

SUBSURFACE SEWAGE DISPOSAL SYSTEM UPGRADE

223B MAIN STREET
BOXFORD MA

REGISTRY INFORMATION:

DEED:
BOOK NO.: 35709
PAGE NO.: 16

ASSESSORS INFORMATION:

MAP: 23
BLOCK: 1
LOT: 5.2

PREPARED FOR:

MICHAEL VIGNEAULT
223B MAIN STREET
BOXFORD MA



PHONE: (978) 372-3440
FAX: (978) 991-3888
EMAIL: info@scanlanengineering.com
WEB: www.scanlanengineering.com

DATE: OCTOBER 1, 2020
DESIGN BY: JBS
DRAWN BY: JBS

PLAN & FLOW PROFILE

SHEET 1 OF 2
SCALE: 1" = 20'
PROJECT # 1040

BENCHMARKS ASSUMED DATUM	ELEV.
#1 NAIL IN TREE	103.37
#2 TOP FOUNDATION	107.27
#3	

PLAN INTENT:

THIS PLAN IS INTENDED ONLY FOR THE CONSTRUCTION OF A SEPTIC SYSTEM TO SERVE THE SITE. NO OTHER USE OF THIS PLAN IS AUTHORIZED.

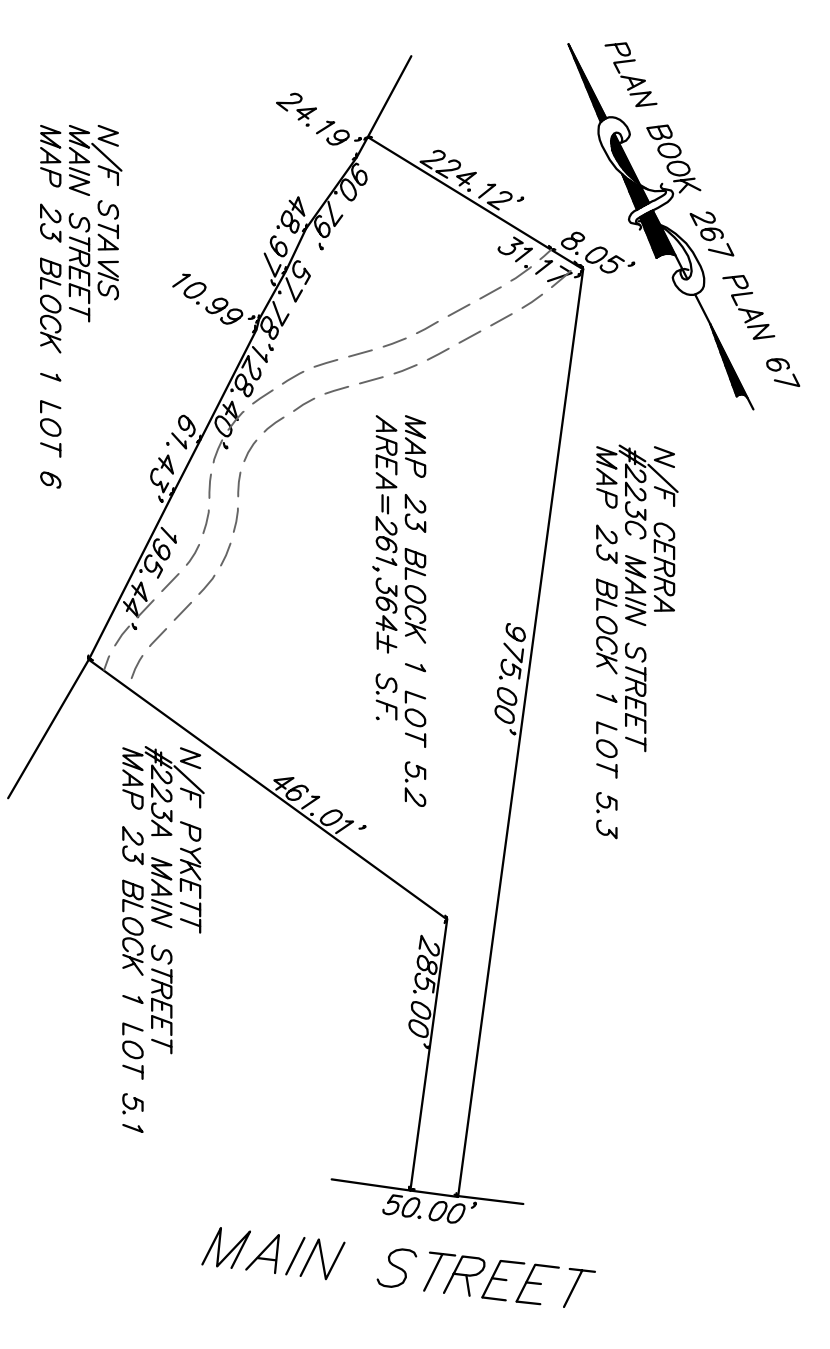
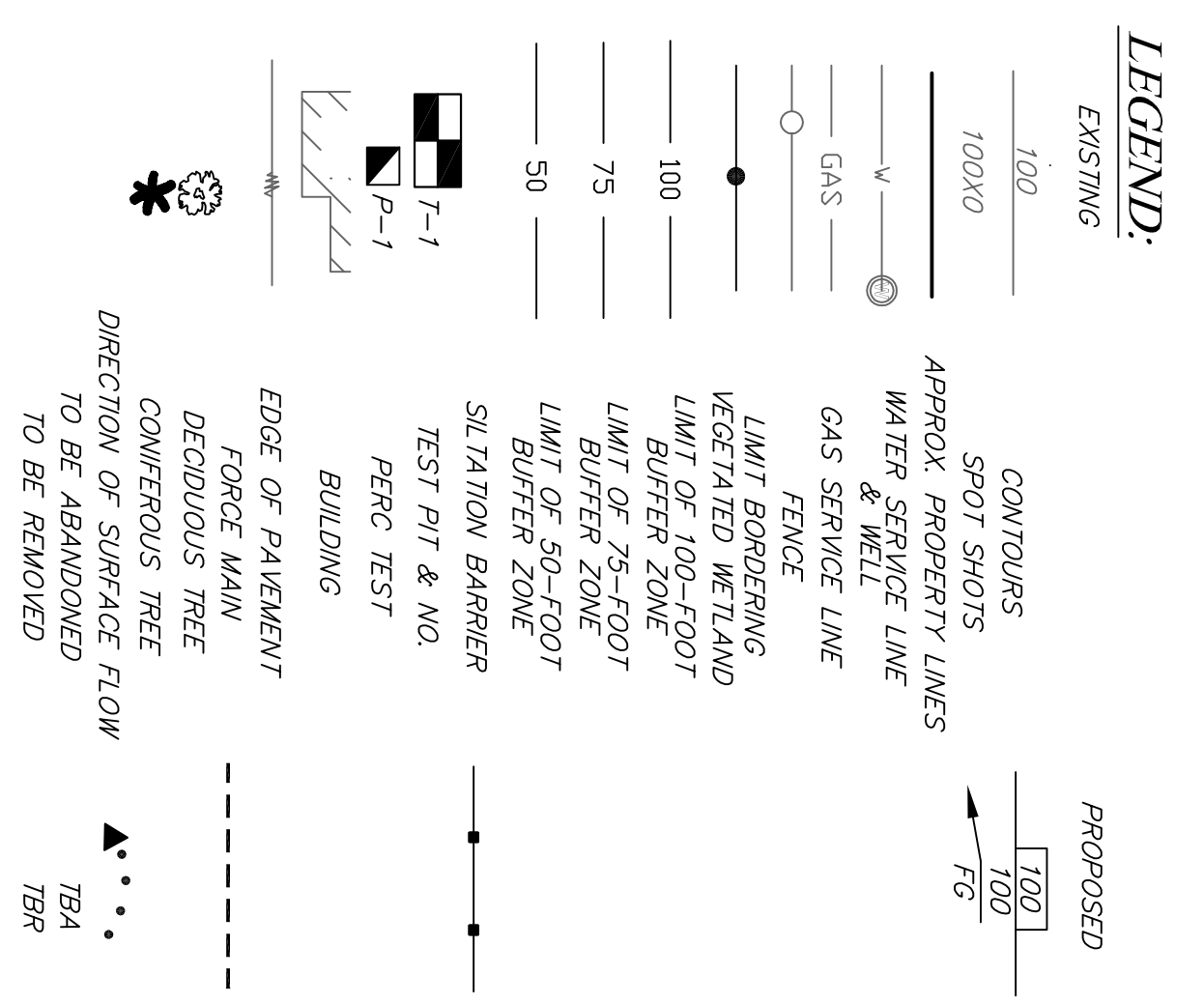
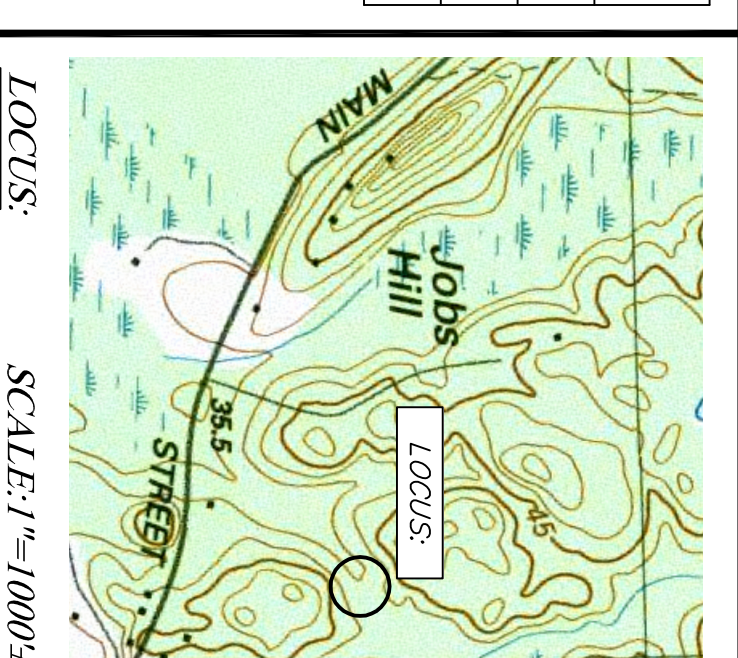
SOILS INFORMATION:

SOIL EVALUATOR: JAMES SCANLAN, P.E.
(SEE#2159 - APRIL 1995)
TOWN WITNESS: KENNEDIL LONGO
DATE: 9/10/2020

I CERTIFY THAT I AM GOVERNMENT APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND CONSERVATION AND THAT THE ABOVE ANALYSIS HAS BEEN PERFORMED BY ME OR UNDER MY SUPERVISION AND IN ACCORDANCE WITH 800 CMR 15.00. I FURTHER CERTIFY THAT THE RESULTS OF MY SOIL ANALYSIS AS INDICATED HEREON ARE THE SOIL EVALUATION FROM THE ASSUMED DATE AND IN ACCORDANCE WITH 800 CMR 15.00.

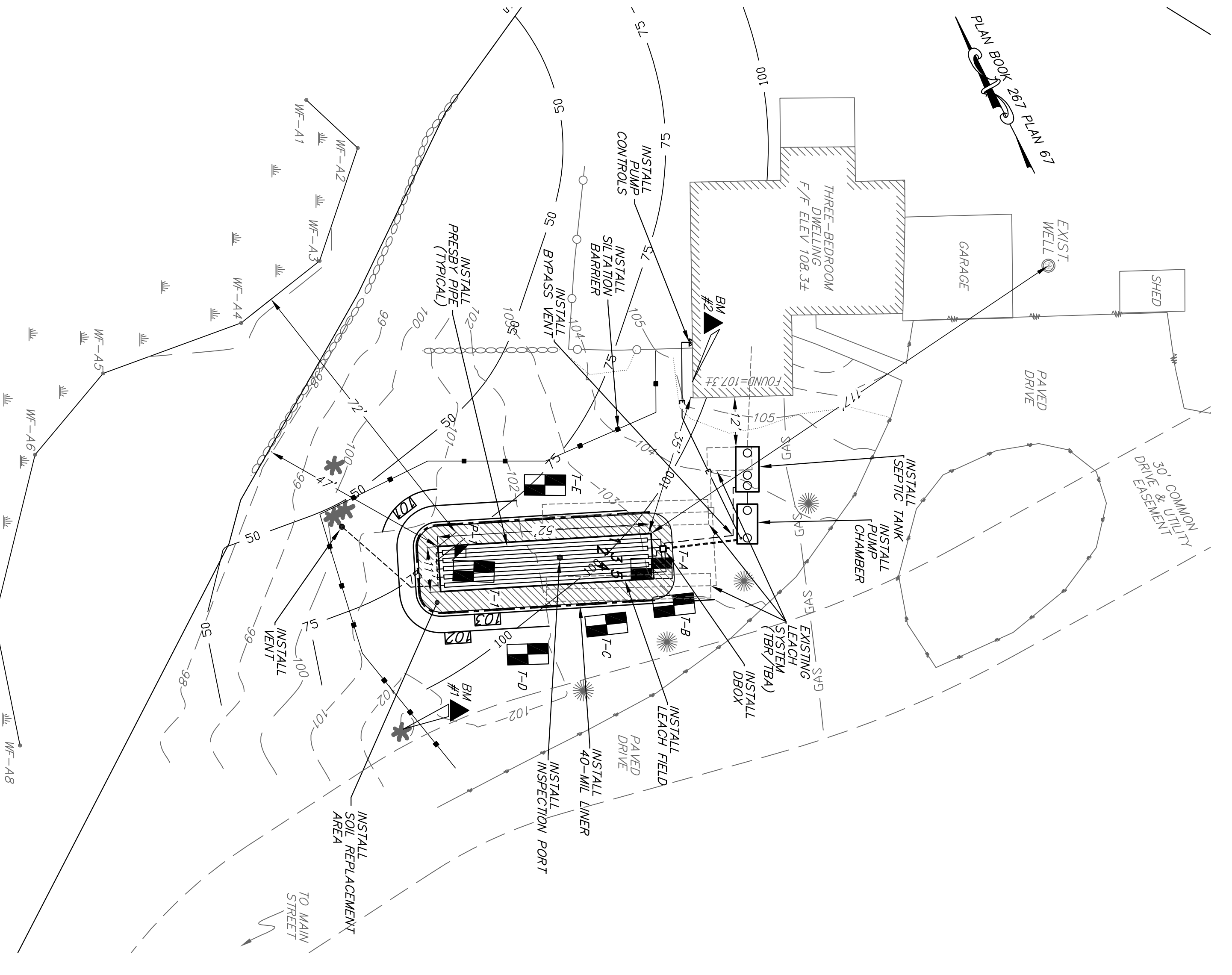
SIGNATURE: _____

DATE: _____



LOCUS PLAN:

SCALE 1" = 200'



SITE PLAN:

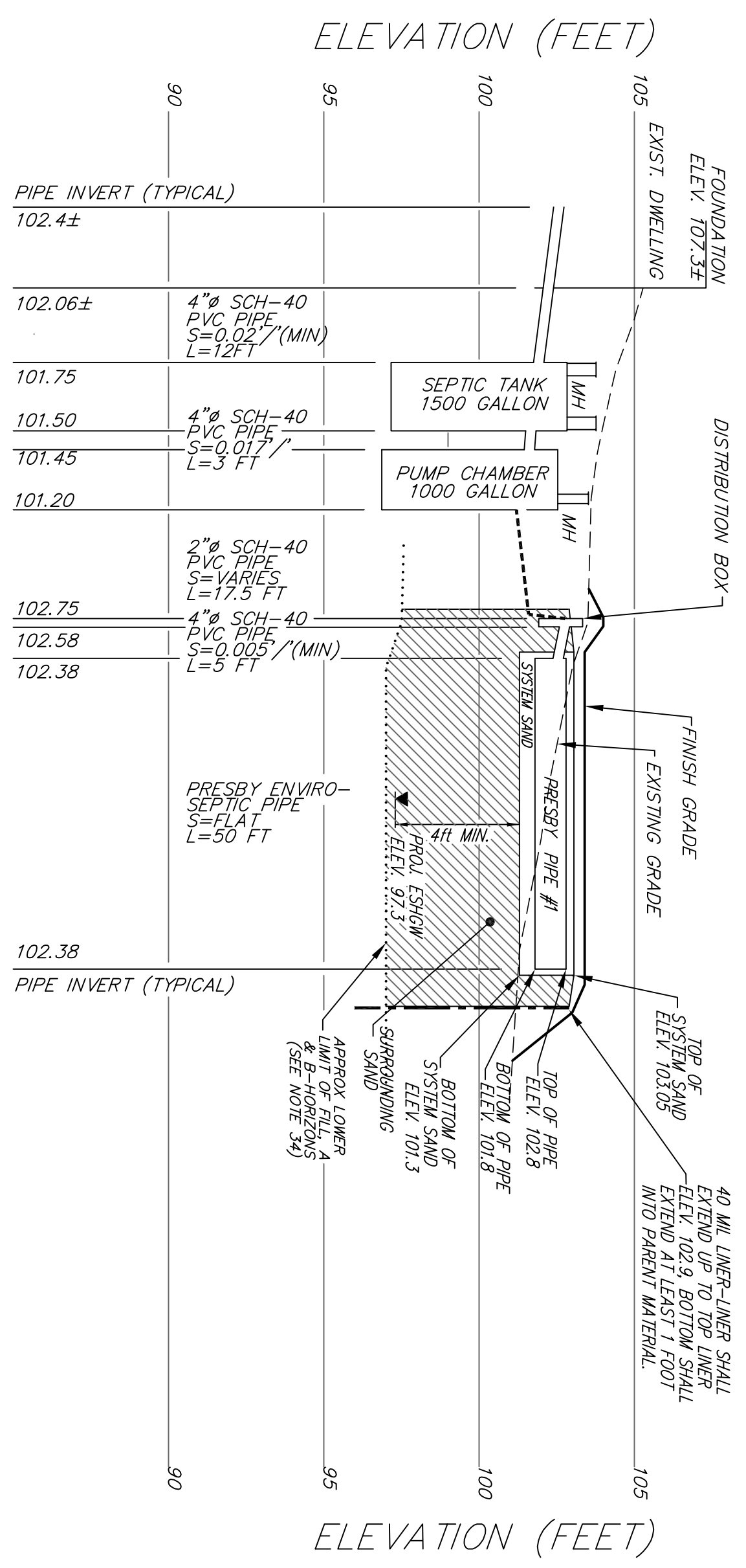
SCALE 1" = 20'

INVERT ELEVATIONS:

DWELLING	102.4±
SEPTIC TANK INLET	101.75
SEPTIC TANK OUTLET	101.50
PUMP CHAMBER INLET	101.45
PUMP CHAMBER OUTLET	101.20
DBOX INLET	102.75
DBOX OUTLET	102.58
PRESBY INLET	102.38

Presby Elevation Chart

	1	2	3	4	5
High Grade	103.0	103.0	103.0	103.0	103.0
ESHGW	97.30	97.30	97.30	97.30	97.30
Bottom System Sand	101.30	101.30	101.30	101.30	101.30
Bottom Presby Pipe	101.80	101.80	101.80	101.80	101.80
Presby Inlet Invert	102.38	102.38	102.38	102.38	102.38
Top Presby Pipe	102.80	102.80	102.80	102.80	102.80
Top System Sand	103.05	103.05	103.05	103.05	103.05
Top Liner	102.90	102.90	102.90	102.90	102.90
Min. Finish Grade	103.39	103.39	103.39	103.39	103.39



FLOW PROFILE:

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

VARIANCES/WAIVERS:

REGULATIONS:

310CMR15.102(2)
TOWN OF BOXFORD
REGULATION 201-9(8)

REQUIRED:

A MINIMUM OF TWO DEEP HOLE OBSERVATIONS SHALL BE PERFORMED IN THE PRESENCE OF THE APPROVING AUTHORITY
100 FT SEPARATION BETWEEN SAS AND WETLANDS
75 FT BETWEEN SAS AND WETLANDS WITH ALTERNATIVE TECHNOLOGY

PROVIDED:

ONE DEEP HOLE IN PRIMARY AREA
PROVIDED LEACH AREA: 572 SF
MINIMUM PRESBY SAND AREA: 934 X 0.6 = 561 SF
PRESBY LEACH AREA PROVIDED: 11' X 52' = 572 SF
MINIMUM PRESBY PIPE: 210 LF
PROVIDED PIPE = 5 LINES @ 50 LF = 250 LF PIPE

DESIGN CRITERIA:

FACTORY TYPE	SOIL CLASS.	CLASS II
SINGLE FAMILY DWELLING	SOILS PERC. RATE:	20 MIN/INCH
3 BEDROOMS	LONG TERM ACCURANCE RATE:	0.53 GAL/SF/DAY
110 GAL/BED/DAY	REQUIRED LEACH AREA:	934 SF (TOWN)
DAILY FLOW RATE:	PROVIDED LEACH AREA:	572 SF
330 GAL/DAY	MINIMUM PRESBY SAND AREA:	934 X 0.6 = 561 SF
NO. OF GRINDERS:	MINIMUM PRESBY PIPE:	210 LF
495+ GAL/DAY	PROVIDED PIPE = 5 LINES @ 50 LF = 250 LF PIPE	

SOIL PERCOLATION RATE:

P-1: DEPTH TO 12" = 48" SOIL PERC RATE = 20 MIN/IN

SOIL ELEVATIONS:

TEST PIT	T-1
GRADE	101.4
E.S.H.G.W.	96.1
OBS. G.W.	NONE
BOTTOM PIT	93.6

SOIL PROFILES:

T-1:	0-45" FILL	T-B:	SYSTEM SAND/PEASTONE FOUND
T-1:	45-94" CI LOAMY SAND 2.5/9.4	T-C:	EDGE SYSTEM SAND/REFUSAL
T-1:	REFUSAL @ 94" ESHGW @ 64"	T-D:	SYSTEM SAND/REFUSAL
T-A:	SYSTEM SAND ROUND	T-E:	NESTED BOULDERS