

NOTE: SEPTIC TANK MUST BE PLACED 50' MINIMUM FROM ANY DOMESTIC WELL.  
\*MINIMUM WALL THICKNESS TO BE 3" IF REINFORCED. 4" WITHOUT REINFORCEMENT  
\*\*FOR TANKS WITH DIFFERENT LIQUID DEPTHS. SCH. 40 PVC OUTLET TEES SHALL BE CONSTRUCTED TO THE DEPTH BELOW THE OUTLET INVERT IN ACCORDANCE WITH 310 CMR 15.227 (6).

**1,500 GALLON SEPTIC TANK**  
N.T.S.

OBSERVATION PIT #TP-1

A(SL)	0"
Bw(SL)	7"
C(SL)	24"
	73"

GROUNDWATER: 24" @ MOTTILING  
NO PERC. TEST PERFORMED

OBSERVATION PIT #TP-2

A(SL)	0"
Bw(SL)	8"
C(SL)	25"
	73"

GROUNDWATER: 24" @ MOTTILING  
NO PERC. TEST PERFORMED

OBSERVATION PIT #TP-9

A(SL)	0"
Bw(SL)	10"
C1(SL)	27"
C2(SL)	48"
	90"

GROUNDWATER: 24" @ MOTTILING  
PERC. TEST AT 45"=25 MIN./INCH

OBSERVATION PIT #TP-10

A(SL)	0"
Bw(SL)	10"
C1(SL)	27"
C2(SL)	46"
	80"

GROUNDWATER: 22" @ MOTTILING  
PERC. TEST AT 36"=15 MIN./INCH

SOIL EVALUATION BY ROBERT H. LeMAITRE, 6/12/13 & 6/12/03  
WITNESSED BY RANDY GAULEY, HEALTH AGENT  
SEE SOIL EVALUATION FORM FOR COMPLETE INFORMATION

**CONSTRUCTION NOTES**

- A MINIMUM OF 48 HOURS NOTICE TO THE ENGINEER IS REQUIRED FOR EXCAVATION INSPECTION AND FINAL INSPECTION OF THE SYSTEM. EXCAVATION BOTTOM INSPECTION REQUIRED PRIOR TO FILL OPERATIONS. FINAL COVER OF THE SYSTEM COMPONENTS SHALL NOT BE COMPLETED UNTIL AFTER THE FINAL INSPECTION.
- ALL EXISTING SOILS ABOVE THE "B" HORIZON SHALL BE REMOVED WITHIN THE AREA SHOWN ON THE PLAN. FILL MATERIAL SHALL BE PLACED IN ACCORDANCE WITH AND SHALL MEET THE SPECIFICATIONS OF 310 CMR 15.255. A CERTIFIED SIEVE ANALYSIS FOR THE FILL MATERIAL SHALL BE FURNISHED BY THE CONTRACTOR TO THE OWNER.
- ALL STRUCTURES, INCLUDING BUT NOT LIMITED TO THE SEPTIC TANK AND THE D-BOX, SHALL BE WITHIN 9" OF FINISHED GRADE, OR EQUIPPED WITH RISERS TO WITHIN 6" OF FINISHED GRADE. RISER COVERS MUST BE SECURED TO PREVENT UNAUTHORIZED ACCESS.
- ALL STRUCTURES SHALL BE MARKED FOR FUTURE LOCATION USING MAGNETIC TAPE OR OTHER COMPARABLE METHOD, IN ACCORDANCE WITH 310 CMR 15.221(12).
- NO PERMANENT STRUCTURES SHALL BE CONSTRUCTED OVER ANY PART OF THE SEWAGE DISPOSAL SYSTEM OR RESERVE AREA.

