

1. Components must be from approved manufacturer by Board of Health and Designer.
2. Manholes shall be minimum 24" diameter, medium duty, cast iron frame and cover, and all manholes brought to finished grade shall be secured to prevent unauthorized access.
3. Components deeper than 9" under finished grade shall be equipped with a riser to within 6" of finished grade.
4. Components shall be water tight. DBox shall have a water tight cover.
5. First 2 feet of line out of DBox shall be level.
6. Components must be water tight and all pipe joints and boots must be hydraulically sealed with hydraulic cement or installed with water tight sleeves.
7. Inlet and outlet tees to rectangular tanks shall be set in the end walls or into a side wall within 12 inches of the end wall.
8. There shall be an air space of at least three inches between the tops of the tees and the inside of the tank cover. The tops of the tees shall be left open to provide ventilation or separate ventilation shall be provided.

1. Contractor shall notify Dig Safe (888) 344-7233 at least 72 hours prior to construction or abandonment of existing system. It shall be the responsibility of the contractor to locate any utilities not delineated by Dig Safe.
2. Contractor shall notify designer 48 hours prior to construction for septic system to be staked.
3. Contractor shall verify all existing site conditions and elevations prior to initiating construction. Any discrepancies shall be reported to the Designer prior to construction.
4. Contractor shall contact designer 48 hours before an inspection.
5. Prior to the commencement of construction, the System Installer must certify in writing to the Designer, the LAA, and the System Owner that (s)he is a locally approved System Installer and, if required by the Company, is certified by or has received appropriate training by the Company.

1. All components of this system shall be marked with magnetic tape or comparable in order to locate components once buried.
2. All disturbed surfaces shall be restored with 4" of loam and seed.
3. All connections shall be glued.
4. The existing septic system shall be abandoned in accordance with 310 CMR 15.354.
5. All contaminated soil in the vicinity of the proposed leaching area shall be excavated and removed by the contractor.
6. Contractor shall notify designer and Approving Authority when conditions are found during construction which would alter the approved septic design plan.
7. Where portions of the existing building sewer are to remain, building sewer shall be inspected for slope, bellies, turns and anything which may prevent it from functioning as required by Title 5.

1. This plan was created for the purposes of showing a proposed sewage disposal system and is NOT intended to be used for the reproduction of property lines. If property lines are in question, a survey should be performed by a Professional Land Surveyor.
2. This plan is for the design and construction of the sewage disposal facility only.
3. The underground utilities denoted on this plan are based off of markings from proper entities and available records. The Designer is not responsible for any subsurface structures not accurately depicted on this plan.
4. Water softener/roof runoff/sump pump discharge shall not be tied into proposed septic system.
5. Any alteration of wetlands or disturbance within the 100-foot buffer zone shall require a filing with the local conservation commission and the department of environmental protection. This project may require such a filing.
6. This plan may not be revised without the consent of the Designer and without Local Board of Health approval.
7. All known wells within 150 feet of this system have been identified.
8. Remote venting allowed, see detail. Final vent location should be discussed with the owner, subject to approval by the designer and local approving authority.
9. System shall be pumped per 15.351.
10. The designers only warranty is that the system was designed in accordance with Title 5 and the local BOH regulations.
11. Onraovent or similar may be used to disguise low vent.

1. Where fill is required to replace unsuitable or impervious material, the excavation of the unsuitable material shall extend a minimum of 5 feet laterally in all directions beyond the outer perimeter of the soil absorption system to a depth of naturally occurring pervious material and shall be replaced with suitable Title 5 fill (310 CMR 15.255).
2. A capped inspection port wrapped in filter fabric shall be installed in leaching area.
3. Surface drainage shall be directed away from leaching area. Finished grade over leaching area shall have a minimum 2% slope.
4. Fill shall be free of clay, tailings or stones larger than 6"
5. Trees should be removed if the roots could reach the leach field, or an impervious barrier should be placed in between field and tree.

1. AES system sand - 35% or less of the total sand may be gravel. 40% to 90% of the total sand is to be coarse to very coarse sand. No gravel shall exceed 3/4 in diameter. No gravel shall pass a #10 sieve. No coarse sand shall pass a #35 sieve. No more than 2% of the total sand may pass through a #200 sieve. ASTM C-33 (Concrete sand) is an alternate acceptable materials for use as system sand.

