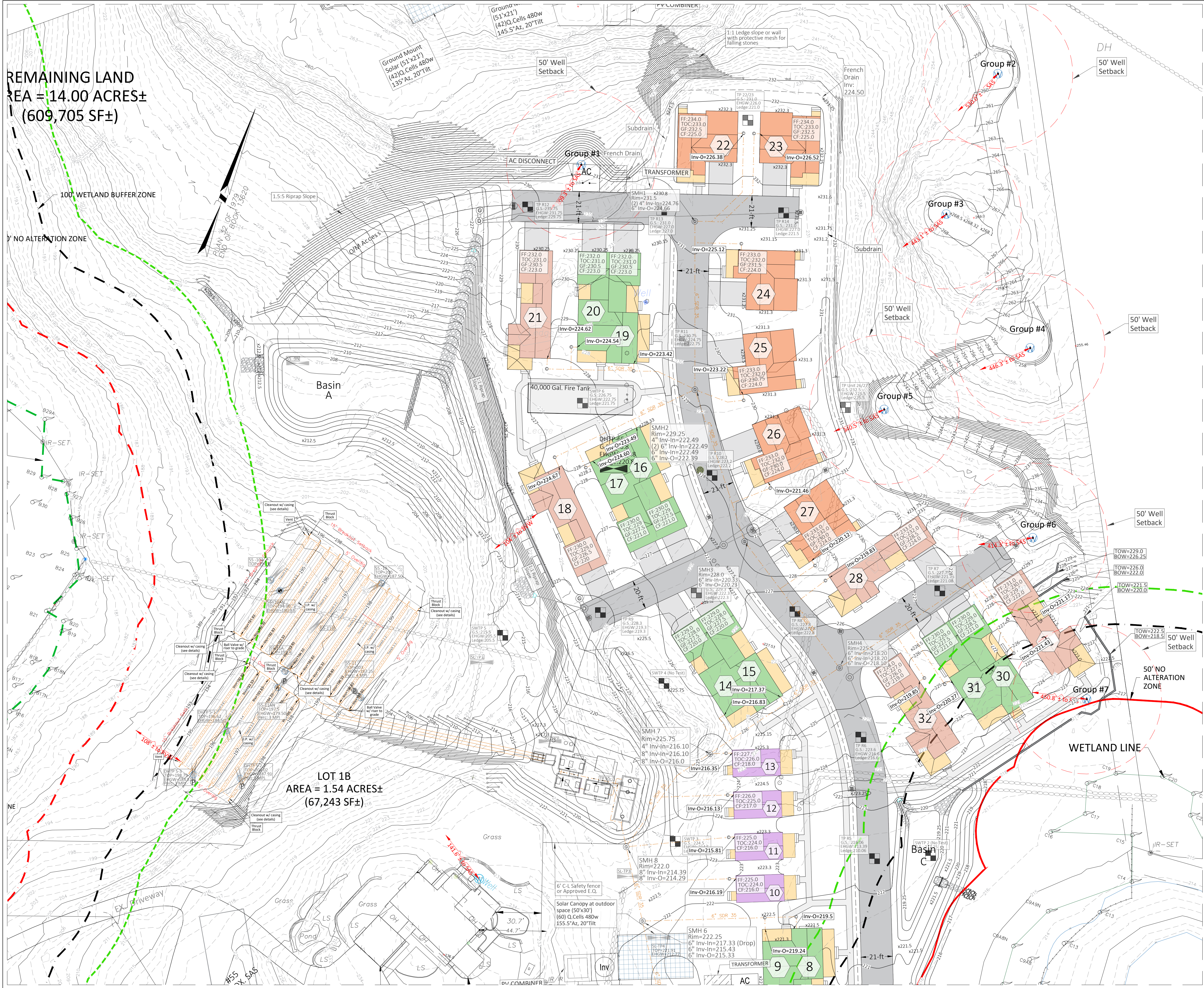




LEGEND

- CATCHBASIN
- ROOF DRAIN
- VENT
- WELL
- ELECTRIC METER
- UTILITY POLE
- GUY WIRE
- LIGHT POLE
- HANDHOLE
- SIGN
- MAILBOX
- POST
- WETLAND FLAG
- TEST PIT LOCATED
- DECIDUOUS TREE
- CONIFEROUS TREE
- SHRUB
- OVERHEAD WIRE
- INDEX CONTOUR
- INTERMEDIATE CONTOUR
- SPOT GRADE
- TW: TOP OF WELL
- EOP: EDGE OF PAVEMENT
- OH: OVERHANG
- MBW: MASONRY BLOCK WALL
- RTW: RAILROAD TIE WALL
- TOP: TOP OF PIPE

Line Legend

- 50' No Alteration Zone
- 100' Wetland Buffer Zone
- 125' Wetland Buffer Zone

APPROVED UNDER MASSACHUSETTS GENERAL LAW CHAPTER 40B

DATE APPROVED: _____
DATE ENDORSED: _____
SHERBORN ZONING BOARD OF APPEALS

I HEREBY CERTIFY THAT 20 DAYS HAVE LAPSED SINCE THE SHERBORN ZONING BOARD OF APPEALS APPROVAL HAS FILED WITH THE SHERBORN TOWN CLERK AND THAT NO APPEAL HAS BEEN FILED WITH THIS OFFICE.

DATE _____ JACKLYN R. MORRIS
SHERBORN TOWN CLERK

Creative Land & Water Engineering, LLC
Environmental Scientists and Engineers
P.O. Box 584 - Southborough - MA - 01772
774-454-0266 www.claweng.com

Plan Title: Proposed Septic System
Proposed Sewer Condition Plan 1

Project Name: Farm Road Homes

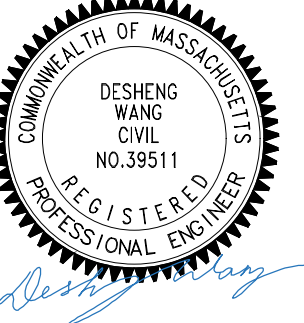
Site Address: 65 Farm Road - Sherborn, MA

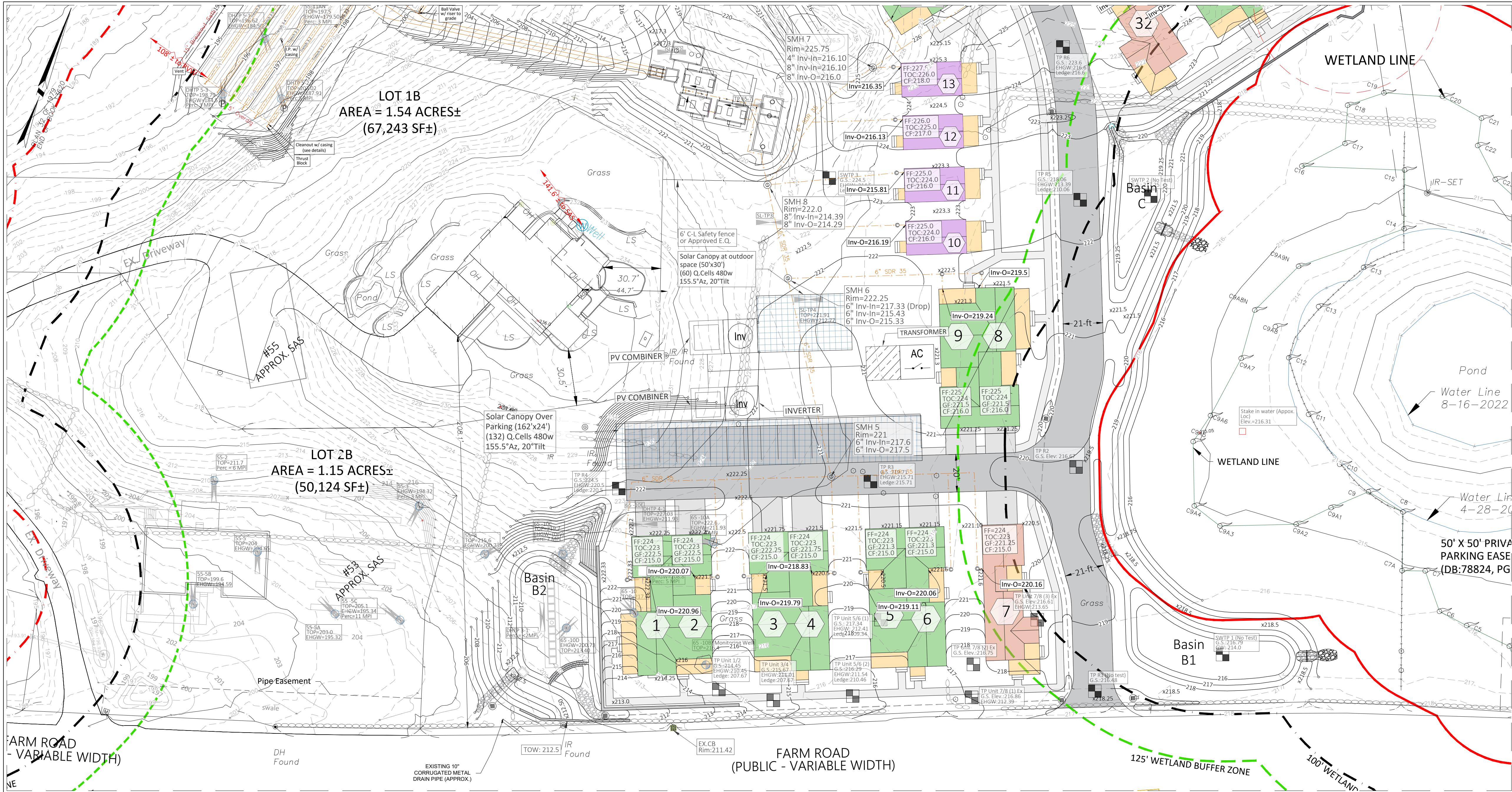
Owner: Fenix Partners Farm Road Dev., LLC Client: Robert Murchison

