

LOCATION MAP

PARKING REQUIREMENTS

TOTAL SPACES REQUIRED:	4.2 SPACES PER 1,000 SF NET FLOOR AREA
NET FLOOR AREA:	65,405 SF / 1,000 SF * 4.2 SPACES = 275 SPACES
INDOOR:	65,405 SF / 1,000 SF * 4.2 SPACES = 275 SPACES
OUTDOOR (NURSERY):	15,167 SF / 1,000 SF * 4.2 SPACES = 63 SPACES
TOTAL SPACES:	338 SPACES
TOTAL SPACES PROVIDED:	343 SPACES

BULK REQUIREMENTS

TOWN OF WALKKILL - ZONING DISTRICT TOWN CENTER (TC)
SHOPPING CENTERS - \$249-26.1 C (12)

MINIMUM BUILDING REQUIREMENTS	REQUIRED	PROPOSED
LOT AREA	60,000 SF	±321,135 SF
LOT WIDTH	200 FEET	±748.0 FEET
LOT DEPTH	200 FEET	±545.9 FEET
FRONT YARD	50 FEET	±51.25 FEET
REAR YARD	50 FEET	±69.25 FEET
SIDE YARD (ONE/BOTH)	50/100 FEET	±188.2 FEET ¹
FRONT YARD PARKING SETBACK	10 FEET	0.0 FEET ²
MAXIMUM ALLOWABLE		
IMPERVIOUS COVERAGE	70 %	±78.8% ³
MAXIMUM BUILDING HEIGHT	60 FEET	±60 FEET

¹ LOT CONTAINS MULTIPLE ROAD FRONTAGES & ONLY ONE SIDE YARD EXISTS
² PARKING IS PROPOSED WITHIN THE NYS DOT USE AND OCCUPANCY EASEMENT AREA AND TOWN OF WALKKILL REQUIRES PARKING SETBACK OF 10' FROM FRONT YARD.
³ A VARIANCE WAS GRANTED ON JULY 13, 2020
⁴ A VARIANCE WAS GRANTED ON JULY 13, 2020

GENERAL NOTES

- TAX MAP IDENTIFICATION NUMBER: SECTION 41 BLOCK 1 LOT 61.22
- TOTAL AREA OF SUBJECT PARCEL: 7.372± ACRES.
- BOUNDARY AND PLANIMETRIC INFORMATION BASED UPON FIELD SURVEY AS PERFORMED BY ENGINEERING & SURVEYING PROPERTIES, PC ON DECEMBER 19, 2017.
- THE TOPOGRAPHY SHOWN HEREON WAS COMPILED BY ENGINEERING & SURVEYING PROPERTIES PC, FROM USGS 1M HYDRO-FLATTENED DIGITAL ELEVATION MODELS (DEMs) AS DERIVED FROM 2012 SOURCE DATA. THE DEMS WERE PROVIDED BY NYS GIS.GOV AND VERIFIED WITH ACTUAL SURVEY OBSERVATIONS TAKEN IN THE FIELD. CONTOURS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988.
- OWNER/APPLICANT: ADAMS WALLKILL LLC, 765 DUTCHESS TURNPIKE, POUGHKEEPS, NY 12603
- PROPOSED USE: SHOPPING CENTER
- THE FOLLOWING VARIANCES WERE GRANTED BY THE TOWN OF WALKKILL ZONING BOARD OF APPEALS ON JULY 13, 2020: \$249-26.1 E. IMPERVIOUS COVERAGE MAXIMUM ALLOWED: 70% PROPOSED: 78.8% \$249-12 D (7) PARKING IN FRONT YARD MINIMUM PARKING SETBACK: 10 FEET PROPOSED PARKING SETBACK: 0 FEET \$249-100 D (1) (a) PERMETER LANDSCAPE BUFFER ABUTTING A PUBLIC R.O.W. MINIMUM BUFFER REQUIRED: 10 FEET PROPOSED BUFFER: 0 FEET \$249-100 D (2) (b) PLANTED MEDIAN REQUIREMENT MORE THAN 4 AISLES PROPOSED: EVERY OTHER AISLE PROPOSED MEDIAN AISLES: NONE
- SEE PLANS BY MASER CONSULTING FOR ALL IMPROVEMENTS WITHIN NYS DOT R.O.W. (NYS ROUTE 211 & EBERT RD). A NYS DOT HIGHWAY WORK PERMIT IS REQUIRED PRIOR TO ANY WORK WITHIN THE NYS DOT R.O.W.
- NO WORK WITHIN WES WARREN DRIVE SHALL BE STARTED UNTIL A PRE-CONSTRUCTION MEETING IS HELD WITH THE TOWN OF WALKKILL, HIGHWAY DEPARTMENT AND THE TOWN ENGINEER AND ANY NECESSARY TOWN OF WALKKILL HIGHWAY WORK PERMITS ARE ISSUED.
- AS THE LOCATION ALL EXISTING UTILITIES SERVICES (WATER & SEWER) FOR THE EXISTING ON-SITE USES ARE UNKNOWN, THE CONTRACTOR SHALL LOCATE THESE SERVICES DURING SITE DEMOLITION AND CUT AND CAP EACH SERVICE AT THEIR RESPECTIVE MAIN. THE TOWN OF WALKKILL WATER AND SEWER DEPARTMENT SHALL BE NOTIFIED PRIOR TO THIS WORK BEING PERFORMED.
- ANY SNOW THAT IS STOCKPILED WITHIN ALL ACCESS DRIVES, PARKING AREAS AS WELL AS LOADING AREAS SHALL BE REMOVED WITHIN 72 HOURS UPON THE END OF THE SNOW FALL EVENT.
- THERE SHALL BE NO OUTSIDE STORAGE OF MATERIALS OTHER THAN THE AREAS AS INDICATED ON THE PLANS AND IN THE SEASONAL TRAILERS.
- ORANGE COUNTY DEPARTMENT OF HEALTH PLAN APPROVAL IS LIMITED TO 5 YEARS. TIME EXTENSIONS FOR PLAN APPROVAL MAY BE GRANTED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH BASED UPON DEVELOPMENT FACTS AND ANY NEW REGULATIONS, OR GUIDANCE, IN EFFECT AT THAT TIME. A NEW PLAN SUBMISSION MAY BE REQUIRED TO OBTAIN A TIME EXTENSION.
- DIG SAFELY NEW YORK MUST BE CONTACTED PRIOR TO ANY EXCAVATION OR DEMOLITION (DAL 811 OR WWW.DIGSAFELYNEWYORK.COM).
- THIS PROJECT HAS INDICATED THE INTENTION TO PROVIDE ADEQUATE FIRE FLOW BY THE PROPOSED INSTALLATION OF SPRINKLER SYSTEMS MEETING NFPA REQUIREMENTS, AND IS THEREFORE, CONSIDERED EXEMPT FROM THE NEEDED FIRE FLOW GUIDELINES OF THE INSURANCE SERVICES OFFICE (ISO). THE PROPOSED SPRINKLER SYSTEM DESIGN HAS NOT BEEN EVALUATED BY THE ORANGE COUNTY DEPT. OF HEALTH FOR COMPLIANCE WITH NFPA REQUIREMENTS.
- THE DUMPSTER(S) AND TRASH COMPACTOR(S) ARE LOCATED AT THE REAR OF THE BUILDING AND ARE SHIELDED FROM THE GENERAL PUBLIC VIEW BY THE BUILDING AND PROPOSED PERIMETER LANDSCAPING AND THEREFORE AN ENCLOSURE IS NOT SHOWN NOR REQUIRED AT THIS TIME. HOWEVER, THE APPLICANT AGREES TO INSTALL AN ENCLOSURE AT A FUTURE DATE SHOULD IT BE DETERMINED NECESSARY BY THE BUILDING DEPARTMENT OR PLANNING BOARD.
- THE APPLICATION FOR ANY BACKFLOW PREVENTION DEVICES, IF REQUIRED, SHALL BE PROVIDED UNDER A SEPARATE APPLICATION TO THE ORANGE COUNTY DEPT. OF HEALTH.
- THE OWNER OF THE PROPERTY LOCATED AT 636 NYS ROUTE 211 EAST (SECTION 41 BLOCK 1 LOT 61.22) SHALL MAINTAIN ALL DRAINAGE STRUCTURES AND PIPES ACCEPTING DRAINAGE FROM THE NEW YORK STATE RIGHT-OF-WAY. THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYS DOT) SHALL ALSO MAINTAIN THE RIGHT TO ACCESS THIS PROPERTY FOR THE PURPOSE OF MAINTENANCE OF THESE PIPES AND STRUCTURES. IN THE EVENT THAT PROPER MAINTENANCE IS NOT COMPLETED BY THE OWNER, TO ENSURE PROPER DRAINAGE FLOW FROM THE NYS DOT RIGHT-OF-WAY, ANY COST ASSOCIATED WITH RESTORATION OF PARKING AREAS, CURBING, LANDSCAPING OR ANY OTHER FEATURES ON THE 636 NYS ROUTE 211 EAST PROPERTY AS A RESULT OF NYS DOT MAINTENANCE OPERATIONS OF SAID PIPES OR STRUCTURES LOCATED WITHIN THE EASEMENT AREA WILL BE AT THE PROPERTY OWNER'S SOLE EXPENSE.

No.	DATE	DESCRIPTION
1	10/26/20	REVISED PER ENGINEER COMMENTS DATED 9/28/20
2	01/13/21	REVISED UNDERGROUND STORMWATER SYSTEM
3	02/12/21	REVISED FOR OGDH WATERMAIN EXTENSION
4	02/03/21	REVISED PER ENGINEER COMMENTS
5	02/12/21	ISSUED FOR FINAL APPROVAL
6	04/06/21	REVISED PER MHE(2/12) & OGDH(3/2) COMMENTS
7	04/13/21	REVISED PER MHE(4/30) COMMENTS
8	04/27/21	REVISED PER MHE PB WORKSHOP COMMENTS
9	06/14/21	FIELD CHANGE #1
10	07/14/21	REVISED EROSION CONTROL
11	09/01/21	FIELD CHANGE #2
12	09/15/21	FIELD CHANGE #3
13	09/23/21	REVISED PER TOWN COMMENTS
14	01/18/22	ADDED WINTER CONDITIONS TO EBS

DRAWING STATUS	ISSUE DATE: 01/18/2022
THIS SHEET IS PART OF THE PLAN SET ISSUED FOR	SHEET NUMBER
<input type="checkbox"/> CONCEPT APPROVAL	N/A OF N/A
<input checked="" type="checkbox"/> PLANNING BOARD APPROVAL	1 OF 13
<input type="checkbox"/> OGDH REALTY SUBDIVISION APPROVAL	N/A OF N/A
<input checked="" type="checkbox"/> OGDH WATERMAIN EXTENSION APPROVAL	1 OF 3
<input type="checkbox"/> NYSDEC APPROVAL	N/A OF N/A
<input type="checkbox"/> NYS DOT APPROVAL	N/A OF N/A
<input type="checkbox"/> OTHER	N/A OF N/A
<input type="checkbox"/> FOR BID	N/A OF N/A
<input type="checkbox"/> FOR CONSTRUCTION	N/A OF N/A
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LIST OF DRAWINGS

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DRAWINGS PREPARED BY OTHERS:
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HIGHWAY IMPROVEMENT PLANS FOR ROUTE 211 BY MASER CONSULTING, P.A. 15

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JAY SAMUELSON, P.E.
NEW YORK LICENSE # 080023

1 inch = 30 feet

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OVERALL PLAN


ADAMS FAIRACRE FARMS
636 NYS ROUTE 211 EAST
TOWN OF WALKKILL
ORANGE COUNTY, NEW YORK

JOB #: 1378.02
DATE: 09/21/2020
REVISION: 14 - 01/18/2022

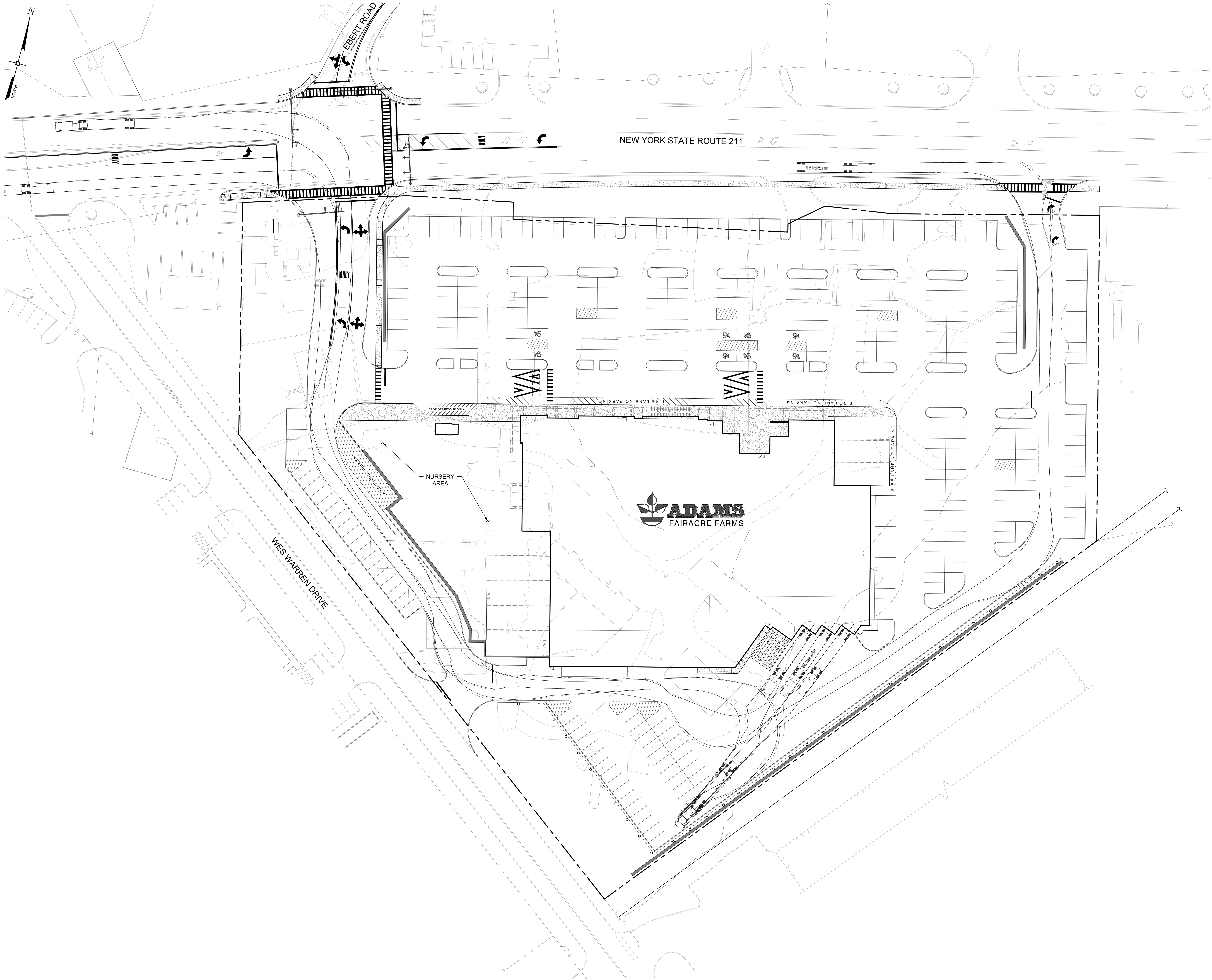
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TAX LOT: 41-1-61.22

O-100

TOWN OF WALKKILL PB SHEET 1 OF 54

 ENGINEERING & SURVEYING PROPERTIES <i>Achieving Successful Results with Innovative Designs</i>	MONTGOMERY OFFICE 71 CLINTON STREET MONTGOMERY, NY 12549 P: (845) 457-7722 WWW.EP-C.COM												
	<h2>LIGHTING PLAN</h2>												
	ADAMS FAIRACRE FARMS 636 NYS ROUTE 211 EAST TOWN OF WALLKILL ORANGE COUNTY, NEW YORK												
	<table border="1"> <tr> <td>JOB #:</td> <td>1378.02</td> <td>DRAWN BY:</td> <td>JS</td> </tr> <tr> <td>DATE:</td> <td>09/21/2020</td> <td>SCALE:</td> <td>1"=30'</td> </tr> <tr> <td>REVISION:</td> <td>14 - 01/18/2022</td> <td>TAX LOT:</td> <td>41-61-22</td> </tr> </table>		JOB #:	1378.02	DRAWN BY:	JS	DATE:	09/21/2020	SCALE:	1"=30'	REVISION:	14 - 01/18/2022	TAX LOT:
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DATE:	09/21/2020	SCALE:	1"=30'										
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C-104




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<input checked="" type="checkbox"/> PLANNING BOARD APPROVAL	7 OF 13
<input type="checkbox"/> OGDH REALTY SUBDIVISION APPROVAL	N/A OF N/A
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<input type="checkbox"/> OTHER	N/A OF N/A
<input type="checkbox"/> FOR BID	N/A OF N/A
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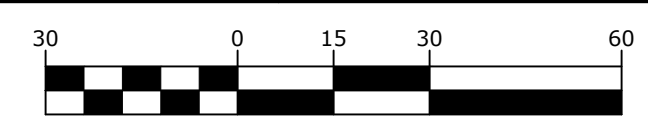
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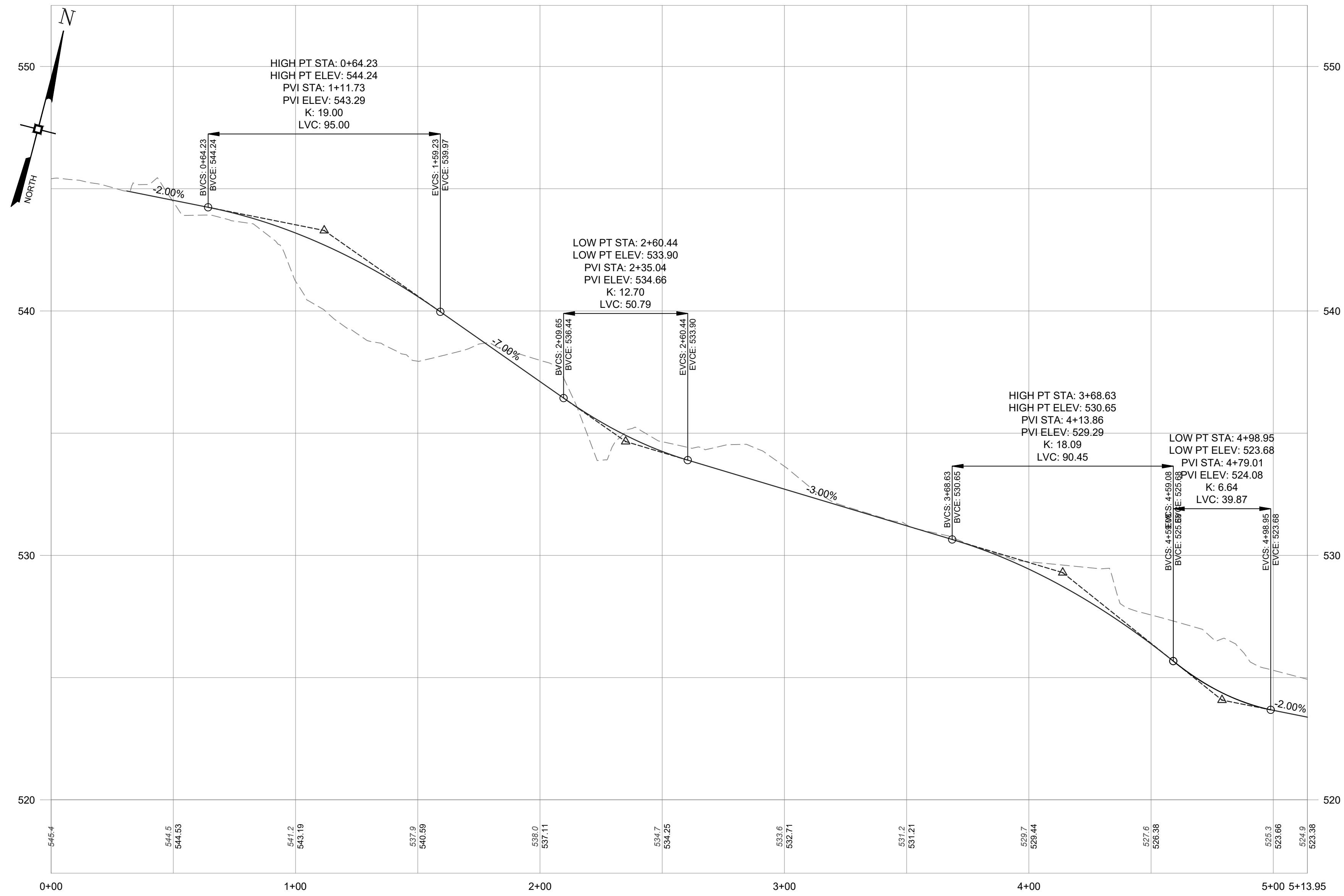
TRUCK MOVEMENT PLAN

ADAMS FAIRACRE FARMS
636 NYS ROUTE 211 EAST
TOWN OF WALLKILL
ORANGE COUNTY, NEW YORK

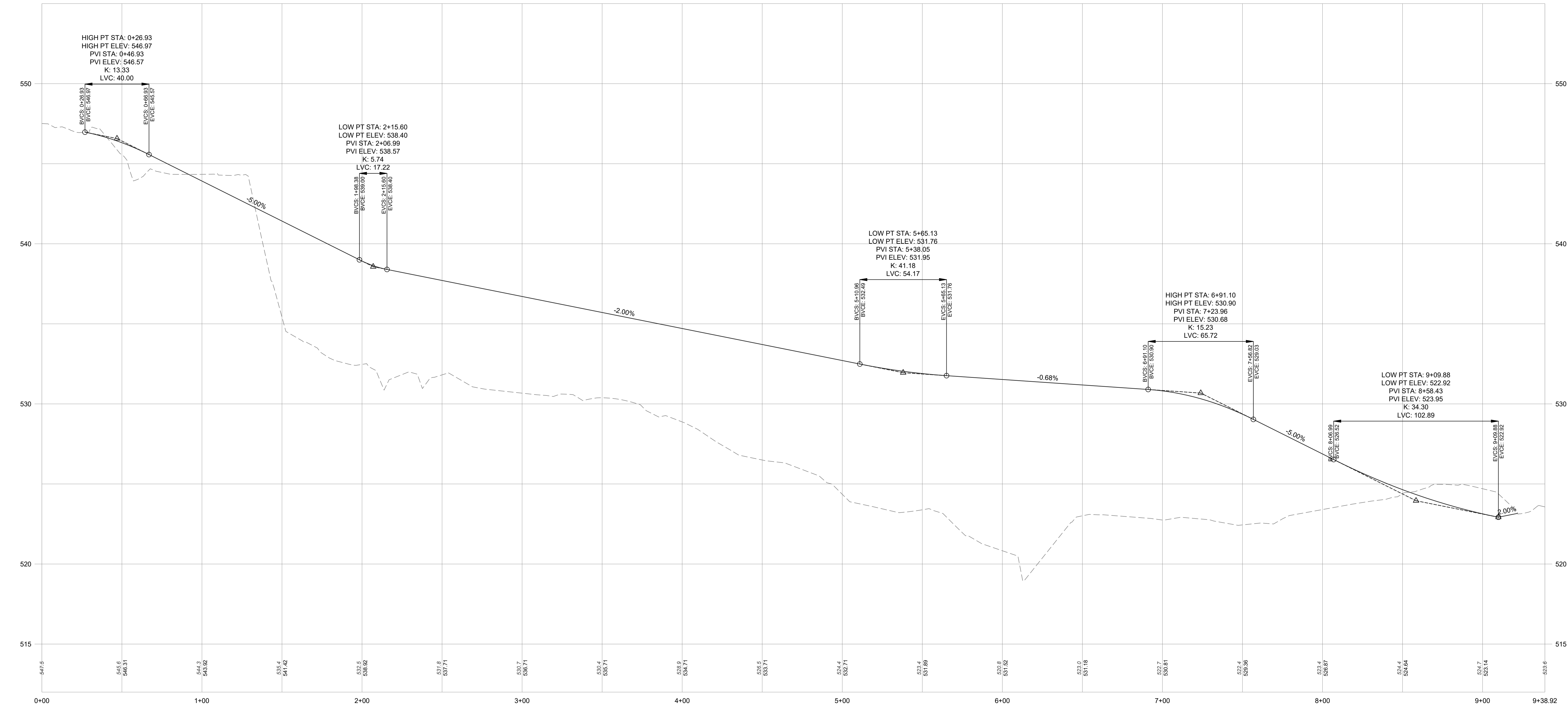
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REVISION:	14 - 01/18/2022	TAX LOT:	41-1-61.22

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TOWN OF WALLKILL PB SHEET 7 OF 54



MAIN ENTRANCE FROM NYS ROUTE 211



SECONDARY ENTRANCE FROM NYS ROUTE 211 TO WES WARREN

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0 1 2 3
ORIGINAL SCALE IN INCHES

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ENTRY PROFILES

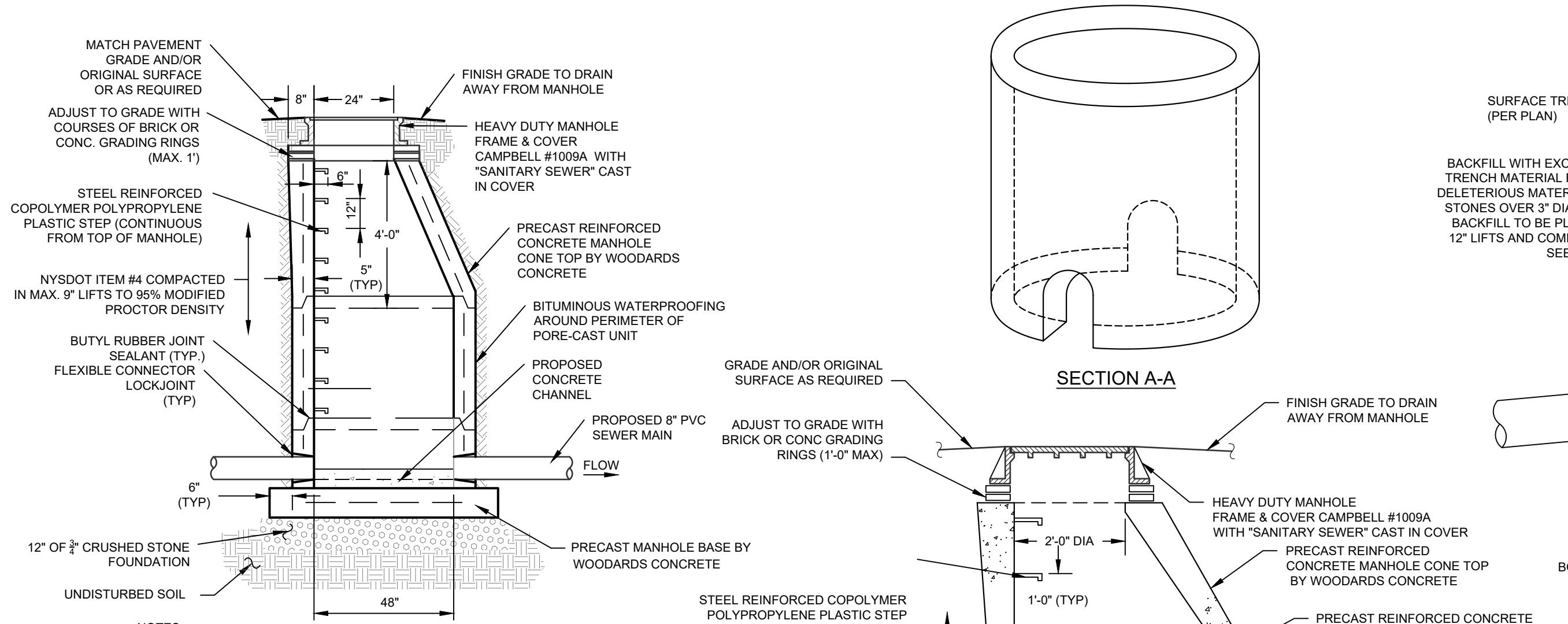
ADAMS FAIRACRE FARMS
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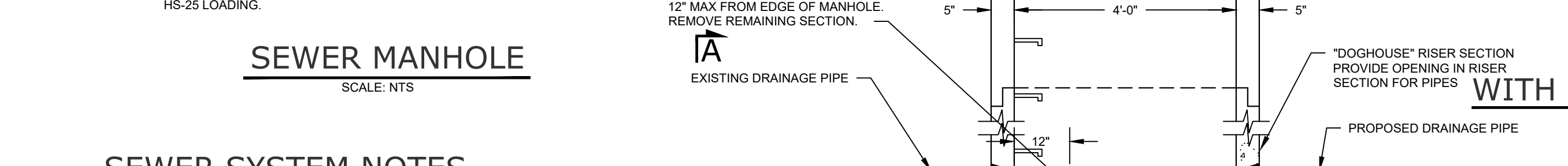
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C-201

TOWN OF WALKILL PB SHEET 8 OF 54

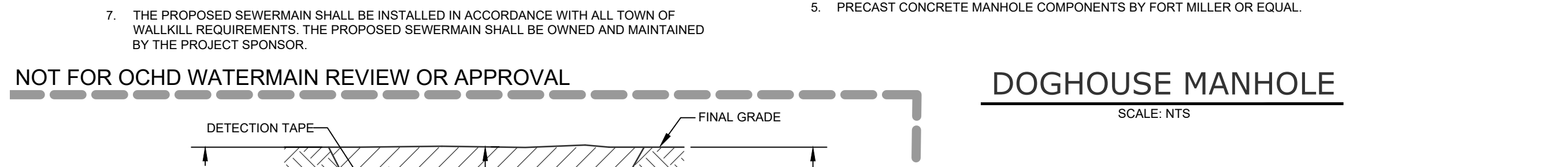


- SEWER MANHOLE**
SCALE: NTS
- SEWER SYSTEM NOTES**
1. CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI @ 28 DAYS.
 2. REINFORCEMENT TO BE IN CONFORMANCE WITH ASTM A615 GRADE 60.
 3. ALL MANHOLE SECTIONS TO CONFORM WITH ASTM SPECIFICATION C-478.
 4. ALL MANHOLES WITHIN PAVEMENT AREAS SHALL BE DESIGNED TO WITHSTAND HS-25 LOADINGS.

