

NOTE:

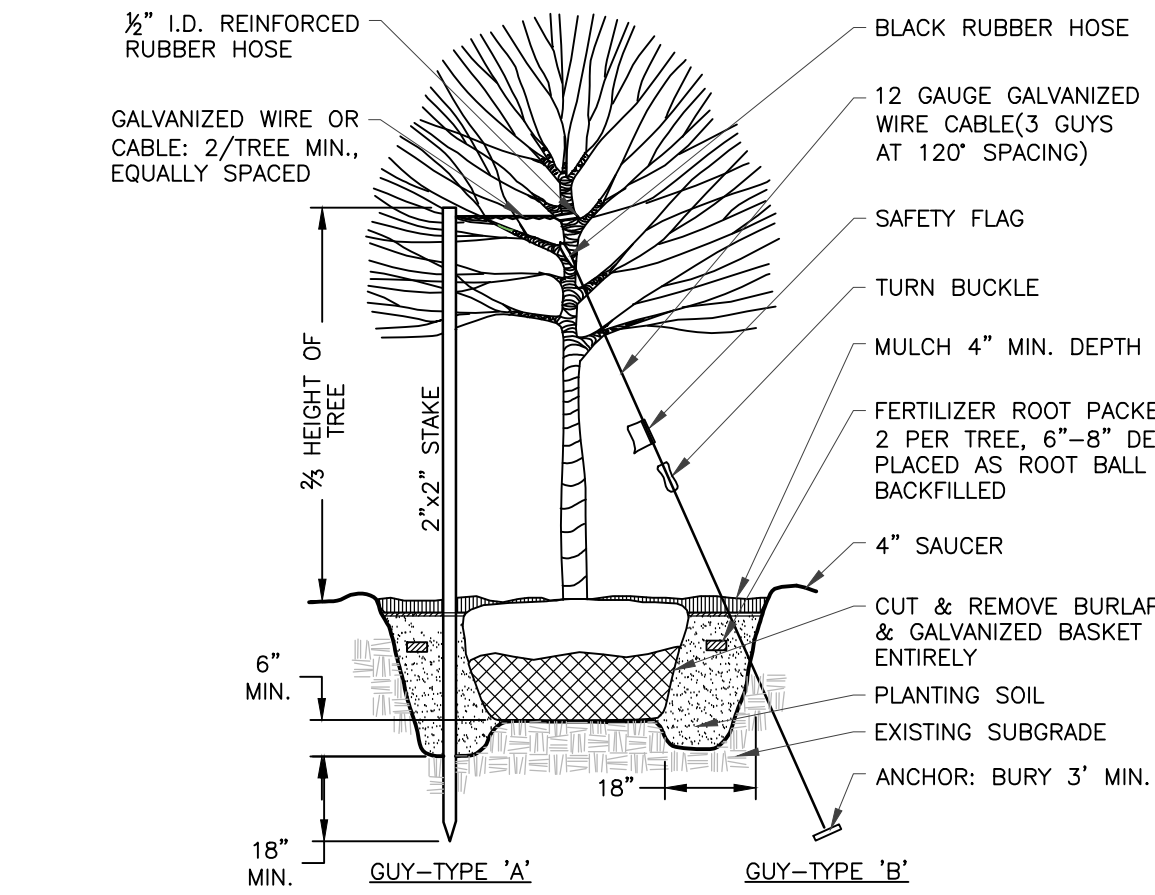
1. ALL REMOVAL AND RELOCATION OF EXISTING UTILITY POLES SHALL BE COORDINATED WITH THE CORRESPONDING UTILITY PROVIDER(S).
2. ALL TREES, STUMPS AND ANY OTHER ORGANIC DEBRIS TO BE REMOVED SHALL BE DISPOSED OF AT A LICENSED WASTE FACILITY.
3. CONTRACTOR TO REMOVE AND DISPOSE OF ANY BURIED STUMPS FOUND DURING CONSTRUCTION AT A LICENSED WASTE FACILITY.

PROJ. NO:1238.04
SCALE: AS SHOWN
DATE: 10/01/26

1. ALL NEW PLANT MATERIAL SHALL CONFORM TO THE MINIMAL GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. PROVIDE QUALITY, SIZE, GROWTH, VARIETY OF TREES AND SHRUBS INDICATED, AND ROOT BALL SIZE COMPLYING WITH APPLICABLE REQUIREMENTS OF ANSI Z60.1 AMERICAN STANDARD FOR NURSERY STOCK. ALL PLANTS SHALL BE NURSERY GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT.
2. PLANT SIZES: MEASURE TREES AND SHRUBS ACCORDING TO ANSI Z60.1 WITH BRANCHES AND TRUNKS OR CANES IN THEIR NORMAL POSITION. TAKE CALIPER MEASUREMENTS 6 INCHES ABOVE GROUND FOR TREES UP TO 4-INCH CALIPER SIZE. MEASURE MAIN BODY OF TREE OR SHRUB FOR HEIGHT AND SPREAD; DO NOT MEASURE BRANCHES OR ROOTS 10'-10'-10'.
3. ALL CONTAINER GROWN PLANTS SHALL BE SIZED ACCORDING TO ANSI Z60.1 FOR TYPE AND SIZE OF PLANT REQUIRED. PLANTS SHALL BE PREMIUM QUALITY, APPEAR 'FULL', OR 'HEAVY' WITHIN THEIR CONTAINER, AND BE REPRESENTATIVE OF THE CONTAINER SIZE SPECIFIED. PLANTS DEEMED TO BE SUBSTANDARD IN SIZE BY THE LANDSCAPE ARCHITECT WILL BE REJECTED.
4. ALL NEW PLANTS TO BE DULLED AND OVERLAPPED OR CONTAINER GROWN UNLESS OTHERWISE NOTED ON THE PLANT SCHEDULE.
5. TREES SHOULD BE FREELY DUG DURING THE SEASON OF PLANTING, MARCH 1ST TO MAY 1ST FOR SPRING PLANTING AND OCTOBER 15TH TO DECEMBER 15TH FOR FALL PLANTING. PLANTS KNOWN AS FALL DIG HAZARDS SHALL BE DUG IN THE SPRING ONLY.
6. THE CONTRACTOR SHALL SUPPLY ALL NEW PLANT MATERIAL IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON THE DRAWINGS.
7. IN GENERAL, PLANT SPECIES SUBSTITUTIONS WILL NOT BE ACCEPTED. IF SPECIFIED MATERIAL IS NOT OBTAINABLE, CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO THE LANDSCAPE ARCHITECT ALONG WITH PROPOSED SUBSTITUTION. ANY PROPOSED SUBSTITUTIONS OF PLANT SPECIES SHALL BE MADE WITH PLANTS OF EQUIVALENT OVERALL FORM, HEIGHT, SIZE, BRANCHING HABIT, FLOWER, LEAF, COLOR, FRUIT AND CULTURE, AND ONLY AFTER WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT.
8. THE LANDSCAPE ARCHITECT RETAINS THE RIGHT TO INSPECT TREES AND SHRUBS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEMS, INSECTS, INJURIES AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. CONTRACTOR SHALL REMOVE REJECTED TREES OR SHRUBS IMMEDIATELY FROM PROJECT SITE.
9. CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING UTILITY LINES PRIOR TO PLANTING AND SHALL REPORT ANY CONFLICTS TO THE LANDSCAPE ARCHITECT.
10. THE CONTRACTOR SHALL STAKE THE LOCATIONS OF ALL PROPOSED PLANT MATERIAL AND PLANT BEDS FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF PLANTING.
11. INSTALLED PLANTS SHALL BEAR THE SAME RELATIONSHIP TO PROPOSED GRADE AS THEY BORE TO PREVIOUS GRADE. NO TREES SHALL BE PLANTED BEFORE ACCEPTANCE OF ROUGH GRADING.
12. CONTRACTOR SHALL PROVIDE LONG LASTING, SLOW RELEASE STARTER FERTILIZER IN EACH PLANTING PIT FOR TREES, SHRUBS AND PERENNIALS.
13. ALL PLANT BEDS SHALL RECEIVE THREE INCHES (3") OF SHREDDED BARK MULCH. MULCH SHALL BE FREE FROM DELETERIOUS MATERIALS AND SUITABLE AS A TOP DRESSING OF TREES AND SHRUBS, CONSISTING OF DOUBLE HAMMERED SHREDDED BARK MULCH COMPRISED OF EITHER HARDWOOD OR SOFTWOOD SHREDDED BARK. SHREDDED BARK MULCH SHALL NOT EXCEED 3" IN GREATEST DIMENSION, AND SHALL BE DARK BROWN IN COLOR.
14. PLANTS SHALL BE DELIVERED ONLY AS THEY CAN BE INSTALLED IN REASONABLE TIME. ALL PLANTS ARE SUBJECT TO INSPECTION AT DELIVERY BY THE LANDSCAPE ARCHITECT / OWNER'S REPRESENTATIVE.
15. IF DISCREPANCIES EXIST BETWEEN THE NUMBER OF PLANTS DRAWN ON THE PLANTING PLAN AND THE NUMBER OF PLANTS IN THE PLANT LIST, THE PLANTING PLAN SHALL GOVERN.
16. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS PLANTED AND SHALL CONTINUE FOR A MINIMUM 30-DAY MONITORING PERIOD AFTER NOTIFICATION OF SUBSTANTIAL COMPLETION AND UNTIL FINAL ACCEPTANCE, WHICHEVER IS GREATER. MAINTENANCE INCLUDES PRUNING, WEEDING, WATERING, FERTILIZATION, AND RE-SEEDING AS NECESSARY.
17. PROTECT PLANTS FROM DAMAGE DUE TO LANDSCAPE OPERATIONS AND OPERATIONS OF OTHER CONTRACTORS AND TRADES. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TREAT, REPAIR, OR REPLACE DAMAGED PLANTINGS.
18. UPON COMPLETION OF ALL PLANTING WORK, THE CONTRACTOR SHALL REQUEST IN WRITING THAT THE LANDSCAPE ARCHITECT FORMALLY INSPECT THE PLANTING WORK. IF PLANT MATERIALS AND WORKMANSHIP ARE ACCEPTABLE, THE LANDSCAPE ARCHITECT WILL ISSUE A WRITTEN CERTIFICATE OF SUBSTANTIAL COMPLETION.
19. FOLLOWING THE ISSUANCE OF THE CERTIFICATE OF SUBSTANTIAL COMPLETION TO THE CONTRACTOR, THE CONTRACTOR SHALL MAINTAIN THE PLANTS FOR THE MAINTENANCE PERIOD SPECIFIED IN THIS SECTION.
20. ACCEPTANCE STANDARDS AT END OF THE MAINTENANCE PERIOD:
- 20.1. PLANTS SHALL BE FREE OF FROST CRACKS, SUN SCALD, DAMAGE DUE TO INSECTS, PESTS, AND DISEASE, STRUCTURAL DEFECTS; AND DAMAGE RESULTING FROM MACHINERY OR TOOLS. ALL PLANTS REGARDLESS OF THE SEASON OF REVIEW SHALL HAVE A MINIMUM OF 70 PERCENT HEALTHY, BALANCED BRANCHING STRUCTURE WITH A HEALTHY TERMINAL LEADER(S) WITH VISIBLE TERMINAL BUD(S). TREES SHALL BE PLUMB AND SHOW NO SIGNS OF UNIFORM SETTLING OR LEANING.
- 20.2. LAWN AREAS SHALL HAVE A HEALTHY, UNIFORM STAND OF GRASS FREE OF WEEDS, SURFACE IRREGULARITIES, WITH COVERAGE EXCEEDING 90% OVER ANY 10 SQ. FT. AND BARE SPOTS NOT EXCEEDING 5"X5"
21. GUARANTEE: CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL TO REMAIN ALIVE AND BE IN A HEALTHY, VIGOROUS CONDITION FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE OF PLANTING WORK, AGAINST DEFECTS INCLUDING DEATH AND UNSATISFACTORY WORK.
22. CONTRACTOR SHALL REPLACE ALL PLANTS THAT ARE MORE THAN 25% DEAD OR, AS DETERMINED BY THE LANDSCAPE ARCHITECT, ARE IN AN UNHEALTHY OR UNSUITABLE CONDITION. CONTRACTOR SHALL BEAR THE COST OF COMPLETE REPLACEMENTS. REPLACEMENTS SHALL BE OF THE SAME SIZE AND SPECIES AS SPECIFIED ON THE PLANTING LIST.
23. GRASS SEED: FRESH, CLEAN, DRY, NEW-CROP SEED COMPLYING WITH AGA'S "RULES FOR TESTING SEEDS" FOR PURITY AND GERMINATION TOLERANCES. PROVIDE SEED MIXTURE COMPOSED OF SPECIES, PROPORTIONS AND MINIMUM PERCENTAGES OF PURITY, GERMINATION, AND MAXIMUM PERCENTAGE OF WEED SEED, AS FOLLOWS:
- | COMMON NAME | PROPORTION BY WEIGHT | GERMINATION MINIMUM | PURITY MINIMUM |
|---|----------------------|---------------------|----------------|
| OREOPHYTE RED FESCUE OR CHEWINGS FESCUE | 50% | 85% | 90% |
| KENTUCKY BLUEGRASS | 25% | 85% | 90% |
| PERENNIAL RYE | 25% | 90% | 90% |
24. NATIVE WILDFLOWER & GRASS SEED: FRESH, CLEAN, DRY, NEW-CROP SEED COMPLYING WITH AGA'S "RULES FOR TESTING SEEDS" FOR PURITY AND GERMINATION TOLERANCES. PROVIDE SEED MIXTURE COMPOSED OF SPECIES, PROPORTIONS AND MINIMUM PERCENTAGES OF PURITY, GERMINATION, AND MAXIMUM PERCENTAGE OF WEED SEED, AS FOLLOWS:

SEEDING RATE: 20LBS/AC WITH 30 LBS/AC COVER CROP
COVER CROP: EITHER GRASS ONLY (JANUARY 1 TO JULY 31)
OR, GRASS RYE (AUGUST 1 TO DECEMBER 31)

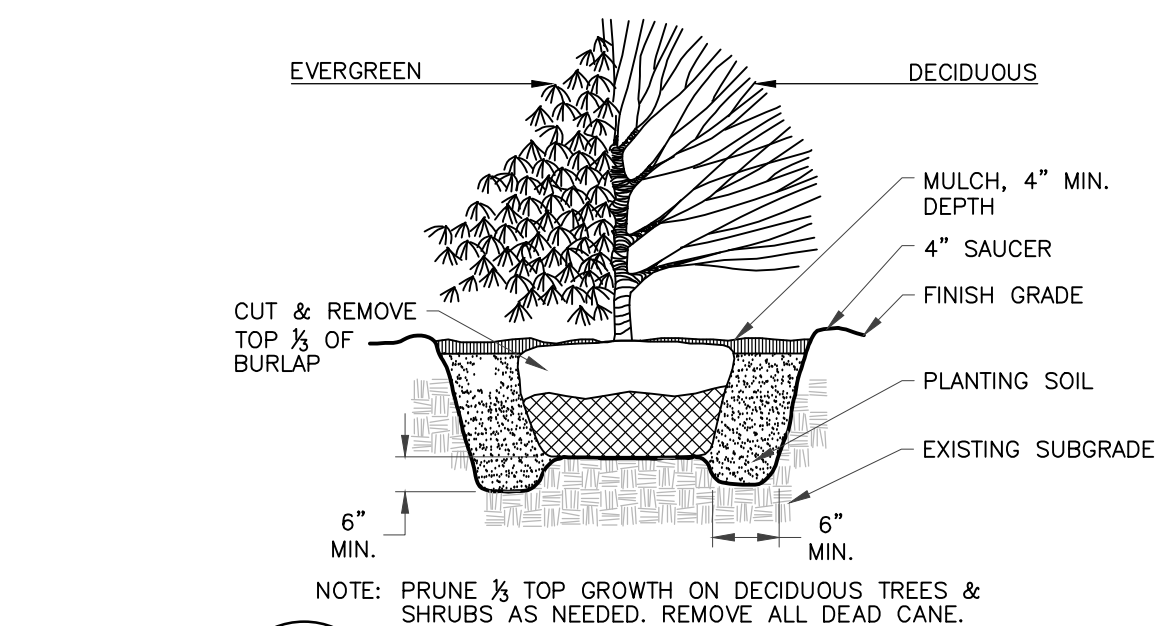
- MIX COMPOSITION:
- 29.1% Schizanthus scapularis (Little Bluestem 'Prairie View')
 - 20.0% Sorghastrum nutans (Indiangrass)
 - 15.0% Elymus virginicus (Virgin Wildrye)
 - 8.0% Echinochloa purpurea (Purple Coneflower)
 - 5.0% Panicum clandestinum (Deertongue)
 - 3.0% Chamaecrista fasciculata (Partridge Pea)
 - 3.0% Coreopsis lanceolata (Lanceleaf Coreopsis)
 - 3.0% Rudbeckia hirta (Black-eyed Susan)
 - 3.0% Verbena hastata (Blue Vervain)
 - 2.0% Helianthus annuus (Oxeye Sunflower)
 - 1.5% Asclepias incarnata (Swamp Milkweed)
 - 1.0% Aster novae-angliae (New England Aster)
 - 1.0% Pycnanthemum tenuifolium (Narrowleaf Mountainmint)
 - 1.0% Senecio jacobaea (Wild Sennel)
 - 0.8% Tradescantia virginiana (Ohio Spiderwort)
 - 0.6% Eupatorium perfoliatum (Boneset)
 - 0.5% Zizia aurea (Golden Alexander)
 - 0.5% Baptisia australis (Blue False Indigo)
 - 0.5% Monarda fistulosa (Wild Bergamot)
 - 0.5% Solidago nemoralis (Gray Goldenrod)
 - 0.3% Asclepias syriaca (Common Milkweed)
 - 0.3% Penstemon digitalis (Tall White Beardtongue)
 - 0.2% Solidago rugosa (Wrinkleleaf Goldenrod)
 - 0.1% Aster umbellatus (Flat Topped White Aster)



