

GENERAL NOTES:

- 1. THERE ARE NO EXISTING WETLANDS ON SITE OR IMMEDIATELY OFFSITE THAT WOULD IMPACT THE PROPOSED CONSTRUCTION...
2. NO FLOODPLAINS EXIST ON THE SUBJECT PROPERTY AS PER THE FLOOD INSURANCE RATE MAPS PUBLISHED BY FEMA.
3. THE SUBJECT PROPERTY IS LOCATED WITHIN THE 'VILLAGE COMMERCIAL (VC) ZONE' AS DESIGNATED ON THE UNION TOWNSHIP'S ZONE MAP AND 'C-3 HIGHWAY ORIENTED COMMERCIAL ZONE' AS DESIGNATED ON THE CLINTON TOWN'S ZONE MAP.
4. THE SUBJECT PROPERTY IS SHOWN ON UNION TOWNSHIP'S TAX MAP SHEET #22.01 AND CLINTON TOWN'S TAX MAP SHEET #2.
5. THE TOTAL NET AREA OF BLOCK 24.01 LOT 1 (UNION TOWNSHIP) IS 1.135 ACRES (49449± SQ FT) AND BLOCK 4 LOT 2 (CLINTON TOWN) IS 0.599 ACRES (26,082 SQ FT).
6. OFFICIAL NOTICE TO BE SERVED FROM CERTIFIED LISTS OBTAINED FROM THE UNION TOWNSHIP, CLINTON TOWN & FRANKLIN TOWNSHIP.
7. ARCHITECTURAL DATA (FLOOR PLAN AND EXTERIOR ELEVATIONS) FOR THE PROJECT PREPARED BY D. A. DENSON ARCHITECTS ENTITLED 'BONNELL TAVERN ADDITIONS & ALTERATIONS ROUTE 31 TOWN OF CLINTON HUNTERDON COUNTY NEW JERSEY DATED 04/12/22.
8. THE ZONING AND LAND DEVELOPMENT ORDINANCES AVAILABLE ON THE UNION TOWNSHIP AND CLINTON TON WEBSITES WERE USED IN THE PREPARATION OF THE DESIGN SHOWN ON THESE PLANS.
9. ALL PROPOSED UTILITIES TO BE LOCATED UNDERGROUND AND SHALL BE APPROVED BY APPLICABLE AGENCIES.
10. THERE SHALL BE NO ON-SITE BURIAL OF CONSTRUCTION MATERIAL (TREES, TREES STUMPS, BRUSH OR OTHER SURPLUS MATERIAL). ALL SUCH MATERIAL SHALL BE REMOVED FROM THE SITE AND DISPOSED IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS.
11. PRIOR TO ANY TREE REMOVAL, LIMITS OF CLEARING IN WOODED AREAS SHALL BE DELINEATED WITH SNOW FENCE. STANDARD TREE CLEARING INSPECTION BY THE MUNICIPALITY IS REQUIRED PRIOR TO ANY TREE REMOVAL OR LAND DISTURBANCE.
12. THIS BUILDING WILL BE SERVED BY CONNECTIONS TO THE EXISTING SANITARY COLLECTION SYSTEM AND THE POTABLE WATER SUPPLY SYSTEM.
13. EXISTING UTILITIES TO THIS BUILDING WILL REMAIN AND SHALL BE EXTENDED THROUGHOUT THE ADDITIONS AS REQUIRED BY APPLICABLE CODES.
14. THIS SET OF PLANS HAS BEEN PREPARED FOR THE PURPOSES OF MUNICIPAL AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION DOCUMENTS UNTIL ALL CONDITIONS OF APPROVAL HAVE BEEN SATISFIED ON THE DRAWINGS.
15. ANY/ ALL AS-BUILT DOCUMENTS WILL BE PROVIDED BY THE APPLICANT/ LANDOWNER AS THE VARIOUS CONSTRUCTION ITEMS ARE COMPLETED.
16. TRASH COLLECTION AND RECYCLING SHALL CONFORM WITH THE TYPICAL PROCEDURES FOR SIMILAR NON-RESIDENTIAL FACILITIES IN THIS AREA.
17. THE APPLICANT WILL PROVIDE POST-CONSTRUCTION ACCESS TO THE APPROPRIATE MUNICIPAL REPRESENTATIVE TO INSPECT THE ONSITE STORMWATER MANAGEMENT FEATURES AND ASSOCIATED MAINTENANCE RECORDS AS PROPOSED ON THESE PLANS.
18. LIST OF REQUIRED PERMITS AND/ OR APPROVALS: BULK VARIANCE (UNION TOWNSHIP'S PLANNING BOARD - ZONING BOARD OF ADJUSTMENT) PRELIMINARY AND FINAL SITE PLAN (UNION TOWNSHIP'S PLANNING BOARD - ZONING BOARD OF ADJUSTMENT) EROSION CONTROL CERTIFICATION (HUNTERDON COUNTY SOIL CONSERVATION DISTRICT) CONSTRUCTION PERMITS (UNION TOWNSHIP'S BUILDING DEPARTMENT) CERTIFICATE OF OCCUPANCY (UNION TOWNSHIP'S BUILDING DEPARTMENT) MINOR ACCESS PERMIT (NEW JERSEY DEPARTMENT OF TRANSPORTATION) SEWER CONNECTION PERMIT (TOWN OF CLINTON WATER & SEWER DEPARTMENT)

BULK VARIANCE APPLICATION AND PRELIMINARY & FINAL SITE PLAN APPLICATION THE BONNELL TAVERN BLOCK 24.01 LOT 1 UNION TOWNSHIP BLOCK 4 LOT 2 TOWN OF CLINTON 2 COUNTY ROUTE 513 HUNTERDON COUNTY NEW JERSEY

COUNTY APPROVAL BLOCK:

MUNICIPAL (UNION TOWNSHIP) APPROVAL BLOCK:

THIS PLAN WAS APPROVED BY THE PLANNING BOARD - BOARD OF ADJUSTMENT OF UNION TOWNSHIP AT A MEETING HELD ON

DATE

BOARD CHAIRMAN DATE

BOARD SECRETARY DATE

TOWNSHIP ENGINEER DATE

MUNICIPAL (TOWN OF CLINTON) APPROVAL BLOCK:

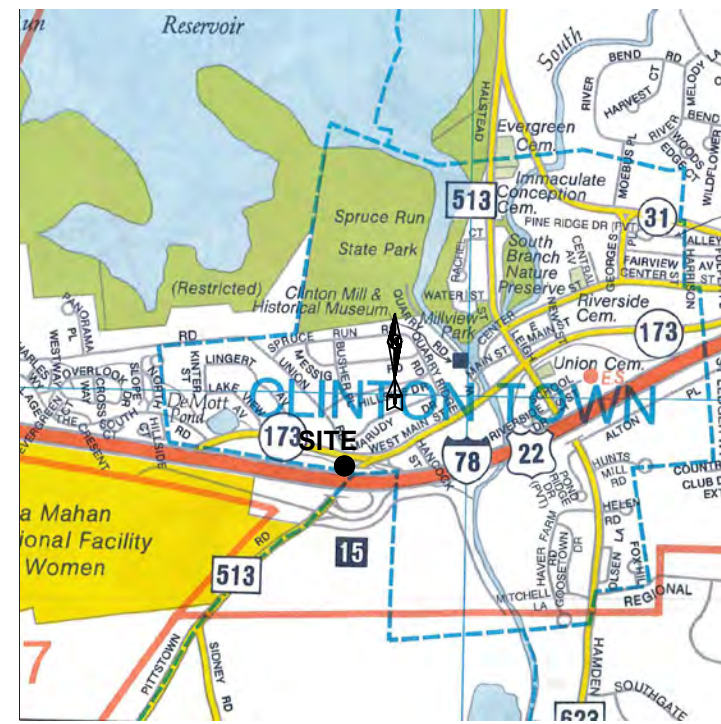
THIS PLAN WAS APPROVED BY THE PLANNING BOARD - BOARD OF ADJUSTMENT OF TOWN OF CLINTON AT A MEETING HELD ON

DATE

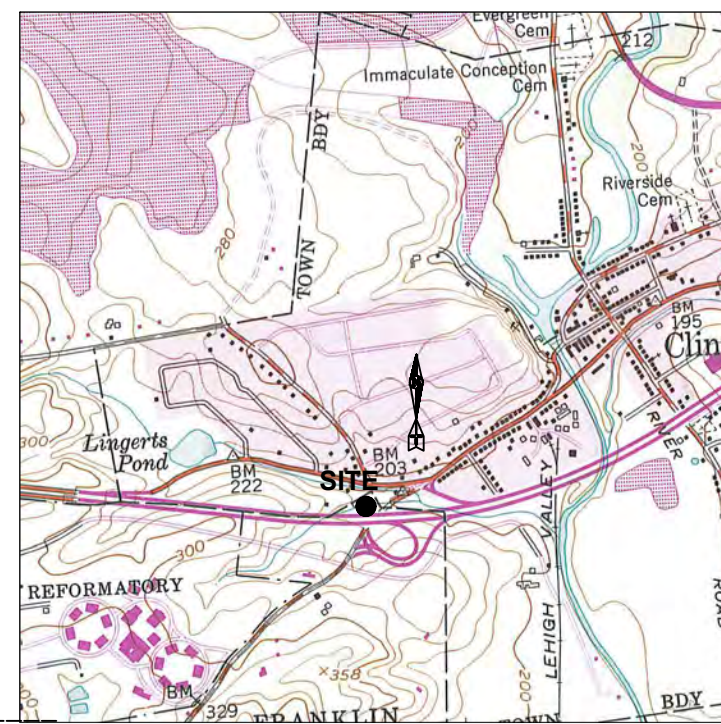
BOARD CHAIRMAN DATE

BOARD SECRETARY DATE

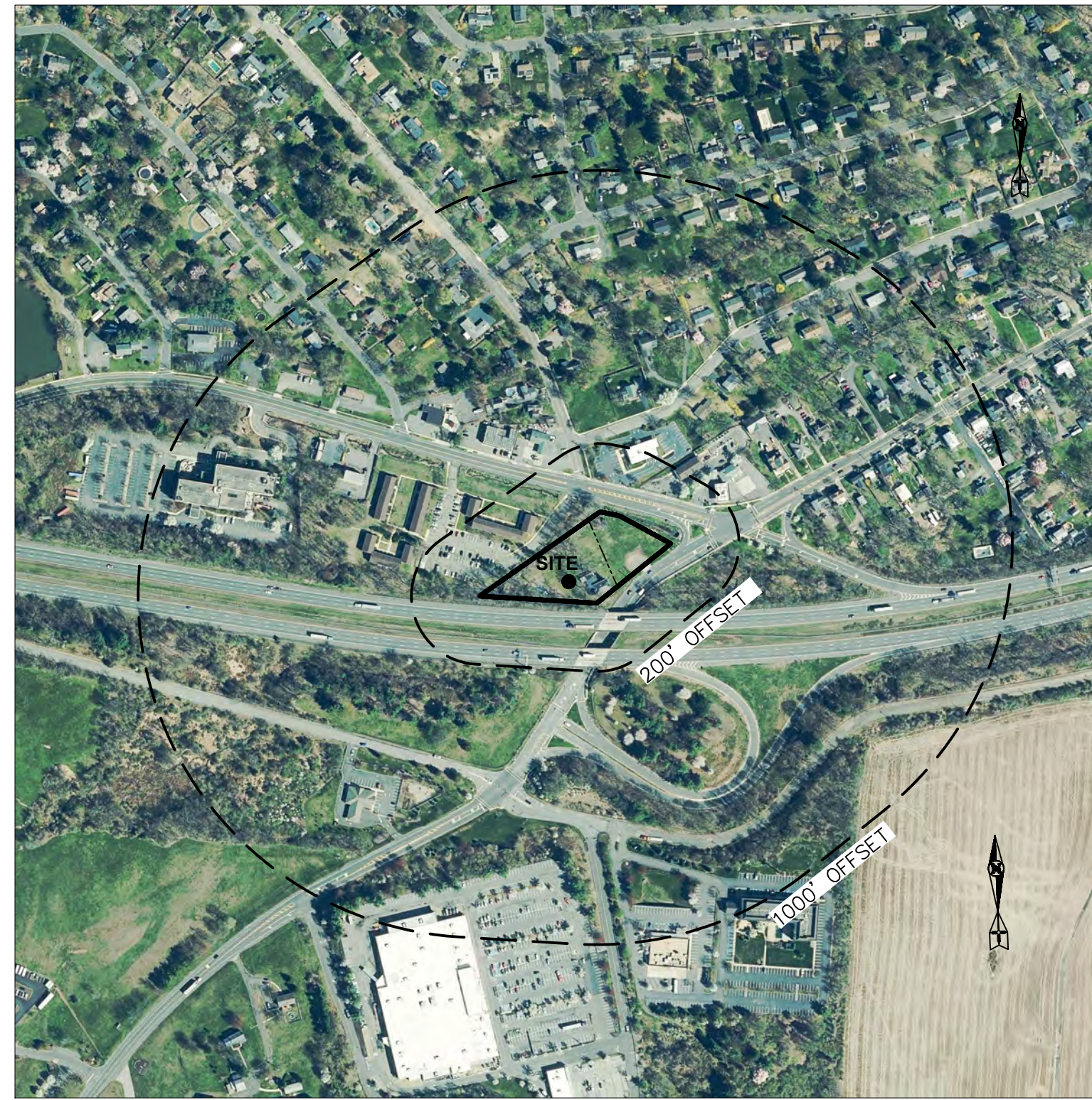
TOWN ENGINEER DATE



HAGSTROM SITE MAP 1" = 2170'±



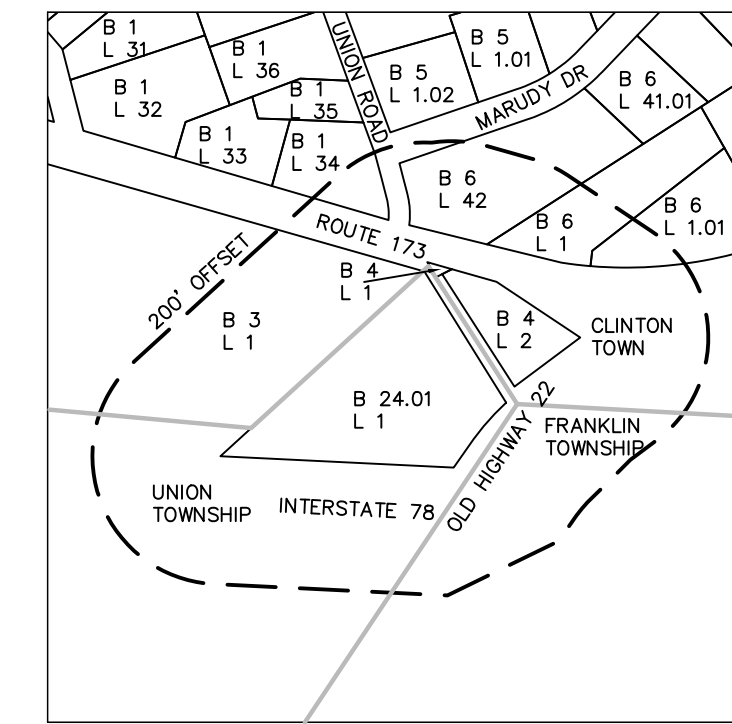
USGS QUADRANGLE MAP HIGH BRIDGE, NJ 1" = 2000'



AERIAL PHOTOGRAPHY 1" = 500'±



USDA HUNTERDON COUNTY SOIL SURVEY 1" = 800'±



TAX MAP DATA 1" = 540'±

MUNICIPAL (UNION TOWNSHIP) SIGNATURES:

I HAVE REVIEWED THIS SITE PLAN AND CERTIFY THAT IT MEETS ALL CODES AND ORDINANCES UNDER MY JURISDICTION.

TOWNSHIP ENGINEER DATE I HEREBY CERTIFY THAT ALL THE REQUIRED IMPROVEMENTS HAVE BEEN INSTALLED OR A BOND POSTED IN COMPLIANCE WITH ALL APPLICABLE CODES AND ORDINANCES. (IF IMPROVEMENTS INSTALLED)

TOWNSHIP CLERK DATE

TOWNSHIP OF UNION, HUNTERDON COUNTY, NEW JERSEY

WAIVER LIST FROM UNION TOWNSHIP'S SITE PLAN CHECKLIST

62. CARBONATE AREA DISTRICT INVESTIGATIONS

LIST OF WAIVERS/ VARIANCES FROM UNION TOWNSHIP ORDINANCE:

ORDINANCE SECTION 30-4.8b MINIMUM LOT AREA GROSS DENSITY BUILDING COVERAGE RATIO LOT IMPERVIOUS COVERAGE RATIO FLOOR AREA RATIO FRONT YARD SETBACK SIDE YARD SETBACK

ORDINANCE SECTION 30-6.4b4 STEEP SLOPE DISTURBANCE

ORDINANCE SECTION 30-5.5E PARKING COUNT

ORDINANCE SECTION 30-6.9 CARBONATE AREA DISTRICT INVESTIGATION

PROJECT ENGINEER: THEODORE H BAYER, PE BAYER-RISSE ENGINEERING INC 78 ROUTE 173 WEST SUITE 6 HAMPTON NEW JERSEY 08827 PHONE: (908) 735 2255 EMAIL: tbayer@bayer-risse.com

PROJECT TRAFFIC ENGINEER: MATTHEW SECKLER, PE STONERFIELD ENGINEERING & DESIGN 92 PARK AVENUE RUTHERFORD NEW JERSEY 07070 PHONE: (201) 340 4468 EMAIL: mseckler@stonerfieldeng.com

TOWN OF CLINTON, HUNTERDON COUNTY, NEW JERSEY

WAIVER LIST FROM TOWN OF CLINTON'S DEVELOPMENT REVIEW CHECKLIST

PRELIMINARY MAJOR SITE PLAN E. CERTIFICATION FROM TOWN'S WATER & SEWER DEPARTMENT FOR FEES H. CERTIFICATION & WILL SERVE LETTERS FROM TOWN'S WATER AND SEWER DEPARTMENT FOR UTILITY CONNECTIONS I. WILL SERVE & REVIEW LETTERS FROM FIRE OFFICIALS J. WILL SERVE LETTER FROM PUBLIC UTILITIES K. OUTSIDE AGENCIES APPLICATION T. FLOOD HAZARD AREA DOCUMENTS U. ENVIRONMENTAL IMPACT STATEMENT/ NATURAL RESOURCE INVENTORY V. WETLANDS REPORT W. WETLANDS LOI Y. GEOLOGICAL INVESTIGATION REPORT

REQUIRED DOCUMENTS (TO BE PROVIDED ON PLANS) 11. EXISTING AND PROPOSED STREETS

PROJECT ARCHITECT: DAVID A. DENSON D.A. DENSON ARCHITECTS 28 CENTER STREET CLINTON NEW JERSEY 08809 PHONE: (908) 730 7881 EMAIL: dadenson@embarqmail.com

PROJECT PLANNER: TIFFANY A. MORRISSEY T. MORRISSEY ENGINEERING & DESIGN 7 EQUESTRIAN DRIVE GALLOWAY, NJ 08205 PHONE: (856) 912 4415 EMAIL: tamorrissey@comcast.net

APPLICANT'S ATTORNEY: KARA KACZYNSKI, ESQ MCNALLY, YAROS, KACZYNSKI, LIMB 275 EAST MAIN STREET SOMERVILLE NEW JERSEY 088876 PHONE: (908) 800 7010 EMAIL: kara@mykl-law.com

APPLICANT/ OWNER: BONNELL PROPERTIES LLC C/O HENRY BONNELL PO BOX 51 ANNADALE NEW JERSEY 08801 PHONE: (917) 753 3333 EMAIL: hbonnell@bonnelltaVERN.com

INDEX OF DRAWINGS table with columns: DRAWING NAME, SHEET NUMBER. Includes COVER PAGE, EX CONDS & DEMO PLAN, PROP CONDS & ZONING PLAN, GRADING & DRAINAGE PLAN, LANDSCAPING PLAN, LIGHTING PLAN, SOIL EROSION CONTROL PLAN, CONSTRUCTION DETAILS I-III, SLOPE STUDY PLAN.

PROPERTY OWNERS WITHIN 200' OF SUBJECT PROPERTY:

NOTE, THIS LISTING MAY BECOME OUTDATED OVER TIME AND SHOULD NOT BE USED FOR ANY OFFICIAL NOTIFICATION. ONLY THE OFFICIAL/ CERTIFIED LISTS FROM EACH OF THE MUNICIPALITIES SHOULD BE USED FOR SUCH PURPOSES.

Table with columns: SUBJECT PARCEL IN UNION TOWNSHIP, OWNER'S NAME & MAILING ADDRESS, PROPERTY LOCATION. Lists adjacent properties.

ADJOINERS UNION TOWNSHIP NONE

Table with columns: CLINTON TOWN BLOCK LOT, OWNER'S NAME & MAILING ADDRESS, PROPERTY LOCATION. Lists adjacent properties in Clinton Town.

PUBLIC UTILITY AND CABLE TV COMPANIES:

UNION TOWNSHIP SPRINT ATT. NETWORK ENGINEER II 160 CENTER STREET CLINTON, NJ, 08809 MANAGER: CORPORATE PROPERTIES 80 PARK PLAZA, T66 NEWARK, NJ, 07102 NEW JERSEY DEPARTMENT OF TRANSPORTATION ROUTE 79 AND DANIELS WAY FREEHOLD NJ 07728 HUNTERDON COUNTY PLANNING BOARD P. O. BOX 2900 FLEMINGTON NEW JERSEY 08822-2900

CLINTON TOWN CLINTON WATER DEPARTMENT ART DYSART N, WATER SUPERINTENDENT 0. BOX 5194 CLINTON, NEW JERSEY 08809 CLINTON SEWER DEPARTMENT BOB NEIZGODA, SUPERINTENDENT 0. BOX 5194 CLINTON, NEW JERSEY 08809 COMCAST CABLE COMPANY 50 RANDOLPH ROAD SOMERSET NEW JERSEY 08873 COMCAST CONSTRUCTION J C P & L (ELECTRICITY) 300 MADISON AVENUE & PUNCH BOWL ROAD MORRISTOWN NEW JERSEY 07960 ELIZABETHTOWN GAS CO CENTURYLINK 520 GREEN LANE UNION NEW JERSEY 07083 TELEPHONE COMPANY OF NJ 160 CENTER STREET CLINTON NEW JERSEY 08809 AT&T 50 PATRICIA DRIVE FLANDERS, NEW JERSEY 07836 NEW JERSEY DEPARTMENT OF TRANSPORTATION STATE OF NEW JERSEY DEPARTMENT OF TRANSPORTATION 1035 PARKWAY A VENUE CN 600 TRENTON, NEW JERSEY 08625 HUNTERDON COUNTY PLANNING BOARD 314 ROUTE 12, BUILDING # 1, 1 ST FLOOR P. O. BOX 2900 FLEMINGTON NEW JERSEY 08822-2900

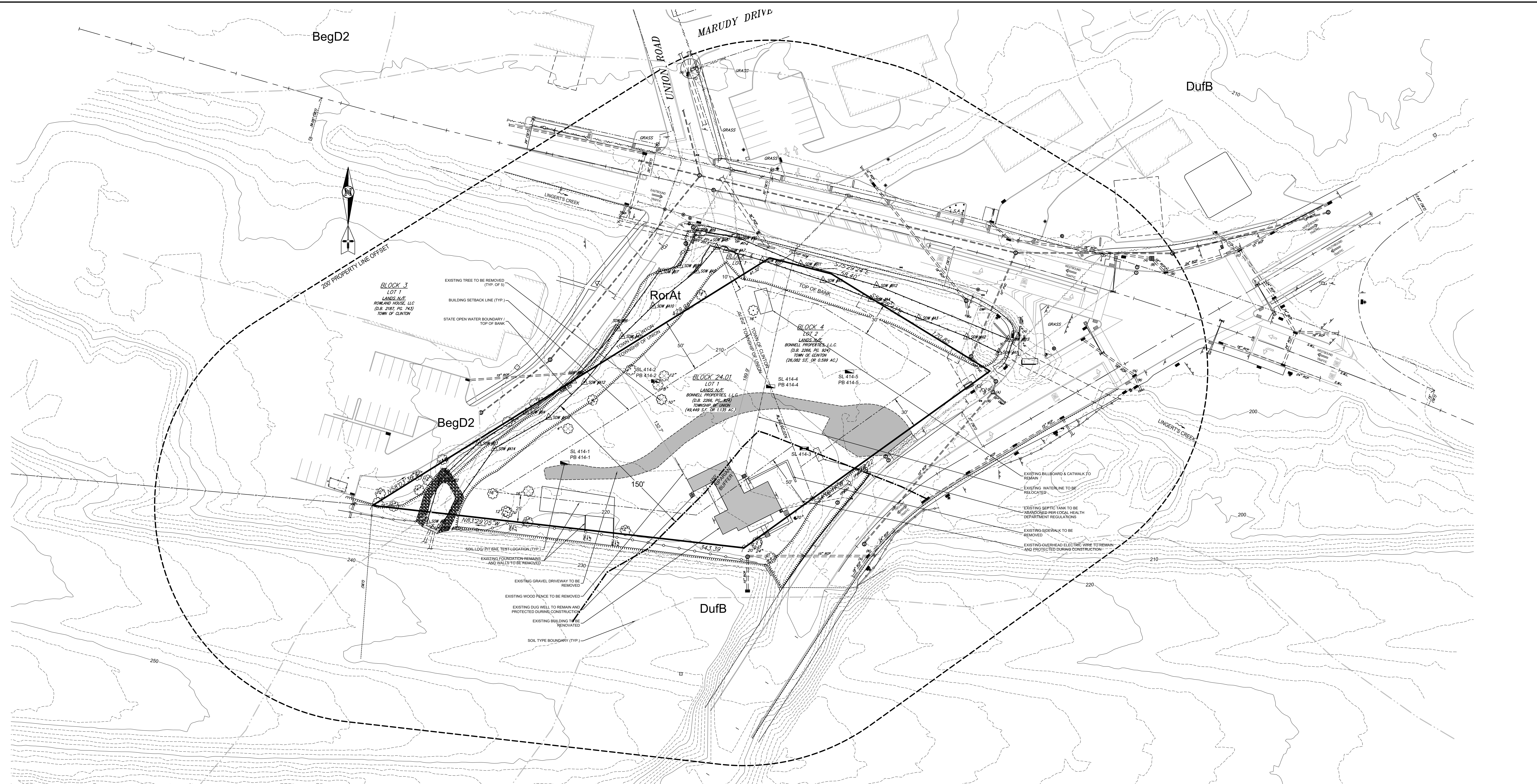
REFERENCE MATERIALS & GENERAL NOTES:

- 1. SURVEY DATA FOR THE BONNELL TAVERN PREPARED BY CARROLL ENGINEERING ENTITLED 'BOUNDARY AND TOPOGRAPHIC SURVEY THE BONNELL TAVERN REDEVELOPMENT PROJECT SITUATED IN BLOCK 24.01, LOT 1 - UNION TOWNSHIP BLOCK 4, LOT 2 - TOWN OF CLINTON HUNTERDON COUNTY, NEW JERSEY' DATED 07/29/22 AND REVISED THROUGH 03/23/23, JOB #21-5316-000, SIGNED BY THOMAS A. WATKINS PLS #37611.
2. SURROUNDING TOPOGRAPHIC DATA FROM FILES E705, E706, E709 & E7D10 OF NORTHWEST NJ 2018 LIDAR PROJECT FROM NJ GEOGRAPHIC INFORMATION NETWORK INTERACTIVE MAP.
3. ARCHITECTURAL DATA (FLOOR PLAN AND EXTERIOR ELEVATIONS) FOR THE PROJECT PREPARED BY D. A. DENSON ARCHITECTS ENTITLED 'BONNELL TAVERN ADDITIONS & ALTERATIONS ROUTE 31 TOWN OF CLINTON HUNTERDON COUNTY NEW JERSEY DATED 04/12/22.
4. UNION TOWNSHIP TAX MAP CLINTON TOWN TAX MAP
5. UNION TOWNSHIP ZONING MAP CLINTON TOWN ZONING MAP
6. USDA NRCS SOIL DATA FOR HUNTERDON COUNTY
7. USGS QUADRANGLE MAPS: HIGH BRIDGE, NEW JERSEY
8. AERIAL IMAGING FROM GOOGLE EARTH WEBSITE
9. FLOOD INSURANCE RATE MAP (FIRM) FOR HUNTERDON COUNTY PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) IDENTIFIED MAP #34019C0118F EFFECTIVE 09-25-09
10. THIS SITE IS WITHIN THE PLANNING AREA AS PER THE HIGHLANDS INTERACTIVE MAP.

CERTIFICATION BLOCK

- 1. PRELIMINARY SITE PLAN OF BLOCK #24.01 LOT #1, ZONE 'VC VILLAGE COMMERCIAL DISTRICT' DATED: AUGUST 5, 2022 APPLICANT & OWNER: BONNELL PROPERTIES LLC C/O HENRY BONNELL MAILING ADDRESS: PO BOX 51, ANNADALE, NEW JERSEY 08801
2. I CONSENT TO THE FILING OF THIS SITE PLAN WITH THE PLANNING BOARD - BOARD OF ADJUSTMENT OF UNION TOWNSHIP HENRY BONNELL, OWNER 08/05/22 DATE
3. I HEREBY CERTIFY THAT I HAVE PREPARED THIS SITE PLAN AND THAT ALL DIMENSIONS AND INFORMATION ARE CORRECT, AND PLANS FOR ALL IMPROVEMENTS ARE BASED UPON TOPOGRAPHICAL DATA THAT HAS BEEN INSTANTLY VERIFIED IN THE FIELD THEODORE H BAYER NJPE #33806 DATE 08/05/22

Professional seal area containing BAYER-RISSE ENGINEERING, INC. logo, contact information, and THEODORE H. BAYER, P.E. signature and seal. Includes drawing title 'LAND DEVELOPMENT PLAN COVER PAGE' and project details.



BegD2

DufB

BegD2

DufB

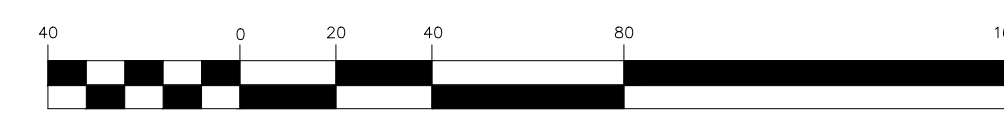
BLOCK 3
LOT 1
LANDS N/E
ROWLAND HOUSE, LLC
(O.B. 2187, PG. 743)
TOWNSHIP OF CLINTON

RorAt

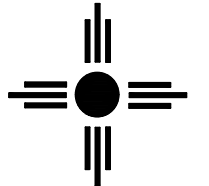

BLOCK 4
LOT 2
LANDS N/E
BONNELL PROPERTIES, LLC
(O.B. 2266, PG. 824)
TOWNSHIP OF CLINTON
(26,082 SQ. FT. OR 0.599 AC.)