Project No: J269-12 Drawn by: FA Date: 11/30/23 Sheet No: 2 of 9

Designed by: DSW, FA Approved by: DSW Scale: 1"=30'

Rev.: _____ Date: _____ Description: _____ By: _____





- LEGEND**
- CATCHBASIN
 - ROOF DRAIN
 - VENT
 - WELL
 - ELECTRIC METER
 - UTILITY POLE
 - GUY WIRE
 - LIGHT POLE
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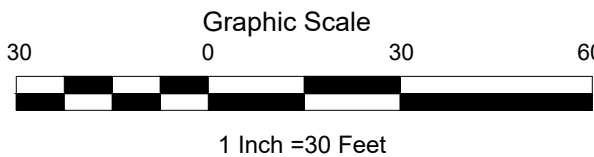
- Line Legend**
- 50' No Alteration Zone
 - 100' Wetland Buffer Zone
 - 125' Wetland Buffer Zone

APPROVED UNDER MASSACHUSETTS GENERAL LAW CHAPTER 40B

DATE APPROVED: _____
DATE ENDORSED: _____
SHERBORN ZONING BOARD OF APPEALS

I HEREBY CERTIFY THAT 20 DAYS HAVE LAPSED SINCE THE SHERBORN ZONING BOARD OF APPEALS APPROVAL HAS FILED WITH THE SHERBORN TOWN CLERK AND THAT NO APPEAL HAS BEEN FILED WITH THIS OFFICE.

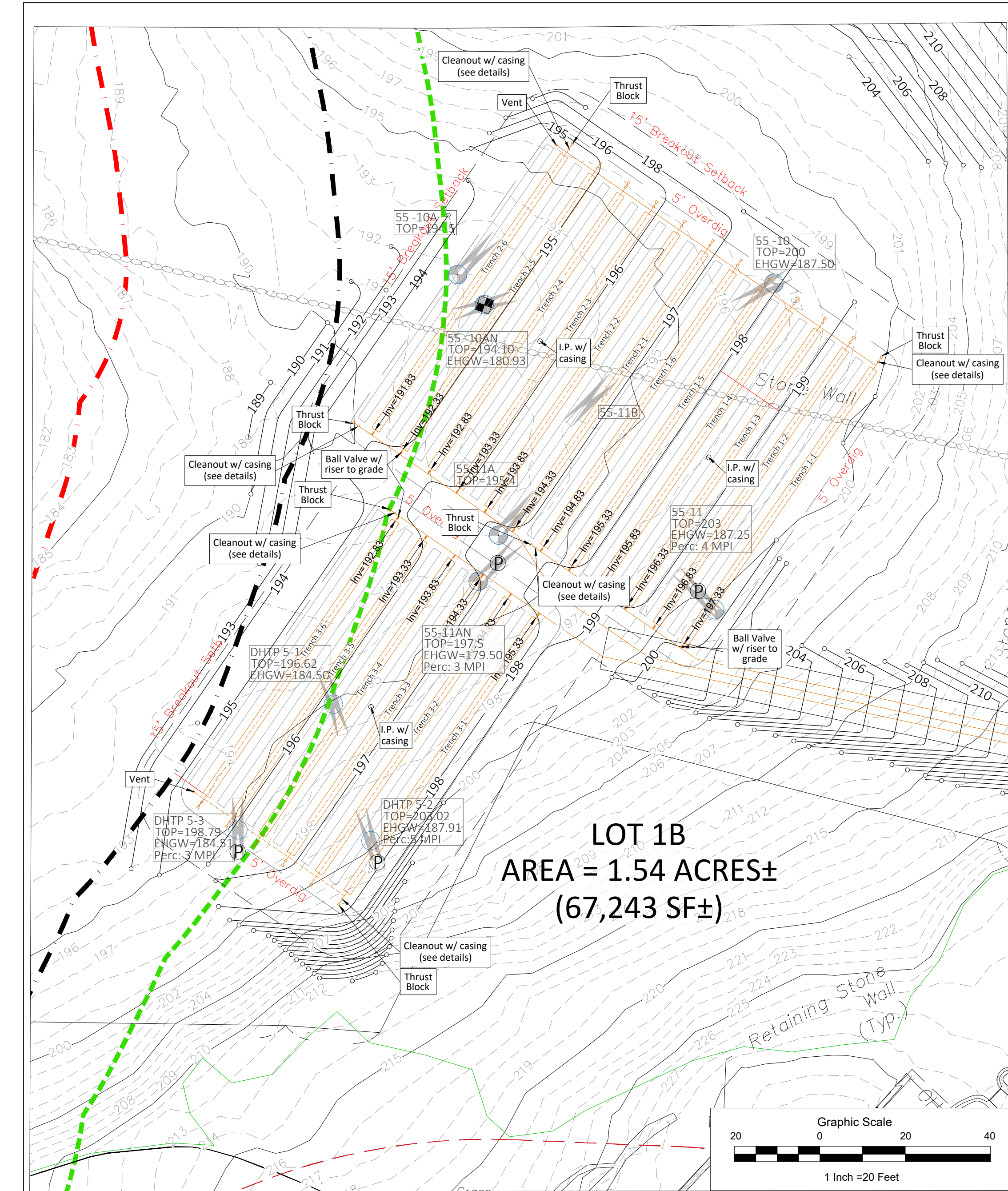
DATE _____ JACKLYN R. MORRIS
SHERBORN TOWN CLERK



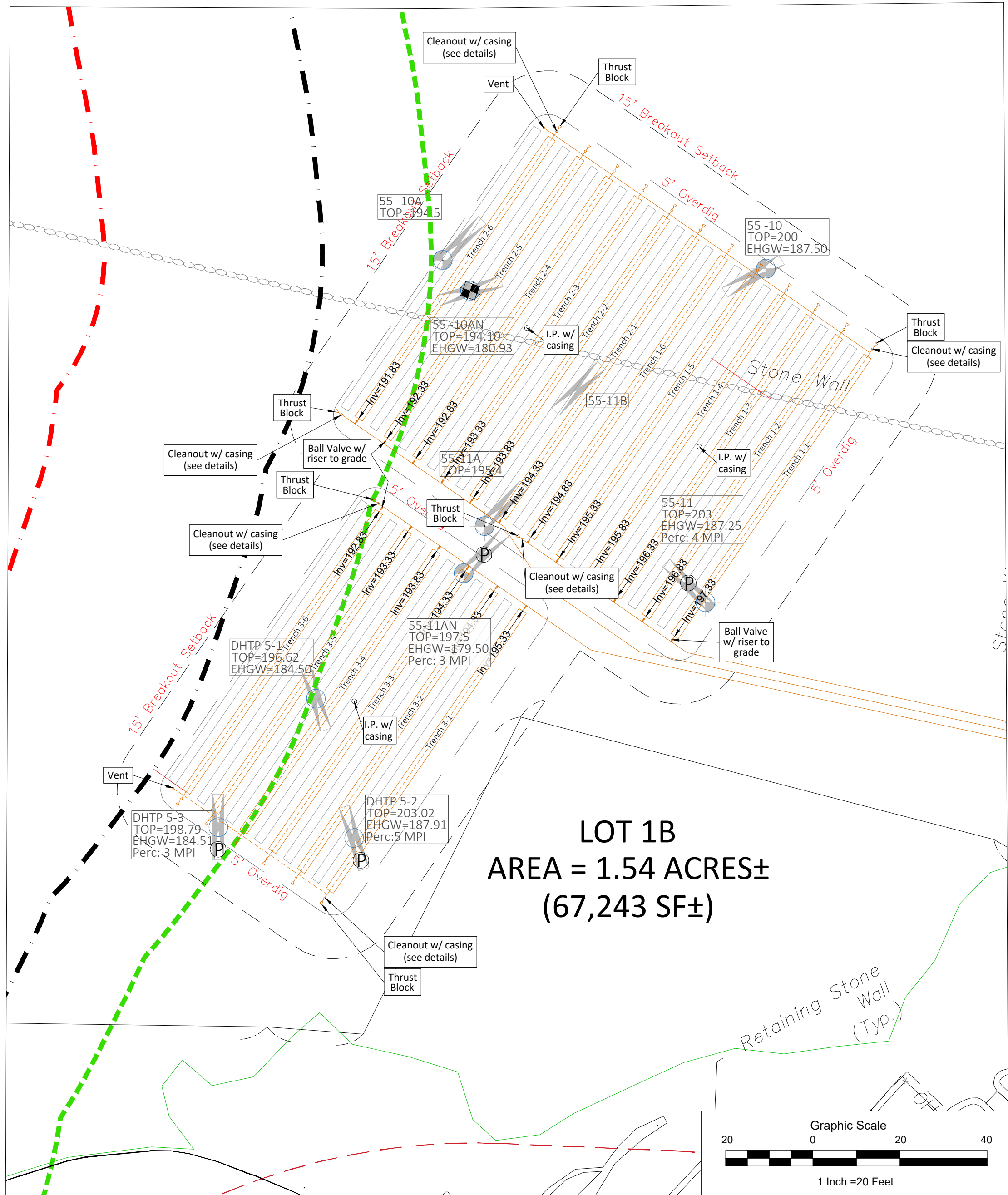
House Summary										
Unit #	Well Group#	Unit Type	Bedrooms	# Baths	EHGW	Ledge	FF	TOC	G.F.	C.F.
1	7	Duplex	2	2.5	210	207	224	223	222.5	215
2	7	Duplex	2	2.5	210.45	207.67	224	223	222.5	215
3	7	Duplex	2	2.5	211.01	207.67	224	223	222.25	215
4	7	Duplex	2	2.5	211.28	209.07	224	223	221.75	215
5	7	Duplex	2	2.5	212.41	209.34	224	223	221.3	215
6	7	Duplex	2	2.5	212.41	209.34	224	223	221.3	215
7	5	Rear Loaded	3	2.5	213.65	Unknown	224	223	221.25	215
8	5	Duplex	2	2.5	214	Unknown	225	224	221.5	216
9	5	Duplex	2	2.5	214	Unknown	225	224	221.5	216
10	5	Cottage	2	2.5	214	210	225	224	N/A	216
11	5	Cottage	2	2.5	214	210	225	224	N/A	216
12	4	Cottage	2	2.5	214	212	226	225	N/A	217
13	4	Cottage	2	2.5	216.6	216.6	227	226	N/A	218
14	4	Duplex	2	2.5	222.8	222.8	229	228	227.5	220
15	4	Duplex	2	2.5	222.8	222.8	229	228	227.5	220
16	1	Duplex	2	2.5	220.8	220.8	230	229	227.5	221
17	1	Duplex	2	2.5	220.8	220.8	230	229	227.5	221
18	3	Rear Loaded	3	2.5	220.8	220.8	230	229	226.5	220
19	1	Duplex	2	2.5	224.75	222.75	232	231	230.5	223
20	1	Duplex	2	2.5	224.75	222.75	232	231	230.5	223
21	1	Rear Loaded	3	2.5	224.75	222.75	232	231	230.5	223
22	2	Front Loaded	3	2.5	226	221	234	233	232.5	225
23	2	Front Loaded	3	2.5	226	221	234	233	232.5	225
24	2	Front Loaded	3	2.5	227	221.5	233	232	231.5	224
25	2	Front Loaded	3	2.5	224.75	222.75	233	232	230.75	224
26	3	Front Loaded	3	2.5	223.6	223.6	233	232	230	224
27	3	Front Loaded	3	2.5	224	Unknown	233	232	230	224
28	3	Rear Loaded	3	2.5	221.75	221.08	233	232	228.5	224
29	6	Rear Loaded	3	2.5	217	Unknown	231	230	229.5	222
30	6	Duplex	2	2.5	217	Unknown	230	229	228.5	221
31	6	Duplex	2	2.5	217	Unknown	230	229	227.5	221
32	6	Rear Loaded	3	2.5	217	Unknown	228	227	226	219

