



MAP REFERENCE:
1. MAP OF A SURVEY
PREPARED FOR: RANDY
& JENNIFER A. NAVAS,
BY ANTHONY VENEZIA, L
DATED 1/26/21



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PROPOSED RAISED FILL SEPTIC SYSTEM PROPOSED NAVAS RESIDENCE

ROSSIER ROAD

TM#111.00-1-38.112
TOWN OF CANANDAIGUA
ONTARIO COUNTY, NY

FEBRUARY 4, 2021 SHEET 1 OF 4

SHEET 1 OF 4

WILLIAM J. GROVE, PE
NYS LICENSE #084111



GENERAL NOTES:

1. SITE INVESTIGATION CONSISTING OF ONE (1) DEEP TEST PIT AND TWO (2) PERCOLATION (PERC) TEST, WAS PERFORMED ON JANUARY 5, 2021 BY WILLIAM J. GROVE, PE. SEE "SOILS INFORMATION" FOR SUMMARIZED SITE INVESTIGATION RESULTS. BASED ON THE RESULTS OF THE SITE INVESTIGATION, A RAISED FILL SEPTIC SYSTEM IS PROPOSED.
2. LOCATIONS OF THE SYSTEM COMPONENTS ARE SHOWN IN THE PLAN VIEW AND COMPONENT DETAILS ARE SHOWN SEPARATELY.
3. THE SEPTIC SYSTEM IS DESIGNED TO TREAT AND DISPERSE 520 GALLONS PER DAY BASED ON THE PROPOSED 4 BEDROOM RESIDENCE, ITS PROPOSED USE AND THE DOH REGULATIONS.
4. WATER SUPPLY TO BE SERVICED BY A PROPOSED WELL. THE WATER SERVICE IS LOCATED AS SHOWN.
5. THE BACKFILL IS TO BE GRADED TO ROUTE SURFACE WATER AWAY FROM THE ABSORPTION FIELD.
6. WATER TREATMENT SYSTEM WASTES (SUCH AS FROM A WATER SOFTENER) ARE TO BE EXCLUDED FROM THE SYSTEM.
7. NO "CLEAN" WATER IS TO ENTER THE SYSTEM VIA ROOF DRAINS, SUMP PUMPS, FOOTING DRAINS, ETC. THE SYSTEM IS A DISPOSAL UNIT FOR COMMON BATHROOM, LAUNDRY AND KITCHEN WASTES ONLY. GARBAGE GRINDERS ARE NOT TO BE USED ON THIS SYSTEM.
8. IF THE HOUSE USES A WATER SOFTENER, THE WATER SOFTENER DISCHARGE SHALL NOT BE ROUTED TO THE WASTEWATER SYSTEM. THE WATER SOFTENER DISCHARGE SHOULD BE DIRECTED TO ITS OWN SUBSURFACE DISPOSAL SYSTEM LOCATED AWAY FROM THE PROPOSED LEACH AREA.
9. THE CONTRACTOR IS TO CONTACT DIG SAFELY NEW YORK AT 800-962-7962 TO VERIFY THE LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO DOING ANY EXCAVATION WORK.
10. NO PART OF THE SYSTEM IS TO BE LOCATED UNDER DRIVEWAYS, BUILDINGS, SWIMMING POOLS OR OTHER AREAS SUBJECT TO HEAVY LOADING UNLESS DESIGNED FOR SUCH.
11. HEAVY CONSTRUCTION EQUIPMENT MUST NOT BE ALLOWED WITHIN THE AREA OF THE SYSTEM PRIOR TO CONSTRUCTION
12. ALL VEGETATION SHALL BE CUT AS CLOSE TO GRADE AS POSSIBLE AND REMOVED.
13. UNDERLYING SOIL SHALL BE PLOWED WITH AT LEAST A DOUBLE BOTTOMED BLADE/FURROW PLOW AND THE FURROW TURNED UPSLOPE.
14. AFTER THE SITE HAS BEEN CLEARED AND PLOWED, ALL TRAFFIC SHALL BE EXCLUDED.
