



TOWNSHIP of HOPEWELL
MERCER COUNTY

201 WASHINGTON CROSSING – PENNINGTON ROAD
TITUSVILLE, NEW JERSEY 08560-1410

PROJECT / APPLICATION

BLOCK:

LOT:

ADDRESS:

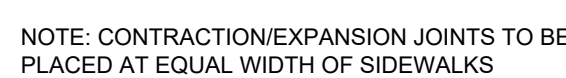
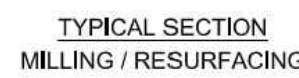
PROJECT NAME:

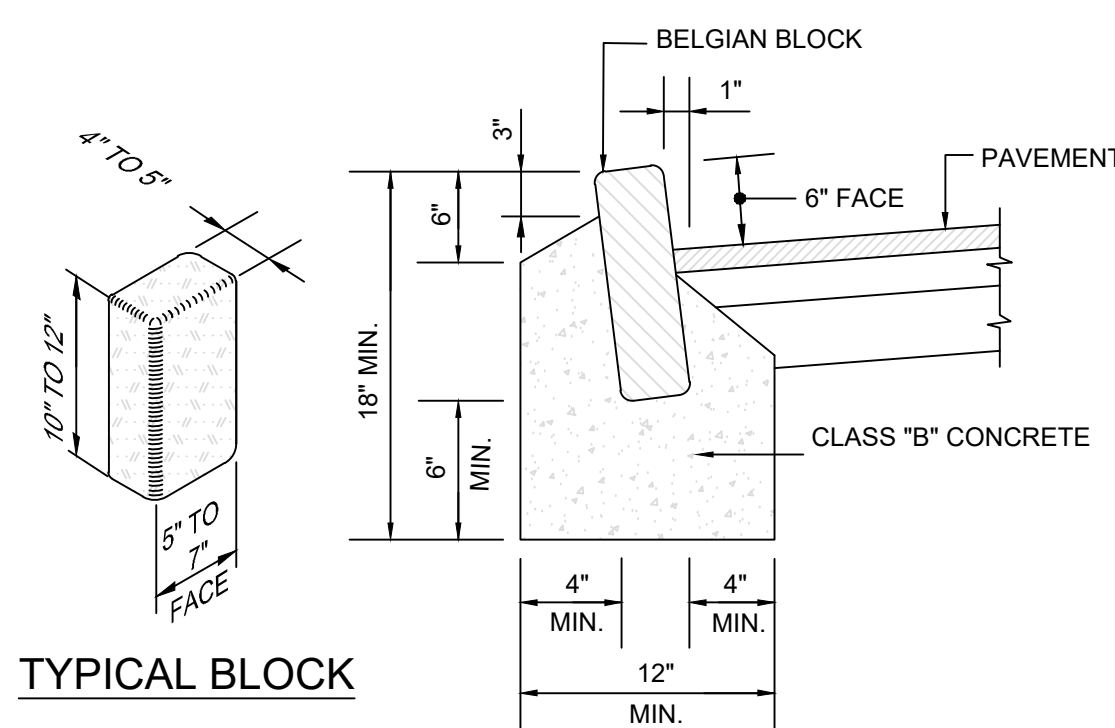
PLANS

CONSTRUCTION DETAILS



COUNTY OF MERCER
DEPARTMENT OF
TRANSPORTATION & INFRASTRUCTURE
DIVISION OF ENGINEERING
GREGORY SANDUSKY, P.E., P.L.S. COUNTY ENGINEER
PROFESSIONAL ENGINEER & LAND SURVEYOR
NEW JERSEY LICENSE NO. 36758
DRAWN BY: MIKE WILLIAMSON