NOTE:
- GUY TYPE "A" IS FOR TREES LESS THAN 3" CALIPER
- GUY TYPE "B" IS FOR TREES 3" CALIPER OR GREATER

1 DECIDUOUS TREE PLANTING

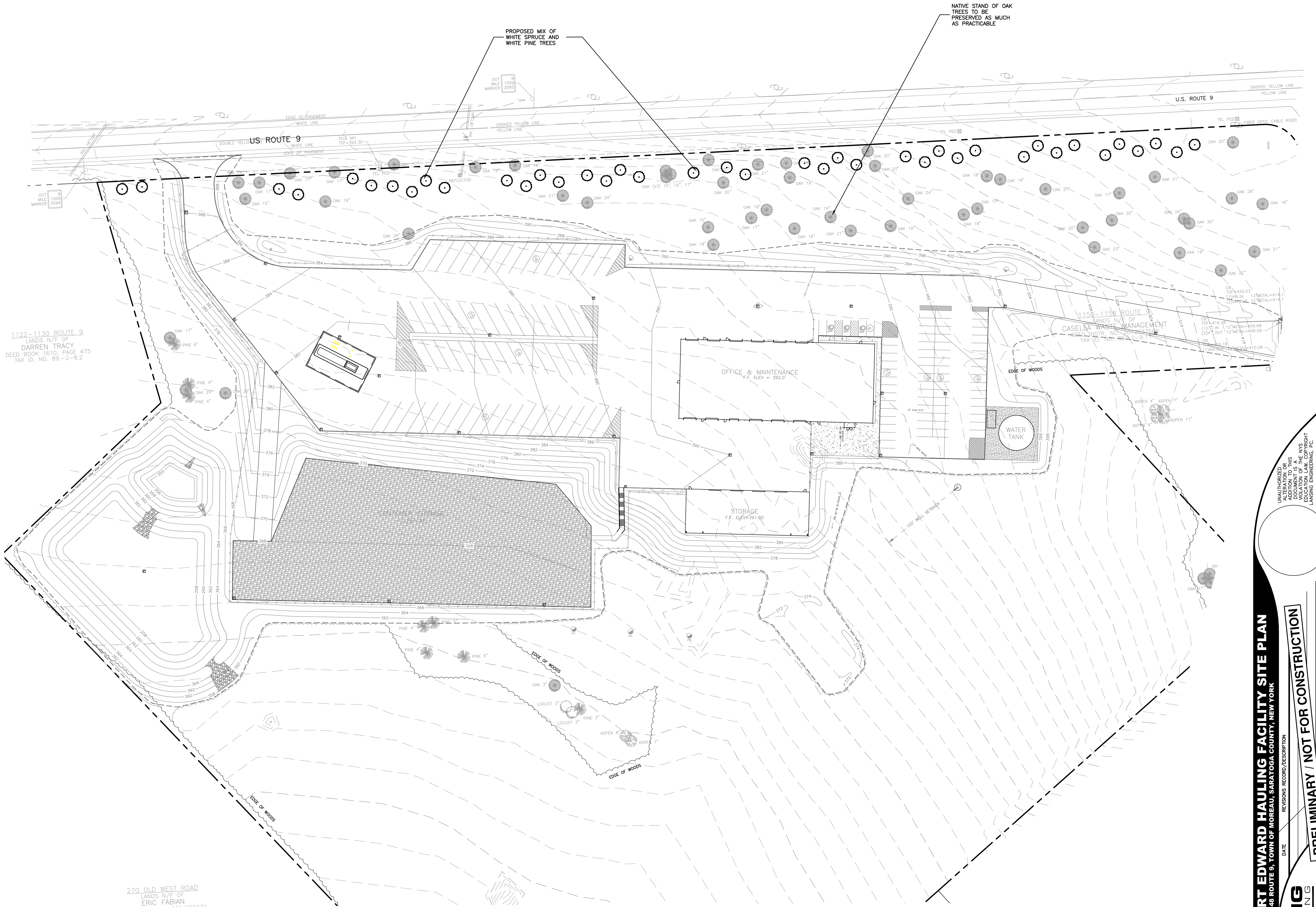
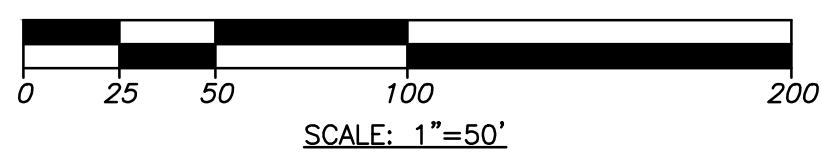
SCALE: NTS



2 SHRUB PLANTING DETAIL

SCALE: NTS

LANDSCAPING PLAN



UNAUTHORIZED
ADDITION TO THIS
DRAWING IS
VIOLATION OF THE
PROFESSIONAL
LANDSCAPING ENGINEERING
PC

DATE: _____
REVISIONS: RECORD / DESCRIPTION
PRELIMINARY / NOT FOR CONSTRUCTION

CASELLA - FORT EDWARD HAULING FACILITY SITE PLAN
1132-1148 ROUTE 9, TOWN OF MOREAU, SARATOGA COUNTY, NEW YORK
LANSING
ENGINEERING
2025
1132-1148 ROUTE 9
1132-1148 ROUTE 9
1132-1148 ROUTE 9

LANDSCAPING
PLAN

PROJ. NO: 1238.04
SCALE: AS SHOWN
DATE: 10/01/26
SHEET 5 OF 13

ADDITIONAL EROSION CONTROL MEASURES:

1. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE REMOVAL AND DISPOSAL OF ANY CUT MATERIAL.
2. SOILS CONTAMINATED DURING CONSTRUCTION MUST BE REMOVED AND DISPOSED OF AT A LICENSED WASTE FACILITY.
3. EXPOSED SOILS TO BE STABILIZED WITHIN 3 DAYS DURING THE WINTER MONTHS (NOVEMBER 15 - APRIL1).
4. EROSION CONTROL MEASURES DURING THE WINTER MONTHS SHALL ALSO INCLUDE AN ENLARGED ENTRANCE, PERIMETER BUFFER OF 25 FEET, TALL MARKER STAKES ON SILT FENCE, CLEAR PATHS TO DRAINAGE STRUCTURES, STABILIZED SOIL STOCKPILES TWICE THE TYPICAL MULCHING RATE, SNOW STORAGE DURING CONSTRUCTION SHALL BE CONSISTENT WITH THE SNOW STORAGE AREAS OUTLINED ON SHEET LM-1.
5. RIP RAP WEIGHT RANGE SHALL BE 20 TO 35 POUNDS WITH 75% OF ITS MATERIAL IN THE 25 TO 35 POUND RANGE.
6. MULCH SHALL BE A WOOD FIBER HYDRO MULCH OR SPRAYABLE PRODUCT. MULCHING BLANKETS MUST BE USED ON STEEP SLOPES AND DRAINAGE SWALES. MULCHING BLANKETS MUST BE "OURLEX ENFORCER" BY AMERICAN EXCELSIOR COMPANY OR "GEOWEB SLOPE PROTECTION SYSTEM" BY PRESTO GEOSYSTEMS.
7. ALL TOPSOIL MUST COMPLY WITH THE BLUE BOOK. TOPSOIL PH MUST BE BETWEEN 5.5 AND 7.5. TOPSOIL ORGANICS CONTENT MUST BE BETWEEN 2% AND 20%. TOPSOIL GRADATION MUST COMPLY WITH THE FOLLOWING:
100% PASSING 1 1/2" IN SIEVE
85-100% PASSING 1" IN SIEVE
65-100% PASSING 3/4" IN SIEVE
20-100% PASSING NO. 200 SIEVE
8. TOTAL LIVE SEED MUST BE 80 POUNDS PER ACRE. TOTAL WEED CONTENT SHALL NOT EXCEED 1%. ALL SEED MIXTURES MUST COMPLY WITH THE TOWN OF COLONE HIGHWAY AND DRAINAGE STANDARDS, TABLE 11-2.

RECOMMENDED SOIL EROSION AND SEDIMENT CONTROL MEASURES

MEASURES SHOWN ARE TO DEFINE INTENT. ACTUAL MEASURES WILL BE IMPLEMENTED AS SITE CONDITIONS WARRANT BY THE CONTRACTOR. CONTRACTOR SHALL PROVIDE ALL NEEDED CONTROL MEASURES TO PREVENT SOIL EROSION.

GENERAL MEASURES:

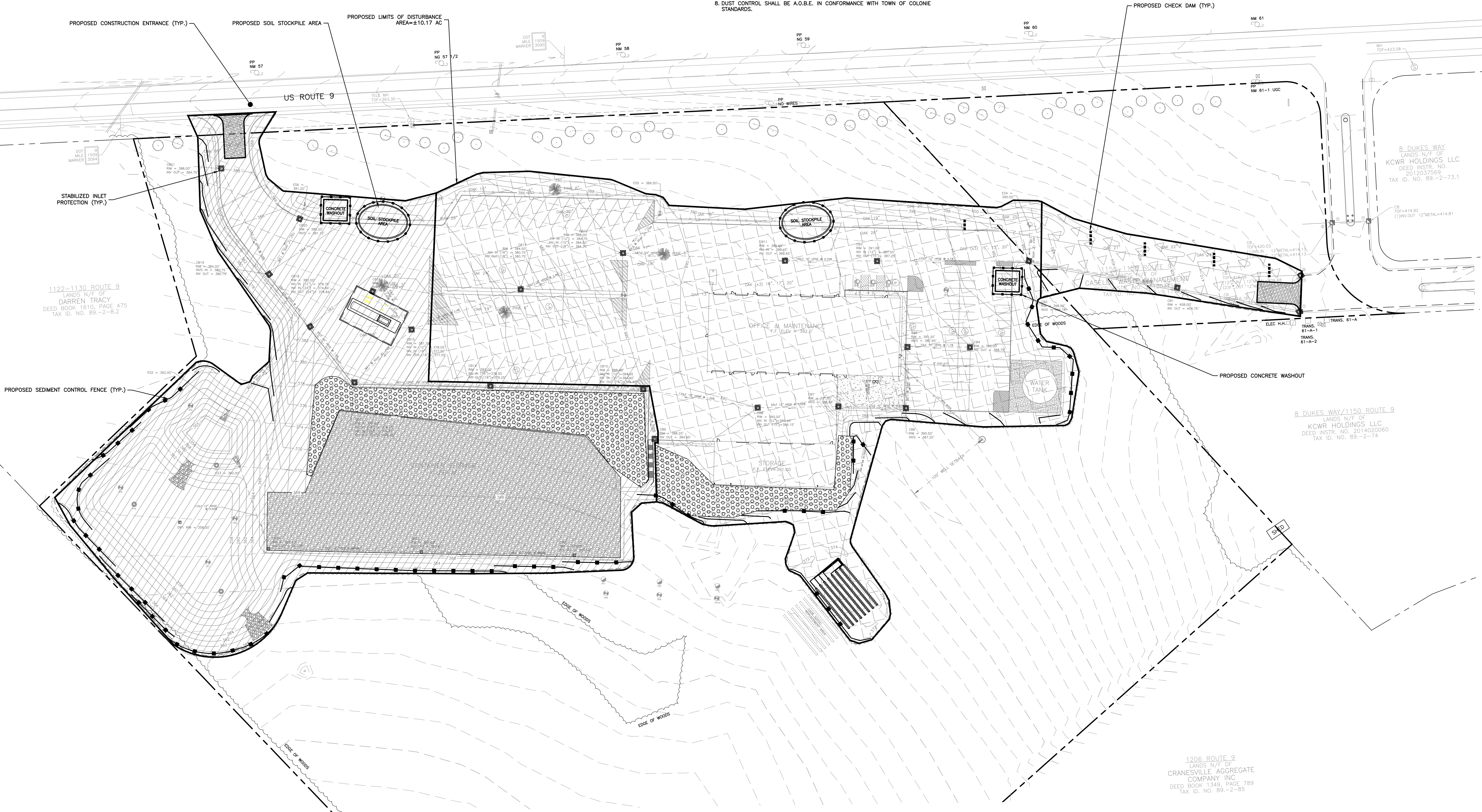
1. DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION SHALL BE MINIMIZED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE.
 2. INsofar AS PRACTICABLE, EXISTING VEGETATION SHALL BE PRESERVED. FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES IN ANY PORTION OF THE SITE, PERMANENT VEGETATION SHALL BE ESTABLISHED ON ALL EXPOSED SOILS.
 3. SITE PREPARATION ACTIVITIES SHALL BE PLANNED TO MINIMIZE THE AREA AND DURATION OF SOIL DISRUPTION.
 4. PERMANENT TRAFFIC CORRIDORS SHALL BE ESTABLISHED AND "ROUTES OF CONVENIENCE" SHALL BE AVOIDED.
- PARTICULAR MEASURES:**
1. IMMEDIATELY FOLLOWING COMPLETION OF ANY AND ALL OF THE PROPOSED STORM DRAIN INLETS, STORM DRAIN INLET PROTECTION SHALL BE CONSTRUCTED.
 2. DRAINAGE DITCH SEDIMENT FILTERS: UNTIL SUCH TIME AS FINAL SITE STABILIZATION IS COMPLETED, DITCHES SHALL RECEIVE TREATMENT WITH STONE CHECK DAMS SO AS TO EFFECTIVELY TRAP SEDIMENT AND MINIMIZE ITS RELEASE OFF-SITE. STONE CHECK DAMS SHALL BE CONSTRUCTED WITHIN EACH DITCH BEGINNING AT ITS DOWNSTREAM TERMINUS AND SHOULD NOT BE PLACED AT INTERVALS EXCEEDING 20 FEET.
 3. TOPSOIL AND FILL THAT IS TO REMAIN STOCKPILED ON-SITE FOR PERIODS GREATER THAN 14-DAYS SHALL BE STABILIZED BY SEEDING AND MULCHING. PROVIDE SILT FENCE EROSION CONTROL DOWNGRADIENT OF SOIL STOCKPILE AREA.
 4. IN NO CASE SHALL ERODIBLE MATERIALS BE STOCKPILED WITHIN 25 FEET OF ANY DITCH, STREAM, OR OTHER SURFACE WATER BODY.
 5. PERMANENT VEGETATIVE COVER: IMMEDIATELY FOLLOWING THE COMPLETION OF CONSTRUCTION ACTIVITIES IN ANY PORTION OF THE SITE, PERMANENT VEGETATION SHALL BE ESTABLISHED ON ALL EXPOSED SOILS.
 6. ALL HEALTHY TREES OF DESIRABLE SPECIES ARE TO BE PROTECTED FROM DAMAGE. ALL UNNECESSARY REMOVAL OF HEALTHY TREES SHALL BE AVOIDED EXCEPT WHERE NOTED ON SHEETS EC-1 & EC-2.
 7. THE CONTRACTOR IS TO ADHERE TO ALL REQUIREMENTS SET FORTH IN THE SWPPP.
 8. DUST CONTROL SHALL BE A.O.B.E. IN CONFORMANCE WITH TOWN OF COLONE STANDARDS.

CONSTRUCTION PHASING TABLE	
PHASE NUMBER	
PHASE 1	PHASE 1 = 4.78 ACRES
PHASE 2	PHASE 2 = 4.92 ACRES
PHASE 3	PHASE 3 = 0.47 ACRES

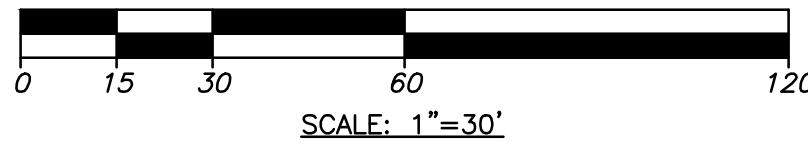
TABLE 5.3 SOIL RESTORATION REQUIREMENTS*

TYPE OF SOIL DISTURBANCE	SOIL RESTORATION REQUIREMENT	COMMENTS/ EXAMPLES
NO SOIL DISTURBANCE	RESTORATION NOT PERMITTED	PRESERVATION OF NATURAL FEATURES
MINIMAL SOIL DISTURBANCE	RESTORATION NOT PERMITTED	CLEARING AND GRUBBING
AREAS WHERE TOPSOIL IS STRIPPED ONLY - NO CHANGE IN GRADE	HSG C&D AERATE** AND APPLY 6" OF TOPSOIL	PROTECT AREA FROM ANY ONGOING CONSTRUCTION ACTIVITIES
AREAS OF CUT OR FILL	HSG C&D APPLY FULL SOIL RESTORATION***	
HEAVY TRAFFIC AREAS ON SITE (ESPECIALLY IN A ZONE 5-25 FEET AROUND BUILDINGS BUT NOT WITHIN A 5' PERIMETER AROUND 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 CROSSING THESE AREAS. TO PROTECT NEWLY INSTALLED PRACTICE FROM ANY ONGOING CONSTRUCTION ACTIVITIES, CONSTRUCT A SINGLE PHASE OPERATION FENCE AREA
REDEVELOPMENT PROJECTS	SOIL RESTORATION IS REQUIRED ON REDEVELOPMENT PROJECTS IN AREAS WHERE EXISTING IMPERVIOUS AREA WILL BE CONVERTED TO PERVIOUS AREA	

NOTE: THE PROPOSED PROJECT IS SITUATED ON TYPE D SOILS WITH A HISTORY OF DEVELOPMENT AND COMPACTION. IT IS A SITE REQUIREMENT THAT FULL SOIL RESTORATION WITH DECOMPACTION AND COMPOST ENHANCEMENT IS CARRIED OUT FOR THIS PROJECT IN ACCORDANCE WITH THE DEEP RIPPER AND DE-COMPACTION, DEC 2008 FOUND IN APPENDIX K OF THE PROJECT SWPPP.



