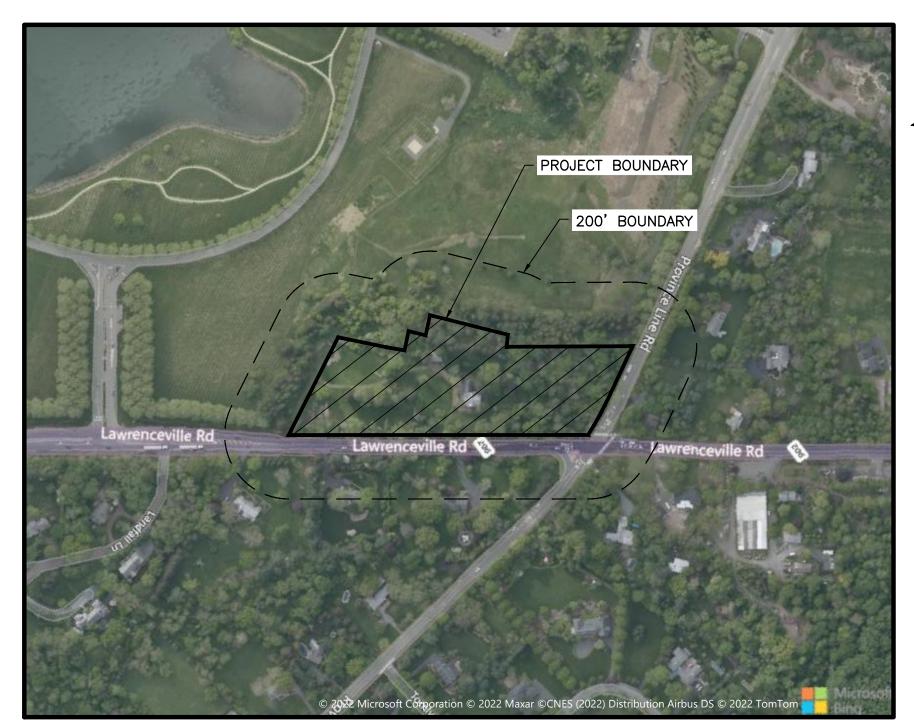
Tax Map Sheets 66.02 & 66.04 3641 Lawrenceville Road; Block 6601, Lot 2 Lawrence Township, Mercer County, New Jersey



Vicinity Map SCALE: 1" = 300'

	S	Sheet List Table
No.	Drawing	Sheet Title
1	CVR-1	COVER SHEET
2	LEG-1	LEGEND & GENERAL NOTES
3	EXC-1	EXISTING CONDITIONS PLAN
4	DEM-1	DEMOLITION PLAN
5	DEM-2	DEMOLITION PLAN
6	CSP-1	CONSTRUCTION SITE PLAN
7	SSP-1	SIGNAGE AND STRIPING PLAN
8	GRD-1	GRADING PLAN
9	DRN-1	DRAINAGE & UTILITY PLAN
10	DRN-2	DRAINAGE & UTILITY PLAN
11	LSP-1	LANDSCAPING PLAN
12	LTP-1	LIGHTING PLAN
13	PRF-1	STORM SEWER PROFILES
14	CSD-1	CONSTRUCTION DETAILS
15	CSD-2	CONSTRUCTION DETAILS
16	CSD-3	CONSTRUCTION DETAILS
17	CSD-4	CONSTRUCTION DETAILS
18	CSD-5	CONSTRUCTION DETAILS
19	TTP-1	TRUCK TURNING PLAN - FIRE TRUCK

## OWNER CERTIFICATION

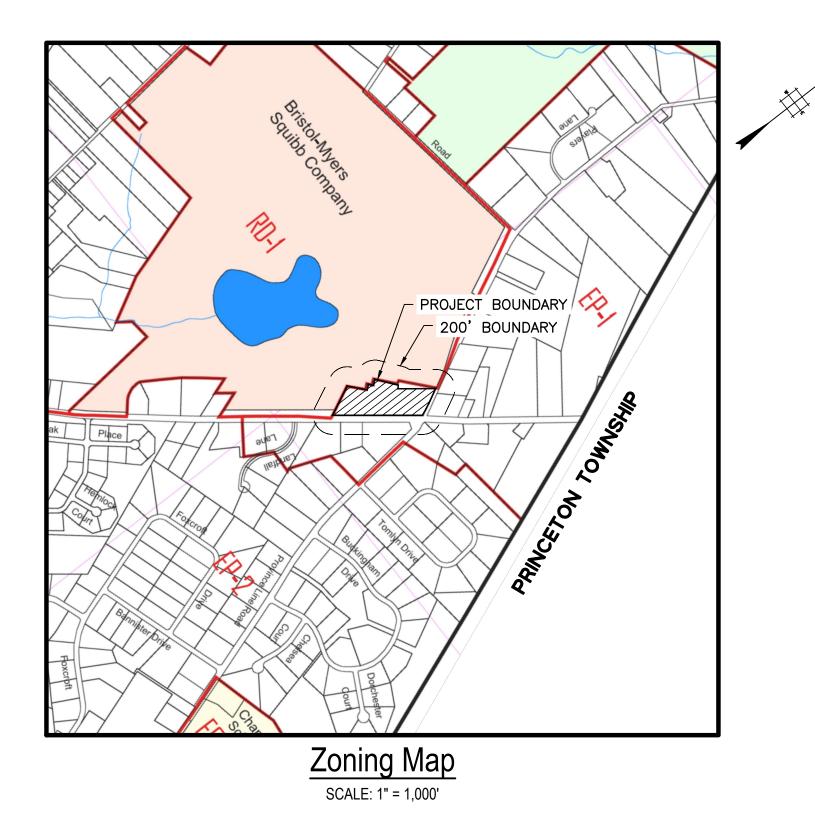
I CONSENT TO THE FILING OF THIS SITE PLAN WITH THE ZONING BOARD OF THE TOWNSHIP OF

APPLICANT/OWNER:

### SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY TO CAREONE AT LAWRENCE, LLC. AND 3641 LAWRENCEVILLE ROAD, LLC. THAT THIS PLAN, SURVEY AND A CORRESPONDING METES AND BOUNDS DESCRIPTION HAVE BEEN PREPARED UNDER MY IMMEDIATE SUPERVISION IN ACCORDANCE WITH A WRITTEN CONTRACT WITH CARE ONE MANAGEMENT, LLC.; THAT THIS PLAN IS A CORRECT REPRESENTATION OF CONDITIONS EXISTING AS OF MAY, 2022, SUBJECT TO SUCH NOTES AS MAY APPEAR HEREON.

I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEVE THIS MAP AND LAND SURVEY DATED MAY 27, 2022 MEETS THE MINIMUM SURVEY DETAIL REQUIREMENTS, WITH CORNERS FOUND, SET OR OMITTED AS INDICATED ACCORDING TO RULES PROMULGATED BY THE STATE BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS AND HAS BEEN MADE UNDER MY SUPERVISION, AND COMPLIES WITH THE PROVISIONS OF THE MAP FILING LAW.



SITE & ADJACENT ZONING DISTRICTS							
DESIGNATION	ZONING CLASSIFICATION						
EP-1	ENVIRONMENTAL PROTECTION - 1						
EP-2	ENVIRONMENTAL PROTECTION - 2						
RD-1	RESEARCH & DEVELOPMENT - 1						

### **OWNER**

3641 Lawrenceville Road, LLC 173 BRIDGE PLAZA NORTH FORT LEE, NJ 07024

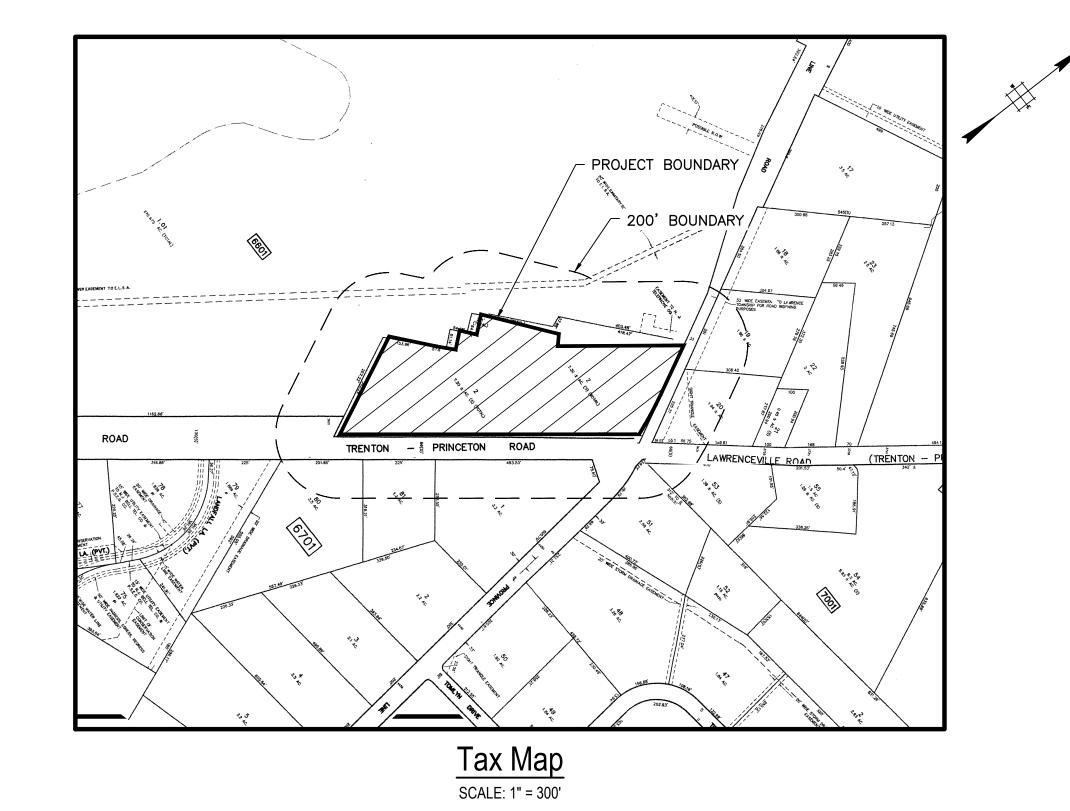
PHONE: 201-242-4000

**APPLICANT** CareOne at Lawrence, LLC 173 BRIDGE PLAZA NORTH FORT LEE, NJ 07024



AND LAND SURVEYORS CERTIFICATE OF AUTHORIZATION 24GA27987500

PHONE: 201-242-4000



APPROVED BY THE MERCER COUNTY PLANNING BOARD

MUNICIPAL ENGINEER

PLANNING DIRECTOR	DATE
RECORDING SECRETARY	DATE
APPROVED BY THE LAWRENCE TOWNSHIP ZONING BOARD (	OF ADJUSTMENT:
CHAIRPERSON	DATE
SECRETARY	 DATE



CALIFORNIA, INDIANA, KENTUCKY, MASSACHUSETTS, MICHIGAN, NEW JERSEY, OHIO AND PENNSYLVANIA DRAWING **CHECKED BY** DRAWN BY 05/27/22

**AS SHOWN** 

OFFICES LOCATED IN:

MICHAEL S. FINNEGAN N.J. LIC. LAND SURVEYOR LIC. NO. GS34851 DATE SIGNED

**Zoning Information Table** 

PROPOSED ASSISTED LIVING/SKILLED NURSING FACILITY (NOT PERMITTED) AND SINGLE FAMILY DETACHED RESIDENTIAL (PERMITTED USE)

	ZONE EP-1 ENV	/IRONMENTAL	PROTECTION 1		
ITEM	REQU	JIRED	EXISTING LOT	PROPOSED LOT 2.01	PROPOSED LO 2.02
TYPE	SINGLE FAMILY DETACHED RESIDENTIAL	OTHER PERMITTED USES	SINGLE FAMILY DETACHED RESIDENTIAL	SINGLE FAMILY DETACHED RESIDENTIAL	ASSISTED LIVING/SKILLED NURSING (V2)
MINIMUM LOT AREA PER UNIT	2 AC	3 AC	6.449 AC	1.000 AC	5.449 AC
MINIMUM OPEN SPACE	0%	N/A	93.71%	75.80%	N/A
MAXIMUM TRACT DENSITY	N/A	N/A	N/A	N/A	N/A
MINIMUM TRACT AREA	N/A	N/A	N/A	N/A	N/A
		BUILDING			
MINIMUM LOT FRONTAGE	200'	200'	935.0'	223.88'	851.10'
MINIMUM FRONT YARD	75'	100'	91.86'	37.67 (V)	73.37' (V)
MINIMUM SIDE YARD	50'	50'	401.28'	50.00'	87.28'
MINIMUM REAR YARD	50'	50'	174.62'	80.83'	38.64' (V)
MINIMUM ACREAGE EXCLUSIVE OF CRITICAL AREAS	N/A	1 AC	N/A	N/A	5.449 AC
MINIMUM USEABLE YARD AREA	N/A	20% OF EACH YARD	N/A	N/A	100%
MAXIMUM IMPERVIOUS SURFACE RATIO	0.14	0.08	0.06	0.24 (V)	0.45 (NP)
MAXIMUM BUILDING HEIGHT	35'	35'	42.4' (ENC)	42.4' (V3) (3)	40.0' (V3) (2) (3
		PARKING			
PARKING SPACES	3	1 SPACE FOR EVERY 2 BEDS (1)	N/A	3	126 (4)
		SIGNAGE			
MAXIMUM SIGN AREA	N/A	20 SF	N/A	N/A	24 SF (V)
MAXIMUM HEIGHT	N/A	5'	N/A	N/A	6' (V)
SETBACK	N/A	30'	N/A	N/A	20.52' (V)
NOTES:					
N/A - NOT APPLICABLE					
IP - NON-PERMITTED USE					
TBD - TO BE DETERMINED					
ENC - EXISTING NON-CONFORMITY					
/ - C VARIANCE					
V2 - D1 VARIANCE					
V3 - D6 VARIANCE					

Property Owners List within 200' of Block 6601, Lot 2 Lawrenceville Realty Company (Care One)

(3) - MAX. FAA BUILDING HEIGHT REQUIREMENT IS 50' + ADDITIONAL 10% FOR ROOFTOP EQUIPMENT

(2) - 47' INCLUDING PARAPET. PROPOSED BUILDING MORE THAN 600' FROM EXISTING BRISTOL MEYER SQUIBB HELISTOP.

(4) - PARKING REQUIREMENTS: 170 BEDS/2 = 85 SPACES. 126 SPACES PROVIDED. EV PARKING EQUALS 4% (6 SPACES) OF TOTAL PARKING AREA.

	BLOCK	LOT	OWNER(S) & ADDRESS
	6601	1.01	Bristol-Myers Squibb Company 100 Nassau Park Boulevard SU-Tax Princeton NJ 08543-4500
	6701	1	Smiles Real Estate, LLC 11 Compton Drive E. Windsor NJ 08520
		79	Dennis Williams, Jr. & S. Quintero 1 Landfall Lane Princeton NJ 08540
		80	Barbara Egbert & John Frercks 3590 Lawrenceville Road Princeton NJ 08540
		81	Mark C. Hamrick & Erin McDonald-Hamrick 3620 Lawrenceville Road Princeton NJ 08540
	7001	51	Mario Garland & Natalia Bertran 4453 Province Line Road Princeton NJ 08540
		53	Bennett Pereira & Kristel DaCosta 30 Periwinkle Drive Monroe NJ 08831
549	7601	19	Richard Ilchert & Saleena Miller 4471 Province Line Road Princeton NJ 08540
		20	Gerardo Elias Mejia

4465 Province Line Road

Princeton NJ 08540

General Notes

EXISTING UTILITY INFORMATION SHOWN HEREON HAS BEEN COLLECTED FROM VARIOUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY ALL INFORMATION TO HIS SATISFACTION PRIOR TO EXCAVATION, DRIVING OF PILES. OR ANY OTHER SUBSURFACE DISTURBANCE. WHERE EXISTING UTILITIES ARE TO BE CROSSED BY PROPOSED CONSTRUCTION, TEST PITS SHALL BE DUG BY THE CONTRACTOR PRIOR TO CONSTRUCTION TO ASCERTAIN EXISTING INVERTS, MATERIALS AND SIZES. TEST PIT INFORMATION SHALL BE GIVEN TO THE ENGINEER PRIOR TO CONSTRUCTION OR STRUCTURE FABRICATION TO PERMIT ADJUSTMENTS AS REQUIRED TO AVOID CONFLICTS.

ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN CHANGES. NO EXTRA COMPENSATION SHALL BE MADE TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE

DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN. ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION FOR SITE IMPROVEMENTS SHOWN HEREON SHALL BE IN ACCORDANCE WITH:

B. CURRENT, PREVAILING MUNICIPAL AND/OR COUNTY SPECIFICATIONS, STANDARDS AND REQUIREMENTS. C. CURRENT, PREVAILING UTILITY COMPANY/AUTHORITY SPECIFICATIONS, STANDARDS AND REQUIREMENTS. D. NATIONAL FIRE PROTECTION ASSOCIATION AND AMERICAN WATER WORKS ASSOCIATION STANDARDS, AS CURRENTLY AMENDED.

A. NJDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", AS CURRENTLY AMENDED.

THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF ANY FIELD CONDITIONS ENCOUNTERED DIFFER MATERIALLY FROM THOSE PRESENTED HEREON.

ALL WORK IS TO BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE REQUIREMENTS OF THE GOVERNING AUTHORITIES OR AGENCIES.

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS.

ALL PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.

FIRE DEPARTMENT CONNECTIONS ARE TO MATCH LAWRENCE TOWNSHIP FIRE FIGHTING EQUIPMENT AND SHALL BE COORDINATED THROUGH THE OWNER.

NJDOT STANDARD ROADWAY CONSTRUCTION / TRAFFIC CONTROL / BRIDGE CONSTRUCTION DETAILS, LATEST REVISION, ARE APPLICABLE TO THIS PROJECT EXCEPT FOR THOSE DETAILS CONTAINED HEREIN.

ALL ON-SITE UTILITY CABLES AND WIRING MUST BE INSTALLED UNDERGROUND.

THESE GENERAL NOTES APPLY TO ALL SHEETS IN THIS SET OF PLANS.

ALL WATER MAINS AND SANITARY SEWER MAINS ARE TO BE HORIZONTALLY SEPARATED BY A MINIMUM OF 10' OR VERTICALLY BY A MINIMUM OF 18". IF SUCH VERTICAL SEPARATION IS NOT POSSIBLE, THE SANITARY SEWER MAIN SHALL BE OF WATER TIGHT CONSTRUCTION (DIP) WITH MECHANICAL RESTRAINED JOINTS FOR A MINIMUM OF 10' FROM THE WATER MAIN CROSSING. USE TRANSITION COUPLING, POWERSEAL MODEL #3501-8AAB OR EQUIVALENT AT DIP/PVC JOINTS.

ALL WATER MAIN IS TO BE INSTALLED AT A DEPTH TO MAINTAIN A MINIMUM OF 48 INCHES TO THE TOP OF PIPE FROM PROPOSED

THE SUITABILITY OF EXCAVATED MATERIAL FOR USE AS BACKFILL SHALL BE DETERMINED BY THE GEOTECHNICAL ENGINEER.

THE CONTRACTOR SHALL COORDINATE UTILITY INSTALLATION WITH THE RESPECTIVE UTILITY COMPANY IF APPLICABLE. THE UTILITY COMPANY SHALL VERIFY INSTALLATION LOCATION(S).