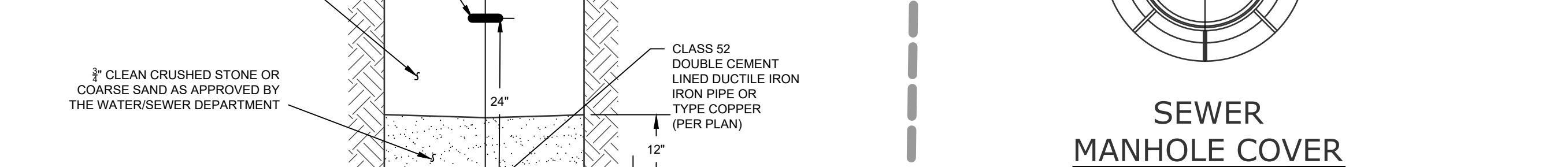


- SEWER & DRAINAGE CROSSING**
WITH LESS THAN 6" SEPARATION BETWEEN PIPES
SCALE: NTS
- NOT FOR OCHD WATERMAIN REVIEW OR APPROVAL**
- DOGHOUSE MANHOLE**
SCALE: NTS
- SEWER MANHOLE COVER**
SCALE: NTS
- NOT FOR OCHD WATERMAIN REVIEW OR APPROVAL**

- SEWER PIPE TRENCH**
SCALE: NTS
- NOT FOR OCHD WATERMAIN REVIEW OR APPROVAL**
- WATER PIPE TRENCH**
SCALE: NTS
- NOT FOR OCHD WATERMAIN REVIEW OR APPROVAL**



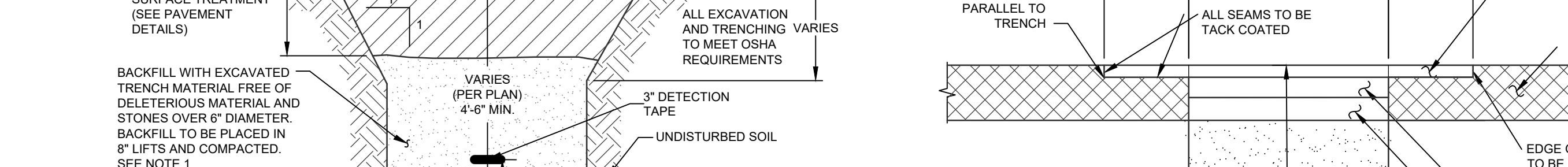
- WATER PIPE TRENCH WITH EASEMENT**
SCALE: NTS
- UTILITY PIPE TRENCH**
WITHIN TOWN OF WALKILL R.O.W.
SCALE: N.T.S.



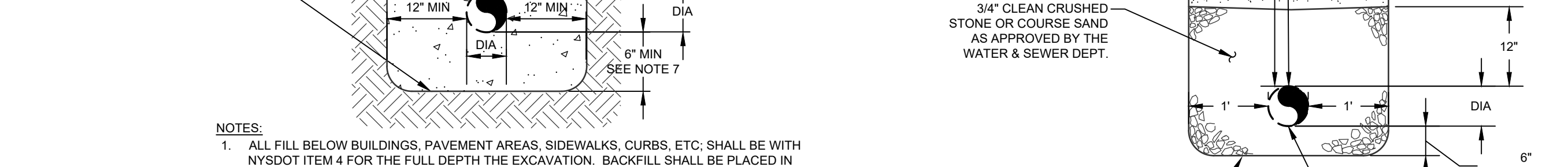
- THRUST BLOCK**
SCALE: NTS
- PIPE RESTRAINT DETAIL**
SCALE: NTS



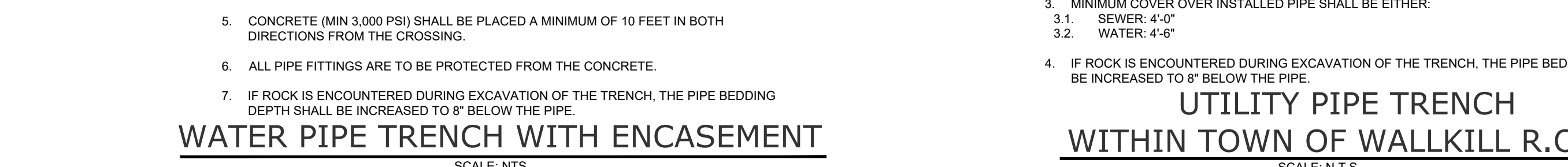
- HYDRANT ASSEMBLY**
- WET TAP ASSEMBLY**
SCALE: NTS



- WATER SYSTEM NOTES**
1. CONTRACTOR SHALL VERIFY THE LOCATION AND ELEVATION OF EXISTING WATER AND SEWER UTILITIES PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
 2. CONTRACTOR TO CALL UNDERGROUND MARK-OUT AT LEAST 2 DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION AT 1-800-962-7962 FOR COMPLETE UTILITIES MARK-OUT.
 3. CONTRACTOR TO CONTACT TOWN OF WALKILL WATER DEPARTMENT AT (845) 342-1668 AT LEAST 2 DAYS PRIOR TO CONSTRUCTION.
 4. WATER MAIN 4" OR LARGER TO BE CLASS 52 BITUMINOUS COATED DOUBLE CEMENT LINED DUCTILE IRON PIPE.
 5. CONTRACTOR TO NOTIFY ENGINEER IMMEDIATELY OF ANY DEVIATION FROM HORIZONTAL OR VERTICAL ALIGNMENTS WITH REGARDS TO EXISTING UTILITIES BEFORE PROCEEDING.
 6. A CERTIFIED AS BUILT MAP OF THE WATER SYSTEM IMPROVEMENTS SHALL BE PROVIDED TO THE TOWN OF WALKILL WATER DEPARTMENT BY A LICENSED DESIGN PROFESSIONAL.
 7. THIS PROJECT HAS DEMONSTRATED AN AVAILABLE FLOW OF 2376 GALLONS PER MINUTE WHILE MAINTAINING A MINIMUM OF 20 PSI AT ALL POINTS IN THE DISTRIBUTION SYSTEM. THIS VALUE SHOULD BE COMPARED TO THE NEEDED FIRE FLOW (NFF) FOR THE PROPOSED CONSTRUCTION IN ACCORDANCE WITH THE INSURANCE SERVICES OFFICE (ISO) GUIDELINES. PER THE RECOMMENDED STANDARDS FOR WATER WORKS (NYS SANITY CODE PART 5, APPENDIX 5-A), THE NEEDED FIRE FLOW FOR THE PROPOSED CONSTRUCTION IS 500 GPM AAS PER ISO GUIDELINES.
 8. ALL PIPE, FITTINGS AND FITTINGS MUST COMPLY WITH THE FEDERAL "SAFE DRINKING WATER ACT," SECTION 1417 WHICH REQUIRES ALL SURFACES IN CONTACT WITH POTABLE WATER CONTAIN NO MORE THAN 0.25% LEAD BY WEIGHT.
 9. THE TOWN OF WALKILL COMMISSIONER OF PUBLIC WORKS OR HIS DESIGNATED REPRESENTATIVE MUST BE INFORMED OF ANY HYDROSTATIC OR BACTERIOLOGICAL TESTING TO PERMIT THE TESTING TO BE WITNESSED.
 10. THE TOWN OF WALKILL COMMISSIONER OR PUBLIC WORKS OR HIS DESIGNATED REPRESENTATIVE MUST ACCEPT HYDROSTATIC AND BACTERIOLOGICAL TEST RESULTS AS ADEQUATE.
 11. THE PROPOSED WATERMAIN SHALL BE INSTALLED IN ACCORDANCE WITH ALL TOWN OF WALKILL REQUIREMENTS. THE PROPOSED WATERMAIN SHALL BE OWNED AND MAINTAINED BY THE PROJECT SPONSOR.



- DRAWING STATUS**
- | THIS SHEET IS PART OF THE PLAN SET ISSUED FOR | ISSUE DATE | ISSUE NO. | ISSUE DESCRIPTION |
|---|------------|-----------|-------------------|
| CONCEPT APPROVAL | 01/18/2022 | N/A | OF N/A |
| PLANNING BOARD APPROVAL | 09 | OF | 13 |
| OCODH REALTY SUBDIVISION APPROVAL | N/A | OF | N/A |
| OCODH WATERMAIN EXTENSION APPROVAL | 3 | OF | 3 |
| NYSDC APPROVAL | N/A | OF | N/A |
| NYSDOT APPROVAL | N/A | OF | N/A |
| OTHER | N/A | OF | N/A |
| FOR BID | N/A | OF | N/A |
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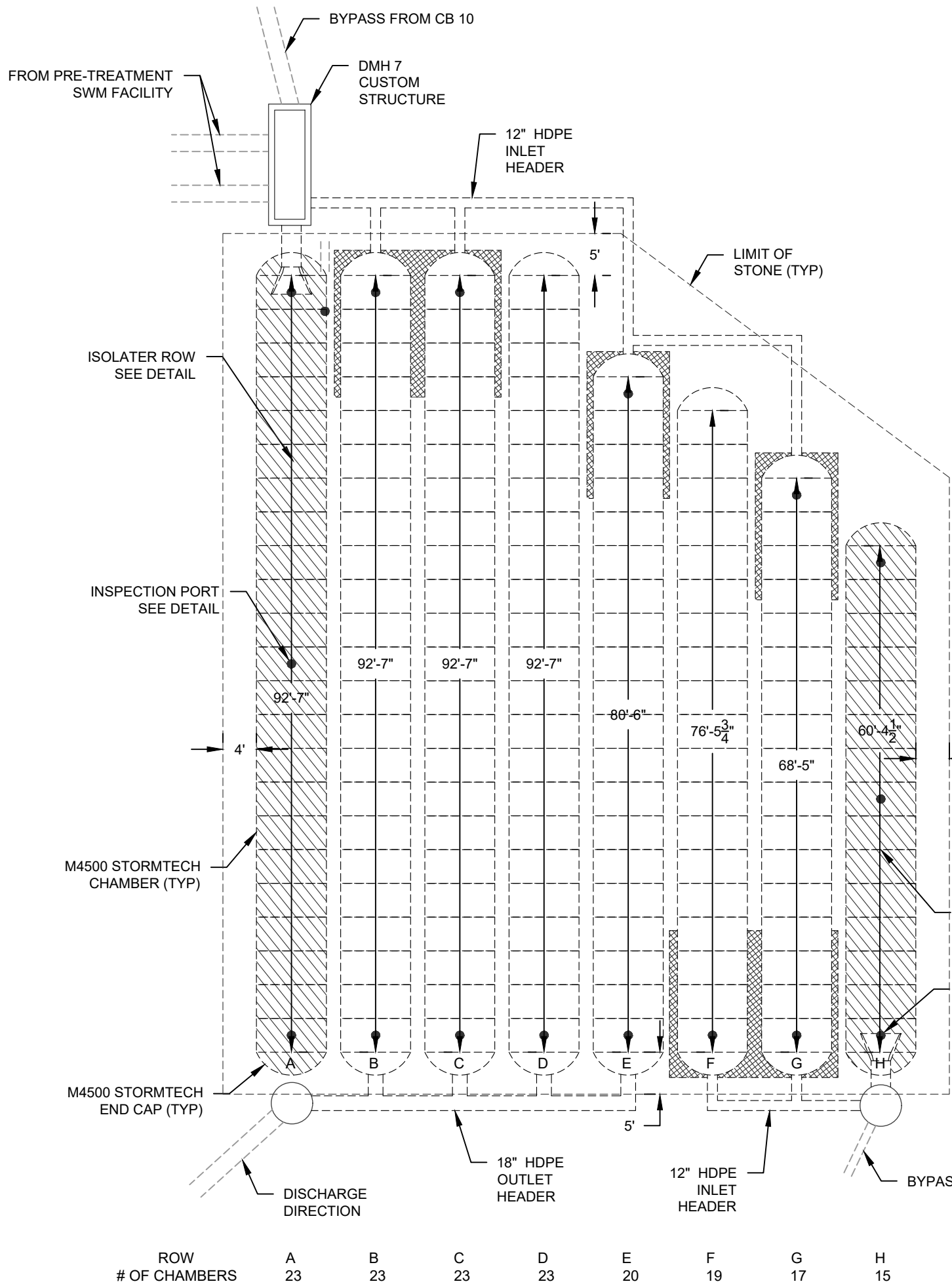
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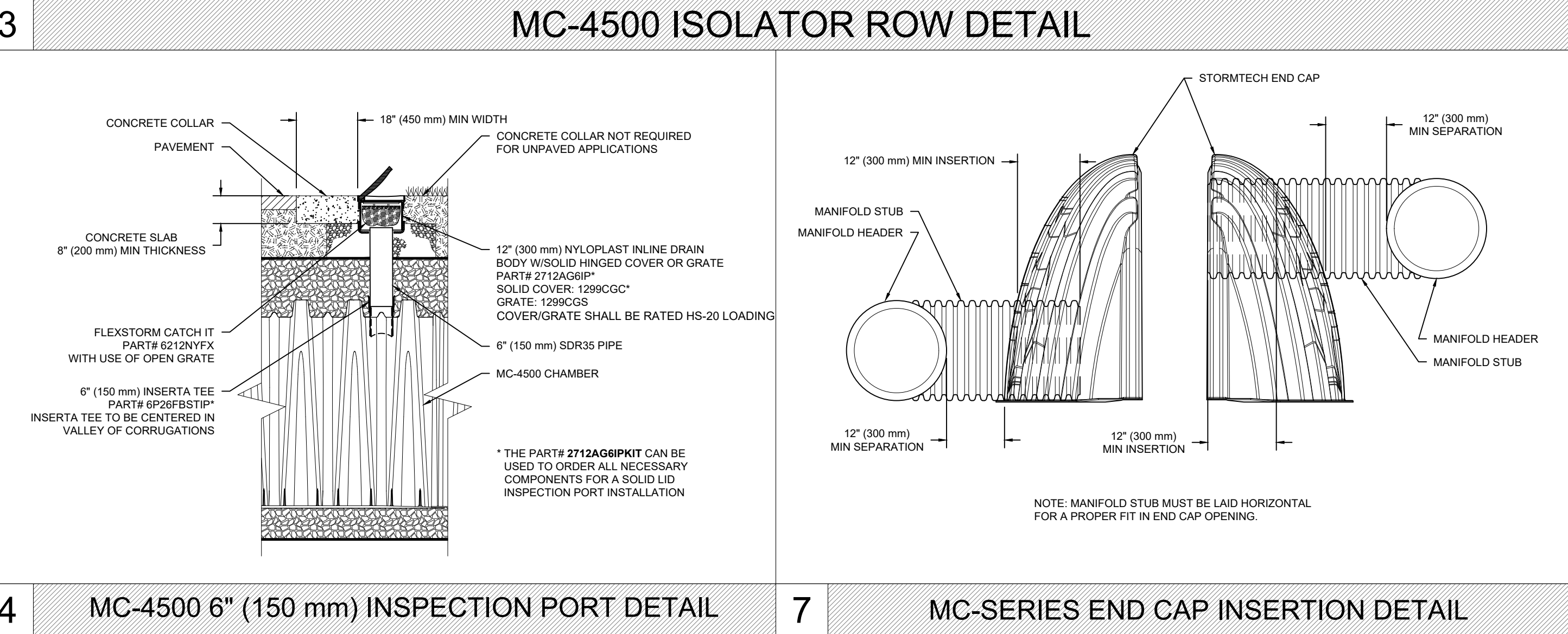
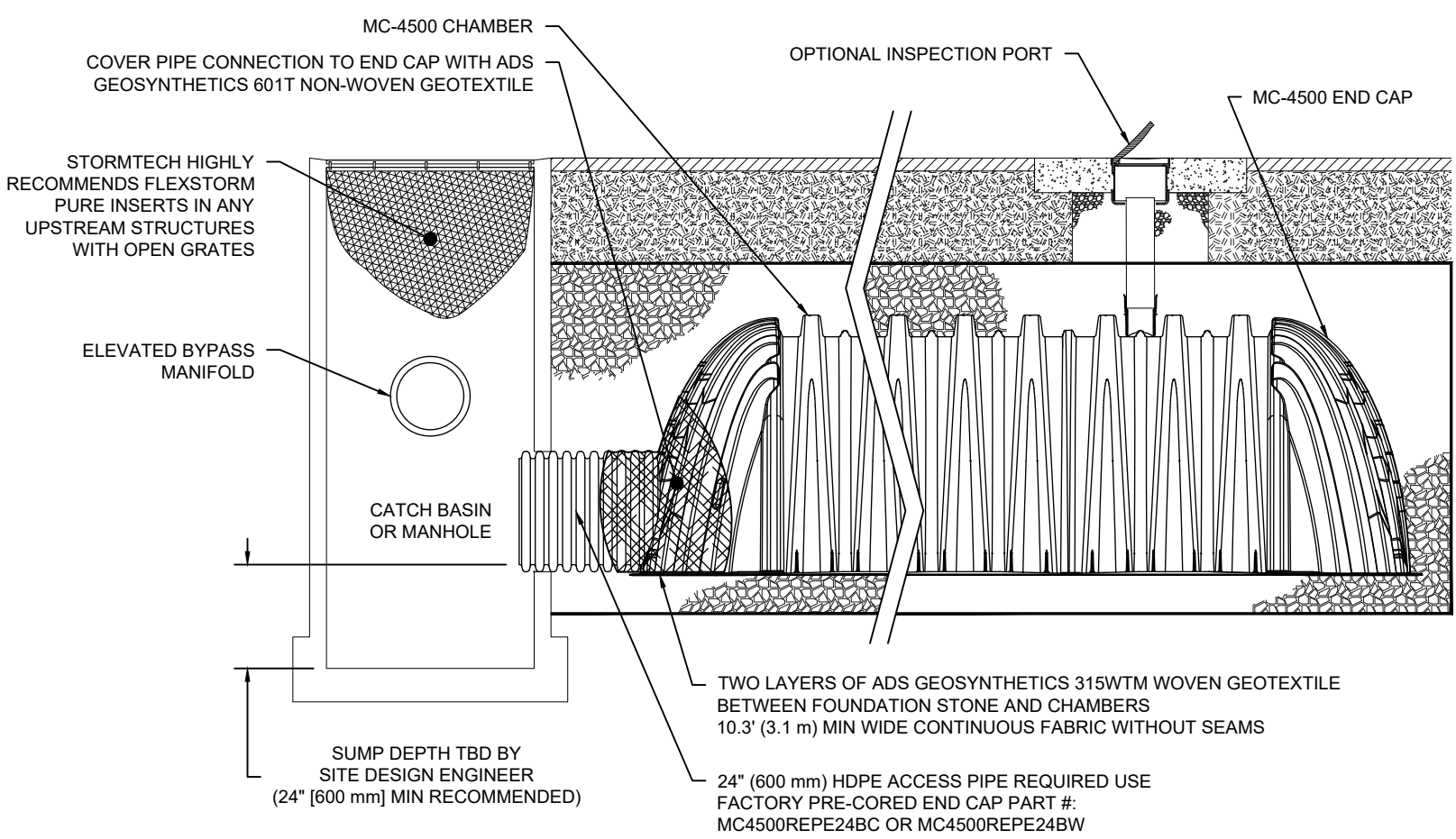
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PROPOSED LAYOUT	
163	STORMTECH MC-4500 CHAMBERS
16	STORMTECH MC-4500 END CAPS
39	STONE ABOVE (H)
9	STONE BELOW (H)
40	% STONE VOID
INSTALLED SYSTEM VOLUME (CF) (PERIMETER STONE INCLUDED)	
8310	SYSTEM AREA (H)
398	SYSTEM RESISTANCE (H)
PROPOSED ELEVATIONS	
530.59	MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED)
526.08	MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC)
525.59	MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC)
525.58	MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT)
525.58	MINIMUM ALLOWABLE GRADE (TOP OF RIGID PAVEMENT)
526.09	TOP OF STONE
523.58	TOP OF MC-4500 CHAMBER
518.11	12\"/>
518.77	24\"/>
520.80	18\"/>
518.58	BOTTOM OF MC-4500 CHAMBER
517.83	BOTTOM OF STONE



STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE STORMTECH MC-4500.
- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418-16a, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS" CHAMBER CLASSIFICATION 60A101.
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPIDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER (2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 3".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 8.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 500 LBS/IN² AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF MC-4500 CHAMBER SYSTEM

- STORMTECH MC-4500 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH MC-4500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONES/ROCK LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 9" (230 mm) SPACING BETWEEN THE CHAMBER ROWS.
- INLET AND OUTLET MANIFOLDS MUST BE INSERTED A MINIMUM OF 12" (300 mm) INTO CHAMBER END CAPS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE MEETING THE AASHTO M43 DESIGNATION OF #3 OR #4.
- STONE SHALL BE BROUGHT UP EVENLY AROUND CHAMBERS SO AS NOT TO DISTORT THE CHAMBER SHAPE. STONE DEPTHS SHOULD NEVER EXCEED BY MORE THAN 12" (300 mm) BETWEEN ADJACENT CHAMBER ROWS.
- STONE MUST BE PLACED ON THE TOP CENTER OF THE CHAMBER TO ANCHOR THE CHAMBERS IN PLACE AND PRESERVE ROW SPACING.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIAL BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH MC-4500 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
 - NO EQUIPMENT IS ALLOWED ON BASE CHAMBERS.
 - NO RUBBER Tired LOADER, DUMP TRUCK OR EXCAVATORS ARE ALLOWED UNLESS PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH MC-3500/MC-4500 CONSTRUCTION GUIDE".
- FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY USING THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-882-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.