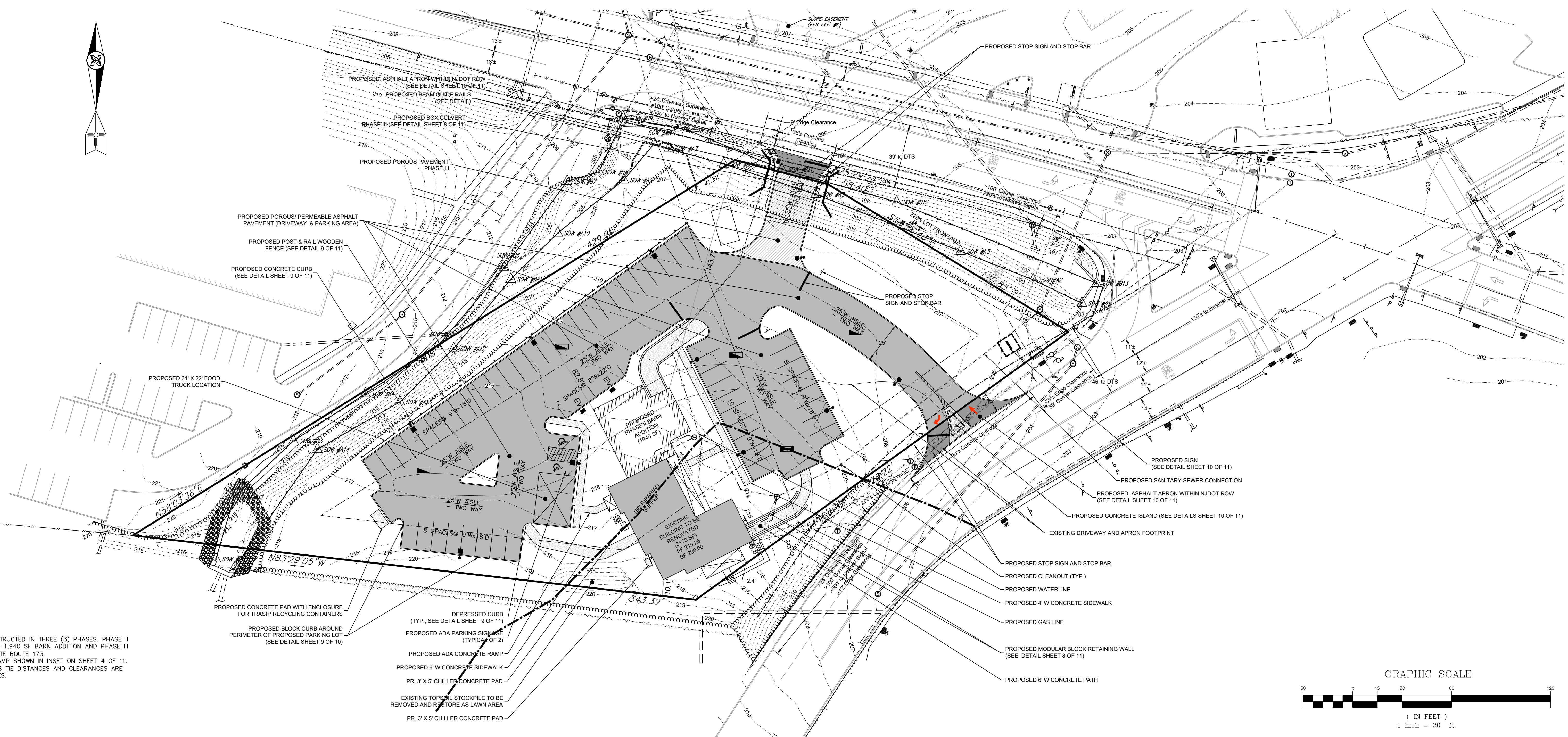
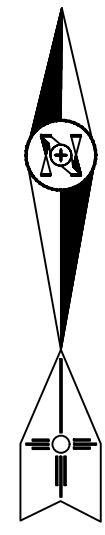
BLOCK 24.01
LOT 1
LANDS N/E
BONNELL PROPERTIES, LLC
(O.B. 2266, PG. 824)
TOWNSHIP OF CLINTON
(48,449 SQ. FT. OR 1.115 AC.)

GRAPHIC SCALE

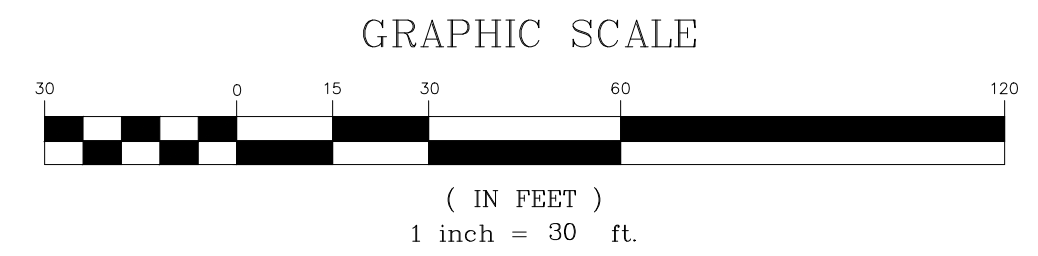


(IN FEET)
1 inch = 40 ft.

SUBJECT PARCELS: UNION TOWNSHIP TOWN OF CLINTON		BL 24.01 LOT 1 BL 4 LOT 2				
 BAYER-RISSE ENGINEERING, INC. 78 ROUTE 173 WEST, SUITE 6 HAMPTON, NEW JERSEY 08827 PHONE 908-735-2255 FAX 908-735-5838 <small>Certificate of Authorization No. 245427943900</small>		REV PER TWP & NJDOT REVIEW COMMENTS	03-15-23	THB		
		REV PER TWP REVIEW COMMENTS	11-23-22	THB		
		REV PER TWP REVIEW COMMENTS	10-19-22	THB		
		REVISION DESCRIPTION	DATE	APPROVED		
		LAND DEVELOPMENT PLAN EXIST CONDS & DEMO				
		<i>The Bonnell Tavern</i> Block 24.01 Lot 1 2 County Route 513 UNION TOWNSHIP, HUNTERDON COUNTY, NEW JERSEY				
 THEODORE H. BAYER, P.E. New Jersey Professional Engineer License No. GE33806		DRAWN BY: RT	DESIGNED BY: RT	CHECKED BY: THB	DWG NO.: TBT-2	BEE JOB#: 21-2345
SCALE:	As Noted	DATE:	August 5, 2022	SHEET:	2 of 11	



- NOTES:**
- PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED IN THREE (3) PHASES. PHASE II IMPROVEMENTS CONSIST OF THE PROPOSED 1,940 SF BARN ADDITION AND PHASE III CONSISTS NORTH INGRESS/ EGRESS TO STATE ROUTE 173.
 - BASEMENT ACCESS FOR PHASE I IS VIA RAMP SHOWN IN INSET ON SHEET 4 OF 11.
 - EXISTING AND PROPOSED INGRESS/ EGRESS TIE DISTANCES AND CLEARANCES ARE INCLUDED FOR NJDOT PERMITTING PURPOSES.



ZONE SCHEDULE BULK REQUIREMENTS FOR BLOCK 24.01 LOT 1 IN UNION TOWNSHIP'S VILLAGE COMMERCIAL (VC) DISTRICT				
TOPICS (TYPICAL ITEMS FOR DISCUSSION)	CONVENTIONAL STANDARDS	EXISTING CONDITIONS	PROPOSED CONDITIONS	COMMENT
LOT AREA (MIN) ACRES	2.0	1.135	NO CHANGE	VARIANCE 'A'
LOT WIDTH (MIN) FEET	150	>150	NO CHANGE	CONFORM
GROSS DENSITY (MAX)	0.5	0.88	NO CHANGE	VARIANCE 'A'
BUILDING COVERAGE RATIO (MAX)	0.06	0.08	0.10 'B'	VARIANCE 'A'
LOT IMPERVIOUS COVERAGE RATIO (MAX)	0.20	0.16	0.53	VARIANCE 'A'
FLOOR AREA RATIO (MAX)	0.125	0.143	0.21 'B'	VARIANCE 'A'
PRINCIPAL BUILDING SETBACKS				
FRONT YARD (MIN) FEET	50	8.8	NO CHANGE	VARIANCE 'A'
SIDE YARD (MIN) FEET	25	10.1	NO CHANGE	VARIANCE 'A'
REAR YARD (MIN) FEET	50	132.7	82.8	CONFORM
PRINCIPAL BUILDING HEIGHT				
HEIGHT (MAX) STORY	2.5	2.5	2.5	CONFORM
HEIGHT (MAX) FEET	35	<35	<35	CONFORM

A. EXISTING NON-CONFORMING ISSUE AS PER REFERENCED SURVEY
B. REFER TO REFERENCE #3.

ZONE SCHEDULE BULK REQUIREMENTS FOR BLOCK 4 LOT 2 IN CLINTON TOWN C-3 HIGHWAY ORIENTED COMMERCIAL DISTRICT				
TOPICS (TYPICAL ITEMS FOR DISCUSSION)	CONVENTIONAL STANDARDS	EXISTING CONDITIONS	PROPOSED CONDITIONS	COMMENT
LOT AREA (MIN) ACRES	0.33	0.599	NO CHANGE	CONFORM
LOT WIDTH (MIN) FEET	150	>150	NO CHANGE	CONFORM
GROSS DENSITY (MAX)	---	---	---	---
BUILDING COVERAGE RATIO (MAX)	0.25	0	0	CONFORM
LOT IMPERVIOUS COVERAGE RATIO (MAX)	0.75	0.12	0.39	CONFORM
FLOOR AREA RATIO (MAX)	0.30	0	0	CONFORM
PRINCIPAL BUILDING SETBACKS				
FRONT YARD (MIN) FEET	30	---	---	N/A
SIDE YARD (MIN) FEET	10	---	---	N/A
REAR YARD (MIN) FEET	35	---	---	N/A
PRINCIPAL BUILDING HEIGHT				
HEIGHT (MAX) STORY	2	---	---	N/A
HEIGHT (MAX) FEET	35	---	---	N/A

IMPERVIOUS LOT COVERAGES TABLE - UNION TOWNSHIP PARCEL					
EXISTING CONDITION	AREA	% OF LOT	PROPOSED CONDITION	AREA	% OF LOT
BUILDING FOOTPRINT	2461 SF	4.98	PROPOSED BUILDING RENOVATION	3173 SF	6.42
PORCHES	470 SF	0.95	PHASE II BARN ADDITION	1940 SF	3.92
CONCRETE SIDEWALKS, STEPS & WALL	146 SF	0.30	PORCHES	534 SF	1.08
FOUNDATION REMAINS	1423 SF	2.88	CONCRETE SIDEWALKS, STEPS & WALL	2228 SF	4.51
DRIVEWAY	3173 SF	6.42	DRIVEWAY & PARKING AREA	18015 SF	36.43
			MISC	500 SF	1.01
TOTALS (LOT AREA = 49449± SF)	7673 SF	15.52	TOTALS (LOT AREA = 49449± SF)	26390 SF	53.37

IMPERVIOUS LOT COVERAGES TABLE - CLINTON TOWN PARCEL					
EXISTING CONDITION	AREA	% OF LOT	PROPOSED CONDITION	AREA	% OF LOT
DRIVEWAY	3197 SF	12.26	DRIVEWAY & PARKING AREA	8390 SF	32.17
			PHASE II DRIVEWAY	1470 SF	5.64
			CONCRETE SIDEWALKS, STEPS, ISLAND & WALL	230 SF	0.88
TOTALS (LOT AREA = 26082± SF)	3197 SF	12.26	TOTALS (LOT AREA = 26082± SF)	10090 SF	38.69

CARBONATE ROCK DISTRICT (CRD): THE ZONING MAP OF UNION TOWNSHIP IDENTIFIES THE SITE AS BEING LOCATED WITHIN THE CARBONATE ROCK DISTRICT. FIVE (5) SOIL LOGS WERE EXCAVATED ONSITE TO ESTABLISH THE DESIGN REQUIREMENTS FOR THE STORMWATER MANAGEMENT SYSTEM. NO LIMESTONE OR OTHER CARBONATE ROCK WAS IDENTIFIED IN THE SOIL LOG EXCAVATIONS. THE SOIL LOGS IDENTIFIED BRUNSWICK SHALE AT DEPTHS AS SHOWN AS 48" AND EXTENDING TO 168". REFER TO SHEET 4 FOR SOIL LOG INFORMATION. ADDITIONALLY, A THOROUGH ONSITE INSPECTION OF THE SURFICIAL CONATIONS ONSITE DID NOT IDENTIFY ANY SINKHOLES, DEPRESSIONS, OR OTHER EVIDENCE OF CARBONATE ROCK. FURTHER, HIGHLANDS COUNCIL'S INTERACTIVE MAP SHOWS NO CARBONATE ROCK AREA ONSITE. A WAIVER FROM A PHASE I AND II GEOLOGICAL STUDY IS REQUIRED.

SITE CAPABILITY CALCULATIONS:

1. **Gross Site Area per Union Township Ordinance 30-6.3(b)1**

Total Property Area	1.135	Acres
Lands within ROW	0.000	Acres
Gross Site Area	1.135	Acres

2. **Resource Restrictions and Resource Protection Lands within the Gross Site Area per Union Township Ordinance 30-6.3-(b)2**

Natural Resources	Minimum Required Resources Protection Ratio	Acres of Land in Natural Resource	Resource Protection Land*	Comments
Steep Slopes**				
10% - 15%	0.65	0.14	0.09	
15% - 20%	0.80	0.04	0.03	
>20%	0.90	0.10	0.09	

TOTAL LAND WITH NATURAL RESOURCE RESTRICTIONS = 0.22 Acres

*In the event two or more resources overlap, only the resource with the highest open space ratio shall be used.
**Refer to Slope Analysis on Sheet 6 of 6.

3. **Minimum Active Recreation Land Per Union Township Ordinance 30-6.3(b)3**
Exempted. Any development that contains only one or two dwelling units shall be exempted.

PARKING DATA TABLE				
PROPOSED USAGES	REQUIREMENTS (UNION TWP)	PROPOSAL	REQUIRED	PROVIDED
PHASE I				
BRWERY	1 SP / 220 SF GFA*	6162 SF	28 SPACES	57 SPACES
PHASE II				
BRWERY	1 SP / 220 SF GFA*	6162 SF	28 SPACES	57 SPACES
BARN ADDITION	1 SP / 200 SF GFA*	1396 SF	7 SPACES	

* GROSS FLOOR AREA

SUBJECT PARCELS:
UNION TOWNSHIP TOWN OF CLINTON BL 24.01 LOT 1 BL 4 LOT 2

BAYER-RISSE ENGINEERING, INC.
78 ROUTE 173 WEST, SUITE 6
HAMPTON, NEW JERSEY 08827
PHONE 908-735-2255 FAX 908-735-5838
Certificate of Authorization No. 245427943900

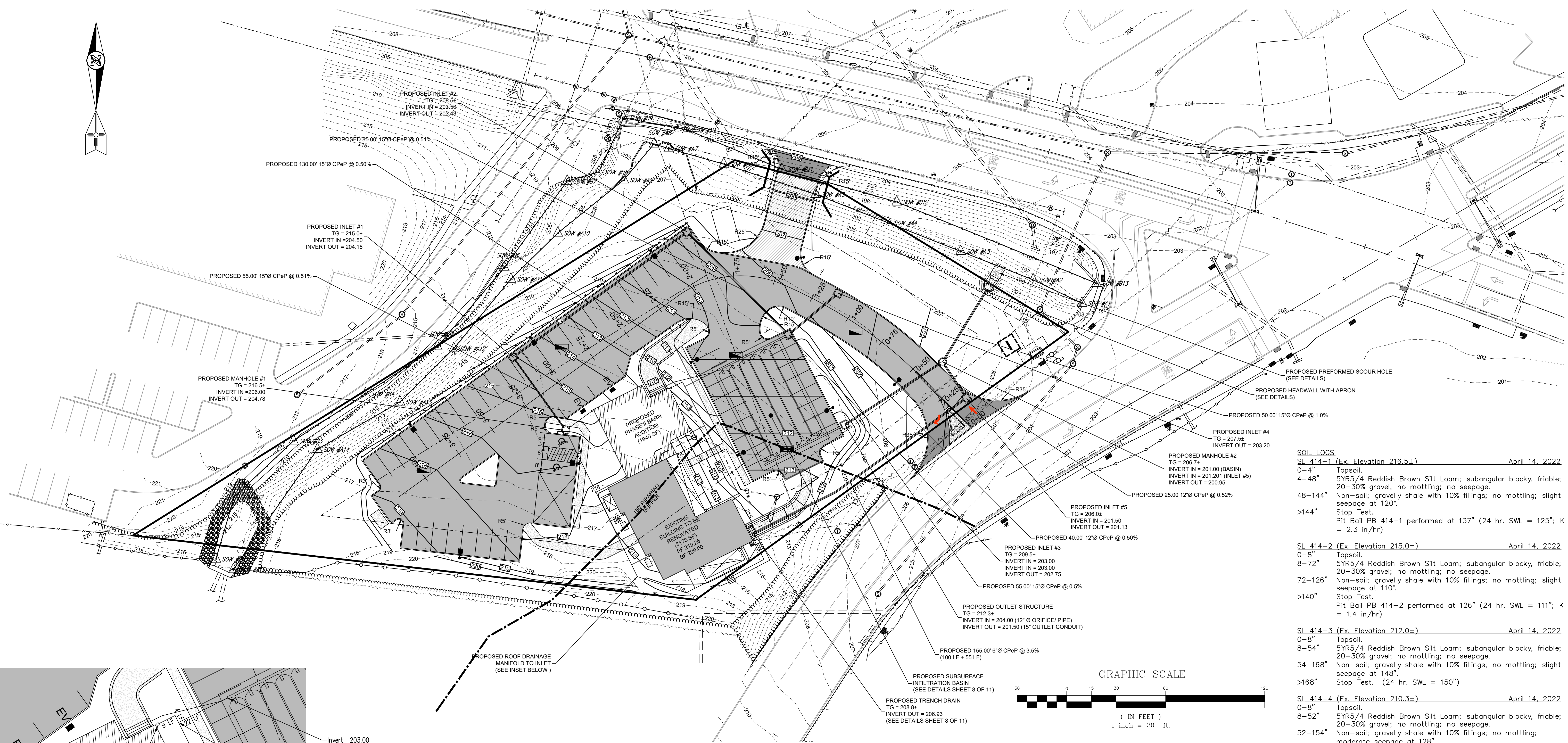
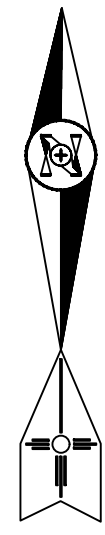
THEODORE H. BAYER, P.E.
New Jersey Professional Engineer License No. GE33806

SCALE: As Noted	DATE: August 5, 2022	SHEET: 3 of 11
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**LAND DEVELOPMENT PLAN
PROP CONDS & LAYOUT**

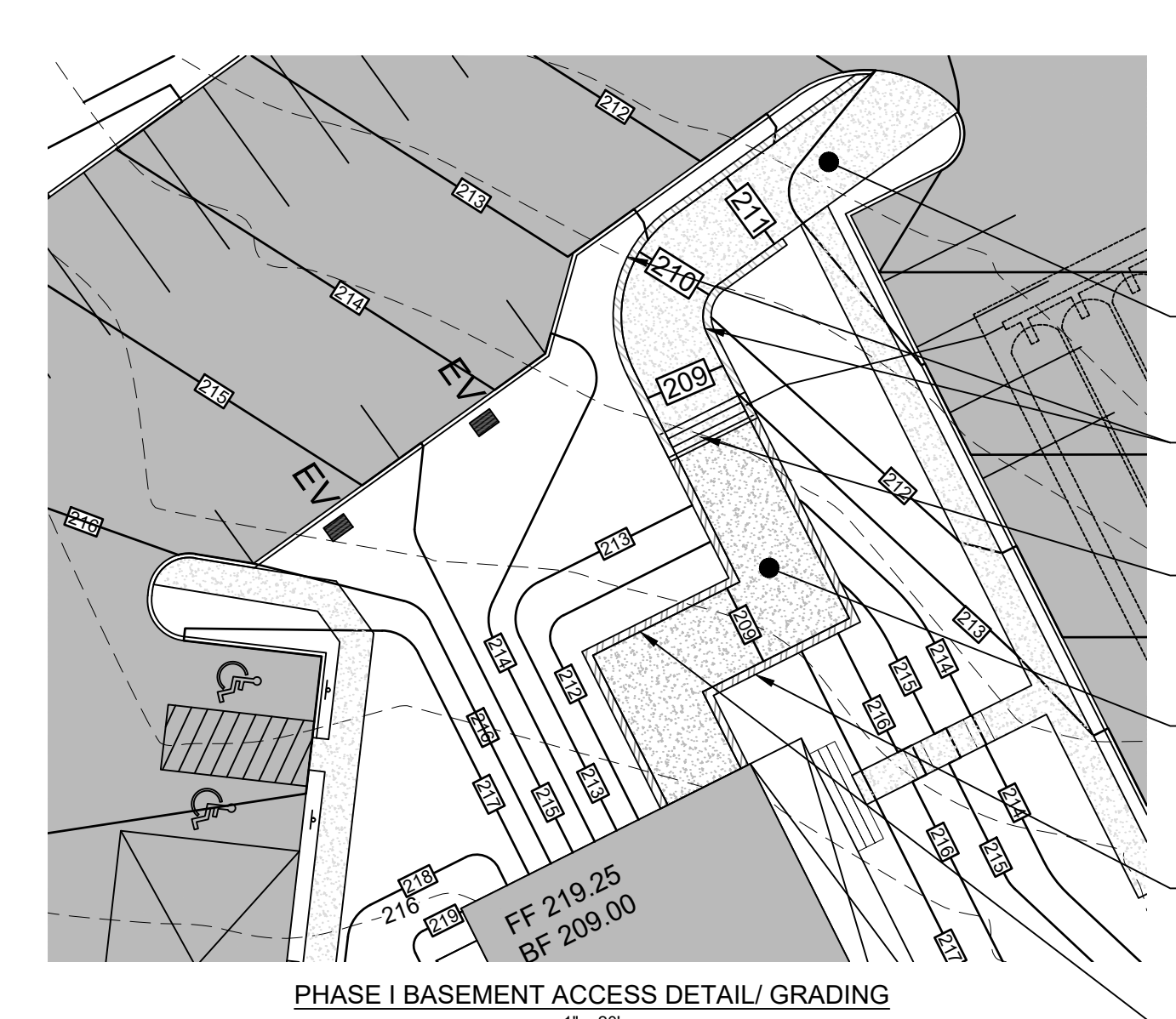
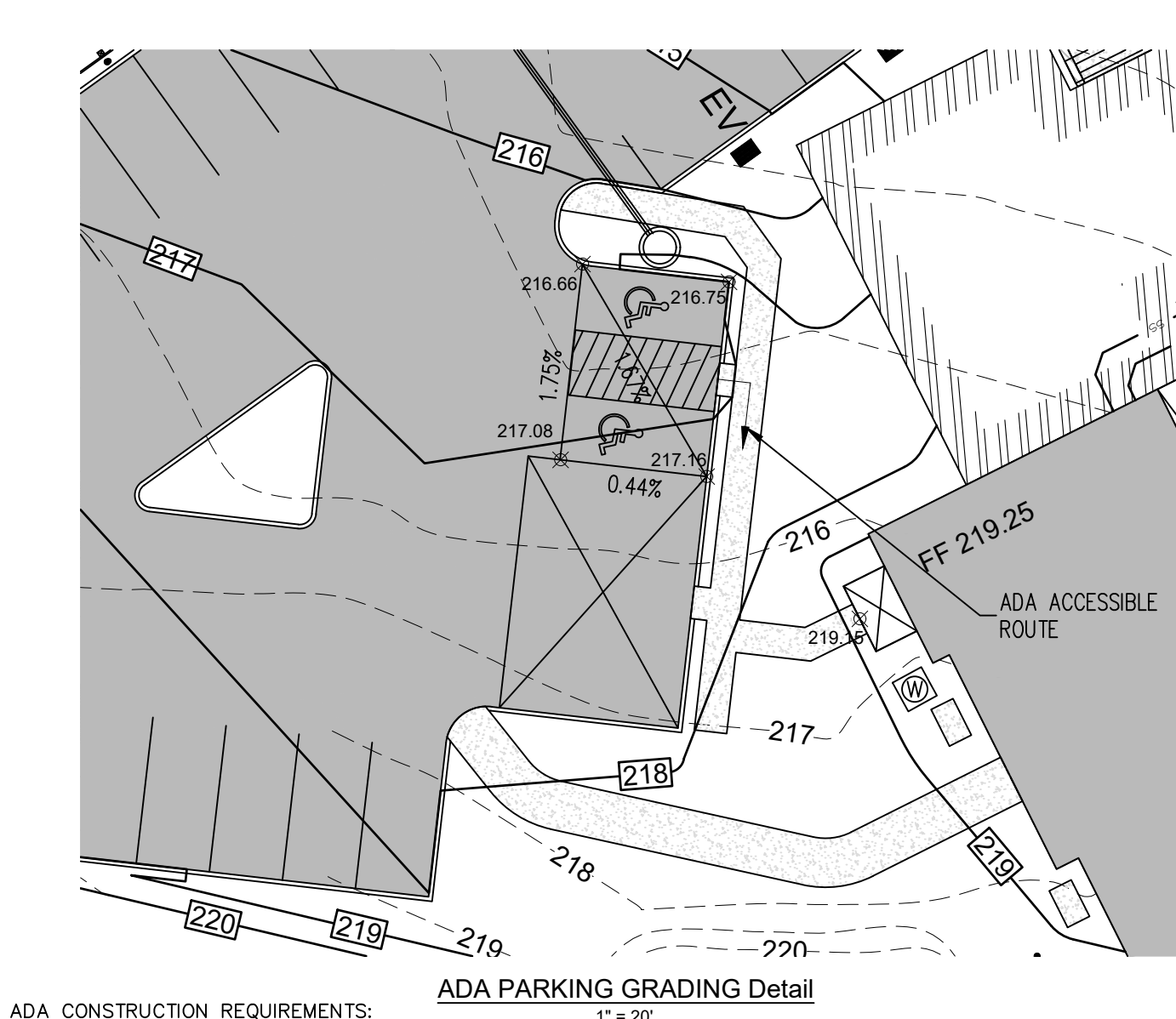
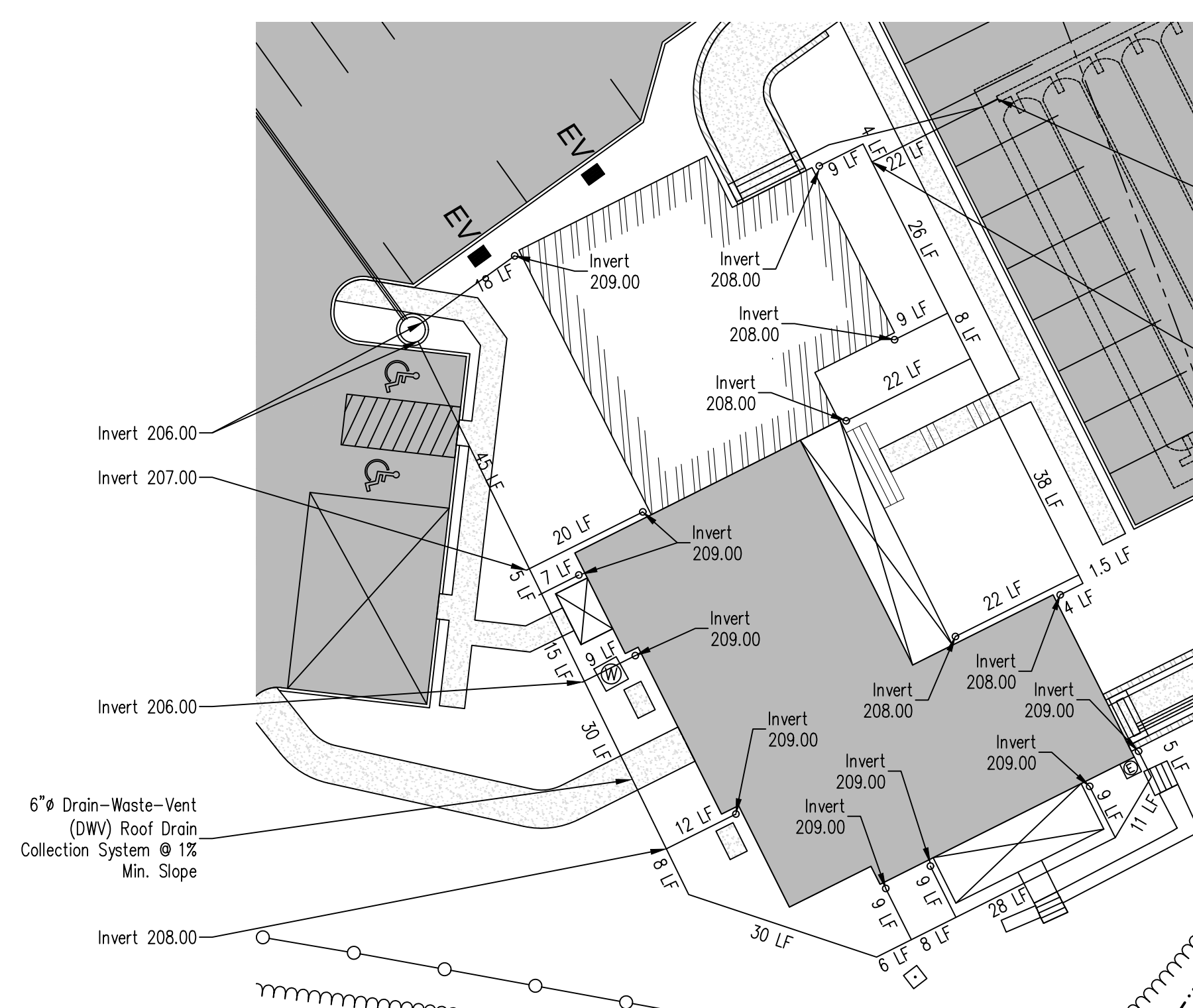
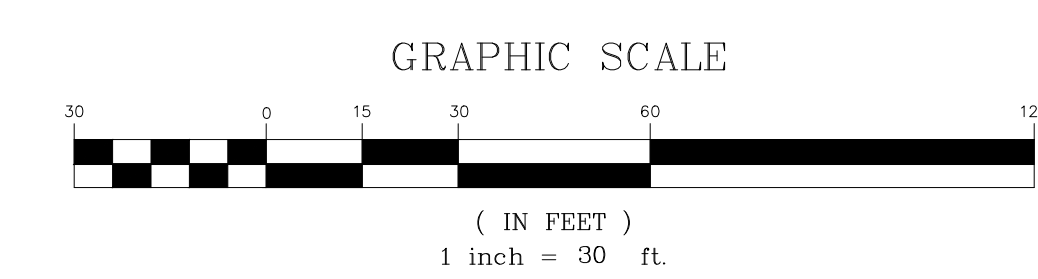
The Bonnell Tavern
Block 24.01 Lot 1
2 County Route 513
UNION TOWNSHIP, HUNTERDON COUNTY, NEW JERSEY

REV PER TWP & NJDOT REVIEW COMMENTS	03-15-23	THB
REV PER TWP REVIEW COMMENTS	11-23-22	THB
REV PER TWP REVIEW COMMENTS	10-19-22	THB
REVISION DESCRIPTION	DATE	APPROVED
RT	RT	THB
DWG NO: TBT-3	BRE JOB: 21-2345	



SOIL LOGS

SL 414-1 (Ex. Elevation 216.5±)	April 14, 2022
0-4"	Topsoil.
4-48"	5YR5/4 Reddish Brown Silt Loam; subangular blocky, friable; 20-30% gravel; no mottling; no seepage.
48-144"	Non-soil; gravelly shale with 10% fillings; no mottling; slight seepage at 120".
>144"	Stop Test. Pit Ball PB 414-1 performed at 137" (24 hr. SWL = 125"; K = 2.3 in/hr)
SL 414-2 (Ex. Elevation 215.0±)	April 14, 2022
0-8"	Topsoil.
8-72"	5YR5/4 Reddish Brown Silt Loam; subangular blocky, friable; 20-30% gravel; no mottling; no seepage.
72-126"	Non-soil; gravelly shale with 10% fillings; no mottling; slight seepage at 110".
>140"	Stop Test. Pit Ball PB 414-2 performed at 126" (24 hr. SWL = 111"; K = 1.4 in/hr)
SL 414-3 (Ex. Elevation 212.0±)	April 14, 2022
0-8"	Topsoil.
8-54"	5YR5/4 Reddish Brown Silt Loam; subangular blocky, friable; 20-30% gravel; no mottling; no seepage.
54-168"	Non-soil; gravelly shale with 10% fillings; no mottling; slight seepage at 148".
>168"	Stop Test. (24 hr. SWL = 150")
SL 414-4 (Ex. Elevation 210.3±)	April 14, 2022
0-8"	Topsoil.
8-52"	5YR5/4 Reddish Brown Silt Loam; subangular blocky, friable; 20-30% gravel; no mottling; no seepage.
52-154"	Non-soil; gravelly shale with 10% fillings; no mottling; moderate seepage at 128".
>154"	Stop Test. Pit Ball PB 414-4 performed at 143" (24 hr. SWL = 130"; K = 92.3 in/hr).
SL 414-5 (Ex. Elevation 208.2±)	April 14, 2022
0-4"	Topsoil.
4-48"	Soil Fill.
48-120"	5YR5/4 Reddish Brown Silt Loam; subangular blocky, friable; 20-30% gravel; no mottling; moderate seepage 102".
>120"	Stop Test. Pit Ball PB 414-5 performed at 120" (24 hr. SWL = 106"; K = 91.7 in/hr)

