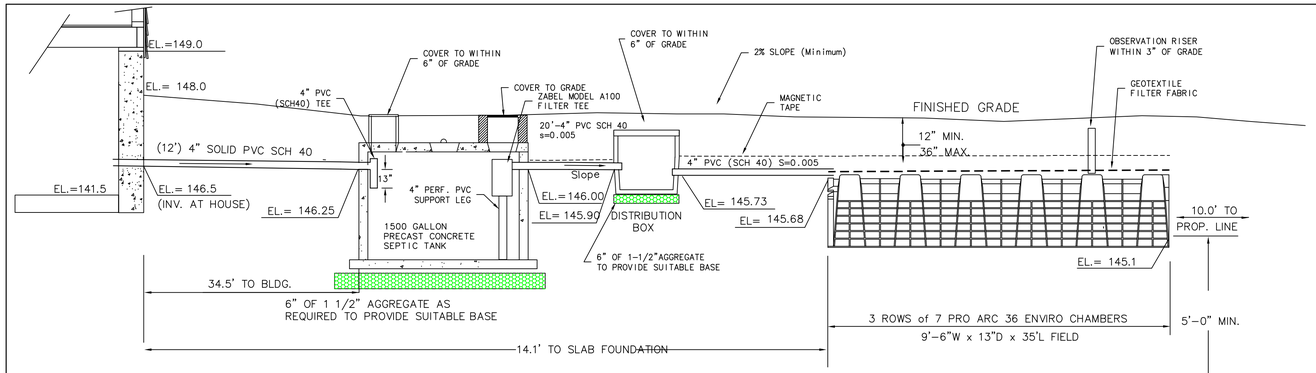
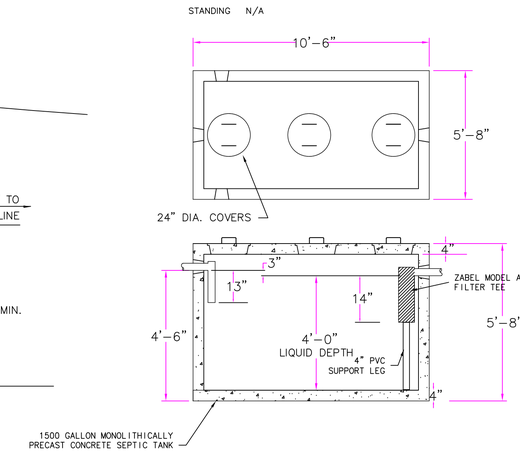


SEPTIC SYSTEM PROFILE

NOTE:
GROUNDWATER ELEVATION IS BASED UPON BOTTOM ELEVATION OF ADJACENT STORMWATER FEATURE



1500 GAL. SEPTIC TANK

304 WHITING STREET

TEST PIT # 1

PERFORMED BY: GARY D. JAMES, P.E.
WITNESSED BY: M. MacDONALD, B.O.H.
PERC RATE: <2 MIN./IN.
DATE 10/23/03

DEEP OBSERVATION HOLE LOG

DEPTH FROM SURFACE (INCHES)	SOIL HORIZONS	SOIL TEXTURES (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING	OTHER (STRUCTURES, CONSISTENCY,% GRAVEL)
153.8					
10"	A	LOAM	10 YR 3/2		
24"	B	LOAMY SAND	10 YR 5/6		FRIABLE,CRUMB 10-15% STONES
30"	C_1	M-C SAND	5 Y 5/4		LOOSE, GRAIN 20-25% STONES
49"	C_2	MED SAND	5 Y 5/4		LOOSE, GRAIN 0-5% STONES
115"					

WEEPING FROM PIT FACE: N/A
ESTIMATED DEPTH TO MAX. G.W. >115"
STANDING N/A

TEST PIT # 2

PERFORMED BY: GARY D. JAMES, P.E.
WITNESSED BY: M. MacDONALD, B.O.H.
PERC RATE: <2 MIN./IN.
DATE 10/23/03

DEEP OBSERVATION HOLE LOG

DEPTH FROM SURFACE (INCHES)	SOIL HORIZONS	SOIL TEXTURES (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING	OTHER (STRUCTURES, CONSISTENCY,% GRAVEL)
154.2					
13"	A	LOAM	10 YR 3/2		
25"	B	LOAMY SAND	10 YR 5/6		FRIABLE,CRUMB 10-15% STONES
30"	C_1	M-C SAND	5 Y 5/4		LOOSE, GRAIN 25-30% STONES
52"	C_2	MED SAND	5 Y 5/4		LOOSE, GRAIN 0-5% STONES
110"					