INSPECTION & MAINTENANCE

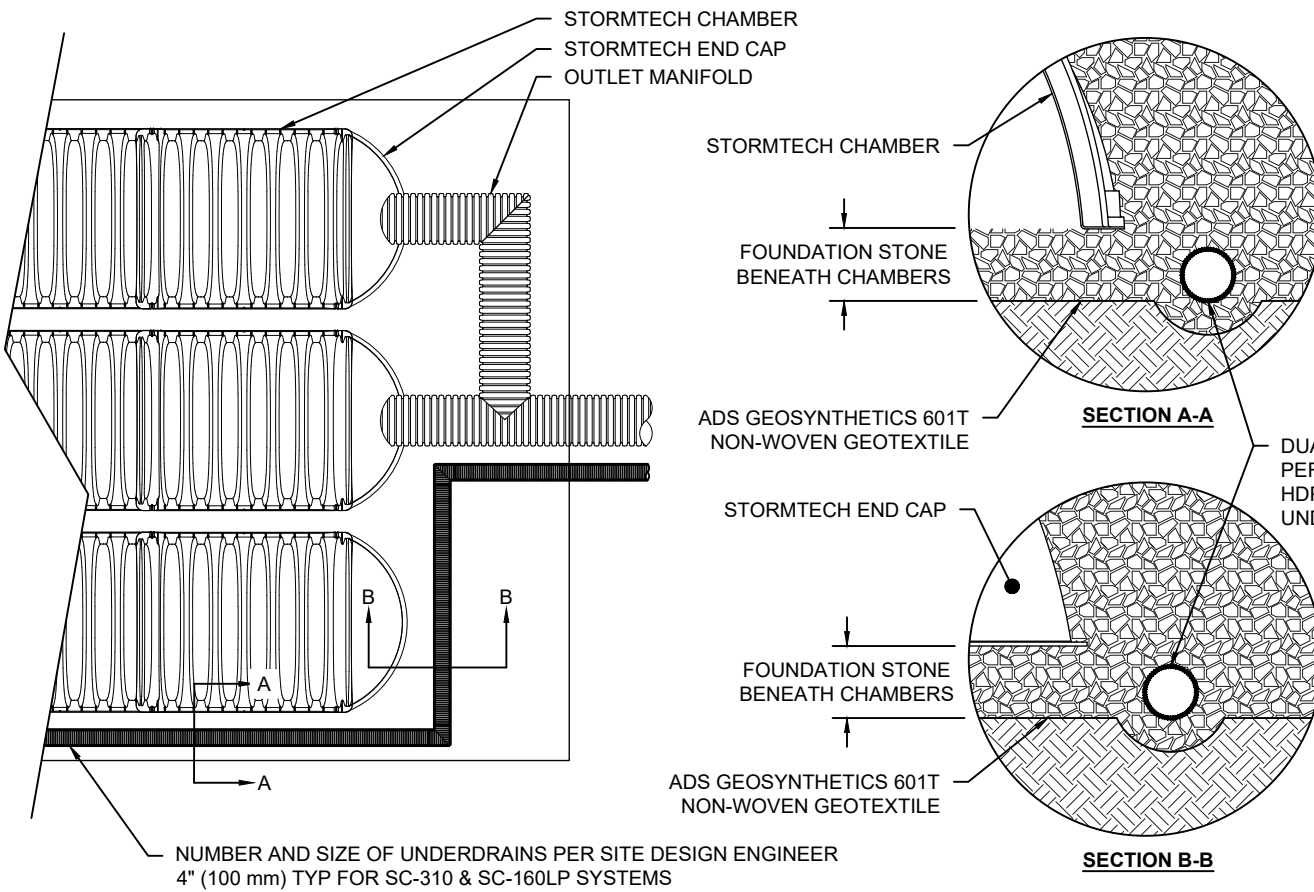
- STEP 1: INSPECT ISOLATOR ROW FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
- A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
- A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
- A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
- A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
- A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR ROWS
- B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW
- B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE
- B.3. MIRRORS OR POLES OR CARBARS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
- B.3.1. FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
- B.3.2. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- STEP 2: CLEAN OUT ISOLATOR ROW USING THE JETVAC PROCESS
- A. A TIED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKLASH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED
- STEP 3: REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS, RECORD OBSERVATIONS AND ACTIONS.
- STEP 4: INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

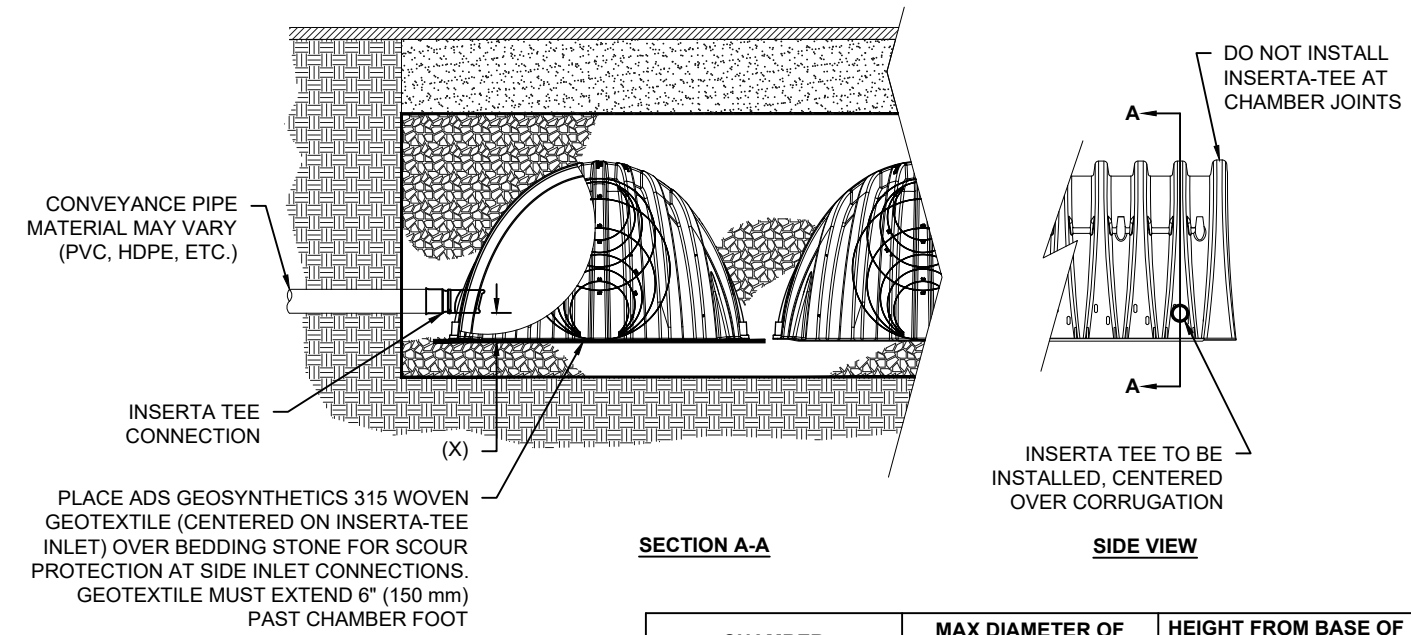
- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION, ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACUUMING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

DEEP TEST HOLE RESULTS

TEST HOLE #	DATE	SURFACE ELEVATION	DEPTH	DESCRIPTION
INF 01	10/28/20	521.55	0' - 48" 48' - 72" 72' - 96"	MISCELLANEOUS FILL MATERIAL TAN SILTY CLAYEY LOAM CLAY SAND LOAM GROUNDWATER @ 88", NO MOTTLING, NO ROCK
INF 02	10/28/20	521.82	0' - 60" 60' - 72" 72' - 96"	MISCELLANEOUS FILL MATERIAL CLAY SAND LOAM SLTY CLAY SAND LOAM GROUNDWATER @ 89", NO MOTTLING, NO ROCK
INF 03	10/28/20	520.08	0' - 2" 2' - 36" 36' - 42" 42' - 72"	TOPSOIL TAN SILTY CLAYEY LOAM MISCELLANEOUS FILL MATERIAL CLAY SAND LOAM NO GROUNDWATER, NO MOTTLING, NO ROCK
INF 04	10/28/20	520.11	0' - 64" 64' - 72"	MISCELLANEOUS FILL MATERIAL CLAY SAND LOAM GROUNDWATER @ 64", NO MOTTLING, NO ROCK



UNDERDRAIN DETAIL

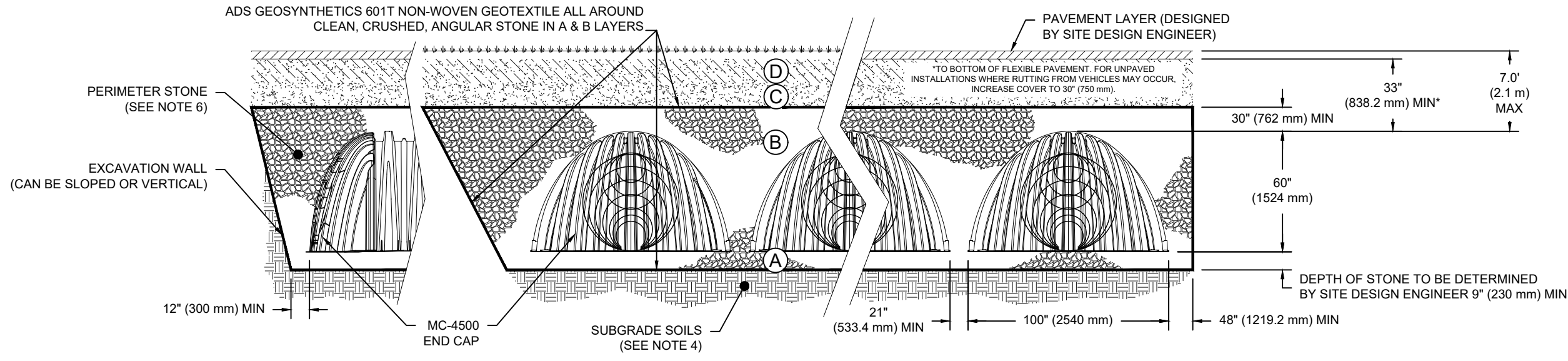


INSERTA-TEE SIDE INLET DETAIL

ACCEPTABLE FILL MATERIALS: STORMTECH MC-4500 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'C' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (8' LAYER) TO 24" (600 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'C' LAYER.	AASHTO M145 ¹ A-1, A-2.4, A-3 OR AASHTO M43 ² 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 24" (600 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 12" (300 mm) MAX LIFTS TO A MIN. 90% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSSED AGGREGATE MATERIALS.
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 ² 3, 4	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 ² 3, 4	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}

- PLEASE NOTE:
- THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR #4 STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
 - STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 9" (230 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
 - WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.

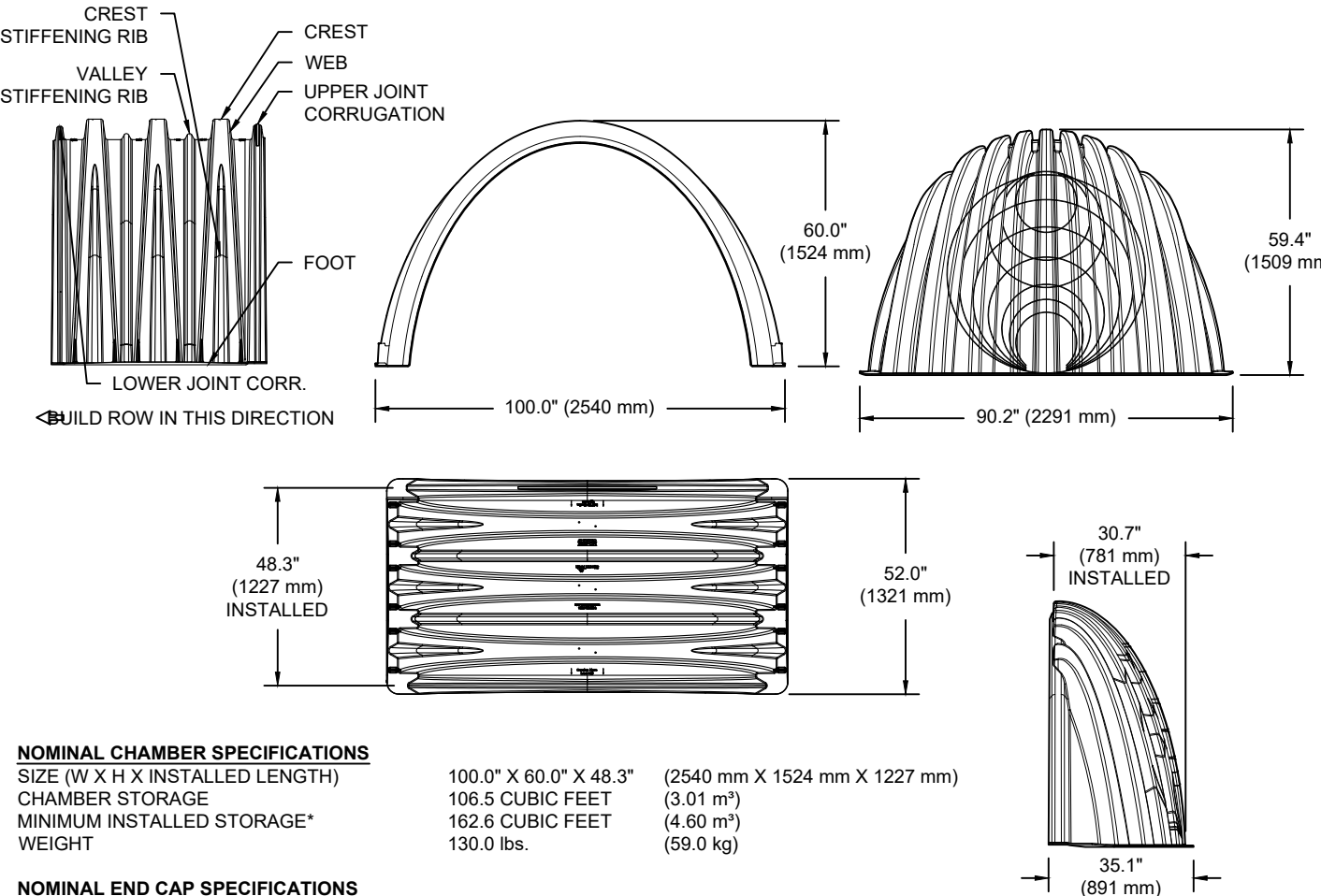


NOTES:

- MC-4500 CHAMBERS SHALL CONFORM TO THE REQUIREMENTS OF ASTM F2418 "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- MC-4500 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- ACCEPTABLE FILL MATERIALS: TABLE ABOVE PROVIDES MATERIAL LOCATION, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
- ONCE LAYER 'C' IS PLACED, ANY SOL MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVED SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.
- PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.

INFILTRATION TEST RESULTS

TEST HOLE #	TEST HOLE DEPTH	TEST HOLE DIA.	TIME	INFILTRATION TEST RUNS (WATER DROP IN INCHES OVER ONE HOUR)	AVERAGE DROP
10/28/20 IT-01	42"	8"	START	09:45 AM	10:45 AM
			FINISH	10:45 AM	11:45 AM
			DROP	0.75	0.50
10/28/20 IT-02	45"	8"	START	9:10 AM	10:10 AM
			FINISH	10:10 AM	11:10 AM
			DROP	1.0	1.0
10/28/20 IT-03	24"	8"	START	12:55 PM	1:55 PM
			FINISH	1:55 PM	2:55 PM
			DROP	0.75	0.75
10/28/20 IT-04	30"	8"	START	1:15 PM	2:15 PM
			FINISH	2:15 PM	3:15 PM
			DROP	0.50	0.50



SIZE (W X H X INSTALLED LENGTH)
CHAMBER STORAGE
MINIMUM INSTALLED STORAGE*
WEIGHT

100.0" X 60.0" X 48.3"
106.5 CUBIC FEET
122.8 CUBIC FEET
130.0 lbs.

(2540 mm X 1524 mm X 1227 mm)
(3.01 m³)
(4.80 m³)
(59.0 kg)

SIZE (W X H X INSTALLED LENGTH)
END CAP STORAGE
MINIMUM INSTALLED STORAGE*
WEIGHT

90.2" X 59.4" X 30.7"
35.7 CUBIC FEET
108.7 CUBIC FEET
115.0 lbs.

(2291 mm X 1509 mm X 781 mm)
(1.01 m³)
(3.08 m³)
(61.2 kg)

*ASSUMES: 12" (305 mm) STONE ABOVE, 9" (229 mm) STONE FOUNDATION AND BETWEEN CHAMBERS, 12" (305 mm) STONE PERIMETER IN FRONT OF END CAPS AND 40% STONE POROSITY.

PART #	STUB	B	C
MC4500REPE06T	6" (150 mm)	42.54" (1.081 m)	0.86" (22 mm)
MC4500REPE08B	8" (200 mm)	40.50" (1.029 m)	---
MC4500REPE08T	8" (200 mm)	38.37" (973 mm)	1.01" (26 mm)
MC4500REPE10T	10" (250 mm)	38.37" (973 mm)	1.33" (34 mm)
MC4500REPE12T	12" (300 mm)	35.69" (907 mm)	1.55" (39 mm)
MC4500REPE12B	12" (300 mm)	32.72" (831 mm)	---
MC4500REPE15T	15" (375 mm)	32.72" (831 mm)	1.70" (43 mm)
MC4500REPE15B	15" (375 mm)	29.38" (746 mm)	---
MC4500REPE15TW	15" (375 mm)	29.38" (746 mm)	---
MC4500REPE18TC	18" (450 mm)	40.50" (1.029 m)	1.97" (50 mm)
MC4500REPE18TB	18" (450 mm)	38.37" (973 mm)	---
MC4500REPE24TC	24" (600 mm)	23.05" (586 mm)	---
MC4500REPE24TW	24" (600 mm)	23.05" (586 mm)	---
MC4500REPE24BC	24" (600 mm)	23.05" (586 mm)	---
MC4500REPE24BW	24" (600 mm)	23.05" (586 mm)	---
MC4500REPE30BC	30" (750 mm)	23.05" (586 mm)	---
MC4500REPE30BC	30" (750 mm)	23.05" (586 mm)	---
MC4500REPE42BC	42" (1050 mm)	23.05" (586 mm)	---

NOTE: ALL DIMENSIONS ARE NOMINAL.

MC-4500 TECHNICAL SPECIFICATIONS

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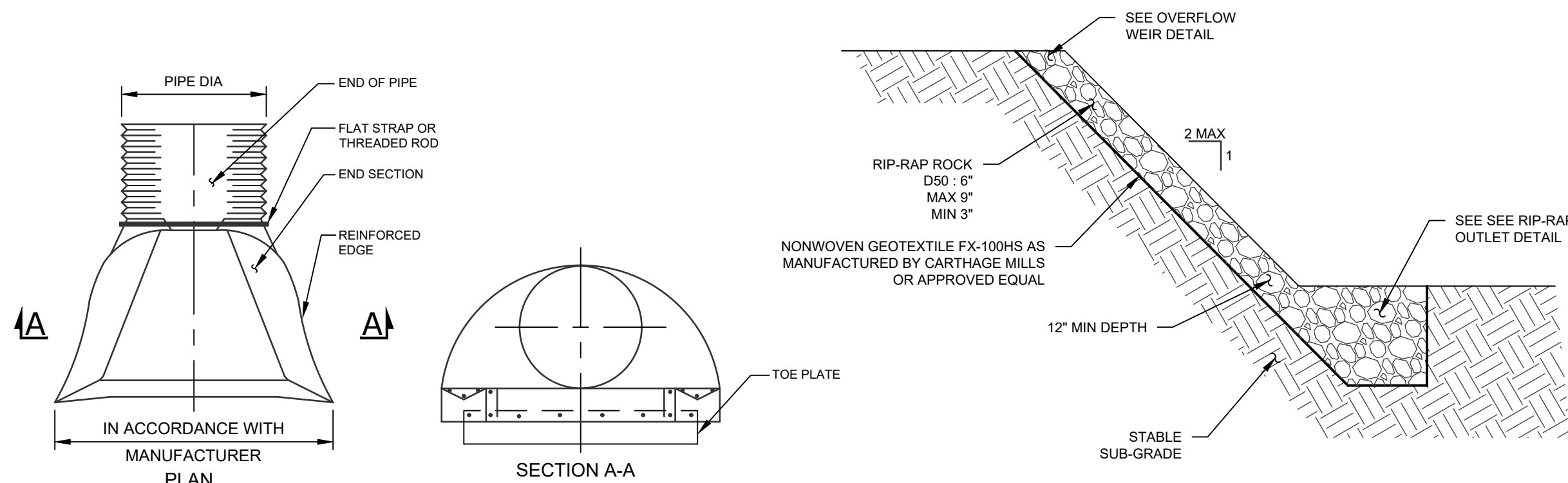
No.	DATE	DESCRIPTION
1	10/28/20	REVISED PER ENGINEER COMMENTS DATED 9/28/20
2	01/31/21	REVISED UNDERGROUND STORMWATER SYSTEM
3	02/11/21	REVISED FOR OGDH WATERMAIN EXTENSION
4	02/03/21	REVISED PER ENGINEER COMMENTS
5	02/12/21	ISSUED FOR FINAL APPROVAL
6	04/06/21	REVISED PER MHE(2)12 & OGDH(3)22 COMMENTS
7	04/13/21	REVISED PER MHE(4)9 COMMENTS
8	04/27/21	REVISED PER MHE PB WORKSHOP COMMENTS
9	06/14/21	FIELD CHANGE #1
10	07/14/21	REVISED EROSION CONTROL
11	09/01/21	FIELD CHANGE #2
12	09/15/21	FIELD CHANGE #3
13	09/23/21	REVISED PER TOWN COMMENTS
14	01/18/22	ADDED WINTER CONDITIONS TO EBS

DRAWING STATUS	ISSUE DATE:
THIS SHEET IS PART OF THE PLAN SET ISSUED FOR	01/18/2022
<input type="checkbox"/> CONCEPT APPROVAL	N/A OF N/A
<input checked="" type="checkbox"/> PLANNING BOARD APPROVAL	10 OF 13
<input type="checkbox"/> OGDH REALTY SUBDIVISION APPROVAL	N/A OF N/A
<input type="checkbox"/> OGDH WATERMAIN EXTENSION APPROVAL	N/A OF 3
<input type="checkbox"/> NYSDEC APPROVAL	N/A OF N/A
<input type="checkbox"/> NYSDDOT APPROVAL	N/A OF N/A
<input type="checkbox"/> OTHER	N/A OF N/A
<input type="checkbox"/> FOR BID	N/A OF N/A
<input type="checkbox"/> FOR CONSTRUCTION	N/A OF N/A

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JAY SAMUELSON, P.E. NEW YORK LICENSE # 080023	1 2 3 ORIGINAL SCALE IN INCHES

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DETAILS	
ADAMS FAIRACRE FARMS 636 NYS ROUTE 211 EAST TOWN OF WALKILL ORANGE COUNTY, NEW YORK	
JOB #: 1378.02	DRAWN BY: JS
DATE: 09/21/2020	AS NOTED
REVISION: 14 - 01/18/2022	TAX LOT: 41-1-61.22
C-302	
TOWN OF WALKILL, PB SHEET 10 OF 54	



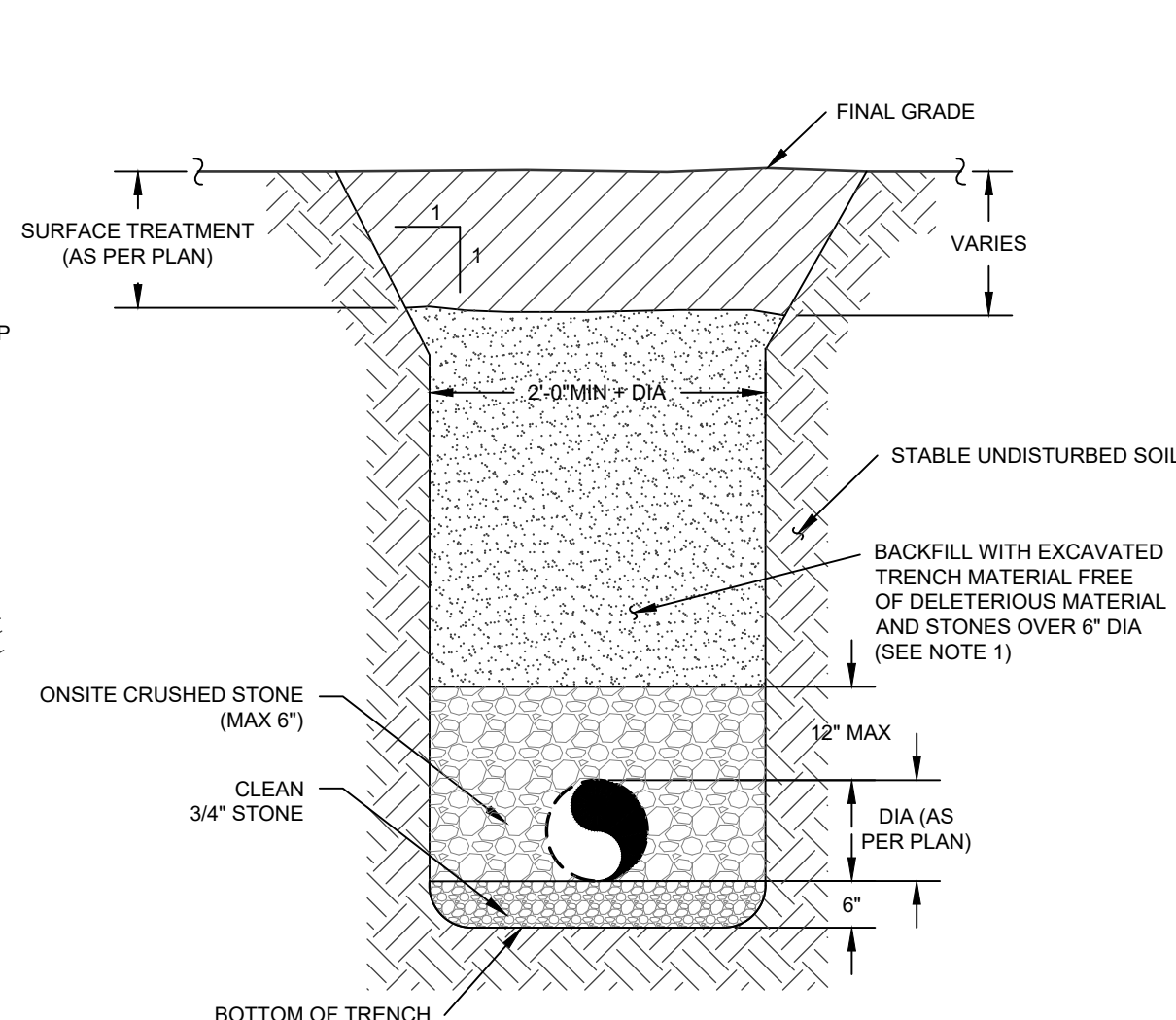
NOTE:
RIP-RAP TO BE PROVIDED AT THE END OF THE
FLARED END SECTION AS PER PLANS.

FLARED END SECTION

SCALE: N.T.S.

RIP-RAP SLOPE DETAIL

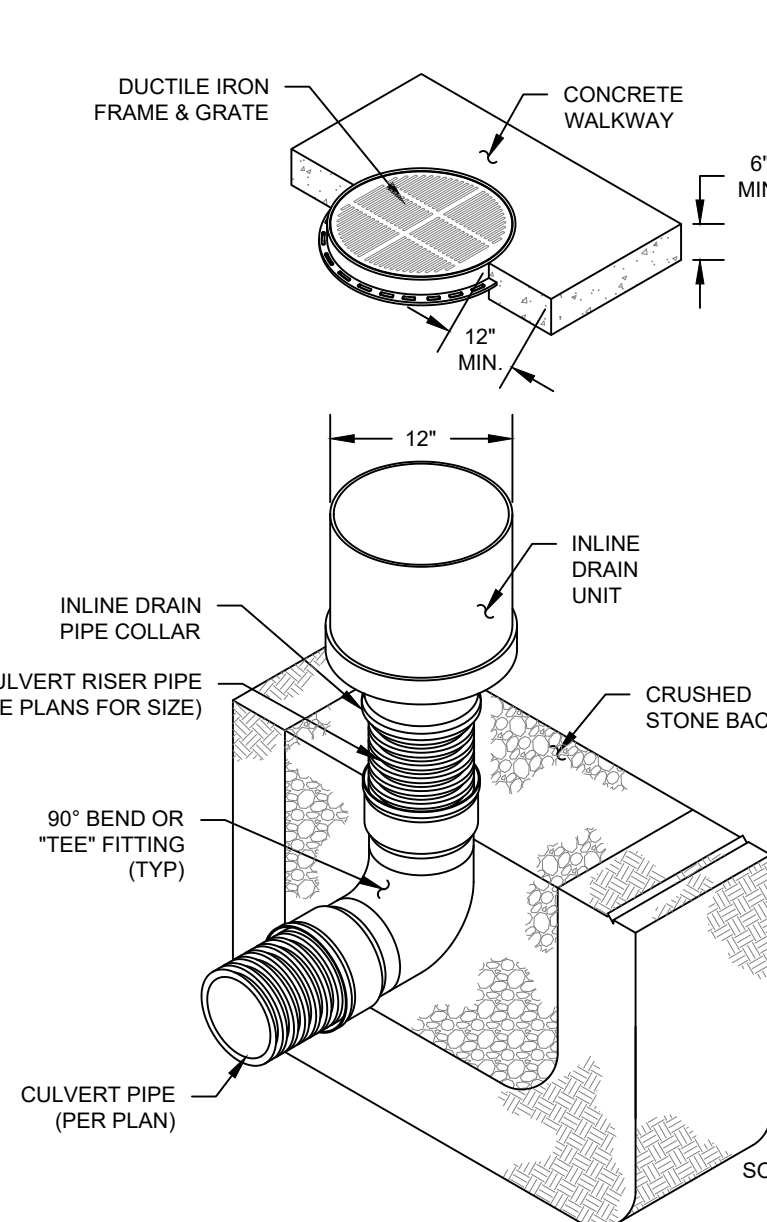
SCALE: N.T.S.



- NOTES:
- ALL BACKFILL WITHIN ANY RIGHT-OF-WAY SHALL BE WITH ITEM 4 (NYSDOT SPEC) FOR THE FULL DEPTH OF THE EXCAVATION. BACKFILL SHALL BE PLACED IN 8" MAXIMUM LIFTS AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY MODIFIED PROCTOR TEST.
 - ALL DRAINAGE PIPE SHALL BE HDPE WITH A SMOOTH INVERT.
 - ALL EXCAVATION AND TRENCHING TO MEET OSHA REQUIREMENTS.

