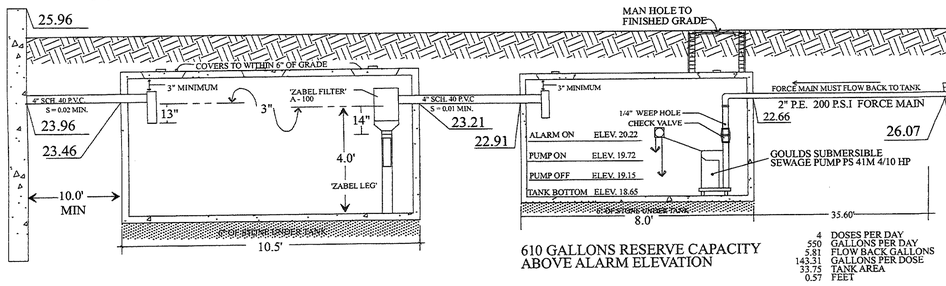
PROPOSED 1500 GALLON TANK

MONOLITHIC AND BITUMINOUS SEALCOAT
NOT TO SCALE



PROPOSED 1000 GAL.PUMP CHAMBER

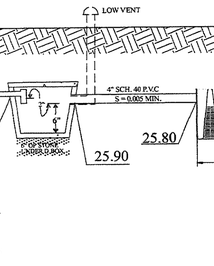
MONOLITHIC AND BITUMINOUS SEALCOAT
NOT TO SCALE

610 GALLONS RESERVE CAPACITY
ABOVE ALARM ELEVATION

4	DOSES PER DAY
550	GALLONS PER DAY
5.81	FLOW BACK GALLONS
143.31	GALLONS PER DOSE
33.75	TANK AREA
0.57	FEET

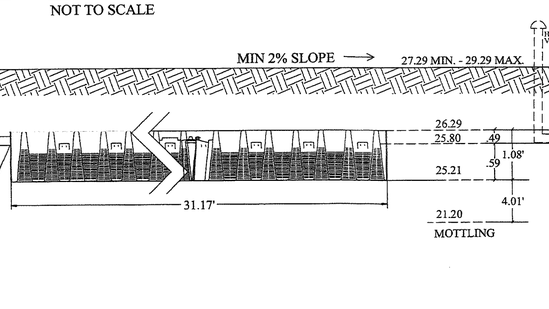
DISTRIBUTION BOX

NOT TO SCALE



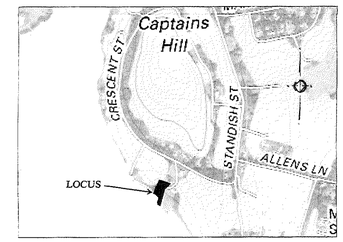
ARC 36 STANDARD CAPACITY INFILTRATOR DETAIL