**GENERAL NOTES**

- NO WETLANDS WITHIN 50' OF PROPOSED SEPTIC SYSTEM.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH 310 CMR 15.00, THE STATE ENVIRONMENTAL CODE, TITLE 5.
- SEPTIC TANK SHALL BE MAINTAINED IN ACCORDANCE WITH 310 CMR 15.351.
- ALL PIPING FROM HOUSE TO DISTRIBUTION BOX SHALL BE SCH-40, WATER TIGHT. DISTRIBUTION LINES SHALL BE SCH-40 OR SDR-35 PER 310 CMR 15.252(2)(h). END OF DISTRIBUTION LINES SHALL BE CAPPED.
- PROPERTY LINES SHOWN ARE FOR ENGINEERING DESIGN PURPOSES ONLY.
- NO OTHER WELLS OBSERVED WITHIN 200' OF SYSTEM.
- BACKWASH OF WATER PURIFICATION OR FILTRATION DEVICES MUST DISCHARGE TO A DRYWELL, NOT TO PROPOSED LEACH FACILITY.
- CONTRACTOR TO OBTAIN APPLICABLE TRENCH PERMITS FROM LOCAL COMMUNITY.
- EXISTING BUILDINGS ON ABUTTING PROPERTY SHOWN ON THIS PLAN FOR GRAPHICAL REPRESENTATION ONLY. BUILDING LOCATIONS BASED ON MAGIS AERIAL DATA.

**DESIGN CALCULATIONS**

4 BEDROOMS X 2 PERSONS PER BEDROOM = 8 PERSONS  
8 PERSONS X 55 GALLONS OF WASTEWATER PER PERSON PER DAY = 440 GALLONS OF WASTEWATER PER DAY.  
PERCOLATION RATE = 25 MIN PER INCH.  
LEACHING AREA REQUIREMENTS: CLASS II SOIL 310 CMR 15.242  
USE 25 MIN. PER INCH EFFLUENT LOADING RATE = 0.40 GPD/SF

**LEACHING FIELD DESIGN**  
REQUIRED SIZE OF FIELD  
440 G.P.D. WITHOUT GARBAGE GRINDER  
440 G.P.D. / 0.40 G.P.D./S.F = 1,100 SQ. FT.

**CAPACITY OF SYSTEM AS DESIGNED**  
TWO 40' X 16' = 1,280 S.F. LEACH FIELD  
1,280 S.F. X 0.40 GPD/S.F. = 512 GALLONS OF WASTEWATER PER DAY. (WITHOUT GARBAGE GRINDER)

**SEPTIC TANK**  
WITHOUT GARBAGE DISPOSAL:  
440 GALLONS OF WASTEWATER PER DAY X 200% = 880 GALLONS REQUIRED  
EFFECTIVE LIQUID CAPACITY OF SEPTIC TANK.  
USE 1500 GAL SEPTIC TANK MIN.

**INSTALLATION DETAIL**  
N.T.S.

ADJACENT ROLLS SHALL TIGHTLY ABUT

3'-4"