THE CONTRACTOR SHALL VERIFY THE LOCATION, GRADE, AND INVERT ELEVATION OF ALL EXISTING UTILITY STRUCTURES.

THE CONTRACTOR SHALL RAISE/ADJUST ALL UTILITY VALVE COVERS, FRAMES, GRATES, ETC., WITHIN THE CONSTRUCTION AREA TO THE PROPOSED GRADE. REFER TO DEMOLITION AND UTILITY REMOVAL PLANS FOR DETAILS ON UTILITIES TO BE ABANDONED AND

PROPOSED FIRE AND DOMESTIC WATER LINE SIZES SHALL BE VERIFIED WITH THE ARCHITECTURAL PLANS AND MECHANICAL CONTRACTOR.

CONTOURS AND SPOT ELEVATIONS INDICATE FINISHED GRADE.

2% ABOVE OR 3% BELOW OPTIMUM.

ALL DISTURBED AREAS NOT RECEIVING IMPERVIOUS SURFACE OR LANDSCAPING SHALL BE RESTORED IN ACCORDANCE WITH THE LANDSCAPING/SOIL EROSION AND SEDIMENT CONTROL SEEDING SPECIFICATIONS.

SITE GRADING SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATION SET FORTH BY THE DESIGN ENGINEER. CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING ALL SOFT, YIELDING, OR UNSUITABLE MATERIALS AND REPLACING WITH SUITABLE MATERIALS AS APPROVED BY THE ENGINEER. ALL EXCAVATED OR FILLED AREAS SHALL BE COMPACTED TO 95% MODIFIED PROCTOR MAXIMUM DENSITY. MOISTURE CONTENT AT TIME OF PLACEMENT SHALL NOT EXCEED

ELECTRIC, TELEPHONE, CATV AND ALL OTHER WIRE SERVED UTILITY EXTENSIONS AND SERVICES SHALL BE INSTALLED UNDERGROUND WITH STANDARDS ESTABLISHED BY THE SERVICING UTILITY COMPANY.

ALL AREAS WHERE NATURAL VEGETATION AND/OR SPECIMEN TREES ARE TO REMAIN SHALL BE PROTECTED BY THE ERECTION OF FENCING, AND NO DISTURBANCE SHALL OCCUR PRIOR TO INSPECTION BY THE OWNER OR OWNER'S REPRESENTATIVE AND THE ISSUANCE OF WRITTEN AUTHORIZATION TO PROCEED WITH THE CONSTRUCTION. THESE PROTECTIVE MEASURES SHALL NOT BE ALTERED OR REMOVED WITHOUT THE APPROVAL OF THE OWNER OR OWNER'S REPRESENTATIVE.

ALL PROPOSED CONSTRUCTION IS TO CONFORM TO THE LATEST EDITION OF THE NEW JERSEY UNIFORM CONSTRUCTION CODE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE EXISTENCE AND LOCATION OF ALL EXISTING UTILITIES WITHIN THE LIMITS OF WORK THRU THE USE OF RECORD DOCUMENTS PROVIDED BY THE OWNER AND THE ENGINEER, AND FIELD SURVEY AND/OR TEST PIT EXCAVATIONS IF SAME ARE DETERMINED TO BE NECESSARY. CONTRACTOR ALSO RESPONSIBLE FOR CALLING 1-800-MARKOUT FOR UTILITY MARKOUT PRIOR TO CONSTRUCTION.

TWO SURVEY BENCHMARKS SHALL BE ESTABLISHED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION ACTIVITIES.

AS SHOWN HEREIN, THE PROPOSED IMPROVEMENTS ARE LOCATED OUTSIDE STATE OPEN WATERS AND RIPARIAN ZONES.

THE PROPOSED IMPROVEMENTS ARE LOCATED IN ZONE "B" IN ACCORDANCE WITH THE DELAWARE AND RARITAN CANAL COMMISSION REGULATIONS AND MAPPING.

REMOVAL OF OFF-SITE DEMOLITION MATERIALS SHALL BE IN CONFORMANCE WITH STATE AND LOCAL REGULATIONS.

EXACT LOCATION OF PROPOSED ROOF LEADERS TO BE CONFIRMED BY PROJECT ARCHITECT PRIOR TO INSTALLATION.

STANDARD PARKING SPACES ARE TO BE STRIPED IN WHITE LINES.

HANDICAP PARKING SPACES ARE TO BE STRIPED IN BLUE LINES. TRASH COLLECTION WILL TAKE PLACE AT THE PROPOSED LOCATION.

SOLID WASTE WILL BE PRIVATELY COLLECTED TWICE PER WEEK AND RECYCLING WILL BE COLLECTED ONCE EVERY TWO WEEKS.

PROPOSED IRRIGATION SYSTEM TO BE DESIGNED BY OTHERS.

Utility Companies

WATER COMPANY **ELECTRIC** LAWRENCEVILLE WATER COMPANY 10 GORDON AVENUE 80 PARK PLAZA, 4B LAWRENCEVILLE NJ 08648 NEWARK NJ 07101 PHONE **VERIZON** ELIZABETHTOWN GAS COMPANY 1490 PROSPECT STREET ONE ELIZABETHTOWN PLAZA THIRD FLOOR EAST TRENTON NJ 08638 UNION NJ 07083 CABLE COMCAST CABLEVISION EWING-LAWRENCEVILLE SEWERAGE 940 PROSPECT STREE 600 WHITEHEAD ROAD TRENTON NJ 08618

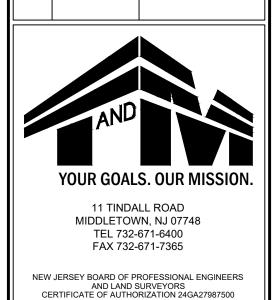
LOCATION OF UTILITIES SHOWN ON THE PLANS ARE PLOTTED FROM AVAILABLE DATA ON FILE WITH THE UTILITY COMPANIES AND ARE NOT WARRANTED AS TO EXACTNESS. CONTRACTOR IS TO DETERMINE EXACT LOCATION AND DEPTH OF UTILITIES AT ALL CROSSINGS PRIOR TO CONSTRUCTION IN ACCORDANCE WITH THE

REQUIREMENTS OF THE CONTRACT DOCUMENTS. NJ UNDERGROUND UTILITIES LOCATION 1-800-272-1000.

LAWRENCEVILLE NJ 08648

MICHAEL R. THOMAS, P.E. PROFESSIONAL ENGINEER

LICENSED PROFESSIONAL ENGINEER STATE OF NJ LICENSE No. GE48086



OFFICES LOCATED IN: CALIFORNIA, INDIANA, KENTUCKY,

MASSACHUSETTS, MICHIGAN, NEW JERSEY OHIO AND PENNSYLVANIA DRAWING CHECKED B

05/27/22

BM BM IS M IN MUELLER ON HYDRANT OFF OF RT. 206

PREPARED BY KENT L. SCULLY OF VAN NOTE-HARVEY ASSOCIATES, INC., REVISED THROUGH MAY 13, 1987.

PLANIMETRIC AND TOPOGRAPHIC FEATURES SHOWN HEREON ARE DRAWN IN ACCORDANCE WITH FIELD SURVEY PERFORMED

TAX MAP (SHEET NOS. 66.02 & 66.04), TOWNSHIP OF LAWRENCE, MERCER COUNTY, N.J., REVISED THROUGH JAN. 25,

. MAP ENTITLED, "PLAN OF SURVEY, LAWRENCE TOWNSHIP, MERCER COUNTY, NEW JERSEY, BLOCK 6601, LOT 2" PREPARE

. MAP ENTITLED, "BOUNDARY & TOPOGRAPHIC SURVEY OF BLOCK 6601 LOT 1.01 PREPARED FOR BRISTOL-MYERS SQUIBB COMPANY, SITUATED IN LAWRENCE TOWNSHIP, MERCER CO., NJ" PREPARED BY KENNETH R. RAIKE OF VAN NOTE-HARVEY

MAP ENTITLED, "SITE PLAN OF LANDFALL SUBDIVISION FOR DESIGN INTERFACE, LAWRENCE TOWNSHIP, MERCER CO. NJ"

ON THE GROUND BY T&M ASSOCIATES, THROUGH MAY, 2022. HORIZONTAL DATUM IS NEW JERSEY STATE PLANE

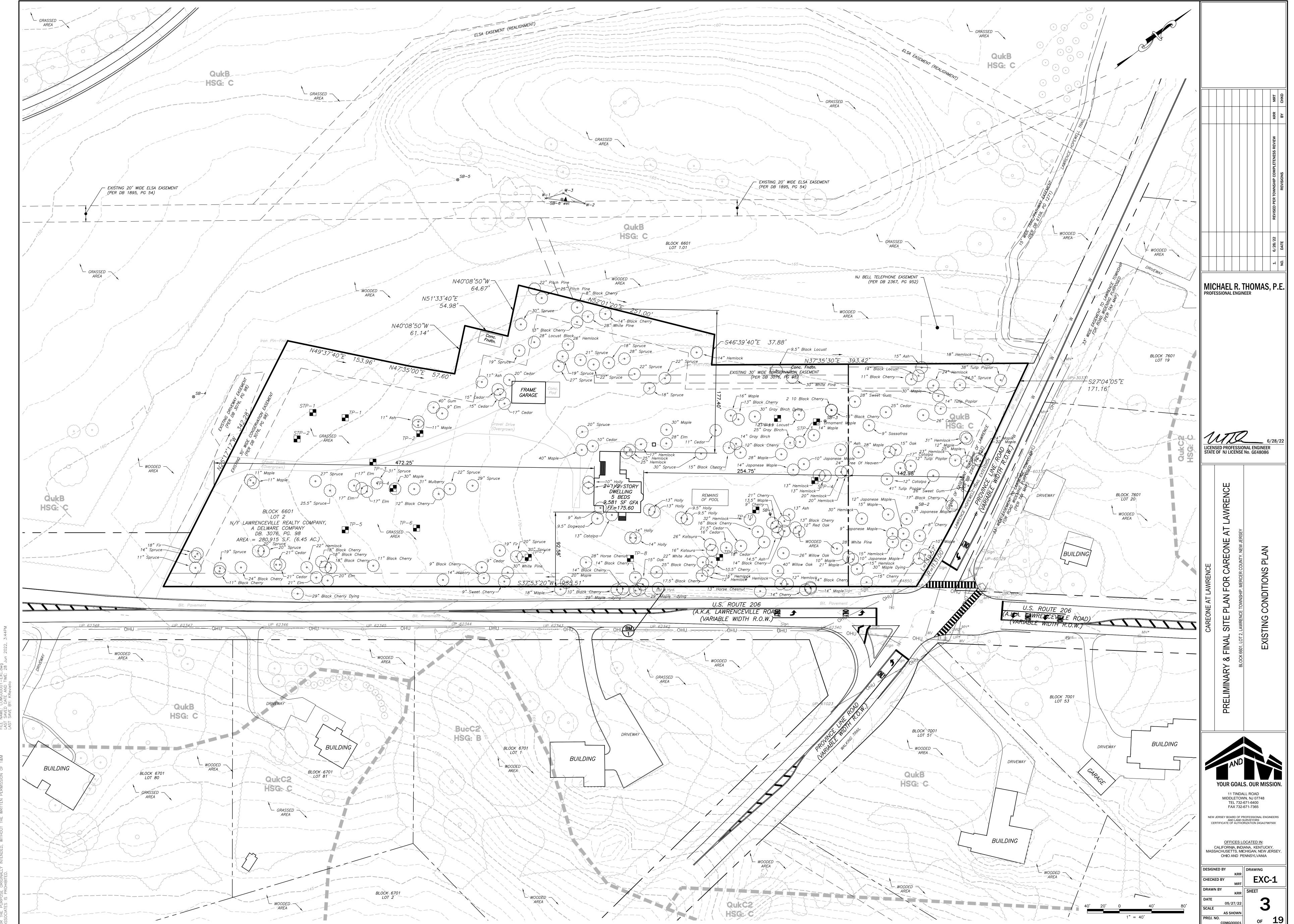
COORDINATE (N.A.D. 1983), VERTICAL DATUM IS NORTH AMERICAN VERTICAL DATUM (N.A.V.D. 1988).

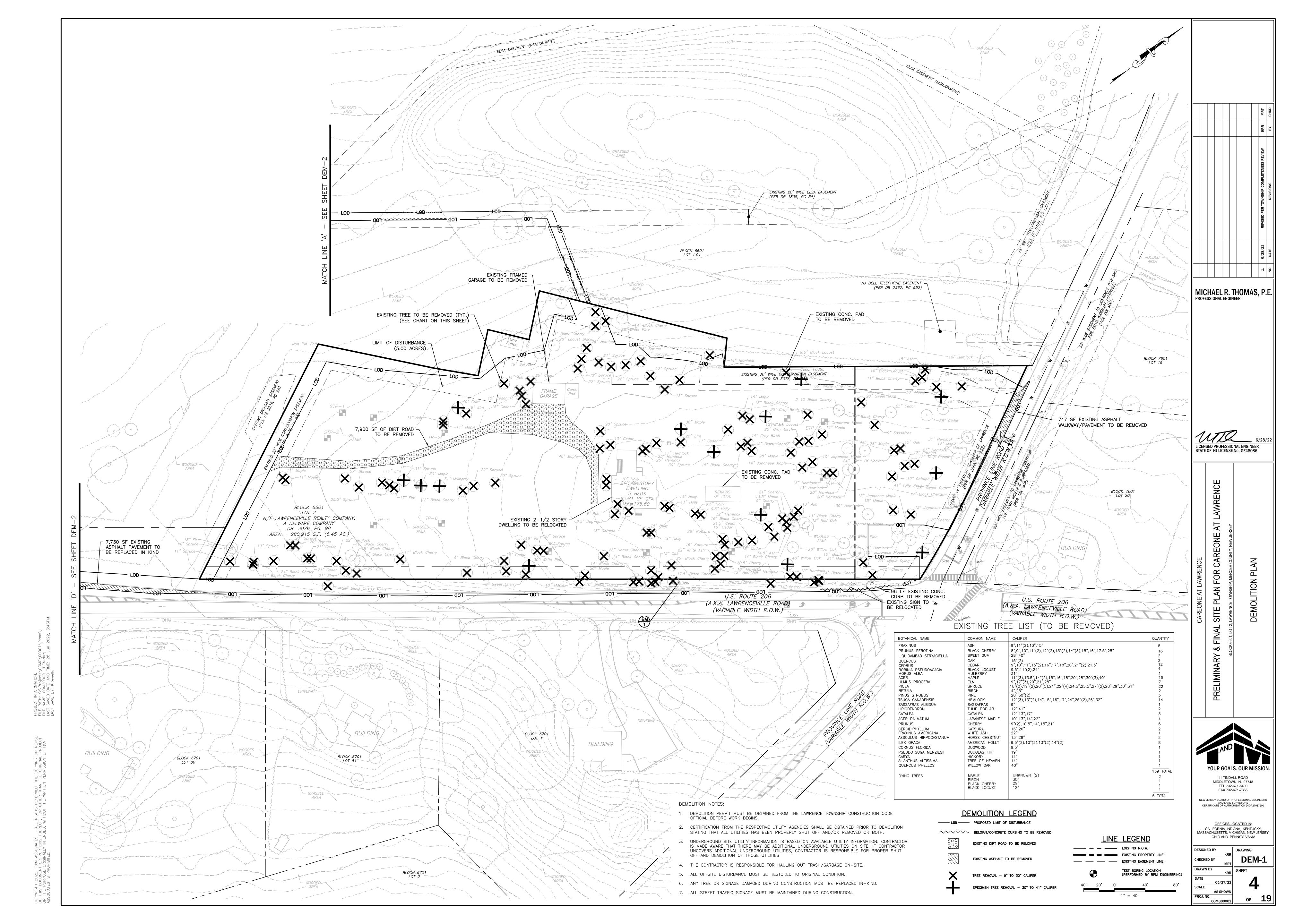
BY ROBERT M. HORVATH OF BRUNSWICK SURVEYING INC., DATED JUNE 7, 2006.

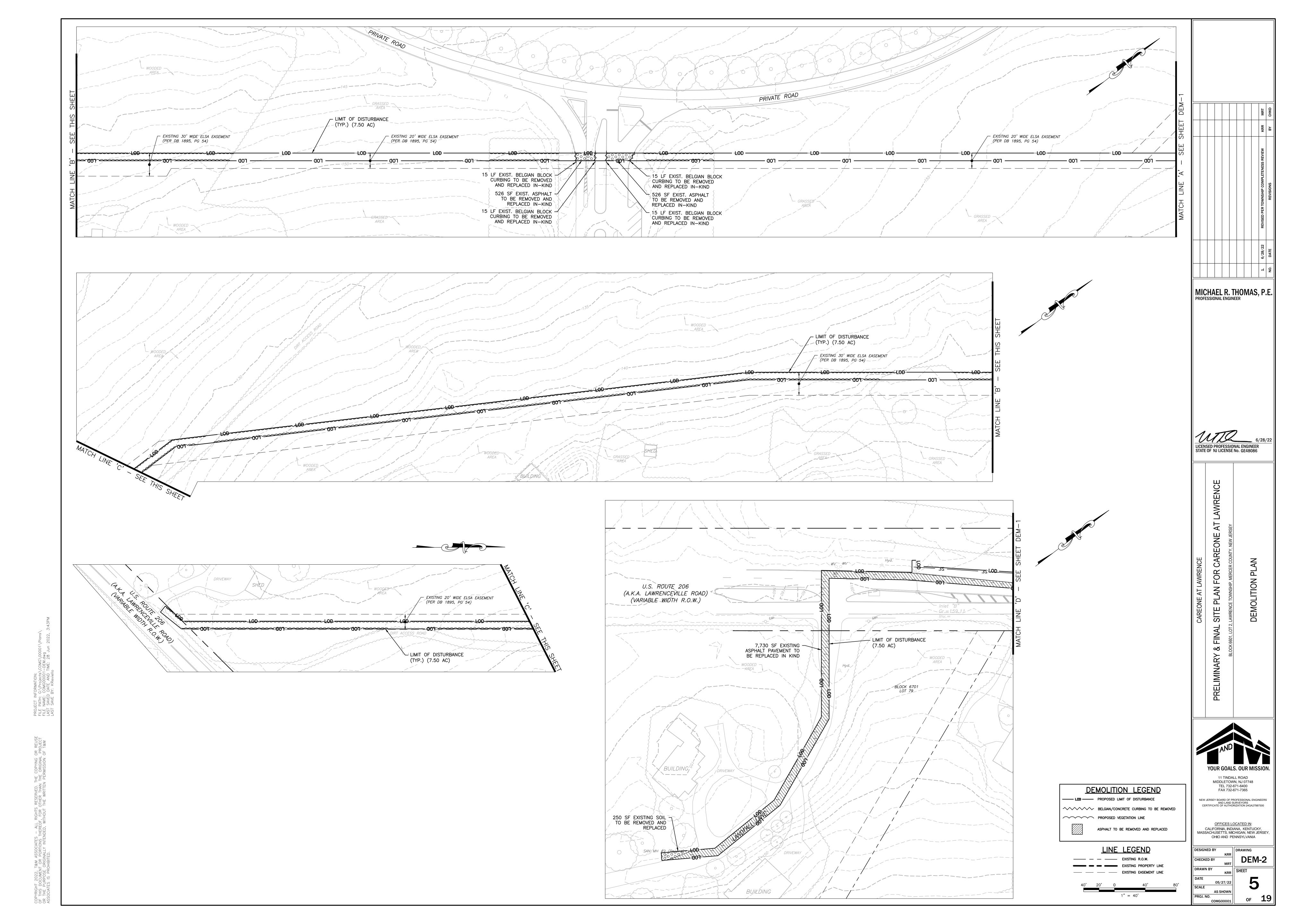
1994, PREPARED BY JOHN M. DURA, P.L.S.