15. SOIL WITH A PERCOLATION RATE OF 11-20 MINUTES PER INCH IS REQUIRED
16. PERCOLATION TESTS SHALL BE CONDUCTED IN THE IN SITU FILL MATERIAL AT THE BORROW PIT AND IN THE STABILIZED FILL MATERIAL AT THE CONSTRUCTION SITE.
17. SOILS WHOSE PERMEABILITY CHARACTERISTICS WILL NOT CHANGE SIGNIFICANTLY UPON STABILIZATION (i.e., SAND AND SANDY LOAM) MAY BE MECHANICALLY COMPACTED OR ALLOWED TO SETTLE NATURALLY.
18. MECHANICAL COMPACTION SHALL BE ACHIEVED VIA LIGHT TRACK TYPE MACHINES (BULLDOZER OR FRONT END LOADER WITH DOWNWARD BLADE/BUCKET PRESSURE) OR A STEEL WHEELED ROLLER. MECHANICAL COMPACTION SHALL BE ACCOMPLISHED IN SHALLOW LIFTS (APPROXIMATELY 6") TO THE APPROXIMATE DENSITY OF THE UNDISTURBED BORROW PIT SOIL.
19. THE TOPSOIL SURFACE OF THE FILL SHALL BE GRADED TO ENHANCE RUNOFF OF PRECIPITATION.
20. ON SLOPED SITES, A DIVERSION DITCH OR CURTAIN DRAIN SHALL BE CONSTRUCTED UPHILL FROM THE FILL TO PREVENT SURFACE RUNOFF FROM ENTERING THE FILL.
21. RAISED SYSTEM SHALL INCORPORATE AN AUTOMATIC DOSING DEVICE OR PRESSURE DISTRIBUTION. GRAVITY DISTRIBUTION MAY BE INSTALLED UNDER THE JURISDICTION OF A LOCAL HEALTH DEPARTMENT WITH A SYSTEM DESIGN AND CONSTRUCTION INSPECTION CERTIFICATION PROGRAM.
22. DISTRIBUTION PIPE DIAMETERS FOR DOSING SHALL BE IN THE RANGE OF 3 INCHES MINIMUM TO 6 INCHES MAXIMUM. DISTRIBUTION PIPE DIAMETERS FOR PRESSURE DISTRIBUTION SHALL BE IN THE RANGE OF 1 INCH MINIMUM TO 3 INCHES MAXIMUM. USE 4 INCH DIAMETER PERFORATED PIPE OR BIODIFFUSER2 TYPE CHAMBER FOR GRAVITY DISTRIBUTION IN CONVENTIONAL SYSTEM. USE 4 INCH DIAMETER PERFORATED PIPE OR "BIODIFFUSER2" TYPE CHAMBERS WITH HANGING PERFORATED PIPE IN A RAISED FILL SYSTEM UTILIZING AN AEROBIC TREATMENT UNIT.
23. THE CONTRACTOR SHALL PROVIDE AN ACCURATE AS-BUILT MAP TO THE OWNER REFERENCING ALL SYSTEM COMPONENTS TO PERMANENT SITE FEATURES FOR LATER RECOVERY.
24. AFTER AN ENVIRONMENTAL ASSESSMENT, THE ENGINEER HAS DETERMINED THAT THE DEVELOPMENT OF THE SITE WITH THE PROPOSED SYSTEM IS CONSISTENT WITH THE OVERALL DEVELOPMENT OF THE AREA AND WILL CAUSE NO ADVERSE ENVIRONMENTAL IMPACTS.
25. THE PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM MUST BE DESIGNED AND THE INSTALLATION SUPERVISED AND CERTIFIED BY A DESIGN PROFESSIONAL.
26. IT IS THE RESPONSIBILITY OF THE OWNER AND/OR CONTRACTOR TO CONTACT THE LOCAL CODE ENFORCEMENT OFFICER ABOUT ANY REQUIRED PERMITS OR FEES BEFORE STARTING WORK ON THE SYSTEM INSTALLATION.

