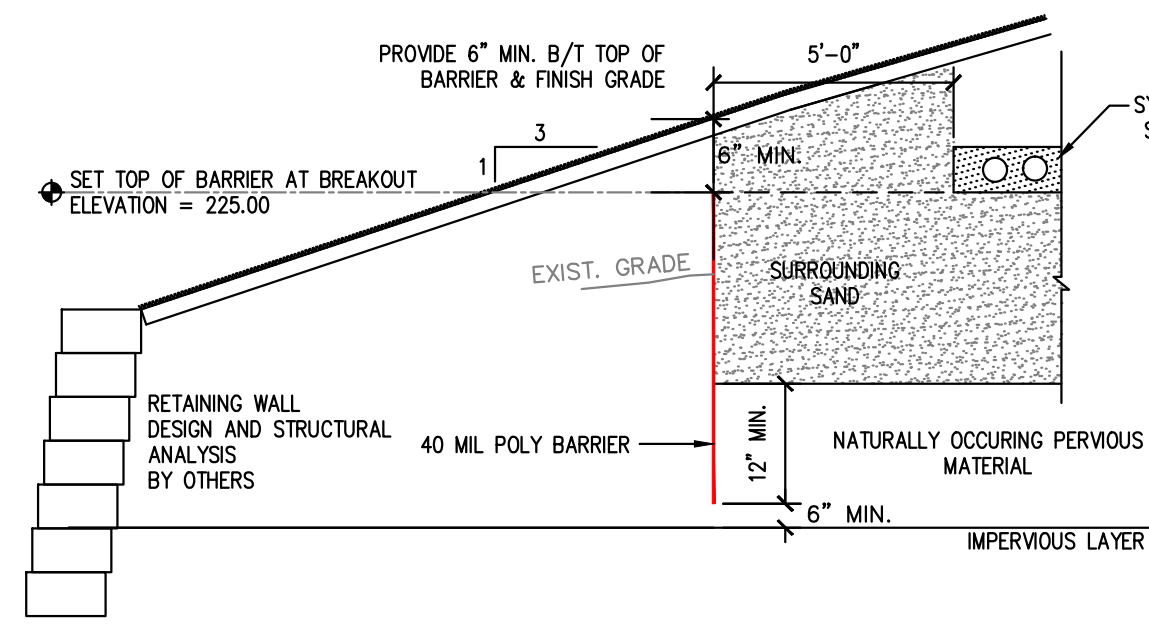


STRAW BALE & SILT FENCE
SCALE: AS NOTED



PROPOSED IMPERVIOUS BARRIER DETAIL
SCALE: NOT SHOWN

DESIGN CRITERIA

TYPE OF BUILDING: EXISTING RESIDENTIAL
 # OF BEDROOMS: 2 BEDROOMS
 ESTIMATED DAILY FLOW: 220 GPD RESIDENTIAL LOADING:
 PERC RATE: 14 MPI & 2 MPI
 SOIL GROUP (1-4): 2
 SYSTEM SLOPE: 0 %
 GARBAGE GRINDER: NOT ALLOWED
 PIPE ROW LENGTH: 40 FT
 ENVIRO-SEPTIC PIPE REOD: 210 FT
 ENVIRO-SEPTIC PIPE PROVIDED: 240 FT
 USE C/A TO C/L SPACING: 1.5 FT
 NUMBER OF SECTIONS: 1
 NUMBER OF ROWS PER SECTION: 6 ROWS / SECTION
 SYSTEM PIPE WIDTH: 8.5 FT
 NUMBER OF PIPE ROWS: 6 ROWS
 MIN SAND AREA REOD: 400 SQ FT
 SAND AREA PROVIDED: 441 SQ FT
 SYSTEM SAND LENGTH: 42 FT
 SYSTEM SAND WIDTH: 10.5 FT

