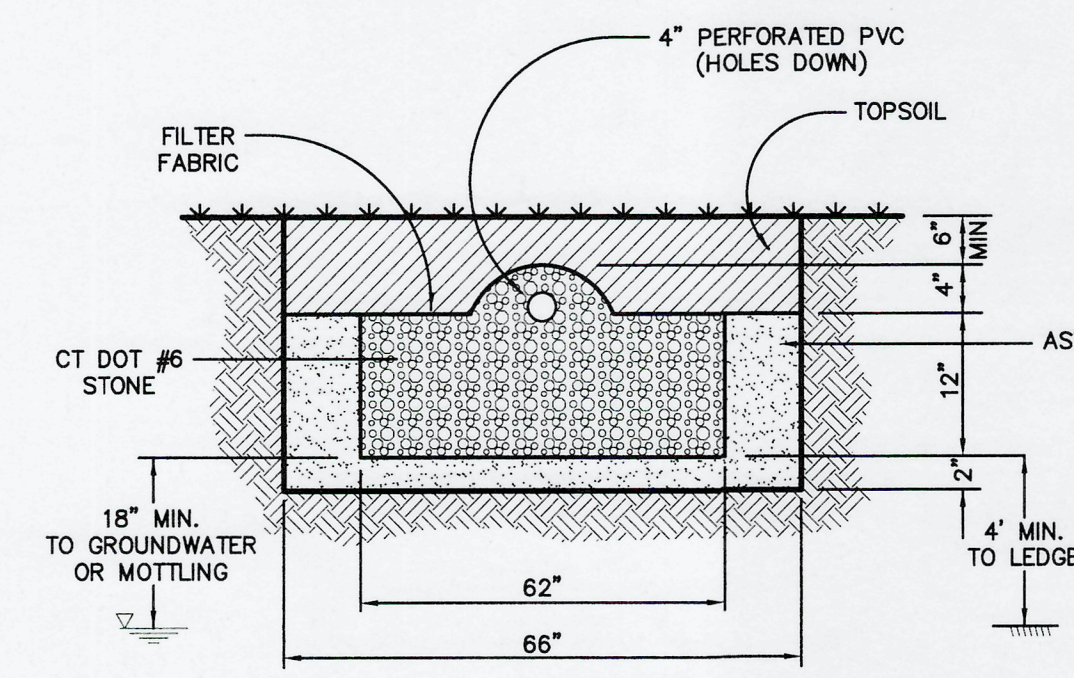


TYPICAL SEPTIC TANK DETAIL

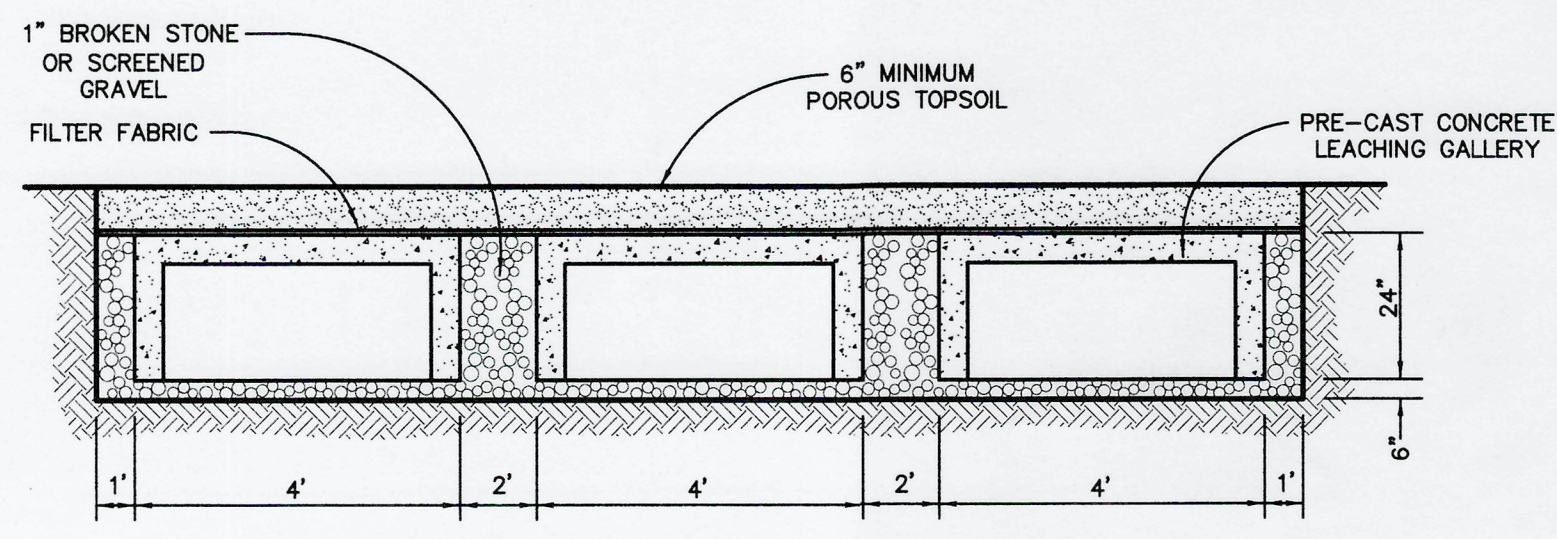
N.T.S.