Warning and Disclaimer of Liability:
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DESIGN CALCULATIONS:

DESIGN FLOW	4 BEDROOM HOUSE @ 130 GALLONS PER DAY (GPD)/BEDROOM = 520 GPD
SEPTIC TANK:	1250 GALLON DUAL COMPARTMENT
DESIGN PERC. RATE:	11 TO 15 MINUTES/INCH (PLACED FILL)
REQUIRED BASAL AREA:	2600 SQUARE FEET (0.2 GPD/SF) 2600 PROVIDED (65' x 40')
REQUIRED ABSORPTION TRENCH LENGTH:	325 FEET 360 FEET PROPOSED

SIX (6) 60 FOOT LONG TRENCHES ARE PROPOSED (TOTAL 300 FEET). TRENCHES TO BE SPACED AT 6 FT ON CENTER

CALCULATION REFERENCE BASED ON N.Y.S.D.O.H., "INDIVIDUAL RESIDENTIAL WASTEWATER TREATMENT SYSTEMS - DESIGN HANDBOOK", 2012

PERCOLATION TEST RESULTS:

TESTS PERFORMED ON JANUARY 5, 2021

TEST NUMBER	DEPTH	PERC RATES (MIN/IN.)	STABILIZED PERC RATE
PT -1	12 INCHES	9, 10, 10	10 MINUTES/INCH
PT - 2	12 INCHES	14, 14, 15	15 MINUTES/INCH

SOILS INFORMATION:

DH - 1	
0" - 11"	DARK BROWN LOAMY TOPSOIL
11" - 17"	LIGHT BROWN SILTY LOAM
17" - 48"	LIGHT BROWN AND GRAY SILTY CLAY

MOTTLING OBSERVED AT 19"
ROOTS TO 18"

KEY:

- PT-1 PERC TEST LOCATION
- ⊕ TP-1 TEST PIT LOCATION
- CLEAN-OUT



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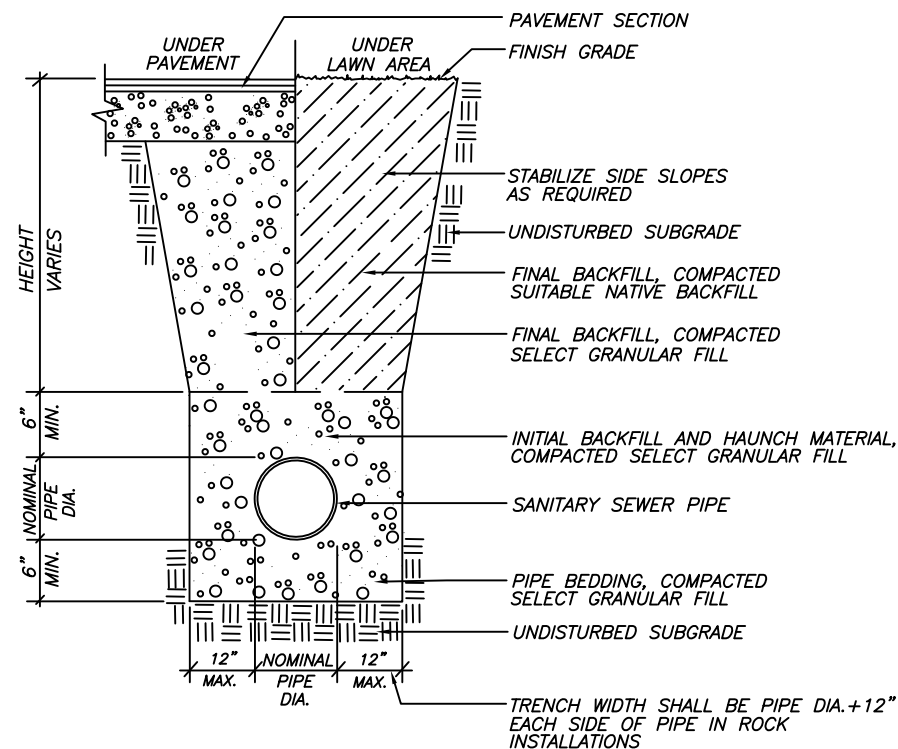
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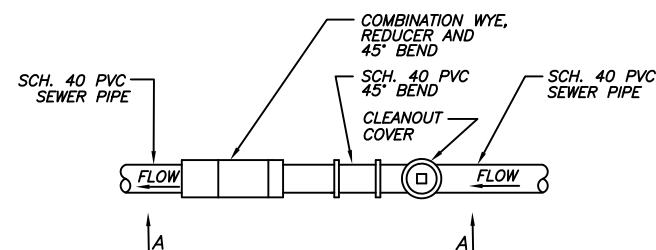
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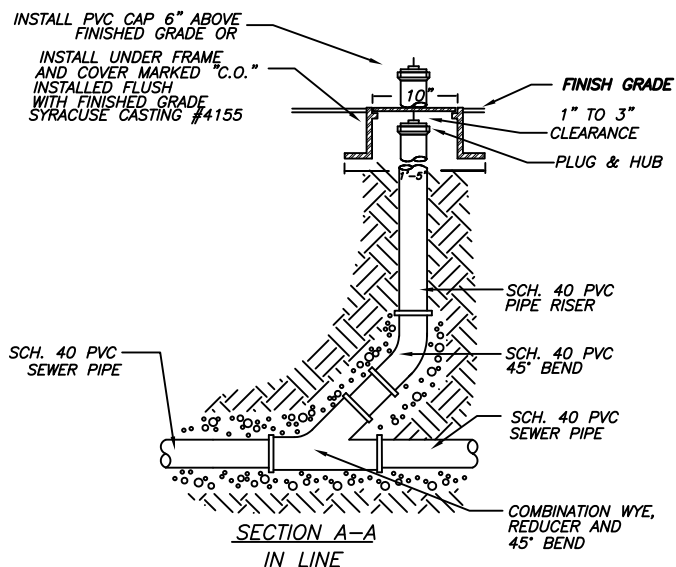


