

50' No
Alteration
Zone

100' Wetland
Buffer

125' Wetland
Buffer

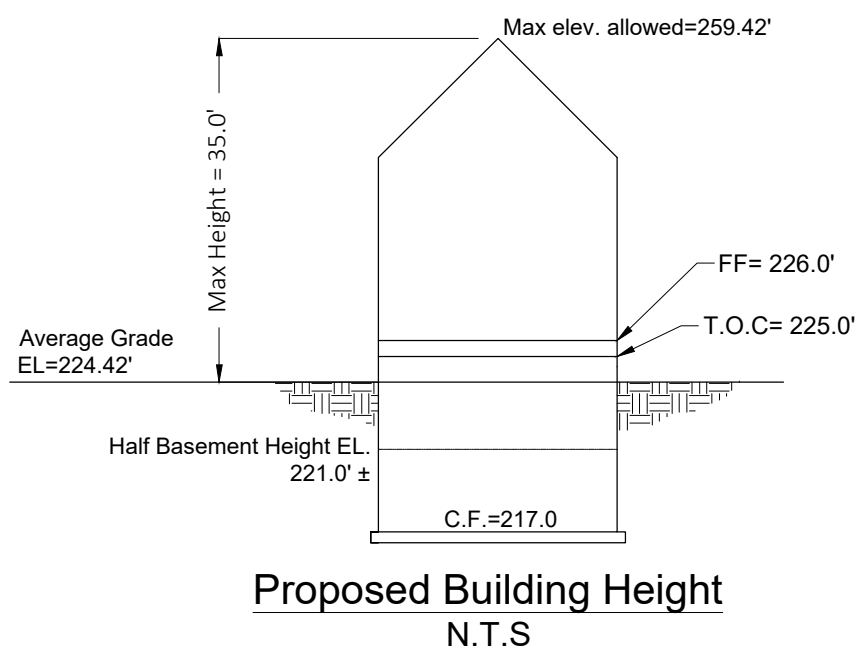
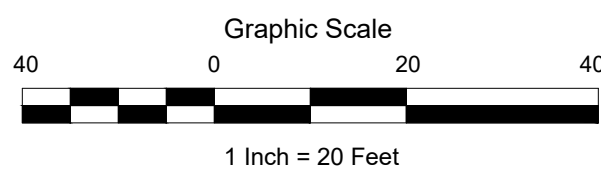


Table 1. Lowest Average Finished Grade (for building Permit)				
Section	Location description	Section L, ft	Elev. G, ft	LxG
1	Landing	22	225.5	4961.00
2	The rest estimated	204.23	224.3	45808.79
Average Grade=		226.23	-	50769.79
				224.42

Table 2. Zoning Compliance Summary (Sherborn Residential B District)			
Item	RB	Proposed	Waiver Required (Yes, No)
Minimum Lot Area	2 acres	0.92 acres	Yes
Minimum Frontage	200 feet	200 feet	No
Minimum Lot Width	200 feet	202.75 feet	Yes
Minimum Lot Depth	n/a	n/a	n/a
Minimum Front Setback	60 feet	70.51 feet	No
Minimum Side Setback	40 feet	42.0 feet	No
Minimum Rear Setback	30 feet	75.07 feet	No
Maximum Height (stories)	2.5 stories	2.5 stories	No
Maximum Height (feet)	35	<35	No
Maximum Lot Coverage	n/a	n/a	n/a

General Notes

- Record owner is AB Realty Trust of 7 Saint Joseph St, Hyannis, MA 02601. See Middlesex County Registry of Deeds Book 25396, Page 417 and Sherborn Assessor's Map 7, Lot 49 for records.
- The Zoning district for the parcel is RB.
- The lot is shown in a FEMA Federal Hazard Zone "X" (unshaded), area of minimal flood hazard and outside the 0.2% annual chance floodplain. FIRM 25017C0632E, Effective 06/04/2010.
- This plan is only for the purpose of comprehensive permitting.
- The Wetland Delineation was conducted by Creative Land & Water Engineering, LLC. on February 24 and on March 3, 4, 8, and 14 of 2022 and approved by Sherborn Conservation Commission on October 11, 2022, DEP file 283-0437.
- The Horizontal Datum was based on NAD 83.
- Existing site details are based on the plan titled "Plan of Land" by Samiotes Consultants, INC., dated January 11, 2023.
- This plan is referenced vertically to the North American Vertical Datum of 1988 by RTK GPS observations taken on March 11, 14 & 15 of 2022 by Samiotes Consultants, INC.
- This plan is the result of an instrument survey performed on March 11, 14 & 15 of 2022 by Samiotes Consultants, INC.
- Owners of abutting properties are according to current assessor's records.