NOTE: INSTALLATION REQUIRES THE USE OF PROPRIETARY FORMS AND MUST BE SUPERVISED BY A REPRESENTATIVE FROM GEOMATRIX.

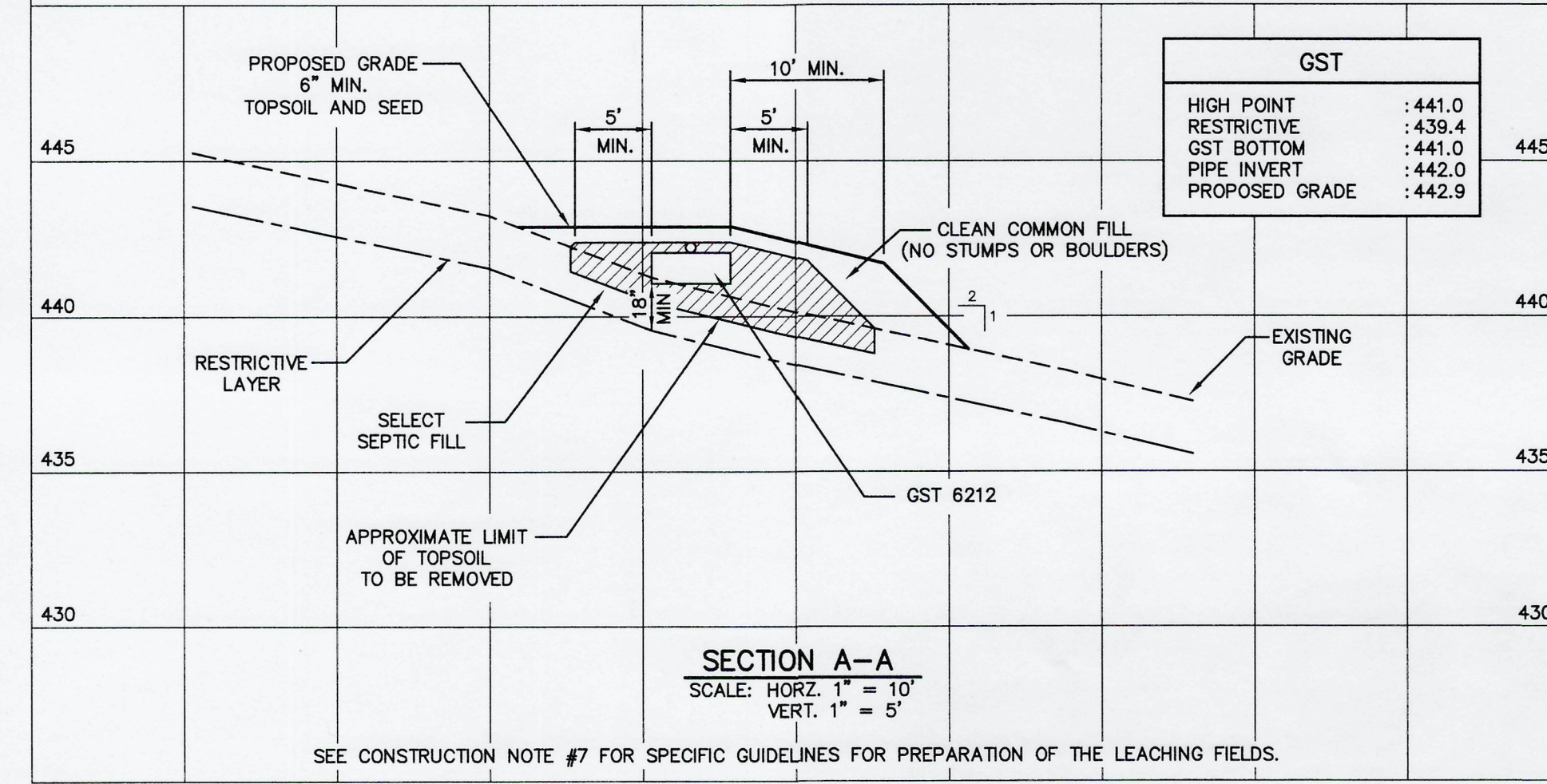
GEOMATRIX GST 6212 DETAIL

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