BOTTOM ELEVATION OF ENVIRO-SEPTIC PIPE = 225.50
 SYSTEM SAND (C-33) BEYOND HIGHEST ROW = 1 FT
 SYSTEM SAND (C-33) BEYOND LOWEST ROW = 1 FT
 MATERIAL COVER OVER ENVIRO-SEPTIC PIPES = 10 INCHES
 SYSTEM SLOPE = 0%
 CENTER-TO-CENTER PIPE SPACING = 1.5 FT
 NUMBER OF ROWS = 6
 DEPTH TO SEASONAL HIGH GROUNDWATER = 60 INCHES
 SEPARATION DISTANCE TO GROUNDWATER = 5 FT
 DROP IN ELEVATION FROM PIPE TO PIPE = 0.00 FT
 BOTTOM ELEVATION OF SYSTEM SAND (C-33) = 225.00
 OUTSIDE-TO-OUTSIDE PIPE LAYOUT WIDTH OF SYSTEM = 8.5 FT
 TOTAL SYSTEM SAND (C-33) WIDTH = 10.5 FT

SOIL TESTING

DATE PERFORMED: 12/17/19
 BY: SHELLEY HULTOREN
 WITNESS: KALENE GENDRON

DH-1

L 10YR3/3	A 0-16
SL 10YR5/6	B 16-24
LS 10YR3/6	BC 24-30
S/G 2.5Y5/3	C1 30-60
SIS 2.5Y5/4	C2 60-95

MOTTLES @ 60"
 NO W/W/R/

SOIL TESTING

DATE PERFORMED: 7/28/20
 BY: SHELLEY HULTOREN
 WITNESS: KALENE GENDRON

DH-4A

L 10YR3/3	A 0-13
SL 10YR5/6	B 13-27
LS 10YR3/6	C1 27-40
S/G 2.5Y5/3	C2 40-71

MOTTLES @ 60"
 NO W/W/R/

DH-2

L 10YR3/3	A 0-16
SL 10YR5/6	B 16-24
FS 2.5Y5/3	C1 20-64
FSIS 2.5Y5/4	C2 64-97

MOTTLES @ 64"
 NO W/W/R/

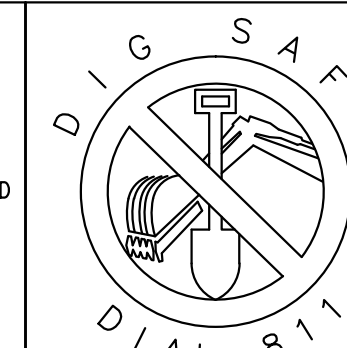
DH-3

L 10YR3/3	A 0-9
SL 10YR5/6	B 9-28
LS/S 10YR3/6	C1 28-61
SIS 2.5Y5/3	C2 61-72

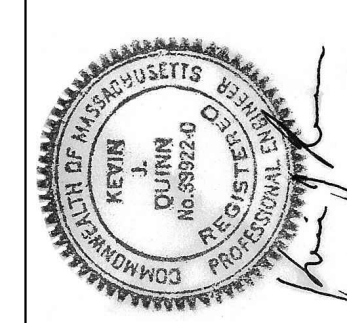
MOTTLES @ 61"

PERC TEST

DATE PERFORMED: 12/17/19
 BY: SHELLEY HULTOREN
 WITNESS: KALENE GENDRON
 PERC RATE: #1 - ABANDONED
 #2 - 14 MPI
 #3 - 4 MPI
 #4 - 2 MPI



			11/17/20	DATE
			11/17/20	
			8/24/20	
3	REVISED PER CON COM & BOH			
2	REVISED PER CON COM & BOH			
1	REVISED PER BOH & ZBA			
				NO.
				REVISION



OWNER: MARY JANE CRAMER
 52 FLINT DRIVE
 MARLBORO MA, 01752

APPLICANT: FRANK & MARY JANE CRAMER
 MARLBORO MA, 01752

PROPOSED COMPONENT ELEVATIONS

PROPOSED INVERT AT FOUNDATION	207.00
INVERT AT TANK INLET	206.75
INVERT AT TANK OUTLET	206.25
4" INVERT AT PUMP CHAMBER IN	206.00
2" INVERT AT PUMP CHAMBER OUT	205.75
INVERT AT DBOX INLET	226.45
INVERT AT DBOX OUTLET	226.28