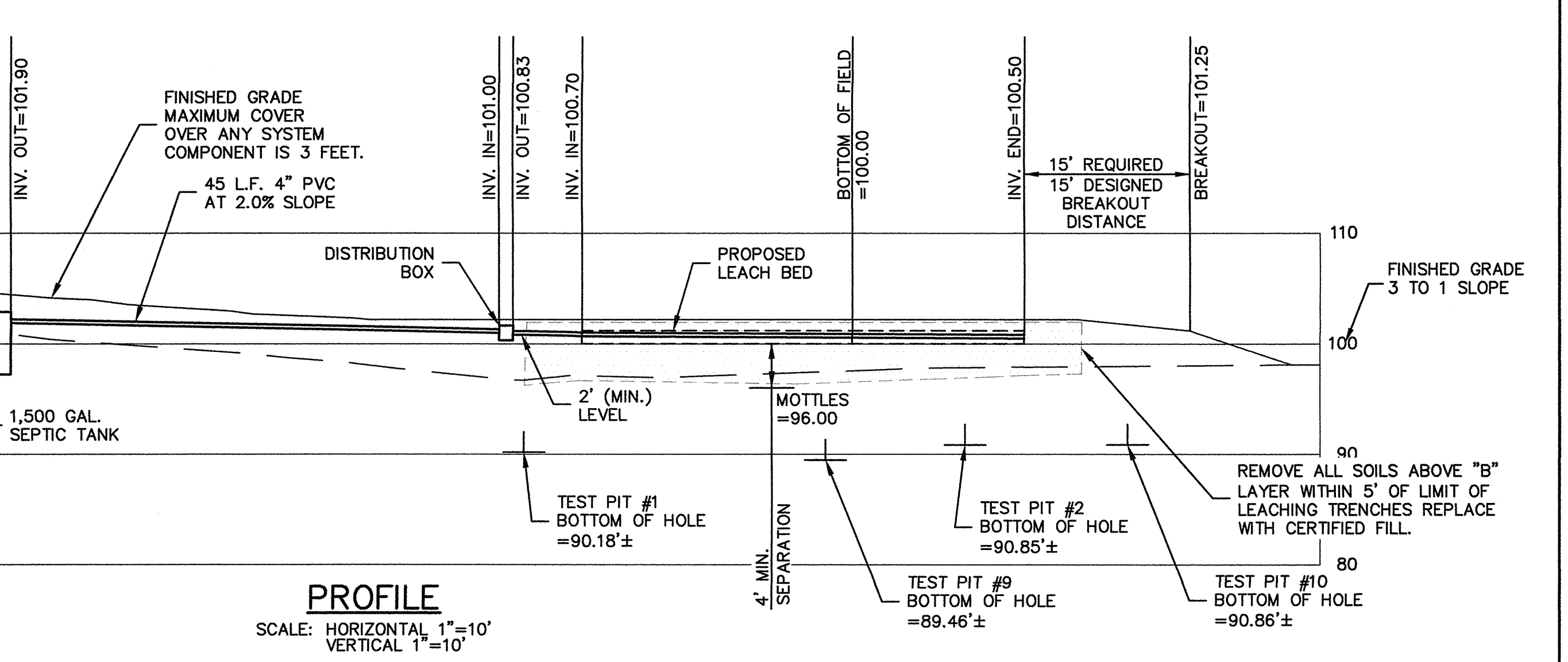
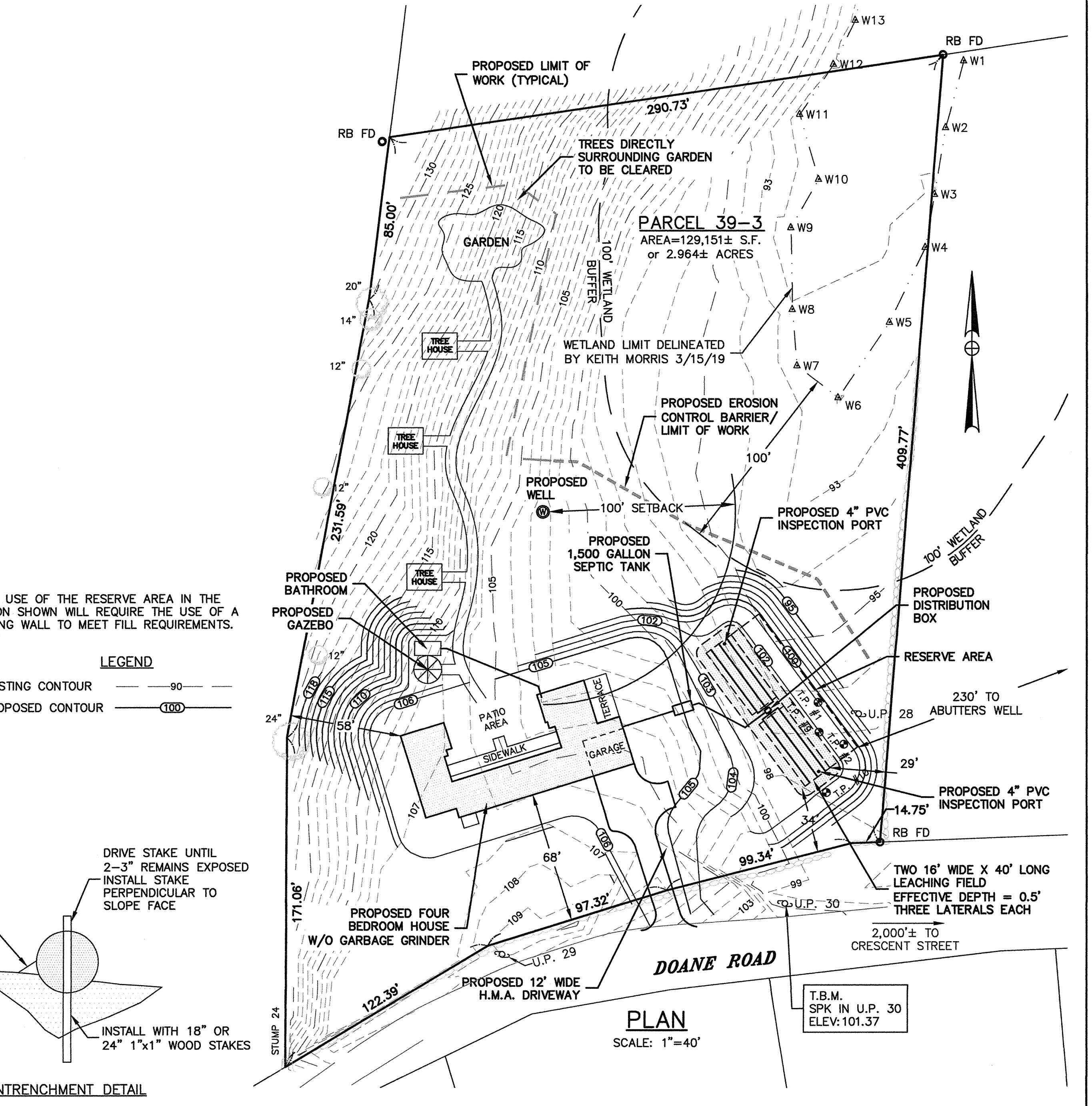
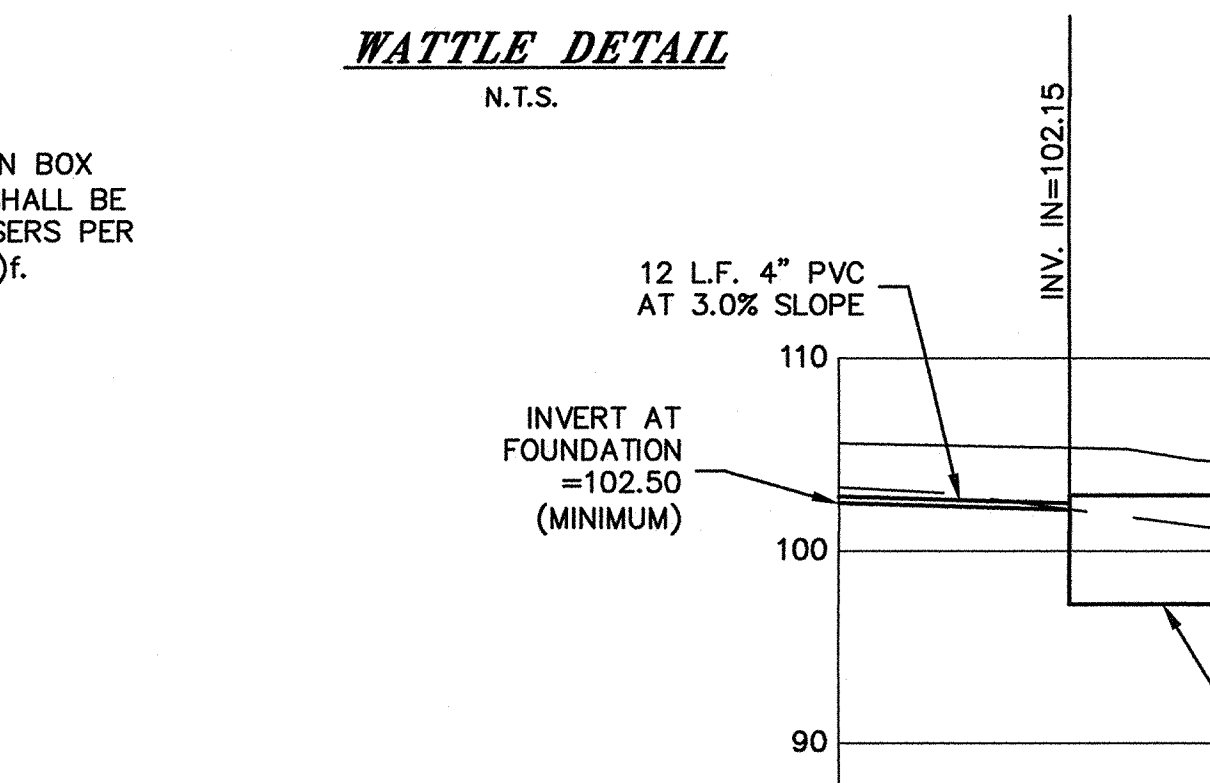
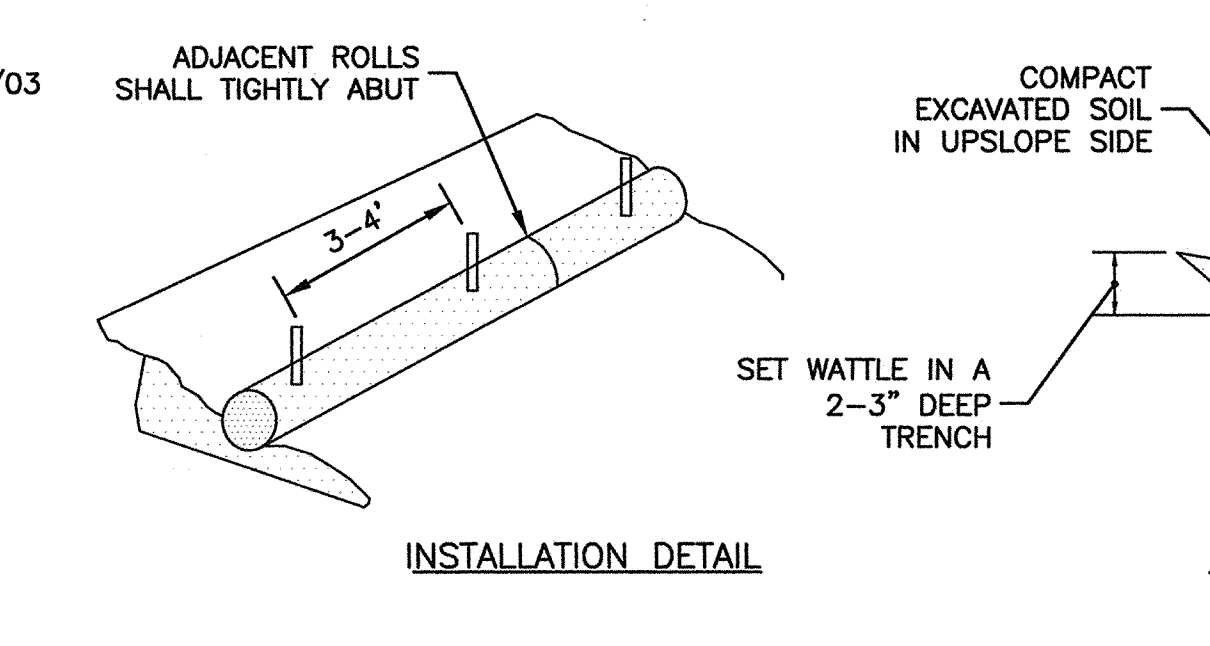
**ENTRENCHMENT DETAIL**  
N.T.S.

DRIVE STAKE UNTIL 2-3" REMAINS EXPOSED  
INSTALL STAKE PERPENDICULAR TO SLOPE FACE

COMPACT EXCAVATED SOIL IN UPSLOPE SIDE

SET WATTLE IN A 2-3" DEEP TRENCH

INSTALL WITH 18" OR 24" 1"x1" WOOD STAKES



NO.	DATE	BY	REVISIONS

**SHERMAN & FRYDRYK, LLC**  
Land Surveying and Engineering  
3 Converse Street, Suite 203  
Palmer, MA 01069

DESIGN: GAB  
DRAFTING: GAB,MJA  
CHECKED: KTT

FOR PUBLIC RELEASE

SCALE:  
HORZ: AS SHOWN  
VERT: AS SHOWN  
DATE: 3/4/21

**REQUEST FOR DETERMINATION**

PLAN OF PROPOSED SEWAGE DISPOSAL SYSTEM  
PREPARED FOR  
**ANA ESTIEN**  
PARCEL 39-3, DOANE ROAD  
WARE, MA

PROJECT NUMBER  
19004A  
SHEET NUMBER  
1 OF 1