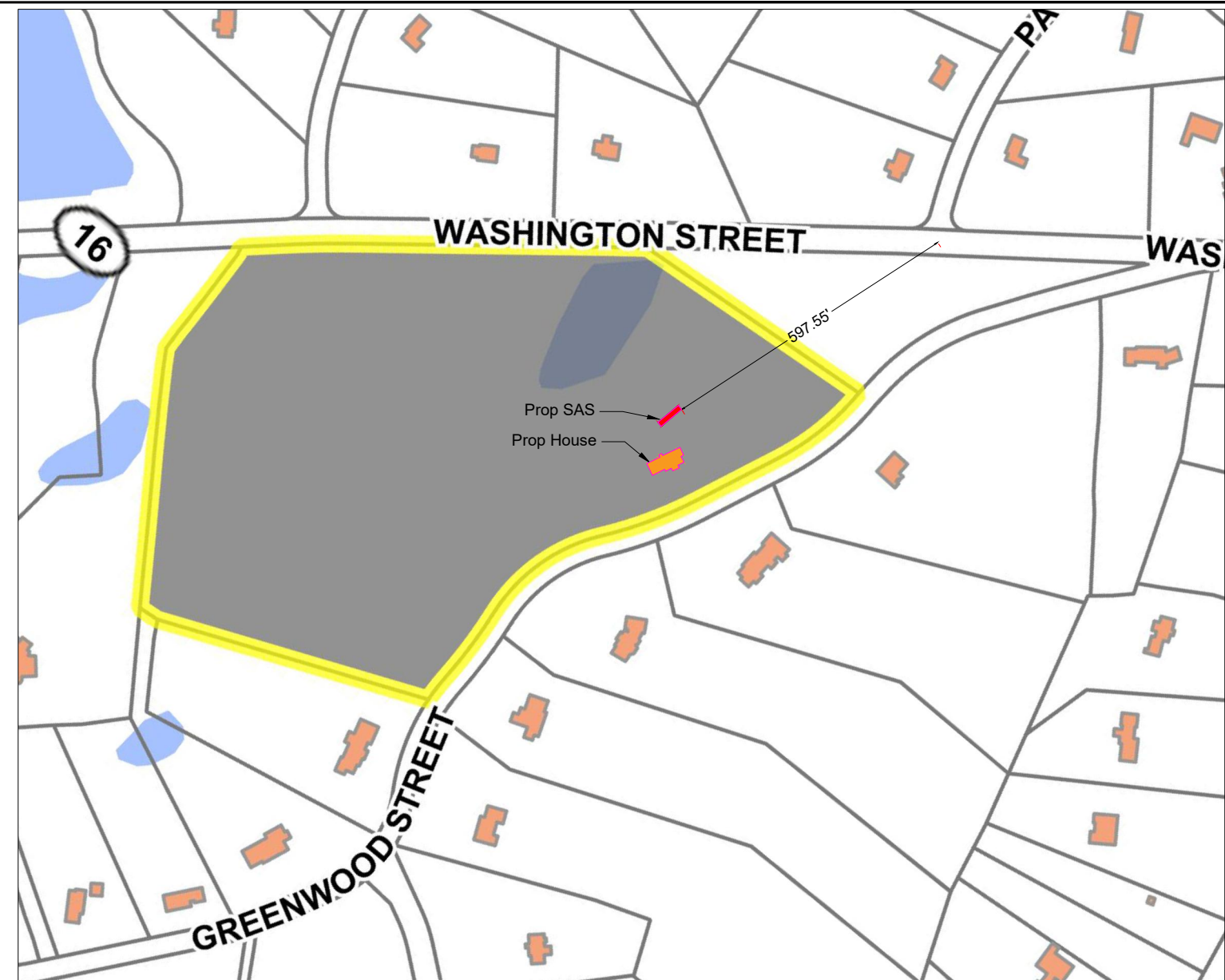
Septic Notes

- This plan is only for a new, 4-bedroom, single family house septic construction and grading purposes.
- This plan and specifications are intended to be explanatory of the work to be done for review, approval, and field construction. Should any omissions, errors, or discrepancies appear, they shall be subject to correction and interpretation by the design engineer to define and fulfill the intent of the plans according to applicable regulations and engineering principles. The Board of Health Representative shall also be notified.
- To verify that the plans being utilized for construction are current, call 774-454-0266.
- All erosion control shall be installed according to the plan prior to construction.
- Prior to execution of construction contract or commencement of construction, all B.O.H. permits and relevant Town Permits must be obtained. This plan must be approved by, and a disposal works construction permit issued by the Sherborn board of health if applicable.
- All materials and workmanship shall be in compliance with title 5 of the state sanitary code.
- An installer certification is required for the installation of the septic system.
- NO GARBAGE GRINDER IS ALLOWED FOR THIS DESIGN. PROOF OF DEED RESTRICTION IS REQUIRED BY THE BOARD OF HEALTH PRIOR TO THE RELEASE OF THE APPROVED PLAN.
- The septic tank shall be inspected annually and pumped as needed and records retained.
- Prior to construction, property lines and proposed structures shall be field staked by a Professional Land Surveyor.
- There are no other existing utilities or liens on the property except as shown on the plan, which shall be verified by DIGSAFE if they are underground.
- It shall be the responsibility of the contractor to contact all utility companies for field locations of existing underground pipes, conduits, tanks, structures, etc. Contact DIGSAFE at 1-888-344-7233 or 811.
- If conditions encountered during construction vary substantially from those shown on this plan, notify CLAWE before proceeding with construction. The Board of Health Representative shall also be notified.
- Upon completion of excavation for the leaching facility the board of health and design engineer shall be notified for inspection.
- All components are not to be backfilled or concealed without inspection by Board of Health and permission obtained by Board of Health.
- After construction, this system will be inspected by the B.O.H. and by the design engineer. After verification of the construction, the engineer will certify that the system is constructed in significant compliance with the design plan and the terms of the permit prior to the final approval of the B.O.H.
- The as-built survey and sieve analysis for the imported fill material shall be provided to the Sherborn Board of Health prior to inspection.
- It is the Contractor's responsibility to notify the design engineer and board of health for all required inspections at least 72 hours in advance.
- All loam, subsoil and other unsuitable material below the invert elevation of the leaching facility must be removed within 5 feet of the leaching area and replaced with material having a percolation rate of 2 minutes per inch or less in accordance with 310 CMR 15.255 (3).
- Limits of excavation of the soil absorption system may be made by mechanical means to assure that the soil at the bottom of the excavation area is not compacted or smeared.