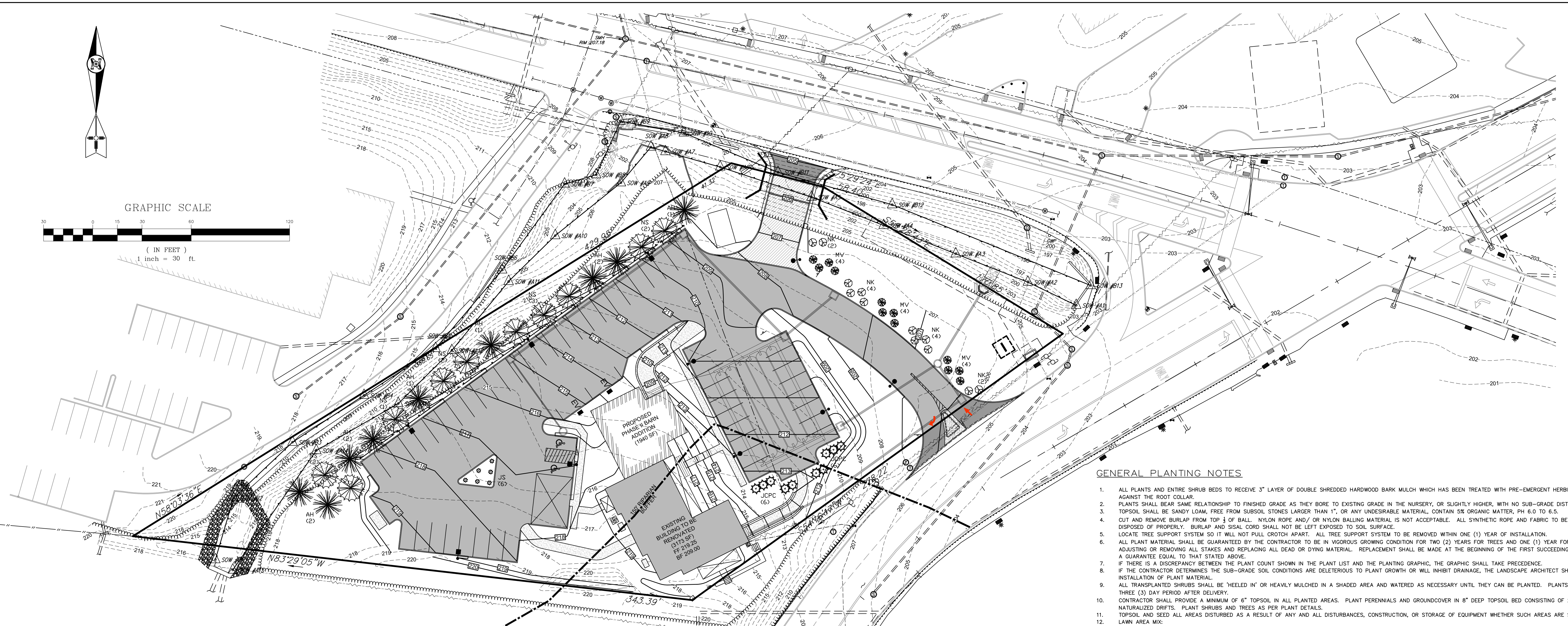
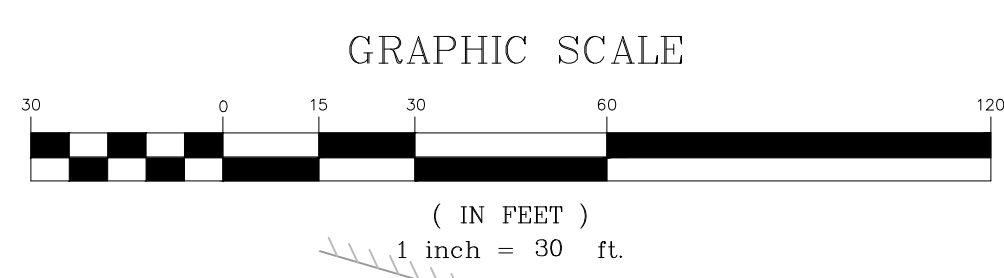
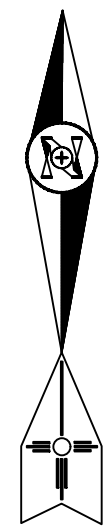


NOTE: IMPERVIOUS COVERAGE IN PHASE I IS LESS THAN THAT OF PHASE II & WILL BE REMOVED IN THE PHASE II. ONLY PHASE II & III IMPERVIOUS COVERAGE ARE ACCOUNTED FOR COVERAGE AND SORMWATER CALCULATIONS.

- PROPOSED 10' WIDE 600 SF CONCRETE PATH (TO REMAIN IN PHASE II)
- PROPOSED RETAINING WALL (TO REMAIN IN PHASE II)
- PROPOSED TRENCH DRAIN TG = 208.5± INVERT OUT = 206.5± (TO REMAIN IN PHASE II; SEE DETAIL SHEET 8 OF 11)
- PROPOSED 10' WIDE 575 SF CONCRETE PATH PHASE I (TO BE REMOVED IN PHASE II)
- PROPOSED RETAINING WALL (TO REMAIN IN PHASE II & USE AS FOUNDATION OF BARN ADDITION)
- PROPOSED RETAINING WALL (TO BE REMOVED IN PHASE II)

ADA CONSTRUCTION REQUIREMENTS:
MAX. CROSS SLOPE ≤ 2%
MAX. SLOPE ALONG ACCESSIBLE ROUTE ≤ 8.3%; 7% PER UT ORDINANCE (5.2% PROPOSED)
MAX. VERTICAL DROPS SHALL BE 1/4"
A 4' X 4' LANDING (MIN.) SHALL BE PROVIDED AT ENTRANCE
MAX. FLARE AT CURBSIDE ≤ 10%

SUBJECT PARCELS: UNION TOWNSHIP TOWN OF CLINTON		BL 24.01 LOT 1 BL 4 LOT 2	
REV PER TWP & NJDOT REVIEW COMMENTS	03-15-23	THB	
REV PER TWP REVIEW COMMENTS	11-23-22	THB	
REV PER TWP REVIEW COMMENTS	10-19-22	THB	
REVISION DESCRIPTION	DATE	APPROVED	
 BAYER-RISSE ENGINEERING, INC. 78 ROUTE 173 WEST, SUITE 6 HAMPTON, NEW JERSEY 08827 PHONE 908-735-2255 FAX 908-735-5838 <small>Certificate of Authorization No. 24527943900</small>			
LAND DEVELOPMENT PLAN GRADING & DRAINAGE			
The Bonnell Tavern Block 24.01 Lot 1 2 County Route 513 UNION TOWNSHIP, HUNTERDON COUNTY, NEW JERSEY			
 THEODORE H. BAYER, P.E. New Jersey Professional Engineer License No. GE33806	DRAWN BY: RT DESIGNED BY: RT CHECKED BY: THB DWG. NO.: TBT-4 SCALE: As Noted	DATE: August 5, 2022 SHEET: 4 of 11	BUREAU: 21-2345



GENERAL PLANTING NOTES

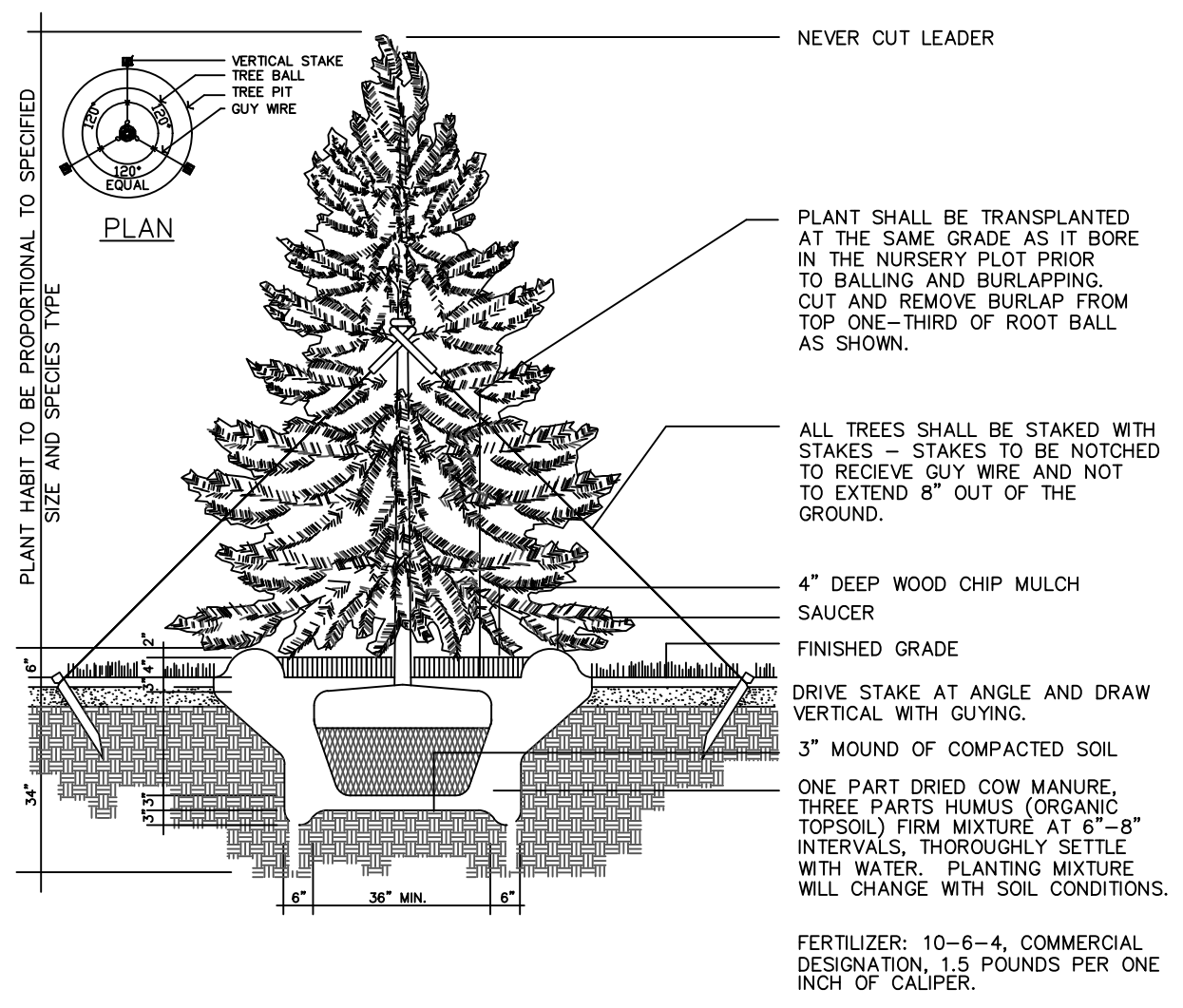
- ALL PLANTS AND ENTIRE SHRUB BEDS TO RECEIVE 3" LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH WHICH HAS BEEN TREATED WITH PRE-EMERGENT HERBICIDE. MULCH SHALL NOT BE PLACED DIRECTLY AGAINST THE ROOT COLLAR.
- PLANTS SHALL BEAR SAME RELATIONSHIP TO FINISHED GRADE AS THEY BORE TO EXISTING GRADE IN THE NURSERY, OR SLIGHTLY HIGHER, WITH NO SUB-GRADE DISTURBANCE.
- TOPSOIL SHALL BE SANDY LOAM, FREE FROM SUBSOL STONES LARGER THAN 1", OR ANY UNDESIRABLE MATERIAL, CONTAIN 5% ORGANIC MATTER, PH 6.0 TO 6.5.
- CUT AND REMOVE BURLAP FROM TOP 1/3 OF BALL. NYLON ROPE AND/OR NYLON BANDING MATERIAL IS NOT ACCEPTABLE. ALL SYNTHETIC ROPE AND FABRIC TO BE REMOVED COMPLETELY FROM PLANTING PIT AND DISPOSED OF PROPERLY. BURLAP AND SISAL CORD SHALL NOT BE LEFT EXPOSED TO SOIL SURFACE.
- LOCATE TREE SUPPORT SYSTEM SO IT WILL NOT PULL CROTCH APART. ALL TREE SUPPORT SYSTEM TO BE REMOVED WITHIN ONE (1) YEAR OF INSTALLATION.
- ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN VIGOROUS GROWING CONDITION FOR TWO (2) YEARS FOR TREES AND ONE (1) YEAR FOR SHRUBS. THE CONTRACTOR IS RESPONSIBLE FOR ADJUSTING OR REMOVING ALL STAKES AND REPLACING ALL DEAD OR DYING MATERIAL. REPLACEMENT SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A GUARANTEE EQUAL TO THAT STATED ABOVE.
- IF THERE IS A DISCREPANCY BETWEEN THE PLANT COUNT SHOWN IN THE PLANT LIST AND THE PLANTING GRAPHIC, THE GRAPHIC SHALL TAKE PRECEDENCE.
- IF THE CONTRACTOR DETERMINES THE SUB-GRADE SOIL CONDITIONS ARE DELETERIOUS TO PLANT GROWTH OR WILL INHIBIT DRAINAGE, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY AND PRIOR TO INSTALLATION OF PLANT MATERIAL.
- ALL TRANSPLANTED SHRUBS SHALL BE 'HEELED IN' OR HEAVILY MULCHED IN A SHADED AREA AND WATERED AS NECESSARY UNTIL THEY CAN BE PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR MORE THAN A THREE (3) DAY PERIOD AFTER DELIVERY.
- CONTRACTOR SHALL PROVIDE A MINIMUM OF 6" TOPSOIL IN ALL PLANTED AREAS. PLANT PERENNIALS AND GROUNDCOVER IN 8" DEEP TOPSOIL BED CONSISTING OF 2/3 TOPSOIL AND 1/3 HUMUS. PLANT BULBS IN NATURALIZED DRIFTS. PLANT SHRUBS AND TREES AS PER PLANT DETAILS.
- TOPSOIL AND SEED ALL AREAS DISTURBED AS A RESULT OF ANY AND ALL DISTURBANCES, CONSTRUCTION, OR STORAGE OF EQUIPMENT WHETHER SUCH AREAS ARE SHOWN ON THE PLANS OR NOT.
- LAWN AREA MIX:
 - 30% ONYX TURF-TYPE TALL FESCUE;
 - 30% MONTAUK TURF-TYPE TALL FESCUE;
 - 30% SANTA FE TURF-TYPE TALL FESCUE;
 - 10% WASHINGTON KENTUCKY BLUEGRASS.
- SEEDING RATE: 75-100 LBS/ ACRE. SEED MULCH SHALL BE STRAW OR HAY, OR WOOD CELLULOSE FIBER, OR SOIL STABILIZATION MATTING.
- ALL PLANT MATERIAL SHALL BE NURSERY GROWN, FREE OF DISEASE, UNIFORM IN SIZE AND FORM AND SHALL MEET OR EXCEED MINIMUMS NOTED IN THE LATEST EDITION OF AMERICAN STANDARDS FOR NURSERY STOCK BY THE AMERICAN ASSOCIATION OF NURSERYMEN, ANSI 2601.
- NO BUILDING MATERIAL, CONSTRUCTION EQUIPMENT, OR SOIL DEPOSITS SHALL BE PLACED WITHIN FOUR FEET OF ANY EXISTING SHRUB OR WITHIN THE DRIP LINE OF ANY TREE TO REMAIN. EXISTING PLANT MATERIAL TO REMAIN SHALL BE PROTECTED WITH A FOUR FOOT HIGH SHIELD FENCE BARRIER.
- ALL SUBSTITUTIONS IN PLANT MATERIAL SHALL BE APPROVED, IN WRITING, BY THE LANDSCAPE ARCHITECT.
- PLANTING OPERATIONS SHALL BE PERFORMED DURING THE PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE. SPRING PLANTING SEASON SHALL BE MARCH 15 THROUGH MAY 15; FALL PLANTING SEASON SHALL BE SEPT 15 THROUGH NOV 1. PLANTING IS ACCEPTABLE DURING OTHER TIMES AS WEATHER PERMITS, THE GROUND IS NOT FROZEN AND SUPPLEMENTAL WATERING IS PROVIDED (IN SUMMER MONTHS).
- NO PLANT, OTHER THAN GROUNDCOVER, MAY BE PLANTED CLOSER THAN TWO FEET TO EXISTING STRUCTURES OR SIDEWALKS.
- THE FOLLOWING 'FALL PLANTING HAZARD' TREE SPECIES SHALL BE PLANTED IN THE SPRING SEASON ONLY:
 - ACER RUBRUM;
 - LIQUIDAMBAR;
 - QUERCUS (EXCEPT QUERCUS PALUSTRIS).
- ALL TREE PRUNING WORK SHALL BE PERFORMED BY A NEW JERSEY BOARD CERTIFIED TREE EXPERT.
- A NURSERY CERTIFICATE, OR PLANT DEALER CERTIFICATE, CONFIRMING NURSERY STOCK CERTIFICATION BY THE NEW JERSEY DEPARTMENT OF AGRICULTURE (N.J.S.A. 4:7-15) SHALL BE SUBMITTED FOR TOWNSHIP FILE, AS REQUIRED.
- SHADE AND EVERGREEN TREES SHALL NOT HAVE THEIR CENTRAL LEADER REMOVED. ONLY DEAD OR BROKEN BRANCHES SHALL BE PRUNED TO NATURAL TARGETS. TREE SUPPORT SYSTEM THAT DIRECTLY CONTACT THE TREE TRUNK SHALL EITHER BE LOOSELY SECURED WIDE STRAPPING, 1" MINIMUM WIDE PLASTIC INTERLOCK TYPE CHAIN, OR AN APPROVED SUBSTITUTE APPROVED BY THE LANDSCAPE ARCHITECT. TREE SUPPORT SYSTEMS SHALL BE REMOVED WITHIN ONE YEAR (1) OF INSTALLATION FROM TREE THAT DO NOT REQUIRE OBVIOUS STRAIGHTENING.
- ALL TREE TRUNK WRAP MATERIAL SHALL BE REMOVED DURING INSTALLATION PROCESS. FERTILIZER SHALL NOT BE USED DURING THE FIRST YEAR AFTER INSTALLATION.
- CONSERVATION EASEMENT SEED MIX SHALL BE 'SHOWY NORTHEAST NATIVE WILDFLOWER MIX'; ERNMX-153, AS SUPPLIED BY ERNST SEED CO. AND CONSISTS OF THE FOLLOWING:

15% LITTLE BLUESTEM	5% BLACKEYED SUSAN	2% BUTTERFLY MILKWEED
10% SIDEDOTS GRAMA, 'BUTTE'	4.5% TALL WHITE BEARDTONGUE	2% WHORLED ROSINWEED
10% SILKY WILD RYE	4% WILD SENNA	2% OHIO SPIDERWORT
10% TOMAHAWK INDIANA GRASS	3% ZIGZAG ASTER/ MY ASTER MIX	1.5% NEW ENGLAND ASTER
7% PARTRIDGE PEA	3% GREAT ST JOHN'S WORT	1.5% BLUE FALSE INDIGO
5% NIAGRA BIG BLUESTEM	2% GOLDEN ALEXANDERS	1% WILD BLUE LUPINE
5% OX EYE SUNFLOWER	2% COMMON MILKWEED	0.5% ROUNDHEAD LESPEDEZA

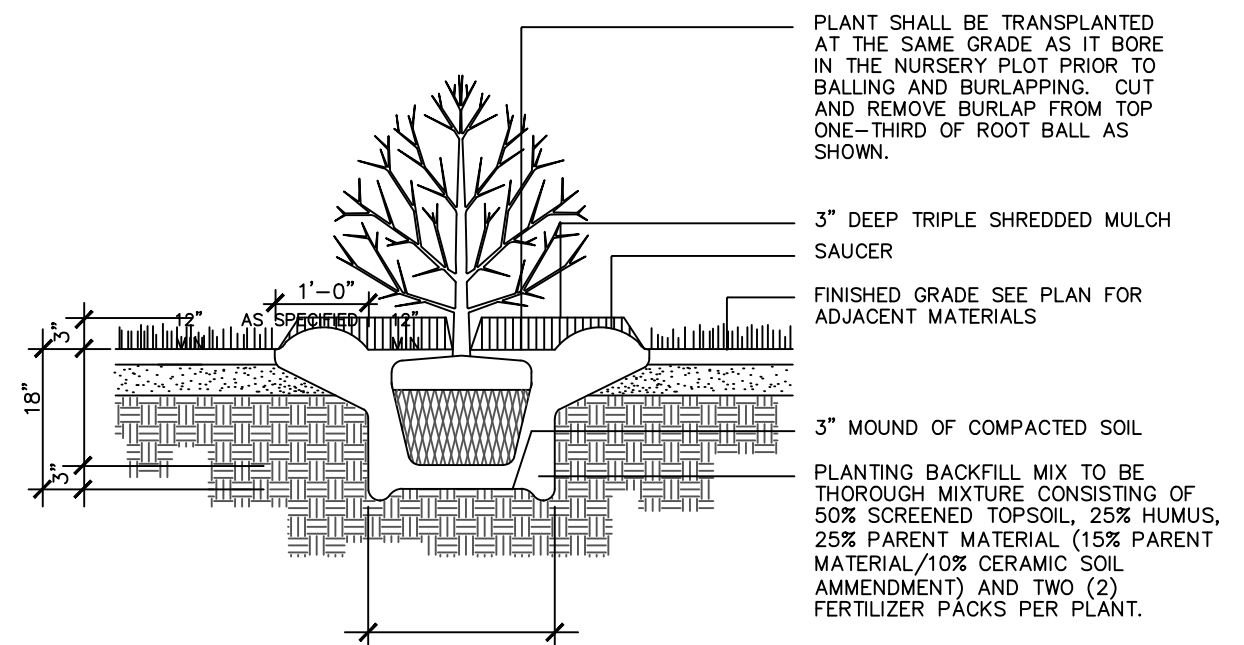
PLANT LIST

Key	Botanical Name	Common Name	Quantity	Planted Size (At Time of Installation)			Mature Size		Comments
				Height	Spr/Cal	Root Cont.	Height	Spread	
EVERGREEN TREES									
AH	Ilex Opaca	American Holly	9	6' - 8'	--	BB	30' - 40'	15' - 20'	
NS	Picea Abies	Norway Spruce	10	6'-8"	--	BB	50'-60'	15'-20'	
JCPC	Juniperus chinensis 'Pfitzeriana Compacta'	Compact Pfitzer Juniper	10	15"-18"	--	2 gal.	3'-4'	3'-4'	compact form, gray-green color
SHRUBS									
NK	Physocarpus Opulifolius	Ninebark	12	3'-4'	--	BB	6'-10'		
MV	Viburnum Acerifolium	Mapleleaf Viburnum	12	3'-4'	--	BB	6'	6'-10'	
JS	Carex Morrowi 'Variegata'	Japanese Sedge	7	10"-12"	--	1 Gal.	18"-20"	12"	

The property owner (applicant) may supplement landscape plantings on the site (foundation/ screenings/ ornamental trees/ lawn/ etc) after the building construction is completed and the site is operational.

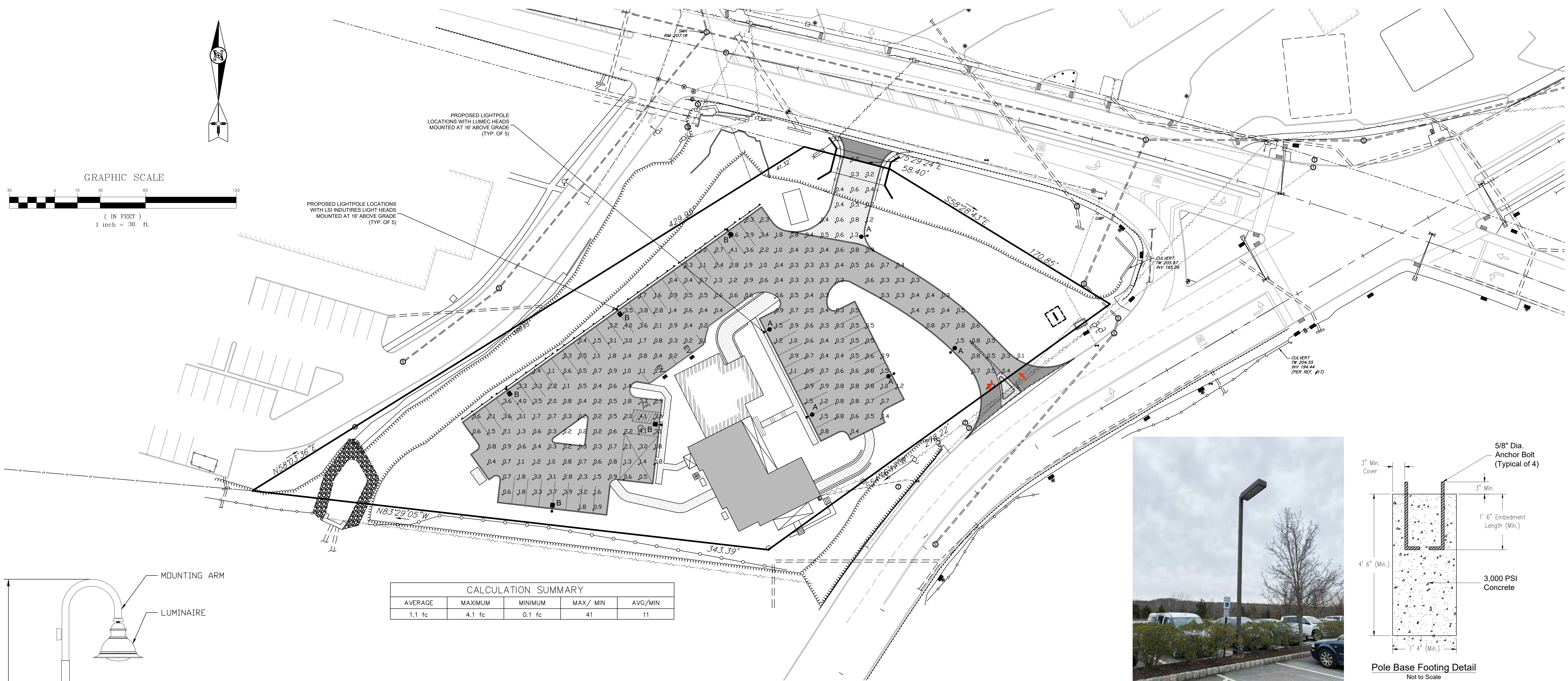
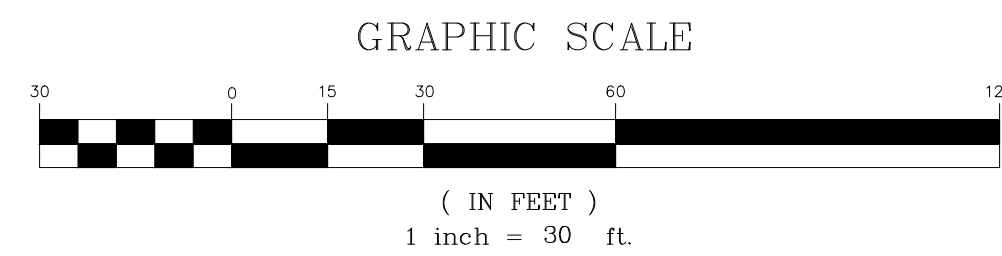
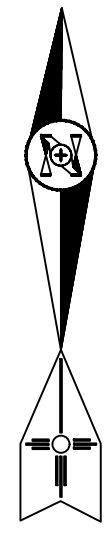


EVERGREEN TREE PLANTING DETAIL NTS



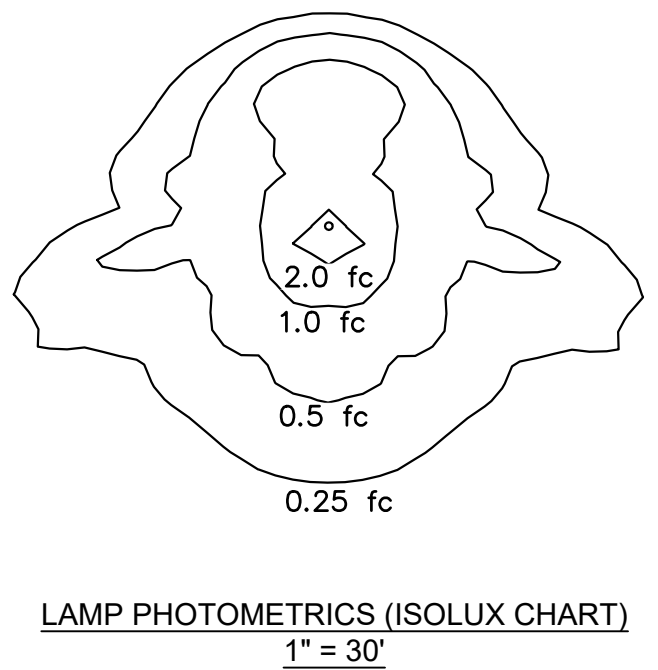
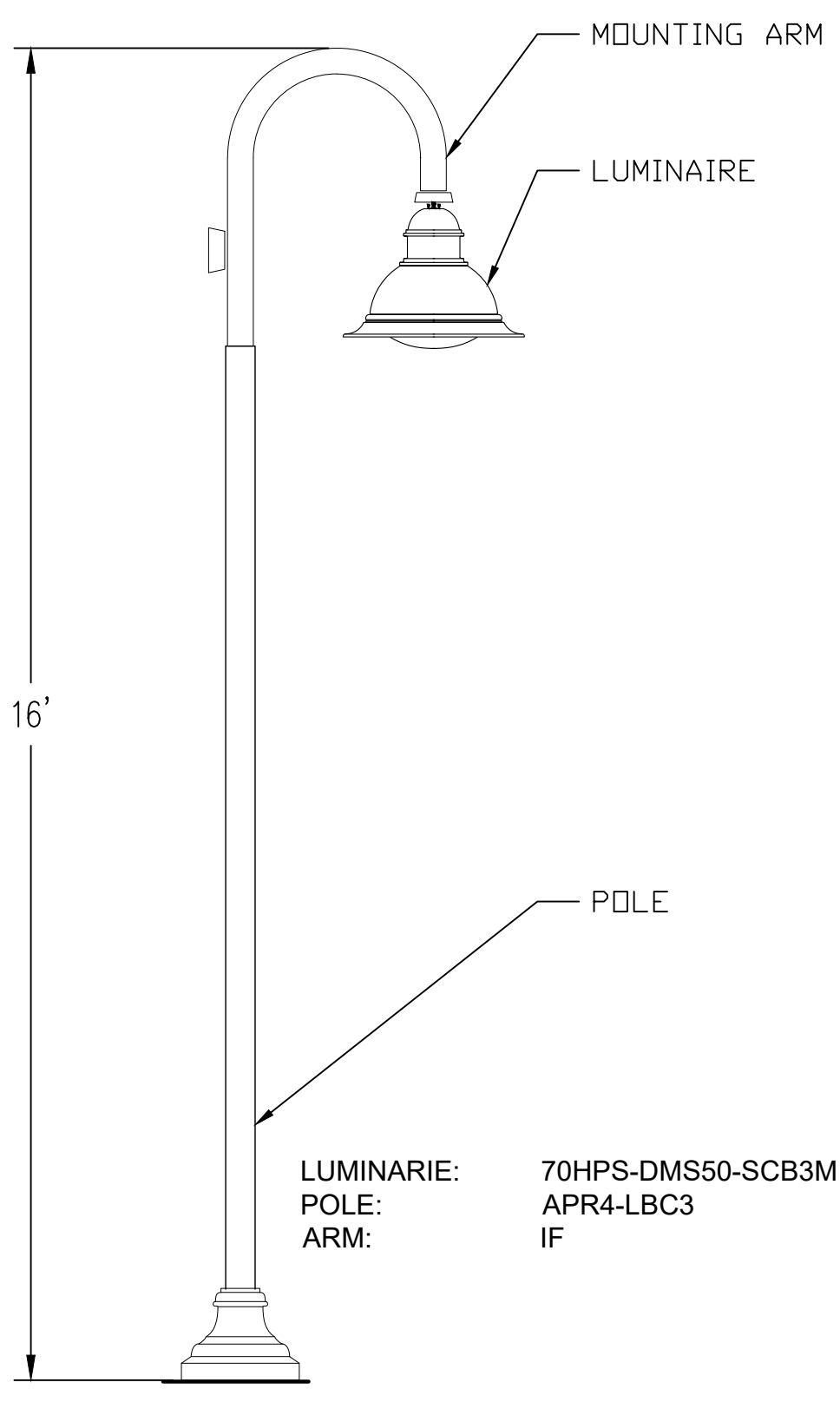
DECIDUOUS AND EVERGREEN SHRUB PLANTING DETAIL NTS

SUBJECT PARCELS: UNION TOWNSHIP BL 24.01 LOT 1 TOWN OF CLINTON BL 4 LOT 2			
 BAYER-RISSE ENGINEERING, INC. 78 ROUTE 173 WEST, SUITE 6 HAMPTON, NEW JERSEY 08827 PHONE 908-735-2255 FAX 908-735-5838 <small>Certificate of Authorization No. 245427943900</small>		REV PER TWP & N.JDOT REVIEW COMMENTS	03-15-23 THB
		REV PER TWP REVIEW COMMENTS	11-23-22 THB
		REV PER TWP REVIEW COMMENTS	10-19-22 THB
 THEODORE H. BAYER, P.E. New Jersey Professional Engineer License No. GE33806		REVISION DESCRIPTION	DATE
DRAWN BY: RT DESIGNED BY: RT CHECKED BY: THB DWG NO.: TBT-5 SHEET: 21-2345		LAND DEVELOPMENT PLAN LANDSCAPING PLAN <i>The Bonnell Tavern</i> Block 24.01 Lot 1 2 County Route 513 UNION TOWNSHIP, HUNTERDON COUNTY, NEW JERSEY	
SCALE: As Noted		DATE: August 5, 2022	SHEET: 5 of 11



CALCULATION SUMMARY				
AVERAGE	MAXIMUM	MINIMUM	MAX / MIN	AVG/MIN
1.1 fc	4.1 fc	0.1 fc	41	11

LUMINAIRE SCHEDULE										
SYMBOL	LABEL	QUANTITY	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMP	NUMBER LAMPS	LUMENS PER LAMP	LIGHT LOSS FACTOR	WATTAGE
●	A	5	LUMEC BY SIGNIFY	70HPS-DMS50-SCB3M	DOMUS - BELL SHAPED DECORATIVE PENDANT MOUNT	(1) 70W HIGH PRESSURE SODIUM MOGUL ET23.5	1	6300	0.90	77
■	B	5	LSI INDUSTRIES	SLM-LED-09L-SIL-FT-30-70CRI-IL	-	-	1	9000	0.90	63



LAMP PHOTOMETRICS (ISOLUX CHART) 1" = 30'

LIGHTING POLE DETAILS NTS

LUMEC LIGHTING DETAILS

Slice Medium - SLM Outdoor LED Area Light

The Slice's sleek design makes it perfectly-suited for Commercial B Industrial applications, while its cost-effective die-cast aluminum housing makes its acquisition cost very competitive. The Slice offers high performance silicone optics, die cast aluminum housing, 42,000+ lumens and is available with integral Airlink Synapse controls.