Creative Land & Water Engineering, LLC
Environmental Scientists and Engineers
P.O. Box 584 - Southborough - MA - 01772
774-454-0266 www.claweng.com

Plan Title: Proposed Septic System Proposed Sewer Condition Plan 2			
Project Name: Farm Road Homes			
Site Address: 65 Farm Road - Sherborn, MA			
Owner: Fenix Partners Farm Road Dev., LLC		Client: Robert Murchison	
Project No: J269-12	Drawn by: FA	Date: 11/30/23	Sheet No: 3 of 9
Designed by: DSW, FA	Approved by: DSW	Scale: 1"=30'	
Rev.:	Date:	Description	By:



Primary Area Grading



Primary Area Layout

Summary of Groundwater Mounding Analysis - SAS

Parameters	Leaching Field		Note
Recharge area	SAS 1+2	SAS3	All trenches are placed more than 8 ft above the estimated highgroundwater and not be impacted by groundwater mounding.
Dimension, Length, ft	92	82	
Dimension, Width, ft	82	46	
Area, sq. ft	7544.00	3772.00	
Recharge Vol. Cu ft (per day or event)	745.10	372.55	
Duration, day	90	90	
Recharge rate, cu ft/day/sq. ft	0.10	0.10	
Dewater time, day	90	90	
GW Separation, ft	8.49	12.58	
Distance to wetland, ft	125	125	
Maximum mounding height, ft	0.73	0.61	
Estimated effective Max MH, ft	0.73	0.61	
Impact mounding height by other systems, ft	0	0	
Combined Mound height, ft	0.73	0.61	
Bottom of Trench, ft	192.58	192.08	
Top of stones, ft			
EHGW, ft	184.09	179.5	
	average		
Bottom aquifer, ft	170	170	
Flood routing elev, ft	291.670	291.670	
Top of grade, ft	292.5	275.5	
Aquifer depth, ft	14.09	9.5	
Hydraulic Conductivity, ft/day	24.00	24.00	

DHTP 5-1. Date 11/10/21									
Depth (ft)	Soil Horizon Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume Cobbles & Stones	Soil Structure	Soil Consistence (Moist)
				Depth	Color	Percent			
0-9	A	S.L.	10 YR 3/2						Friable
9-36	B	S.L.	2.5 Y 6/6						Friable Bld's
36-180+	C	Co.M.L.S.	2.5 Y 5/4						Dense, 20% Stones

No Standing. No Weeping. EHGW=184.50. Dry Pit. Deep Hole Only

DHTP 5-2. Date 11/09/21									
Depth (ft)	Soil Horizon Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume Cobbles & Stones	Soil Structure	Soil Consistence (Moist)
				Depth	Color	Percent			
0-4	A	S.L.	10 YR 3/2						Friable
4-30	B	S.L.	2.5 Y 6/6						Friable
30-180+	C	Co.L.S.	2.5 Y 5/4						Fri-Loose

No Standing. No Weeping. EHGW=187.91. Dry Pit. Perc Rate=5 MPI. Perc Depth=64"

DHTP 5-3. Date 11/10/21									
Depth (ft)	Soil Horizon Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume Cobbles & Stones	Soil Structure	Soil Consistence (Moist)
				Depth	Color	Percent			
0-4	A	S.L.	10 YR 3/2						Friable
4-30	B	S.L.	2.5 Y 6/6						Fri. L. Boulders
30-54	C1	M.S.	2.5 Y 6/4						Loose
54-180+	C2	Co.M.L.S.	2.5 Y 5/4						Dense, 20% Stones

No Standing. No Weeping. EHGW=184.51. Dry Pit. Perc Rate=3 MPI. Perc Depth=60"

DHTP 55-10. Date 4/21/21									
Depth (ft)	Soil Horizon Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume Cobbles & Stones	Soil Structure	Soil Consistence (Moist)
				Depth	Color	Percent			
0-6	A	S.L.	10 YR 3/2						Friable
6-30	B	S.L.	2.5 Y 6/6						Friable
30-135	C	L.S.	2.5 Y 5/4						Dense Fri

No Standing. No Weeping. EHGW=187.50. Dry Pit. Deep Hole Only

DHTP 55-10AN. Date 4/21/21									
Depth (ft)	Soil Horizon Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume Cobbles & Stones	Soil Structure	Soil Consistence (Moist)
				Depth	Color	Percent			
0-6	A	S.L.	10 YR 3/2						Friable
6-30	B	S.L.	2.5 Y 6/6						Friable
30-174	C	L.S.	2.5 Y 6/4						Fri-Dense

Standing @168". Weeping @168". EHGW=180.93. Deep Hole Only

DHTP 55-11. Date 4/21/21									
Depth (ft)	Soil Horizon Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume Cobbles & Stones	Soil Structure	Soil Consistence (Moist)
				Depth	Color	Percent			
0-4	A	S.L.	10 YR 3/2						Friable
4-30	B	S.L.	10 YR 6/6						Friable
30-192	C	L.S.	2.5 Y 5/4						Dense-Fri

No Standing. No Weeping. EHGW=187.25. Dry Pit. Perc Rate=4 MPI. Perc Depth=54"

DHTP 55-11AN. Date 4/21/21									
Depth (ft)	Soil Horizon Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume Cobbles & Stones	Soil Structure	Soil Consistence (Moist)
				Depth	Color	Percent			
0-4	A	S.L.	10 YR 3/2						Friable
4-32	B	S.L.	2.5 Y 6/6						Friable
32-216	C	L.S.	2.5 Y 5/4						Friable

Standing @204". Weeping @204". EHGW=179.50. Perc Rate=3 MPI. Perc Depth=54"

DHTP 55-11B. Date 4/21/21									
Depth (ft)	Soil Horizon Layer	Soil Texture (USDA)	Soil Matrix: Color-Moist (Munsell)	Redoximorphic Features			Coarse Fragments % by Volume Cobbles & Stones	Soil Structure	Soil Consistence (Moist)
				Depth	Color	Percent			
0-6	A	S.L.	10 YR 3/2						Friable
6-30	B	S.L.	2.5 Y 6/6						Friable
30-120+	C	L.S.	2.5 Y 6/4						Dense Bory