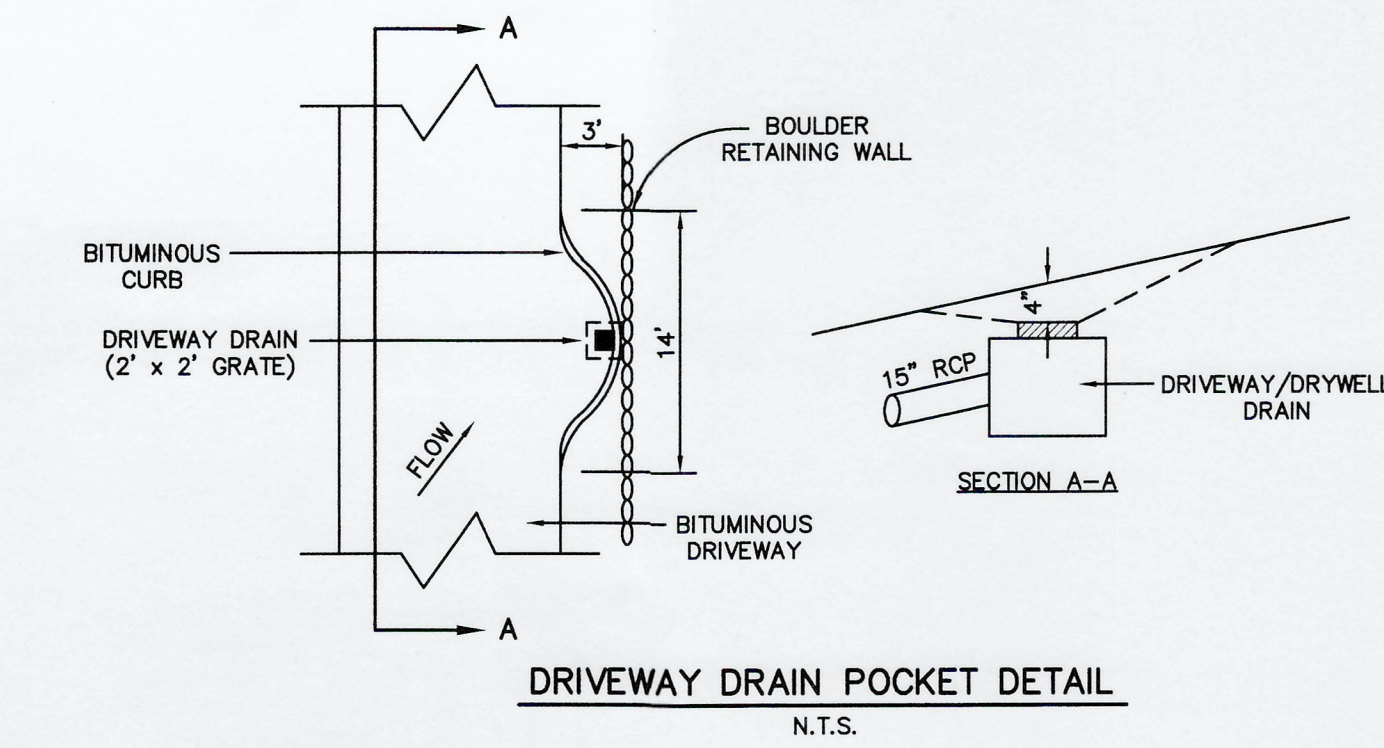


24" x 48" UNDERGROUND DETENTION SYSTEM GALLERY DETAIL

N.T.S.

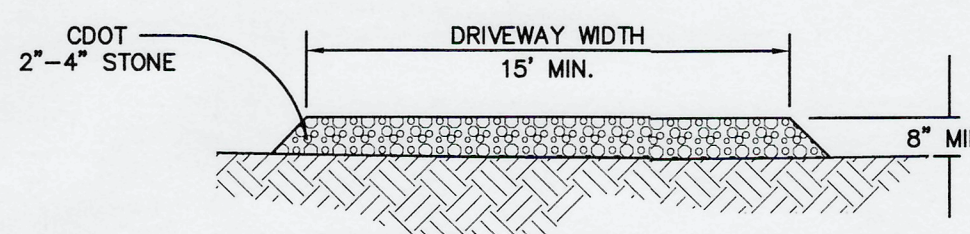


SEE CONSTRUCTION NOTE #7 FOR SPECIFIC GUIDELINES FOR PREPARATION OF THE LEACHING FIELDS.