- Prior to placement of the fill, the bottom surface of the excavation shall be dry and scarified. The fill be stockpiled at the edge of foundation and pushed or cast inward over excavated area. The fill shall not be placed during rain or snow storms. Dewatering is required if fill is to be placed below groundwater.
- A sieve analysis is to be completed on the "in place" imported fill and shall meet the specifications in accordance with 310 CMR 15.255 (3).
- The septic tank shall be two compartments with gas baffle and outlet filter sized in accordance with the design flow.
- Where retaining wall is required, it should be constructed to ASTM standards and 310 CMR 15.255(2).
- The leaching area and septic tank shall be located to meet all the applied setbacks and groundwater separation in the State Environmental Code 310 CMR15.211.
- All disturbed areas shall be stabilized with loam and seed.
- All construction shall follow the design plan, 310 CMR 15.00.
- The septic tank shall be maintained in accordance with 310 CMR 15.351.
- Fill material for leaching field fill shall be in compliance with 310 CMR 15.255 (3).
- Leaching fields and septic system components are not designed to stand construction equipment loading. The contractor and owner shall be responsible for preventing vehicle or heavy loading over the septic system.
- All system components shall be marked with magnetic tape for future location per 310 CMR 15.221:
 - four sides of the SAS and top of the distribution laterals;
 - envelope of the septic tank, pumping chamber, and the D-box;
 - any other I/A components.

ADDITIONAL NOTES

- Based on our record review at Sherborn Board of Health and field investigation, there are no existing wells located within 200-ft of the proposed septic leaching field unless otherwise noted on the plan.
- The proposed unit will serve a 4-bedroom single family house.
- The proposed onsite well serving the proposed residential house meet the required setback 100 ft from SAS and 50 ft from septic tank and other setback requirements per 310 CMR15.211 as shown on the plan.
- The proposed septic soil absorption system (leaching field) for the project is not located within or impacted by any easements, wetlands, vernal pools or flood zones per State Environmental code 310 CMR 15.000 as shown on the plan.
- The project is located within a nitrogen sensitive area. The parcel is 0.92 AC (40000 Sq.ft) and will accommodate the 4-bedroom design (440 gallons per day), which meets State Environmental code 310 CMR 15.000 of 440 gallons per day per acre.
- There are no bordering vegetated wetlands located within 100' of the proposed SAS as shown on the plan.
- There are no wetlands bordering surface water supply or tributaries within 200' of the SAS unless otherwise shown on the plan.
- There is no surface, foundation drain or other forms of open, surface or subsurface drains located within 100 ft of the leaching field for the project that intercept high groundwater table, nor any other forms of drains (open, surface, subsurface) intercept high groundwater.
- There is no surface water located within 150' of the SAS unless otherwise noted.
- There are no surface water supplies located within 400' of the proposed SAS unless otherwise shown.
- There are no inland banks located within 150' of the proposed SAS.

