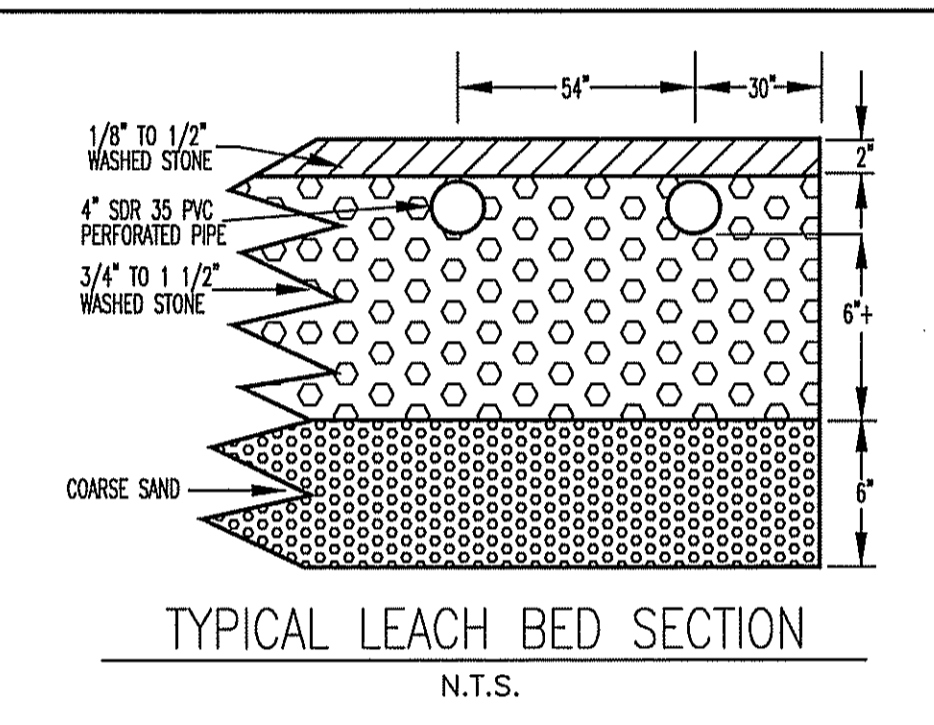
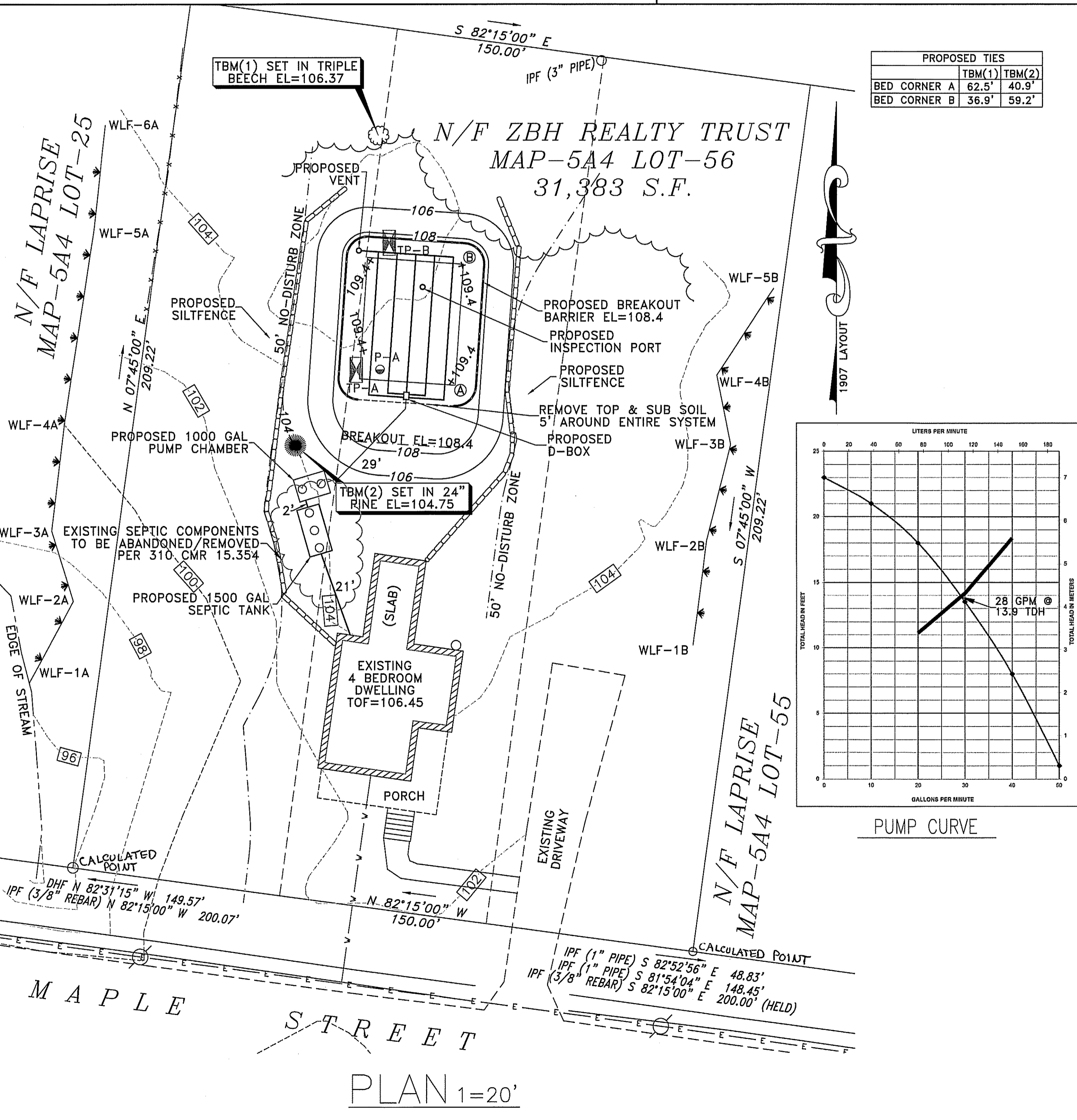