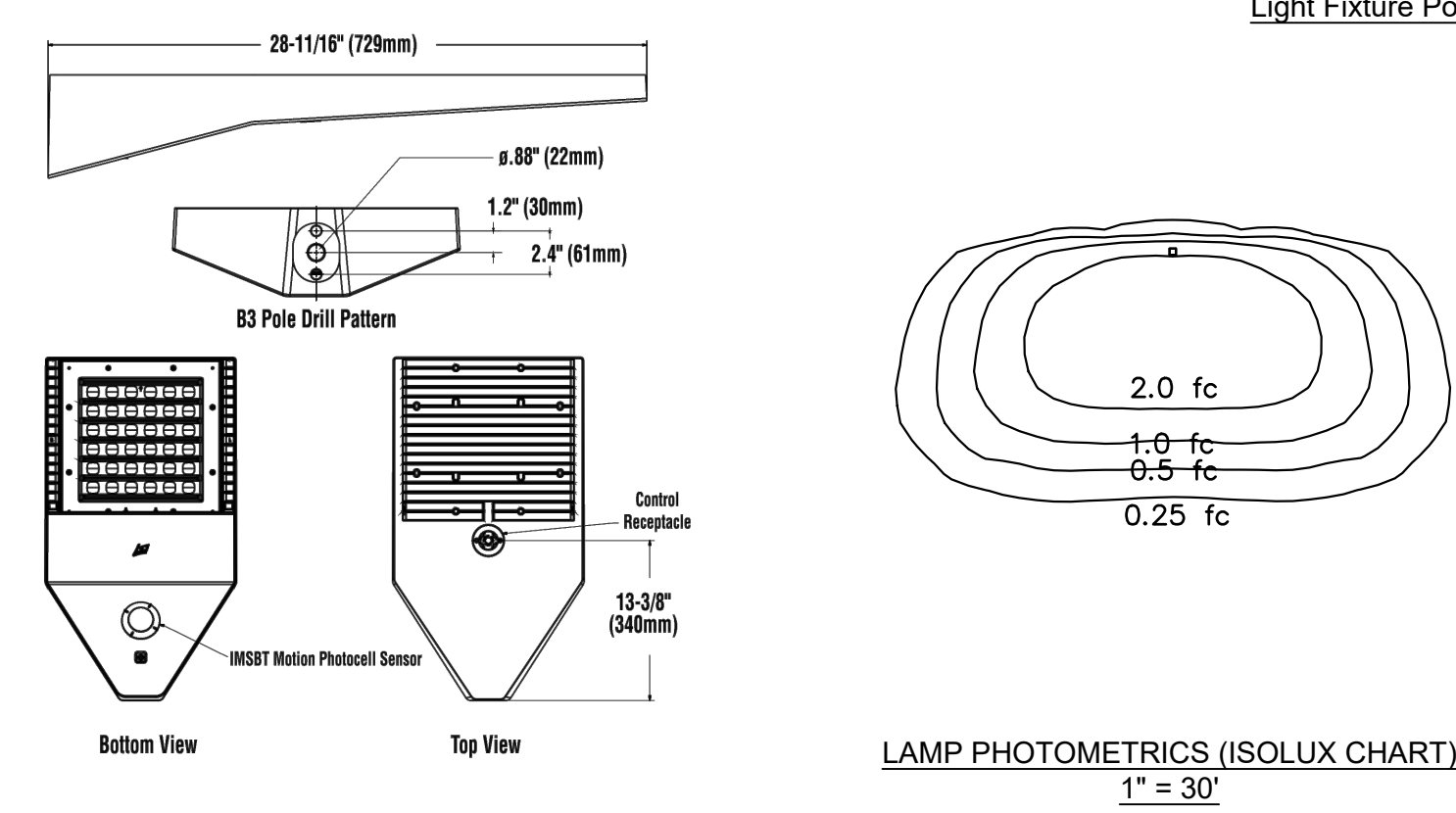
Features & Specifications

- State-of-the-Art one piece silicone optic sheet delivers industry leading optical control with an integrated gasket to provide IP66 rated sealed optical chamber in 1 component.
- Proprietary silicone refractor optics provide exceptional coverage and uniformity in IES Types 2, 3, SW, FT and FTA.

Optical System

Product Dimensions

LSI INDUSTRIES LIGHTING DETAILS

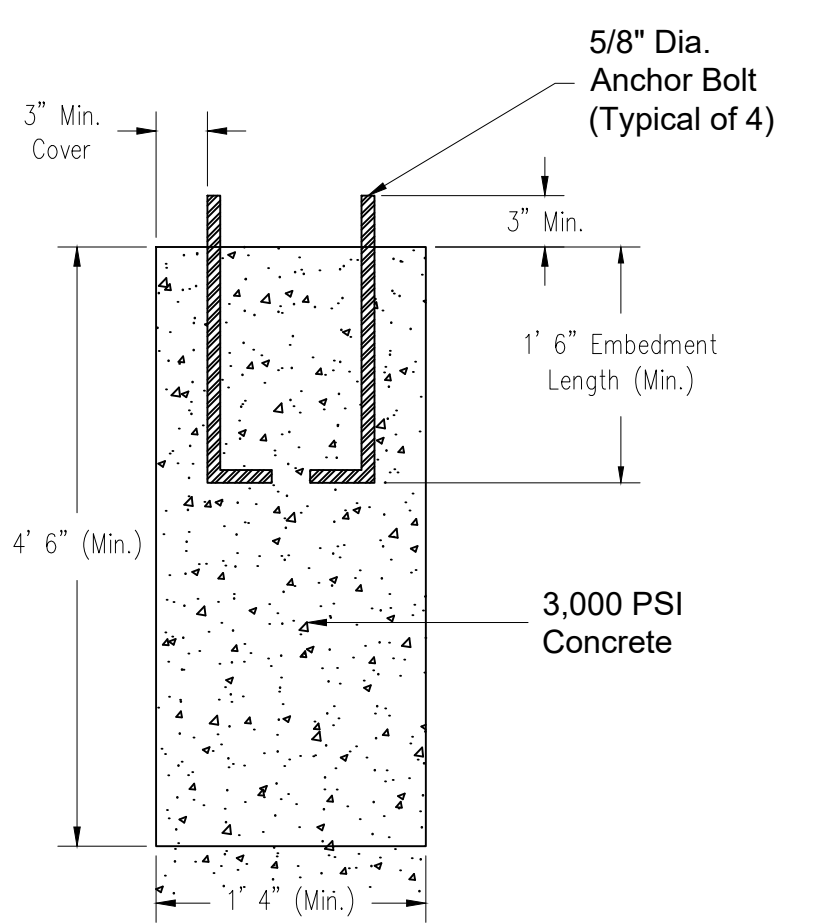


LAMP PHOTOMETRICS (ISOLUX CHART) 1" = 30'

LSI CATALOG INFORMATION NTS



PHOTO OF A TYPICAL POLE-MOUNTED LIGHT FIXTURE WITH A SINGLE DOWNCAST FIXTURE. THE TOTAL HEIGHT OF THIS LIGHT IS 16' MAX. AND THE SIZE OF THE MOUNTING POLE IS 5" X 5".



Pole Base Footing Detail Not to Scale

ALL LIGHTS SHALL BE EQUIPPED WITH AUTOMATIC TIMING DEVICES. IF REQUIRED BY THE PLANNING BOARD, THE LIGHTING FOR THIS SITE WILL DIM AND/OR SHUT OFF AT NIGHT. MOTION DETECTORS MAY BE INSTALLED IF DESIRED BY PROPERTY OWNER.

IF REQUIRED BY THE PLANNING BOARD, THE LIGHTING SYSTEM FOR THIS SITE MAY BE SUBJECT TO A NIGHT LIGHT TEST DETERMINING THE ADEQUACY/ CONFORMANCE TO THE TOWNSHIP STANDARDS.

General Lighting Note Not to Scale

SUBJECT PARCELS:
UNION TOWNSHIP BL 24.01 LOT 1
TOWN OF CLINTON BL 4 LOT 2

BAYER-RISSE ENGINEERING, INC.
78 ROUTE 173 WEST, SUITE 6
HAMPTON, NEW JERSEY 08827
PHONE 908-735-2255 FAX 908-735-5838
Certificate of Authorization No. 245427943900

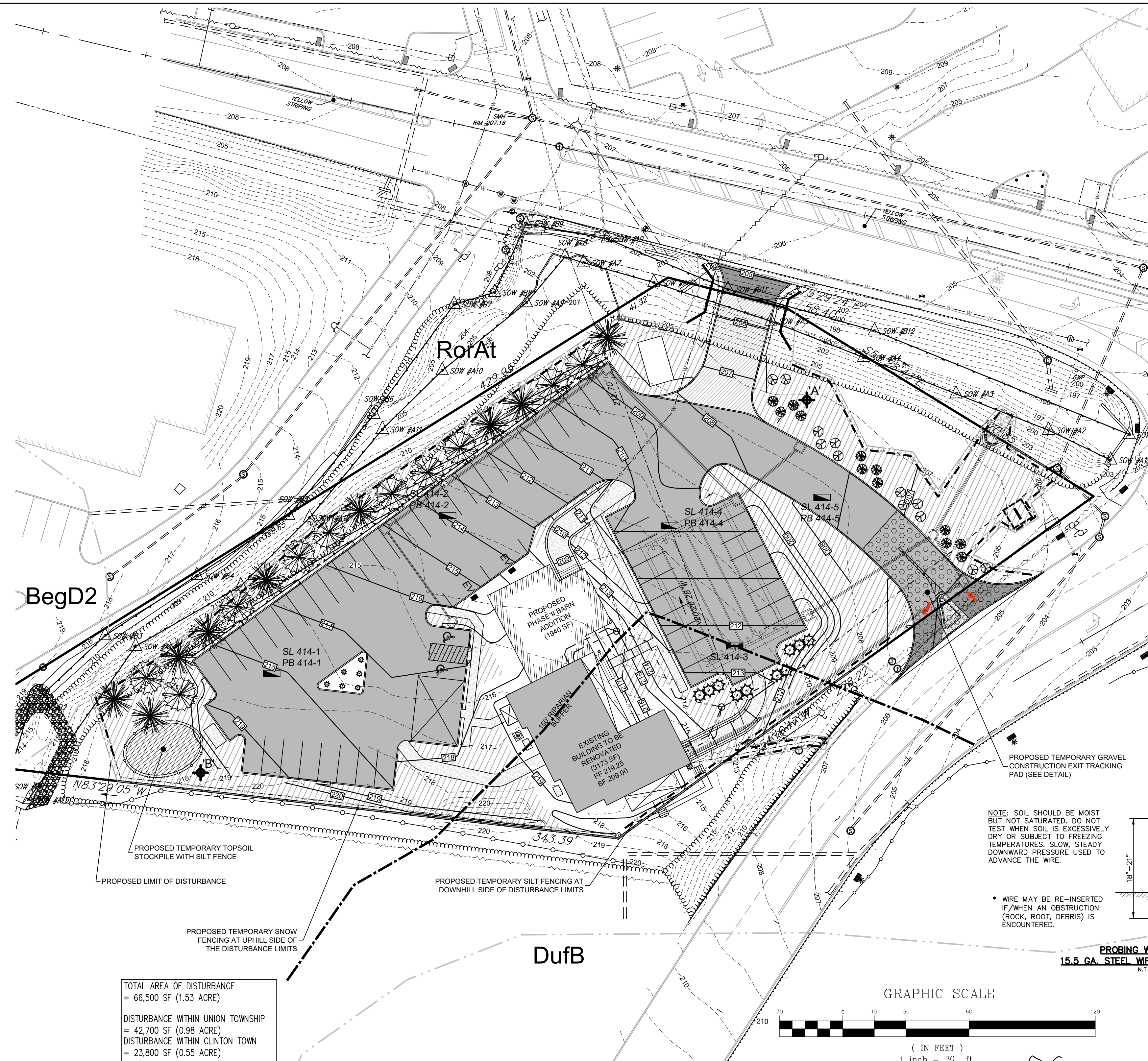
LAND DEVELOPMENT PLAN LIGHTING PLAN

The Bonnell Tavern
Block 24.01 Lot 1
2 County Route 513
UNION TOWNSHIP, HUNTERDON COUNTY, NEW JERSEY

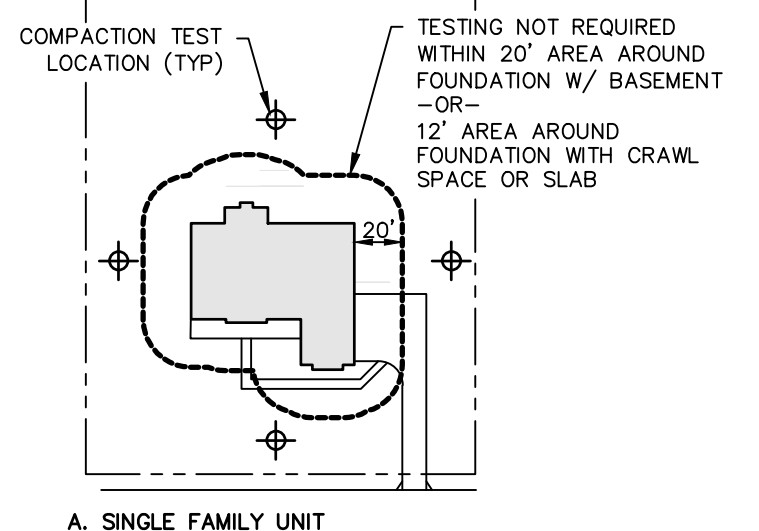
THEODORE H. BAYER, P.E.
New Jersey Professional Engineer License No. GE33806

REV	DESCRIPTION	DATE	APPROVED
REV PER TWP & NJDOT REVIEW COMMENTS		03-15-23	THB
REV PER TWP REVIEW COMMENTS		11-23-22	THB
REV PER TWP REVIEW COMMENTS		10-19-22	THB

SCALE: As Noted DATE: August 5, 2022 SHEET: 6 of 11



TOTAL AREA OF DISTURBANCE = 66,500 SF (1.53 ACRE)
 DISTURBANCE WITHIN UNION TOWNSHIP = 42,700 SF (0.98 ACRE)
 DISTURBANCE WITHIN CLINTON TOWN = 23,800 SF (0.55 ACRE)



LEGEND

SOIL COMPACTION TESTING AREAS: 25,200 SF (0.58 AC) TOTAL SOIL COMPACTION TESTING AREA

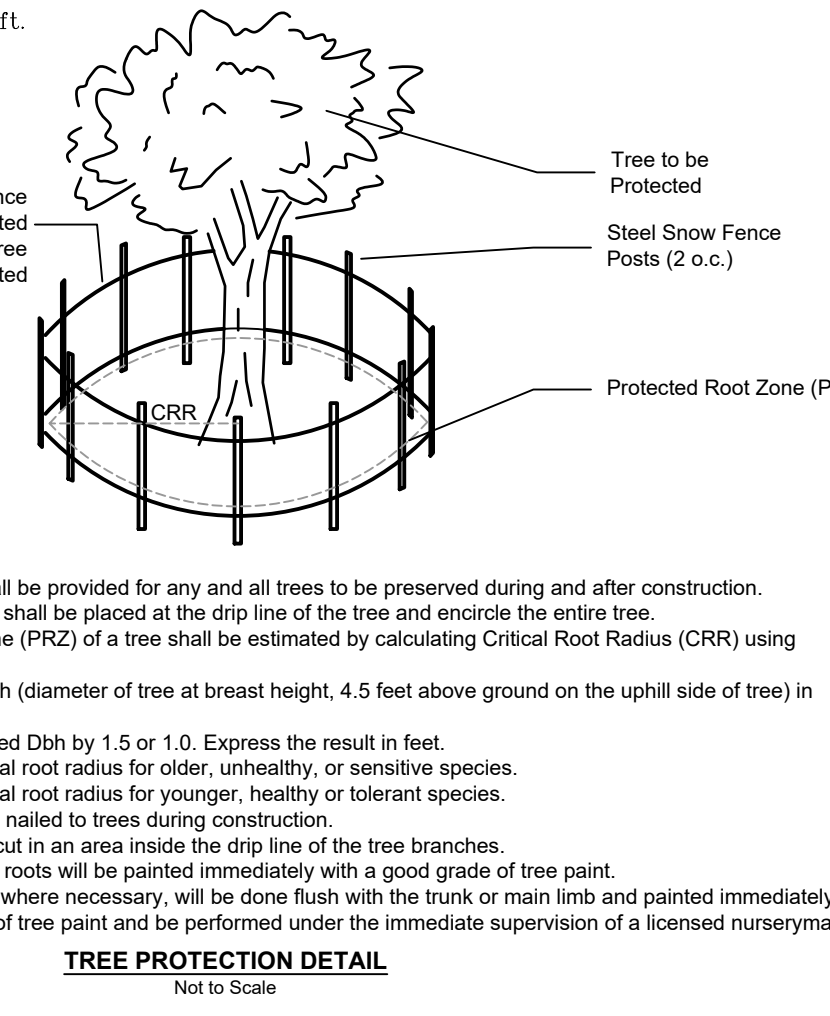
SOIL COMPACTION TEST LOCATIONS: 2 PER ACRE; 2 MINIMUM; 2 TEST LOCATIONS REQUIRED (2 TEST LOCATIONS PROVIDED)

TOTAL LAND DISTURBANCE: 66,500 SF (1.53 AC)

SOIL TYPE	NAME	HYDROLOGICAL GROUP
RorAt	Rorland Silt Loam	C
BegD2	Berks Channery Loam	C

SNOW FENCE OPTIONAL ON UPHILL SIDE OF DISTURBANCE AREA AND OR TO RESTRICT ACCESS

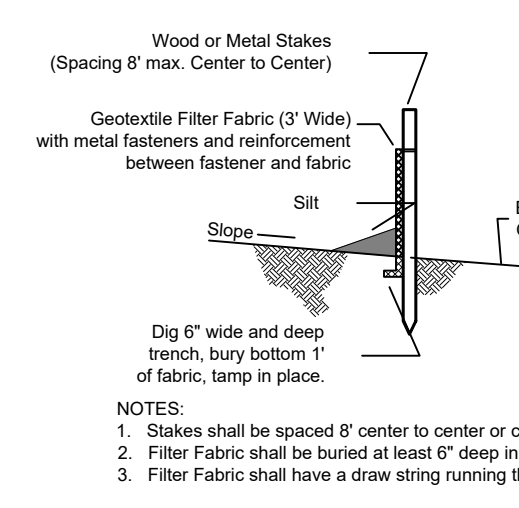
SILT FENCE ON DOWNHILL SIDE OF DISTURBANCE AREA



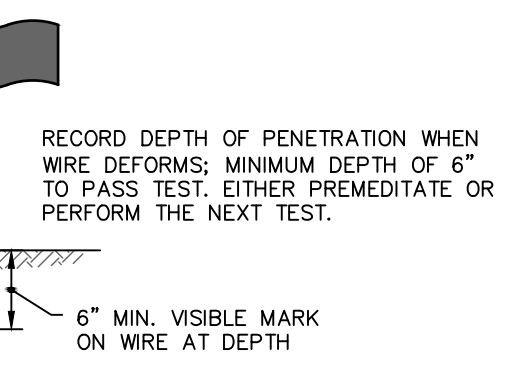
TREE PROTECTION DETAIL
Not to Scale

- SOIL DE-COMPACTION AND TESTING REQUIREMENTS**
- A. SOIL COMPACTION TESTING REQUIREMENTS**
- Subgrade soils prior to the application of topsoil (see permanent seeding and stabilization note for topsoil requirements) shall be free of excessive compaction to a depth of 6.0 inches to enhance the establishment of permanent vegetative cover.
 - Areas of the site which are subject to compaction testing and/or mitigation are graphically denoted on the Certified Soil Erosion Control Plan. Compaction testing locations are denoted on the plan. Location ID's shall be used to complete the compaction remediation form available from the local Soil Conservation District. This form must be filled out and submitted prior to receiving a certificate of compliance from the District. In the event that testing indicates compaction in excess of the maximum thresholds indicated for the simplified testing methods (see details below), the contractor/owner shall have the option to perform either 1) compaction mitigation over the entire mitigation area denoted on the plan (excluding the exempt areas), or 2) perform additional, more detailed testing to establish the limits of excessive compaction whereupon only the excessively compacted areas would require compaction mitigation. Additionally detailed testing shall be performed by a trained, licensed professional.
- B. COMPACTION METHODS**
- Probing Wire Test (see detail).
 - Hand-held Penetrometer Test (see detail).
 - Tube Bulk Density Test (licensed professional required).
 - Nuclear Density Test (licensed professional required).
- Note: Additional testing methods which conform to ASTM Standards and Specifications, and which produce a dry weight. Soil Bulk Density measurement may be allowed subject to District approval.
- Detailed requirements for each compaction testing method can be found in section 19 'Standard for Land Grading' of the NJ Standards for Soil Erosion and Sediment Control, latest edition.
 - Soil compaction testing is not required if when subsoil compaction remediation (scarification/ tillage (6" minimum depth) or similar) is proposed as part of the sequence of construction.
- C. PROCEDURES FOR SOIL COMPACTION MITIGATION**
- Procedures shall be used to mitigate excessive soil compaction prior to placement of topsoil and establishment of permanent vegetative cover.
 - Restoration of compacted soils shall be through deep scarification/ tillage (6" minimum depth) where there is no danger to underground utilities (cables, irrigation systems, etc.). In the alternative, another method as specified by a new jersey licensed professional engineer may be substituted subject to District approval.

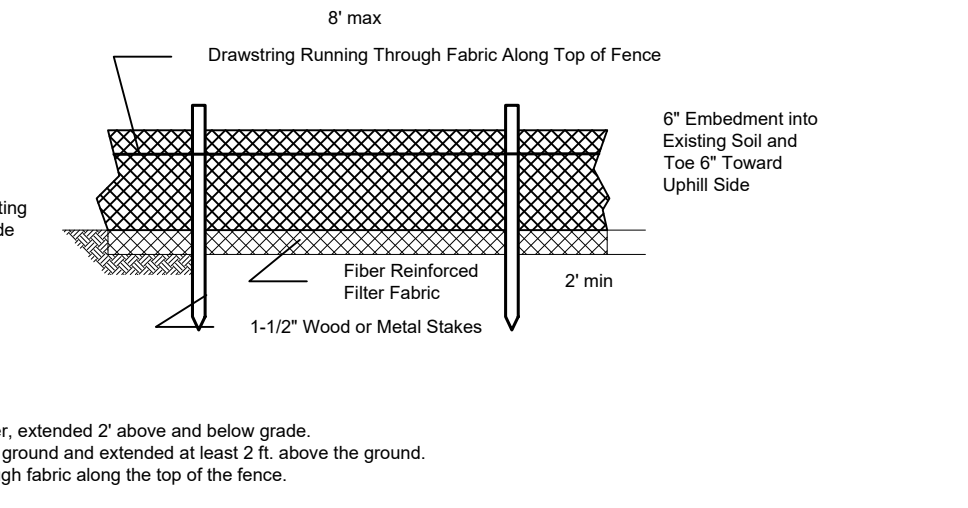
- SEQUENCE OF SITE WORK CONSTRUCTION**
- All work shall be performed in accordance with the New Jersey Soil Erosion and Sediment Control Standards.
 - All temporary erosion controls shall be implemented before construction begins and maintained throughout the construction activity. No clearing and/or grubbing of the site may take place until all the erosion and sedimentation controls have been installed and are functional.
 - If excess materials are removed from site, the project owner/ applicant shall be responsible for its proper disposal and shall notify the Hunterdon County Soil Conservation District of this location prior to removal from site.
 - Prior to the commencement of any land disturbance, the soil erosion and sediment control portion of this application must be approved by the Hunterdon County Soil Conservation District. Notify the District 48 hours in advance of the construction start.
- ON-SITE PROJECT CONSTRUCTION TASKS**
- Notify Soil Conservation District 48 Hours in advance of construction
 - Install temporary SESC measures around the disturbance limits as shown
 - Locate/ verify the existing underground utilities within disturbance areas and protect same during construction
 - Strip/ stockpile topsoil on site as shown including silt fencing around downhill side of same
 - Remove existing features as shown on the plan
 - Construct stormwater feature and provide erosion protection
 - Install driveway and parking areas
 - Perform soil de-compaction testing or compaction mitigation in presence of Soil Conservation Inspector or Licensed P.E. (mitigation: scarify subsoil 6" in previous areas affected by construction).
 - Final grading/ spread topsoil/ fertilizer/ seeding/ mulch according to agronomic specifications
 - Remove remaining temporary SESC measures after site area is stabilized and 80% vegetative cover is achieved.



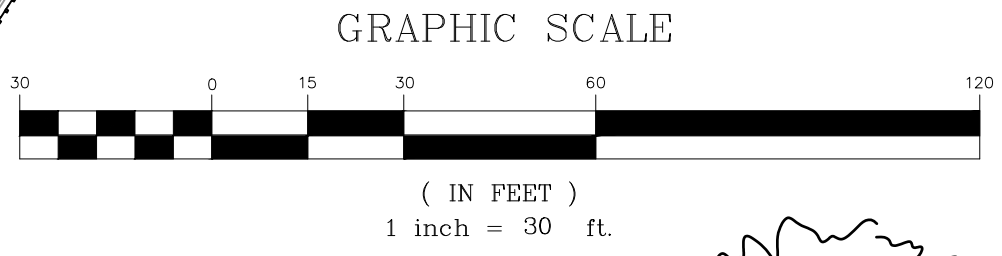
SILT FENCE DETAIL
Not to Scale



PROBING WIRE TEST
15.5 GA. STEEL WIRE (SURVEY FLAG)
N.T.S.



HANDHELD SOIL PENETROMETER TEST
N.T.S.



- GENERAL AGRONOMIC SPECIFICATIONS FOR LAWNS AND CONSTRUCTION SITES**
- All disturbed areas that are not being graded, not under active construction, or not permanently seeded within 30 days shall be temporarily stabilized as per specifications below:
 - All exposed areas which are to be permanently vegetated shall be seeded and mulched within 10 days of final grading.
 - Straw mulch (hay mulch may be substituted if approved by the District) is to be applied to all seeding at a rate of 1.5 to 2 tons per acre (approx. 100 to 130 bales per acre).
 - Mulch anchoring is required after mulching to minimize loss by wind or water. This shall be done using one of the methods (crimping, liquid mulch binders, nettings, etc.) in the "Standards for Soil Erosion and Sediment Control" in New Jersey.
 - Existing weedy and poorly-vegetated areas with less than 80% perennial grass cover must receive permanent stabilization (as specified below). This is to include all acreage of the subject property and/or former cropland fields that were left fallow.
 - All bags shall be saved for lime, fertilizer, seed, and liquid mulch binder (if used as mulch anchoring method). Such proofs shall be submitted to the District Inspector for verification of materials and quantities used for all seeding.
 - An additional fee of \$120.00 per inspection will be assessed on those sites where additional inspections are necessitated as a result of non-compliance with the approved plan. This includes additional inspections performed after the failure of an initial Report of Compliance inspection. The entire project site is inspected at the time of a request for Report of Compliance.
- SEED-BED PREPARATION FOR ALL SEEDINGS**
- SUB-SOIL PREPARATION:** Immediately prior to seeding and topsoil application, the surface should be scarified to a depth of 6-12" where there has been soil compaction (e.g. areas of heavy construction traffic). This practice is to be applied to all compacted areas where there is no danger to underground utilities (cables, irrigation systems, etc.).
 - TOPSOILING:** Areas to be seeded shall have a minimum of 5" of friable, loamy topsoil free of objectionable weeds, stones and debris.
 - FINAL GRADING:** Grading shall be smooth of ruts and free of objectionable stones, depressions, vehicle tracks and rough edges. There shall be positive drainage away from all buildings and dwellings. Refuse from seamed preparation (roots, sticks, stones, construction debris) must be disposed of properly.
 - LIMING/FERTILIZING:** Apply limestone and fertilizer to soil test recommendations or as follows:
 - Lime shall be applied at the rate of 2 tons (4,000 lbs) per acre. Lime may be any product type as long as the GCE Calcium Carbonate Equivalency = 2 tons/acre. Pelletized and liquid products may be preferred because of their lack of dust and ease of handling but must meet the fore-mentioned criteria.
 - Starter fertilizer, specified as 10-20-10, shall be applied at 500 lb. per acre.
 - Lime and fertilizer shall be worked into the soil to a depth of 4 inches.

TEMPORARY SEEDING

Temporary seeding shall be used on all disturbed areas where permanent stabilization will not be recommended for a period up to 6 months.

