COUNTY OF UNION

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

BOARD OF
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County Manager

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Deputy County Manager

BRUCE H. BERGEN, ESQ.
County Counsel

JAMES E. PELLETTIERE, RMC
Clerk of the Board

MEMORANDUM

TO: All Potential Bidders

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

DATE: December 29, 2020

RE: **ADDENDUM NUMBER 2**

2021 ROAD RESURFACING PROJECT – VARIOUS MUNICIPALITIES (CA-2020) COUNTY OF UNION, NEW JERSEY BA#4-2021; UNION COUNTY ENGINEERING PROJECT #2019-023

Attached is Addendum Number 2 dated December 29, 2020 for the above referenced project.

Please note that the attached "Addendum Number 2" form must be completed and submitted with the original bid submission packet.

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

COUNTY OF UNION

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Joseph A. Graziano Sr., Director

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Clerk of the Board

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

ADDENDUM # 2

2021 ROAD RESURFACING PROJECT – VARIOUS MUNICIPALITIES (CA-2020) COUNTY OF UNION, NEW JERSEY BA#4-2021; UNION COUNTY ENGINEERING PROJECT #2019-023

December 29, 2020

1. The "Bid Form" page B-5 located within the Bid Sheets is being revised, specifically item # 39 "Rumble Strip" is being revised to "Rumble Strip (If & Where Directed)". Page B-5 shall be replaced with the updated "Bid Form" Page B-5 denoted as Addendum #2.

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

BIDDER'S NAME:_____

ACKNOWLEDGMENT OF ADDENDUM

ADDENDUM NUMBER 2

DATED: December 29, 2020

COUNTY OF UNION

2021 ROAD RESURFACING PROJECT
VARIOUS MUNICIPALITIES (CA-2020)
COUNTY OF UNION, NEW JERSEY

BA#4-2021; UNION COUNTY ENGINEERING
PROJECT #2019-023

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.

Union County is issuing Addendum #2 for the above mentioned project as described below:

Local Unit Reference Number or Title of Addendum/Revision **ADDENDUM NUMBER 2:**	**How Received (mail, fax, pick-up, etc.)**	**Date Received**
1. The "Bid Form" page B-5 located within the Bid Sheets is being revised, specifically item # 39 "Rumble Strip" is being revised to "Rumble Strip (If & Where Directed)". Page B-5 shall be replaced with the updated "Bid Form" Page B-5 denoted as Addendum #2, 12/24/2020;		

ACKNOWLEDGMENT BY BIDDER:

NAME OF BIDDER: _____

ORIGINAL SIGNATURE: _____

PRINTED NAME AND TITLE:_____

DATE: _____

Bidder's Name_____

ITEM NO	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	AMOUNT
18	CURB PRICE	UNIT	11		
19	BICYCLE SAFE GRATE	UNIT	12		
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	925		
21	RESET WATER VALVE BOX	UNIT	285		
22	RESET GAS VALVE BOX	UNIT	39		
23	INLET, TYPE B	UNIT	1		
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	10		
25	15" REINFORCED CONCRETE PIPE	LF	275		
26	INLET FILTER TYPE 2, 2' X 4'	UNIT	2		
27	10" X 20" CONCRETE VERTICAL CURB	LF	7,320		
28	GRANITE CURB	LF	150		
29	CONCRETE SIDEWALK, 4" THICK	SY	3,300		
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	4,505		
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	310		
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY	100		
33	TRAFFIC STRIPES, 4"	LF	207,820		
34	TRAFFIC STRIPES, 6"	LF	750		
35	TRAFFIC STRIPES, 8"	LF	10,260		
36	TRAFFIC MARKING, LINES 12"	LF	16,870		
37	TRAFFIC MARKING, LINES 24"	LF	4,860		
38	TRAFFIC MARKINGS, SYMBOLS	SF	4,765		
39	RUMBLE STRIP (IF & WHERE DIRECTED)	LF	300		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	1,530		
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF	150,000		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAT SUPPORT	SF	1,250		
43	ACCESSORY PANEL, TYPE DF	SF	1,250		
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF	500		

COUNTY OF UNION

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

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Clerk of the Board

MEMORANDUM

TO: All Potential Bidders

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

DATE: December 21, 2020

RE: **ADDENDUM NUMBER 1**

2021 ROAD RESURFACING PROJECT – VARIOUS MUNICIPALITIES (CA-2020)
COUNTY OF UNION, NEW JERSEY
BA#4-2021; UNION COUNTY ENGINEERING PROJECT #2019-023

Attached is Addendum Number 1 dated December 21, 2020 for the above referenced project.

Please note that the attached "Addendum Number 1" form must be completed and submitted with the original bid submission packet.

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

COUNTY OF UNION

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

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Clerk of the Board

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

ADDENDUM # 1

2021 ROAD RESURFACING PROJECT – VARIOUS MUNICIPALITIES (CA-2020)
COUNTY OF UNION, NEW JERSEY
BA#4-2021; UNION COUNTY ENGINEERING PROJECT #2019-023

December 21, 2020

1. The "Deck Surface Sealer" and "Deck Joint Filler and Sealer" specifications shall be added to the technical specifications denoted as Addendum #1, 12/21/2020;

2. The "Bid Form" page B-4 located within the Bid Sheets is being revised, specifically item # 14 "Deck Joint Repair" is being removed". Page B-4 shall be replaced with the updated "Bid Form" Page B-4 denoted as Addendum #1, 12/21/2020;

BIDDER'S NAME:_____

ACKNOWLEDGMENT OF ADDENDUM

ADDENDUM NUMBER 1

DATED: December 21, 2020

COUNTY OF UNION

2021 ROAD RESURFACING PROJECT
VARIOUS MUNICIPALITIES (CA-2020)
COUNTY OF UNION, NEW JERSEY

BA#4-2021; UNION COUNTY ENGINEERING PROJECT #2019-023

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.

Union County is issuing Addendum #1 for the above mentioned project as described below:

Local Unit Reference Number or Title of Addendum/Revision **ADDENDUM NUMBER 1:**	**How Received (mail, fax, pick-up, etc.)**	**Date Received**
1. The "Deck Surface Sealer" and "Deck Joint Filler and Sealer" specifications shall be added to the technical specifications denoted as Addendum #1, 12/18/2020		
2. The "Bid Form" page B-4 located within the Bid Sheets is being revised, specifically item # 14 "Deck Joint Repair" is being removed". Page B-4 shall be replaced with the updated "Bid Form" Page B-4 denoted as Addendum #1, 12/18/2020;		

ACKNOWLEDGMENT BY BIDDER:

NAME OF BIDDER: _____

ORIGINAL SIGNATURE: _____

PRINTED NAME AND TITLE:_____

DATE: _____

DECK SURFACE SEALER

PART 1 – GENERAL

1.1 SUMMARY

A. Fluid-applied waterproofing includes:

1. Application to seal top of bridge deck.

1.2 PERFORMANCE REQUIREMENTS

A. Provide waterproofing measures that establish and maintain watertight condition.

1.3 SUBMITTALS

A. Submit manufacturer's product specifications, handling, installation and curing instructions, and performance tested data sheets for each product required.

B. Submit certificates from manufacturers of joint sealers attesting that their products comply with specification requirements and are suitable for the use indicated.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Engage an installer who has successfully completed within the last 3 years at least 3 waterproofing applications similar in type and size to that of this project and who will assign mechanics from these earlier applications to this project, of which one will serve as lead mechanic.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to project site in original unopened containers or bundles with labels indicating manufacturer, product name, and expiration date as applicable.

B. Store and handle materials to prevent their deterioration or damage due to moisture, temperature changes, contaminants, or other causes.

1.6 JOB CONDITIONS

A. Do not proceed with installation of products under the following conditions:

1. When ambient and substrate temperature conditions are outside the limits permitted by joint sealer manufacturer or below 40oF.

2. When joint substrates are wet due to rain, frost, condensation, or other causes.

B. Substrate Conditions: Do not proceed with installation of products until contaminants capable of interfering with adhesion are removed from substrates.

PART 2 - PRODUCTS

2.1 SHEET WATERPROOFING

A. Self-adhering waterproof membrane for substructures: Provide cold-applied, flexible, preformed waterproof membrane conforming to ASTM D624. Use Bituthene 3000/3000 HC or approved equal.

2.2 FLUID APPLIED WATERPROOFING

A. Fluid applied waterproofing for below grade deck waterproofing: Provide hotpoured liquid asphalt conforming to ASTM D449, Type I.

2.3 MISCELLANEOUS MATERIALS

A. Protection board for vertical waterproofing applications. Use Bituthene Protection Board or approved equal.

B. Protection board for horizontal waterproofing applications. Use protection course #712 as manufactured by WR Meadows or approved equal.

PART 3 - EXECUTION

3.1 INSPECTION

A. Installer shall inspect substrate indicated to receive waterproofing for compliance with requirements for surface preparation. Do not allow joint work to proceed until unsatisfactory conditions have been corrected.

3.2 SURFACE PREPARATION

A. Clean surfaces immediately before installation to comply with recommendations of manufacturers and the following requirements:

1. Remove all foreign materials from joint substrates which could interfere with adhesion of joint sealer, including rust; paints, except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer; old joint sealers; oil; grease; waterproofing; water repellents; water; surface dirt; and frost.

2. Clean concrete, masonry, unglazed surfaces of ceramic tile and similar porous joint substrate surfaces, by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond. Remove loose particles remaining from above cleaning operations by vacuuming or blowing with oil-free compressed air.

3. Remove laitance and form release agents from concrete.

B. Prime surfaces where indicated, and where recommended by manufacturer. Confine primer/sealer to areas of work; do not allow spillage or migration onto adjoining surfaces.

3.3 INSTALLATION

A. Sheet Waterproofing

1. Comply with manufacturer's printed instructions except where more stringent requirements are shown or specified, and except where manufacturer's technical representative directs otherwise.

2. Sheet waterproofing: surfaces must be smooth, regular and dry. Prime surfaces with one coat of Bituthene Primer (or approved equal) using brush or roller. Allow to dry completely before application of self-adhering sheets.

3. Where vertical surface meets footing install fillet of Bituthene Liquid Membrane (or approved equal) along joint.

4. Application of sheet to start at bottom of wall and proceed to top. Lap any joints a minimum of 6".

5. Install protection board with joints butted tight. Spot bond with Pak Adhesive (or approved equal) as needed to hold in place.

B. Liquid Applied Membrane

1. Comply with manufacturer's printed instructions except where more stringent requirements are shown or specified, and except where manufacturer's technical representative directs otherwise.

2. Install liquid applied membrane to depths as shown, or, if not shown, as recommended by manufacturer.

3. Install protection board with joints butted tight. Spot bond with Pak Adhesive (or approved equal) as needed to hold in place.

3.4 PROTECTION

A. Install protection board at the end of each days waterproofing to both horizontal and vertical surfaces.

PART 4 – METHOD OF PAYMENT

4.1 QUANTITY AND PAYMENT

A. Payment for the item Bridge Deck Sealer will be made on a square yard (SY) basis, and the cost thereof shall be included in the price for the item **DECK SURFACE SEALER** in the Bid Proposal, which price shall include the furnishing of all materials, labor and equipment and all else necessary therefore and incidental thereto.

END OF SECTION

DECK JOINT FILLER AND SEALER

PART 1 – GENERAL

1.1 SUMMARY

A. The applications for joint sealers as work of this section include exterior joints in the following vertical surfaces:

1. Control, expansion, and deflection joints in cast-in-place concrete structures

and stone masonry veneer.

2. Other joints as indicated.

B. The applications for joint sealers as work of this section also include exterior joints in the following horizontal surfaces:

1. Bridge Parapet Joints.

1.2 PERFORMANCE REQUIREMENTS

A. Provide joint sealants that establish and maintain watertight and airtight continuous joint seals without staining or deteriorating joint substrates.

1.3 SUBMITTALS

A. Submit manufacturer's product specifications, handling, installation and curing instructions, and performance tested data sheets for each product required.

B. With product data, submit certified test reports for sealants on aged performances as specified, including hardness, stain resistance, adhesion, cohesion or tensile strength, elongation, low temperature flexibility, compression set, modulus of elasticity, water absorption, and resistance (aging, weight loss, deterioration) to heat and exposures to ozone and ultraviolet.

C. Submit color charts for each product exposed to view showing full range of colors available for color selection.

D. Submit certificates from manufacturers of joint sealers attesting that their products comply with specification requirements and are suitable for the use indicated.

1.4 QUALITY ASSURANCE

A. Installer Qualifications: Engage an installer who has successfully completed within the last 3 years at least 3 joint sealer applications similar in type and size to that of this project and who will assign mechanics from these earlier applications to this project, of which one will serve as lead mechanic.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Deliver materials to project site in original unopened containers or bundles with labels indicating manufacturer, product name, color, expiration date, pot life, curing time and mixing instructions.

B. Store and handle materials to prevent their deterioration or damage due to moisture, temperature changes, contaminants, or other causes.

1.6 JOB CONDITIONS

A. Do not proceed with installation of liquid sealants under the following conditions:

1. When ambient and substrate temperature conditions are outside the limits permitted by joint sealer manufacturer or below 40F.

2. When joint substrates are wet due to rain, frost, condensation, or other causes.

B. Joint Width Conditions: Do not proceed with installation of joint sealers when joint widths are less than allowed by joint sealer manufacturer for application indicated.

C. Joint-Substrate Conditions: Do not proceed with installation of joint sealants until contaminants capable of interfering with adhesion are removed from joint substrates.

1.7 WARRANTY

A. General Warranty: Special warranties specified in this Article shall not deprive Owner of other rights Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by Contractor under requirements of the Contract Documents.

B. Special Installer's Warranty: Written warranty, signed by Installer agreeing to repair or replace elastomeric joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.

C. Warranty Period: Ten years from date of Substantial Completion.

D. Special warranties specified in this Article exclude deterioration or failure of elastomeric joint sealants from the following:

1. Movement of the structure resulting in stresses on the sealant exceeding sealant manufacturer's written specifications for sealant elongation and compression caused by structural settlement or errors attributable to design or construction.

2. Disintegration of joint substrates from natural causes exceeding design specifications.

3. Mechanical damage caused by individuals, tools, or other outside agents.

4. Changes in sealant appearance caused by accumulation of dirt or other atmospheric contaminants.

PART 2 - PRODUCTS

2.1 SEALANTS

A. Elastomeric Sealant for Exterior Use: Provide one-part formulation silicone sealant conforming to ASTM C 920, Type S, Grade NS. Class 25, Dow 790, or approved equal. Colors will be selected by Engineer from manufacturer's standard colors.

B. Paving Sealant: Shall be a 2-component self-leveling polyurethane, meeting Federal Specification TT-S-00227E, THC-900 by Tremco, NR-200 by Pecora, or approved equal. Colors will be selected by Engineer from standard colors available with "Multi-Systems Color-Pak".

C. Hot-Poured Joint Sealer for Bridge Deck Joints: Provide sealer conforming to ASTM D 6690. Use Type II Sealer in accordance with AASHTO.

2.2 CELLULAR FOAM JOINT FILLERS AND SEALANT BACKERS

A. Expanded Polyethylene Joint Filler (Backup): Provide flexible, compressible, closed cell, polyethylene of not less than 10 psi compression deflection, 25%; except provide higher compression deflection strength as may be necessary to withstand installation forces and provide proper support for sealants; surface water absorption of not more than 0.1 lbs. per sq. ft.

2.3 MISCELLANEOUS MATERIALS

A. Bond Breaker Tape: Polyethylene tape or other plastic tape as recommended by sealant manufacturer to be applied to sealant contact surfaces where bond to substrate or joint filler must be avoided for proper performance of sealant. Provide self-adhesive tape where applicable.

B. Preformed Joint Filler: Use preformed joint fillers conforming to AASHTO M33 or AASHTO M 213. Provide the filler for each joint in a single piece for the full depth and width required for the joint. If the RE approves the use of more than 1 piece for a joint, fasten the abutting ends securely, and hold to shape or other means of means of positive fastening.

PART 3 - EXECUTION

3.1 INSPECTION

A. Installer shall inspect joints indicated to receive joint sealers or assemblies for compliance with requirements for joint configuration, installation tolerances and other conditions affecting joint performance. Do not allow joint sealer or assembly installation to proceed until unsatisfactory conditions have been corrected.

3.2 JOINT PREPARATION

A. Clean joint surfaces immediately before installation of sealant compounds to comply with recommendations of joint sealer manufacturers and the following requirements:

1. Remove all foreign materials from joint substrates which could interfere with adhesion of joint sealer, including rust; paints, except for permanent, protective coatings tested and approved for

sealant adhesion and compatibility by sealant manufacturer; old joint sealers; oil; grease; waterproofing; water repellents; water; surface dirt; and frost.

2. Clean concrete, masonry, unglazed surfaces of ceramic tile and similar porous joint substrate surfaces, by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealers. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil-free compressed air.

3. Remove laitance and form release agents from concrete.

4. Clean metal, glass, porcelain enamel, glazed surfaces of ceramic tile; and other nonporous surfaces by chemical cleaners or other means which are not harmful to substrates or leave residues capable of interfering with adhesion of joint sealers.

B. Prime or seal joint surfaces where indicated, and where recommended by sealant manufacturer. Confine primer/sealer to areas of sealant bond; do not allow spillage or migration onto adjoining surfaces.

C. Use masking tape where required to prevent contact of sealant with adjoining surfaces which otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 INSTALLATION

A. Comply with manufacturer's printed instructions except where more stringent requirements are shown or specified, and except where manufacturer's technical representative directs otherwise.

B. Set joint filler units at proper depth or position in joint to coordinate with other work, including installation of bond breakers, backer rods and sealants. Do not leave voids or gaps between ends of joint filler units. Do not stretch, twist, puncture or tear joint fillers. Remove absorbent joint fillers which have become wet prior to sealant application and replace with dry materials.

C. Install sealant backer rod for liquid applied sealants, except where shown to be omitted or recommended to be omitted by sealant manufacturer for application indicated.

D. Install bond breaker tape where indicated and where required by manufacturer's recommendations to ensure that liquid applied sealants will perform properly.

E. Employ only proven installation techniques, which will ensure that sealants are deposited in uniform, continuous ribbons without gaps or air pockets, with complete wetting of joint bond surfaces equally on opposite sides. Except as otherwise indicated, fill sealant rabbet to a slightly concave surface, slightly below adjoining surfaces. Where horizontal joints are between a horizontal surface and vertical surface, fill joint to form a slight cove, so that joint will not trap moisture and dirt.

F. Install liquid applied sealant to depths as shown, or, if not shown, as recommended by sealant manufacturer but within the following general limitations, measured at center (thin) section of bead; (not applicable to sealants in lapped joints):

1. For sidewalks, pavements and similar joints sealed with elastomeric sealants and subject to traffic and other abrasion and indentation exposures, fill joints to a depth equal to 75% of joint width, but neither more than 5/8" deep nor less than 3/8" deep.

2. For normal moving joints sealed with elastomeric sealants but not subject to traffic, fill joints to a depth equal to 50% of joint width, but neither more than 1/2" deep nor less than 1/4" deep.

G. Do not allow sealants or compounds to overflow from confines of joints, or to spill onto adjoining work, or to migrate into voids of exposed finishes. Clean adjoining surfaces by whatever means may be necessary to eliminate evidence of spillage.

3.4 CURE AND PROTECTION

A. Cure sealant compounds in compliance with manufacturer's instructions and recommendations, to obtain high early bond strength, internal cohesive strength and surface durability. Advice Contractor of procedures required for cure and protection of joint sealers during construction period, so that they will be without deterioration or damage, other than normal wear and weathering, at time of substantial completion. Cure and protect sealants in a manner which will minimize increases in modulus of elasticity and other accelerated aging effects. Replace or restore sealants which are damaged or deteriorated during construction period.

B. Clean off excess sealants or sealant smears adjacent to joints as work progresses by methods and with cleaning materials approved by manufacturers of joint sealers and of products in which joints occur.

PART 4 – METHOD OF PAYMENT

4.1 QUANTITY AND PAYMENT

A. Payment for the item Bridge Deck Joint will be made on a lineal foot (LF) basis, and the cost thereof shall be bid for the item **DECK JOINT FILLER AND SEALER** in the Bid Proposal, which price shall include the furnishing of all materials, labor and equipment and all else necessary therefore and incidental thereto.

END OF SECTION

Bidder's Name_____

BID FORM

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

2021 ROAD RESURFACING PROJECT
VARIOUS MUNICIPALITIES, (CA-2020)
COUNTY OF UNION, NEW JERSEY
BA# 4-2021;
UNION COUNTY ENGINEERING PROJECT #2019-023

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	HOUR	400	$76.23	$30,492.00
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.	1	$700,000.00	$700,000.00
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	1,370		
7	HMA MILLING, 3" OR LESS	SY	423,925		
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	1,470		
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	4,130		
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	49,590		
11	HOT MIX ASPHALT 9.5M64 ITERMEDIATE COURSE	TON	2,855		
12	FUEL PRICE ADJUSTMENT	ALLOW.	1	$29,100.00	$29,100.00
13	ASPHALT PRICE ADJUSTMENT	ALLOW.	1	$47,600.00	$47,600.00
14	NO ITEM				
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF	600		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY	1,090		
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF	900		

SPECIFICATIONS

2021 ROAD RESURFACING PROJECT

VARIOUS MUNICIPALITIES, (CA-2020)

COUNTY OF UNION, NEW JERSEY

BA# 4-2021;

UNION COUNTY ENGINEERING PROJECT #2019-023

DECEMBER 2020

UNION COUNTY OFFICIALS
BOARD OF CHOSEN FREEHOLDERS

Alexander Mirabella, Chairman
Angela R. Garretson, Freeholder
Sergio Granados, Freeholder
Christopher Hudak, Freeholder
Bette Jane Kowalski, Freeholder
Kimberly Palmieri-Mouded, Freeholder
Andrea Staten, Freeholder
Rebecca Williams, Freeholder

CLERK OF THE BOARD
James E. Pellettiere, RMC

COUNTY MANAGER
Edward T. Oatman

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

COUNTY ENGINEER
DIVISION OF ENGINEERING
Thomas O. Mineo, P.E.

Prepared by:
Neglia Engineering Associates
200 Central Avenue, Suite 102, Mountainside, N.J. 07092
David R. Atkinson, P.E., P.P., C.M.E.

Revised: 2020.02.19

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**, January 12, 2021 at 11:30 a.m**., prevailing time, in the **3rd Floor Conference Room**, U.C. Administration Building, 10 Elizabethtown Plaza, Elizabeth, New Jersey for:

2021 ROAD RESURFACING PROJECT
VARIOUS MUNICIPALITIES, (CA-2020)
COUNTY OF UNION, NEW JERSEY
BA# 4-2021; UNION COUNTY ENGINEERING PROJECT #2019-023

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 CHOSEN FREEHOLDERS
We're Connected to You!

2021 ROAD RESURFACING PROJECT
VARIOUS MUNICIPALITIES, (CA-2020)
COUNTY OF UNION, NEW JERSEY
BA# 4-2021;
UNION COUNTY ENGINEERING PROJECT #2019-023

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UNION COUNTY BOARD OF CHOSEN FREEHOLDERS
INSTRUCTIONS TO BIDDERS AND FORMS

DEFINITIONS

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

OWNER/COUNTY:
Union County Board of Chosen Freeholders
UC Administration Building, 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: 2021 ROAD RESURFACING PROJECT
VARIOUS MUNICIPALITIES, (CA-2020)
COUNTY OF UNION, NEW JERSEY
BA# 4-2021;
UNION COUNTY ENGINEERING PROJECT #2019-023

BIDDER: Bidder shall be a single overall contract bidder

ENGINEER: Neglia Engineering Associates

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

COUNTY ENGINEER:
Thomas O. Mineo, P.E.
Union County
Division of Engineering

CONSTRUCTION MANAGER:

GENERAL SPECIFICATIONS

1. BID FORM

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

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

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

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

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

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

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

Change Order(s). See Section 37, Change Orders, of these general specifications for further details.

Refer to Bid Document Submission Checklist for all required documents.

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

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

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

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

The County reserves the right to reject any or all bids and also reserves the right to waive any 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 Chosen Freeholders, officers, employees, agents and servants shall be included as an additional insured. Coverage is provided on a primary and non-contributory basis to the County of Union, et al.

b) Automobile Liability: Coverage for all owned, non-owned and hired vehicles with limits not less than $5,000,000 per occurrence, combined single limits (CSL) or its equivalent.

c) Workers Compensation: As required by the State of New Jersey and Employers Liability with limits not less than $1,000,000 per accident for bodily injury or disease.

d) Professional Liability (if design/build): Coverage with limits not less than $1,000,000 per occurrence or claim, $2,000,000 aggregate

e) Contractor's Pollution Legal Liability and/or Asbestos Legal Liability and/or Errors & Omissions (if project involves environmental hazards): Coverage with limits no less than $1,000,000 per occurrence or claim/$2,000,000 aggregate.

f) Builders Risk (for major renovations): During the course of construction utilizing an "All Risk" coverage form with limits equal to the completed value of the project and no coinsurance penalty provisions.

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

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

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

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 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 Chosen Freeholders on May 8, 2014. The resolution is furnished in Section 51 of these General Specifications.

UNION LABOR IS PREFERRED ON ALL COUNTY WORK

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

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

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

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

EXHIBIT B
(Revised 4/10)

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

CONSTRUCTION CONTRACTS

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

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

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

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

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

When hiring or scheduling workers in each construction trade, the contractor or subcontractor agrees to make good faith efforts to employ minority and women workers in each construction trade consistent with the targeted employment goal prescribed by N.J.A.C. l7:27-7.2; provided, however, that the Division may, in its discretion, exempt a contractor or subcontractor from

compliance with the good faith procedures prescribed by the following provisions, A, B and C, as long as the Division is satisfied that the contractor or subcontractor is employing workers provided by a union which provides evidence, in accordance with standards prescribed by the Division, that its percentage of active "card carrying" members who are minority and women workers is equal to or greater than the targeted employment goal established in accordance with N.J.A.C. l7:27-7.2. The contractor or subcontractor agrees that a good faith effort shall include compliance with the following procedures:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

(D) The contractor and its subcontractors shall furnish such reports or other documents to the Division of Public Contracts Equal Employment Opportunity Compliance as may be requested by the Division from time to time in order to carry out the purposes of these regulations, and public agencies shall furnish such information as may be requested by the Division of Public Contracts Equal Employment Opportunity Compliance for conducting a compliance investigation pursuant to **Subchapter l0 of the Administrative Code (NJAC 17:27).**

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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.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

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.

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).

Bidder's Name_____

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.

Bidder's Name_____

_____ 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

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.**

Bidder's Name_____

BID FORM

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

2021 ROAD RESURFACING PROJECT
VARIOUS MUNICIPALITIES, (CA-2020)
COUNTY OF UNION, NEW JERSEY
BA# 4-2021;
UNION COUNTY ENGINEERING PROJECT #2019-023

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	HOUR	400	$76.23	$30,492.00
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.	1	$700,000.00	$700,000.00
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	1,370		
7	HMA MILLING, 3" OR LESS	SY	423,925		
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	1,470		
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	4,130		
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	49,590		
11	HOT MIX ASPHALT 9.5M64 ITERMEDIATE COURSE	TON	2,855		
12	FUEL PRICE ADJUSTMENT	ALLOW.	1	$29,100.00	$29,100.00
13	ASPHALT PRICE ADJUSTMENT	ALLOW.	1	$47,600.00	$47,600.00
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF	300		
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF	600		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY	1,090		
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF	900		

Bidder's Name_____

ITEM NO	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	AMOUNT
18	CURB PRICE	UNIT	11		
19	BICYCLE SAFE GRATE	UNIT	12		
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	925		
21	RESET WATER VALVE BOX	UNIT	285		
22	RESET GAS VALVE BOX	UNIT	39		
23	INLET, TYPE B	UNIT	1		
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	10		
25	15" REINFORCED CONCRETE PIPE	LF	275		
26	INLET FILTER TYPE 2, 2' X 4'	UNIT	2		
27	10" X 20" CONCRETE VERTICAL CURB	LF	7,320		
28	GRANITE CURB	LF	150		
29	CONCRETE SIDEWALK, 4" THICK	SY	3,300		
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	4,505		
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	310		
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY	100		
33	TRAFFIC STRIPES, 4"	LF	207,820		
34	TRAFFIC STRIPES, 6"	LF	750		
35	TRAFFIC STRIPES, 8"	LF	10,260		
36	TRAFFIC MARKING, LINES 12"	LF	16,870		
37	TRAFFIC MARKING, LINES 24"	LF	4,860		
38	TRAFFIC MARKINGS, SYMBOLS	SF	4,765		
39	RUMBLE STRIP	LF	300		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	1,530		
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF	150,000		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAT SUPPORT	SF	1,250		
43	ACCESSORY PANEL, TYPE DF	SF	1,250		
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF	500		

Bidder's Name_____

ITEM NO	DESCRIPTION	UNIT	CONTRACT QUANTITY	UNIT PRICE	AMOUNT
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT	2		

_____ _____
Written Figures

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

One Hundred Fifty Thousand Dollars and Zero Cents **$150,000.00**
Written Figures

TOTAL BASE BID ITEMS PLUS BID CONTINGENCY AMOUNT:

_____ _____
Written Figures

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

Bidder's Name_____

CONSENT OF SURETY
TO ACCOMPANY PROPOSAL (BID)

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

NOTE:
Expiration date
Needed if Annual
Surety

_____

_____
NAME OF INSURANCE COMPANY

ADDRESS: _____
_____
_____

_____
ORIGINAL SIGNATURE
ATTORNEY-IN-FACT FOR INSURANCE CO.

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

Bidder's Name_____

BIDDER SIGNATURE PAGE

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

1. If doing business under a **trade name, partnership or a sole proprietorship**, you must submit the bid under exact title of the trade name, partnership, or proprietorship, and the bid must be signed by either the **owner**, or a **partner** and **witnessed** by a **notary public**.

2. If a **Corporation**, the bid must be signed by the **President** or **Vice President** and **witnessed** by a **Corporate Secretary** (corporate title must be exact) and **affix corporate seal**. If a Corporate Secretary does not exist, President or Vice President's signature shall be witnessed by a Notary Public.

3. Other persons **authorized** by **corporate resolution** to execute agreements in its behalf may also sign the bid documents (pages). **Copy of a resolution must accompany the bid**.

4. The person who signs this bid form **must also** sign the **Non-Collusion Affidavit**.

5. You **cannot** witness your own signature.

_____
NAME OF BIDDER

_____
_____
_____
ADDRESS OF BIDDER

_____
ORIGINAL SIGNATURE
CORPORATE SECRETARY

_____
PRINT NAME AND TITLE
CORPORATE SECRETARY

TEL: _____
FAX: _____
E-Mail: _____

BY: _____
ORIGINAL SIGNATURE

Corporate Seal

_____

_____
PRINT OR TYPE NAME AND TITLE

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

Bidder's Name_____

STATEMENT OF OWNERSHIP DISCLOSURE

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

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

Name of Organization: _____

Organization Address: _____

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

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

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

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

☐ Partnership ☐ Limited Partnership ☐ Limited Liability Partnership (LLP)

☐ Other (be specific): _____

Part II

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

OR

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

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

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

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

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

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

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

Bidder's Name_____

SUBCONTRACTOR IDENTIFICATION STATEMENT

LIST OF SUBCONTRACTORS

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

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

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

Company Name:_____

Address:_____

Telephone: _____ Subcontract Amount: $_____

Specific Scope of Work Subcontracted: _____

_____

License No. _____

Company Name:_____

Address: _____

Telephone: _____ Subcontract Amount: $_____

Specific Scope of Work Subcontracted: _____

_____

License No. _____

Company Name:_____

Address: _____

Telephone: _____ Subcontract Amount: $_____

Specific Scope of Work Subcontracted: _____

_____

License No. _____

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

(Continued on following page)

Bidder's Name_____

SUBCONTRACTOR IDENTIFICATION CERTIFICATION

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

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

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

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

_____
Witness

Date _____

_____
NAME OF BIDDER

_____
ADDRESS

By: _____
ORIGINAL SIGNATURE ONLY

_____

_____
PRINT NAME AND TITLE

Bidder's Name_____

ACKNOWLEDGMENT OF ADDENDUM

COUNTY OF UNION

_____ _____

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

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

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

ACKNOWLEDGMENT BY BIDDER:

NAME OF BIDDER: _____

ORIGINAL SIGNATURE: _____

PRINTED NAME AND TITLE:_____

DATE: _____

Bidder's Name_____

CONTRACTOR BUSINESS REGISTRATION CERTIFICATE

New Mandatory Requirement - Effective 1/18/2010

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

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

Proof of business registration shall be

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

Register online at www.nj.gov/treasury/revenue/taxreg.htm. Click the "online" link and then select "Register for Tax and Employer Purposes or call the Division at 609-292-1730.
Note: A NJ Certificate of Authority is <u>not</u> acceptable.

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

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

IN ADDITION:

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

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

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

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

Bidder's Name_____

BUSINESS REGISTRATION

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.

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.

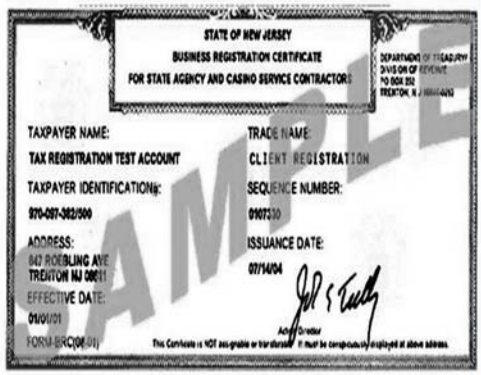
(2) the contractor shall maintain and submit to the County of Union a list of subcontractors and their addresses that may be updated from time to time.

(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.

Bidder's Name_____


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

TAXPAYER NAME:
TAX REGISTRATION TEST ACCOUNT

TRADE NAME:
CLIENT REGISTRATION

TAXPAYER IDENTIFICATION#:
970-007-302/000

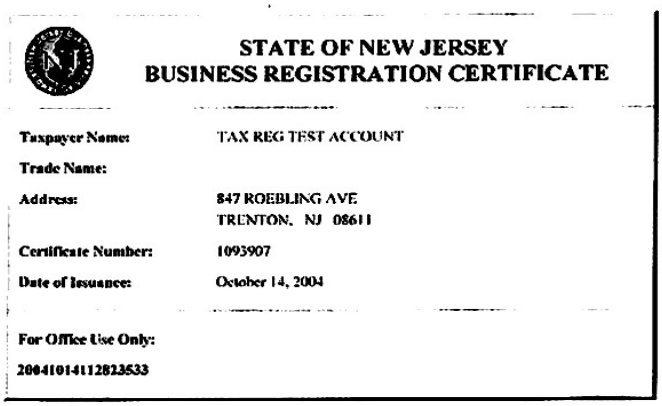
SEQUENCE NUMBER:
0907330

ADDRESS:
847 ROEBLING AVE
TRENTON NJ 08611

ISSUANCE DATE:
07/14/04

EFFECTIVE DATE:
01/01/01

SAMPLE


STATE OF NEW JERSEY
BUSINESS REGISTRATION CERTIFICATE

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

For Office Use Only:
20041014112823533

ATTACH BRC HERE

Bidder's Name_____

AFFIRMATIVE ACTION REQUIREMENT

REQUIRED AFFIRMATIVE ACTION EVIDENCE

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

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

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

_____
NAME OF BIDDER

_____
ORIGINAL SIGNATURE

_____
PRINT OR TYPE NAME AND TITLE

_____
DATE THIS FORM IS COMPLETED

Bidder's Name_____

EXPERIENCE STATEMENT

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

_____
Witness

_____
Date

_____
NAME OF BIDDER

_____
_____
_____
ADDRESS

By: _____
ORIGINAL SIGNATURE ONLY

_____

_____
PRINT NAME AND TITLE

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

Bidder's Name_____

CERTIFICATE OF BIDDER SHOWING ABILITY TO PERFORM CONTRACT

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

I, _____, of the (City, Town, Borough, etc.) of ___ _____ State of _____, of full age, being duly sworn according to law on my oath depose and say that:

I am _____ of the firm of _____, the Bidder making the proposal for the above named Project ("Contractor'), and that I executed said proposal with full authority to do so; and that said Contractor, pursuant to N.J.S.A. 40A:11-20, certifies that it owns, leases or controls all the necessary equipment required by the Plans, Specifications and Advertisements under this Bids are asked for.

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

_____
(Also type or print name of affiant under signature)

By:_____

Bidder's Name_____

NON-COLLUSION AFFIDAVIT

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

STATE OF _____)
) **SS:**_____
COUNTY OF _____)

I _____, of the City of _____, in the County of _____, and the State of _____, of full age, being duly sworn according to law, on my oath depose and say that: I am _____ of the firm of _____, the bidder making the proposal for the above named project, and that I executed the said proposal for the above named project, and that I executed the said proposal with full authority to do so; that said bidder has not, directly or indirectly, entered into any agreement, participation in any collusion, or otherwise taken any action in restraint of free, competitive bidding in connection with the above named project; and that all statements contained in said proposal and in this Affidavit are true and correct, and made with full knowledge that the COUNTY OF UNION, NEW JERSEY relies upon the truth of the statements contained in said proposal and in the statements contained in the affidavit in awarding the contract for the said project.

I further warrant that no person or selling agency has been employed or retained to solicit or secure such contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee, except bona fide employees or bonafide established commercial or selling agencies maintained by _____ (N.J.S.A. 52:34-15).

_____

NAME OF BIDDER

_____

ORIGINAL SIGNATURE ONLY

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

Subscribed and sworn 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.

Bidder's Name_____

Contractor Registration Advisement

For Public Works Projects

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

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

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

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

Bidder's Name_____

AMERICANS WITH DISABILITIES ACT

EQUAL OPPORTUNITY FOR INDIVIDUALS WITH DISABILITIES

The contractor and the County of Union (hereafter "Owner") do hereby agree that the provisions of Title II of the Americans With Disabilities Act of 1990 (the "Act") (42 US.C. S12101 et seq.), which prohibits discrimination on the basis of disability by public entities in all services, programs and activities provided or made available by public entities, and the rules and regulations promulgated pursuant thereunto, are made a part of this contract. In providing any aid, benefit, or service on behalf of the Owner pursuant to this contract, the contractor agrees that the performance shall be in strict compliance with the Act. In the event the contractor, its agents, servants, employees, or subcontractors violate or are alleged to have violated the Act during the performance of this contract, the contractor shall defend the Owner in any action or administrative proceeding commenced pursuant to this Act. The contractor shall indemnify, protect, and save harmless the Owner, its agents, servants, and employees from and against any and all suits, claims, losses, demands, or damages of whatever kind or nature arising out of or claimed to arise out of the alleged violation. The contractor shall, at its own expense, appear, defend, and pay any and all charges for legal services and any and all costs and other expenses arising from such action or administrative proceeding or incurred in connection therewith. In any and all complaints brought pursuant to the Owner's grievance procedure, the contractor agrees to abide by any decision of the Owner which is rendered pursuant to said grievance procedure. If any action or administrative proceeding results in an award of damages against the Owner, or if the Owner incurs any expense to cure a violation of the ADA which has been brought pursuant to its grievance procedure, the contractor shall satisfy and discharge the same at its own expense.

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

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

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

Name _____ (Please print or type)

Signature _____Date _____

Bidder's Name_____

STATEMENT OF BIDDER'S QUALIFICATIONS

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

1. _____
   (Name of Bidder)

2. _____
   (Permanent Main Office Address)

3. _____
   (When Organized)

4. _____
   (If a Corporation, where incorporated)

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

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

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

   _____

   _____

   _____

8. General character of work performed by you._____

   _____

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

   _____

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

    _____

    _____

Bidder's Name_____

STATEMENT OF BIDDER'S QUALIFICATIONS - (continued)

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

_____

_____

12. List your major equipment available for this Contract.

_____

_____

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

_____

_____

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

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

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

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

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

18. The undersigned, hereby authorizes and requests any person, firm or corporation to furnish any information requested by the proper agency in verification of the responses comprising this Statement of Bidder's Qualifications.

19. Bidder's telephone number, fax number and e-mail address (if applicable).

    Phone _____

    Fax _____

    E-mail_____

    Mobile _____

Dated at _____ this _____ day of _, 20__.

_____
BIDDER (Signature)

_____
BIDDER (Print Name)

Subscribed and sworn to before me

this _____ day of_____, 20__.

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

My Commission Expires _____, 20__.

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

Bidder's Name_____

CONTRACTOR PERFORMANCE RECORD

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

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

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

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

Bidder's Name_____

CONTRACTOR PERFORMANCE RECORD CERTIFICATION

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

_____
(Name of Organization)

_____
(Signature)

_____
(Title)

Subscribed and sworn to before me

this _____ day of_____, 20__.

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

My Commission Expires _____, 20__.

Bidder's Name_____

AFFIDAVIT REGARDING LIST OF DEBARRED, SUSPENDED OR DISQUALIFIED BIDDERS

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

I, _____, of the (City, Town, Borough, etc.) of ___ _____ State of _____, of full age, being duly sworn according to law on my oath depose and say that:

I am _____ of the firm of _____, the Bidder making the Proposal for the above named Project. I have executed the said Proposal with full authority to do so. Said Bidder is not at the time of the making this bid included on the New Jersey State Treasurer's or the Federal Government's List of Debarred, Suspended or Disqualified Bidders as a result of action taken by any State or Federal Agency.

_____
Name of Contractor

By:_____
(Signature of Authorized Representative)

Subscribed and sworn to before me

this _____ day of_____, 20__.

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

My Commission Expires _____, 20__.

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

Bidder's Name_____

PRIOR NEGATIVE EXPERIENCE QUESTIONNAIRE

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

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

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

   _____
   _____
   _____
   _____

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

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

   _____
   _____
   _____
   _____

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

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

   _____
   _____
   _____
   _____

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

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

   _____
   _____
   _____
   _____

Bidder's Name_____

PRIOR NEGATIVE EXPERIENCE CERTIFICATION

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

_____
Name of Contractor

By_____
(Signature of Authorized Representative)

Subscribed and sworn to before me

this _____ day of_____, 20__.

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

My Commission Expires _____, 20__.

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

Bidder's Name_____

TO BE COMPLETED ONLY WHEN FINAL PAYMENT IS REQUESTED

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

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

CONTRACT:

PROJECT: _____

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

COUNTY OF UNION

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

CONTRACTOR: _____
ADDRESS: _____
_____
BY: _____
ORIGINAL SIGNATURE ONLY

STATE OF NEW JERSEY
COUNTY OF _____

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

Subscribed and sworn 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.

Bidder's Name_____

UNCOMPLETED CONTRACTS AFFIDAVIT

(To be Submitted with DPMC Form 701)

PURSUANT TO N.J.A.C. 17:19-2.13, BIDDER DECLARES THE FOLLOWING WITH RESPECT TO ITS UNCOMPLETED CONTRACTS, ON ALL WORK, FROM WHATEVER SOURCE (PUBLIC AND PRIVATE), BOTH IN NEW JERSEY AND FROM OTHER GOVERNMENTAL JURISDICTIONS				
ENTITY	**PROJECT TITLE**	**ORIGINAL CONTRACT AMOUNT**	**UNCOMPLETED AMOUNT AS OF BID OPENING DATE**	**NAME AND TELEPHONE NUMBER OF PARTY TO BE CONTACTED 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.**

Bidder's Name_____

CERTIFICATE OF INSURANCE STATEMENT

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

_____
BIDDER (Signature)

_____
BIDDER (Print Name)

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

Bidder's Name_____

COLLECTION OF USE TAX ON SALES TO LOCAL GOVERNMENTS STATEMENT

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

_____
BIDDER (Signature)

_____
BIDDER (Print Name)

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

Bidder's Name_____

TIME OF COMPLETION

The undersigned proposed that if awarded the Contract, the scope of work will be started within ten (10) calendar days and will be substantially completed within **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

Bidder's Name_____

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

Solicitation Number: _____ Vendor/Bidder: _____

PART 1

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

Pursuant to Public Law 2012, c. 25, any person or entity that submits a bid or proposal or otherwise proposes to enter into or renew a contract must complete the certification below to attest, under penalty of perjury, that neither the person nor entity, nor any of its parents, subsidiaries, or affiliates, is identified on the State of New Jersey, Department of the Treasury's Chapter 25 list as a person or entity engaged in investment activities in Iran. The Chapter 25 list is found on the Department's website at http://www.state.nj.us/treasury/pdf/Chapter25List.pdf. Vendors/Bidders **must** review this list prior to completing the below certification. **Failure to complete the certification will render a Vendor's/Bidder's proposal non-responsive.** If the Director of the Division of Purchase and Property finds a person or entity to be in violation of the law, s/he shall take action as may be appropriate and provided by law, rule or contract, including but not limited to, imposing sanctions, seeking compliance, recovering damages, declaring the party in default and seeking debarment or suspension of the party.

CHECK THE APPROPRIATE BOX

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

OR

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

PART 2

PLEASE PROVIDE ADDITIONAL INFORMATION RELATED TO INVESTMENT ACTIVITIES IN IRAN
If you checked Box "B" above, provide a detailed, accurate and precise description of the activities of the Vendor/Bidder, or one of its parents, subsidiaries or affiliates, engaged in investment activities in Iran by completing the information below.

