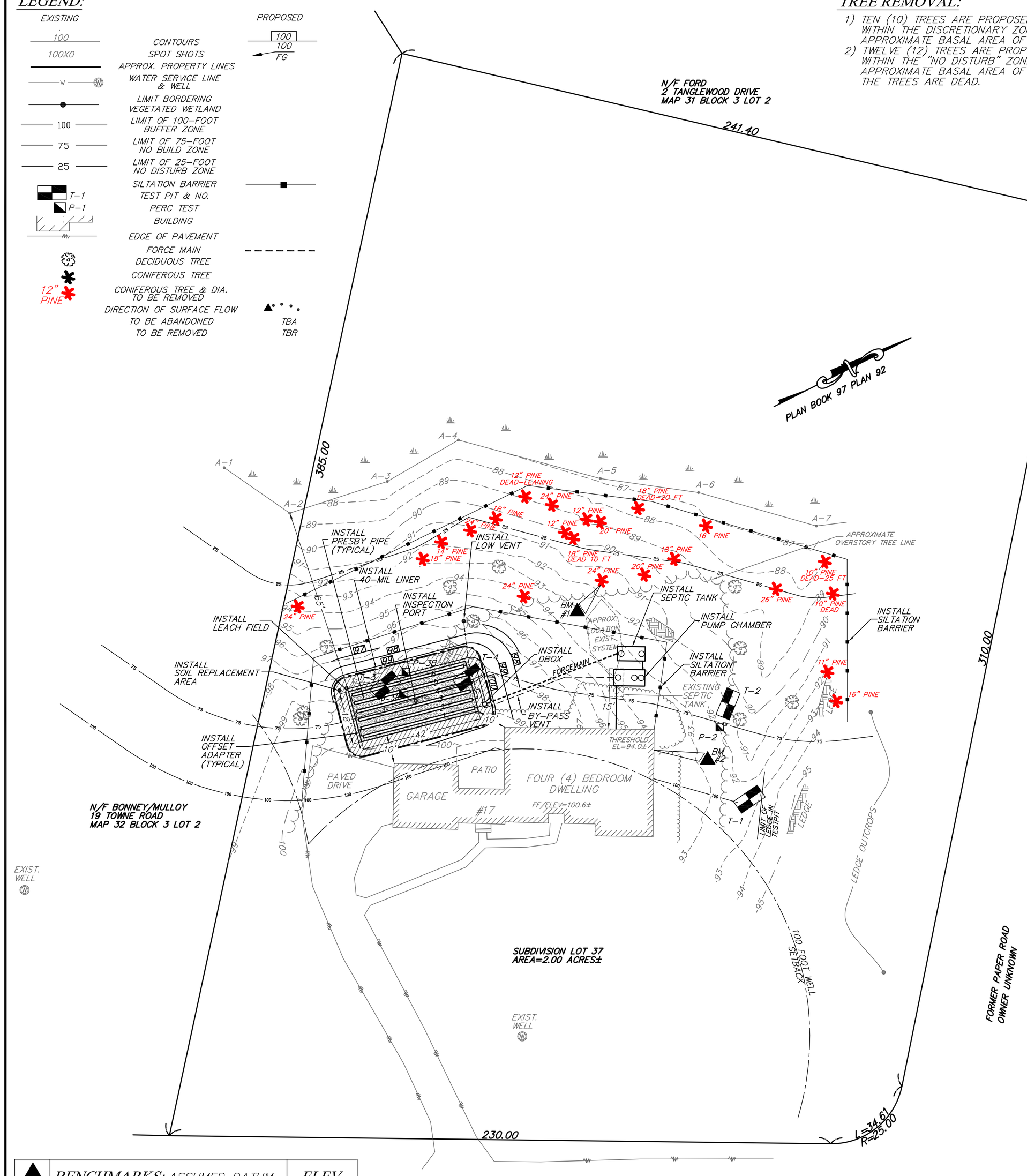
LEGEND:

EXISTING		PROPOSED
100	CONTOURS	100
100X0	SPOT SHOTS	100 FG
	APPROX. PROPERTY LINES	
W	WATER SERVICE LINE & WELL	
	LIMIT BORDERING VEGETATED WETLAND	
100	LIMIT OF 100-FOOT BUFFER ZONE	
75	LIMIT OF 75-FOOT NO BUILD ZONE	
25	LIMIT OF 25-FOOT NO DISTURB ZONE	
	SILTATION BARRIER	
T-1	TEST PIT & NO.	
P-1	PERC TEST	
	BUILDING	
	EDGE OF PAVEMENT	
	FORCE MAIN	
	DECIDUOUS TREE	
	CONIFEROUS TREE	
12" PINE	CONIFEROUS TREE & DIA. TO BE REMOVED	
	DIRECTION OF SURFACE FLOW	
	TO BE ABANDONED	TBA
	TO BE REMOVED	TBR

TREE REMOVAL:

1) TEN (10) TREES ARE PROPOSED FOR REMOVAL WITHIN THE DISCRETIONARY ZONE, WITH AN APPROXIMATE BASAL AREA OF 24 SF.
2) TWELVE (12) TREES ARE PROPOSED FOR REMOVAL WITHIN THE "NO DISTURB" ZONE, WITH AN APPROXIMATE BASAL AREA OF 18 SF. FIVE(5) OF THE TREES ARE DEAD.



BENCHMARKS: ASSUMED DATUM		ELEV.
#1	NAIL IN TREE	92.31
#2	THRESHOLD – SIDE BASEMENT DOOR	93.99
#3		

SITE PLAN:

SCALE 1"=20'

SOILS INFORMATION:

SOIL EVALUATOR: JAMES SCANLAN, P.E. (SE#2159 – APRIL 1995)
TOWN WITNESS: KENDELL LONGO
DATE: AUGUST 10, 2017

I CERTIFY THAT I AM CURRENTLY APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL PROTECTION PURSUANT TO 310CMR15.017 TO CONDUCT SOIL EVALUATIONS AND THE THE ABOVE ANALYSIS HAS BEEN PERFORMED BY ME CONSISTENT WITH THE REQUIRED TRAINING, EXPERTISE AND EXPERIENCE DESCRIBED IN 310CMR15.017. I FURTHER CERTIFY THAT THE RESULTS OF MY SOIL EVALUATION, AS INDICATED IN THE ATTACHED SOIL EVALUATION FORM, ARE ACCURATE AND IN ACCORDANCE WITH 310CMR 15.100 THROUGH 15.107.

SIGNATURE: _____ DATE: _____

SOIL PERCOLATION RATE:

P-1: DEPTH TO 12"= 50" SOIL PERC RATE= 12 MIN/IN
P-3A: DEPTH TO 12"= 5" SOIL PERC RATE= 5 MIN/IN
P-3B: DEPTH TO 12"= 32" SOIL PERC RATE= 13 MIN/IN

SOIL ELEVATIONS:

TESTPIT	T-1	T-2	T-3	T-4
GRADE	92.5	91.2	98.4	98.3
E.S.H.G.W.	87.8	86.7	NONE	NONE
OBS. G.W.	NONE	NONE	NONE	NONE
BOTTOM PIT	85.6	84.4	93.6	91.0

SOIL PROFILES:

T-1:
0-8" A FINE SANDY LOAM 10YR3/3 MASSIVE FRIABLE
8-24" B FINE SANDY LOAM 10YR4/6 MASSIVE FRIABLE
24-83" C1 GRAVELY SANDY LOAM 2.5Y5/4 MASSIVE FRIABLE (30% LARGE BOULDERS)
ESHGW @ 56" (2.5Y6/2 , 7.5YR5/8)
REFUSAL @ 83"