DRAINAGE PIPE TRENCH

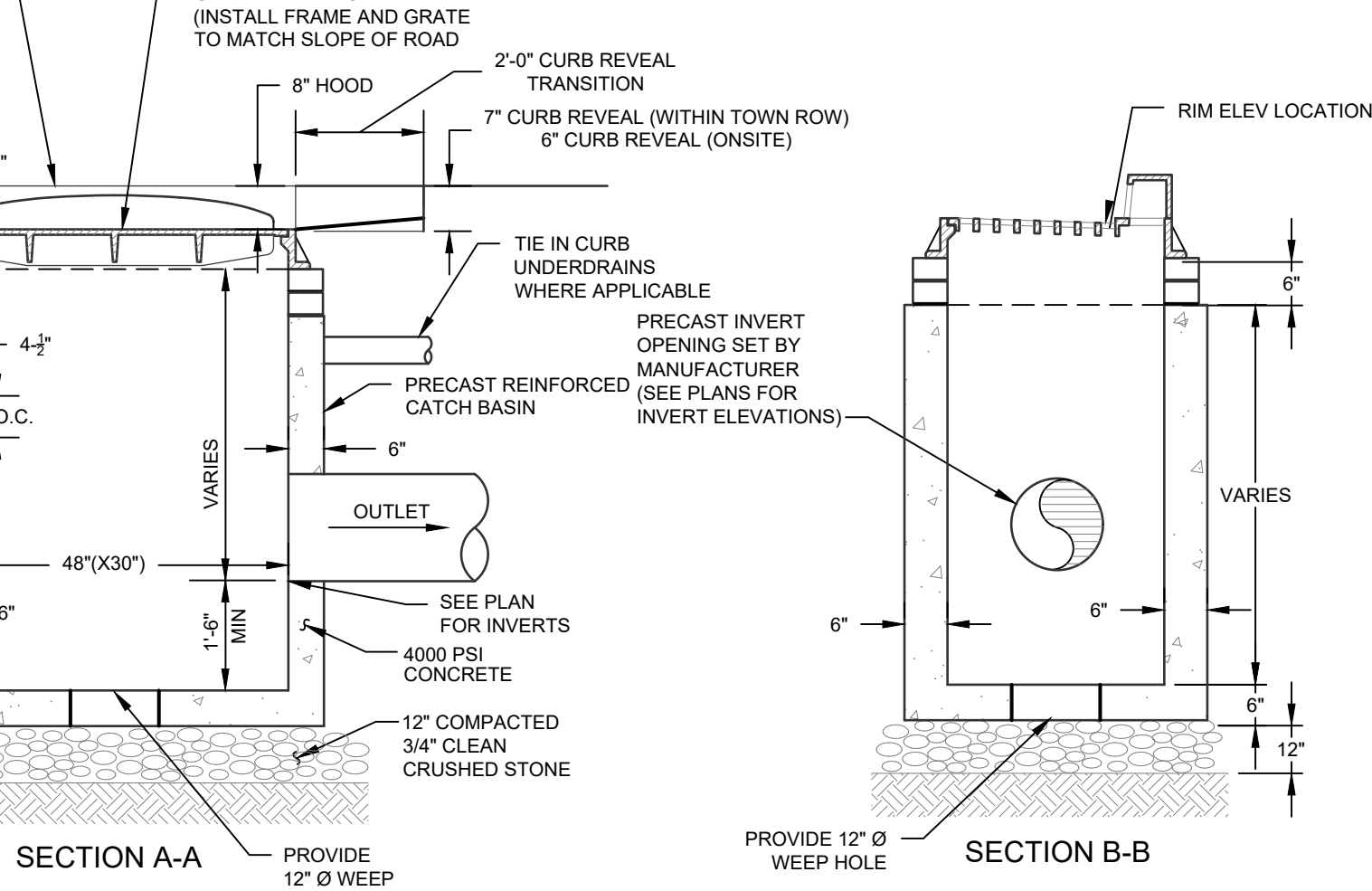
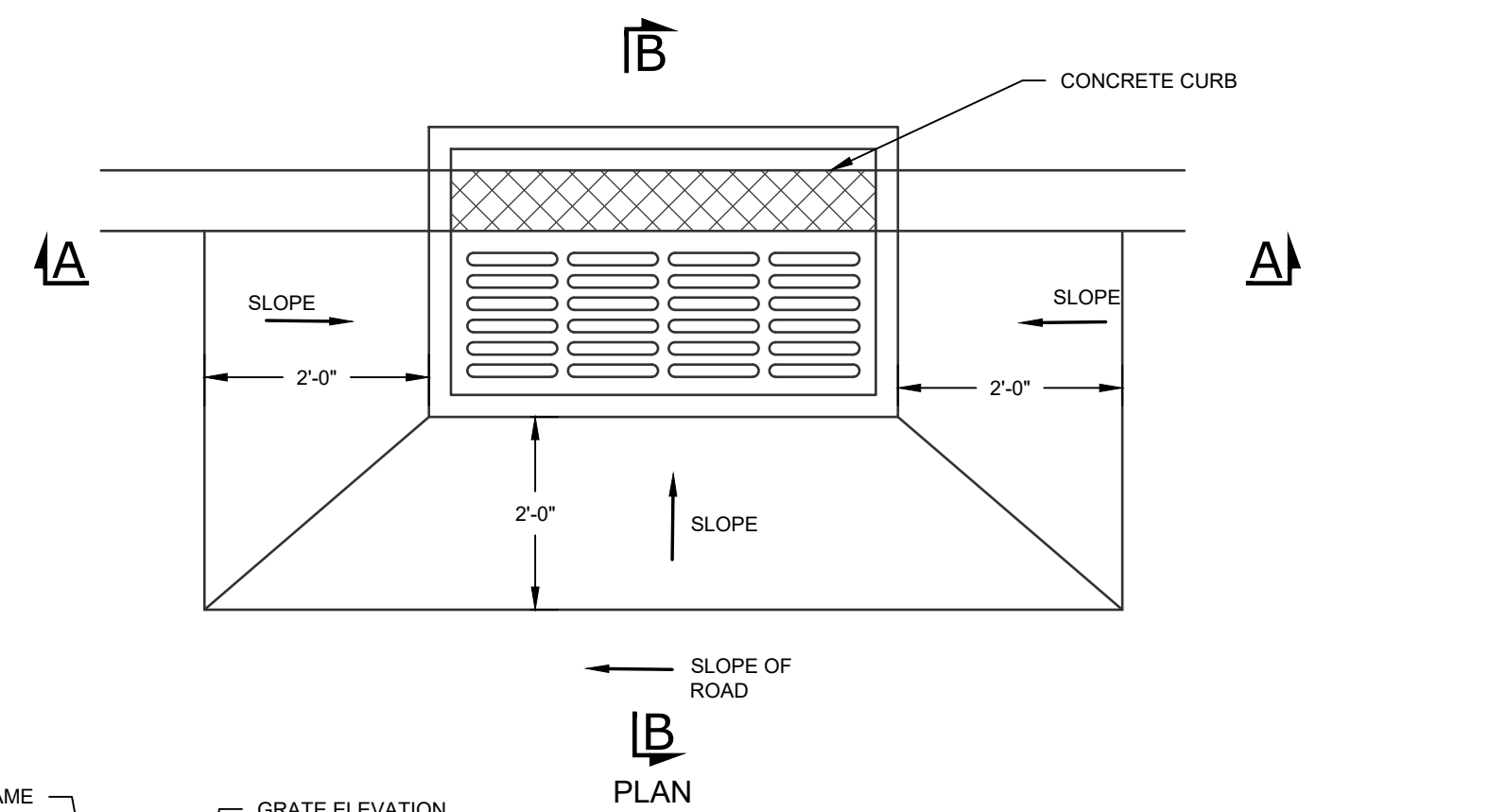
SCALE: N.T.S.



- NOTES:
- INLINE DRAIN AS MANUFACTURED BY ADS NYLOPLAST PRODUCTS OR APPROVED EQUAL.
 - ANY STRUCTURE LOCATED WITHIN VEHICULAR TRAFFIC AREA SHALL BE CAPABLE OF WITHSTANDING HS-20 LOADING.

12" INLINE DRAIN

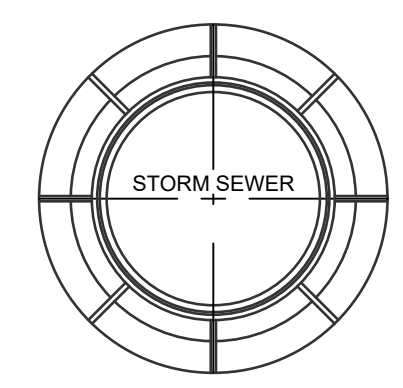
SCALE: N.T.S.



- NOTES:
- BACKFILL AROUND CATCH BASIN SHALL BE NYSDOT ITEM 4 TO BE COMPACTED IN MAX 8" LIFTS.
 - STEPS SHALL BE PROVIDED FOR ALL BASINS GREATER THAN FOUR FEET IN DEPTH.
 - ALL FULL BELOW BUILDINGS, PAVEMENT AREAS, SIDEWALKS, CURBS, ETC. SHALL BE WITH ITEM 4 (NYSDOT SPEC) FOR THE FULL DEPTH OF THE EXCAVATION. BACKFILL SHALL BE PLACED IN 8" MAXIMUM LIFTS AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY MODIFIED PROCTOR TEST.
 - PRECAST CONCRETE BASIN SHALL BE H20 LOAD RATED AS MANUFACTURED BY WOODARDS CONCRETE PRODUCTS OR APPROVED EQUAL.
 - THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE OF CATCH BASIN.

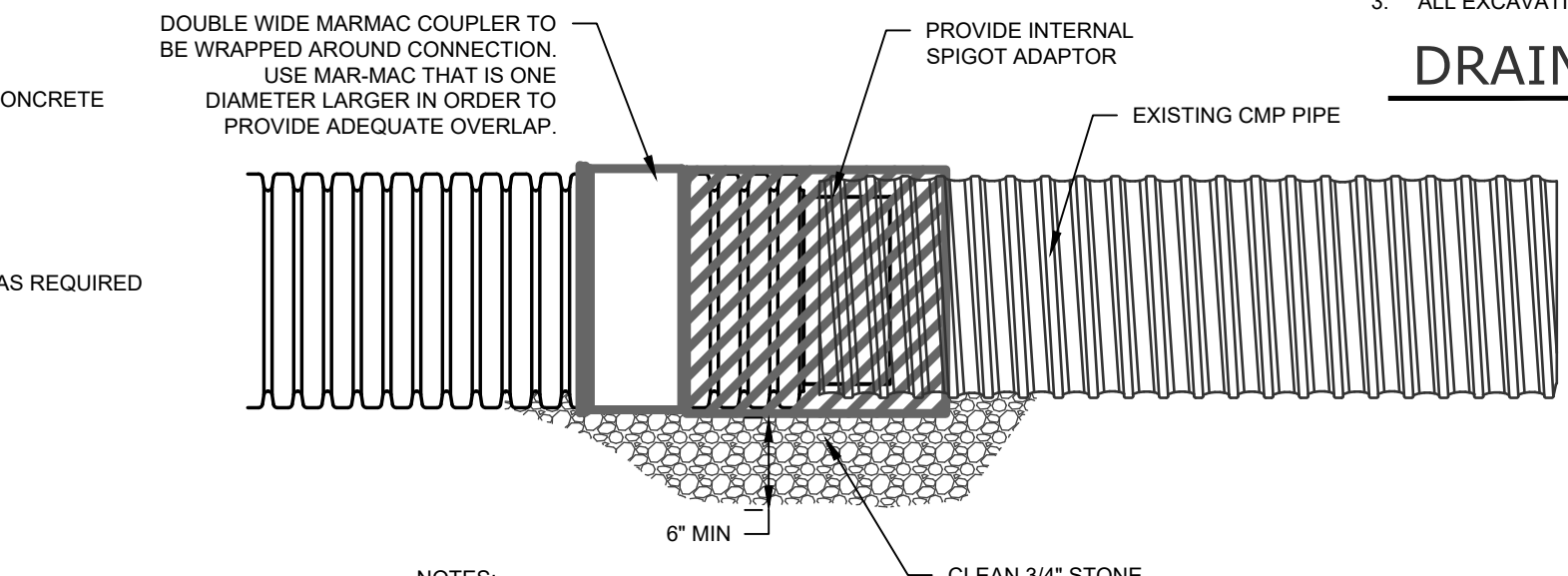
CATCH BASIN

SCALE: N.T.S.



DRAINAGE MANHOLE COVER

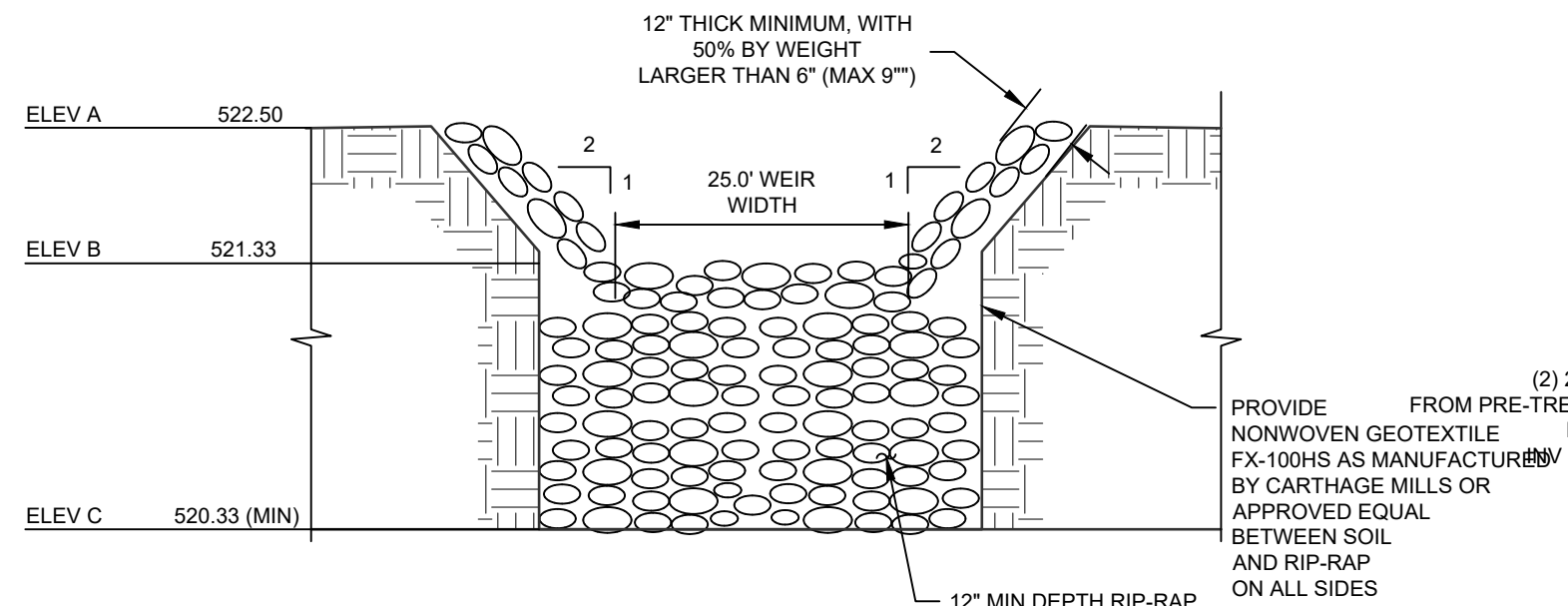
SCALE: N.T.S.



- NOTES:
- MARMAC POLY SEAL PIPE COUPLER TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

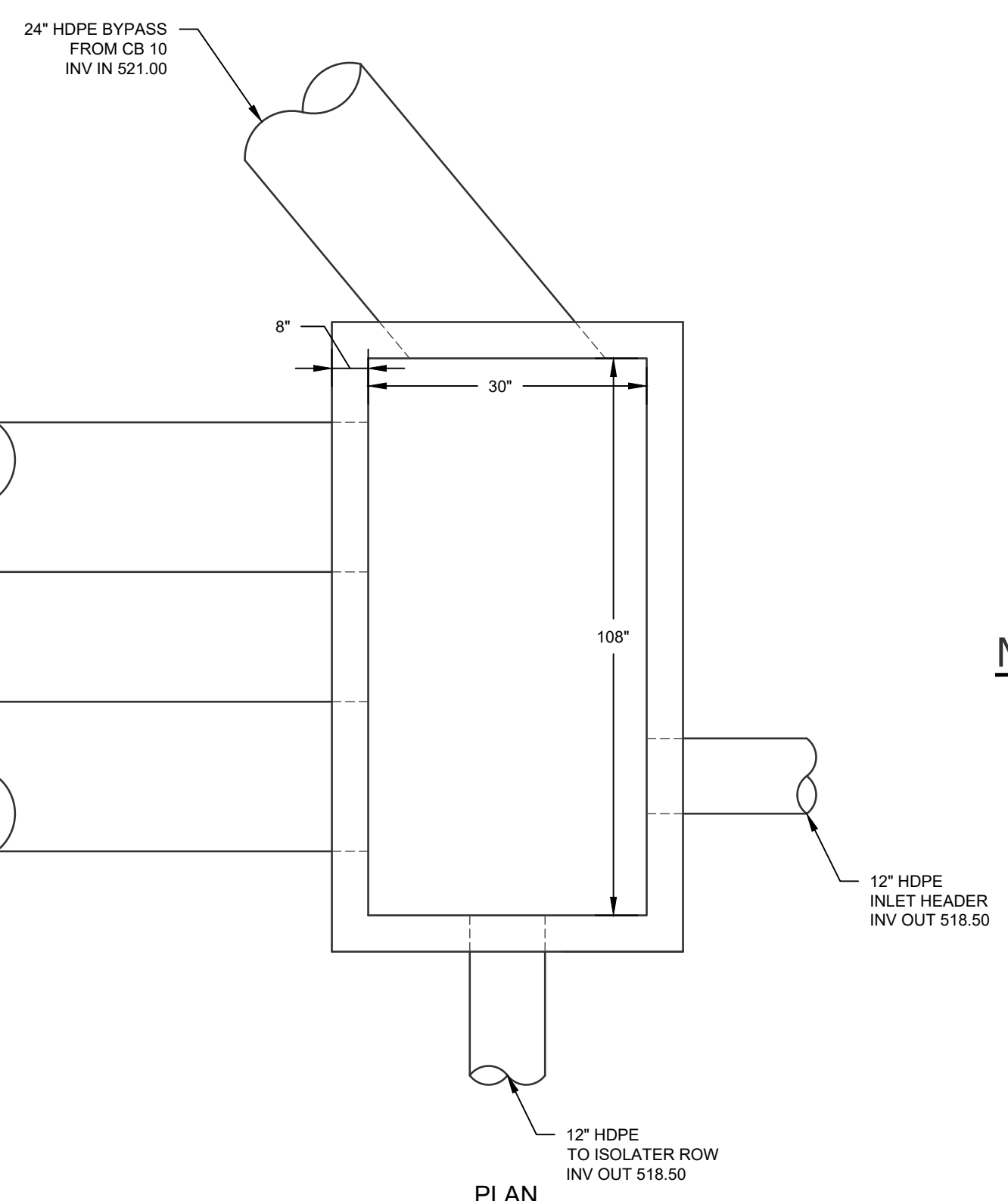
PIPE COUPLER

SCALE: N.T.S.



OVERFLOW WEIR

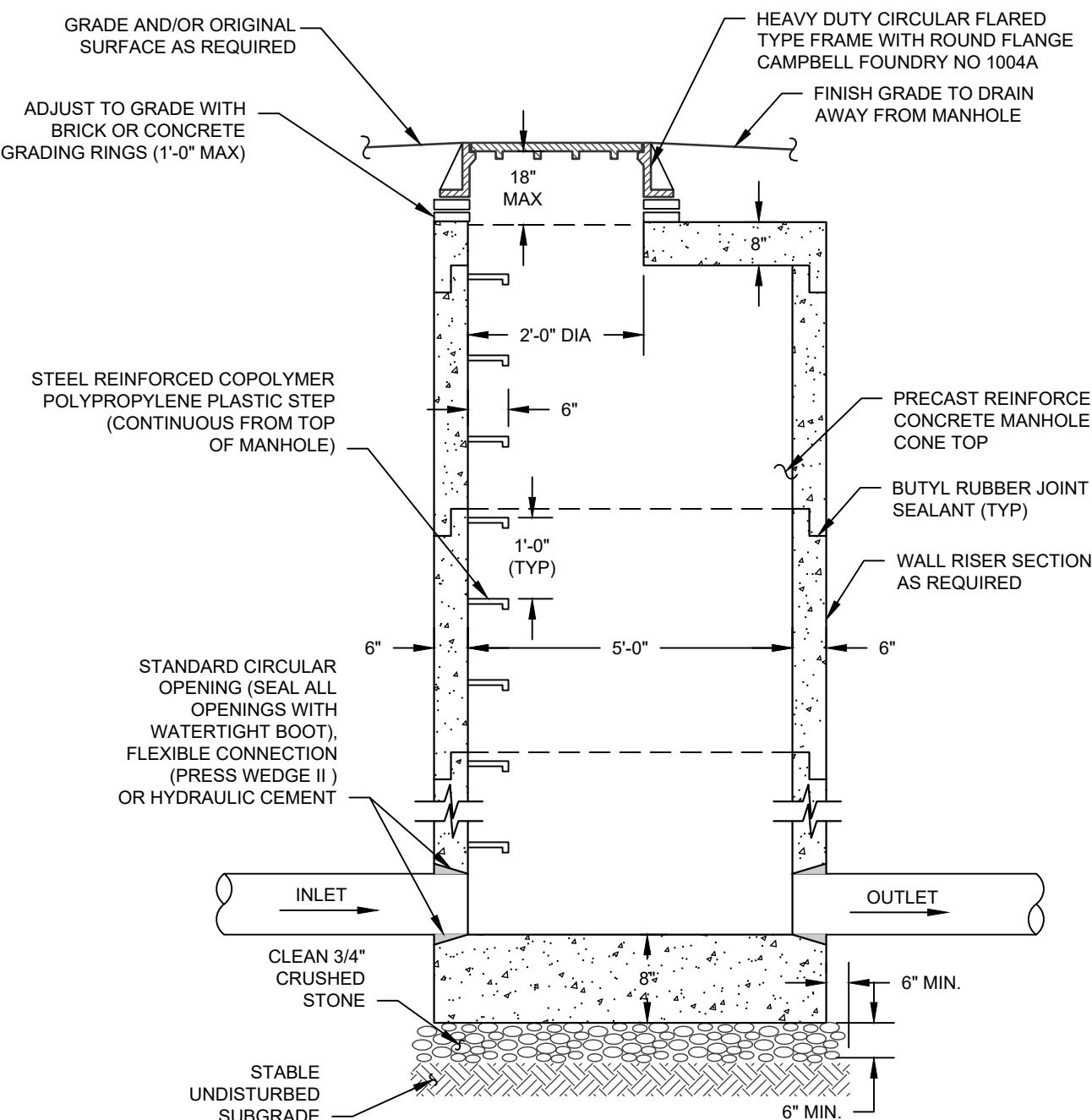
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PLAN

DRAINAGE MANHOLE

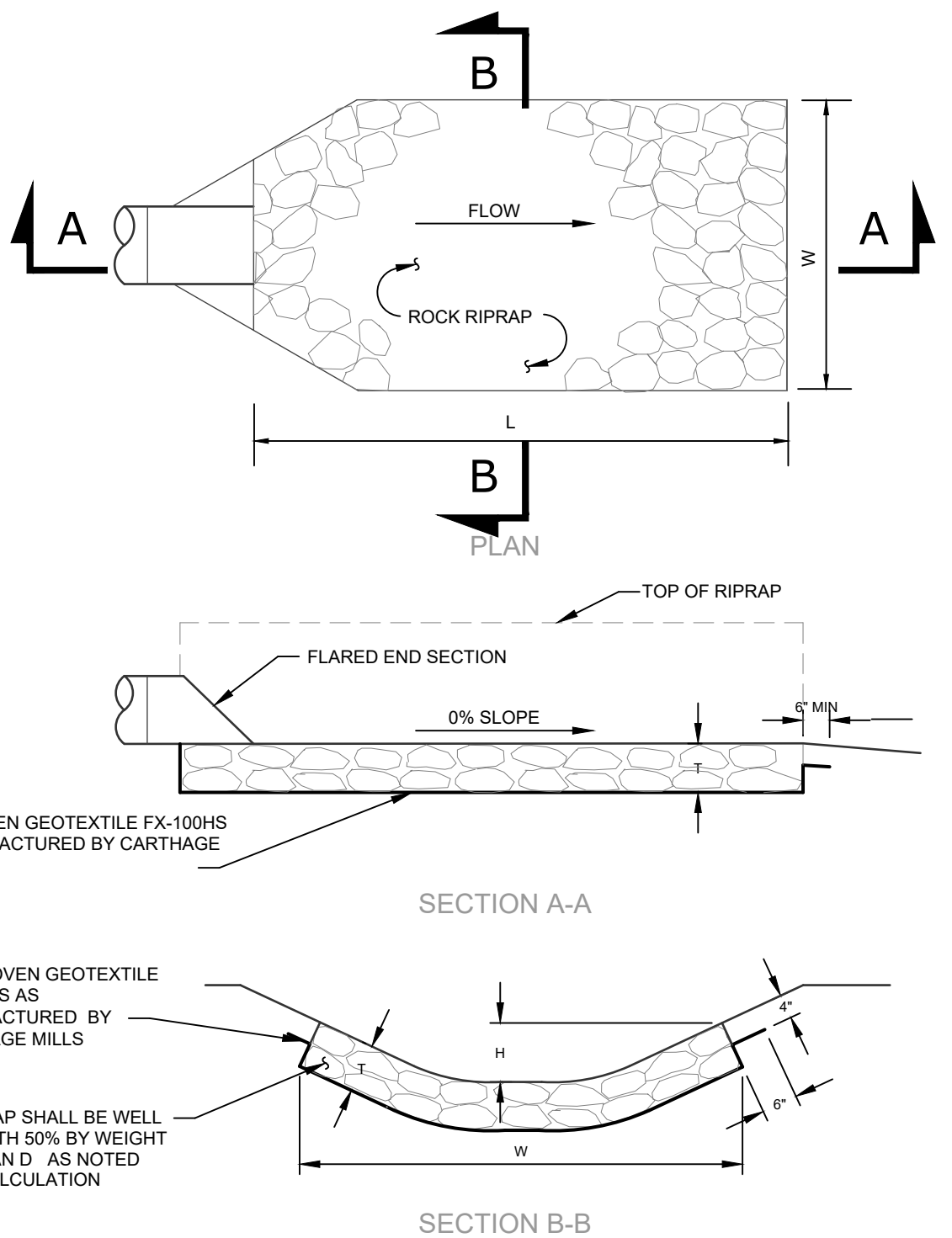
SCALE: N.T.S.



- NOTES:
- OVERSIZE DRAINAGE MANHOLE TO BE USED FOR JUNCTIONS OF DRAINAGE PIPE IN EXCESS OF 24" IN DIAMETER.
 - CONCRETE TO HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
 - REINFORCEMENT TO BE IN CONFORMANCE WITH ASTM A615 GRADE 60 AND ASTM A185 GRADE 65.
 - CONTRACTOR TO ORDER MANHOLE SECTIONS FROM MANUFACTURER TO MATCH REQUIRED ELEVATIONS AND INVERTS PER PLAN.
 - MANHOLE CONSTRUCTION TO BE CAPABLE OF WITHSTANDING H-20 LOADINGS.
 - PRECAST CONCRETE MANHOLE COMPONENTS BY WOODARDS CONCRETE PRODUCTS OR APPROVED EQUAL.

OVERSIZED DRAINAGE MANHOLE

SCALE: N.T.S.



FES OUTLET PROTECTION

SCALE: N.T.S.