EROSION & SEDIMENT CONTROL PLAN



CASELLA - FORT EDWARD HAULING FACILITY SITE PLAN
1132-1148 ROUTE 9, TOWN OF MOREAU, SARATOGA COUNTY, NEW YORK

PRELIMINARY / NOT FOR CONSTRUCTION

LANSING
ENGINEERING

EROSION &
SEDIMENT
CONTROL PLAN

PROJ. NO:1238.04
SCALE: AS SHOWN
DATE: 10/01/26
SHEET 7 OF 13

SOIL APPRAISAL							
DEEP HOLE OBSERVATIONS & PERCOLATION TESTING PERFORMED ON 9/23/2026 IN DRY, 50°F CONDITIONS BY LANSING ENGINEERING AND WITNESSED BY AJM							
MOREAU CASELLA TRUCK SHOP	TRIAL 1	TRIAL 2	TRIAL 3	TRIAL 4	TRIAL 5	TRIAL 6	TRIAL 7
PT1 - PERCOLATION TEST NO. 1	0:49 MIN./IN.	0:53 MIN./IN.	0:58 MIN./IN.	0:59 MIN./IN.	1:02 MIN./IN.		
PT2 - PERCOLATION TEST NO. 2	0:43 MIN./IN.	0:48 MIN./IN.	0:54 MIN./IN.	0:58 MIN./IN.	0:59 MIN./IN.	0:59 MIN./IN.	1:02 MIN./IN.
PT3 - PERCOLATION TEST NO. 3	0:46 MIN./IN.	0:51 MIN./IN.	0:57 MIN./IN.	1:03 MIN./IN.	1:07 MIN./IN.	1:10 MIN./IN.	
TP1 - TEST PIT NO. 1	0'-2" 2'-10.5' TOPSOIL MEDIUM BROWN SAND		NO MOTTLING OBSERVED NO GROUNDWATER OBSERVED				
TP2 - TEST PIT NO. 2	0'-4" 4'-10.5' TOPSOIL MEDIUM/COARSE GRAY SAND		NO MOTTLING OBSERVED NO GROUNDWATER OBSERVED				
TP3 - TEST PIT NO. 3	0'-12" 12'-11" TOPSOIL MEDIUM/COARSE GRAY SAND MORE FINE @ BOTTOM		SLIGHT MOTTLING @ 132" NO GROUNDWATER OBSERVED				
TP4 - TEST PIT NO. 4	0'-12" 12'-4" 4'-11" TOPSOIL MEDIUM ORANGE SAND MED/COARSE GRAY SAND		NO MOTTLING OBSERVED NO GROUNDWATER OBSERVED				
TP5 - TEST PIT NO. 5	0'-1.5' 1.5'-7" 7'-10" TOPSOIL MEDIUM GRAY SAND SILTY HARD PACKED TILL - NOT PERMEABLE		NO MOTTLING OBSERVED NO GROUNDWATER OBSERVED				
TP6 - TEST PIT NO. 6	0'-12" 12'-5.75' 5.75'-10" LOAMY TOPSOIL MEDIUM GRAY SAND HARD PACKED FINE SAND/TILL - LIMITING		NO MOTTLING OBSERVED NO GROUNDWATER OBSERVED				
TP7 - TEST PIT NO. 7	0'-12" 12'-7.25' 7.25'-10" TOPSOIL MEDIUM GRAY SAND HARD FINE SAND/TILL		NO MOTTLING OBSERVED NO GROUNDWATER OBSERVED				
TP8 - TEST PIT NO. 8	0'-6" 6'-8" 8'-9.5" TOPSOIL FINE/MEDIUM GRAY SAND PACKED FINE SAND/TILL		NO MOTTLING OBSERVED NO GROUNDWATER OBSERVED				
TP9 - TEST PIT NO. 9	0'-12" 12'-7" 7'-11" LOAMY TOPSOIL FINE/MEDIUM GRAY SAND FINE PACKED SILTY SAND		NO MOTTLING OBSERVED NO GROUNDWATER OBSERVED				
TP10 - TEST PIT NO. 10	0'-12" 12'-7.75' 7.75'-10" LOAMY TOPSOIL FINE/MEDIUM GRAY SAND FINE PACKED SILTY SAND		NO MOTTLING OBSERVED NO GROUNDWATER OBSERVED				

WWTS OPERATION & MAINTENANCE NOTES:

- EFFLUENT FILTER TO BE INSPECTED AND CLEANED EVERY 2 MONTHS OR AS NEEDED. INSPECTION AND CLEANING SHALL BE THE RESPONSIBILITY OF THE OWNER.
- OWNER SHALL BE RESPONSIBLE FOR COORDINATING SEPTIC TANK PUMPING EVERY 2 YEARS MAXIMUM. ANNUAL PUMPING MAY BE REQUIRED BASED ON QUANTITY OF SOLID BUILD-UP IN SEPTIC TANK.
- OWNER SHALL AVOID DISPOSAL OF WIPES, PAPER TOWELS, COOKING OIL/GREASE, FOOD SCRAPS, ECT TO HOUSE SEWAGE SYSTEM AND TO WASTEWATER DISPOSAL SYSTEM.
- STRONG CHEMICALS INCLUDING BUT NOT LIMITED TO BACTERIAL DESTROYING PRODUCTS, DRAIN CLEANERS, SOLVENTS, PAINT, PAINT THINNERS, FLOOR CLEANERS, SINK CLEANERS, OILS, ANTIFREEZE, AND PESTICIDES SHALL NOT BE DISPOSED OF TO WASTEWATER DISPOSAL SYSTEM.
- OWNER SHALL BE RESPONSIBLE FOR INSPECTION AND MAINTENANCE OF THE ROOF LEADER DRAIN(S) AND PERIMETER UNDERDRAIN DISCHARGE AND REMOVE ANY BLOCKAGE AS NEEDED TO ENSURE PROPER FLOW AND DISCHARGE.

SEPTIC TANK

SEPTIC TANK SHALL BE 1,750 GALLON SEAMLESS DUAL COMPARTMENT PRECAST CONCRETE TANK. EFFLUENT FILTER, POLYLOK PL-122 OR EQUAL, SHALL BE INSTALLED ON OUTLET SIDE OF SEPTIC TANK. (ADD 250 GALLONS FOR FOR GARBAGE GRINDER, ADD 250 GALLONS FOR WHIRLPOOL, SPA).

DISTRIBUTION BOX

TO BE PRECAST CONCRETE BOX AND COVER WITH SPEED LEVELERS BY GUARDIAN CONCRETE, INC. OR EQUIVALENT.

BUILDING TO SEPTIC TANK

EXISTING 4" PVC SCH 40 WITH TIGHT JOINTS, MINIMUM SLOPE: 1/4" PER FOOT.

SEPTIC TANK TO DISTRIBUTION BOX

4" PVC SDR35 WITH TIGHT JOINTS, MINIMUM SLOPE: 1/8" PER FOOT.

DISTRIBUTION BOX TO LATERALS

4" PVC SDR35 WITH TIGHT JOINTS, MINIMUM SLOPE 1/16" TO 1/32" PER FOOT.

DISTRIBUTION LATERALS

4" PVC PERFORATED SCHEDULE 20 W/ TIGHT JOINTS, MINIMUM SLOPE 1/16" TO 1/32" PER FOOT.

REQUIRED INSPECTIONS:

ENGINEER SHALL INSPECT SYSTEM CONSTRUCTION AT THE FOLLOWING STAGES OF CONSTRUCTION.

INSPECTION #1: UPON COMPLETION OF INSTALLATION OF NEW ABSORPTION TRENCHES, SEPTIC TANK EFFLUENT FILTER, AND DISTRIBUTION BOX DESIGN ENGINEER SHALL BE NOTIFIED TO COMPLETE INSPECTION.

INSPECTION #2: UPON COMPLETION OF FINAL GRADING INCLUDING PLACEMENT OF TOPSOIL AND FINAL SEEDING.

NOTE: OWNER IS RESPONSIBLE FOR NOTIFYING THE ENGINEER A MINIMUM OF 24 HRS. IN ADVANCE OF EACH REQUIRED INSPECTION. IF WORK COMMENCES WITHOUT THE NOTED INSPECTIONS, THE ENGINEER WILL NOT BE ABLE TO CERTIFY THE SYSTEM AS-BUILT PER PLAN

DESIGN CALCULATIONS:

SEPTIC SYSTEM FLOW ANALYSIS:

THE DAILY DESIGN FLOW IS BASED ON 15 GPD PER EMPLOYEE, PER NYSDOH RESIDENTIAL ONSITE WASTEWATER TREATMENT SYSTEMS DESIGN HANDBOOK

FLOW ANALYSIS: 15 GALLONS PER DAY PER EMPLOYEE X 61 EMPLOYEES (PER OWNER)= 915 GPD

THE STABILIZED PERCOLATION TEST RESULTS WITHIN THE FIELD AREA ARE BETWEEN 3:04 MIN/IN AND 4:55 MIN/INCH. AS A RESULT, A CONSERVATIVE RANGE OF 6 TO 7 MIN/IN PERCOLATION RATE HAS BEEN UTILIZED FOR DESIGN PURPOSES.

APPLICATION RATE: 6 TO 7 MIN/IN PERCOLATION RATE = 1.0 GPD/SF

915 GPD/(1.0 GPD/SF)= 915 SF

915 SF/(2 SF/LF) = 457.5 = 458 LF OF LATERAL MINIMUM

BASED ON THE CALCULATIONS ABOVE, THE TOTAL ABSORPTION TRENCH LENGTH SHALL BE 458 LF MINIMUM. THE LENGTH OF THE PROPOSED ABSORPTION TRENCH SHALL BE 8 LATERALS AT 60 FEET EACH MIN.

WASTE WATER TREATMENT SYSTEM SPECIFICATIONS

GENERAL NOTES:

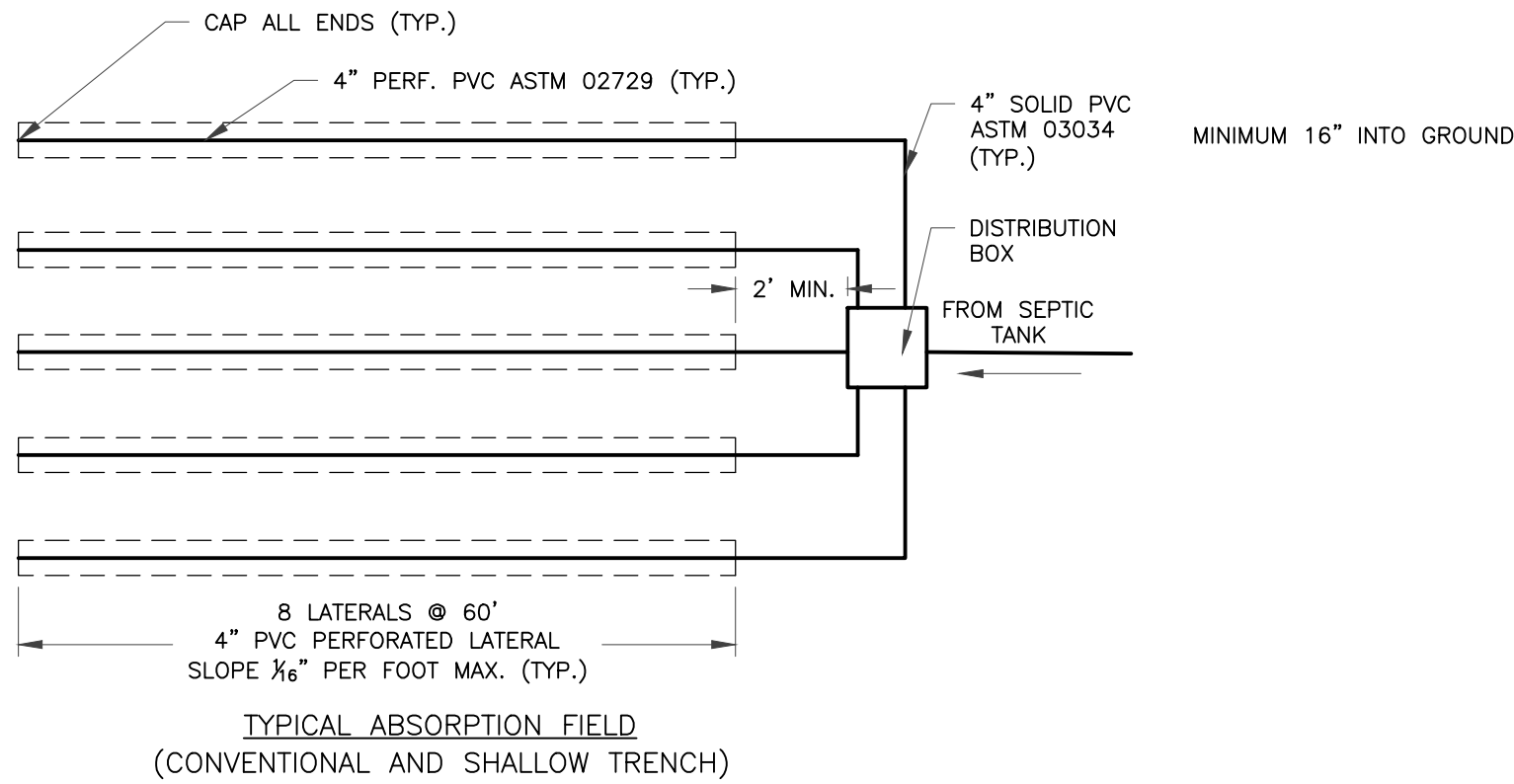
- ALL SEPTIC SYSTEMS ARE TO BE DESIGNED AND CONSTRUCTED IN COMPLIANCE WITH N.Y.S. HEALTH CODE PART 75A, "WASTEWATER TREATMENT STANDARDS - INDIVIDUAL HOUSEHOLD SYSTEMS", PERTAINING TO CONVENTIONAL SYSTEMS.
- BUILDER TO VERIFY GRADE OF SOIL PIPE AT BUILDING PRIOR TO CONSTRUCTION OF SYSTEM.
- NO EXISTING WELLS, PONDS OR WATER COURSES EXISTING WITHIN 100 FEET OF PROPOSED SEWAGE DISPOSAL SYSTEM.
- NO ROOF, FOOTING, FLOOR, COOLING WATER, BACKWASH DRAINS ETC. SHALL BE CONNECTED TO THE SEPTIC SYSTEM.
- ALL ROOF LEADER DOWNSPOUTS TO BE DIRECTED AWAY FROM ALL PARTS OF THE SEPTIC SYSTEM.
- SEPTIC SYSTEM TO BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE SYSTEM.
- SEDIMENT CONTROL FENCE AND/OR STONE CHECK DAMS ARE TO BE INSTALLED AT LIMITS OF DISTURBANCE UNTIL A PERMANENT STAND OF VEGETATION IS ESTABLISHED.
- ANY CHANGE IN CONDITIONS MUST BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.
- PRIOR TO THE START OF CONSTRUCTION BUILDER TO VERIFY THAT THE BUILDING FINISHED FLOOR AND TANK INVERTS ARE SET TO ACHIEVE REQUIRED SLOPES AND COVER AS INDICATED ON THE PLANS AND DETAILS.
- CERTIFICATION OF THE SYSTEM IS NECESSARY BEFORE A CERTIFICATE OF OCCUPANCY WILL BE ISSUED.
- VEHICULAR TRAFFIC SHALL BE KEPT OFF ALL WASTEWATER DISPOSAL SYSTEM COMPONENTS AT ALL TIMES. BROKEN SYSTEM COMPONENTS AND OVER-COMPACTION OF SOILS WILL RESULT IN SYSTEM FAILURE AND/OR IMPROPER FUNCTION.
- TREES AND SHRUBS SHALL NOT BE PLANTED ON OR WITHIN 6 FEET OF THE WASTEWATER DISPOSAL SYSTEM COMPONENTS.

MINIMUM SEPARATION DISTANCES

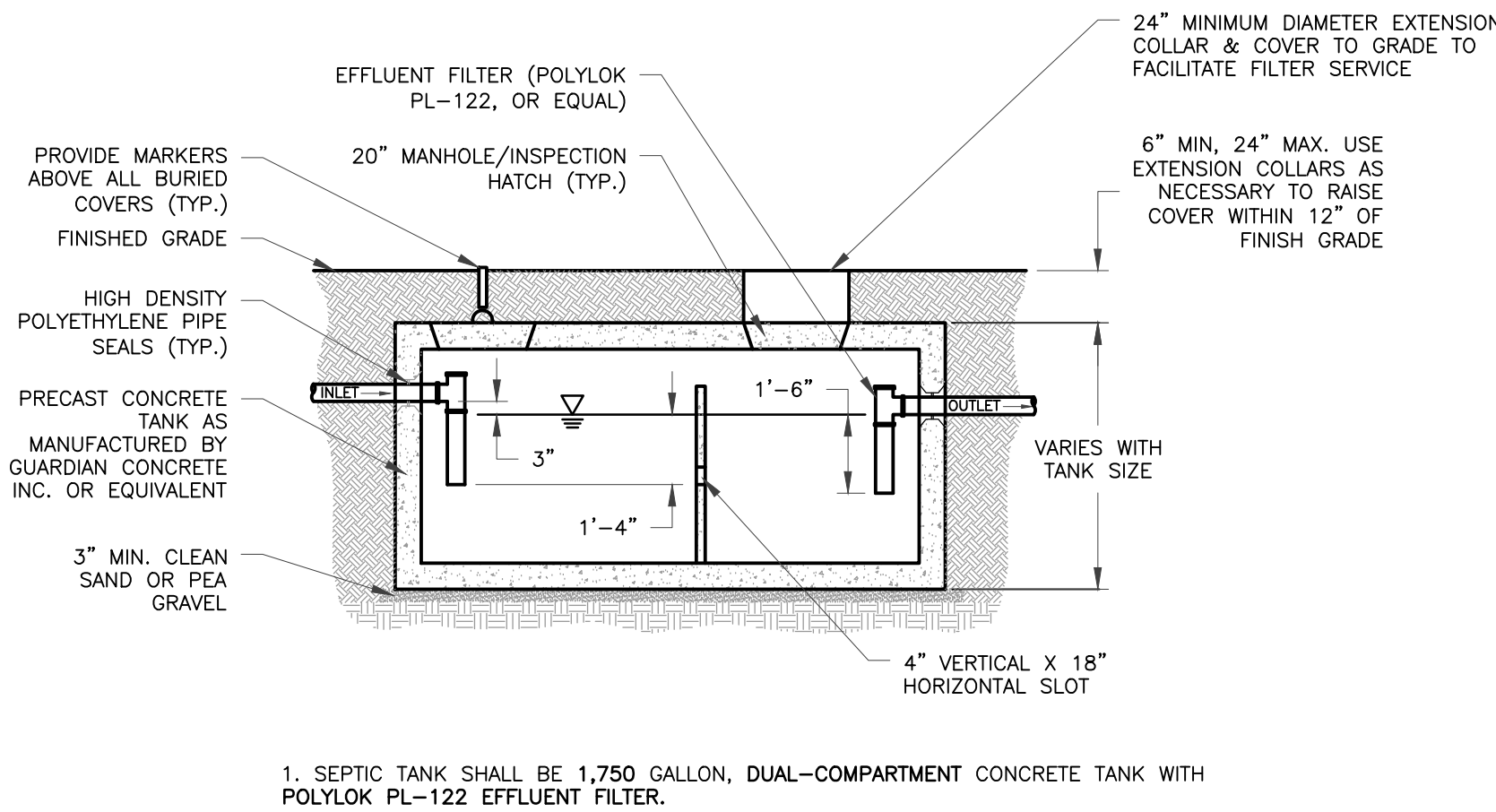
BUILDING TO SEPTIC TANK	10' MIN.
BUILDING TO ABSORPTION FIELD	20' MIN.
PROPERTY LINE TO ABSORPTION FIELD	10' MIN.
WATER LINE TO ANY SEPTIC SYSTEM COMPONENT	10' MIN.
WELL TO ABSORPTION FIELD	100' MIN.

