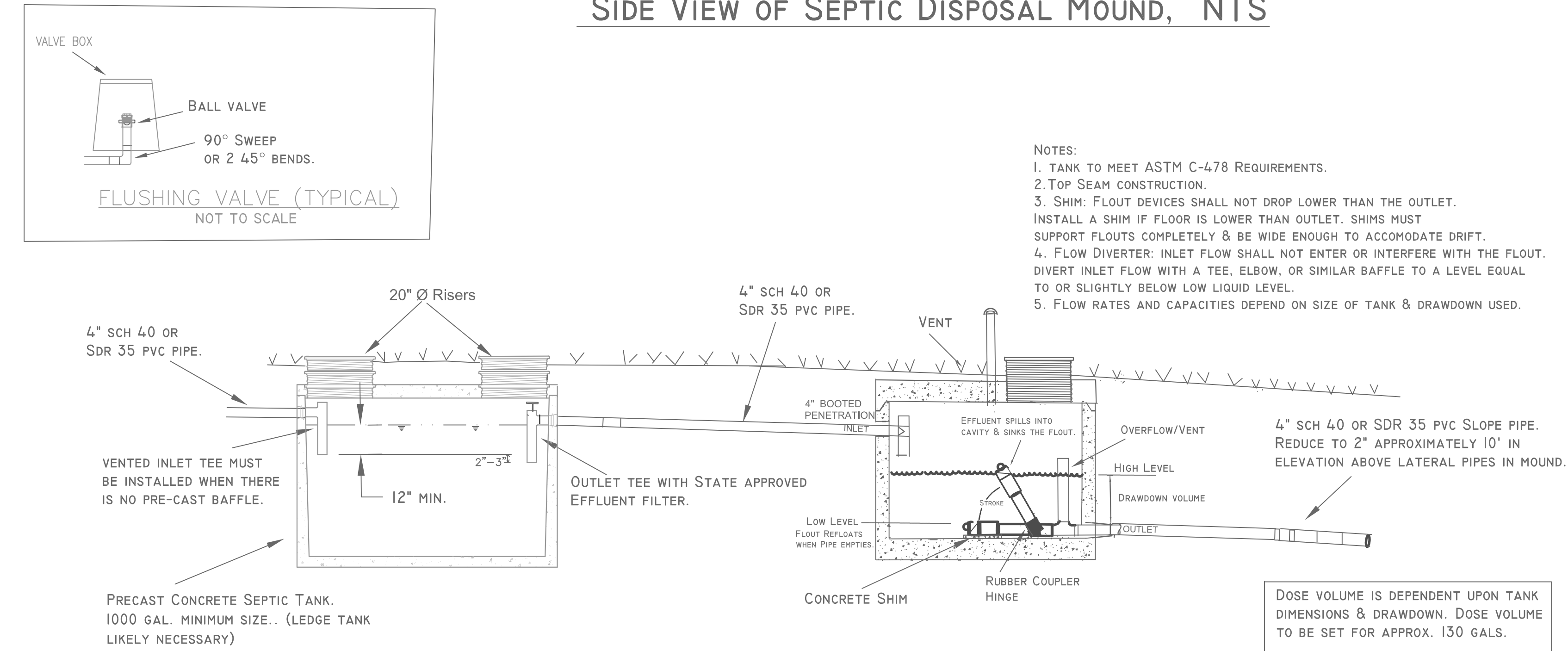


SIDE VIEW OF SEPTIC DISPOSAL MOUND, NTS



SEPTIC TANK DETAIL (TYP.)

500 GALLON FLOUT TANK WITH 3" DISCHARGE,

TEST PIT LOGS: 7/6/22; by Todd Hill. Robert Pelosi also present; (rain previous night)

Harmon, Lot B, Leland Farm Rd, Middlesex

Test pit # 1: No ledge to 42", dry. Estimated seasonal water table: 24".