T-2:
0-24" FILL
24-32" A FINE SANDY LOAM 7.5YR3/3 MASSIVE FRIABLE
32-38" B FINE SANDY LOAM 10YR4/6 MASSIVE FRIABLE
38-82" C1 GRAVELY SANDY LOAM 2.5Y5/4 MASSIVE FRIABLE (30% LARGE BOULDERS)
ESHGW @ 54" (2.5Y6/2 , 7.5YR5/8)
REFUSAL @ 82"+

T-3:
0-6" A FINE SANDY LOAM 10YR3/3 MASSIVE FRIABLE
6-18" B FINE SANDY LOAM 10YR4/6 MASSIVE FRIABLE
18-58" C1 GRAVELY LOAMY SAND 2.5Y5/3 SINGLE GRAIN FRIABLE / FIRM (20 % LARGE BOULDERS)
LARGE NESTED BOULDERS @ 58"
NO ESHGW NO OBSERVED GROUNDWATER
ROOTS TO BOTTOM OF PIT

T-4:
0-12" A FINE SANDY LOAM 10YR3/3 MASSIVE FRIABLE
12-24" B FINE SANDY LOAM 10YR4/6 MASSIVE FRIABLE
24-88" C1 GRAVELY LOAMY SAND 2.5Y5/3 SINGLE GRAIN FRIABLE / FIRM
NO ESHGW NO OBSERVED GROUNDWATER
REFUSAL @ 88"

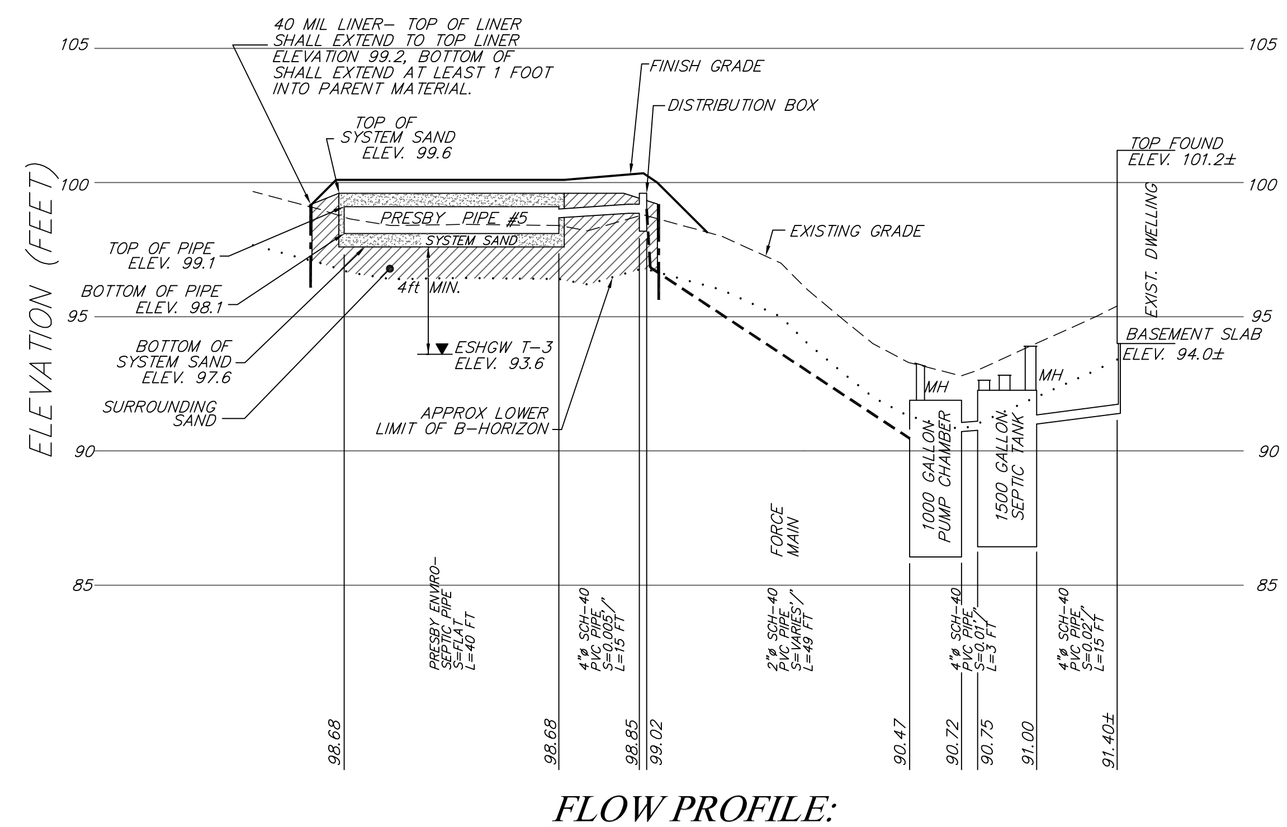
DESIGN CRITERIA:

FACILITY TYPE: SINGLE FAMILY DWELLING
SIZE: 4 BEDROOMS
UNIT FLOW RATE: 110 GAL/BED/DAY
DAILY FLOW: 440 GAL/DAY
GARBAGE GRINDER: NO
SYSTEM DESIGN: 660* GAL/DAY
* MUST DESIGN FOR GARBAGE GRINDER PER BOXFORD BOH REGULATIONS

SOILS CLASS: CLASS I
SOIL PERC RATE: 13 MIN/INCH
LONG TERM ACCEPTANCE RATE: 0.56 GAL/SF/DAY
REQUIRED LEACH AREA: (TOWN) 1179 SF (STATE) 786 SF
PROVIDED LEACH AREA: 756 SF
MINIMUM PRESBY SAND AREA: 1179 X 0.6 = 708 SF
PROVIDED PRESBY SAND AREA: 18' X 42' = 756 SF
MINIMUM PIPE= 220 LF (4 BEDROOM @ 13 MIN/IN)
PROVIDED PIPE= 6 LINES @ 40 LF = 240 LF PIPE

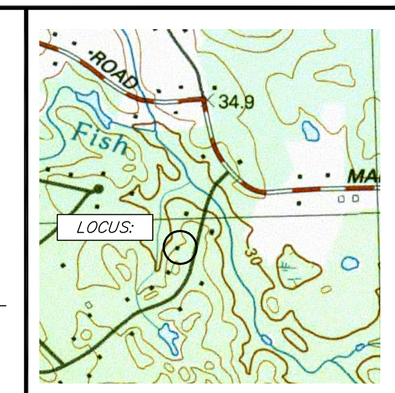
VARIANCES/WAIVERS:

REGULATION:	REQUIRED:	PROVIDED:
310CMR15.211(1)	20' SETBACK BETWEEN SAS AND CELLAR WALL	10 FEET
BOXFORD REGULATION 201-9(B)	100' SETBACK BETWEEN SAS AND WETLAND RESOURCE AREA	65 FEET



FLOW PROFILE:

SCALE 1"=20' HORIZONTAL
1"=4' VERTICAL



LOCUS: SCALE:1"=1000'±

SUBSURFACE SEWAGE DISPOSAL SYSTEM UPGRADE

17 TOWNE ROAD
BOXFORD, MA 01921

REGISTRY INFORMATION:

DEED:
BOOK NO.: 9177
PAGE NO.: 287

ASSESSORS INFORMATION:

MAP: 32
BLOCK: 3
LOT: 1

PREPARED FOR:

PETER CLARK
17 TOWNE ROAD
BOXFORD, MA 01921

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PHONE: (978) 372-3440
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WEB: www.scanlanengineering.com

#	BY	DATE	REVISIONS TO PLANS

DATE: OCTOBER 18, 2017
DESIGN BY: JBS
DRAWN BY: JBS

PLAN & FLOW PROFILE

SHEET 1 OF 2 SCALE: 1"= 20'
PROJECT # 0810