Well note: Based on our record review at Sherborn Board of Health and field investigation, there are no existing septic leaching fields located within 150-ft upgradient or downgradient of the proposed drinking water well unless otherwise noted.



Site Locus
1"=300'

Creative Land & Water Engineering, LLC

Environmental Scientists and Engineers
P.O. Box 584 - Southborough - MA - 01772
774-454-0266 www.claweng.com

Plan Title: Lot 4 Septic and Well Plan

Project Name: Greenwood Street Homes

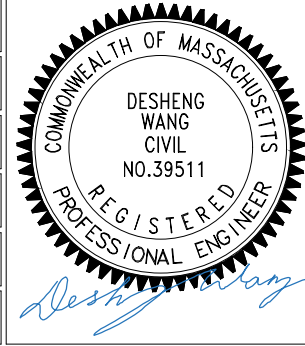
Site Address: 0 Washington St (Map 7, Lot 49) - Sherborn, MA

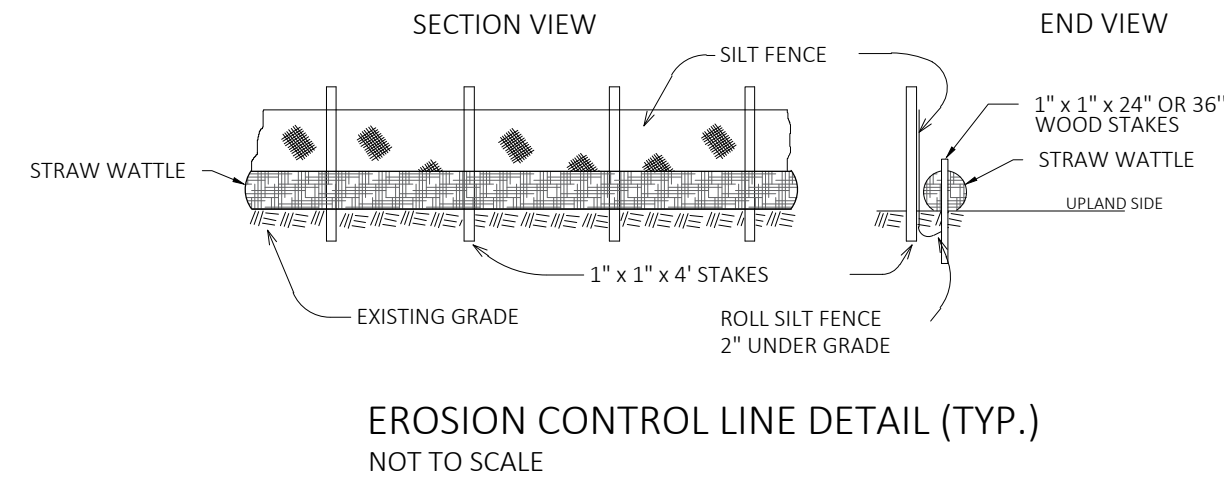
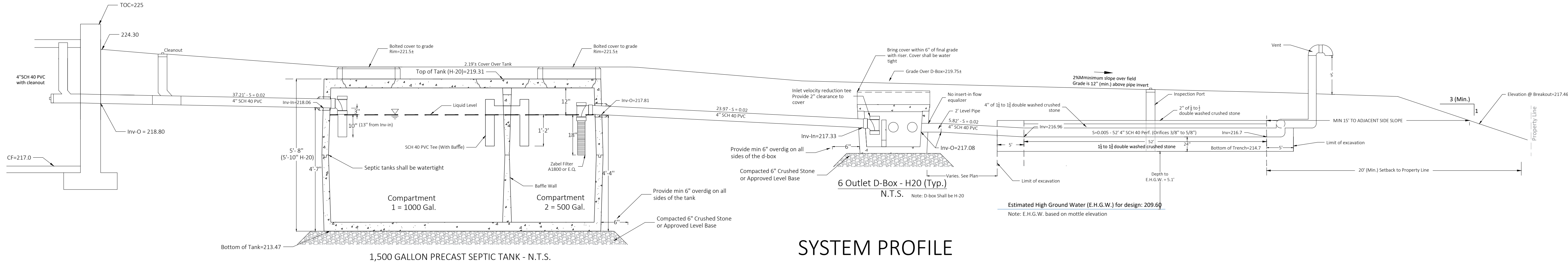
Owner: AB Realty Trust Client: Robert Murchison