0-2": loamy topsoil. 10YR 3/4.

2-18": very fine sandy loam, very friable, ABK, 10YR 5/6.

18-21": very fine sandy loam, very friable, ABK, 10YR 5/4.

21-24": very fine sandy loam, friable, ABK, 10YR 5/3.

24-42": loam, very firm, ABK, 10YR 4/2, faint redox.; dry.

Test pit # 2: No ledge or water. Est. SWT: 21".

0-2": loamy topsoil. 10YR 3/4.

2-18": very fine sandy loam, very friable, ABK, 10YR 5/6.

18-40": loam, firm, ABK, 10YR 4/2, faint redox. from 21"; dry.

Test pit # 3: No ledge or water. Est. SWT: 27".

0-2": loamy topsoil. 10YR 3/4.

2-20": very fine sandy loam, very friable, ABK, 10YR 5/6.

20-27": very fine sandy loam, very friable, ABK, 10YR 5/3.

27-46": loam, firm, ABK, 10YR 4/2, faint redox.; dry.

Test pit # 4: No ledge, dry. Est. SWT: 18".

0-2": loamy topsoil. 10YR 3/4.

2-16": very fine sandy loam, very friable, ABK, 10YR 5/6.

16-40": loam, firm, ABK, 10YR 4/2, faint redox. from 18"; dry

BASIS OF WASTEWATER SYSTEM DESIGN:

3 bedroom house ; Design flow: 420 gallons/day.

Maximum application rate for pressurized mound: 1.0 gals/sq. ft./day for stone beds.

Minimum Leach field area required: 420 sq. ft..

Leach field area in mound provided: 42'L x 10'W = 420 sq. ft. (stone bed, pressurized)

DESKTOP HYDROGEOLOGICAL ANALYSIS:

Conservative Seasonal water table: 21". Slope: 12%. Soils: very fine sandy loam.
(f): 18.7 . Linear loading rate (LLR) = 10 gals/linear feet. LLR = h(water table mounding) x f.

10 = h x 18.7.. 10/18.7 = .53' (7"). 21"- 7" = 14" (induced seasonal water table)
36" (required separation) - 14" = 22" (minimum sand depth under stone in mound)

BASIS OF WATER SUPPLY DESIGN:

3 bedroom house.
Design flow: 420 gallons/day. Average Day Demand: 560 gallons/day.

Maximum Day Demand: 420 gals/day / 720 minutes = 0.58 gals./ min..

MOUND SAND SPECIFICATIONS:

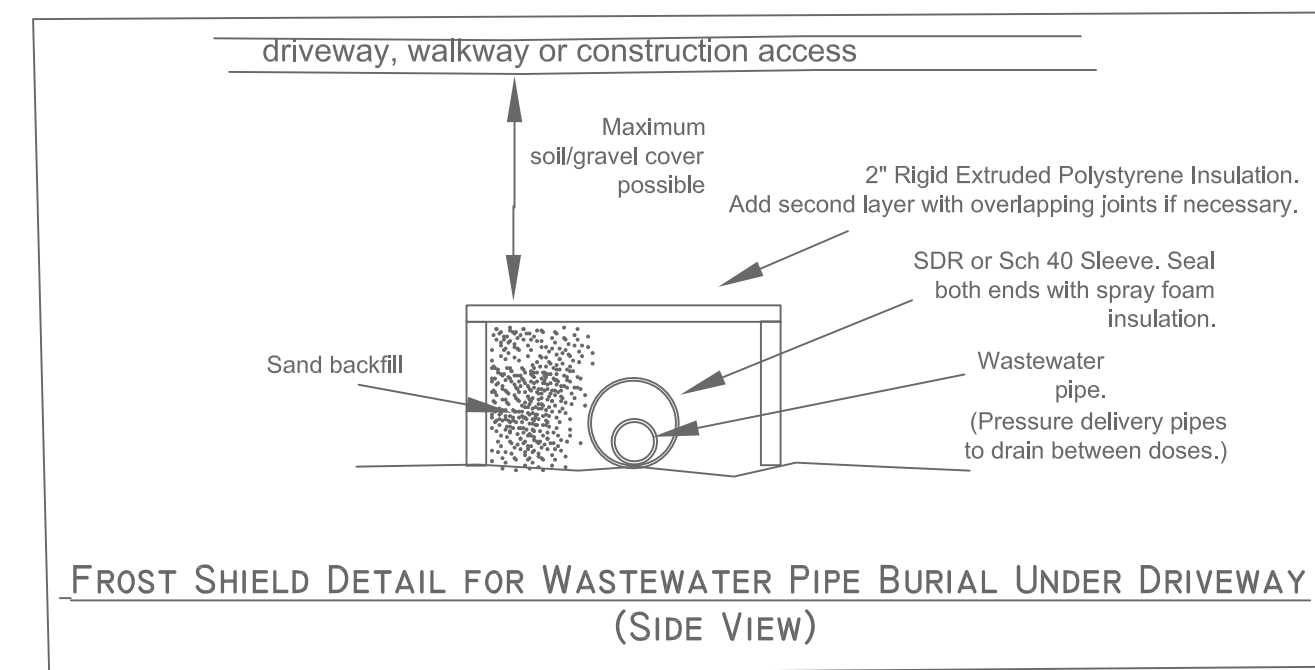
THE FILL MATERIAL FROM NATURAL SOIL PLOWED SURFACE TO THE TOP OF THE TRENCH OR BED SHALL BE SAND MEETING ONE OF THE FOLLOWING SIEVE REQUIREMENTS:

SIEVE NUMBER	OPENING (MM)	PERCENT PASSING, BY WEIGHT
3/8	9.500	85 - 100
40	0.420	25 - 75
60	0.240	0 - 30
100	0.149	0 - 10
200	0.074	0 - 5

(2) (THIS IS ASTM SPEC. C 33 AND IS INTENDED FOR MANUFACTURED MATERIAL)

SIEVE NUMBER	OPENING, (MM)	PERCENT PASSING, BY WEIGHT
4	4.750	95 - 100
8	2.380	80 - 100
16	1.190	50 - 85
30	0.590	25 - 60
50	0.297	10 - 30
100	0.149	2 - 10

SIEVE NUMBER	OPENING (MM)	PERCENT PASSING BY WEIGHT
3/8	9.500	85 - 100
40	0.420	30 - 50
200	0.074	0 - 5



APPROXIMATE PIPE INVERT ELEVATIONS:

SEPTIC TANK OUTLET: 1392' +/-
FLOUT TANK INLET: 1385' +/-
FLOUT TANK OUTLET: 1382'; +/-
4" TO 2" DELIVERY PIPE TRANSITION: 1378' +/-
MOUND LATERALS: 1368' +/-

Notes:

- Septic systems are not designed for discharges from garbage disposals, *water softeners, toxic chemicals, or heavily chlorinated water. Backwash brine from water softeners should be plumbed into a separate Seepage pit.

- Septic tank to be pumped every three to five years, or as necessary. Filter to to be hosed off at least once per year, or as necessary.

- Well & Leach field area to be flagged by designer prior to construction.

