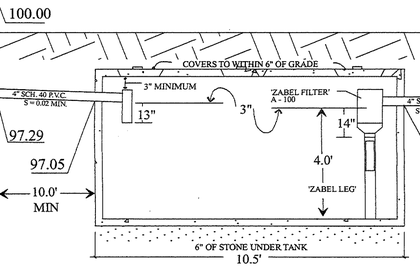
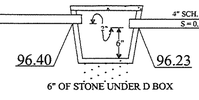
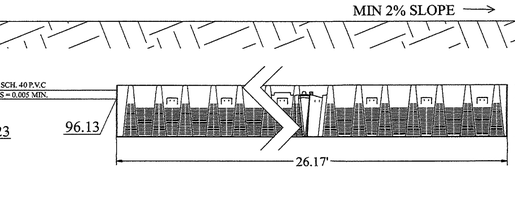
PROPOSED 1500 GALLON TANK
NOT TO SCALE



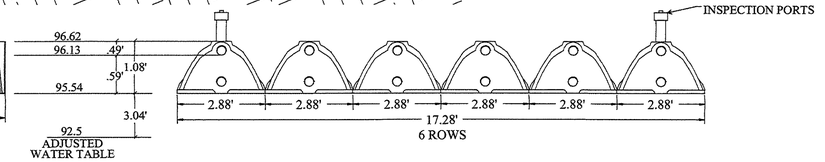
DISTRIBUTION BOX
NOT TO SCALE

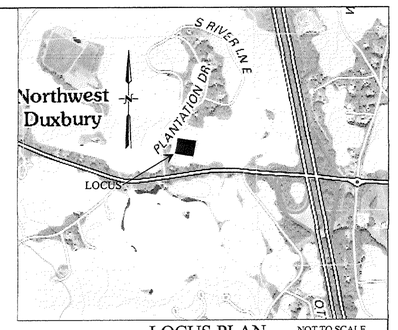


ARC 36 CAPACITY CHAMBER DETAIL
NOT TO SCALE



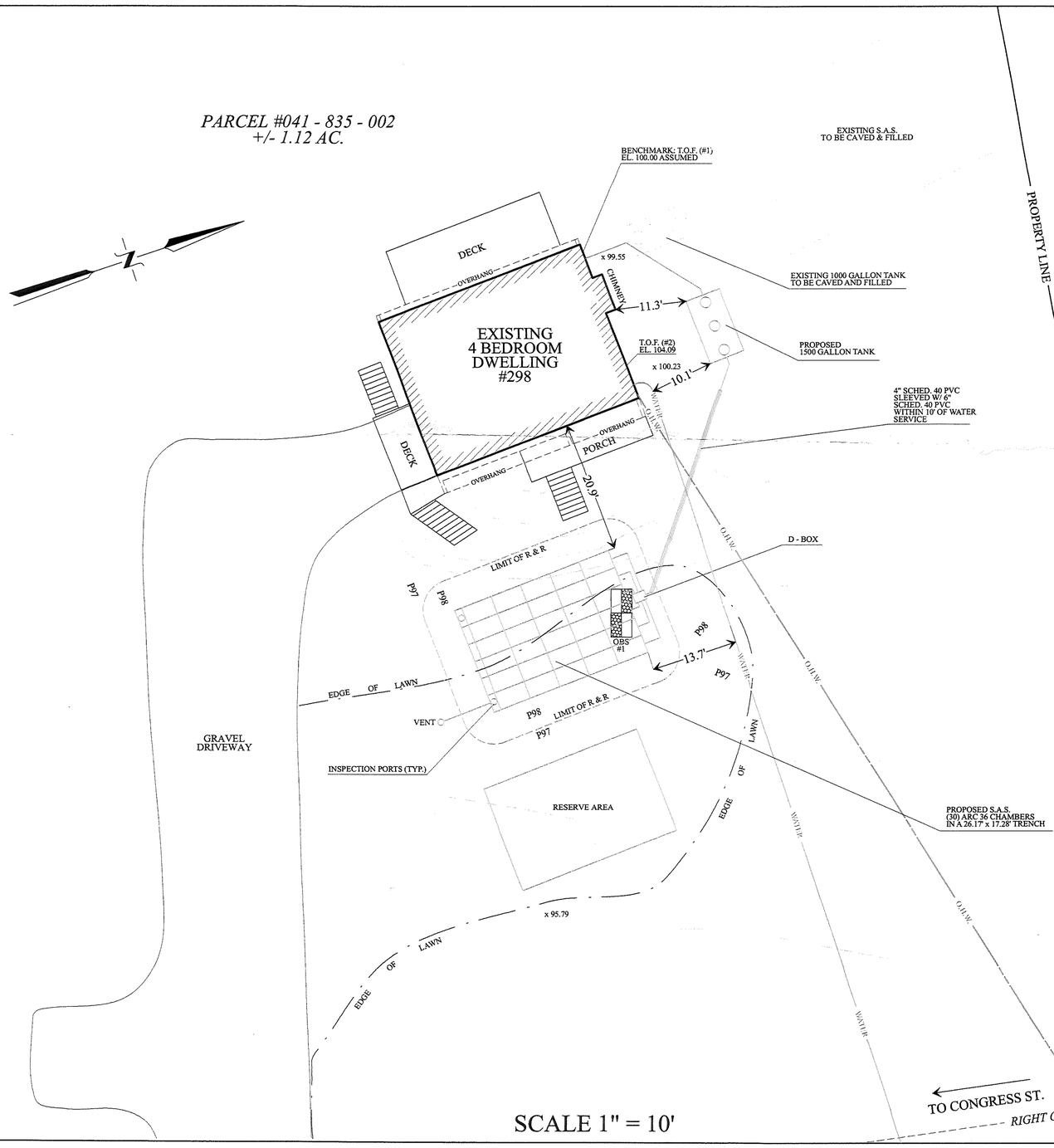
CROSS SECTION
NOT TO SCALE





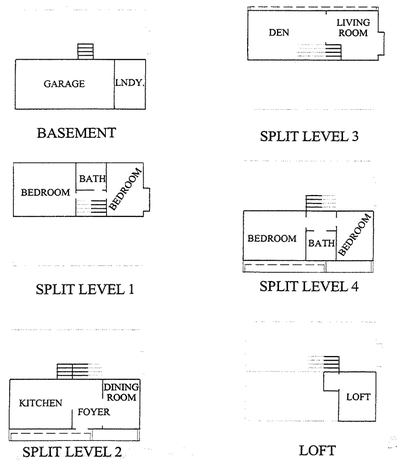
LOCUS PLAN NOT TO SCALE

PARCEL #041 - 835 - 002
+/- 1.12 AC.



SCALE 1" = 10'

FLOOR PLAN
NOT TO SCALE



DESIGN CALCULATIONS

EXISTING BEDROOMS	4	
PROPOSED BEDROOMS	4 @ 110 G.P.D.=	440 G.P.D.
NUMBER OF ROWS	6	
NUMBER OF UNITS PER ROW	5	
NUMBER OF CHAMBERS	30	
NUMBER OF COUPLINGS	6	
DEPTH BELOW INVERT	0.59	
LENGTH OF BED	26.17	
WIDTH OF BED	17.28	
TOTAL CHAMBER LENGTH	157.02	
LTAR	0.60	
SQ.FT. MIN.	734	
SQ.FT. PER X235253 @ 4.8	753.70	
CAPACITY TOTAL	452.22	

THIS SEPTIC SYSTEM IS NOT DESIGNED TO ACCOMODATE A GARBAGE DISPOSAL

GENERAL NOTES

ALL PIPING TO BE SCHEDULE 40 P.V.C.

ALL LOCATIONS OF UTILITIES SHOWN ARE AS MARKED BY DIG-SAFE AND ARE TO BE VERIFIED BY INSTALLER PRIOR TO CONSTRUCTION.