WEEPING FROM PIT FACE: N/A
ESTIMATED DEPTH TO MAX. G.W. >110"
STANDING N/A

TEST PIT # 3

PERFORMED BY: GARY D. JAMES, P.E.
WITNESSED BY: M. MacDONALD, B.O.H.
PERC RATE: <2 MIN./IN.
DATE 10/23/03

DEEP OBSERVATION HOLE LOG

DEPTH FROM SURFACE (INCHES)	SOIL HORIZONS	SOIL TEXTURES (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING	OTHER (STRUCTURES, CONSISTENCY,% GRAVEL)
154.4					
13"	A	LOAM	10 YR 3/2		
29"	B	LOAMY SAND	10 YR 5/6		FRIABLE,CRUMB 10-15% STONES
28"	C_1	M-C SAND	5 Y 5/4		LOOSE, GRAIN 25-30% STONES
48"	C_2	MED SAND	5 Y 5/4		LOOSE, GRAIN 0-5% STONES
115"					

WEEPING FROM PIT FACE: N/A
ESTIMATED DEPTH TO MAX. G.W. >115"
STANDING N/A

TEST PIT # 4

PERFORMED BY: GARY D. JAMES, P.E.
WITNESSED BY: M. MacDONALD, B.O.H.
PERC RATE:
DATE 10/23/03

DEEP OBSERVATION HOLE LOG

DEPTH FROM SURFACE (INCHES)	SOIL HORIZONS	SOIL TEXTURES (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING	OTHER (STRUCTURES, CONSISTENCY,% GRAVEL)
154.5					
10"	A	LOAM	10 YR 3/2		
20"	B	LOAMY SAND	10 YR 5/6		FRIABLE,CRUMB 10-15% STONES
36"	C_1	M-C SAND	5 Y 5/4		LOOSE, GRAIN 25-30% STONES
45"	C_2	MED SAND	5 Y 5/4		LOOSE, GRAIN 0-5% STONES
112"					

WEEPING FROM PIT FACE: N/A
ESTIMATED DEPTH TO MAX. G.W. >112"
STANDING N/A

NOTES CONTINUED:

14. LEACHING FACILITIES SHALL BE COVERED WITH A GEOTEXTILE FABRIC LAYER.

15. IN AREAS SHOWN ON THE PLAN, ALL TOPSOIL, PEAT AND OTHER IMPERVIOUS MATERIAL SHALL BE REMOVED AND REPLACED WITH A CLEAN GRANULAR SAND FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES, WHICH SHALL BE GRADED SUCH THAT;

1. NO MATERIAL IS LARGER THAN 2 INCHES.
2. NOT MORE THAN 45% IS RETAINED ON THE #4SIEVE;
3. OF THE FRACTION PASSING THE #4 SIEVE, THE MATERIAL SHALL FALL WITHIN THE GRADATION LIMITS AS FOLLOWS;

SIEVE SIZE	PERCENT PASSING
#50	10-100%
#100	0-20%
#200	0-5%

16. A SIEVE ANALYSIS OF THE MATERIAL SHALL BE PERFORMED TO DETERMINE THAT IT MEETS THE GRADATION REQUIREMENTS AS NOTED ABOVE.

17. A PERCOLATION TEST AND OBSERVATION HOLE SHALL BE CONDUCTED AT THE TIME OF CONSTRUCTION TO CONFIRM THE LTAR AND DETERMINE IF THERE ARE ANY UNSUITABLE SOILS TO BE REMOVED.

18. UNLESS OTHERWISE NOTED, ALL PIPING SHALL BE SCHEDULE 40 PVC AND SHALL BE COVERED BY A MAGNETIC TAPE TO ASSIST WITH LOCATING THE PIPE.

19. UNLESS OTHERWISE NOTED, THERE ARE NO KNOWN WELLS WITHIN 200' OF THE PROPOSED LEACHING FACILITIES.

20. ALL SYSTEM COMPONENTS SHALL BE COVERED WITH A MAGNETIC TAPE TO HELP IDENTIFY LOCATION AFTER INSTALLATION.

21. DESIGN ENGINEER SHALL BE CONTACTED TO INSPECT THE CONSTRUCTION PROGRESS OF THE SYSTEM ;

1. WHEN ALL UNSUITABLE MATERIALS HAVE BEEN REMOVED PRIOR TO REPLACEMENT TO INSPECT THE MATERIAL AT THE BOTTOM OF THE HOLE;
2. WHEN THE SYSTEM COMPONENTS HAVE BEEN INSTALLED PRIOR TO BACKFILLING; AND
3. WHEN THE SYSTEM FINAL GRADING HAS BEEN COMPLETED.

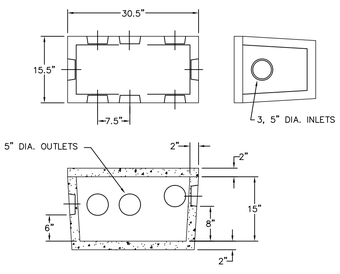
22. THE SITE IS NOT LOCATED IN A FEMA FLOOD HAZARD AREA.

23. PRO ARC 36 CHAMBERS SHALL BE OPERATED AND MAINTAINED IN STRICT ACCORDANCE WITH THE GENERAL USE PERMIT ISSUED BY DEP ON AUGUST 27, 2017, AND THE STANDARD CONDITIONS FOR ALTERNATIVE SOIL ABSORPTION SYSTEMS ISSUED BY DEP MARCH 5,2018

1. ELEVATIONS REFER TO NGVD
2. BENCH MARK GARAGE SLAB EL. 99.46
3. ESTIMATED DAILY FLOW
   3 BEDROOMS X 110 GALLONS PER BEDROOM PER DAY= 330 GALLONS PER DAY.
4. SEPTIC TANK REQ'D CAPACITY = 1500 GALLONS
5. LEACHING AREA REQUIREMENTS RATE <5 M.P.I. CLASS I SOIL
   APPLICATION RATE = 0.74 G/SF
   USE INFILTRATOR CHAMBER ARC 36 STANDARD
   AREA =4.80 S.F. / L.F.
   AREA REQ. =330.0 ÷ 0.74 GAL/S.F. =445.9 S.F.
   LNGTH REQ. =445.9 S.F. ÷ 4.8 S.F./L.F. =92.9 L.F.
6. LEACHING AREA PROVIDED
   USE ENVIRO CHAMBER BED 35'L X 9.5' W
   3 ROWS OF CHAMBERS 35'L = 105'
   EQUIV. AREA PROV. = 105 x 4.8 = 504 S.F.
   CAP. PROV=504 X 0.74 G/S.F.= 373.0 G.P.D.
7. HEAVY GRADING MACHINERY SHALL NOT BE PERMITTED TO PASS OVER LEACHING AREAS.
8. ALL CONSTRUCTION TO CONFORM TO THE REQUIREMENTS OF THE MASSACHUSETTS DEPARTMENT OF ENV. PROTECTION SANITARY CODE, TITLE 5, AND THE TOWN OF HINGHAM BOARD OF HEALTH.
9. PERCOLATION DATA

	PERC RATE	DEPTH OF TEST	DATE
1.	<2 MIN/IN	30"	10/23/03
2.	<2 MIN/IN	30"	10/23/03
3.	<2 MIN/IN	28"	10/23/03
4.			

10. THIS SYSTEM IS NOT DESIGNED TO ACCOMMODATE A GARBAGE GRINDER.
11. THE FIRST TWO FEET OF EACH LINE EXITING FROM THE "D-BOX" SHALL BE LEVEL.
12. DESIGN ENGINEER TO BE NOTIFIED AT LEAST 48 HOURS PRIOR TO REQUIRED INSPECTIONS.
13. SEPTIC SYSTEM OWNER SHALL HAVE SEPTIC TANK INSPECTED AT LEAST ONCE EACH YEAR & PUMPED AS DEEMED NECESSARY BY THE INSPECTOR NOT LESS THAN ONCE EVERY THREE YEARS .