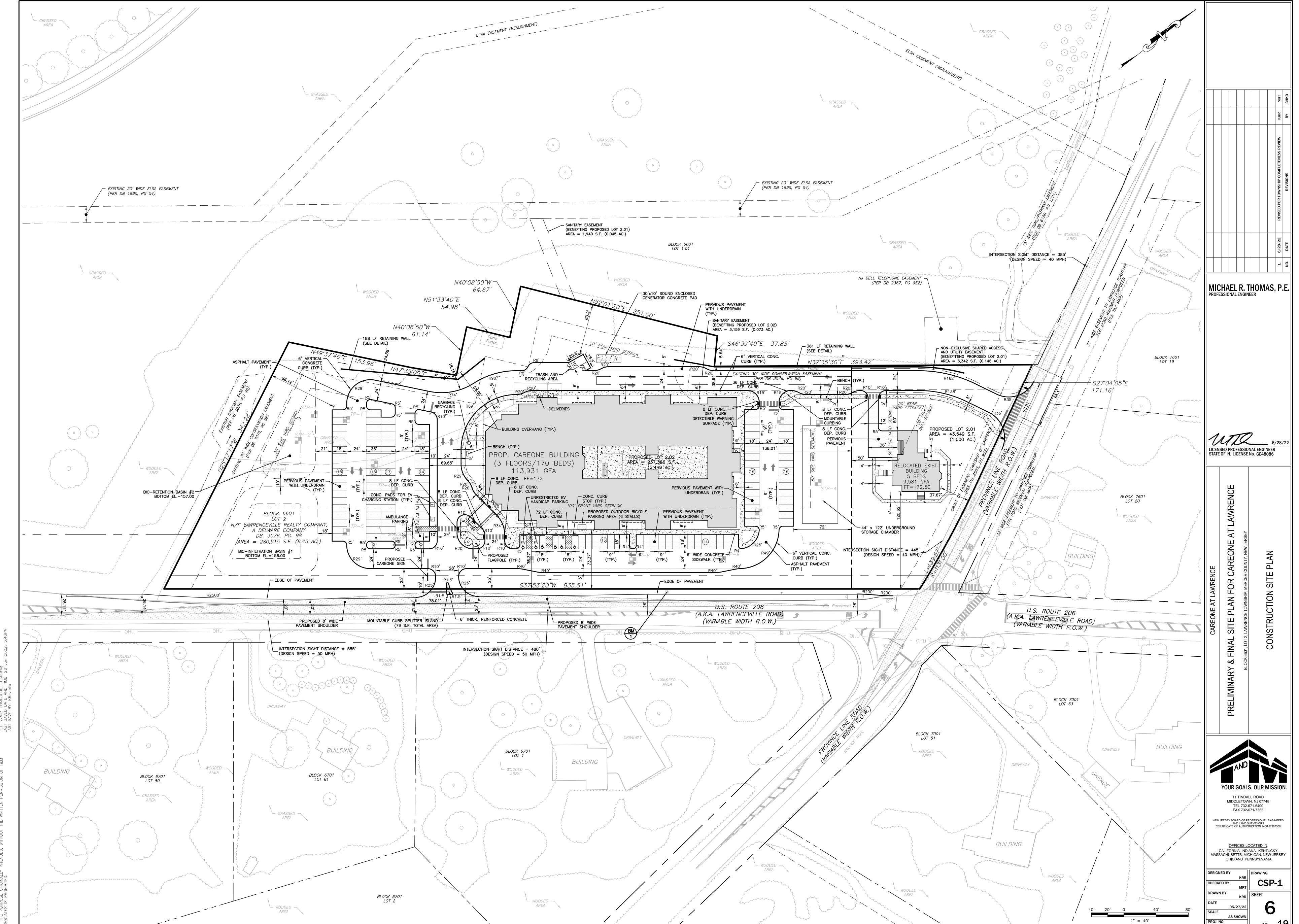
ASSOCIATES, INC., REVISED THROUGH SEPT. 11, 2017.

DRAWN BY

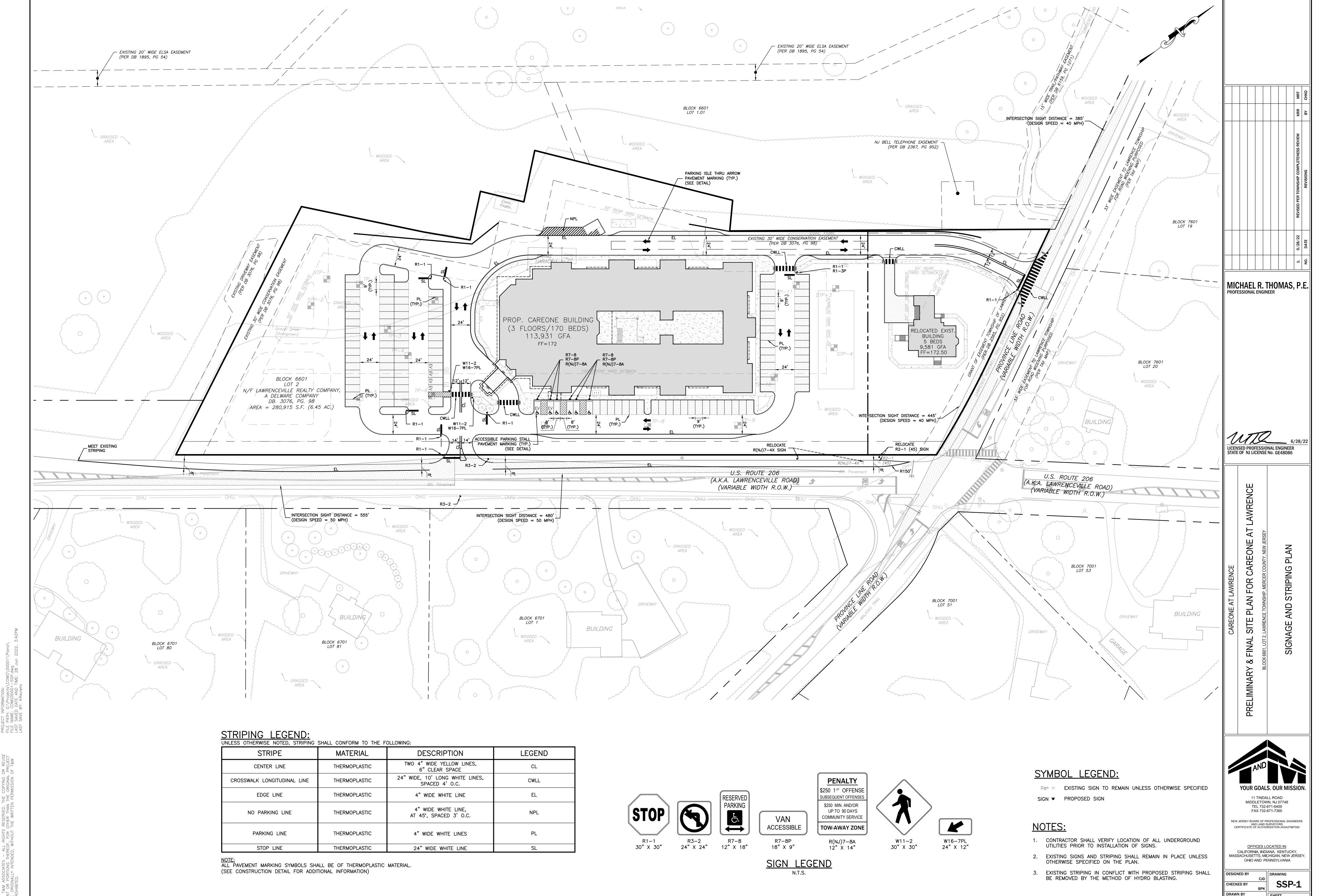








PROJECT II FILE PATH: FILE NAME: LAST SAVEI LAST SAVE

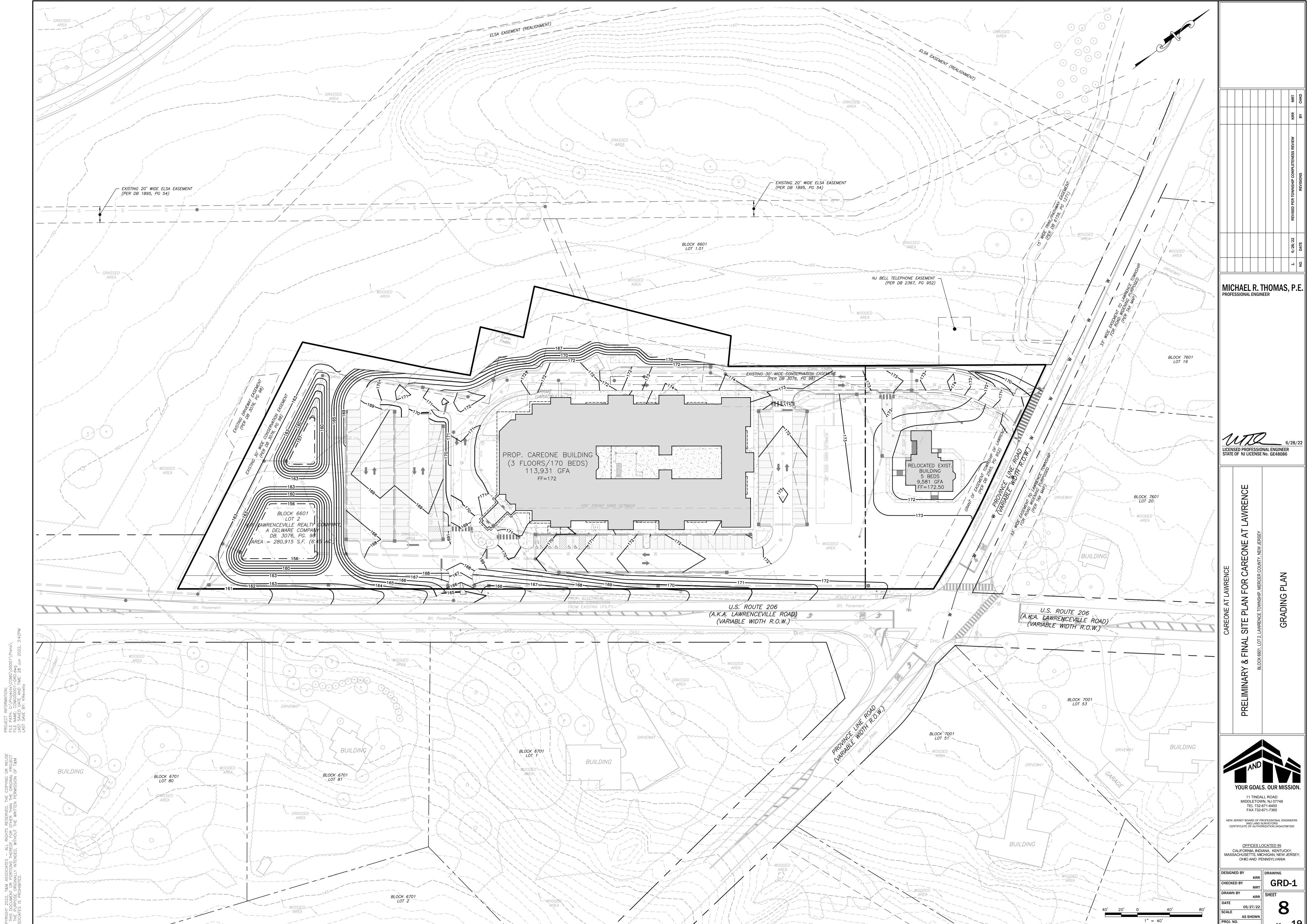


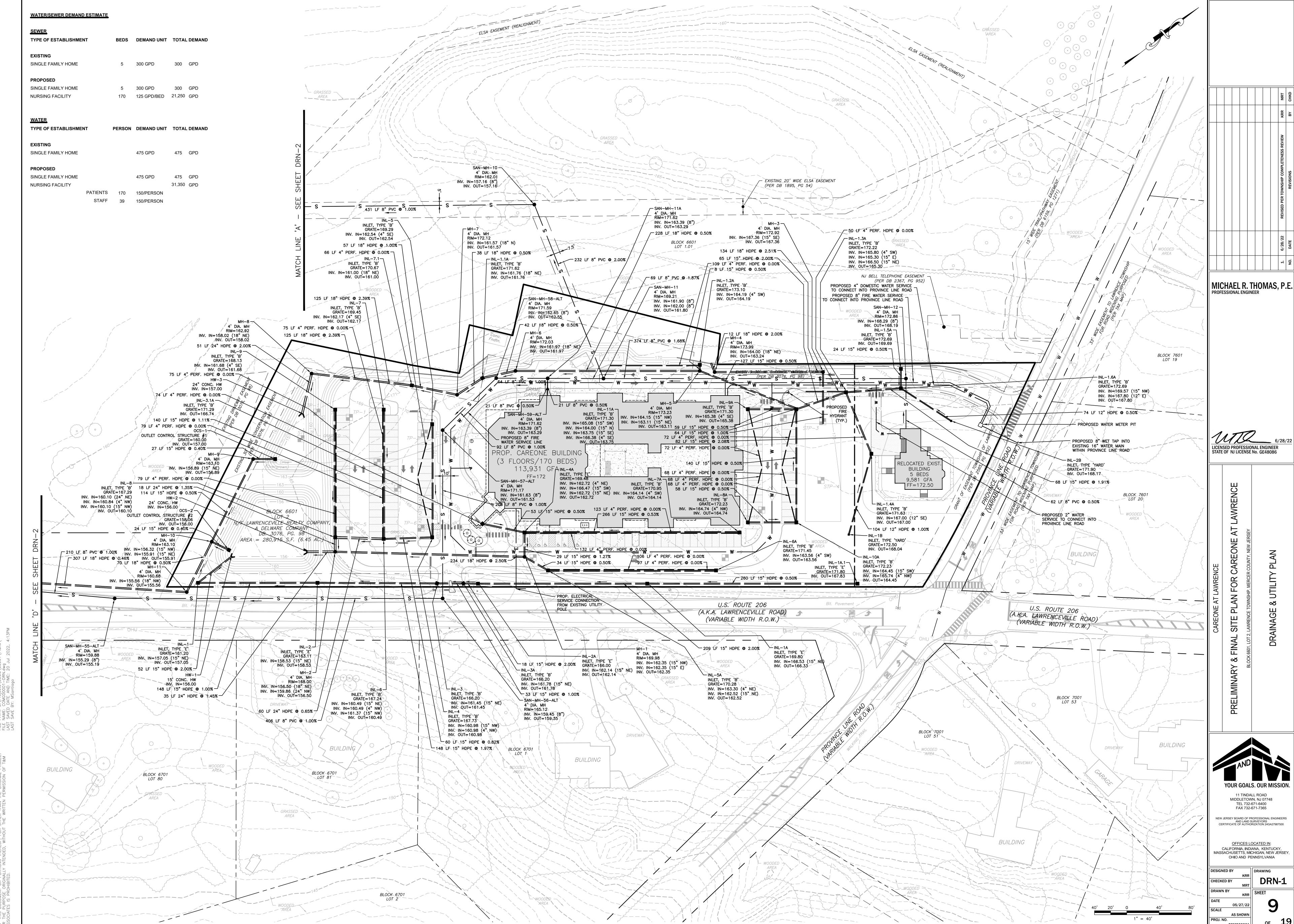
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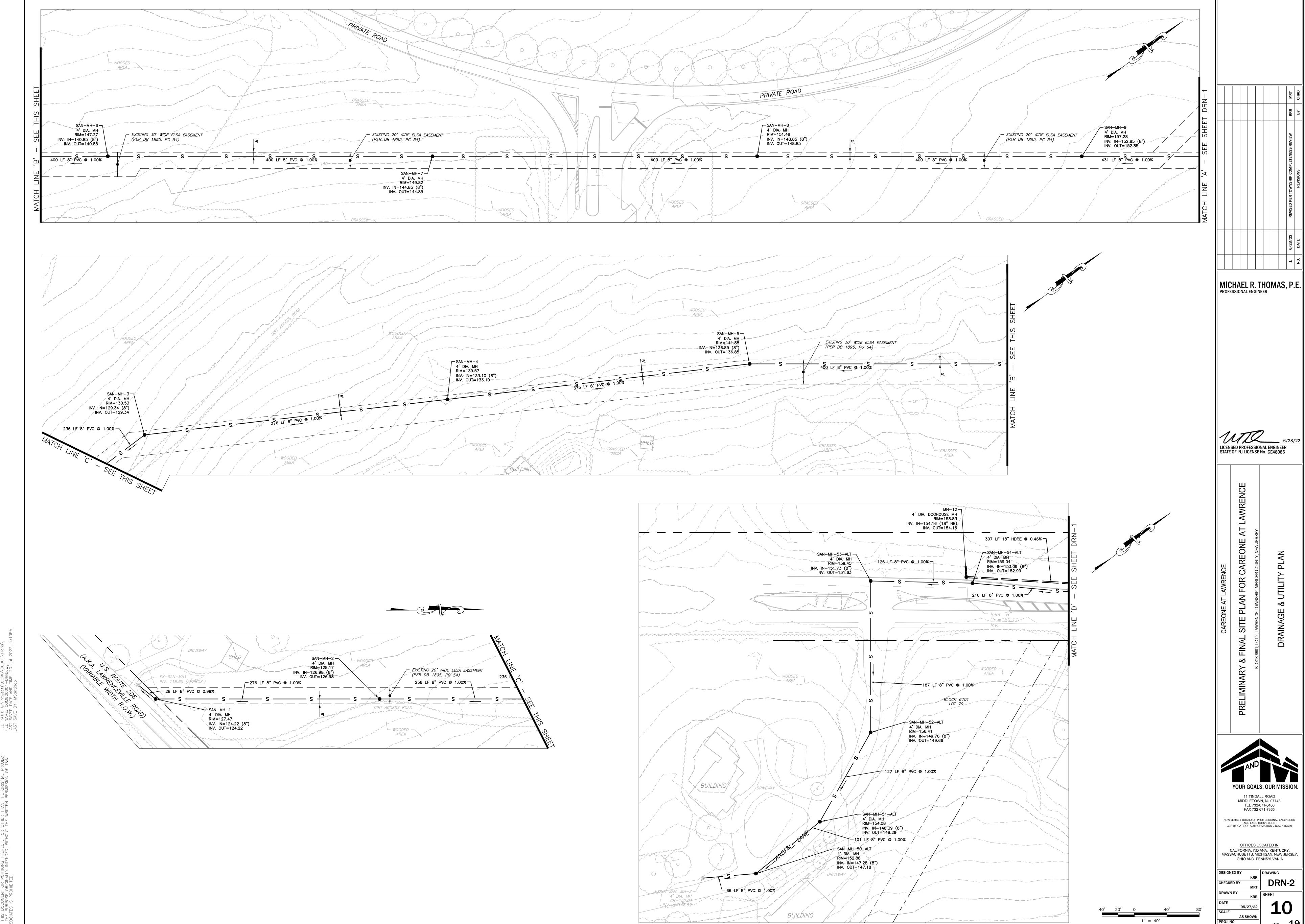
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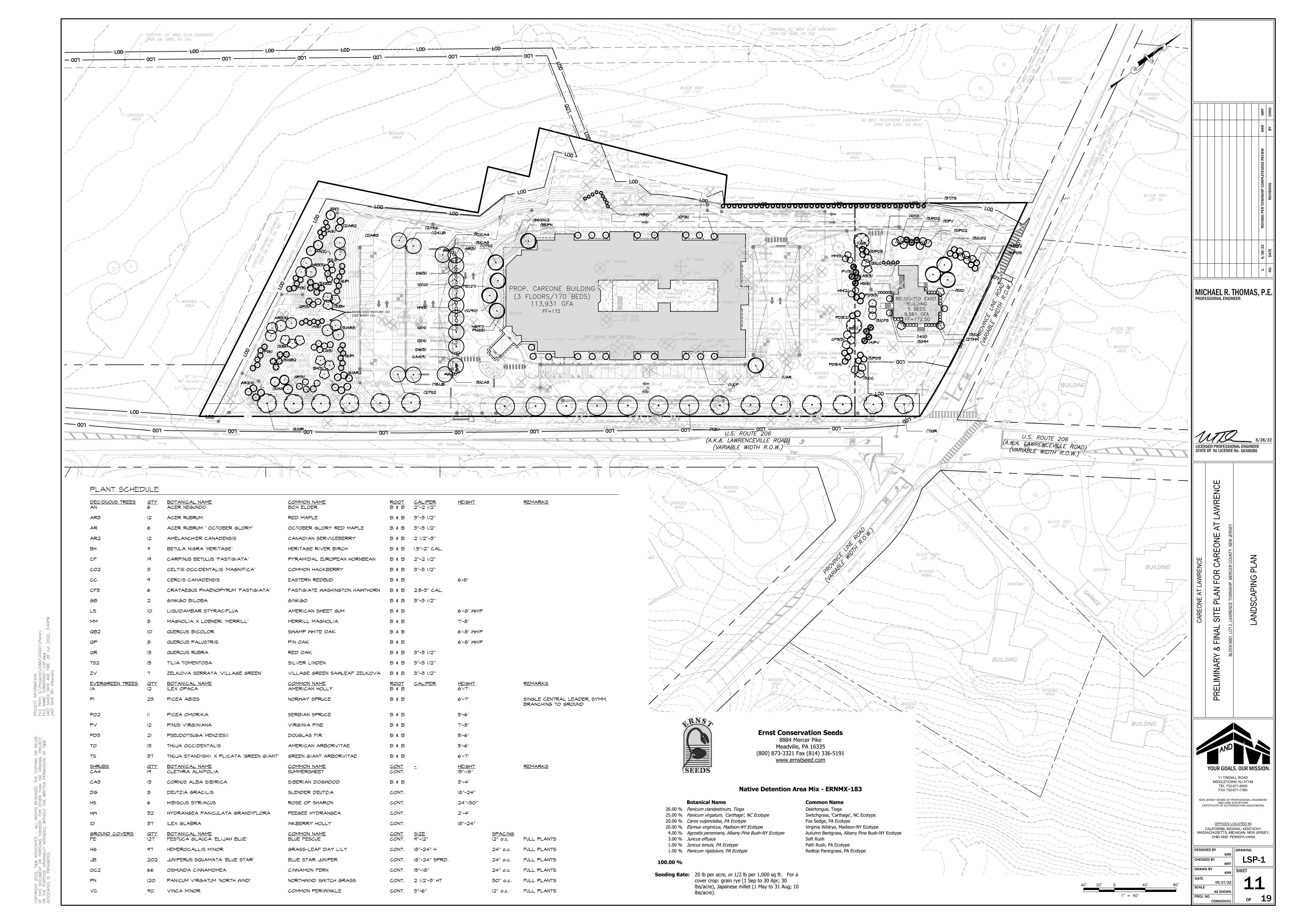
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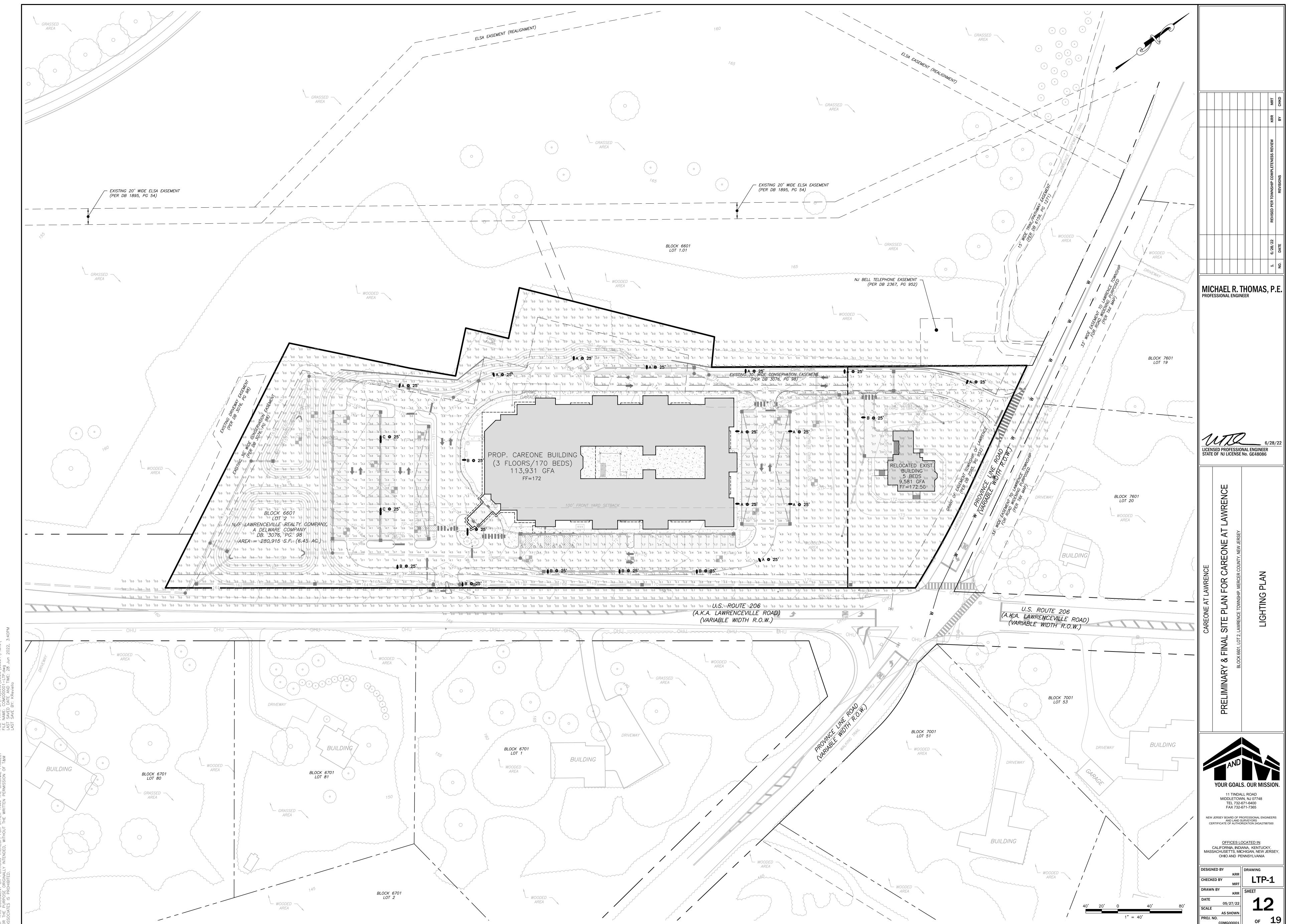
AS SHOWN

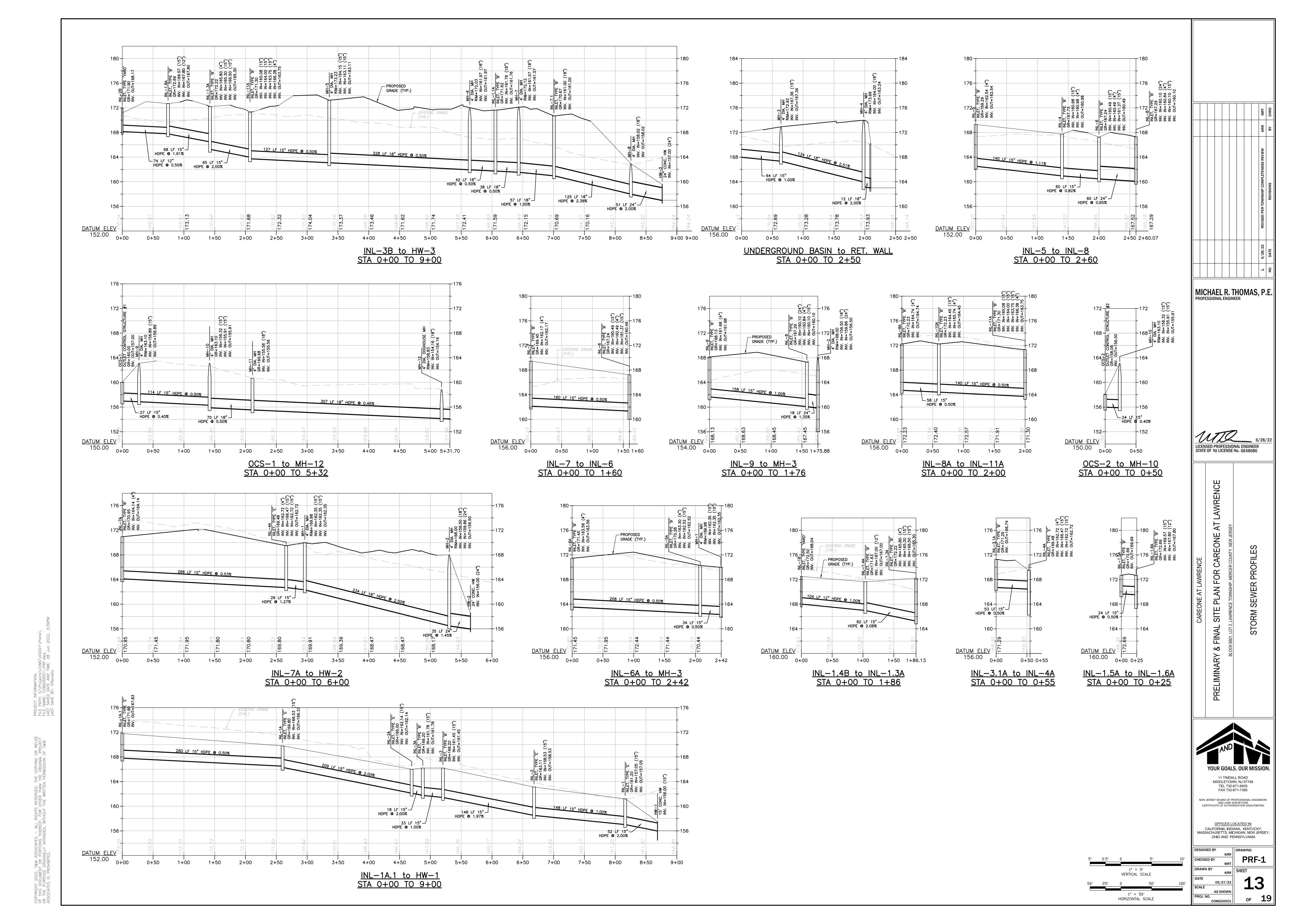


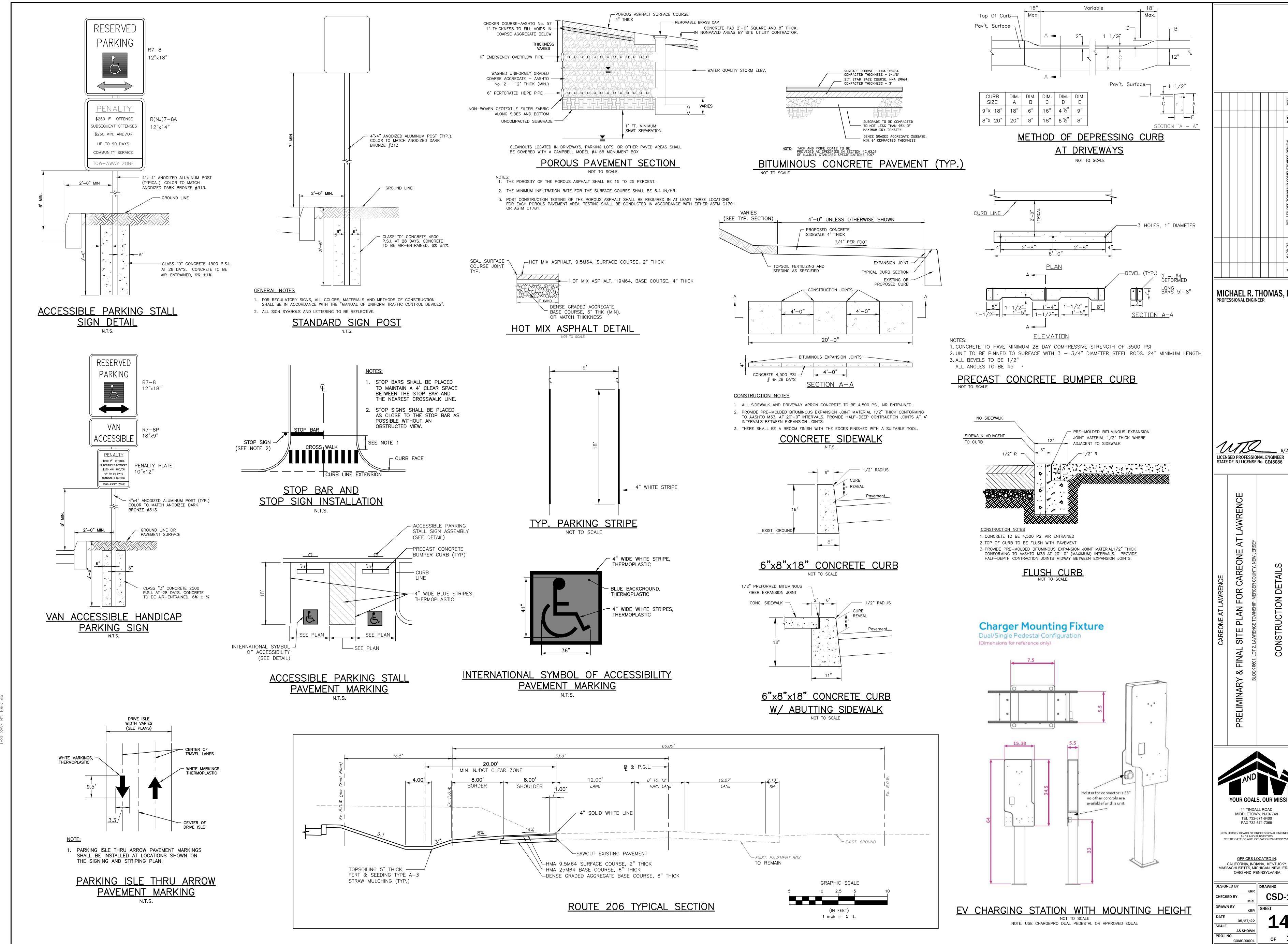












MICHAEL R. THOMAS, P.E. PROFESSIONAL ENGINEER

**AS SHOWN** 

11 TINDALL ROAD MIDDLETOWN, NJ 07748 TEL 732-671-6400

FAX 732-671-7365 NEW JERSEY BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS CERTIFICATE OF AUTHORIZATION 24GA27987500

OFFICES LOCATED IN: CALIFORNIA, INDIANA, KENTUCKY, MASSACHUSETTS, M**I**CHIGAN, NEW JERSEY. OHIO AND PENNSYLVANIA

05/27/22



VITRIFIED BRICK INVERT - (SPLIT PIPE MAY BE MANHOLE JOINTS TO BE MORTARED -USED FOR STRAIGHT THRU MANHOLES ON INSIDE AND OUTSIDE SURFACES GENERAL NOTES INVERT TO BE NJDOT 1. MANHOLE FRAME AND COVER TO BE CAMPBELL FOUNDRY NO. 3193 TYPE "A" w/ 1/2" x 1/2" OPENINGS, OR APPROVED EQUAL. CLASS 'C' CONCRETE 2. IF WALLS ARE OTHER THAN CONCRETE, THE WALLS SHALL BE PLASTERED INSIDE AND OUTSIDE WITH 1/2" THICK CEMENT PLASTER. ¹<mark>→ →</mark> 12" ALL AROUND AREA OF REINFORCING STEEL <u>SECTION - MANH</u>OLE FRAME 3. FOOTER AND INVERT TO BE N.J.D.O.T. CLASS "C" CONCRETE. = 0.12 SQ. IN. / L.F. 4. IF INLET DEPTH IS GREATER THAN 30", ALUMINUM LADDER RUNGS MANHOLE COVERS AND FRAMES SHALL BE: 12" COARSE ARE TO BE PROVIDED 18" O.C. FILTER FABRIC -AGGREGATE LAYER STANDARD (HEAVY TRAFFIC TYPE) 5. ALL CONCRETE TO BE AIR ENTRAINED, 6% ±1%. SECTION A-A CAMPBELL FOUNDRY COMPANY -----PATTERN NO. 1203, OR EQUAL. CONSTRUCTION NOTES: W/ FLOW SEAL COVER WATERTIGHT 1. PRECAST MANHOLE SECTIONS TO BE IN ACCORDANCE WITH LATEST ASTM DESIGNATION C-478, MINIMUM COMPRESSION STRENGTH TO BE 4000 PSI CAMPBELL FOUNDRY COMPANY -----PATTERN NO. 1502, OR EQUAL. 2. FLEXIBLE RUBBER BOOT SHALL BE USED FOR CONNECTION OF PVC PIPE TO MANHOLE. LOCKING TYPE CAMPBELL FOUNDRY COMPANY -----PATTERN NO. 1487, OR EQUAL. 3. PRECAST CHANNELS SHALL NOT BE USED FOR BENDS GREATER THAN 45°. POURED CONCRETE LONG RADIUS CHANNELS SHALL BE CONSTRUCTED. STORM MANHOLE FRAME AND COVER PRECAST SANITARY MANHOLE CAMPBELL "BICYCLE SAFE" PATTERN #3425 DOUBLE GRATE OR APPROVED EQUAL (2) #6 DEFORMED BARS, LENGTH= 1-1/2" x DIAMETER OF PIPE MANHOLF FRAME AND COVER ABOVE (INLET END ONLY) MANHOLE FRAME AND COVER ESTABLISHED IN FIELD ا کیا FLAT CONCRETE APRON-6" -THICK DISHED CONCRETE APRON FOR INLET END ONLY FRAME TO BE THOROUGHLY BEDDED IN MORTAR TO BE CARRIED TO FIRM 1'-6" FOR DIAMETERS UP TO 40" SECTIONAL PLAN BEARING BELOW FROST LINE 1/3 H FOR DIAMETERS OVER 40" - AREA OF CIRCUMFERENTIAL **ELEVATION** STEEL = 0.12 SQ. IN/LN. FT. DIAMETER AS 4000 PSI. CONCRETE SPECIFIED 4' MIN. 4000 PSI. CONC. FILL ALUMINUM LADDER CONCRETE AND ROUND RUBBER RUNGS @ 12" O.C GASKET JOINT IN ACCORDANCE HEADWALLS IN CUBIC YARDS WITH ASTM DESIGNATION C-923 8"(0'-10" DEEP) REINFORCED CONCRETE CONC. WALLS FOR APRONS 12" | 1.73' | 2.00' | 3.00' | 2.00' | 1.4 C.Y. 0.2 C.Y. 8" MIN. 3/4" STONE MANHOLE JOINTS TO BE MORTARED ON INSIDE OF OUTSIDE SURFACES 15" | 2.17' | 2.50' | 3.75' | 2.25' (TYP.) ALL INLETS 1.7 C.Y. 0.2 C.Y. 18" | 2.60' | 3.00' | 4.50' | 2.50' | 2.1 C.Y. CLASS 'C' CONCRETE 21" | 3.03' | 3.50' | 5.25' | 2.75' | 2.5 C.Y. | 0.4 C.Y. AREA OF REINFORCING STEEL 24" | 3.46' | 4.00' | 6.00' | 3.00' | 2.9 C.Y. | 0.5 C.Y. = 0.12 SQ. IN./L.F. 30" | 4.33' | 5.00' | 7.50' | 3.50' 3.8 C.Y. 0.7 C.Y. 12" COARSE AGGREGATE LAYER AS DIRECTED 36" | 5.19' | 6.00' | 9.00' | 4.00' 4.8 C.Y. SECTION A-A 42" | 6.06' | 7.00' | 10.50' | 4.50' | **GENERAL NOTES CONSTRUCTION NOTES** 12.00' | 5.00' ALL EDGES TO BE CHAMFERED 1". 1. PRECAST MANHOLE SECTIONS TO BE ON ACCORDANCE WITH LATEST ASTM SPECIFICATION ASTM C-473 | 7.79' | 9.00' | 13.50' | 5.50' | 10.7 C.Y. WITH RUBBER GASKET JOINTS, CONFORMING TO ASTM SPECIFICATION C-923. MAXIMUM ADSORPTION TO 2. CONCRETE TO BE N.J.D.O.T. CLASS "C". 60" | 8.65' | 10.00' | 15.00' | 6.00' | BE 8% IN ACCORDANCE WITH ASTM SPECIFICATION C-478. 13.4 C.Y. 3. APRONS TO BE 6" THICK CONCRETE, FLAT AT 2. MINIMUM COMPRESSION STRENGTH TO BE 4000 PSI. 66" | 9.52' | 11.00' | 16.50' | 6.50' | 16.4 C.Y. OUTLET END, DISHES AT INLET END. PRECAST DRAINAGE MANHOLE | 10.38' | 12.00' | 18.00' | 7.00' | 19.9 C.Y. 4. EXPOSED PORTIONS OF WALL TO BE RUBBED AND FLOATED. 19"x30" | 4.33' | 5.00' | 7.50' | 2.58' | 3.9 C.Y. 5. FOR ARCH PIPE, THE SPAN SHALL BE SUBSTITUTED FOR D. <u>CONCRETE HEADWALI</u> 3/4" ALUMINUM -ROUND STOCK **GENERAL NOTES** SUITABLE FOR BACKFILL. CURB OR EDGE OF PAVEMENT - PROPERTY LINE REQUIRED. CURB BOX SPACED AS REQUIRED - 1" CORPORATION STOP -1/4" x 2" ALUMINUM BAR STOCK 1. ALL JOINTS SHALL BE WELDED 2. TRASH RACK SHALL BE ABLE TO WITHSTAND PERPENDICULAR LIVE LOAD OF 300 PSF AND BE CONSTRUCTED OF RIGID, DURABLE, AND CORROSION 3. OVERFLOW GRATE SHALL BE SECURED TO THE OUTLET STRUCTURE BUT REMOVABLE FOR EMERGENCIES AND MAINTENANCE. D.I.P. DISTRIBUTION MAIN 4. TRASH RACK BARS SHALL BE PARALLEL AND HAVE 1" SPACING. ACCESS FOR INSPECTION WATER SERVICE CONNECTION TRASH RACK DETAIL CONCRETE -SPLASH PAD BASINS 1 AND 2 NOT TO SCALE LONG RADIUS WYE STORM DRAIN
COLLECTION SYSTEM PIPE
AS SHOWN SPECIFIED HEREIN CLEANOUT PROFILE 1. CLEAN-OUTS IN DRIVEWAYS SHALL BE COVERED WITH A MONUMENT BOX -CAMPBELL PATTERN NO. 4155 OR EQUAL. 2. SEE ARCHITECTURAL PLANS FOR ROOF DRAIN PIPING WITHIN BUILDING TO 5' OUTSIDE OF BUILDING. ROOF DRAIN COLLECTION SYSTEM

RAISED NON-SKID

RECTANGULAR LUGS

PENETRATING PICK HOLE

FULLY SET CASTING IN -

MORTAR, ALL AROUND

(2 TOTAL)

PLAN - MANHOLE FRAME

LATEST ASTM A-48 CLASS 30 SPECIFICATION AND BE SUITABLE FOR

3. THE MANHOLE FRAME SHALL HAVE A MINIMUM OVERALL HEIGHT OF 8"

1. MANHOLE FRAME AND COVER CASTINGS SHALL CONFORM TO THE

2. FRAME AND COVERS SHALL BE COATED WITH TWO COATS OF

4. THE MANHOLE COVER THICKNESS SHALL BE A MINIMUM OF 2"

GENERAL NOTES

HJ-20 LOADING CAPACITY.

ASPHALTUM VARNISH

| - - - - - - - - - -

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2'-0" SQUARE

MANHOLE FRAME AND COVER ABOVE

MANHOLE FRAME AND COVER AS SPECIFIED—SEE DETAIL

DIAMETER AS

SPECIFIED 4' MIN.

SECTIONAL PLAN

2 COATS BITUMASTIC —

8 MIL / COAT

PIPE IN AND OUT OF MANHOLE TO BE

BEDDED IN STONE, OR AS ORDERED

CONCRETE AND ROUND RUBBER -

GASKET JOINT IN ACCORDANCE WITH ASTM DESIGNATION C-443

BY ENGINEER.

FRAME TO BE

THOROUGHI Y

- AREA OF CIRCUMFERENTIAL

- ALUMINUM MANHOLE

STEPS, 12" O.C.

STEEL = 0.12 SQ. IN/LN. FT.

BEDDED IN

MORTAR

SUITABLE EXCAVATED MATERIAL OR SELECT FILL AS DIRECTED CONCRETE PAD 2'-0" SQUARE AND -BY THE ENGINEER COMPACTED 8" THICK IN NON-PAVED AREAS TO 95% DENSITY BY SITE UTILITY CONTRACTOR SEE PLANS FOR PIPE MATERIAL MAGNETIC TAPE EXTENDING 2' (DIA., D) BELOW GRADE MUST BE WRAPPED N.J.D.O.T. COARSE AGGREGATE AROUND EACH CLEANOUT No. 57 COMPACTED TO 95% MAX. DENSITY 6"-1/8" BEND -─ UNDISTURBED SUBGRADE 2% MINIMUM SLOPE FOR 4" LATERALS 45° STANDARD T-WYE 1% MINIMUM SLOPE FOR 6" LATERALS SIZE AS REQUIRED GENERAL NOTE N.T.S. IN PRECAST STRUCTURES, STEPS SHALL BE DRIVEN INTO WET CONCRETE WALL DURING MANUFACTURE. 4~→ POLYPROPYLENE

**GENERAL NOTES** 

HS20 LOADING.

\_\_\_\_

\_\_\_\_

SECTION B-B

TERMINAL INVERT DETAIL

1. ALL CASTINGS MUST INCLUDE "US-1" OR OTHER

AND ARE SUBJECT TO THE APPROVAL OF THE TOWNSHIP ENGINEER PRIOR TO INSTALLATION.

3. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTING ADEQUATE BALLAST TO OFFSET

4. ALL REINFORCEMENT IS SUBJECT TO ENGINEER

INDICATION OF U.S. MADE STEEL IN RAISED LETTERING

. ALL INLET STEPS SHALL BE FABRICATED OF NON-SLIP

FLOATATION FORCES ACTING ON INLETS INSTALLED IN

APPROVAL BEFORE CONSTRUCTION. (BLOCK MANHOLE

SECTION B-

ALUMINUM, STEEL, OR STEEL REINFORCED PLASTIC.

GENERAL NOTES

WET AREAS.

SET CASTING IN -

0.8 PIPE -

INLET, TYPE 'E'

1" MORTAR BED

INLET, TYPE 'B'

 $\leftarrow$  - - - - - + -

L\_\_\_\_\_\_\_

SECTION A-A

PROVIDE 4" TOPSOIL AND SEEDING FOR

REFER TO PAVEMENT DETAIL FOR

TRENCH THROUGH PAVEMENT AREAS

TRENCH THROUGH GRASSED AREAS

DRAINS TO WATERWAY

└─ COORDINATE

- 6" IF CONCRETE OR CONCRETE BLOCK

8" IF CONCRETE BRICK

SECTION A-A

THROUGH INVERT DETAIL

MORTAR ·

WALLS & BASE

COMPACTED SELECT

FILL ALL SIDES

LOCATION POINT

1. FOOTER AND INVERT TO BE 2500 PSI CONCRETE @ 28 DAYS.

2. IF WALL CONSTRUCTION OTHER THAN CONCRETE THE WALLS SHALL BE PLASTERED OUTSIDE WITH 1/2" THICK CEMENT

3. CASTING TO BE CAMPBELL FOUNDRY NO. 2618 TYPE 'N -

5. WHEN ADDITIONAL DEPTH IS SCHEDULED WALLS BELOW THE

6. IF STRUCTURE IS PRECAST, SHALL BE CONSTRUCTED FOR

DEPTH OF 8'-0" MEASURED FROM THE INLET GUTTER TO

INVERT, SHALL BE 12" THICK IF CONCRETE OR DOUBLE BLOCK

IF BLOCK. THE FOUNDATION DIMENSION SHALL BE INCREASED

- 2500 PSI CONCRETE TO BE POURED WHEN

INLET IS COMPLETE

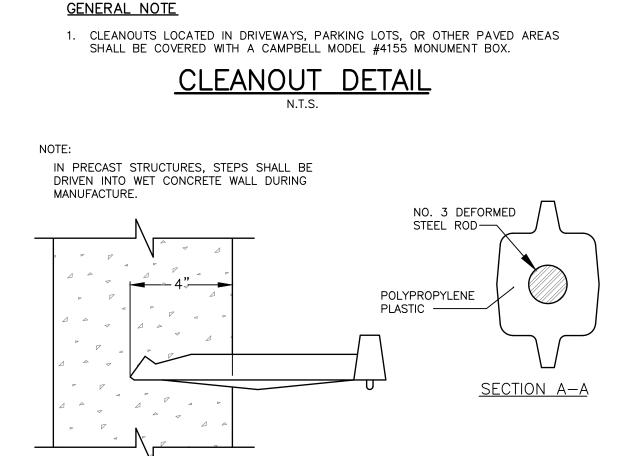
CRUSHED

STONE

ECO' WITH SAFETY GRATE OR EQUIVALENT.

4. PROVIDE ALUMINUM LADDER RUNGS 18" O.C.

12" IN WIDTH AND TO 12" IN DEPTH.



SANITARY SEWER LATERAL DETAIL

1. DETAIL SHOWS CONSTRUCTION OF A "BRANCH CONNECTION" AND OF TWO DIFFERENT

2. SIZE OF LATERAL TO BE AS SHOWN ON THE PLANS OR AS DIRECTED, 4" MINIMUM.

3. CLEAN-OUTS IN DRIVEWAYS SHALL BE COVERED WITH A MONUMENT BOX -

TYPES OF "LATERAL CONNECTION". TYPE CONNECTION IS AT CONTRACTOR'S OPTION.

12" ALL AROUND

30" MAX.

WORD "WATER" ───

ROADWAY —

C.I. VALVE BOX-

POURED CONCRETE

DETAIL FOR SIZES

THRUST BLOCK - SEI

BEARING ON

6" OR 8" D.I.P

SPECIFIED ON

WATER MAIN AS-

CONSTRUCTION NOTES:

DETAIL FOR THRUST BLOCKS.

CONSTRUCTION NOTES:

WASTEWATER, 1975").

STANDARD DETAIL FOR THRUST BLOCKS.

CONTRACTOR SUBJECT TO ENGINEER'S APPROVAL.

5. ALL CONNECTIONS AND FITTINGS TO BE MECHANICAL JOINT.

CUT SHEET) OR COATED WITH A BITUMINOUS MATERIAL.

- UNDISTURBED GROUND

12" TYPICAL

(VARIABLE)

WHERE SHOWN

TIE RODS (3/4" MIN.)—

6" THK. STONE BEDDING

BENEATH ALL VALVES

AND FITTINGS

1. CONCRETE FOR THRUST BLOCKS SHALL CONFORM TO THE STANDARD

2. SIZE AND BEARING AREA FOR THRUST BLOCKS SHALL CONFORM TO THE

3. FINISH PAINTING AND MARKING SHALL BE DESIGNATED ON THE PLANS OR

CONTRACT DOCUMENTS OR SHALL BE AS DIRECTED BY THE ENGINEER.

6. MECHANICAL RESTRAINT COMPONENTS MUST BE CORROSION RESISTANT (PROVIDE

FIRE HYDRANT

THRUST BLOCK TABLE

HRUST BLOCK WITH UNDISTURBED EARTH (SQUARE FE

12.6

18.0

NOT TO SCALE

4. SPECIAL HYDRANT ARRANGEMENTS OR SETTINGS TO BE DETAILED BY

9.9

1. BEARING AREA FOR THRUST BLOCKS ARE BASED ON THE UNDISTURBED

ACCORDINGLY (FIG. 14, ASCE "PIPELINE DESIGN FOR WATER AND

2. ALL CONCRETE FOR THRUST BLOCKS SHALL BE NJDOT, CLASS C

BEAR ON THE UNDISTURBED WALL OF THE TRENCH.

5. ALL CONCRETE SHALL BE MINIMUM 4500 PSI,

45° BRANCH CONNECTION-

(DIAMETER AS SHOWN)

- 2" X 2" WOOD STAKE TO BE PLACED

/-CURB LINE

- END CAP OR CONNECTION

PAYMENT LIMIT FOR

LATERAL HOUSE CONNECTION

**CONSTRUCTION NOTES:** 

- SEE CLEANOUT PROFILE

WHERE LATERALS ARE NOT CONNECTED

√45° ELBOW

END CAP-

28 DAY COMPRESSIVE STRENGTH

AIR-ENTRAINED, 6% ±1%

SOIL WITH BEARING CAPACITY OF 1000 LBS. PER SQUARE FOOT. FOR

3. DIMENSIONS OF THRUST BLOCKS SHALL BE APPROXIMATELY SQUARE, AND THE THRUST BLOCKS SHALL BE POURED FORM FITTING SUCH THAT THEY

4. THE TABULATED CONTACT BEARING AREAS LISTED ARE FOR HORIZONTAL

AND DOWNWARD THRUST ONLY, AND ARE NOT APPLICABLE FOR UPWARD

THRUST BLOCKS

OTHER SOIL OF LESS BEARING CAPACITY, THE AREAS SHALL BE ADJUSTED

∠— 6″ GATE VALVE

- CONNECTIONS AS SPECIFIED 1-4 1'2"

HYDRANT TO HAVE

BREAK SECTION OR

HYDRANT MAKE TYPE

THRUST BLOCK — SEE - SELECT POROUS FILL

AND SIZE SPECIFIED

AROUND BARREL

POURED CONCRETE

DETAIL FOR SIZES

-BEARING ON

UNDISTURBED

GROUND

I CUBIC FOOT GRAVEL

OR BROKEN STONE DRAIN

REMOVABLE BARREL

**DESIGNED BY** 

- BRANCH CONNECTION SHALL BE PLACED ON NJDOT CLASS C CONCRETE CRADLE (4" MINIMUM THICKNESS) OR ON PROPER

BEDDING AS SPECIFIED HEREIN FOR

OF CURB-

PROPER BEDDING AS SPECIFIED

HEREIN FOR SANITARY SEWERS.

-NJDOT CLASS C CONCRETE CRADLE

SANITARY SEWERS.

-SANITARY SEWER LINE

- FILTER FABRIC

STONE BEDDING

UNDER STRUCTURES

OFFICES LOCATED IN: OHIO AND PENNSYLVANIA

CALIFORNIA, INDIANA, KENTUCKY,

DRAWING CHECKED BY 05/27/22 **AS SHOWN** 

<u>INSTALLATION</u>

NOT TO SCALE

POLYPROPYLENE STEP DETAIL



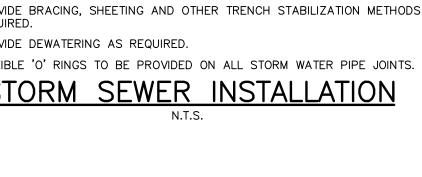
# 1. THE ENGINEER SHALL DETERMINE WHETHER THE EXCAVATED MATERIAL IS

2. ALL EXCAVATED MATERIALS FROM THE UTILITY TRENCH SHALL BE STOCKPILED

A MINIMUM DISTANCE EQUAL TO THE TRENCH DEPTH FROM THE TRENCH WALL. 3. PROVIDE BRACING, SHEETING AND OTHER TRENCH STABILIZATION METHODS AS

# 4. PROVIDE DEWATERING AS REQUIRED.

# 5. FLEXIBLE 'O' RINGS TO BE PROVIDED ON ALL STORM WATER PIPE JOINTS.

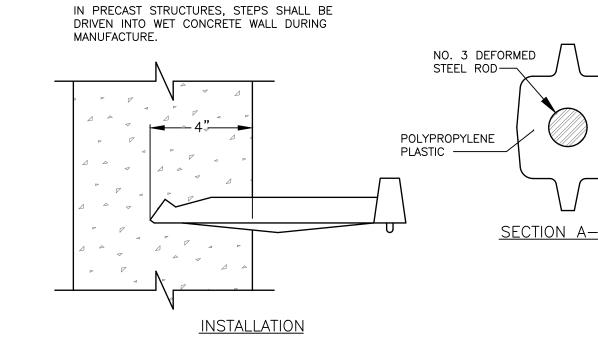


SLOTTED CAP FOR OVERFLOW

LONG RADIUS WYE 6" LATERAL AS ———

SPECIFIED HEREIN

DOWNSPOUT PROFILE



4. SEE ARCHITECTURAL PLANS FOR LATERALS AND CLEANOUTS WITHIN BUILDING, AND TO 5' OUTSIDE OF BUILDING. 5. MAGNETIC TAPE EXTENDING 2' BELOW GRADE SHALL BE WRAPPED AROUND EACH 6. SANITARY SEWER LATERALS SHALL BE INSTALLED AT A MINIMUM DEPTH OF THREE FEET TO THE TOP OF PIPE. 7. SANITARY SEWER LATERALS SHALL BE CONSTRUCTED AT A 2% MINIMUM SLOPE

CAMPBELL PATTERN NO. 4155 OR EQUAL.

COARSE AGGREGATE NO. 57 (3/4" CLEAN STONE), 12" THK.

11 TINDALL ROAD MIDDLETOWN, NJ 07748 TEL 732-671-6400 FAX 732-671-7365

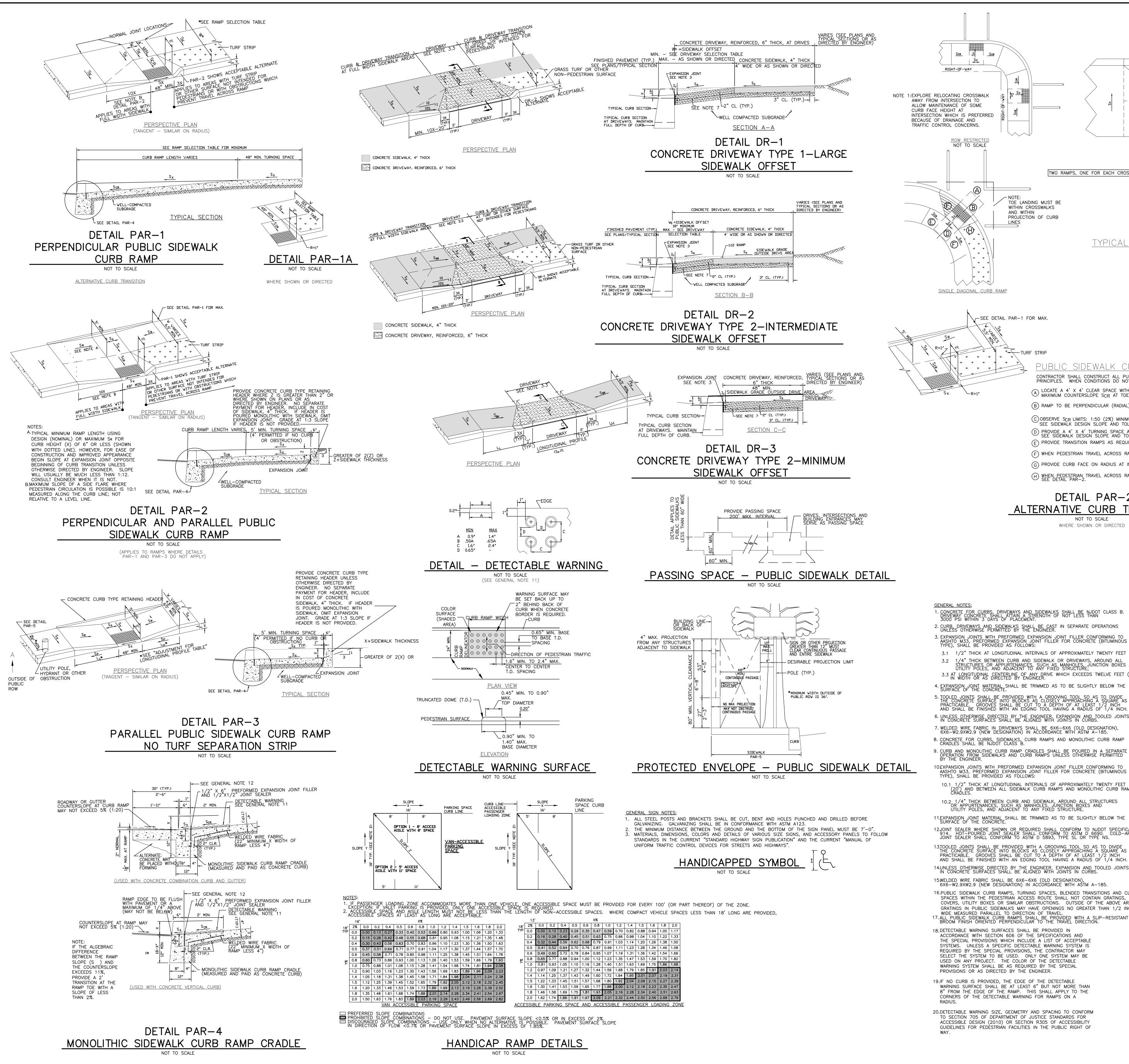
NEW JERSEY BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS CERTIFICATE OF AUTHORIZATION 24GA27987500

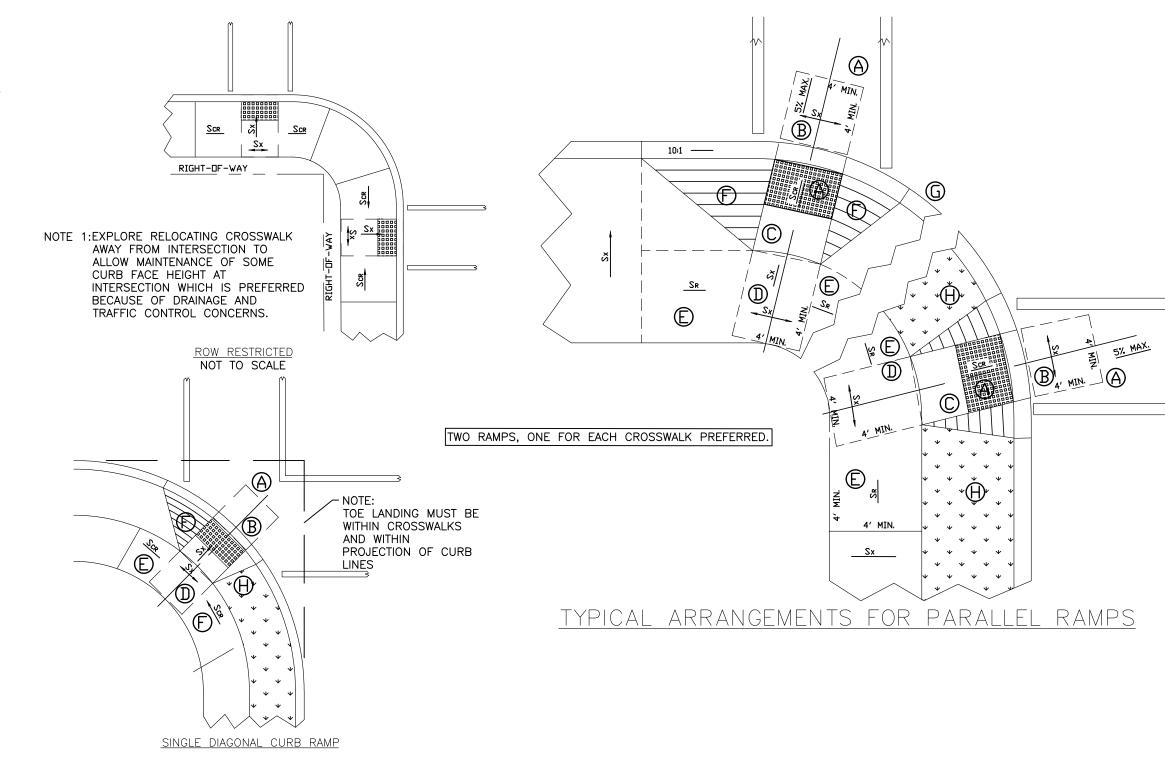
MICHAEL R. THOMAS, P.E.

STATE OF NJ LICENSE No. GE48086

PROFESSIONAL ENGINEER

MASSACHUSETTS, MICHIGAN, NEW JERSEY.





\_\_SEE DETAIL PAR-1 FOR MAX.

PUBLIC SIDEWALK CURB RAMPS LAYOUT PRINCIPLES

(A) LOCATE A 4' X 4' CLEAR SPACE WITHIN CROSSWALK AT TOE OF RAMP CROSS SLOPE S 1:50 (2%). CR MAXIMUM COUNTERSLOPE SCR AT TOE OF RAMP 1:20 (5%) MAXIMUM.

(B) RAMP TO BE PERPENDICULAR (RADIAL) TO CURB LINE (OR ROADWAY EDGE), NO LIP AT STREET - CURB TOP TO SLOPE WITH RAMP.

C)OBSERVE SCR LIMITS: 1:50 (2%) MINIMUM, (8.3%) MAXIMUM IN NEW CONSTRUCTION. OBSERVE Sx LIMITS: 1:50 (2%) MAXIMUM. D PROVIDE A 4' X 4' TURNING SPACE AT TOP. OBSERVE SX LIMITS 1:50 (2%) MAXIMUM IN ANY DIRECTION. SEE SIDEWALK DESIGN SLOPE AND TOLERANCES TABLE. (F) WHEN PEDESTRIAN TRAVEL ACROSS RAMP IS POSSIBLE, PROVIDE 10:1 MAXIMUM TRANSITION AT CURB LINE (OR ROADWAY EDGE). (G) PROVIDE CURB FACE ON RADIUS AT INTERSECTION TO THE EXTENT POSSIBLE IN PREFERENCE TO DEPRESSING ENTIRE RADIUS. H WHEN PEDESTRIAN TRAVEL ACROSS RAMP IS OBSTRUCTED BY TURF OR OTHER ELEMENTS, PROVIDE 18" LONG CURB TRANSITION.

### DETAIL PAR-2A ALTERNATIVE CURB TRANSITION

NOT TO SCALE WHERE SHOWN OR DIRECTED

2. CURB, DRIVEWAYS AND SIDEWALKS SHALL BE CAST IN SEPARATE OPERATIONS UNLESS OTHERWISE PERMITTED BY THE ENGINEER. 3. EXPANSION JOINTS WITH PREFORMED EXPANSION JOINT FILLER CONFORMING TO AASHTO M33, PREFORMED EXPANSION JOINT FILLER FOR CONCRETE (BITUMINOUS TYPE), SHALL BE PROVIDED AS FOLLOWS:

3.1 1/2" THICK AT LONGITUDINAL INTERVALS OF APPROXIMATELY TWENTY FEET (20'); 1/4" THICK BETWEEN CURB AND SIDEWALK OR DRIVEWAYS, AROUND ALL STRUCTURES OR APPURTENANCES, SUCH AS MANHOLES, JUNCTION BOXES AND UTILITY POLES, AND ADJACENT TO ANY FIXED STRUCTURE; 3.3 AT LONGITUDINAL CENTERLINE OF ANY DRIVE WHICH EXCEEDS TWELVE FEET (12') IN WIDTH OR AS DIRECTED BY ENGINEER. 4. EXPANSION JOINT MATERIAL SHALL BE TRIMMED AS TO BE SLIGHTLY BELOW THE SURFACE OF THE CONCRETE.

9. CURB AND MONOLITHIC CURB RAMP CRADLES SHALL BE POURED IN A SEPARAT OPERATION FROM SIDEWALKS AND CURB RAMPS UNLESS OTHERWISE PERMITTED BY THE ENGINEER. 10 EXPANSION JOINTS WITH PREFORMED EXPANSION JOINT FILLER CONFORMING TO AASHTO M33, PREFORMED EXPANSION JOINT FILLER FOR CONCRETE (BITUMINOUS

YPE), SHALL BE PROVIDED AS FOLLOWS: 10.1 1/2" THICK AT LONGITUDINAL INTERVALS OF APPROXIMATELY TWENTY FEET AND BETWEEN ALL SIDEWALK CURB RAMPS AND MONOLITHIC CURB RAMP

15.WELDED WIRE FABRIC SHALL BE 6X6-6X6 (OLD DESIGNATION 6X6-W2.9XW2.9 (NEW DESIGNATION) IN ACCORDANCE WITH ASTM A-185. 16.PUBLIC SIDEWALK CURB RAMPS, TURNING SPACES, BLENDED TRANSITIONS AND CLEAR SPACES WITHIN THE PEDESTRIAN ACCESS ROUTE SHALL NOT CONTAIN GRATINGS, COVERS, UTILITY BOXES OR SIMILAR OBSTRUCTIONS. OUTSIDE OF THE ABOVE AREAS, GRATINGS IN PUBLIC SIDEWALKS MAY HAVE OPENINGS NO GREATER THAN 1/2 INCH WIDE MEASURED PARALLEL TO DIRECTION OF TRAVEL.

17.ALL PUBLIC SIDEWALK CURB RAMPS SHALL BE PROVIDED WITH A SLIP-RESISTANT BROOM FINISH ORIENTED PERPENDICULAR TO THE TRAVEL DIRECTION.

18. DETECTABLE WARNING SURFACES SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 606 OF THE SPECIFICATIONS AND THE SPECIAL PROVISIONS WHICH INCLUDE A LIST OF ACCEPTABLE SYSTEMS. UNLESS A SPECIFIC DETECTABLE WARNING SYSTEM IS REQUIRED BY THE SPECIAL PROVISIONS. THE CONTRACTOR MAY SELECT THE SYSTEM TO BE USED. ONLY ONE SYSTEM MAY BE USED ON ANY PROJECT. THE COLOR OF THE DETECTABLE WARNING SYSTEM SHALL BE AS REQUIRED BY THE SPECIAL PROVISIONS OR AS DIRECTED BY THE ENGINEER. 19.IF NO CURB IS PROVIDED, THE EDGE OF THE DETECTABLE

20.DETECTABLE WARNING SIZE, GEOMETRY AND SPACING TO CONFORM TO SECTION 705 OF DEPARTMENT OF JUSTICE STANDARDS FOR ACCESSIBLE DESIGN (2010) OR SECTION R305 OF ACCESSIBILITY

		OPE AND TO	OPES (NOTE 1)	
SYMBOL	DESCRIPTION	DESIGN (NOMINAL	MINIMUM	MAXIMUM
S <sub>x</sub>	CROSS SLOPE OF PUBLIC SIDEWALK	1:60 1.67% 3/4" PER 4' 3/16" PER 1'	1:72 1.4% 5/8" PER 4' <3/16" PER 1'	1:50 2%
S <sub>DR</sub>	LONGITUDINAL (RUNNING) SLOPE OF DRIVEWAY TRANSITION RAMP	NIRMAL RANGE MINIMUM 1:36 2.8% 1 1/4" PER 4' 5/16" PER 1' NIRMAL RANGE MAXIMUM 1:14 7.1% 3/4" PER 4' APPROIX 7/8" PER 1' (NITE 2)	1:50 2%	1:12 8.3% (NDTE 2)
SA	LONGITUDINAL (RUNNING) SLOPE OF DRIVEWAY APRON	1:10 10% 1 1/4" PER 1'	1:50 2%	1:8 12.5% 1 1/2" PER

1. UNLESS OTHERWISE DIRECTED BY THE ENGINEER, CONSTRUCTION WHICH DOES NOT CONFORM TO THE TOLERANCES SPECIFIED (ie. WHICH EXCEEDS THE MAXIMUM OR IS LESS THAN THE MINIMUM) WILL BE REMOVED AND REPLACED WITHOUT COST TO THE OWNER. 2.IF SDR EXCEEDS 1:20 (5%), THE MAXIMUM VERTICAL RISE PERMITTED IS 6". WHEN THIS CANNOT BE ACHIEVED IN THE ALTERATION OF EXISTING FACILITIES, CONSULT THE ENGINEER.

SYMBOL	DESCRIPTION		SLOPES (	(NOTE 1)
2 I MBUL	DESCRIPTION	DESIGN (NOMINAL	MINIMUM	MAXIMUM
S <sub>x</sub>	CROSS SLOPE OF PUBLIC SIDEWALK OR CROSS SLOPE OF CURB RAMP	1:60 1.67% 3/4" PER 4' 3/16" PER 1' (NDTE 3)	1:72 1.4% 5/8" PER 4' <3/16" PER 1' (NDTE 3)	1:50 2% (NDTE 3)
S <sub>CR</sub>	LONGITUDINAL (RUNNING) SLOPE OF PUBLIC SIDEWAL CURB RAMP	1:14 K7.1% 3 1/2" PER 4' (APPROX 7/8" PER 1')	1:50 2%	1:12.05 8.3% (NDTE 2)
S <sub>R</sub>	LONGITUDINAL (RUNNING) SLOPE OF PARALLEL SIDEWALK CURB RAMP	1:14 7.1% 3 1/2" PER 4' (APPROX 7/8" PER 1')	1:50 2%	1:12.05 8.3% (NDTE 2)

'UNLESS OTHERWISE DIRECTED BY THE ENGINEER, CONSTRUCTION WHICH DOES NOT CONFORM TO THE TOLERANCES SPECIFIED (ie. WHICH EXCEEDS THE MAXIMUM OR IS LESS THAN THE MINIMUM) WILL BE REMOVED AND REPLACED WITHOUT COST TO THE OWNER. THE MAXIMUM LENGTH FOR A PARALLEL PUBLIC SIDEWALK CURB RAME SHALL BE 15 FEET. MAXIMUM LONGITUDINAL (RUNNING) SLOPE LIMITS 3.(SR) DO NOT APPLY IF LENGTH IS 15 FEET OR GREATER. CROSS SLOPE OF CURB RAMP (Sx) TO MATCH ROADWAY PROFILE SLOPES (SP) OF 1:50 (2%) OR LESS. IF SP EXCEEDS 1:50 (2%), A TRANSITION MUST BE PROVIDED AT CURB RAMPS TO MAINTAIN SX EQUAL TO OR LESS THAN 1:50 (2%). EXCEPTION: THIS DOES NOT APPLY AT MID-BLOCK CROSSINGS WHERE SX AT CURB RAMPS MAY MATCH SP, EVEN IF GREATER THAN 1:50 (2%).

				MRT	СНКD	
				KRR	ВУ	
				REVISED PER TOWNSHIP COMPLETENESS REVIEW	REVISIONS	
				6/28/22	DATE	
				4	NO.	

MICHAEL R. THOMAS, P.E.

LICENSED PROFESSIONAL ENGINEER STATE OF NJ LICENSE No. GE48086

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11 TINDALL ROAD MIDDLETOWN, NJ 07748 TEL 732-671-6400 FAX 732-671-7365 NEW JERSEY BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS CERTIFICATE OF AUTHORIZATION 24GA27987500

OFFICES LOCATED IN: CALIFORNIA, INDIANA, KENTUCKY, MASSACHUSETTS, MICHIGAN, NEW JERSEY OHIO AND PENNSYLVANIA DRAWING

**DESIGNED BY** CSD-3 **CHECKED BY DRAWN BY SHEET** 05/27/22 SCALE **AS SHOWN** 

### RAZAR SERIES-LED

### Optical Housing

Heavy cast low copper aluminum (A356 alloy; <0.2% copper) assembly with integral cooling fins. The Optical Panel mounting surface is milled flat (surface variance <± .002") to facilitate thermal transfer of heat to housing and cooling fins. Solid barrier wall separates optical and electrical compartments. The optical and electrical compartments are integrated to create one assembly. Minimum wall thickness is .188"

### Electrical Housing w/ Integrated Arm

Heavy cast low copper aluminum (A356 alloy; <0.2% copper) assembly with integral cooling ribs surrounding the electrical compartment and a flat surface on the top of the arm to accommodate a photocell receptacle. Solid barrier wall separates optical and electrical compartments. The optical compartment and electrical compartment with the integrated support arm combine to create one assembly. Minimum wall thickness is .188". Cast and hinged driver assembly cover is integrated with wiring compartment cover.

### PLED" Optics

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern, LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments.

## LED Driver(s)

Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized and mounted directly against the Electrical Housing to facilitate thermal transfer, held down by universal clamps to facilitate easy removal. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

### High output LED's are utilized with drive currents ranging from

Warm White (3000K). Consult Factory for other LED options. Amber LED's TRA (True Amber) LED's utilize material that emits light in the

350mA to 1050mA. 70CRI Minimum. LED's are available in

standard Neutral White (4000K), or optional Cool White (5000K) or

### amber spectral bandwidth only without the use of phosphors.

Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step media blast and iron phosphate pretreatment for protection and paint

### Mast Arm Fitter/Electrical Housing

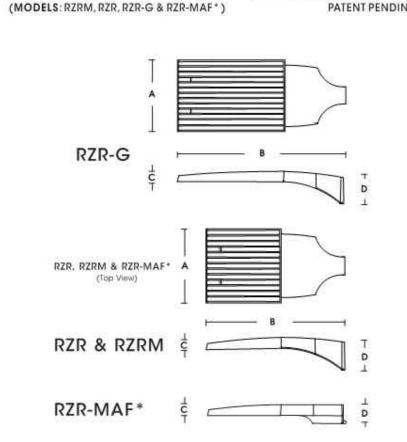
Replaces standard Electrical Housing. Fits standard 2 3/8" O.D. horizontal tenon. Two (2) straps with two (2) bolts each encircle the lower half of the tenon. Upper half of the tenon rests on self-centering steps that position the angle of the luminaire at 0°, +1.5°, +1.5 or +3° up from the horizontal. All hardware is stainless

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adhesion. 400°F bake for maximum hardness and durability.