FIELD ELEVATIONS

ROW #	1	2	3	4	6	6
FINISH GRADE (SYSTEM SLOPE = 0%)	227.50	227.50	227.50	227.50	227.50	227.5
TOP OF ENVIRO-SEPTIC PIPE	226.50	226.50	226.50	226.50	226.50	226.50
4" PVC INVERT INTO ENVIRO-SEPTIC PIPE	226.08	226.08	226.08	226.08	226.08	226.08
BOTTOM OF ENVIRO-SEPTIC PIPE	225.50	225.50	225.50	225.50	225.50	225.50
BREAKOUT ELEVATION/BOTTOM OF SYSTEM SAND	225.00	225.00	225.00	225.00	225.00	225.00

CONVENTIONAL SIZING REQUIREMENT COMPLIANCE

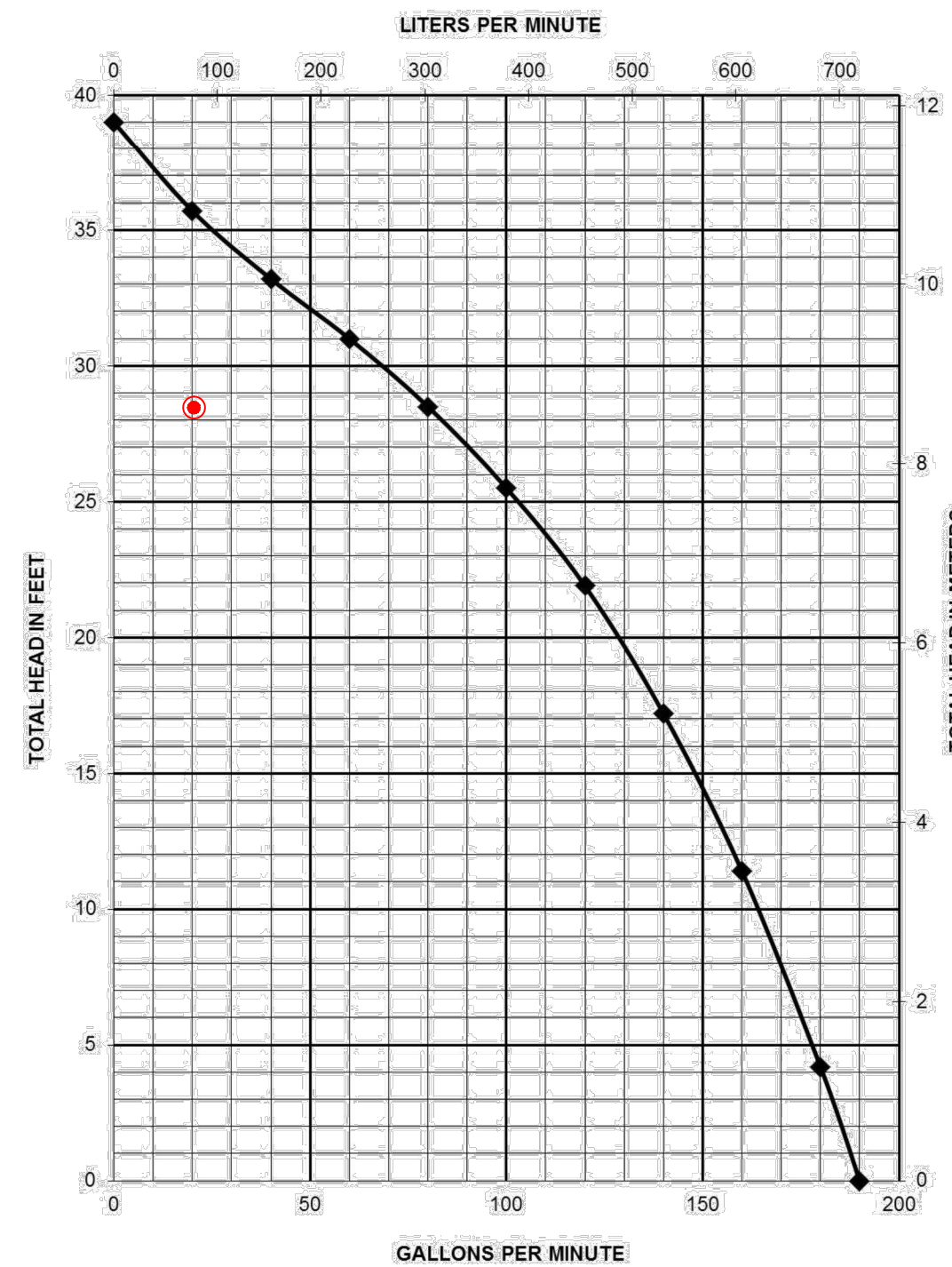
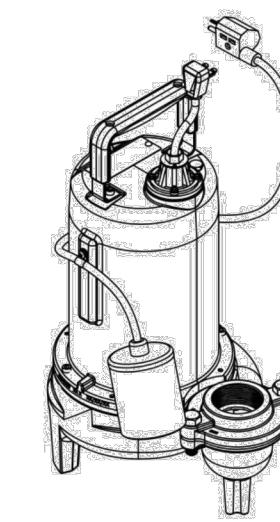
LEACHING AREA REQUIRED UNDER TITLE 5:
 (220x150% GPD)/(0.56 GPD/S.F.) = 589 S.F.
 (PRESBY SYSTEMS ARE REQUIRED TO BE NO LESS THAN 60% OF THE AREA OF A PIPE AND AGGREGATE SYSTEM AND NO LESS THAN 400 S.F.)