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

CERTIFICATION

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

_____ _____
Signature Date

_____
Print Name and Title

Revised 10/19/17

STANDARD 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 <u>not</u> subject to the New Jersey Prevailing Wage Act or the Public Works Contractor Registration Act.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Air Conditioning & Refrigeration - Service and Repair **PREVAILING WAGE RATE**

	03/01/20
Journeyman (Mechanic)	W40.33 B25.67 T66.00

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**

	01/01/20
Foreman	W50.88 B45.21 T96.09
General Foreman	W52.88 B46.22 T99.10
Journeyman	W45.88 B43.54 T89.42

Craft: Boilermaker **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
1000 Hours	65%	70%	75%	80%	85%	90%	95%			
Benefit =	37.08	37.99	39.49	39.84	40.78	41.70	42.61			

Ratio of Apprentices to Journeymen - *

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

Craft: Boilermaker **COMMENTS/NOTES**

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

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

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

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

hours per week.

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

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Boilermaker - Minor Repairs **PREVAILING WAGE RATE**

	01/01/20
Foreman	W33.62 B16.47 T50.09
General Foreman	W34.12 B16.47 T50.59
Mechanic	W32.12 B16.47 T48.59

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**

	10/01/20
Deputy Foreman	W47.45 B33.73 T81.18
Foreman	W50.45 B33.73 T84.18
Journeyman	W44.45 B33.73 T78.18

Craft: Bricklayer, Stone Mason **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
6 Months	40%	50%	55%	60%	65%	70%	75%	80%		
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.

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**

	05/07/20
Foreman	W59.06 B34.29 T93.35
Journeyman	W51.36 B29.90 T81.26

Craft: Carpenter **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
Yearly	40%	55%	65%	80%	90%					
Benefit	57% of	Appren	tice	Wage Rate	for all	intervals	+ $0.63			

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**

	05/05/20
Foreman	W59.06 B34.20 T93.26
Journeyman	W51.36 B29.81 T81.17

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

INTERVAL	PERIOD AND RATES									
Yearly	40%	55%	65%	80%	90%					
Benefit	57%	of	Appren	tice	Wage Rate	for all	intervals	+ $0.54		

Ratio of Apprentices to Journeymen - *

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

Craft: Carpenter - Resilient Flooring **COMMENTS/NOTES**

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

FOR SYNTHETIC TURF INSTALLATION ONLY:
- The rate shall be 90% of the wage and benefit rate.

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

SHIFT DIFFERENTIALS:
- When a 2 shift schedule (including a day shift) is established, the day shift, shall be established on an 8 hour basis. The second shift shall be established on an 8 hour basis, and receive the regular wage rate plus 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.

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- New Construction **PREVAILING WAGE RATE**

	09/24/20
Foreman	W45.05 B27.06 T72.11
General Foreman	W49.14 B27.55 T76.69
Journeyman	W40.95 B26.56 T67.51

Craft: Commercial Painter- New Construction **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
6 Months	40%	45%	55%	65%	70%	75%	80%	80%		
Benefits	8.05	8.05	10.05	10.05	11.05	11.05	14.05	14.05		

Ratio of Apprentices to Journeymen - 1:4

Craft: Commercial Painter- New Construction **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,

Veterans' Day, Thanksgiving Day, Christmas Day.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Commercial Painter- Repainting **PREVAILING WAGE RATE**

	09/24/20
Foreman	W33.11 B20.66 T53.77
General Foreman	W34.61 B20.66 T55.27
Journeyman	W30.10 B20.66 T50.76

Craft: Commercial Painter- Repainting **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
	SEE	COMMER	CIAL	PAINTER	NEW	CONSTRUC	TION			

Ratio of Apprentices to Journeymen - 1:4

Craft: Commercial Painter- Repainting **COMMENTS/NOTES**

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

NOTE: These rates may only be used on jobs where no major alterations (only doing painting and carpeting with nothing else being changed in the commercial building) occur, and where not more than 3 other trades are present on the job, but may NOT, under any circumstances, be used for work on bridges, stacks, tanks, or generating stations.

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.

OVERTIME:
- Hours in excess of 8 per day and 40 per week shall be paid at time and one-half the regular rate. All hours on Sundays and holidays shall be paid at double the regular rate.
- Four 10-hour days may be worked, at straight time, Monday through Sunday.

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

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Diver **PREVAILING WAGE RATE**

	05/05/20
Diver	W60.24 B48.47 T108.71
Tender	W48.50 B48.47 T96.97

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

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**

	05/05/20
Foreman	W55.78 B48.47 T104.25
Foreman (Concrete Form Work)	W54.97 B35.36 T90.33
Journeyman	W48.50 B48.47 T96.97
Journeyman (Concrete Form Work)	W47.80 B35.36 T83.16

Craft: Dockbuilder **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
Yearly	19.40	24.25	31.53	38.80						
Benefit	32.07	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 19.12 23.90 31.07 38.24
Benefits 24.16 for all intervals

CREOSOTE HANDLING:
When handling creosote products on land piledriving, floating marine construction, and construction of wharves, the worker shall receive an additional $0.25 per hour.

HAZARDOUS WASTE WORK:
- Hazardous waste removal work on a state or federally designated hazardous waste site where Level A, B, or C personal protection is required: an additional 20% of the hourly rate, per hour.
- Hazardous waste removal work in Level D, or where personal protection is not required: an additional $1.00 per hour.

CERTIFIED WELDER: When required on the job by the project owner, a Certified Welder shall receive an additional $1.00 per hour.

FOREMAN REQUIREMENTS:
The first Dockbuilder on the job shall be designated a Foreman.

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

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

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Drywall Finisher **PREVAILING WAGE RATE**

	09/24/20
Foreman	W44.43 B27.06 T71.49
General Foreman	W46.45 B27.06 T73.51
Journeyman	W40.39 B27.06 T67.45

Craft: Drywall Finisher **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
6 Months	40%	50%		60%	70%		80%	90%		
Benefits	Intervals	1 to 2 =	10.65	Intervals	3 to 4 =	13.41	Intervals	5 to 6 =	16.63	

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**

	06/01/20	05/31/21
Cable Splicer	W63.83 B37.99 T101.82	W64.92 B39.29 T104.21
Foreman (11-20 Journeymen)	W67.90 B40.41 T108.31	W69.05 B41.78 T110.83
Foreman (1-3 Journeymen)	W63.83 B37.99 T101.82	W64.92 B39.29 T104.21
Foreman (4-10 Journeymen)	W66.74 B39.72 T106.46	W67.87 B41.07 T108.94
General Foreman (21-30 Journeymen)	W69.64 B41.44 T111.08	W70.82 B42.85 T113.67
General Foreman (31-60 Journeymen)	W75.44 B44.89 T120.33	W76.72 B46.42 T123.14
General Foreman (61+ Journeymen)	W76.60 B45.58 T122.18	W77.90 B47.13 T125.03
Journeyman	W58.03 B34.54 T92.57	W59.02 B35.72 T94.74
Sub-Foreman	W66.16 B39.37 T105.53	W67.28 B40.71 T107.99

Craft: Electrician **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
Yearly	40%	49%	58%	68%	80%		of Jour	neyman	Wage	Rate
Benefit	40%	49%	58%	68%	80%		of Jour	neyman	Benefit	Rate

Ratio of Apprentices to Journeymen - 2:3

Craft: Electrician **COMMENTS/NOTES**

THESE RATES ALSO APPLY TO THE FOLLOWING:
-All burglar and fire alarm work.
-All fiber optic work.
-Teledata work in new construction.
-Teledata work involving 16 Voice/Data Lines or more.

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

FOREMAN REQUIREMENTS:
- 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**

	11/02/20
Master Technician/General Foreman	W57.42 B31.58 T89.00
Senior Technician/Lead Foreman (21-30 Workers on Job)	W52.56 B28.91 T81.47
Technician A/Foreman (11-20 Workers on Job)	W50.35 B27.69 T78.04
Technician B/Working Foreman (4-10 Workers on Job)	W48.15 B26.47 T74.62
Technician C/Journeyman (1-3 Workers on Job)	W44.17 B24.29 T68.46

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

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

Ratio of Apprentices to Journeymen - 2:3

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

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM AFTER 10-31-14:

INTERVAL	PERIOD AND RATES									
6 Months	35%	35%	40%	43%	48%	54%	61%	67%	74%	81%
Benefits	6.76	6.76	7.16	7.70	8.59	9.66	10.82	11.99	13.25	14.51

NOTES:
- These rates are for service, maintenance, moves, and/or changes affecting 15 Voice/Data (teledata) lines or less. These rates may NOT be used for any teledata work in new construction (including additions) or any fiber optic work.
- The number of Teledata workers on the jobsite is the determining factor for which Foreman category applies .

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

SHIFT DIFFERENTIALS:
- Shift work must run for a minimum of 5 consecutive workdays.

- 2nd Shift (4:30 PM to 12:30 AM) shall receive 8 hours pay for 7.5 hours work + an additional 10% of the regular rate, per hour, inclusive of benefits.
- 3rd Shift (12:30 AM to 8:00 AM) shall receive 8 hours pay for 7 hours work + an additional 15% of the regular rate, per hour, inclusive of benefits.

OVERTIME:
Hours in excess of 8 per day, or outside of the regular workday, Monday through Friday, and all hours on Saturdays, shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the regular rate, inclusive of benefits.

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

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

County - UNION

Craft: Electrician - Teledata (16 Instruments & More) **PREVAILING WAGE RATE**

See "Electrician" Rates

Craft: Electrician - Teledata (16 Instruments & More) **COMMENTS/NOTES**

See ELECTRICIAN Rates

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Electrician- Outside Commercial **PREVAILING WAGE RATE**

	06/01/20	05/31/21
Cable Splicer	W64.14 B37.69 T101.83	W65.22 B38.97 T104.19
Certified Welder	W61.22 B35.97 T97.19	W62.26 B37.21 T99.47
Equipment Operator	W58.31 B34.26 T92.57	W59.29 B35.43 T94.72
Foreman (1-3 Journeymen workers on job)	W64.14 B37.69 T101.83	W65.22 B38.97 T104.19
Foreman (4-10 Journeymen workers on job)	W67.06 B39.40 T106.46	W68.19 B40.75 T108.94
General Foreman (11-20 Journeymen workers on job)	W68.22 B40.08 T108.30	W69.37 B41.45 T110.82
General Foreman (21-30 Journeymen workers on job)	W69.97 B41.11 T111.08	W71.16 B42.52 T113.68
General Foreman (31-60 Journeymen workers on job)	W75.80 B44.54 T120.34	W77.08 B46.06 T123.14
General Foreman (61+ Journeymen workers on job)	W76.96 B45.22 T122.18	W78.27 B46.77 T125.04
Groundman	W34.99 B20.56 T55.55	W35.58 B21.26 T56.84
Journeyman Lineman/Technician	W58.31 B34.26 T92.57	W59.29 B35.43 T94.72
Sub-Foreman	W66.47 B39.06 T105.53	W67.60 B40.40 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	57.75% of	Journey	man	wage	+ $.01					

Craft: Electrician- Outside Commercial **COMMENTS/NOTES**

EFFECTIVE 6-1-20- The apprentice benefit rate shall be 58.75% + $.01.
EFFECTIVE 5-31-21- The apprentice benefit rate shall be 59.75% + $.01.

* FOR UTILITY WORK PLEASE SEE STATEWIDE RATES

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

FOREMAN REQUIREMENTS:
- 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	29.11	31.54	33.96	36.39	38.82	41.24	43.67			
Benefits	25.61	27.04	28.46	29.90	31.33	32.79	34.23			

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**

	03/17/20	03/17/21	03/17/22	03/17/23
Journeyman	W69.56 B41.92 T111.48	W72.29 B42.92 T115.21	W75.14 B43.91 T119.05	W77.49 B45.57 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

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**

	03/17/20	03/17/21	03/17/22	03/17/23
Journeyman	W54.56 B40.86 T95.42	W56.77 B41.82 T98.59	W59.09 B42.79 T101.88	W60.89 B44.41 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.

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**

	09/24/20
* Leadman	W48.80 B27.31 T76.11
Foreman	W50.80 B27.55 T78.35
General Foreman	W52.80 B27.79 T80.59
Journeyman	W46.80 B27.07 T73.87

Craft: Glazier **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
6 Months	50%	55%		60%	65%		70%	75%		
Benefits	Intervals	1 to 2 =	9.50	Intervals	3 to 4 =	12.11	Intervals	5 to 6 =	15.60	

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

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**

	09/21/20
Foreman	W58.52 B33.42 T91.94
General Foreman	W60.86 B34.53 T95.39
Journeyman	W56.74 B32.86 T89.60

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

INTERVAL	PERIOD AND RATES									
Yearly	26.55	31.49	37.95	44.36						
Benefits	19.44	23.03	25.44	27.76						

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**

	09/24/19
Asbestos Helper Abatement	W36.89 B24.92 T61.81

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

INTERVAL	PERIOD AND RATES									
	SEE	HEAT &	FROST	INSULATOR						

Ratio of Apprentices to Journeymen - 1:3

Craft: Heat & Frost Insulator - Asbestos Worker **COMMENTS/NOTES**

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

The regular workday shall be 8 hours between 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**

	07/28/20
Foreman	W62.18 B28.99 T91.17
General Foreman	W64.18 B28.99 T93.17
Journeyman	W57.18 B28.99 T86.17

Craft: Industrial Painter- Bridges **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
6 Months	40%	50%			60%	70%		80%	90%	
Benefits	Intervals	1 to 2 =	10.28	Intervals	3 to 4 =	12.55	Intervals	5 to 6 =	15.56	

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 facilitites , 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

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**

	07/28/20
Foreman	W50.92 B26.64 T77.56
General Foreman	W52.92 B26.64 T79.56
Journeyman	W45.92 B26.64 T72.56

Craft: Industrial Painter- Structural Steel **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	SEE	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 facilitites , 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**

	07/28/20
Foreman	W51.97 B26.29 T78.26
General Foreman	W53.97 B26.29 T80.26
Journeyman	W46.97 B26.29 T73.26

Craft: Industrial Painter- Water Tanks **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	SEE	PAINTER	BRIDGES							

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 facilitites , 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**

	07/28/20
Journeyman	W38.23 B26.04 T64.27

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**

	07/24/20
Rod /Fence Foreman	W46.14 B48.12 T94.26
Rod/Fence Journeyman	W43.14 B48.12 T91.26
Structural Foreman	W48.44 B48.12 T96.56
Structural Journeyman	W45.44 B48.12 T93.56

Craft: Ironworker **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
6 Months	50%	60%		Yearly	70%	80%	90%			

Ratio of Apprentices to Journeymen - 1:4

Craft: Ironworker **COMMENTS/NOTES**

HAZARDOUS WASTE WORK: On hazardous waste removal work on a state or federally designated hazardous waste site where the Ironworker is required to wear Level A,B, or C personal protection: + $3.00 per hour

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

FOREMAN REQUIREMENTS:
When there are 2 or more Ironworkers on a job, 1 shall be designated a Foreman.

SHIFT DIFFERENTIALS:
- When a 2 shift schedule is established, the first, or day shift , shall be established on an 8 hour basis .The second shift shall be established on an 8 hour basis, and receive the regular rate plus 15%.
- When a three shift schedule is established, the first shift shall be established on an 8 hour basis, the second shift on a 7.5 hour basis, and the third shift on a 7 hour basis. The first shift shall receive the regular hourly rate, the second shift shall receive the regular rate plus 15%, and the third shift shall receive the regular rate plus 20%.
- When there is no day shift, and a second or third shift is established, it shall be established on an 8 hour basis.
- When an irregular shift is established for the Ironworker (Structural) classification, the rate shall be paid at time and one-half the regular rate, inclusive of benefits. When an irregular shift is established for the Rod /Fence classification, the shift shall be established on an 8 hour basis and receive the regular rate, plus 20%.

OVERTIME:

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

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

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Laborer - Asbestos & Hazardous Waste Removal **PREVAILING WAGE RATE**

	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, Good Friday, Easter, Memorial Day, July 4th, Labor Day, Presidential Election Day, Veterans' Day, Thanksgiving Day, Christmas Day. (Holidays start at 12:00 am).

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Laborer - Building **PREVAILING WAGE RATE**

	05/12/20
Class A Journeyman	W34.85 B30.27 T65.12
Class B Journeyman	W34.10 B30.27 T64.37
Class C Journeyman	W28.99 B30.27 T59.26
Foreman	W39.21 B30.27 T69.48
General Foreman	W43.56 B30.27 T73.83

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

INTERVAL	**PERIOD AND RATES**									
6 Months	60%	70%	80%	90%						
Benefit	27.02	27.02	27.02	27.02						

Ratio of Apprentices to Journeymen - *

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

Craft: Laborer - Building **COMMENTS/NOTES**

CLASS A: Specialist laborer including mason tender or concrete pour crew; scaffold builder (scaffolds up to 14 feet in height); operator of forklifts, Bobcats (or equivalent machinery), jack hammers, tampers, motorized tampers and compactors, vibrators, street cleaning machines, hydro demolition equipment, riding motor buggies, conveyors, burners; and nozzlemen on gunite work.
CLASS B: Basic laborer - includes all laborer work not listed in Class A or Class C.
CLASS C: Janitorial-type light clean-up work associated with the TURNOVER of a project, or part of a project, to the owner. All other clean-up work is Class B.

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

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

on the basis of 8 hours pay for 7 hours worked. The day shift shall receive the regular rate, the second shift shall receive the regular rate plus an additional 10%, and the third shift shall receive the regular rate plus an additional 15%.
- When a second or third shift is worked with no day shift, the second or third shift shall be established on the basis of 8 hours pay for 8 hours worked. The second shift shall receive the regular rate plus an additional 10%, and the third shift shall receive the regular rate plus an additional 15%.

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

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

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Laborer - Heavy & General **PREVAILING WAGE RATE**

Rates are located in the
"Statewide" rate package

Craft: Laborer - Heavy & General **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
1000 Hours	60%	70%	80%	90%						
Benefit	21.78	for	all	intervals						

Ratio of Apprentices to Journeymen - *

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

Craft: Laborer - Heavy & General **COMMENTS/NOTES**

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

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Laborer-Residential and Modular Construction **PREVAILING WAGE RATE**

	04/01/20
* Skilled Tradesman (only applies to Modular Construction)	W26.55 B5.45 T32.00
Foreman (person directing crew, regardless of his skill classification)	W30.55 B5.45 T36.00
Laborer	W22.55 B5.45 T28.00
Laborer (for single family and stand-alone duplex owned by single owner)	W17.05 B2.95 T20.00

Craft: Laborer-Residential and Modular Construction **APPRENTICE RATE SCHEDULE**

INTERVAL	**PERIOD AND RATES**									
As shown	800 hours	600 hours	600 hours							
wage & benefits	70%	80%	90%							

Ratio of Apprentices to Journeymen-

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

Craft: Laborer-Residential and Modular Construction **COMMENTS/NOTES**

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

RESIDENTIAL CONSTRUCTION- All residential construction (not commercial), single-family, stand-alone duplex houses, townhouses and multi-family buildings of not more than four (4) floors. 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

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**

	05/01/20
Foreman	W59.32 B35.01 T94.33
Journeyman	W51.58 B30.52 T82.10

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

The regular workday shall consist of 8 hours, starting between 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**

	01/23/20
Apprentice (1st year)	W27.50 B11.90 T39.40
Apprentice (2nd year)	W31.50 B20.60 T52.10
Foreman (Charge Person)	W40.15 B21.38 T61.53
Journeyman 1 (at least 1 year of working exp. as a journeyman)	W35.38 B21.38 T56.76
Journeyman 2 (at least 2 years of working exp. as a journeyman)	W39.15 B21.38 T60.53

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 - New Construction **PREVAILING WAGE RATE**

	09/24/20
Foreman	W45.05 B26.56 T71.61
Journeyman	W40.95 B26.56 T67.51

Craft: Paperhanger - New Construction **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
	SEE	COMMER	CIAL	PAINTER	NEW	CONSTRUC	TION			

Ratio of Apprentices to Journeymen - 1:4

Craft: Paperhanger - New Construction **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: Paperhanger - Renovation **PREVAILING WAGE RATE**

	09/24/20
Foreman	W33.94 B20.70 T54.64
Journeyman	W30.86 B20.70 T51.56

Craft: Paperhanger - Renovation **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
		SEE	COMMER	CIAL	PAINTER	NEW	CONSTRUC	TION		

Ratio of Apprentices to Journeymen - 1:4

Craft: Paperhanger - Renovation **COMMENTS/NOTES**

NOTE: These rates may only be used on jobs where no major alterations occur, and where not more than 3 other trades are present on the job, but may NOT, under any circumstances, be used for work on bridges, stacks, elevated tanks, or generating stations.

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

OVERTIME:
- Hours in excess of 8 per day and 40 per week shall be paid at time and one-half the regular rate.
- Four 10-hour days may be worked, at straight time, Monday through Sunday.

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Pipefitter **PREVAILING WAGE RATE**

	05/01/20
Foreman	W54.76 B45.83 T100.59
Journeyman	W51.01 B42.70 T93.71

Craft: Pipefitter **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
Yearly	35%	45%	55%	65%	75%					
Benefit	21.63	24.20	26.79	29.36	31.94					

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

hours on Sundays and holidays shall be paid at double time, inclusive of benefits.

NOTE: Maintenance work is work to repair, restore, or improve the efficiency of existing facilities. This does NOT apply to ANY new construction.

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

County - UNION

Craft: Plasterer **PREVAILING WAGE RATE**

See Bricklayer, Stone Mason Rates

Craft: Plasterer **COMMENTS/NOTES**

See BRICKLAYER, STONE MASON Rates

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Plumber **PREVAILING WAGE RATE**

	05/01/20
Foreman	W60.69 B37.32 T98.01
General Foreman	W64.62 B37.32 T101.94
Journeyman	W56.19 B37.32 T93.51

Craft: Plumber **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
Yearly	30%	45%	55%	65%	75%					
Benefits	14.31	20.83	22.72	24.52	26.50					

Ratio of Apprentices to Journeymen - *

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

Craft: Plumber **COMMENTS/NOTES**

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

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

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

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

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

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Roofer **PREVAILING WAGE RATE**

	06/04/20
Foreman	W42.77 B28.03 T70.80
Journeyman	W39.77 B28.03 T67.80

Craft: Roofer **APPRENTICE RATE SCHEDULE**

INTERVAL	PERIOD AND RATES									
6 Months	15.90	19.89	23.86	27.84	31.82	35.79				
Benefits	2.10	2.10	25.28	25.28	25.28	25.28				

Ratio of Apprentices to Journeymen - *

* A) For roofing jobs that are of the 1 or single ply nature: 1:2 or fraction thereof
B) For roofing jobs on new built up roofs: 1:3 or fraction thereof
C) For roofing jobs that are of a tear-off nature: 1:2 or fraction thereof
D) For roofing jobs {not requiring complete removal of existing systems, installation done over existing roof}: 1:3 or fraction thereof

Craft: Roofer **COMMENTS/NOTES**

APPRENTICE RATE SCHEDULE FOR THOSE APPRENTICES ENTERING PROGRAM AFTER 4-1-17:

INTERVAL	PERIOD AND RATES							
6 Months	15.90	19.89	23.86	25.85	27.84	29.83	31.82	35.79
Benefits	2.10	2.10	25.28	25.28	25.28	25.28	25.28	25.28

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**

	04/16/20
Foreman	W38.29 B35.55 T73.84
Journeyman	W36.79 B35.55 T72.34

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	12.03	13.71	15.39	17.09	19.21	20.92	22.65	24.38	26.10	27.82

Ratio of Apprentices to Journeymen - 1:3

Craft: Sheet Metal Sign Installation **COMMENTS/NOTES**

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

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

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

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

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

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Sheet Metal Worker **PREVAILING WAGE RATE**

	06/09/20
Foreman	W53.62 B46.85 T100.47
General Foreman	W54.62 B46.85 T101.47
Journeyman	W50.12 B46.85 T96.97

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**

	07/01/20
Foreman	W66.89 B32.13 T99.02
General Foreman	W70.15 B32.13 T102.28
Journeyman	W62.64 B32.13 T94.77

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	12.33	12.33	25.63	25.63	25.63	25.63	Intervals 7 to 10 receive Journeyman Ben.			

Craft: Sprinkler Fitter **COMMENTS/NOTES**

The regular workday consists of 8 consecutive hours between 6:00 AM and 4:30 PM.

FOREMAN REQUIREMENTS:
- The first Sprinkler Fitter on the job must be designated a Foreman.
- On any job having 12 or more Sprinkler Fitters, one must be designated a General Foreman.

SHIFT DIFFERENTIALS:
- Shift work must run for a minimum of 2 consecutive workdays.
- 2nd and 3rd shift shall receive an additional 15% of the regular rate, per hour.
- Any "off hours" shift starting at 8:00 PM or later shall receive an additional 25% of the regular rate, per hour.

OVERTIME:
The first 2 hours in excess of 8 per day, after the regular workday that are not shift work, Monday through Friday, shall be paid at time and one-half the regular rate. Hours worked in excess of 10 per day, Monday through Friday, and all hours on Saturday, Sunday and holidays, shall be paid double the regular rate.
Four 10 hour days may be worked, Monday through Friday, at straight-time.

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

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

County - UNION

Craft: Tile Finisher-Marble **PREVAILING WAGE RATE**

	06/02/20
Finisher	W47.92 B35.14 T83.06

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**

	06/02/20
Finisher	W46.21 B31.31 T77.52
Setter	W60.09 B34.63 T94.72

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**

	06/02/20
Tile Setter	W60.35 B37.39 T97.74

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**

	07/09/20
Grinder or Assistant	W55.82 B37.31 T93.13
Mechanic	W57.42 B37.33 T94.75
Terrazzo Resinous Worker	W47.92 B30.24 T78.16

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**

	05/01/20
Bucket, Utility, Pick-up, Fuel Delivery trucks	W39.21 B38.05 T77.26
Dump truck, Asphalt Distributor, Tack Spreader	W39.21 B38.05 T77.26
Euclid-type vehicles (large, off-road equipment)	W39.31 B38.05 T77.36
Helper on Asphalt Distributor truck	W39.21 B38.05 T77.26
Slurry Seal, Seeding/Fertilizing/ Mulching truck	W39.21 B38.05 T77.26
Straight 3-axle truck	W39.21 B38.05 T77.26
Tractor Trailer (all types)	W39.31 B38.05 T77.36
Vacuum or Vac-All truck (entire unit)	W39.21 B38.05 T77.26
Winch Trailer	W39.41 B38.05 T77.46

Craft: Truck Driver **COMMENTS/NOTES**

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

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

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

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

SHIFT DIFFERENTIAL:
- Shifts starting at 4:00 PM (2nd Shift): + $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 $36.80.
As of 5-1-20, benefits on overtime shall be $37.80.

RECOGNIZED HOLIDAYS: New Year's Day, President's Day, Memorial Day (Decoration Day), July 4th, Labor Day, Presidential Election Day, Veteran's 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**

	04/01/20
Driver	W25.60 B15.71 T41.31

Craft: Truck Driver-Material Delivery Driver **COMMENTS/NOTES**

BLENDED RATE:
When a truck driver is performing work on the site and also serving as a material delivery driver, the driver shall be paid a "blended rate". See the "Truck Driver" craft for the blended rates.

Truck Foreman/Shop Steward: +$0.25 per hour

SHIFT DIFFERENTIALS:
- 2nd Shift shall receive an additional $0.50 per hour
- 3rd Shift shall receive time and one-half the hourly rate.

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

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

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

TERRITORY

ENTIRE STATE

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

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 4:30 PM.

SHIFT DIFFERENTIALS:
- Shift work must run for 5 consecutive workdays.
- When 2 shifts are worked, the second shift shall receive an additional 10% of the regular rate inclusive of benefits, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the regular rate inclusive of benefits, per hour. The third shift shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the regular rate inclusive of benefits, per hour.
- When such hours are mandated by the project owner, a shift that starts between 8:00 PM and midnight and ends by 6:00 AM Saturday, or that starts after 8:00 PM on Sunday, provided there are consecutive hours of work within the shift, shall receive an additional 15% of the regular rate, inclusive of benefits.
- On Highway, Road, Street, and Sewer projects irregular shifts starting between 5:00 PM and 12:00 AM may be worked Monday through Friday, and shall receive an additional 15% of the regular rate, inclusive of benefits. When working with other trades that receive a higher irregular shift rate, the Operating Engineer shall also receive the higher irregular shift rate.

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

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

On hazardous waste removal work or asbestos removal work, on a state or federally designated hazardous waste site, where the operating engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin, and eye protection, the operating engineer shall receive an additional 20% of the hourly wage, per hour.

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2020		**07/01/2021**	**07/01/2022**
Rate	Fringe	Total	Total	Total
53.23	34.50	87.73	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 addtional $1.00 per hour on 100 ft. up to 199 ft. total height, and an additional $2.00 per hour on 200 ft. and over total height.

Hydraulic Crane (10 tons & under)

Hydraulic Dredge

Hydro-Axe

Hydro-Blaster

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
53.23	34.50	87.73	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:

	07/01/2020		**07/01/2021**	**07/01/2022**
Rate	Fringe	Total	Total	Total
51.32	34.50	85.82	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 (Hetzel, Rexomatic & similar types)

Concrete Vibrator

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2020		**07/01/2021**	**07/01/2022**
Rate	Fringe	Total	Total	Total
51.32	34.50	85.82	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, tugger, aerial platform hoist, house car)

Hopper

Hopper Doors (power operated)

Ladder (motorized)

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2020		07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
51.32	34.50	85.82	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

Skimmmer Machine (boom type)

Steel Cutting Machine (service & maintenance)

Tamrock Drill

Tractor

Transfer Machines

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2020		07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
51.32	34.50	85.82	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:

	07/01/2020		07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
47.98	34.50	82.48	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:

	07/01/2020		07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
45.40	34.50	79.90	82.20	84.45

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2020		**07/01/2021**	**07/01/2022**
Rate	Fringe	Total	Total	Total
55.56	34.50	90.06	92.36	94.61

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (minimum)

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2020		**07/01/2021**	**07/01/2022**
Rate	Fringe	Total	Total	Total
54.82	34.50	89.32	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

Helicoptor Co-Pilot

Helicoptor Communications Engineer

Juntann Pile Driver

Locomotive (large)

Mucking Machine

OPERATING ENGINEERS **Rates Expiration Date :**

Effective Dates:

	07/01/2020		**07/01/2021**	**07/01/2022**
Rate	Fringe	Total	Total	Total
54.82	34.50	89.32	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:

	07/01/2020		**07/01/2021**	**07/01/2022**
Rate	Fringe	Total	Total	Total
49.69	34.50	84.19	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:

	07/01/2020		07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
49.69	34.50	84.19	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 proprane, natural gas, and flow-type units)

Water or Sprinkler Truck

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

Welding System - Multiple (rectifier transformer type)

Wellpoint Systems (including installation by bull gang and maintenance)

Effective Dates:

	07/01/2020		07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
56.64	34.50	91.14	93.44	95.69

CLASSIFICATIONS:

Helicoptor Pilot/Engineer

Effective Dates:

	07/01/2020		07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
61.32	34.50	95.82	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:

	07/01/2020		07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
60.32	34.50	94.82	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:

	07/01/2020		**07/01/2021**	**07/01/2022**
Rate	Fringe	Total	Total	Total
56.82	34.50	91.32	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:

	07/01/2020		**07/01/2021**	**07/01/2022**
Rate	Fringe	Total	Total	Total
59.32	34.50	93.82	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:

	07/01/2020		**07/01/2021**	**07/01/2022**
Rate	Fringe	Total	Total	Total
55.82	34.50	90.32	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 4:30 PM.

SHIFT DIFFERENTIALS:
- Shift work must run for 5 consecutive workdays.
- When 2 shifts are worked, the second shift shall receive an additional 10% of the regular rate inclusive of benefits, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the regular rate inclusive of benefits, per hour. The third shift shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the regular rate inclusive of benefits, per hour.
- When such hours are mandated by the project owner, a shift that starts between 8:00 PM and midnight and ends by 6:00 AM Saturday, or that starts after 8:00 PM on Sunday, provided there are consecutive hours of work within the shift, shall receive an additional 15% of the regular rate, inclusive of benefits.
- On Highway, Road, Street, and Sewer projects irregular shifts starting between 5:00 PM and 12:00 AM may be worked Monday through Friday, and shall receive an additional 15% of the regular rate, inclusive of benefits. When working with other trades that receive a higher irregular shift rate, the Operating Engineer shall also receive the higher irregular shift rate.

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

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

On hazardous waste removal work or asbestos removal work, on a state or federally designated hazardous waste site, where the operating engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin, and eye protection, the operating engineer shall receive an additional 20% of the hourly wage, per hour.

Effective Dates:

07/01/2020			**07/01/2021**	**07/01/2022**
Rate	Fringe	Total	Total	Total
58.45	34.50	92.95	95.25	97.50

CLASSIFICATIONS:

Helicopter Co-Pilot & Communications Engineer

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
54.39	34.50	88.89	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:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
51.73	34.50	86.23	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:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
50.20	34.50	84.70	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:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
48.44	34.50	82.94	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:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
56.01	34.50	90.51	92.81	95.06

CLASSIFICATIONS:

Lead Engineer, Foreman Engineer, Safety Engineer (Minimum)

Effective Dates:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
45.40	34.50	79.90	82.20	84.45

CLASSIFICATIONS:

Field Engineer - Rodman or Chainman

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
55.15	34.50	89.65	91.95	94.20

CLASSIFICATIONS:

Field Engineer-Chief of Party

Vacuum Truck

Effective Dates:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
63.34	34.50	97.84	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:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
61.68	34.50	96.18	98.48	100.73

CLASSIFICATIONS:

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

Effective Dates:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
58.84	34.50	93.34	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:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
57.18	34.50	91.68	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.

STRUCTURAL STEEL ERECTION **Rates Expiration Date :**

Effective Dates:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
58.84	34.50	93.34	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 4:30 PM.

SHIFT DIFFERENTIALS:
- Shift work must run for 5 consecutive workdays.
- When 2 shifts are worked, the second shift shall receive an additional 10% of the regular rate inclusive of benefits, per hour.
- When 3 shifts are worked, the second shift shall receive 8 hours pay for 7.5 hours of work, plus an additional 10% of the regular rate inclusive of benefits, per hour. The third shift shall receive 8 hours pay for 7 hours of work, plus an additional 15% of the regular rate inclusive of benefits, per hour.
- When such hours are mandated by the project owner, a shift that starts between 8:00 PM and midnight and ends by 6:00 AM Saturday, or that starts after 8:00 PM on Sunday, provided there are consecutive hours of work within the shift, shall receive an additional 15% of the regular rate, inclusive of benefits.
- On Highway, Road, Street, and Sewer projects irregular shifts starting between 5:00 PM and 12:00 AM may be worked Monday through Friday, and shall receive an additional 15% of the regular rate, inclusive of benefits. When working with other trades that receive a higher irregular shift rate, the Operating Engineer shall also receive the higher irregular shift rate.

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

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

On hazardous waste removal work or asbestos removal work, on a state or federally designated hazardous waste site, where the operating engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin, and eye protection, the operating engineer shall receive an additional 20% of the hourly wage, per hour.

Effective Dates:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
54.82	34.50	89.32	91.62	93.87

CLASSIFICATIONS:

Driller

Effective Dates:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
47.98	34.50	82.48	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

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Effective Dates:

03/01/2020

Rate	Fringe	Total
45.75	32.53	78.28

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

03/01/2020

Rate	Fringe	Total
45.45	32.53	77.98

CLASSIFICATIONS:

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

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
44.95	32.53	77.48

CLASSIFICATIONS:

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
47.45	32.53	79.98

CLASSIFICATIONS:

Blaster

Effective Dates:

03/01/2020

Rate	Fringe	Total
44.40	32.53	76.93

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

03/01/2020

Rate	Fringe	Total
44.05	32.53	76.58

CLASSIFICATIONS:

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

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.90	32.53	76.43

CLASSIFICATIONS:

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

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

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

Effective Dates:

	03/01/2020	
Rate	Fringe	Total
43.50	32.53	76.03

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:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
53.57	34.50	88.07	90.37	92.62

CLASSIFICATIONS:

Driller

Effective Dates:

07/01/2020			07/01/2021	07/01/2022
Rate	Fringe	Total	Total	Total
47.33	34.50	81.83	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:

10/01/2020

Rate	Fringe	Total
41.42	15.29	56.71

CLASSIFICATIONS:

Lead Dredgerman, Operator, Leverman

Licensed Tug Operator (over 1000 HP)

Effective Dates:

10/01/2020

Rate	Fringe	Total
35.82	14.84	50.66

CLASSIFICATIONS:

Derrick Operator, Spider/Spill Barge Operator

Engineer, Electrician, Chief Welder, Chief Mate

Fill Placer, Operator II

Licensed Boat Operator

Maintenance Engineer

Effective Dates:

10/01/2020

Rate	Fringe	Total
33.72	14.67	48.39

CLASSIFICATIONS:

Certified Welder

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

Effective Dates:

10/01/2020

Rate	Fringe	Total
32.80	14.30	47.10

CLASSIFICATIONS:

Mate, Drag Barge Operator, Steward, Assistant Fill Placer

Welder

Effective Dates:

10/01/2020

Rate	Fringe	Total
31.74	14.21	45.95

CLASSIFICATIONS:

Boat Operator

Effective Dates:

10/01/2020

Rate	Fringe	Total
26.37	13.48	39.85

CLASSIFICATIONS:

Shoreman, Deckhand, Rodman, Scowman

Effective Dates:

10/01/2020

Rate	Fringe	Total
36.91	14.93	51.84

CLASSIFICATIONS:

Crane Operator

TERRITORY

ENTIRE STATE

NEW JERSEY DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

PREVAILING WAGE RATE DETERMINATION

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

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: + $3.00/hr
-other Hazardous Waste site: + $1.00/hr

Effective Dates:

03/01/2020

Rate	Fringe	Total
45.25	32.53	77.78

CLASSIFICATIONS:

Paving Foreman

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.80	32.53	76.33

CLASSIFICATIONS:

Head Raker

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.65	32.53	76.18

CLASSIFICATIONS:

Raker, Screedman, Luteman

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.40	32.53	75.93

CLASSIFICATIONS:

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.50	32.53	76.03

CLASSIFICATIONS:

Milling Controller

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.70	32.53	76.23

CLASSIFICATIONS:

Traffic Control Coordinator

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:

10/18/2020			10/18/2021	10/18/2022
Rate	Fringe	Total	Total	Total
32.92	29.50	62.42	64.17	65.92

CLASSIFICATIONS:

Helper (4th year helper)

Effective Dates:

10/18/2020			10/18/2021	10/18/2022
Rate	Fringe	Total	Total	Total
41.74	29.50	71.24	73.24	75.24

CLASSIFICATIONS:

Driller

Effective Dates:

10/18/2020			10/18/2021	10/18/2022
Rate	Fringe	Total	Total	Total
47.78	29.50	77.28	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.

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

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

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.00	32.53	75.53

CLASSIFICATIONS:

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.70	32.53	76.23

CLASSIFICATIONS:

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

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.95	32.53	76.48

CLASSIFICATIONS:

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
47.50	32.53	80.03

CLASSIFICATIONS:

"A" Rate:
blaster

Effective Dates:

03/01/2020

Rate	Fringe	Total
45.25	32.53	77.78

CLASSIFICATIONS:

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
46.25	32.53	78.78

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.

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

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

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.00	32.53	75.53

CLASSIFICATIONS:

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.00	32.53	75.53

CLASSIFICATIONS:

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

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.70	32.53	76.23

CLASSIFICATIONS:

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.70	32.53	76.23

CLASSIFICATIONS:

wagon or directional drill operator; drill master

Effective Dates:

03/01/2020

Rate	Fringe	Total
47.50	32.53	80.03

CLASSIFICATIONS:

blaster

Effective Dates:

03/01/2020

Rate	Fringe	Total
45.25	32.53	77.78

CLASSIFICATIONS:

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
46.25	32.53	78.78

CLASSIFICATIONS:

general foreman

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.95	32.53	76.48

CLASSIFICATIONS:

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

PIPELINE - MAINLINE TRANSMISSION **Rates Expiration Date :**

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:

06/09/2020

Rate	Fringe	Total
54.58	32.80	87.38

CLASSIFICATIONS:

Pipeline Journeyman Welder

PIPELINE - MAINLINE TRANSMISSION **Rates Expiration Date :**

Effective Dates:

06/09/2020

Rate	Fringe	Total
54.58	32.80	87.38

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

06/09/2020

Rate	Fringe	Total
33.27	22.42	55.69

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:

	11/02/2020		**11/01/2021**	**11/01/2022**
Rate	Fringe	Total	Total	Total
61.50	27.23	88.73	91.23	93.73

CLASSIFICATIONS:

Pipeline Journeyman Welder

Effective Dates:

	11/02/2020		**11/01/2021**	**11/01/2022**
Rate	Fringe	Total	Total	Total
61.50	27.23	88.73	91.23	93.73

CLASSIFICATIONS:

Pipeline Journeyman

Effective Dates:

	11/02/2020		**11/01/2021**	**11/01/2022**
Rate	Fringe	Total	Total	Total
39.46	19.88	59.34	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: + $3.00/hr
-other Hazardous Waste site: + $1.00/hr

Effective Dates:

03/01/2020

Rate	Fringe	Total
45.25	32.53	77.78

CLASSIFICATIONS:

Asphalt Foreman

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.95	32.53	76.48

CLASSIFICATIONS:

Asphalt Screedman

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.70	32.53	76.23

CLASSIFICATIONS:

Asphalt Raker or Lute Man

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
43.00	32.53	75.53

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 wokday Monday through Friday, that is not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate, inclusive of benefits. All hours on Sundays and holidays shall be paid at double the hourly rate, inclusive of benefits.
Four 10-hour days may worked, at straight time, between 7:00 AM and 6:30 PM, Monday through Thursday.

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

Effective Dates:

	12/30/2019		**11/29/2020**
Rate	Fringe	Total	Total
55.89	38.56	94.45	96.84

CLASSIFICATIONS:

Chief Lineman

Effective Dates:

	12/30/2019		**11/29/2020**
Rate	Fringe	Total	Total
52.73	36.38	89.11	91.36

CLASSIFICATIONS:

Journeyman Lineman

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

Effective Dates:

12/30/2019			11/29/2020
Rate	Fringe	Total	Total
52.73	36.38	89.11	91.36

CLASSIFICATIONS:

Special License Operator

Effective Dates:

12/30/2019			11/29/2020
Rate	Fringe	Total	Total
52.20	36.02	88.22	90.44

CLASSIFICATIONS:

Transit Man

Effective Dates:

12/30/2019			11/29/2020
Rate	Fringe	Total	Total
50.62	34.91	85.53	87.70

CLASSIFICATIONS:

Line Equipment Operator

Effective Dates:

12/30/2019			11/29/2020
Rate	Fringe	Total	Total
44.29	30.55	74.84	76.73

CLASSIFICATIONS:

Dynamite Man

Effective Dates:

12/30/2019			11/29/2020
Rate	Fringe	Total	Total
65.91	45.47	111.38	114.19

CLASSIFICATIONS:

General Foreman

Effective Dates:

12/30/2019			11/29/2020
Rate	Fringe	Total	Total
60.64	41.83	102.47	105.05

CLASSIFICATIONS:

Assistant General Foreman

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

Effective Dates:

12/30/2019			11/29/2020
Rate	Fringe	Total	Total
59.06	40.73	99.79	102.32

CLASSIFICATIONS:

Line Foreman

Effective Dates:

12/30/2019			11/29/2020
Rate	Fringe	Total	Total
42.71	29.46	72.17	73.99

CLASSIFICATIONS:

Street Light Mechanical Leader

Effective Dates:

12/30/2019			11/29/2020
Rate	Fringe	Total	Total
40.60	28.02	68.62	70.34

CLASSIFICATIONS:

Groundman Winch Operator

Effective Dates:

12/30/2019			11/29/2020
Rate	Fringe	Total	Total
40.60	28.02	68.62	70.34

CLASSIFICATIONS:

Groundman Truck Operator

Effective Dates:

12/30/2019			11/29/2020
Rate	Fringe	Total	Total
40.07	27.64	67.71	69.43

CLASSIFICATIONS:

Street Light Mechanic

Effective Dates:

12/30/2019			11/29/2020
Rate	Fringe	Total	Total
40.07	27.64	67.71	69.43

CLASSIFICATIONS:

Line Equipment Mechanic

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

Effective Dates:

	12/30/2019		**11/29/2020**
Rate	Fringe	Total	Total
34.27	23.64	57.91	59.38

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

	12/30/2019		**11/29/2020**
Rate	Fringe	Total	Total
31.64	21.83	53.47	54.80

CLASSIFICATIONS:

Groundman 1st Year

Effective Dates:

	12/30/2019		**11/29/2020**
Rate	Fringe	Total	Total
52.20	36.02	88.22	90.44

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 wokday Monday through Friday, that is not shift work, and all hours on Saturday shall be paid at time and one-half the regular rate. All hours on Sundays and Holidays shall be paid double the hourly rate.

Four 10-hour days may be worked, at straight time, between 6:00 AM and 6:00 PM, Monday through Thursday with Friday used as a make-up day.

RECOGNIZED HOLIDAYS:
New Year's Day, Memorial Day, July 4th, Labor Day, Veterans' Day, Thanksgiving Day and Christmas Day or on days celebrated.

WORKING RULES:
There shall be a Foreman in charge of each work crew. No crews are to exceed twelve (12) men, including Foremen.

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

Effective Dates:

12/01/2019

Rate	Fringe	Total
62.11	49.53	111.64

CLASSIFICATIONS:

General Foreman

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

Effective Dates:

12/01/2019

Rate	Fringe	Total
55.31	45.49	100.80

CLASSIFICATIONS:

Foreman

Effective Dates:

12/01/2019

Rate	Fringe	Total
52.40	43.78	96.18

CLASSIFICATIONS:

Small Job Foreman

Effective Dates:

12/01/2019

Rate	Fringe	Total
48.52	41.48	90.00

CLASSIFICATIONS:

Heavy Equipment Operator

Effective Dates:

12/01/2019

Rate	Fringe	Total
48.52	41.48	90.00

CLASSIFICATIONS:

Cable Splicer

Effective Dates:

12/01/2019

Rate	Fringe	Total
48.52	41.48	90.00

CLASSIFICATIONS:

Journeyman Lineman

Effective Dates:

12/01/2019

Rate	Fringe	Total
48.52	41.48	90.00

CLASSIFICATIONS:

Journeyman Welder

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

Effective Dates:

12/01/2019

Rate	Fringe	Total
48.52	41.48	90.00

CLASSIFICATIONS:

Journeyman Painter

Effective Dates:

12/01/2019

Rate	Fringe	Total
38.82	35.73	74.55

CLASSIFICATIONS:

Light Equipment Operator

Effective Dates:

12/01/2019

Rate	Fringe	Total
33.96	32.86	66.82

CLASSIFICATIONS:

Groundman Truck Driver

Effective Dates:

12/01/2019

Rate	Fringe	Total
31.54	31.44	62.98

CLASSIFICATIONS:

Groundman 3rd Year

Effective Dates:

12/01/2019

Rate	Fringe	Total
29.11	30.01	59.12

CLASSIFICATIONS:

Groundman 2nd Year

Effective Dates:

12/01/2019

Rate	Fringe	Total
26.69	28.57	55.26

CLASSIFICATIONS:

Groundman 1st Year

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

Effective Dates:

12/01/2019

Rate	Fringe	Total
21.35	25.41	46.76

CLASSIFICATIONS:

Flagman

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS **Rates Expiration Date :**

THESE RATES APPLY TO CONSTRUCTION ON NEW TRANS HUDSON TUNNELS ONLY

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

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

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

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

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

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
68.63	32.53	101.16

CLASSIFICATIONS:

Walking Boss & Superintendent

Effective Dates:

03/01/2020

Rate	Fringe	Total
68.18	32.53	100.71

CLASSIFICATIONS:

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

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS **Rates Expiration Date :**

Effective Dates:

03/01/2020

Rate	Fringe	Total
67.43	32.53	99.96

CLASSIFICATIONS:

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

Effective Dates:

03/01/2020

Rate	Fringe	Total
71.18	32.53	103.71

CLASSIFICATIONS:

Blaster

Effective Dates:

03/01/2020

Rate	Fringe	Total
66.60	32.53	99.13

CLASSIFICATIONS:

Top Labor Foreman

Effective Dates:

03/01/2020

Rate	Fringe	Total
66.08	32.53	98.61

CLASSIFICATIONS:

Skilled Men (including Caulker, Powder Carrier, all other skilled men)
Skilled Men (including Miner, Drill Runner, Iron Man, Conveyor Man, Maintenance Man, Safety Miner, Rigger, Block Layer, Cement Finisher, Rod Man)

Effective Dates:

03/01/2020

Rate	Fringe	Total
65.85	32.53	98.38

CLASSIFICATIONS:

Semi-Skilled Men (including Bell or Signal Man top or bottom, Form Worker & Mover, Concrete Worker, Shaft Man, Tunnel Laborer, Caulker's Helper, all other semi-skilled)
Semi-Skilled Men (including Miner's Helper, Chuck Tender, Track Man, Nipper, Brake Man, Derail Man, Cable Man, Hose Man, Gravel Man, Form Man)

HEAVY & GENERAL LABORERS- NEW TRANS HUDSON TUNNELS **Rates Expiration Date :**

Effective Dates:

	03/01/2020	
Rate	Fringe	Total
65.25	32.53	97.78

CLASSIFICATIONS:

All others (including Powder Watchman, Change House Attendant, Top Laborer, Job Steward)

TECHNICAL SPECIFICATIONS

CONDITIONS SPECIFIC TO THIS PROJECT

The 2021 County Aid Resurfacing Project consists of the resurfacing of 17.38 miles of roadway within Union County. The specific roads are as listed below:

- Ackerman Avenue from Deer Path to Coles Avenue
- Green Brook Park Drive from Clinton Avenue to West End Avenue
- Main Street from the Essex County Line to Springfield Avenue
- New Brunswick Avenue from St. Georges Avenue to Hazelwood Avenue
- New Providence Road from Whipporwill Way to US Route 22
- Oak Ridge Road from Lake Avenue to the Union County Line
- Park Avenue from 9th Street to Sloane Boulevard
- Roselle Street from Elizabeth Avenue to St. Georges Avenue
- Springfield Avenue from the Morris County Line to Central Avenue
- Shunpike Road from Mountain Avenue to Interstate Route 78
- Vaux Hall Road from the Milburn Township Line to Salem Road
- First Avenue from the Cranford Township Line to the Elizabeth City Line
- Warinaco Park and Exits
- Terrill Road and La Grande Avenue Intersection

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
- 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:

- Oak Ridge Road from Lake Avenue to the Union County Line (Clark Township)

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

The pavement resurfacing will include milling to an average depth of two inches and resurfacing with hot-mix asphalt (HMA) 9.5M64 surface course of the same thickness. The 9.5M64 mix will also be used as a leveling course where necessary. Isolated base pavement repair prior to resurfacing will be performed as determined necessary by the County or our inspectors after milling. The County's standard pavement section will be used for base repair and curb restoration, including an HMA 19M64 base course six inches in thickness and a dense-graded aggregate base course four inches in thickness.

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

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

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

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

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

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

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

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

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

Work within any portion of NJDOT Right-Of-Way (R.O.W.) including off-ramps closures, will be permitted between 9:00 AM and 3:00 PM, Monday through Friday. Additionally, any lane closures (within the NJDOT right of way) resulting from adjacent work, and or maneuvering space for construction equipment, shall be restricted to the above mentioned times. For nighttime closures of NJDOT roadways, NJDOT restricts the hours of operation between 10:00 PM and 6:00 AM. The Contractor is made aware of the different time restrictions for County and NJDOT roadways. The Contractor shall review any applicable NJDOT permits for further restrictions. These times indicate the road closure & opening times, respectively. Therefore, the contractor shall have all equipment and materials out of the NJDOT right of way and terminate all construction operations at the appropriate time (with adequate time for cleanup, material cooling, drying, curing, etc.), in order for the roads to be opened to traffic by the specified time. The County of Union will secure all NJDOT permits, where necessary, prior to construction. Other items to be installed including accessible curb ramps, street name signs, pavement reflectors, loop detectors and curb ramp delineation, shall be performed while traffic is maintained.

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

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

Approximately 17.38 miles of County roads will be improved under this Program as follows:

Municipality	**Street**	From	To	Length (Miles)
Berkeley Heights/New Providence	**Springfield Avenue**	Morris County Line	Central Avenue	2.10
Clark	**Oak Ridge Road**	Lake Avenue	Union County Line	.83
Linden	**Roselle Street**	Elizabeth Avenue	St. Georges Avenue	.81
Mountainside	**Ackerman Avenue**	Deer Path	Coles Avenue	.39
Mountainside	**New Providence Road**	Whippoorwill Way	US Route 22	.65
Plainfield	**Park Avenue**	9th Street	Sloane Boulevard	1.12
Plainfield	**Green Brook Park Drive**	Clinton Avenue	West End Avenue	.97
Rahway	**New Brunswick Avenue**	St. Georges Avenue	Hazelwood Avenue	.90
Roselle	**First Avenue**	Cranford Township Line	Elizabeth City Line	2.10
Roselle	**Warinaco Park & Exits**	St. Georges Avenue	St. Georges Avenue	2.61
Springfield	**Main Street**	Essex County Line	Springfield Avenue	.28
Springfield	**Shunpike Road**	Mountain Avenue	Interstate Route 78	.82
Union	**Vaux Hall Road**	Milburn Township Line	Salem Road	3.80
Fanwood/Plainfield	**Terrill Road/La Grande Avenue Intersection**	N/A	N/A	
			Total Mileage	**17.38**

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

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

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

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

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

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

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

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

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

The required time of completion for this project is <u>180 calendar days</u> from the Notice to Proceed.

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

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

The County retains the right to delete or substitute roads to be milled and paved under this contract. The County also retains the right to increase or decrease any and all quantities up to 25 percent of those estimated, at the unit prices bid.

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

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

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

All roads under this contract requiring milling will be milled to a depth of two (2) inches. 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
Berkeley Heights/New Providence	Springfield Avenue	Plainfield Avenue, Lone Pine Drive, Snyder Avenue, Union Avenue, Central Avenue
Clark	Oak Ridge Road	Lake Avenue
Linden	Roselle Street	St. Georges Avenue, Curtis Street, Elizabeth Avenue
Mountainside	New Providence Road	US Route 22
Plainfield	Park Avenue	9th Street, Randolph Road, Pemberton Avenue,
Rahway	New Brunswick Avenue	St. Georges Avenue, Inman Avenue, Hazelwood Avenue
Roselle	First Avenue	Amsterdam Avenue, Locust Street, Chestnut Street, Walnut Street, Linden Road
Springfield	Main Street	Springfield Avenue
Springfield	Shunpike Road	Mountain Avenue
Union	Vaux Hall Road	Valley Street, Springfield Avenue, Hilton Avenue, Liberty Avenue, Burnet Avenue, Stahuber Avenue, Hendricks Drive, Caldwell Avenue, Barbara Avenue, Stuyvesant Avenue, Oakland Avenue, Salem Road
Fanwood/Plainfield	Terrill Road/La Grande Avenue	Terrill Road/La Grande Avenue

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

SPECIAL PROVISIONS
2021 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 2001~~7~~ Standard Specifications unless otherwise noted.

Whenever reference to page number is made, it is construed to refer to the 2001~~7~~ 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:

   Thomas R. Solfaro, P.E., C.M.E.
   Neglia Engineering Associates
   200 Central Avenue, Suite 102, Mountainside, NJ 07092
   Email: tsolfaro@negliaengineering.com
   Telephone: (201) 939-8805

2. **After Award of Contract.**

   Thomas R. Solfaro, P.E., C.M.E.
   Neglia Engineering Associates
   200 Central Avenue, Suite 102, Mountainside, NJ 07092
   Email: tsolfaro@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 expanse, 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

Item	*Pay Unit*
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 PARAGRAPGH 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 Binder[1]

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.

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 401 – HOT MIX ASPHALT (HMA) COURSES

401.03.03 AIR VOIDS ACCEPTANCE PLAN

THIS SUBSECTION IS REPLACED BY THE FOLLOWING:

H. Air Void Requirements.

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 Regional District Local Aid 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 1.

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 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 in-place air voids of each completed lot outside the acceptable range of 2 percent air voids to 8 percent air voids.

The RE will assess a reduction in lot due to nonconformance to air voids according to the Table 401.03.03-3.

Table 401.03.03-3 Reduction for Nonconformance to Air Voids Requirements

Lot Average Air Void Value (Five Samples)	Reduction Per Lot (Percent of Lot)
0.0 to 1.9	10
2.0 to 8.0	0
8.1 to 9.0	5
9.1 to 10.0	15
10.1 to 12.0	30
Over 12.0	Remove & Replace

If the average air voids for the lot is greater than 12.0 percent, remove and replace the lot. The replacement work is subject to the same requirements as the initial work.

401.03.03 I THICKNESS REQUIREMENTS

THIS SUBSECTION IS DELETED. IN NO INSTANCE WILL A COMPACTED AVERAGE THICKNESS OF LESS THAN 1.25 INCHES BE ACCEPPTABLE.

THIS SUBSECTION IS REPLACED BY THE FOLLOWING:

I. Thickness Requirements.

Thickness requirements will apply when full-depth, uniform-thickness HMA pavement construction is shown.

Pavement lots are defined as approximately 15,000 square yards of pavement area. The Engineer will not include areas consisting of different HMA mixtures or thicknesses in the same lot. If thickness lot area is less than 5000 square yards, the Regional District Local Aid Office may waive the thickness requirements.

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

The Laboratory Technician who performs the quality assurance sampling shall be certified by the Society of Asphalt Technologists of New Jersey as an Asphalt Plant Technologist, Level 1.

The Laboratory will test for thickness using the full-depth cores taken for surface course air voids, evaluated according to NJDOT B-4. The Laboratory will base acceptance on total thickness and thickness of the surface course.

1. Total Thickness. The Laboratory will calculate the percent defective (PD) as the percentage of the lot that is less than the design thickness. The Department will base total thickness acceptance on the percentage of the lot estimated to fall below the specified thickness as follows:

a. Sample Mean ($\overline{X}$) and Standard Deviation (S) of the N Test Results ($X_1, X_2,..., X_N$).

$$\overline{X} = \frac{(X_1 + X_2 + ... + X_N)}{N}$$

$$S = \sqrt{\frac{(X_1 - \overline{X})^2 + (X_2 - \overline{X})^2 + ... + (X_N -$$

b. Quality Index (Q_l).

$Q_L = (\overline{X} - T_{des})/S$, and T_{des} is the design thickness.

c. Percent Defective (PD). Using NJDOT ST for the appropriate sample size, determine the percentage of material (PD) falling below the design thickness associated with Q_L (lower limit).

d. Reduction in Payment. The Department will determine the reduction in payment based on the quantity of the surface course multiplied by the percent reduction in payment from Table 401.03.03-5.

Table 401.03.03-5 Reduction in Payment for Nonconformance to Requirements for Total Thickness

Percent Defective	Percent Reduction
0 to 25.0	0
25.1 to 30.0	2
30.1 to 35.0	5
35.1 to 40.0	10
40.1 to 45.0	20
Over 45.0	Remove & Replace

e. Removal and Replacement. If the lot PD ≥ 45, remove and replace, or mill and overlay, the lot. The replacement work is subject to the same requirements as the initial work.

2. **Surface Course Thickness.** The Laboratory will evaluate the surface course solely to determine whether a remove-and-replace or an overlay condition exists, not for pay adjustment. The Laboratory will calculate the percent defective (PD) as the percentage of the lot that is less than the allowable thickness for the nominal maximum aggregate used in the surface course. The Laboratory will accept pavement lots with PD ≤ 25 and will reject pavement lots with PD > 25.

   The Laboratory will base surface thickness acceptance on the percentage of the lot estimated to fall below the allowable thickness as follows:

   a. **Sample Mean ($\overline{X}$) and Standard Deviation (S) of the N Test Results (X_1, X_2,..., X_N).** Calculate using the formula as specified in 401.03.03.I.1.

   b. **Quality Index (Q).**

      $Q_L = (\overline{X} - T_{all})/S$, where T_{all} is the minimum allowable thickness from Table 401.03.03-6.

Table 401.03.03-6 Surface Course Thickness Requirements

HMA Mix Design Size Designation	Minimum Allowable Compacted Lift Thickness (T_{all})
4.75 MM	0.75 inch
9.5 MM	1.00 inch
12.5 MM	1.25 inches
19 MM	2.00 inches

   c. **Percent Defective.** Using NJDOT ST for the appropriate sample size, determine the percentage of material (PD) falling below the allowable thickness associated with Q_L (lower limit).

   d. **Removal and Replacement.** If the surface course fails to meet the acceptance requirement with a PD ≤ 25, the Department will require removal and replacement of the lot. The replacement work is subject to the same requirements as the initial work.

REPLACE 401.03.03.J WITH THE FOLLOWING:

J. **Ride Quality Requirements**. The Department may evaluate the HMA surface course placed in travel lanes using the International Roughness Index (IRI) according to ASTM E 1926. Other areas will be tested with a ten foot straight edge. The Department will use the measured IRI and straight edge to compute pay adjustment (PA). The PA will be negative for defective work.

The RE will designate an independent testing agency to perform the ride quality testing and analysis. The testing agency is required to comply with certification requirements according to NJDOT R-1.

The Department will calculate the Pay Adjustment (PA) as specified in Table 401.03.03-7 and will base PA on lots of 0.01mile length for each travel lane.

1. Smoothness Measurement.

   The testing agency will test the longitudinal profile of the HMA surface course for ride quality with a Class 1 Inertial Profiling System according to AASHTO MP 11 approved according to AASHTO PP 49.

   The testing agency will test the full extent of the pavement in the direction of travel in each wheel path. The single IRI value reported for each 0.01-mile lot of pavement is the average of 3 runs.

2. Other Areas.

In addition to the above, a 10-foot straightedge shall be used for the following areas: transverse profile of the finished riding surface, longitudinal and transverse profile of shoulders and ramps, utility hardware, drainage inlets and manholes, and any other areas so designated in the Special Provisions. Any areas that have more than a 1/4-inch deviation between any two contact points of the straightedge shall be corrected by the Contractor using infrared heating to rework the material in a manner approved by the Engineer. Following correction, the area will be retested to verify compliance, each individual non-complying location will be assessed $250 negative PA.

3. Control Testing.

   Perform control testing during HMA placement to ensure compliance with the ride quality requirements specified in Table 401.03.03-7.

4. Preparation for IRI Testing.

   Provide the necessary traffic control when the testing agency performs IRI testing. Perform required mechanical sweeping of the surface course before IRI testing. To facilitate auto triggering on laser profilers, place a single line of preformed traffic marking tape perpendicular to the roadway baseline 300 feet before the beginning of each lane to be tested.

5. Acceptance.

   The Engineer will determine acceptance and make payment adjustments based on the following:

   i. Pay Adjustment.

      The pay equations in Table 401.03.03-7 express the pay adjustment in dollars per lot of 0.01 mile. For lots of any other length, the Engineer will scale the pay adjustment up or down in proportion to the actual length of the lot. IRI numbers are in inches per mile.

Table 401.03.03-7 Pay Equations for IRI Ride Quality for 0.01 Mile

Local Roadways with Posted Speed ≥ 45 MPH	IRI ≤ 100	PA = $0
	100 < IRI ≤ 170	PA = (IRI − 100) × (− $1.43)
	IRI > 170	Remove & Replace
Local Roadways with Posted Speed < 45 MPH	IRI ≤ 120	PA = $0
	120 < IRI ≤ 220	PA = (IRI − 120) × (− $1.00)
	IRI > 220	Remove & Replace

   ii. Retest provision.

      After testing, if the IRI exceeds the Remove and Replace value (RRV) in Table 401.03.03-7, the testing agency will retest the lot. The testing agency will average the IRI values from the initial test and the retest to determine the final result.

   iii. Removal and Replacement.

      If the average IRI is greater than the RRV after a retest is performed, remove and replace the lot. Any replacement work is subject to the same requirements as the initial work. If only a small percentage (less than 8 percent) of paving lots falls under the RRV, the RE may allow the Contractor to submit a plan for corrective action. If the Contractor's plan for corrective action is not approved, the RE may require removal and replacement, or may allow the lot to remain in place and the lot will be subject to the pay adjustment as

computed in Table 401.03.03-7. If the Contractor's plan for corrective action is approved and the lot is reworked, the testing agency will test and evaluate it as a new lot that must meet the same requirements as the initial work.

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

606.03.02 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.

606.04 MEASUREMENT AND PAYMENT

THE FOLLOWING IS ADDED:

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

RESET BRICK PAVER

DESCRIPTION

Under this item the Contractor shall restore the work site and access area to its original condition including, but not limited to repair of driveways, (paver) sidewalks, roadways, restoration of loose Belgian Block curbs, cleaning and removal of stockpiles and equipment and all else not specifically covered elsewhere in these specifications. All concrete aprons shall be restored and driveways (paver) impacted by work performed on site. All areas within the public right-of-way that are impacted by the installation of new sidewalk shall be repaired/reset, including but not limited to, brick pavers.

MATERIALS

NJDOT Standard Specifications.

METHODS OF CONSTRUCTION

The site shall be returned to its original condition. Fences shall be reinstalled with posts in concrete footings in accordance with specifications herein. Hedges shall be reinstalled where possible or replaced in kind and in the same locations as existing. Lawn areas disturbed by Contractor's activities shall be re-graded, hydroseeded and mulched as specified by the Engineer. Cleaning shall include hand brooming of sidewalk and pavement areas. Adjacent structures shall be cleaned, as necessary, by a method approved by the Engineer. All brick and/or concrete paver areas shall be reset as specified by the Engineer, only to the extent impacted by construction. All construction equipment and stockpiles shall be removed from the site and disposed of by the Contractor in a suitable and timely manner.

QUANTITY AND PAYMENT

The quantity of Site Restoration for which payment will be made will be on a square yard basis for the item “RESET BRICK PAVER (IF & WHERE DIRECTED)” in the Proposal, which price shall include the cost of any and all materials, labor and equipment and all else necessary and incidental thereto.

STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT & ACCESSORY PANEL, TYPE DF

DESCRIPTION

Under this item the Contractor shall furnish and install street signs, accessory panels, and any other material required for complete installation of street signs.

MATERIALS

Street name sign, type DF shall be a double-faced sign, white text, gothic B font, on a green background. Street name sign shall be variable width with a 30" minimum and 36" maximum length. Height of the sign shall be 9" and the text on the sign shall be 6" high. Street name sign and accessory panels shall match all properties as shown in the construction details.

METHODS OF CONSTRUCTION

As per manufacturer requirements and guidelines.

QUANTITY AND PAYMENT

The quantity of Site Restoration for which payment will be made will be on a square foot basis for the items "STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT" and "ACCESSORY PANEL, TYPE DF" in the Proposal, which price shall include the cost of any and all materials, labor and equipment and all else necessary and incidental thereto.

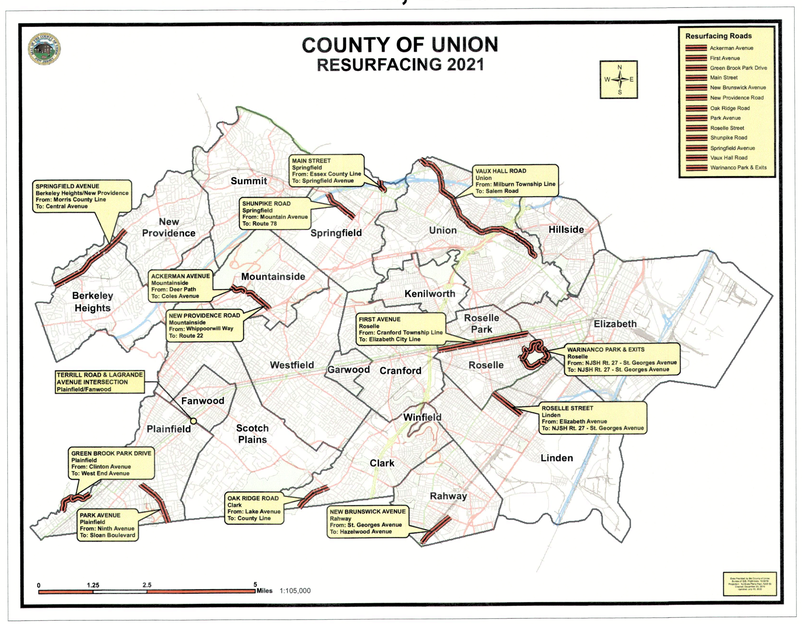
COUNTY OF UNION
BOARD OF CHOSEN FREEHOLDERS

2021 ROAD RESURFACING PROJECT
(CA-2020)

TOWNSHIP OF BERKELEY HEIGHTS, TOWNSHIP OF CLARK, CITY OF LINDEN, BOROUGH OF MOUNTAINSIDE
BOROUGH OF NEW PROVIDENCE, CITY OF PLAINFIELD, CITY OF RAHWAY, BOROUGH OF ROSELLE
TOWNSHIP OF SPRINGFIELD, TOWNSHIP OF UNION

UNION COUNTY, NEW JERSEY
JUNE, 2020

UTILITY COMPANY CONTACTS	
COMPANY	**ADDRESS**
P.S.E. & G. - GAS	472 WESTEN 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 WESTMAIN STREET FREEHOLD, NJ (732) 357 - 2313



KEY MAP (N.T.S.)
SOURCE: REF. TAX MAPS

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 - 4.05	WARINACO PARK & EXITS
5.00 - 5.01	ACKERMAN AVENUE
6.00 - 6.02	PARK AVENUE
7.00 - 7.02	GREEN BROOK PARK DRIVE
8.00 - 8.02	OAK RIDGE ROAD
9.00 - 9.04	SPRINGFIELD AVENUE
10.00 - 10.02	ROSELLE STREET
11.00 - 11.01	NEW PROVIDENCE ROAD
12.00 - 12.01	MAIN STREET
13.00 - 13.07	VAUX HALL ROAD
14.00 - 14.04	FIRST AVENUE
15.00 - 15.02	NEW BRUNSWICK AVENUE
16.00 - 16.02	SHUNPIKE ROAD
17.00	TERRILL ROAD & LAGRANDE AVENUE INTERSECTION
18.00	MAINTENANCE OF TRAFFIC CONTROL
19.00	NJDOT CURB RAMP DETAILS
20.00 - 20.02	CONSTRUCTION DETAILS

RECOMMENDED FOR APPROVAL BY
Thomas O. Mineo, P.E., County Engineer — 10/6/2020

APPROVED BY
Edward T. Oatman, County Manager

New Jersey ONE CALL 1-800-272-1000 CONFIRMATION NUMBER

-NOTICE-

LOCATION OF UTILITIES AS SHOWN ON THESE PLANS ARE PLOTTED FROM AVALIABLE 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.

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CERTIFICATE OF AUTHORIZATION (N.J.S.A. 45:8-56) 24GA27927000

REVISIONS					
NO.	DATE	DESCRIPTION	DRAWN	DESIGNED	CHECKED

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PROFESSIONAL ENGINEER
N.J. LICENSE NO. 41635

DAVID R. ATKINSON, P.E., C.M.E.
PROFESSIONAL ENGINEER
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PROFESSIONAL LAND SURVEYOR N.J. LICENSE NO. 38604
PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

COVER SHEET / KEY MAP
2021 ROAD RESURFACING PROJECT
(CA-2020)
VARIOUS MUNICIPALITIES
UNION COUNTY NEW JERSEY

DRAWN BY: KD, KT, JV	CHECKED BY:	PROJECT NO. UNIOCTY20.010	SHEET NO. 1.00
DESIGNED BY: KD, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.	PAGE:	DATE: JUNE 15, 2020	

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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.

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 responsibility 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. Private utility companies must be contacted by the Contractor so that privately owned castings will be reset as required.

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 curb/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 Municipalities 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

WV	WATER VALVE		INLET
GV	GAS VALVE	JB	JUNCTION BOX
CO	CLEAN OUT		UTILITY POLE
	MANHOLE		FIRE HYDRANT
S	SANITARY MANHOLE	CURB	CURB LINE
D	DRAINAGE MANHOLE	DC	DEPRESSED CURB
	TREE	RR	RAILROAD TIE CURB OR WALL
	SHRUB	G	GAS MAIN
		W	WATER MAIN
		E	UNDERGROUND ELECTRIC LINE
RD	ROOF DRAIN AT CURB	T	UNDERGROUND TELEPHONE LINE
EP	EDGE OF PAVEMENT	FO	UNDERGROUND FIBER OPTIC LINE
LSA	LANDSCAPED AREA		SANITARY SEWER / STORM PIPE

PROPOSED CONDITIONS

	RESET VALVES & CLEANOUTS
	PROPOSED VALVES
CO	PROPOSED CLEAN OUT
	RESET MANHOLE CASTING
RD	RECONNECT ROOF DRAIN
	RESET INLET
	PROPOSED INLET
DC	PROPOSED DEPRESSED CURB
	PROPOSED CURB
	LIMIT OF CONSTRUCTION
	FLOW ARROW
	TREE REMOVAL
L.O.C.	LIMIT OF CONSTRUCTION
TBR	TO BE REMOVED

PROPOSED HATCHING

	MILLING AND RESURFACING
	ROADWAY RECONSTRUCTION
	CONCRETE SIDEWALK
	HOT MIX ASPHALT DRIVEWAY

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	____	6" 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
2021 ROAD RESURFACING PROJECT
(CA-2020)

UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 2.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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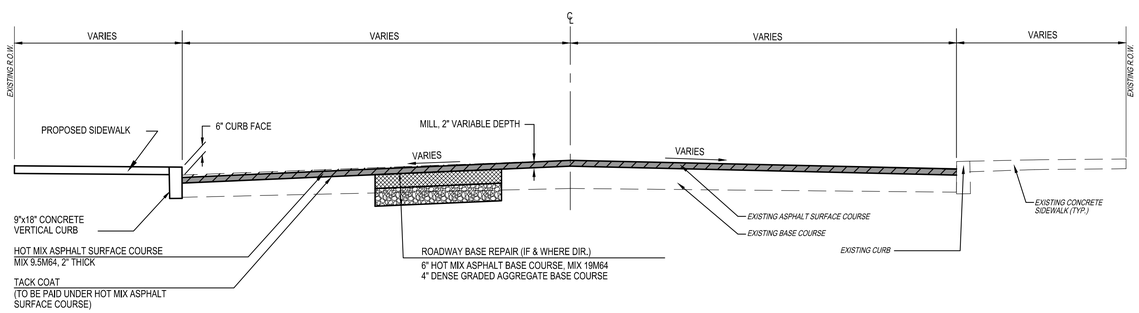
ESTIMATE OF QUANTITIES

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 NIGHTTIME OPERATION	UNIT	4	
4	TRAFFIC DIRECTOR, FLAGGER	HOUR	400	
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.	1	
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	1,370	
7	HMA MILLING, 3" OR LESS	SY	423,925	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	1,470	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	4,130	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	49,590	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	2,855	
12	FUEL PRICE ADJUSTMENT	ALLOW.	1	
13	ASPHALT PRICE ADJUSTMENT	ALLOW.	1	
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF	300	
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF	600	
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY	1,090	
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF	900	
18	CURB PIECE	UNIT	11	
19	BICYCLE SAFE GRATE	UNIT	12	
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	925	
21	RESET WATER VALVE BOX	UNIT	285	
22	RESET GAS VALVE BOX	UNIT	39	
23	INLET, TYPE B	UNIT	1	
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	10	
25	15" REINFORCED CONCRETE PIPE	LF	275	
26	INLET FILTER TYPE 2, 2' X 4'	UNIT	2	
27	10"X20" CONCRETE VERTICAL CURB	LF	7,320	
28	GRANITE CURB	LF	150	
29	CONCRETE SIDEWALK, 4" THICK	SY	3,300	
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	4,505	
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	310	
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY	100	
33	TRAFFIC STRIPES, 4"	LF	207,820	
34	TRAFFIC STRIPES, 6"	LF	750	
35	TRAFFIC STRIPES, 8"	LF	10,260	
36	TRAFFIC MARKING, LINES, 12"	LF	16,870	
37	TRAFFIC MARKING, LINES, 24"	LF	4,860	
38	TRAFFIC MARKINGS, SYMBOLS	SF	4,765	
39	RUMBLE STRIP	LF	300	
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	1,530	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF	150,000	
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT	SF	1,250	
43	ACCESSORY PANEL, TYPE DF	SF	1,250	
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF	500	
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT	2	

MILLING

SURFACE COURSE



TYPICAL ROAD SECTION

NOT TO SCALE

NOTES:

- COST OF TACK COAT TO BE INCLUDED IN THE UNIT PRICE FOR VARIOUS BITUMINOUS PAYMENT ITEMS.
- 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
2021 ROAD RESURFACING PROJECT
(CA-2020)
VARIOUS MUNICIPALITIES
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 3.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
04+72	RT	21" X 18"				X
10+85	RT	A				X
10+94	LT	A				X
14+15	LT	A				X
21+37	LT	18" X 21 -1/2"				X
21+43	RT	18" X 21 -1/2"				X
24+27	LT	18" X 21 -1/2"				X
26+95	RT	18" X 21 -1/2"				X
27+83	LT	A				X
30+22	RT	18" X 21 -1/2"				X
30+23	LT	32" X 18"				X
34+97	LT	18" X 21 -1/2"				X
35+46	RT	18" X 21 -1/2"				X
36+48	RT	A				X
38+97	RT	18" X 21 -1/2"				X
41+35	RT	18" X 21 -1/2"				X
43+90	LT	18" X 19"				X
43+1	RT	18" X 21 -1/2"				X
46+29	LT	18" X 21 -1/2"				X
46+43	RT	18" X 21 -1/2"				X
48+65	LT	18" X 21 -1/2"				X
54+09	RT	18" X 21 -1/2"				X
54+30	LT	18" X 21 -1/2"				X
54+47	LT	18" X 21 -1/2"				X
54+48	RT	18" X 21 -1/2"				X
54+85	LT	18" X 21 -1/2"				X
61+45	LT	18" X 21 -1/2"				X
61+47	RT	18" X 21 -1/2"				X
63+98	RT	18" X 21 -1/2"				X
63+99	LT	18" X 21 -1/2"				X
65+98	LT	18" X 21 -1/2"				X
65+99	RT	18" X 21 -1/2"				X
68+21	RT	18" X 21 -1/2"				X
68+30	LT	18" X 21 -1/2"				X
70+74	LT	18" X 21 -1/2"				X
77+16	LT	18" X 21 -1/2"				X
77+30	RT	18" X 21 -1/2"				X
78+97	LT	18" X 21 -1/2"				X
78+94	RT	18" X 21 -1/2"				X
81+04	LT	18" X 21 -1/2"				X
81+05	RT	18" X 21 -1/2"				X
83+10	LT	18" X 21 -1/2"				X
83+12	RT	18" X 21 -1/2"				X
88+11	LT	18" X 21 -1/2"				X
88+14	RT	18" X 21 -1/2"				X
90+77	LT	18" X 21 -1/2"				X
92+56	RT	18" X 21 -1/2"				X
93+55	LT	18" X 21 -1/2"				X
93+56	RT	18" X 21 -1/2"				X
95+56	RT	18" X 21 -1/2"				X
97+35	RT	18" X 21 -1/2"				X
97+36	LT	18" X 21 -1/2"				X
100+34	RT	18" X 21 -1/2"				X
101+03	LT	18" X 21 -1/2"				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	170	
7	HMA MILLING, 3" OR LESS	SY	49,800	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	170	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	520	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	5,745	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	150	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF		
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY	640	
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF	600	
18	CURB PIECE	UNIT		
19	BICYCLE SAFE GRATE	UNIT		
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	70	
21	RESET WATER VALVE BOX	UNIT		
22	RESET GAS VALVE BOX	UNIT		
23	INLET, TYPE B	UNIT		
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT		
25	15" REINFORCED CONCRETE PIPE	LF		
26	INLET FILTER TYPE 2, 2' X 4'	UNIT		
27	10"X20" CONCRETE VERTICAL CURB	LF		
28	GRANITE CURB	LF		
29	CONCRETE SIDEWALK, 4" THICK	SY		
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY		
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY		
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
33	TRAFFIC STRIPES, 4"	LF	8,855	
34	TRAFFIC STRIPES, 6"	LF		
35	TRAFFIC STRIPES, 8"	LF	805	
36	TRAFFIC MARKING, LINES, 12"	LF	1,010	
37	TRAFFIC MARKING, LINES, 24"	LF	2,020	
38	TRAFFIC MARKINGS, SYMBOLS	SF	925	
39	RUMBLE STRIP	LF		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	350	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT	SF		
43	ACCESSORY PANEL, TYPE DF	SF		
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF		
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT		

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NO.	DATE	DESCRIPTION	DRAWN	DESIGNED	CHECKED

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WARINACO PARK QUANTITY SHEET
2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF ROSELLE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 4.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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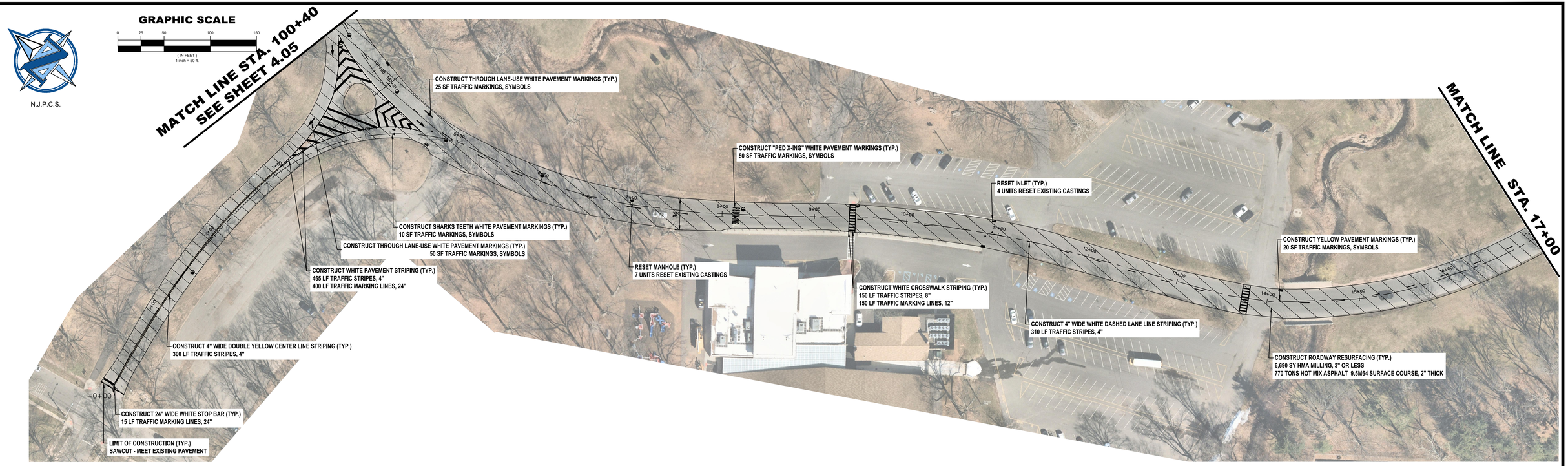

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WARINACO PARK (STA. 0+00 - STA. 33+50)
2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF ROSELLE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 4.01
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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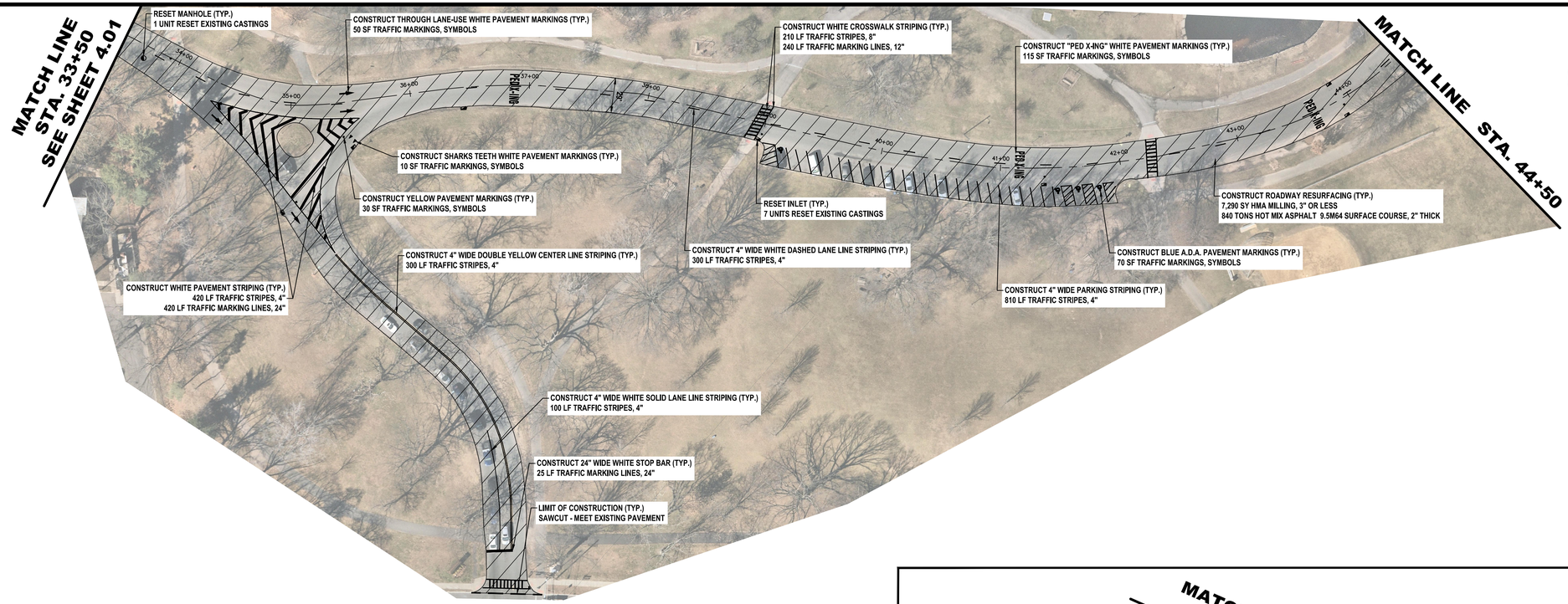

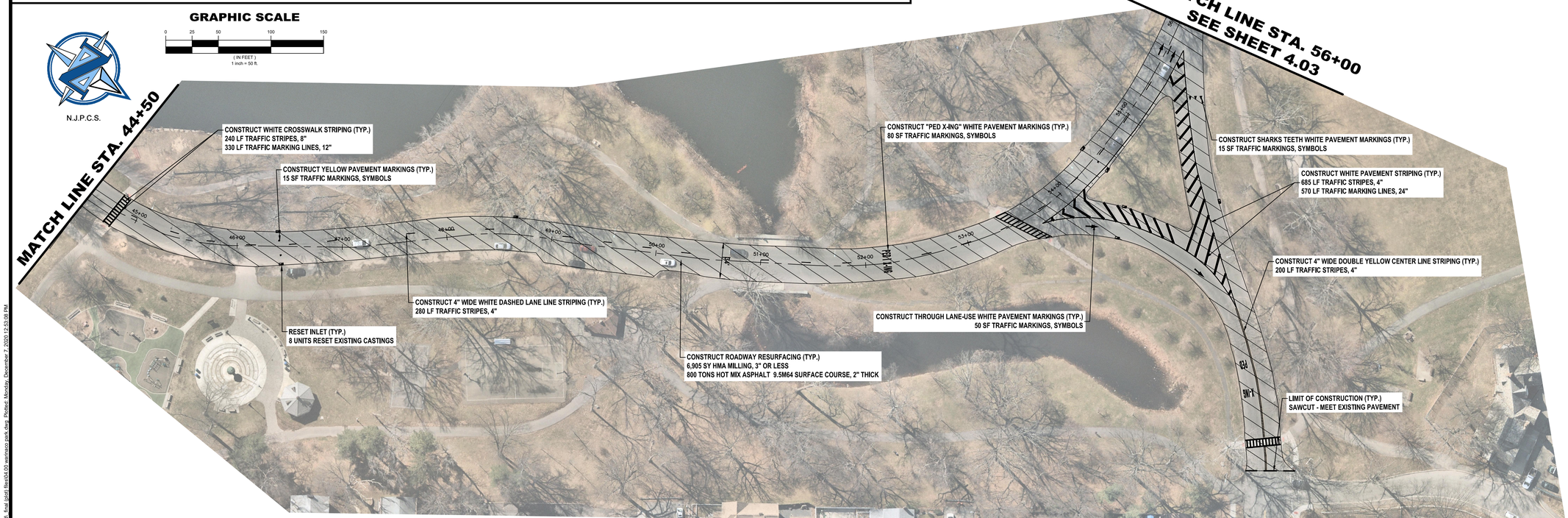

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WARINACO PARK (STA. 33+50 - STA. 56+00)
2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF ROSELLE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 4.02
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 10, 2020	

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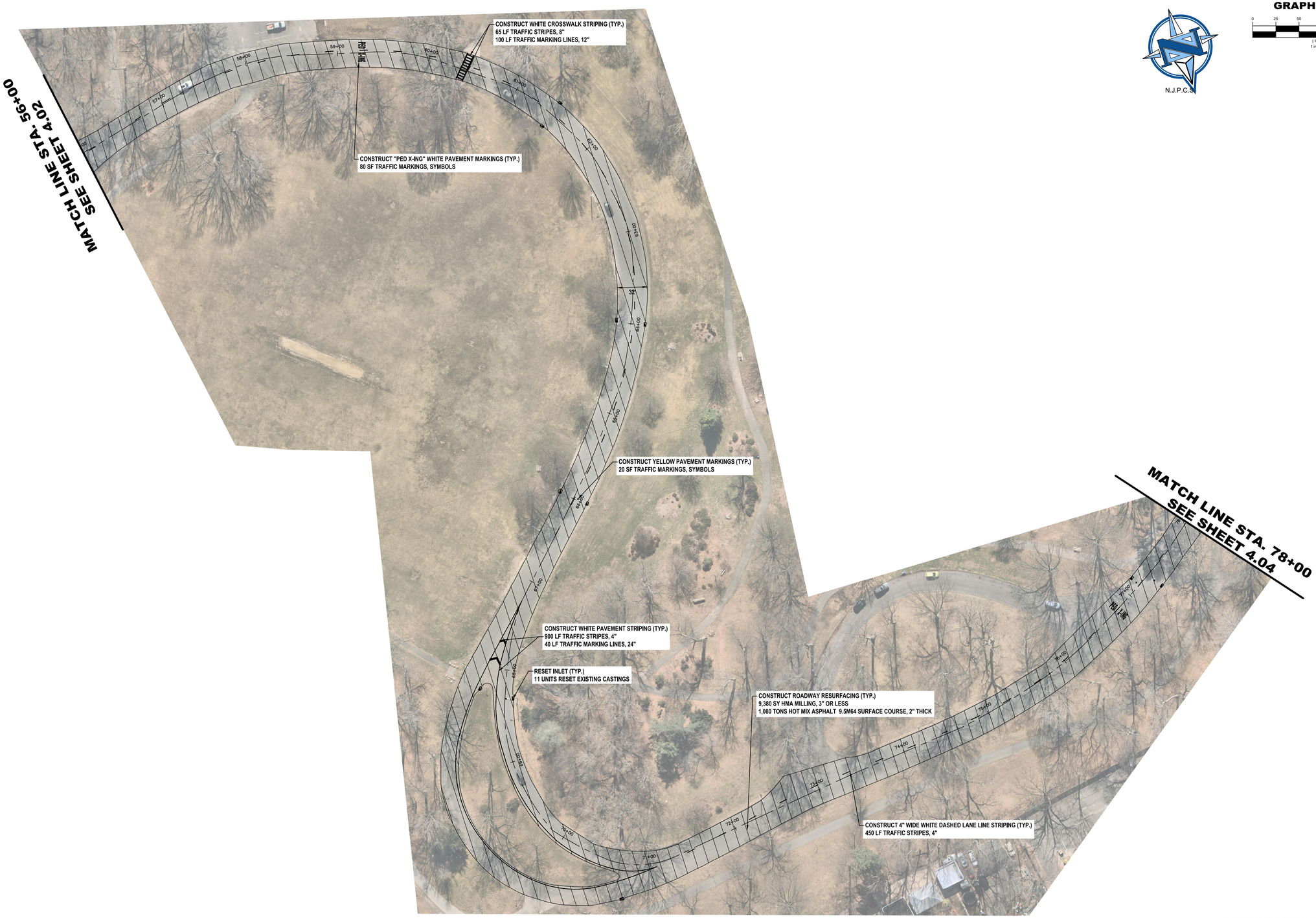

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.

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WARINACO PARK (STA. 56+00 - STA. 78+00)
2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF ROSELLE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 4.03
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 10, 2020	

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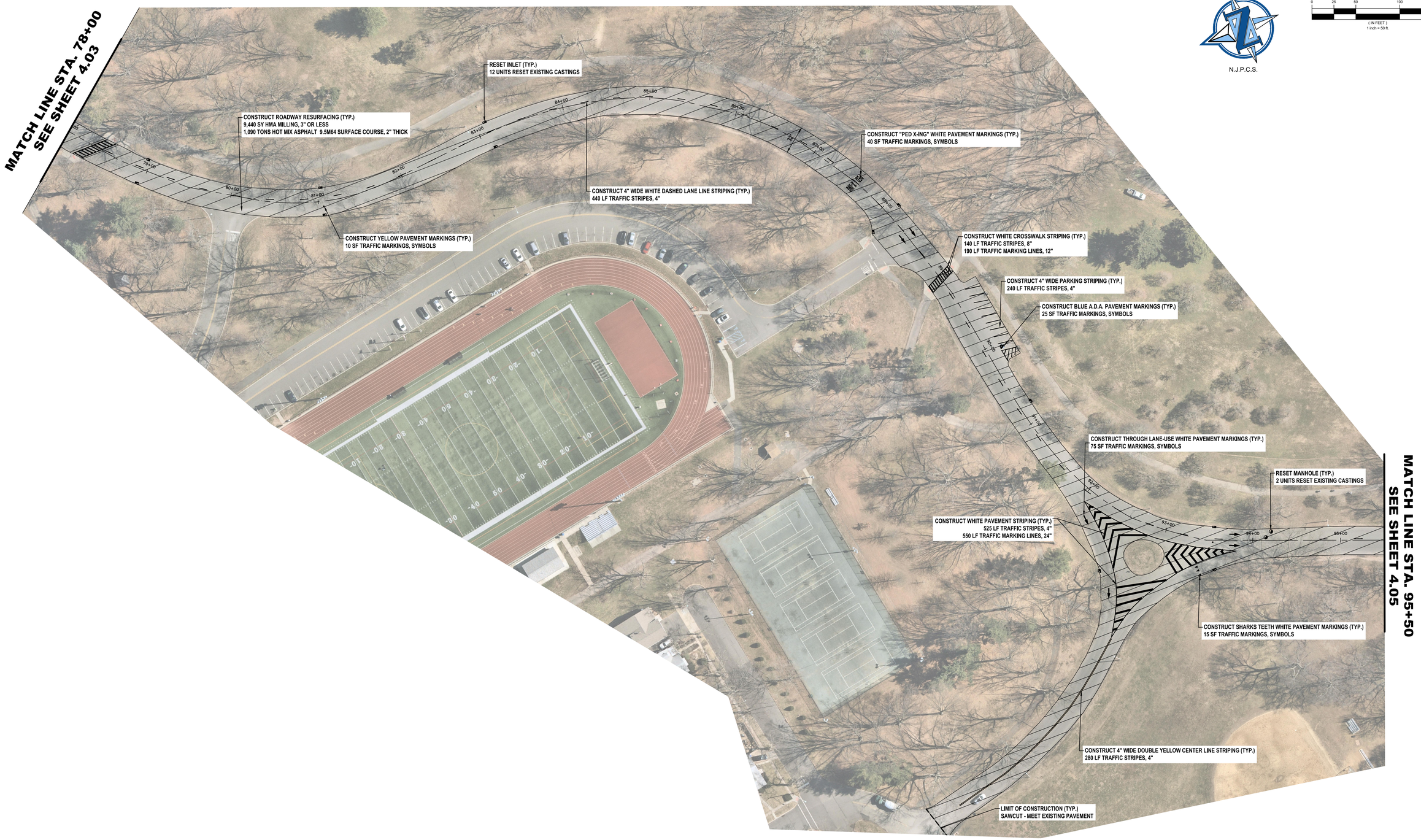

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

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WARINACO PARK (STA. 78+00 - STA. 95+50)
2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF ROSELLE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 4.04
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FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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N.J.P.C.S.

GRAPHIC SCALE

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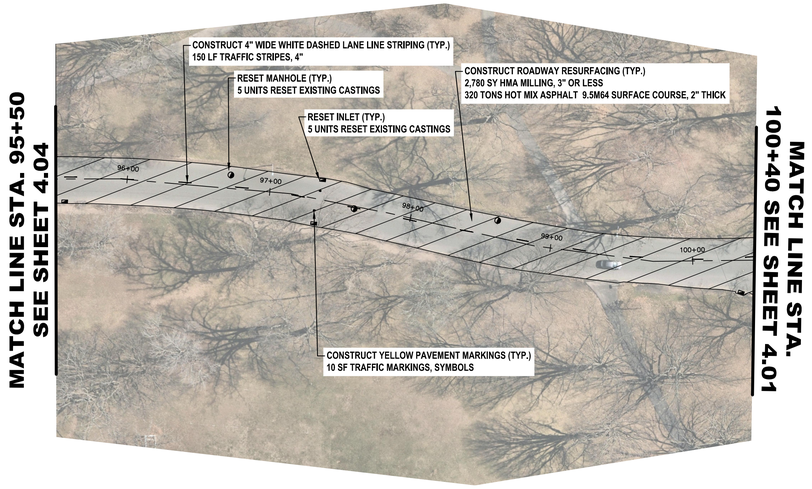
(IN FEET)
1 inch = 50 ft.



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PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

WARINACO PARK (STA. 95+50 - STA. 10+21)
2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF ROSELLE
UNION COUNTY NEW JERSEY

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FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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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+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	1	
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT	1	
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT	5	
4	TRAFFIC DIRECTOR, FLAGGER	HOUR		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.	1	
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	30	
7	HMA MILLING, 3" OR LESS	SY	9,500	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	30	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	100	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1,100	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	20	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF		
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
18	CURB PIECE	UNIT		
19	BICYCLE SAFE GRATE	UNIT		
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	37	
21	RESET WATER VALVE BOX	UNIT	10	
22	RESET GAS VALVE BOX	UNIT		
23	INLET, TYPE B	UNIT		
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT		
25	15" REINFORCED CONCRETE PIPE	LF		
26	INLET FILTER TYPE 2, 2' X 4'	UNIT		
27	10"X20" CONCRETE VERTICAL CURB	LF		
28	GRANITE CURB	LF		
29	CONCRETE SIDEWALK, 4" THICK	SY		
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY		
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY		
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
33	TRAFFIC STRIPES, 4"	LF	4,000	
34	TRAFFIC STRIPES, 6"	LF		
35	TRAFFIC STRIPES, 8"	LF		
36	TRAFFIC MARKING, LINES, 12"	LF		
37	TRAFFIC MARKING, LINES, 24"	LF		
38	TRAFFIC MARKINGS, SYMBOLS	SF		
39	RUMBLE STRIP	LF		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT		
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT	SF	50	
43	ACCESSORY PANEL, TYPE DF	SF		
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF		
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT		

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NO.	DATE	DESCRIPTION	DRAWN	DESIGNED	CHECKED

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PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

ACKERMAN AVENUE QUANTITY SHEET
2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF MOUNTAINSIDE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 5.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

m:\union county\uniocty20.010 2021 road program\cad_final plans\sheets 09 ackerman.dwg Plotted: Monday, December 7, 2020 1:09:30 PM

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.

CONSTRUCT 24" WIDE WHITE STOP BAR (TYP.)
50 LF TRAFFIC MARKING LINES, 24"

CONSTRUCT ROADWAY RESURFACING (TYP.)
9,500 SY HMA MILLING, 3" OR LESS
1,100 TONS HOT MIX ASPHALT 9.5M64 SURFACE COURSE

RESET INLET, TYPE 'B' (TYP.)
20 UNITS RESET EXISTING CASTING

RESET WATER VALVE BOX (TYP.)
10 UNITS

RESET MANHOLE (TYP.)
17 UNITS RESET EXISTING CASTING

CONSTRUCT 4" WIDE DOUBLE YELLOW CENTER LINE STRIPING (TYP.)
4,000 LF TRAFFIC STRIPES, 4"

COLES AVENUE (50' R.O.W. PER TAX MAP)

ACKERMAN AVENUE (50' R.O.W. PER TAX MAP)

CHAPEL HILL (50' R.O.W. PER TAX MAP)

OUTLOOK DRIVE (60' R.O.W. PER TAX MAP)

FOREST COURT (50' R.O.W. PER TAX MAP)

FOREST HILL WAY (60' R.O.W. PER TAX MAP)

DOGWOOD WAY (50' R.O.W. PER TAX MAP)

DEER PATH (50' R.O.W. PER TAX MAP)

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 20+13

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CERTIFICATE OF AUTHORIZATION (N.J.S.A. 45:8-56) 24GA27927000

NO.	DATE	REVISIONS DESCRIPTION	DRAWN	DESIGNED	CHECKED

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PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

ACKERMAN AVENUE (STA. 0+00 - STA. 20+13)
2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF MOUNTAINSIDE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 5.01
DESIGNED BY: KO, KT, JV	SCALE: 1"= 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

m:\union county\uniocty20.010\2021 road program\cad_final (dgn)\ files\5.00 ackerman.dwg Plotted: Monday, December 7, 2020 1:09:36 PM

ADA RAMPS										
STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES			
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE
7+60	RT		X				30		10	1
7+60	LT					X	30		5	2
8+75	LT			X			30		10	1
11+40	RT					X	30		5	1
11+65	RT					X	30		5	1
13+15	LT					X	30		5	1
13+30	LT					X	30		5	1
22+50	RT			X			30		5	1
22+90	RT			X			30		5	1
31+50	RT					X	30		5	1
32+00	LT					X	30		5	2
32+25	RT					X	30		5	2
32+45	LT					X	30		5	1
38+25	RT					X	30		5	1
38+70	RT					X	30		5	2
41+95	LT			X			30		10	1
42+40	LT			X			30		5	1
44+80	LT			X			30		10	1
45+30	LT			X			30		10	1
47+85	RT					X	30		5	2
47+90	LT					X	30		5	2
48+40	RT					X	30		5	2
48+50	LT					X	30		5	2
50+60	LT			X			30		10	1
51+10	LT			X			30		10	1
53+75	LT			X			20		5	1
54+20	LT			X			30		5	1
58+25	LT			X			30		10	1
58+70	LT			X			30		10	1

INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
3+18	LT	B				X
3+18	RT	B				X
5+95	LT	B				X
6+20	RT	B				X
7+50	LT	B				X
8+20	RT	B				X
8+25	LT	B				X
10+75	LT	B				X
11+90	RT	B				X
13+00	LT	B				X
13+70	LT	B				X
13+80	RT	B				X
17+50	LT	B				X
17+90	RT	B				X
18+80	LT	B				X
23+65	LT	B				X
24+70	LT	B				X
24+80	RT	B				X
27+20	RT	B				X
27+80	LT	B				X
28+45	LT	B				X
29+45	LT	B				X
31+05	RT	B				X
31+85	LT	B				X
32+40	RT	B				X
32+80	LT	B				X
43+40	RT	B				X
43+50	LT	B				X
44+75	LT	B				X
47+55	LT	B				X
48+50	RT	B				X
48+60	LT	B				X
50+55	LT	B				X
51+20	RT	B				X
51+20	LT	B				X
53+60	LT	B				X
54+20	RT	B				X
54+25	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.	1	
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY		
7	HMA MILLING, 3" OR LESS	SY	29,600	
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	300	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	3,450	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	50	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF		
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
18	CURB PIECE	UNIT		
19	BICYCLE SAFE GRATE	UNIT		
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	115	
21	RESET WATER VALVE BOX	UNIT	21	
22	RESET GAS VALVE BOX	UNIT	2	
23	INLET, TYPE B	UNIT		
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT		
25	15" REINFORCED CONCRETE PIPE	LF		
26	INLET FILTER TYPE 2, 2' X 4'	UNIT		
27	10"X20" CONCRETE VERTICAL CURB	LF	860	
28	GRANITE CURB	LF		
29	CONCRETE SIDEWALK, 4" THICK	SY	350	
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	190	
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	37	
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY	100	
33	TRAFFIC STRIPES, 4"	LF	9,830	
34	TRAFFIC STRIPES, 6"	LF		
35	TRAFFIC STRIPES, 8"	LF	880	
36	TRAFFIC MARKING, LINES, 12"	LF	1,200	
37	TRAFFIC MARKING, LINES, 24"	LF	100	
38	TRAFFIC MARKINGS, SYMBOLS	SF	275	
39	RUMBLE STRIP	LF		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT		
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT	SF		
43	ACCESSORY PANEL, TYPE DF	SF		
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF		
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT		

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NO.	DATE	DESCRIPTION	DRAWN	DESIGNED	CHECKED

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PARK AVENUE QUANTITY SHEET
2021 ROAD RESURFACING PROJECT
(CA-2020)
CITY OF PLAINFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 6.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

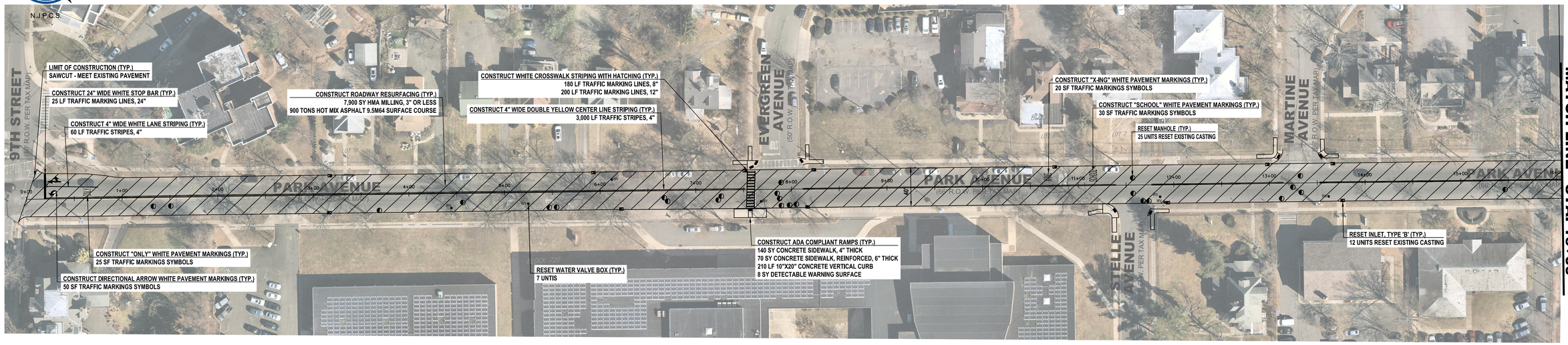
m:\union county\unioct\20.010 (2024 road program)\cadd_final (cpld files)\6.00 park ave.dwg, Plotted: Monday, December 2, 2020 - 1:13:34 PM

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



MATCH LINE STA. 16+00

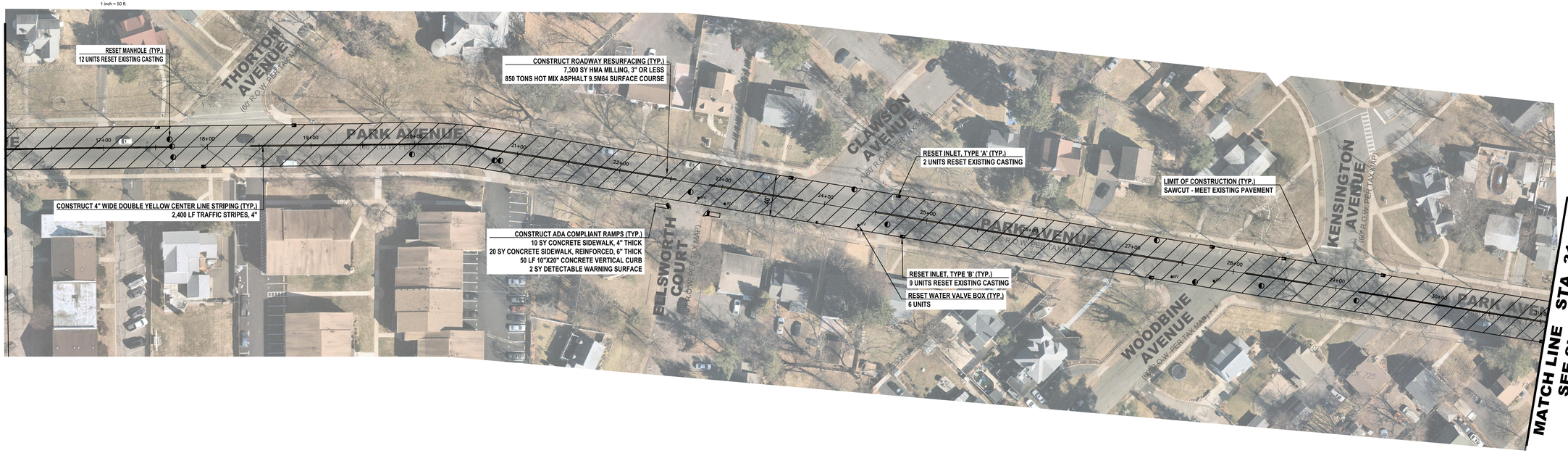
GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.

MATCH LINE STA. 16+00



MATCH LINE STA. 31+00
SEE SHEET 6.02

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PARK AVENUE (STA. 0+00 - STA. 31+00)
2021 ROAD RESURFACING PROJECT
(CA-2020)
CITY OF PLAINFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 6.01
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

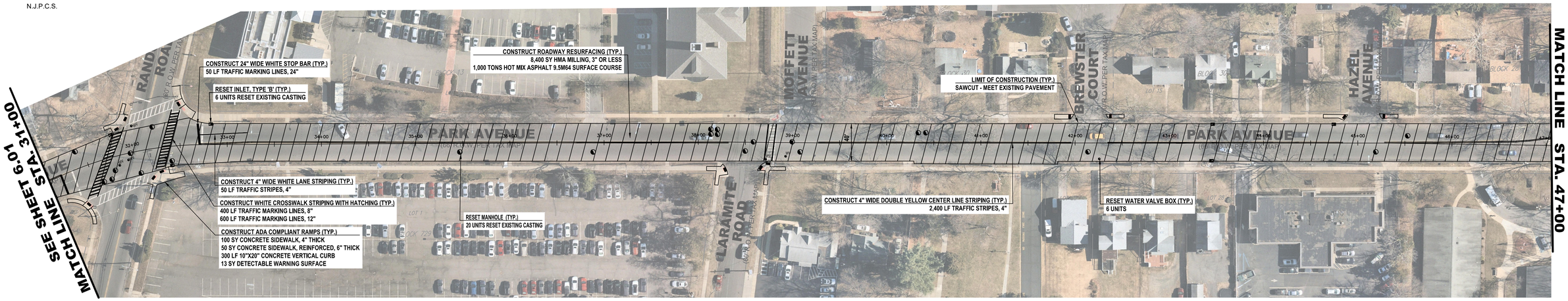
m:\union county\union\20.010\ 2021 road program\cad\ final plots\6.00 park ave.dwg Plotted: Monday, December 7, 2020 1:13:55 PM

N.J.P.C.S.

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

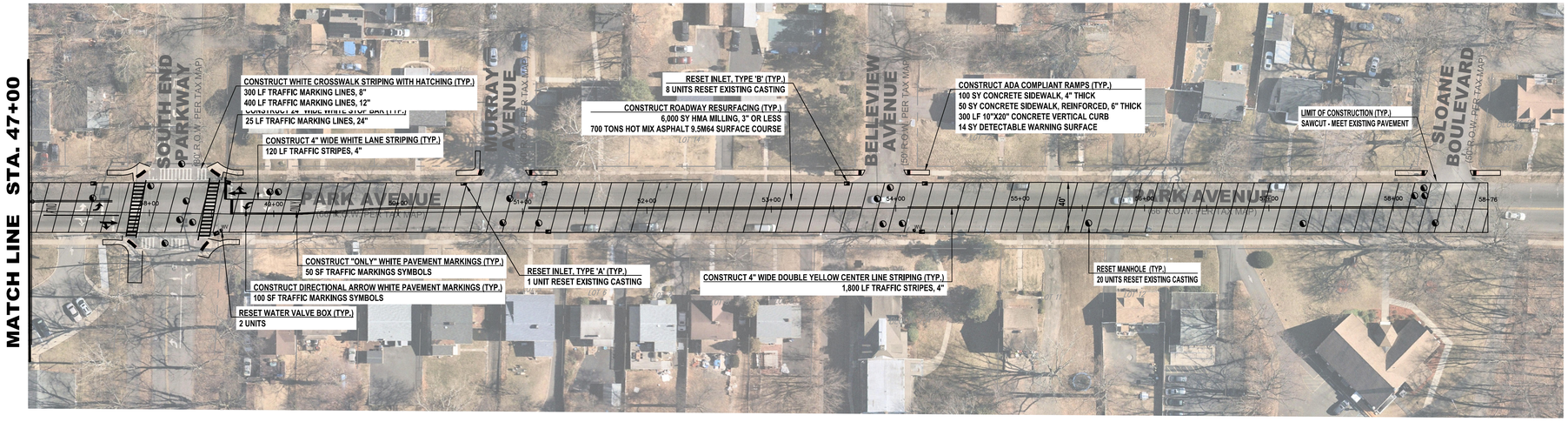


N.J.P.C.S.

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.



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PARK AVENUE (STA. 31+00 - STA. 55+71)
2021 ROAD RESURFACING PROJECT
(CA-2020)
CITY OF PLAINFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 6.02
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

m:\union county\unioc\y20.010 (2021 road program\cad_final (post fixes)_09 park ave.dwg Plotted: Monday, December 7, 2020 1:14:10 PM

ADA RAMPS										
STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES			
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE
0+00	RT	5	X				30		10	1
0+10	LT	5	X				30		10	1
46+30	LT	5	X				30		10	1
46+30	RT	5	X				30		10	1

INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
5+45	LT	B				X
38+30	RT	B				X
38+60	LT	B				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT	1	
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT	1	
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT	5	
4	TRAFFIC DIRECTOR, FLAGGER	HOUR		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.	1	
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	55	
7	HMA MILLING, 3" OR LESS	SY	17,000	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	55	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	170	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2,000	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	30	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF		
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
18	CURB PIECE	UNIT		
19	BICYCLE SAFE GRATE	UNIT		
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	3	
21	RESET WATER VALVE BOX	UNIT		
22	RESET GAS VALVE BOX	UNIT		
23	INLET, TYPE B	UNIT		
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT		
25	15" REINFORCED CONCRETE PIPE	LF		
26	INLET FILTER TYPE 2, 2' X 4'	UNIT		
27	10"X20" CONCRETE VERTICAL CURB	LF	120	
28	GRANITE CURB	LF		
29	CONCRETE SIDEWALK, 4" THICK	SY		
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	40	
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	4	
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
33	TRAFFIC STRIPES, 4"	LF	9,200	
34	TRAFFIC STRIPES, 6"	LF		
35	TRAFFIC STRIPES, 8"	LF		
36	TRAFFIC MARKING, LINES, 12"	LF	300	
37	TRAFFIC MARKING, LINES, 24"	LF	35	
38	TRAFFIC MARKINGS, SYMBOLS	SF	50	
39	RUMBLE STRIP	LF		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT		
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT	SF		
43	ACCESSORY PANEL, TYPE DF	SF		
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF		
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT		

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GREEN BROOK QUANTITY SHEET
2021 ROAD RESURFACING PROJECT
(CA-2020)
CITY OF PLAINFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.:	SHEET NO.:
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.	UNIOCTY20.010	7.00
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

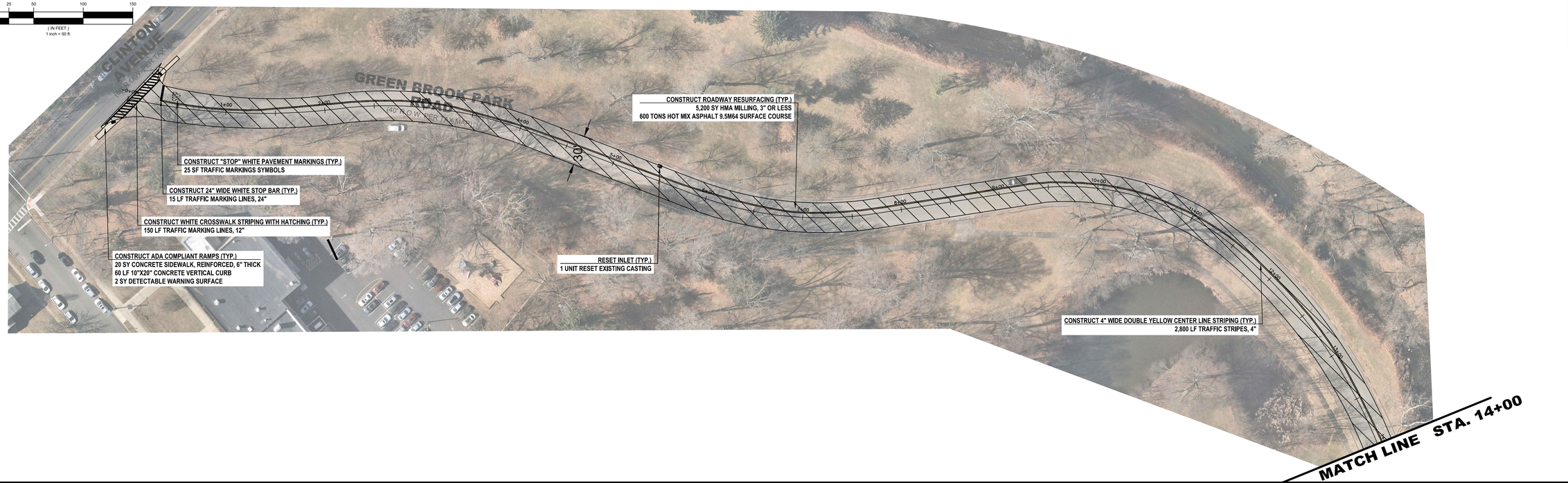
m:\union county\unioct\20.010 (2021 road program)\cadd_final plots\ files\7.00 green brook park dr.dwg, Plotted: Monday, December 7, 2020, 1:16:39 PM

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



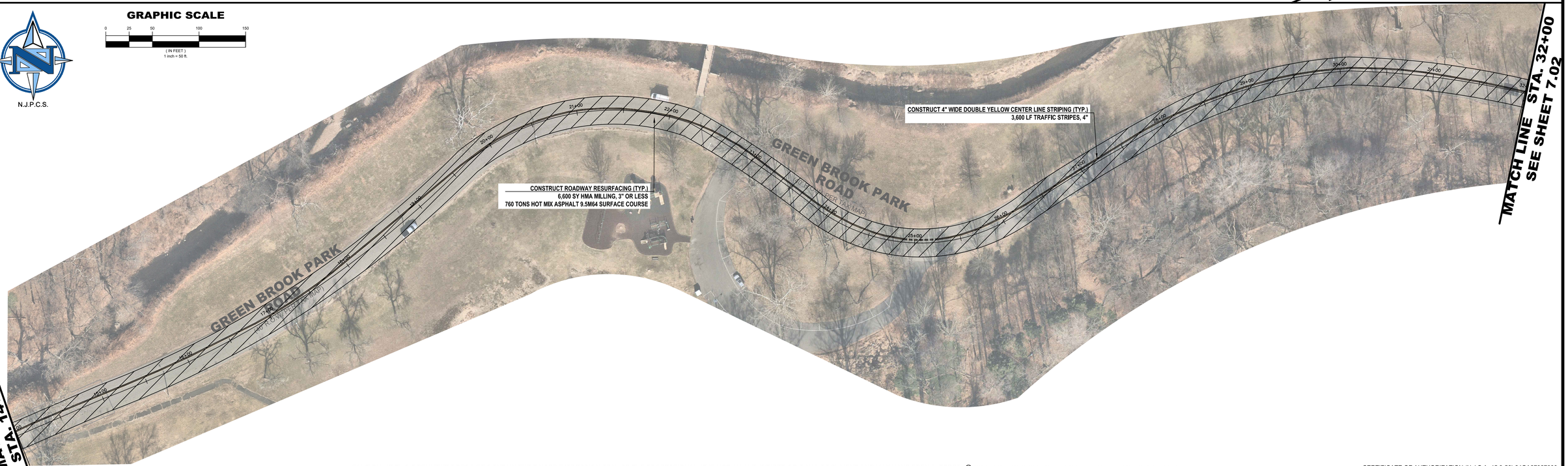
MATCH LINE STA. 14+00

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



MATCH LINE STA. 14+00

MATCH LINE STA. 32+00
SEE SHEET 7.02

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PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

GREEN BROOK (STA. 0+00 - STA. 32+00)
2021 ROAD RESURFACING PROJECT
(CA-2020)
CITY OF PLAINFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 7.01
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 10, 2020	

m:\union county\unioc\y20.010 (2021 road program)\ca8_final plots\ file\7.00 green brook park.dwg Plotted: Monday, December 7, 2020 1:16:56 PM

N.J.P.C.S.

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

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CERTIFICATE OF AUTHORIZATION (N.J.S.A. 45:8-56) 24GA27927000

NO.	DATE	REVISIONS DESCRIPTION	DRAWN	DESIGNED	CHECKED

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DAVID R. ATKINSON, P.E., C.M.E.
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PROFESSIONAL LAND SURVEYOR N.J. LICENSE NO. 38604
PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

GREEN BROOK (STA. 32+00 - STA. 46+24)
2021 ROAD RESURFACING PROJECT
(CA-2020)
CITY OF PLAINFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 7.02
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

m:\union county\union20.010\ 2021 road program\cad\ final plots\7.00 green brook park dr.dwg Plotted: Monday, December 7, 2020 1:17:05 PM

ADA RAMPS										
STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES			
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE
12+65	RT	5		X			30		10	1
13+40	RT	5		X			30		10	1
20+20	RT	4				X	30		10	1
20+70	RT	4				X	30		10	1
26+00	LT	4				X	30		10	1
26+25	RT	5		X			30		10	1
26+50	LT	4				X	30		10	1
26+70	RT	5		X			30		10	2
26+78	LT	4				X	30		10	1
30+00	LT	4				X	30		10	1
30+00	RT	5				X	30		10	2
30+50	RT	5		X			30		10	1
33+75	LT	4				X	30		10	1
33+85	RT	4				X	30		10	2
34+77	LT	4				X	30		10	1
34+77	LT	4				X	30		10	2
37+90	LT	4				X	30		10	1
37+90	RT	4				X	30		10	2
38+40	LT	4				X	30		10	1
38+40	RT	5				X	30		10	2
43+25	LT	3				X	15		5	1
43+80	RT	1				X	15		10	2

INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
2+05	LT	B				X
2+05	RT	B				X
9+55	RT	B				X
9+65	LT	B				X
12+35	RT	B				X
12+40	LT	B				X
16+05	RT	B				X
16+10	LT	B				X
20+60	LT	B				X
22+20	LT	B				X
22+20	RT	B				X
23+70	LT	B		X		X
25+05	LT	B				X
25+05	RT	B				X
26+15	RT	B				X
26+85	RT	B				X
30+10	LT	B				X
38+00	LT	E	X			X
38+10	LT	B				X
38+27	RT	B				X
43+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	ALLOW.	1	
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.	1	
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY		
7	HMA MILLING, 3" OR LESS	SY	22,300	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY		
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY		
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2,580	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON		
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF		
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
18	CURB PIECE	UNIT	1	
19	BICYCLE SAFE GRATE	UNIT	1	
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	45	
21	RESET WATER VALVE BOX	UNIT	17	
22	RESET GAS VALVE BOX	UNIT		
23	INLET, TYPE B	UNIT		
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT		
25	15" REINFORCED CONCRETE PIPE	LF		
26	INLET FILTER TYPE 2, 2' X 4'	UNIT		
27	10"X20" CONCRETE VERTICAL CURB	LF	630	
28	GRANITE CURB	LF		
29	CONCRETE SIDEWALK, 4" THICK	SY	90	
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	210	
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	29	
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
33	TRAFFIC STRIPES, 4"	LF	11,200	
34	TRAFFIC STRIPES, 6"	LF	100	
35	TRAFFIC STRIPES, 8"	LF		
36	TRAFFIC MARKING, LINES, 12"	LF	1,900	
37	TRAFFIC MARKING, LINES, 24"	LF	25	
38	TRAFFIC MARKINGS, SYMBOLS	SF	215	
39	RUMBLE STRIP	LF		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT		
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT	SF		
43	ACCESSORY PANEL, TYPE DF	SF		
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF		
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT		

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OAK RIDGE ROAD QUANTITY SHEET
2021 ROAD RESURFACING PROJECT (CA-2020)
TOWNSHIP OF CLARK
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 8.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

m:\union county\union\y2010\2021 road program\cad_final plots\final\8.00 oak ridge road .dwg Plotted: Monday, December 7, 2020 2:03:21 PM

GRAPHIC SCALE

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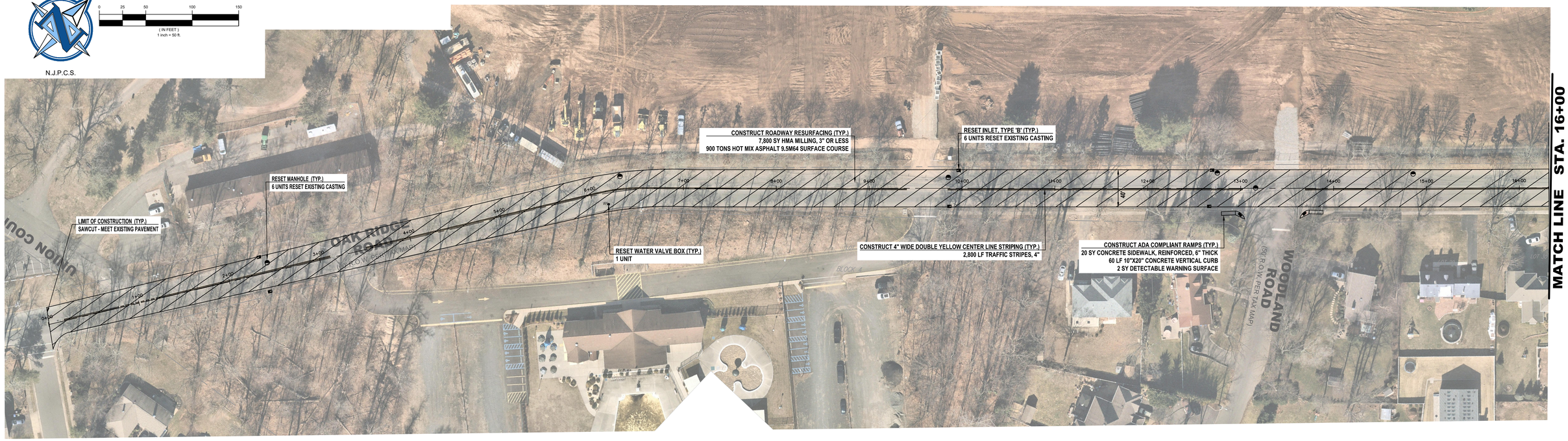
(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



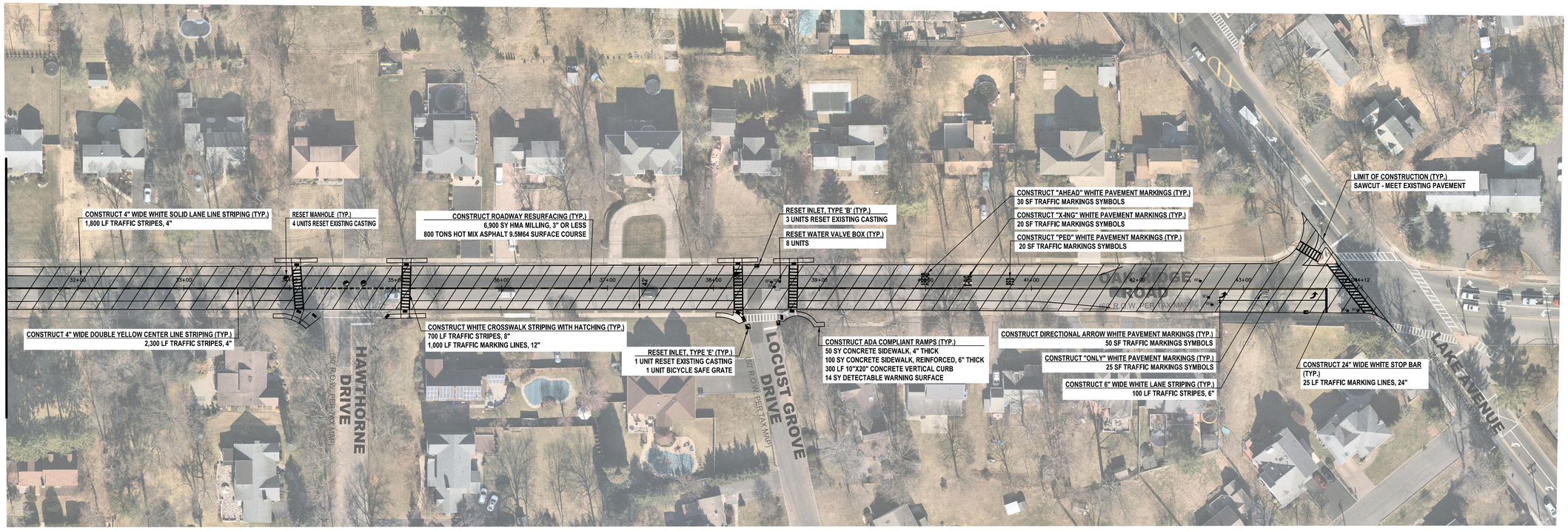
N.J.P.C.S.

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

SEE SHEET 8.01
MATCH LINE STA. 31+00



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OAK RIDGE ROAD (STA. 31+00 - STA. 43+80)
2021 ROAD RESURFACING PROJECT
(CA-2020)
TOWNSHIP OF CLARK
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 8.02
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

m:\union county\unioct\y20.010 (2021 road program)\ca20_final (plot files)\8.00 oak ridge road .dwg, Plotted Monday, December 7, 2020 2:03:41 PM

ADA RAMPS

STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES			
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE
1+30	LT	5		X			30		10	1
10+40	LT	5		X			30		10	1
10+40	RT	4				X	30		10	1
10+80	RT	1				X	30		10	1
10+90	LT	5		X			30		10	1
17+00	RT	5		X			30		10	1
17+40	RT	5		X			30		10	1
22+60	LT	3				X	30		10	1
22+60	RT	3				X	30		10	1
23+00	LT	3				X	30		10	1
23+00	RT	4				X	30		10	1
26+55	LT	3				X	30		10	2
26+55	RT	3				X	30		10	2
27+05	LT	3				X	30		10	2
27+30	RT	3				X	30		10	2
61+40	LT	3				X	30		10	1
61+85	LT	4				X	30		10	1
68+00	LT	4				X	30		10	1
68+40	LT	4				X	30		10	1
76+35	LT	5		X			30		10	1
76+75	LT	5			X		30		10	1
80+85	RT	5		X			30		10	1
81+30	RT	5		X			30		10	1
88+50	RT	4				X	30		10	1
88+60	LT	4				X	30		10	1
89+00	LT	5		X			30		10	1
89+10	RT	5		X			30		10	1
100+65	LT	5		X			30		10	1
101+15	LT	5		X			30		10	1
108+75	LT	4				X	30		10	1
109+00	RT	3				X	30		10	1
109+50	LT	4				X	30		10	1
109+77	RT	3				X	30		10	1

INLET TYPES & LOCATIONS

STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
1+25	LT	B				X
1+35	RT	B				X
1+95	LT	B				X
6+35	RT	A				X
7+65	RT	B				X
7+85	RT	B				X
10+85	RT	B				X
11+00	LT	B				X
12+35	LT	B				X
14+40	RT	B				X
14+40	LT	B				X
17+60	RT	B				X
17+70	LT	B				X
22+45	LT	B				X
23+15	LT	B				X
24+90	LT	B				X
26+40	LT	B				X
26+40	RT	B				X
27+15	LT	B				X
27+50	RT	B				X
27+70	LT	B				X
27+70	RT	B				X
29+40	LT	B				X
32+10	LT	B				X
32+80	LT	B				X
32+80	RT	B				X
34+67	LT	B				X
36+55	RT	B				X
40+50	RT	B				X
43+50	RT	A				X
43+60	LT	B				X
46+45	RT	B				X
46+60	LT	B				X
49+00	LT	B				X
50+67	LT	B				X
52+25	LT	A				X
52+30	LT	A				X
52+40	RT	B				X
54+80	LT	B				X
54+90	RT	B				X
55+10	RT	B				X
55+15	LT	B				X
55+78	LT	A				X
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58+55	RT	B				X
59+10	RT	B				X
61+55	RT	B				X
61+65	LT	A				X
62+05	LT	B				X
63+15	RT	B				X
63+60	LT	B				X
71+25	LT	B				X
71+25	RT	B				X
74+37	RT	B				X
74+60	LT	B				X
75+30	LT	B				X
75+30	RT	B				X
76+90	LT	B				X
78+60	LT	B				X
78+60	RT	B				X
81+45	RT	B				X
81+60	LT	B				X
88+35	RT	B				X
88+40	LT	B				X
89+20	LT	B				X
89+25	LT	B				X
91+68	RT	B				X
92+85	LT	B				X
93+12	RT	B				X
96+20	LT	A				X
96+20	RT	B				X
97+20	RT	A				X
98+00	RT	B				X
101+30	LT	B				X
101+30	RT	B				X
102+65	RT	B				X
104+40	RT	B				X
104+40	LT	B				X
107+05	RT	B				X
107+10	LT	B				X

ITEM NO.	TO BE CONSTRUCTED	UNIT	QUANTITY	AS-BUILT QUANTITY
1	PORTABLE VARIABLE MESSAGE SIGN	UNIT	1	
2	TRAFFIC CONTROL TRUCK WITH MOUNTED CRASH CUSHION	UNIT	1	
3	FLOODLIGHTS FOR NIGHTTIME OPERATION	UNIT	5	
4	TRAFFIC DIRECTOR, FLAGGER	HOUR	1	
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.	1	
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	190	
7	HMA MILLING, 3" OR LESS	SY	55,800	
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	560	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	6,380	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	100	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF		
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY	450	
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF	300	
18	CURB PIECE	UNIT		
19	BICYCLE SAFE GRATE	UNIT		
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	136	
21	RESET WATER VALVE BOX	UNIT	40	
22	RESET GAS VALVE BOX	UNIT	15	
23	INLET, TYPE B	UNIT		
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT		
25	15" REINFORCED CONCRETE PIPE	LF		
26	INLET FILTER TYPE 2, 2' X 4'	UNIT		
27	10"X20" CONCRETE VERTICAL CURB	LF	990	
28	GRANITE CURB	LF		
29	CONCRETE SIDEWALK, 4" THICK	SY	140	
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	330	
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	37	
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
33	TRAFFIC STRIPES, 4"	LF	30,900	
34	TRAFFIC STRIPES, 6"	LF	550	
35	TRAFFIC STRIPES, 8"	LF	2,850	
36	TRAFFIC MARKING, LINES, 12"	LF	4,750	
37	TRAFFIC MARKING, LINES, 24"	LF	270	
38	TRAFFIC MARKINGS, SYMBOLS	SF	785	
39	RUMBLE STRIP	LF		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT		
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT	SF	50	
43	ACCESSORY PANEL, TYPE DF	SF	50	
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF		
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT		

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SPRINGFIELD AVENUE QUANTITY SHEET
2021 ROAD RESURFACING PROJECT
(CA-2020)

TOWNSHIP OF BERKELEY HEIGHTS & BOROUGH OF NEW PROVIDENCE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 9.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

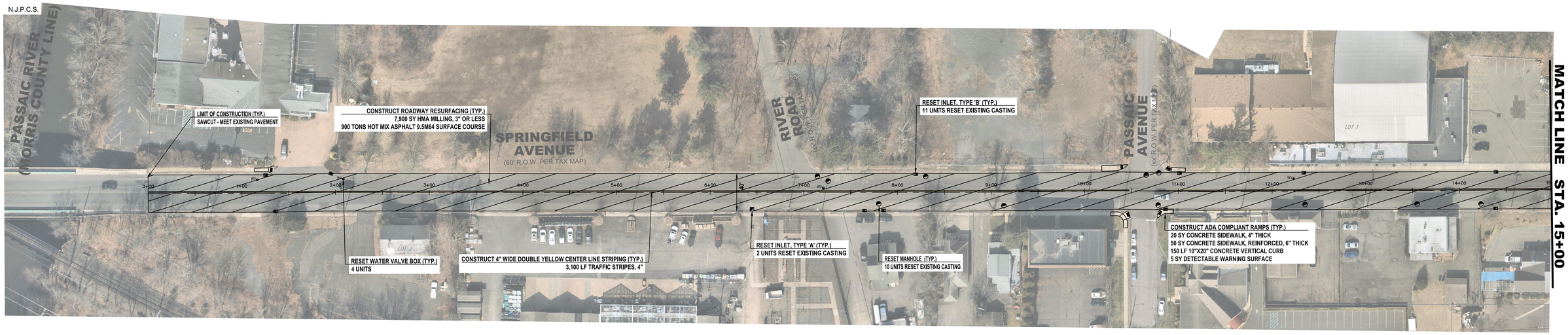
m:\union county\uniocty20.010 (f20 - road program\local_final (post files\9 09 springfield avenue.dwg Plotted: Monday, December 7, 2020 1:24:20 PM

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



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0 25 50 100 150

(IN FEET)
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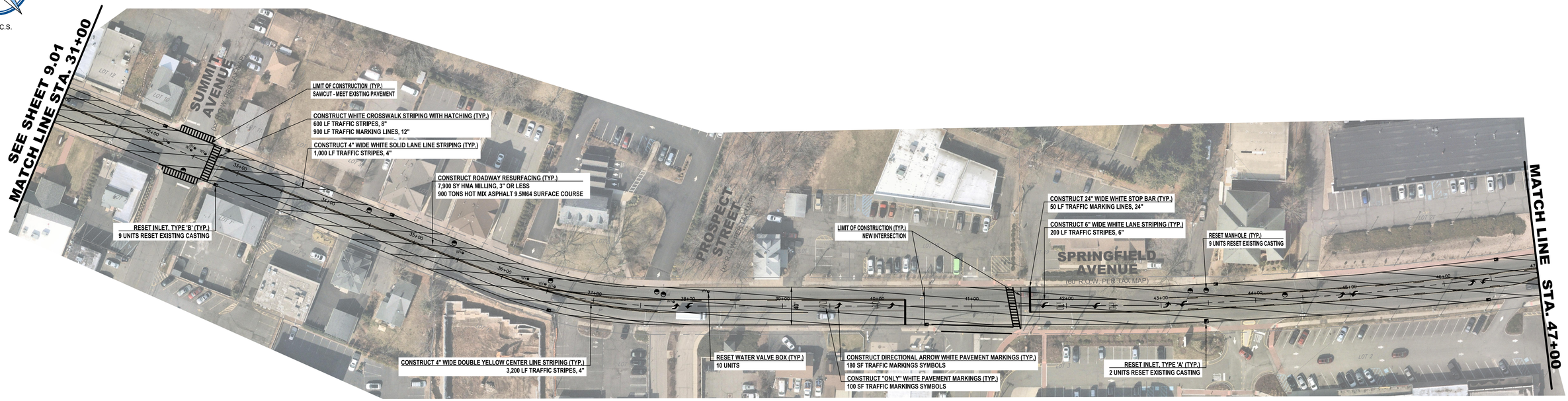
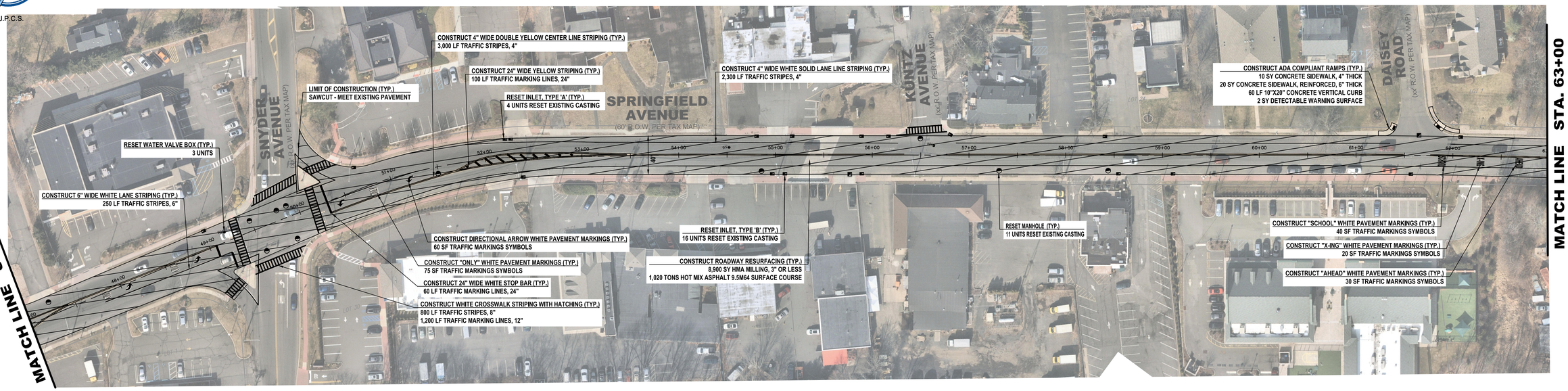


GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



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A PROJECT OF
34 PARK AVENUE LYNDHURST NEW JERSEY
TEL: 201-939-8805 FAX: 201-939-0846 E-MAIL: NEA@NEGLIAENGINEERING.COM

MICHAEL J. NEGLIA, P.E., P.L.S., P.P.
PROFESSIONAL ENGINEER N.J. LICENSE NO. 38604
PROFESSIONAL LAND SURVEYOR N.J. LICENSE NO. 38604
PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

SPRINGFIELD AVENUE (STA. 31+00 - STA. 63+00)
2021 ROAD RESURFACING PROJECT
(CA-2020)
TOWNSHIP OF BERKELEY HEIGHTS & BOROUGH OF NEW PROVIDENCE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 9.02
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

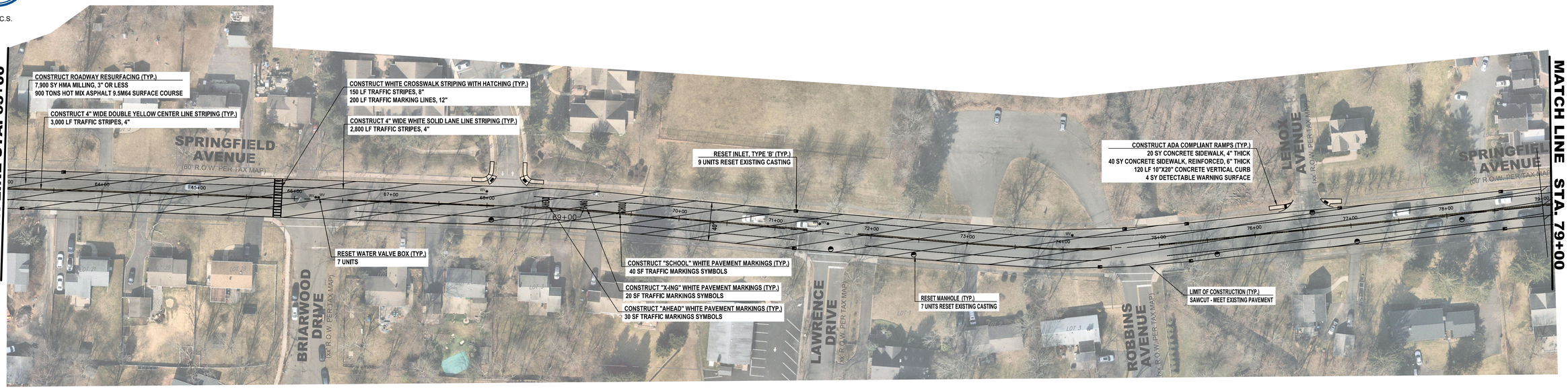
m:\union county\unioc\y20.010\ 2021 road program\ca-6_final (dot) files\9.00 springfield avenue.dwg Picked: Monday, December 7, 2020 1:25:07 PM

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.

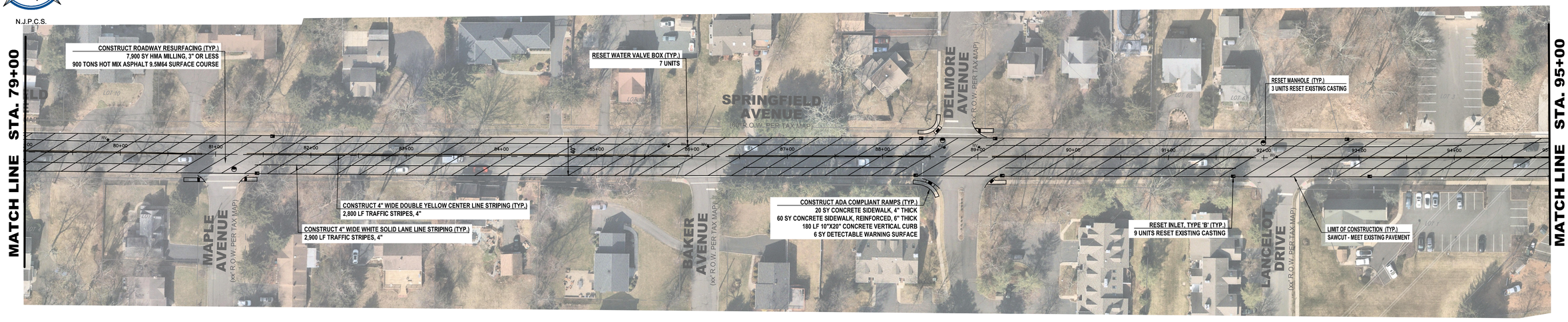


GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



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CERTIFICATE OF AUTHORIZATION (N.J.S.A. 45:8-56) 24GA27927000

NO.	DATE	REVISIONS	DRAWN	DESIGNED	CHECKED

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PROFESSIONAL ENGINEER
N.J. LICENSE NO. 41635

DAVID R. ATKINSON, P.E., C.M.E.
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PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

SPRINGFIELD AVENUE (STA. 63+00 - STA. 95+00)
2021 ROAD RESURFACING PROJECT
(CA-2020)

TOWNSHIP OF BERKELEY HEIGHTS & BOROUGH OF NEW PROVIDENCE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 9.03
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

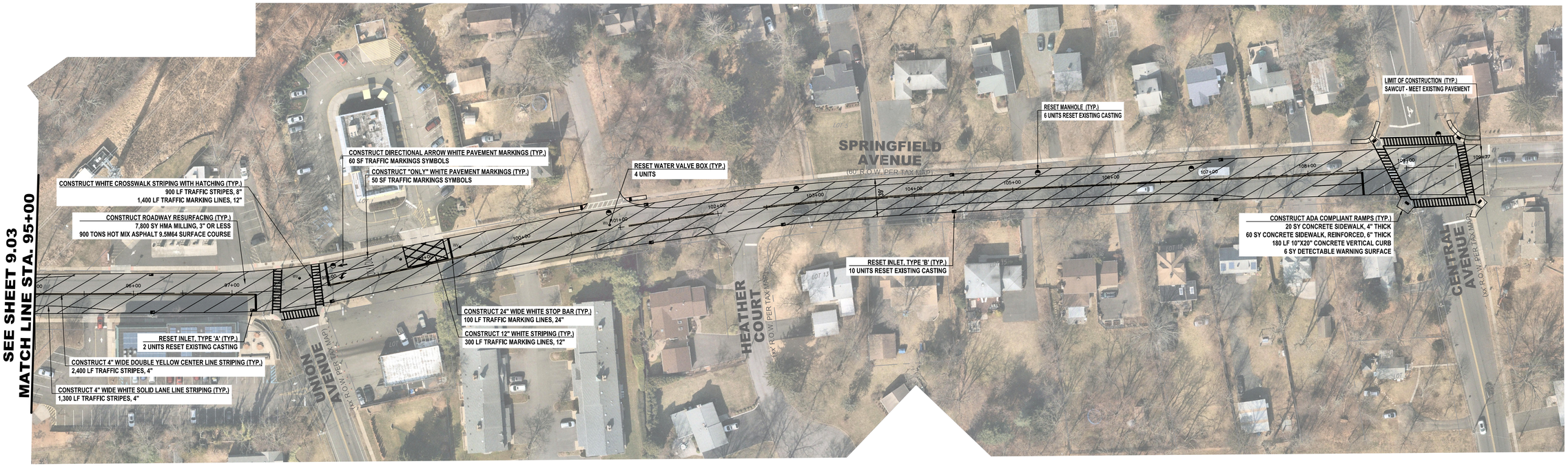
m:\union county\unioct\20.010 2020 road program\cad_final plots\sheet\9.00 springfield avenue.dwg, Plotted: Monday, December 7, 2020 1:25:31 PM

N.J.P.C.S.

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.



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SPRINGFIELD AVENUE (STA. 95+00 - STA. 109+77)
2021 ROAD RESURFACING PROJECT
(CA-2020)
TOWNSHIP OF BERKELEY HEIGHTS & BOROUGH OF NEW PROVIDENCE
UNION COUNTY NEW JERSEY

DRAWN BY: KD, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 9.04
DESIGNED BY: KD, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:		DATE: JUNE 15, 2020

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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	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE
0+10	RT	1			X		25		20	1
0+10	LT	1			X		25		20	1
2+30	RT	1				X	25		20	1
2+70	RT	2				X	25		15	1
4+30	LT	2			X		25		20	1
4+30	RT	2			X		25		20	1
4+70	LT	1			X		25		20	1
4+70	RT	2			X		25		20	1
6+80	LT	2			X		25		20	1
6+80	RT	1			X		25		20	1
7+20	LT	2			X		25		20	1
7+20	RT	5	X				20		15	1
9+30	LT	2	X				25		20	1
9+30	RT	2	X				25		20	1
9+70	LT	1	X				25		20	1
9+70	RT	2	X				25		20	1
11+80	LT	2			X		25		20	1
11+80	RT	2			X		25		20	1
12+20	LT	1			X		25		20	1
12+20	RT	2			X		25		20	1
14+30	LT	2			X		25		20	1
14+30	RT	1			X		25		20	1
14+70	LT	2			X		25		20	1
14+70	RT	2			X		25		20	1
16+75	RT	2				X	30		20	2
16+80	LT	2				X	30		20	2
17+30	LT	2				X	30		20	2
17+30	RT	2				X	30		20	2
19+45	LT	2			X		25		20	1
19+45	RT	5	X				25		15	1
19+85	LT	2			X		25		20	1
19+85	RT	2			X		25		20	1
22+00	LT	1			X		25		20	1
22+00	RT	2	X				25		20	1
22+40	LT	2			X		25		20	1
22+40	RT	2			X		25		20	1
26+20	LT	2				X	25		20	1
26+20	RT	2				X	25		20	1
26+55	LT	2				X	25		20	1
26+55	RT	2				X	25		20	1
28+95	RT	2			X		25		20	1
29+35	RT	1			X		25		20	1
31+65	RT	2				X	25		20	2
31+70	LT	2				X	25		20	1
32+20	LT	2				X	25		20	1
32+20	RT	2				X	25		20	2
34+75	LT	5	X				25		20	1
35+15	LT	2			X		25		20	1
35+25	RT	2			X		25		20	1
35+60	RT	1			X		25		20	1
38+00	LT	1				X	25		20	1
38+25	RT	2				X	25		20	2
38+60	LT	2	X				25		20	1
39+10	RT	2	X				25		20	1
39+90	LT	2			X		25		20	1
40+25	LT	2			X		25		20	1
42+50	LT	2				X	25		20	2
42+50	RT	2				X	25		20	2
43+05	LT	1				X	25		20	1
43+05	RT	1				X	25		20	1

INLET TYPES & LOCATIONS

STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
04+15	LT	B				X
04+15	RT	B				X
04+20	LT	B				X
04+20	RT	B				X
04+97	LT	B				X
05+11	RT	B				X
06+66	LT	B	X	X		X
06+69	RT	B				X
07+30	RT	B				X
07+32	LT	B				X
14+15	RT	B				X
14+16	LT	B				X
16+65	LT	B				X
21+92	RT	B				X
22+56	RT	B				X
25+93	RT	B				X
25+94	LT	B				X
25+98	LT	B				X
25+99	RT	B		X		X
26+66	LT	B		X		X
26+68	RT	B				X
26+70	LT	B				X
38+11	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	90	
7	HMA MILLING, 3" OR LESS	SY	25,370	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	90	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	280	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2,930	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	100	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF		
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
18	CURB PIECE	UNIT	4	
19	BICYCLE SAFE GRATE	UNIT	1	
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	55	
21	RESET WATER VALVE BOX	UNIT	53	
22	RESET GAS VALVE BOX	UNIT	17	
23	INLET, TYPE B	UNIT		
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT	1	
25	15" REINFORCED CONCRETE PIPE	LF		
26	INLET FILTER TYPE 2, 2' X 4'	UNIT		
27	10"X20" CONCRETE VERTICAL CURB	LF	1,515	
28	GRANITE CURB	LF		
29	CONCRETE SIDEWALK, 4" THICK	SY	800	
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	1,185	
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	69	
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
33	TRAFFIC STRIPES, 4"	LF	7,090	
34	TRAFFIC STRIPES, 6"	LF		
35	TRAFFIC STRIPES, 8"	LF	1,010	
36	TRAFFIC MARKING, LINES, 12"	LF	920	
37	TRAFFIC MARKING, LINES, 24"	LF	100	
38	TRAFFIC MARKINGS, SYMBOLS	SF	235	
39	RUMBLE STRIP	LF		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	150	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT	SF		
43	ACCESSORY PANEL, TYPE DF	SF		
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF		
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT		

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PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

ROSELLE STREET QUANTITY SHEET
2021 ROAD RESURFACING PROJECT
(CA-2020)
CITY OF LINDEN
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 10.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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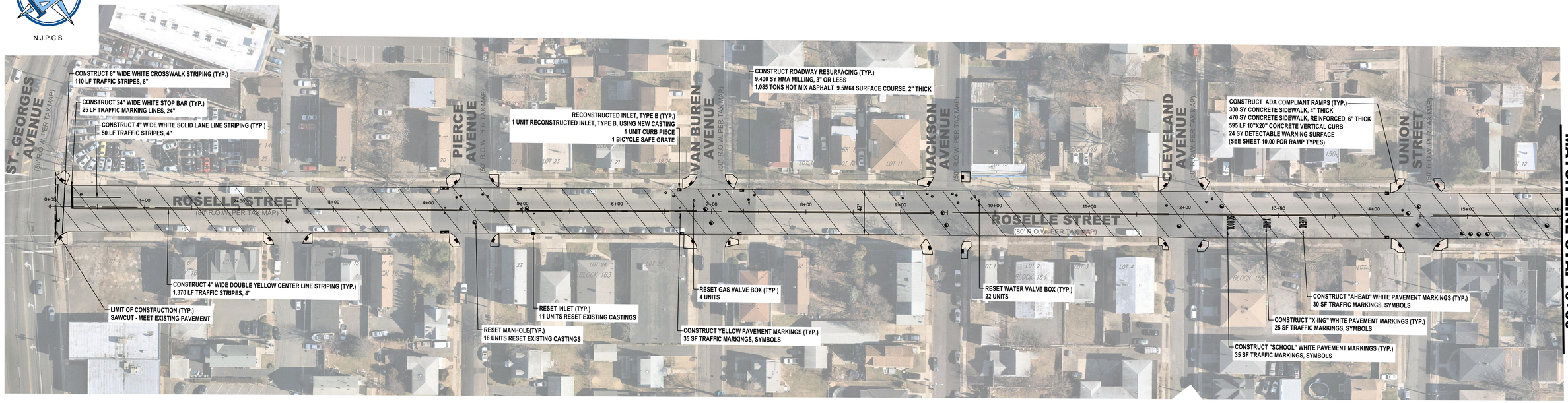
GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



MATCH LINE STA. 16+00

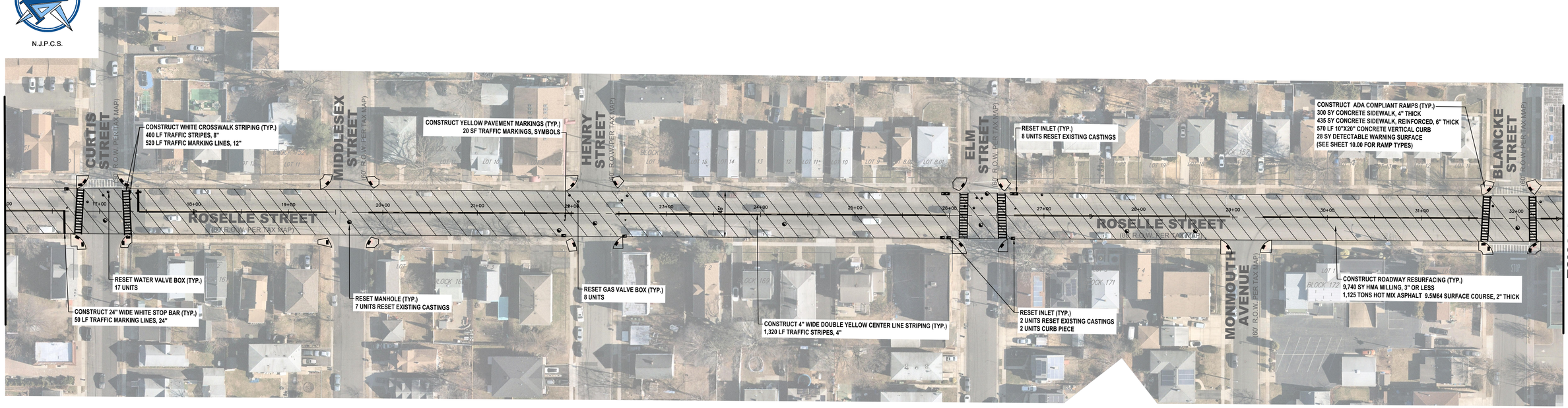
MATCH LINE STA. 32+50
SEE SHEET 10.02

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



MATCH LINE STA. 16+00

MATCH LINE STA. 32+50
SEE SHEET 10.02

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ROSELLE STREET (STA. 0+00 - STA. 32+50)
2021 ROAD RESURFACING PROJECT
(CA-2020)
CITY OF LINDEN
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 10.01
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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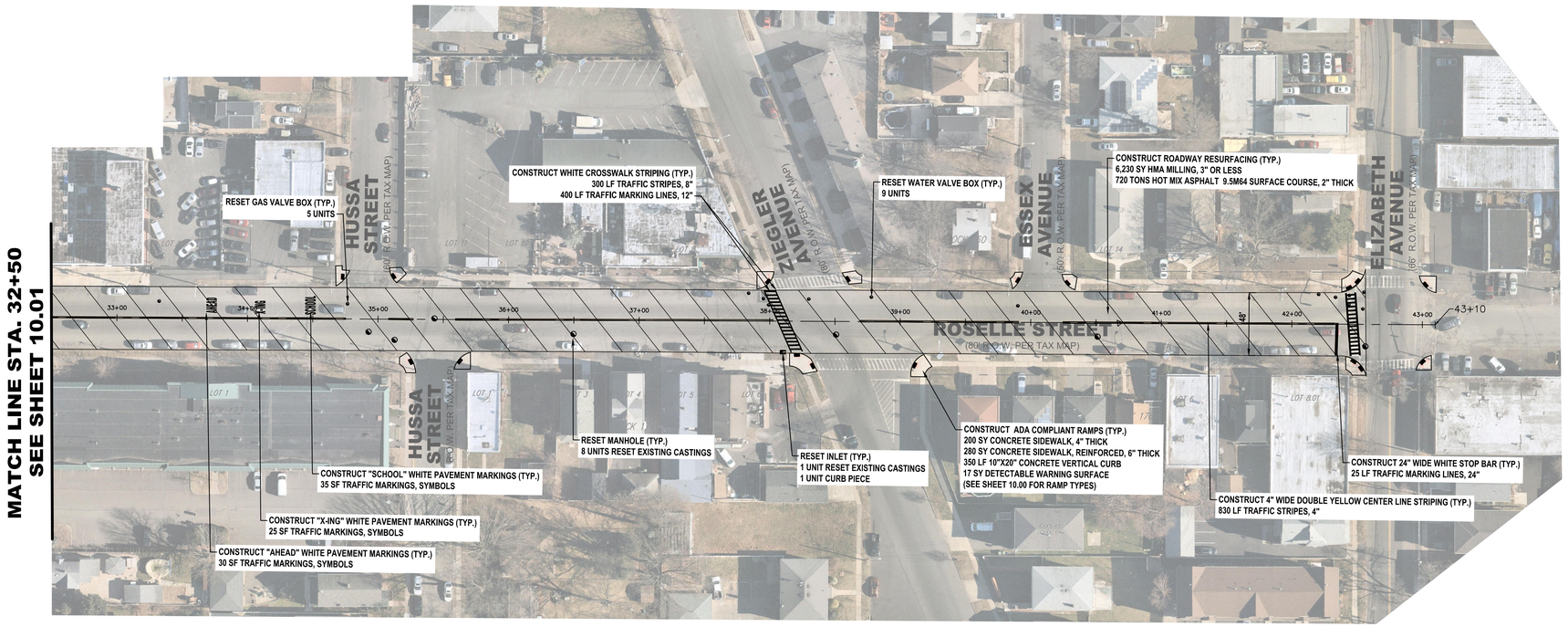
N.J.P.C.S.

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.



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PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

ROSELLE STREET (STA. 32+50 - STA. 43+10)
2021 ROAD RESURFACING PROJECT
(CA-2020)
CITY OF LINDEN
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 10.02
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
01+48	RT	B				X
08+23	RT	B				X
10+12	RT	B				X
10+13	LT	B				X
19+44	LT	B				X
24+06	LT	B				X
24+39	LT	B				X
25+63	RT	B				X
25+76	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	ALLOW.		
5	TRAFFIC DIRECTOR, UNIFORM POLICE	ALLOW.		
6	EXCAVATION, UNCLASSIFIED (IF & WHERE DIRECTED)	CY	50	
7	HMA MILLING, 3" OR LESS	SY	12,985	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	50	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	150	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	1,505	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	50	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF		
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
18	CURB PIECE	UNIT		
19	BICYCLE SAFE GRATE	UNIT		
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	23	
21	RESET WATER VALVE BOX	UNIT	10	
22	RESET GAS VALVE BOX	UNIT	3	
23	INLET, TYPE B	UNIT	1	
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT		
25	15" REINFORCED CONCRETE PIPE	LF	275	
26	INLET FILTER TYPE 2, 2' X 4'	UNIT	2	
27	10"X20" CONCRETE VERTICAL CURB	LF		
28	GRANITE CURB	LF		
29	CONCRETE SIDEWALK, 4" THICK	SY		
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY		
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY		
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
33	TRAFFIC STRIPES, 4"	LF	8,260	
34	TRAFFIC STRIPES, 6"	LF		
35	TRAFFIC STRIPES, 8"	LF	80	
36	TRAFFIC MARKING, LINES, 12"	LF	120	
37	TRAFFIC MARKING, LINES, 24"	LF	25	
38	TRAFFIC MARKINGS, SYMBOLS	SF	380	
39	RUMBLE STRIP	LF		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	100	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT	SF		
43	ACCESSORY PANEL, TYPE DF	SF		
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF		
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT		

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CERTIFICATE OF AUTHORIZATION (N.J.S.A. 45:8-56) 24GA27927000

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NO.	DATE	DESCRIPTION	DRAWN	DESIGNED	CHECKED

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NEW PROVIDENCE ROAD QUANTITY SHEET
2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF MOUNTAINSIDE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 11.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

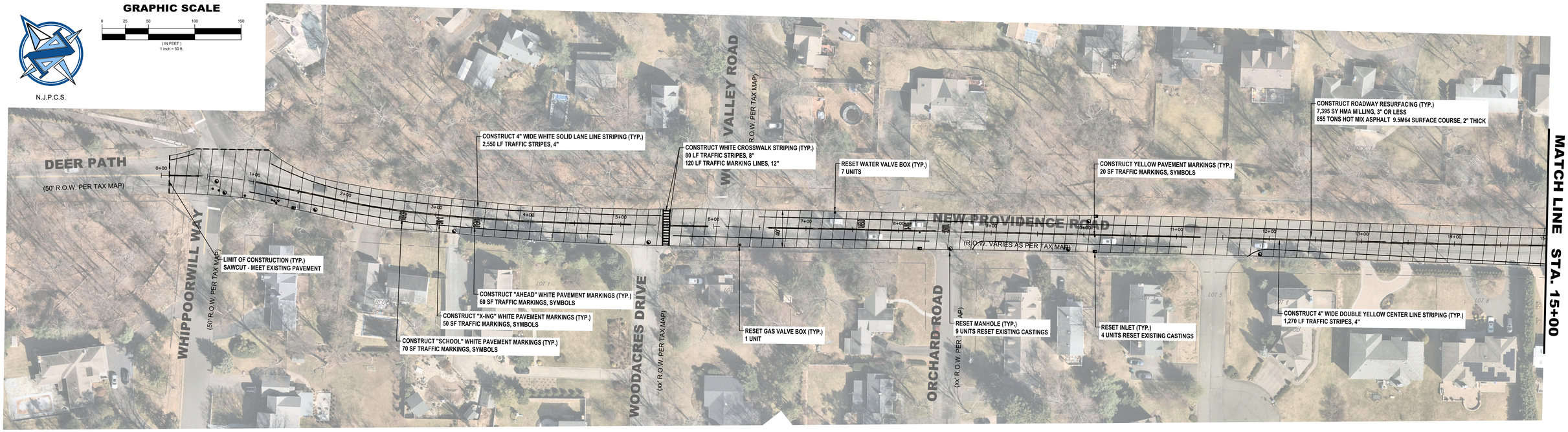
m:\union county\uniocty20.010 (2021 road program)\cad_final (plot) files\11.00 new providence road.dwg Plotted: Monday, December 7, 2020 1:34:05 PM

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.

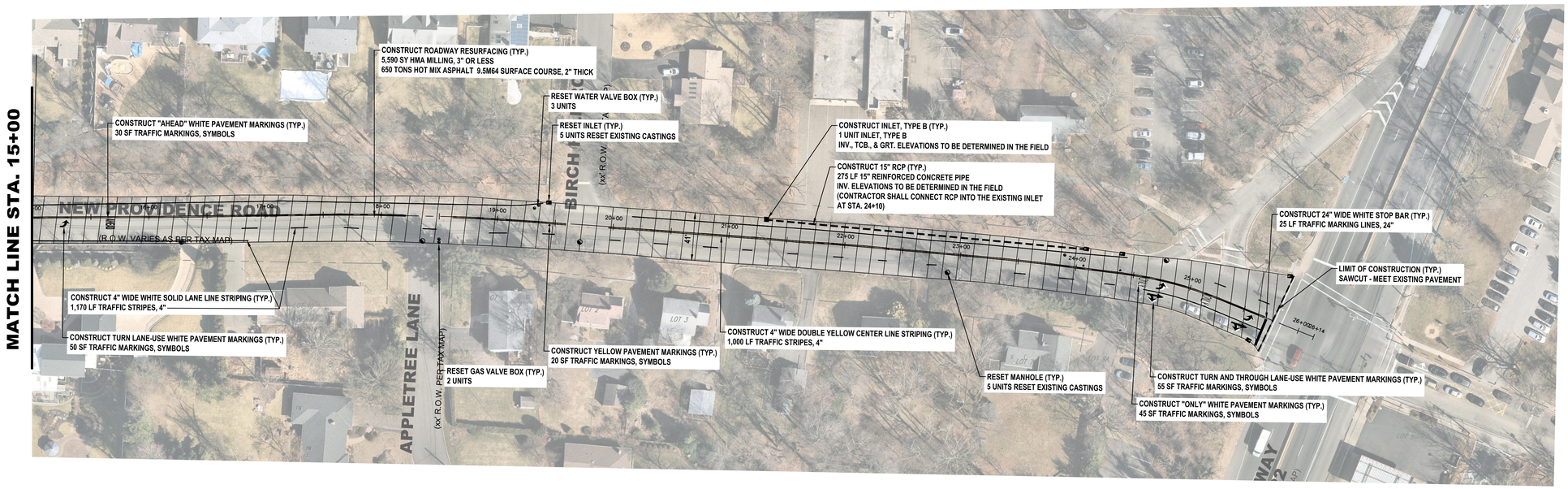


GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



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NEW PROVIDENCE ROAD (STA. 0+00 - NJ ROUTE 22)
2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF MOUNTAINSIDE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 11.01
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

n:\union county\unioct\20.010 (2021 road program)\cad_final plots\11.00 new providence road.dwg, Plotted: Monday, December 7, 2020 1:34:31 PM

INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
00+29	LT	B				X
00+30	RT	B				X
06+00	RT	B				X
06+84	LT	B				X
09+77	LT	B				X
11+93	RT	B				X
11+94	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	25	
7	HMA MILLING, 3" OR LESS	SY	4,945	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	25	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	80	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	570	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	30	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF		
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
18	CURB PIECE	UNIT		
19	BICYCLE SAFE GRATE	UNIT		
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	8	
21	RESET WATER VALVE BOX	UNIT	1	
22	RESET GAS VALVE BOX	UNIT		
23	INLET, TYPE B	UNIT		
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT		
25	15" REINFORCED CONCRETE PIPE	LF		
26	INLET FILTER TYPE 2, 2' X 4'	UNIT		
27	10"X20" CONCRETE VERTICAL CURB	LF		
28	GRANITE CURB	LF		
29	CONCRETE SIDEWALK, 4" THICK	SY		
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY		
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY		
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
33	TRAFFIC STRIPES, 4"	LF	1,800	
34	TRAFFIC STRIPES, 6"	LF	100	
35	TRAFFIC STRIPES, 8"	LF	210	
36	TRAFFIC MARKING, LINES, 12"	LF	160	
37	TRAFFIC MARKING, LINES, 24"	LF	25	
38	TRAFFIC MARKINGS, SYMBOLS	SF	35	
39	RUMBLE STRIP	LF		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT		
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT	SF		
43	ACCESSORY PANEL, TYPE DF	SF		
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF		
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT		

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MAIN STREET QUANTITY SHEET
2021 ROAD RESURFACING PROJECT
(CA-2020)
TOWNSHIP OF SPRINGFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 12.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

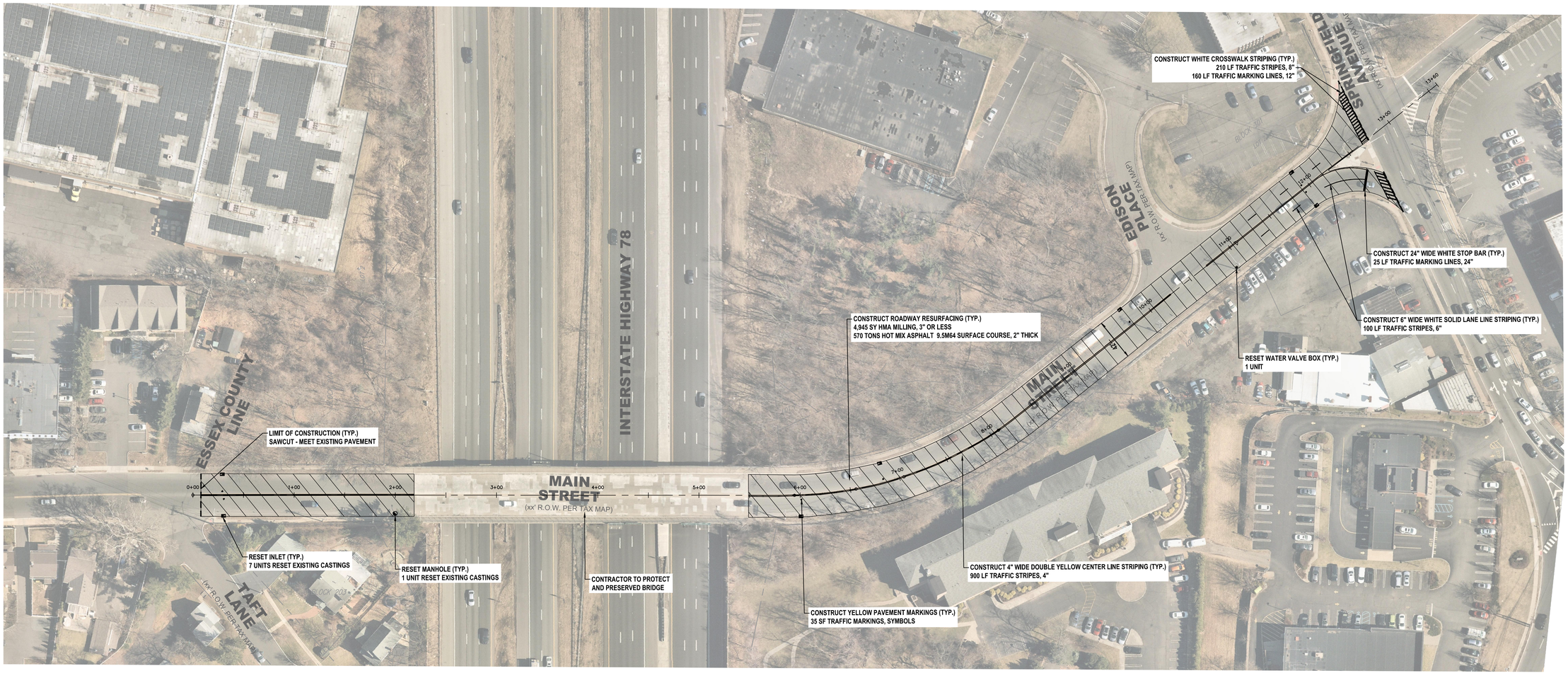
m:\union county\unioct\20.010 (2024 road program)\cadd_final (cpld files\12.00 main street.dwg Plotted: Monday, December 7, 2020 1:37:42 PM

N.J.P.C.S.

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.



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MAIN STREET (STA. 0+00 - SPRINGFIELD AVENUE)
2021 ROAD RESURFACING PROJECT
(CA-2020)
TOWNSHIP OF SPRINGFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 12.01
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

m:\union county\uniocty20.010 (f21 road program)\cad_final (dot) files\12.00 main street.dwg Plotted: Monday, December 7, 2020, 1:37:52 PM

ADA RAMPS

STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES			
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE
0+40	RT	5			X		30		20	1
44+10	LT	2				X	30		20	1
44+50	LT	2				X	25		20	1
54+45	RT	5	X				30		20	1
54+85	RT	2				X	25		20	1
93+25	RT	1	X				25		20	1
93+70	RT	1	X				25		20	1
93+75	RT	1	X				25		20	1
94+30	LT	5	X				20		15	1
94+75	LT	5	X				20		20	1
97+20	LT	2	X				25		20	1
97+25	RT	5	X				25		15	1
97+65	LT	5	X				20		15	1
97+65	RT	2	X				25		20	1
99+75	RT	2	X				25		20	1
100+25	RT	2				X	25		20	2
100+30	LT	1	X				25		20	1
100+33	LT	1	X				25		20	1
100+70	LT	2				X	25		20	1
106+00	RT	2				X	25		20	1
106+30	RT	5	X				20		15	1
110+25	RT	2				X	25		20	1
110+45	LT	2				X	25		20	1
110+70	RT	2				X	25		20	1
110+80	LT	2				X	25		20	1
117+55	LT	1			X		25		20	1
117+55	RT	2			X		25		20	1
117+95	LT	2			X		25		20	1
117+95	RT	1			X		25		20	1
121+20	RT	2			X		25		20	1
121+55	RT	2				X	25		20	1
123+60	RT	2	X				25		20	1
124+00	RT	2	X				25		20	1
124+00	LT	2			X		25		20	1
124+45	LT	2				X	25		20	1
126+40	RT	2				X	25		20	1
126+80	RT	2			X		25		20	1
127+55	LT	1			X		25		20	1
127+90	LT	2			X		25		20	1
129+00	RT	2				X	25		20	1
129+45	RT	2				X	25		20	1
130+50	LT	1				X	30		20	1
130+90	LT	1				X	30		20	1
132+90	LT	5	X				20		15	1
133+20	LT	5	X				20		15	1
137+35	RT	2			X		25		20	1
137+85	RT	5			X		20		15	1
139+40	LT	1				X	25		20	1
140+10	LT	2			X		25		20	1
141+85	LT	2			X		25		20	1
142+30	LT	2			X		25		20	1
166+50	LT	5			X		20		15	1
166+85	LT	2			X		25		20	1
168+90	LT	2			X		25		20	1
169+30	LT	2			X		25		20	1
169+60	RT	2			X		25		20	1
170+05	RT	2			X		25		20	1

INLET TYPES & LOCATIONS

STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
00+95	RT	TYPE B				X
01+00	LT	TYPE B				X
01+50	LT	TYPE B				X
04+22	LT	TYPE B				X
04+23	RT	TYPE B				X
10+05	LT	TYPE B				X
10+09	LT	TYPE B				X
28+67	LT	TYPE B				X
28+78	RT	TYPE B				X
32+30	LT	TYPE B				X
32+73	LT	TYPE B				X
33+38	LT	TYPE B				X
34+31	LT	TYPE B				X
35+90	LT	TYPE B				X
39+65	RT	TYPE B				X
39+80	LT	TYPE A				X
48+31	RT	TYPE B				X
48+31	LT	TYPE B				X
52+72	RT	TYPE B				X
52+84	LT	TYPE E				X
53+63	RT	TYPE B				X
54+38	RT	TYPE B				X
55+02	RT	TYPE B				X
55+87	LT	TYPE A				X
55+88	RT	TYPE B				X
71+24	LT	TYPE B				X
71+24	RT	TYPE B				X
71+82	LT	TYPE B				X
72+95	LT	TYPE B				X
74+05	RT	TYPE B				X
74+05	LT	TYPE B				X
77+21	LT	TYPE E				X
77+26	RT	TYPE B				X
79+82	LT	TYPE B				X
79+82	RT	TYPE B				X
83+08	LT	TYPE B				X
83+22	RT	TYPE B				X
84+97	LT	TYPE B				X
88+71	RT	TYPE B				X
89+03	LT	TYPE B				X
90+73	RT	TYPE B				X
91+18	RT	TYPE B				X
93+28	LT	TYPE B				X
93+95	RT	TYPE B				X
95+85	LT	TYPE B				X
97+82	LT	TYPE B				X
97+88	RT	TYPE B				X
99+60	RT	TYPE B				X
100+30	LT	TYPE B				X
102+12	RT	TYPE A				X
102+21	LT	TYPE A				X
106+86	LT	TYPE B				X
108+78	RT	TYPE B				X
108+88	RT	TYPE B				X
108+94	LT	TYPE B				X
108+98	LT	TYPE B				X
110+84	RT	TYPE B				X
110+96	LT	TYPE B				X
115+58	RT	TYPE B				X
115+66	LT	TYPE B				X
117+48	RT	TYPE B				X
119+88	LT	TYPE B				X
120+02	RT	TYPE B				X
121+13	RT	TYPE B				X
121+40	LT	TYPE B				X
121+66	RT	TYPE B				X
130+97	LT	TYPE B				X
142+36	RT	TYPE B				X
142+41	LT	TYPE B				X
143+83	LT	TYPE B				X
144+81	LT	TYPE B				X
144+86	RT	TYPE B				X
149+47	RT	TYPE B				X
149+50	LT	TYPE B				X
150+76	LT	TYPE B				X
151+97	LT	TYPE B				X
158+47	RT	TYPE A				X
158+98	RT	TYPE B				X
158+99	LT	TYPE B				X
163+80	RT	TYPE B				X
163+80	LT	TYPE B				X
166+35	LT	TYPE B				X
166+40	RT	TYPE B				X
168+74	RT	TYPE B				X
168+84	LT	TYPE B				X
171+03	LT	TYPE B				X
171+03	RT	TYPE B				X
172+50	RT	TYPE B				X
174+91	RT	TYPE B				X
175+15	LT	TYPE B				X
175+52	RT	TYPE B				X
183+92	RT	TYPE B				X
183+94	LT	TYPE B				X
184+92	RT	TYPE B				X
187+04	LT	TYPE B				X
187+06	RT	TYPE B				X
188+94	LT	TYPE E				X
188+94	RT	TYPE B				X
190+33	RT	TYPE B				X
191+43	RT	TYPE B				X
192+28	LT	TYPE B				X
192+30	RT	TYPE B				X
196+10	LT	TYPE B				X
201+28	RT	TYPE E				X
201+73	RT	TYPE 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	325	
7	HMA MILLING, 3" OR LESS	SY	94,000	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	325	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	940	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	11,135	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	1,100	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF		
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
18	CURB PIECE	UNIT	4	
19	BICYCLE SAFE GRATE	UNIT		
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	237	
21	RESET WATER VALVE BOX	UNIT	46	
22	RESET GAS VALVE BOX	UNIT	2	
23	INLET, TYPE B	UNIT		
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT		
25	15" REINFORCED CONCRETE PIPE	LF		
26	INLET FILTER TYPE 2, 2' X 4'	UNIT		
27	10"X20" CONCRETE VERTICAL CURB	LF	1,410	
28	GRANITE CURB	LF		
29	CONCRETE SIDEWALK, 4" THICK	SY	865	
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	1,100	
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	58	
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
33	TRAFFIC STRIPES, 4"	LF	60,350	
34	TRAFFIC STRIPES, 6"	LF		
35	TRAFFIC STRIPES, 8"	LF	2,435	
36	TRAFFIC MARKING, LINES, 12"	LF	3,360	
37	TRAFFIC MARKING, LINES, 24"	LF	1,805	
38	TRAFFIC MARKINGS, SYMBOLS	SF	1,405	
39	RUMBLE STRIP	LF		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	450	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT	SF		
43	ACCESSORY PANEL, TYPE DF	SF		
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF		
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT		

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NO.	DATE	REVISIONS	DRAWN	DESIGNED	CHECKED

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PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

VAUX HALL ROAD QUANTITY SHEET
2021 ROAD RESURFACING PROJECT
(CA-2020)
TOWNSHIP OF UNION
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 13.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

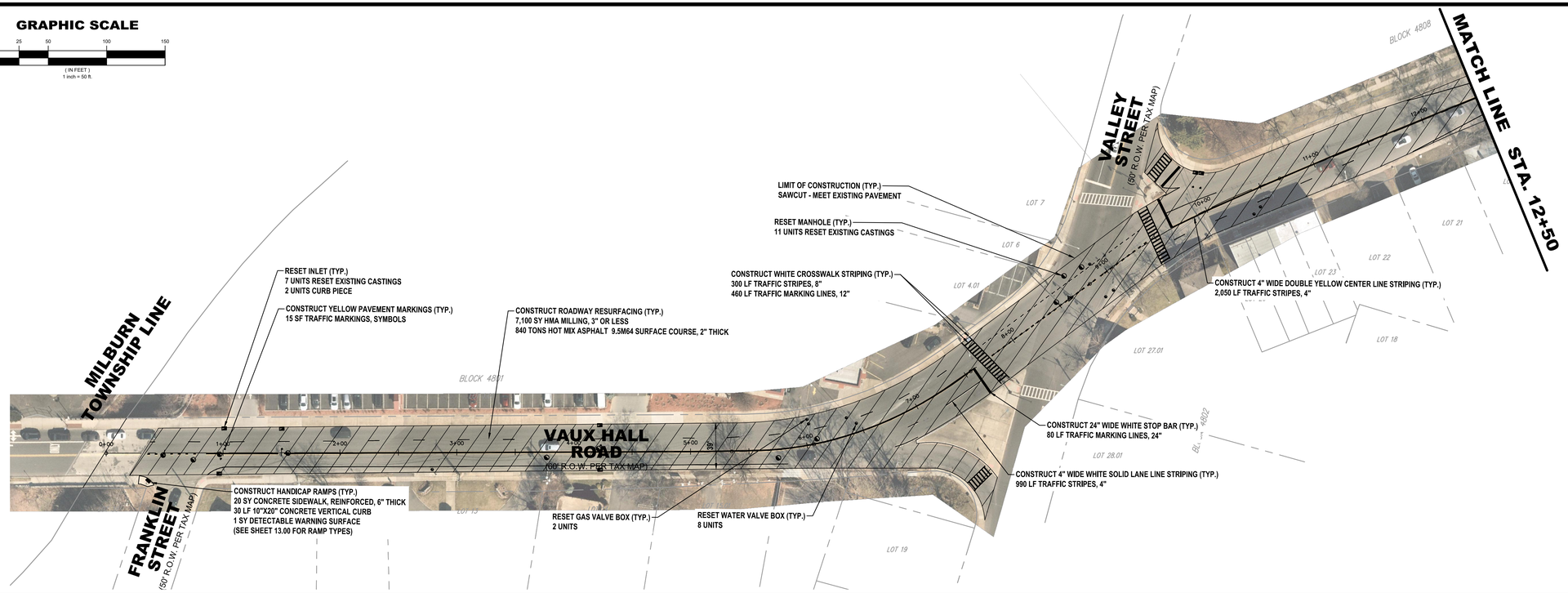
m:\union county\unioc\y20.010 (f)\21 road program\cad_final (dcd) files\1130 vaux hall road.dwg, Plotted: Monday, December 7, 2020 1:41:06 PM

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.

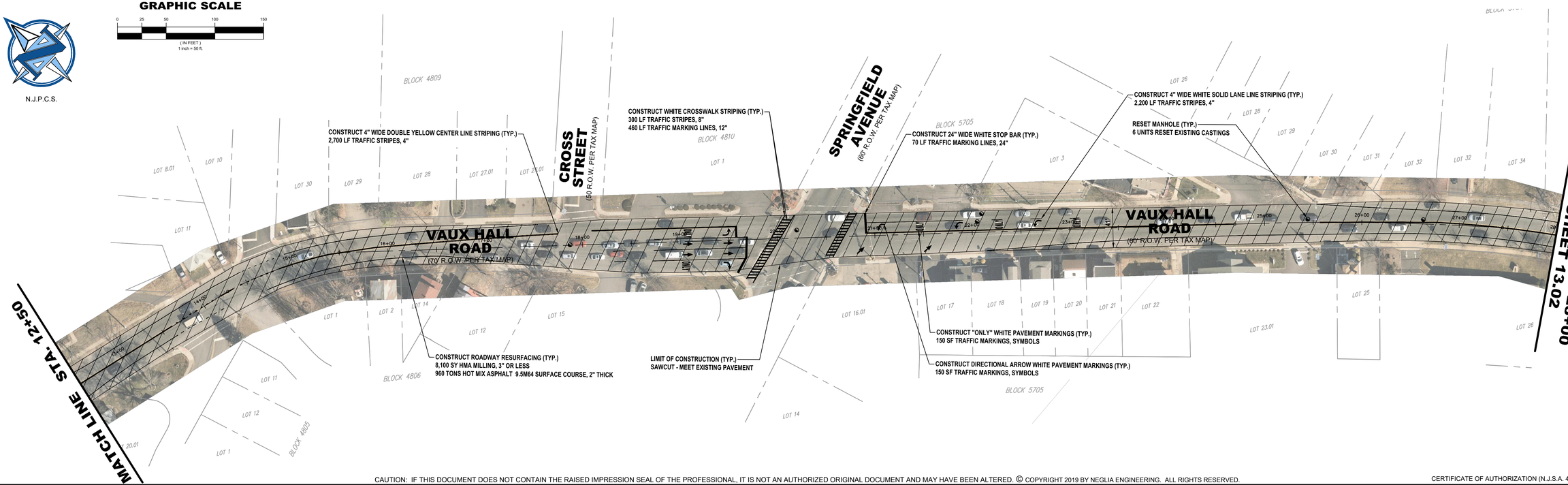


GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



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VAUX HALL ROAD
2021 ROAD RESURFACING PROJECT
(CA-2020)
TOWNSHIP OF UNION
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 13.01
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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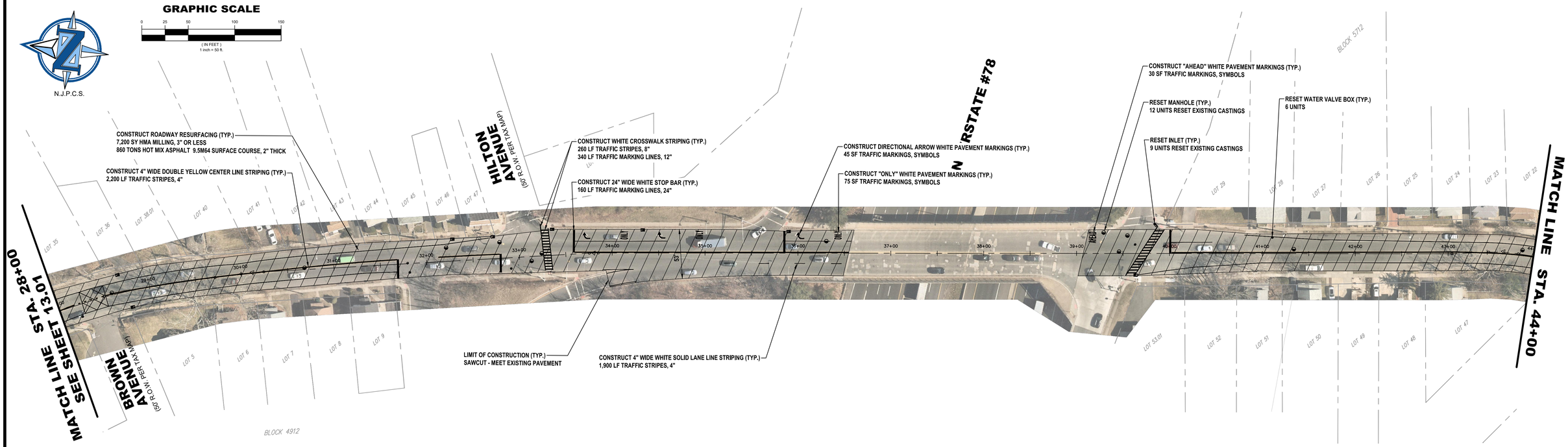

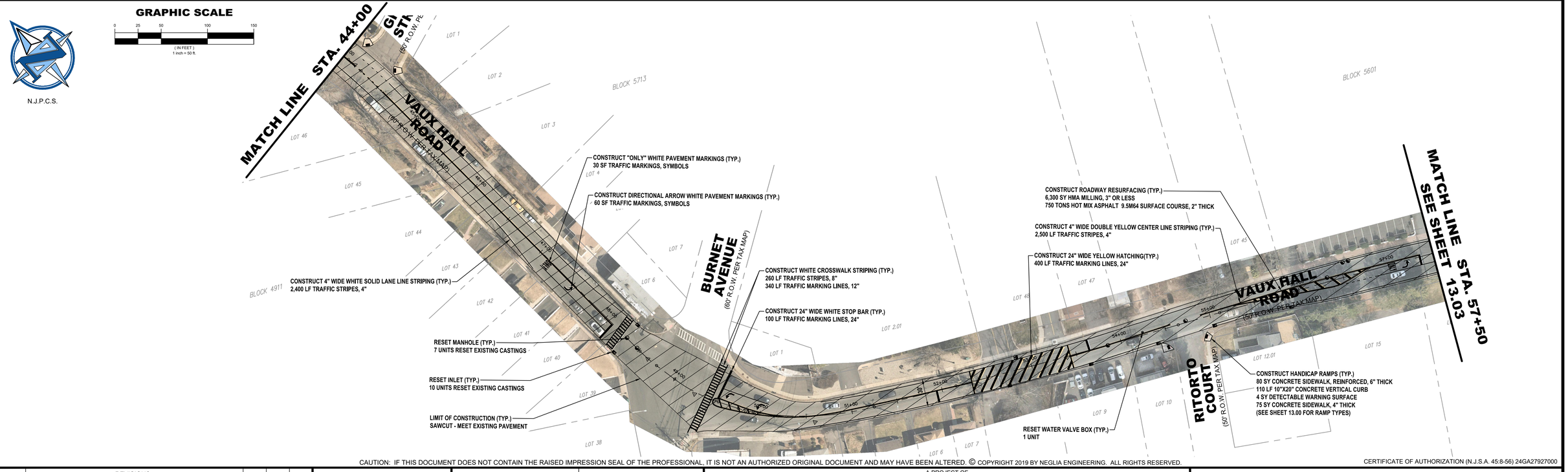

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VAUX HALL ROAD
2021 ROAD RESURFACING PROJECT
(CA-2020)
TOWNSHIP OF UNION
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 13.02
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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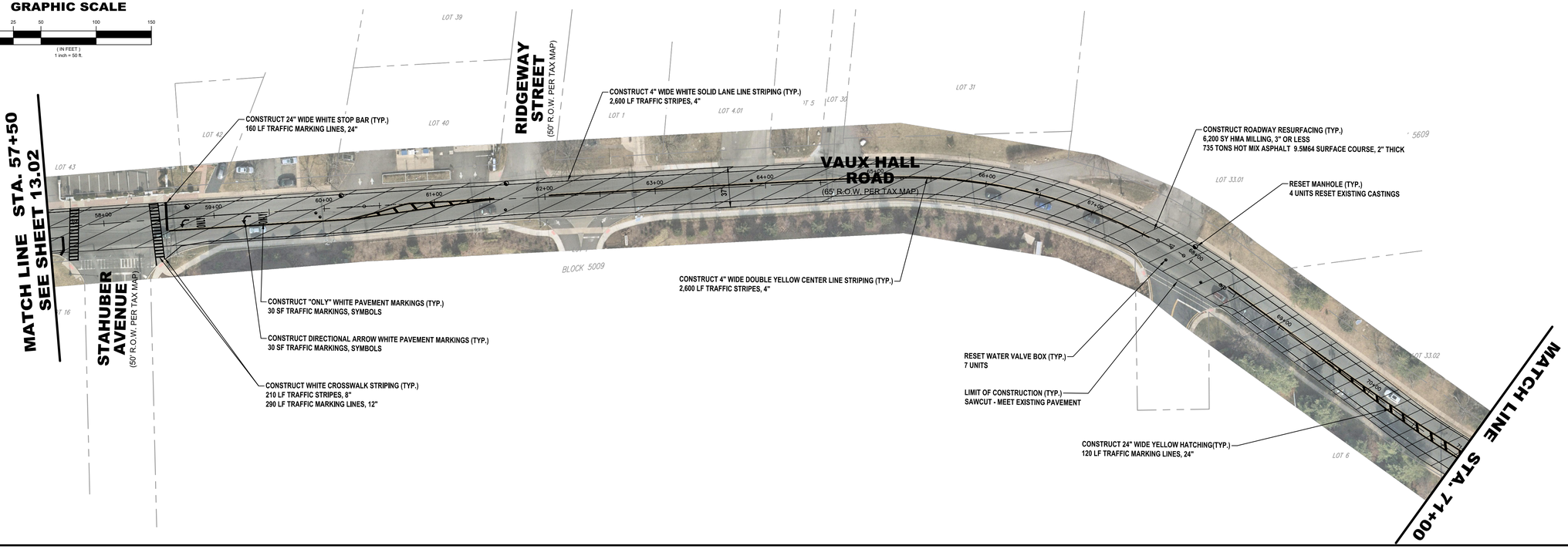
N.J.P.C.S.

GRAPHIC SCALE

0 25 50 100 150

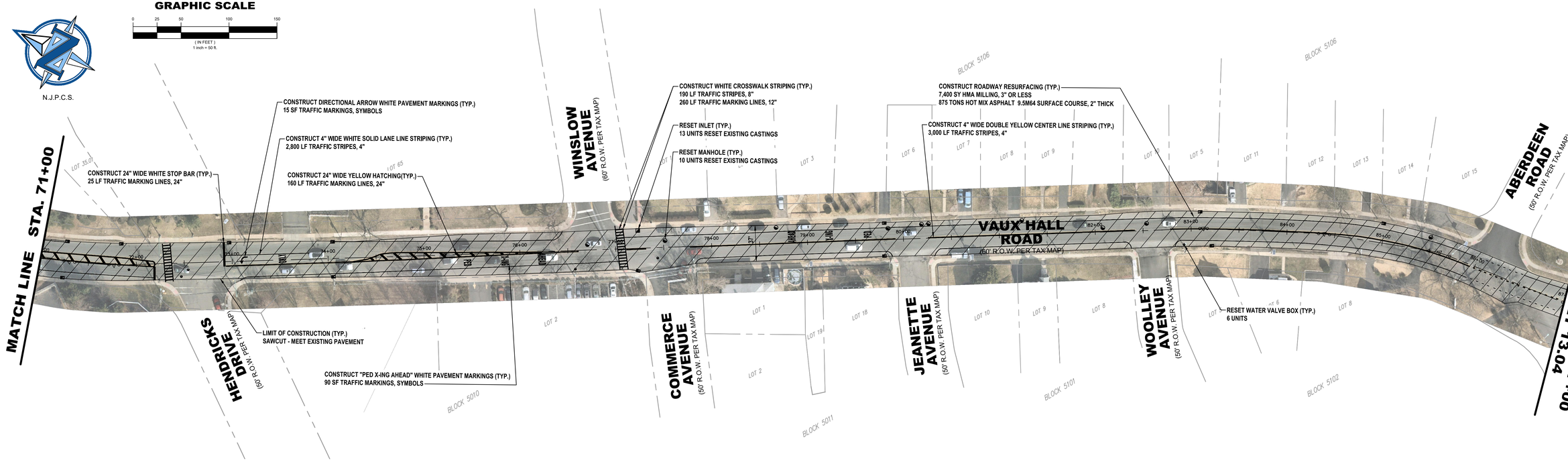
(IN FEET)
1 inch = 50 ft.



GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.



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UNION COUNTY NEW JERSEY

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DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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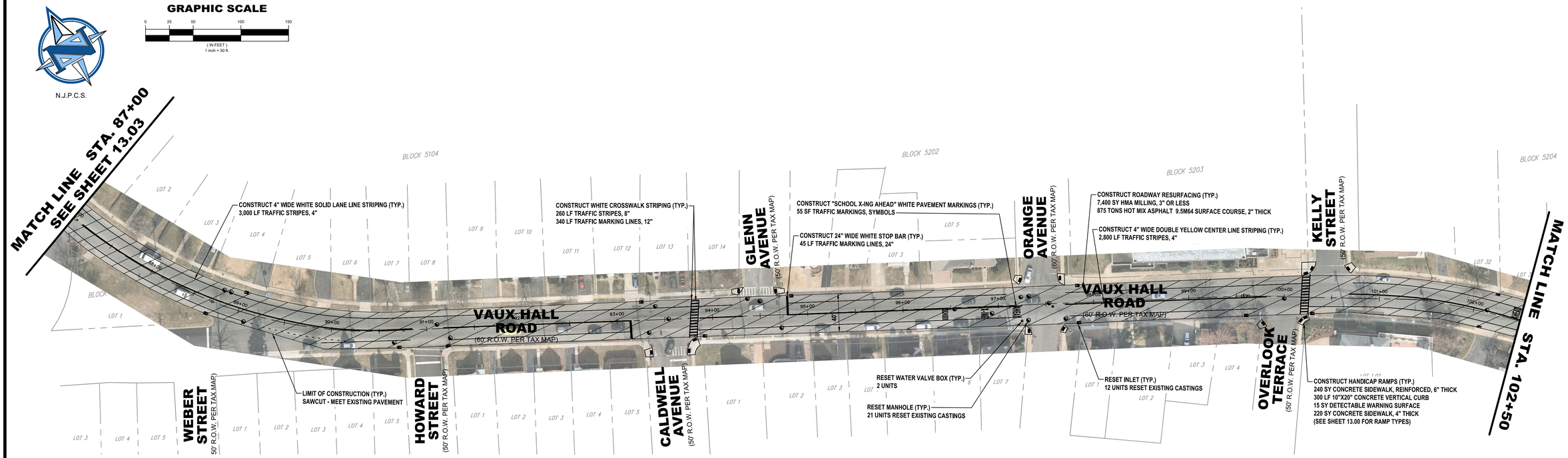
GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.

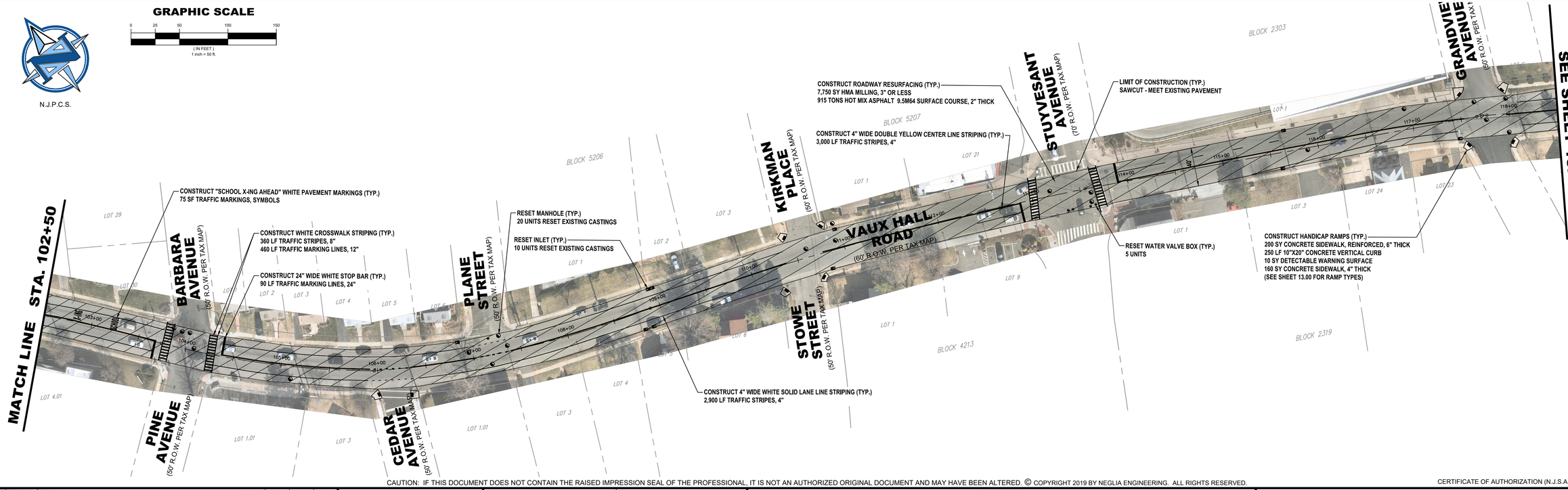


GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



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2021 ROAD RESURFACING PROJECT
(CA-2020)
TOWNSHIP OF UNION
UNION COUNTY NEW JERSEY

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DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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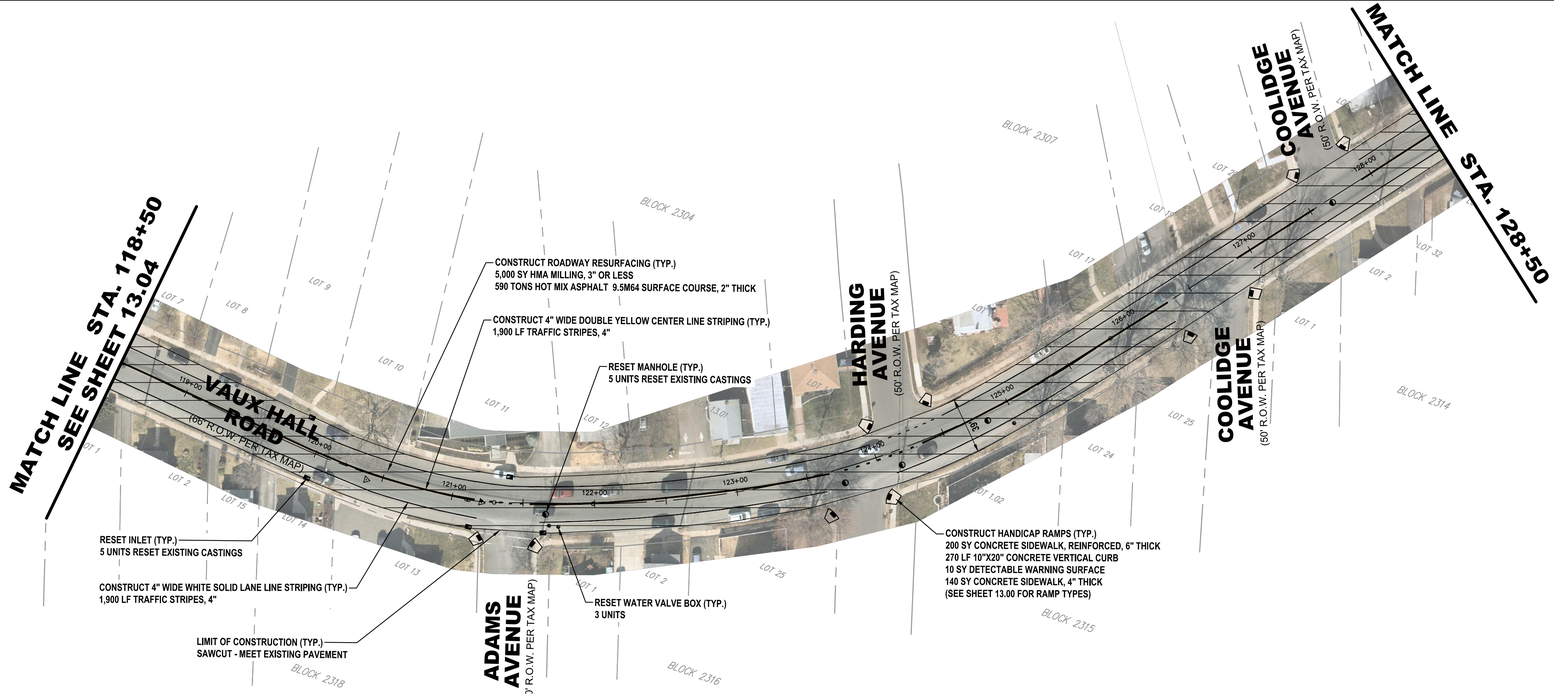
N.J.P.C.S.

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

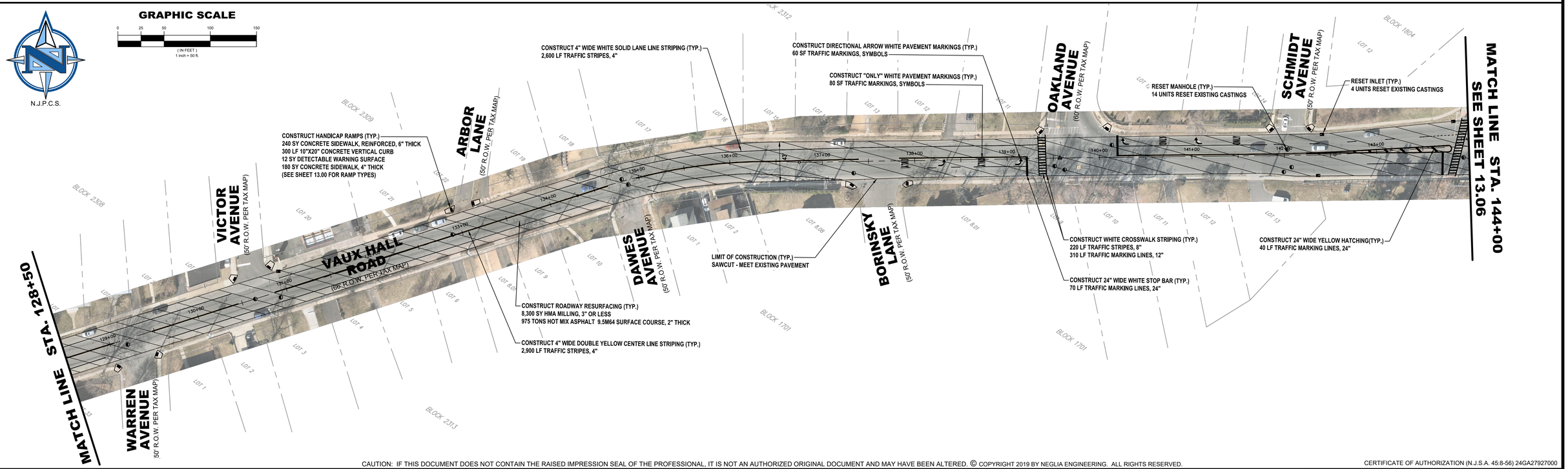


GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



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2021 ROAD RESURFACING PROJECT
(CA-2020)
TOWNSHIP OF UNION
UNION COUNTY NEW JERSEY

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DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 10, 2020	

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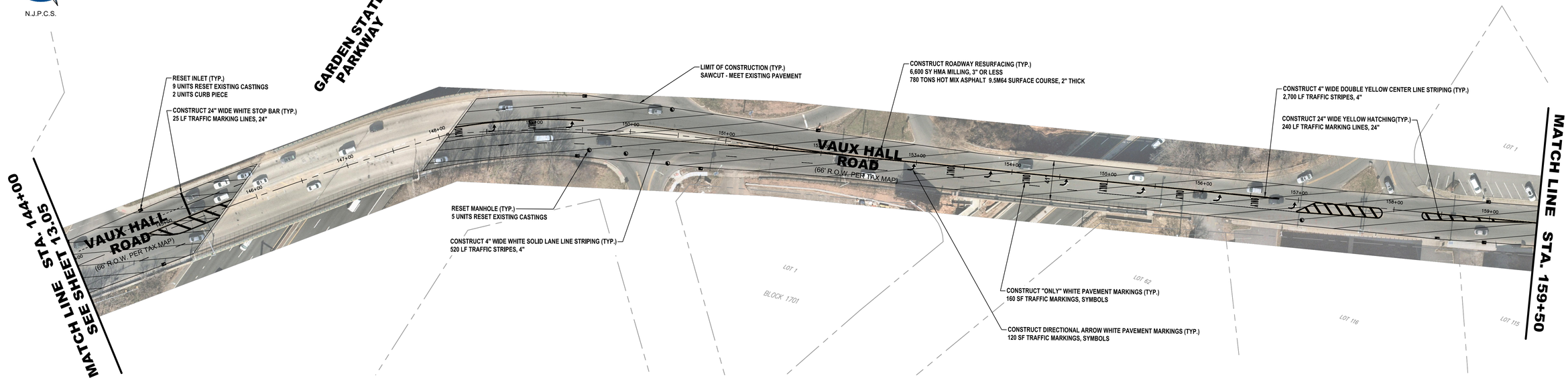
GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.

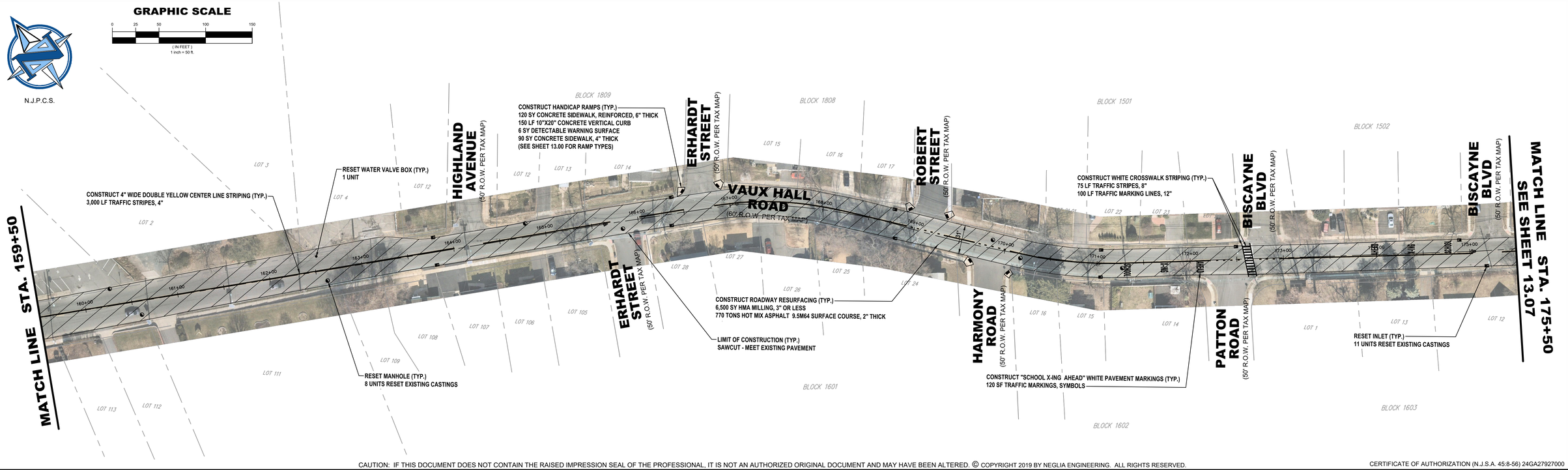


GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



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(CA-2020)
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UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 13.06
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
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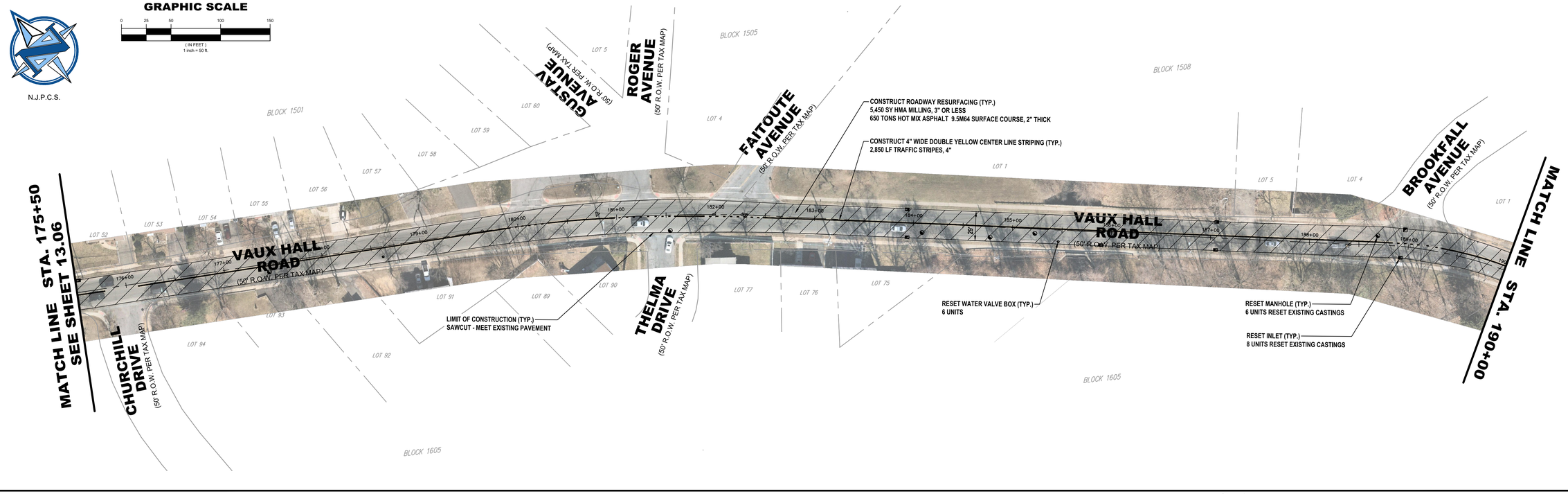

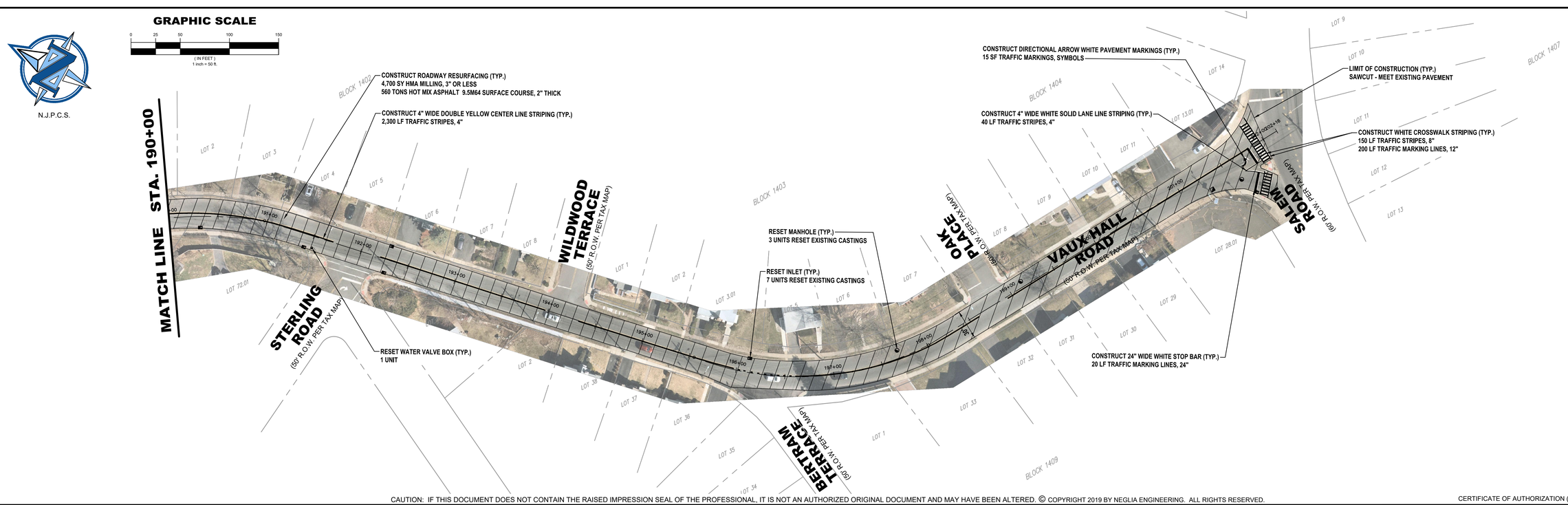

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(CA-2020)
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DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 13.07
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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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	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE
11+90	RT	5	X				20		15	1
12+40	RT	5	X				20		15	1
17+15	RT	1			X		25		20	1
17+20	LT	7				X	25		25	1
17+55	RT	1			X		25		20	1
17+75	LT	7				X	25		20	1
19+65	RT	1			X		25		20	1
20+10	RT	1			X		25		20	1
22+45	RT	1			X		25		20	1
22+80	RT	1			X		25		20	1
29+85	RT	2			X		25		20	1
30+25	RT	2			X		25		20	1
63+45	LT	1				X	25		25	2
63+50	RT	2				X	25		25	2
64+20	RT	1				X	25		20	1
64+23	RT	1				X	25		20	1
64+25	LT	2				X	25		25	2
73+60	RT	5	X				20		15	1
74+05	RT	5	X				20		15	1
76+70	LT	7			X		25		25	1
76+95	RT	5	X				20		15	1
77+20	LT	7			X		25		25	1
77+45	RT	2				X	25		20	1
84+95	RT	2			X		25		20	1
85+40	RT	2			X		25		20	1
87+55	RT	5	X				20		20	1
88+00	RT	5	X				20		20	1
90+15	RT	2			X		25		20	1
90+60	RT	2			X		25		20	1
92+70	RT	2			X		25		20	1
92+75	LT	1			X		25		20	1
93+25	RT	2			X		25		20	1
93+30	LT	7				X	25		20	1
101+05	RT	7				X	25		20	1
101+45	RT	2			X		25		20	1
104+15	RT	5	X				25		15	1
104+55	RT	5	X				25		15	1
106+50	LT	1	X				25		20	1
106+55	RT	1	X				25		20	1
106+60	LT	1			X		25		20	1
106+70	RT	1	X				25		20	1
107+25	LT	5	X				20		15	1
107+35	RT	2	X				25		20	1
107+37	LT	1	X				25		20	1
109+20	RT	2			X		25		20	1
109+60	RT	2			X		25		20	1
111+65	RT	5	X				20		20	1
112+05	RT	2			X		25		20	1

INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
10+50	LT	TYPE B				X
10+50	RT	TYPE A				X
11+00	LT	TYPE B				X
11+00	RT	TYPE B				X
27+42	LT	TYPE B				X
27+46	RT	TYPE B				X
28+08	LT	TYPE B				X
28+10	RT	TYPE B				X
42+46	LT	TYPE B				X
42+68	RT	TYPE B				X
43+72	LT	TYPE B				X
43+72	RT	TYPE B				X
47+18	LT	TYPE B				X
47+48	RT	TYPE A				X
62+94	LT	TYPE B				X
63+43	RT	TYPE B				X
66+87	LT	TYPE B				X
66+88	RT	TYPE A				X
68+27	LT	TYPE B				X
68+91	LT	TYPE B				X
69+87	LT	TYPE B				X
71+37	LT	TYPE B				X
73+00	LT	TYPE B				X
80+50	LT	TYPE B				X
81+50	LT	TYPE B				X
83+76	LT	TYPE B				X
85+35	LT	TYPE B				X
86+43	LT	TYPE B				X
87+38	LT	TYPE B				X
88+72	LT	TYPE B				X
90+20	LT	TYPE B				X
96+63	LT	TYPE E				X
96+92	RT	TYPE E				X
98+22	RT	TYPE E				X
98+33	LT	TYPE B				X
98+56	RT	TYPE E				X
98+62	LT	TYPE A				X
98+95	LT	TYPE B				X
99+04	RT	TYPE 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	55,950	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	185	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	560	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	6,670	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	670	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF		
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
18	CURB PIECE		2	
19	BICYCLE SAFE GRATE			
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	101	
21	RESET WATER VALVE BOX		46	
22	RESET GAS VALVE BOX			
23	INLET, TYPE B	UNIT		
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT		
25	15" REINFORCED CONCRETE PIPE	LF		
26	INLET FILTER TYPE 2, 2' X 4'	UNIT		
27	10"X20" CONCRETE VERTICAL CURB	LF	1,155	
28	GRANITE CURB	LF		
29	CONCRETE SIDEWALK, 4" THICK	SY	685	
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	950	
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	51	
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
33	TRAFFIC STRIPES, 4"	LF	32,050	
34	TRAFFIC STRIPES, 6"	LF		
35	TRAFFIC STRIPES, 8"	LF	1,030	
36	TRAFFIC MARKING, LINES, 12"	LF	1,210	
37	TRAFFIC MARKING, LINES, 24"	LF	305	
38	TRAFFIC MARKINGS, SYMBOLS	SF	225	
39	RUMBLE STRIP	LF		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	255	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT	SF		
43	ACCESSORY PANEL, TYPE DF	SF		
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF		
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT		

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NO.	DATE	REVISIONS DESCRIPTION	DRAWN	DESIGNED	CHECKED

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FIRST AVENUE QUANTITY SHEET
2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF ROSELLE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 14.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 10, 2020	

m:\union county\uniocty20.010 (2021 road program)\cad_ final (plot files)\14.00 first avenue.dwg, Plotted: Monday, December 7, 2020 - 1:47:11 PM

N.J.P.C.S.

GRAPHIC SCALE

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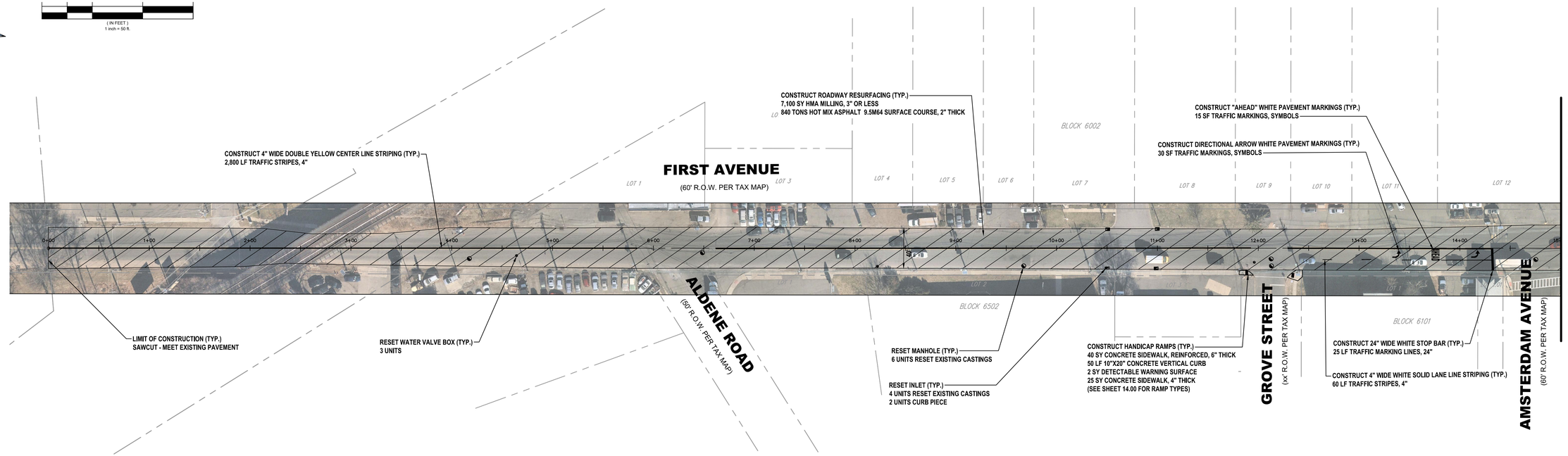
(IN FEET)
1 inch = 50 ft.



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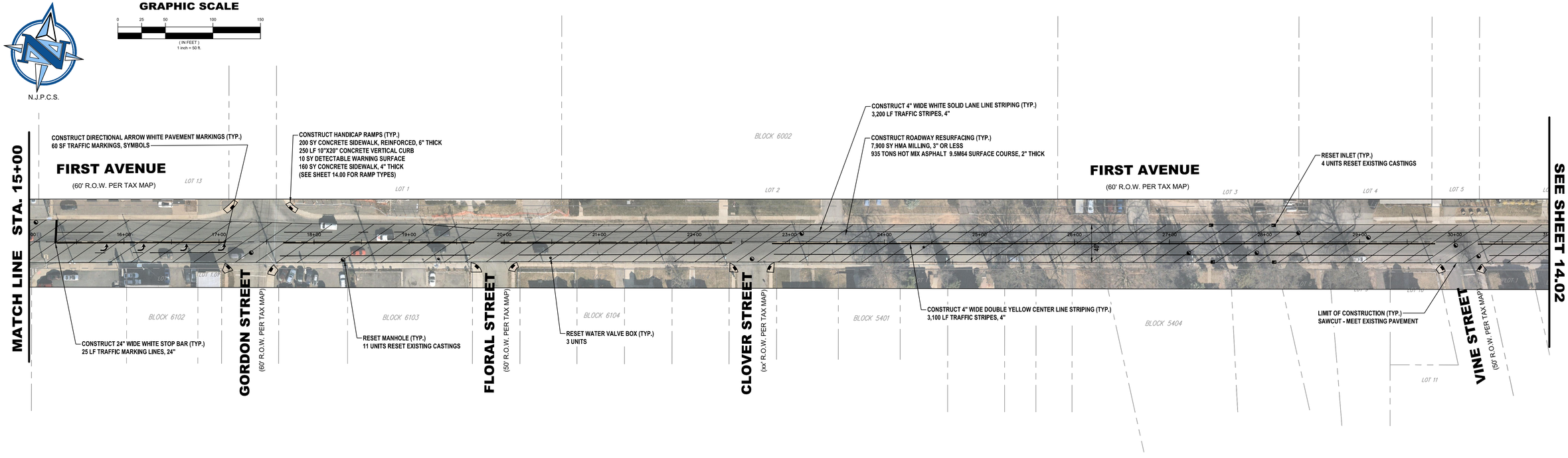

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FIRST AVENUE
2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF ROSELLE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 14.01
DESIGNED BY: KO, KT, JV	SCALE: 1"=50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 10, 2020	

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GRAPHIC SCALE

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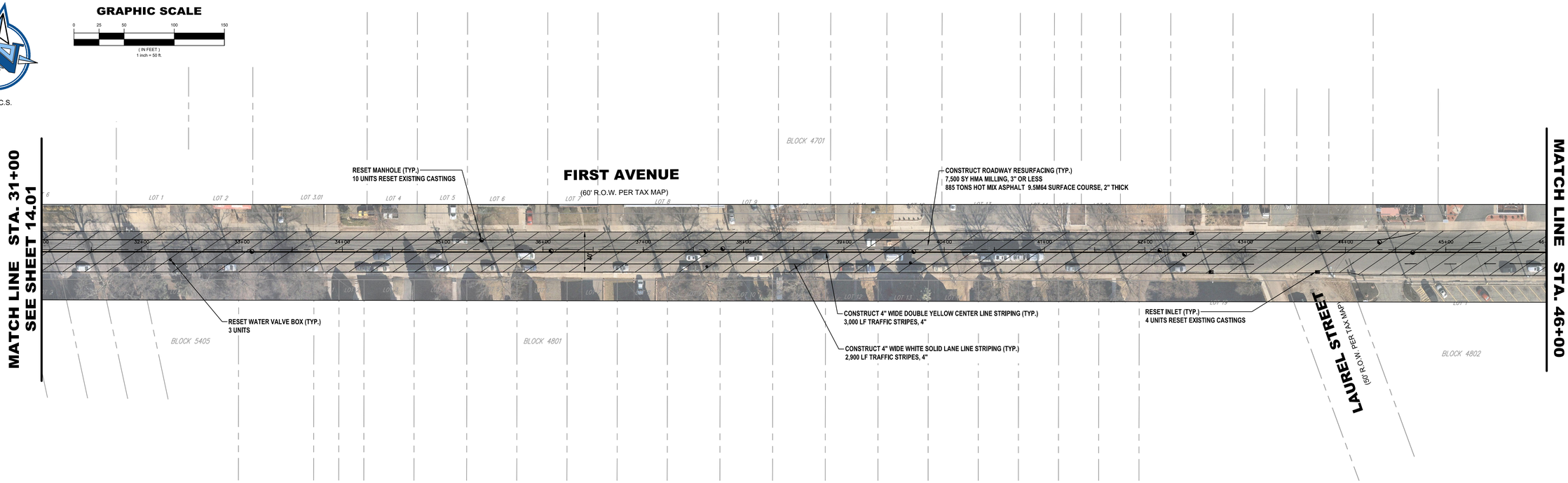

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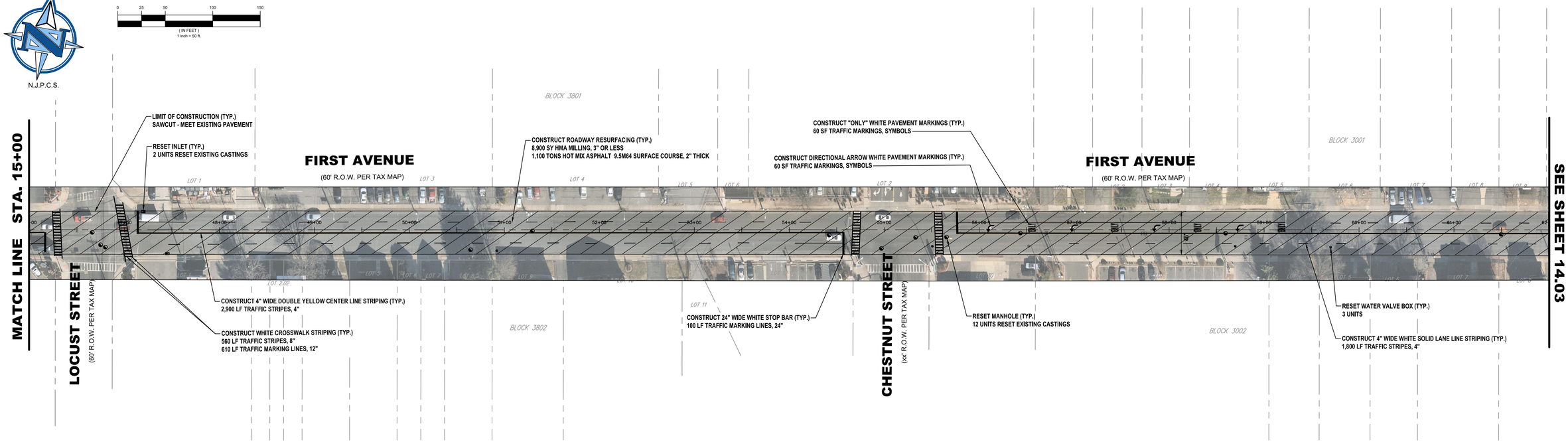

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FIRST AVENUE
2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF ROSELLE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 14.02
DESIGNED BY: KO, KT, JV	SCALE: 1"=50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 10, 2020	

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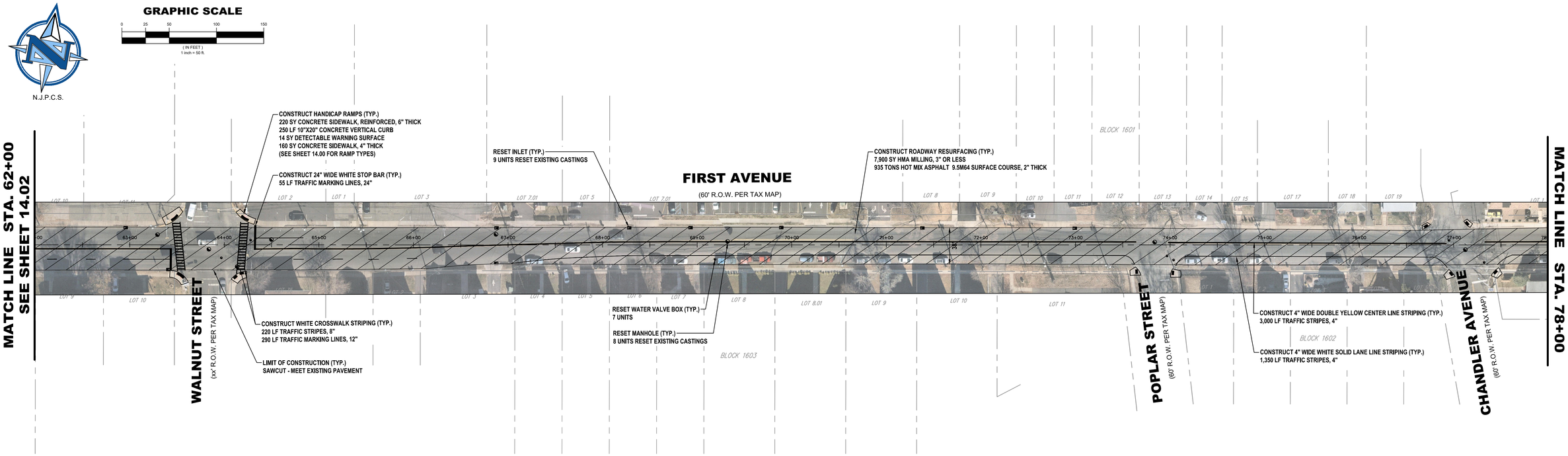

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FIRST AVENUE
2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF ROSELLE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 14.03
DESIGNED BY: KO, KT, JV	SCALE: 1"=50'		
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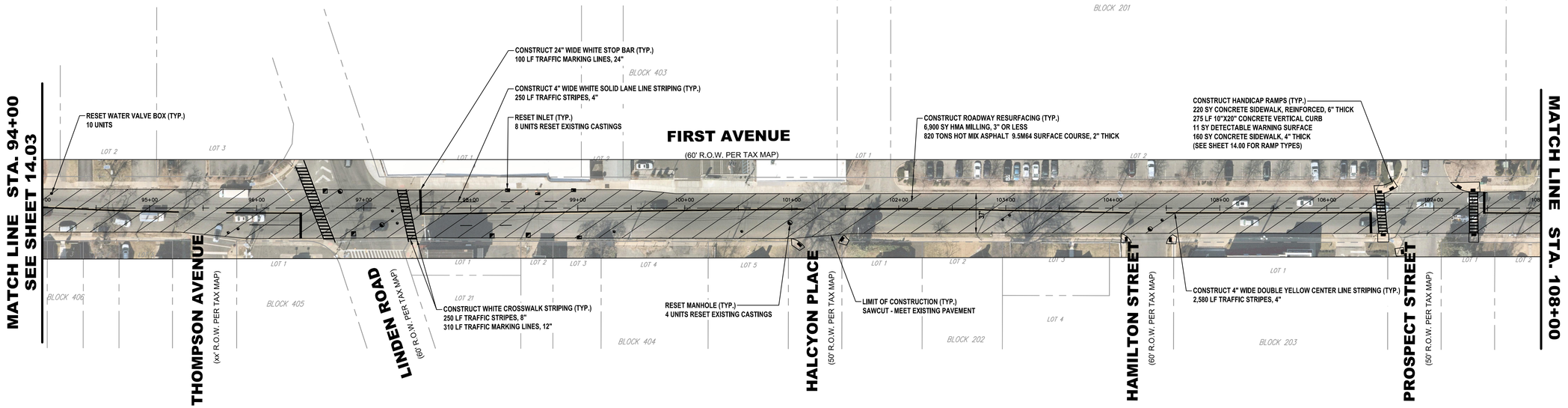
N.J.P.C.S.

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.



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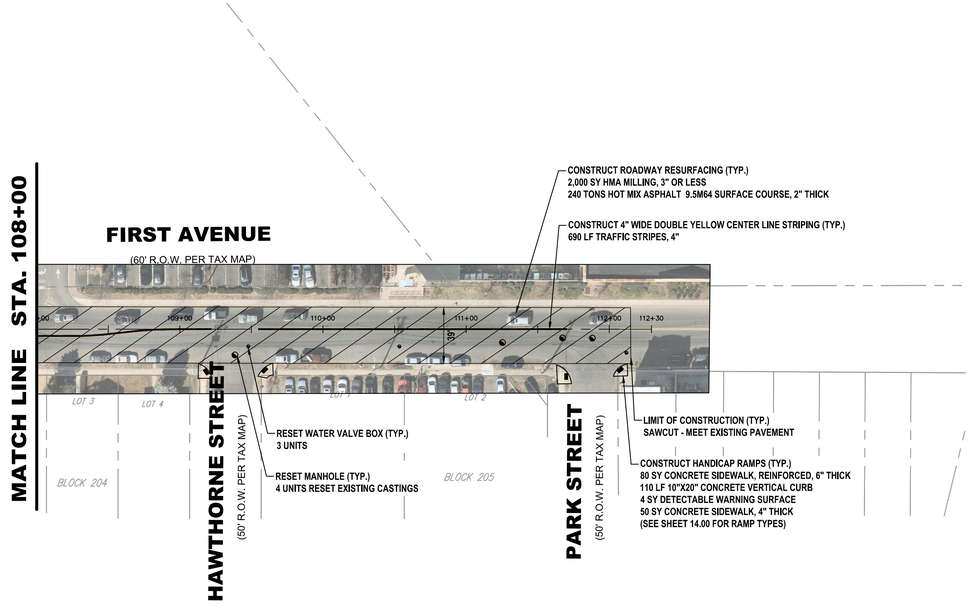

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2021 ROAD RESURFACING PROJECT
(CA-2020)
BOROUGH OF ROSELLE
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 14.04
DESIGNED BY: KO, KT, JV	SCALE: 1"=50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 10, 2020	

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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	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE
0+00	RT	2	X				25		20	1
0+25	RT	2	X				25		20	1
0+80	LT	1	X				30		20	1
1+00	LT	1	X				35		20	1
1+35	LT	5	X				25		20	1
20+10	LT	2	X				25		20	1
20+12	RT	2	X				25		20	1
20+50	LT	2	X				25		20	1
20+90	LT	2	X				25		20	1
21+50	LT	2	X				25		20	1
21+50	RT	2	X				25		20	1
26+05	RT	5	X				25		20	1
26+50	RT	1			X		25		20	1
29+15	RT	5	X				25		20	1
29+75	RT	2			X		25		20	1
33+65	RT	2	X				25		20	1
34+15	RT	2	X				25		20	1
43+10	RT	2	X				25		20	1
43+48	RT	2	X				25		20	1

INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
00+13	RT	TYPE B				X
01+31	LT	TYPE B				X
06+85	RT	TYPE B				X
06+85	LT	TYPE B				X
20+39	RT	TYPE B				X
21+13	LT	TYPE B				X
26+08	RT	TYPE B				X
26+50	RT	TYPE B				X
27+63	RT	TYPE B				X
27+64	LT	TYPE B				X
29+18	RT	TYPE B				X
29+71	RT	TYPE B				X
33+65	RT	TYPE B				X
33+83	LT	TYPE B				X
34+13	RT	TYPE B				X
40+27	LT	TYPE E				X
40+76	LT	TYPE B				X
43+15	RT	TYPE A				X
43+45	RT	TYPE 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	125	
7	HMA MILLING, 3" OR LESS	SY	22,100	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	125	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	235	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2,620	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	260	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF		
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
18	CURB PIECE	UNIT		
19	BICYCLE SAFE GRATE	UNIT		
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	58	
21	RESET WATER VALVE BOX	UNIT	25	
22	RESET GAS VALVE BOX	UNIT		
23	INLET, TYPE B	UNIT		
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT		
25	15" REINFORCED CONCRETE PIPE	LF		
26	INLET FILTER TYPE 2, 2' X 4'	UNIT		
27	10"X20" CONCRETE VERTICAL CURB	LF	490	
28	GRANITE CURB	LF		
29	CONCRETE SIDEWALK, 4" THICK	SY	280	
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	380	
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	19	
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
33	TRAFFIC STRIPES, 4"	LF	7,785	
34	TRAFFIC STRIPES, 6"	LF		
35	TRAFFIC STRIPES, 8"	LF	360	
36	TRAFFIC MARKING, LINES, 12"	LF	440	
37	TRAFFIC MARKING, LINES, 24"	LF	125	
38	TRAFFIC MARKINGS, SYMBOLS	SF	195	
39	RUMBLE STRIP	LF		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	115	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT	SF		
43	ACCESSORY PANEL, TYPE DF	SF		
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF		
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT		

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PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

NEW BRUNSWICK AVENUE QUANTITY SHEET
2021 ROAD RESURFACING PROJECT
(CA-2020)
CITY OF RAHWAY
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 15.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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GRAPHIC SCALE

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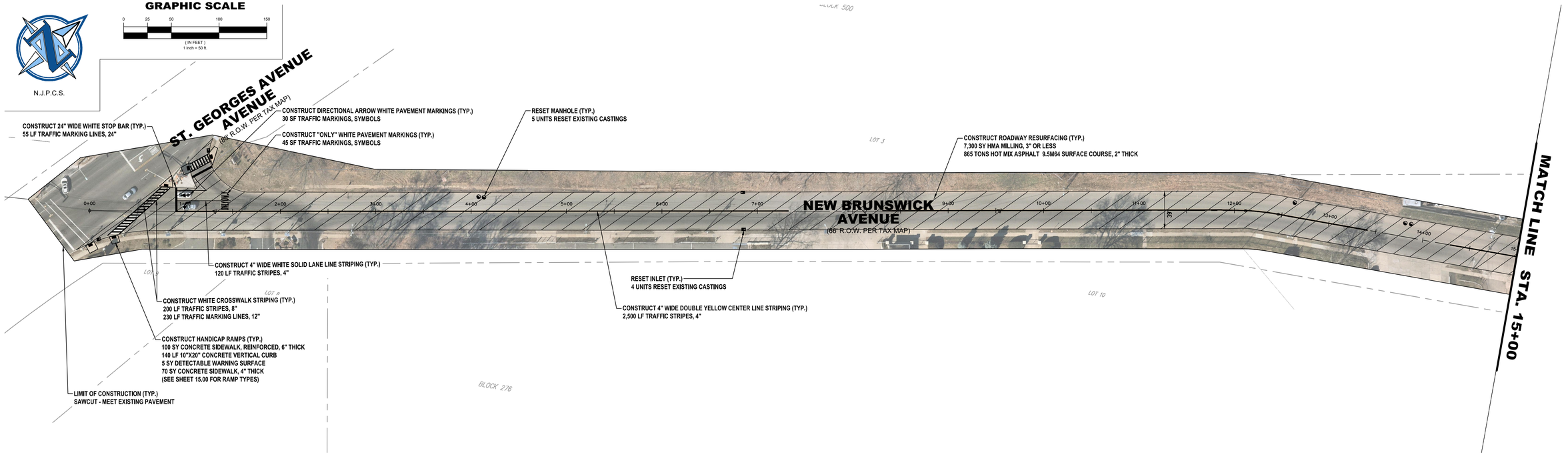
(IN FEET)
1 inch = 50 ft.

N.J.P.C.S.



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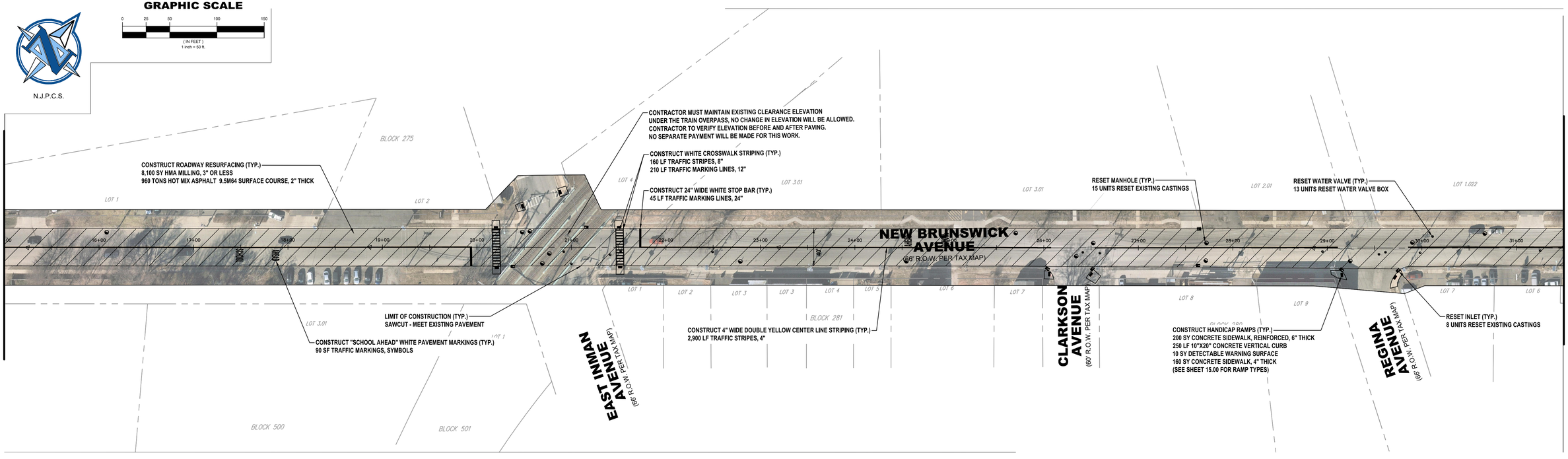

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NEW BRUNSWICK AVENUE
2021 ROAD RESURFACING PROJECT
(CA-2020)
CITY OF RAHWAY
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 15.01
DESIGNED BY: KO, KT, JV	SCALE: 1"=50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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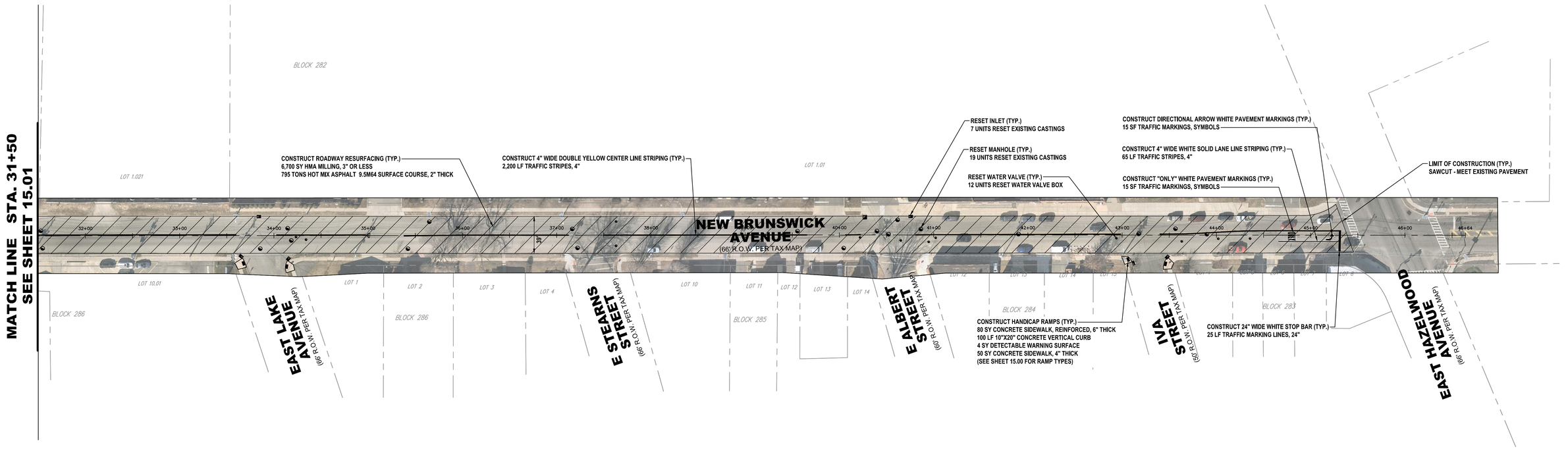

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NEW BRUNSWICK AVENUE
2021 ROAD RESURFACING PROJECT
(CA-2020)
CITY OF RAHWAY
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 15.02
DESIGNED BY: KO, KT, JV	SCALE: 1"=50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

m:\union county\rahway\20.010 (2020 road program)\cad_final (cad) files\15.00 new brunswick ave.dwg Plotted: Monday, December 7, 2020 1:50:39 PM

ADA RAMPS										
STATION	OFFSET (LT/RT)	CURB RAMP TYPE	CURB RAMP LAYOUT				QUANTITIES			
			PERPENDICULAR	PARALLEL	DIAGONAL	COMBINATION	10"X20" CONC. VERTICAL CURB	GRANITE CURB	CONC. SIDEWALK, REINFORCED 6" THICK	DETECTABLE WARNING SURFACE
19+15	LT	2			X		25		20	1
19+60	LT	2			X		25		20	1
27+05	LT	2			X		25		20	1
27+50	LT	2			X		25		20	1
33+90	LT	5			X		25		20	1
34+40	LT	5			X		25		20	1

INLET TYPES & LOCATIONS						
STATION	OFFSET (LT/RT)	EXISTING INLET TYPE	QUANTITY			
			BICYCLE SAFE GRATE	CURB PIECE	PLATE	RESET
2+58	RT	TYPE B				X
5+85	LT	TYPE B				X
6+70	RT	TYPE B				X
10+90	RT	TYPE B				X
13+40	LT	TYPE B				X
13+60	RT	TYPE B				X
16+40	RT	TYPE B				X
18+52	RT	TYPE B				X
18+54	LT	TYPE B				X
19+95	LT	TYPE B				X
22+90	RT	TYPE B				X
22+92	LT	TYPE B				X
26+90	LT	TYPE B				X
27+55	RT	TYPE B				X
27+70	LT	TYPE B				X
42+05	LT	TYPE B				X
42+05	RT	TYPE 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	125	
7	HMA MILLING, 3" OR LESS	SY	23,300	
8	DENSE GRADED AGGREGATE BASE COURSE, VARIABLE THICKNESS (IF & WHERE DIRECTED)	CY	125	
9	HOT MIX ASPHALT PAVEMENT REPAIR (EXCAVATION, 4" DGA, 6" BASE COURSE) (IF & WHERE DIRECTED)	SY	235	
10	HOT MIX ASPHALT 9.5M64 SURFACE COURSE	TON	2,750	
11	HOT MIX ASPHALT 9.5M64 INTERMEDIATE COURSE	TON	275	
12	FUEL PRICE ADJUSTMENT	ALLOW.		
13	ASPHALT PRICE ADJUSTMENT	ALLOW.		
14	DECK JOINT REPAIR (IF & WHERE DIRECTED)	LF		
15	REPAIR OF CONCRETE DECK, TYPE B (IF & WHERE DIRECTED)	SF		
16	DECK SURFACE SEALER (IF & WHERE DIRECTED)	SY		
17	DECK JOINT FILLER AND SEALER (IF & WHERE DIRECTED)	LF		
18	CURB PIECE	UNIT		
19	BICYCLE SAFE GRATE	UNIT		
20	RESET EXISTING CASTING (INLETS AND MANHOLES)	UNIT	37	
21	RESET WATER VALVE BOX	UNIT	16	
22	RESET GAS VALVE BOX	UNIT		
23	INLET, TYPE B	UNIT		
24	RECONSTRUCTED INLET, TYPE B, USING NEW CASTING (IF & WHERE DIRECTED)	UNIT		
25	15" REINFORCED CONCRETE PIPE	LF		
26	INLET FILTER TYPE 2, 2' X 4'	UNIT		
27	10"X20" CONCRETE VERTICAL CURB	LF	150	
28	GRANITE CURB	LF		
29	CONCRETE SIDEWALK, 4" THICK	SY	90	
30	CONCRETE SIDEWALK, REINFORCED 6" THICK	SY	120	
31	DETECTABLE WARNING SURFACE (CAST-IN-PLACE)	SY	6	
32	RESET BRICK PAVER (IF & WHERE DIRECTED)	SY		
33	TRAFFIC STRIPES, 4"	LF	16,500	
34	TRAFFIC STRIPES, 6"	LF		
35	TRAFFIC STRIPES, 8"	LF		
36	TRAFFIC MARKING, LINES, 12"	LF		
37	TRAFFIC MARKING, LINES, 24"	LF	25	
38	TRAFFIC MARKINGS, SYMBOLS	SF	40	
39	RUMBLE STRIP	LF		
40	RPM, BI-DIRECTIONAL, AMBER LENS	UNIT	110	
41	SEALING OF CRACKS IN HOT MIX ASPHALT SURFACE COURSE	LF		
42	STREET NAME SIGN, TYPE DF WITH BREAKAWAY SUPPORT	SF		
43	ACCESSORY PANEL, TYPE DF	SF		
44	LOOP DETECTOR (IF & WHERE DIRECTED)	LF		
45	IMAGE DETECTOR (IF & WHERE DIRECTED)	UNIT		

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NO.	DATE	DESCRIPTION	DRAWN	DESIGNED	CHECKED

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SHUNPIKE ROAD QUANTITY SHEET
2021 ROAD RESURFACING PROJECT (CA-2020)
TOWNSHIP OF SPRINGFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 16.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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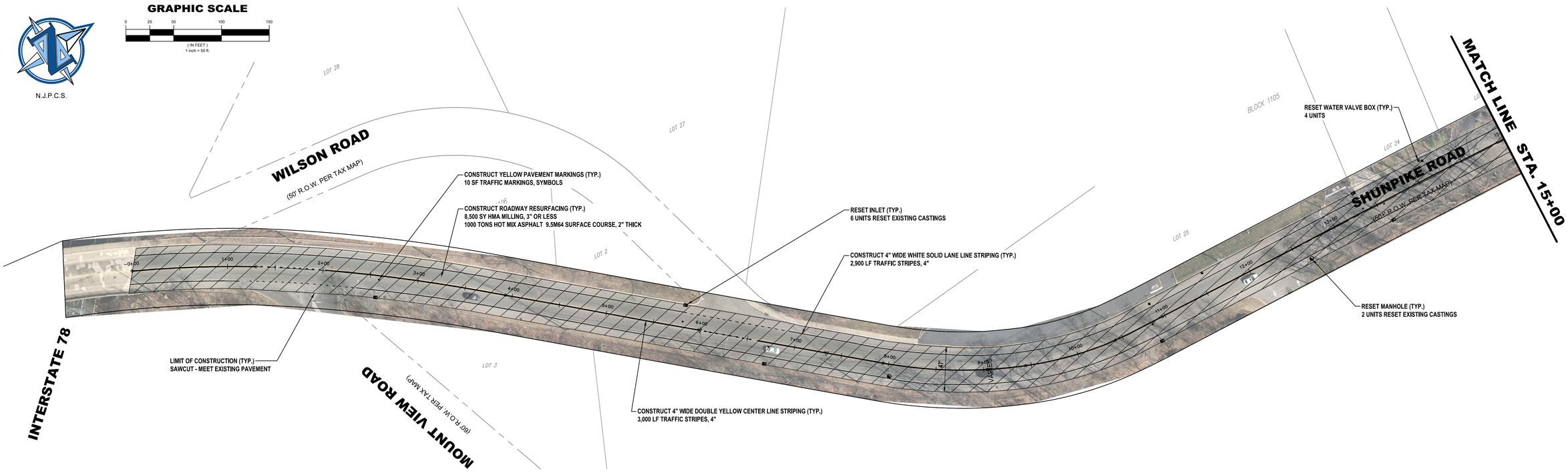

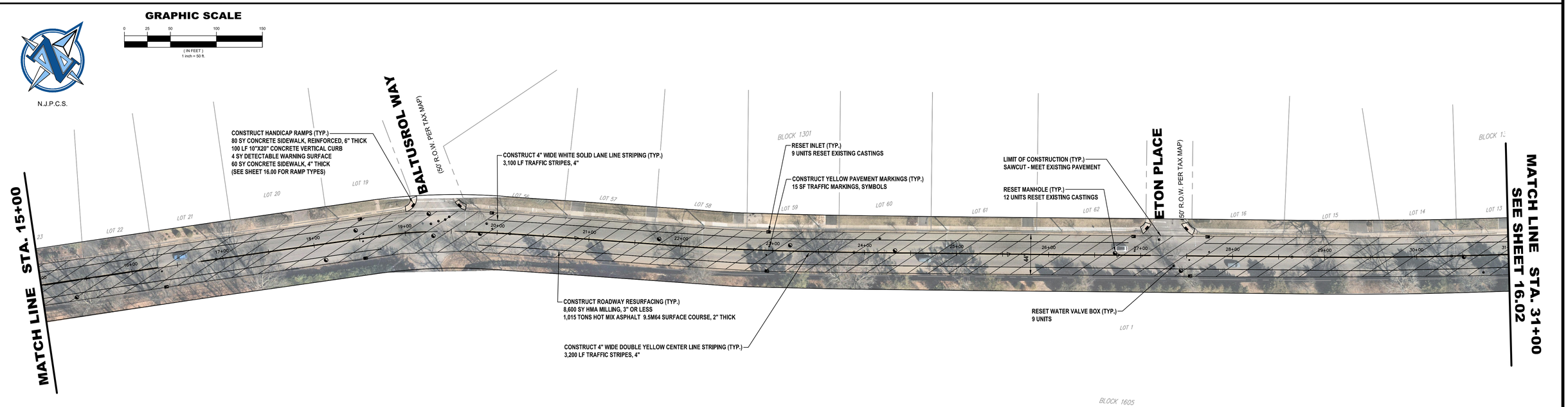

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SHUNPIKE ROAD
2021 ROAD RESURFACING PROJECT
(CA-2020)
TOWNSHIP OF SPRINGFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 16.01
DESIGNED BY: KO, KT, JV	SCALE: 1" = 50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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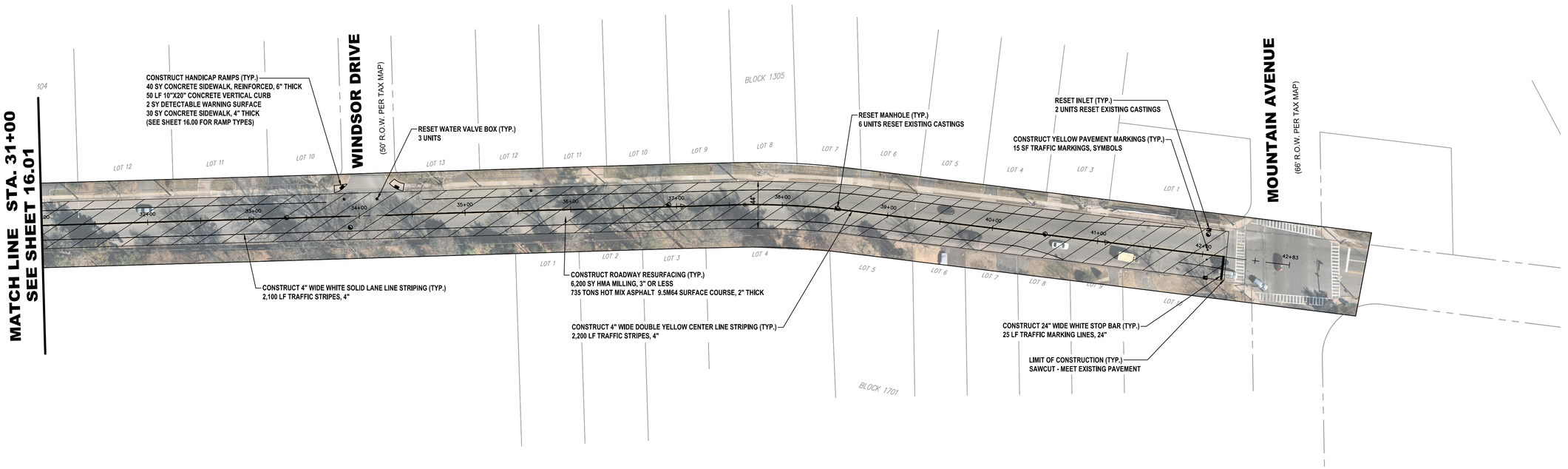
N.J.P.C.S.

GRAPHIC SCALE

0 25 50 100 150

(IN FEET)
1 inch = 50 ft.



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SHUNPIKE ROAD
2021 ROAD RESURFACING PROJECT
(CA-2020)
TOWNSHIP OF SPRINGFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 16.02
DESIGNED BY: KO, KT, JV	SCALE: 1"=50'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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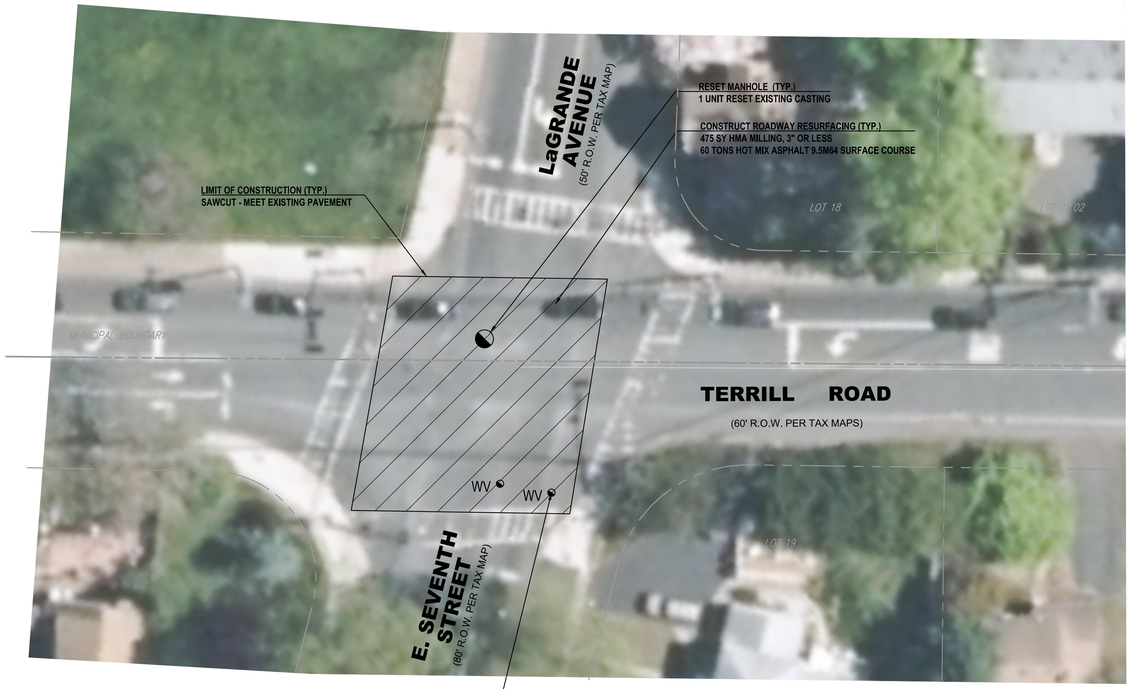
NORTH

N.J.S.P.C.S.

GRAPHIC SCALE

0 10 20 40 60

(IN FEET)
1 inch = 20 ft.



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TERRILL ROAD & LAGRANDE AVENUE 2021 ROAD RESURFACING PROJECT (CA-2020)

BOROUGH OF FANWOOD & CITY OF PLAINFIELD
UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY: D.R.A.	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 17.00
DESIGNED BY: KO, KT, JV	SCALE: 1"=20'		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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GENERAL NOTES:

1. 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.
2. ALL SMALL SIGN SUPPORTS SHALL BE OF THE BREAKAWAY TYPE WITH EXCEPTION OF THOSE INSTALLED BEHIND GUIDE RAIL OR OTHER ROADSIDE BARRIER.
3. ALL STEEL POSTS AND BRACKETS SHALL BE CUT, BENT, AND HOLES PUNCHED AND DRILLED BEFORE GALVANIZING. GALVINIZING SHALL BE IN CONFORMANCE WITH ASTM A123.
4. 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.
5. SIGN PANEL SIZES SHALL DETERMINE POST TYPE AND NUMBER AS SHOWN ON THIS DETAIL.
6. BOLTS SHALL NOT PROTRUDE MORE THAN 3/4" BEYOND THE NUT WHEN TIGHT, BUT SHALL ENGAGE ALL THREADS IN THE NUT.
7. 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 8 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.
8. 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.

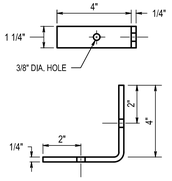
   WHERE BEHIND GUIDE RAIL - 4 FEET MINIMUM FROM BACK OF BEAM GUIDE RAIL ELEMENT TO SIGN POST.
9. PERMANENT SIGN SUPPORTS SHOULD NOT BE INSTALLED ON SLOPES GREATER THAN 10H:1V, EXCEPT WHERE GRADING OF 10H:1V CANNOT BE OBTAINED OR THE SIGN SUPPORTS WILL BE BEHIND A TRAFFIC BARRIER. THE SLOPE SHALL EXTEND A MINIMUM OF 3 FEET BEYOND THE OUTSIDE EDGE OF SIGN (SEE GRADING DETAIL FOR SLOPE TREATMENT).
10. EXTRUDED ALUMINUM SIGN PANELS ARE NOT PERMITTED FOR USE WITH STEEL U-POST SIGN SUPPORTS.
11. STEEL U-POST SIGN SUPPORTS SHALL NOT BE PLACED IN FRONT OF GUIDE RAIL AND THE POSTS MUST NOT STRADDLE GUIDE RAIL.
12. 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" x 36"	2	2.5
30" x 36"	1	4.0

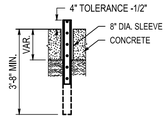
PANEL SIZE (W x H)	# OF POSTS	POST SIZE (LB/FT)
36" x 36"	2	2.5
36" x 48"	2	2.5
45" x 36"	2	2.5
48" x 24"	2	2.5
48" x 36"	2	2.5
48" x 48"	2	4.0
48" x 64" x 64"	2	2.5
60" x 36"	2	4.0
48" x 60"	2	4.0
60" x 30"	2	4.0

BREAKAWAY SIGN SUPPORT

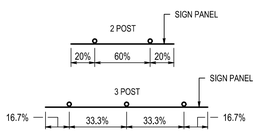
U-POST SELECTION TABLE



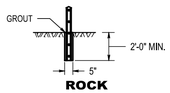
DETAIL OF BRACKET FOR SIDE MOUNTED SIGNS



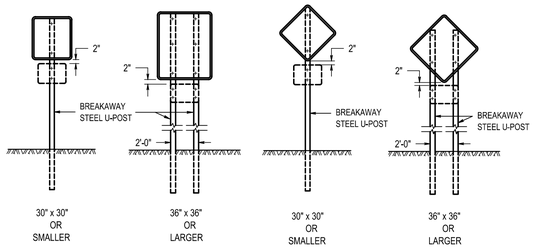
CONCRETE INSTALLATION

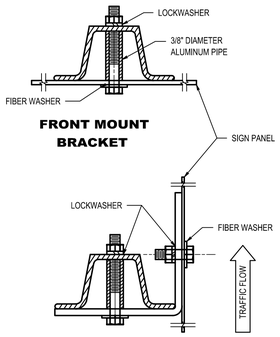


STEEL U-POST SPACING



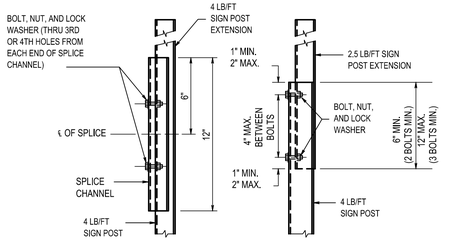
ROCK INSTALLATION



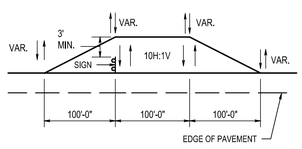


FRONT MOUNT BRACKET

SIDE MOUNT BRACKET



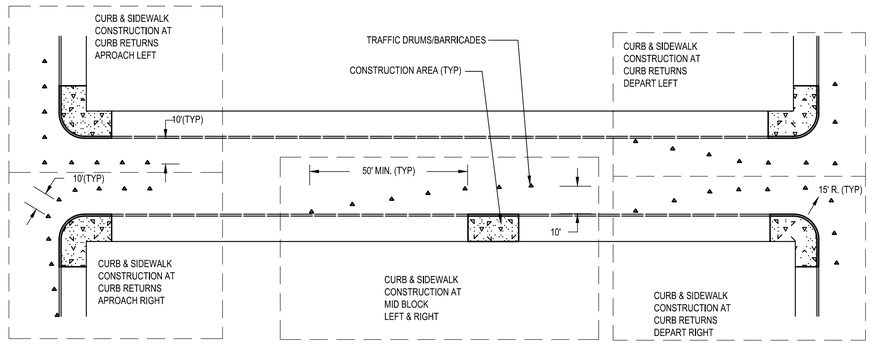
SIGN POST EXTENSION SPLICE DETAILS



STEEL U-POST GRADING DETAIL

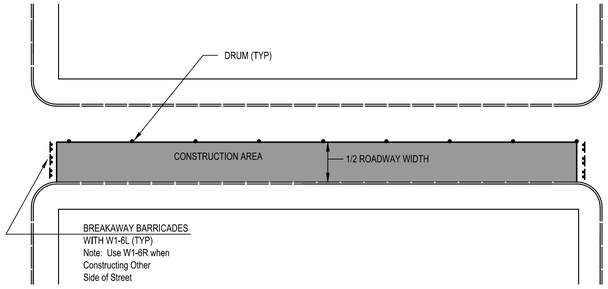
STEEL U-POST SIGN SUPPORTS

NOT TO SCALE
CD-612-4



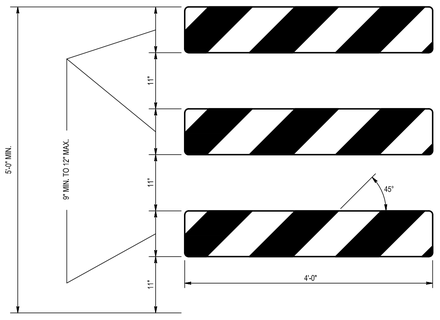
TRAFFIC CONTROL FOR CURB & SIDEWALK CONSTRUCTION

NOT TO SCALE



TRAFFIC CONTROL FOR MILLING AND OVERLAY

NOT TO SCALE



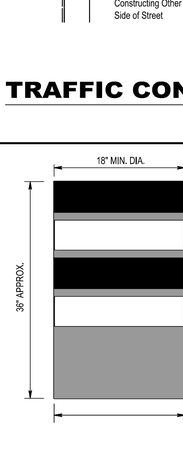
TYPE III BARRICADE - FRONT VIEW

NOTES:

1. 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.
2. 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.
3. IF NECESSARY, THE SANDBAGS SHALL BE FABRICATED AND PLACED ACCORDING TO THE MANUFACTURE'S RECOMMENDATION.
4. THE FRAMING FOR BARRICADE PANELS SHALL BE NCHRP-350 CRASHED TESTED AND FHWA APPROVED.

BREAKAWAY BARRICADES

NOT TO SCALE
CD-159-1.3



DRUMS SHALL BE MADE OF ORANGE PLASTIC WITH A MINIMUM OF FOUR ALTERNATE FLUORESCENT 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..

DRUMS

NOT TO SCALE
CD-159-1.1

GENERAL NOTES:

1. 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".
2. (S) REPRESENTS A SPECIAL SIZE SIGN.
3. LETTERS AND NUMERALS SHALL CONFORM TO THE CURRENT MANUAL, "STANDARD ALPHABETS FOR HIGHWAY SIGNS" U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.
4. 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.
5. DISTANCE LEGEND SIGN NUMBER FOLLOWED BY

LETTER	DISTANCE
A	1500'
B	1000'
C	500'
D	___MILE
E	___ MILES AHEAD
F	AHEAD

BACKING MATERIAL

1. ALUMINUM SHALL BE FLAT SHEET OF ALLOY 5052-H38 OR 6061-T6 ALLOY, 0.100" GAUGE.

TEMPORARY SIGN SUPPORTS

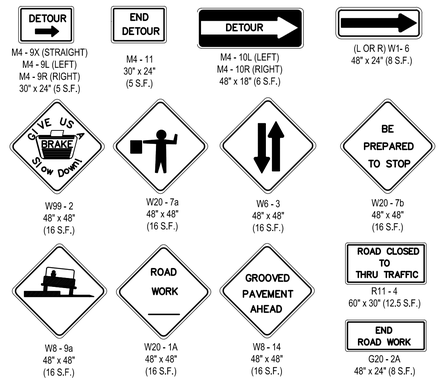
1. SIGN SUPPORTS SHALL BE OF WELL SEASONED LUMBER, S4S, FREE OF SPLITS, KNOTS AND WARPS OR, OF STEEL COMPONENTS.
2. WOOD POSTS SHALL HAVE A UNIFORM CROSS-SECTION AND SHALL NOT EXCEED THE FOLLOWING DIMENSIONS FOR:
   SINGLE POST = 4" x 6" ; TWO POSTS = 3" x 6" OR 4" x 5" ; THREE POSTS = 3" x 5" OR 4" x 4"
   4" x 6" WOOD POSTS SHALL BE MODIFIED BY DRILLING 1 1/2" DIAMETER HOLES 4" AND 18" ABOVE THE GROUND LINE AND PERPENDICULAR TO THE ROADWAY CENTERLINE.
3. 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'.
4. STEEL POSTS SHALL BE IN ACCORDANCE WITH THE STANDARD DETAIL FOR U-POST SIGN SUPPORT.
5. TEMPORARY SIGN SUPPORTS NOT MEETING THIS CRITERIA SHALL BE SHIELDED BY A LONGITUDINAL BARRIER OR CRASH CUSHIONS.

SIGN FACES

1. SIGN FACES SHALL BE RETROREFLECTIVE SHEETING, TYPE II OR IIIA, EXCEPT FOR THE W20 SERIES AND W4-2 SIGN FACES WHICH SHALL BE TYPE IV-B SHEETING.

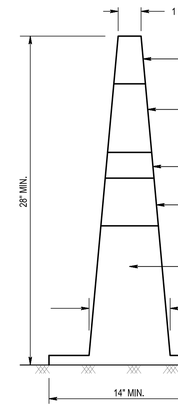
FASTENING

1. ALL SIGNS SHALL BE SECURELY FASTENED TO THEIR SUPPORTS WITH BOLTS, NUTS AND WASHERS IN ACCORDANCE WITH THE SPECIFICATIONS.



CONSTRUCTION SIGNS

NOT TO SCALE



NOTES:

1. TRAFFIC CONES SHALL BE PREDOMINATELY ORANGE IN COLOR.
2. BASES MAY BE OF BREAKAWAY BALLASTED TYPE.
3. 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

1. 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.
2. Contractor to develop detailed maintenance and protection of traffic plan for review by the engineer prior to construction.
3. 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.
4. 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.
5. 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.
6. The contractor shall maintain at least one lane of traffic at all times.
7. During construction, all roads shall be properly maintained to accommodate emergency vehicles at all times.
8. All barricades shall be Type III breakaway barricades.
9. Fill material for escape ramps shall be on-site material. All costs for storing, placing, moving and removing fillet material shall be included in the price bid for the various items in the proposal.

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NO.	DATE	REVISIONS DESCRIPTION	DRAWN	DESIGNED	CHECKED

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TRAFFIC CONTROL
2021 ROAD RESURFACING PROJECT
(CA-2020)

UNION COUNTY **NEW JERSEY**

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 18.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 10, 2020	

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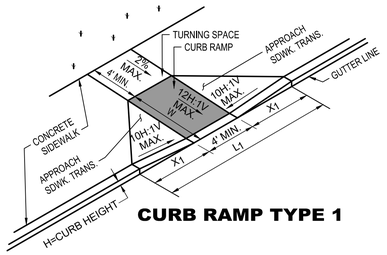
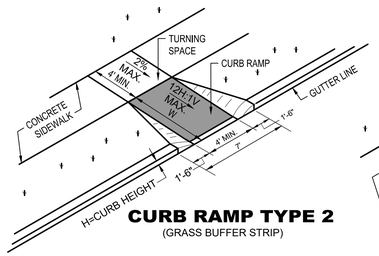
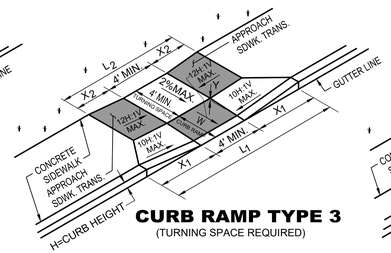


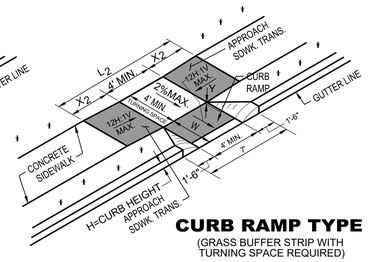
CURB RAMP TYPE 1



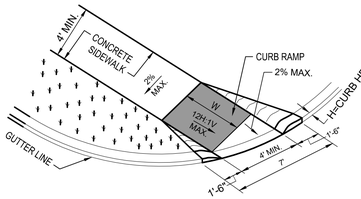
CURB RAMP TYPE 2
(GRASS BUFFER STRIP)

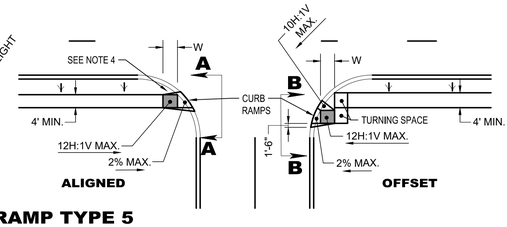


CURB RAMP TYPE 3
(TURNING SPACE REQUIRED)

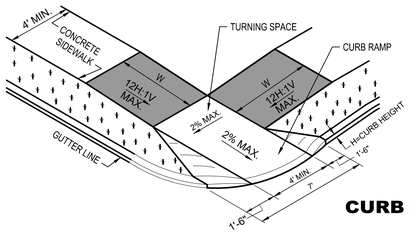


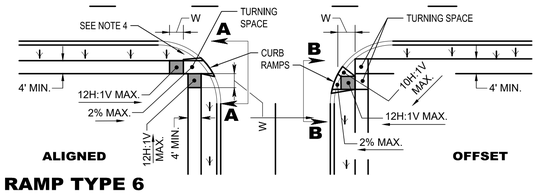
CURB RAMP TYPE 4
(GRASS BUFFER STRIP WITH TURNING SPACE REQUIRED)



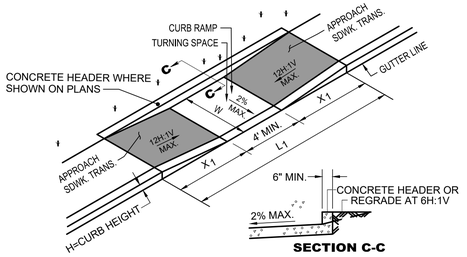


CURB RAMP TYPE 5



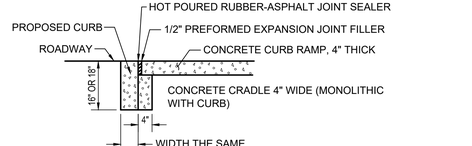


CURB RAMP TYPE 6

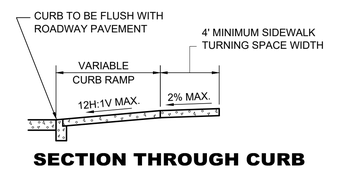


SECTION C-C

CURB RAMP TYPE 7
(LIMITED ROW)
(SEE NOTE 7)

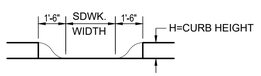


DROPPED CURB AND CRADLE

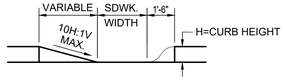


SECTION THROUGH CURB RAMPS 1 THROUGH 4

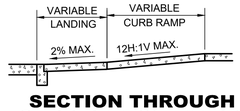
NOTE:
CURB RAMP OPENING TO BE FLUSH WITH ROADWAY PAVEMENT (CURB RAMP TYPES 5 & 6).



SECTION A-A



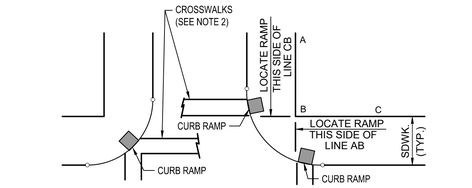
SECTION B-B



SECTION THROUGH CURB RAMPS 5 AND 6

NOTES:

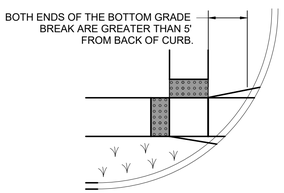
1. KEEP TURNING SPACE, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP CLEAR OF OBSTRUCTIONS THAT PROTRUDE ABOVE THE SIDEWALK.
2. FOR DIMENSIONS SEE CD-606-1B AND CD-606-1C.
3. CURB (DROPPED CURB) GUTTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 4 FEET AT ALL CURB RAMPS.
4. FOR CURB RAMP TYPES 5 AND 6, IF A GRASS BUFFER DOES NOT EXIST, SLOPE CURB TO EQUAL SLOPE OF ADJACENT CURB RAMP.
5. SIDEWALK AND CURB RAMP WITHIN AREA ENCLOSED BY HEAVY LINES INDICATES THE PAY LIMIT FOR CONCRETE SIDEWALK OF THE APPROPRIATE ADJACENT THICKNESS.
6. CURB AND HEADER WITHIN AREA ENCLOSED BY HEAVY LINES INDICATES THE PAY LIMIT FOR VERTICAL CURB OR SLOPING CURB OF THE APPROPRIATE ADJACENT SIZE AND KIND.
7. WHERE THE DISTANCE FROM THE GUTTER LINE TO THE OUTSIDE EDGE OF SIDEWALK IS 6 FEET OR LESS, USE CURB RAMP TYPE 7, INSTEAD OF CURB RAMP TYPE 1 THROUGH 4.
8. CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED. SEE PLANS.
9. 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.
10. THE 12H:1V MAX SLOPE IS THE RUNNING SLOPE FOR CURB RAMPS, BUT ONLY THE 12H:1V SLOPE MEASURED AS X^2 IS THE RUNNING SLOPE FOR TYPE 3 AND TYPE 4 CURB RAMPS. ENSURE THE RUNNING SLOPE OF CURB RAMPS DOES NOT REQUIRE ITS LENGTH TO EXCEED 15 FEET. THE RUNNING SLOPE MAY EXCEED THE 12H:1V MAX SLOPE SO AS NOT TO EXCEED THE 15 FEET MAXIMUM LENGTH.
11. FOR NARROW ISLAND WIDTH, SEE PEDESTRIAN REFUGE ISLAND WALKWAY OPENING AT INTERSECTIONS DETAIL.
12. FOR MEDIUM AND LARGE ISLAND WIDTH, SEE CURB RAMP TYPE 1 ON CD-606-1.
13. CONSTRUCT CURB RAMP TYPES 1, 2, 3, 4 & 7 PERPENDICULAR TO CURBLINE, AS SHOWN.
14. 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.
15. 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.

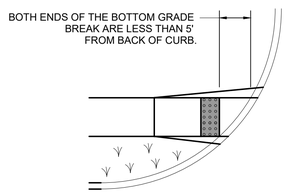


ALTERNATE TREATMENT
(SEE NOTE 13)

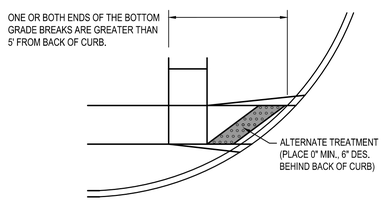
PREFERRED TREATMENT
(SEE NOTE 13)

LOCATION OF CURB RAMP TYPES 1, 2, 3, 4 & 7 FOR CROSSING PARALLEL AND PERPENDICULAR TO HIGHWAY



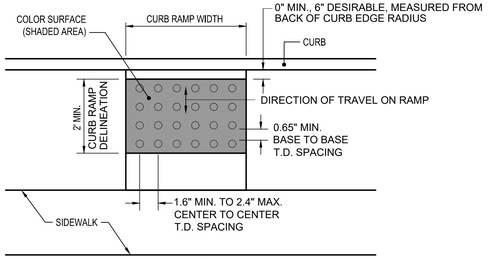


PREFERRED TREATMENT

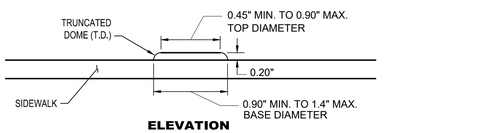


ALTERNATE TREATMENT
(SEE NOTE 15)

PLACEMENT OF DETECTABLE WARNING SURFACE FOR CURB RAMP TYPE 5 AND 6

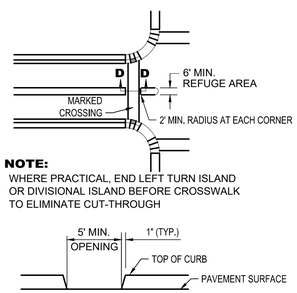


PLAN VIEW



ELEVATION

DETECTABLE WARNING SURFACE

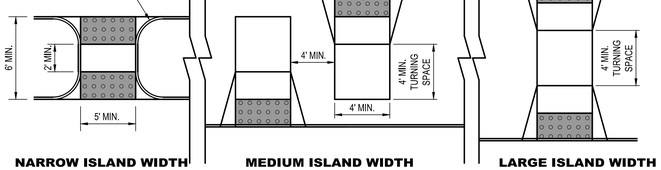


NOTE:
WHERE PRACTICAL, END LEFT TURN ISLAND OR DIVISIONAL ISLAND BEFORE CROSSWALK TO ELIMINATE CUT-THROUGH

SECTION D-D

NOTE:
5'MIN. WIDE OPENING TO BE FLUSH WITH ROADWAY PAVEMENT

PEDESTRIAN REFUGE ISLAND WALKWAY OPENING AT INTERSECTIONS

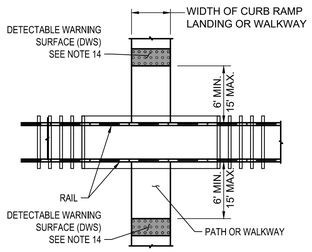


NARROW ISLAND WIDTH
(SEE NOTE 11)

MEDIUM ISLAND WIDTH
(SEE NOTE 12)

LARGE ISLAND WIDTH
(SEE NOTE 12)

PEDESTRIAN REFUGE ISLAND



PEDESTRIAN RAILROAD CROSSING

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PROFESSIONAL ENGINEER
N.J. LICENSE NO. 41635

DAVID R. ATKINSON, P.E., C.M.E.
PROFESSIONAL ENGINEER
N.J. LICENSE NO. 45506

A PROJECT OF
NEGLIA ENGINEERING ASSOCIATES
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PROFESSIONAL ENGINEER N.J. LICENSE NO. 38604
PROFESSIONAL LAND SURVEYOR N.J. LICENSE NO. 38604
PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

NJDOT CURB RAMP DETAILS
2021 ROAD RESURFACING PROJECT
(CA-2020)

UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 19.00
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:		DATE: JUNE 15, 2020

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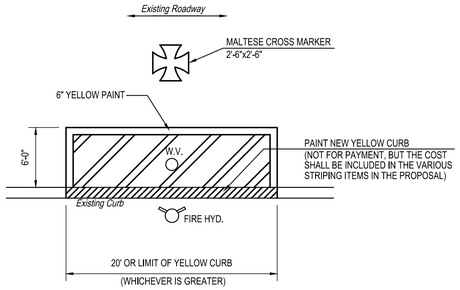
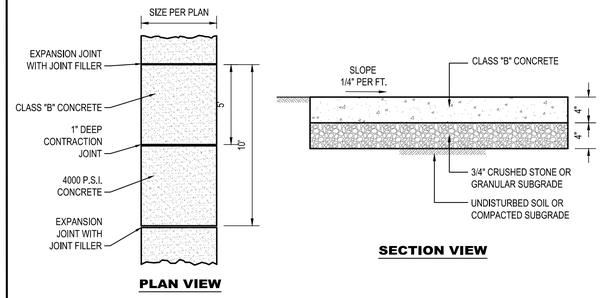


PAVEMENT MARKING FOR HYDRANT

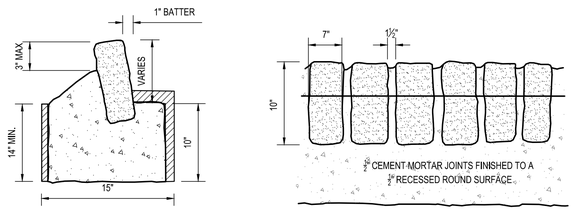
NOT TO SCALE



NOTES:
1. UNIT PRICE FOR SIDEWALK INCLUDES EXCAVATION, GRADING, CONCRETE REMOVAL,CONC, SAWCUTTING AND DISPOSAL, AND D.G.A.
2. EXISTING GREEN BELT MATERIALS (GRASS, BRICK,CONCRETE, ETC.) TO BE REPLACED WITH SAME MATERIAL UNLESS OTHERWISE APPROVED OR DIRECTED BY THE BOROUGH ENGINEER.
3. PAY LIMIT FOR TOPSOIL, SEED, & MULCHING IS AS SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.

4" THICK CONCRETE SIDEWALK

NOT TO SCALE

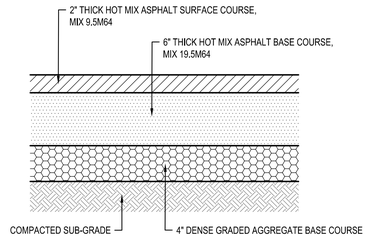


NOTES:

1. BELGIAN BLOCK CURB SHALL CONFORM TO CURBS SECTION OF NEW JERSEY DEPARTMENT OF TRANSPORTATION SPECIFICATIONS 2019.

GRANITE CURB

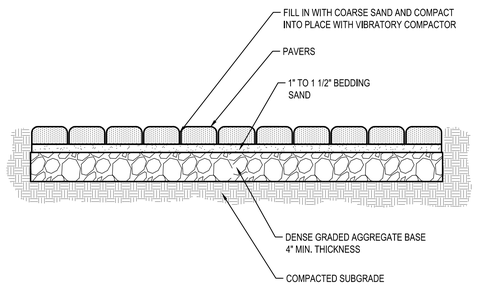
NOT TO SCALE



NOTE:
FULL DEPTH ASPHALT PAVEMENT INCLUDES SAWCUTTING, EXCAVATION, D.G.A., ASPHALT PAVEMENT CONSTRUCTION (BASE COURSE), GRADING, CONCRETE & ASPHALT REMOVAL, AND PROPER DISPOSAL OF ALL WASTE AS A RESULT THEREOF. COSTS FOR FULL DEPTH ASPHALT PAVEMENT TO BE INCLUDED IN THE APPROPRIATE BID ITEMS AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS. SHOULD ROADWAY RECONSTRUCTION BE NECESSARY DUE TO INLET RECONSTRUCTION OR RESETTING, NO SPECIFIC PAYMENT SHALL BE MADE FOR SUCH WORK.

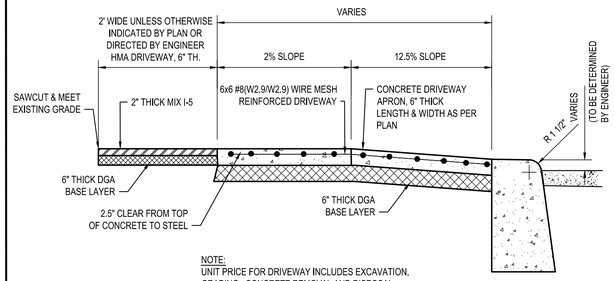
HOT MIX ASPHALT PAVEMENT REPAIR

NOT TO SCALE

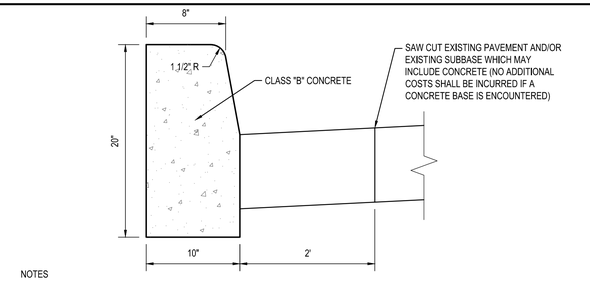


RESET BRICK PAVERS

NOT TO SCALE



NOTE:
UNIT PRICE FOR DRIVEWAY INCLUDES EXCAVATION, GRADING, CONCRETE REMOVAL AND DISPOSAL, D.G.A. AND SAWCUTTING.

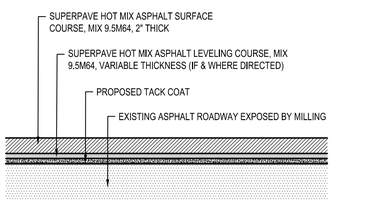


NOTES

1. FULL FORM CURBS MUST BE USED.
2. ALL QUANTITIES WITHIN THE 2 FOOT PAY LIMIT SHALL BE INCORPORATED IN THE UNIT PRICE BID FOR LINEAR FOOT OF CURB.
3. ALL EXCAVATION INCLUDES THE REMOVAL OF EXISTING CURB AND SHALL BE INCORPORATED IN THE UNIT PRICE BID PER LINEAR FOOT OF CURB.
4. CONTRACTOR SHALL NOTE THAT ALL CONCRETE CURBS AND CONCRETE SIDEWALK/APRONS/RAMPS SHALL BE FORMED AND POURED SEPARATE OF EACH OTHER. MONOLITHIC POURS WILL NOT BE PERMITTED.

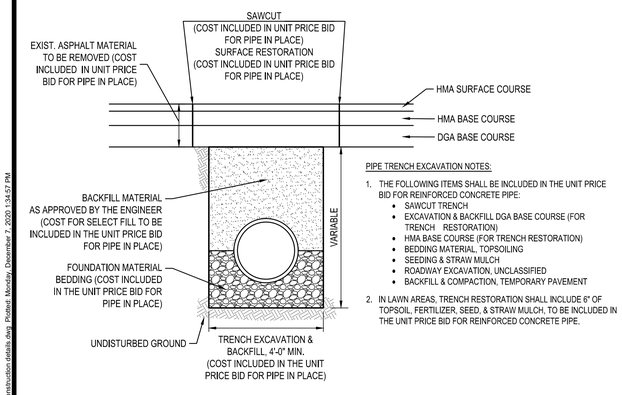
10"x20" CONCRETE VERTICAL CURB

NOT TO SCALE



MILL & PAVE SECTION

NOT TO SCALE

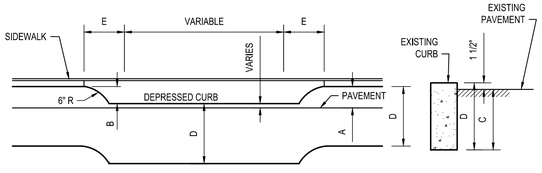


PIPE TRENCH EXCAVATION NOTES:

1. THE FOLLOWING ITEMS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR REINFORCED CONCRETE PIPE:
   - SAWCUT TRENCH
   - EXCAVATION & BACKFILL DGA BASE COURSE (FOR TRENCH RESTORATION)
   - HMA BASE COURSE (FOR TRENCH RESTORATION)
   - BEDDING MATERIAL, TOPSOILING
   - SEEDING & STRAW MULCH
   - ROADWAY EXCAVATION, UNCLASSIFIED
   - BACKFILL & COMPACTION, TEMPORARY PAVEMENT
2. IN LAWN AREAS, TRENCH RESTORATION SHALL INCLUDE 6" OF TOPSOIL, FERTILIZER, SEED, & STRAW MULCH. TO BE INCLUDED IN THE UNIT PRICE BID FOR REINFORCED CONCRETE PIPE.

PIPE TRENCH EXCAVATION

NOT TO SCALE

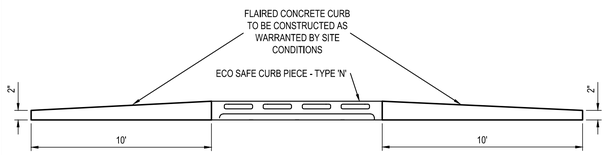


NOTE: CONTRACTOR SHALL NOTE THAT ALL CONCRETE CURBS AND CONCRETE SIDEWALK/APRONS/RAMPS SHALL BE FORMED AND POURED SEPARATE OF EACH OTHER. MONOLITHIC POURS WILL NOT BE PERMITTED.

DEPRESSED CURB @ DRIVEWAY (TABLE)					
DESCRIPTION	A	B	C	D	E
9"X 18" CONCRETE CURB (W/3' TREE OR GRASS BELT)	6"	4 1/2"	16"	18"	18"
9"X 18" CONCRETE CURB (S/W AGAINST CURB)	6"	4 1/2"	16"	18"	1:8 SLOPE
10"X 20" CONCRETE CURB (WITH 3' TREE OR GRASS BELT)*	8"	6 1/2"	18"	20"	18"
10"X 20" CONCRETE CURB (S/W AGAINST CURB)*	8"	6 1/2"	18"	20"	1:8 SLOPE
* DETAIL TO BE UTILIZED					

CONCRETE SIDEWALK, 6" REINFORCED

NOT TO SCALE

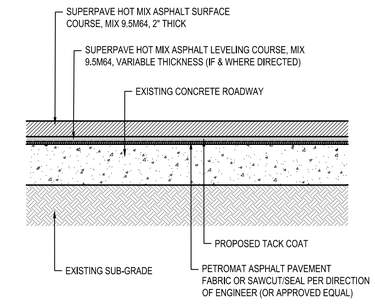


NOTES

1. THE CURBS AT ALL 'TIRE BUSTERS' SHALL BE ACCOMPANIED BY FLAIRED CONCRETE CURBS AS INDICATED ABOVE.
2. A PORTION OF THE CURB QUANTITY SHALL BE USED FOR THIS WORK AND IN AN 'IF & WHERE DIRECTED' MANNER.
3. THE ABOVE CURB SHALL BE CONSTRUCTED AS DIRECTED IN THE FIELD.

CURB ENDS AT INLET

NOT TO SCALE



PAVEMENT OVERLAY SECTION

NOT TO SCALE

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CERTIFICATE OF AUTHORIZATION (N.J.S.A. 45:8-56) 24GA27927000

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CONSTRUCTION DETAILS
2021 ROAD RESURFACING PROJECT
(CA-2020)

UNION COUNTY **NEW JERSEY**

DRAWN BY: KG, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 20.00
DESIGNED BY: KG, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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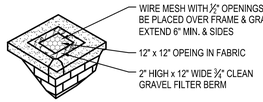
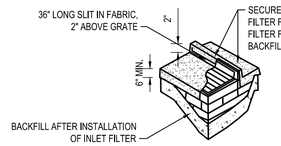


TYPE A & E INLET

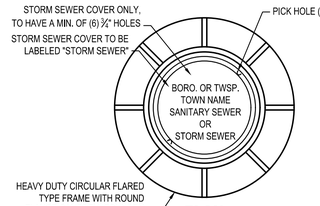


TYPE B INLET

NOTES:
1. CONTRACTOR IS TO INSPECT INLET FILTER AFTER EVERY STORM, AND CLEAN OR REPLACE AS REQUIRED
2. CONTRACTOR IS TO REMOVE FABRIC AND MESH JUST PRIOR TO PAVING
3. FILTER FABRIC SHALL BE "MIRAFI 700X" TYPE OR APPROVED EQUAL
4. INLET FILTER SHALL FILTER RUNOFF FROM THE 1 YEAR 24 HOUR STORM EVENT AND SHALL SAFELY CONVEY HIGHER FLOWS DIRECTLY INTO STORM SEWER SYSTEM.
5. CONTRACTOR SHALL BE RESPONSIBLE TO CLEAN EXISTING DRAINAGE STRUCTURES.

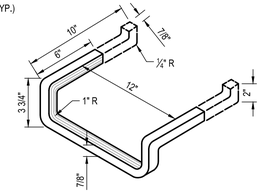
INLET FILTER & PROTECTION

NOT TO SCALE



PLAN

SECTION

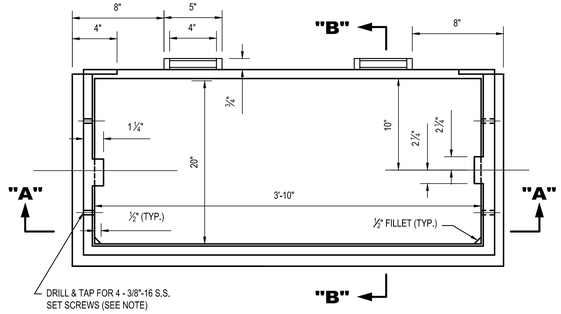


ALUMINUM LADDER RUNG

NOTE:
PORTION EMBEDDED IN MASONRY TO BE COATED WITH COAL TAR PATCH, VARNISH OR OTHER SPECIFIED MATERIAL.

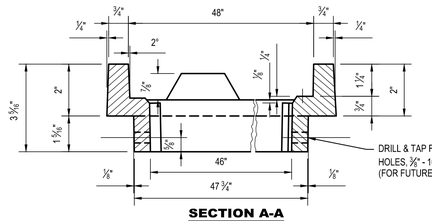
STANDARD MANHOLE FRAME, COVER & LADDER RUNG

NOT TO SCALE

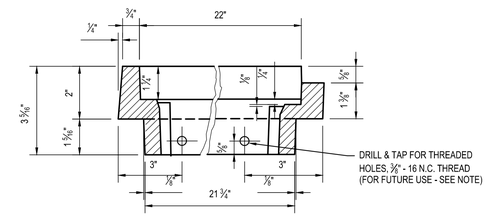


NOTE:
A TREADED INSERT NAY BE USED AS AN ALTERNATE TO DRILLING AND TAPPING.

PLAN

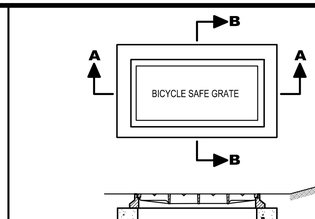


SECTION A-A

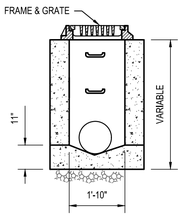


CAST IRON EXTENSION FRAMES FOR EXISTING INLETS

NOT TO SCALE



SECTION A-A

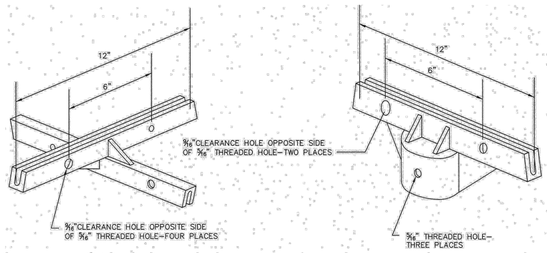


SECTION B-B

NOTES:
1. INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS. BOTTOMS SHALL BE DISHED AND SLOPED TOWARDS THE OUTLET PIPE AT A RATE OF GRADE OF 2 INCHES PER FOOT.
2. THIS INLET MAY BE CONSTRUCTED OF BRICK, CONCRETE, OR CONCRETE BLOCK. IF BRICK OR CONCRETE BLOCK IS USED, THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE & THE OUTSIDE OF THE WALLS SHALL BE PLASTERED WITH ½" COAT OF 1:2 CEMENT SAND MORTAR.
3. INLET FRAME AND GRATES TO BE CAMPBELL FOUNDRY PATTERN NON. 2824 OR APPROVED EQUAL.

INLET TYPE "A"

NOT TO SCALE



BOLT THRU CROSS

EACH HOLE SHALL BE DRILLED AND TAPPED TO ACCEPT A ⅜" STANDARD SET SCREW. VANDAL PROOF SET SCREWS SHALL BE USED IN PLACE OF THE STANDARD SET SCREW ⅝" CLEARANCE HOLE ON OPPOSITE SIDE FOR BOLT—THROUGH ALIGNMENT WITH VANDAL PROOF BOLTS.

STREET SIGN BOLT THRU BRACKETS
N.T.S.

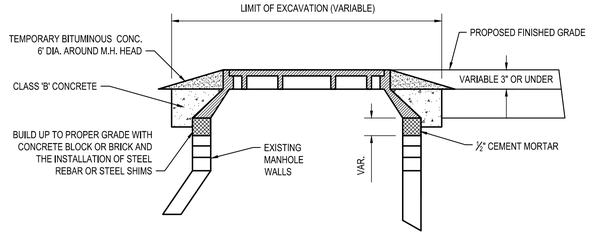
FOR FLAT EXTRUDED SIGNS AND ROUND, SQUARE OR U—CHANNEL POSTS 12' BLADE HOLDER DRILLED AND TAPPED ON 6" CENTERS

STREET NAME SIGN, TYPE DF (ALL MUNICIPALITIES EXCEPT SUMMIT CITY)
N.T.S.

STREET NAME SIGN, TYPE DF (SUMMIT CITY ONLY)
N.T.S.

STREET SIGNS

NOT TO SCALE

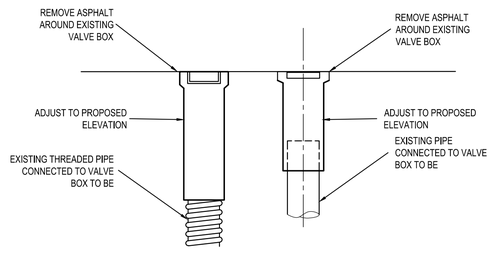


NOTES:

1. ALL CASTINGS TO BE MADE IN THE U.S.A. AS PER LOCAL, STATE, AND FEDERAL REQUIREMENTS.
2. CONTRACTOR TO INSTALL REBAR AND/OR STEEL RIMS DURING THE RESETTING OF ALL CASTINGS, AS DIRECTED IN THE FIELD. NO ADDITIONAL PAYMENT SHALL BE MADE FOR THE LABOR OR MATERIALS ASSOCIATED WITH SUCH WORK.

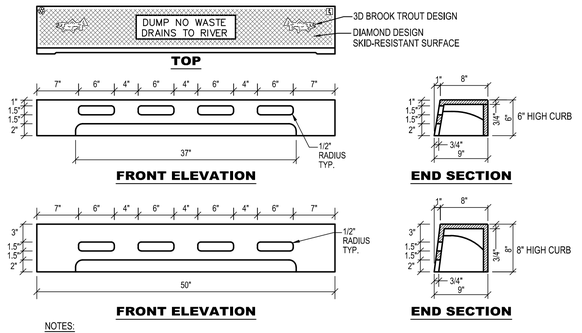
RESET CASTINGS (TYP.)

NOT TO SCALE



RESET VALVE BOX

NOT TO SCALE

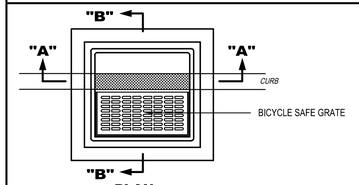


NOTES:

1. MATERIAL: GRAY CAST IRON ASTM A48-83, CLASS 30B
2. IN RETROFIT SITUATIONS THIS CURB PIECE (HEAD) WILL FIT EXISTING CAMPBELL FOUNDARY CO. MANUFACTURED CURB INLETS FOR NJDOT TYPES B, B-1, B-2, D, D-1, AND D-2
3. NAMEPLATE MESSAGE CAN BE MODIFIED TO YOUR SPECIFIC NEEDS WITHIN AREA SHOWN
4. CASTING SUPPLIED WITHOUT SURFACE COATING

CURB PIECE

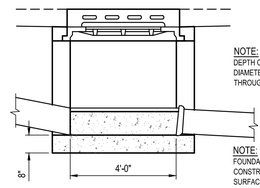
NOT TO SCALE



PLAN

NOTES:

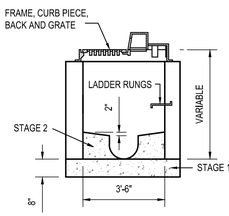
1. ALL STRUCTURES SHALL BE MORTARED INSIDE AND OUT. IN ADDITION, ALL STRUCTURES SHALL BE WATERPROOFED ON THE OUTSIDE.
2. THE BICYCLE SAFE GRATES SHALL BE CAMBELL FOUNDRY PATTERN NUMBER 2618 OR APPROVED EQUAL. ALL CASTINGS SHALL BE MADE IN THE U.S.A. AS PER LOCAL, STATE, AND FEDERAL REQUIREMENTS.



SECTION A-A

NOTE:
DEPTH OF INVERT TO BE 0.80 OF DIAMETER OF THE MAIN PIPE THROUGH THE INLET.

NOTE:
FOUNDATION AND INVERT TO BE CONSTRUCTED IN 2 STAGES. TOP SURFACE OF STAGE 1 TO BE LEFT ROUGH.



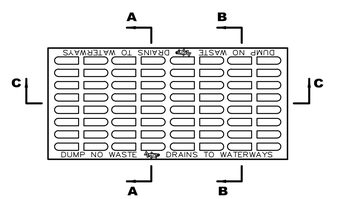
SECTION B-B

INLET TYPE "B"

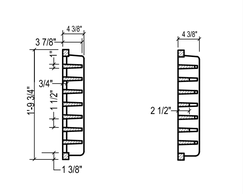
NOTES:

CD-602-2.6

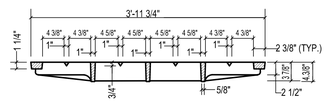
NOT TO SCALE



PLAN



SECTION A-A **SECTION B-B**



SECTION C-C

MIN. WEIGHT 325 LBS.

NJDOT CD-602-1.8

BICYCLE SAFE GRATE (CAST IRON)

NOT TO SCALE

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CERTIFICATE OF AUTHORIZATION (N.J.S.A. 45:8-56) 24GA27927000

NO.	DATE	REVISIONS DESCRIPTION	DRAWN	DESIGNED	CHECKED

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PROFESSIONAL ENGINEER
N.J. LICENSE NO. 41635

DAVID R. ATKINSON, P.E., C.M.E.
PROFESSIONAL ENGINEER
N.J. LICENSE NO. 45506

A PROJECT OF
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TEL: 201-939-8805 FAX: 201-939-0846 E-MAIL: NEA@NEGLIAENGINEERING.COM

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PROFESSIONAL ENGINEER N.J. LICENSE NO. 38604
PROFESSIONAL LAND SURVEYOR N.J. LICENSE NO. 38604
PROFESSIONAL PLANNER N.J. LICENSE NO. 33LI00569800

CONSTRUCTION DETAILS
2021 ROAD RESURFACING PROJECT
(CA-2020)

UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 20.01
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
FIELD BOOK NO.:	PAGE:	DATE: JUNE 15, 2020	

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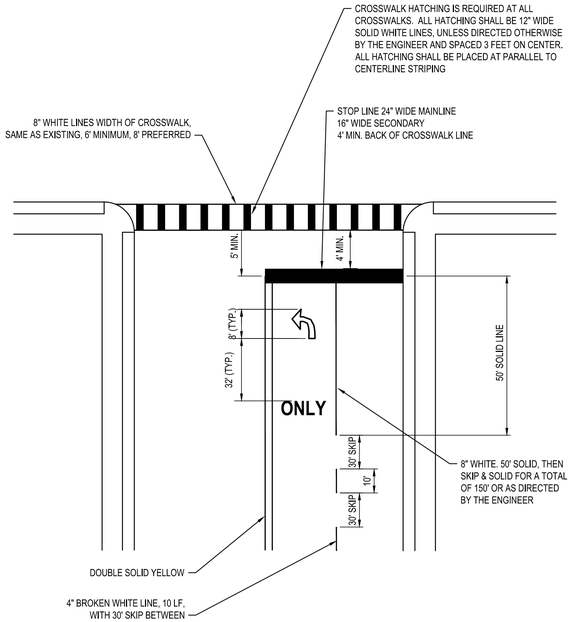


NOTES

ALL TRAFFIC MARKINGS IN CONFORMANCE WITH THE M.U.T.C.D.

PAVEMENT SYMBOL MARKINGS SHALL BE DESIGNED IN CONFORMANCE WITH THE STANDARD ALPHABET FOR HIGHWAY SIGNS & PAVEMENT MARKINGS.

ALL PAVEMENT MARKINGS SHALL BE APPLIED TO WITH THERMOPLASTIC MATERIAL.

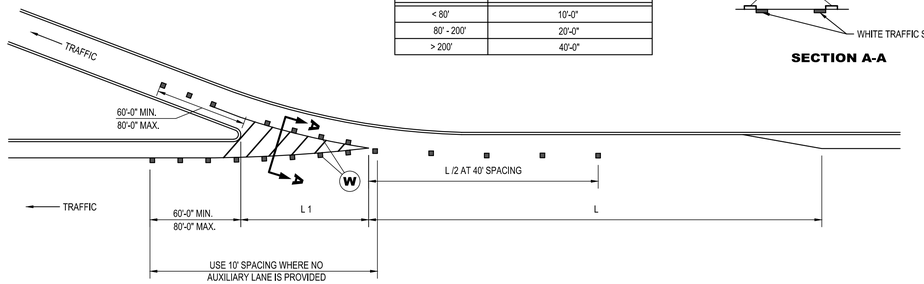
ALL PERMANENT AND TEMPORARY STRIPING SHALL OCCUR WITHIN THE TIMELINES SET FORTH IN THE TECHNICAL SPECIFICATIONS.

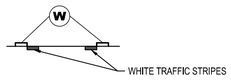
THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH THE OWNER AND/OR ENGINEER THE STRIPING FOR ALL SECONDARY STREET CROSSWALKS. IN THE EVENT THE EXISTING CROSSWALK LINES UP WITH THE NEW HANDICAP RAMP NO STRIPING MAY BE DONE ALONG THE SECONDARY ROADWAY.

TRAFFIC STRIPING

NOT TO SCALE

L_1	RPM SPACING AT GORE
< 80'	10'-0"
80' - 200'	20'-0"
> 200'	40'-0"

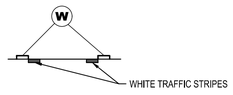




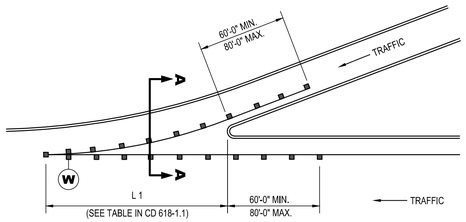
SECTION A-A

TYPICAL DECELERATION LANE TREATMENT

NOT TO SCALE

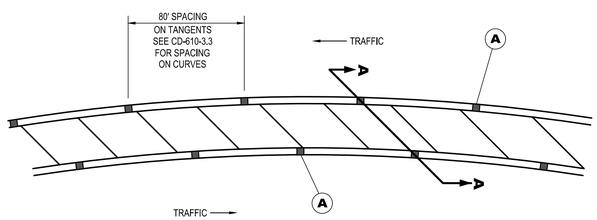


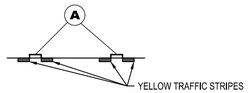
SECTION A-A



TYPICAL ACCELERATION LANE TREATMENT

NOT TO SCALE





SECTION A-A

TYPICAL PAVED MEDIAN TREATMENT

NOT TO SCALE

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CERTIFICATE OF AUTHORIZATION (N.J.S.A. 45:8-56) 24GA27927000

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CONSTRUCTION DETAILS
2021 ROAD RESURFACING PROJECT (CA-2020)

UNION COUNTY NEW JERSEY

DRAWN BY: KO, KT, JV	CHECKED BY:	PROJECT NO.: UNIOCTY20.010	SHEET NO.: 20.02
DESIGNED BY: KO, KT, JV	SCALE: N.T.S.		
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