PLAN VIEW
SCALE 1:20

RETAINING WALL

PROPOSED ASPHALT DRIVE

GARAGE SLAB: 877.5

PROPOSED 5 BEDROOM HOUSE
FFE: 878.5
BFE: 869.0

DECK

TOPSOIL STOCKPILE

EXISTING CONTOUR (TYP)

PROPOSED CONTOUR (TYP)

LEACH LINES WITH END CAPS:
(6) @ 56' LONG = 336' TOTAL
INFILTRATOR QUICK4 PLUS EQ-36 LOW PROFILE GRAVELLESS SYSTEM OR EQUAL OR 4" PERFORATED PIPE IN STONE TRENCH, TRENCHES COVERED WITH MINIMUM 6" TOPSOIL, SEEDED AND MAINTAINED AS LAWN

PROPERTY LINE (TYP)

PROPOSED WATER SERVICE

PROPOSED ELECTRIC SERVICE

1500 GALLON DUAL COMPARTMENT SEPTIC TANK WITH EFFLUENT FILTER
INV. IN ± 867.0'
INV. OUT ± 866.7'

13% ±

10' MIN

25'

155.2'

DROP BOX (TYP)

OVERFLOW DRYWELL
RIM: 869.5
INV: 866.5

4" SCH. 40 PVC SEWER LINE WITH CLEANOUT SLOPE 1/4" PER FT

4" SCH. 40 PVC EFFLUENT LINE WITH BENDS AS REQUIRED MIN SLOPE 1/8" PER FOOT

PT-1

DH-1

PT-2

STABILIZED CONSTRUCTION ENTRANCE

NOTE: CONTRACTOR TO MARK AND PROTECT PROPOSED LEACH AREA

50% FUTURE EXPANSION AREA

PROPOSED SILT FENCE BELOW DISTURBED AREA

COUNTY ROAD 16

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CONVENTIONAL SEPTIC SYSTEM DESIGN

SCHUTT RESIDENCE

4526 COUNTY ROAD 16
PORTION OF
T.M.#140.07-1-5.100

TOWN OF CANANDAIGUA
ONTARIO COUNTY
NEW YORK

FEBRUARY 21, 2020

SHEET 1 OF 4

STATE OF NEW YORK
WILLIAM JAMES GROVE
LICENSED PROFESSIONAL ENGINEER
084111

WILLIAM J. GROVE, PE
NYS LICENSE #084111

GENERAL NOTES:

1. SITE INVESTIGATION CONSISTING OF ONE (1) DEEP TEST PIT AND TWO (2) PERCOLATION (PERC) TESTS, WAS PERFORMED ON FEBRUARY 4, 2020 BY WILLIAM J. GROVE, PE. SEE "SOILS INFORMATION" FOR SUMMARIZED SITE INVESTIGATION RESULTS. BASED ON THE RESULTS OF THE SITE INVESTIGATION, A CONVENTIONAL 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 650 GALLONS PER DAY BASED ON THE PROPOSED 5 BEDROOM RESIDENCE, THE PROPOSED USE AND THE DOH REGULATIONS.
4. WATER SUPPLY IS SERVICED BY THE TOWN OF CANANDAIGUA WATER SERVICE, THE SERVICE FOR WHICH IS SHOWN ON THE PLAN.
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. 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.
8. 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.
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.
11. TRENCH DEPTH SHALL BE ±14". TRENCHES SHALL BE EXCAVATED TO DESIGN DEPTH WITH BOTTOMS PRACTICALLY LEVEL
12. FOLLOWING EXCAVATION, THE TRENCH BOTTOMS SHOULD BE GRADED BY HAND.
13. TRENCH BOTTOMS AND SIDES SHALL BE IMMEDIATELY RAKED AFTER FINAL GRADING.
14. INFILTRATOR QUICK 4 PLUS EQ-36 LOW PROFILE GRAVELLESS DISTRIBUTOR CHAMBERS SHALL BE INSTALLED IN THE TRENCHES AT A SLOPE OF 1/32" PER FOOT.
15. TRENCHES SHALL BE BACKFILLED WITH THE NATIVE SOIL EXCAVATED FROM THE TRENCHES.
16. TRENCHES SHALL BE COVERED WITH 6" TOPSOIL, SEEDED AND MULCHED AND MAINTAINED AS LAWN.
17. THE EARTH BACKFILL IS TO BE MOUNDED SLIGHTLY ABOVE THE ORIGINAL GROUND LEVEL (i.e., NOT COMPACTED) TO ALLOW FOR SETTLING. FOLLOWING SETTLEMENT, THE ENTIRE AREA SHOULD BE GRADED WITHOUT THE USE OF HEAVY EQUIPMENT AND SEEDED WITH GRASS. HEAVY EQUIPMENT SHALL NOT ENTER THE ABSORPTION FACILITY AREA OR THE PROPOSED EXPANSION AREA AFTER THE SUBSURFACE SEWAGE TREATMENT SYSTEM HAS BEEN CONSTRUCTED.
18. HEAVY CONSTRUCTION EQUIPMENT MUST NOT BE ALLOWED WITHIN THE AREA OF THE SYSTEM PRIOR TO CONSTRUCTION
19. THE TOPSOIL SURFACE 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. DISTANCE BETWEEN TRENCHES TO BE 4 FEET MINIMUM EDGE-TO-EDGE (TYPICALLY 6' CENTER-TO-CENTER).
22. THE CONTRACTOR SHALL PROVIDE AN ACCURATE AS-BUILT MAP TO THE OWNER REFERENCING ALL SYSTEM COMPONENTS TO PERMANENT SITE FEATURES FOR LATER RECOVERY.
23. 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.
24. THE PROPOSED ONSITE WASTEWATER TREATMENT SYSTEM MUST BE DESIGNED AND THE INSTALLATION SUPERVISED AND CERTIFIED BY A DESIGN PROFESSIONAL.
25. 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.