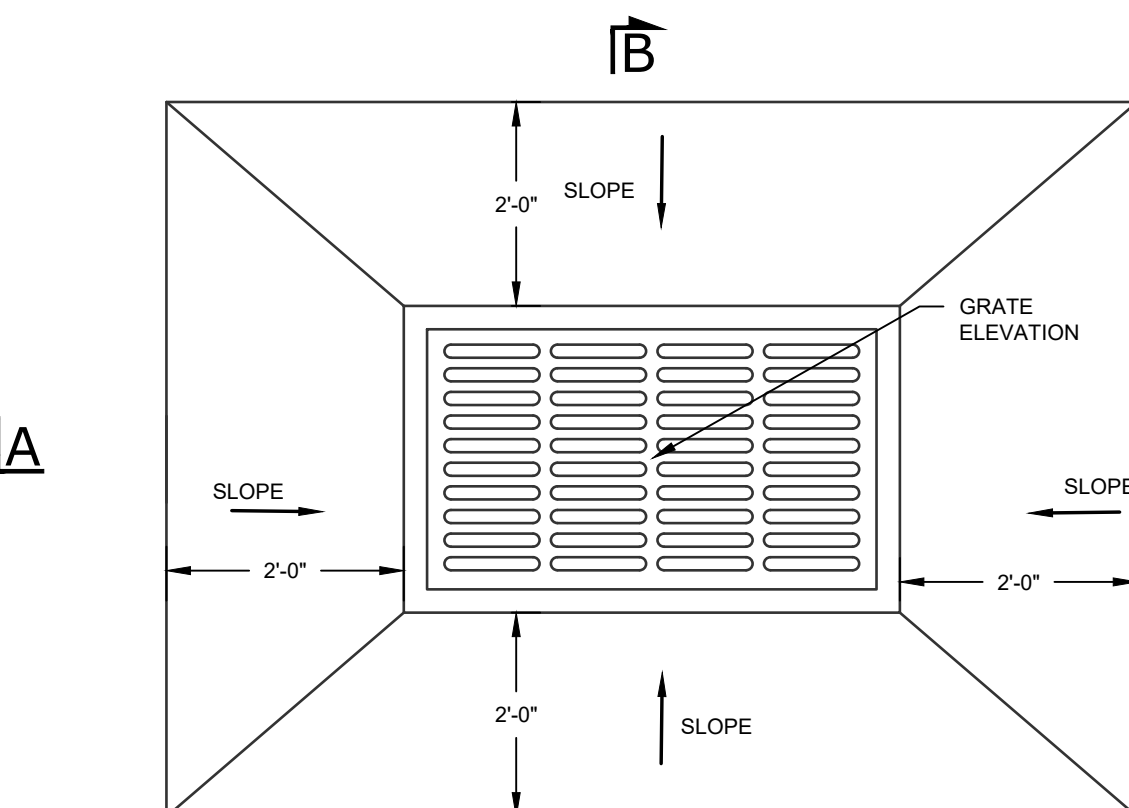
OUTLET PROTECTION SIZING CALCULATIONS

END SECTION	DIA. (in)	Q _{max} (cfs)	V _{max} (ft/s)	D ₅₀ (in)	L (ft)	W (ft)	T (in)	H (in)
FES 1	15	8.1	6.6	6	9	10	11.25	12
FES 2	15	11.8	7.6	9	12	12	13.25	12
FES 3	36	139.0	19.7	18	27	32	12	36
FES 4	12	5.8	7.4	6	9	10	11	15

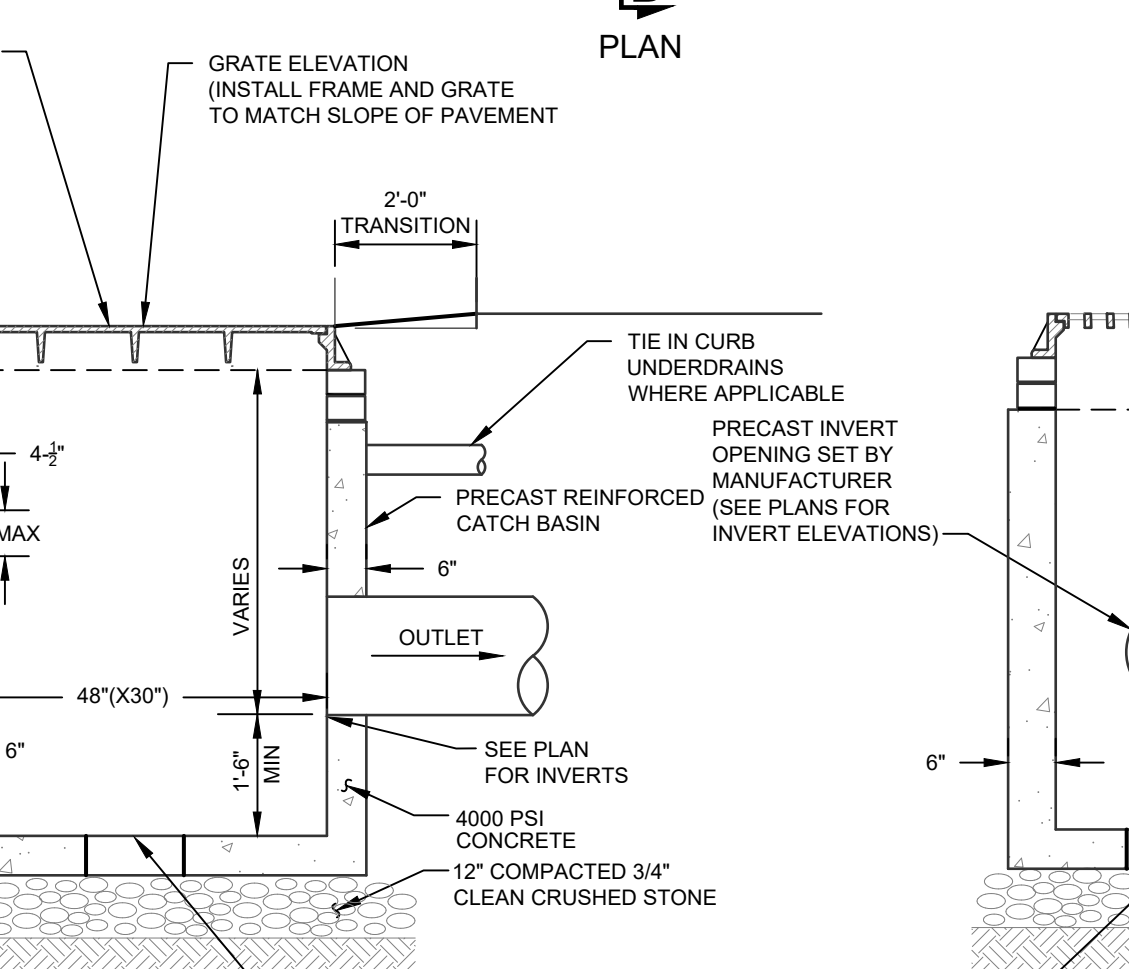
- NOTES:
- DMH 7 SHALL BE UTILIZED IN THE LOCATION AS SHOWN ON THE PLANS.
 - CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS.
 - REINFORCEMENT TO BE IN CONFORMANCE WITH ASTM A615 GRADE 60 AND ASTM A185 GRADE 65.
 - CONTRACTOR TO ORDER SECTIONS FROM MANUFACTURER TO MATCH REQUIRED ELEVATIONS AND INVERTS PER PLAN.
 - MANHOLE CONSTRUCTION TO BE CAPABLE OF WITHSTANDING H-20 LOADINGS.
 - PRECAST CONCRETE MANHOLE COMPONENTS BY WOODARDS CONCRETE PRODUCTS OR APPROVED EQUAL.

OVERSIZED DRAINAGE STRUCTURE (DMH 7)

SCALE: N.T.S.



PLAN



- NOTES:
- BACKFILL AROUND CATCH BASIN SHALL BE NYSDOT ITEM 4 TO BE COMPACTED IN MAX 8" LIFTS.
 - STEPS SHALL BE PROVIDED FOR ALL BASINS GREATER THAN FOUR FEET IN DEPTH.
 - ALL FULL BELOW BUILDINGS, PAVEMENT AREAS, SIDEWALKS, CURBS, ETC. SHALL BE WITH ITEM 4 (NYSDOT SPEC) FOR THE FULL DEPTH OF THE EXCAVATION. BACKFILL SHALL BE PLACED IN 8" MAXIMUM LIFTS AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY MODIFIED PROCTOR TEST.
 - PRECAST CONCRETE BASIN SHALL MEET ALL H20 LOAD RATINGS AND AS MANUFACTURED BY WOODARDS CONCRETE PRODUCTS OR APPROVED EQUAL.
 - THE ENDS OF ALL PIPES SHALL BE CUT OFF FLUSH WITH THE INSIDE OF CATCH BASIN.

CATCH BASIN (FLAT GRATE)

SCALE: N.T.S.

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NO.	DATE	DESCRIPTION
1	10/26/20	REVISED PER ENGINEER COMMENTS DATED 9/28/20
2	01/13/21	REVISED UNDERGROUND STORMWATER SYSTEM
3	02/11/21	REVISED FOR OGDH WATERMAIN EXTENSION
4	02/03/21	REVISED PER ENGINEER COMMENTS
5	02/12/21	ISSUED FOR FINAL APPROVAL
6	04/06/21	REVISED PER MHE(2/12) & OGDH(3/2) COMMENTS
7	04/13/21	REVISED PER MHE(4/9) COMMENTS
8	04/27/21	REVISED PER MHE PB WORKSHOP COMMENTS
9	06/14/21	FIELD CHANGE #1
10	07/14/21	REVISED EROSION CONTROL
11	09/01/21	FIELD CHANGE #2
12	09/15/21	FIELD CHANGE #3
13	09/23/21	REVISED PER TOWN COMMENTS
14	01/18/22	ADDED WINTER CONDITIONS TO EBS

DRAWING STATUS		ISSUE DATE:
THIS SHEET IS PART OF THE PLAN SET ISSUED FOR		01/18/2022
	SHEET NUMBER	
<input type="checkbox"/> CONCEPT APPROVAL	N/A	OF N/A
<input checked="" type="checkbox"/> PLANNING BOARD APPROVAL	11	OF 13
<input type="checkbox"/> OGDH REALTY SUBDIVISION APPROVAL	N/A	OF N/A
<input type="checkbox"/> OGDH WATERMAIN EXTENSION APPROVAL	N/A	OF 3
<input type="checkbox"/> NYSDEC APPROVAL	N/A	OF N/A
<input type="checkbox"/> NYSDOT APPROVAL	N/A	OF N/A
<input type="checkbox"/> OTHER	N/A	OF N/A
<input type="checkbox"/> FOR BID	N/A	OF N/A
<input type="checkbox"/> FOR CONSTRUCTION	N/A	OF N/A