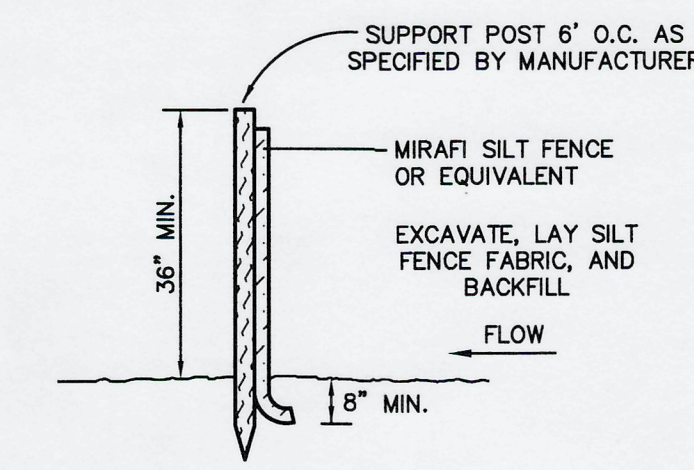
DRIVEWAY DRAIN POCKET DETAIL

N.T.S.



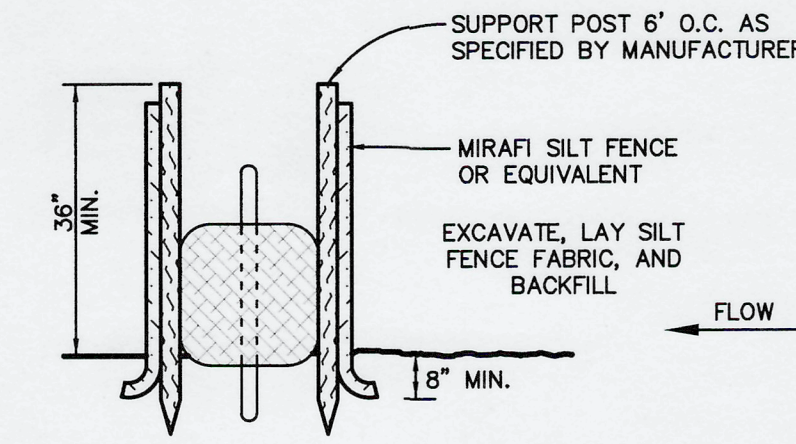
CONSTRUCTION ENTRANCE DETAIL

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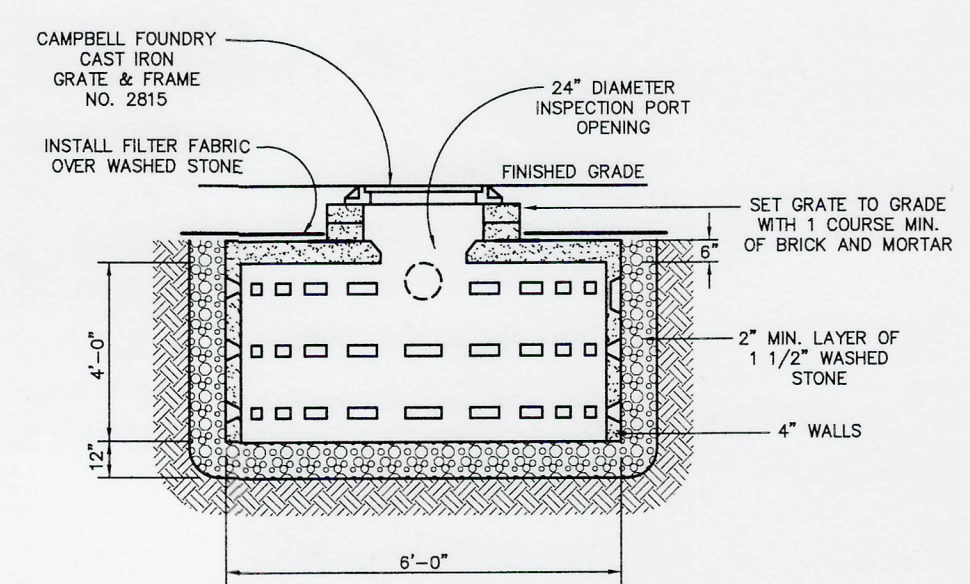
SILT FENCE DETAIL

N.T.S.



SILT FENCE BACKED WITH STAKED HAYBALE DETAIL

N.T.S.



DRYWELL DETAIL

N.T.S.

- SPECIFICATIONS:
1. CONCRETE MINIMUM STRENGTH - 5000 PSI @ 28 DAYS
  2. STEEL REINFORCING - ASTM SPEC. A-615-75, GRADE 60, 1" MIN. COVER
  3. DESIGN LOADING - AASHTO HS20-44
  4. SLAB TOP - 6" THICK REINFORCED WITH #5 REBAR

DESIGN CRITERIA:

1. PERCOLATION RATE: PT-AA = 1:20
  - A. DESIGN RATE FOR PRIMARY SYSTEM: 1:20
  - B. DESIGN RATE FOR RESERVE SYSTEM: 1:20
2. MINIMUM LEACHING SYSTEM SPREAD (MLSS):
  - A. HYDRAULIC FACTOR (HF)
    - 1) HYDRAULIC GRADIENT = 13%
    - 2) DEPTH OF RESTRICTIVE LAYER = 26.8" (AVERAGE DT10, DT12 AND DT1A THRU 4A)
    - 3) HYDRAULIC FACTOR = 24'
  - B. FLOW FACTOR (FF): 4 BEDROOM = 1.75
  - C. PERCOLATION FACTOR (PF): 1:20 = 1.25
  - D. MINIMUM LEACHING SYSTEM SPREAD = 24' x 1.75 x 1.25 = 52.5'
  - E. LEACHING SYSTEM SPREAD PROVIDED = 80'
3. SYSTEM DESCRIPTION:
  - A. NUMBER OF BEDROOMS: 4
  - B. REQUIRED LEACHING AREA: 787.5 SF @ 10 SF/LF = 78.75 LF (PLUS 100% RESERVE)
  - C. SYSTEM COMPONENTS: 1250 GALLON SEPTIC TANK AND GST 6212.
  - D. TOTAL FIELDS PROPOSED:
    - 1) PRIMARY SYSTEM: 1 x 80 LF = 80 LF @ 10 SF/LF = 800 SF
    - 2) RESERVE SYSTEM: 1 x 80 LF = 80 LF @ 10 SF/LF = 880 SF
4. DEPTH OF SYSTEM CONTROL: RESTRICTIVE LAYER @ 19" IN DEEP TEST 12 WILL CONTROL THE DEPTH OF THE SYSTEM.

DEEP TEST AND PERCOLATION TEST DATA:

DEEP TEST 7	DEEP TEST 8	DEEP TEST 9
0"-14" TOPSOIL 14"-29" RED-BROWN SANDY LOAM 29"-42" LIGHT BROWN FINE SAND 42"-82" MOTTLED COMPACT GREY HARDPAN	0"-14" TOPSOIL 14"-24" RED-BROWN SANDY LOAM 24"-30" LIGHT BROWN FINE SAND 30"-88" MOTTLED COMPACT GREY HARDPAN	0"-10" TOPSOIL 10"-35" BROWN SANDY LOAM 35"-80" MOTTLED COMPACT GREY HARDPAN
MOTTLING @ 42" NO LEDGE NO GROUNDWATER NO ROOTS	MOTTLING @ 30" NO LEDGE NO GROUNDWATER NO ROOTS	MOTTLING @ 35" NO LEDGE NO GROUNDWATER NO ROOTS
DEEP TEST 10	DEEP TEST 11	DEEP TEST 12
0"-8" TOPSOIL 8"-28" BROWN FINE SANDY LOAM 28"-86" MOTTLED COMPACT GREY HARDPAN	0"-12" TOPSOIL 12"-29" RED-BROWN SANDY LOAM 29"-35" BROWN FINE SANDY LOAM 35"-88" MOTTLED COMPACT GREY HARDPAN	0"-8" TOPSOIL 8"-11" BROWN SANDY LOAM 11"-19" GREY-BROWN SAND 19"-90" MOTTLED COMPACT GREY SAND
MOTTLING @ 28" NO LEDGE NO GROUNDWATER ROOTS TO 28"	MOTTLING @ 35" NO GROUNDWATER NO ROOTS	MOTTLING @ 19" NO GROUNDWATER @ 58" ROOTS TO 19"
DEEP TEST 1A	DEEP TEST 2A	DEEP TEST 3A
0"-10" TOPSOIL 10"-34" RED/BROWN SANDY LOAM 34"-84" TAN/GRAY MODERATELY COMPACT HARDPAN	0"-24" TOPSOIL 24"-38" RED/BROWN SANDY LOAM 38"-82" GRAY MODERATELY COMPACT HARDPAN	0"-10" TOPSOIL 10"-20" RED/BROWN SANDY LOAM 20"-95" TAN/GRAY HARDPAN
NO MOTTLING NO LEDGE NO GROUNDWATER RESTRICTIVE @ 34"	NO MOTTLING NO LEDGE NO GROUNDWATER RESTRICTIVE @ 38"	NO MOTTLING NO LEDGE NO GROUNDWATER RESTRICTIVE @ 20"
DEEP TEST 4A	DEEP TEST 5A	PERCOLATION TEST A
0"-9" TOPSOIL 9"-22" RED/BROWN SANDY LOAM 22"-84" TAN/GRAY HARDPAN	0"-8" TOPSOIL 8"-29" RED/BROWN SANDY LOAM 29"-72" GRAY HARDPAN	PRESOAK: 4/5/04 DEPTH: 26" DIAMETER: 9"
NO MOTTLING NO LEDGE NO GROUNDWATER RESTRICTIVE @ 22"	NO MOTTLING NO LEDGE NO GROUNDWATER RESTRICTIVE @ 29"	TIME DEPTH DROP 8:30 4" - 8:40 7 1/2" 3 1/2" 8:50 9 1/2" 2" 9:00 10 3/4" 1 1/4" 9:10 12" 1" 9:20 13" 1" 9:30 13 3/4" 3/4"
PERCOLATION TEST B	PERCOLATION TEST AA	PERCOLATION TEST BB
PRESOAK: 4/5/04 DEPTH: 26" DIAMETER: 9"	DEPTH: 20" DIAMETER: 10" PRESOAK: 1 HOUR	DEPTH: 20" DIAMETER: 8" PRESOAK: 1 HOUR
TIME DEPTH DROP 8:30 5 1/2" - 8:40 10 1/2" 5" 8:50 13 1/2" 3" 9:00 16" 2 1/2" 9:10 18" 2" 9:20 19 1/2" 1 1/2" 9:30 21" 1 1/2"	TIME DEPTH DROP 11:30 7" - 11:40 10 3/4" 3 3/4" 11:50 12 1/4" 1 1/2" 12:00 13 1/4" 1" 12:10 14 1/4" 1" 12:20 15 1/4" 1" 12:30 16" 3/4"	TIME DEPTH DROP 12:30 5 1/2" - 12:40 8 3/4" 3 1/4" 12:50 11" 2 1/4" 1:00 13 1/4" 2 1/4" 1:10 14 3/4" 1 1/2" 1:20 15 7/8" 1 1/8" 1:30 16 7/8" 1"