No Standing. No Weeping. EHGW=180.93. Dry Pit. Deep Hole Only

Table 2.2. SAS Soil Testing Summary

Test Pit #	Test Date	GSE (ft)	Depth to pit bottom (ft)	Soil Texture	Adjusted Depth to HGW (ft)	Water adjustment, ft	EHGW, ft	Perc rate, mpi	Perc depth, in	Bottom Hole El, ft	Ledge Note: L=ledge,N=no ledge, U=unknown	Note
DHTP 55-10	4/23/2021	196.92	11.25	Co. M. L.S.	9.42		187.50			185.67	N	well installed, upslope, dry
DHTP 55-10An	4/23/2021	192.10	14.50	Co. M. L.S.	11.17		180.93			177.60	U	Well installed, lower SLP, some weeping
DHTP 55-11	4/23/2021	201.00	16.00	Co. M. L.S.	13.75	1.83	187.25	4.00	54.00	185.00	N	Well installed, upslope, dry
DHTP 55-11An	4/23/2021	193.92	18.00	Co. M. L.S.	14.42		179.50	3.00	54.00	175.92	U	Well installed, lower SLP, some weeping
DHTP 55-11B	4/23/2021	194.00	10.00	Co. M. L.S.	n/t		n/t			184.00	U	No well, confirm soil, mid slope, dry
DHTP 5-1	11/24/2021	195.04	14.50	Co. M. L.S.	10.54		184.50			180.54	N	Well installed, lower SLP, dry
DHTP 5-2	11/24/2021	200.77	17.49	Co. M. L.S.	12.86	2.38	187.91	5.00	64.00	183.28	N	well installed, upslope, dry
DHTP 5-3	11/24/2021	198.04	16.66	Co. M. L.S.	13.53		184.51	3.00	60.00	181.38	N	well installed, upslope, dry

Note: 1. Nearby downgradient wetland is at elevation of 177-178, which is in line with the weeping water elevation in Test pits DHTP-11An and DHTP-10An; 2. Except the two test pits, other test pits were dry and no water measured and the water table based on the depth of hole is a conservative estimate and normally will not be considered.

Creative Land & Water Engineering, LLC

Environmental Scientists and Engineers

P.O. Box 584 - Southborough - MA - 01772

774-454-0266 www.claweng.com

Plan Title: Proposed Septic System
Soil Absorption System Plan

Project Name: Farm Road Homes

Site Address: 65 Farm Road, Sherborn, MA

Owner: Fenix Partners Farm Road Dev., LLC

Client: Robert Murchison

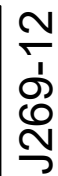
Project No: J269-12 Drawn by: FA Date: 11/30/23 Sheet No: 4 of 9

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

Rev.:	Date:	Description	By:		



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Remarks:	Project: Sewer Main Capacity Analysis (Typical)				
	Pipe diameter (in):	6	RIM=	205	ft
	Slope (ft/ft):	0.02	Pipe length: U/S INV, Z <u>u</u> :	100.00	ft
	Calc. slope (ft/ft)	0.0200	D/S INV, Z <u>d</u> :	202.00	ft
				200.00	ft
	Peak Design Discharge (cfs):	0.05	Entrance Head:	1.00	ft
	Design Velocity (ft/s):	2.21	E.L.F.:	1.13	cfs
	Design flow (2xdaily)	double	W.L. at Inlet:	203	ft
	Design flow depth (in):	0.82			

Average Daily flow:	8360	gpd
Peak/Average ratio:	4.19	normally between 4-5
Peak flow:	35021.371	gpd
	0.054182588	cfs



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Total Dynamic Head Calculations											
Head Loss from pump to F. Main				Equivalent Lenghts (Le)							
Item (Fittings)	Units	Pump # 1 Le/unit Total Le	Total MLC	Units	Pump # 2 Le/unit Total Le	Total MLC	Units	Pump # 3 Le/unit Total Le			
Expansion coupling (3"x4")	1	1 1		1	1 1		1	1 1			
90° Bend (4")	1	10 10		1	10 10		1	10 10			
Check Valve (4")	1	26 26		1	26 26		1	26 26			
Gate Valve (4")	2	2.3 4.6		2	2.3 4.6		2	2.3 4.6			
Tee (4")	0	7 0		0	7 0		0	7 0			
Transition Coupling (4"x4")	0	2 0		0	2 0		0	2 0			
22.5° Bend (4")	1	2.5 2.5		3	2.5 7.5		1	2.5 2.5			
45° Bend (4")	0	5 0		0	5 0		0	5 0			
Reducer Tee (4"x4"x2")	0	2 0		0	2 0		0	2 0			
Ball Valve (4")	0	14 0		0	14 0		0	14 0			
4" Equivalent Pipe Fittings Subtotals (Ft.)	-	- 44.1		-	- 49.1		-	- 44.1			
Linear Feet of 4" pipe: from pump to force main	-	- 182.82		-	- 233.62		-	- 218.02			
Friction loss @270GPM in 4" pipe: pump to force main (Ft.head/100-ft)	-	- 3.70		-	- 3.70		-	- 3.70			
Subtotal: 4" fittings + 4" pipe	-	- 8.40		-	- 10.46		-	- 9.70			

Head Loss from F. Main to Beg. Lateral											
Head Loss from F. Main to Beg. Lateral				Equivalent Lenghts (Le)							
Item (Fittings)	Pump # 1			Total MLC	Pump # 2			Total MLC	Pump # 3		
	Units	Le/unit	Total Le		Units	Le/unit	Total Le		Units	Le/unit	Total Le
Expansion coupling (3"x4")	0	1	0		0	1	0		0	1	0
90° Bend (2")	0	5.5	0		0	5.5	0		0	5.5	0
Check Valve (2")	0	13	0		0	13	0		0	13	0
Gate Valve (2")	0	1.2	0		0	1.2	0		0	1.2	0
Tee (2")	0	4	0		0	4	0		0	4	0
Transition Coupling (2"x2")	0	1	0		0	1	0		0	1	0
22.5° Bend (2")	1	1.25	1.25		1	1.25	1.25		1	1.25	1.25
45° Bend (2")	0	2.5	0		0	2.5	0		0	2.5	0
Reducer Tee (4"x4"x2")	1	1	1		1	1	1		1	1	1
Ball Valve (2")	1	7	7		1	7	7		1	7	7
4" Equivalent Pipe Fittings Subtotals (Ft.)	-	-	9.25		-	-	9.25		-	-	9.25
Length of 2" pipe from force main to beg. Lateral (Ft)	-	-	1.5		-	-	1.5		-	-	1.5
Friction loss @ 45GPM in 2" pipe:force main to Beg. Lateral (Ft.head/100-ft)	-	-	3.43		-	-	3.43		-	-	3.43
Subtotal: 2" fittings + 2" pipe	-	-	0.37		-	-	0.37		-	-	0.37

Head Loss from Beg. Lateral to end Lateral											
Head Loss from Beg. Lateral to end Lateral				Equivalent Lenghts (Le)							
Item (Fittings)	Pump # 1			Total MLC	Pump # 2			Total MLC	Pump # 3		
	Units	Le/unit	Total Le		Units	Le/unit	Total Le		Units	Le/unit	Total Le
Expansion coupling (3"x4")	0	1	0		0	1	0		0	1	0
90° Bend (2")	0	5.5	0		0	5.5	0		0	5.5	0
Check Valve (2")	0	13	0		0	13	0		0	13	0
Gate Valve (2")	0	1.2	0		0	1.2	0		0	1.2	0
Tee (2")	0	4	0		0	4	0		0	4	0
Transition Coupling (2"x2")	0	1	0		0	1	0		0	1	0
22.5° Bend (2")	0	1.25	0		0	1.25	0		0	1.25	0
45° Bend (2")	0	2.5	0		0	2.5	0		0	2.5	0
Reducer Tee (4"x4"x2")	0	1	0		0	1	0		0	1	0
Ball Valve (2")	0	7	0		0	7	0		0	7	0
2" Equivalent Pipe Subtotals	-	-	0		-	-	0		-	-	0
Linear Feet of 2" pipe from beg lateral to end lateral (Ft)	-	-	78.0		-	-	78.0		-	-	78.0
Friction loss@ 45GPM in 2" pipe Beg. Lateral to End. Lateral (Ft.head/100-ft)	-	-	3.43		-	-	3.43		-	-	3.43
Subtotal: 2" fittings + 2" pipe	-	-	2.68		-	-	2.68		-	-	2.68

	Pump # 1		Pump # 2		Pump # 3
Friction Loss	11.44		13.50		12.74
Static Head	-6.43		-6.43		-6.43
Total: Friction Loss + Static Head	5.01		7.07		6.31

SAS, Dosing Chamber and Pump Design

Project:	Farm Road 40B	Site:	Farm Rd
Engineer:	Desheng Wang	Date:	2/16/2023
Design Parameters			
Total	32	3 Bdrn	2 Bdrm
Units	76	12	20
Bdrn		36	40
Design Flow	2786.666667	GPD/Field	
# Fields	3		
Total Flow	8360	GPD/Field	

Leaching Area Sizing: w/ Cultec Contactor 202					
Cultec Contactor 202 Approved Effective Width (Ft)	8.10	Reserve in between trench (Yes, No)	Yes		
Design Perc. Rate	5	mpi			
ELR	0.74	gpsps			
Trench Width (In)	24				
	465				
Number of Lines	6				
Line Spacing C-C (Ft)	8				
Line Length (Ft)	78				
Field Width (Ft)	46				
Overdig Length (Ft)	88				
Overdig Width (Ft)	56				

Pumping Rate:					
Design Point:	End of Laterals	Residual Pressure =	3.65	ft	
Laterals:	2 inches	Perforations:	0.3125	inches	
	78 ft long	# of Per L.:	20		
Flow rate per L.:	42.8938365	# of Laterals:	6		
Design lateral invert, ft:			197.33	ft	
Static Head:			-10.08	ft	
Residual Head:			3.65	ft	
Manifold/Delivery pipe:			20.71	ft	HL+Hf (friction + fitting)
Lateral:			2.93	ft	HL+Hf (friction + fitting)
Total Dynamic Head:			17.21	ft	