441 S.F. PROVIDED > (589 S.F.)(60%) OK
 441 S.F. PROVIDED > 353 S.F. REOD OK

Liberty Pumps

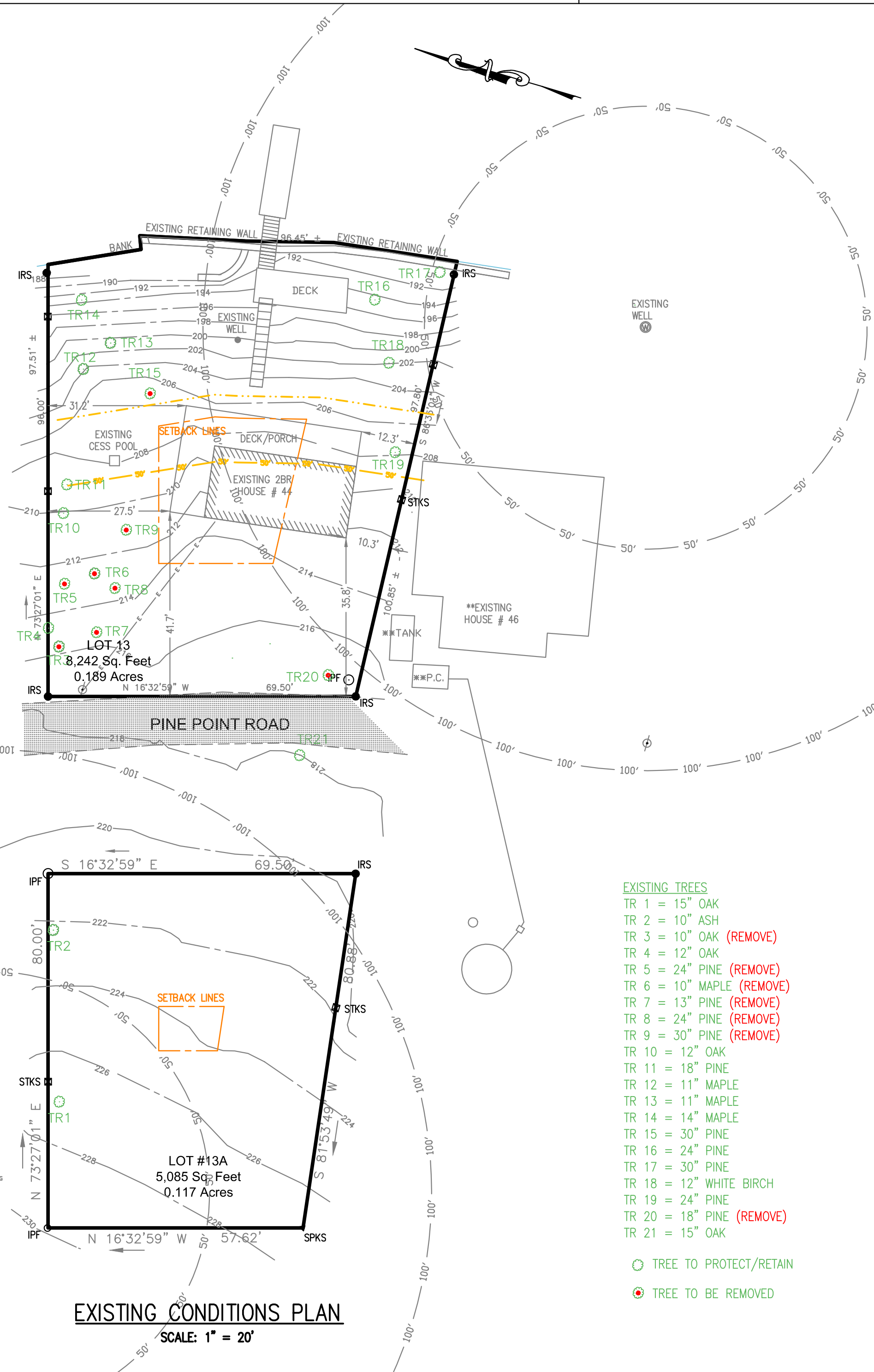
Pump Specifications

**LE100-Series
1HP Submersible Sewage Pump**



LE100-P1 R8/5/2014

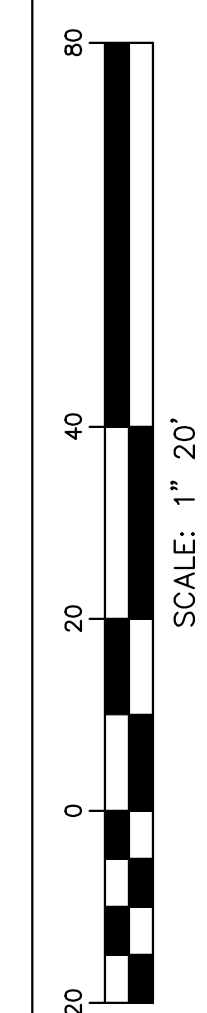
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EXISTING CONDITIONS PLAN
SCALE: 1" = 20'

- EXISTING TREES**
- TR 1 = 15" OAK
 - TR 2 = 10" ASH
 - TR 3 = 10" OAK (REMOVE)
 - TR 4 = 12" OAK
 - TR 5 = 24" PINE (REMOVE)
 - TR 6 = 10" MAPLE (REMOVE)
 - TR 7 = 13" PINE (REMOVE)
 - TR 8 = 24" PINE (REMOVE)
 - TR 9 = 30" PINE (REMOVE)
 - TR 10 = 12" OAK
 - TR 11 = 18" PINE
 - TR 12 = 11" MAPLE
 - TR 13 = 11" MAPLE
 - TR 14 = 14" MAPLE
 - TR 15 = 30" PINE
 - TR 16 = 24" PINE
 - TR 17 = 30" PINE
 - TR 18 = 12" WHITE BIRCH
 - TR 19 = 24" PINE
 - TR 20 = 18" PINE (REMOVE)
 - TR 21 = 15" OAK
- TREE TO PROTECT/RETAIN
 ● TREE TO BE REMOVED

PROPOSED SITE PLAN
 IN STOW, MA
 44 PINE POINT ROAD



QUINN ENGINEERING, INC.
 P.O. Box 107
 Paxton, Massachusetts 01612
 (508)753-7999 Fax: (508)795-0939

DATE: FEBRUARY 7, 2020
 EXISTING CONDITIONS & SEPTIC DETAILS
 44 PINE POINT ROAD
 SHEET 3 OF 5