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DETAILS

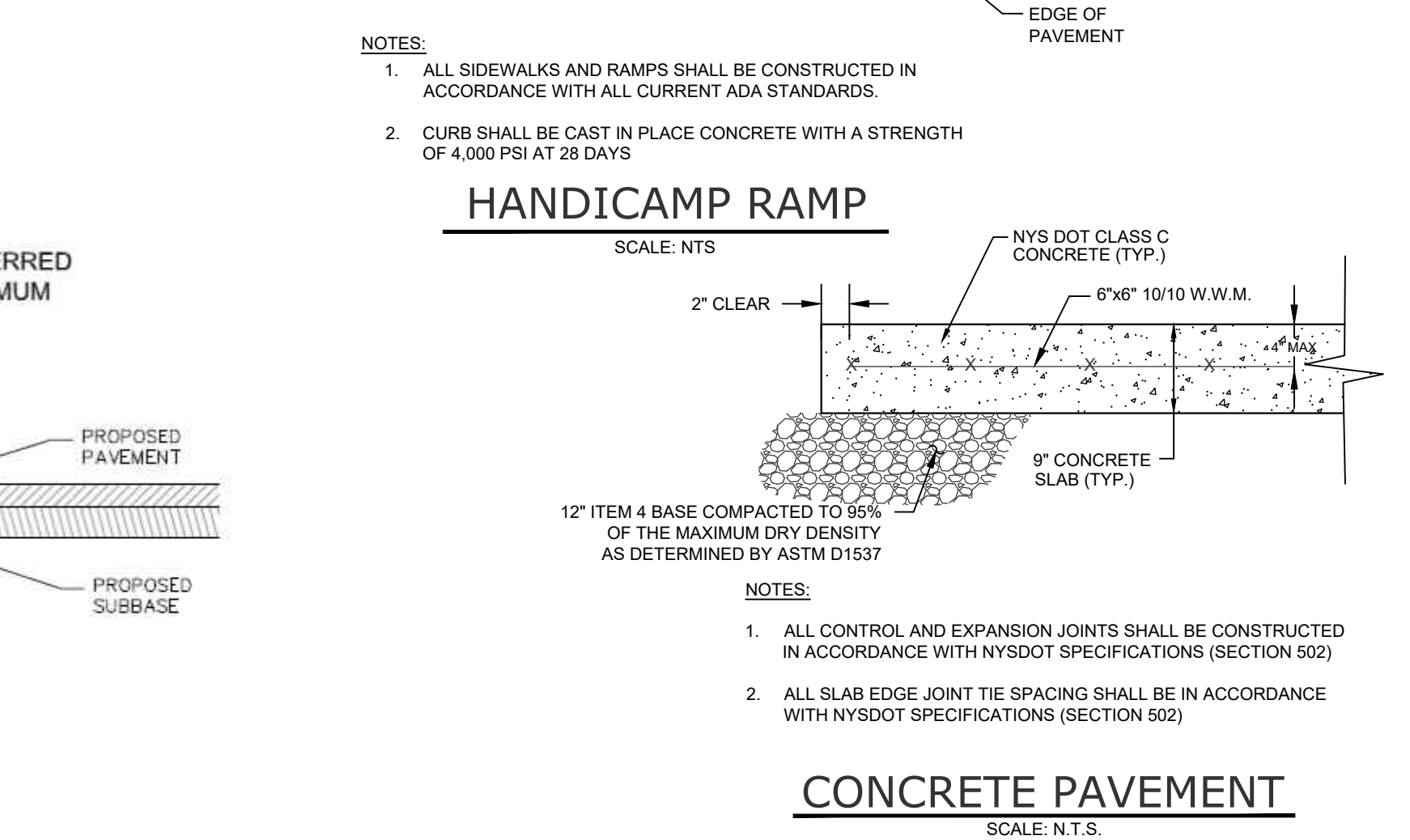
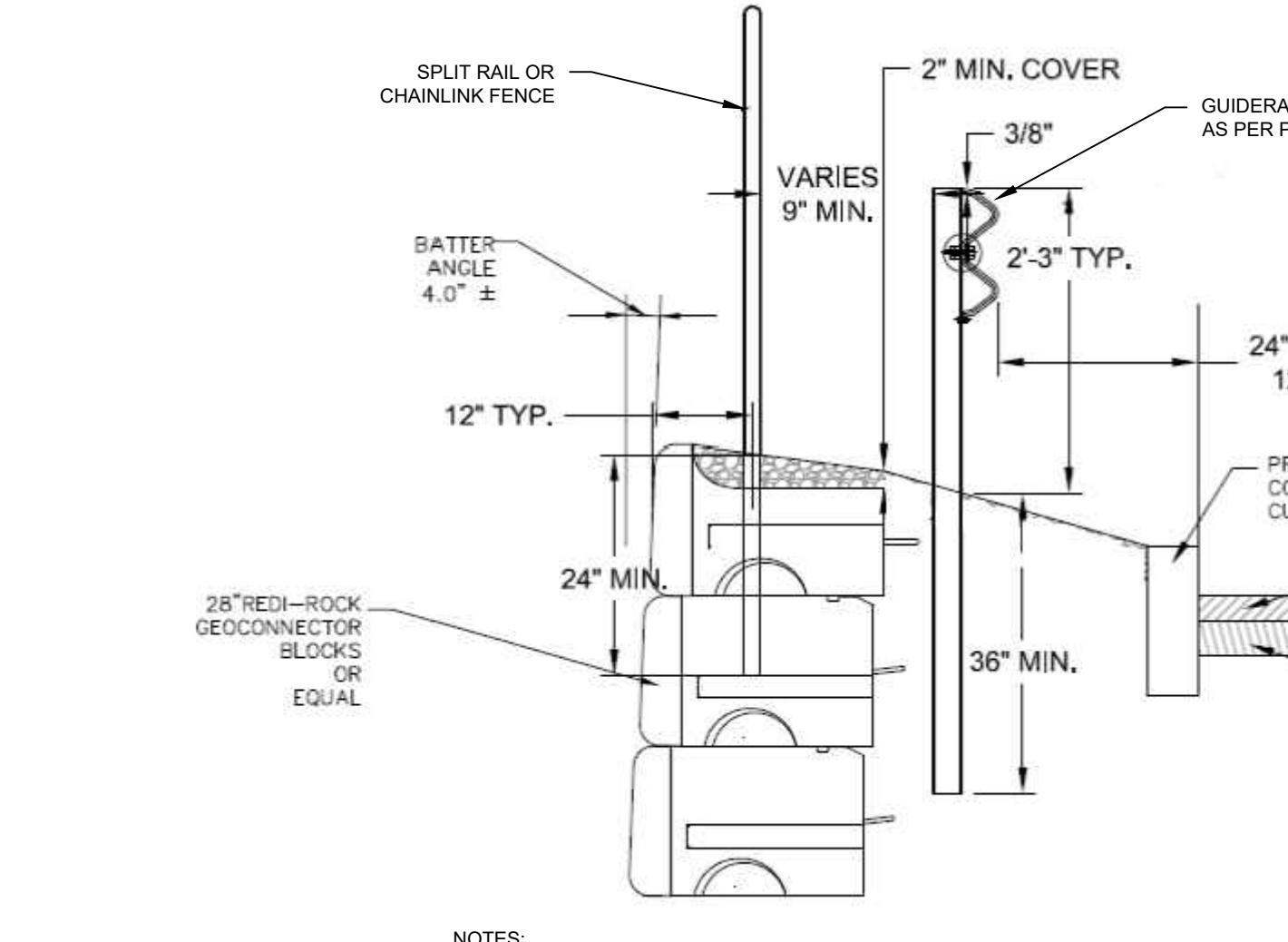
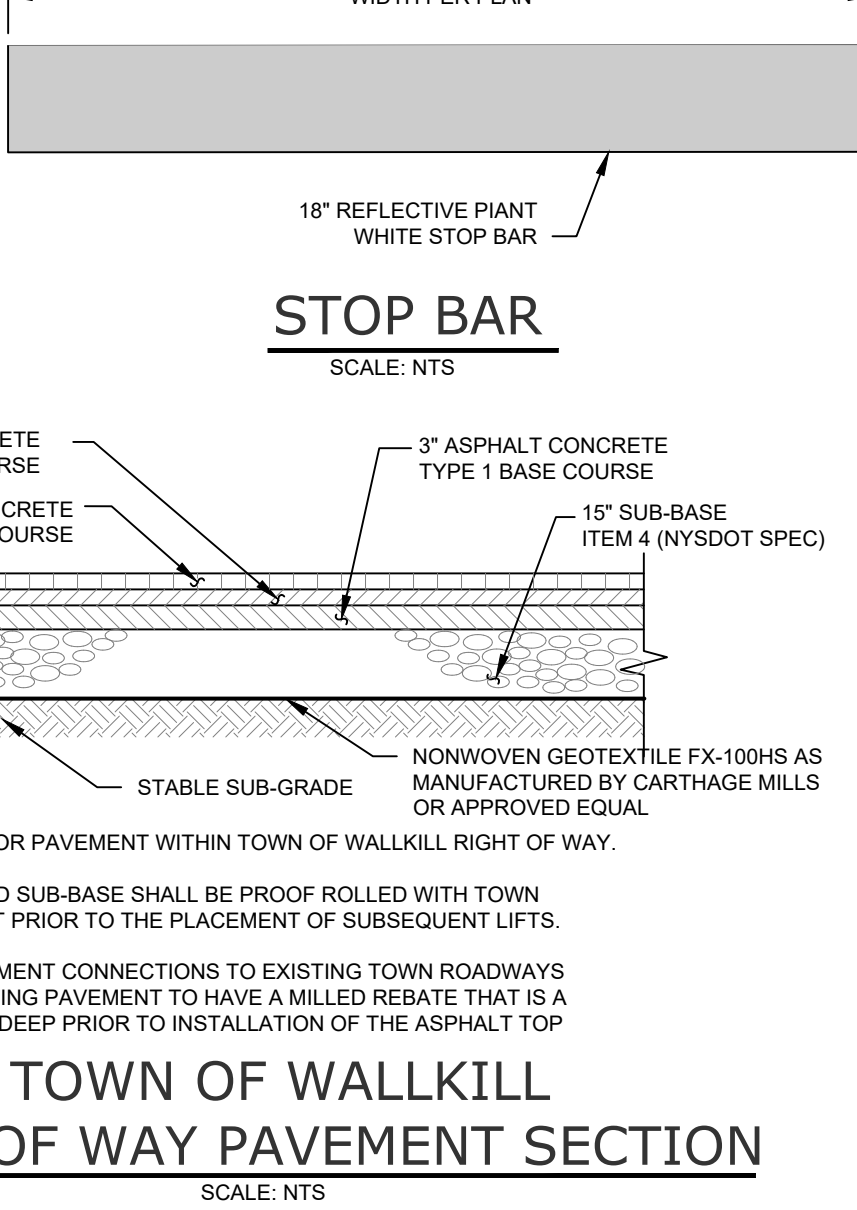
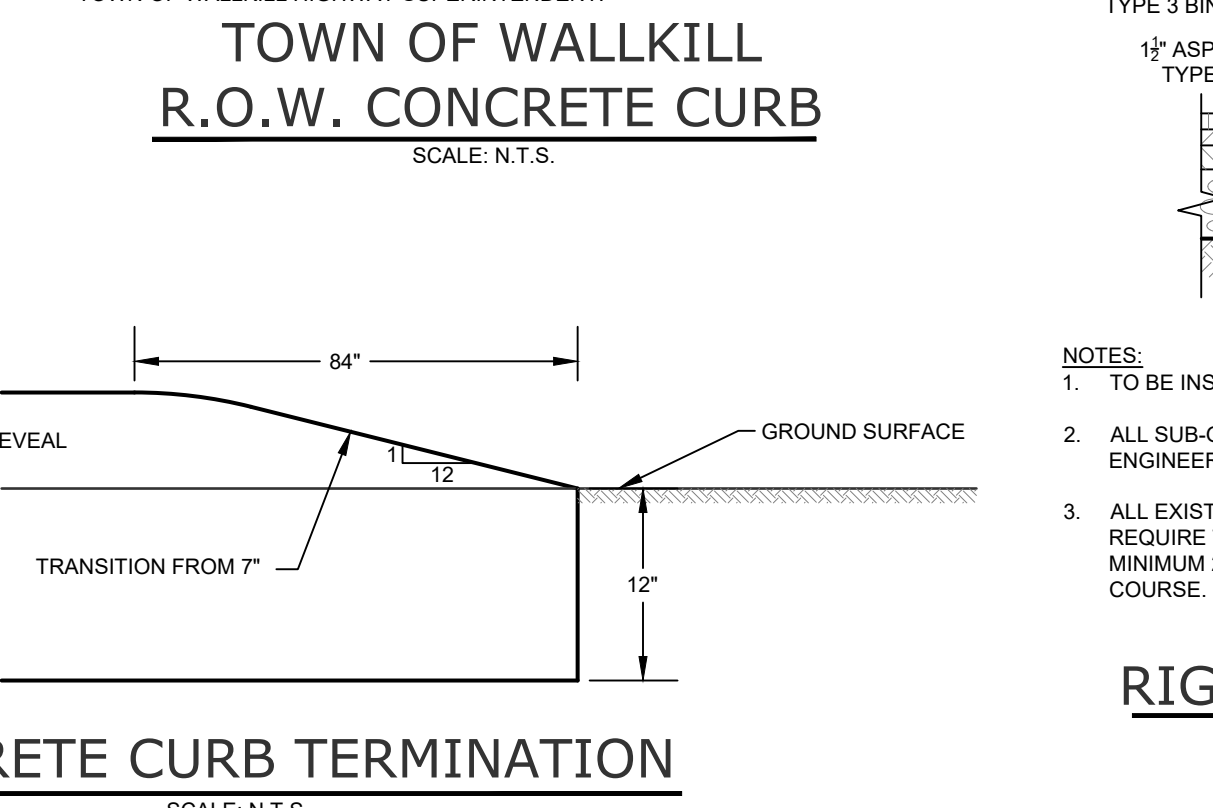
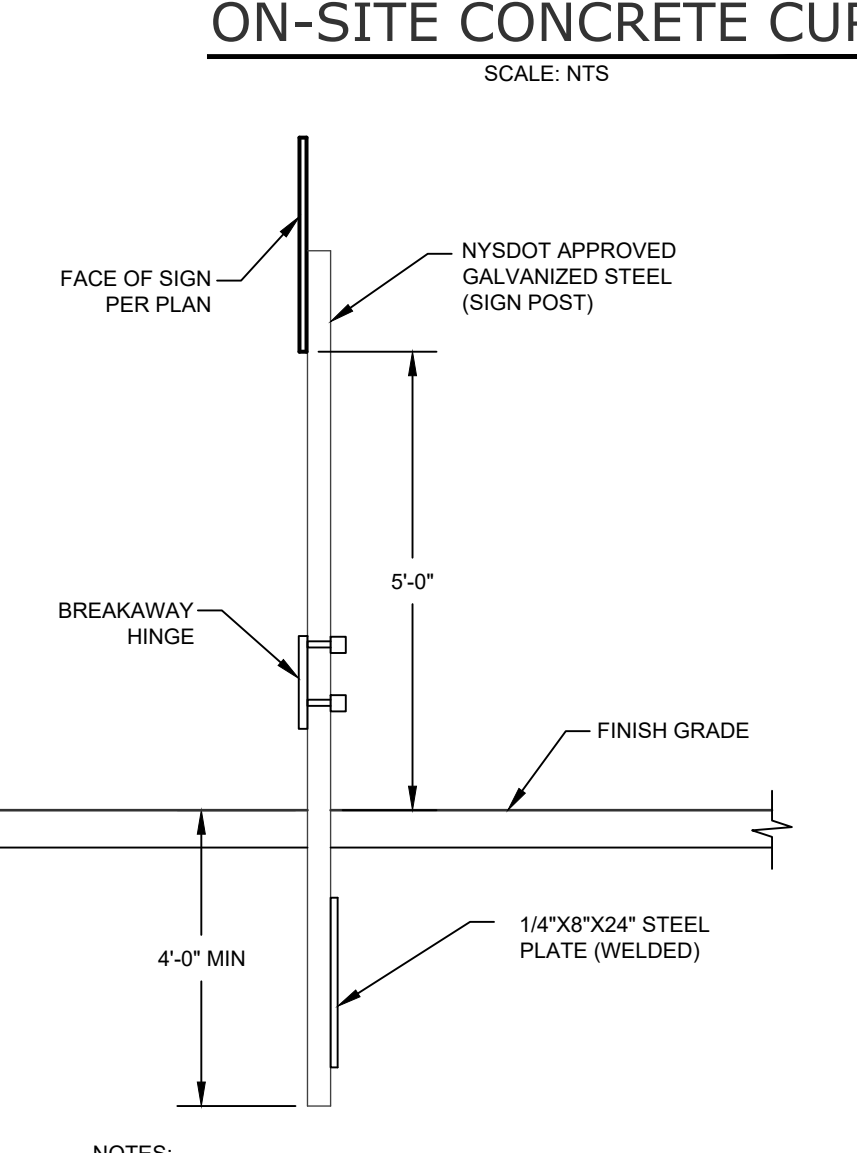
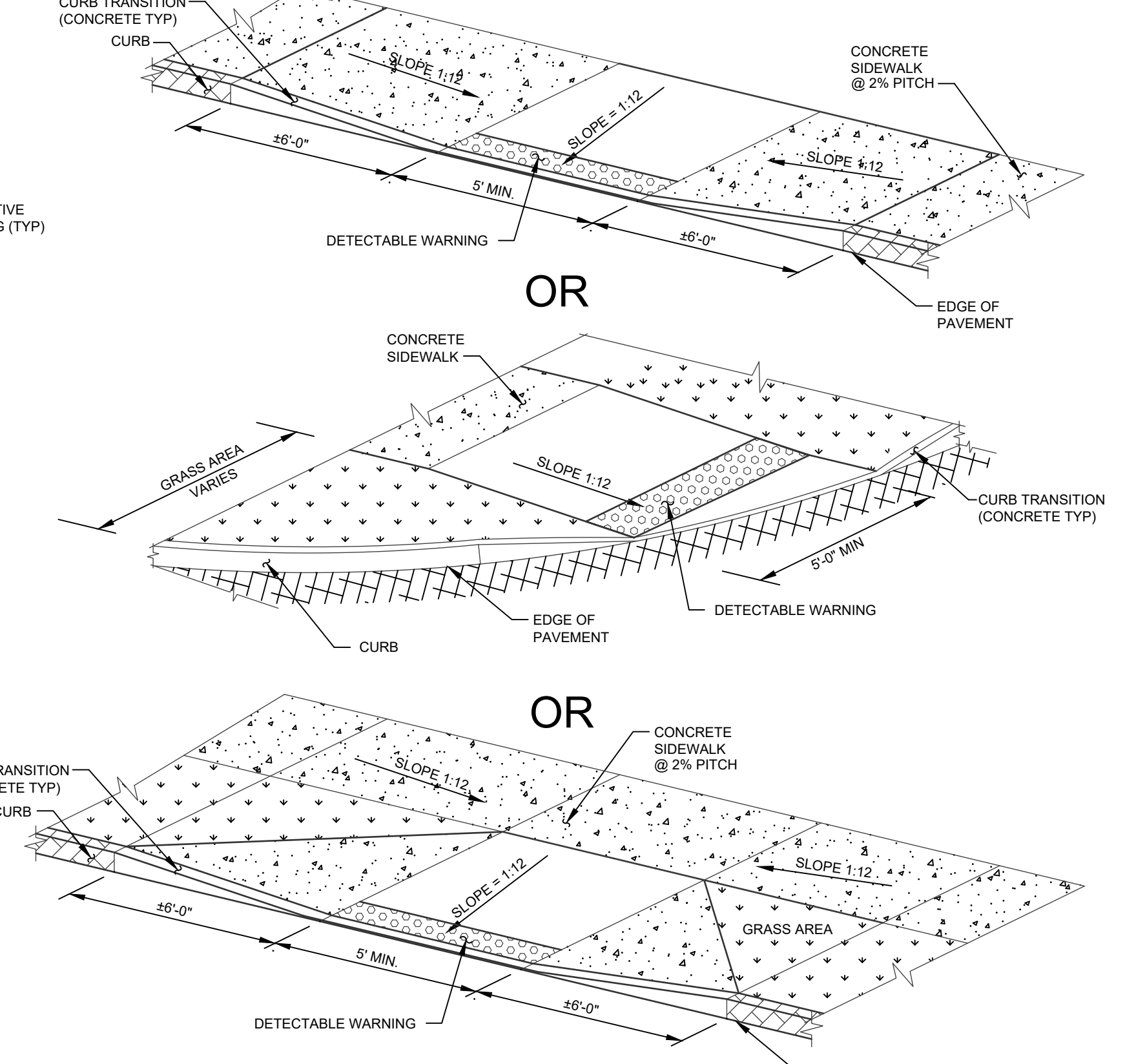
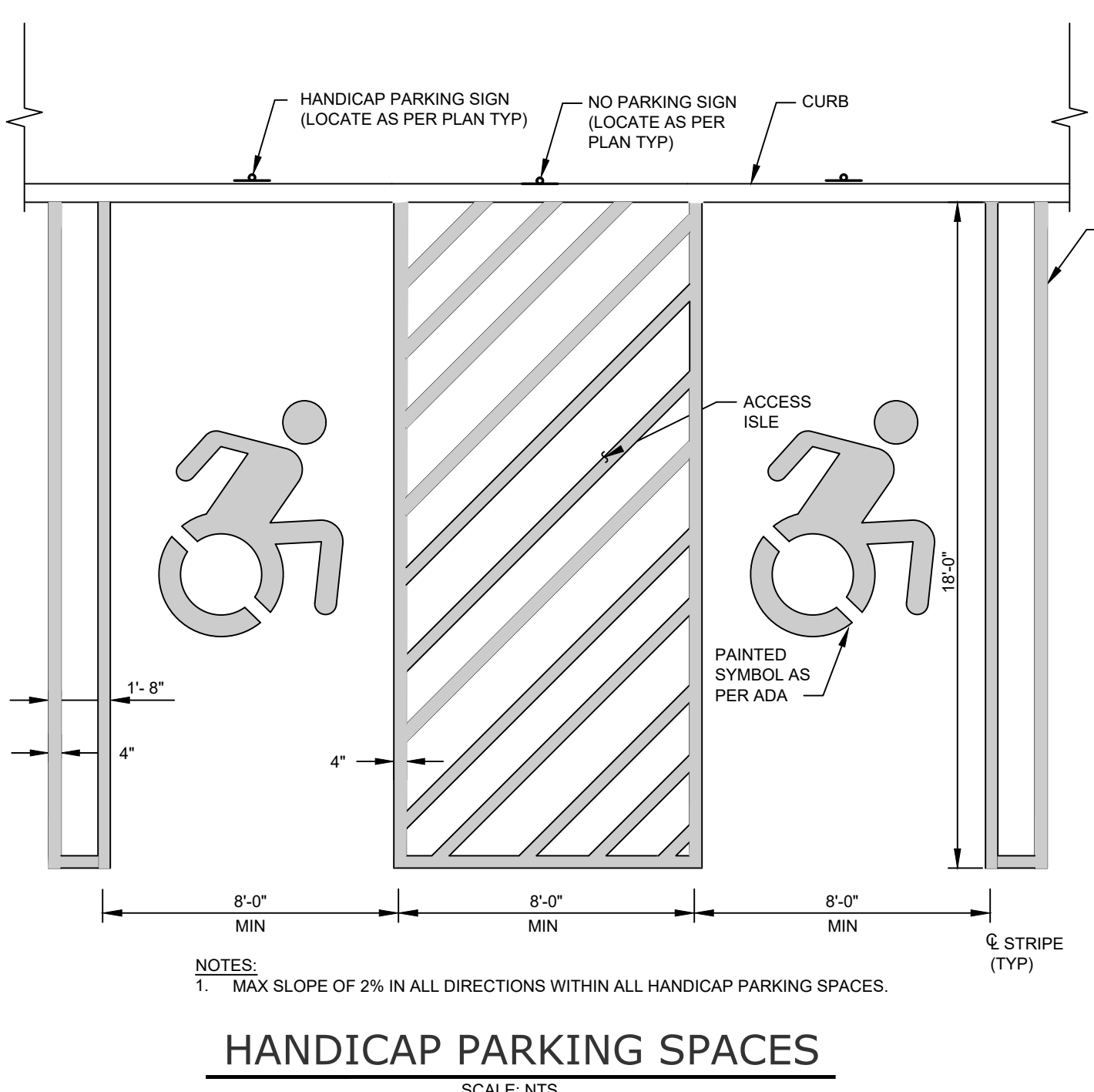
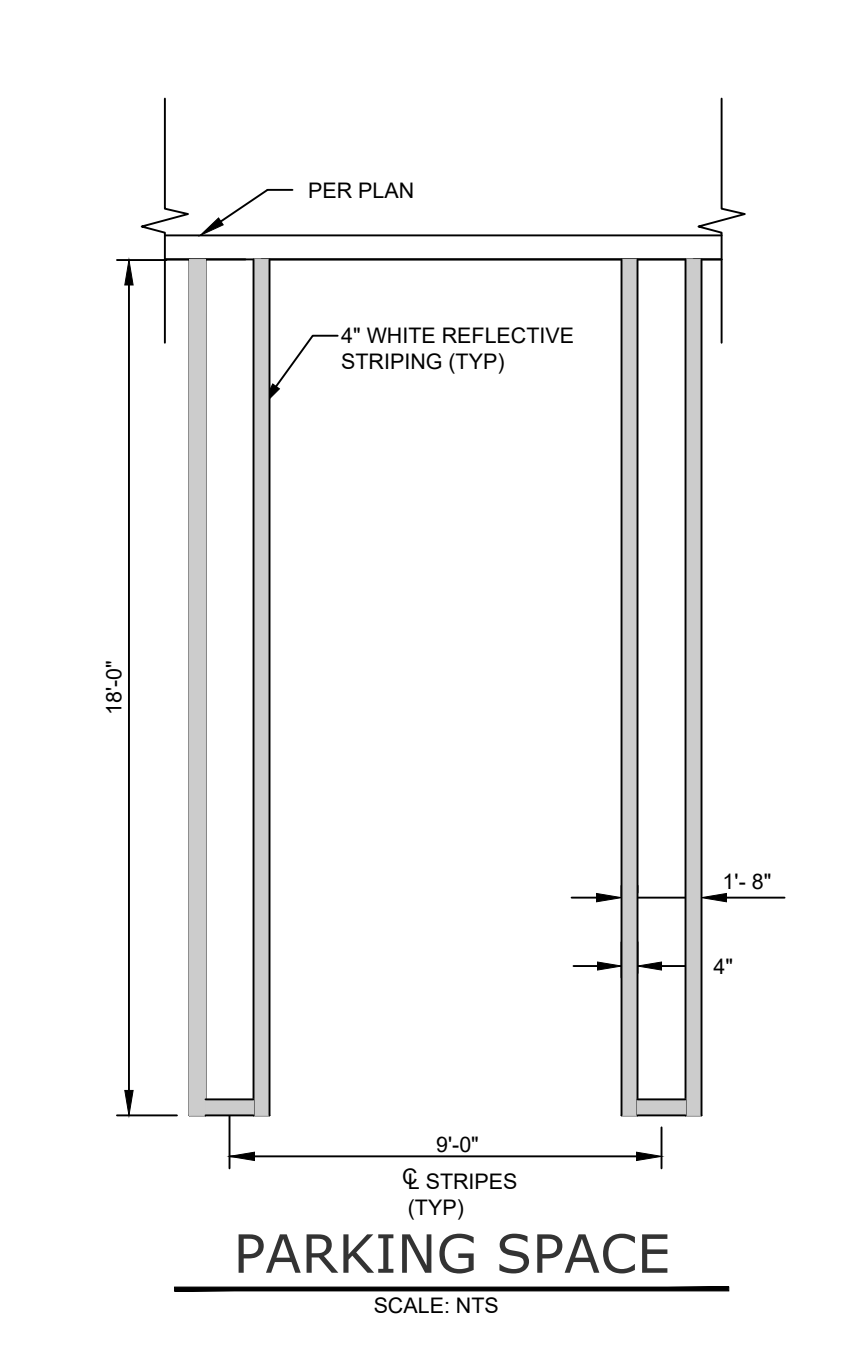
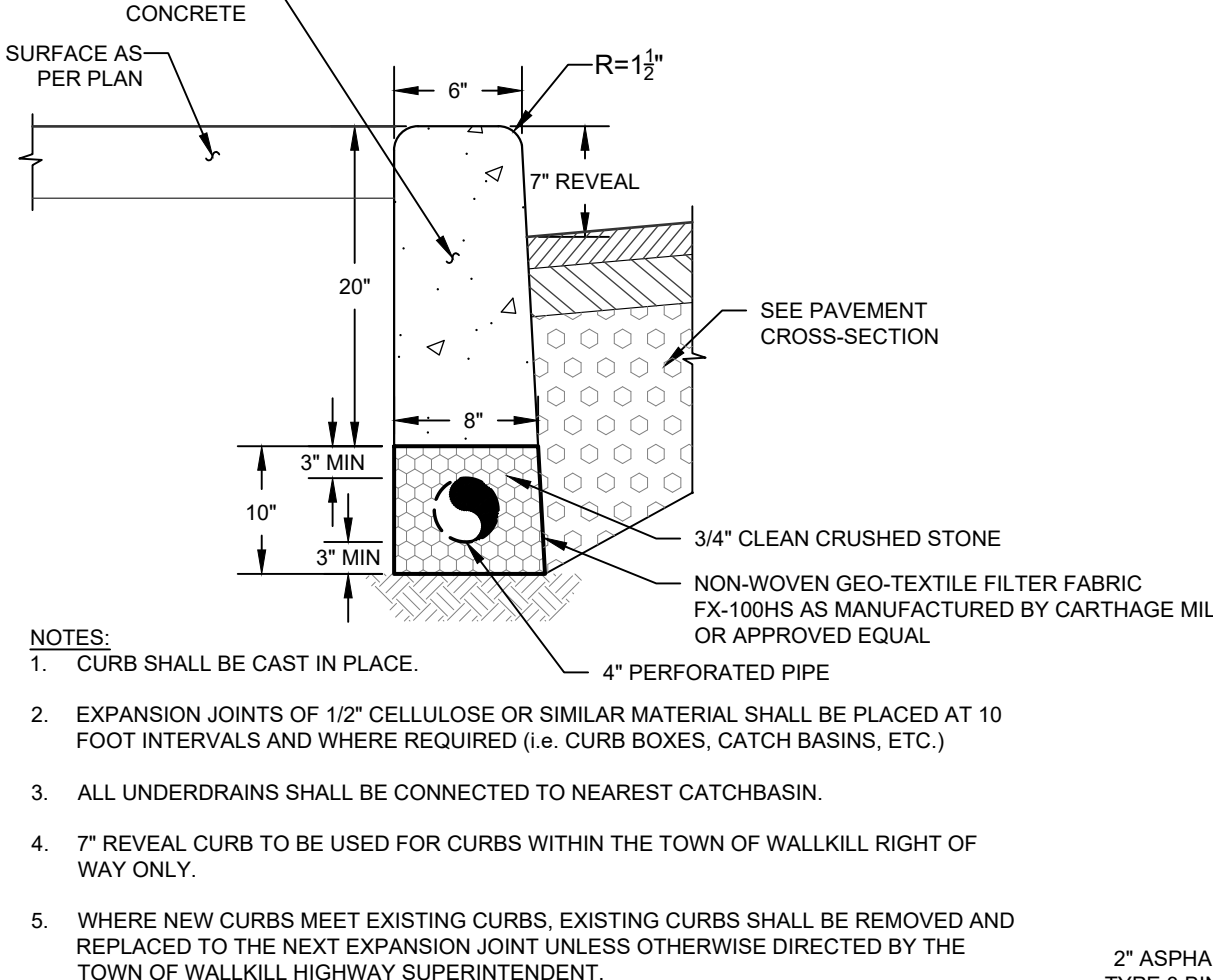
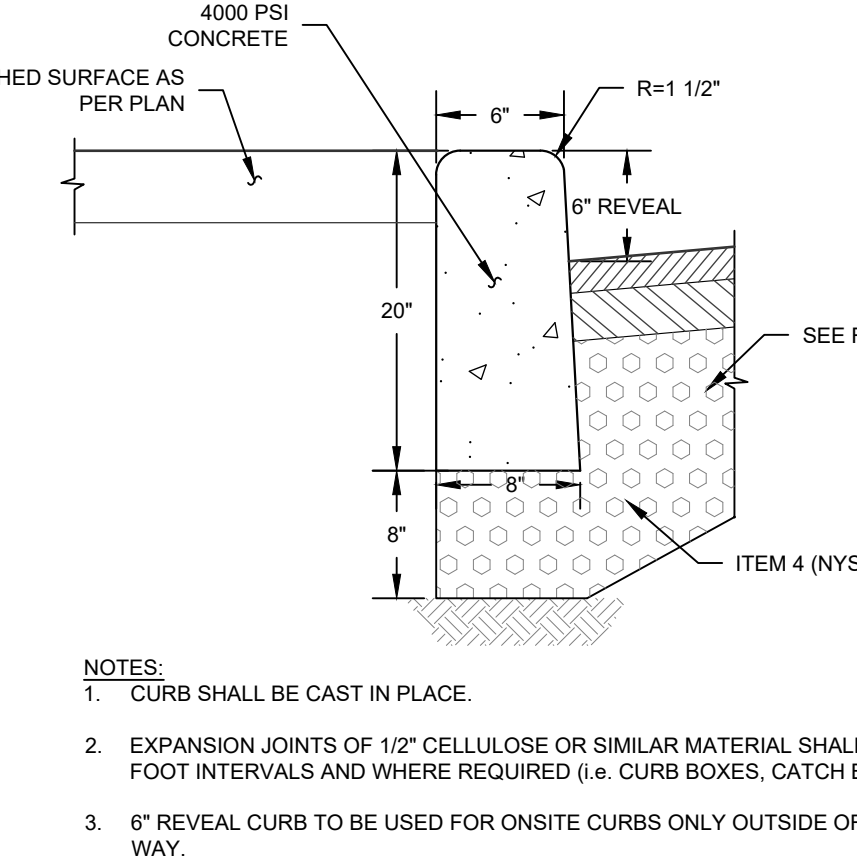
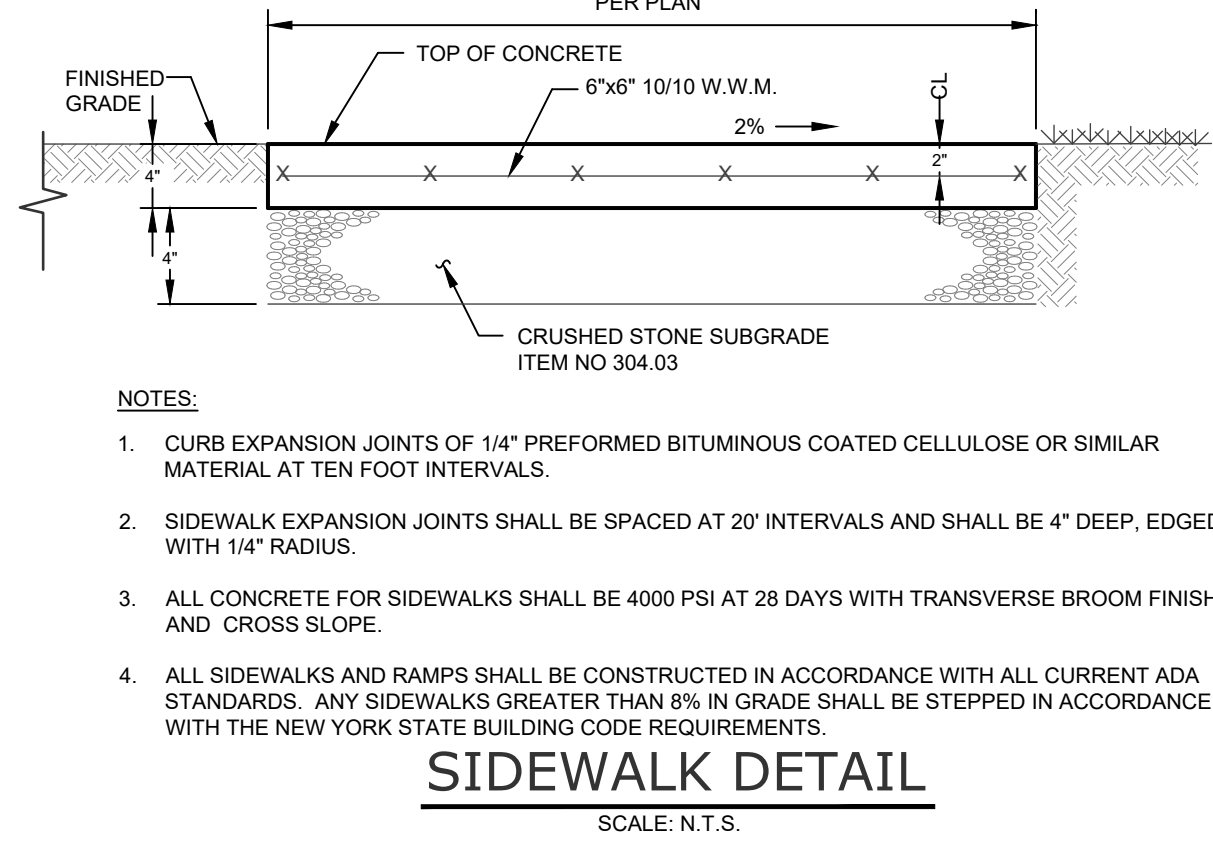
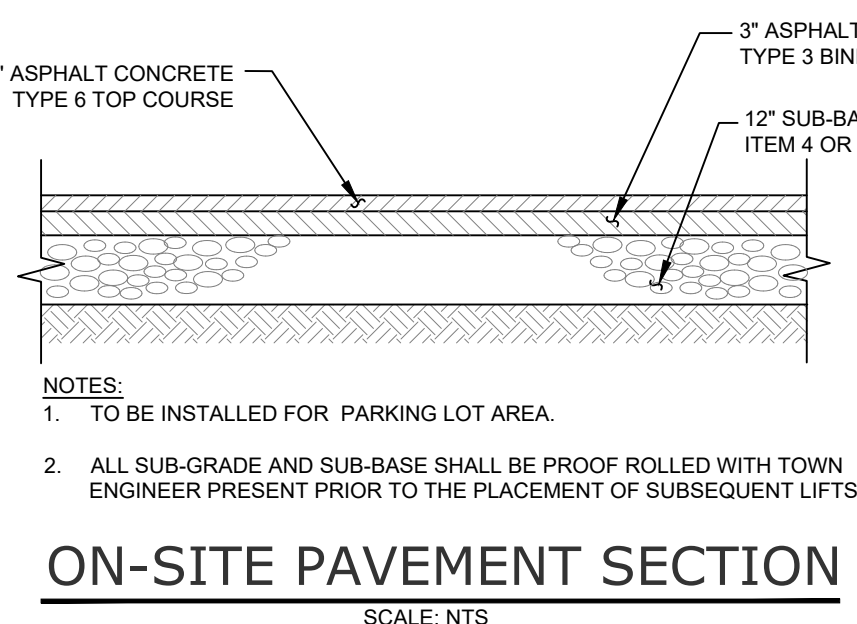
ADAMS FAIRACRE FARMS
636 NYS ROUTE 211 EAST
TOWN OF WALKILL
ORANGE COUNTY, NEW YORK