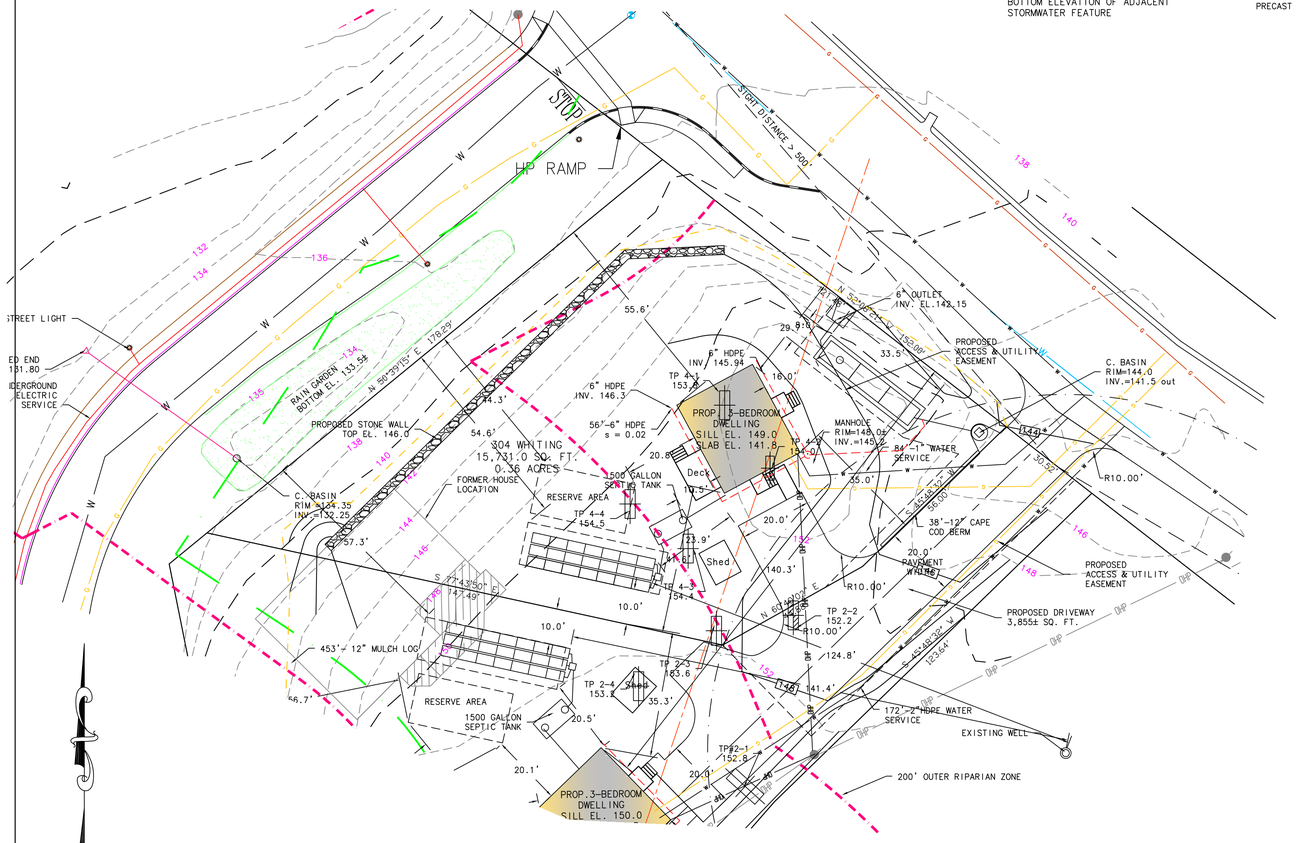
DISTRIBUTION BOX

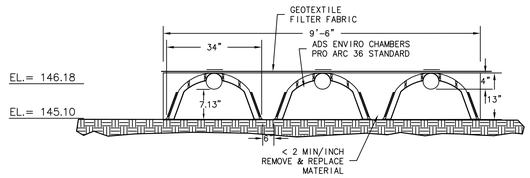
OWNER

TRUSTEES OF THE HINGHAM AFFORDABLE HOUSING TRUST
TOWN OFFICES
210 CENTRAL STREET
HINGHAM, MA 02043

APPLICANT

SOUTH SHORE HABITAT FOR HUMANITY
20 MATHEWSON DRIVE
WEYMOUTH, MA 02189





SECTION THRU LEACHING

NO.	DATE	DESCRIPTION	BY
1	02/10/20	Response to comments	GDJ

PROPOSED
SUBSURFACE DISPOSAL SYSTEM
304 WHITING STREET
HINGHAM, MA.

SHEET NUMBER 8 OF 8

SCALE: 1"=20'

DATE: 11/24/19

JAMES ENGINEERING, Inc.
125 GREAT ROCK ROAD
HANOVER, MASS. 02339
TEL:1-(781) 878-1795

PennimanKnoll.dwg

DRAWN: NLJ/ACAD

CHECKED: G.D.J.

FEET 20 0 20 40 60