GENERAL NOTES:

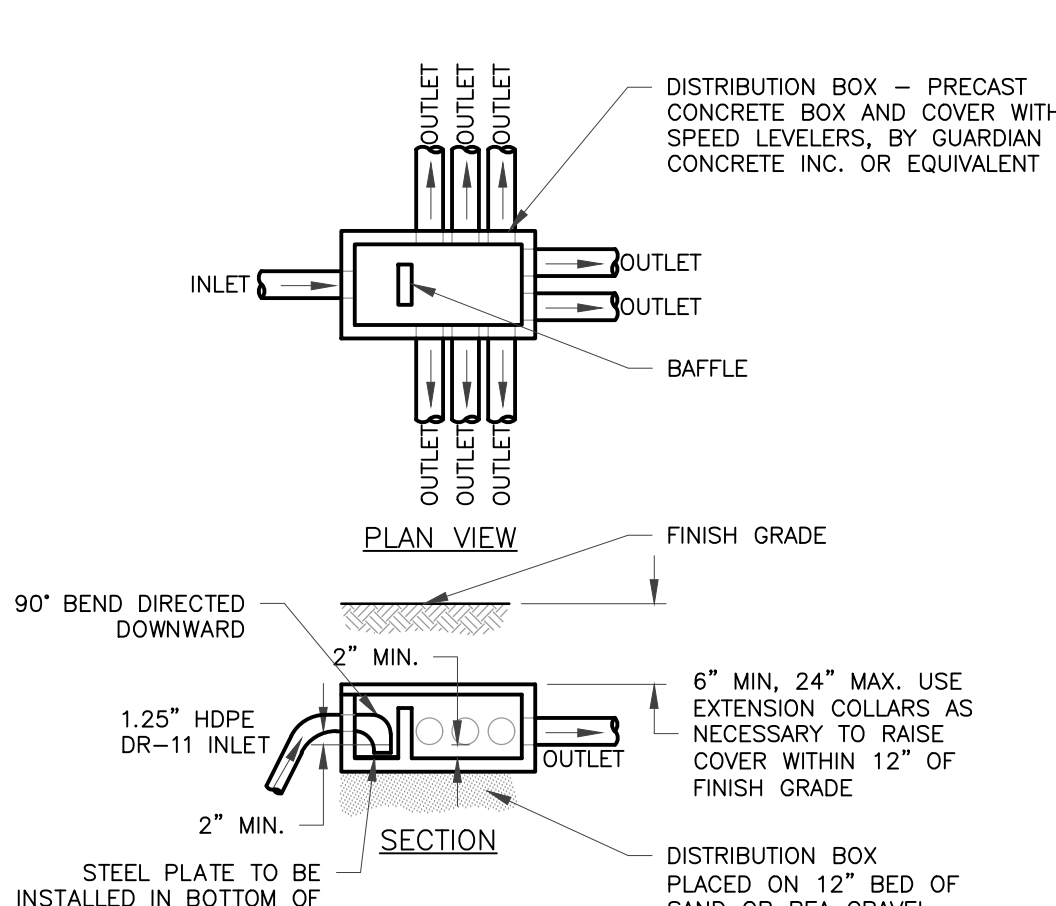
- CONTRACTOR TO FIELD VERIFY EXISTING GRADES PRIOR TO CONSTRUCTION OF BUILDING AND WWTS. CONTRACTOR TO SET THE BUILDING ELEVATION TO PROVIDE POSITIVE DRAINAGE FROM BUILDING TO WWTS WITHIN THE MINIMUM DESIGN SPECIFICATIONS OUTLINED ON THESE PLANS. DISCREPANCIES TO BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.



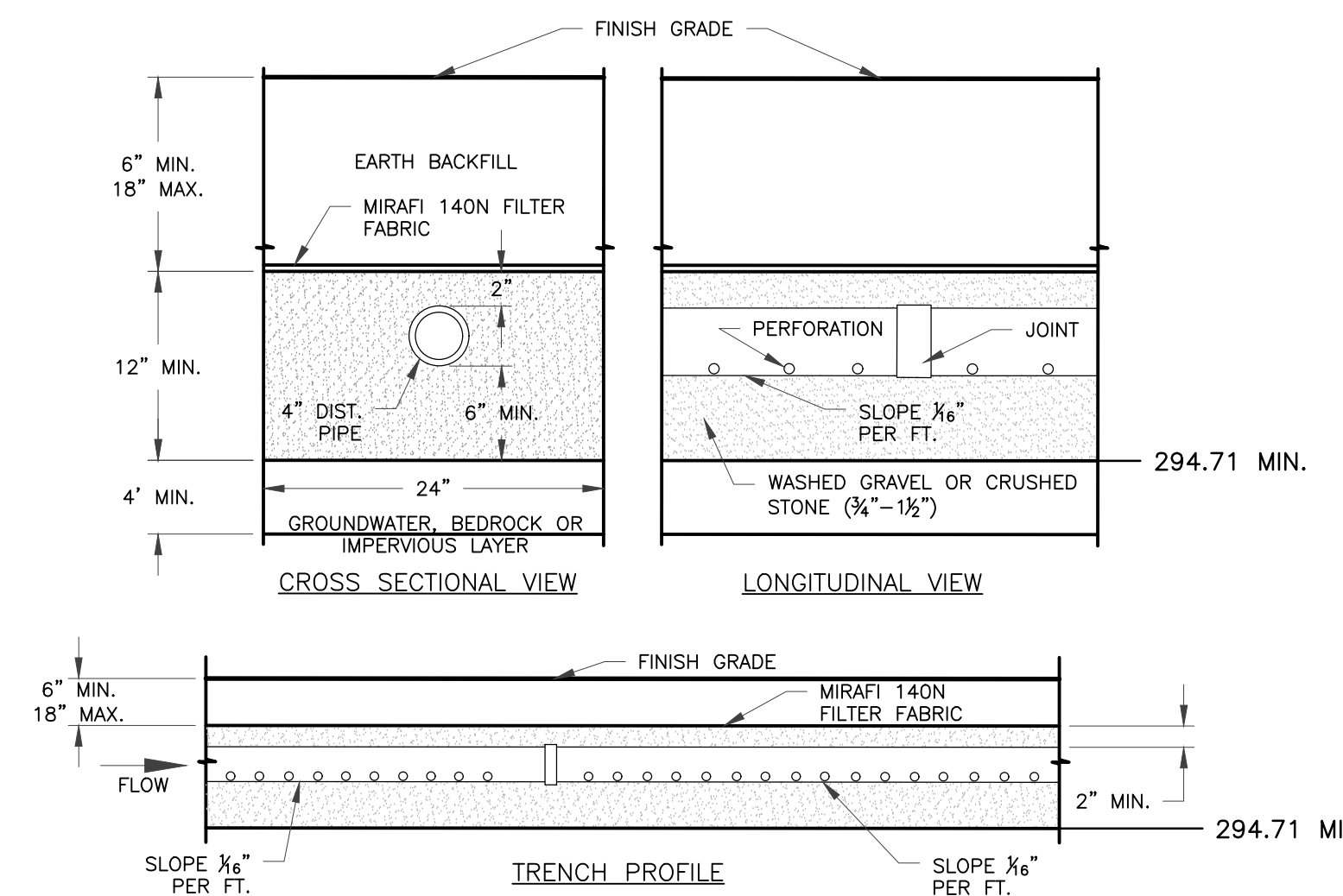
TYPICAL ABSORPTION FIELD
SCALE: NTS



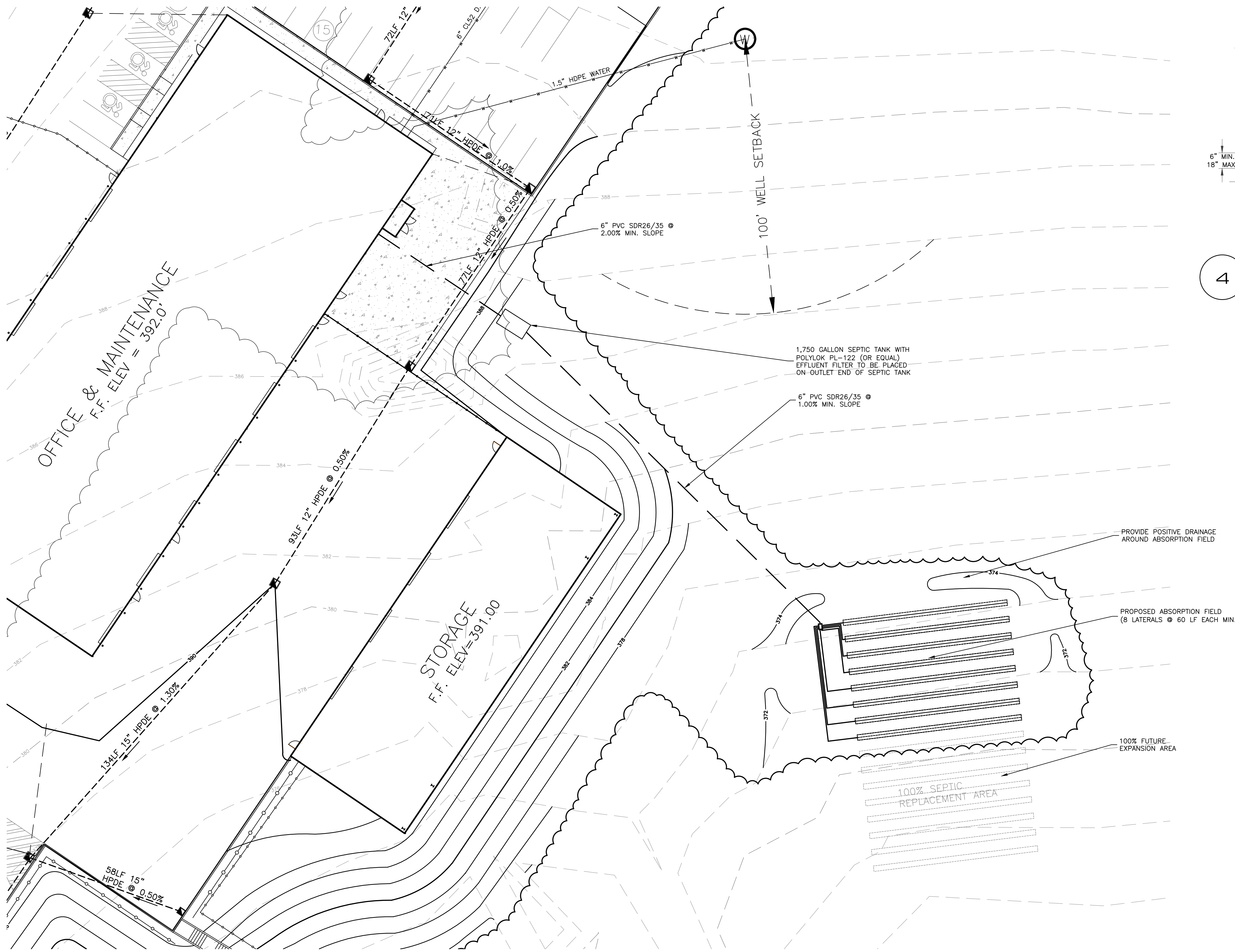
PRECAST SEPTIC TANK - (SEAMLESS) DUAL COMPARTMENT
SCALE: NTS



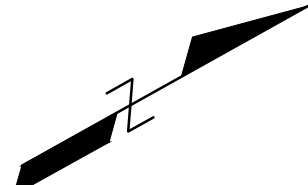
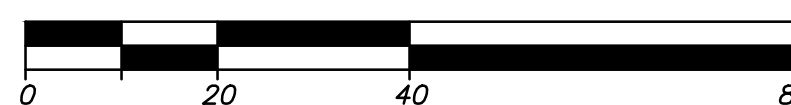
PRECAST DISTRIBUTION BOX
SCALE: NTS



TYPICAL ABSORPTION TRENCH
SCALE: NTS



WWTS LAYOUT PLAN



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OR
MODIFICATION
OF THIS
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BY
LANSING
ENGINEERING,
P.C.

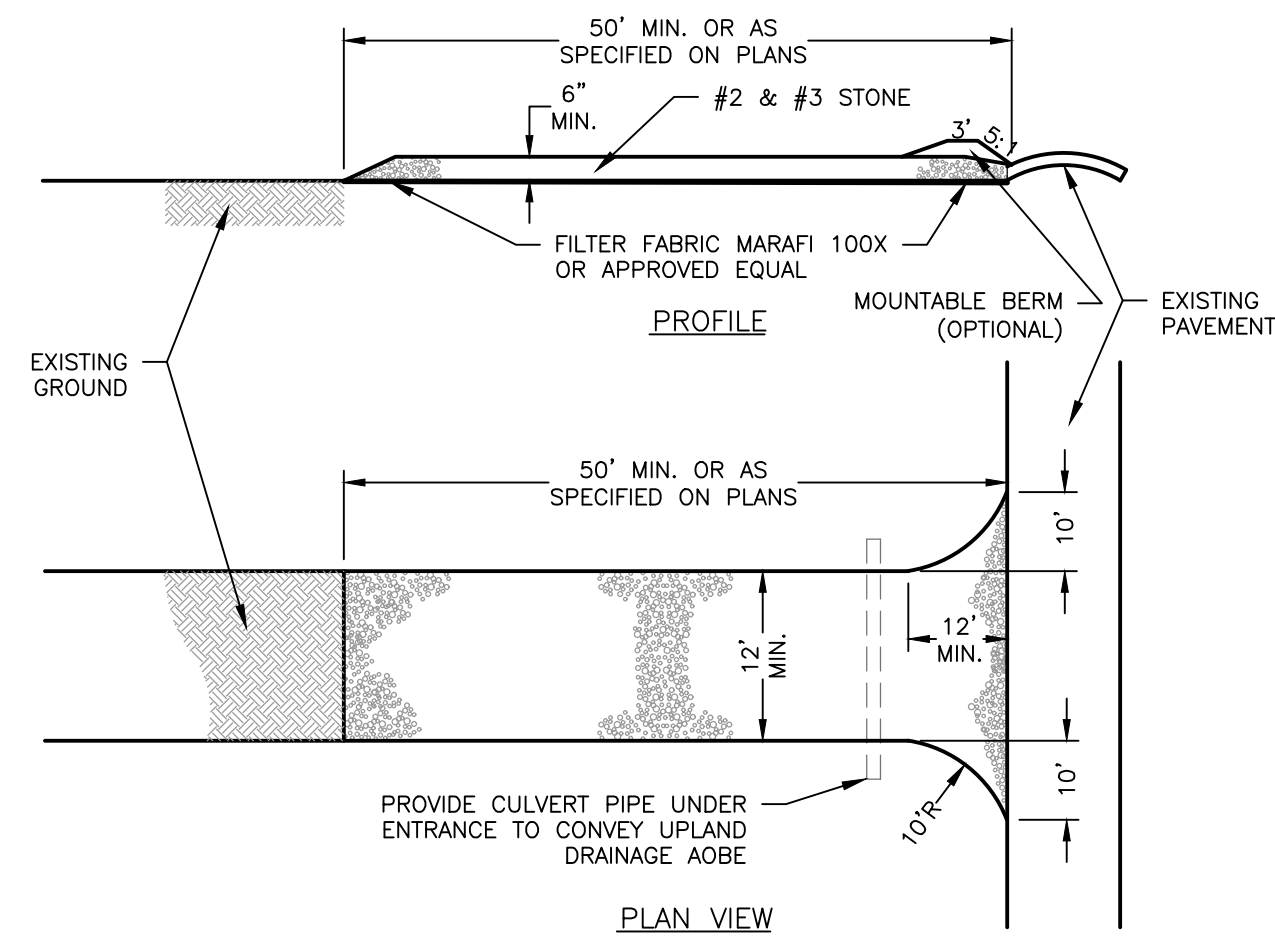
CASELLA - FORT EDWARD HAULING FACILITY SITE PLAN
1132-1148 ROUTE 9, TOWN OF MOREAU, SARATOGA COUNTY, NEW YORK

REVISION RECORD/DESCRIPTION
DATE
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LANSING
ENGINEERING
2435E WALKER ROAD
SUITE 301
VALTIC, NY 12150
(518) 889-8843

WWTS DESIGN
& LAYOUT

PROJ. NO:1238.04
SCALE: AS SHOWN
DATE: 10/01/26
SHEET 9 OF 13



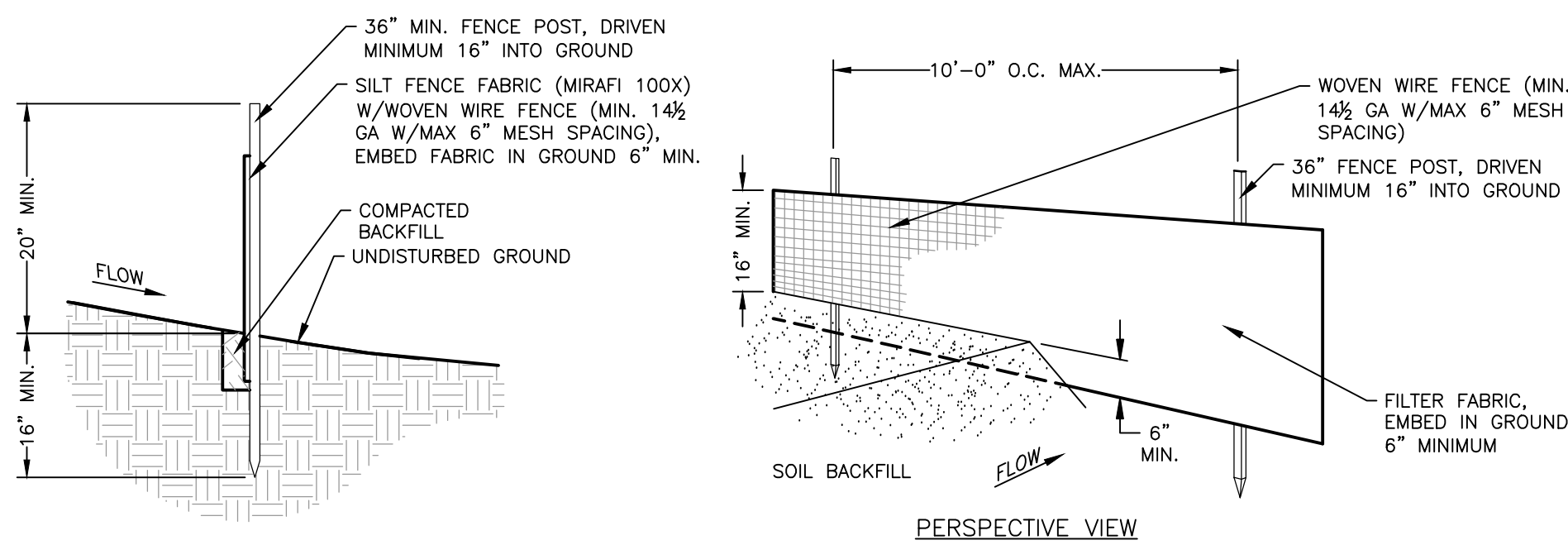
CONTRACTOR SHALL REMOVE MATERIALS AND RESTORE ENTRANCE AREA, ESTABLISHING VEGETATIVE COVER.