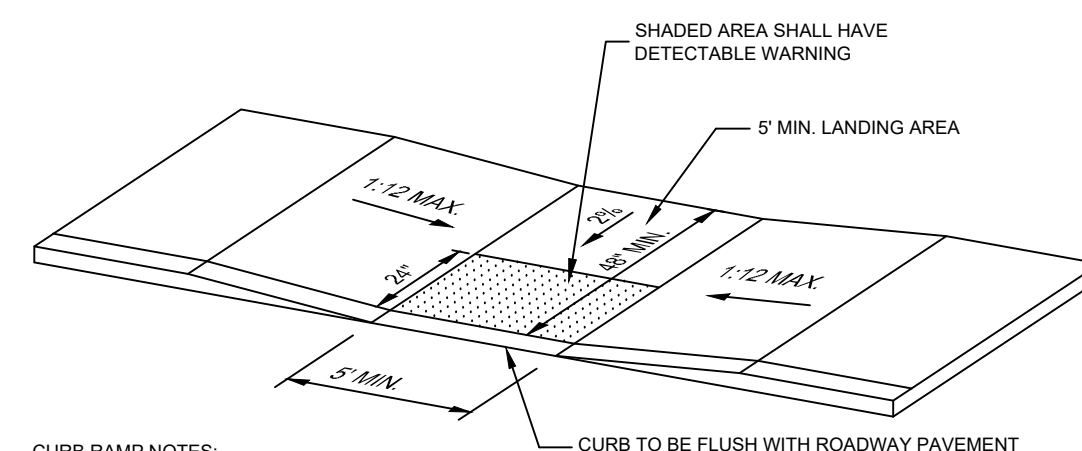


TYPICAL BLOCK

12"
MIN.

GRANITE BLOCK CURB DETAIL

NOT TO SCALE

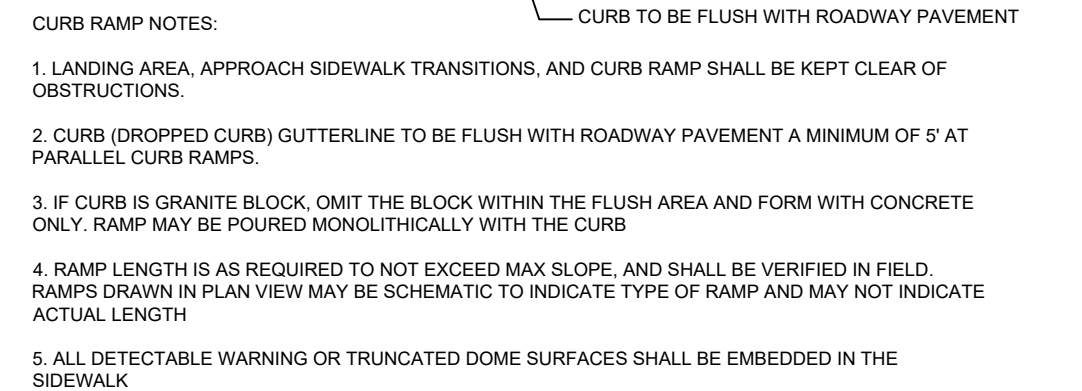


CURB RAMP 'B' DETAIL
SIDEWALK ADJACENT TO CURE
NOT TO SCALE

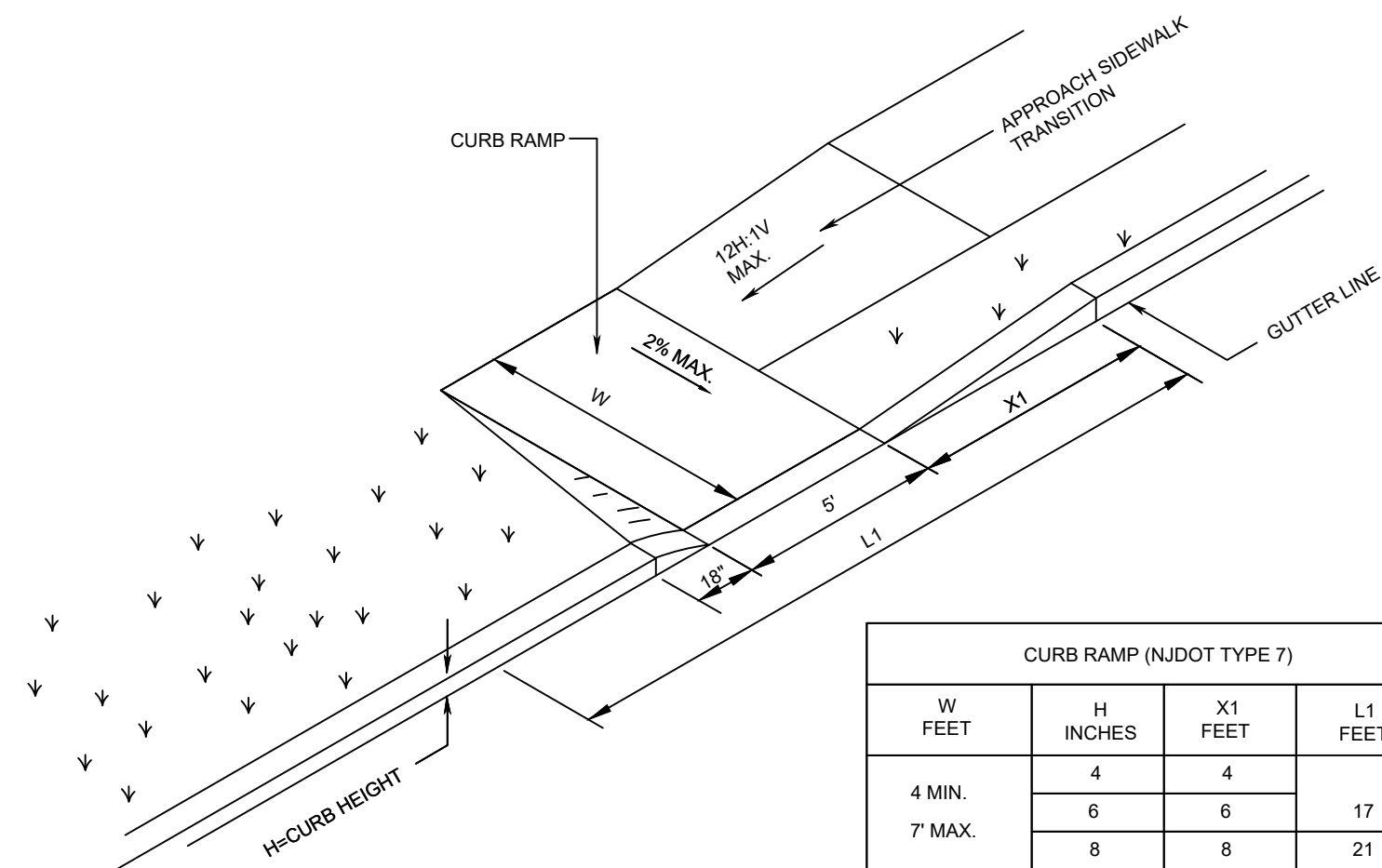
CURB RAMP NOTES:

- 1. LANDING AREA, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS.
- 2. CURB (DROPPED CURB) GUTTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 5' AT PARALLEL CURB RAMP POINTS.
- 3. IF CURB IS GRANITE BLOCK, POUR THE BLOCK WITH THE FLUSH AREA AND FORM WITH CONCRETE ONLY. RAMP MAY BE POURED MONOLITHICALLY WITH THE CURB.
- 4. RAMP LENGTH IS AS REQUIRED TO NOT EXCEED MAX. SLOPE. SLOPE SHALL BE VERIFIED IN FIELD. RAMP DRAIN IN PLAN VIEW MAY BE SCHEMATIC TO INDICATE TYPE OF RAMP AND MAY NOT INDICATE ACTUAL LENGTH.
- 5. ALL DETECTABLE WARNING OR TRUNCATED DOME SURFACES SHALL BE EMBEDDED IN THE SIDEWALK.

CURB RAMP 'B' DETAIL
SIDEWALK ADJACENT TO CURE
NOT TO SCALE



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NOT TO SCALE

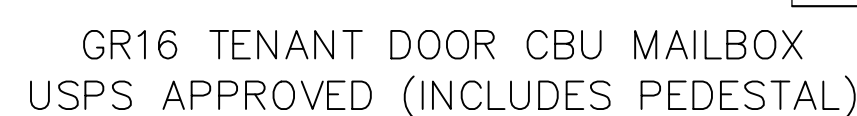


ADA SIDEWALK AND CURB RAMP TYPE 'D'

_____ EACH SIDEWALK

ADA SIDEWALK AND CURB RAMP TYPE 'E'

CURB RAMP (NJDOT TYPE 7)			
W FEET	H INCHES	X1 FEET	L1 FEET
4 MIN. 7" MAX.	4	4	17
	6	6	
	8	8	21



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PRELIMINARY AND FINAL MAJOR SUBDIVISION &
PRELIMINARY AND FINAL SITE PLAN FOR
VENUE AT HOPEWELL

CONSTRUCTION DETAILS - UTILITY

BLOCK 63, LOTS 19, 20, 45-01, 46 & 60
TOWNSHIP OF HOPEWELL, MERCER COUNTY, NEW JERSEY

SHEET No.
18D

REINFORCING SHOW FOR PRECAST INLETS IS THE MINIMUM REQUIRED. ADDITIONAL REINFORCING FOR HANDLING IS THE RESPONSIBILITY OF THE CONTRACTOR.

THE ITEM OF RESET HEADS SHALL INCLUDE RAISING OR LOWERING THE HEAD CASTINGS OF INLETS AND CATCH BASINS, OR THE RAISING OF MANHOLE HEAD CASTINGS, FOR A MAXIMUM OF 12". ALL OTHER CHANGES IN POSITION OF HEAD CASTING SHALL BE CONSIDERED AS RECONSTRUCTED MANHOLES OR RECONSTRUCTED INLETS OR CATCH BASINS.