Head Loss:	Delivery	Lateral	Required Flow
Head loss coef, ξ	5.77	1.83	(elbows+chk valve+Ts)
Fitting head loss, ft:	4.32	0.60886585	ft
L, ft:	225.86	79.50	ft
r, in.:	2	1.00	in
Manning's n:	0.011	0.011	
Min. Flow Q, gpm:	271.80	45.30	gpm
Friction, HL:	16.39	2.32	ft
Velocity, ft/s	6.94	4.63	
Velocity head, ft:	0.75	0.33	
Pump to use:	Triplex	Barnes 3SE 1524DS 1.5 hp, 230 volt, 1 Phase	

Dosing Volume (gallons):					
Daily Design Volume:	8360.00	gpd			
Dose/day/field:	2.00	total doses:	6		
Volume per dose:	1393.33	gallons			
Pipe Volume:					
Laterals:	77.81	Diameter (in):	2	Length (ft):	78
(Backflow) Manifold:	147.38	Diameter (in):	4	Length (ft):	160
Total pipe vol.:	225.19	gallons			
Min. dosing volume:	736.88	to	1473.758	gallons (5 -10 times of pipe volume)	
Dosing volume =	1393.33	gallons	OK		
Dosing time=	5.13	minutes			

Dosing Chamber:	(Shea Concrete 9400 gallon tanks, primary 2400 gal + 7000 secondary tank)				
Width (internal):	see plan	ft	6	6	Prim. T
Length (internal):		ft	16	9	Sec. T
Sec. Area:		180.00	sq. ft		
Pump off to lead on:		1.03	ft		
Grade:	see plan	ft			
Top of tank:	see plan	ft			
Sump floor (primary):	205.16	ft	Secondary	207.06	
Pump off:	207.41	ft			
Lead on:	208.44	ft			
Lag on:	208.64	ft			
Alarm on:	208.64	ft			
Inlet invert:	213.73	ft			
Outlet invert >=:	214.16	ft			
Emergency storage:	7427	gal above alarm to outlet			

Creative Land & Water Engineering, LLC

Environmental Scientists and Engineers

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Plan Title:

Proposed Septic System
Pressure Dosing and Pipe Analysis

Project Name:

Farm Road Homes

Site Address:

65 Farm Road, Sherborn, MA

Owner:

Fenix Partners Farm Road Dev., LLC

Client:

Robert Murchison

Project No:

J269-12

Drawn by:

FA

Date:

11/30/23

Sheet No:

6 of 9

Designed by:

DSW, FA

Approved by:

DSW

Scale:

Indicated

Rev.:

Date:

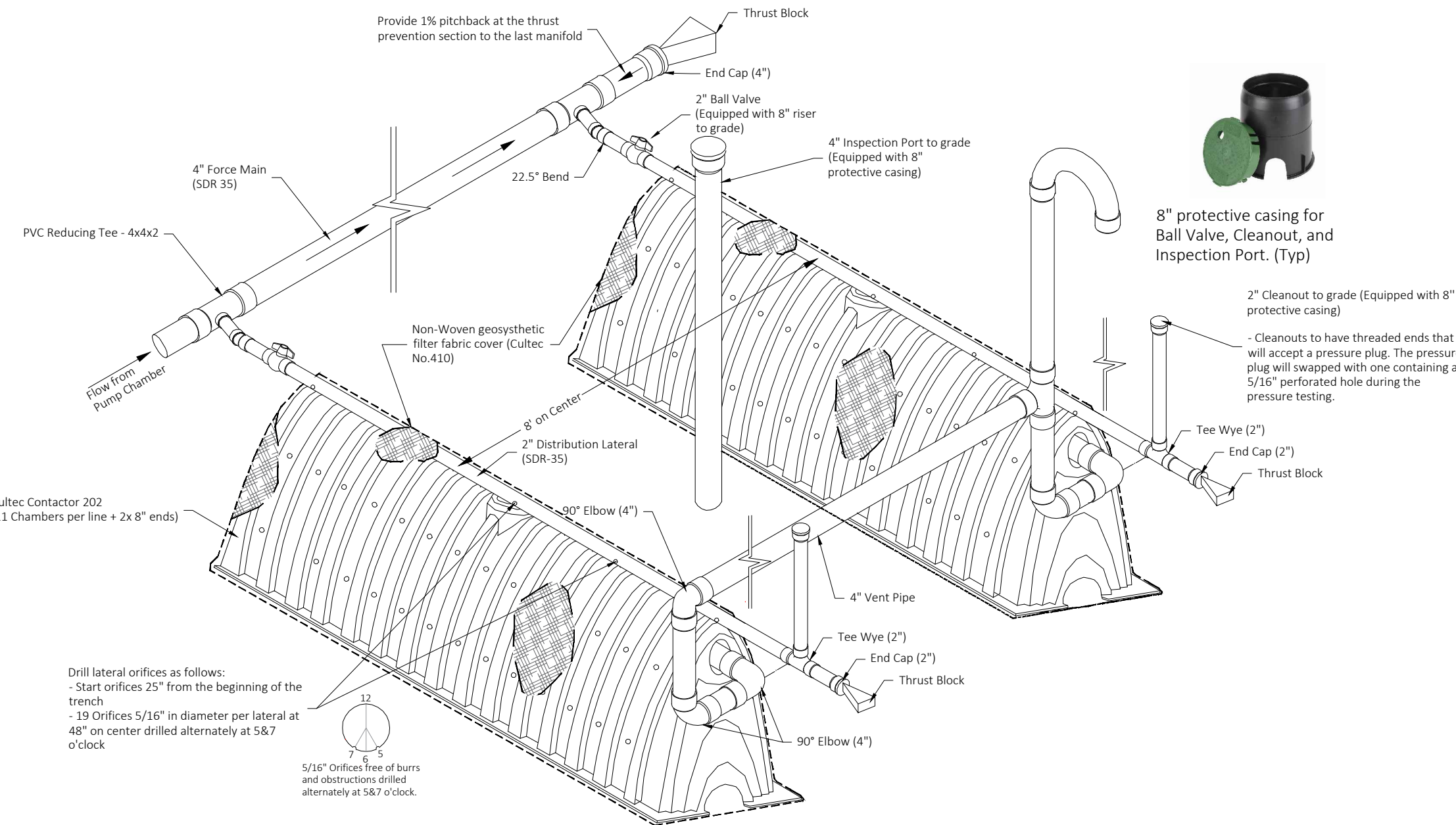
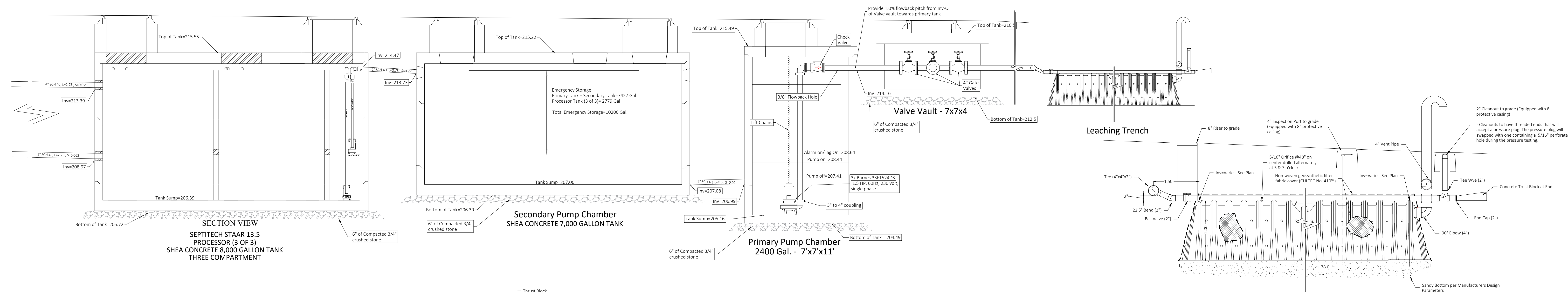
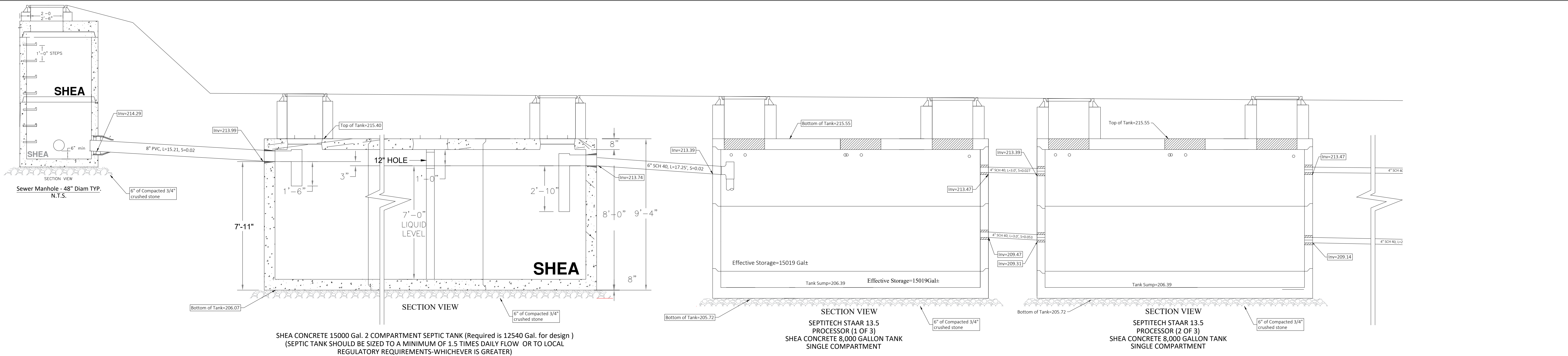
Description

By:

DESIGNER'S SEAL

DESIGNER'S SIGNATURE

C:\Users\ldave\OneDrive\Videos\Sherborn\J269-12 55 Farm rd\Drafting\Site Design - 11 27 23 - S&W 02 24 22 Base.dwg



Pressure System Notes

- After system installation but prior to backfilling, a full pressure test of the system shall be conducted. The pump chamber shall be filled and a supply of water provided to the pump chamber.
- The design engineer shall be contacted to conduct the pressure and to obtain the initial calibration data.
- The pressure system shall provide for a minimum distal head of 2.5 feet.
- The system shall be inspected as required by Title 5, as stated in 310 CMR 15.254 (2)(d). Every three months.