NOTE:

1. STONE SIZE - USE MIXTURE OF #2 & #3 STONE (1-4 INCHES), OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - NOT LESS THAN FIFTY (50) FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A THIRTY (30) FOOT MINIMUM LENGTH WOULD APPLY).
3. THICKNESS - NOT LESS THAN SIX (6) INCHES.
4. WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
5. GEOTEXTILE - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. 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.
7. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE

SCALE: NTS



CONSTRUCTION SPECIFICATIONS

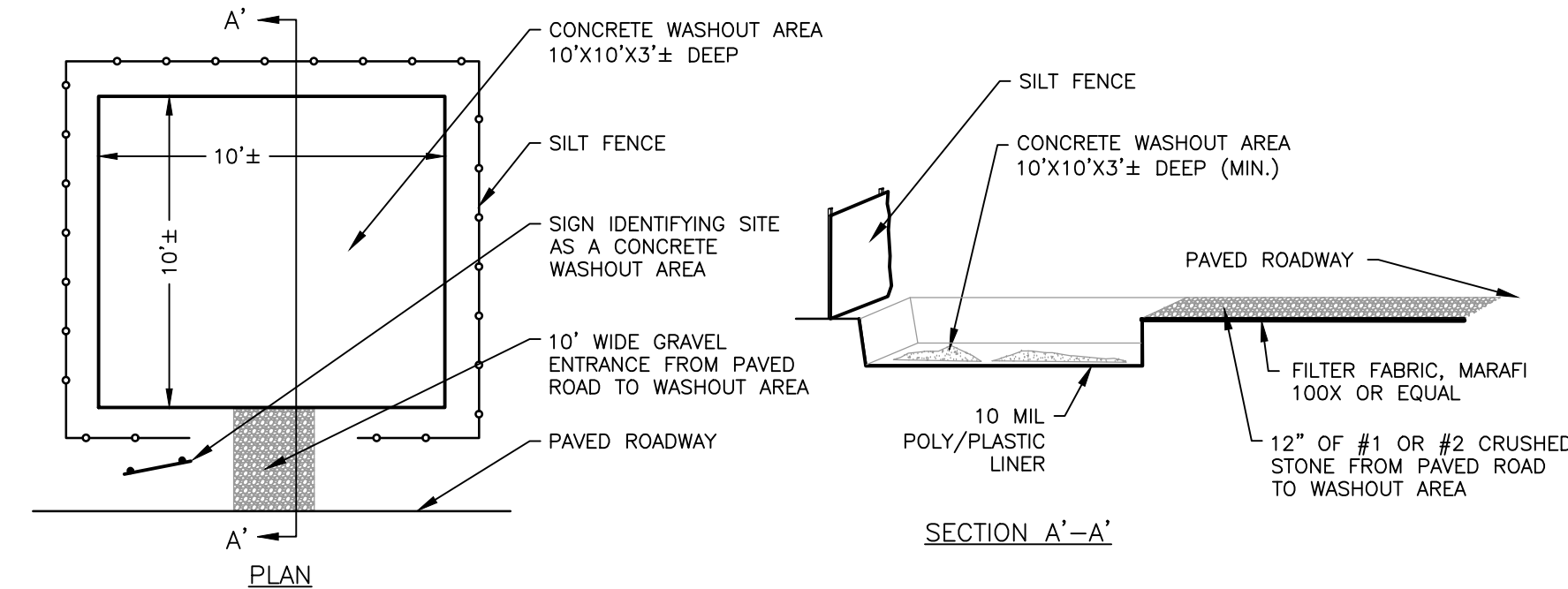
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "T" OR "U" TYPE OR HARDWOOD.
2. FILTER CLOTH TO BE TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 126 GA, 4" MAXIMUM MESH OPENING.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY (6) INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
4. PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SLOPE	STEEPNESS	SLOPE LENGTH/FENCE LENGTH (FT)		
		STANDARD	REINFORCED	SUPER
<2%	<50:1	300/1500	N/A	N/A
2-10%	50:1 TO 10:1	125/1000	250/2000	300/2500
10-20%	10:1 TO 5:1	100/750	150/1000	200/1000
20-33%	5:1 TO 3:1	60/500	80/750	100/1000
33-50%	3:1 TO 2:1	40/250	70/350	100/500
>50%	>2:1	20/125	30/175	50/250

STANDARD SILT FENCE (SF) IS FABRIC ROLLS STAPLED TO WOODEN STAKES DRIVEN 18" IN THE GROUND.
REINFORCED SILT FENCE (RSF) IS FABRIC PLACED AGAINST WELDED WIRE FABRIC WITH ANCHORED STEEL POSTS DRIVEN 18" IN THE GROUND.
SUPER SILT FENCE (SSF) IS FABRIC PLACED AGAINST CHAIN LINK FENCE AS SUPPORT BACKING WITH POSTS DRIVEN 3" IN THE GROUND.

SEDIMENT CONTROL FENCE

SCALE: NTS



CONSTRUCTION SPECIFICATIONS

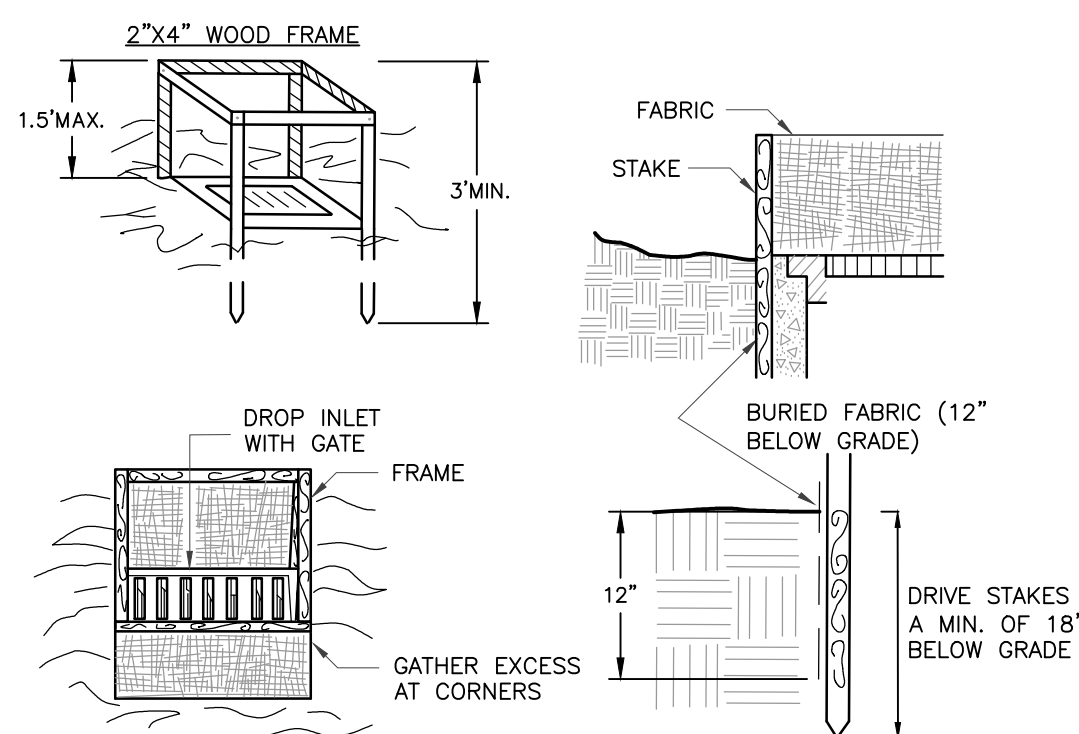
1. CONCRETE WASHOUT LOCATION SHALL BE A MINIMUM OF 100' FROM SENSITIVE AREAS.
2. THE BASIN DIMENSIONS DEPICTED ABOVE ARE REQUIRED MINIMUMS. CONCRETE WASHOUT FACILITY SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS. (APPROX. 60 GAL. OF WATER/WASTE PER TRUCK)
3. PLASTIC LINING MATERIAL SHALL BE 10 MIL(MINIMUM) POLY SHEETING AND BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL. LINER TO BE ANCHORED BEYOND THE TOP OF THE PIT WITH AN EARTHEN BERM, SAND BAGS, OR STONE.
4. WASHOUT FACILITY MUST BE CLEANED OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.

MAINTENANCE AND CLEANING

1. DO NOT DISCHARGE LIQUID OR SLURRY TO WATERWAYS, STORM DRAINS OR DIRECTLY ONTO GROUND.
2. DO NOT USE SANITARY SEWER WITHOUT LOCAL APPROVAL.
3. PLACE A SECURE NON-COLLAPSING, NON-WATER COLLECTING COVER OVER THE FACILITY PRIOR TO PREDICTED WET WEATHER TO PREVENT ACCUMULATION AND OVERFLOW.
4. REMOVE AND DISPOSE OF HARDENED CONCRETE AND RETURN THE STRUCTURE TO A FUNCTIONAL STATE.
5. INSPECT THE WASHOUT FACILITY FOR SIGNS OF WEAKENING OR DAMAGE AND REPAIR AS NECESSARY (RE-LINE THE STRUCTURE WITH NEW POLY SHEETING AFTER EACH CLEANING).

CONCRETE WASHOUT AREA

SCALE: NTS



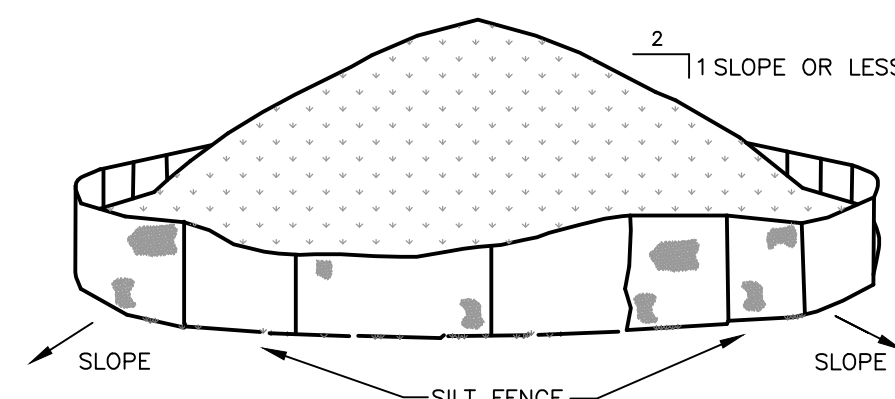
CONSTRUCTION SPECIFICATIONS

1. FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAY BE USED FOR SHORT TERM APPLICATIONS.
2. CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
3. STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
4. SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPANS GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
5. FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
6. A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY.

**MAXIMUM DRAINAGE AREA 1 ACRE.

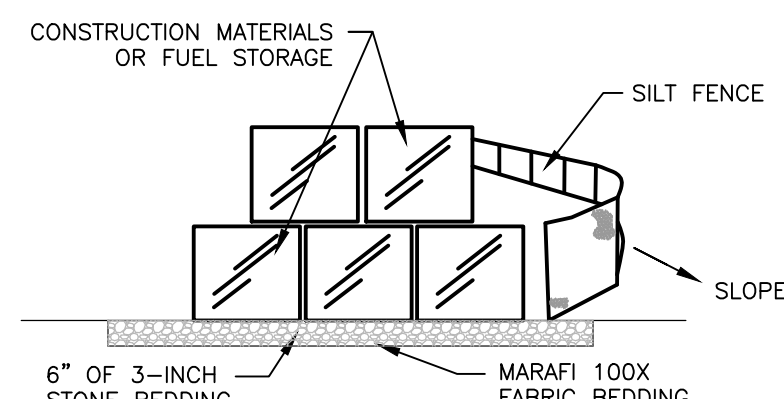
FABRIC DROP INLET PROTECTION

SCALE: NTS



1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE.
2. MINIMUM SLOPE OF STOCKPILE SHALL BE 1:2.
3. SILT FENCING SHALL BE PLACED 5' DOWNSLOPE OF EACH PILE. UPON COMPLETION OF SOIL STOCKPILING, TOPSOIL SHALL BE STABILIZED WITH SEED AND MULCH IF NOT TO BE DISTURBED/UTILIZED WITHIN 14 DAYS.
4. SEE ADDITIONAL DETAILS FOR INSTALLATION OF SILT FENCE.
5. TEMPORARY PERIMETER DIKES MAY BE REQUIRED TO DIRECT CLEAN RUNOFF FROM STOCKPILE AREAS. REFER TO EROSION AND SEDIMENT CONTROL PLAN.

SOIL STOCKPILE

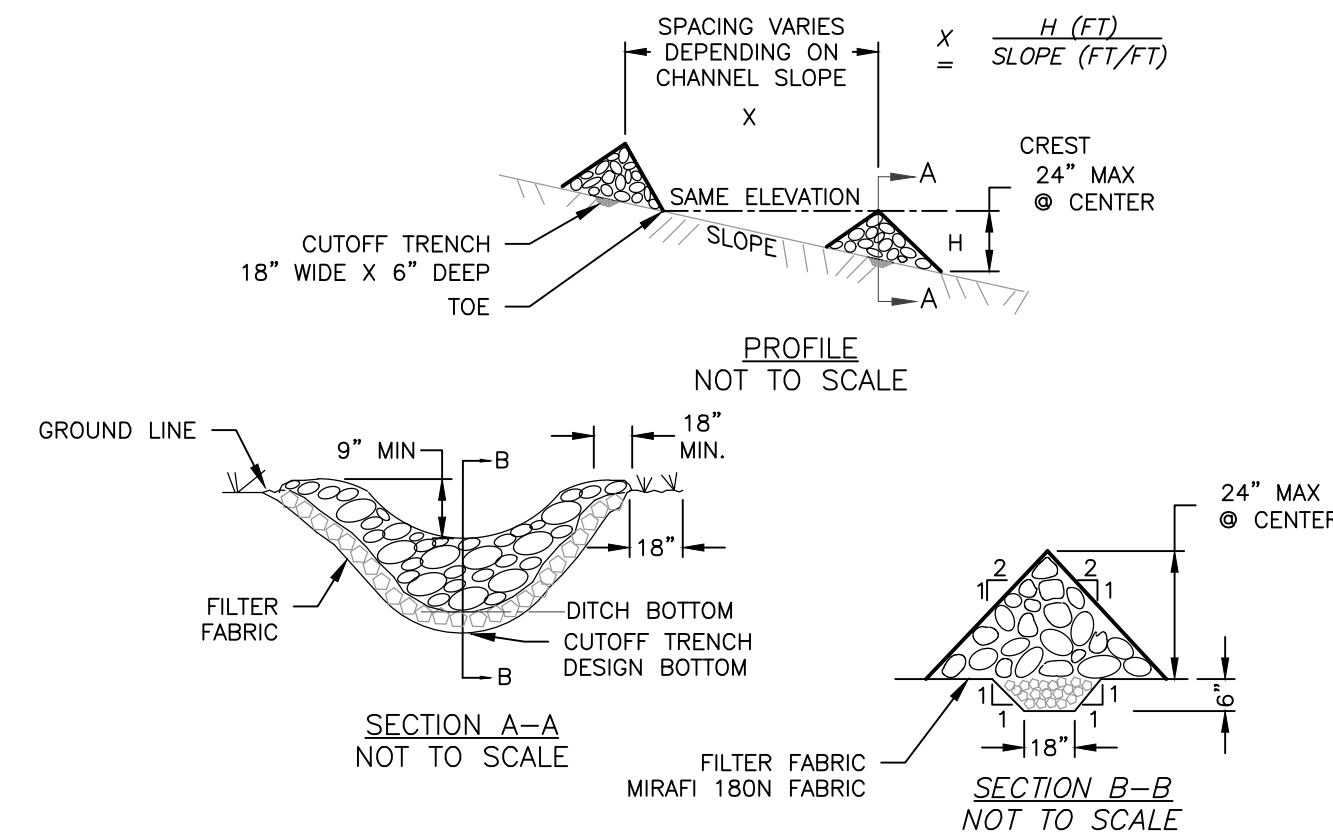


1. AREA CHOSEN FOR STORAGE OPERATIONS SHALL BE DRY AND STABLE.
2. MINIMUM DISTANCE TO A NATURAL WATER COURSE SHALL BE 50'.
3. THE TOP SIX INCHES OF NATIVE MATERIAL SHALL BE REMOVED FROM MATERIAL/FUEL STORAGE AREA AND REPLACED WITH MARAFI 100X GEOTEXTILE FABRIC AND 6" INCHES OF CRUSHED STONE BEDDING. CRUSHED STONE SHALL MEET NYSDOT ITEM NO. 623.11 SPECIFICATIONS.
4. SILT FENCING SHALL BE PLACED 5' DOWNSLOPE OF STORAGE AREA.
5. TEMPORARY PERIMETER DIKES MAY BE REQUIRED TO DIRECT CLEAN RUNOFF FROM STORAGE AREAS. REFER TO EROSION AND SEDIMENT CONTROL PLAN.

FUEL OR MATERIAL STORAGE AREA

MATERIAL STORAGE & SOIL STOCKPILE STABILIZATION DETAIL

SCALE: NTS



CONSTRUCTION SPECIFICATIONS

1. STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
2. SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
4. PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
5. ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE. MAXIMUM DRAINAGE AREA TWO (2) ACRES.