2. Title 5 surrounding sand - Shall meet requirements of 310 CMR 15.255(3). Sand shall be comprised of clean granular sand, free from organic matter and deleterious substances and shall not contain Remediation Waste. Fill shall not contain any material larger than 2 inches. Up to 45% by weight of fill material may be retained on the #4 sieve. Sieve analysis must comply with the following chart:

1. 2 inch drop from abox to presby inlet req'd.
2. Approved Presby Sand must extend 6 inches below and above AES pipe and 12 inches laterally in every direction beyond advanced enviro-septic pipe.
3. Row connections shall be raised to be flush with the top of the AES pipe.
4. PVC raised connection shall be placed 2-4" inside the AES pipe.
5. When gravity fed, Presby recommends not using effluent tee filters with their product.
6. Remote venting is allowed with the AES system. Homeowner should be consulted as to the location of the low and/or high vent.
7. Low vent shall be placed at least 36" off of the ground and high vent (if applicable) should be a minimum of 10 feet higher than the low vent.
8. Connections shall be made at the 12 o'clock position.
9. Vents shall not have charcoal filters with presby.
10. Presby systems with multiple lines out of the distribution box, presby prefers the "V" style polylok flow equalizers.

[illegible]

INSPECTION PORT DETAIL  
NOT TO SCALE

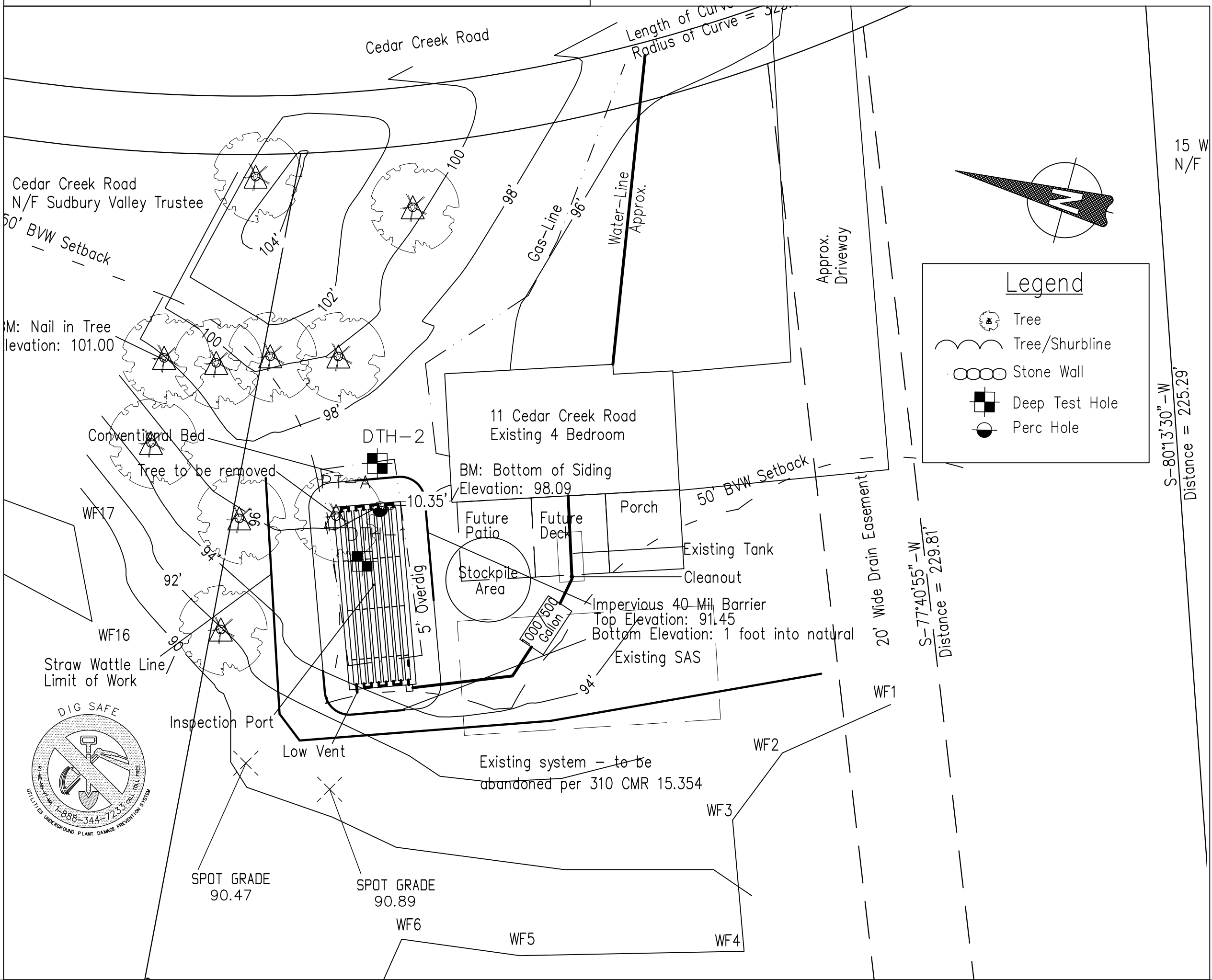
FINISHED GRADE

3 INCH MAX COVER OVER INSPECTION PORT

4 PERE PVC WRAPPED  
W/ FILTER FABRIC

PRESBY SAND

TO BOTTOM OF PRESBY SAND



**Soil Data**

Depth (inches)	Soil Type	Moisture (%)
0"	DTH-1	95.65
16"	Fill/A	94.32
42"	B-SL-10YR5/8	92.15
80"	EHGW	88.98
96"	C-LS-10YR5/6	97.65
No Weeping No Standing		

Depth (inches)	Soil Type	Moisture (%)
0"	DTH-2	96.36
22"	Fill/A	94.53
32"	B-SL-10YR5/8	93.69
76"	C-LS-10YR5/6	90.03
EHGW/Refusal @ 76"		(90.03)
No Weeping No Standing		

		PT-A
	Depth	68'
Date of soil evaluation: 9/7/2021 Soil Evaluation Form Order: (#3704)	Rate	5 mpi

Date of soil evaluation: 9/7/2021  
Soil Evaluator: Evan Carloni (#13784)  
Approving Authority Witness:  
Bill Murphy and Rob Lazo

Local Upgrade Approval (LUA) Requested	
Reg	Request
310 CMR 15.405 (1) (c)	Reduce setback from SAS to foundation from 20 feet to 10 feet. Impervious barrier provided.
Variances Requested	