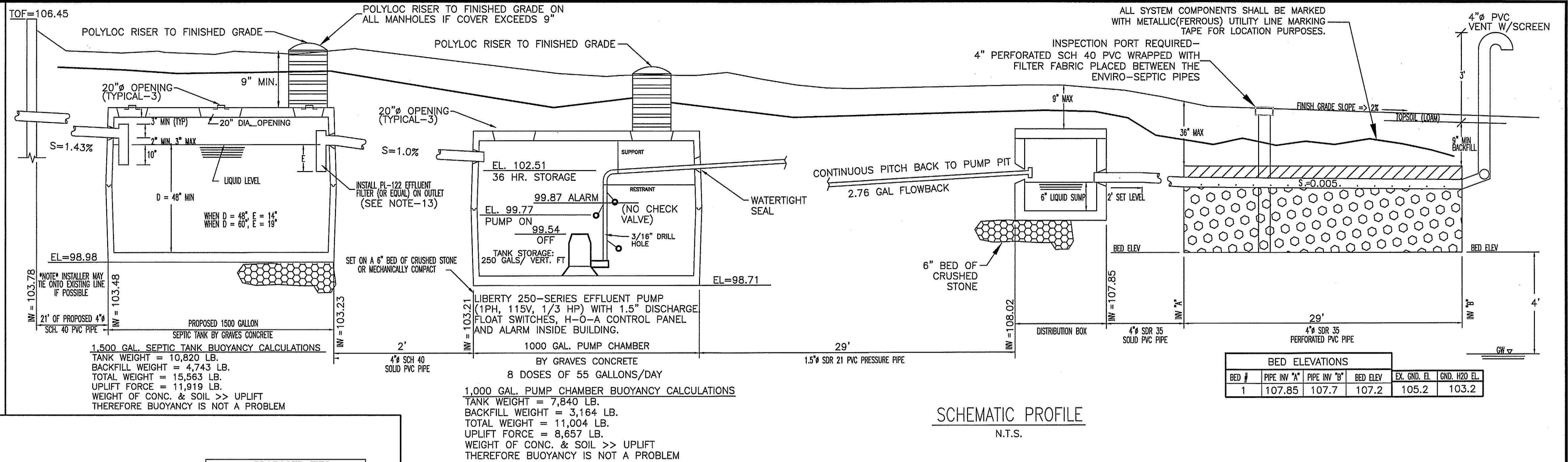