THERE ARE NO KNOWN WETLANDS WITHIN 150' OF THE PROPOSED LEACHING FACILITY UNLESS SHOWN.

THERE ARE NO KNOWN POTABLE WELLS WITHIN 150' OF THE PROPOSED LEACHING FACILITY.

THERE ARE NO KNOWN IRRIGATION WELLS WITHIN 100' OF THE PROPOSED LEACHING FACILITY.

THIS PROPERTY DOES NOT FALL WITHIN A ZONE II OF A WELLHEAD PROTECTION AREA

THIS PROPERTY DOES NOT FALL WITHIN A FLOOD ZONE AS SHOWN ON FIRM MAP 25023C0256J DATED 7/17/2012

THIS DESIGN DOES REQUIRE VARIANCES TO TITLE 5 (310 C.M.R. 15.00) OR DUXBURY SUPPLEMENTAL REGULATIONS

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH TITLE 5 AND DUXBURY SUPPLEMENTAL REGULATIONS.

ALL SYSTEM COMPONENTS SHALL BE MARKED WITH 1" WASHERS

IN-LINE ELEVATIONS PROPOSED AS-BUILT

INV. @ HSE	97.29
INV INTO TANK	97.05
INV OUT OF TANK	96.80
INV INTO D-BOX	96.40
INV OUT OF D-BOX	96.23
INV INTO ARC 36	96.13
BOTTOM OF ARC 36	99.54
SEPARATION PROVIDED	3.04'
WATER TABLE	92.5 (ADJUSTED WATER TABLE)
BOTTOM OF OBS HOLE	90.4

NONE ENCOUNTERED

SURVEY INFORMATION

PROPERTY LINE DATA TAKEN FROM
PLANS DRAWN BY ROBERT B. DELANO
ON JULY 9, 1971 ON FILE AT REG. OF DEEDS
PLAN BOOK 16 PAGE 160