4					ALC:	
	RZR-MAF	15" 381mm	28.25* 724mm	2.5° 64mm	<b>4</b> ** 102mm	
*0	DLC PENDING AS	OF 7/19				
	DLG				20	22070
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-	(a) m	t Location	1 -		ШЭН	THE STATE OF

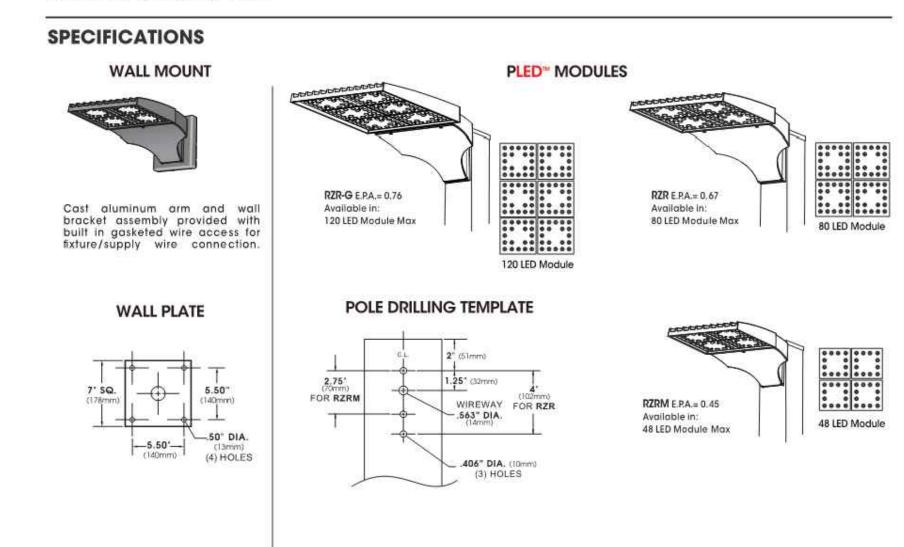
FIXTURE A B C D

14.75' 28.25' 2.75' 6.5'

### RAZAR SERIES-LED

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Luminaire	Optics		LED Mode		Voltage	Mounting	Finish	Options	
Luminaire	Optics		LED		Voltage	Mounting	Finish	Options	
☐ RZR-G	PLED* Distribution Type	# of LEDs  RZR-G  120LED	Drive Current	Color Temp - CCT	☐ 120	Arm Mount	Standard Textured Finish	☐ Internal House Side S	Shleid
	PLED-II  Type II Front Row PLED-II-FR	□ 80LED	☐ 700mA² ☐ 525mA	☐ 30K (3000K) ☐ 40K (4000K)	□ 208 □ 240	☐ 2-180 <b>——</b>	RAL-9005-T  White RAL-9003-T	inc. LED Count (Example: HS-PLED/48)  External Glare Shield 4 Sided	HS-PLE
☐ RZR	Type III Median IIIuminator PLED-II-MIL  Type III Med	RZR	☐ 350mA	Amber*	□ 277 □ 347 □ 480	□ 2-90 <b>1</b>	Dark Bronze	External Glare Shield 3 Sided Rear Wedge  Twist Lack Receptac	EGS3W
RZR-MAF1	Type III Med. PLED-III  Type III Wide PLED-III-W	☐ 80LED		True Amber <sup>4</sup> Consult Factory for Other		3-90	Green RAL-6005-T	Only  7-Pin Twist Lock Receptacle Only  High-Low Dimming for	TPR TPR7
RZRM	Type IV PLED-IV	RZRM		LED Color, CCT, & CRI Options		□ 4-90 <b>■</b>	For smooth finish replace suffix "T"	Switch by Others/Selec Levels 50/100 or 25/10 (Example: HLSW/25)	ct
KENW	Type IV PLED-IV-FT	48LED	NOTES: 2 - 700mA and 1050m/ LED'S	A NOT FOR USE WITH TRA		□ wm ■	with suffix "S" (Example: RAL-9500-S)	Photo Cell + Voltage (Example: PC120V)	PC+V
	Type V Narrow PLED-VSQ-N	☐ 24LED	3 - NARROW BAND AF DEFINABLE CCT E	EQUIVALENT		WM - Wall Mount provided with mounting	Consult factor for custom colors	Single Fuse (120V, 277V)	SF
NOTES: 1 - DLC PENDING AS DF 7/19	Type V Med. PLED-V-SQ-M		4 - AVAILABLE IN 350 CURRENTS ONLY Consult	Factory for		bracket and cover.	<i>9</i> .	Double Fuse (208V, 240V)	DF
7/19	Type V Wide PLED-V-SQ-W			ve Currents				Blue-Tooth Programm Photo/Motion Senso (Factory - Motion 50/100 Photo 75fa)	it

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U.S. ARCHITECTURAL

### LANDSCAPE PLANTING NOTES AND SPECIFICATIONS:

- I. ALL PLANT MATERIAL SHALL BE PROVIDED AND INSTALLED IN STRICT CONFORMANCE WITH USDA STANDARDS FOR NURSERY STOCK AND THE "AMERICAN NURSERY AND LANDSCAPE ASSOCIATION" STANDARDS LATEST EDITIONS.
- 2. THE CONTRACTOR SHALL VERIFY ALL UTILITIES WITHIN WORK AREA PRIOR TO COMMENCING WITH ANY EXCAVATIONS AND SHALL BE RESPONSIBLE FOR THEIR PROTECTION.
- 3. THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS SHOWN ON THE DRAWINGS, AS SPECIFIED, AND IN QUANTITIES INDICATED ON THE PLANT LIST. IF A DISCREPANCY SHOULD ARISE BETWEEN THE AMOUNT OF PLANTS SHOWN ON THE PLAN VS. THE PLANT SCHEDULE, THE PLAN SHALL GOVERN.
- 4. ALL PLANTS SHALL BE NURSERY GROWN.
- 5. ALL PLANTS SHALL BE HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT.
- 6. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OR GROWTH. THEY SHALL BE SOUND, HEALTHY AND VIGOROUS WELL BRANCHED AND DENSELY FOLIATED WHEN IN LEAF THEY SHALL BE FREE OF DISEASE AND INSECT PESTS, EGGS OR LARVAE. THEY SHALL HAVE HEALTHY WELL-DEVELOPED ROOT SYSTEMS.
- 7. SUBSTITUTIONS: WHEN PLANTS OF A SPECIFIED KIND OR SIZE ARE NOT AVAILABLE WITHIN A REASONABLE DISTANCE, SUBSTITUTIONS MAY BE MADE UPON REQUEST BY THE CONTRACTOR IF APPROVED BY THE LANDSCAPE ARCHITECT OR HIS/HER REPRESENTATIVE.
- 8. ALL AREAS TO BE SHOWN AS LAWN SHALL BE SEEDED, AS SPECIFIED, AND WATERED UNTIL A HEALTHY STAND OF GRASS IS OBTAINED.
- 9. TREE LOCATIONS MAY NEED TO BE ADJUSTED BASED ON LOCATIONS OF UTILITIES, FIELD CONDITIONS, OR FINAL GRADING. THE CONTRACTOR SHALL NOTIFY THE OWNER AND/OR THEIR REPRESENTATIVE IF ADJUSTMENTS ARE NECESSARY.
- IO. ALL PLANTING BEDS TO RECEIVE 3" SHREDDED HARDWOOD MULCH.
- II. ROOT BALLS OF ALL PLANTS SHALL BE ADEQUATELY PROTECTED AT ALL TIMES FROM SUN AND DRYING WINDS OR FROST.
- 12. PLANTS WITH BROKEN ROOT BALLS, TRUNK AND BARK DAMAGE OR EXCESSIVE DAMAGE TO THE CROWN SHALL BE REPLACED PRIOR TO PLANTING.
- 13. ROPES AT TOP OF BALL SHALL BE CUT. REMOVE TOP 1/3 OF BURLAP. ALL NON- BIODEGRADABLE MATERIAL SHALL BE TOTALLY REMOVED. WIRE BASKETS SHALL BE CAREFULLY REMOVED ENTIRELY AT THE TIME OF PLANTING, PREFERABLY AFTER THE ROOT BALL HAS BEEN INSTALLED IN THE PLANTING PIT.
- 14. PREPARATION OF PLANTING: CLEAN SOIL EXCAVATED FROM PLANTING PIT OF ROOTS, PLANTS, STONES LARGER THAN 2", CLAY LUMPS, AND OTHER EXTRANEOUS MATERIALS HARMFUL OR TOXIC TO PLANT GROWTH.
- 15. DO NOT ALLOW AIR POCKETS TO FORM WHEN BACKFILLING.
- 16. NO PLANT SHALL BE PLACED IN THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR HIS/HER EQUAL.
- 17. INSTALL ALL PLANTS SO THAT THE TOP OF THE ROOTBALL IS SLIGHTLY ABOVE FINISHED GRADE. IN NO CASE SHALL THE PLAN BE INSTALLED WITH NO LESS THAN THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL ROOT CROWN. EXCESS SOIL MAY EXIST AROUND THE ROOT CROWN FROM NURSERY OPERATIONS. THIS EXCESS MATERIAL SHALL BE REMOVED PRIOR TO PLANTING TO DETERMINE THE PROPER BALL INSTALLATION DEPTH.
- 18. ALL EXISTING TREES THAT ARE TO BE SAVED AS DETERMINED BY LANDSCAPE ARCHITECT SHALL BE PROTECTED UNTIL CONSTRUCTION HAS BEEN COMPLETED. AREA WITHIN DRIPLINE SHALL NOT BE TRAVELED ACROSS BY CONSTRUCTION TRAFFIC.
- 19. TREES PLANTED ALONG STREETS SHALL HAVE A SINGLE STRAIGHT TRUNK THAT DOES NOT FORK BELOW 6'.
- 20. ALL PLANTS SHALL BE BALLED AND WRAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL NON-BIODEGRADEABLE ROOT WRAPPING MATERIAL SHALL BE REMOVED AT TIME OF PLANTING.
- 21. WITH CONTAINER GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE CONTAINER BALL CUT THROUGH THE SURFACE IN TWO VERTICAL LOCATIONS MINIMUM.
- 22. THE CONTRACTOR SHALL LAYOUT WITH IDENTIFIABLE STAKES INDIVIDUAL TREE AND SHRUB LOCATIONS AND AREAS FOR MULTIPLE PLANTING ALONG WITH THE ARRANGEMENTS AND OUTLINE OF PLANTING BEDS AS INDICATED ON DRAWING. THE LAYOUT OF PLANTING WILL THEN BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO ANY EXCAVATION OF PLANT PITS OR PLANT BEDS.
- 23. AT PLANTING TIME, ALL PLANT MATERIAL SHALL TRIMMED TO REMOVE BROKEN AND/OR DEAD VEGETATIVE MATERIAL.
- 24. ALL PLANTS SHALL BE INSTALLED AS PER THE PLANTING DETAILS AND THE CONTRACT SPECIFICATIONS, WHERE APPLICABLE.
- 25. ALL PLANTS SHALL BE INSTALLED PLUMB UNLESS OTHERWISE SPECIFIED.

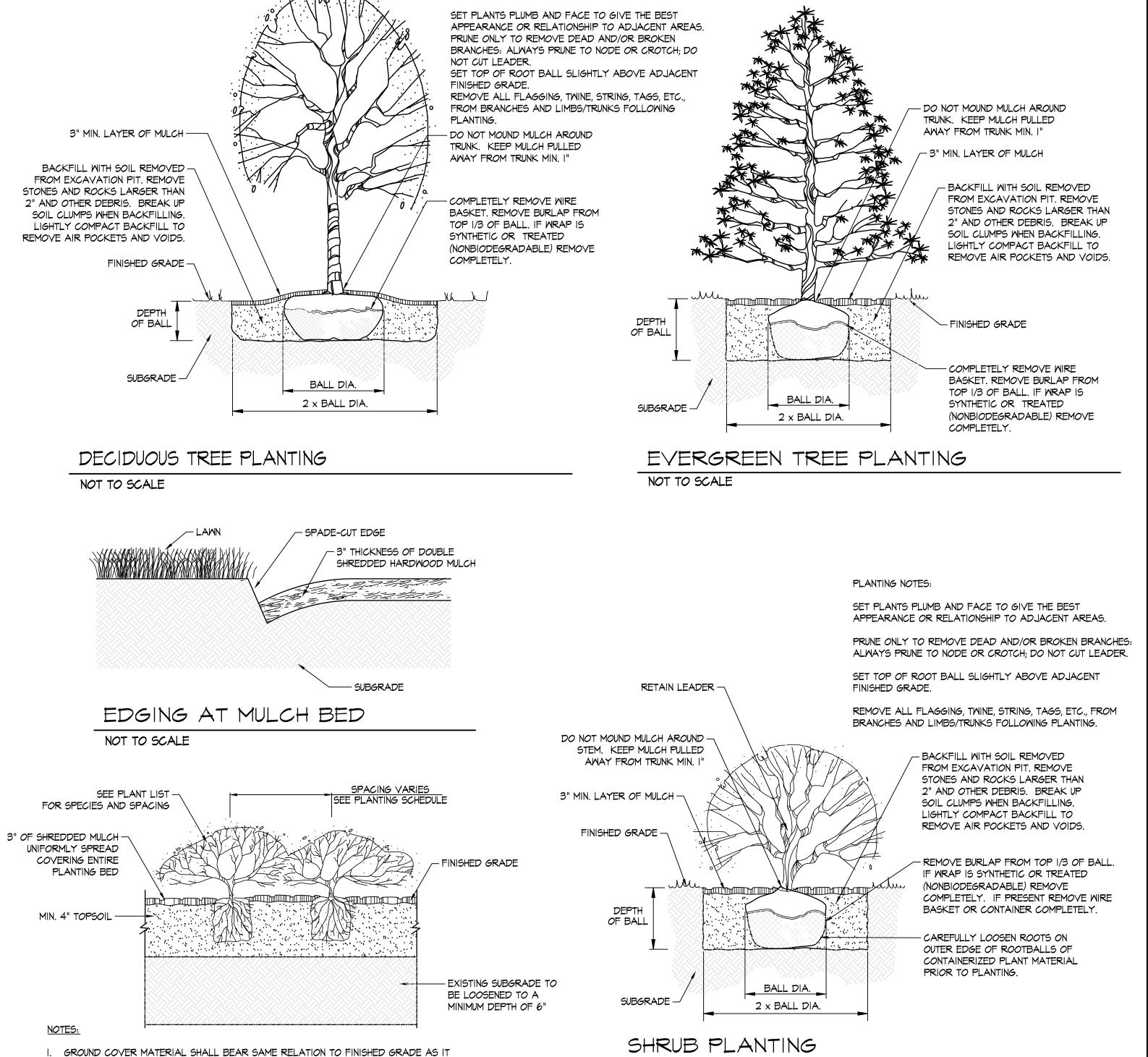
BORE TO PREVIOUS GRADE IN THE NURSERY.

NOT TO SCALE

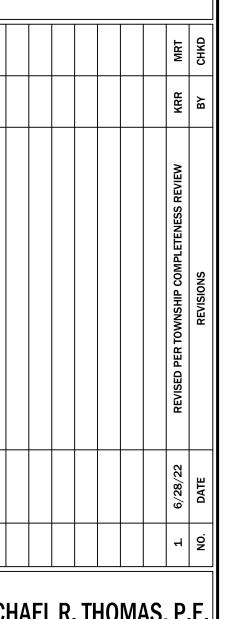
PLUG AND PERENNIAL PLANTING

- 26. ALL PLANTS SHALL BE THOROUGHLY WATERED TWICE DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR MORE OFTEN, IF NECESSARY, DURING THE FIRST GROWING SEASON.
- 27. CONDITIONS DETRIMENTAL TO PLANTS: THE CONTRACTOR SHALL NOTIFY THE PROJECT REPRESENTATIVE IN WRITING OF ALL SOIL OR DRAINAGE CONDITIONS WHICH THE CONTRACTOR CONSIDERS DETRIMENTAL TO THE GROWTH OF PLANTS. HE SHALL STATE THE CONDITIONS AND SUBMIT A PROPOSAL FOR CORRECTING THE CONDITIONS INCLUDING ANY CHANGE IN COST FOR REVIEW AND ACCEPTANCE BY THE PROJECT REPRESENTATIVE.
- 28. WARRANT TREES AND SHRUBS FOR A MINIMUM PERIOD OF ONE (I) YEAR AFTER DATE OF WRITTEN FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT AND/OR THE OWNERS AUTHORIZED REPRESENTATIVE AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY GROWTH. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO MONITOR THE PROJECT PLANTINGS DURING THE WARRANTY PERIOD AND NOTIFY THE OWNER IF PROBLEMS DEVELOP. PLANTS THAT DIE DURING THE WARRANTY PERIOD SHALL BE REMOVED IMMEDIATELY AND REPLACED.

PLANTING NOTES:



NOT TO SCALE



MICHAEL R. THOMAS, P.E. PROFESSIONAL ENGINEER

LICENSED PROFESSIONAL ENGINEER STATE OF NJ LICENSE No. GE48086

> NSTRUCTION ∞ర

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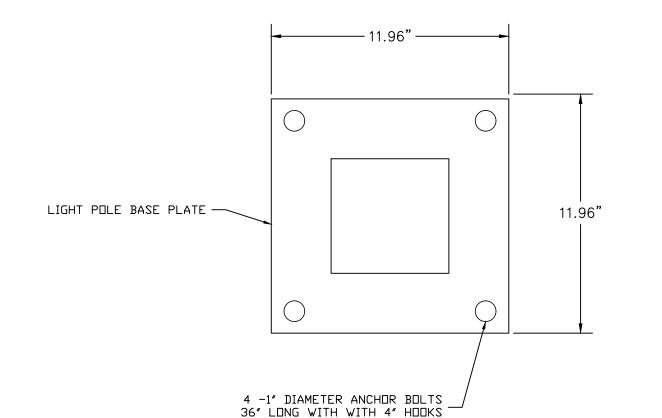
05/27/22

MASSACHUSETTS, M**I**CHIGAN, NEW JERSEY. OHIO AND PENNSYLVANIA CHECKED E

NOTES: 1- AFTER FOUNDATIONS ARE PLACED, CONTRACTOR SHALL SUPPLY AND INSTALL A TRAFFIC CONE. EACH CONE SHALL BE BOLTED ONTO THE POLE ANCHOR LUGS. 2- ALL CONCRETE SHALL BE MINIMUM 4500 PSI, 28 DAY COMPRESSIVE STRENGTH, AIR-ENTRAINED, 6% ±1%

### LIGHT POLE MOUNTING BASE DETAIL

NOT TO SCALE



NOTE:

CONCRETE NOTES:

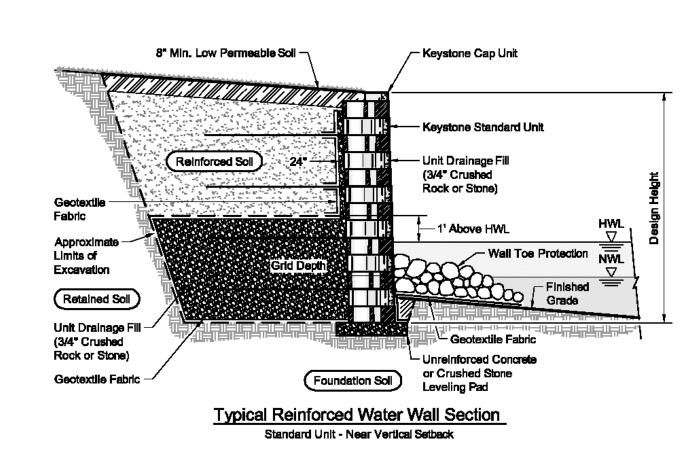
STEEL INSTITUTE.