DESIGN RATE 1:10

DESIGN RATE 1:20

DESIGN RATE 1:10

NOTE: DEEP TESTS WERE CONDUCTED ON MARCH 2, 2004 BY McCHORD ENGINEERING ASSOCIATES, INC. AND WITNESSED BY THE WILTON HEALTH DEPARTMENT. PERCOLATION TESTS WERE CONDUCTED ON APRIL 6, 2004. DEEP TESTS 1A THRU 5A AND PERCOLATION TESTS A AND B WERE PERFORMED BY McCHORD ENGINEERING ASSOCIATES, INC. ON AUGUST 18, 2020. DEEP TEST PITS 1A THRU 4A WERE WITNESSED BY THE WILTON HEALTH DEPARTMENT.

CONSTRUCTION NOTES:

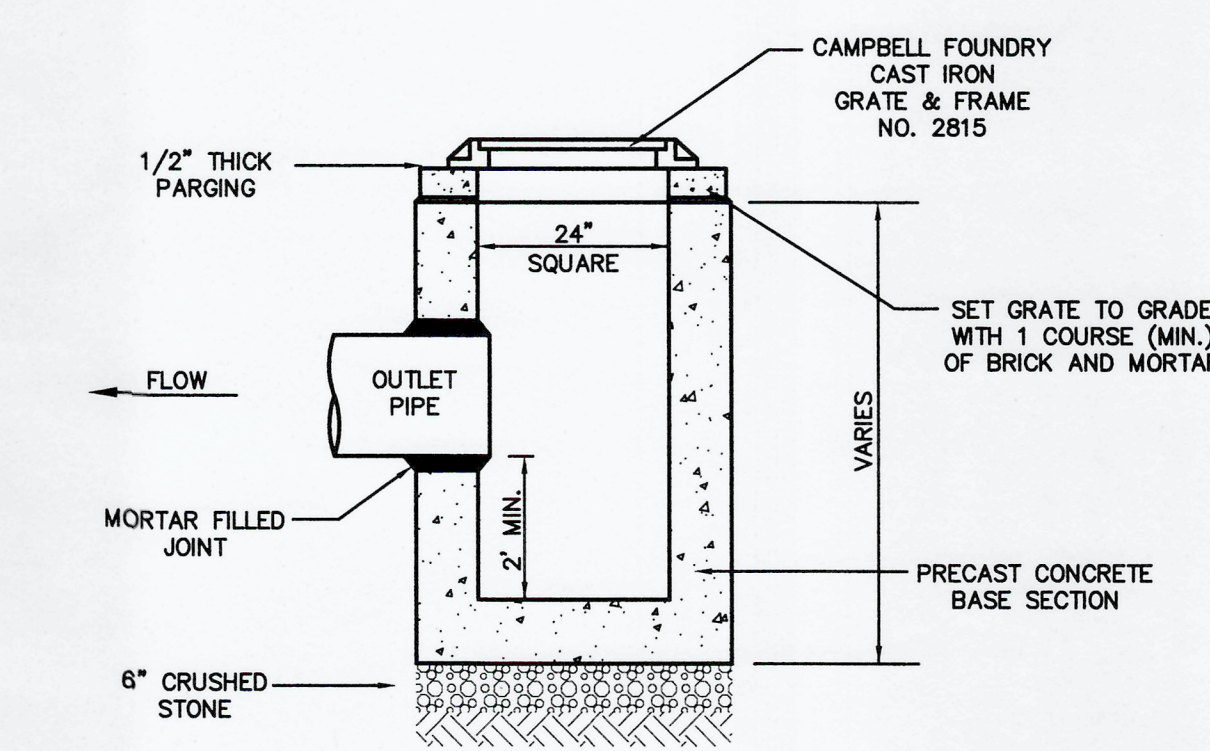
1. SUBSURFACE SEWAGE DISPOSAL SYSTEM MATERIALS AND CONSTRUCTION TECHNIQUES SHALL CONFORM TO THE STATE OF CONNECTICUT AND LOCAL HEALTH CODE STANDARDS AND SPECIFICATIONS, AS WELL AS ACCEPTED STANDARDS OF GOOD WORKMANSHIP.
2. FINAL INSPECTION AND AS-BUILT DRAWINGS SHALL BE MADE IN ACCORDANCE WITH STATE AND LOCAL CODES. THE DESIGN ENGINEER SHALL BE NOTIFIED AT LEAST 24 HOURS IN ADVANCE OF SYSTEM COMPLETION. INSPECTION OF THE SYSTEM SHALL OCCUR AS SOON AS POSSIBLE TO PREVENT DAMAGE AND IT SHALL BE COVERED WITHIN TWO WORKING DAYS OF THE SANITARIAN'S INSPECTION.
3. THE WASTE LINE FROM THE HOUSE/BUILDING TO THE SEPTIC TANK SHALL BE NO LESS THAN 4" DIAMETER CAST IRON PIPE (ASTM A-74) OR A PVC SCHEDULE 40 (ASTM D1785), WITH RUBBER COMPRESSION GASKETS OR SOLVENT WELD JOINTS AND SHALL BE PITCHED WITH A MINIMUM SLOPE OF 1/4" PER FOOT.