STONE CHECK DAM DETAIL

SCALE: NTS

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CASELLA - FORT EDWARD HAULING FACILITY SITE PLAN
1132-1148 ROUTE 9, TOWN OF MOREAU, SARATOGA COUNTY, NEW YORK

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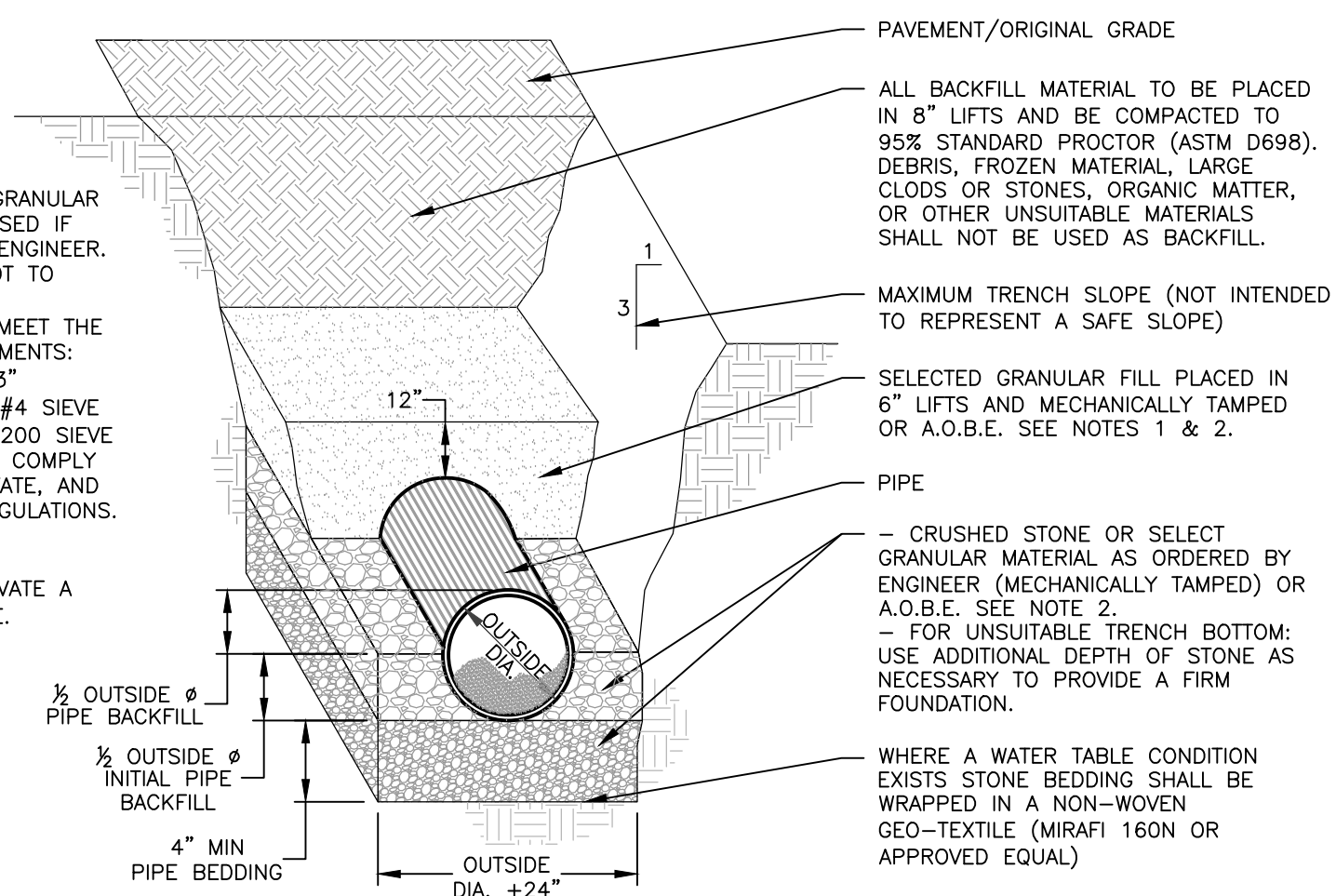
LANSING ENGINEERING
2085 VALLEY ROAD
MALDEN, MA 02148
(617) 889-8843

EROSION & SEDIMENT CONTROL DETAILS

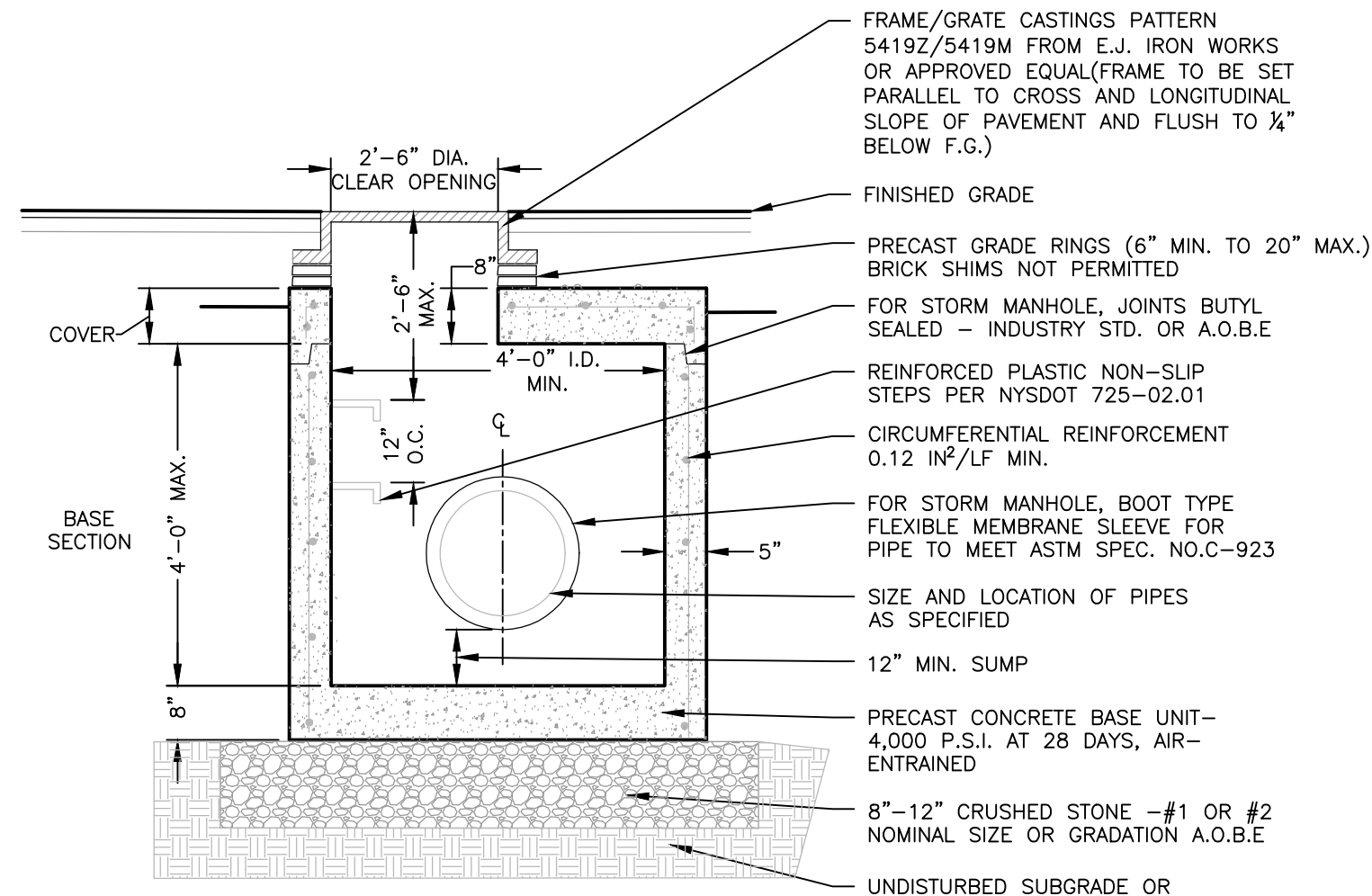
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SCALE: AS SHOWN
DATE: 10/01/26

DT-1
SHEET 10 OF 13

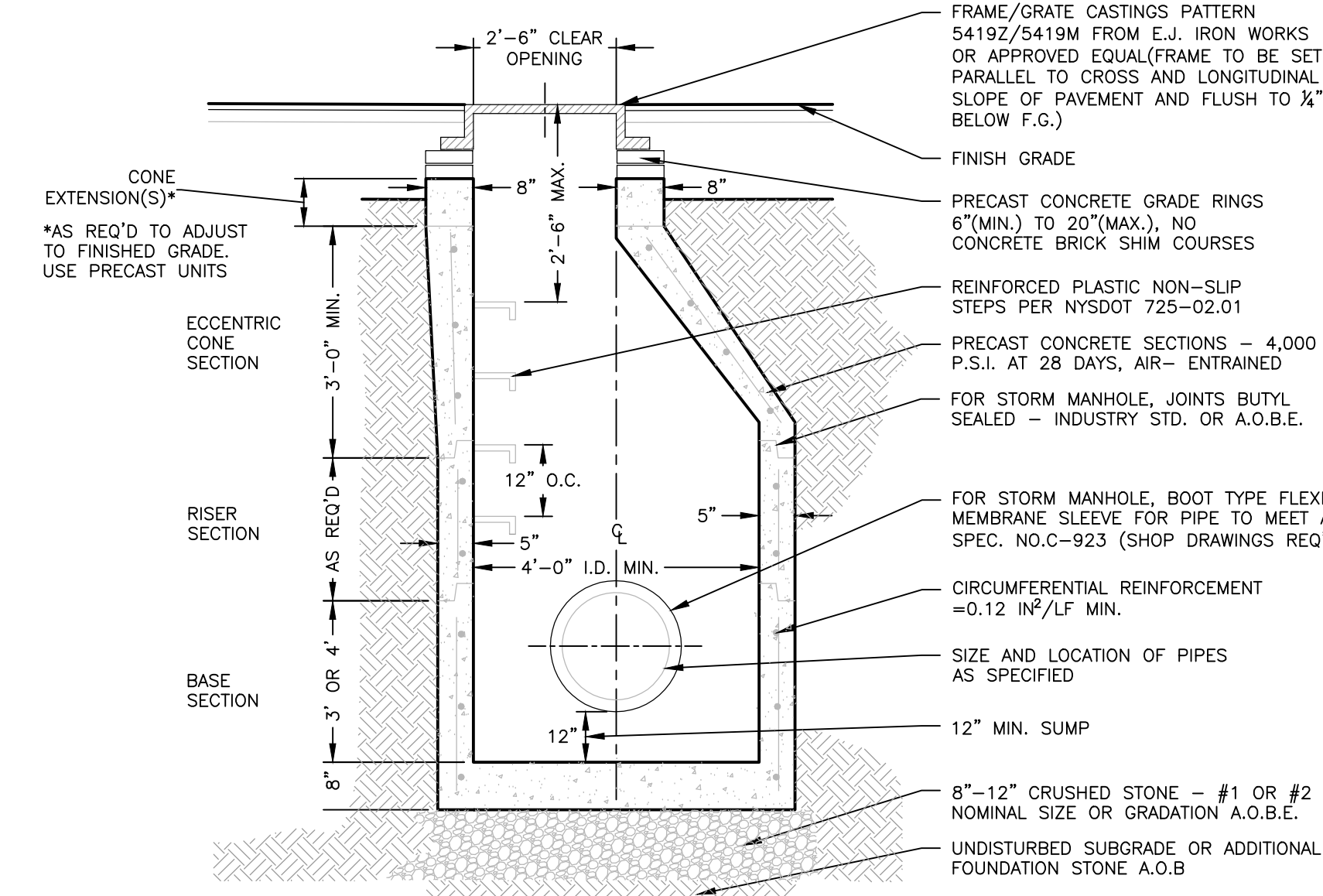
- NOTES:
1. NATIVE EXCAVATED GRANULAR MATERIAL MAY BE USED IF APPROVED BY THE ENGINEER.
 2. CRUSHED STONE NOT TO EXCEED #2 IN SIZE. GRANULAR FILL TO MEET THE FOLLOWING REQUIREMENTS: 0% IN EXCESS OF 3" 25%-70% PASSING #4 SIEVE 0%-15% PASSING #200 SIEVE CONTRACTORS MUST COMPLY WITH ALL LOCAL, STATE, AND FEDERAL SAFETY REGULATIONS. (OSHA & NYSDOT) WHERE ROCK IS ENCOUNTERED EXCAVATE A MIN. 6" BELOW PIPE.
 3. MAXIMUM TRENCH SLOPE (NOT INTENDED TO REPRESENT A SAFE SLOPE)
 4. SELECTED GRANULAR FILL PLACED IN 6" LIFTS AND MECHANICALLY TAMPED OR A.O.B.E. SEE NOTES 1 & 2.



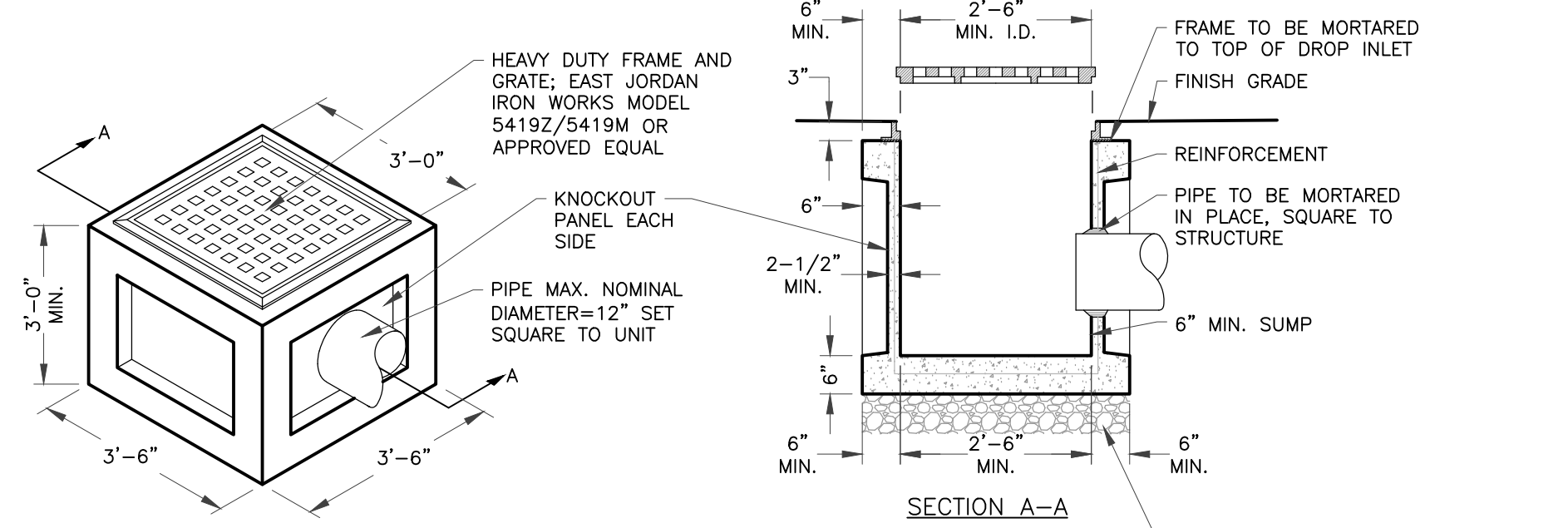
TYPICAL TRENCH DETAIL
FOR CORRUGATED HDPE PIPE
SCALE: NTS



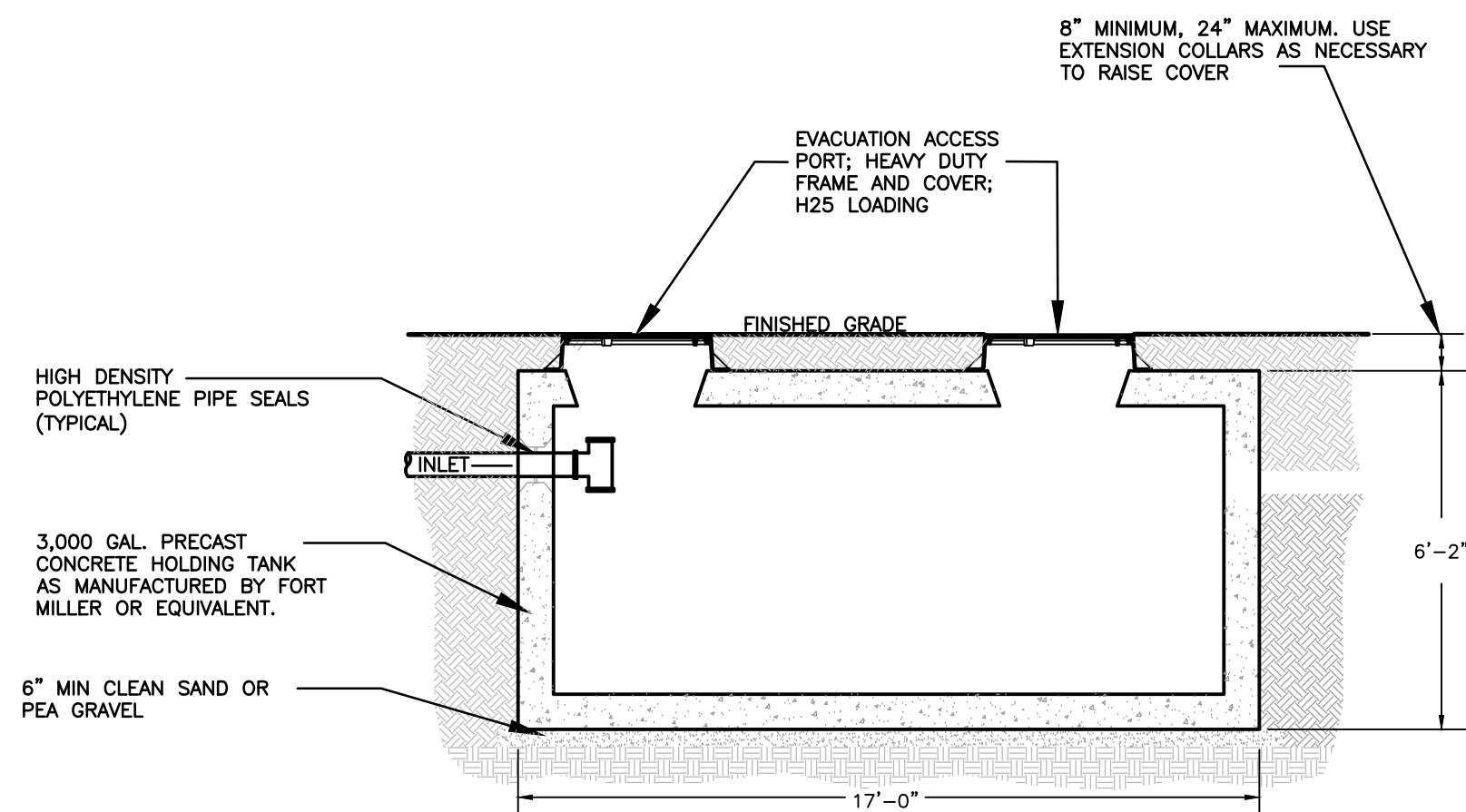
PRECAST CONCRETE
MANHOLE - UNDER 5' DEEP
SCALE: NTS