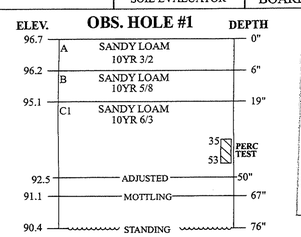
PLAN TO BE USED FOR INSTALLATION OF SEPTIC SYSTEM ONLY

BENCH MARK -
TOP OF FOUNDATION (#1) EL. 100.00 ASSUMED

SOIL LOGS

DATE :	OBSERVED BY:	WITNESSED BY:
6/25/2020	FREEMAN BOYNTON III SOIL EVALUATOR	TRACY MAYO BOARD OF HEALTH

OBS. HOLE #1



RECEIVED
AUG 19 2020
BOARD OF HEALTH
DUXBURY, MA 02332

FRIMPTER ADJUSTMENT

Duxbury (D4W) 79

	INPUT
96.7	measured elevation (ft.)
76	measured depth to water (in.)
6/23/2020	month/year of monthly well data
8.29	monthly well info
6.33	measured depth to water table
6.1	yearly well info
4.0	4.0= 10% exceedence in sand
4.04	yearly well info
2.17	adjustment value
4.17	adjustment to measured depth
	OUTPUT
92.53	adjusted water table elevation (ft.)
50	adjusted depth to water (in.)

WATER SUPPLY LOCATIONS LIST

PARCEL NUMBER	STREET ADDRESS	SUPPLY TYPE
041 - 835 - 002	298 CONGRESS ST	TOWN WATER
041 - 835 - 003	300 CONGRESS ST	TOWN WATER
041 - 502 - 008	0 CONGRESS ST	TOWN WATER
041 - 901 - 047	45 PLANTATION DR	TOWN WATER
041 - 901 - 048	33 PLANTATION DR	TOWN WATER
041 - 901 - 049	19 PLANTATION DR	TOWN WATER
042 - 835 - 001	296 CONGRESS ST	TOWN WATER
042 - 901 - 050	314 CONGRESS ST	TOWN WATER

VARIANCES

DUXBURY SUPPLEMENTAL REGS

SECTION 1.11 (1A) GROUNDWATER SEPARATION

1. THE PROPOSED LEACHING FIELD IS TO BE CONSTRUCTED 4.00' ABOVE MAXIMUM GROUND WATER. (DUXBURY REGULATIONS REQUIRE 5.0' WHERE THE PERC RATE IS GREATER THAN 2 MINS/INCH.)

LOCAL UPGRADE APPROVAL

(b) THE LOCAL APPROVING AUTHORITY MAY REDUCE THE REQUIRED FOUR FOOT SEPARATION (IN SOILS WITH A RECORDED PERCOLATION RATE OF MORE THAN TWO MINTES PER INCH) .... BETWEEN THE BOTTOM OF THE SOIL ABSORPTION SYSTEM AND THE HIGH GROUNDWATER ELEVATION ONLY IF ALL OF THE FOLLOWING CONDITIONS ARE MET:

2. A MINIMUM THREE FOOT SEPARATION (IN SOILS WITH A RECORDED PERCOLATION RATE OF MORE THAN TWO MINUTES PER INCH) .... BETWEEN THE BOTTOM OF THE SOIL ABSORPTION SYSTEM AND THE HIGH GROUNDWATER ELEVATION IS MAINTAINED.

1. THE PROPOSED LEACHING FIELD IS TO BE CONSTRUCTED 3.04' ABOVE MAXIMUM GROUND WATER.

REMOVE AND REPLACE

ALL UNSUITABLE MATERIALS ARE TO BE REMOVED FOR A DISTANCE OF 5' IN ALL DIRECTIONS AROUND PROPOSED LEACHING FACILITY TO THE LAYER C1 OF SANDY LOAM (OBS# 1) APPROX. ELEVATION 95.10 AND REPLACED WITH CLEAN SAND AS REQUIRED BY 310 CMR 15.255(3)

COMMONWEALTH OF MASSACHUSETTS
ROBERT W. CROWELL
CIVIL
No. 39520
REGISTERED PROFESSIONAL ENGINEER

8-13-20
ROBERT CROWELL DATE

I CERTIFY THAT THIS PLAN CONFORMS TO TITLE 5 AND DUXBURY B.O.H. REGULATIONS (EXCLUDING WAIVERS SPECIFIED)

PLAN SHOWING:
PROPOSED SEPTIC SYSTEM REPAIR IN DUXBURY

FOR: GLADYS COVINO	DRAWN BY: NICK MOSCARITOLO
	DESIGN & CHECKED BY: FREEMAN BOYNTON, JR. & ROBERT CROWELL
LOC: 298 CONGRESS STREET	REVISIONS: DESCRIPTION: DATE:
LOT #: 041 - 835 - 002	DATE: JUNE 29, 2020

DUXBURY CONSTRUCTION, LLC.
P.O. BOX 2514 DUXBURY MASSACHUSETTS 781 934 0000