Reg	Request

Chehames 11 Cedar Creek Road, Sudbury, MA 01776 Existing 4 Bedroom House	Updates	
	Date	Update
	9/15/2021	Proposed Plan
	11/15/2021	Conservation Comments

51 Carter Street  
Berlin, MA 01503  
978-621-8278  
RS #1400

County : Middlesex Bk.78547 Pg.553 L

Lot Area: 1.29 Acres

Street: Cedar Creek Road  
Town: Sudbury

Plan #: 2021091301

I HEREBY CERTIFY THAT THIS PLAN MEETS ALL REQUIREMENTS OF 310 CMR 15.000, TITLE 5 OF THE STATE ENVIRONMENTAL CODE AND ALL APPLICABLE REGULATIONS OF THE TOWN OF Sudbury BOARD OF HEALTH.

Schedule of Elevations			Design Criteria
Elevation	Proposed	As-Built	SAS Sizing Design Data:
Invert @ Building:	93.96±		Proposed 4 bedroom home @ 110 GPD/bedroom = 440 GPD Perc Rate = 5 mpi
Tank Inlet:	93.52		LTAR Title 5: 0.74 gpd/sqft LTAR Presby AES= 1,233 gpd/sqft (Presby Manual - Table B)
Tank Outlet:	93.27		Linear Feet of Pipe Req'd: 280' (Presby Manual - Table A)
D-Box Inlet:	93.00		Presby Size Required: 440 gpd/1,233 gpd/sqft = 357 sqft (400 sqft min) Conventional Size Required: 440 gpd/0.74 gpd/sqft = 595 sqft
D-Box Outlet:	92.83		
4" PVC in Presby:	92.66		Primary Presby Provided: 8 lines @ 35 ft (280 lf) - 1.5 OC Spacing=
Presby Inv:	92.05		37 ft x 13.5 sqft = 499 sqft
Bot of system sand (breakout):	91.58		Conventional Shown: 40' L x 15' W Leach Bed = 600 sqft
Minum Cover Over SAS:	93.66		<u>Tank Calcs:</u> Required: 440 GPD x 2 = 880 Gallons
Maximum Cover Over SAS:	96.08		Provided: 1500 Gallon Dual Compartment Tank (1000/500)

Water Source: Town Water  
Garbage Grinder: This septic system has NOT been designed for a garbage grinder. Any existing grinders shall be removed.  
Nitrogen Sensitive Areas: Zone II - YES ; IWPA - no  
Flood Plain: This property is not located in a flood plain.

\*The Presby Advanced Enviro-Septic is proposed under remedial use approval. This design utilizes a 2 foot reduction to the estimated high groundwater table as allowed by the approval letter. This design conforms to the approval and company design guidance.

Transmittal number: X283867

Date of Issuance: July 25, 2013, Revised December 29, 2016, Modified October 30, 2019.

System must be installed and maintained as per the "Standard Conditions for Alternative Soil Absorption Systems with General Use Certification and/or Remedial Use" dated "Revised: March 5, 2018".