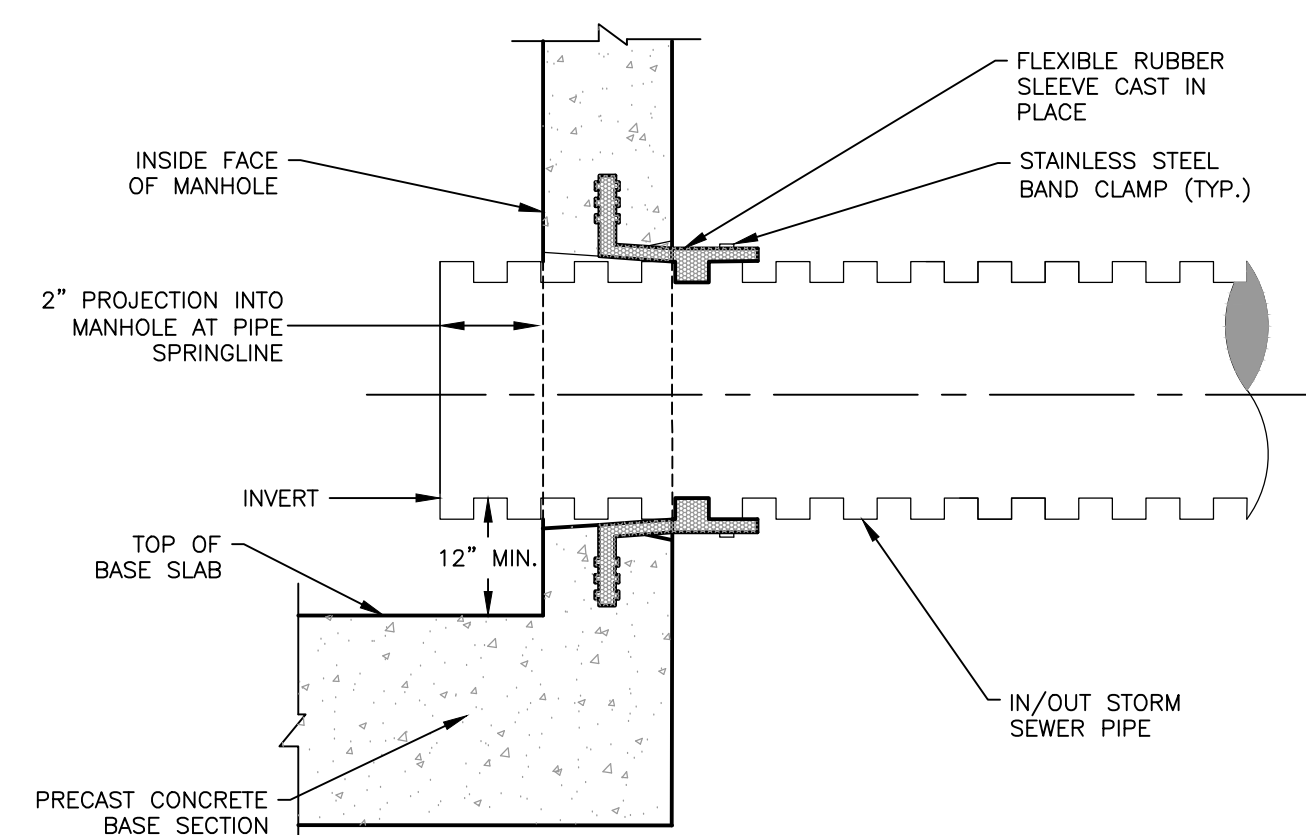
PRECAST CONCRETE
MANHOLE - 5' DEEP AND OVER
SCALE: NTS



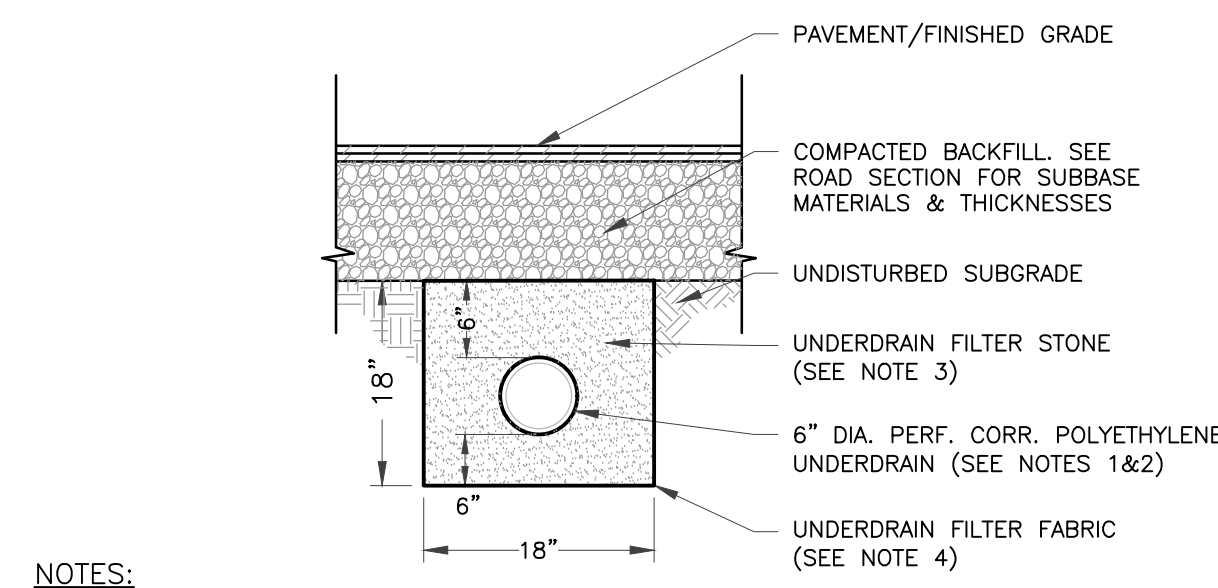
PRECAST CONCRETE MANHOLE -
KNOCKOUT STRUCTURE
SCALE: NTS



PRECAST 3,000 GALLON
HOLDING TANK
SCALE: NTS

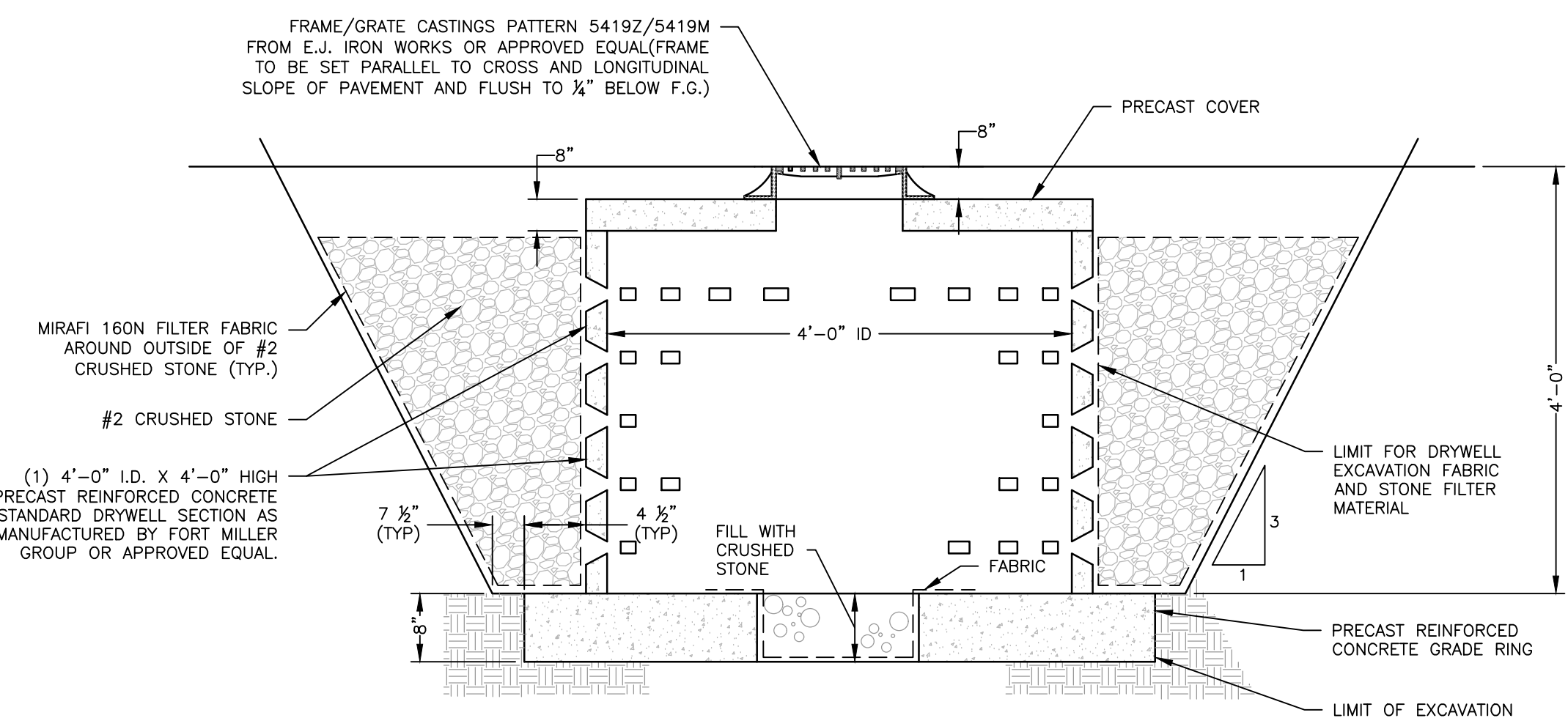


HDPE PIPE TO STRUCTURE:
BOOTED JOINT
SCALE: NTS



- NOTES:
1. UNDERDRAIN SHALL MEET THE REQUIREMENTS OF NYSDOT ITEM 605.1701.
 2. UNDERDRAIN TO BE PLACED WITH PERFORATIONS FACING UPWARD.
 3. FILTER STONE (TYPE 1) SHALL MEET THE REQUIREMENTS OF NYSDOT ITEM 605.0901.
 4. UNDERDRAIN FILTER FABRIC TO BE TYPE II NYSDOT ITEM 605.1001.

UNDERDRAIN DETAIL
SCALE: NTS

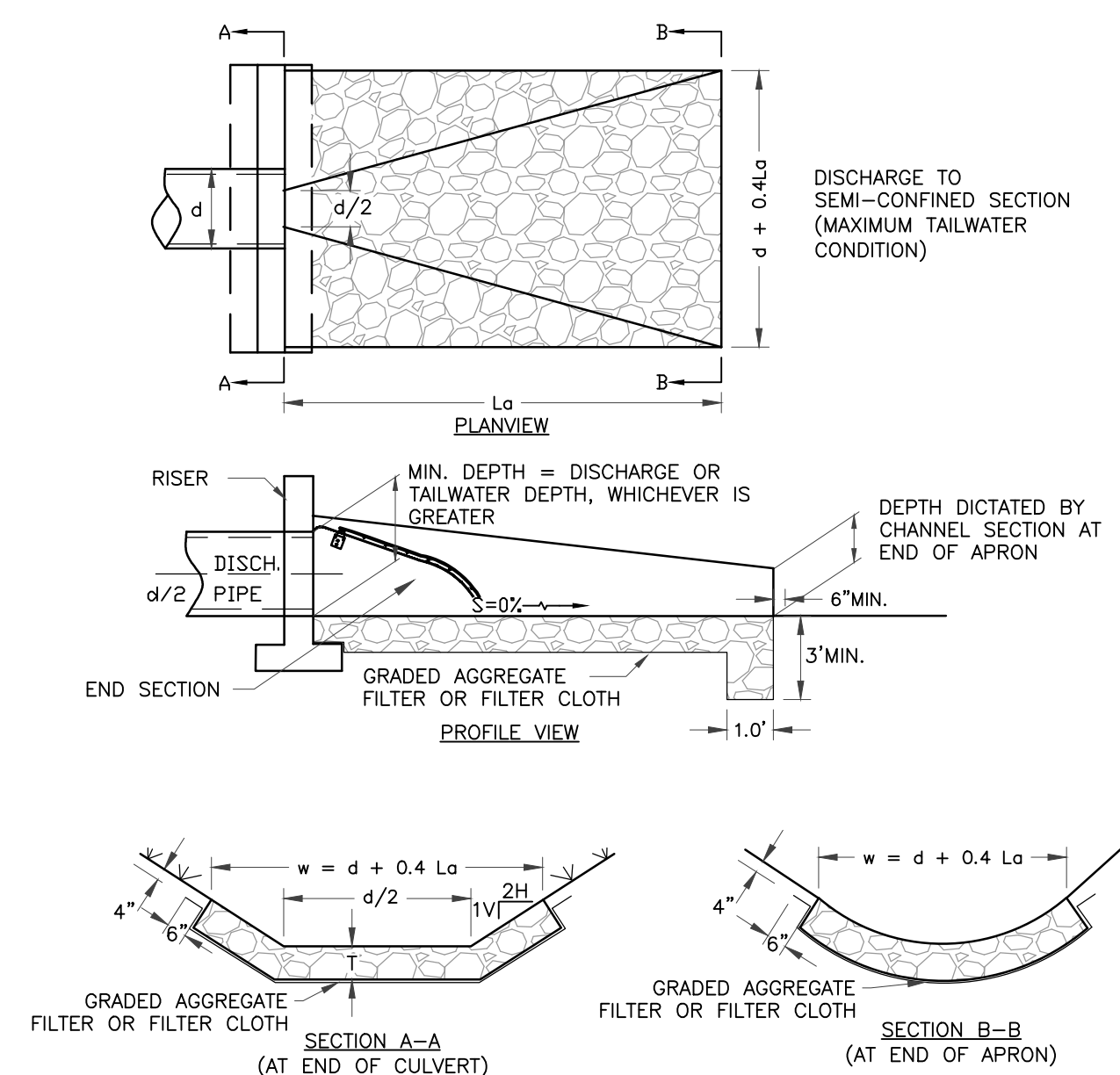


PRECAST CONCRETE DRY WELL
SCALE: NTS

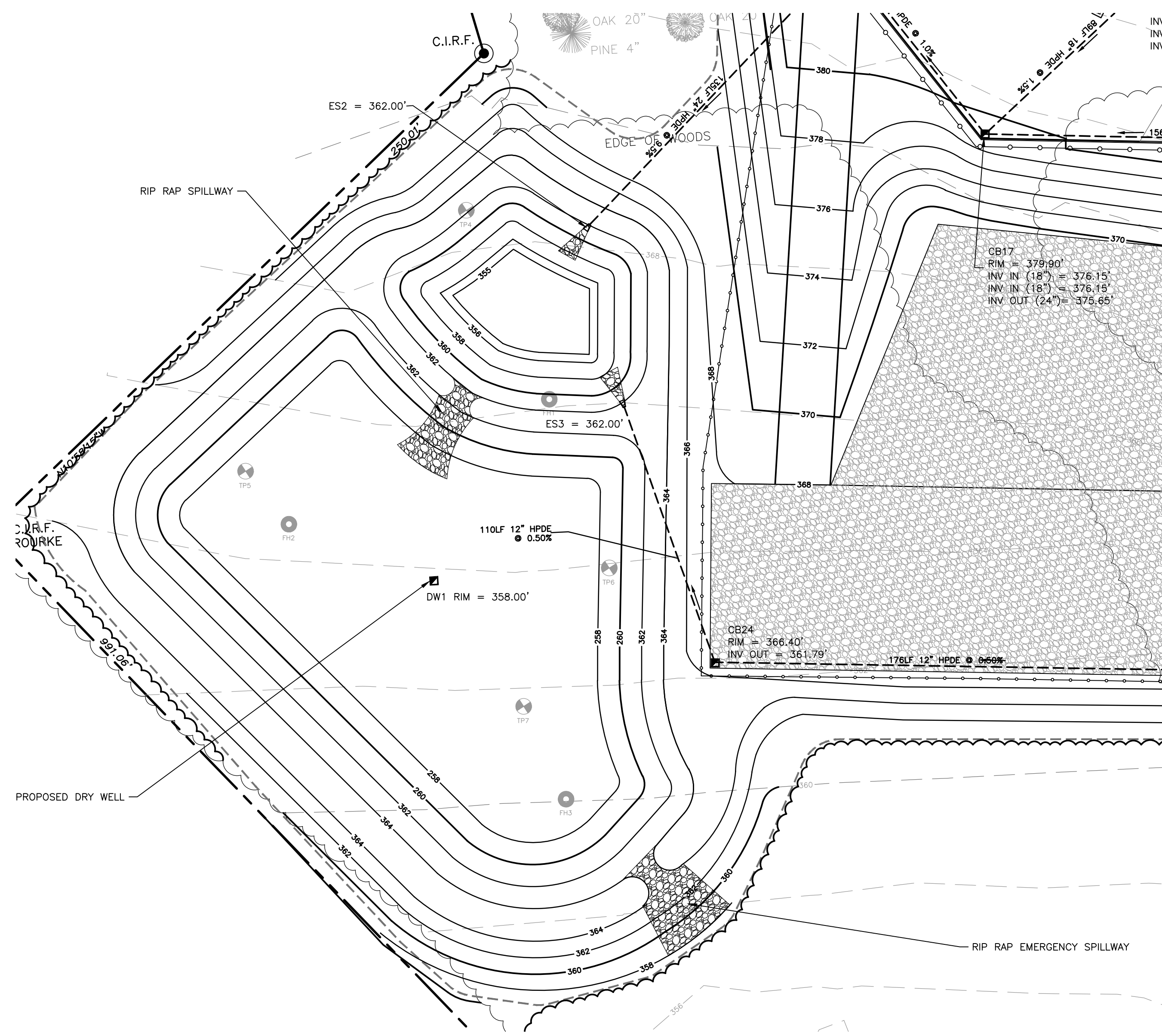
STONE FILL APRON SLOPE*						
PIPE SIZE [4] (IN.)	PIPE SLOPE	STONE DIMENSION [50] (IN.)	NYSDOT STANDARD [17] (IN.)	APRON THICKNESS [17] (IN.)	APRON LENGTH [17] (IN.)	
12	0-3%	4	LIGHT	18	10	
	3-7%	6	LIGHT	18	14	
	7-10%	9	MEDIUM	24	15	
15/18	0-2%	6	LIGHT	18	14	
	2-5%	9	MEDIUM	24	20	
	5-10%	12	MEDIUM	30	24	
24	0-1%	6	MEDIUM	24	14	
	1-2%	9	MEDIUM	24	20	
	2-5%	12	MEDIUM	30	26	
30	0-5%	18	HEAVY	36	30	
	0-3%	12	MEDIUM	28	28	
	3-6%	18	HEAVY	36	36	
36	0-1%	9	MEDIUM	24	24	
	1-2%	15	HEAVY	36	32	
	2-4%	18	HEAVY	36	40	
42	0-1%	12	MEDIUM	28	32	
	0-1%	12	HEAVY	28	28	
	1-2%	15	HEAVY	36	36	
48	0-1%	18	HEAVY	48	48	
	2-3%	24	HEAVY	44	48	
	3-4%	24	HEAVY	44	52	
60	0-1%	18	HEAVY	32	44	
	1-2%	24	HEAVY	43	58	
	2-3%	30	HEAVY	54	66	
	3-4%	33	HEAVY	59	70	

