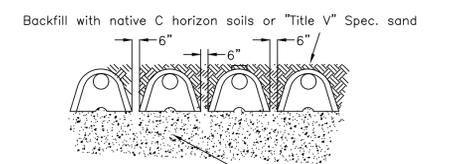
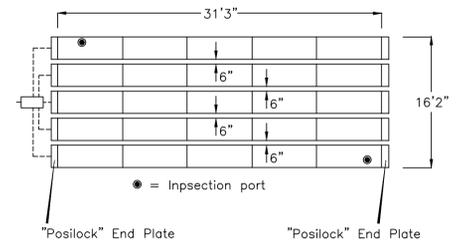
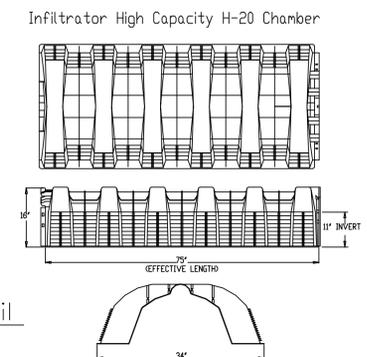


VARIANCES/DIVERGENCES REQUESTED:

- Town of Hingham, Section VII.E., SDS to wetland setback
Proposed: 82' Required: 100'



"Title V" Spec. sand (see note #9), from bottom of overdig to base of Infiltrator chamber

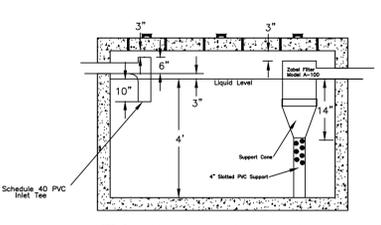


Soil Logs

Elevation (Feet)	Observation Hole #1				
	Depth (inches)	Soil Horizon	Soil Texture	Soil Color	Soil Matting
69.5	0-8	A	Loamy Sand	10 YR 3/2	None
68.8	8-46	B/C	Loamy Sand	10 YR 4/6	None
65.7	46-126	C	Coarse Sand	2.5 Y 5/3	None

NOTE: A second deep observation hole must be completed (witnessed by Hingham Board of Health) at time of system installation.

Tank Detail



Calculations:

- 5 bedrooms, no disposal
- Est. Day Flow (EDF) = # B.R. x 110 G/Day
EDF = 550 Gallons per day
- Perk rate = <2 min/inch, Class I soil (see soil logs)
Effluent Loading (ELR) = 0.74 G/s.f.
- Septic Tank - 2 X EDF with 1,500 G minimum
550 X 2 = 1,100 Gallons, use 1,500 Gallon tank
- Soil Absorption System (SAS)
SAS size required = EDF/ELR
(550 G)/(0.74 G/s.f.) = 743 s.f.
Infiltrator High Capacity H-20 Chamber in bed configuration = 4.73 s.f./l.f.
743 s.f./4.73 s.f./l.f. = 157.1 l.f.
@ 6.25 l.f./unit = 25 units
Use 5 rows of 5 units each (25 units total)

Proposed:

- 1,500 Gallon septic tank (monolithic)
- Distribution box
- 25 Infiltrator units in bed configuration (5 rows of 5) as illustrated on SAS detail

Notes:

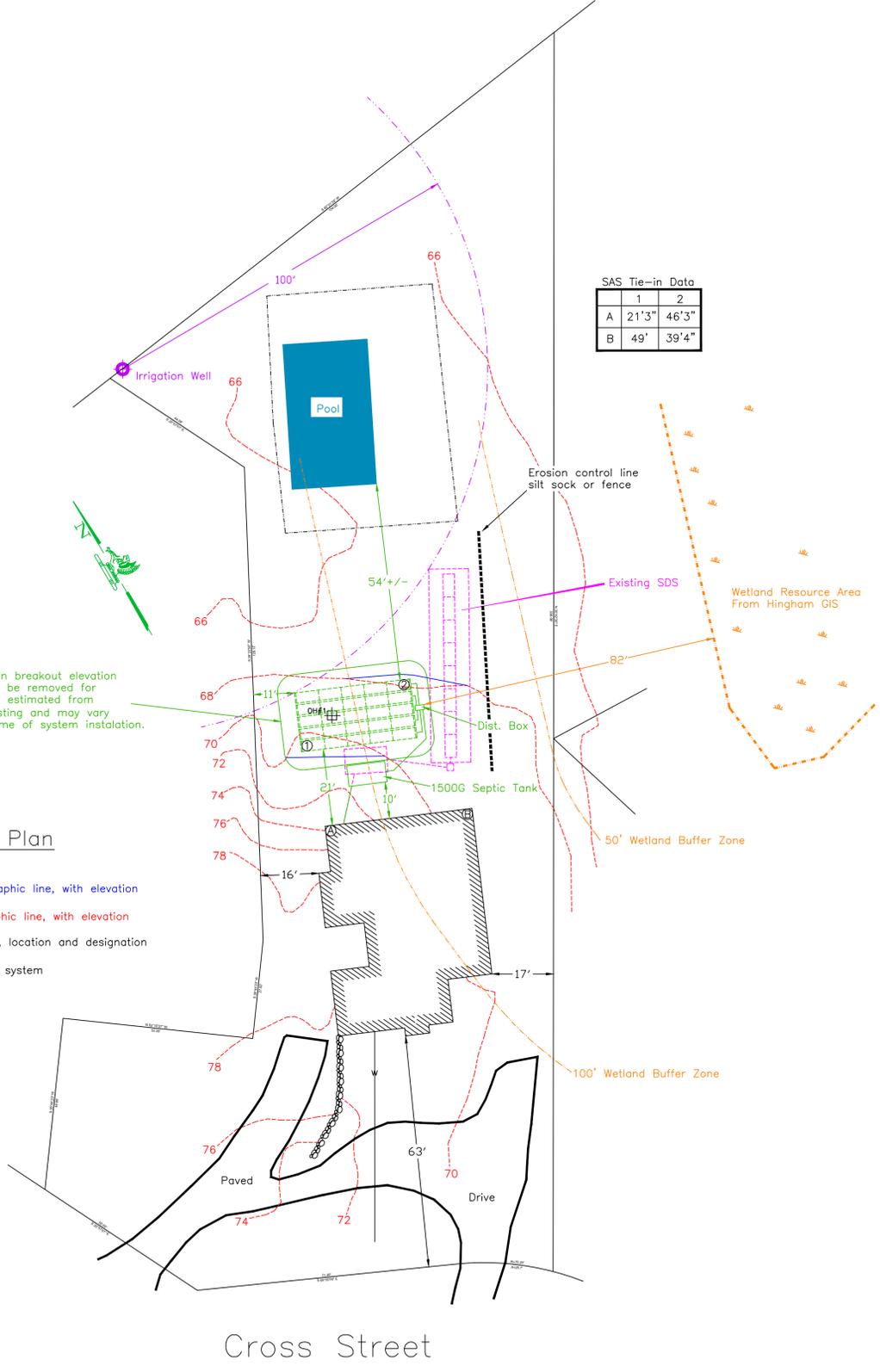
- On 7/14/2022 a soil test was made, as shown here, by Terence McSweeney, a Massachusetts Department of Environmental Protection (DEP) approved Soils Evaluator, with B. Nee observing for the Board of Health. The log of this tests is as follows, with location as #1 on this plan.
- All stone to be washed free of iron, fines, and dust. All "structures" to be precast concrete. All pipes to be P.V.C. Schedule 40, laid true to line and grade. All "structures" under pavement to be H-20 loading with cast iron covers and frames, set to grade, on all manholes.
- The existing SAS is to be abandoned and disposed of to the satisfaction of the health authority.
- It is the responsibility of the home owner to advise the site engineer of the location of all house plumbing prior to construction of the system.
- No part of the proposed system shall be buried greater than 3' below the surface of the ground.
- The Zabel filter is to be covered with a 20" diameter (minimum) metal cover, containing in indelible marking (paint or otherwise) the following notice: "There is a filter under this cover".
- All work to conform to these plans, Title 5 of the Environmental Code (310 CMR 15.00 et. seq.) and supplementary regulations of the Hingham Board of Health.
- House plumbing to be set to the grades specified on this plan, as necessary, with a pipe slope minimum of 0.01.
- All unsuitable material below breakout elevation of 67.0' is to be removed and replaced with material suitable to the health authority, for 5' around SAS. Fill specifications are as follows ("overdig"):
 - No material is larger than 2".
 - Not more than 45% is retained on #4 sieve.
 - For the material which passes the #4 sieve, the following limits apply:
 - #50 sieve 10 - 100% passing
 - #100 sieve 0 - 20% passing
 - #200 sieve 0 - 5% passing
 - Results of sieve analysis submitted to Board of Health for approval prior to installation.
- Property line information as depicted on this plan is to be used for Title V purposes only.

Limits of Overdig. All unsuitable material between breakout elevation (67.0') and bottom of B/C horizon (65.7') must be removed for installation. NOTE: Elevations and volumes are estimated from site data obtained at the time of percolation testing and may vary depending upon conditions encountered at the time of system installation.

Site Detail Plan

(1" = 20')

- 98 ——— = Proposed topographic line, with elevation
- 93 - - - - - = Existing topographic line, with elevation
- OH #1 ⊕ = Observation hole, location and designation
- = Existing disposal system



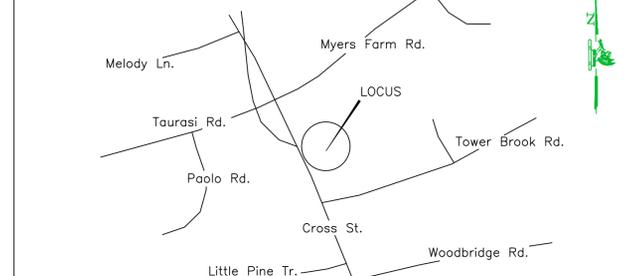
SAS Tie-in Data

	1	2
A	21'3"	46'3"
B	49'	39'4"

I certify that in the fall of 1997 I was approved by the Mass. Department of Environmental Protection as a Soils Evaluator and that the soils analysis contained herein was performed by me, Terence McSweeney, R.S.

I certify that there are no wells known to me, or reported to be within 500 feet of this proposed SAS, other than those shown on this plan. Public water supply wells in the area, location and distance from locus, are shown herein.

Locus Map



Lot Data:
Deed: 45,868/294 - 7/13/2015
Hingham Assessors Map 108/85 - 0.66 acres
Reference Plan:
CCR Associates, 11/27/1996
Plan #82 of 97 (Plymouth County Ro D)

Revisions:

10/31/2022	- Add wetland and buffer zone (TM)
6/26/2024	- Permit renewal (TM)

McSweeney Associates, Inc.

McS Environmental Engineering Services

745 Winter Street, Hanson, MA 02341

Thomas F. McSweeney 1994-1997
Brian McSweeney 1993-2015
Terence K. McSweeney 781-826-4571
Colin T. McSweeney 781-570-9381

Proposed Septic System
59 Cross Street
Hingham, Massachusetts

Job Reference: Cross 59
Scale: As Noted
Date: 9/1/2022
Drawn By: T McS
Checked By: C McS