### LIGHT POLE BASE PLATE DETAIL

1. BASE PLATE DETAIL IS TO BE USED WITH THE SPAULDING SQUARE STRAIGHT ALUMINIM 25 FT POLE SSA-25-60-B

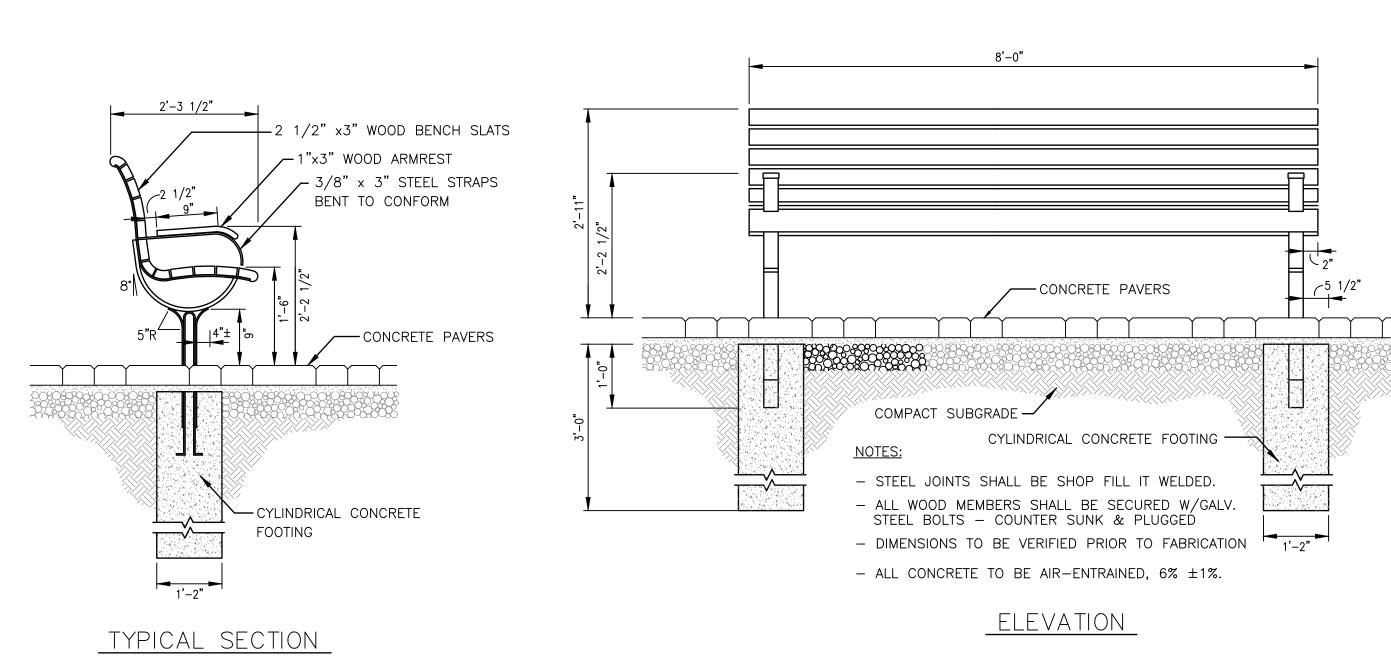
ALL CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 4500 IN 28 DAYS. A MAXIMUM WATER/CEMENT (W/C) RATIO OF 0.45 AND A MAXIMUM SLUMP OF 3 INCHES COARSE AGGREGATE SHALL BE CLEAN, HARD, UNCOATED, ANGULAR CRUSHED STONE AND SHALL CONFORM TO ASTM C33. AGGREGATE SIZE SHALL BE AASHTO NO. 57  $\binom{3}{4}$ " MAXIMUM). REINFORCING STEEL SHALL BE ASTM A-615, GRADE 60, AND SHALL CONFORM TO THE REQUIREMENTS OF THE MANUAL OF STANDARD PRACTICE OF THE CONCRETE REINFORCING

CONCRETE CONSTRUCTION SHALL CONFORM TO ACI-301 AND ACE-304R. PLACING OF CONCRETE DURING HOT WEATHER SHALL COMPLY WITH THE REQUIREMENTS OF ACI-305R PLACING OF CONCRETE DURING COLD WEATHER SHALL COMPLY WITH THE REQUIREMENTS OF ACI-306R WHEN THE AVERAGE DAILY TEMPERATURE IS LESS THAN 40 DEGREES FOR 3 CONSECUTIVE DAYS AND THE AIR TEMPERATURE AT TIME FO PLACEMENT IS LESS THAN 50 DEGREES.

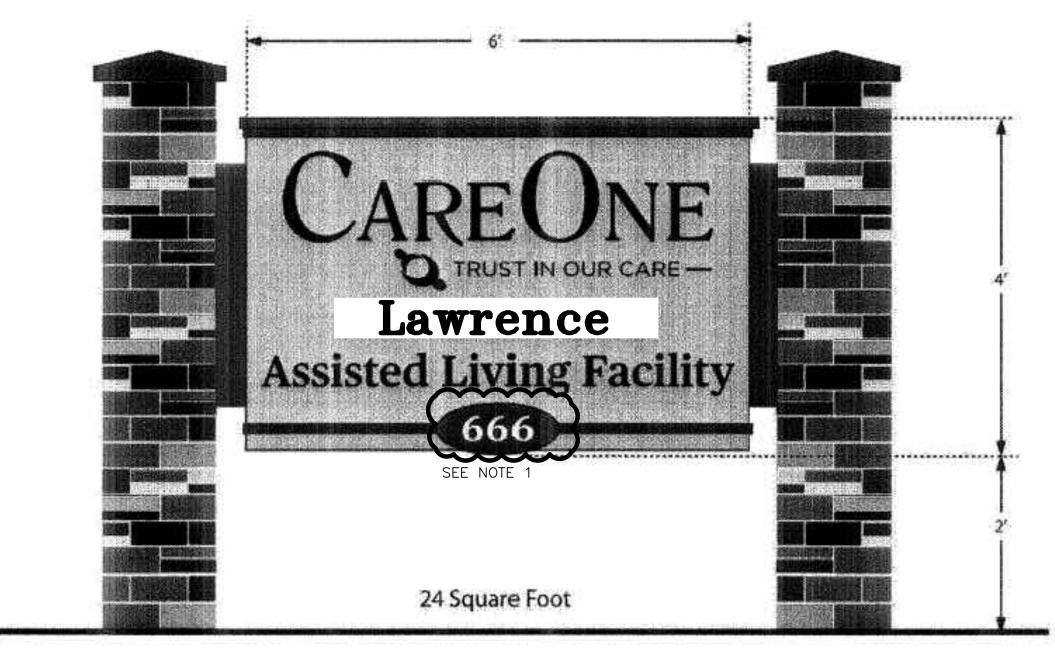


### KEYSTONE RETAINING WALL DETAIL

NOTE: USE KEYSTONE WALL OR APPROVED EQUAL. CONTRACTOR TO SUBMIT STRUCTURAL CALCULATIONS FOR THE WALL TO THE DESIGN ENGINEER FOR APPROVAL PRIOR TO INSTALLATION



### SEATING BENCH DETAILS

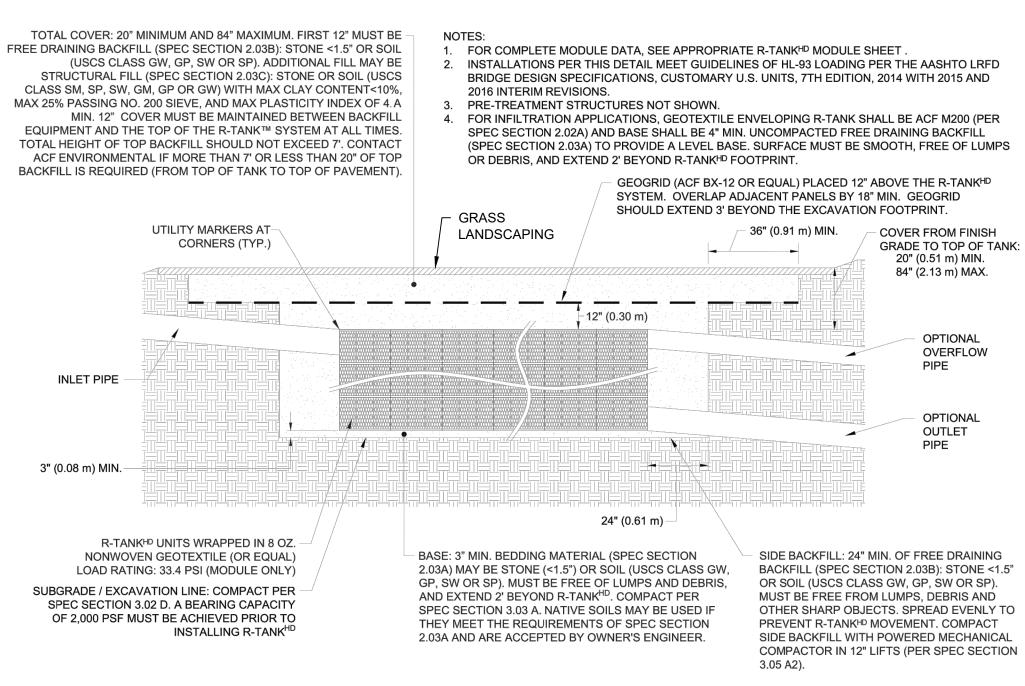


Satin Medium Grey aluminum sign cabinet and satin Dark Grey PVC moldings with "V" carved HDU street number. CareOne, logo icon, "Trust in our Care" and Facility Black Acrylic cut out lettering. All lettering spaced off surface to shed water and prevent staining.

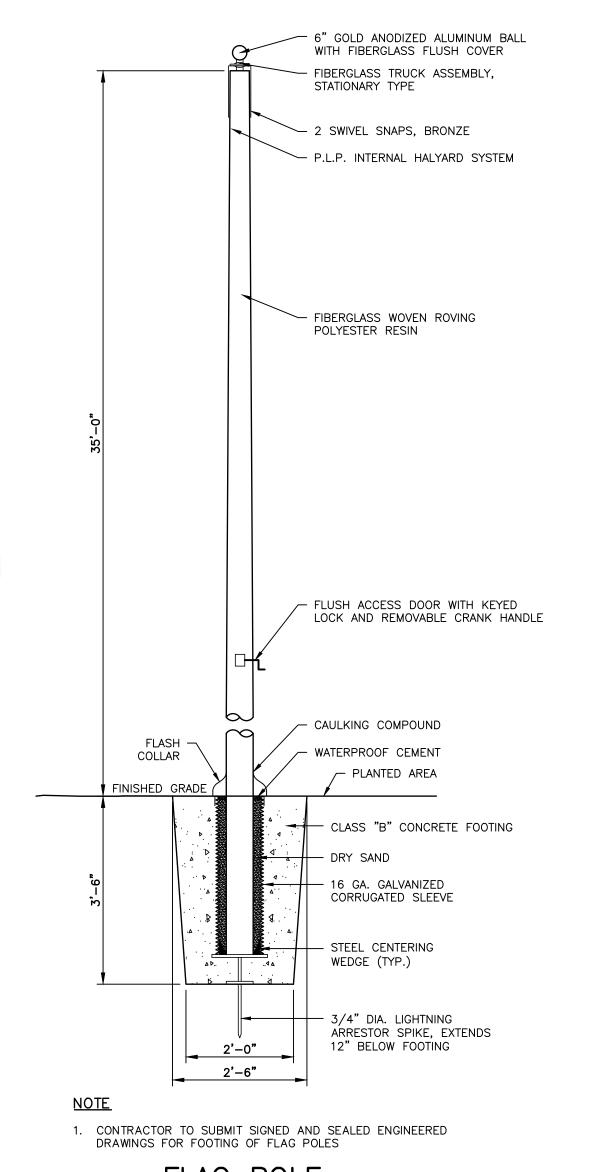
> NOTE: 1. STREET NUMBER ON SIGN TO BE 3641.

### CARE ONE FREESTANDING SIGN

NOT TO SCALE



UNDERGROUND STORAGE BASIN DETAIL



3/4" DIA. GALVANIZED

STEEL ROD WELDED TO-STEEL BAR AND BOTTON

9" LONG ANCHOR BOLTS-

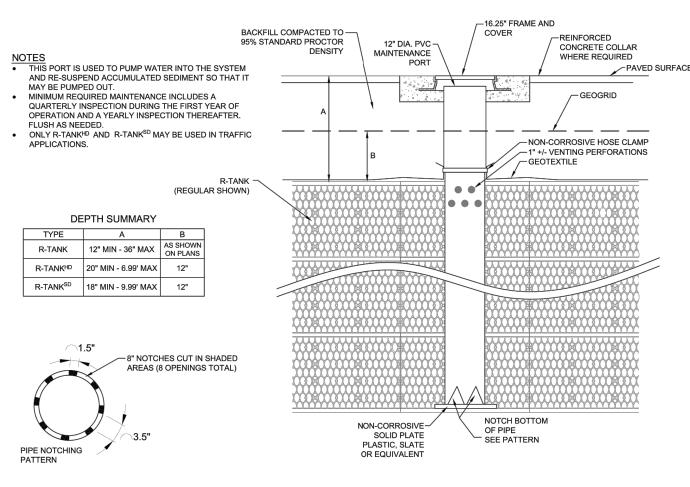
CONCRETE SHALL BE MINIMUM 4500 PS

1'-8"

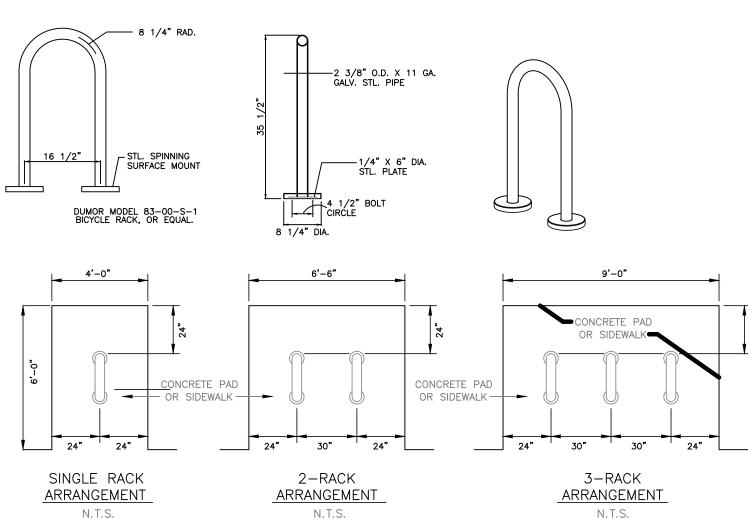
2'-4"

TRASH\_RECEPTACLE NOT TO SCALE

28 DAY COMPRESSIVE STRENGTH AIR-ENTRAINED,  $6\% \pm 1\%$ 



BASIN MAINTENANCE PORT DETAIL



2'-4"

RECYCLING RECEPTACLE

NOT TO SCALE

RECYCLING SIGN

RECEPTACLE

ON FRONT AND BACK OF

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.

REFERENCE NUMBER 017-097

3/4" DIA. GALVANIZED —

STEEL BAR AND BOTTOM

STEEL ROD WELDED TO

BOTTLES & CANS

FOOTING

-1/4"x 2" STEEL BAR

REPEATS FOR ENTIRE CIRCUMFERENCE OF TRASH RECEPTACLE)

—GALVANIZED STEEL LINER

9" LONG ANCHOR BOLTS

CONCRETE SHALL BE MINIMUM 4500 PSI 28 DAY COMPRESSIVE STRENGTH

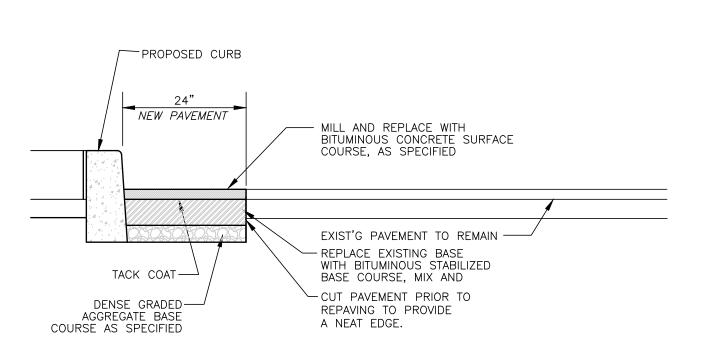
16" DIA. CONC.

AIR-ENTRAINED, 6% ±1%

2. COLOR AND FINISH TO BE SELECTED BY OWNER. 3. 1/2" X 3 3/4" PLTD. EXPANSION ANCHOR BOLTS PROVIDED FOR SURFACE MOUNT AND SUBFLOOR. 4. CONTRACTOR'S NOTE: FOR PRODUCT AND PURCHASING INFORMATION VISIT www.CADdetails.com/info

\* ALL DIMENSIONS ARE MINIMUMS PER "BICYCLE PARKING GUIDELINES" PUBLISHED BY THE ASSOCIATION OF PEDESTRIAN AND BICYCLE PROFESSIONALS, 2002.

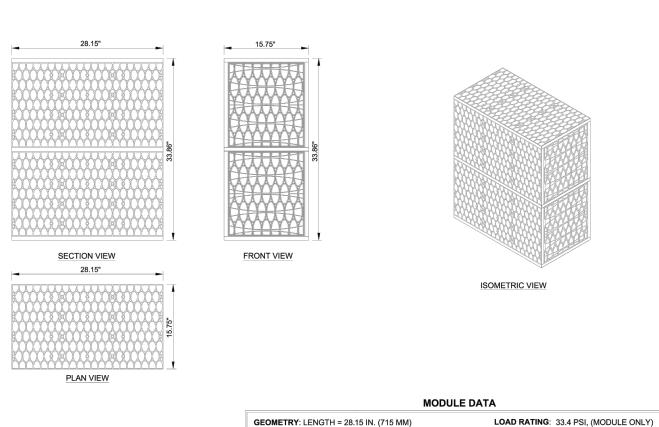
> BIKE RACK DETAILS NOT TO SCALE



**CONSTRUCTION NOTES:** 

ANY SUPERFICIAL SURFACE DAMAGE CAUSED BY THE CONTRACTOR OUTSIDE THE LIMIT SHOWN, SHALL BE PAVED WITH SURFACE COURSE. WHEN THE BASE COURSE OF THE EXISTING PAVEMENT IS DAMAGED BEYOND THE LIMIT SHOWN THE CONTRACTOR SHALL EXCAVATE 6" BEYOND THE DAMAGED AREA AND REPLACE IT WITH BITUMINOUS STABILIZED BASE COURSE.

### PAVEMENT RESTORATION DETAIL



WIDTH = 15.75 IN. (400 MM) HEIGHT = 33.86 IN. (860 MM) TANK VOLUME = 8.69 CF STORAGE VOLUME = 8.25 CF VOID INTERNAL VOLUME: 95% SMALL PLATES PER VOID SURFACE AREA: 90% SEGMENT/TOTAL: 5/10

HS25, (WITH ACF COVER SYSTEM)

BASIN MODULE DETAIL

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**CHECKED BY DRAWN BY** 05/27/22 AS SHOWN