Project No: J269-19a Drawn by: FA Date: 10/18/23 Sheet No: 1 of 2

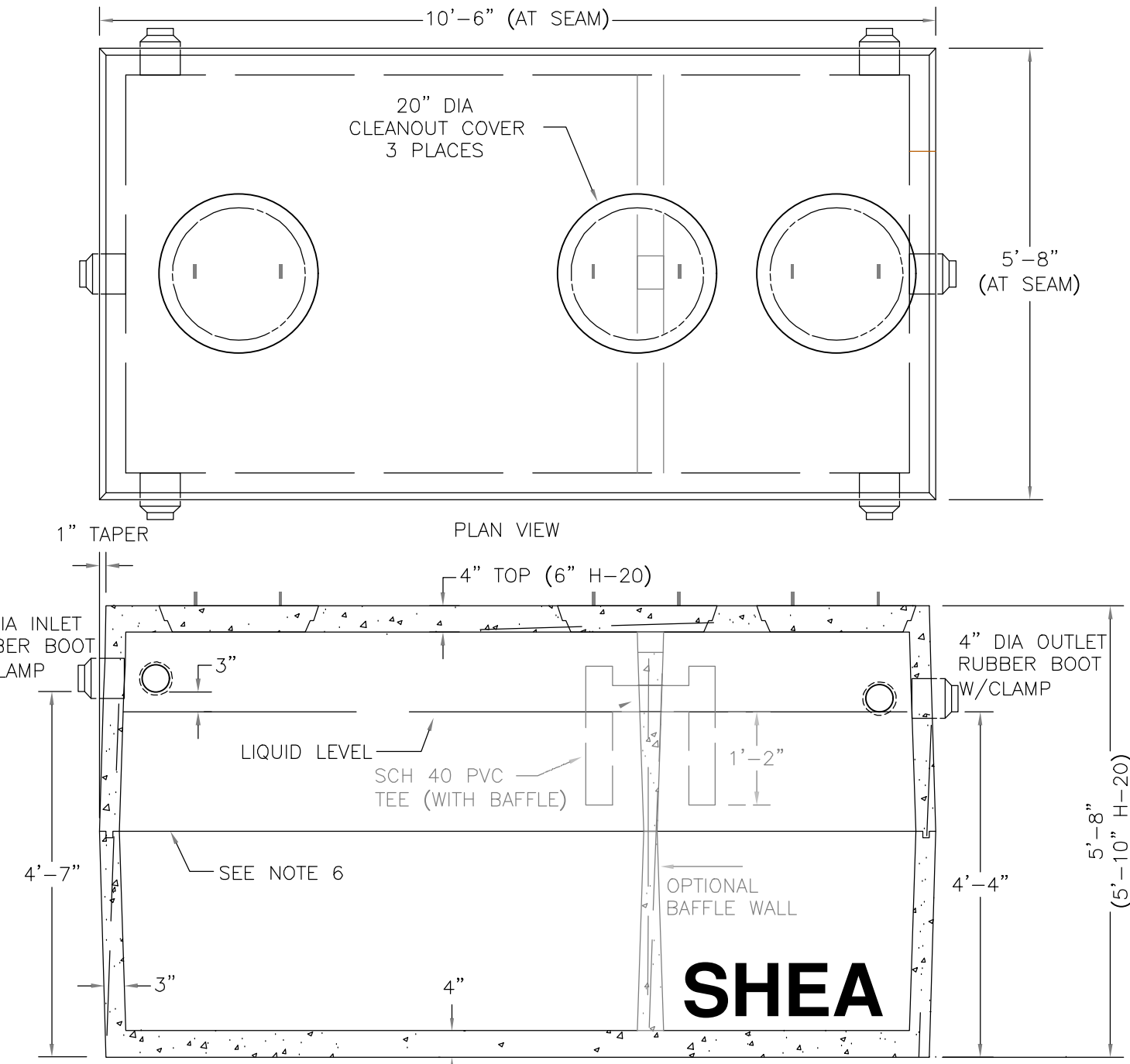
Designed by: DSW/FA Approved by: DSW Scale: Indicated