Leaching Trench Profile N.T.S

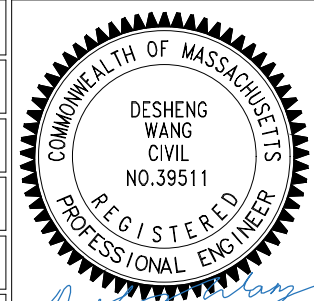
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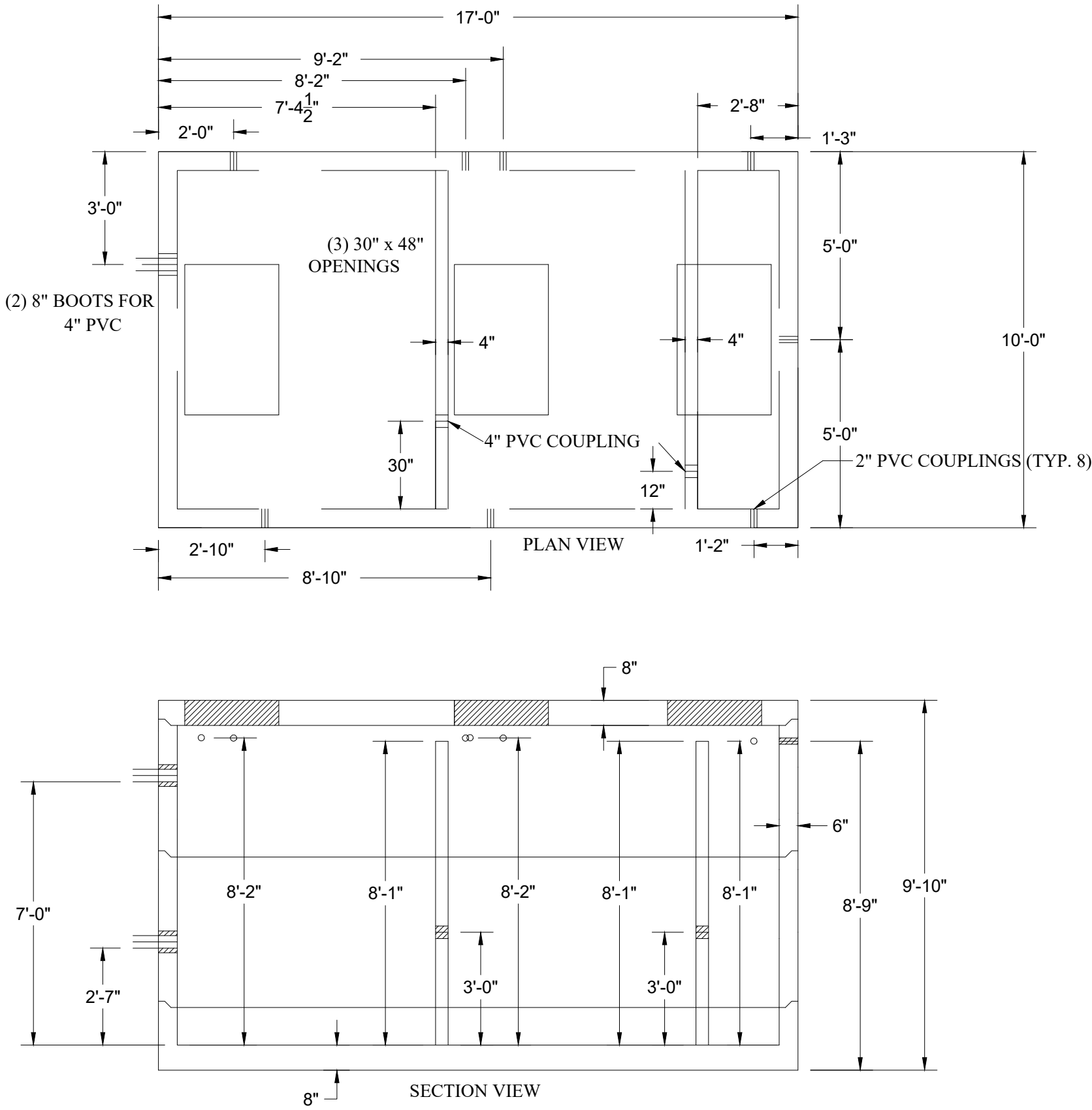
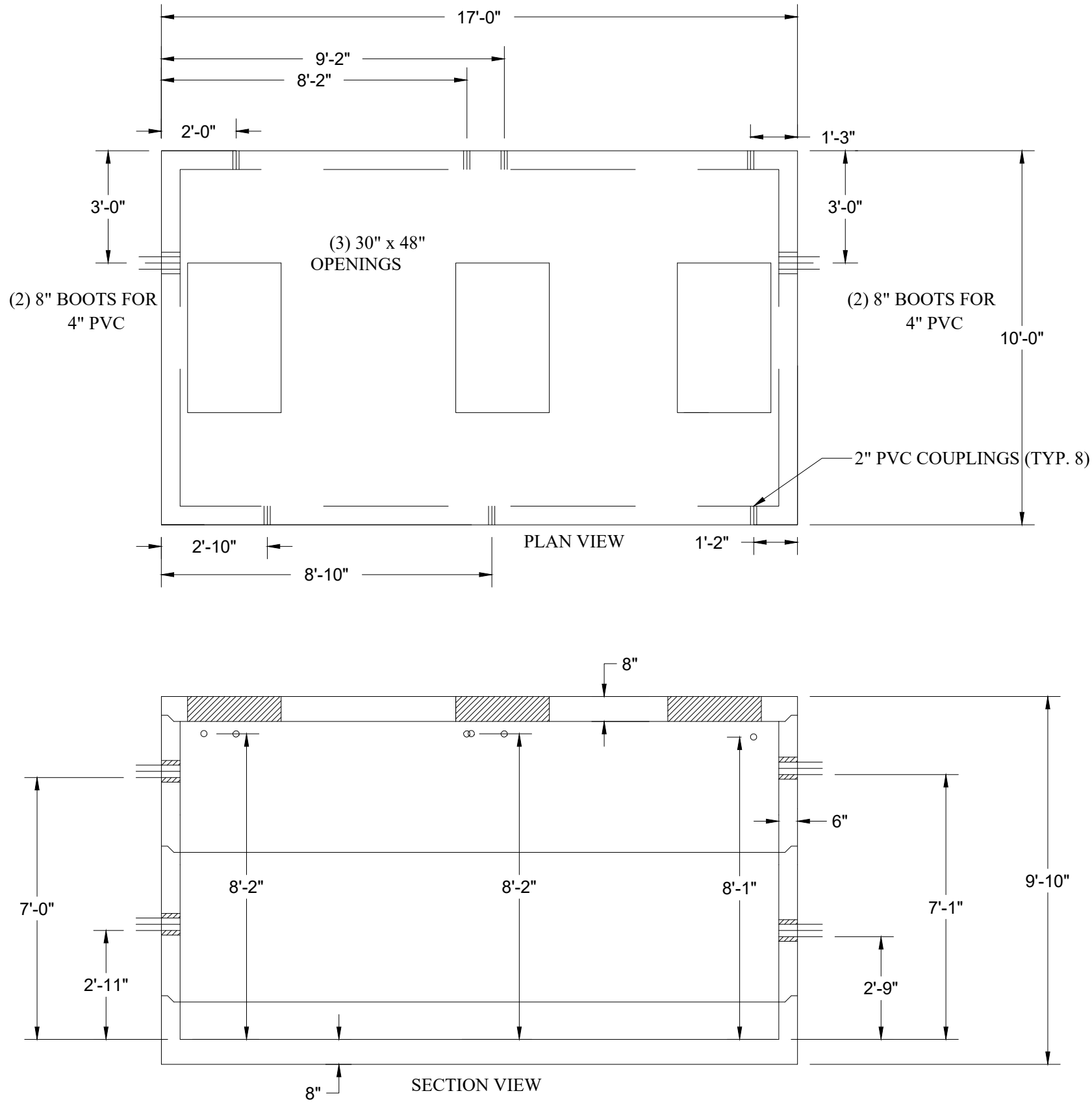
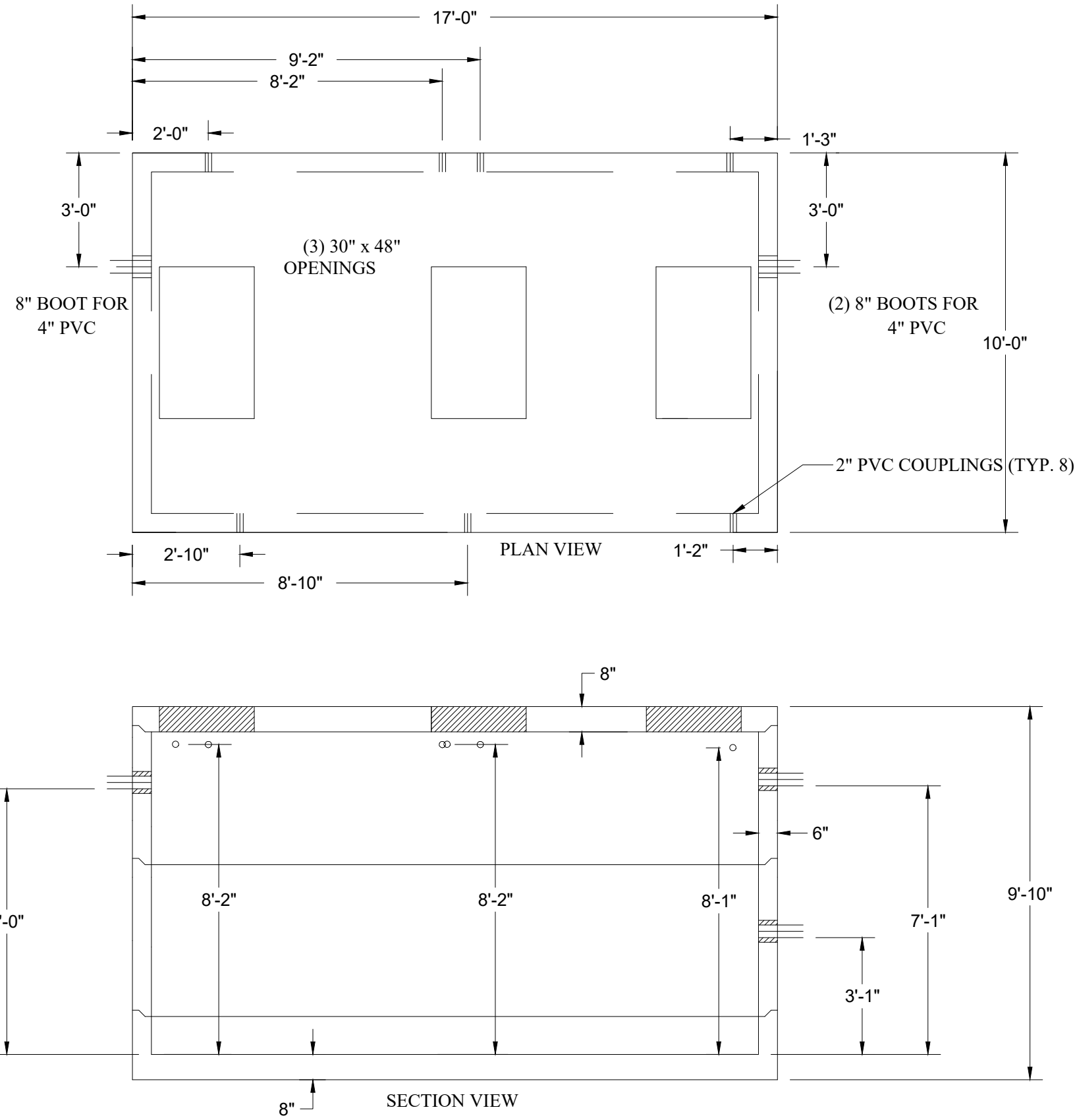
Environmental Scientists and Engineers