Product	Rate	Recommended optimum seeding dates
Perennial Ryegrass	100 lbs. per acre	3/15 - 6/15 & 8/15 - 10/1
Spring Oats	85 lbs. per acre	3/15 - 6/15 & 8/15 - 10/1
Winter Annual Ryegrass	112 lbs. per acre	9/1 - 11/15
Winter Barley	95 lbs. per acre	8/15 - 10/1
Pearl Millet	20 lbs. per acre	6/15 - 8/15
German or Hungarian Millet	30 lbs. per acre	6/15 - 8/15

TEMPORARY STABILIZATION WITH MULCH ONLY

Straw mulch (hay mulch may be substituted if approved by the District) shall be spread uniformly at the rate of 2 to 2.5 tons per acre (total ground surface coverage). This practice is limited to periods when vegetative cover can not be established due to the season or other conditions. Mulch must be anchored in accordance with New Jersey Standards for Soil Erosion and Sediment Control. Mulch alone can only be used for short periods and will require maintenance and renewal. Other mulch materials may be utilized if approved by the District.

STABILIZATION WITH SOD

Stabilization with sod is permitted in areas where maintenance and irrigation are adequate to insure proper establishment and longevity. Seeded preparation shall be consistent with any other stabilization requirements. (Lime and fertilizer bags are to be retained for district inspections). On slopes greater than 3:1, sod must be properly anchored to the slope in accordance with the NJ Standards for Soil Erosion and Sediment Control.

PERMANENT SEEDING

- Seed shall be incorporated into the soil 1/4" - 1/2".
- Lawn seedings shall be a mixture of bluegrasses, turf-type fescues, and turf-type perennial ryegrasses to insure longevity, tolerance, and durability. No seed shall be accepted with a germination test date of more than 12 months old unless restated.
- Professional seed mixtures are recommended rather than seed mixing by contractor.
- Seed mixture (as specified below) shall be applied at a minimum rate of 200 lb. per acre of perennial seed.
- Optimum seeding period for Warren County is from March 1 to May 15 and August 15 to October 1. Outside of those periods, the seeding rates shall be increased by 50% (i.e.: 300 lb. per acre of perennial seed instead of the required 200 lb. per acre during optimum periods).
- Seedings shall receive an application of fertilizer such as 10-10-10 or equivalent at 400 lb. per acre approximately 8 months after first application.

SEEDING MIXTURE FOR GENERAL SEEDING (Example: lawns)

40% turf-type tall fescue 10% creeping red fescue 10% chewing fescue 10% Kentucky bluegrass 30% turf-type perennial ryegrass OR 80% Kentucky bluegrass 20% turf-type perennial ryegrass 20% chewing fescue

SEEDING MIXTURE FOR HIGH TRAFFIC & CRITICAL AREAS (example: waterways, diversions, etc.)

80% turf-type tall fescue 10% Kentucky bluegrass 10% turf-type perennial ryegrass

Other seed mixtures, such as blended varieties of perennial turf-type ryegrass, turf-type tall fescues, or bluegrasses may also be acceptable if approved by the District.

- SOIL EROSION AND SEDIMENT CONTROL NOTES**
- A written notice of the anticipated start of construction must be sent to the SCD 48 hours prior to any construction activity. Failure to notify the District will result in a Stop Construction Order. A Preconstruction Conference with the District and municipal officials must take place prior to any construction activities.
 - Installation of all erosion and sedimentation controls must follow the specification detail sheet and the "Standards for Soil Erosion and Sediment Control in New Jersey" manual.
 - Erosion and sedimentation control must be constructed, stabilized, and functional before site disturbance begins.
 - After final site stabilization has been achieved, the temporary erosion and sediment controls must be removed. Areas disturbed during removal of the controls must be stabilized.
 - All sediment controls shall be inspected after each rainfall. Repairs are to be made immediately if the controls are damaged at any time.
 - Should any measures contained in this plan prove incapable of sedimentation control the contractor must take necessary means to eliminate the problem.
 - The maximum allowable vegetated slope is 2:1. Slopes in excess of 3:1 (between 2:1 and 3:1) shall require temporary erosion control matting, such as "curlex" or equivalent, for stabilization.
 - If excess fill or any other material is to be removed from the site, the project owner/applicant shall be responsible for its proper disposal and will notify the Warren County Soil Conservation District as to the planned disposal site location. If applicable, a Soil Erosion and Sediment Control Plan must be submitted to, reviewed and certified by the Warren County Soil Conservation District prior to any material removal from the project site.

- HUNTERDON COUNTY SOIL CONSERVATION DISTRICT SOIL EROSION AND SEDIMENT CONTROL**
- GENERAL NOTES**
- The District shall be represented at the project preconstruction meeting with the Township Engineer, contractors, and utility representatives. If the Township Engineer does not schedule a preconstruction meeting, it is the responsibility of the owner/applicant to schedule one before any land disturbance. Two weeks notice must be given for scheduling preconstruction meetings.
 - Failure of the aforementioned plan shall not relieve the applicant of any of its responsibilities relevant to the appropriate statutes. Additional erosion and sediment control measures may be required as deemed necessary by the District in the event of any unforeseen problems incurred during construction.
 - Any changes of approved plans shall require an additional submittal to the District including appropriate re-review fees.
 - A 48 hour Start of Land Disturbance Notification shall be given.
 - In that N.J.A. 4-24-39 et seq requires that no Certificates of Occupancy be issued by the municipality before the provisions of the certified plan for soil erosion and sediment control have been complied with for permanent measures. All site work relative to approved plans and all work around individual lots in subdivisions will be completed before the Certificate of Compliance. Two weeks notice must be given to the District to schedule inspection for Certificate of Compliance release.
 - Final stabilization of all land disturbances associated with underground utilities, irrespective of phasing, is the ultimate responsibility of the owner.
 - A cash bond of not less than \$2,500. (Per disturbed acre or part thereof, or a lot) will be posted with the Hunterdon County Soil Conservation District during the non-growing season (November 15 - April 15) if a Certificate of Compliance is issued and soil erosion and sediment control measures for permanent stabilization are not completed.
 - Sediment tracked onto public right-of-ways shall be swept at the end of each working day.
 - No building permits will be released until all soil erosion and sediment control measures as shown on approved plans are installed.
 - Dust to be controlled with water, calcium chloride or other method approved by the Soil Conservation District.
 - Tracking pad" to be kept clean and repaired as necessary. ("not proposed see note #8 above)
 - Soil Erosion and Sediment Control measures shall be in accordance with Standards for Soil Erosion and Sediment Control in New Jersey, February 2014.
 - See Detail Sheets for Additional Soil and Sediment Control Details.

SUBJECT PARCELS:
 UNION TOWNSHIP BL. 24.01 LOT 1
 TOWN OF CLINTON BL. 4 LOT 2

BAYER-RISSE ENGINEERING, INC.
 78 ROUTE 173 WEST, SUITE 6
 HAMPTON, NEW JERSEY 08827
 PHONE 908-735-2255 FAX. 908-735-8538
 Certificate of Authorization No. 245A27943900

REVISION DESCRIPTION	DATE	APPROVED
REV PER TWP & NJDOT REVIEW COMMENTS	03-15-23	THB
REV PER TWP REVIEW COMMENTS	11-23-22	THB
REV PER TWP REVIEW COMMENTS	10-19-22	THB

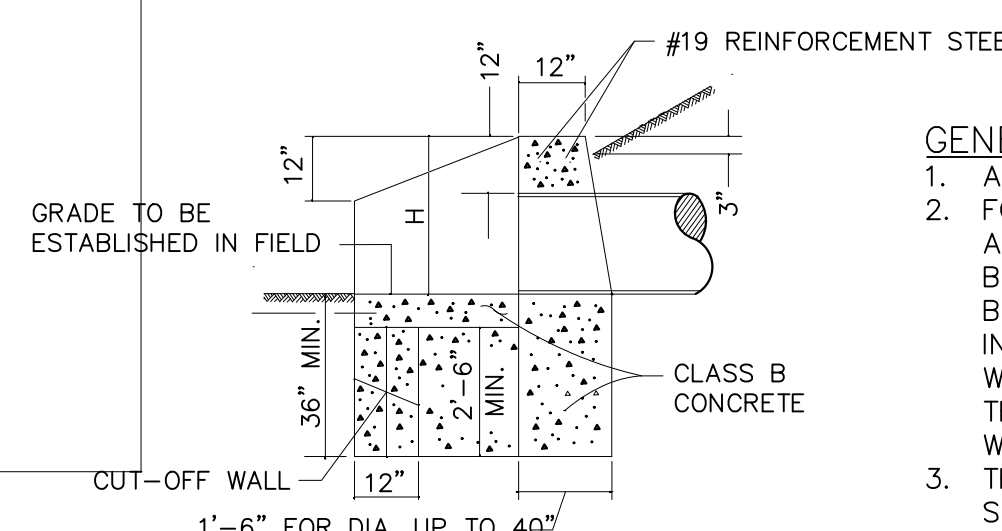
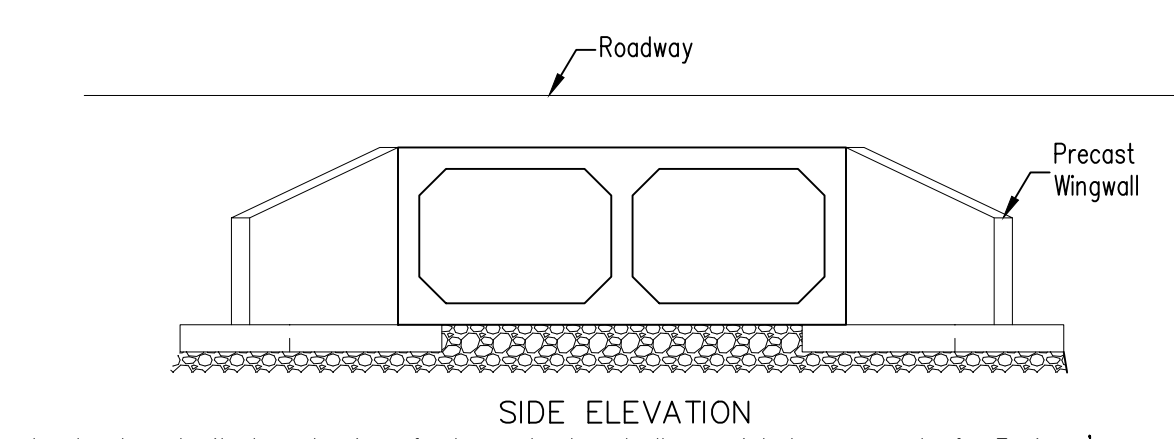
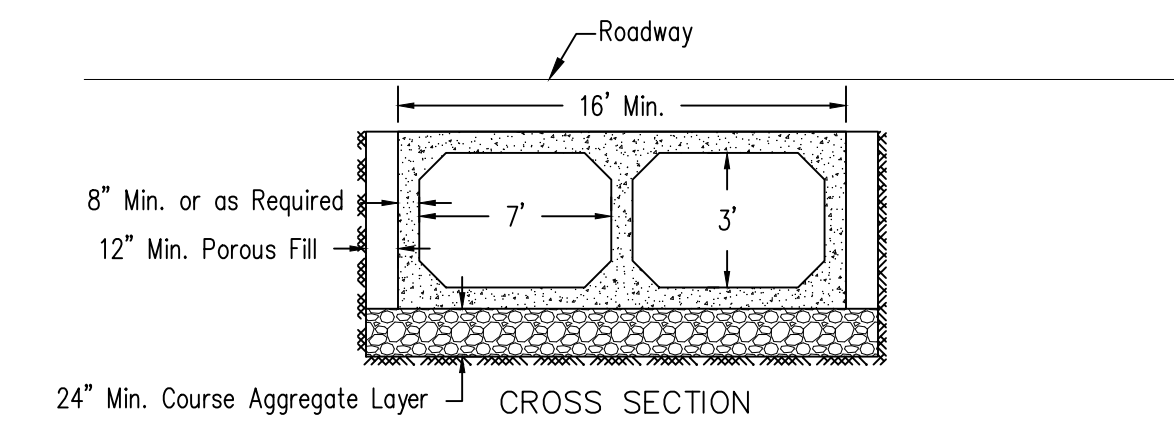
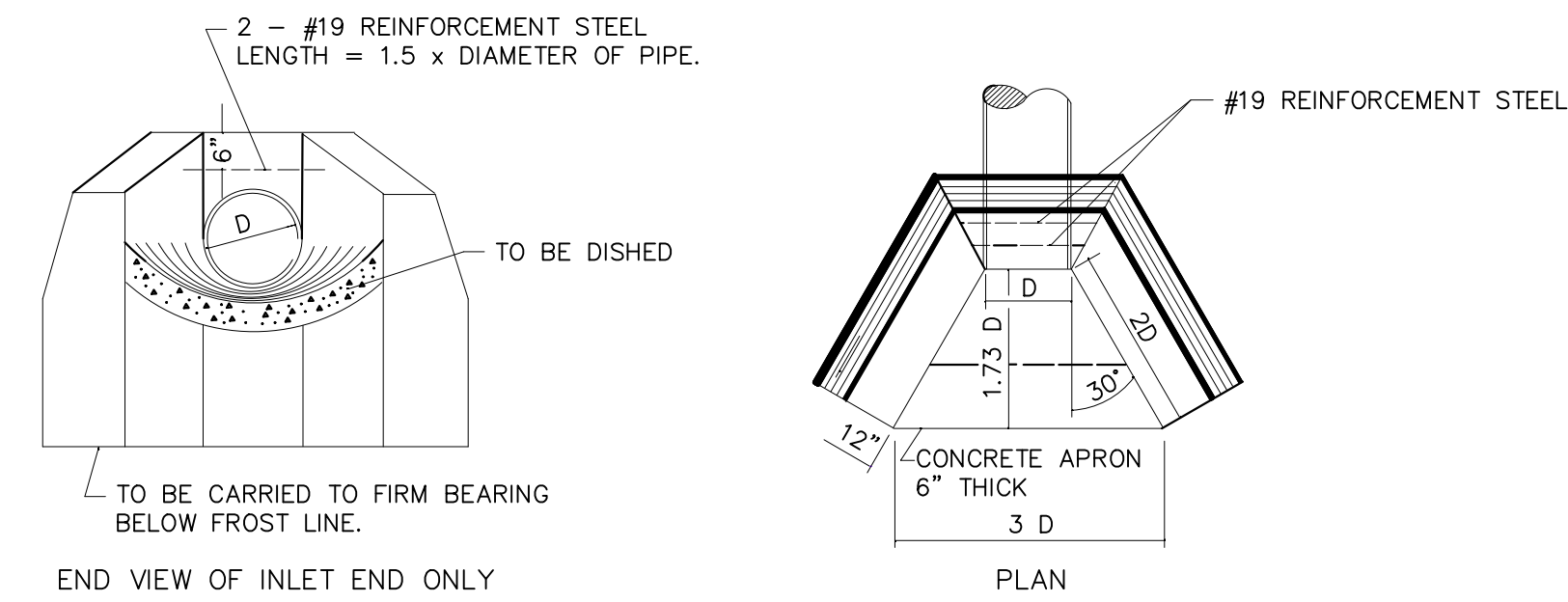
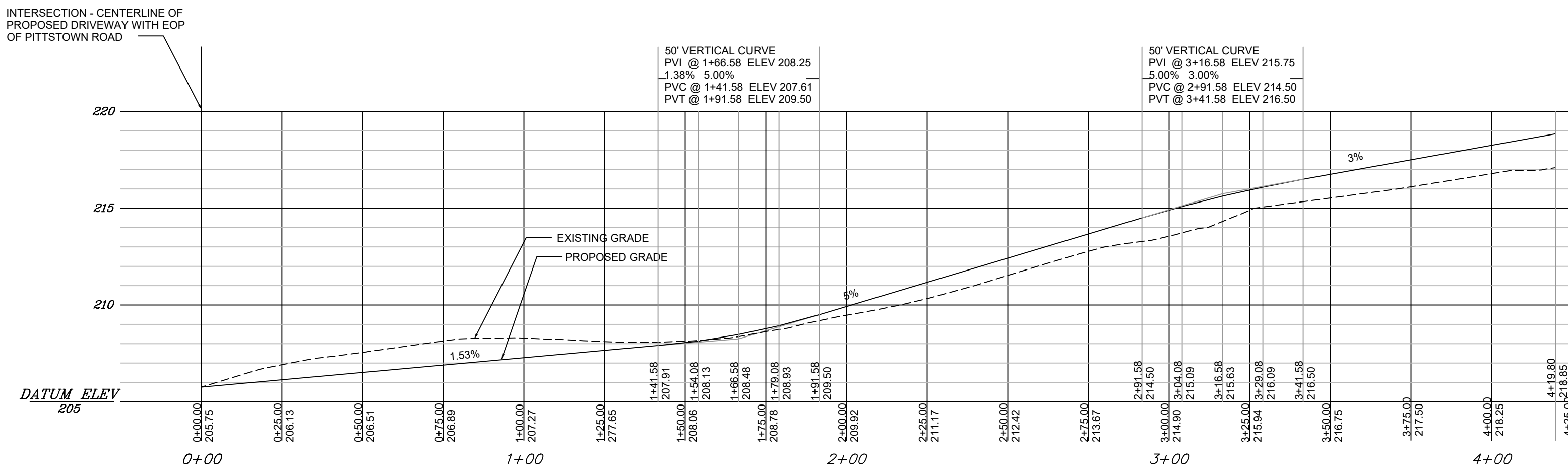
LAND DEVELOPMENT PLAN
SOIL EROSION CONTROL PLAN

The Bonnell Tavern
 Block 24.01 Lot 1
 2 County Route 513
 UNION TOWNSHIP, HUNTERDON COUNTY, NEW JERSEY

THEODORE H. BAYER, P.E.
 New Jersey Professional Engineer License No. GE33806

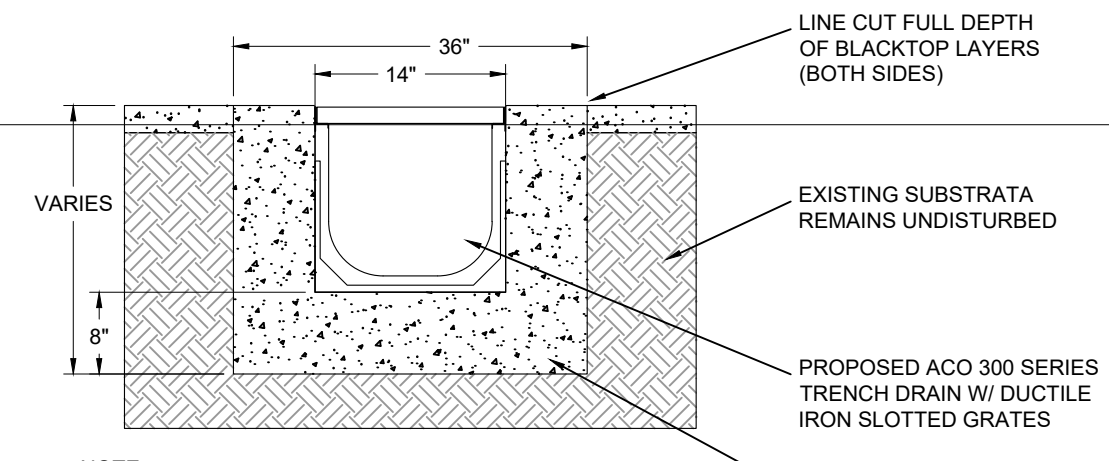
DRAWN BY: RT DESIGNED BY: RT CHECKED BY: THB DWG. NO.: TBT-7 REVISION: 21-2345

SCALE: As Noted DATE: August 5, 2022 SHEET: 7 of 11

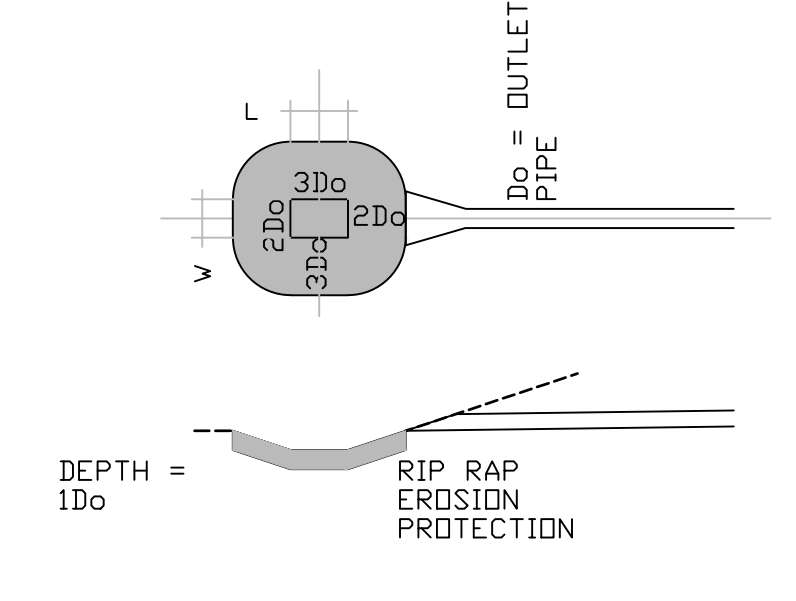
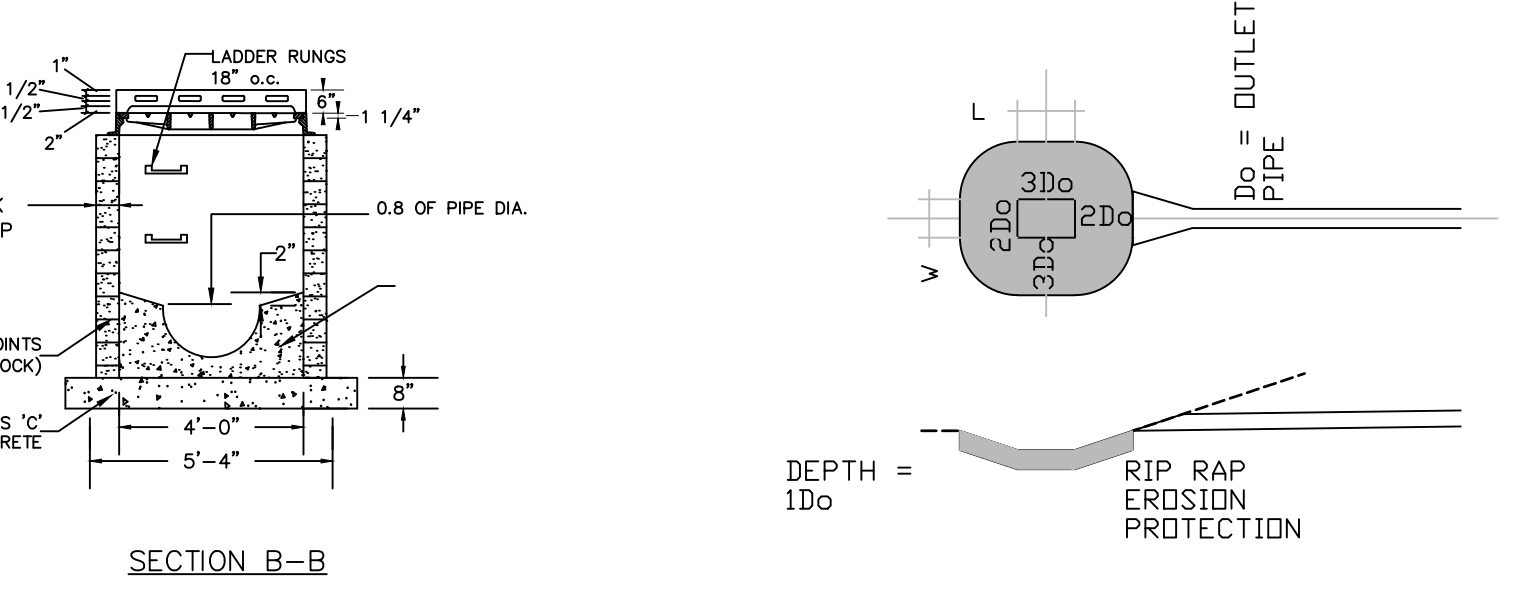
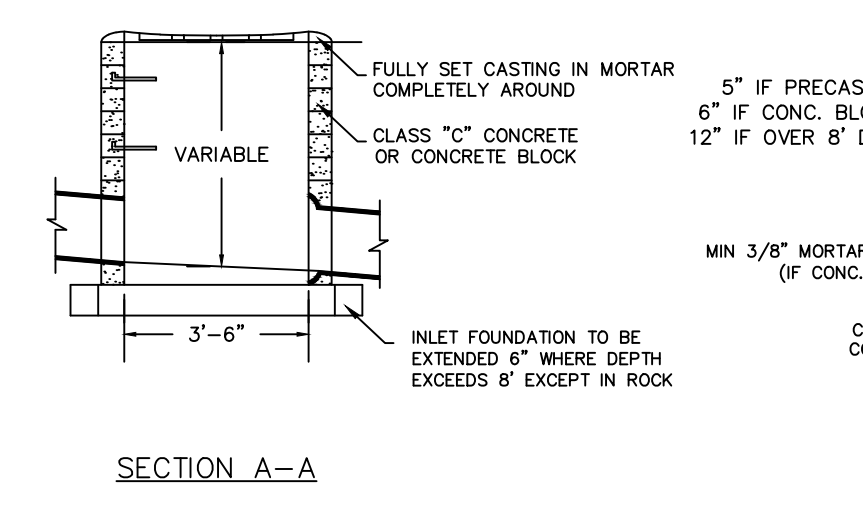
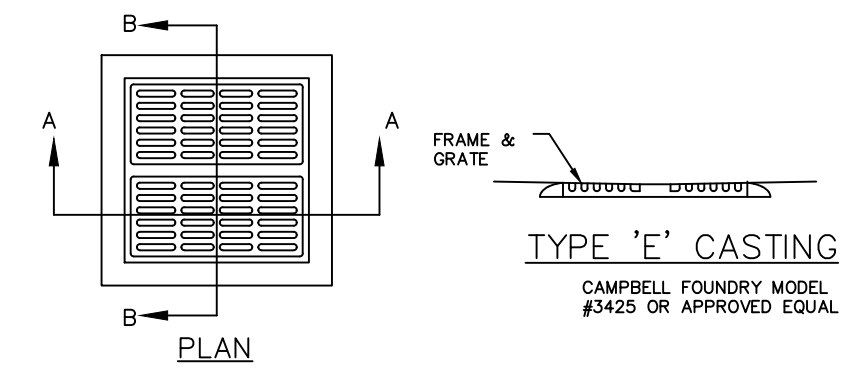
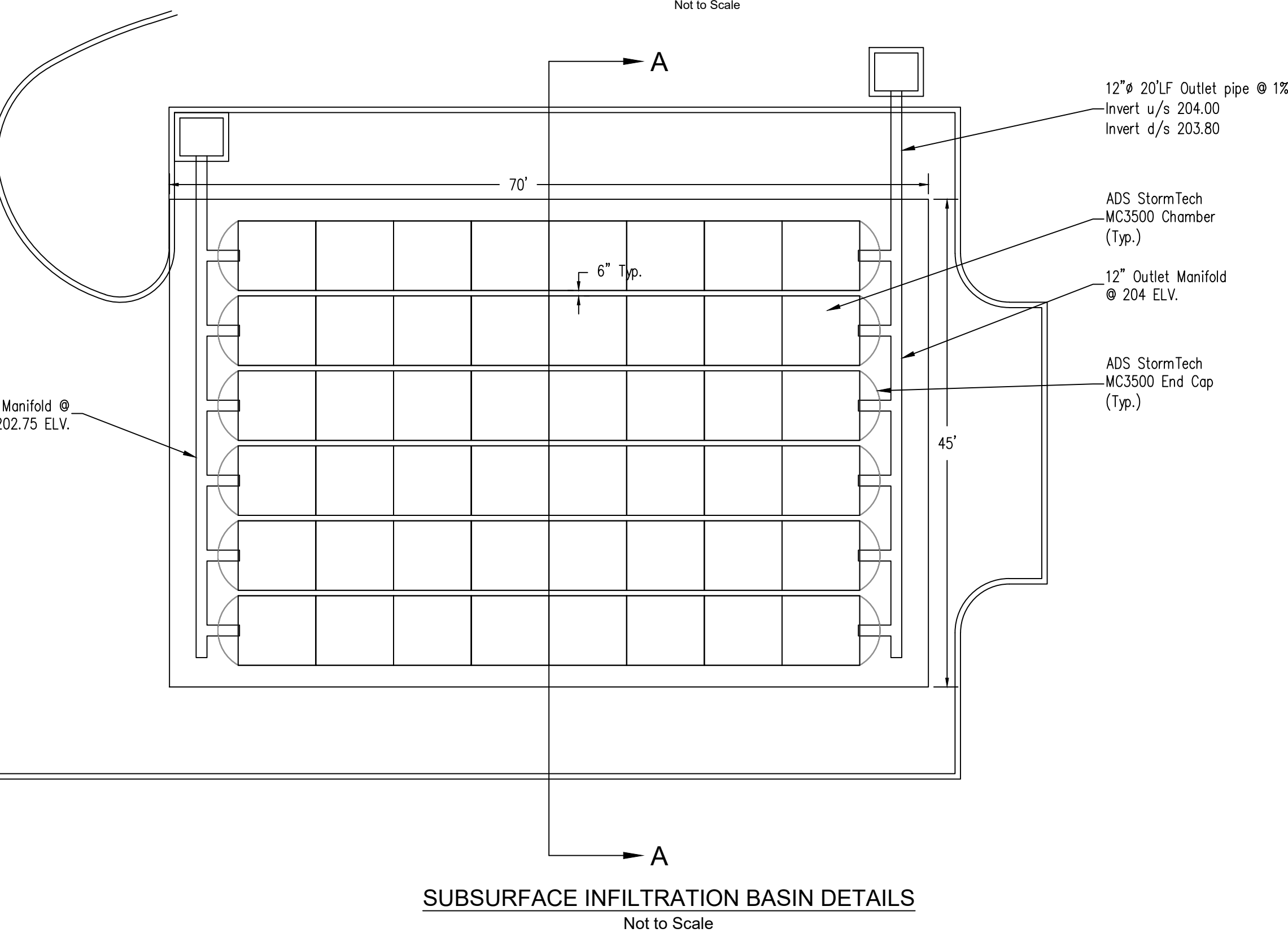
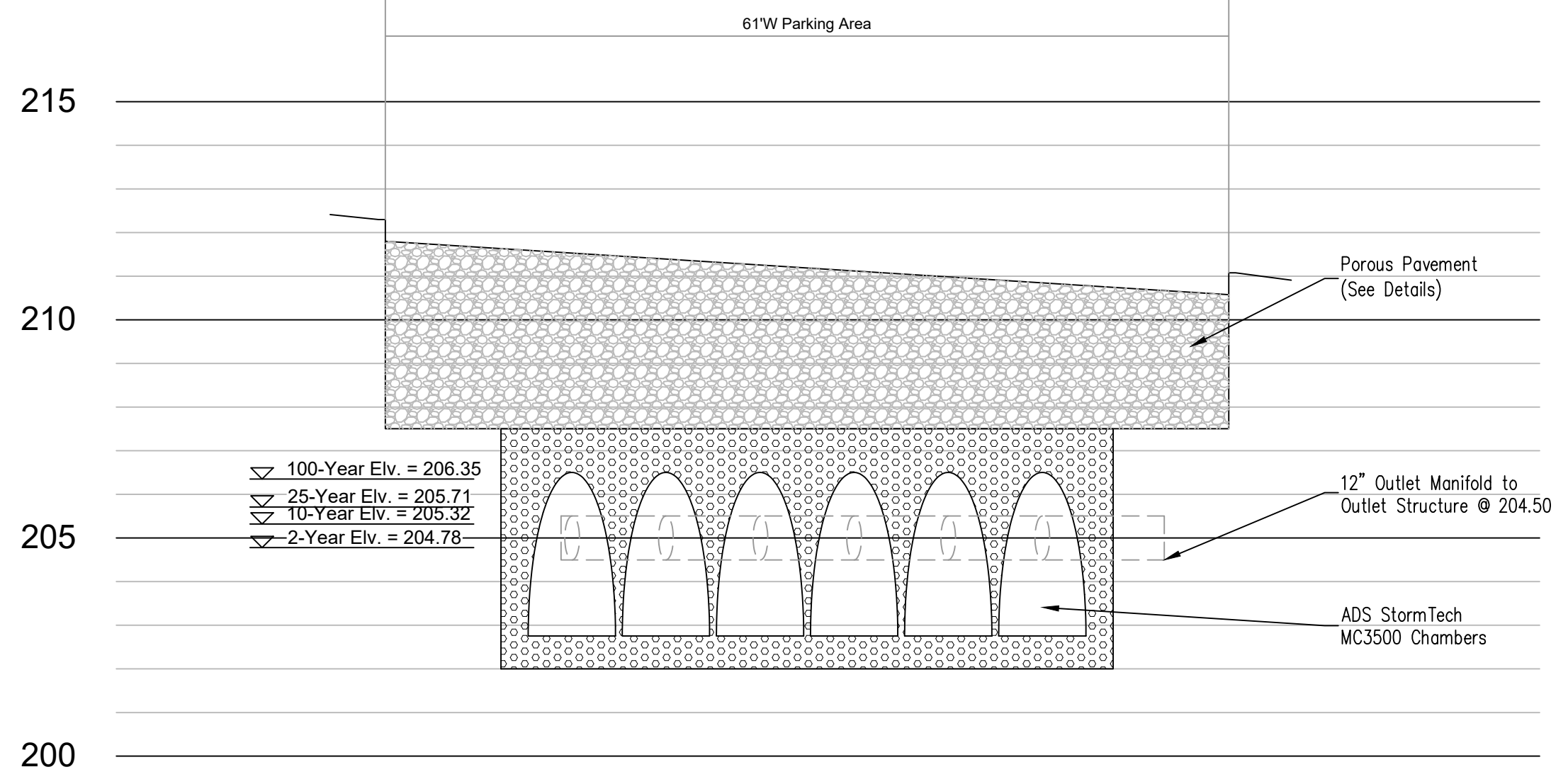
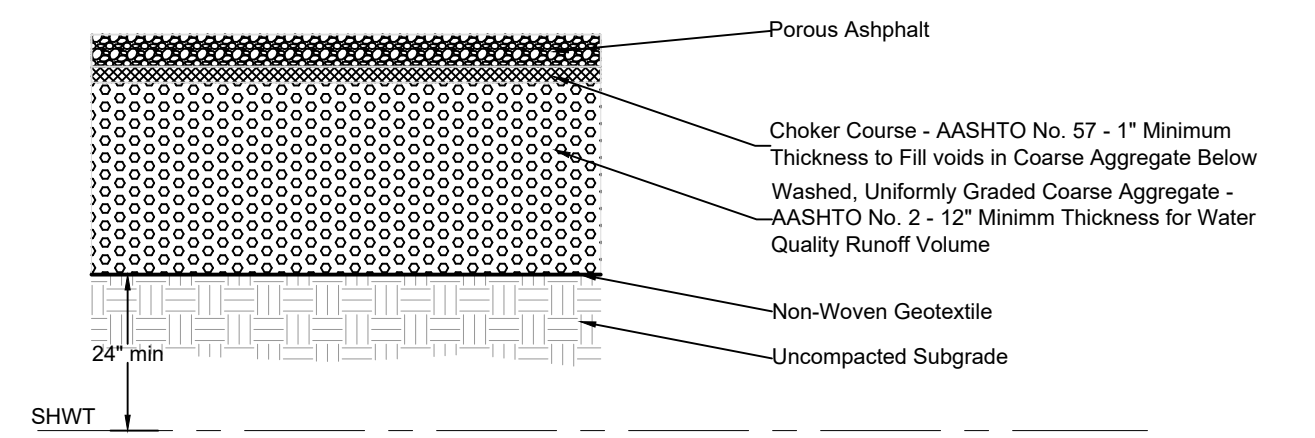
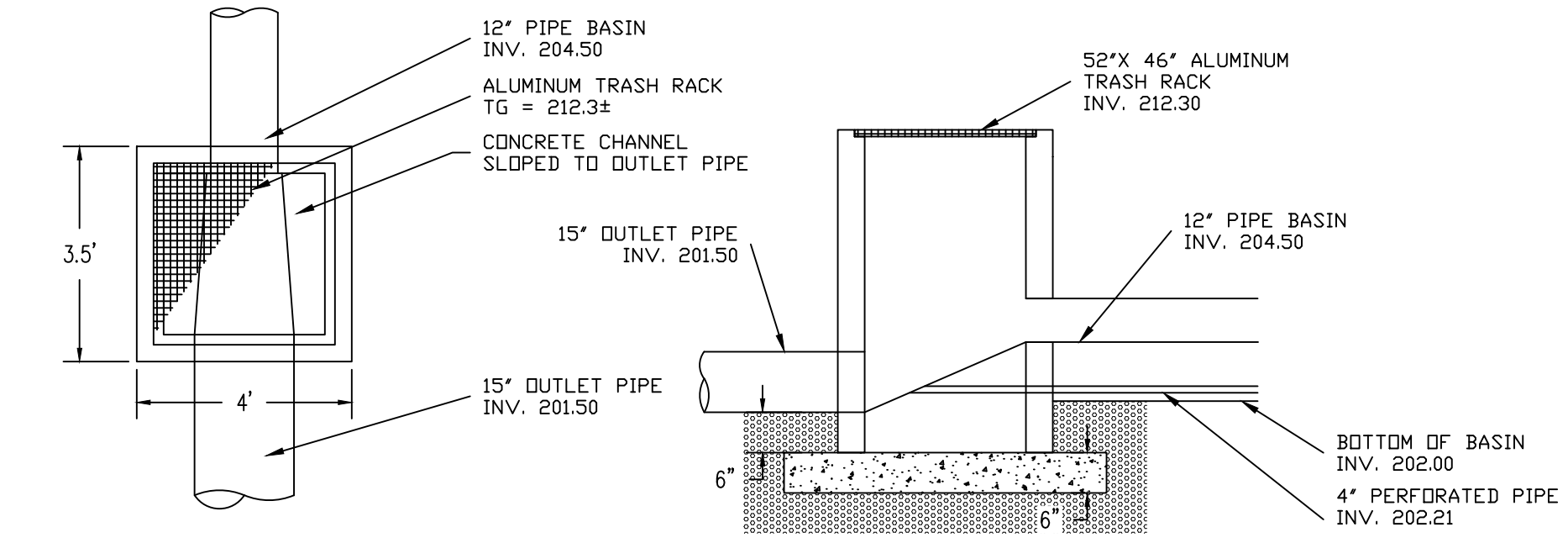
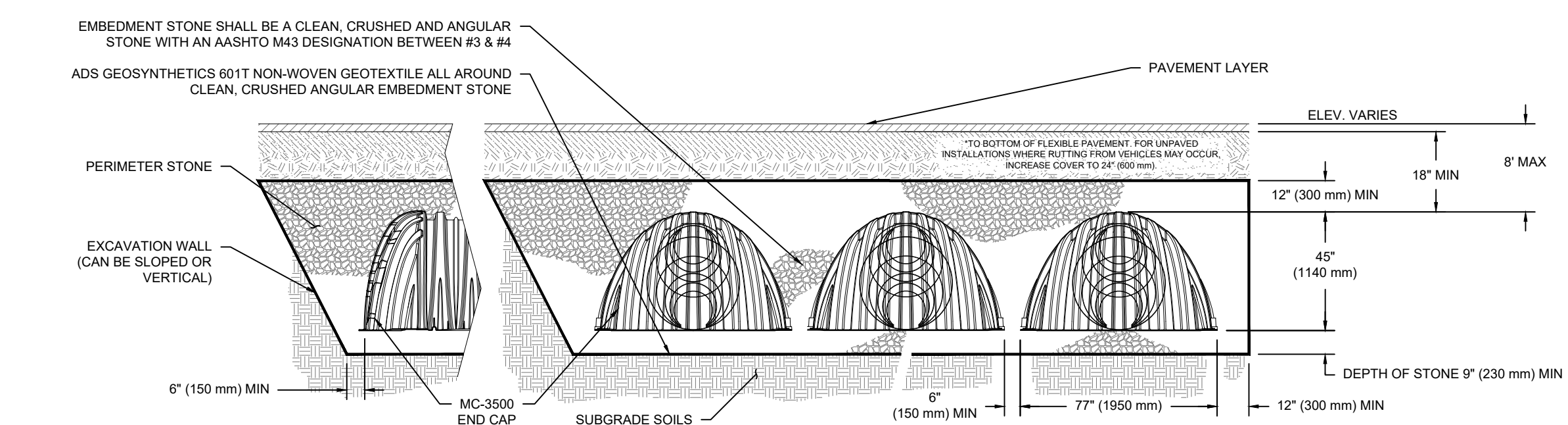