1	12/05/23	General notes, septic features	DSW/FA
Rev.:	Date:	Description	By:

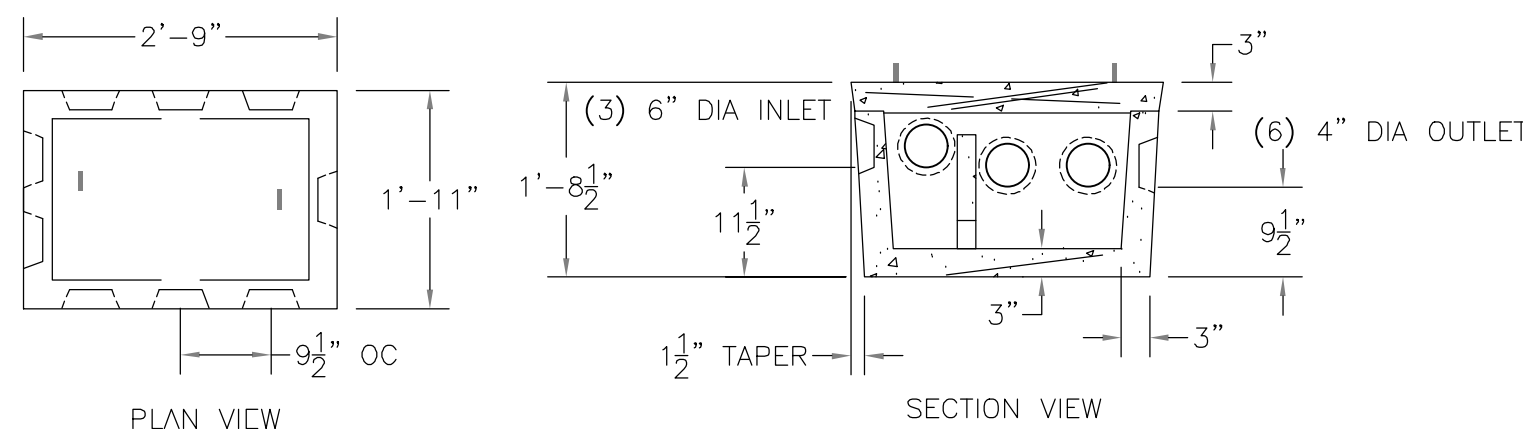




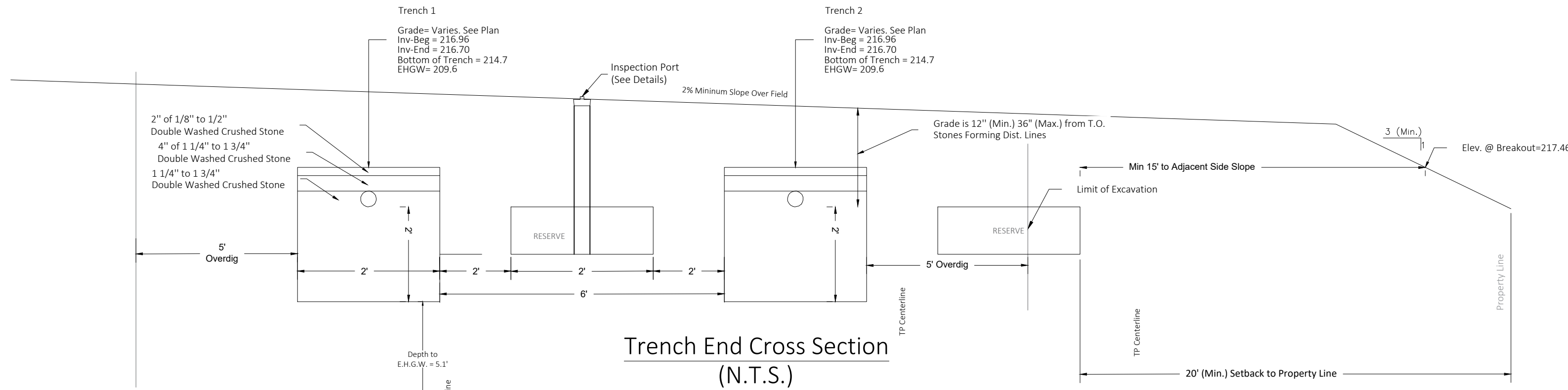
SOIL EXAMINATIONS					
Performed By:		Desheng Wang		Date:	
Witnessed By:		Mark Oram		12/1/2022	
Test Pit #					
DHTP 4-1		DHTP 4-2		DHTP 4-3	
Surface Elevation (ft)		Surface Elevation (ft)		Surface Elevation (ft)	
0" -		0" -		0" -	
(A)		(A)		(A)	
4" (Elev=213.46)		4" (Elev=216.26)		4" (Elev=214.36)	
S.L. - 10 YR 3/2 Friable		S.L. - 10 YR 3/2 Friable		S.L. - 10 YR 3/2 Friable	
(B)		(B)		(B)	
18" (Elev=212.3)		24" (Elev=214.6)		18" (Elev=213.2)	
S.L. 2.5 Y 6/6 Friable		S.L. 2.5 Y 6/6 Friable		L.S. 2.5 Y 6/6 Friable	
(C1)		(C1)		(C1)	
60" (Elev=208.8)		54" (Elev=212.1)		36" (Elev=211.7)	
M.L.S. 2.5 Y 6/6 Friable, Stony Mottles 10 YR 6/8		M.L.S. 2.5 Y 6/6 Friable, Stony Mottles 10 YR 5/8		M.L.S. 2.5 Y 6/4 Friable Mottles 10 YR 6/8	
(C2)		(C2)		(C2)	
108" (Elev=204.8)		108" (Elev=207.6)		108" (Elev=205.7)	
Co.L.S. 2.5 Y 5/6 Friable		Co.L.S. 2.5 Y 5/6 Fri-Firm		Co.M.L.S. 2.5 Y 5/4 Friable	
108"+ (Elev=204.8)		108"+ (Elev= 207.6)		108"+ (Elev=205.7)	
Cr		Cr		Cr	
Percolation Depth (in) =		-		Deep Only	
38"		42"		-	
Start/End Pre-Soak =		10:20 am/10:35 am		-	
9:35 am/9:50 am		-		-	
Time at 12"		10:35 am		-	
9:50 am		-		-	
Time at 11"		10:36 am		-	
9:51 am		-		-	
Time at 10"		10:37 am		-	
9:53 am		-		-	
Time at 9"		10:38 am		-	
9:55 am		-		-	
Time at 8"		10:40 am		-	
9:57 am		-		-	
Time at 7"		10:42 am		-	
9:59 am		-		-	
Time at 6"		10:45 am		-	
10:01 am		-		-	
Time (9"-6")		7 Min		-	
6 Min		-		-	
Percolation Rate (MPI) =		3		-	
3		-		-	
