



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

**REFERENCE PLAN -**

SITE PLAN 68 MIDDLETON ROAD BOXFORD, MA,  
 PROPERTY OF KENNETH C. SEUS  
 SCALE: 1"=40' FEB. 14, 1992  
 305 WILLOW ST. - S. HANLON, TOWN, MA

BENCHMARKS: ASSUMED DATUM	ELEV.
#1 NAIL IN UPOLE	90.52
#2 THRESHOLD	91.55
#3	



**SUBSURFACE SEWAGE DISPOSAL SYSTEM UPGRADE**  
 68 MIDDLETON ROAD  
 BOXFORD, MA 01921

**SOILS INFORMATION:**  
 SOIL EVALUATOR: JAMES SCANLAN, P.E.  
 (SE#2159 - APRIL 1995)  
 TOWN WITNESS: KENDALL LONGO  
 DATE: 6/11/19

**DESIGN CRITERIA:**  
 FACILITY TYPE: SINGLE FAMILY DWELLING  
 SIZE: 3 BEDROOMS  
 UNIT FLOW RATE: 110 GAL/BED/DAY  
 DAILY FLOW: 330 GAL/DAY  
 GARBAGE GRINDER: YES\*  
 (IF YES SYSTEM DESIGN = 150% DAILY FLOW)  
 SYSTEM DESIGN: 495 GAL/DAY  
 \*GROUND BOARD OR HEALTH REGULATIONS REQUIRE DESIGN TO BE SIZED FOR A GARBAGE GRINDER

**SOIL PERCOLATION RATE:**  
 P-1: DEPTH TO 12" = 16" SOIL PERC RATE = 2.67 MIN/IN

TEST PIT	T-1	T-2
GRADE	82.0	82.6
E.S.H.G.W.	79.8	79.6
OBS. G.W.	79.3	78.9
BOTTOM PIT	75.8	75.9

**SOIL PROFILES:**

T-1:  
 0-12" AP FINE SANDY LOAM 10%R2/2 MASSIVE FRIABLE  
 12-18" Bw GRAVELLY SANDY LOAM 10%R3/6 MASSIVE FRIABLE  
 18-66" C1 GRAVELLY LOAMY SAND 2.5%4/4 SINGLE GRAIN LOOSE  
 66-74" C2 NESTED ROCKS WITH MINIMAL SANDY LOAM (UNABLE TO OBTAIN SAMPLE)  
 ESHW @ 28' STANDING @ 32'

T-2:  
 0-16" AP FINE SANDY LOAM 10%R2/2 MASSIVE FRIABLE  
 16-24" Bw GRAVELLY SANDY LOAM 10%R3/4 MASSIVE FRIABLE  
 24-80" C1 GRAVELLY LOAMY SAND 2.5%4/4 SINGLE GRAIN LOOSE 30% GRAVEL  
 ESHW @ 36' STANDING @ 44'

**VARIANCES/WAIVERS:**

**REQUIRED:**  
 A MINIMUM OF TWO DEEP HOLE OBSERVATIONS SHALL BE PERFORMED IN THE PRESENCE OF THE APPROVING AUTHORITY

**PROVIDED:**  
 ONE DEEP HOLE IN PRIMARY AREA

**DESIGN CRITERIA:**  
 FACILITY TYPE: SINGLE FAMILY DWELLING  
 SIZE: 3 BEDROOMS  
 UNIT FLOW RATE: 110 GAL/BED/DAY  
 DAILY FLOW: 330 GAL/DAY  
 GARBAGE GRINDER: YES\*  
 (IF YES SYSTEM DESIGN = 150% DAILY FLOW)  
 SYSTEM DESIGN: 495 GAL/DAY  
 \*GROUND BOARD OR HEALTH REGULATIONS REQUIRE DESIGN TO BE SIZED FOR A GARBAGE GRINDER

**LEGEND:**

EXISTING	PROPOSED
100X10	100X10
SPOT SHOTS	SPOT SHOTS
APPROX. PROPERTY LINES	APPROX. PROPERTY LINES
WATER SERVICE LINE & WELL	WATER SERVICE LINE & WELL
GAS SERVICE LINE	GAS SERVICE LINE
STONE WALL	STONE WALL
LIMIT BORDERLAND	LIMIT BORDERLAND
VEGETATED WETLAND	VEGETATED WETLAND
LIMIT OF 100-FOOT BUFFER ZONE	LIMIT OF 100-FOOT BUFFER ZONE
LIMIT OF 75-FOOT BUFFER ZONE	LIMIT OF 75-FOOT BUFFER ZONE
LIMIT OF 50-FOOT BUFFER ZONE	LIMIT OF 50-FOOT BUFFER ZONE
LIMIT OF 25-FOOT NO DISTURB ZONE	LIMIT OF 25-FOOT NO DISTURB ZONE
LIMIT OF 100-FOOT INNER RIPARIAN ZONE	LIMIT OF 100-FOOT INNER RIPARIAN ZONE
SILTATION BARRIER	SILTATION BARRIER
TEST PIT & NO. PERC. TEST	TEST PIT & NO. PERC. TEST
BUILDING	BUILDING
EDGE OF PAVEMENT	EDGE OF PAVEMENT
FORCE MAIN	FORCE MAIN
DECIDUOUS TREE	DECIDUOUS TREE
CONIFEROUS TREE	CONIFEROUS TREE
DIRECTION OF SURFACE FLOW TO BE ABANDONED	DIRECTION OF SURFACE FLOW TO BE ABANDONED
TBR	TBR

**DESIGN CRITERIA:**  
 FACILITY TYPE: SINGLE FAMILY DWELLING  
 SIZE: 3 BEDROOMS  
 UNIT FLOW RATE: 110 GAL/BED/DAY  
 DAILY FLOW: 330 GAL/DAY  
 GARBAGE GRINDER: YES\*  
 (IF YES SYSTEM DESIGN = 150% DAILY FLOW)  
 SYSTEM DESIGN: 495 GAL/DAY  
 \*GROUND BOARD OR HEALTH REGULATIONS REQUIRE DESIGN TO BE SIZED FOR A GARBAGE GRINDER

**KENNETH SEUS**  
 68 MIDDLETON ROAD  
 BOXFORD, MA 01921

**SE SCANLAN**  
 ENGINEERING LLC  
 PHONE: (978) 372-3440  
 FAX: (978) 891-3888  
 EMAIL: info@scanlanengineering.com  
 WEB: www.scanlanengineering.com

DATE	BY	REVISIONS TO PLANS
JULY 2, 2019	JBS	CONSERVATION ADDITIONS
8/19/19	JBS	

DATE: JULY 2, 2019  
 DESIGN BY: JBS  
 DRAWN BY: JBS

**PLAN & FLOW PROFILE**

SHEET 1 OF 2 SCALE: 1"=20'  
 PROJECT # 0964