NOT TO SCALE

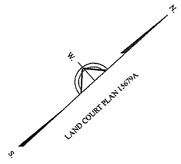


CROSS SECTION

NOT TO SCALE

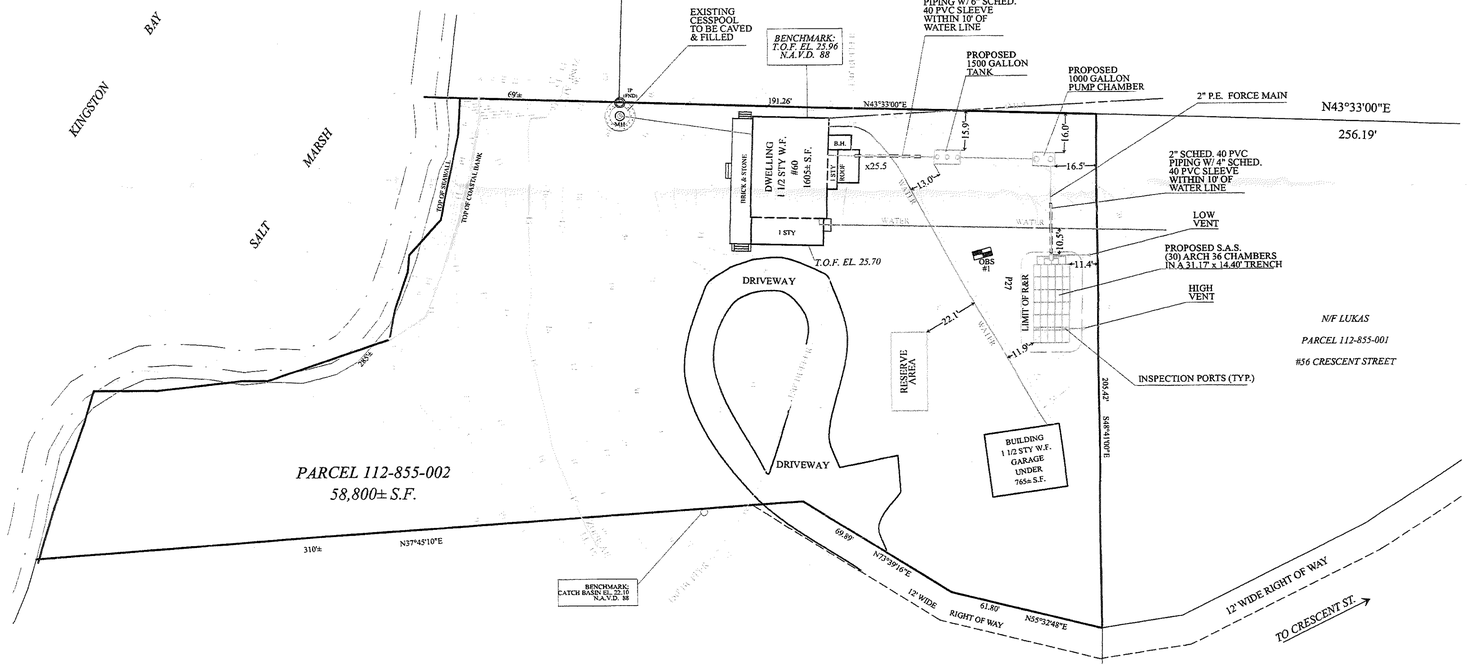


LOCUS PLAN
NOT TO SCALE



BUOYANCY CALCULATIONS

1500 GALLON MONO 2-COMPARTMENT SEPTIC TANK		1000 GAL MONO PUMP CHAMBER	
WEIGHT OF TANK	12,000 LBS.	WEIGHT OF TANK	8,000 LBS.
SOIL DEPTH OVER TANK	2.9'	SOIL DEPTH OVER TANK	6.05'
SOIL WEIGHT OVER TANK	13,097.70 LBS	SOIL WEIGHT OVER TANK	30,969.71 LBS
DOWNWARD FORCE	25,097.70 LBS	DOWNWARD FORCE	38,969.71 LBS
DEPTH OF TANK UNDER WATER	2.58'	DEPTH OF TANK UNDER WATER	3.13'
UPWARD FORCE	9,584.66 LBS	UPWARD FORCE	9,089.04 LBS
DOWNWARD FORCE EXCEEDS UPWARD FORCE BY	2.62 : 1	DOWNWARD FORCE EXCEEDS UPWARD FORCE BY	4.29 : 1



SCALE 1" = 30'

VARIANCES

DUXBURY SUPPLEMENTAL REGS
SECTION 1.11 (1B) GROUNDWATER SEPARATION

1. THE PROPOSED LEACHING FIELD IS TO BE CONSTRUCTED 5.00' ABOVE MAXIMUM GROUND WATER. (DUXBURY REGULATIONS REQUIRE 6.0' WHERE THE PERC RATE IS LESS THAN 2 MINS/INCH.)

LOCAL UPGRADE APPROVAL

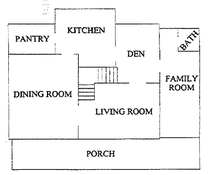
(h) THE LOCAL APPROVING AUTHORITY MAY REDUCE...THE REQUIRED FIVE FOOT SEPERATION IN SOILS WITH A RECORDED PERCOLATION RATE OF TWO MINUTES OR LESS PER INCH BETWEEN THE BOTTOM OF THE SOIL ABSORPTION SYSTEM AND THE HIGH GROUNDWATER ELEVATION ONLY IF ALL OF THE FOLLOWING CONDITIONS ARE MET:

2. ...A MINIMUM FOUR FOOT SPERATION IN SOILS WITH A RECORDED PERCOLATION RATE OF TWO MINUTES OR LESS PER INCH BETWEEN THE BOTTOM OF THE SOIL ABSORPTION SYSTEM AND THE HIGH GROUNDWATER ELEVATION IS MAINTAINED.

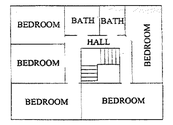
1. THE PROPOSED LEACHING FIELD IS TO BE CONSTRUCTED 4.01' ABOVE MAXIMUM GROUND WATER.