DESIGN CALCULATIONS:

DESIGN FLOW	5 BEDROOM HOME @ 130 GALLONS PER DAY (GPD)/BEDROOM = 650 GPD
SEPTIC TANK:	1500 GALLON DUAL COMPARTMENT WITH EFFLUENT FILTER
DESIGN PERC. RATE:	6-7 MINUTES/INCH
REQUIRED LENGTH OF ABSORPTION TRENCH	325 FEET REQUIRED 336 FEET PROPOSED

SIX (6) 54 FOOT LONG TRENCHES ARE PROPOSED
TOTAL 336 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, AND APPENDIX 75-A

PERCOLATION TEST RESULTS:

TESTS PERFORMED ON 2/4/2020

TEST NUMBER	DEPTH	PERC RATES (MIN/INCH)	STABILIZED PERC RATE
PT -1	24"	2, 2, 3, 3	3 MIN/INCH
PT -2	24"	1.5, 2, 3, 3	3 MIN/INCH

SOILS INFORMATION:

DH - 1

0" - 16"	DARK BROWN LOAMY TOPSOIL MANY ROOTS
16" - 36"	ORANGISH SILTY LOAM
36" - 48"	SILTY SAND

MOTTLING @ 38"
ROOTS TO 18"

KEY:

PT-1	PERC TEST LOCATION
DH-1	DEEP HOLE LOCATION
	CLEAN-OUT

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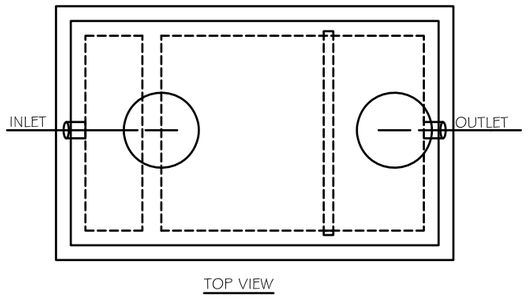
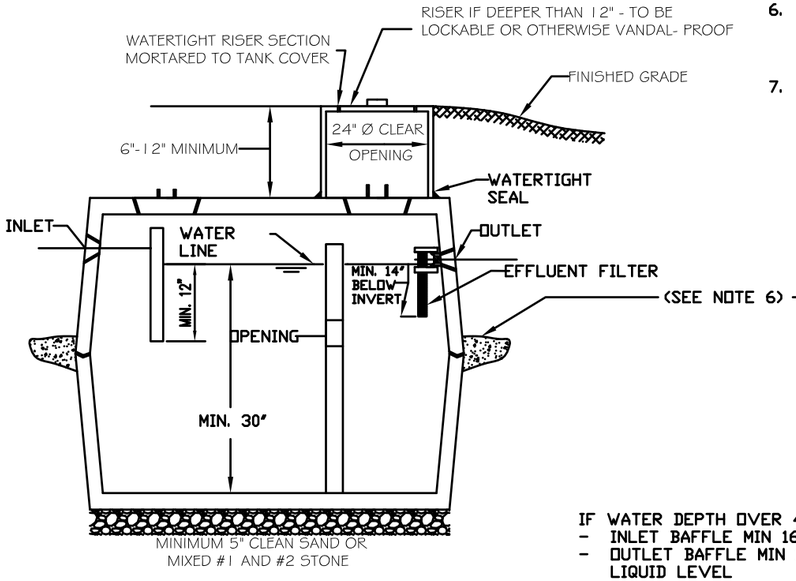


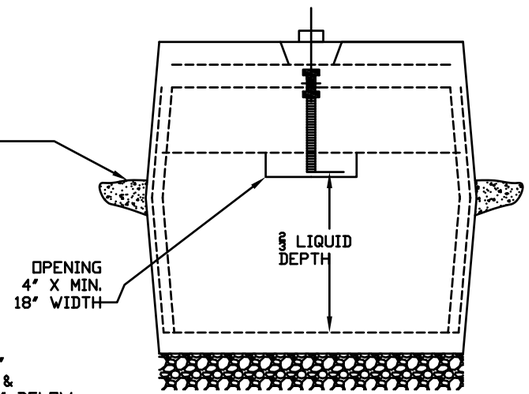
TOP VIEW



SECTION VIEW

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.