SANITARY SEWER PIPE TRENCH

NOT TO SCALE

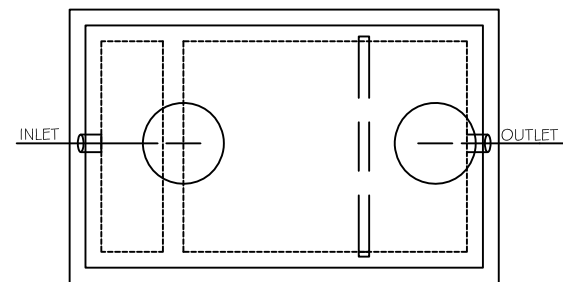


PLAN VIEW

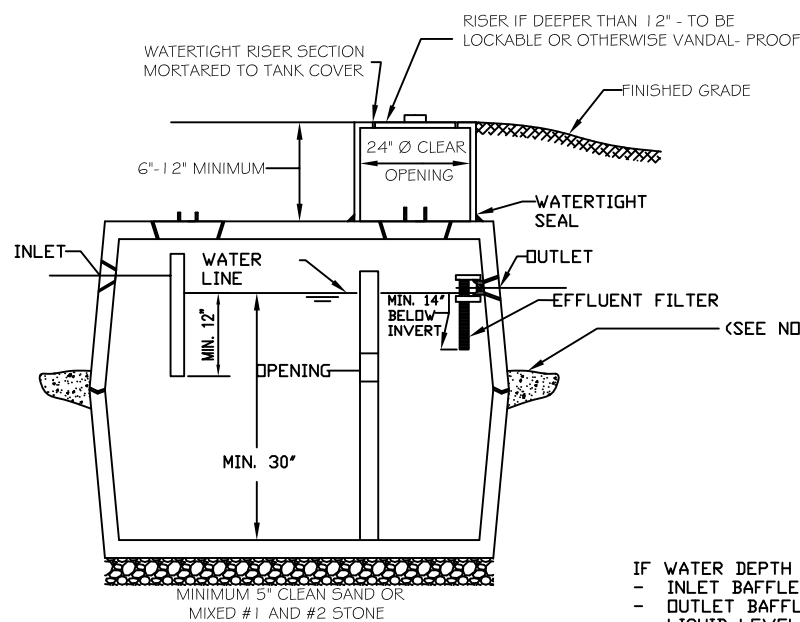


SANITARY SEWER CLEANOUT

NOT TO SCALE



TOP VIEW

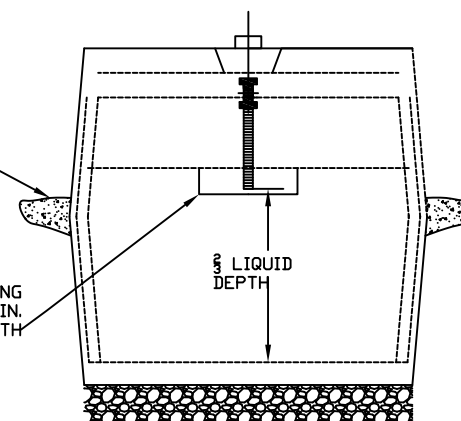


SECTION VIEW

SEPTIC TANK

SEPTIC TANK NOTES:

1. ALL PIPE CONNECTION SHALL BE WATERTIGHT.
2. BAFFLES SHALL BE PROVIDED AT INLET AND OUTLET OF SEPTIC TANK (WITH OUTLET FILTER)
3. A 2" MINIMUM DROP FROM INLET TO OUTLET
4. SEPTIC TANK SHALL BE PRECAST CONCRETE WITH WIRE MESH REINFORCING, OR POLYETHYLENE MINIMUM AS SHOWN ON THE SITE PLAN, DUAL-CHAMBER REQUIRED.
5. INSPECTION PORTS TO BE OF ADEQUATE DIAMETER, ONE TO BE LOCATED OVER BAFFLE TO ACCESS FILTER/BAFFLE.
6. TANK INSTALLATION IN AREA OF HIGH GROUNDWATER SHALL BE INSTALLED WITH ANTI-FLOATING DEVICE AS PER TANK MANUFACTURER.
7. TANK SPECIFICATIONS SHALL CONFORM TO NYS APPENDIX 75- A OR CURRENT STANDARDS.