LOCUS NTS



DESIGN CRITERIA

- Estimated Hydraulic Loading
 4 bedrooms at 110 gals/day/bedroom = 440 gpd
 Garbage disposal shall not be allowed with this system.
- Prop. Septic tank size = 1500 gallons.
 Pump chamber size = 1000 gallons.
- Leaching Area Design Criteria
 Percolation Rate = 8 mpi
 Soil Class Type = I (LOAMY SAND)
 Allowable Loading Rate = 0.66 gpd/sf
 Required Leaching Area = 440 gpd / 0.66 gpd/sf = 667 sf
 Leaching Area Provided = 1 bed x 29 ft bed length x 23 ft bed width = 667 sf
- Breakout
 Breakout Elevation = 108.35
 Breakout Distance = 15 ft (5' w/ barrier)
 Distance Provided = 3 ft

LEGEND

- 242 EXISTING CONTOUR
- 242 PROPOSED CONTOUR
- TP-1 DEEP HOLE TEST PIT
- PT-1 PERCOLATION TEST
- + 238.6 SPOT ELEVATION
- W WATER SERVICE

- GENERAL NOTES**
- Unless otherwise noted, property lines shown are compiled from existing plans and deeds of record.
 - Underground utility data is plotted from visible field locations and available records. The locations are approximate only and verification must be made in the field.
 - All construction to conform to 310 CMR 15.000, "The State Environmental Code, Title 5" and the Board of Health requirements for the Town of Winchendon.
 - The contractor shall install the system exactly as shown on this plan. If changes are necessary, the contractor must contact the Engineer in advance.
 - Heavy machinery shall not be permitted to pass over the leaching area and the contractor shall stake and flag the soil absorption/leaching area perimeter upon completion.
 - All piping shall be polyvinyl chloride (PVC) pipe per ASTM D1785 for SCH. 40 and ASTM D3034 for SDR 35 where indicated on the profile, unless otherwise noted.
 - Septic tank/pump chamber shall be a 1500/1000 gallon reinforced concrete tank of H-10 load design (min.) and watertight conforming to all of the requirements of 310 CMR 15.221, 15.223, 15.226, 15.227, 15.228.
 - The distribution box (D-box) shall be a 5 outlet reinforced concrete box of H-10 load design (min.) with a watertight cover and conform to all the requirements of 310 CMR 15.232.
 - All topsoil, subsoil and impervious material, if any, must be excavated and removed below and 5' beyond the soil absorption system area. Fill material shall consist of a clean granular sand, free from organic matter and deleterious substances. Mixtures and layers of different classes of soil not be used. The sand fill shall not contain any material larger than 2 inches. A sieve analysis, using a #4 sieve, shall be performed on a representative sample of the fill. Up to 45% by weight of the fill sample may be retained on the #4 sieve. Sieve analyses also shall be performed on the fraction of the fill sample passing the #4 sieve, such analyses must demonstrate that the material meets or exceeds each of the following specifications: 100% passing #4 sieve; 10%-100% passing #50 sieve; 0%-20% passing #100 sieve; 0%-5% passing #200 sieve. (11/95 DEP SPEC)
 - For proper performance, septic tank should be inspected at least once a year and pumped when the top of the sludge or solids layer is within 12" or less of the bottom of the outlet tee or the bottom of the scum layer is within 2 inches of the bottom of outlet tee (every 2 or 3 years).
 - There are no wells located within 100 feet of the proposed system.
 - An RDA is required to be filed with the conservation commission for the work shown hereon.
 - INSPECT/ CLEAN TANK OUTLET FILTER ONCE PER YEAR.

SOIL TEST DATA

DEEP HOLE TESTS
 PERFORMED BY: RICHARD C. STEVENS, SE #2347
 WITNESSED BY: JAMES ABARE, B.O.H. WINCHENDON
 DATE: OCTOBER 23, 2023

PERC TESTS
 RICHARD C. STEVENS, SE #2347
 JAMES ABARE, B.O.H. WINCHENDON
 OCTOBER 23, 2023

DEEP HOLE #	TP-A	TP-B
FSL	0"	0"
10YR 3/4	A	A
2% GRAVEL		
SL	10"	12"
10YR 5/8	B	B
22% GRAVEL		
LOAMY SAND	22"	24"
2.5Y 5/6		
89% GRAVEL		
	79"	84"
ESHW	@ 36"	@ 24"
GRD EL	104.7	105.4
ESHW	EL 101.7	EL 103.4
REFUSAL EL	NA	NA

PERC TEST NUMBER	DEPTH	PERC RATE	NOTES
P-A	32"	8 MPI	

NO.	DESCRIPTION	DATE	BY

DESIGNED BY TWF
 DRAWN BY TWF
 CHECKED BY PFG
 DATE 11-30-23
 SCALE 1"=20'
 JOB NUMBER 23199

DESIGNED BY TWF
 DRAWN BY TWF
 CHECKED BY PFG
 DATE 11-30-23
 SCALE 1"=20'
 JOB NUMBER 23199

PROPOSED SEPTIC SYSTEM UPGRADE PLAN
 290 MAPLE STREET (MAP-5A4 LOT-56)
 WINCHENDON, MASSACHUSETTS
 PREPARED FOR
 ZBH REALTY TRUST
 29 TOWN FARM ROAD; WINCHENDON, MA 01475

GRAZ Engineering, LLC
 323 WEST LAKE RD.; FITZ WILLIAM, NH 03447; (603) 585-6959

FIELD BOOK NO. PAGES
 SHEET 1 OF 1