Depth to E.H.G.W. (in) =		84		84	
84		-		84	
Mottles Observed at (in)		84		84	
84		-		None	
Weeping (in)		None		None	
None		-		None	
Standing Water (in)		None		None	
None		-		None	
Groundwater adjustment (ft)		-		-	
-		-		-	
Adjusted depth to GW (ft):		-		-	
-		-		-	
Est. G.W. Elev., (ft) (By Mottles)		209.60		207.70	
206.80		-		-	
Facility to be Served 4 Bedroom Single family house					
Required Design					
Bedroom #:		4 x 110 gal/brm		440 GPD	
Garbage Disposal Provided		___ YES ___ NO		GPD	
Total Required Design (GPD)				440 GPD	
Grease Trap: Not Required					
90-seat restaurant:		0 X 15 gal/seat		GPD	
Grease trap volume:				GPD	
Septic tank:					
Two-compartment				1500 GPD	
ZABEL Filter A1800		___ X ___ YES ___ NO			
Total Required Design (GPD)				1500 GPD	
Soil Absorption System (use 2' Deep x 2' Wide trenches)					
Design Percolation Rate		3 MPI		ELR	
Soil Texture Classification		Use Class I Soils		0.74 gal/sq ft/day	
Min. center to center pipe spacing:		8 ft		use _____ 8 ft	
Trench depth:		12-24 in		use _____ 2 ft	
Trench width:		2-3 ft		use _____ 2 ft	
Min. trench length:		99.10 ft		use _____ 100.00 ft	
Limit of length:		100 ft		use _____ 52.0 ft per line	
Number of lines:		2		use _____ 2	
Design effluent treatment capacity		462 gpd		>440 gpd OK	
Soil Evaluator Certification:					
I certify that on June 8, 1995 I have passed the soil evaluator examination approved by the Department of Environmental Protection and that all soil evaluation and analysis was performed by me consistent with the required training, expertise and experience described in 310 CMR 15.017. My certificate number is SE2545.					
					