- GENERAL NOTES:**
- ALL EDGES TO BE CHAMFERED 1 INCH.
 - FOR MORE THAN ONE PIPE, SET THE PIPES A MINIMUM OF ONE FOOT APART (OUTSIDE BARREL TO OUTSIDE BARREL); THERE SHALL BE 12 INCHES ABOVE THE TOP OF A PIPE IN A WING-WALL; THE TERMINUS OF THE WINGWALL SHALL BE 2 X DIAMETER FROM THE CENTERLINE OF THE PIPE IN A WINGWALL.
 - THE TERMINUS FOR AN OUTLET APRON SHALL BE SET BY EXTENDING THE PIPE GRADE AHEAD AND BACK, RESPECTIVELY.
 - FOR ARCH PIPE, THE SPAN SHALL BE SUBSTITUTED FOR D.

- Note:
- Contractor to submit shop drawings for box culvert and all associated components for Engineer's approval prior to construction.
 - Length of each Culvert unit shall not exceed 10'.
 - Joint seal must be applied between units.
 - DESIGN SPECIFICATIONS:
1996 AASHTO Standard Specifications for Highway Bridges (with current interims as modified by Section 3A of NUDOT Design Manual for Bridges and Structures)
 - CONSTRUCTION SPECIFICATIONS:
The NUDOT Standard Specifications for Road and Bridge Construction with current Supplemental Specifications, as modified by the Special Provisions.



NOTE:
TRENCH DRAIN SHALL BE INSTALLED IN 2 LOCATIONS (SEE SHEET 4 OF 10).



PERFORMED SCOUR HOLE SUMMARY TABLE

DISCHARGE ID	PIPE DIA (IN)	BOTTOM LENGTH (FT)	BOTTOM WIDTH (FT)	D ₅₀ STONE (IN)
OUTLET	15	2.5	3.75	6

- NOTES:
- INLET MAY BE CONSTRUCTED OF CONCRETE OR CONCRETE BLOCK. IF CONCRETE BLOCK IS USED, THE BOTTOM SHALL BE AS SHOWN FOR CONCRETE, AND THE OUTSIDE WALL SHALL BE PLASTERED WITH A 1/2" THICK COAT OF 1:2 CEMENT, SAND MORTAR.
 - PIPE TO BE CUT FLUSH WITH INSIDE WALL.
 - INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLET.
 - BOTTOMS SHALL BE DISHED AND SLOPED TOWARD THE OUTLET.
 - INLET GRATES TO BE "BICYCLE SAFE" GRATES.
 - CURB-TYPE CASTINGS TO HAVE "N-ECO CURB PIECE"
- TYPICAL DRAINAGE INLET/ OUTLET STRUCTURE
NTS

SUBJECT PARCELS:
UNION TOWNSHIP BL 24.01 LOT 1
TOWN OF CLINTON BL 4 LOT 2

BAYER-RISSE ENGINEERING, INC.
78 ROUTE 173 WEST, SUITE 6
HAMPTON, NEW JERSEY 08827
PHONE 908-735-2255 FAX. 908-735-5838
Certificate of Authorization No. 245A27943900

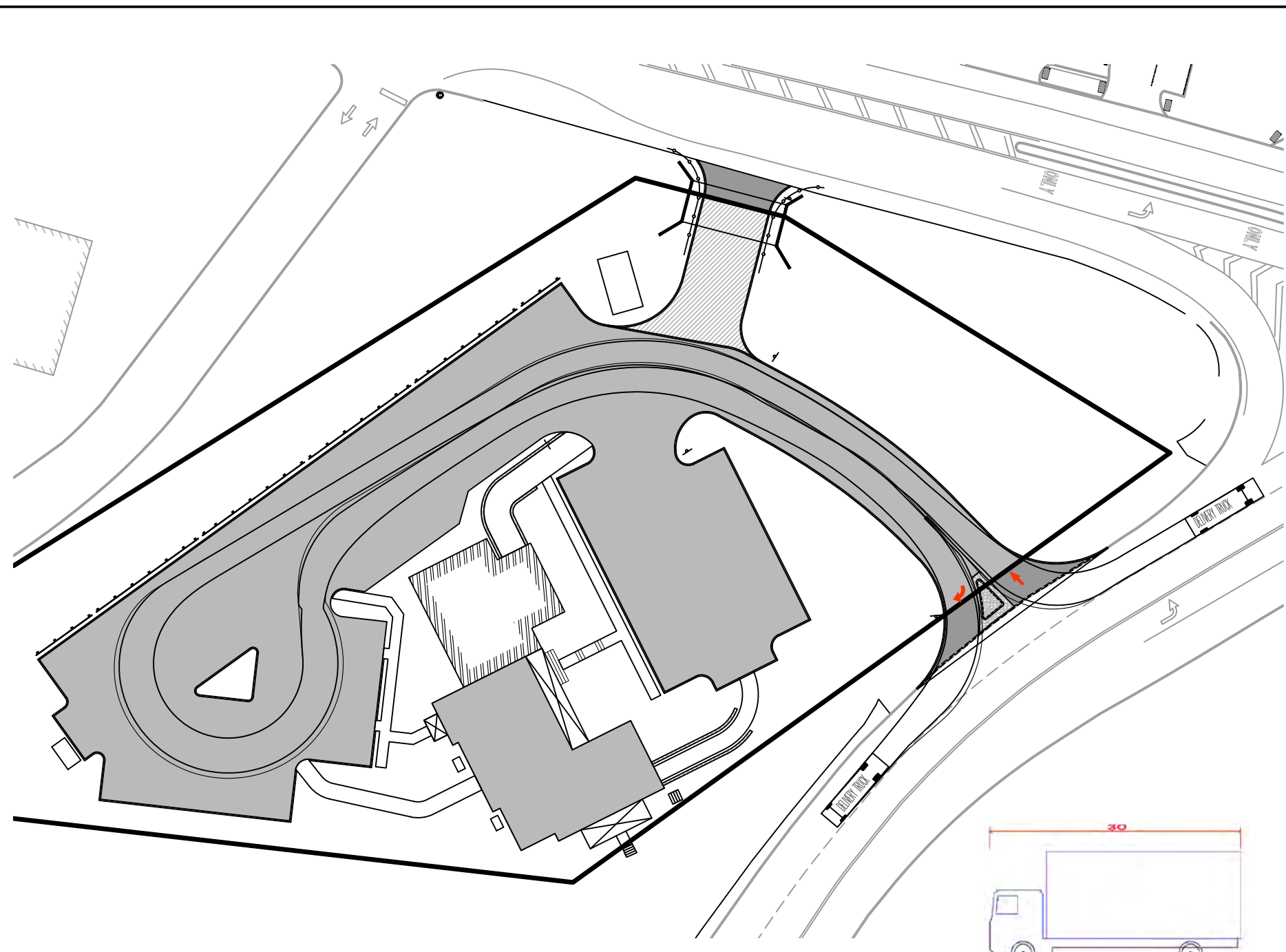
REVISION DESCRIPTION	DATE	APPROVED
REV PER TWP & NJDOT REVIEW COMMENTS	03-15-23	THB
REV PER TWP REVIEW COMMENTS	11-23-22	THB
REV PER TWP REVIEW COMMENTS	10-19-22	THB

LAND DEVELOPMENT PLAN CONSTRUCTION DETAILS I

The Bonnell Tavern
Block 24.01 Lot 1
2 County Route 513
UNION TOWNSHIP, HUNTERDON COUNTY, NEW JERSEY

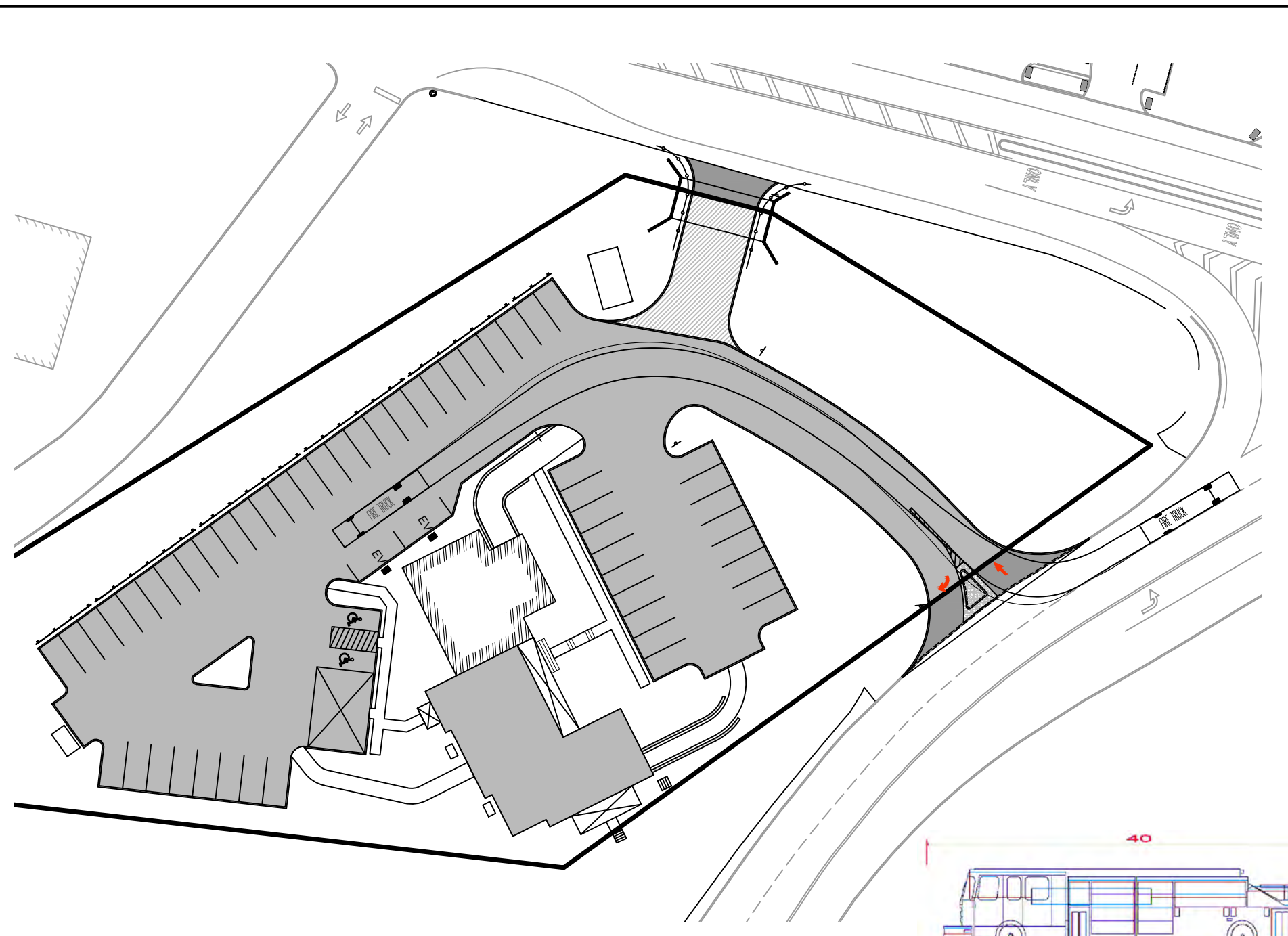
THEODORE H. BAYER, P.E.
New Jersey Professional Engineer License No. GE33806

SCALE: As Noted DATE: August 5, 2022 SHEET: 8 of 11



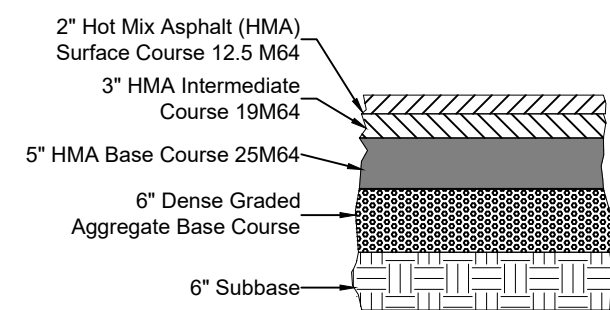
DELIVERY/ SERVICE TRUCK ROUTE
1" = 50'

DELIVERY TRUCK SIZE CONFIGURATION
 OVERALL LENGTH = 30'
 WIDTH = 8'
 TRACK = 8'
 LOCK TO LOCK TIME = 6 sec
 STEERING ANGLE = 31.8°



FIRE TRUCK ROUTE
1" = 50'

FIRE TRUCK SIZE CONFIGURATION
 OVERALL LENGTH = 40'
 WIDTH = 8.167'
 TRACK = 8.167'
 LOCK TO LOCK TIME = 5 sec
 STEERING ANGLE = 45°



PAVEMENT SECTION AND REPAIR STRIP DETAIL
(For Use Within NJDOT ROW)
Not to Scale

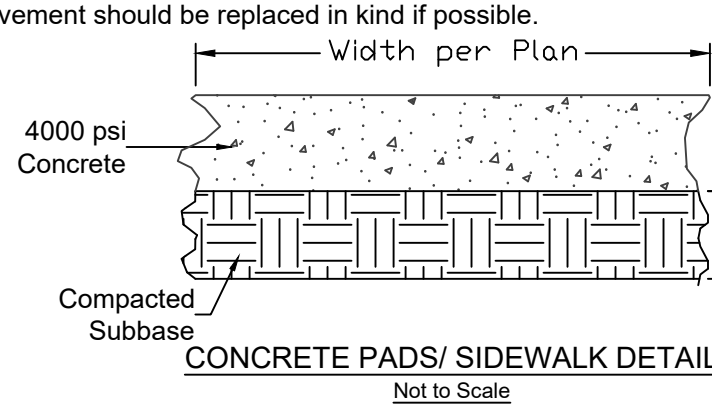
902.02.01 Mix Designations
 The requirements for specific HMA mixtures are identified by the abbreviated fields in the item description as defined as follows:

HOT MIX ASPHALT 12.5ME SURFACE COURSE

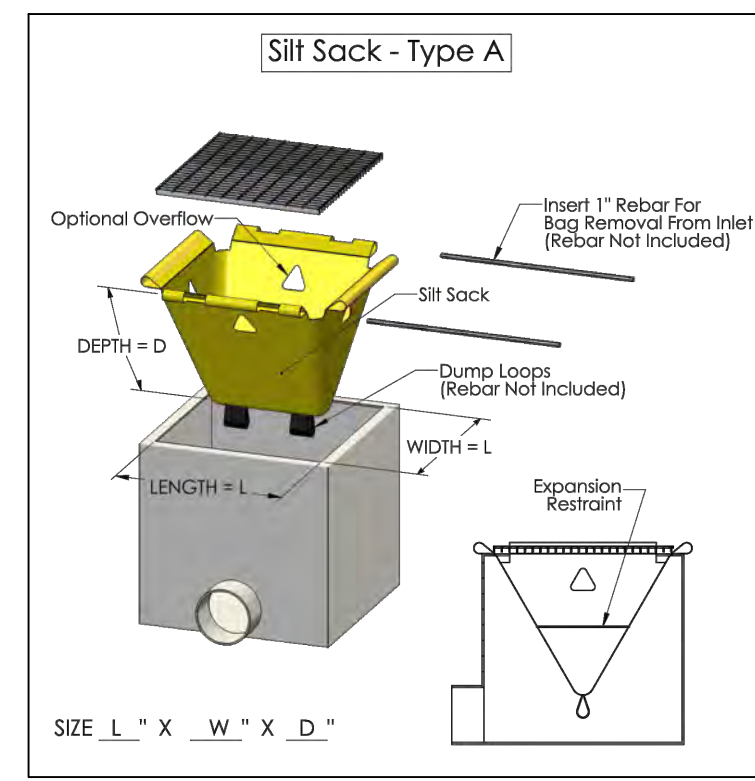
- "HOT MIX ASPHALT" "Hot Mix Asphalt" is located in the first field in the item description for the purpose of identifying the mixture requirements.
- "12.5" The second field in the item description designates the nominal maximum size aggregate (in millimeters) for the job mix formula (sizes are 4.75, 9.5, 12.5, 19, 25, and 37.5 mm).
- "M" The third field in the item description designates the design compaction level for the job mix formula based on traffic forecasts as listed in Table 902.02.03-2 (levels are L=low and M=medium).
- "E" The fourth field in the item description designates the high temperature designation of the performance graded binder. Options are "64" for PG 64-22 and "E" for PG 64E-22.
- "SURFACE COURSE" The last field in the item description designates the intended use and location within the pavement structure (options are surface, intermediate, or base course).

Notes:

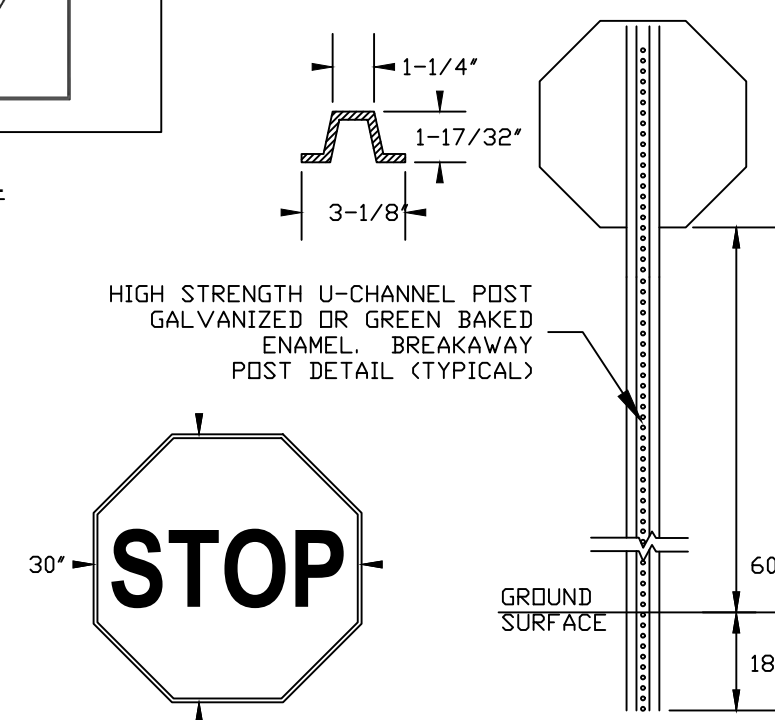
- Pavement section to be a minimum of 2.0 feet in width.
- Sawcut pavement prior to excavation.
- Undercut soft subgrade areas and replace with additional sub-base or borrow excavation-selected material.
- Apply Tract Coat to the edge of existing pavement prior to paving.
- Milling and resurfacing shall be 2" HMA 12.7M76 surface course.
- The longitudinal joint between the new and existing pavement shall be sawed and sealed.
- Existing concrete pavement should be replaced in kind if possible.



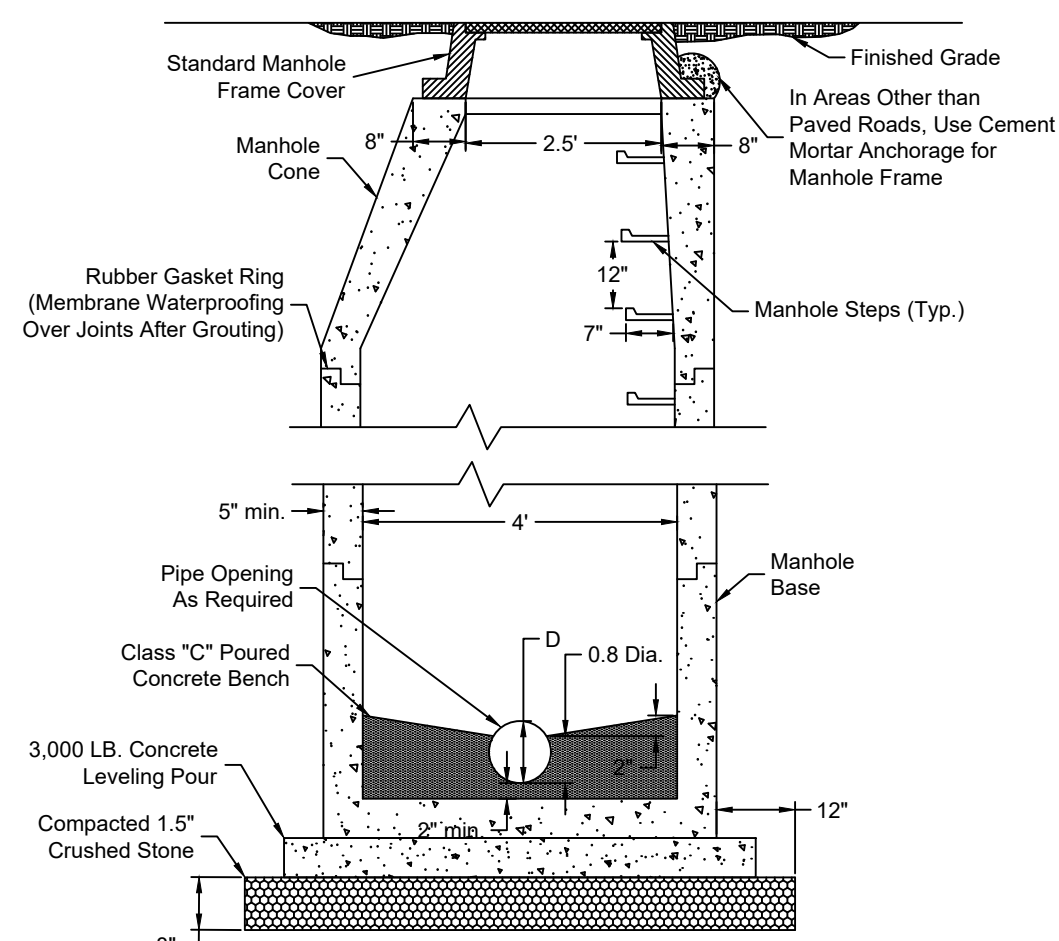
CONCRETE PADS/ SIDEWALK DETAIL
Not to Scale



INLET PROTECTION DETAIL
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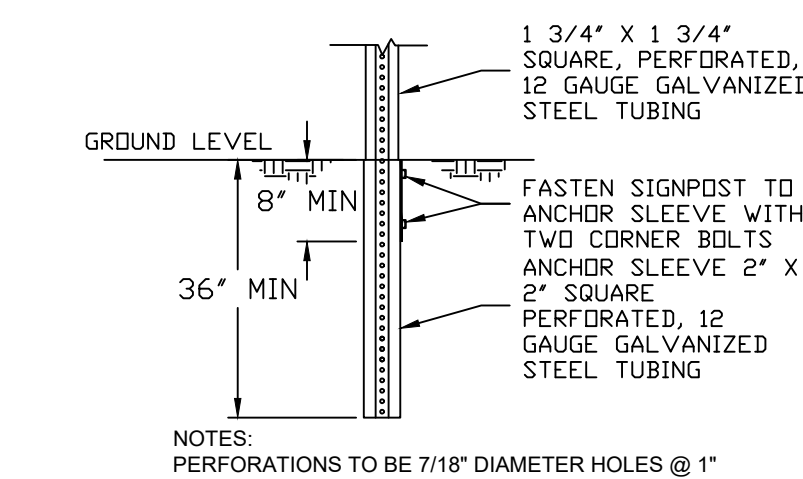


STOP SIGN DETAIL
NTS

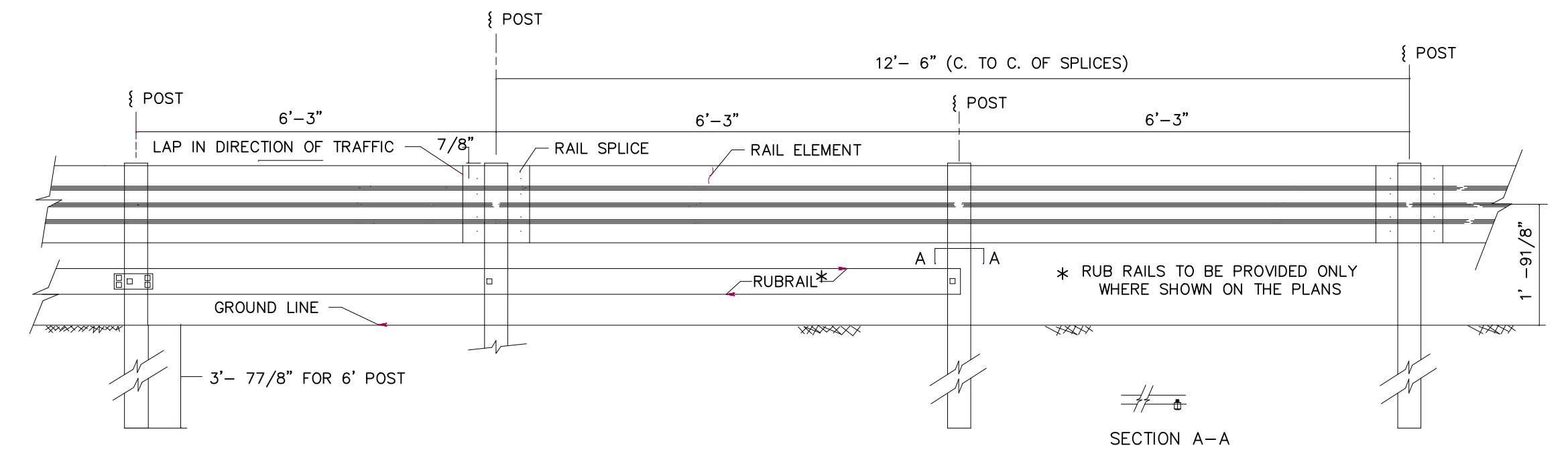


- Notes:**
- All joints shall have round rubber watertight gaskets.
 - Manholes can be precast concrete, concrete block or block.
 - Concrete block manholes shall be coated with tar or other approved watertight sealant.

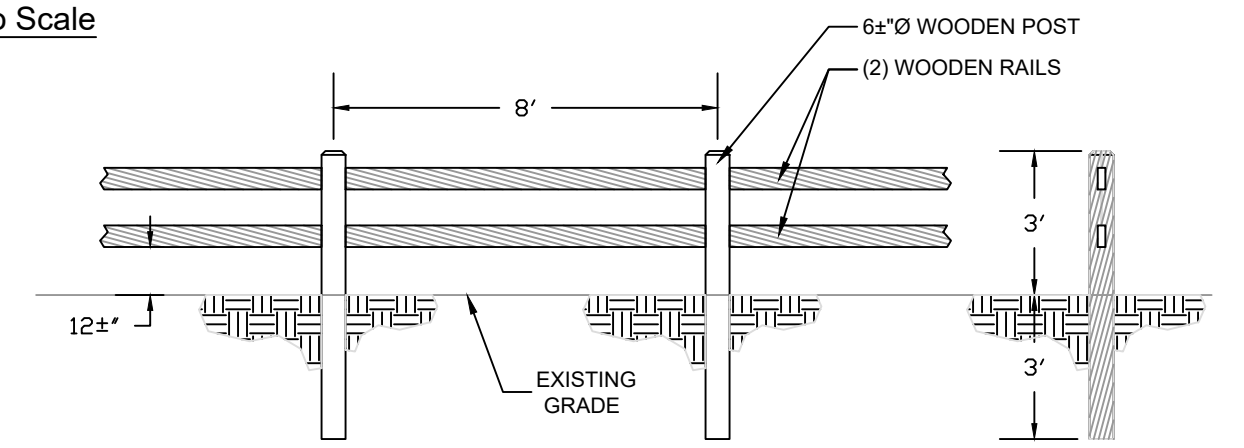
Storm Sewer Manhole
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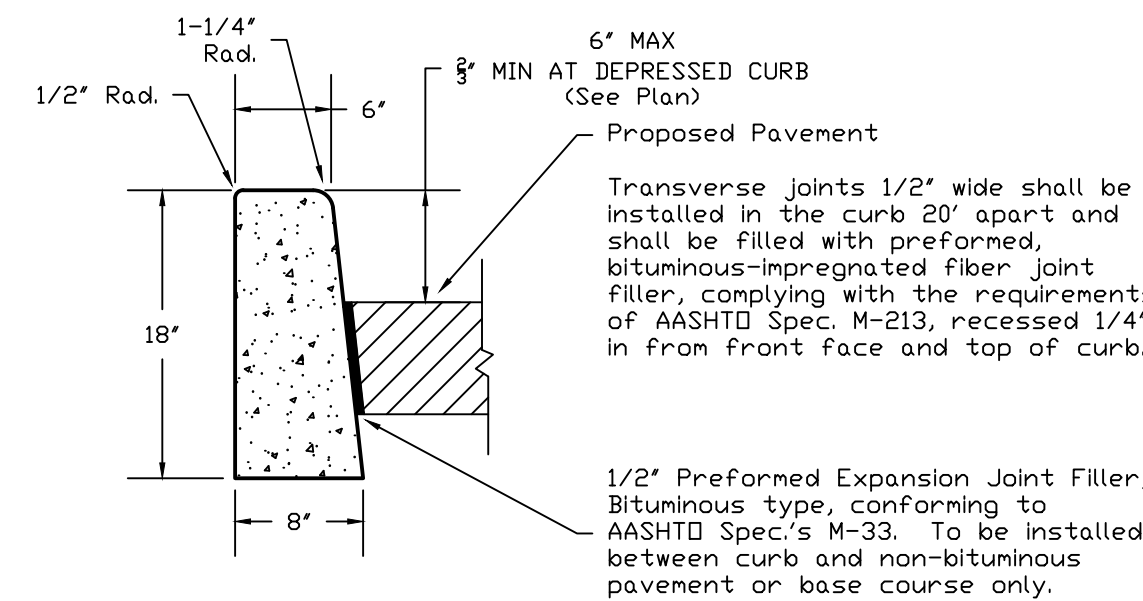
SIGNPOST INSTALLATION DETAIL
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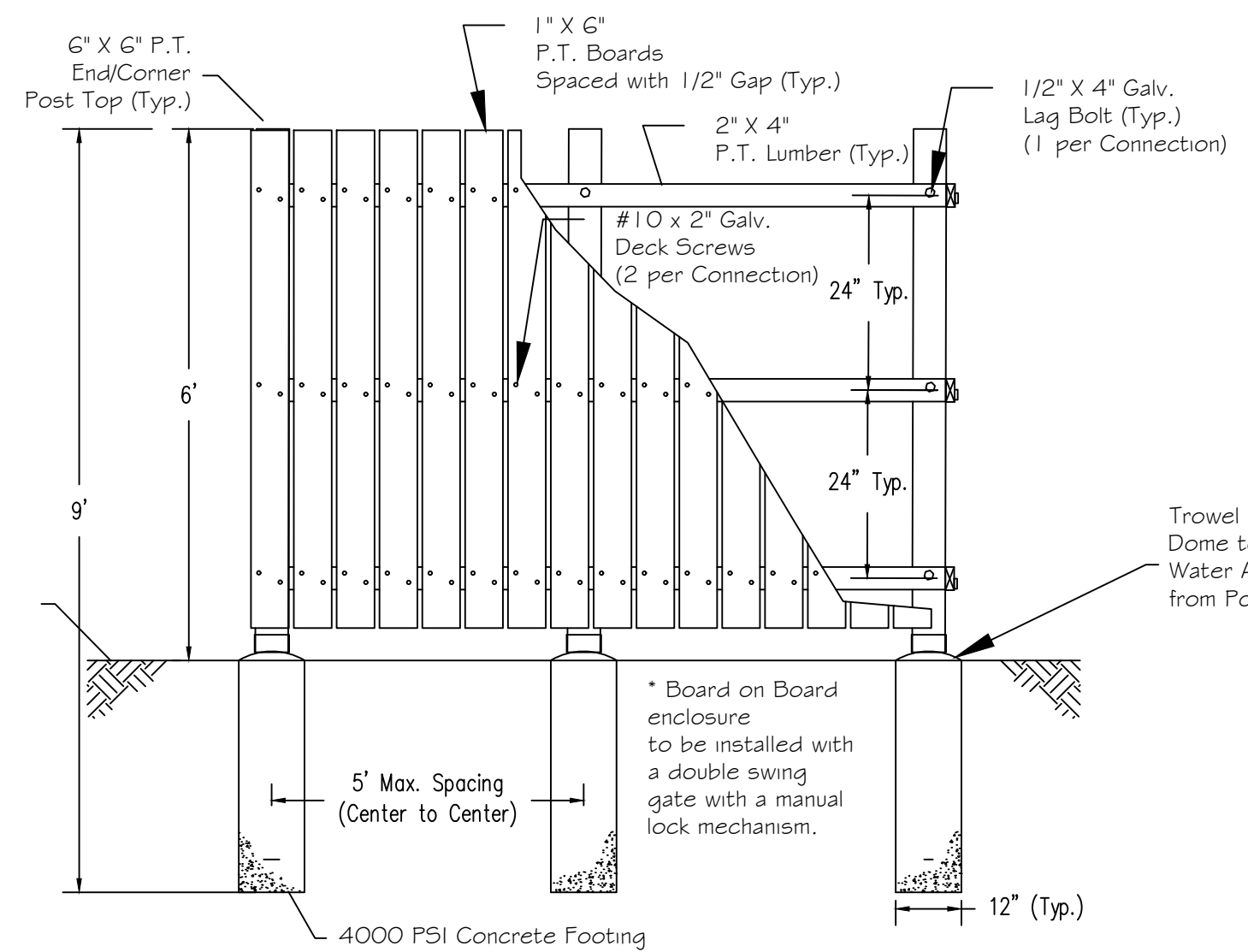
BEAM GUIDE RAIL DETAIL
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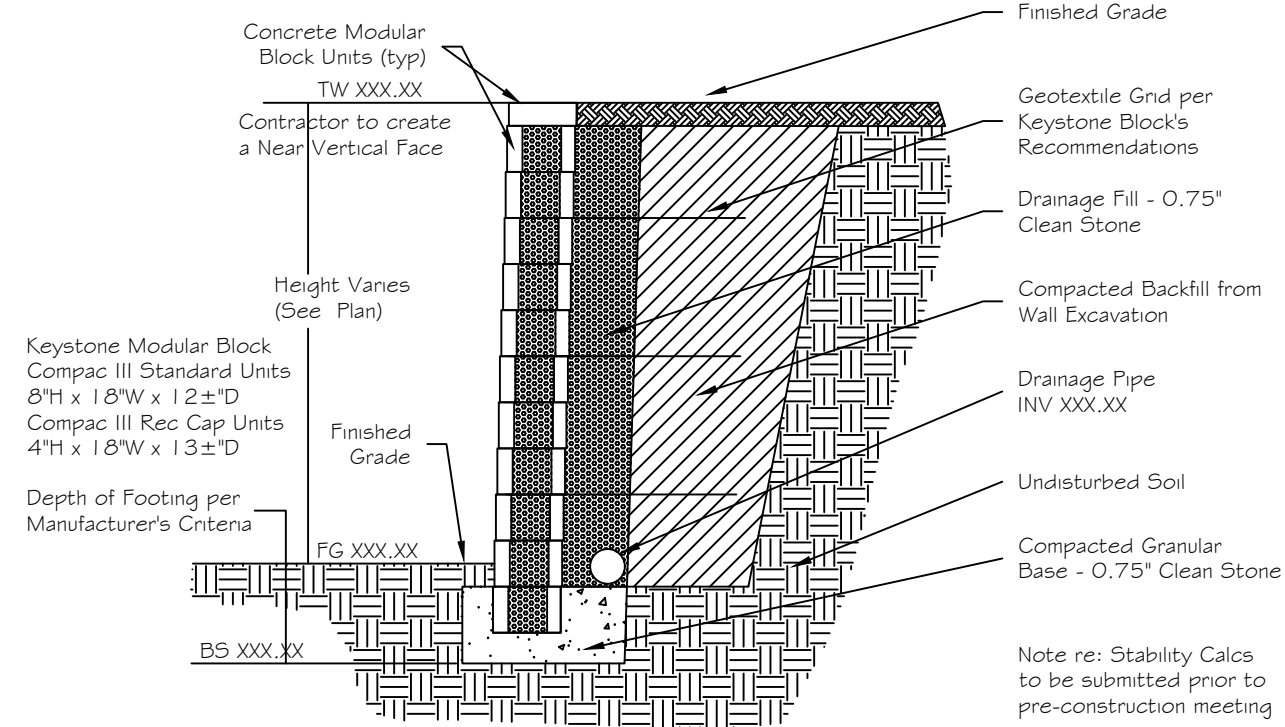
POST & RAIL WOODEN FENCE DETAIL
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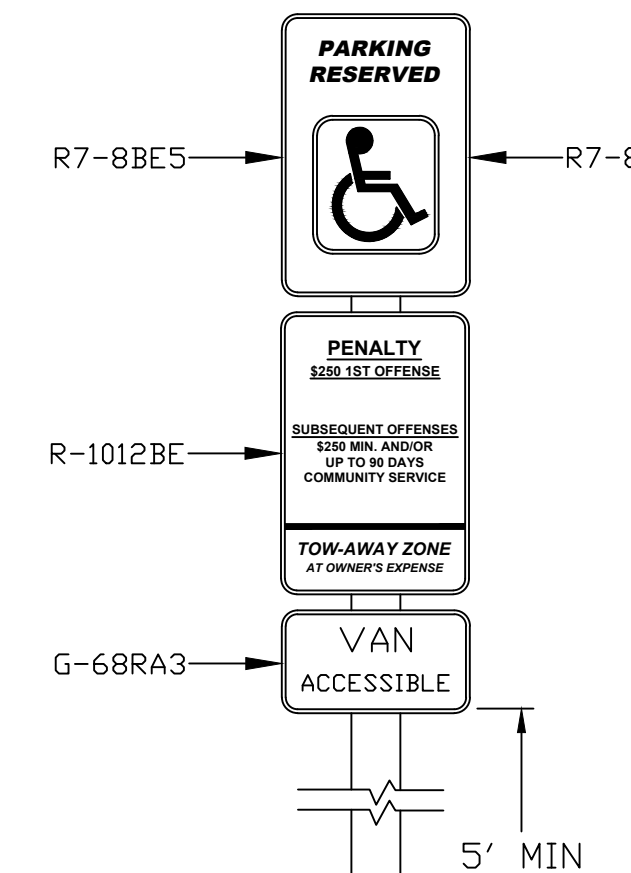
CONCRETE CURB



BOARD ON BOARD TRASH ENCLOSURE DETAIL
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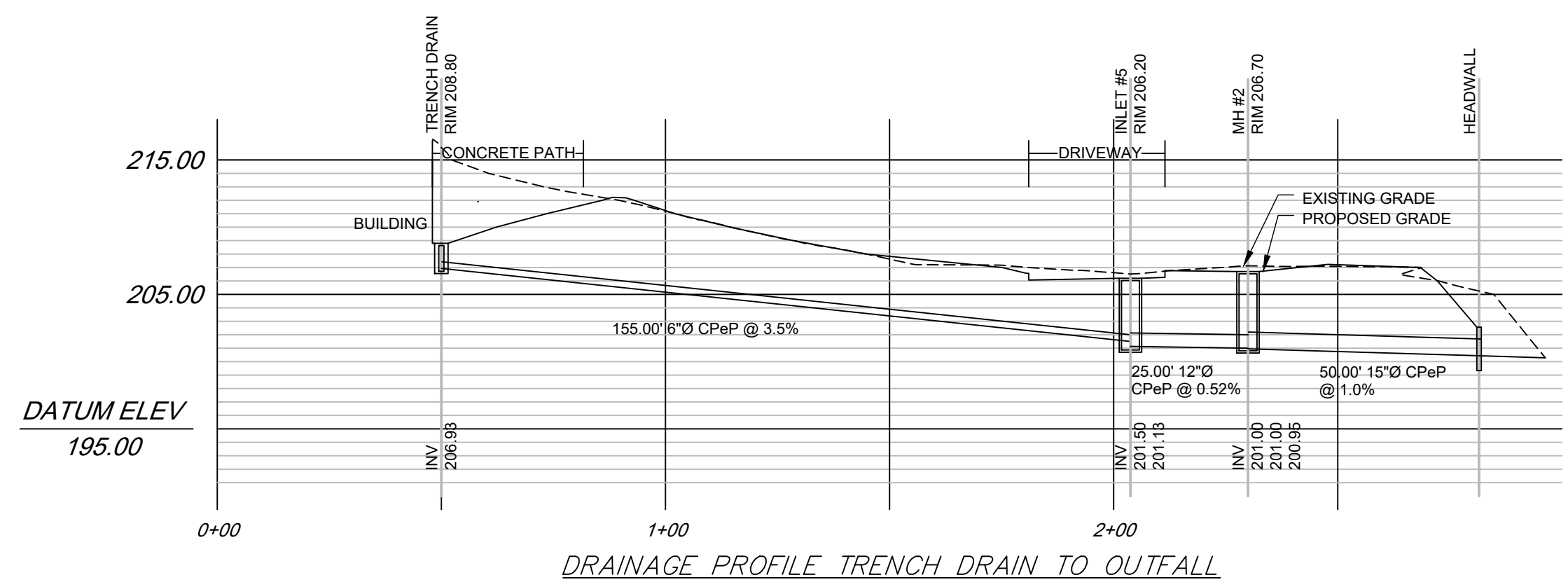
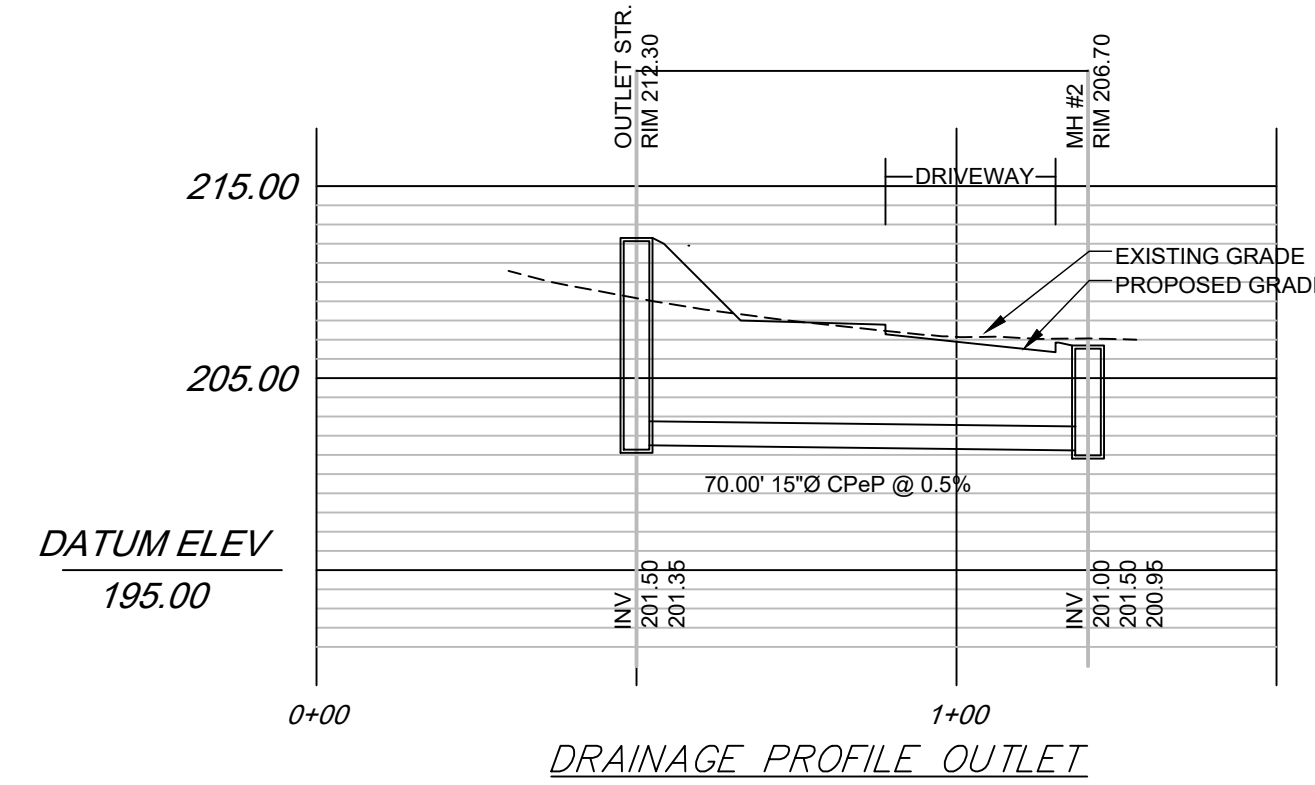
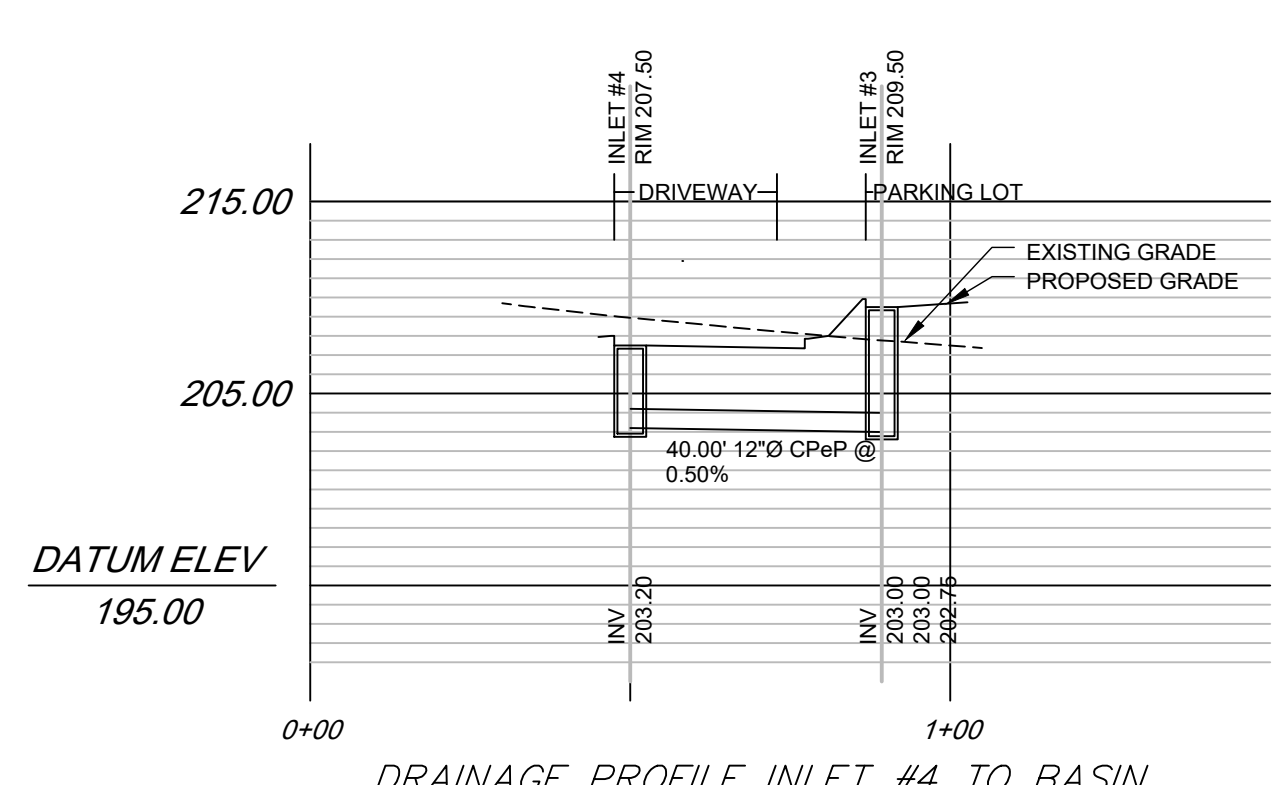
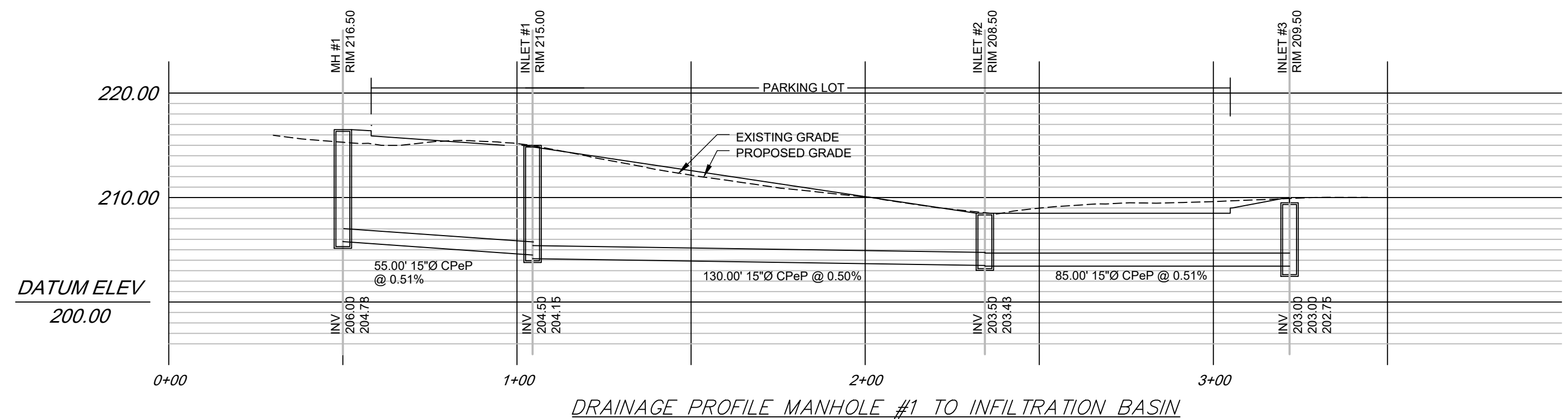
MODULAR BLOCK RETAINING WALL - GRAVITY SYSTEM
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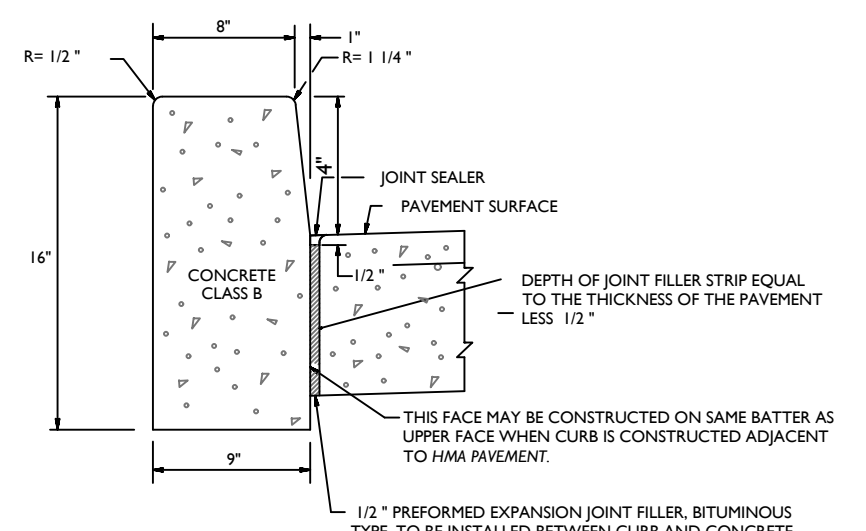
VAN ACCESSIBLE HANDICAP SIGN DETAIL
Not to Scale

- NOTES:**
- PAVEMENT MARKING AS PER AAAG REQUIREMENTS.
 - INDICATED FINES TO BE ADJUSTED ACCORDING TO LOCAL POLICE DEPARTMENT.

SUBJECT PARCELS: UNION TOWNSHIP TOWN OF CLINTON		BL 24.01 LOT 1 BL 4 LOT 2		
 BAYER-RISSE ENGINEERING, INC. 78 ROUTE 173 WEST, SUITE 6 HAMPTON, NEW JERSEY 08827 PHONE 908-735-2255 FAX 908-735-5838 <small>Certificate of Authorization No. 245427943900</small>		REV PER TWP & NJDOT REVIEW COMMENTS	03-15-23	THB
		REV PER TWP REVIEW COMMENTS	11-23-22	THB
		REV PER TWP REVIEW COMMENTS	10-19-22	THB
		REVISION DESCRIPTION	DATE	APPROVED
		LAND DEVELOPMENT PLAN CONSTRUCTION DETAILS II		
		<i>The Bonnell Tavern</i> Block 24.01 Lot 1 2 County Route 513 UNION TOWNSHIP, HUNTERDON COUNTY, NEW JERSEY		
THEODORE H. BAYER, P.E. New Jersey Professional Engineer License No. GE33806		DRAWN BY: RT DESIGNED BY: RT CHECKED BY: THB DWG NO.: TBT-9 SHEET: 9 of 11	DATE: August 5, 2022	BREV: 21-2345

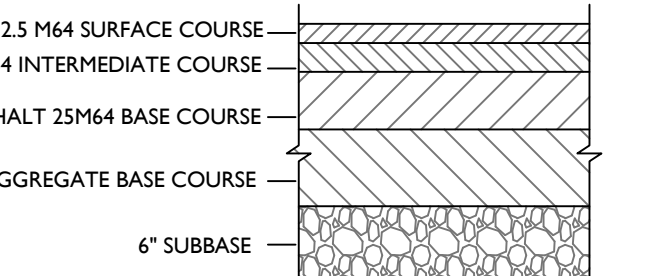


PROFILE SCALES
 HORIZ: 1"=30'
 VERT: 1"=10'



9"X16" CONCRETE VERTICAL CURB
 (FOR USE WITHIN NJDOT ROW)
 NOT TO SCALE

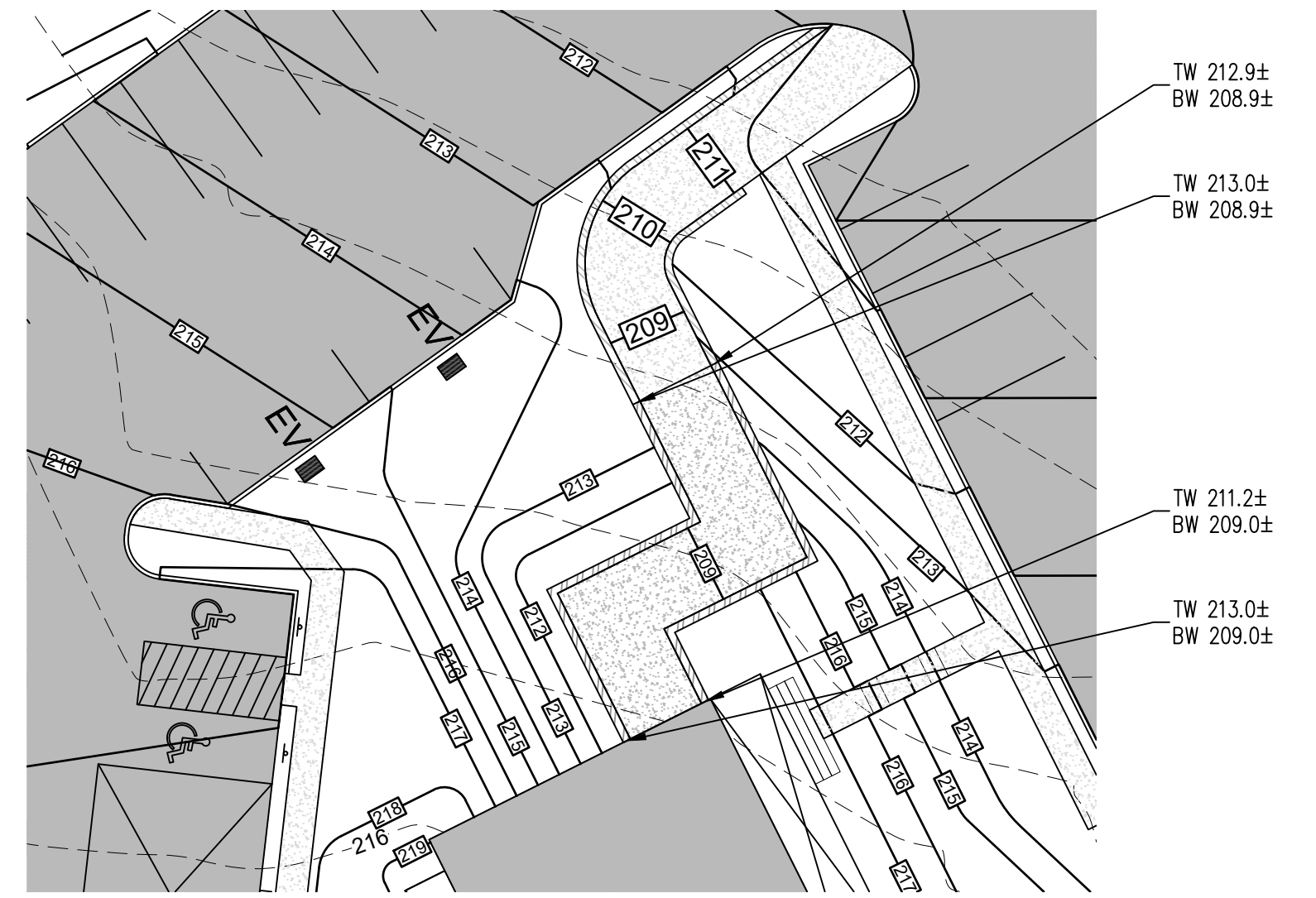
NOTES:
 TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 30 FEET APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS-IMPREGNATED FIBER JOINT FILLER RECESSED 1/4" IN FROM FRONT FACE AND TOP OF CURB.
 EXPANSION JOINTS THRU AND ADJACENT TO THE CURB SHALL BE INCLUDED IN THE UNIT PRICE BID FOR CURB.