JOB #: 1378.02
DATE: 09/21/2020
REVISION: 14 - 01/18/2022

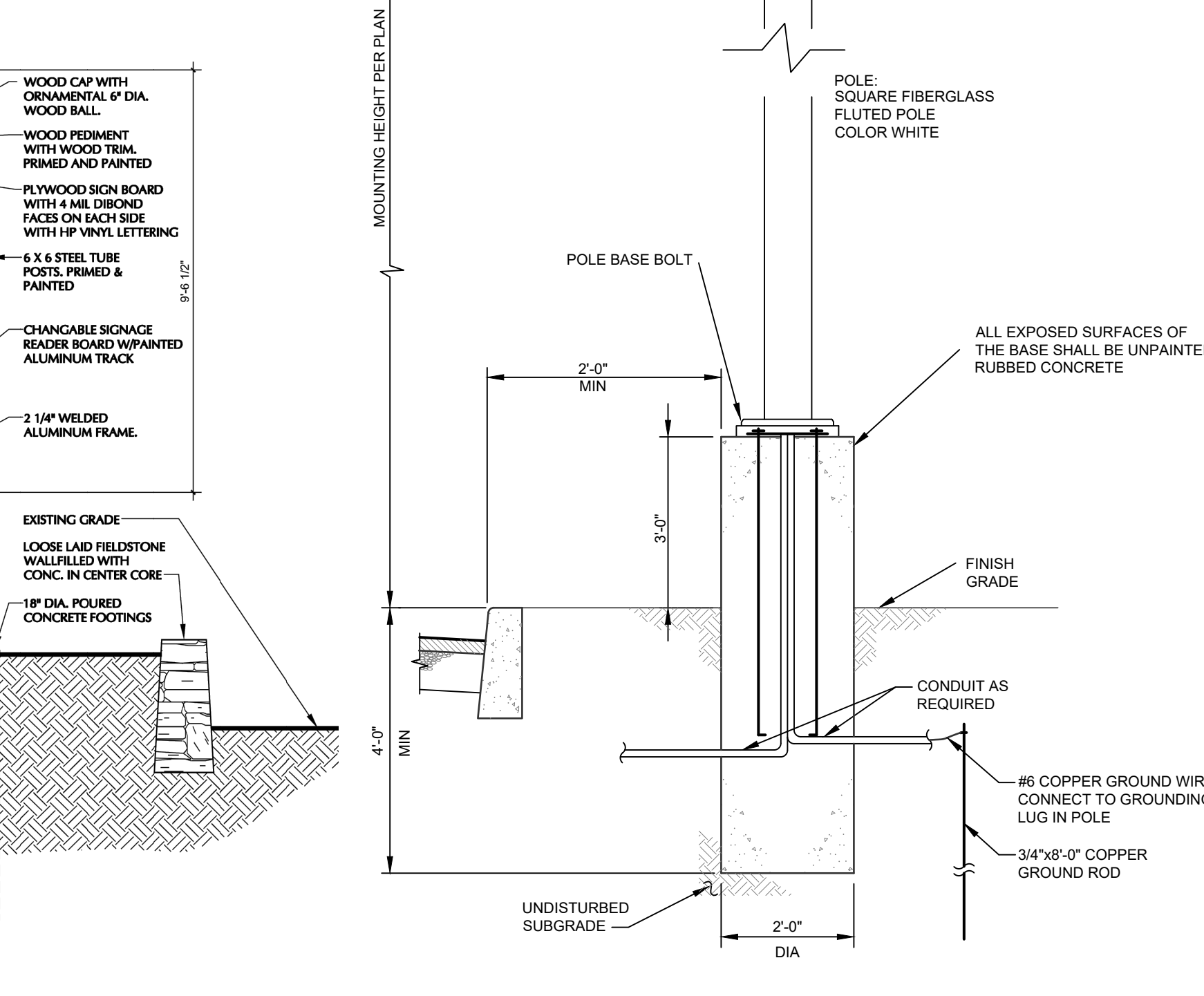
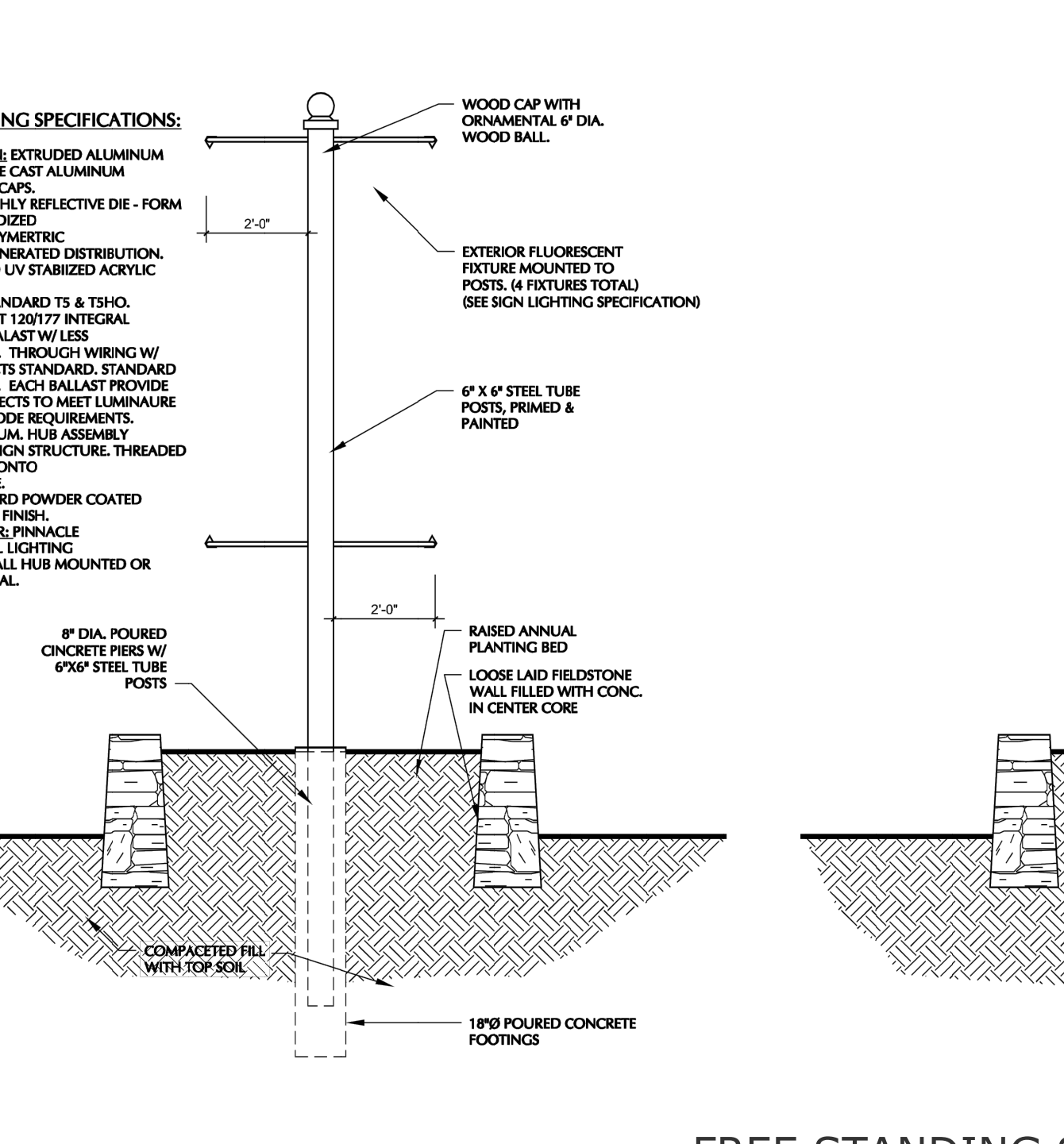
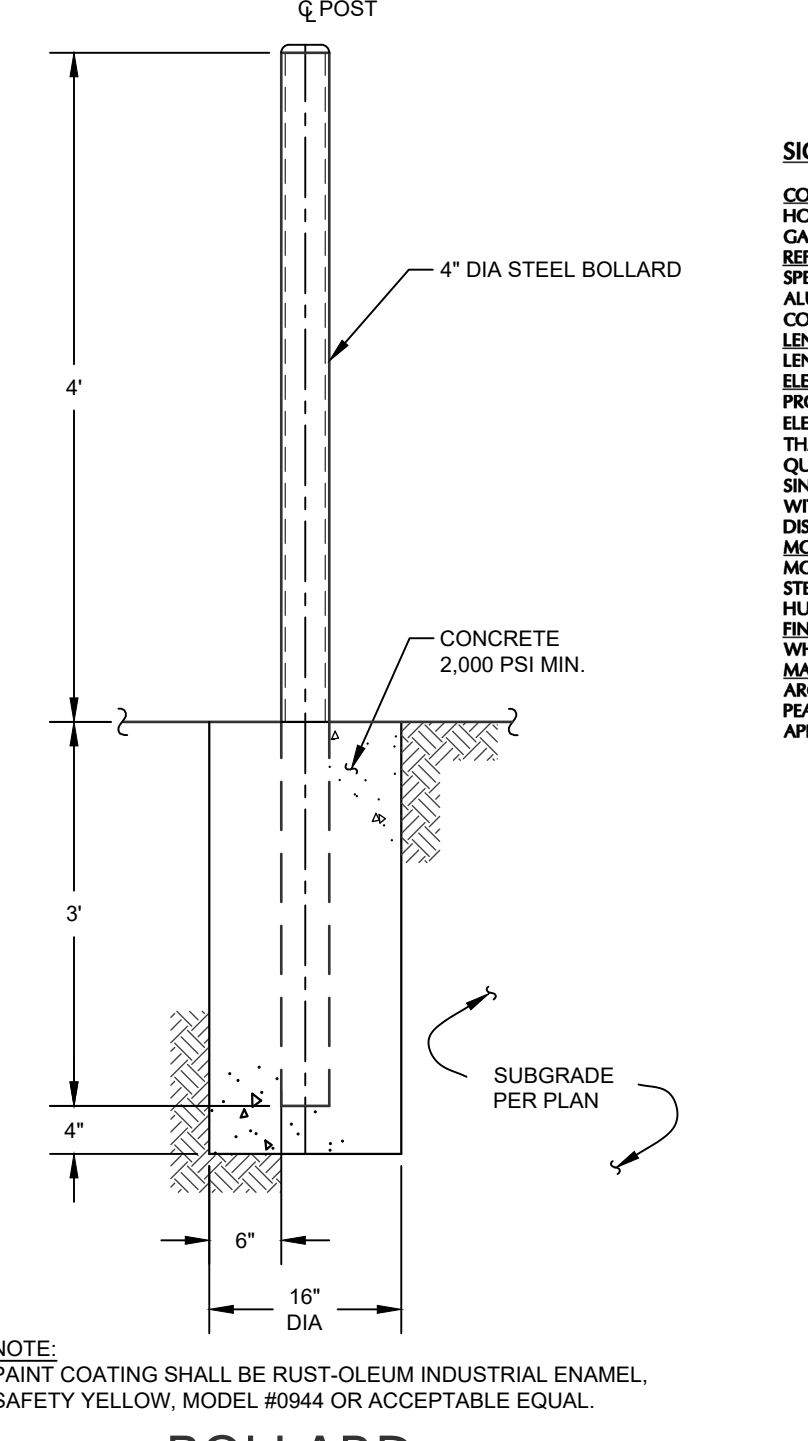
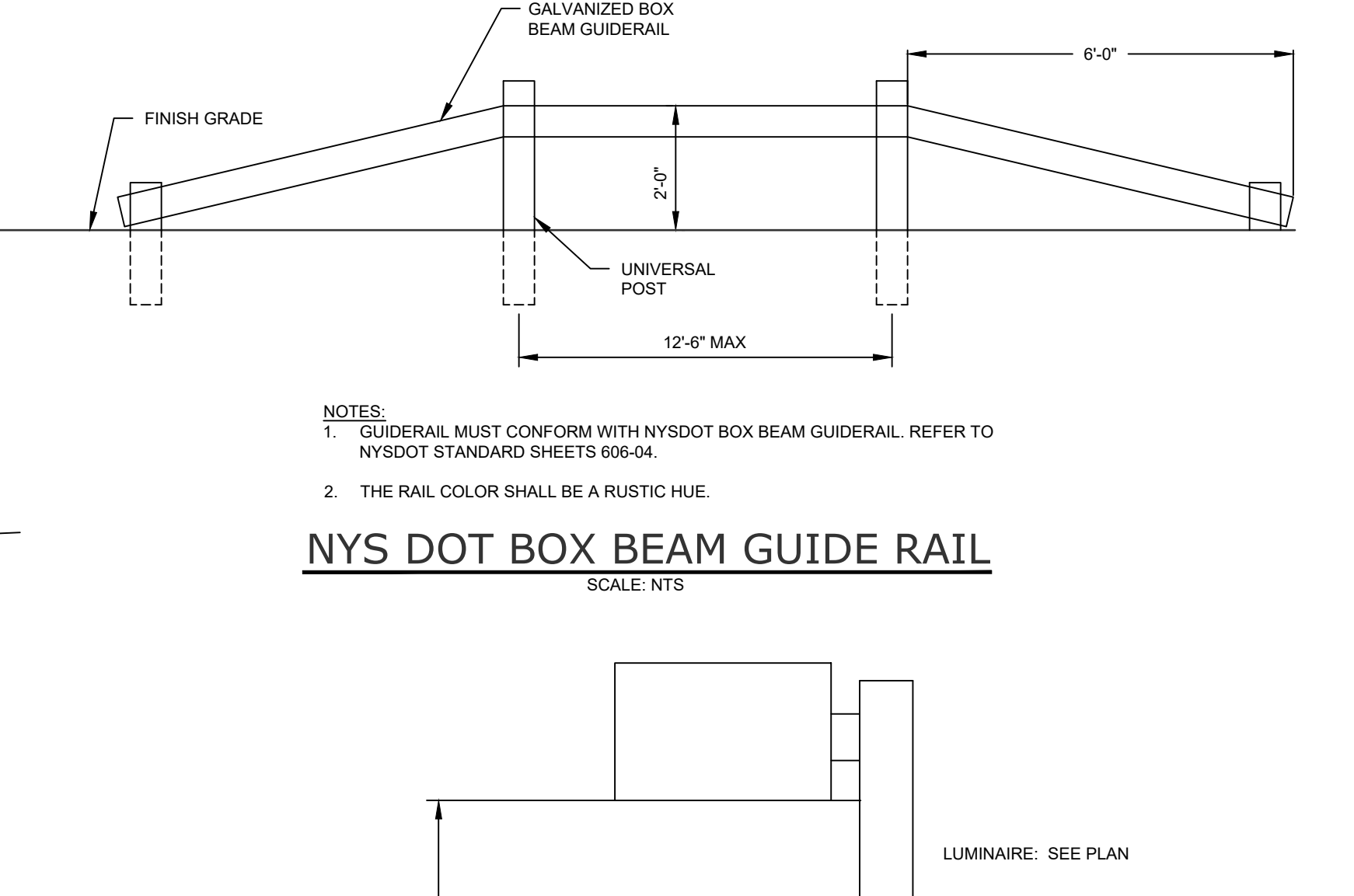
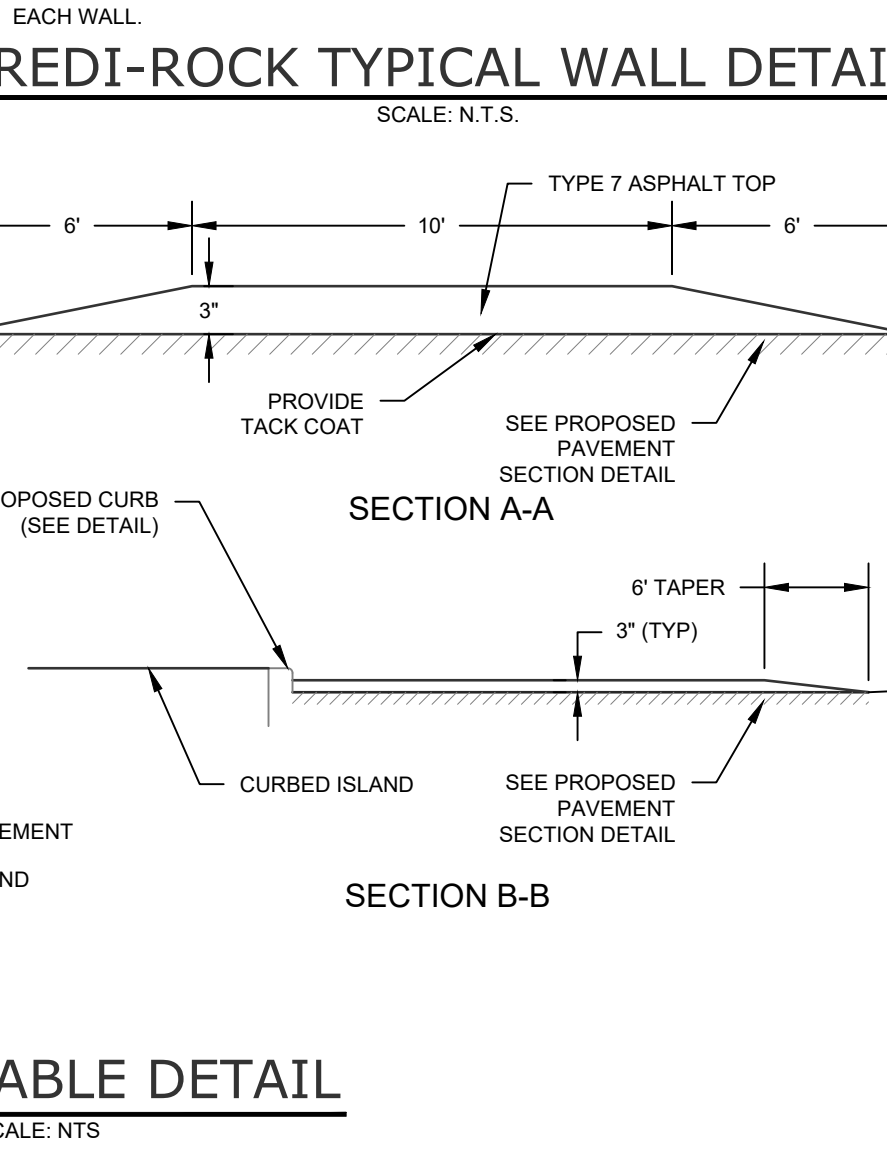
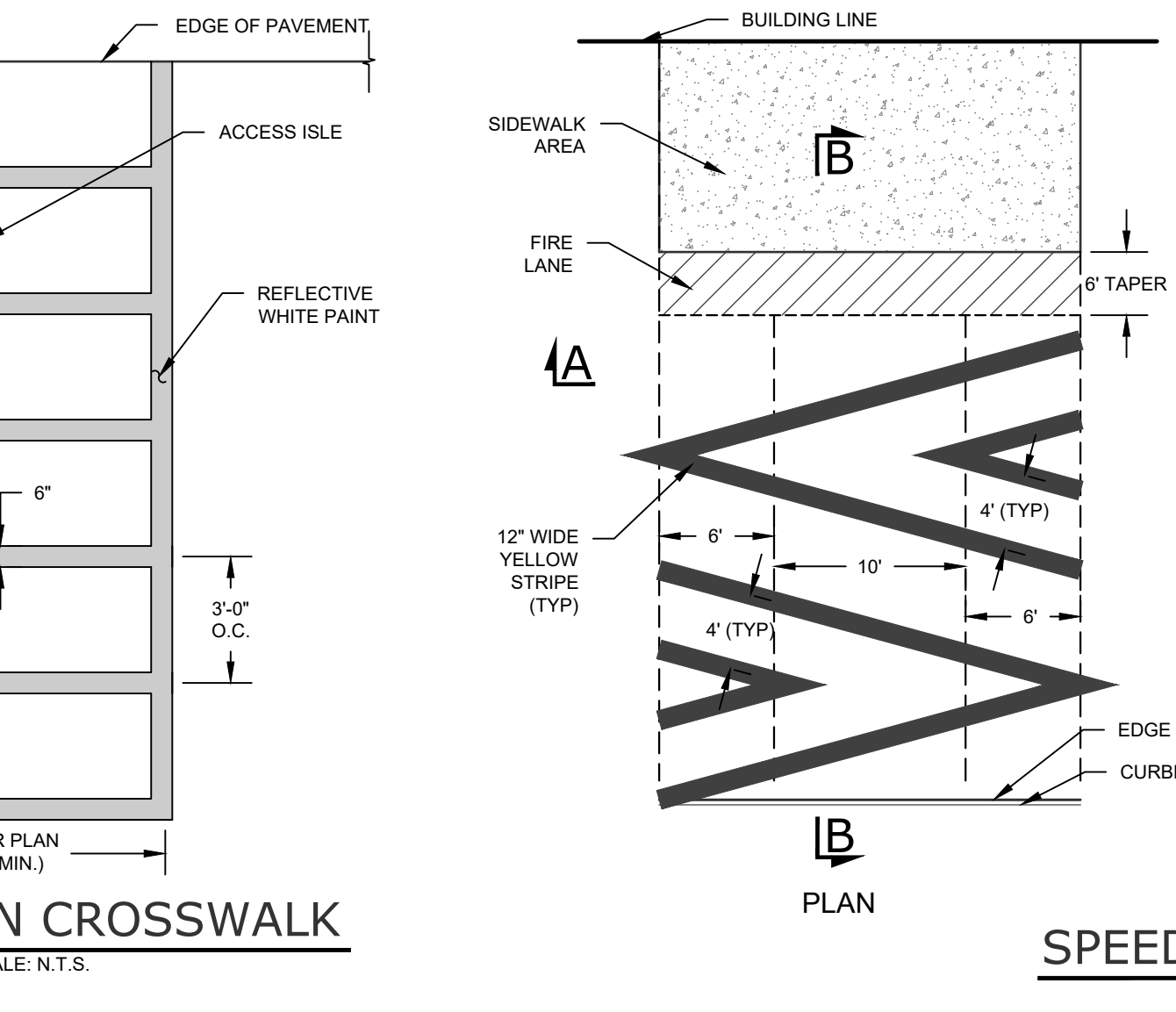
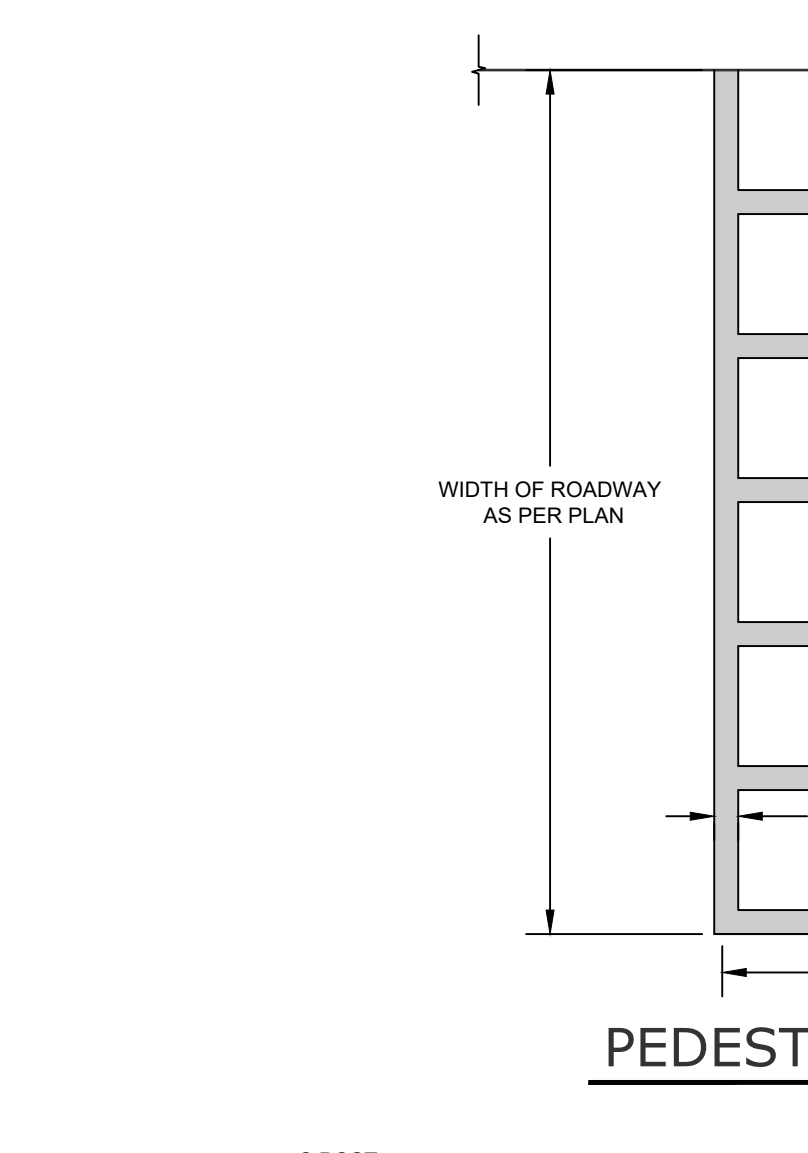
DRAWN BY: JS
SCALE: AS NOTED
TAX LOT: 41-1-61.22

C-303

TOWN OF WALKILL PB SHEET 11 OF 54



SIGN	TEXT	M.U.T.C.D. No.	SIZE OF SIGN	TYPE OF MOUNT	DESCRIPTION
NP	NO PARKING ANY TIME	P1-1C	12" x 18"	GR MTD	WHITE BACKGROUND RED LETTERING
STOP	STOP	R1-1C	36" x 36"	GR MTD	RED BACKGROUND WHITE LEGEND
HC	RESERVED PARKING	M12-1	18" x 24"	GR MTD	BLUE BACKGROUND BLACK SYMBOL WHITE LETTERING
FL	NO PARKING FIRE LANE	R8-31	12" x 18"	BLDG MTD	WHITE BACKGROUND RED LETTERING
OPU	RESERVED PARKING ONLY PICK UP ONLY		12" x 18"	GR MTD	WHITE/GREEN BACKGROUND WHITE/GREEN LETTERING
NLT	NO LEFT TURN	R3-2	24" x 24"	GR MTD	WHITE BACKGROUND BLACK SYMBOL RED CIRCLE & DIAG.
ND	NO DELIVERIES ALL DELIVERIES TO USE ROUTE 211		24" x 24"	GR MTD	WHITE BACKGROUND RED LETTERING
TE	TRUCK EXIT ALL TRUCKS MUST EXIT AT ROUTE 211		24" x 24"	GR MTD	WHITE BACKGROUND RED LETTERING
PED	STATE LAW YIELD TO WITHIN CROSSWALK	R1-6	12" x 36"	GR MTD WITH FLEXIBLE PORTABLE BASE	YELLOW & WHITE BACKGROUND RED YIELD SYMBOL BLACK LETTERING



Dig Safely. New York
Call 811
before you dig

No.	DATE	DESCRIPTION
1	10/26/20	REVISED PER ENGINEER COMMENTS DATED 9/28/20
2	01/13/21	REVISED UNDERGROUND STORMWATER SYSTEM
3	02/12/21	REVISED FOR OGDH WATERMAIN EXTENSION
4	02/03/21	REVISED PER ENGINEER COMMENTS
5	02/12/21	ISSUED FOR FINAL APPROVAL
6	04/06/21	REVISED PER MHE(2/12) & OGDH(3/2) COMMENTS
7	04/13/21	REVISED PER MHE(4/9) COMMENTS
8	04/27/21	REVISED PER MHE PB WORKSHOP COMMENTS
9	06/14/21	FIELD CHANGE #1
10	07/14/21	REVISED EROSION CONTROL
11	09/01/21	FIELD CHANGE #2
12	09/15/21	FIELD CHANGE #3
13	09/23/21	REVISED PER TOWN COMMENTS
14	01/18/22	ADDED WINTER CONDITIONS TO EBS

DRAWING STATUS	ISSUE DATE: 01/18/2022
THIS SHEET IS PART OF THE PLAN SET ISSUED FOR	SHEET NUMBER
<input type="checkbox"/> CONCEPT APPROVAL	N/A OF N/A
<input checked="" type="checkbox"/> PLANNING BOARD APPROVAL	12 OF 13
<input type="checkbox"/> OGDH REALTY SUBDIVISION APPROVAL	N/A OF N/A
<input type="checkbox"/> OGDH WATERMAIN EXTENSION APPROVAL	N/A OF 3
<input type="checkbox"/> NYSDEC APPROVAL	N/A OF N/A
<input type="checkbox"/> NYS DOT APPROVAL	N/A OF N/A
<input type="checkbox"/> OTHER	N/A OF N/A
<input type="checkbox"/> FOR BID	N/A OF N/A
<input type="checkbox"/> FOR CONSTRUCTION	N/A OF N/A

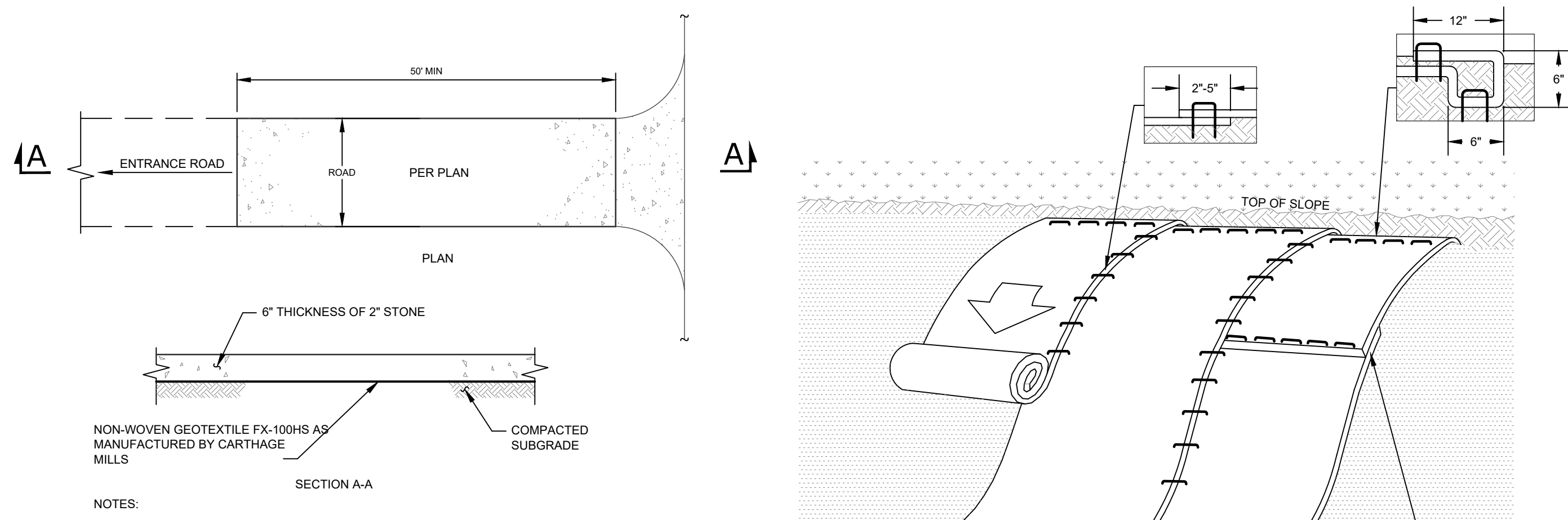
COPIES OF THIS DOCUMENT WITHOUT AN ACTUAL OR FACSIMILE OF THE ENGINEER'S SIGNATURE AND AN ORIGINAL STAMP IN RED OR BLUE INK SHALL BE CONSIDERED INVALID.

UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DOCUMENT BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER IS A VIOLATION OF SECTION 7209 SUBSECTION 2 OF THE NEW YORK STATE EDUCATION LAW.

JAY SAMUELSON, P.E.
NEW YORK LICENSE # 080023

ORIGINAL SCALE IN INCHES

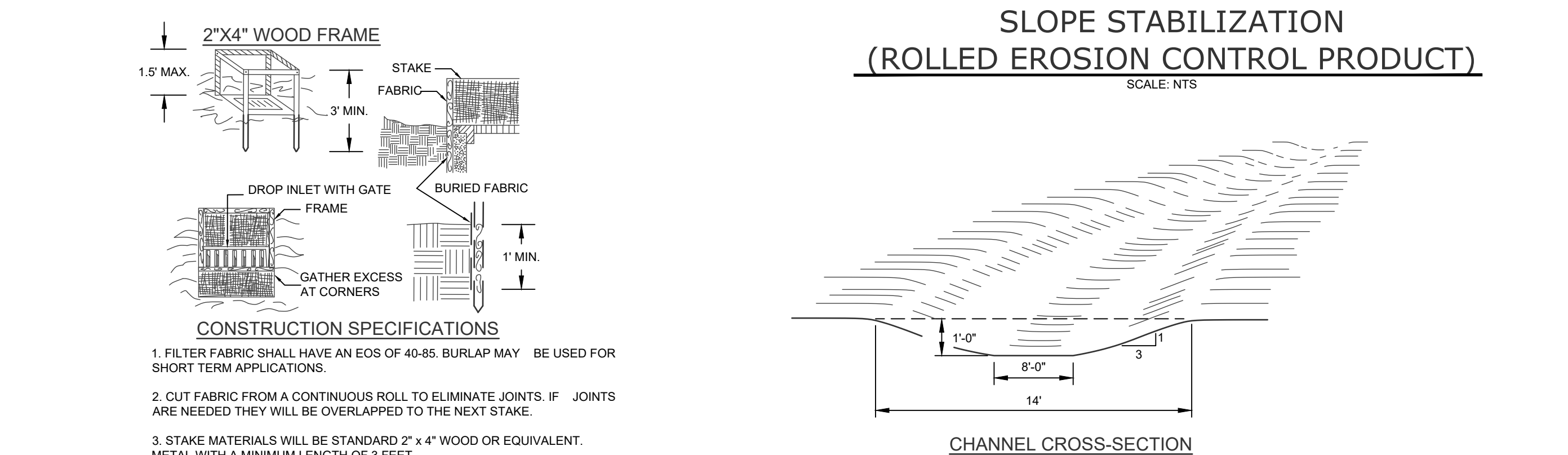
ENGINEERING & SURVEYING PROPERTIES	MONTGOMERY OFFICE 71 CLINTON STREET MONTGOMERY, NY 12549 Ph: (845) 457-7727 WWW.EP-PC.COM
ADAMS FAIRACRE FARMS 636 NYS ROUTE 211 EAST TOWN OF WALKILL ORANGE COUNTY, NEW YORK	DETAILS
JOB #: 1378.02	DRAWN BY: JS
DATE: 09/21/2020	AS NOTED
REVISION: 14 - 01/18/2022	TAX LOT: 41-1-61.22
TOWN OF WALKILL PB SHEET 12 OF 54	



- NOTES:**
- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
 - WIDTH - 24 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
 - SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
 - MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OF FLOWS OR SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRED PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
 - WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
 - PERIODIC INSPECTIONS AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE

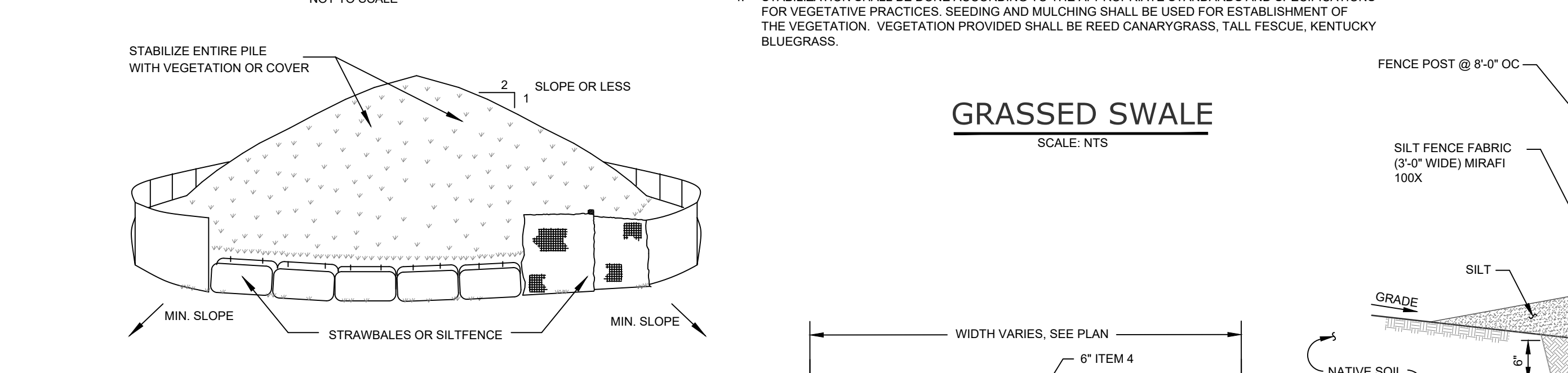
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- CONSTRUCTION SPECIFICATIONS:**
- FILTER FABRIC SHALL HAVE AN EOS OF 40-65. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
 - CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
 - STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
 - SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPACES GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
 - FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
 - A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY. MAXIMUM DRAINAGE AREA 1 ACRE.