4. ALL SOLID DISTRIBUTION PIPING SHALL BE TIGHT JOINT 4" DIAMETER PVC (ASTM D3034 SDR 35). THESE LINES SHALL LIE ON UNDISTURBED OR COMPACTED SOIL.
5. THE SEPTIC TANK SHALL HAVE A MINIMUM CAPACITY OF 1250 GALLONS AND CONTAIN TWO COMPARTMENTS. THE TANK SHALL BE INSTALLED LEVEL AND BE SET UPON AT LEAST 6" OF CRUSHED STONE OR GRAVEL, AND BE EQUIPPED WITH A 30" RISER SECTION TO GRADE, FOR ACCESS. SEPTIC TANKS INDICATED ARE MANUFACTURED BY RICHARD SEPTIC SYSTEMS, INC. OF TORRINGTON, CT. AN EQUIVALENT TANK IS ACCEPTABLE.
6. DISTRIBUTION BOXES ARE MODEL DB 4 AS MANUFACTURED BY RICHARD SEPTIC SYSTEMS, INC. OF TORRINGTON, CONNECTICUT. BOXES SHALL BE SET UPON AT LEAST 6" OF CRUSHED STONE OR GRAVEL. EQUIVALENT BOXES ARE ACCEPTABLE.
7. THE CONTRACTOR SHALL REMOVE FROM THE AREA OF THE SEPTIC SYSTEM ALL TOPSOIL AND ALL OTHER ORGANIC MATERIALS, TREE TRUNKS, AND DEBRIS AND SHALL SCARIFY AND RAKE THE EXPOSED SURFACE TO ENSURE A GOOD BOND BETWEEN THE EXISTING SUBSOIL AND THE SELECT FILL.
8. SELECT FILL SHALL MEET CONNECTICUT DEPARTMENT OF TRANSPORTATION SPECIFICATION M.02.06-1B AS FOLLOWS:
 

SIEVE	% PASSING
#4	100
#10	70-100
#40	10-50 *
#100	0-20
#200	0-5
	0-2.5

\* PERCENT PASSING THE #40 SIEVE CAN BE INCREASED TO NO GREATER THAN 75% IF THE PERCENT PASSING THE #100 SIEVE DOES NOT EXCEED 10% AND #200 SIEVE DOES NOT EXCEED 5%.

THE FILL SHALL ALSO BE ACCEPTABLE TO THE LOCAL HEALTH DEPARTMENT.