*THE ABOVE TEXT IS BASED ON:
NYSDOT NEW YORK STATE STANDARDS & SPECIFICATIONS FOR EROSION & SEDIMENT CONTROL - FIGURE 3.16 OUTLET PROTECTION DESIGN - MINIMUM TAILWATER CONDITION (BASED ON 15\"/>

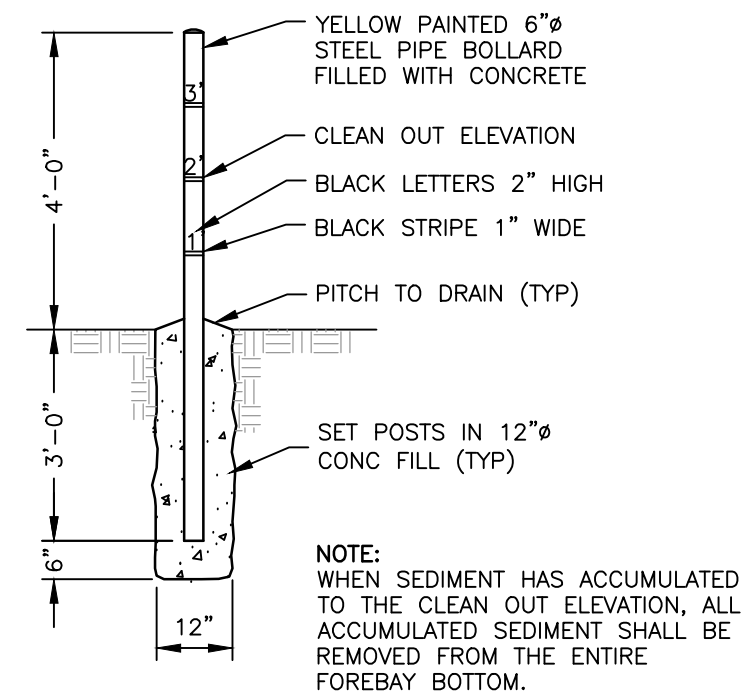
RIPRAP OUTLET PROTECTION
SCALE: NTS



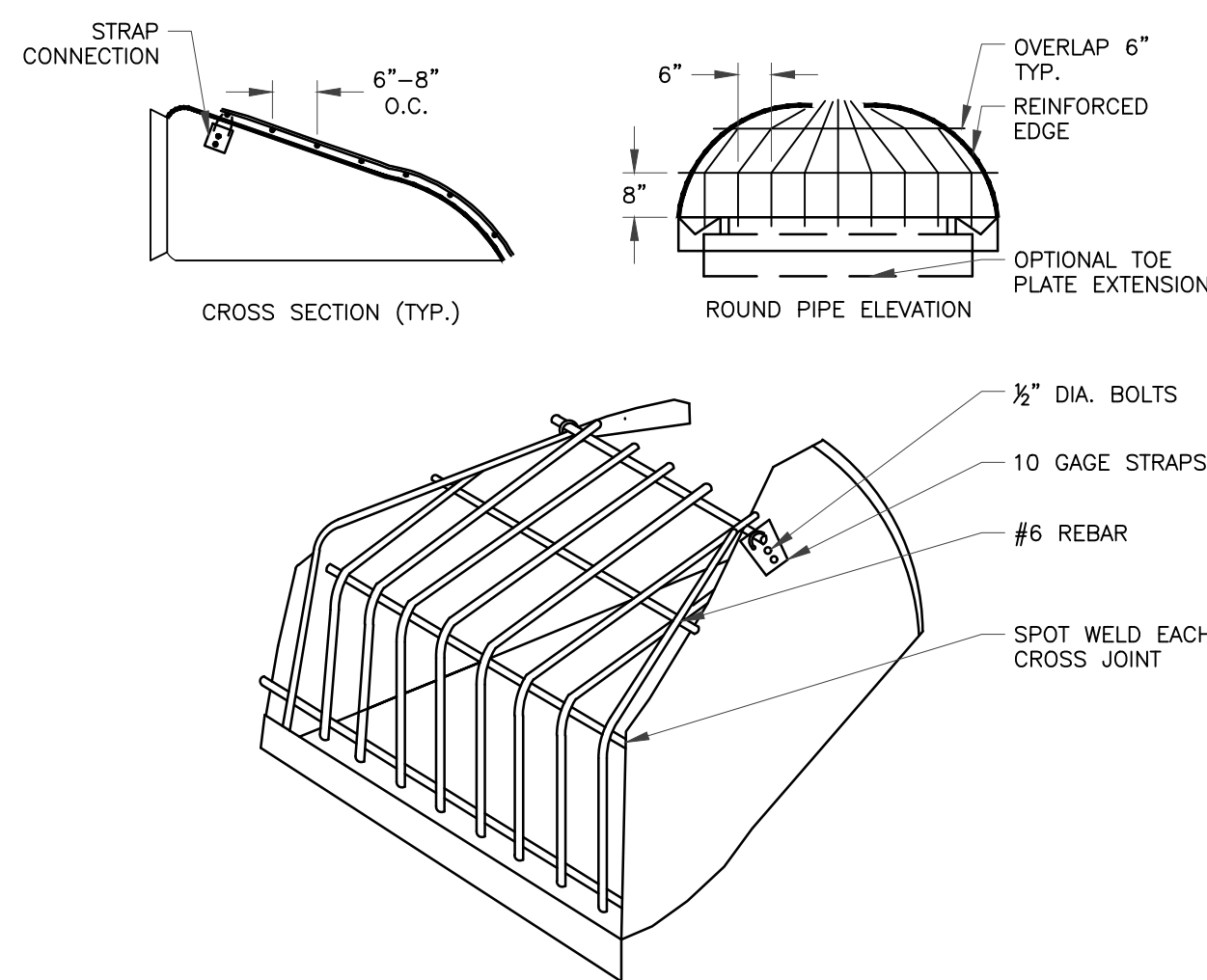
- NOTES:
1. SEE RIPRAP STANDARDS AND SPECIFICATION FOR MAXIMUM TAILWATER CONDITIONS, STONE FILL SIZES AND APRON SIZES.
 2. APRON DIMENSIONS ARE BASED ON PIPES FLOWING FULL; USING ACTUAL FLOWS MAY RESULT IN DIFFERENT APRON DIMENSIONS.
 3. MINIMUM THICKNESS OF THE STONE FILL LAYER SHALL BE 1.5 TIMES THE MAXIMUM STONE DIAMETER FOR 450 OF 15\"/>



1 **STORMWATER INFILTRATION BASIN 1**
SCALE: 1"=30'



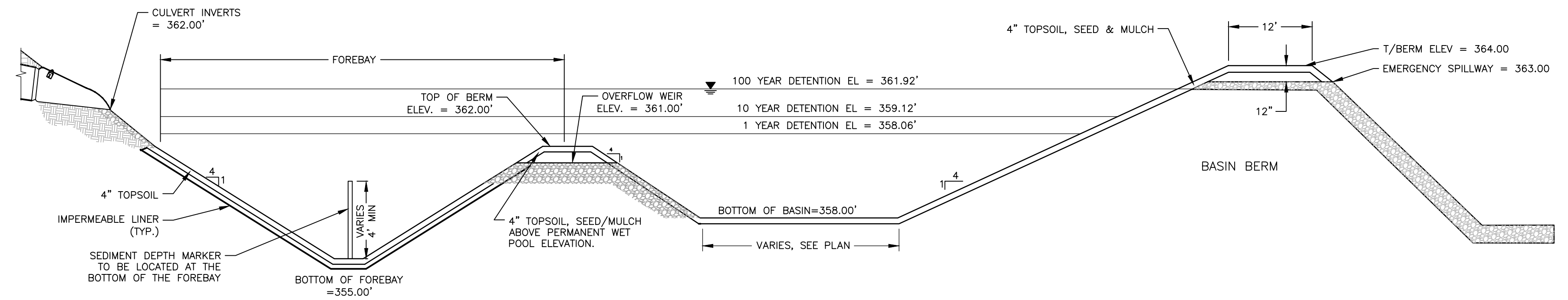
3 **SEDIMENT DEPTH MARKER**
SCALE: NTS



4 **EXTERNAL TRASH RACK**
SCALE: NTS

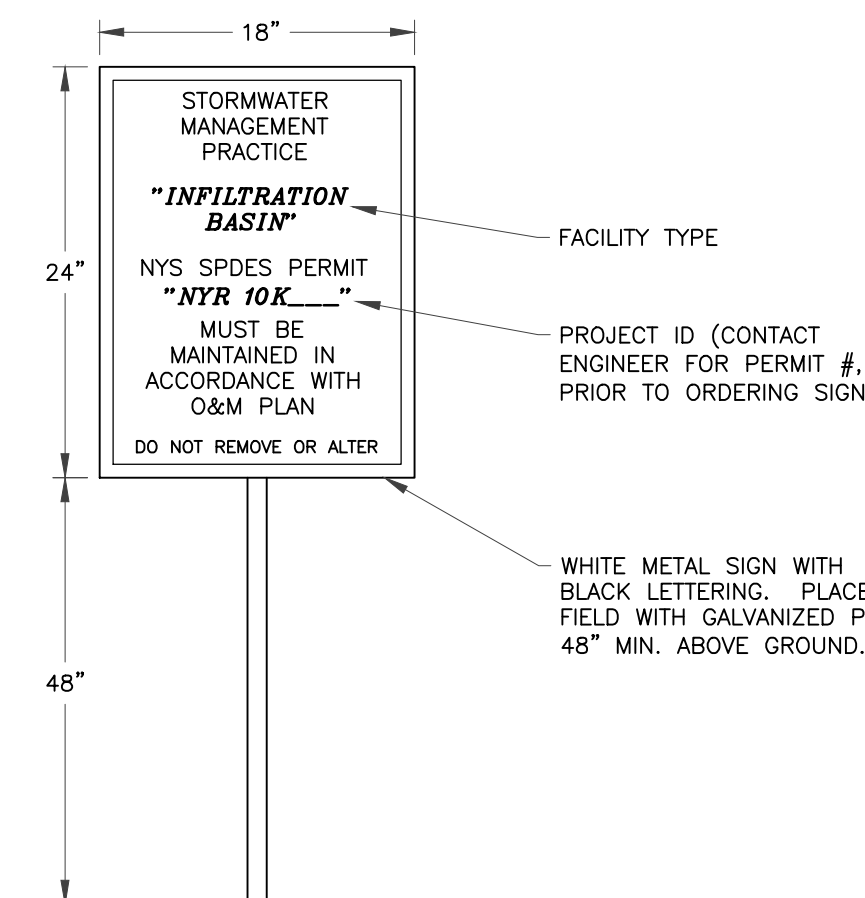
EMBANKMENT FILL NOTES:

- EMBANKMENT FILL FOR THE STORMWATER BASIN BERM SHALL CONSIST OF A CLEAN WELL GRADED MIXTURE OF SILT, CLAY, SAND AND GRAVEL WITH NO PARTICLES LARGER THAN (6) INCHES. EXCAVATED ON SITE SOILS SHALL BE SELECTIVELY STOCKPILED FOR USE AS EMBANKMENT FILL IN AREAS DESIGNATED BY THE ENGINEER. SOIL SUITABLE FOR USE AS EMBANKMENT FILL SHALL HAVE AT LEAST 40% BY WEIGHT FINER THAN THE NO. 200 SIEVE AND NO MORE THAN 15% BY WEIGHT COARSER THAN THE NO. 4 SIEVE. THE FILL SHALL BE FREE OF VEGETATION, ORGANIC MATERIAL AND FROZEN SOIL.
- ALL FILL SHALL BE PLACED IN LIFTS NOT EXCEEDING (8) INCHES IN THICKNESS WHEN LOOSE AND BE COMPACTED TO A DENSITY OF AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM-1557.
- ACCEPTABLE POND LINER OPTIONS INCLUDE: A) 6"-12" OF CLAY SOIL (MINIMUM 50% PASSING THE #200 SIEVE AND A MAXIMUM PERMEABILITY OF 0.00001 CM/SEC), OR B) A 30 MIL POLYLINER.
- THE STABILIZED ACCESS ROAD SHALL CONSIST OF (12) INCHES OF COMPACTED NYSDOT ITEM NO. 304.12.



2 **STORMWATER INFILTRATION BASIN 1**
SCALE: NTS

PH1 - FALLING HEAD TEST 1 4' BELOW GRADE IN MEDIUM SAND	60 IN/HR
PH2 - FALLING HEAD TEST 2 4.5' BELOW GRADE IN TILL LAYER	5.75 IN/HR
PH3 - FALLING HEAD TEST 3 4' BELOW GRADE IN MEDIUM SAND	60 IN/HR

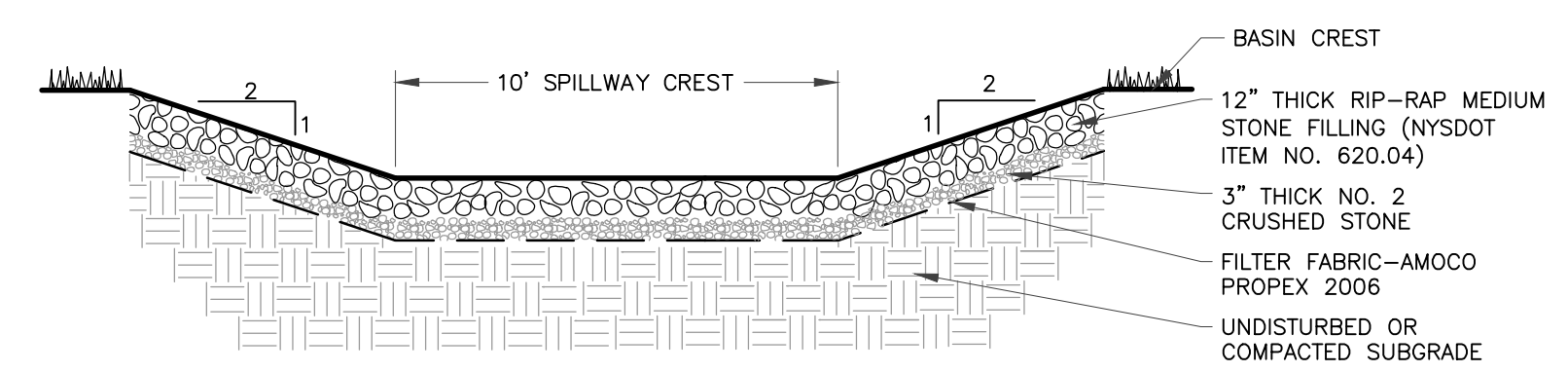


- NOTE:
- SIGNS TO BE PLACED AT ALL STORMWATER MANAGEMENT PRACTICES IN ACCORDANCE WITH SECTION 3.5 OF THE NYS STORMWATER DESIGN MANUAL.
 - "FACILITY TYPE" SHALL BE APPROPRIATE FOR THE ASSOCIATED STORMWATER MANAGEMENT PRACTICE: SEE TABLE 1.
 - USE 10"x12" SIGN FOR STORM PRACTICES SMALLER THAN 400 SF.

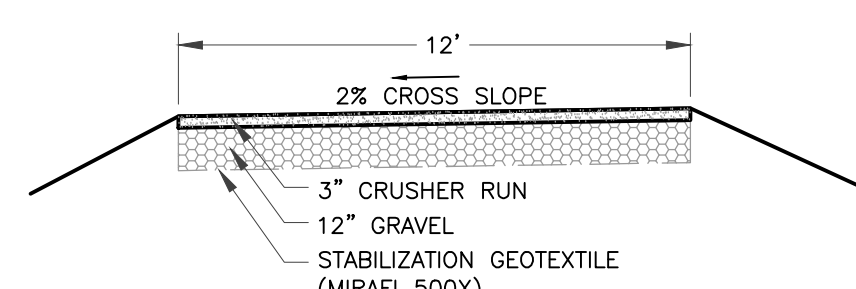
TABLE 1

EXAMPLE FACILITY TYPES
MICROPOOL DETENTION
INFILTRATION BASIN
BIORETENTION
RAIN GARDEN
VEGETATED SWALE
INFILTRATION TRENCH
POROUS PAVEMENT
VEGETATED BUFFER

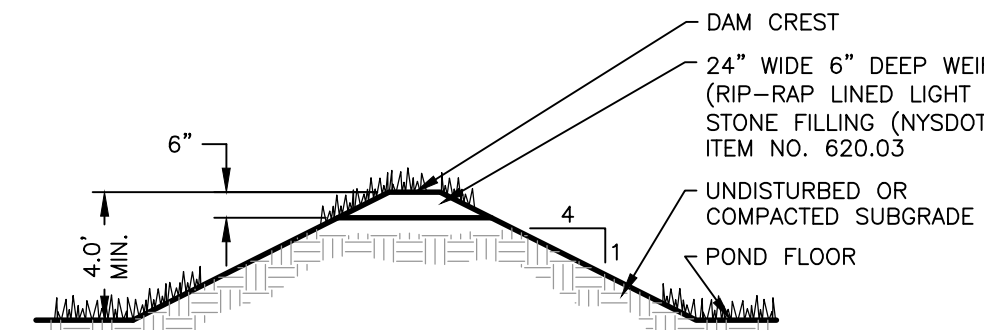
5 **STORMWATER MANAGEMENT FACILITY NOTIFICATION SIGN**
SCALE: NTS



6 **EMERGENCY SPILLWAY CROSS SECTION**
SCALE: NTS



7 **PROPOSED SWMB GRAVEL MAINTENANCE ACCESS DRIVE SECTION**
SCALE: NTS



8 **FOREBAY DAM/WEIR SECTION**
SCALE: NTS

BASIN DETAILS

PROJ. NO:1238.04
SCALE: AS SHOWN
DATE: 10/01/26

DT-4
SHEET 13 OF 13