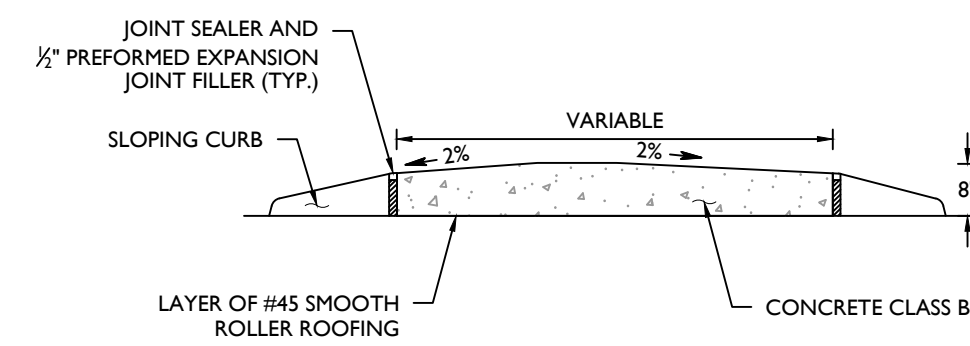
PAVEMENT SECTION AND REPAIR STRIP DETAIL
 (FOR USE WITHIN NJDOT ROW)
 NOT TO SCALE

902.02.01 MIX DESIGNATIONS:
 THE REQUIREMENTS FOR SPECIFIC HMA MIXTURES ARE INTENDED BY THE ABBREVIATED FIELDS IN THE ITEM DESCRIPTION AS DEFINED AS FOLLOWS:
 HOT MIX ASPHALT 12.5M64 SURFACE COURSE
 "HOT MIX ASPHALT" - "HOT MIX ASPHALT" IS LOCATED IN THE FIRST FIELD IN THE ITEM DESCRIPTION FOR THE PURPOSE OF IDENTIFYING THE MIXTURE REQUIREMENTS.
 "12.5" - THE SECOND FIELD IN THE ITEM DESCRIPTION DESIGNATES THE NOMINAL MAXIMUM SIZE AGGREGATE (IN MILLIMETERS) FOR THE JOB MIX FORMULA (SIZES ARE 4.75, 9.5, 12.5, 19, 25 AND 37.5MM).
 "M" - THE THIRD FIELD IN THE ITEM DESCRIPTION DESIGNATES THE DESIGN COMPACTION LEVEL FOR THE JOB MIX FORMULA BASED ON TRAFFIC FORECASTS AS LISTED IN TABLE 902.02.03-2 (LEVELS ARE L-LOW M-MEDIUM H-HIGH).
 "64" - THE FOURTH FIELD IN THE ITEM DESCRIPTION DESIGNATES THE HIGH TEMPERATURE (IN C) OF THE PERFORMANCE-GRADED BINDER (OPTIONS ARE 64, 70, AND 76 C). ALL BINDERS SHALL HAVE A LOW TEMPERATURE OF -22 C, UNLESS OTHERWISE SPECIFIED.
 "SURFACE" COURSE THE LAST FIELD IN THE ITEM DESCRIPTION DESIGNATES THE INTENDED USE AND LOCATION WITHIN THE PAVEMENT STRUCTURE (OPTIONS ARE SURFACE, INTERMEDIATE, OR BASE COURSE).

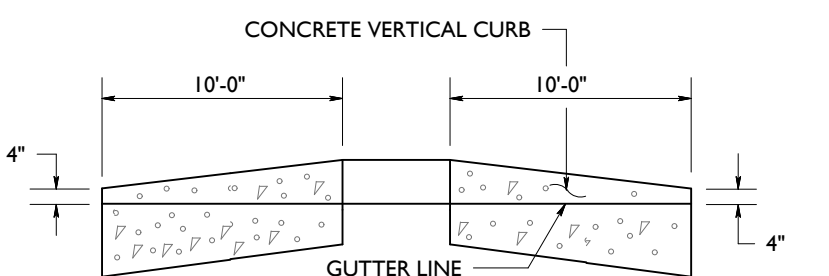
NOTES:
 1. WIDTH OF PAVEMENT REPAIR STRIP TO BE A MINIMUM OF 2 FEET TO ALLOW ASPHALT COMPACTION.
 2. SAWCUT PAVEMENT PRIOR TO EXCAVATION.
 3. UNDERCUT SOFT SUBGRADE AREAS AND REPLACE WITH ADDITIONAL SUB-BASE OR BORROW EXCAVATION-SELECTED MATERIAL.
 4. APPLY TACK COAT FOR SURFACE PREPARATION PRIOR TO ANY PAVING OPERATION.
 5. USE ITEM POLYMERIZED JOINT ADHESIVE FOR ALL LONGITUDINAL COLD PAVING JOINTS AND ALL VERTICAL FACES IN ACCORDANCE WITH 401.03.03 E.I.D. COLD PAVING.
 6. IF ANY PAVEMENT CONSTRUCTION ENCRUSCHES ON EXISTING TRAVEL LANE, THEN MILL 2" OF THE EXISTING PAVEMENT AND RESURFACE WITH 2" HOT MIX ASPHALT 12.5M64 SURFACE COURSE FOR THE FULL WIDTH OF THAT TRAVEL LANE WITHOUT ANY CONSTRUCTION JOINTS WITHIN THE TRAVEL LANE.



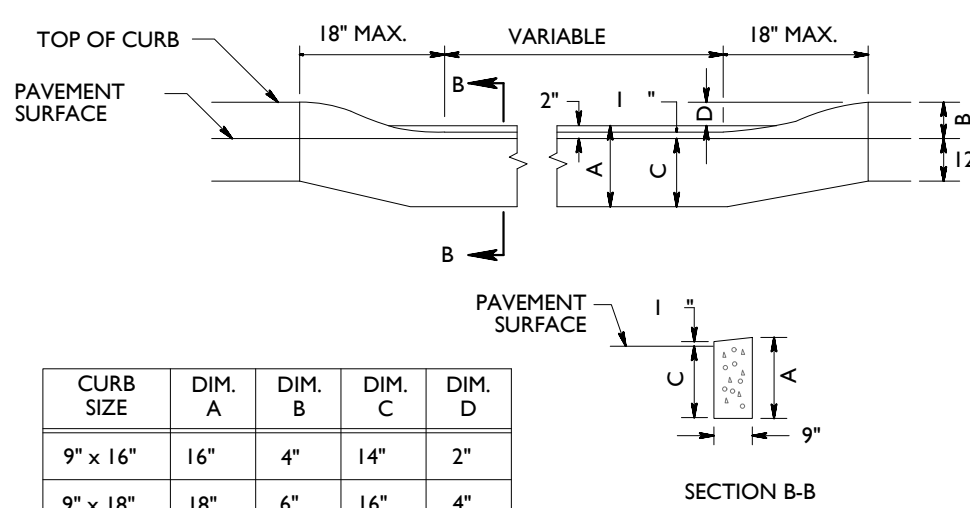
RETAINING WALL ELEVATION DETAILS
 NOT TO SCALE



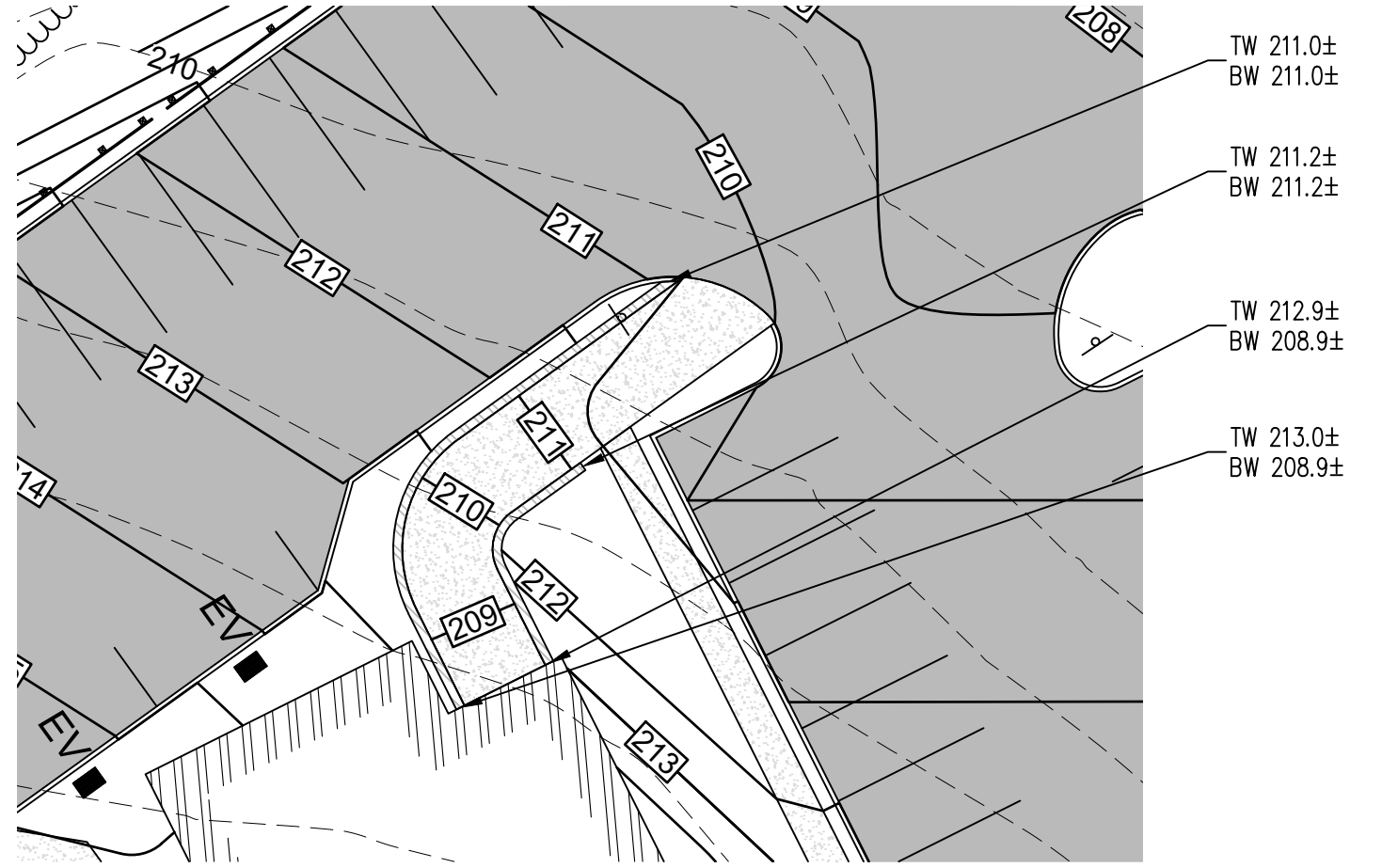
MOUNTABLE CONCRETE/WHITE CONCRETE ISLAND
 NOT TO SCALE



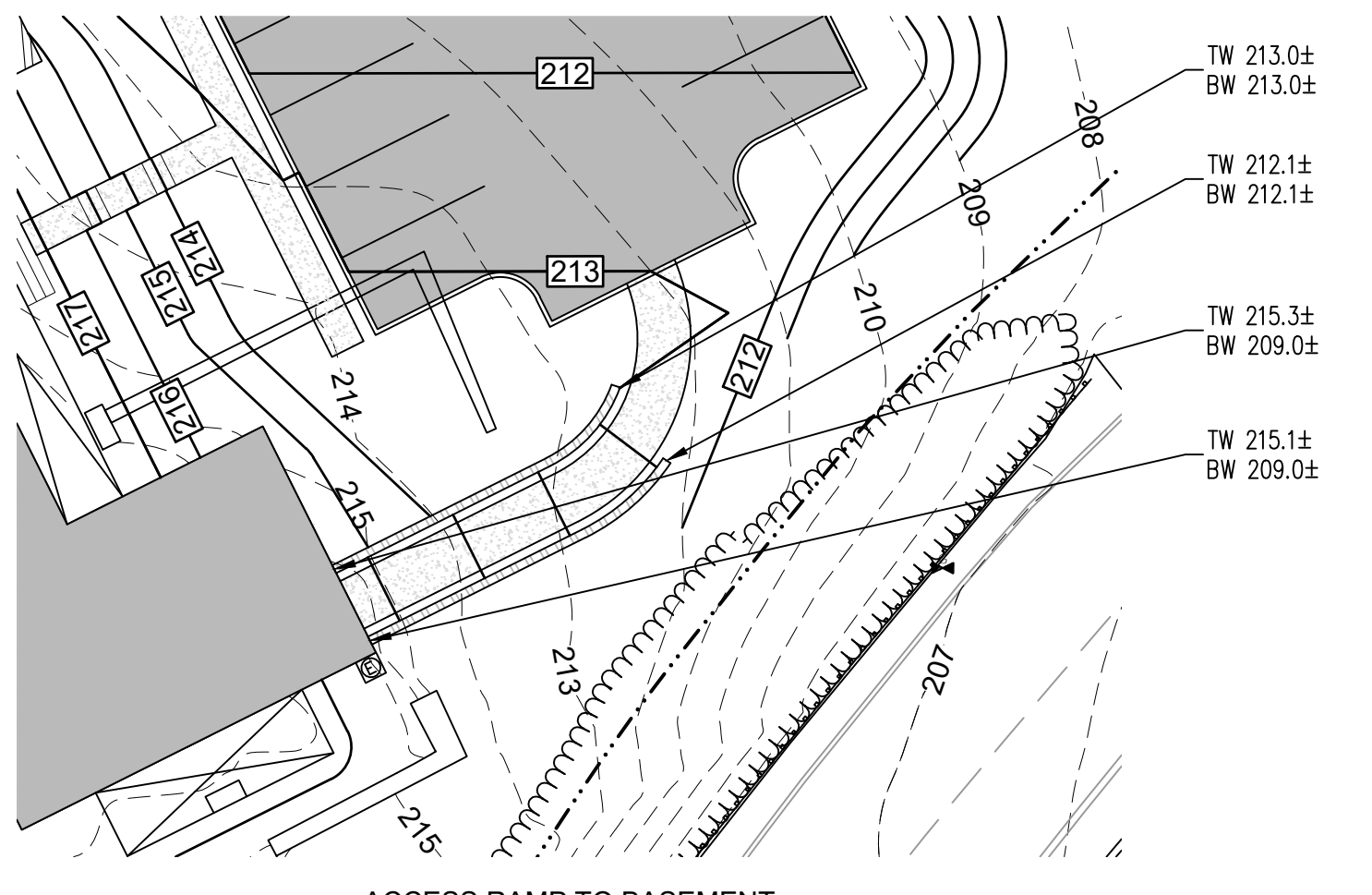
NJDOT CURB TREATMENT AT CURB END
 (FOR USE WITHIN NJDOT ROW)



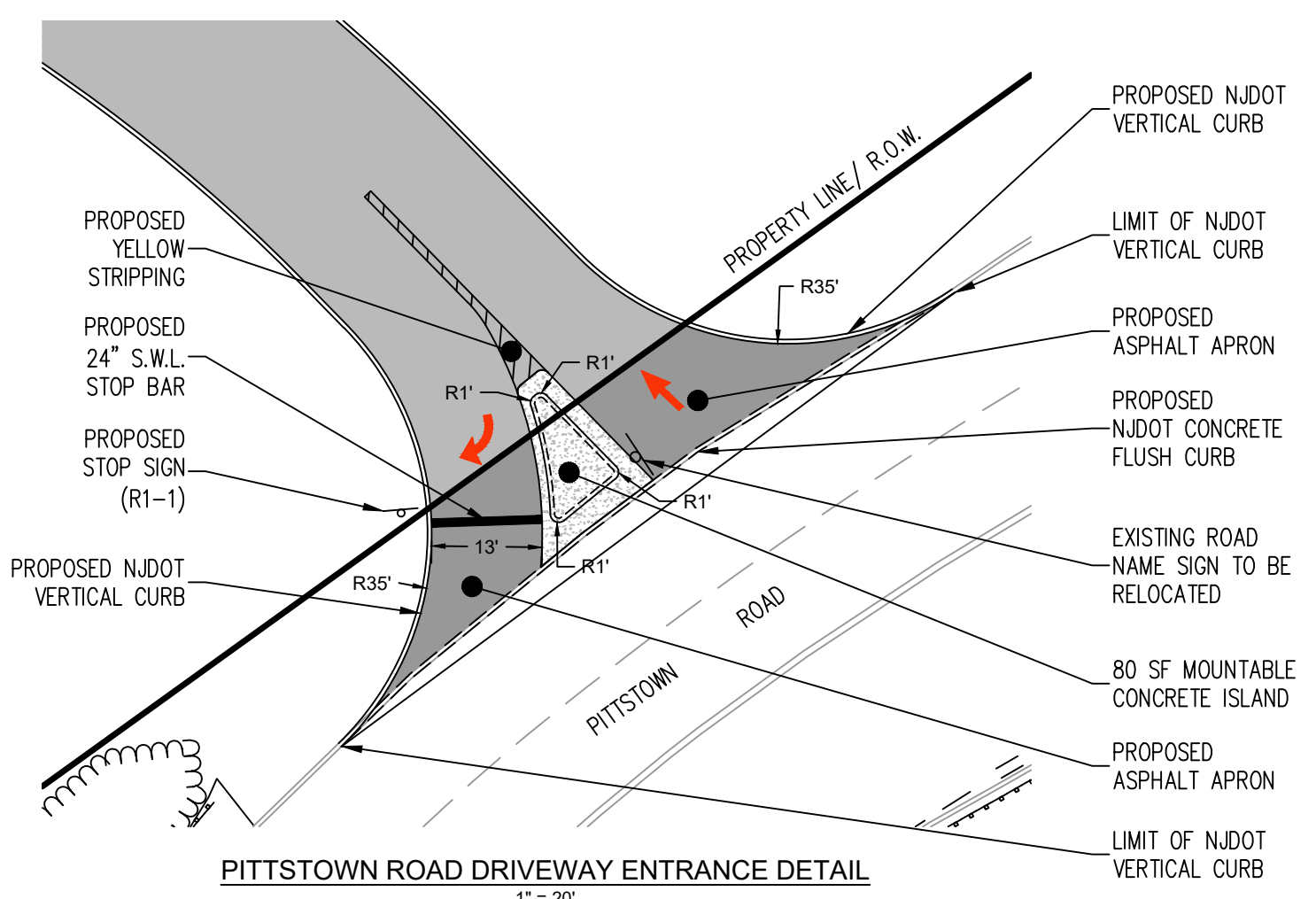
NJDOT METHOD OF DEPRESSING CURB AT DRIVEWAYS
 (FOR USE WITHIN NJDOT ROW)
 NOT TO SCALE



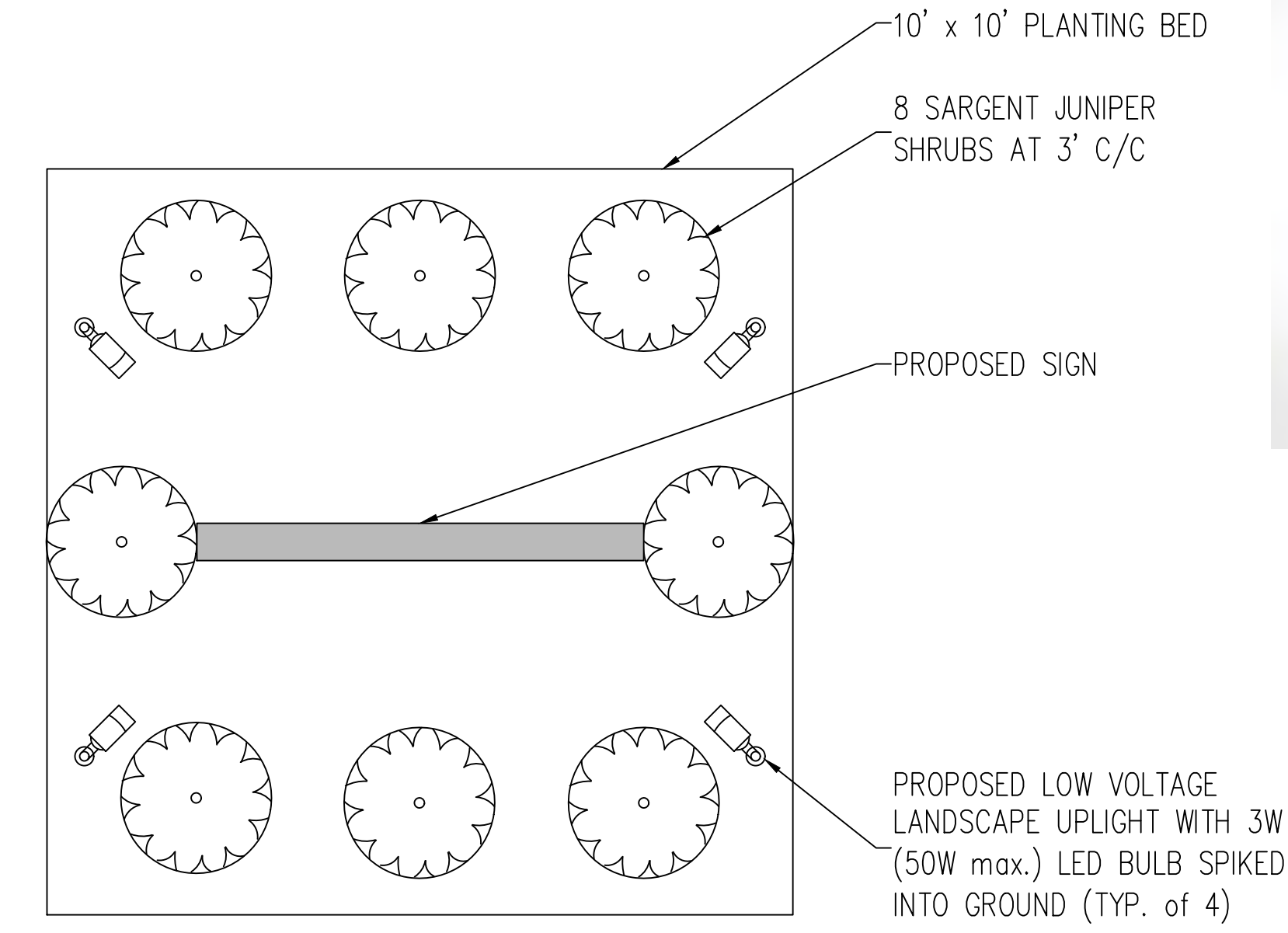
PHASE II ACCESS RAMP TO BASEMENT
 1"=20'



ACCESS RAMP TO BASEMENT
 1"=20'



PITTSBURY ROAD DRIVEWAY ENTRANCE DETAIL
 1"=20'



SIGNAGE DETAIL
 Not To Scale

PLANT LIST

Key	Botanical Name	Common Name	Quantity	Planted Size (At Time of Installation)			Mature Size		Comments
				Height	Sprd/Cal	Root Cont.	Height	Spread	
EVERGREEN SHRUBS									
JCS	Juniperus chinensis 'Sargentii'	Sargent Juniper	8	15"-18"	--	2 gal.	1'-2'	4'-6'	broad spreading prostrate habit

SUBJECT PARCELS:
 UNION TOWNSHIP BL 24.01 LOT 1
 TOWN OF CLINTON BL 4 LOT 2

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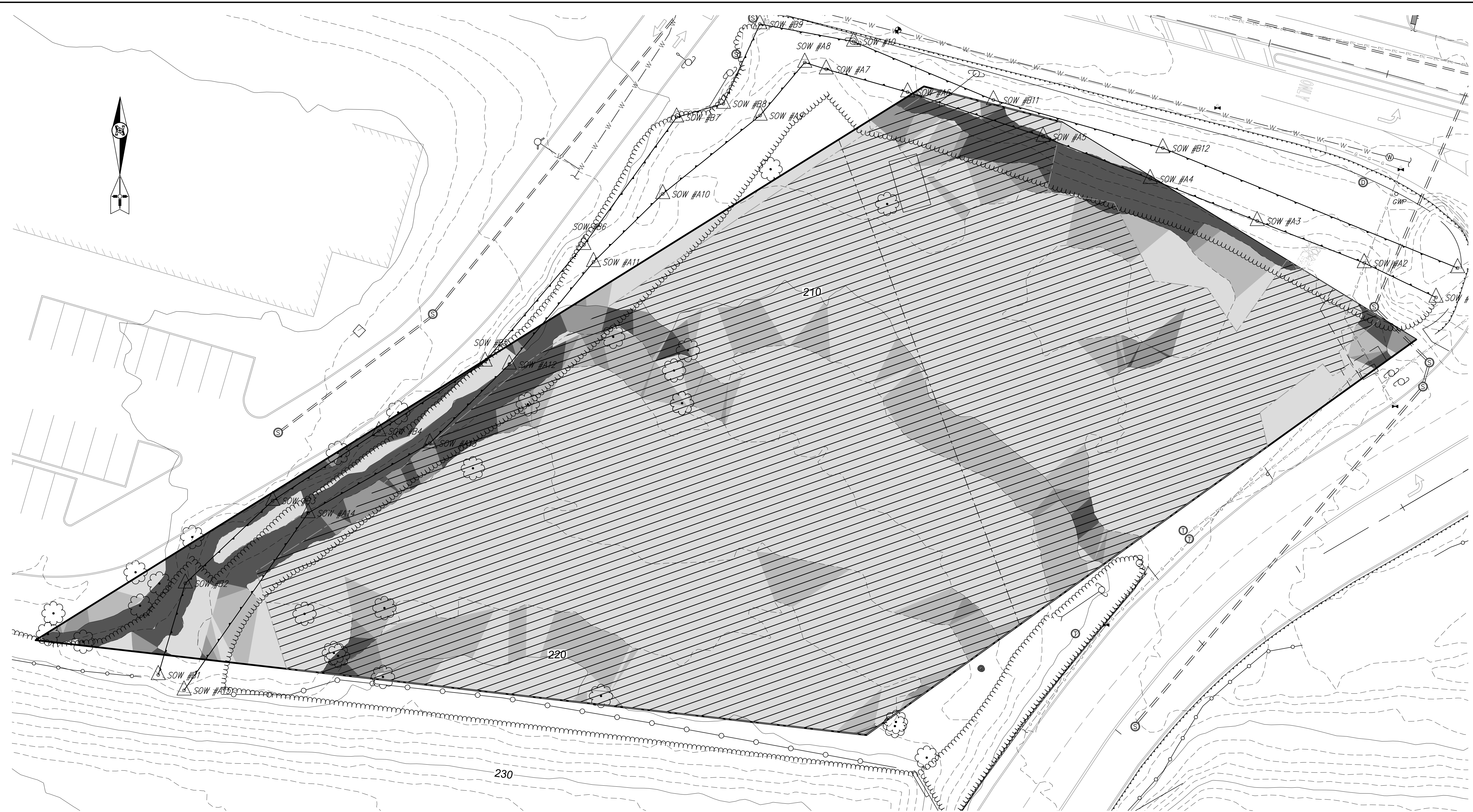
THEODORE H. BAYER, P.E.
 New Jersey Professional Engineer License No. GE33806

REV PER TWP & NJDOT REVIEW COMMENTS	03-15-23	THB
REV PER TWP REVIEW COMMENTS	11-23-22	THB
REV PER TWP REVIEW COMMENTS	10-19-22	THB

LAND DEVELOPMENT PLAN CONSTRUCTION DETAILS III

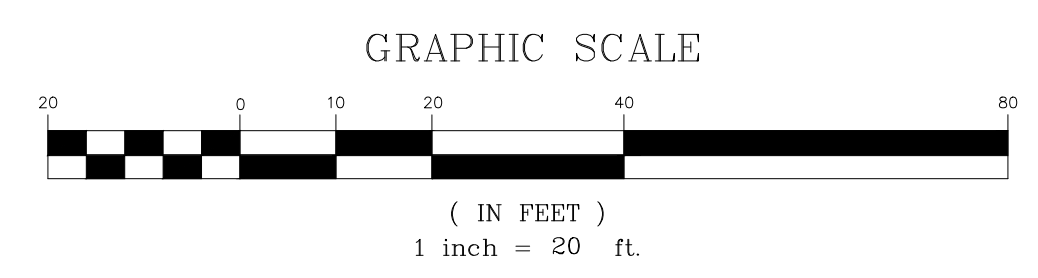
The Bonnell Tavern
 Block 24.01 Lot 1
 2 County Route 513
 UNION TOWNSHIP, HUNTERDON COUNTY, NEW JERSEY

DRAWN BY: RT	DESIGNED BY: RT	CHECKED BY: THB	DATE: August 5, 2022
DWG. NO.: TBT-10	SCALE: As Noted	SHEET: 10 of 11	BRE JOB#: 21-2345

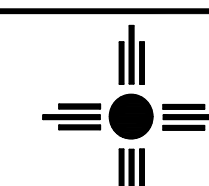


CRITICAL AREA — SLOPE DISTURBANCE ANALYSIS						
SLOPE RANGES PER TWP'S LAND DEVELOPMENT CRITERIA	ALLOW DIST %	SLOPE AREA SF	SLOPE DIST SF	SLOPE DIST %	NOTES/COMMENTS	
UNION TOWNSHIP						
00% TO 10%	100	37,019	34,622	93.52	COMPLIES	
10 TO 15%	35	6,237	5,582	89.50	RELIEF REQUIRED	
15 TO 20%	20	1,710	1,250	73.10	RELIEF REQUIRED	
> 20%	10	4,483	1,190	26.54	RELIEF REQUIRED	
TOTALS		49,449	42,644			
CLINTON TOWN						
00% TO 10%	N/A	18,909	17,297	91.47	N/A	
10 TO 15%	N/A	3,659	2,970	81.17	N/A	
15 TO 20%	N/A	1,135	909	80.09	N/A	
> 20%	N/A	2,379	1,008	42.38	N/A	
TOTALS		26,082	22,184			
TOTAL						
00% TO 10%	N/A	55,928	51,919	92.83	N/A	
10 TO 15%	N/A	9,896	8,552	86.42	N/A	
15 TO 20%	N/A	2,845	2,159	75.89	N/A	
> 20%	N/A	6,862	2,198	32.03	N/A	
TOTALS		75,531	64,828			


LEGEND
 AREA OF DISTURBANCE WITHIN NET LOT AREA



SUBJECT PARCELS:
 UNION TOWNSHIP BL 24.01 LOT 1
 TOWN OF CLINTON BL 4 LOT 2



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**LAND DEVELOPMENT PLAN
SLOPE STUDY PLAN**

The Bonnell Tavern
 Block 24.01 Lot 1
 2 County Route 513
 UNION TOWNSHIP, HUNTERDON COUNTY, NEW JERSEY

DRAWN BY:	DESIGNED BY:	CHECKED BY:	DWG NO.:	BRE JOB#:
RT	RT	THB	TBT-11	21-2345

SCALE: As Noted DATE: August 5, 2022 SHEET: 11 of 11