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Plan Title:		Proposed Septic System Treatment I/A Profile Plan 1		
Project Name:		Farm Road Homes		
Site Address:		65 Farm Road, Sherborn, MA		
Owner:		Fenix Partners Farm Road Dev., LLC		Client: Robert Murchison
Project No:	J269-12	Drawn by:	FA	Date: 11/30/23
Designed by:	DSW, FA	Approved by:	DSW	Scale: Indicated
Rev.:	Date:	Description		By:





NOTES:

1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
2. DESIGN CONFORMS WITH 310 CMR 15.00, DEP TITLE 5 REGS, FOR SEPTIC TANKS.
3. ALL REINFORCEMENT PER ASTM C1227-93.
4. DESIGNED FOR H-20 LOADING, COVER 1-5 FT.
5. TONGUE AND GROOVE JOINT SEALED WITH BUTYL RESIN. INLET HEIGHT MAY INCREASE SLIGHTLY DUE TO THE BUTYL RESIN USED.

TANK-1

SEPTITECH STAAR
SHEA 8000 GALLON 1COMP

NOTES:

1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
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3. ALL REINFORCEMENT PER ASTM C1227-93.
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TANK-2

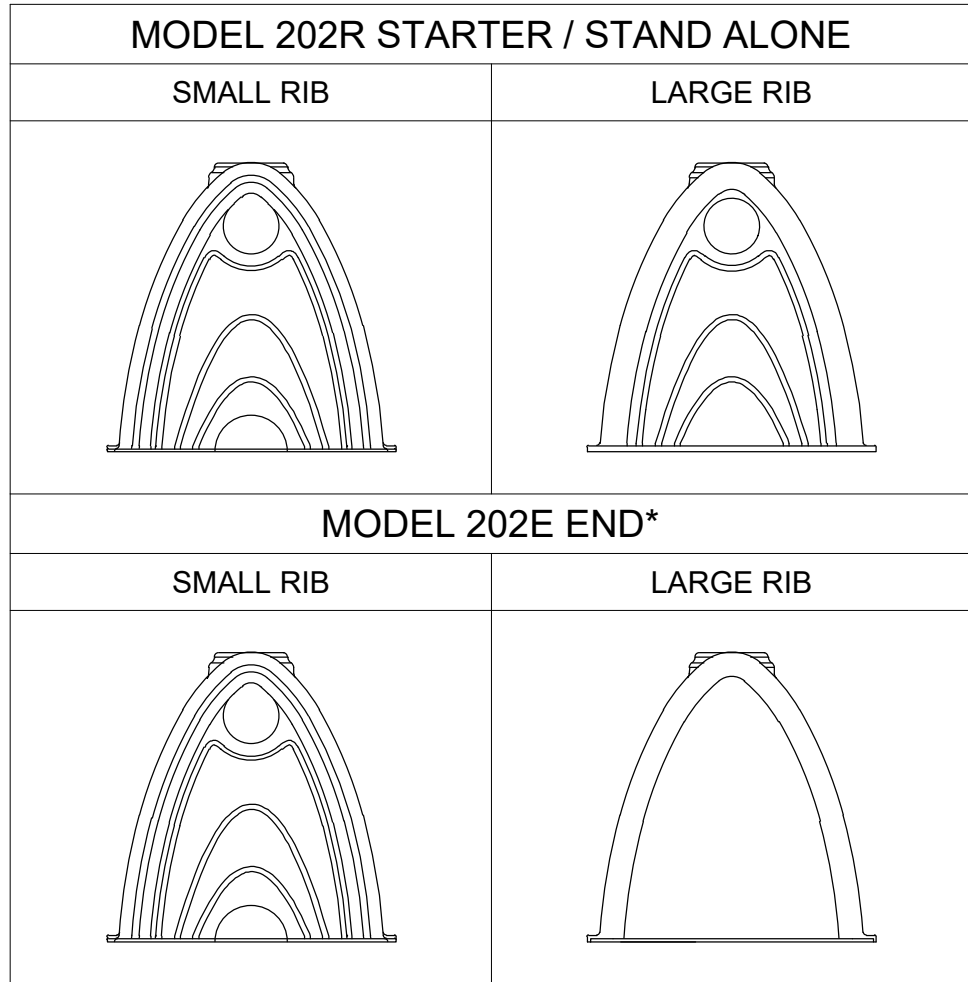
SEPTITECH STAAR
SHEA 8000 GALLON 1COMP

NOTES:

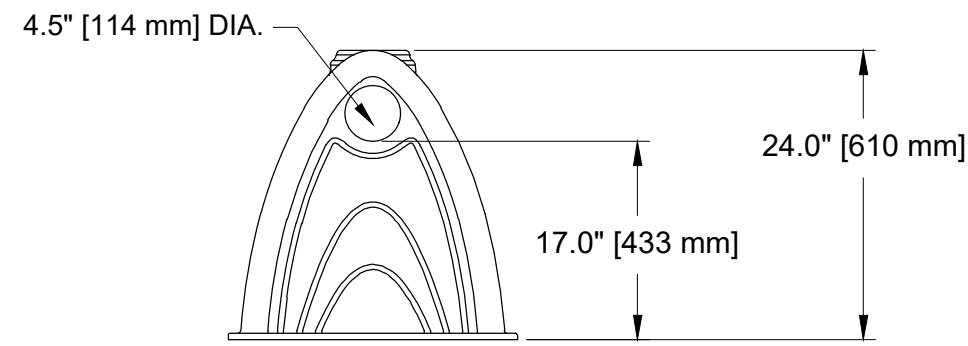
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2. DESIGN CONFORMS WITH 310 CMR 15.00, DEP TITLE 5 REGS, FOR SEPTIC TANKS.
3. ALL REINFORCEMENT PER ASTM C1227-93.
4. DESIGNED FOR H-20 LOADING, COVER 1-5 FT.
5. TONGUE AND GROOVE JOINT SEALED WITH BUTYL RESIN. INLET HEIGHT MAY INCREASE SLIGHTLY DUE TO THE BUTYL RESIN USED.