WHEN CURB PIECE HEIGHT SPECIFIED IS GREATER THAN CURB FACE HEIGHT, DEPRESS THE GUTTER OF GRATE SO THAT THE TOP OF CURB PIECE IS AT THE SAME ELEVATION AS THE TOP OF CURB.

NOT TO SCALE



NOT TO SCALE



NOTES:
1. PRIOR TO C

NOT TO SCALE



NOT TO SCALE



NOT TO SCALE



NOT TO SCALE



NOT TO SCALE

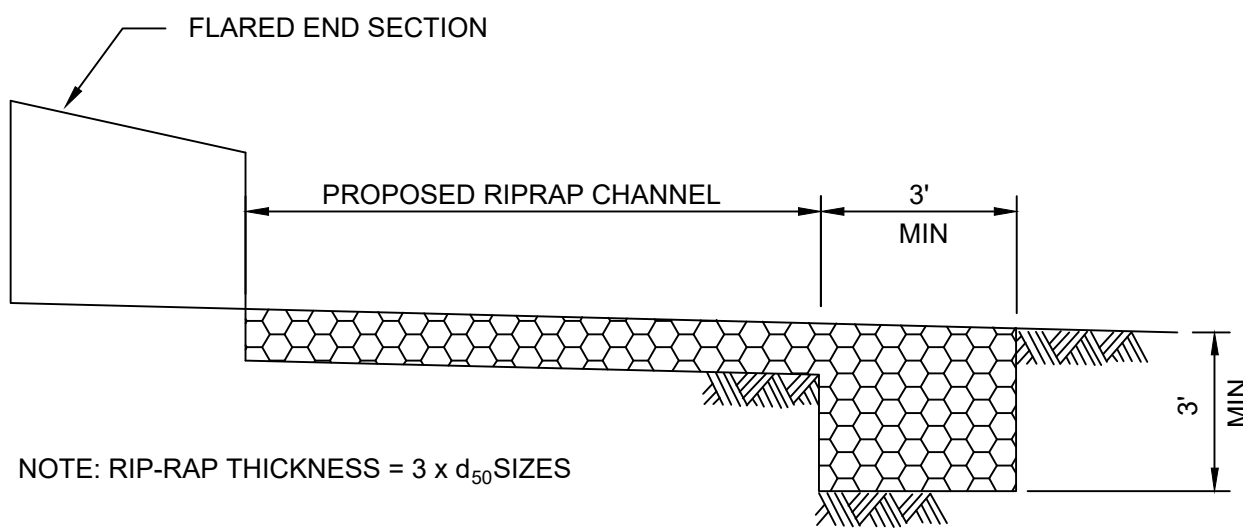
V:\081391 - Nursery Road-Hopewell\081391-01-001 (DWG) - Venue at Hopewell SP Engineering\Engineering Plans\02 Site Plans\081391-SP-DET.dwg 09/10/24 11:12:27AM jpros LAYOUT:SH1-BH-UTILITY
K:\081391 - Nursery Road-Hopewell\081391-01-001 (DWG) - Venue at Hopewell SP Engineering\Engineering Plans\02 Site Plans\081391-SP-DET.dwg 09/10/24 11:12:27AM jpros LAYOUT:SH1-BH-UTILITY

THE WIDTH OF THE APRON AT THE CULVERT SHALL BE AT LEAST TRIPLE D_0 , WHERE THERE IS A WELL-DEFINED CHANNEL DOWNSTREAM OF THE APRON, THE APRON BOTTOM WIDTH SHALL BE AT LEAST EQUAL TO THE CHANNEL BOTTOM WIDTH. THE LINING SHALL EXTEND AT LEAST ONE FOOT ABOVE THE TAILWATER ELEVATION BUT NO LOWER THAN 2/3 OF THE VERTICAL CONDUIT DIMENSION ABOVE THE CONDUIT INVERT. THE BOTTOM GRADE SHALL BE 0.0% AND LEVEL. THERE SHALL BE NO OVERFALL AT THE END OF THE APRON OR THE CULVERT.

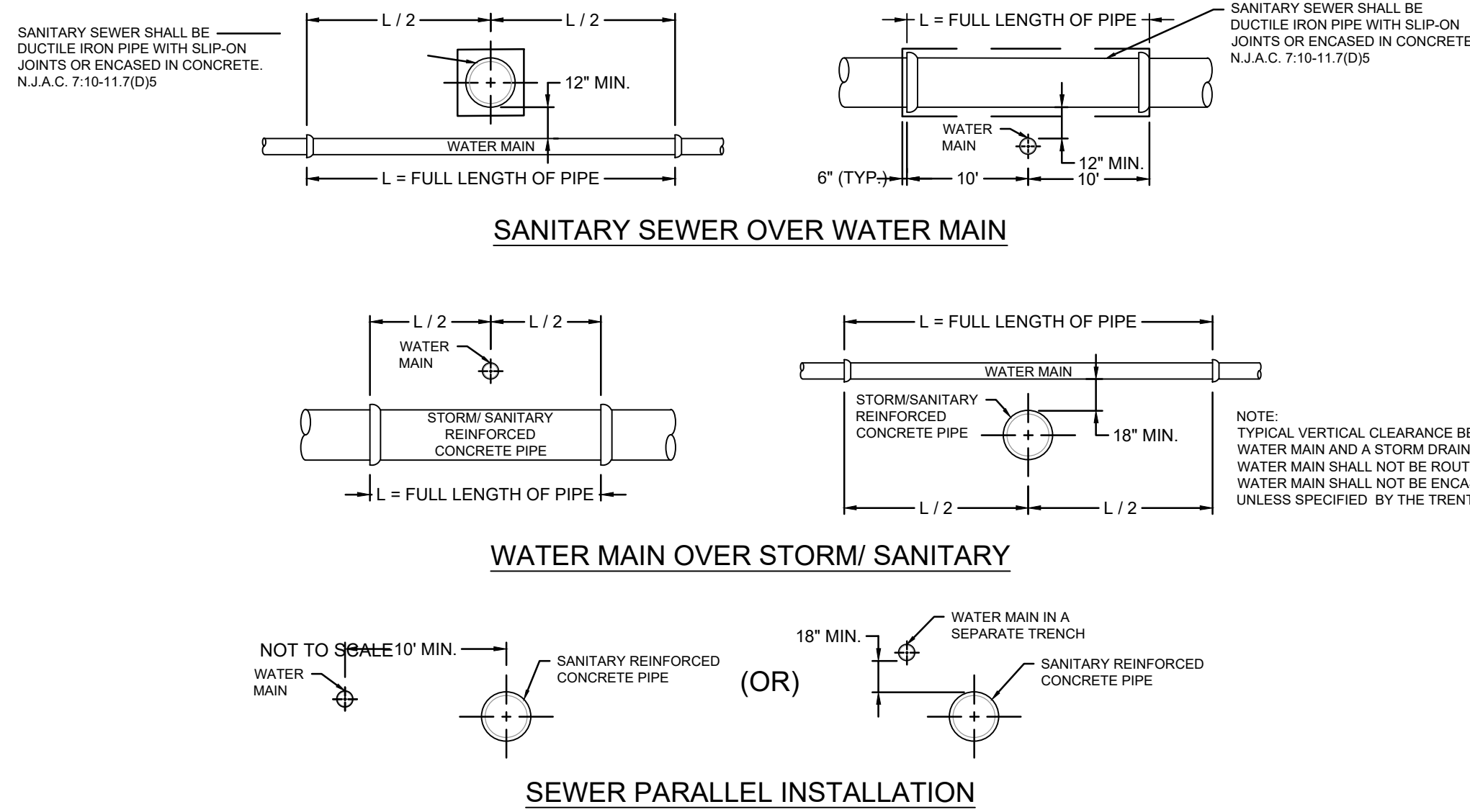
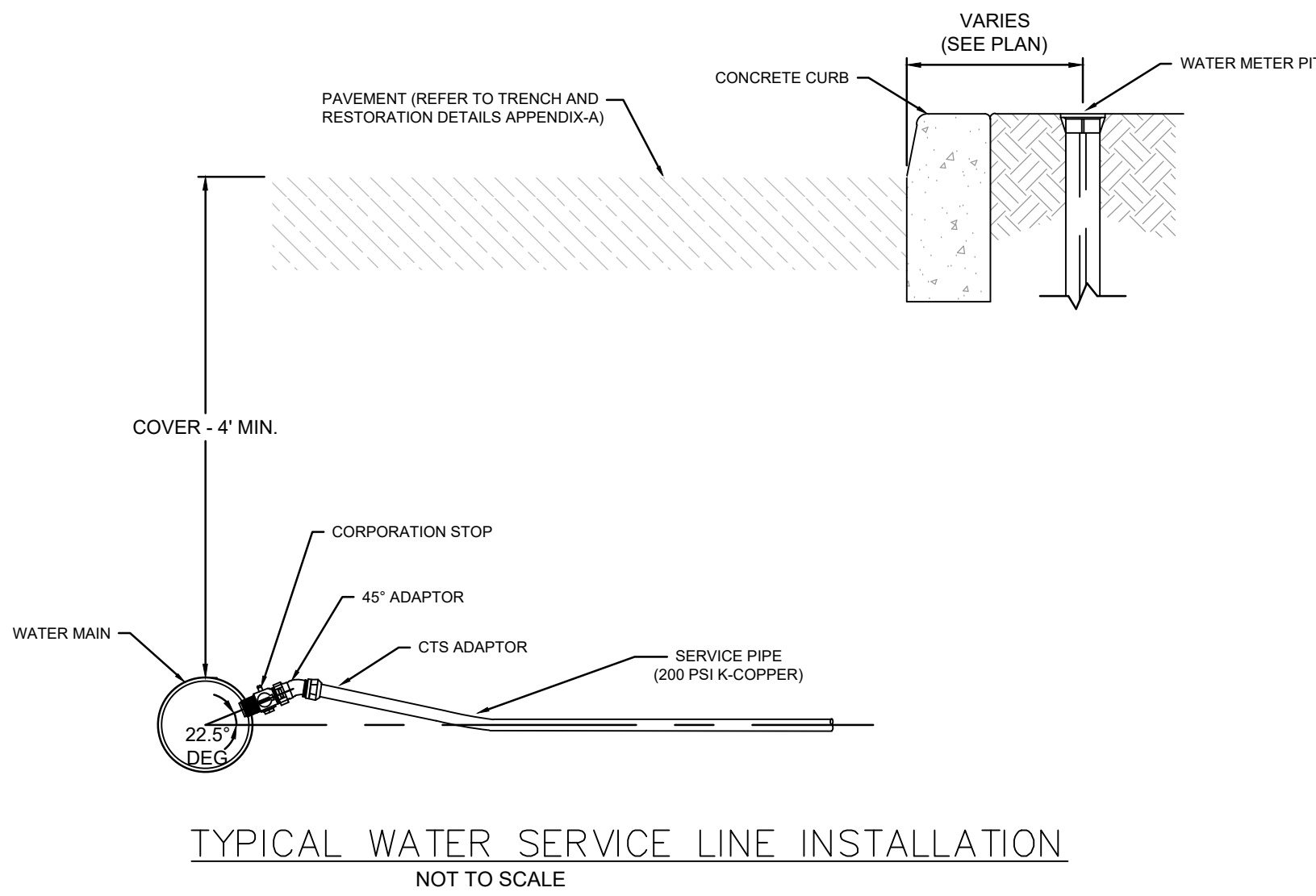
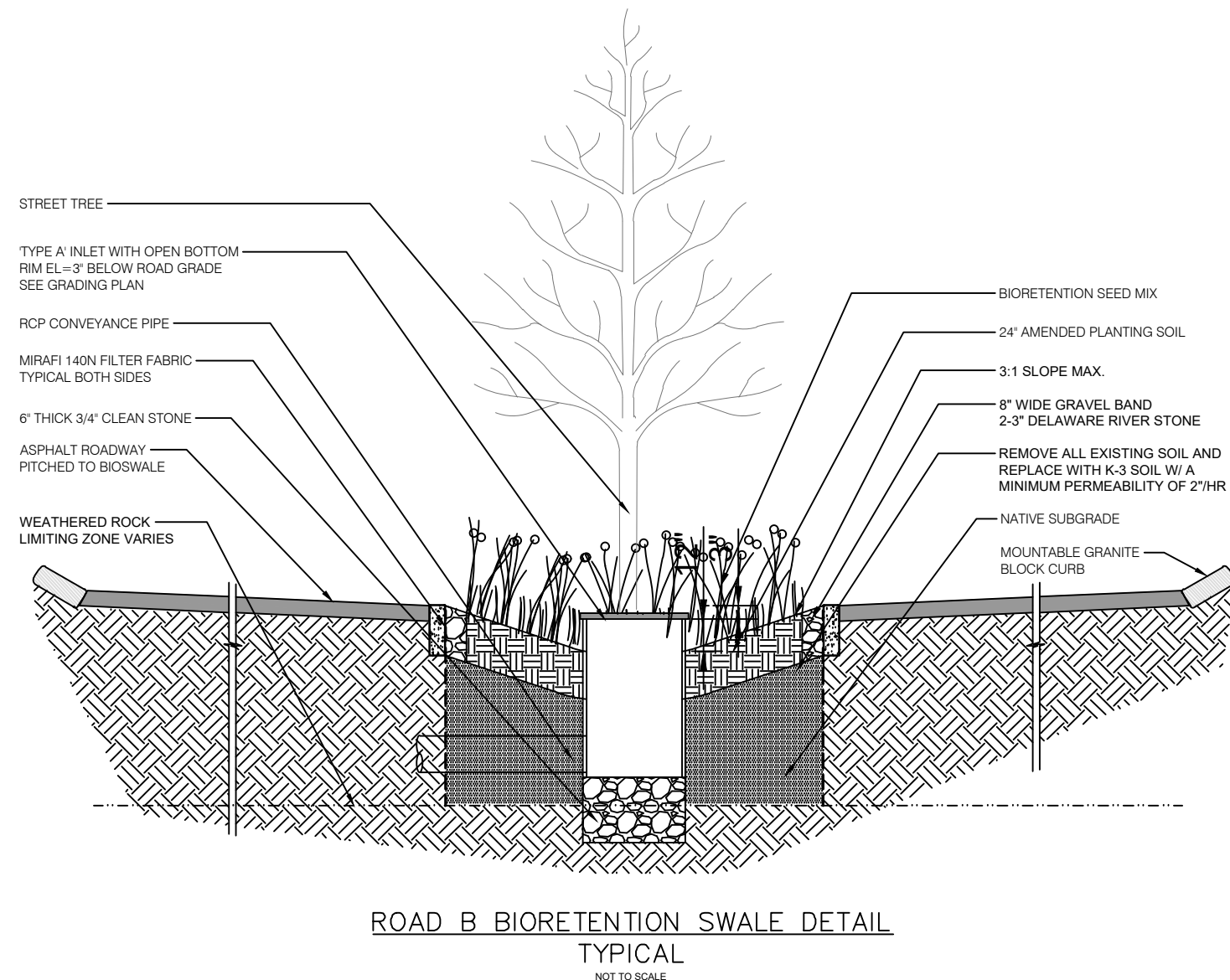