FILTER FABRIC DROP INLET PROTECTION

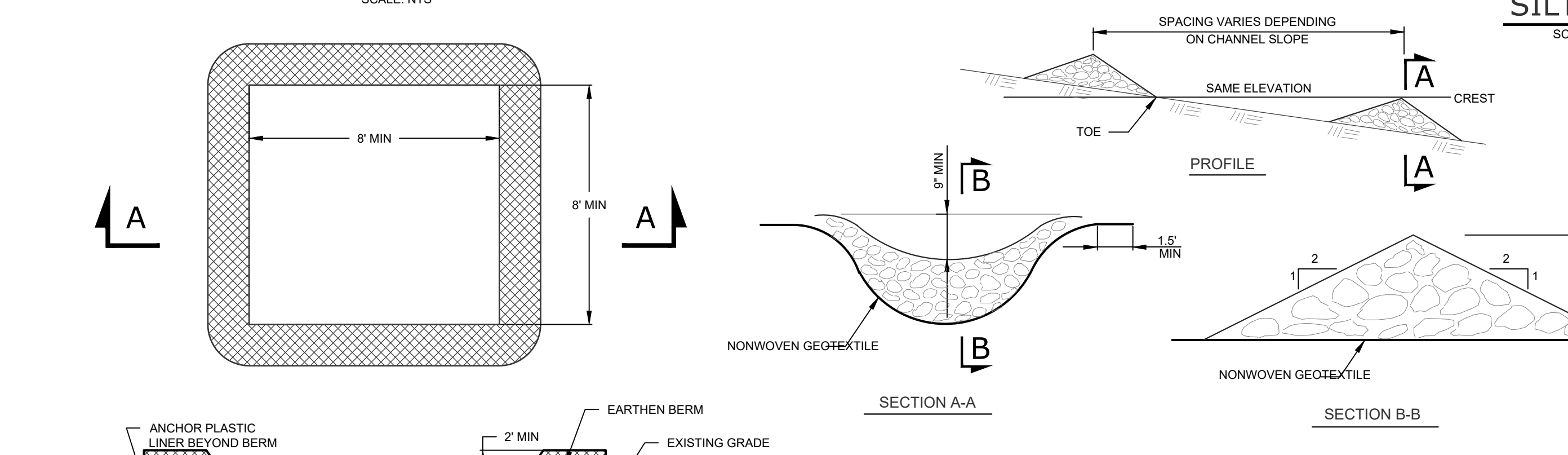
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- NOTES:**
- AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
 - MAXIMUM SLOPE OF STOCKPILE SHALL BE 1:2.
 - UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE SURROUNDED A WITH EITHER SILT FENCING OR STRAWBALES, THEN STABILIZED WITH VEGETATION OR COVERED.
 - SEE SPECIFICATIONS (THIS MANUAL) FOR INSTALLATION OF SILT FENCE.

SOIL STOCKPILING

SCALE: NTS



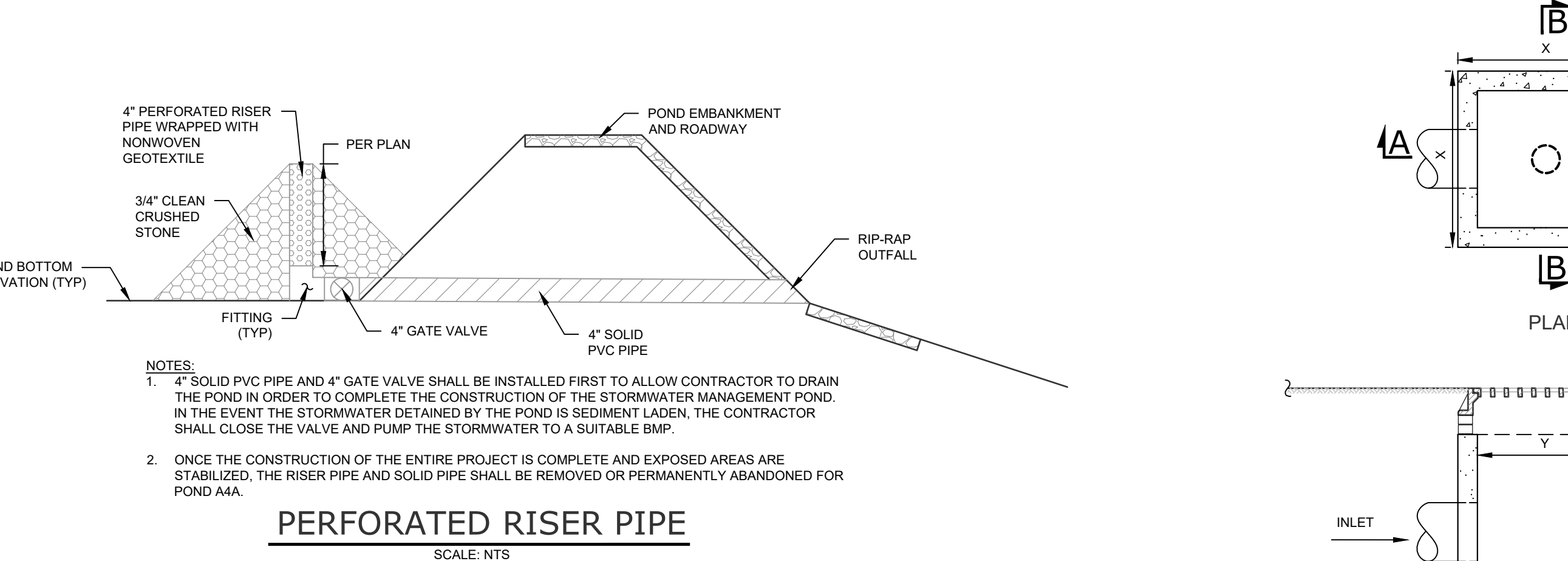
- NOTE:**
- PLASTIC LINER SHALL BE INSPECTED DAILY TO ENSURE THAT THERE ARE NO HOLES OR TEARS. IF ANY HOLES OF TEARS ARE FOUND THE LINER SHALL BE REPLACED AND CLEANING OF THE WASHOUT FACILITY.
 - WASHOUT FACILITY SHALL BE LOCATED A MINIMUM OF 100 FEET FROM DRAINAGE SWALES, STORM DRAIN INLETS, WETLANDS, STREAMS OR OTHER SURFACE WATERS.
 - ACCUMULATED HARDENED MATERIAL SHALL BE REMOVED WHEN 75% OF THE STORAGE CAPACITY OF THE STRUCTURE IS FILLED. ANY EXCESS WASH WATER SHALL BE PUMPED INTO A CONTAINMENT VESSEL, AND PROPERLY DISPOSED OF.
 - DISPOSE OF THE HARDENED MATERIAL OFF-SITE IN A CONSTRUCTION/DEMOLITION LANDFILL.

CONCRETE WASHOUT

SCALE: NTS

STONE CHECK DAM

SCALE: NTS



PERFORATED RISER PIPE

SCALE: NTS

EROSION AND SEDIMENTATION CONTROL NOTES

- SITE DISTURBANCE SHALL BE LIMITED TO THE MINIMUM NECESSARY GRADING AND VEGETATION REMOVAL REQUIRED FOR CONSTRUCTION.
- TEMPORARY EROSION CONTROL MEASURES, INCLUDING SILT FENCES AND/OR STRAW BALE DIKES, SEDIMENT BASIN, TEMPORARY OVERFLOW SWALE DRAINAGE STRUCTURES, AND RIP-RAP PROTECTION SHALL BE INSTALLED PRIOR TO GROUND DISTURBANCE FOR GRADING AND CONSTRUCTION.
- ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED AS SOON AS PRACTICAL FOLLOWING DISTURBANCE TO STABILIZE BARE SOIL AND PROMOTE THE PROMPT RE-ESTABLISHMENT OF VEGETATION.
 - AN ADEQUATE SEEDED SHALL BE PREPARED BY SCARIFYING COMPACTED SOIL AND REMOVING SURFACE DEBRIS AND OBSTACLES.
 - LIME SHALL BE APPLIED SUFFICIENTLY TO ATTAIN A SOIL ACIDITY OF 6.0 TO 7.0.
 - FERTILIZER (5-10-10 MIXTURE OR EQUIVALENT) SHALL BE APPLIED PER SOIL TEST RESULTS OR AT A RATE OF 600 LBS. PER ACRE.
 - DISTURBED AREAS WHICH WILL REMAIN TEMPORARILY FALLOW FOR PERIODS GREATER THAN 30 DAYS SHALL BE SEEDED AT THE FOLLOWING RATE TO PRODUCE TEMPORARY GROUND COVER: 30 LBS. RYEGRASS (ANNUAL OR PERENNIAL) PER ACRE. DURING THE WINTER, USE 100 LBS. CERTIFIED "ARBORETOUR" WINTER RYE (CERIAL RYE) PER ACRE.
 - PERMANENT SEEDED SHALL BE APPLIED ON 4" MIN TOPSOIL AT THE FOLLOWING RATE: 6 LBS. DURUM BIRDFOOT TREFOIL, OR COMMON WHITE CLOVER PER ACRE PLUS 20 LBS. TALL FESCUE PER ACRE PLUS 2 LBS. REDTOP OR 5 LBS. RYEGRASS (PERENNIAL) PER ACRE.
 - ALL SEEDED SHALL BE PERFORMED USING THE BROADCAST METHOD OR HYDROSEEDING, UNLESS OTHERWISE APPROVED.
- ALL DISTURBED AREAS SHALL BE STABILIZED SUBSEQUENT TO SEEDED BY APPLYING 2 TONS OF STRAW MULCH PER ACRE. STRAW MULCH SHALL BE ANCHORED BY APPLYING 750 LBS OF WOOD FIBER MULCH PER ACRE WITH A HYDROSEEDER, OR TUCKING THE MULCH WITH SMOOTH DISCS OR OTHER MULCH ANCHORING TOOLS TO A DEPTH OF 3". MULCH ANCHORING TOOLS SHALL BE PULLED ACROSS SLOPES ALONG TOPOGRAPHIC CONTOURS.
- ALL EROSION AND SEDIMENTATION CONTROL MEASURES AND DRAINAGE STRUCTURES SHALL BE INSPECTED FOLLOWING RAIN EVENT, AND MAINTENANCE AND REPAIRS SHALL BE PERFORMED PROMPTLY TO MAINTAIN PROPER FUNCTION. TRAPPED SEDIMENT SHALL BE REMOVED AND DEPOSITED IN A PROTECTED AREA IN A PROPER MANNER WHICH WILL NOT RESULT IN EROSION.
- TEMPORARY CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED AND GROUND COVER IS COMPLETELY REESTABLISHED. FOLLOWING STABILIZATION, TEMPORARY MEASURES SHALL BE REMOVED TO AVOID INTERFERENCE WITH DRAINAGE.
- ALL STORM INLETS TO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION.
- SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED UNDER SUITABLE CONDITIONS AND IN SUFFICIENT QUANTITIES.
- MULCH NETTING SUCH AS PAPER, JUTE, EXCELSIOR, COTTON OR PLASTIC MAY BE USED. STAPLE IN PLACE, OVER HAY OR STRAW MULCH. USE A DEGRADABLE NETTING IN AREAS TO BE MOVED.
- STABILIZATION OF STEEP SLOPES SHALL BE ACHIEVED BY APPLYING LIME AND FERTILIZER AS SPECIFIED ABOVE AND SEEDED WITH THE FOLLOWING MIXTURE:

MATERIAL	LBS./ACRE
PERENNIAL RYE GRASS	30
CROWN VETCH	12
SPREADING FESCUE	25
- OPTIMUM SEEDED PERIODS ARE 3/15-6/1 AND 8/1-10/15.
- ALL UPSTREAM SITE WORK AND STABILIZATION SHALL OCCUR BEFORE CONNECTING UNDERGROUND DETENTION/STORAGE FACILITY TO PREVENT ANY ERODED SEDIMENTS FROM ENTERING UNDERGROUND FACILITY.
- IN ACCORDANCE WITH THE NYSDEC SPOPS G-20-001, THERE SHALL BE NO MORE THAN 5 ACRES DISTURBED AT ANY TIME.



CATCH BASIN (CONDITIONS OF HIGH GROUNDWATER)

SCALE: NTS

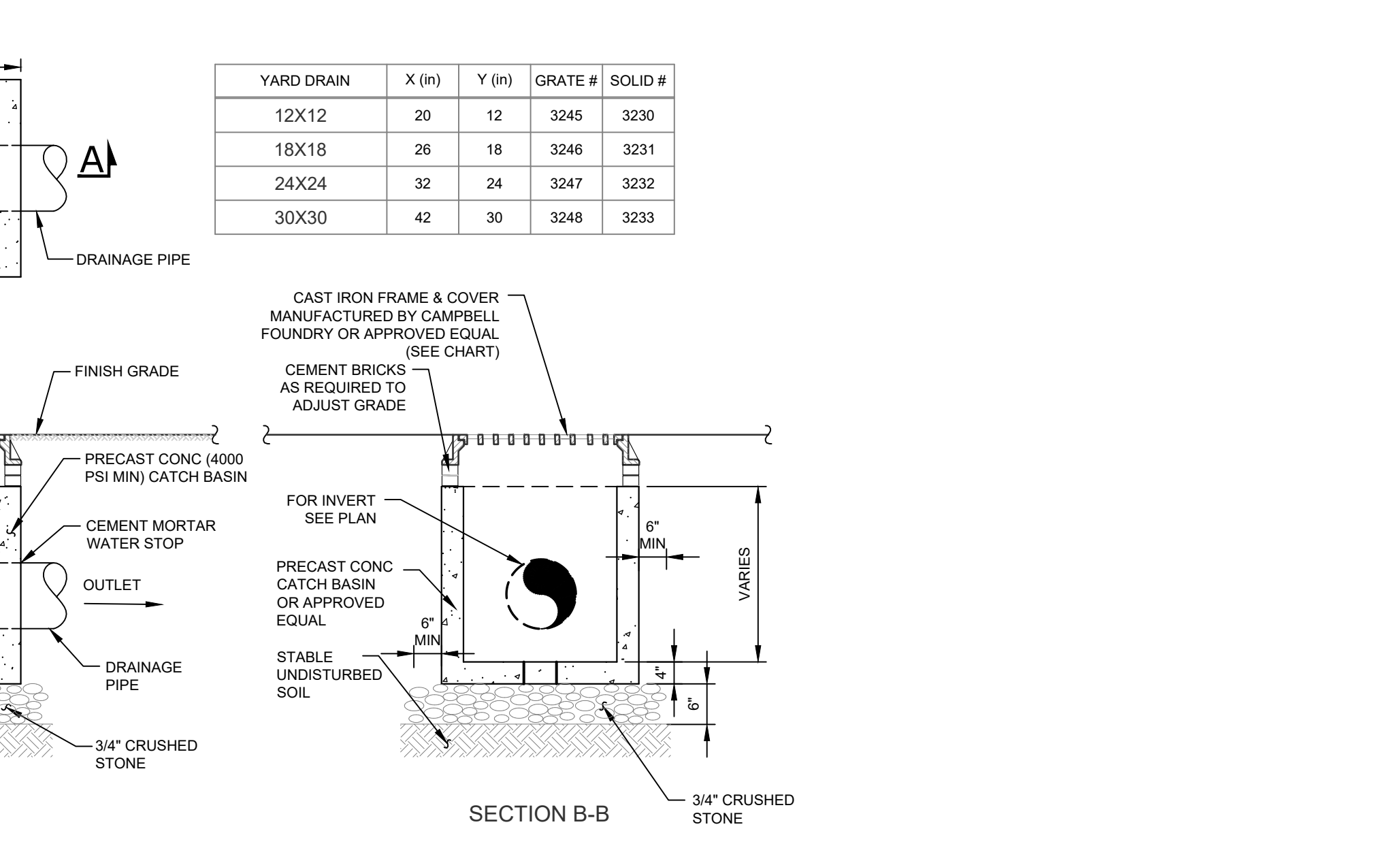
SOIL RESTORATION NOTES

Type of Soil Disturbance	Soil Restoration Requirement	Comments / Examples
No Soil Disturbance	Restoration not permitted	Preservation of Natural Features
Minimal Soil Disturbance	Restoration not required	Clearing and Grubbing
Areas where topsoil is stripped only - NO change in grade.	HSG A & B Apply 6" of topsoil	Protect Areas from any ongoing construction activities.
Areas of cut or fill	HSG A & B Aerate* and apply 6" of topsoil	Apply full Soil Restoration**
Heavy traffic areas on site (especially in a zone 5'-25' around buildings, but not within the 5' perimeter around the foundation walls)	Apply full Soil Restoration** (de-compaction and compost enhancement)	
Areas where Runoff Reduction and/or Infiltration Practices are applied.	Restoration not required, but may be applied to enhance the reduction specified for appropriate practices	Keep construction equipment from crossings these areas. To protect newly installed practice from any ongoing construction activities construct a single phase operation fence area.
Areas where existing impervious area will be converted to pervious area	Soil restoration is required on redevelopment projects. Apply full Soil Restoration** (de-compaction and compost enhancement)	

- NOTES:**
- THIS FILL SECTION IS ONLY TO BE UTILIZED IN LIMITED AREAS AND ONLY UPON AUTHORIZATION OF THE ENGINEER AND NOT INTENDED FOR A FULL SITE FILL SECTION.
 - IF A STABLE (NON-YIELDING) SUBGRADE CANNOT BE ACHIEVED IN AREAS OF CUT, (CONFIRMED BY PROOF ROLL WITH ENGINEER PRESENT), THE AREA SHALL BE OVER-EXCAVATED TO THE SUBGRADE.

FILL SECTION IN AREAS OF CUT WITH NON-STABLE (YIELDING) SUBGRADE

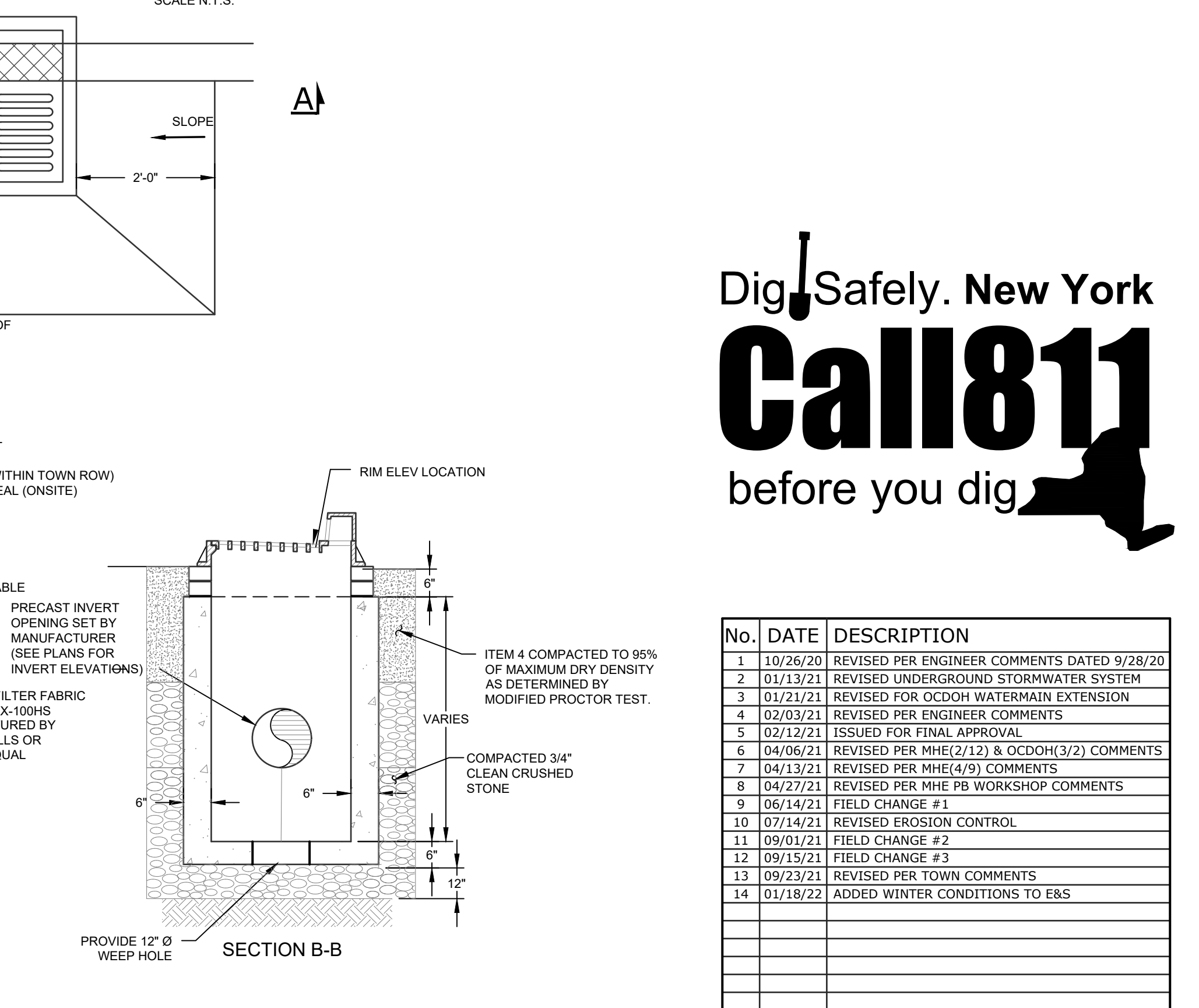
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- NOTES:**
- BACKFILL AROUND CATCH BASIN TO BE COMPACTED IN MAX 6" LIFTS.
 - PRECAST CONCRETE CATCH BASIN COMPONENTS BY WOODARDS CONCRETE PRODUCTS, OR APPROVED EQUAL.

YARD DRAIN

SCALE: NTS



CONSTRUCTION STATUS

NO.	DATE	DESCRIPTION
1	10/26/20	REVISED PER ENGINEER COMMENTS DATED 9/28/20
2	01/31/21	REVISED UNDERGROUND STORMWATER SYSTEM
3	02/12/21	REVISED FOR OGDON WATERMAIN EXTENSION
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12	09/15/21	FIELD CHANGE #3
13	09/23/21	REVISED PER TOWN COMMENTS
14	01/18/22	ADDED WINTER CONDITIONS TO EBS

EARTHWORK CONSTRUCTION NOTES

- ALL WORK TO BE PERFORMED TO THE SPECIFICATIONS OF THE TOWN OF WALKILL.
- ALL TOPSOIL, ROOTS, STUMPS AND OTHER DELETERIOUS MATERIAL SHALL BE REMOVED FROM ALL CONSTRUCTION AREAS.
- ALL FILL FOR POND CONSTRUCTION, BELOW BUILDINGS AND PAVEMENT TO BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY MODIFIED PROCTOR COMPACTION TEST ASTM D1557.
- CELLAR, ROOF AND FOOTING DRAINS SHALL CONNECT TO THE STORM DRAINAGE SYSTEM OR OTHER FREE-FLOWING OUTLET AT A MINIMUM SLOPE OF 0.5%. FOOTING DRAIN SHALL BE INSTALLED BENEATH BOTTOM OF FOOTING.
- COMPLETION OF GRADING AND BASIN. BERMS AFTER OCTOBER 15 SHALL REQUIRE MULCHING AND ANCHORING IN ACCORDANCE WITH NOTES ENTITLED "SEDIMENTATION EROSION CONTROL".
- ALL SLOPES IN EXCESS OF 3H:1V SHALL BE CONSTRUCTED WITH LOCALLY AVAILABLE GLACIAL TILL. THE EMBANKMENT FILL SHALL BE PLACED IN SIX-INCH THICK LIFTS. EACH LIFT SHALL BE PLACED AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY MODIFIED PROCTOR COMPACTION TEST ASTM D1557.
- CONSTRUCT POND EMBANKMENT WITH LOCALLY AVAILABLE GLACIAL TILL WITH 3H:1V SIDE SLOPES OR AS NOTED ON PLAN. THE EMBANKMENT FILL SHALL BE PLACED IN A SIX-INCH THICK CONTINUOUS LAYER OVER THE ENTIRE LENGTH EACH LIFT SHALL BE PLACED AT OPTIMUM MOISTURE CONTENT AND COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY MODIFIED PROCTOR COMPACTION TEST ASTM D1557.
- STABILIZATION OF POND BERMS, AND ALL SLOPES IN EXCESS OF 3H:1V IN ACCORDANCE WITH "EROSION AND SEDIMENTATION CONTROL NOTES".
- ALL POND OUTLETS SHALL HAVE SEEPAGE CONTROL. COLLARS PLACED AT 1/3 AND 2/3 THE WIDTH OF THE EMBANKMENT.
- SOIL RESTORATION SHALL BE APPLIED TO ALL DISTURBED AREAS THAT WILL REMAIN AS PERVIOUS SURFACES. SOIL RESTORATION SHALL CONSIST OF THE FOLLOWING:
 - APPLY 3 INCHES OF COMPOST OVER SUBSOIL.
 - TILL COMPOST INTO SUBSOIL TO A DEPTH OF AT LEAST 12 INCHES USING A CAT-MOUNTED RIPPER, TRACTOR MOUNTED DISC, OR TILLER, MIXING, AND COMPOSTING AIR AND COMPOST INTO SUB-SOILS.
 - ROCK-PICK UNTIL UNLIFTED STONE/ROCK MATERIALS OF FOUR INCHES AND LARGER SIZE ARE CLEANED OFF THE SITE.
 - APPLY TOPSOIL TO A DEPTH OF 6 INCHES.
 - VEGETATE IN ACCORDANCE WITH LANDSCAPE PLAN.

DETAILS

ADAMS FAIRACRE FARMS 636 NYS ROUTE 211 EAST TOWN OF WALKILL ORANGE COUNTY, NEW YORK	
JOB #:	DRAWN BY:
1378.02	JS
DATE:	SCALE:
09/21/2020	AS NOTED
REVISION:	TAX LOT:
14 - 01/18/2022	41-61.22