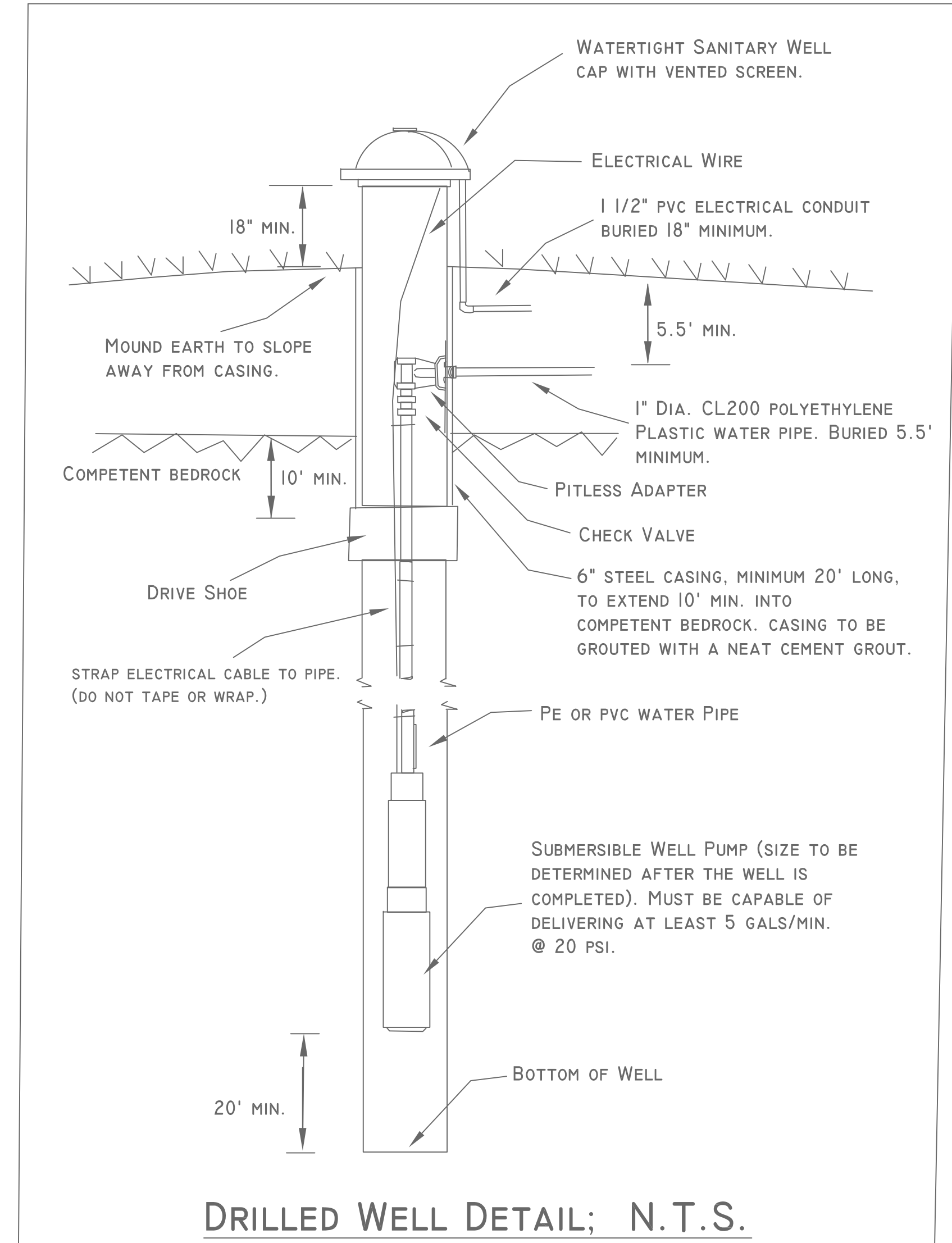
- Contact designer (Todd Hill: 244-7835) to notify of construction initiation and to schedule septic system inspection(s).

- Sieve analysis from mound sand source must be provided to designer.

Todd Hill,
Environmental Consulting & Design
Licensed Designer BW # 341
phone: 802 244-7835
toddhill802@gmail.com

Design certification statement:
I, Todd Hill, a qualified designer in the state of Vermont, certify that the design-related information is true and correct, and that in the exercise of my professional judgment, the design of the potable water supply and wastewater system meets the technical standards of the Vermont EPR's.

Todd Hill



DRILLED WELL DETAIL; N.T.S.