TANK-3

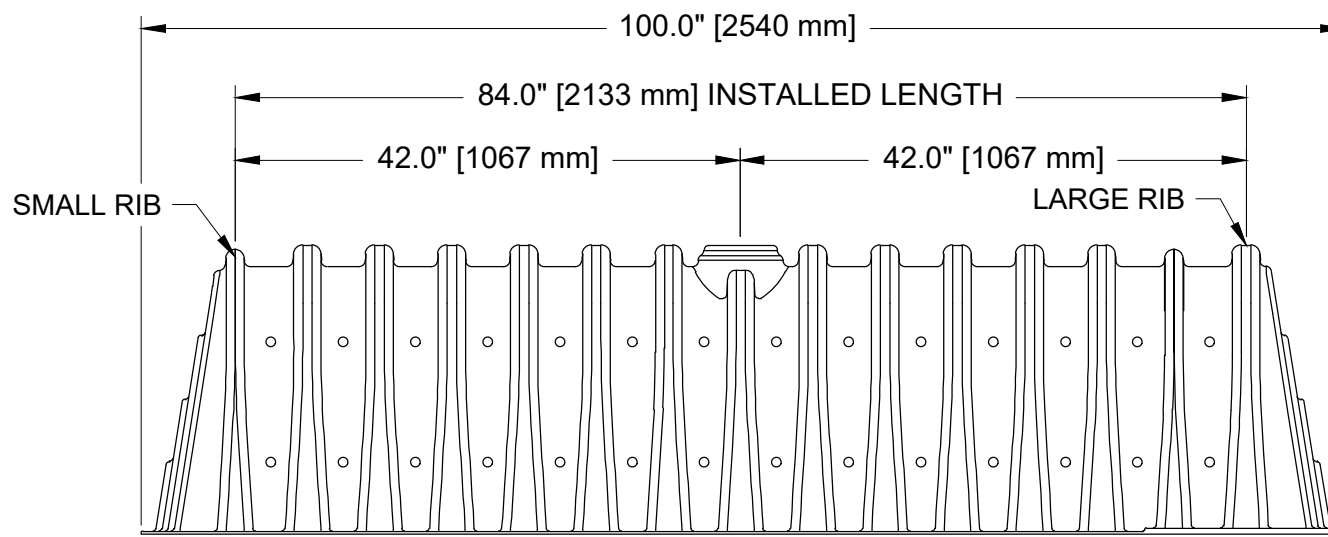
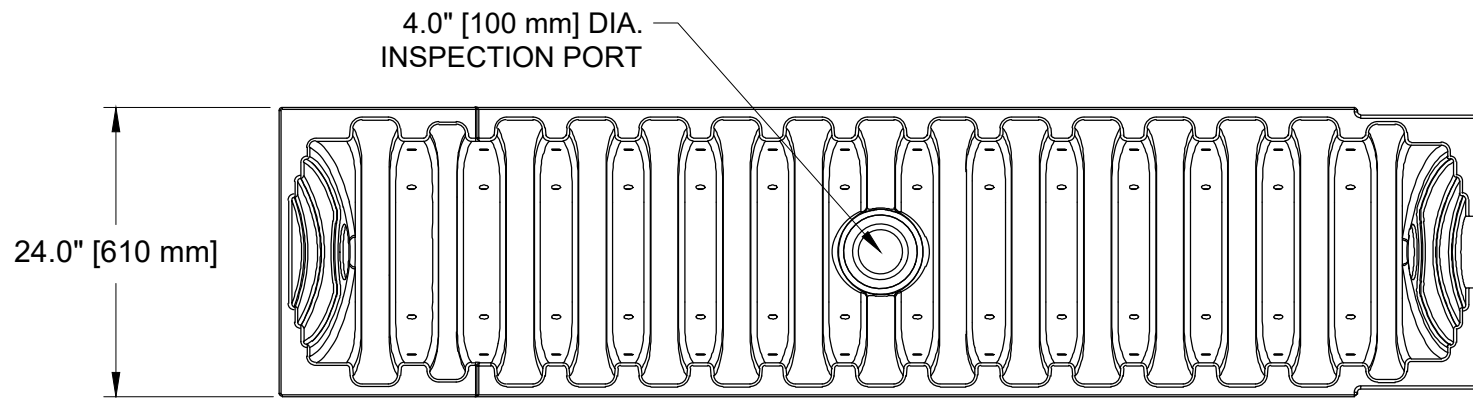
SEPTITECH STAAR
SHEA 8000 GALLON 3-COMP



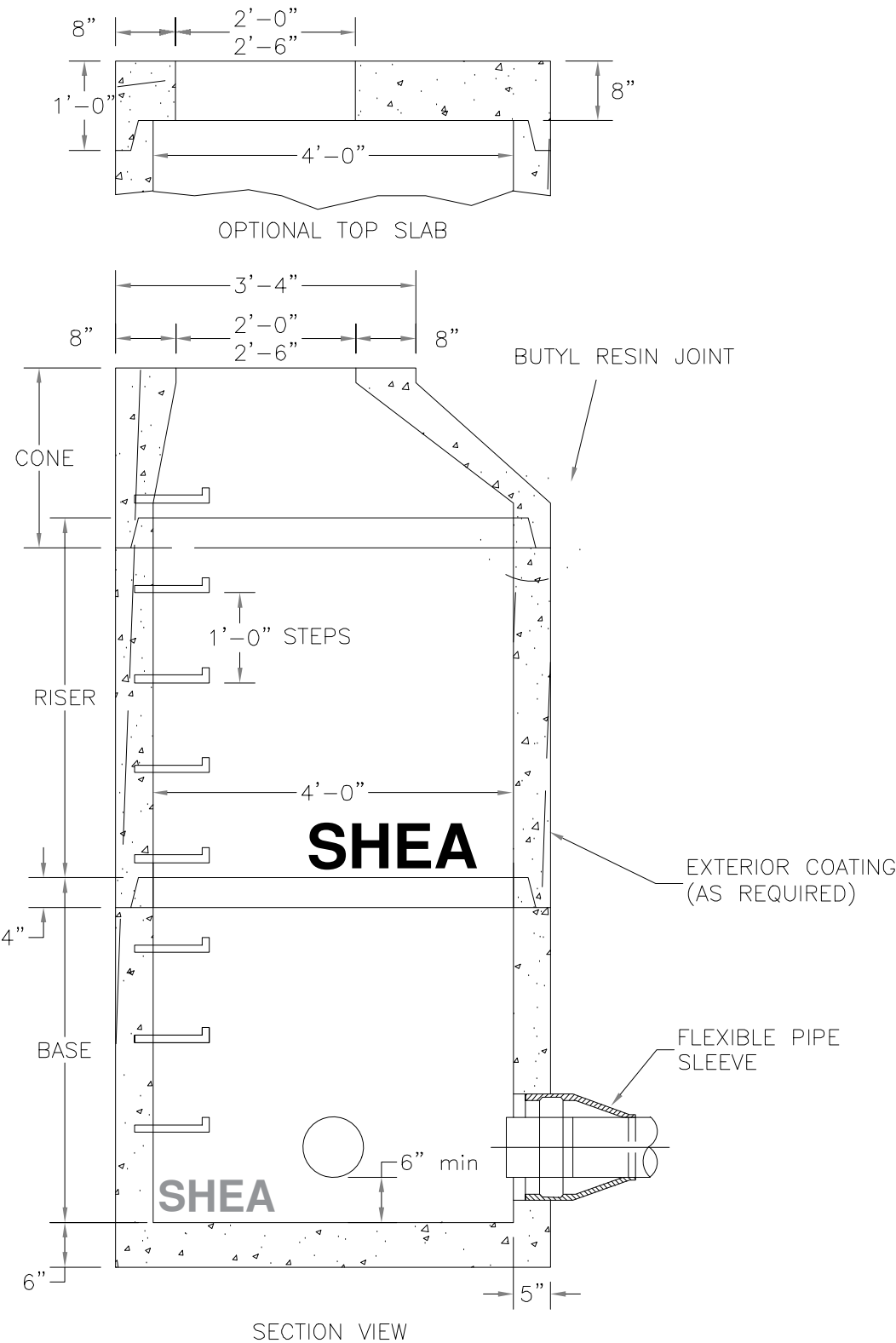
*MAY ALSO BE USED AS AN INTERMEDIATE UNIT TO EXTEND THE LENGTH OF A RUN



Cultec Contactor 202 Details
N.T.S.



CULTEC CONTACTOR 202 CHAMBER STORAGE = 2.18 CF/FT [0.20 m³/m]
INSTALLED LENGTH ADJUSTMENT = 1.33' [0.41 m]



Sewer Manhole - 48" Diam TYP.
N.T.S.

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P.O. Box 584 - Southborough - MA - 01772
774-454-0266 www.claweng.com

Plan Title: Proposed Septic System
Tank, Sewer Manhole and Chamber Details

Project Name: Farm Road Homes

Site Address: 65 Farm Road, Sherborn, MA

Owner: Fenix Partners Farm Road Dev., LLC Client: Robert Murchison

Project No: J269-12 Drawn by: FA Date: 11/30/23 Sheet No: 9 of 9

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

Rev.: Date: Description By:

