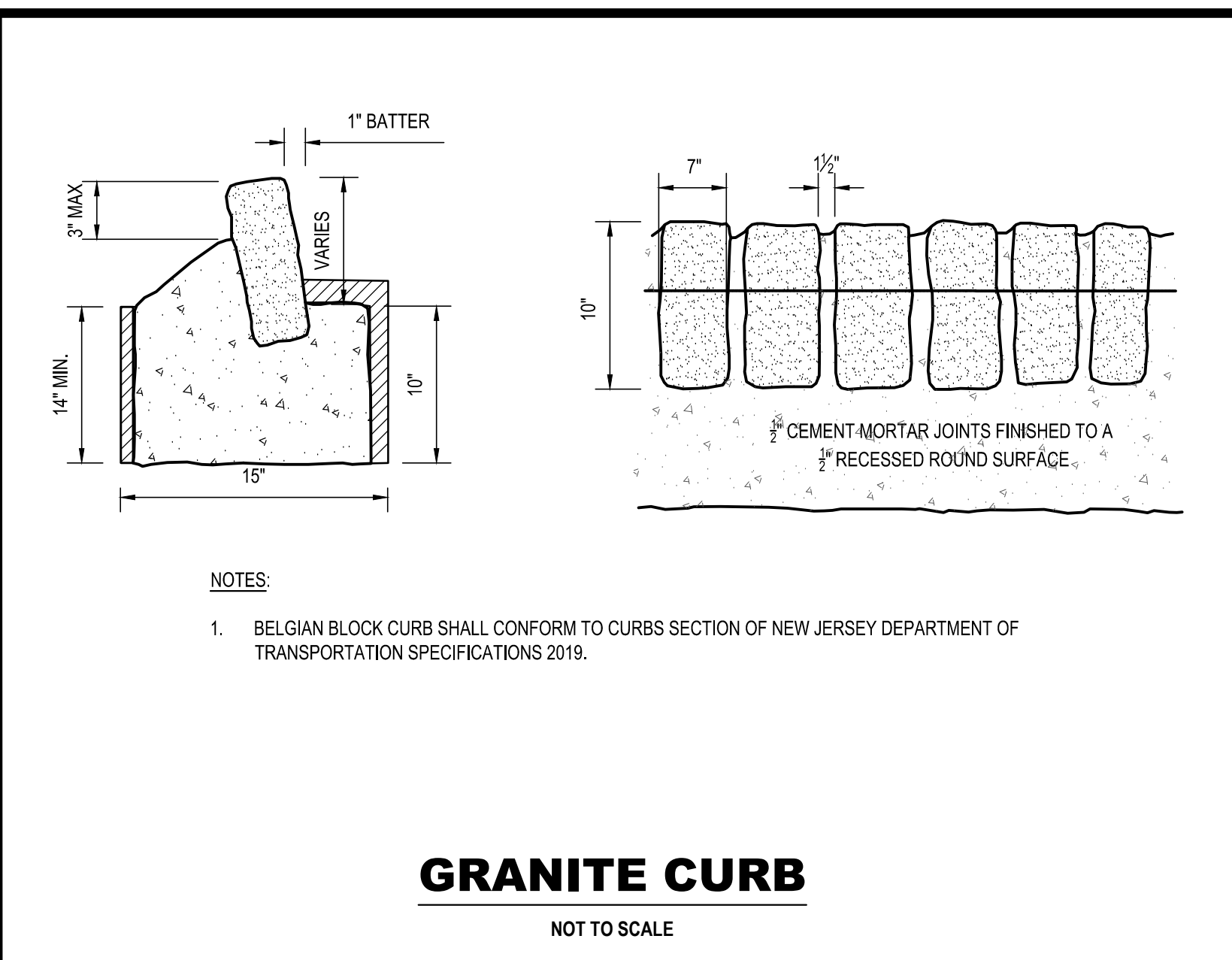
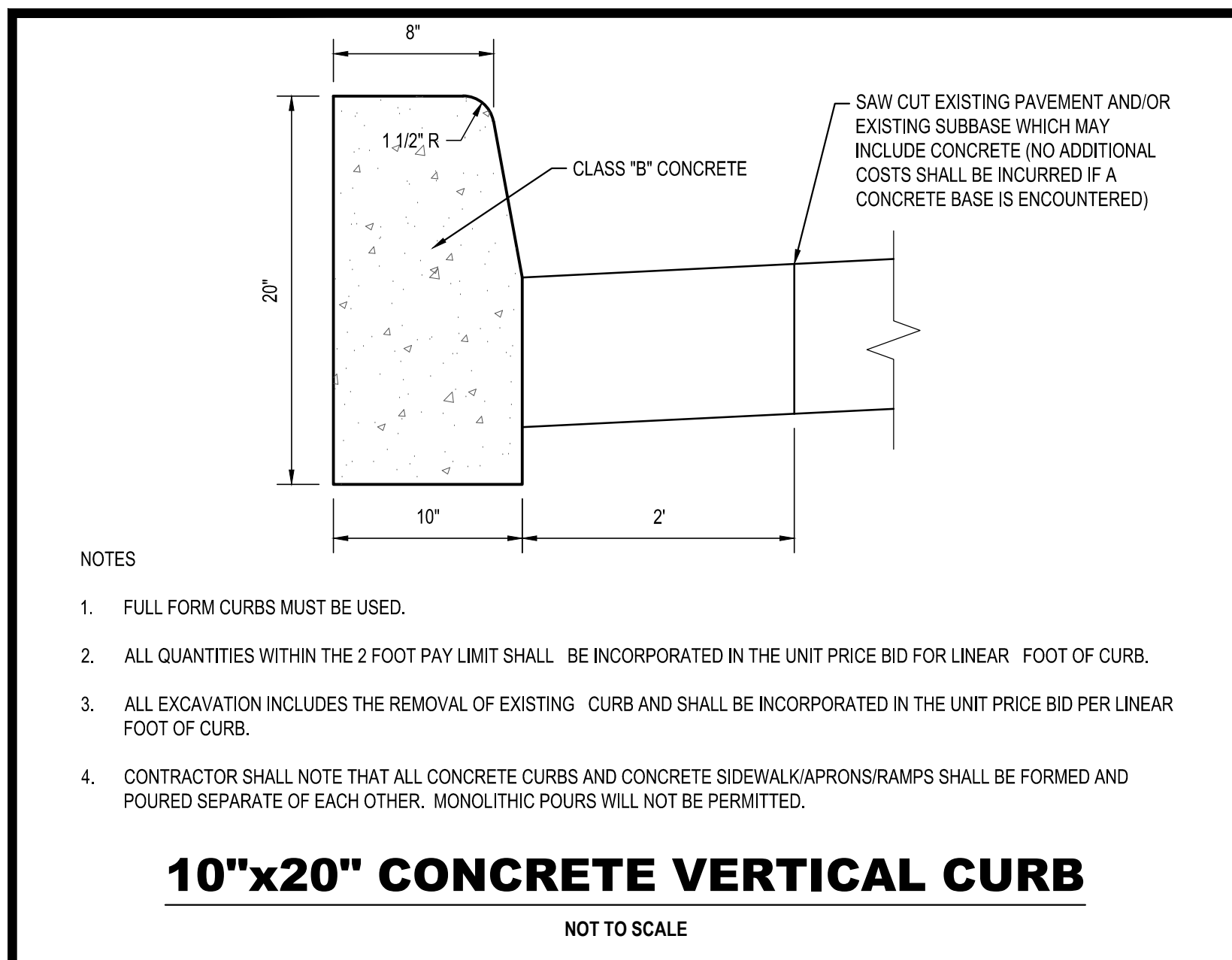
6.0 % GUTTER LINE PROFILE				
H INCHES	W FEET	X _{1U} FEET	X _{1L} FEET	L ₁ FEET
3	4' MIN. 7' MAX.	10.73	1.74	16.47
4		14.31	2.33	20.63
5		17.90	2.91	24.79
6		21.50	3.49	28.94
7		25.10	4.07	33.09
8		28.70	4.65	37.25
9		32.30	5.23	41.41

4.0 % GUTTER LINE PROFILE							
H INCHES	W FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET		
3	2.75	2.75	1.75	0.62	6.37		
4			3.68	1.29	8.97		
5			5.60	1.97	11.57		
6			7.53	2.64	14.17		
7			9.45	3.32	16.77		
8			11.38	4.00	19.37		
9			13.30	4.67	21.97		
3			3.0	3.0	1.39	0.49	5.88
4					3.31	1.16	8.48
5	5.24	1.84			11.08		
6	7.16	2.52			13.68		
7	9.09	3.19			16.28		
8	11.01	3.87			18.88		
9	12.94	4.54			21.48		
3	3.5	3.5			0.66	0.23	4.89
4					2.58	0.91	7.49
5			4.51	1.58	10.09		
6			6.43	2.26	12.69		
7			8.36	2.93	15.29		
8			10.28	3.61	17.89		
9			12.20	4.29	20.49		
3			4.0	4.0	**	**	**
4					1.85	0.65	6.50
5	3.78	1.33			9.10		
6	5.70	2.00			11.70		
7	7.62	2.68			14.30		
8	9.55	3.35			16.90		
9	11.47	4.03			19.50		

5.0 % GUTTER LINE PROFILE							
H INCHES	W FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET		
3	2.75	2.75	2.28	0.57	6.85		
4			4.78	1.19	9.98		
5			7.29	1.82	13.10		
6			9.79	2.45	16.23		
7			12.29	3.07	19.36		
8			14.79	3.70	22.49		
9			17.29	4.32	25.62		
3			3.0	3.0	1.80	0.45	6.26
4					4.31	1.08	9.38
5	6.81	1.70			12.51		
6	9.31	2.33			15.64		
7	11.81	2.95			18.77		
8	14.32	3.58			21.89		
9	16.82	4.20			25.02		
3	3.5	3.5			0.85	0.21	5.07
4					3.36	0.84	8.20
5			5.86	1.46	11.32		
6			8.36	2.09	14.45		
7			10.86	2.71	17.58		
8			13.37	3.34	20.71		
9			15.87	3.96	23.84		
3			4.0	4.0	**	**	**
4					2.41	0.60	7.01
5	4.91	1.23			10.14		
6	7.41	1.85			13.26		
7	9.91	2.48			16.39		
8	12.42	3.10			19.52		
9	14.92	3.73			22.65		

6.0 % GUTTER LINE PROFILE							
H INCHES	W FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET		
3	2.75	2.75	3.26	0.53	7.79		
4			6.84	1.11	11.95		
5			10.41	1.69	16.10		
6			13.99	2.27	20.26		
7			17.57	2.86	24.41		
8			21.15	3.44	28.57		
9			24.73	4.02	32.72		
3			3.0	3.0	2.58	0.42	7.00
4					6.16	1.00	11.16
5	9.73	1.58			15.31		
6	13.31	2.16			19.47		
7	16.89	2.75			23.62		
8	20.47	3.33			27.78		
9	24.05	3.91			31.93		
3	3.5	3.5			1.22	0.20	5.42
4					4.80	0.78	9.58
5			8.37	1.36	13.74		
6			11.95	1.94	17.89		
7			15.53	2.52	22.05		
8			19.11	3.10	26.20		
9			22.69	3.69	30.36		
3			4.0	4.0	**	**	**
4					3.44	0.56	8.00
5	7.02	1.14			12.16		
6	10.59	1.72			16.31		
7	14.17	2.30			20.47		
8	17.75	2.89			24.62		
9	21.33	3.47			28.78		

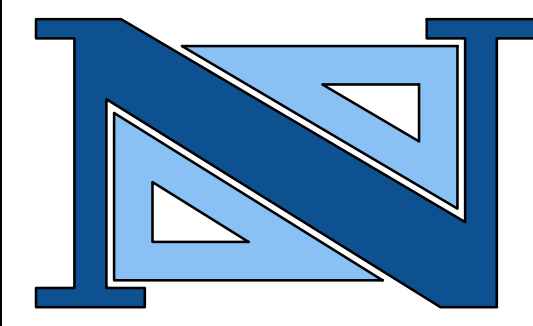
7.0 % GUTTER LINE PROFILE					
H INCHES	W FEET	Y INCHES	X _{2U} FEET	X _{2L} FEET	L ₂ FEET
3	2.75	2.75	5.71	0.50	10.20
4			11.97	1.04	17.01
5			18.23	1.58	23.82
6			24.49	2.13	30.63
7			30.75	2.67	37.4



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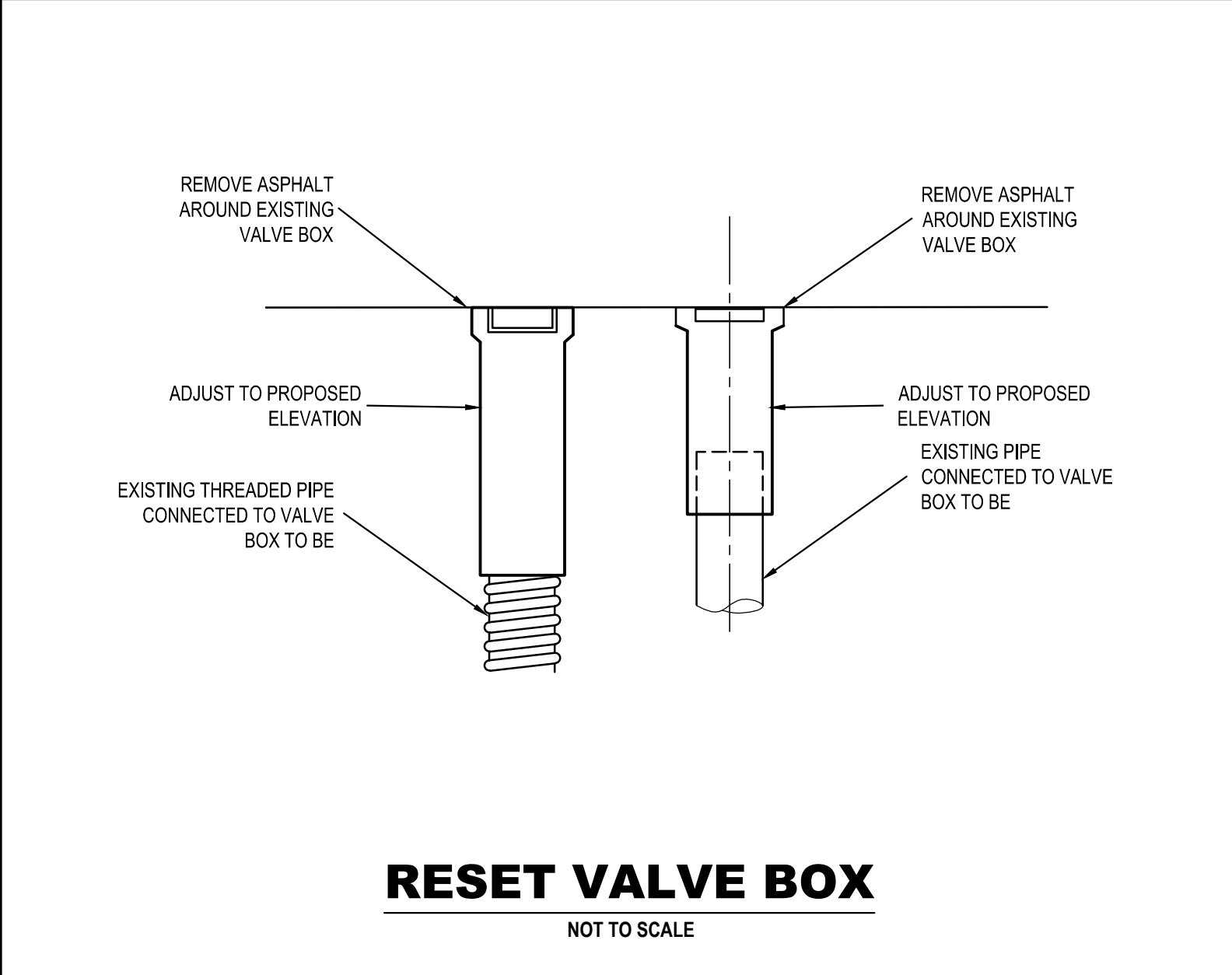
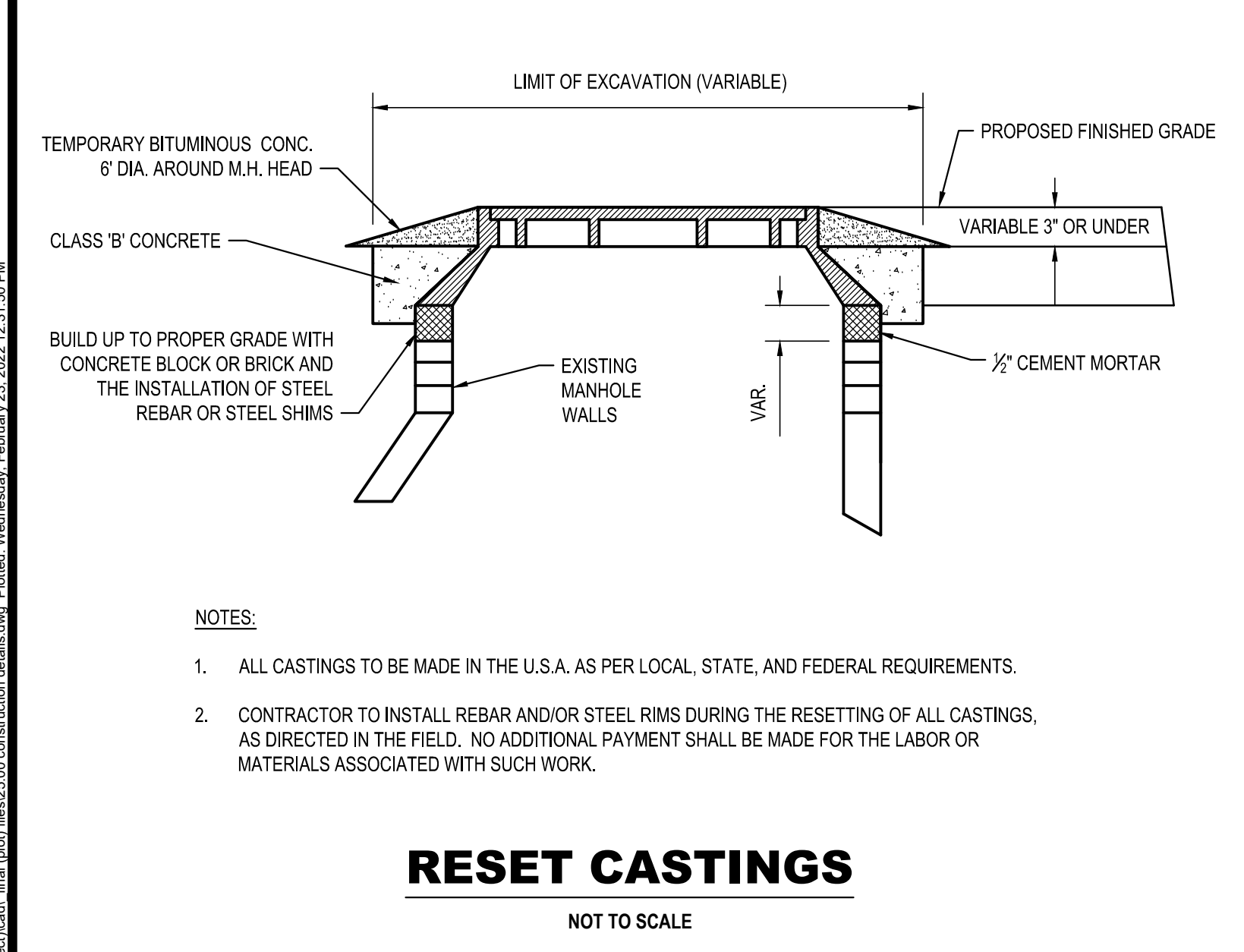
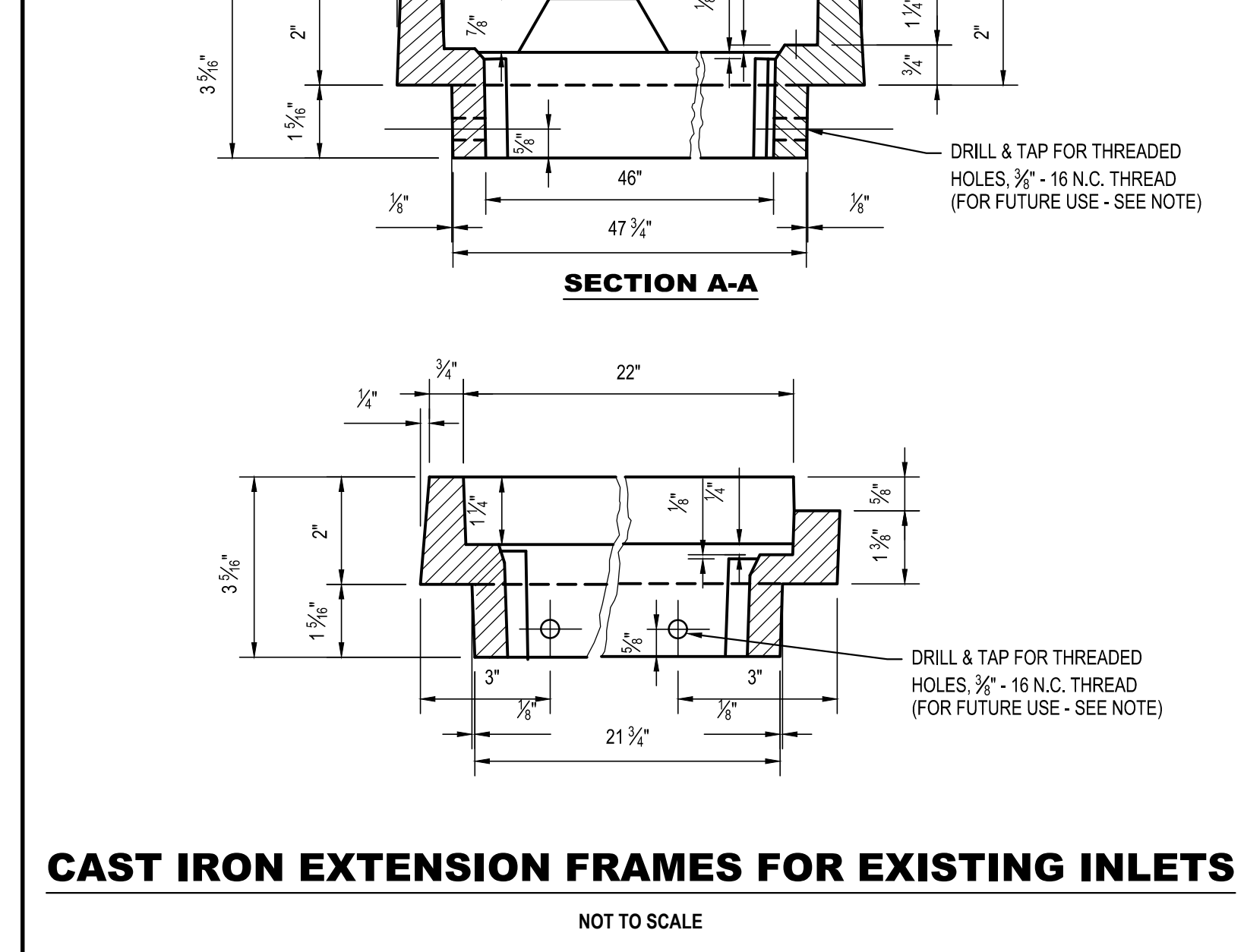
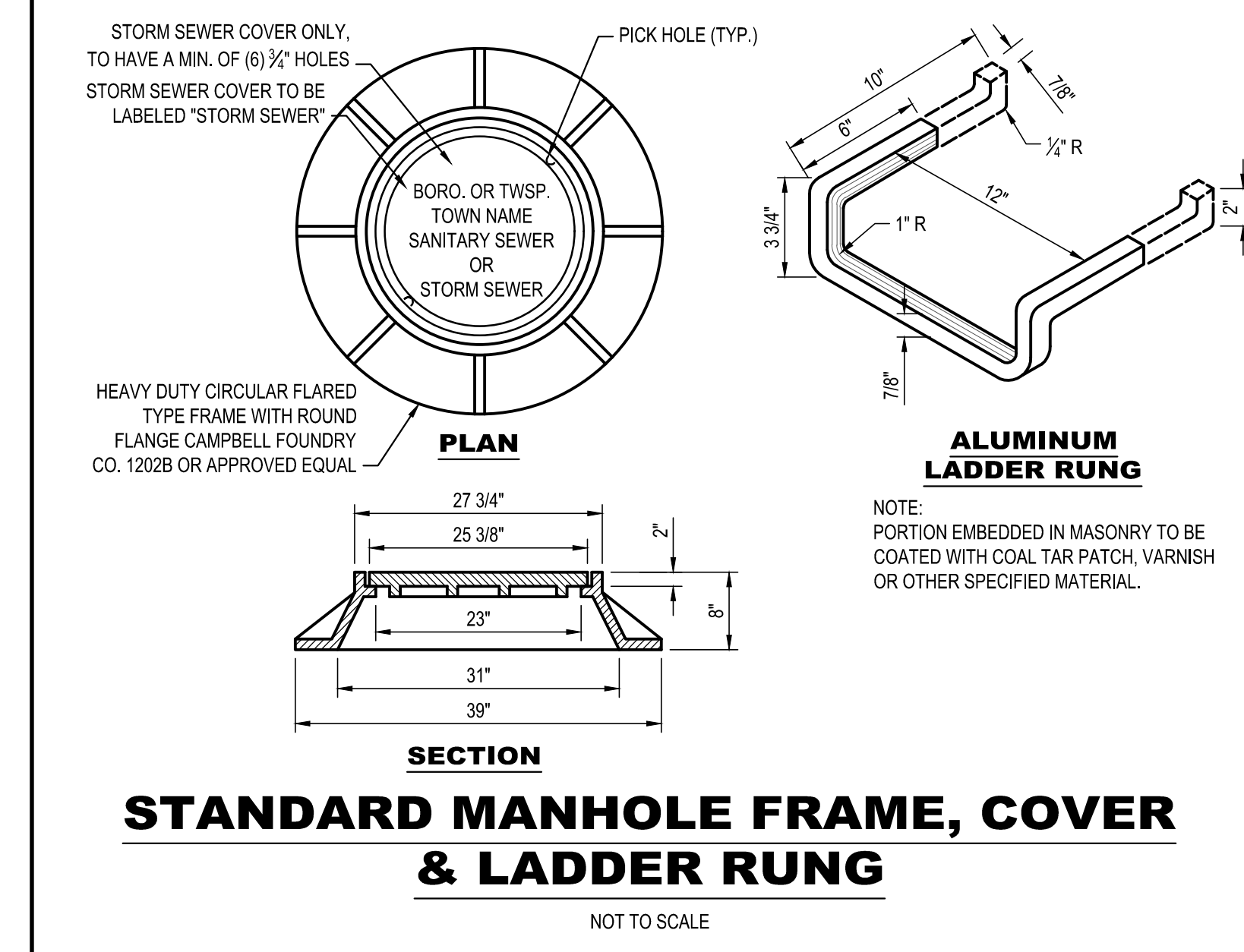
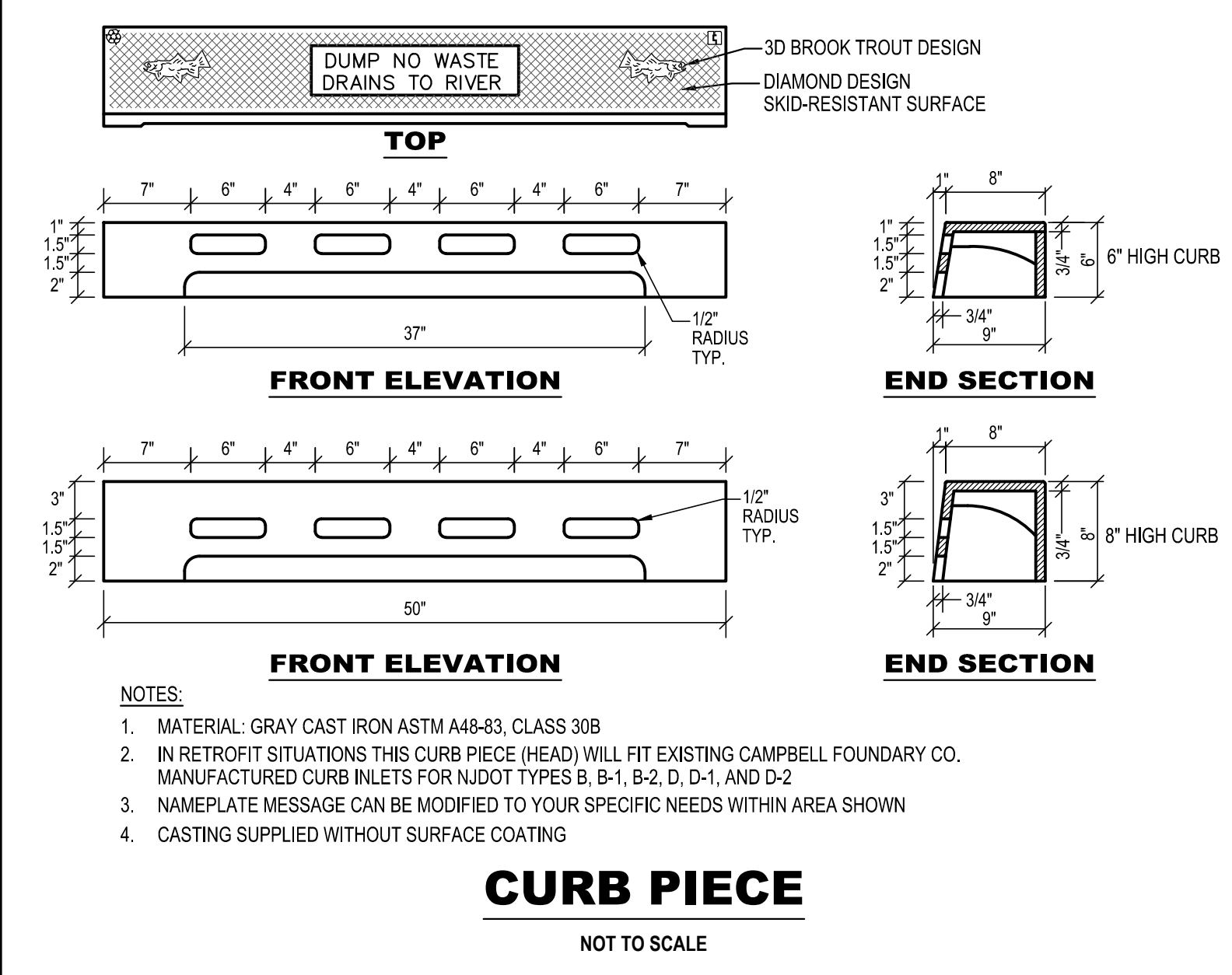
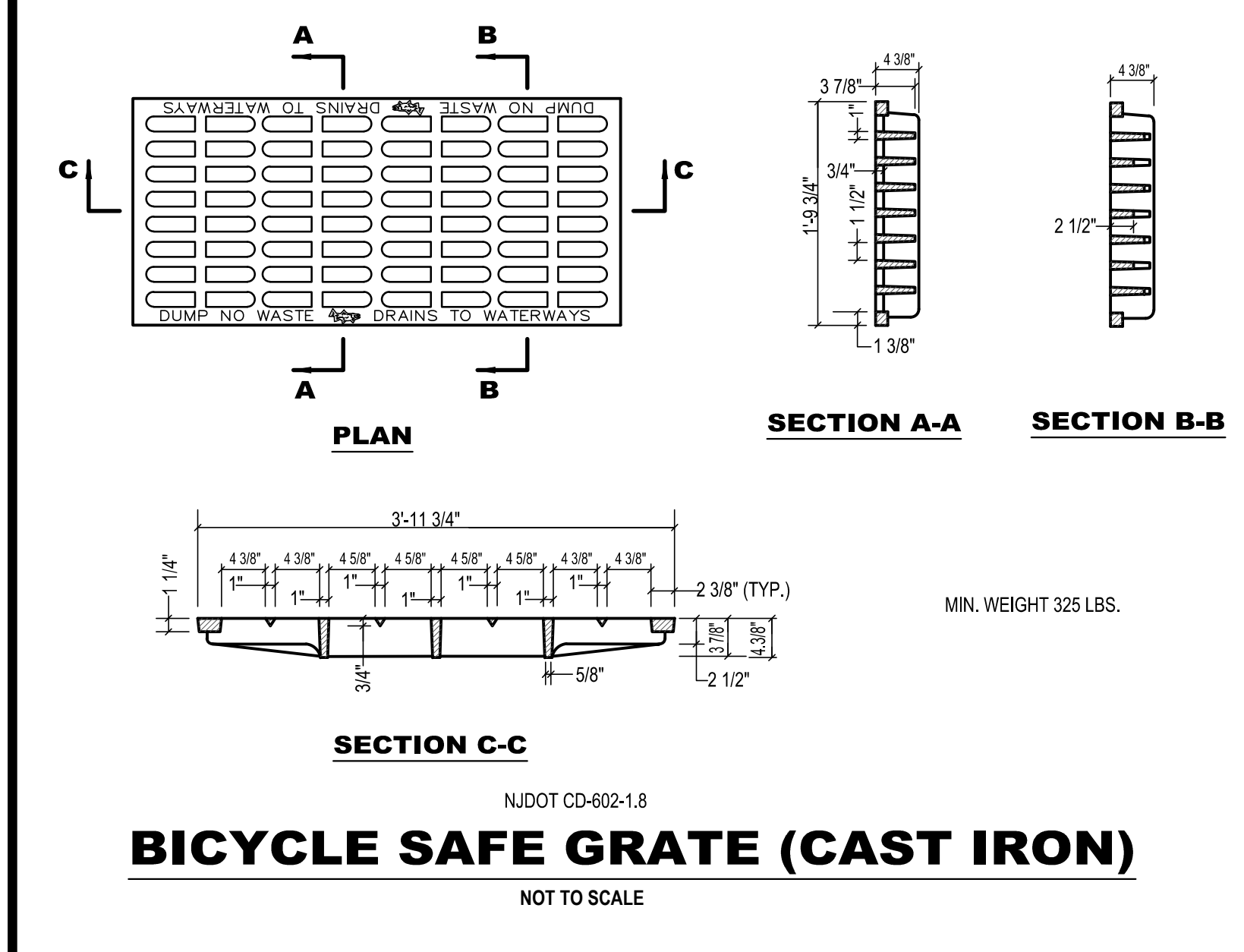
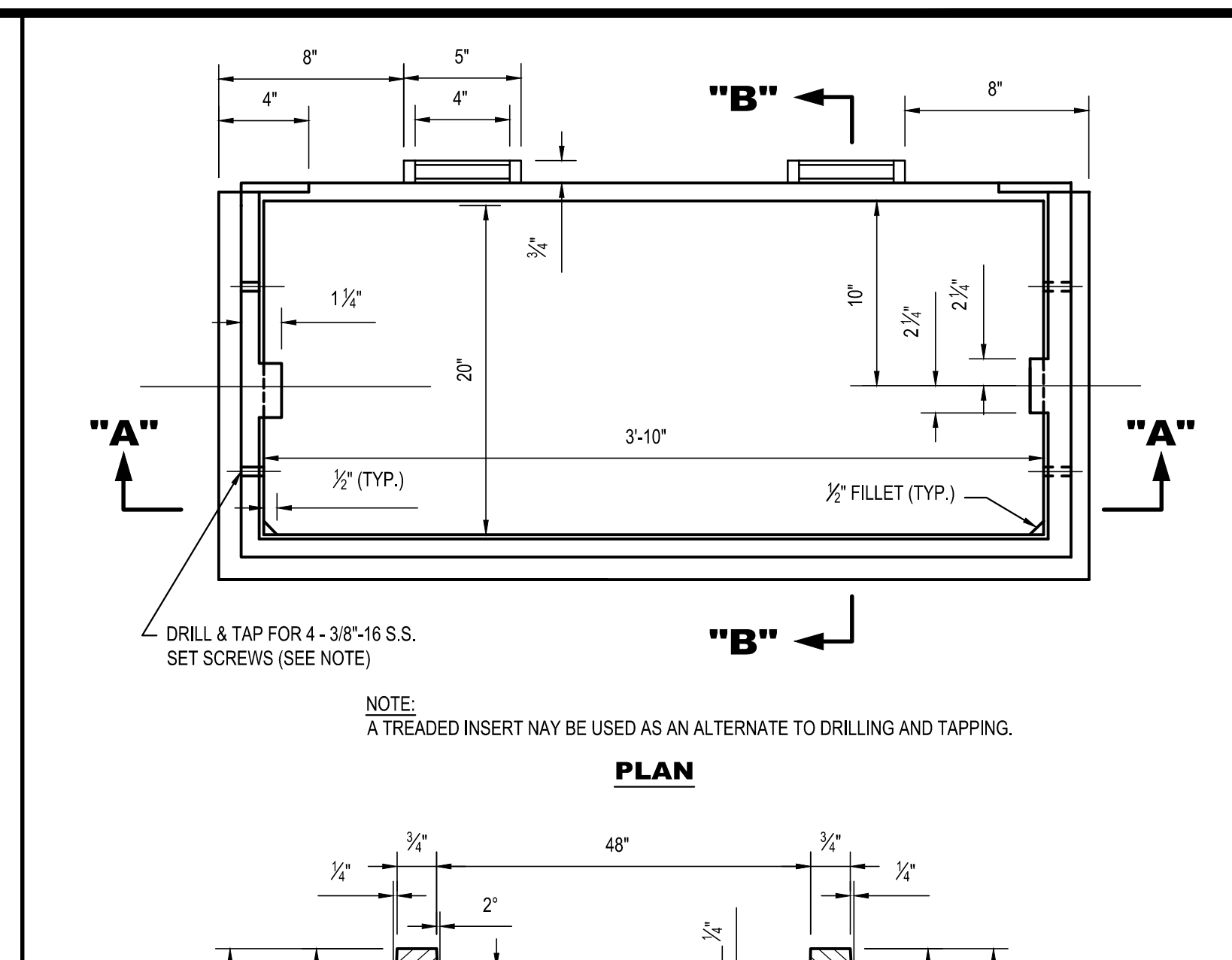
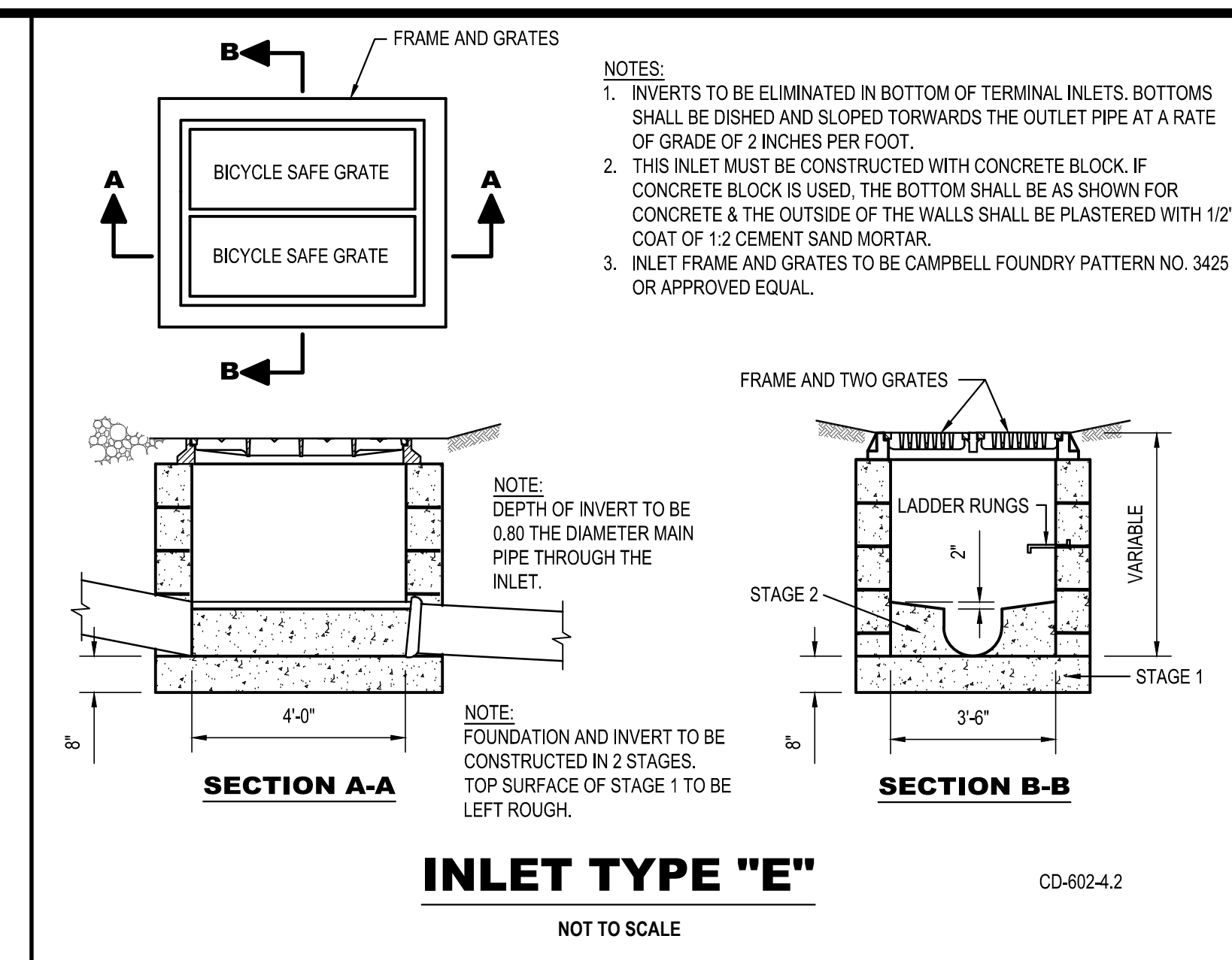
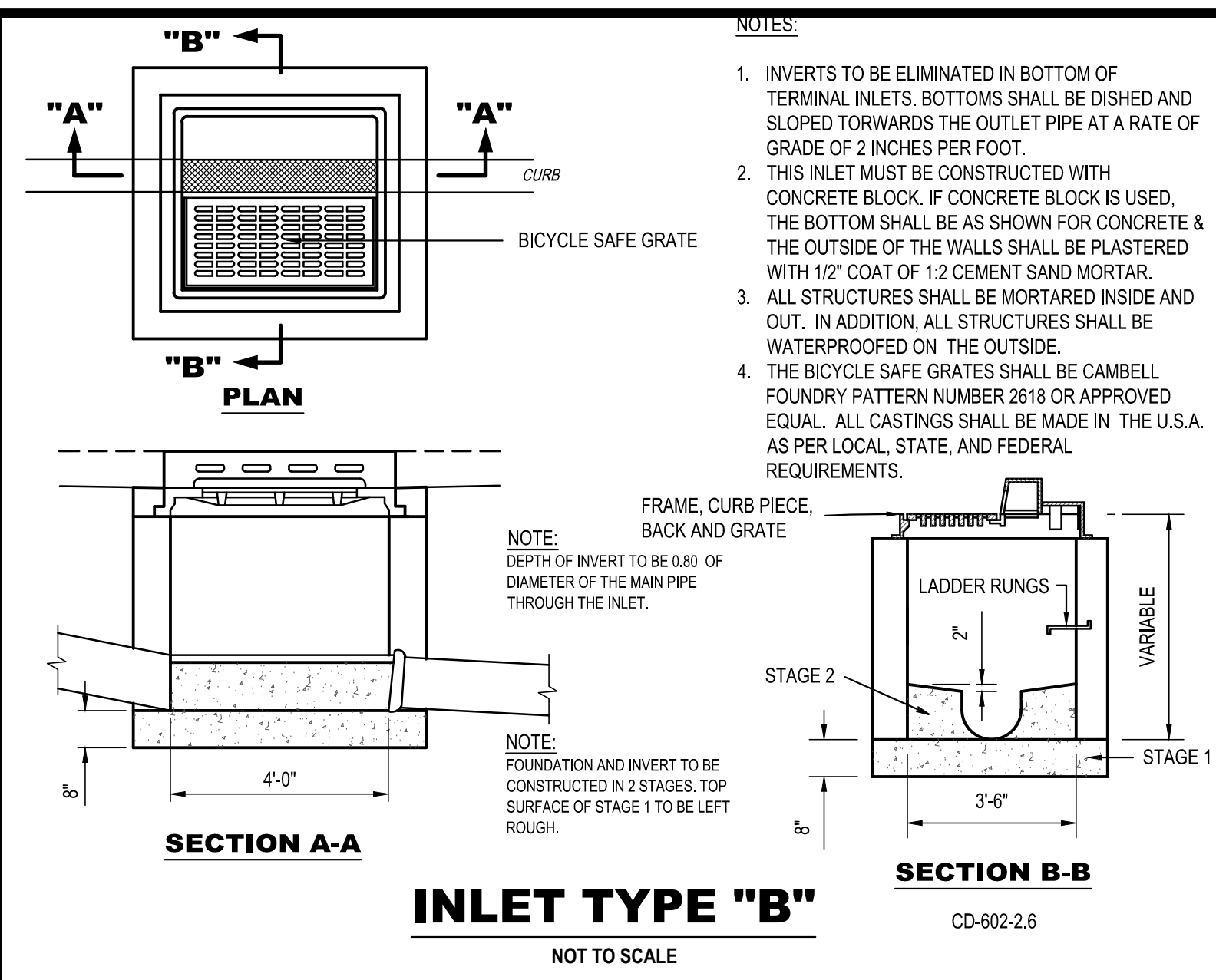
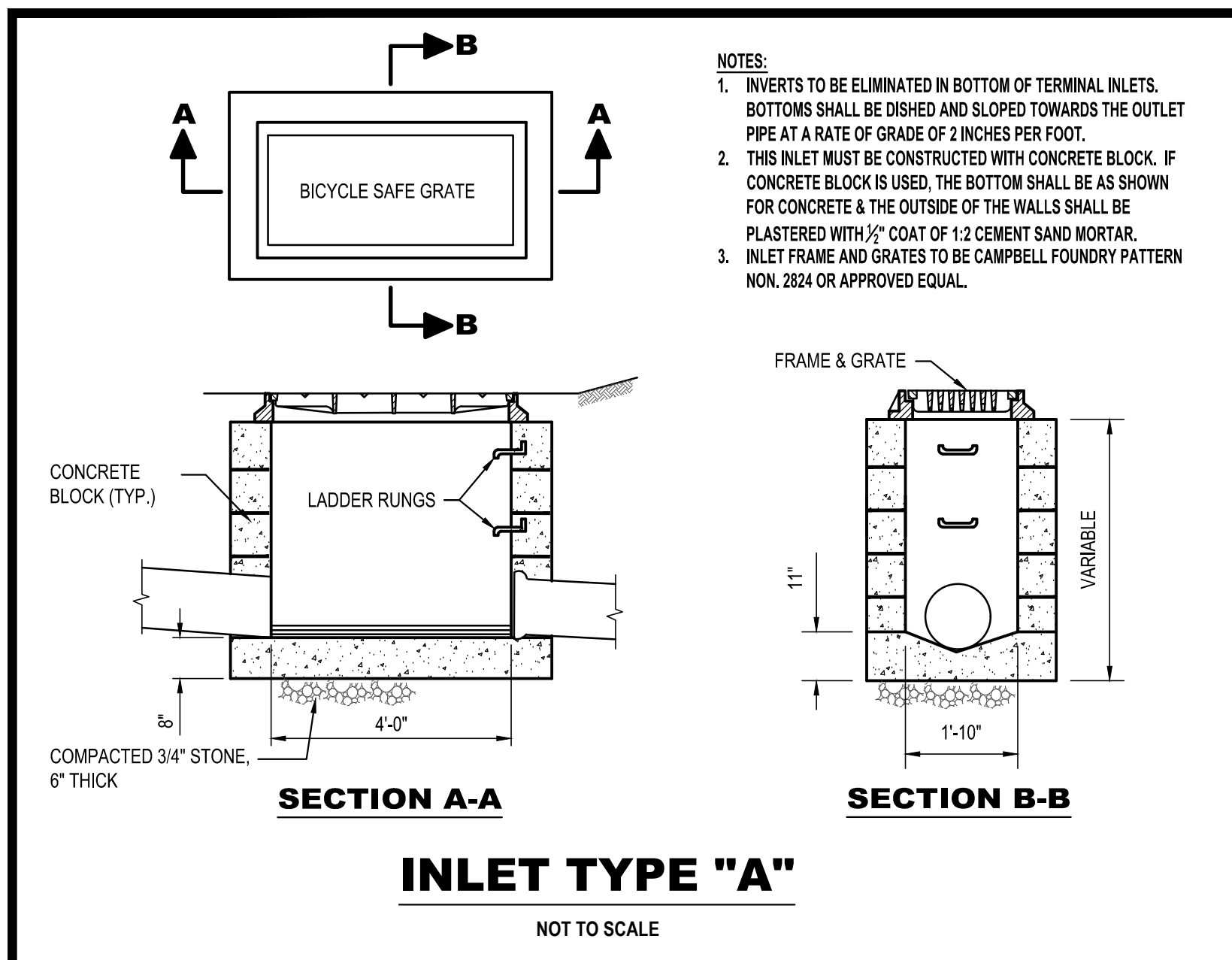
MICHAEL J. NEGLIA, P.E., P.L.S., P.P.
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CONSTRUCTION DETAILS I
2022 ROAD RESURFACING PROJECT
(CA-2021)
VARIOUS MUNICIPALITIES
UNION COUNTY NEW JERSEY

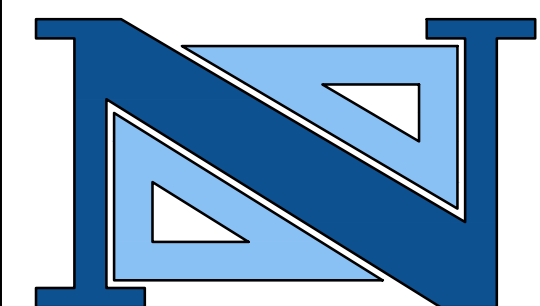
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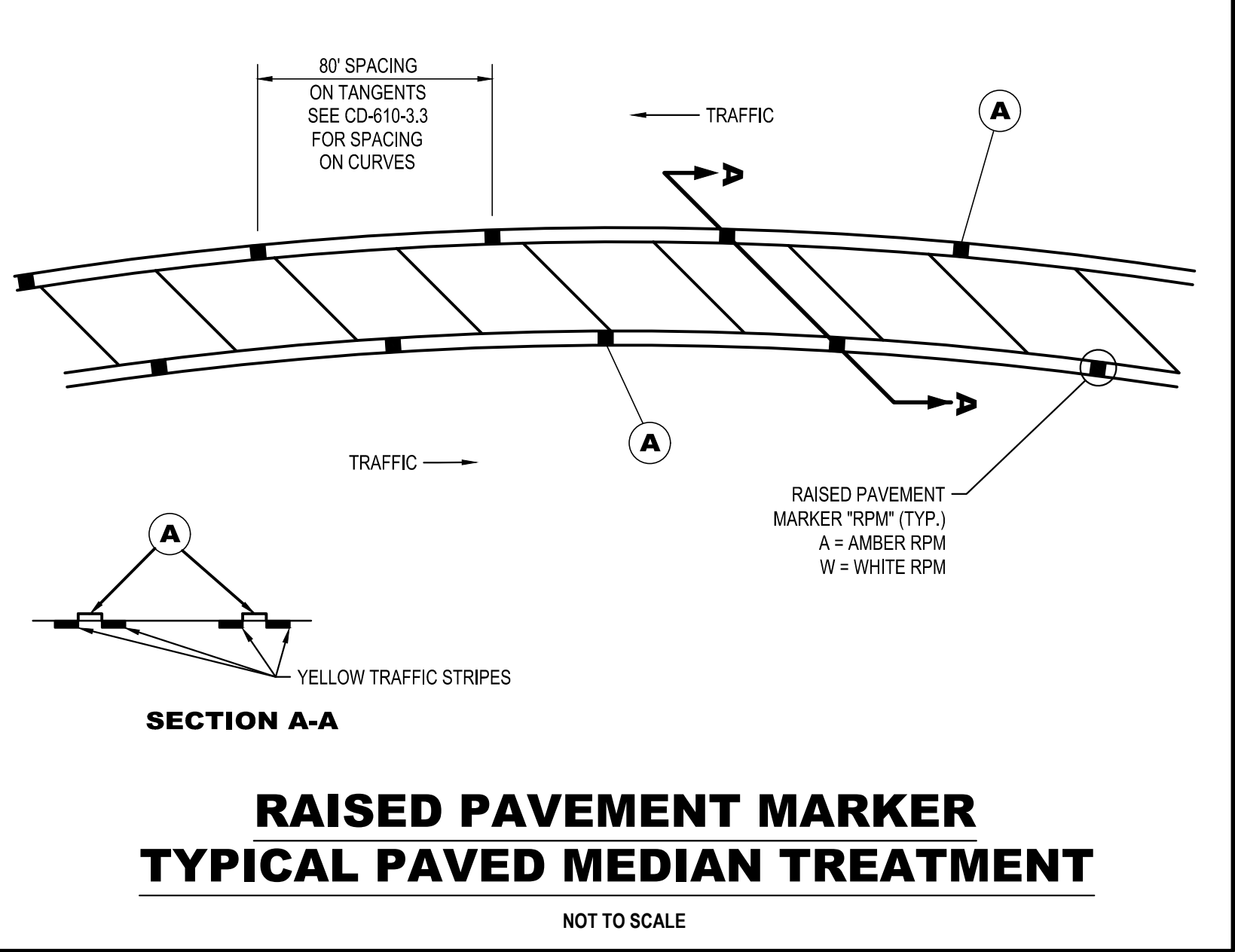
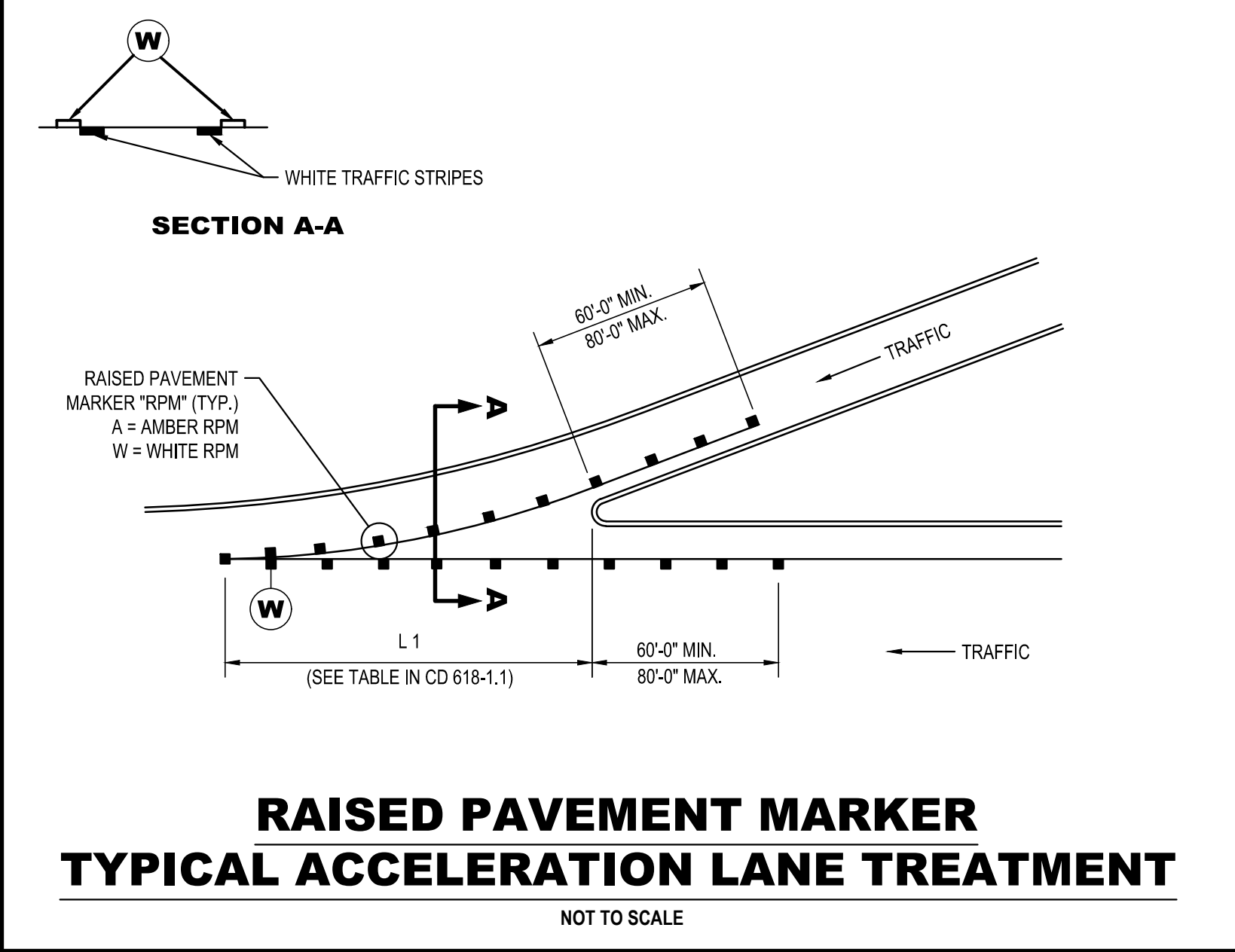
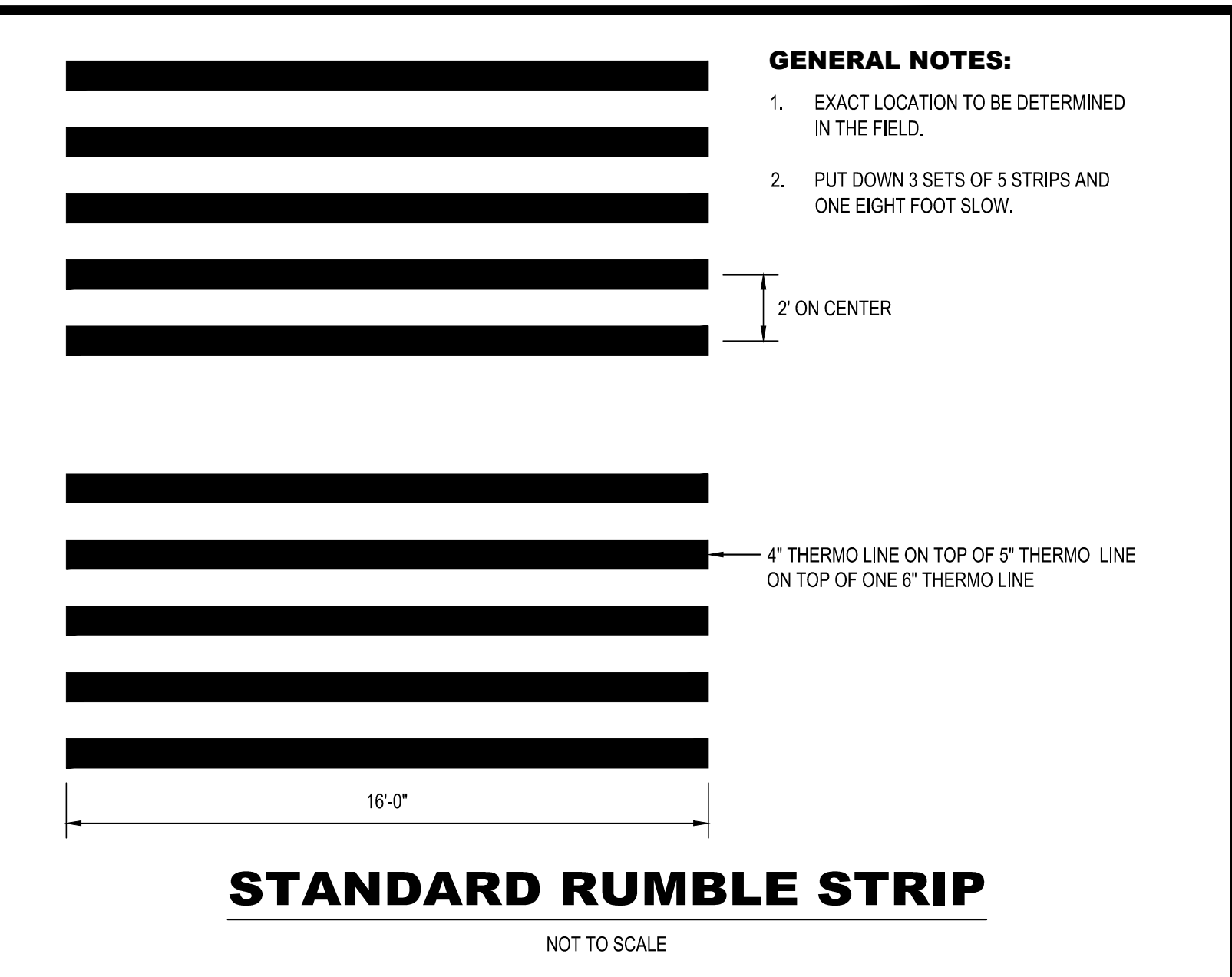
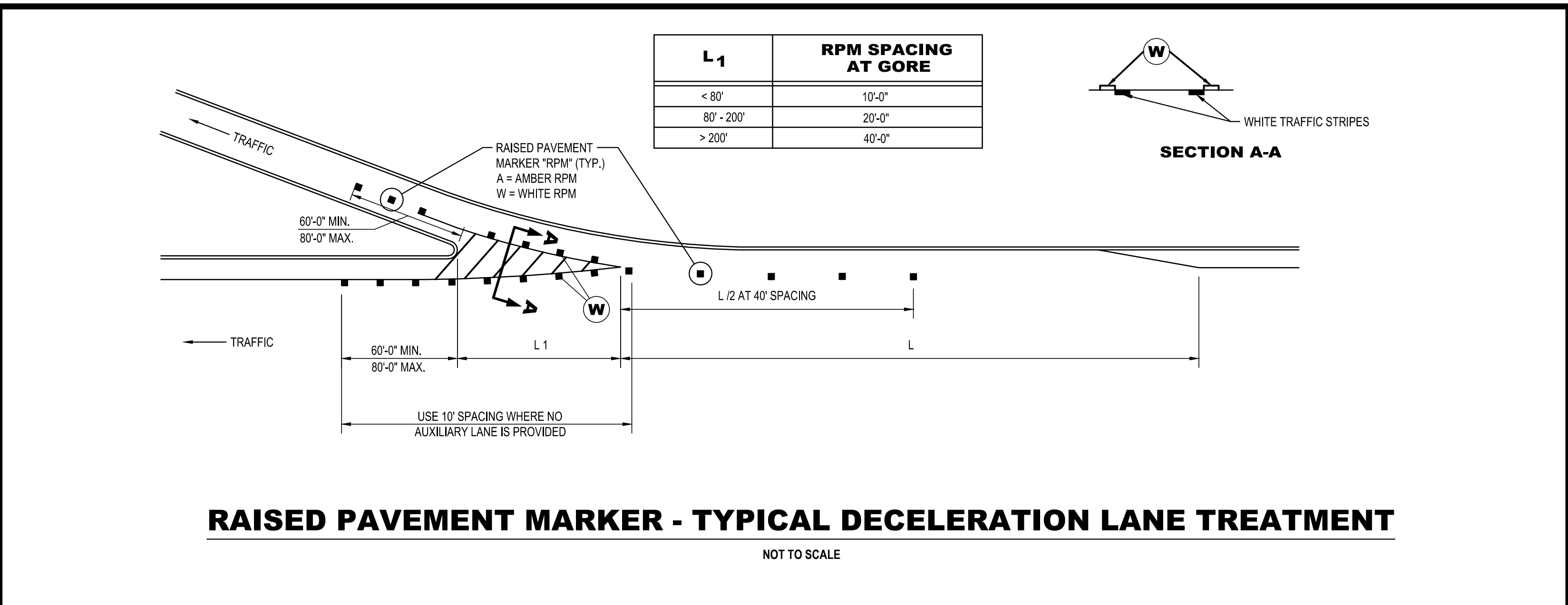
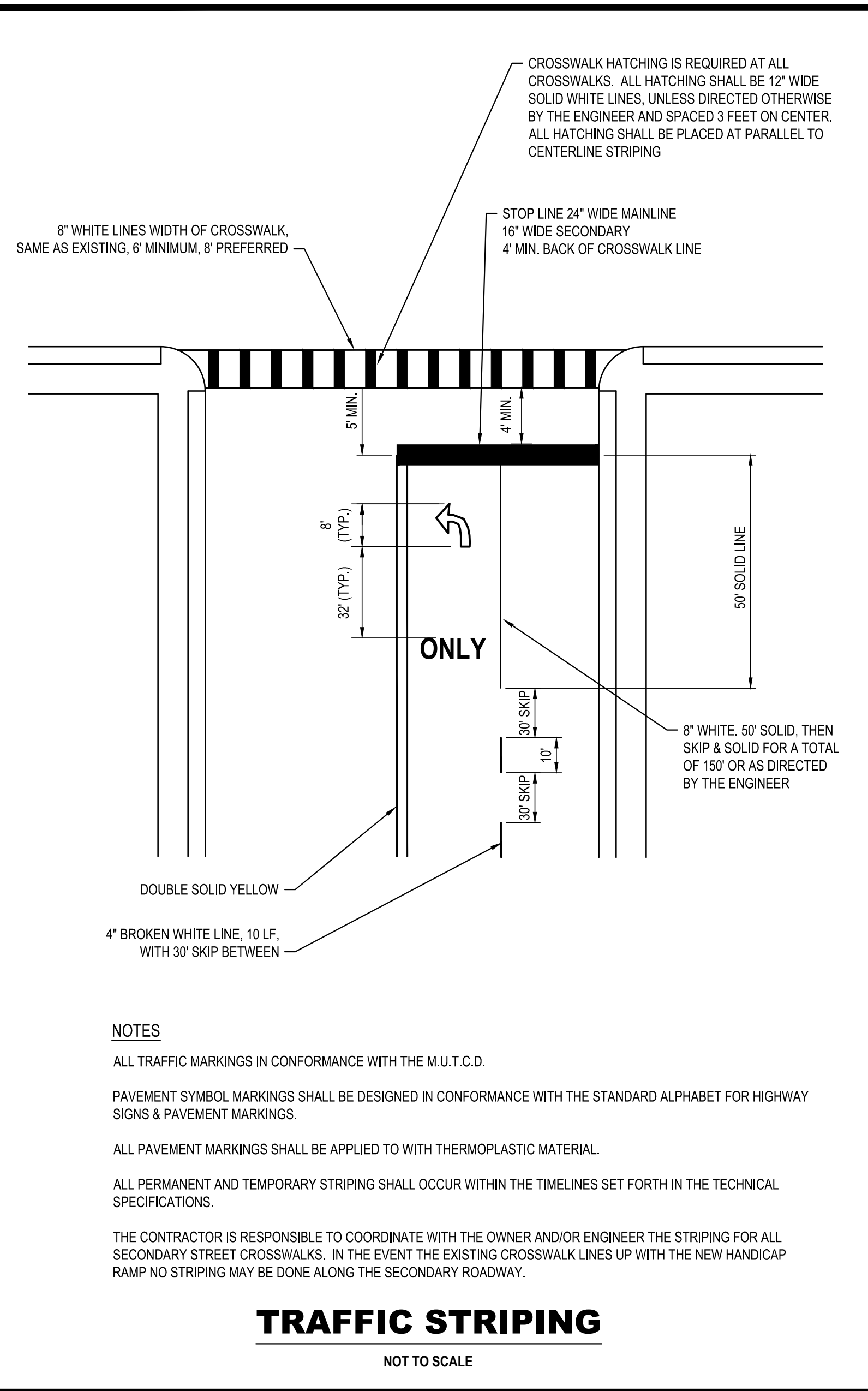
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CONSTRUCTION DETAILS II
2022 ROAD RESURFACING PROJECT
(CA-2021)
VARIOUS MUNICIPALITIES
UNION COUNTY **NEW JERSEY**

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FIELD BOOK NO.: SCALE: N.T.S. DATE: JULY 16, 2021

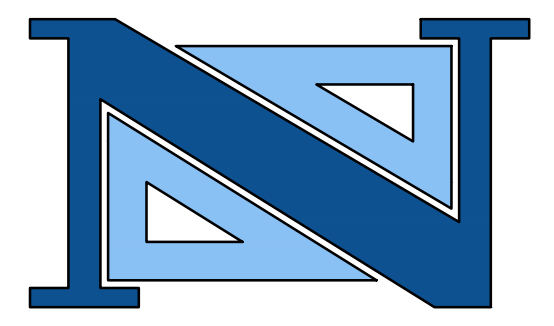


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**CONSTRUCTION DETAILS III
2022 ROAD RESURFACING PROJECT
(CA-2021)
VARIOUS MUNICIPALITIES
UNION COUNTY NEW JERSEY**

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SHEET NO: 25.02
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