9. THE FIRST 6" OF SELECT FILL SHALL BE HARROWED INTO THE EXISTING SOIL. THEREAFTER, IT SHALL BE PLACED IN 12" LIFTS AND MECHANICALLY COMPACTED. COMPACTION SHALL BE AT LEAST 90%-95% OF THAT DETERMINED BY A MODIFIED OPTIMUM COMPACTION TEST PERFORMED IN ACCORDANCE WITH ASTM D1557. SELECT FILL SHALL BE PLACED TO A POINT AT LEAST 5' FROM THE EDGE OF THE TRENCH, AND COMMON FILL TO A POINT 10' FROM THE EDGE OF THE TRENCH. IN CASES WHERE THE DEPTH OF FILL EXCEEDS 12" ABOVE THE EXISTING GRADE, THE TRENCH SHALL BE NOTCHED INTO THE EXISTING SOIL AT LEAST 12" AND FILLED WITH SELECT FILL.
10. FINAL GRADING, INCLUDING THE 6" TOPSOIL LAYER, SHALL BE COMPLETED AS SOON AS POSSIBLE AFTER FINAL INSPECTION. CARE SHALL BE TAKEN TO PREVENT THE PONDING OF SURFACE WATER ON OR NEAR ANY PART OF THE SYSTEM.
11. PROPOSED SEPTIC SYSTEM LOCATIONS MAY NOT BE SHIFTED WITHOUT OBTAINING WRITTEN PERMISSION FROM THE DESIGN ENGINEER AND LOCAL SANITARIAN.
12. NO PART OF THE SEPTIC TANK OR LEACHING TRENCHES SHALL BE WITHIN 75' OF ANY WELL. THERE IS NO APPARENT INTERFERENCE BETWEEN THE WELLS OR SEPTIC SYSTEMS ON ADJACENT PROPERTIES AND THOSE PROPOSED ON THIS PLAN.
13. SURFACE AND GROUNDWATER DRAINS SHALL BE PLACED UP GRADIENT AND AT LEAST 25' FROM THE SEPTIC SYSTEM. WHEN DRAINS ARE REQUIRED TO BE DOWN GRADIENT, THEY MUST BE AT LEAST 50' FROM THE SEPTIC SYSTEM. ALL DRAINS AND ROOF LEADERS SHALL DISCHARGE AWAY FROM THE SEPTIC SYSTEM.
14. SOIL AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS INDICATED ON THE PLAN AND MAINTAINED DURING CONSTRUCTION, UNTIL THE SITE IS STABILIZED.
15. THIS DESIGN IS BASED UPON THE USE OF CONVENTIONAL BATHTUBS WITH A CAPACITY UNDER 100 GALLONS. IF A LARGER BATH/HOT TUB IS TO BE INSTALLED THE LEACHING AREA AND SEPTIC TANK SIZES MUST BE INCREASED TO COMPLY WITH SECTION VII.F OF THE TECHNICAL STANDARDS. ADDITIONALLY, THE SYSTEM HAS NOT BEEN DESIGNED TO ACCEPT EFFLUENT FROM WHIRLPOOL BACKWASH, WATER SOFTENER BACKWASH OR GARBAGE DISPOSALS.
16. THIS DESIGN IS BASED UPON THE INSTALLATION OF THE SEPTIC SYSTEM IN UNCOMPACTED NATURAL SOIL. ALTHOUGH THE CONTRACTOR IS RESPONSIBLE FOR PREPARING THE SITE, THE USE OF HEAVY EQUIPMENT IN THE PROPOSED SEPTIC AREA IS PROHIBITED TO AVOID OVER COMPACTION OF THE NATIVE SOIL.
17. THIS DESIGN CONFORMS TO APPLICABLE CODES AND ACCEPTED PRACTICE. NO OTHER WARRANTY IS EXPRESSED OR IMPLIED.
18. McCHORD ENGINEERING ASSOCIATES, INC. ASSUMES NO RESPONSIBILITY FOR SEPTIC SYSTEM SITE PREPARATION, LOCATION, OR INVERT ELEVATIONS IN COMPLIANCE WITH THE APPROVED PLAN, UNLESS IT SUPERVISES EACH PHASE OF SYSTEM INSTALLATION.



DRIVEWAY/YARD DRAIN DETAIL

N.T.S.

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NO.	DATE	REVISIONS AND SUBMISSIONS
3	1-7-21	ISSUED TO INLAND WETLANDS COMMISSION
2	11-10-20	ISSUED TO INLAND WETLANDS COMMISSION
1	10-21-20	ISSUED TO THE HEALTH DEPARTMENT

SIGNATURE: \_\_\_\_\_ DRAWING NO: \_\_\_\_\_



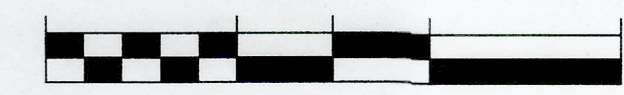
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PLAN PREPARED FOR  
SANDRA CHEN-DAVIS  
WILTON, CONNECTICUT

CONSTRUCTION NOTES AND DETAILS  
105 NOD HILL ROAD  
WILTON, CONNECTICUT

JOB NO: 1102B-1	DATE: OCTOBER 21, 2020
DRAWN BY: DRS	CHECKED BY: TSN, HMR
SCALE: AS SHOWN	



SE2