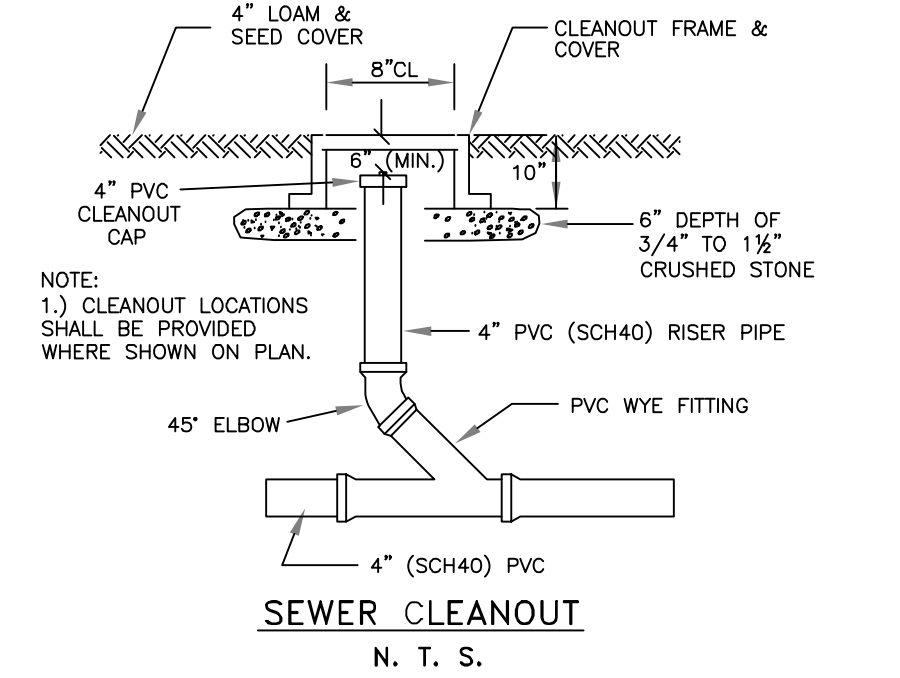
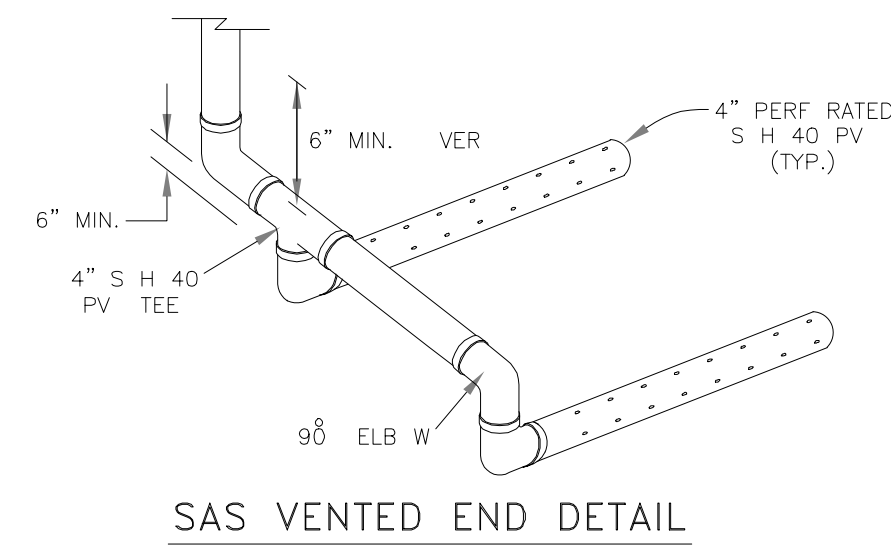
SHEA CONCRETE 1,500 GALLON PRECAST SEPTIC TANK - N.T.S.



6 Outlet Distribution Box with Baffle - Typical
N.T.S. D-box shall be H-20



Estimated High Ground Water (E.H.G.W.) for design: 209.6
Note: E.H.G.W. based on mottle elevation



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Project Name:	Greenwood Street Homes		
Site Address:	0 Washington St (Map 7, Lot 49) - Sherborn, MA		
Owner:	AB Realty Trust	Client:	Robert Murchison
Project No:	J269-19a	Drawn by:	FA
Designed by:	DSW/FA	Approved by:	DSW
Date:	12/05/23	Scale:	Indicatted
Rev.:	1	Date:	12/05/23
		Description:	General notes, septic features
		By:	DSW/FA