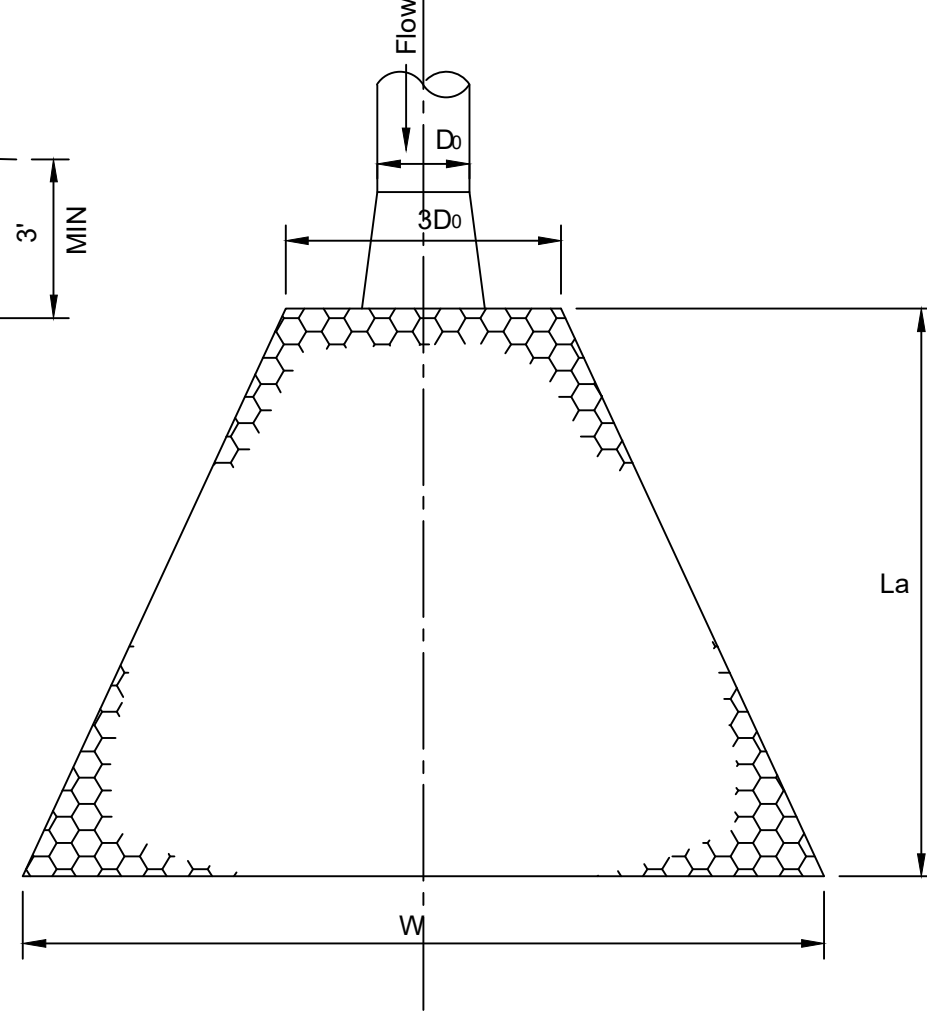
50% BY WEIGHT OF THE RIPRAP MIX SHALL BE SMALLER THAN d_{50} . LARGEST STONE SHALL BE LESS THAN 1.5 TIMES d_{50} . APRON THICKNESS SHALL BE EITHER:
1) THREE TIMES THE d_{50} SIZE, OR
2) TWO TIMES THE d_{50} SIZE WITH A FILTER LAYER