FLOOR PLAN

NOT TO SCALE



FIRST FLOOR



SECOND FLOOR

WATER SUPPLY LOCATIONS LIST

PARCEL NUMBER	STREET ADDRESS	SUPPLY TYPE
112 - 855 - 001	56 CRESCENT STREET	TOWN WATER
113 - 855 - 003	58 CRESCENT STREET	TOWN WATER
112 - 500 - 055	0 CRESCENT STREET	TOWN WATER

COMMONWEALTH OF MASSACHUSETTS
FREEMAN BOYNTON, III NO. 1396
REGISTERED SANITARIAN

8/27/20
FREEMAN BOYNTON III R.S. DATE

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

DESIGN CALCULATIONS

EXISTING BEDROOMS 5
PROPOSED BEDROOMS 5
@ 110 G.P.D.= 550 G.P.D.

NUMBER OF ROWS	5
NUMBER OF UNITS PER ROW	6
NUMBER OF CHAMBERS	30
NUMBER OF COUPLINGS	5
DEPTH BELOW INVERT	0.59
LENGTH OF BED	31.17
WIDTH OF BED	14.40
TOTAL CHAMBER LENGTH	155.85
LTAR	0.74
SQ.FT. MIN.	744
SQ.FT. PER X235253 @ 4.8	748.08
CAPACITY TOTAL	553.58

THIS SEPTIC SYSTEM IS NOT DESIGNED TO ACCOMODATE A GARBAGE DISPOSAL

IN-LINE ELEVATIONS

	PROPOSED	AS-BUILT
INV. @ HSE	23.96	
INV INTO TANK	23.46	
INV OUT OF TANK	23.21	
INV INTO PUMP	22.91	
INV OUT OF PUMP	22.66	
INV INTO D-BOX	26.07	
INV OUT OF D-BOX	25.90	
INV INTO ARC 36	25.80	
BOTTOM OF ARC 36	25.21	
SEPARATION PROVIDED	4.01'	
WATER TABLE	21.20 (MOTTLING)	
BOTTOM OF OBS HOLE	2.4	

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 VERIFIE 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 WITH 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

PART OF THIS PROPERTY DOES FALL WITHIN A FLOOD ZONE AS SHOWN ON FIRM MAP 25023C0243K DATED 11/04/2016

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

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

ALL SYSTEM COMPONENTS SHALL BE MARKE WITH 1" WASHERS

SURVEY INFORMATION

PROPERTY LINE DATA TAKEN FROM:

REFERENCE LAND COURT PLAN #15679A

PLAN TITLED "CERTIFIED PLOT PLAN ON CRESCENT STREET IN DUXBURY MASSACHUSETTS DRAWN BY S. ROBERT PHINNEY ON JULY 14, 2020

PLAN TO BE USED FOR INSTALLATION OF SEPTIC SYSTEM ONLY

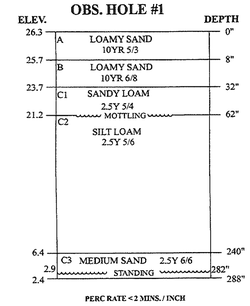
BENCH MARK -

TOP OF FOUNDATION EL. 25.96 N.A.V.D. 88

SOIL LOGS

DATE :	OBSERVED BY:	WITNESSED BY:
7/28/2020	FREEMAN BOYNTON III SOIL EVALUATOR	TRACY MAYO BOARD OF HEALTH

OBS. HOLE #1



PERC RATE <2 MINS. / INCH

*PERCOLATION TESTING SHALL BE PERFORMED AT TIME OF CONSTRUCTION

RECEIVED
AUG 31 2020
BOARD OF HEALTH
DUXBURY, MASS.

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 C3 OF MEDIUM SAND (OBS# 1) APPROX. ELEVATION 6.40 AND REPLACED WITH CLEAN SAND AS REQUIRED BY 310 CMR 15.255(3)

PLAN SHOWING:
PROPOSED SEPTIC SYSTEM REPAIR IN DUXBURY

FOR: ELIAS SOLOMON

LOC: 60 CRESCENT STREET

LOT #: 112 - 855 - 002

DATE: JULY 15, 2020

DRAWN BY: NICK MOSCARITOLO
DESIGN & CHECKED BY: FREEMAN BOYNTON, JR. & ROBERT CROWELL

REVISIONS:	DESCRIPTION:	DATE:

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