END VIEW

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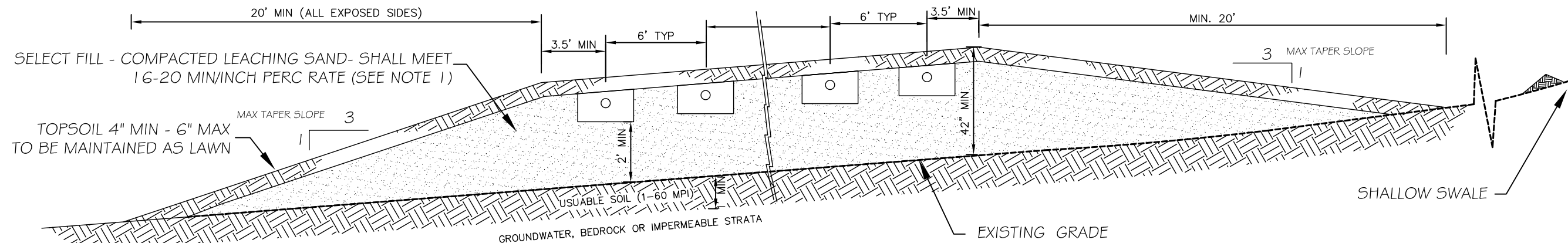
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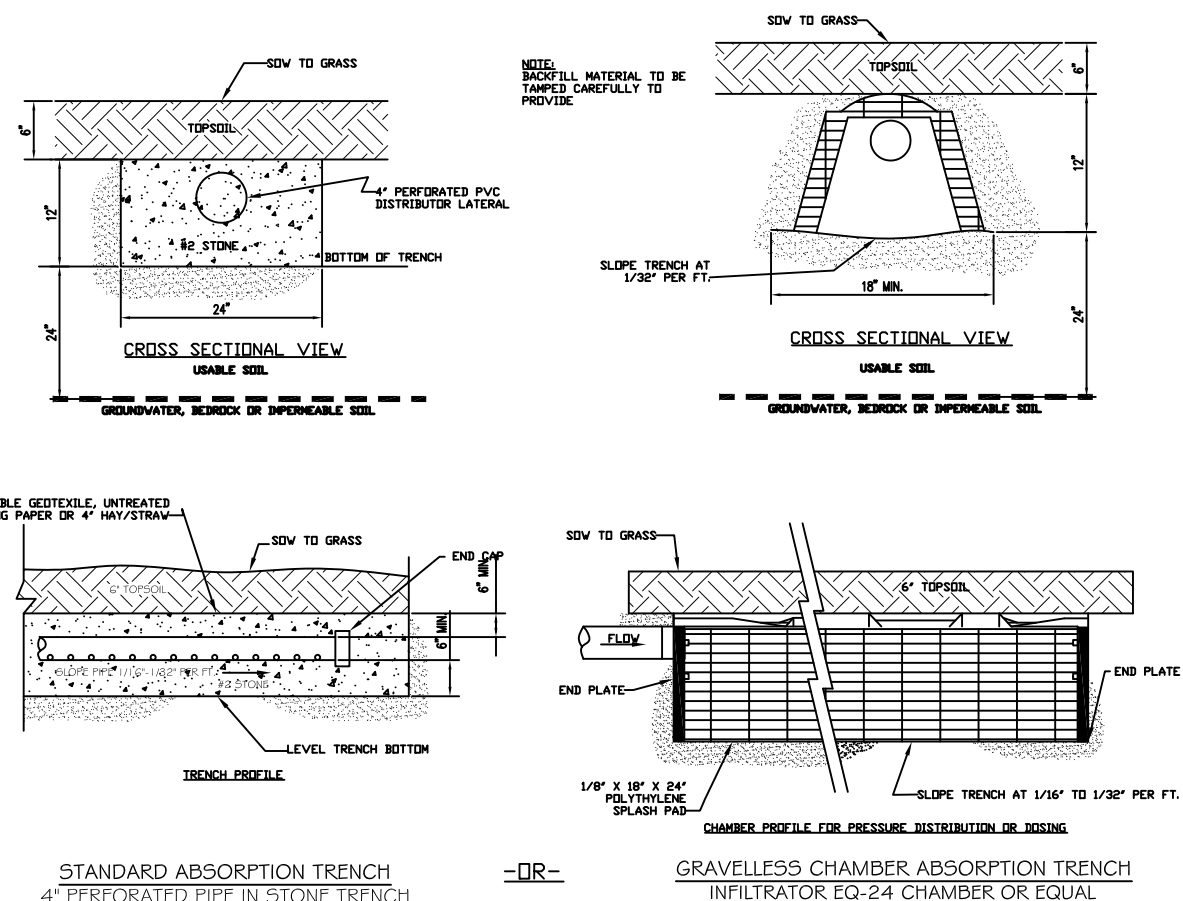


RAISED FILL ON SLOPING GROUND

RAISED BED NOTES:

NOT TO SCALE

1. A MINIMUM OF 2 PERCOLATION TESTS SHALL BE PERFORMED IN THE BED AFTER PLACEMENT/COMPACTION IS COMPLETED, PRIOR TO LINES BEING INSTALLED (WATERSHED INSPECTOR TO WITNESS ALL PERCOLATION TESTS).
2. SEE SYSTEM 'PLAN VIEW' FOR NUMBER AND LOCATION OF LINES TO BE INSTALLED.
3. BED TO BE SOWED TO GRASS AND MAINTAINED AS LAWN AREA



DISPERSAL TRENCH DETAILS

-OR-

GRAVELLESS CHAMBER ABSORPTION TRENCH

INFILTRATOR EQ-24 CHAMBER OR EQUAL

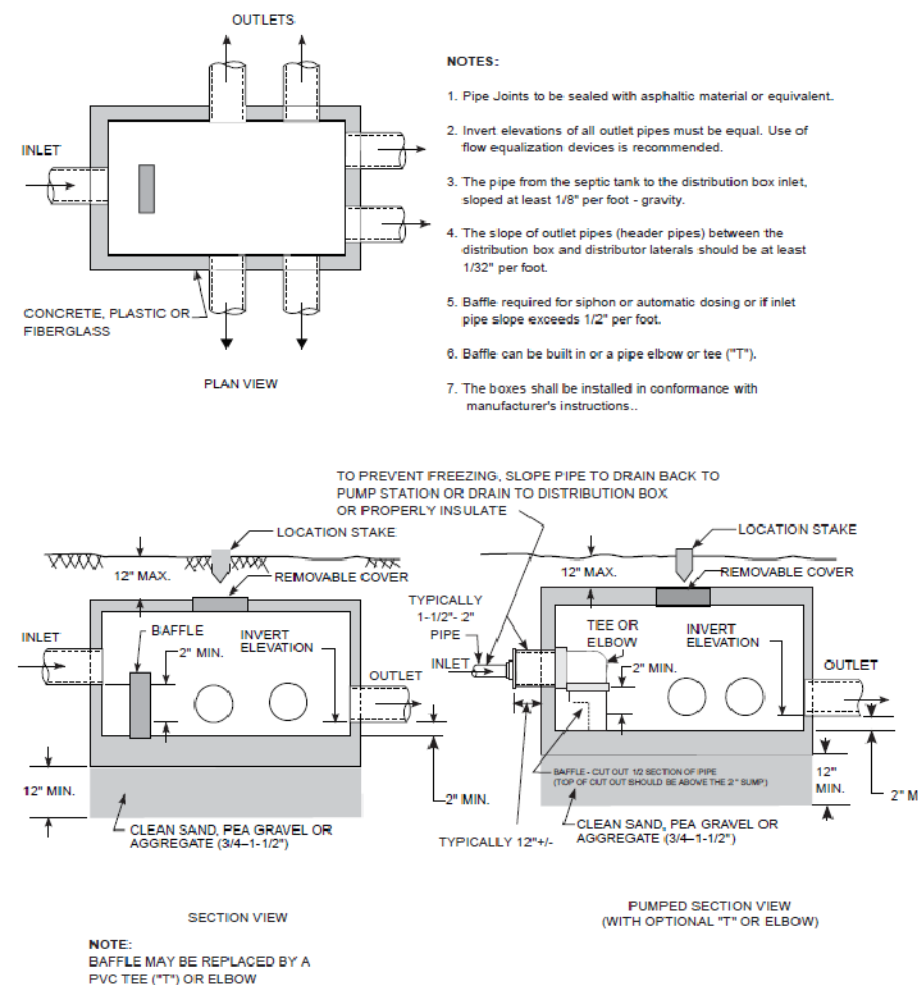


FIGURE 10: DISTRIBUTION BOX DETAIL



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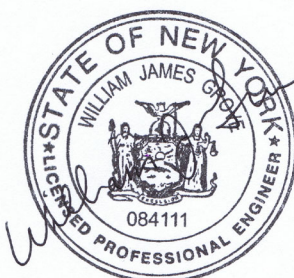
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