CONDUIT OUTLET PROTECTION SUMMARY						
F.E.S. No.	Q (CFS)	D_0 (FT)	TW (FT)	L_a (FT)	W_a (FT)	$D(50)$ (IN)
HW 115	8.38	3.50	0.70	27.0	37.5	6

**RIP RAP APRON
CONDUIT OUTLET PROTECTION DETAIL**
N.T.S.



Q = 25 YEAR PEAK FLOW IN CUBIC FEET PER SECOND
 D_0 = MAXIMUM CONDUIT WIDTH IN FEET
TW = TAILWATER DEPTH AT THE END OF THE APRON (OR 0.2 D WHERE TW IS INDETERMINATE)
 L_a = APRON LENGTH IN FEET
 W_a = APRON WIDTH AT THE OUTFALL END (NOT APPLICABLE FOR WELL-DEFINED CHANNELS)
 d_{50} = MEDIAN RIPRAP SIZE IN INCHES



**STORM/ SANITARY INSTALLATION
AROUND WATER MAIN**

PRELIMINARY AND FINAL MAJOR SUBDIVISION & FUTURE DEVELOPMENT PROJECT FOR
VENUE AT HOPEWELL
CONSTRUCTION DETAILS - UTILITY
BLOCK 03, LOTS 19, 20, 45, 01, 46 & 60
TOWNSHIP OF HOPEWELL, MERCER COUNTY, NEW JERSEY

SHEET No.
18H
OF

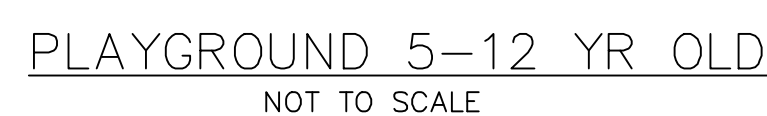
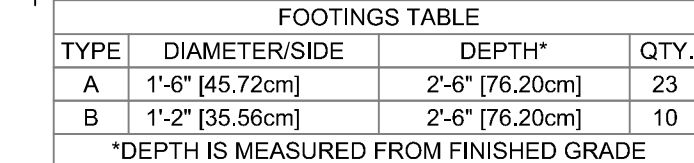
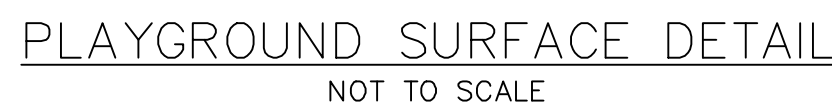
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333 W. Main Street
Freehold, New Jersey 07728
Email: NJS@Bowman.com

Bowman

Sean A. Delany, N.J. Professional Engineer, Lic. 24GED447100

ONLY REVISIONS OF 001
DATE: 06/25/2024
CHND: SAG
THIS WORK WAS CONTRACTED TO BE DESIGNED BY AN INDIVIDUAL OR FIRM NOT LICENSED IN THE STATE OF NEW JERSEY. THE WORK WAS CONTRACTED TO BE DESIGNED BY AN INDIVIDUAL OR FIRM NOT LICENSED IN THE STATE OF NEW JERSEY. THE WORK WAS CONTRACTED TO BE DESIGNED BY AN INDIVIDUAL OR FIRM NOT LICENSED IN THE STATE OF NEW JERSEY. THE WORK WAS CONTRACTED TO BE DESIGNED BY AN INDIVIDUAL OR FIRM NOT LICENSED IN THE STATE OF NEW JERSEY.

NO.	DATE	REVISION	DATE	LOG
1	10/10/24	REVISED PER PER COMPLETE REVIEW		
2				
3				
4				
5				
6				
7				



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E-mail: info@bowman.com
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Fax: 732-485-5001
NJ Certificate of Authorization
No. 2452-02522600

Sean C Delany

SEAN A. DELANY, N.J. Professional Engineer, Lic. 24GEO04447100

SHEET No.
19C
OF