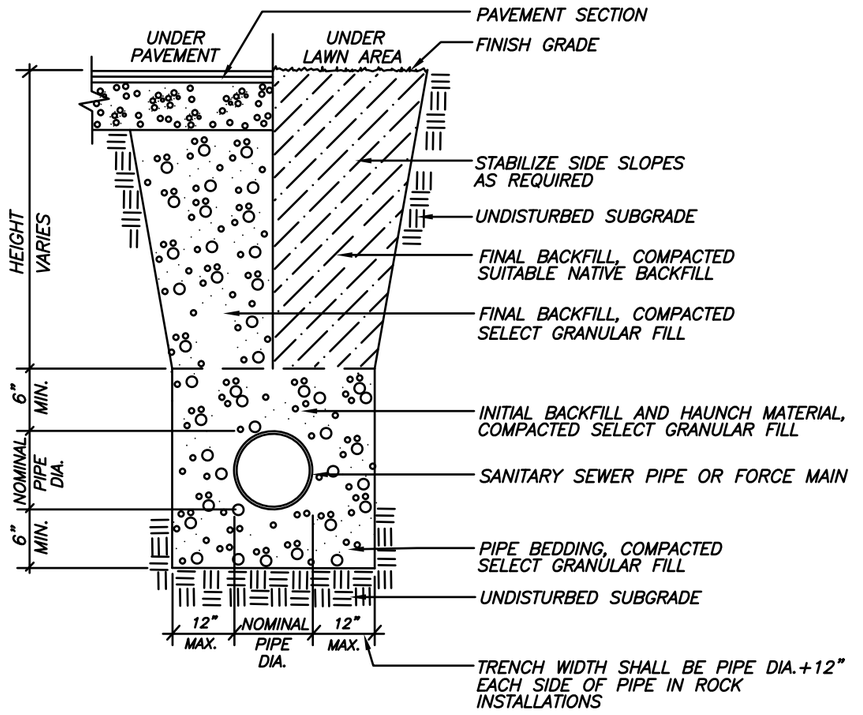


IF WATER DEPTH OVER 40"
- INLET BAFFLE MIN 16" &
- OUTLET BAFFLE MIN 18" BELOW LIQUID LEVEL

END VIEW

SEPTIC TANK

NOT TO SCALE



SANITARY SEWER PIPE TRENCH

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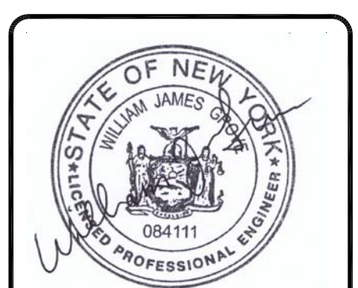

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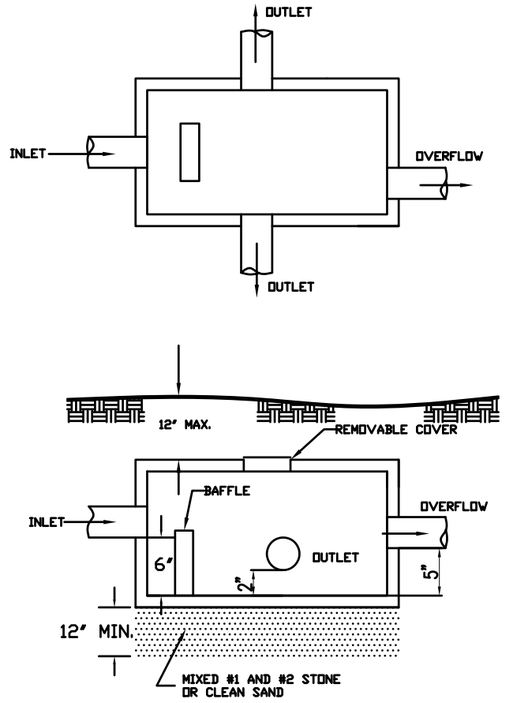
DROPBOX ELEVATION DATA TABLE:

Box 1	
inv. In	864.0
inv. Out	863.6
overflow	863.9
trench invert in	863.5
trench bottom	863.0
Box 2	
inv. In	863.3
inv. Out	862.9
overflow	863.2
trench invert in	862.8
trench bottom	862.3
Box 3	
inv. In	862.5
inv. Out	862.1
overflow	862.4
trench invert in	862.0
trench bottom	861.5
Box 4	
inv. In	861.4
inv. Out	861.0
overflow	861.3
trench invert in	860.9
trench bottom	860.4
Box 5	
inv. In	860.6
inv. Out	860.2
overflow	860.5
trench invert in	860.1
trench bottom	859.6
Box 6	
inv. In	859.9
inv. Out	859.5
overflow	859.8
trench invert in	859.4
trench bottom	858.9

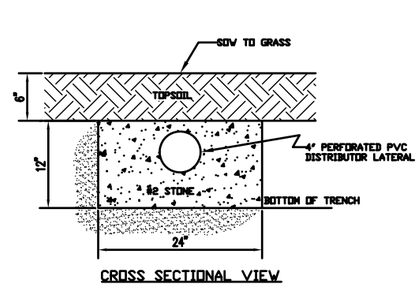


DROP BOX DETAILS

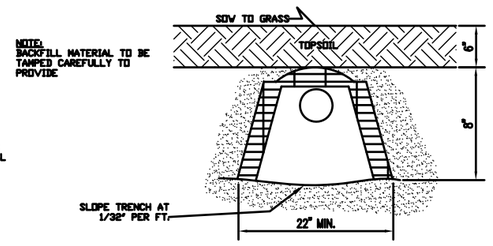
NOT TO SCALE

DISTRIBUTION & DROP BOX NOTES:

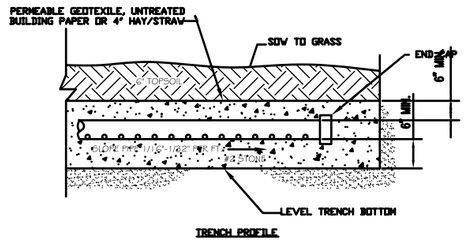
1. DISTRIBUTION BOX OR DROP BOXES USED MUST BE ACCEPTABLE TO THE WATERSHED INSPECTOR. (SEE 'SYSTEM PLAN SKETCH ' ON SHEET 1 OF 2 FOR LOCATION AND NUMBER OF LINES; DISTRIBUTION BOX OR DROP BOX TO HAVE AT LEAST ONE EXTRA PLUGGED OUTLET).
2. PIPE JOINTS TO BE WATERTIGHT
3. INVERT ELEVATIONS OF ALL OUTLET PIPES FROM THE DISTRIBUTION BOX MUST BE EQUAL USE OF FLOW ADJUSTABLE LEVELING DEVICES IS REQUIRED ON EACH OUTLET.
4. INVERT ELEVATIONS OF ALL OUTLET TRENCHLINE PIPES FROM DROP BOXES MUST BE EQUAL. USE OF FLOW ADJUSTABLE LEVELING DEVICES IS REQUIRED ON EACH TRENCHLINE OUTLET.
5. THE SLOPE OF OUTLET PIPES BETWEEN THE DISTRIBUTION BOX OR DROP BOX AND DISTRIBUTOR LATERALS TO BE AT LEAST $\frac{1}{32}$" PER FOOT.
6. BAFFLES ARE REQUIRED. INLET PIPE SLOPE SHALL BE AT LEAST $\frac{1}{8}$"
7. A MINIMUM OF 2 FEET OF SOLID PIPE SHALL EXTEND LEVEL OUT OF DISTRIBUTION BOX OR DROP BOX FROM ALL OUTLETS.



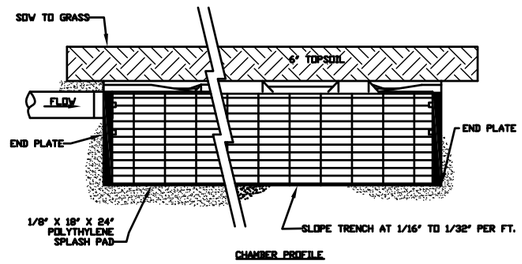
CROSS SECTIONAL VIEW



CROSS SECTIONAL VIEW



TRENCH PROFILE



CHAMBER PROFILE

STANDARD ABSORPTION TRENCH
4" PERFORATED PIPE IN STONE TRENCH

-OR-

GRAVELLESS CHAMBER ABSORPTION TRENCH
INFILTRATOR QUICK4 EQ-36 LOW PROFILE OR EQUAL

DISPERSAL TRENCH DETAILS

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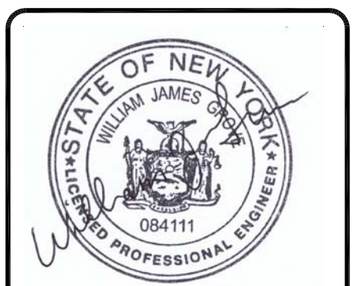

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