

Note: 4 FEET PERMISSIBLE MATERIAL TO BE VERIFIED AT THE TIME OF INSTALLATION.

Note: 5 FOOT STRIP/OUT ALL AROUND TO ELEV. 1.00 or more. Remove soil, replace with clean coarse sand w/perc. rate less than or equal to 2 min./in. before & after placement.

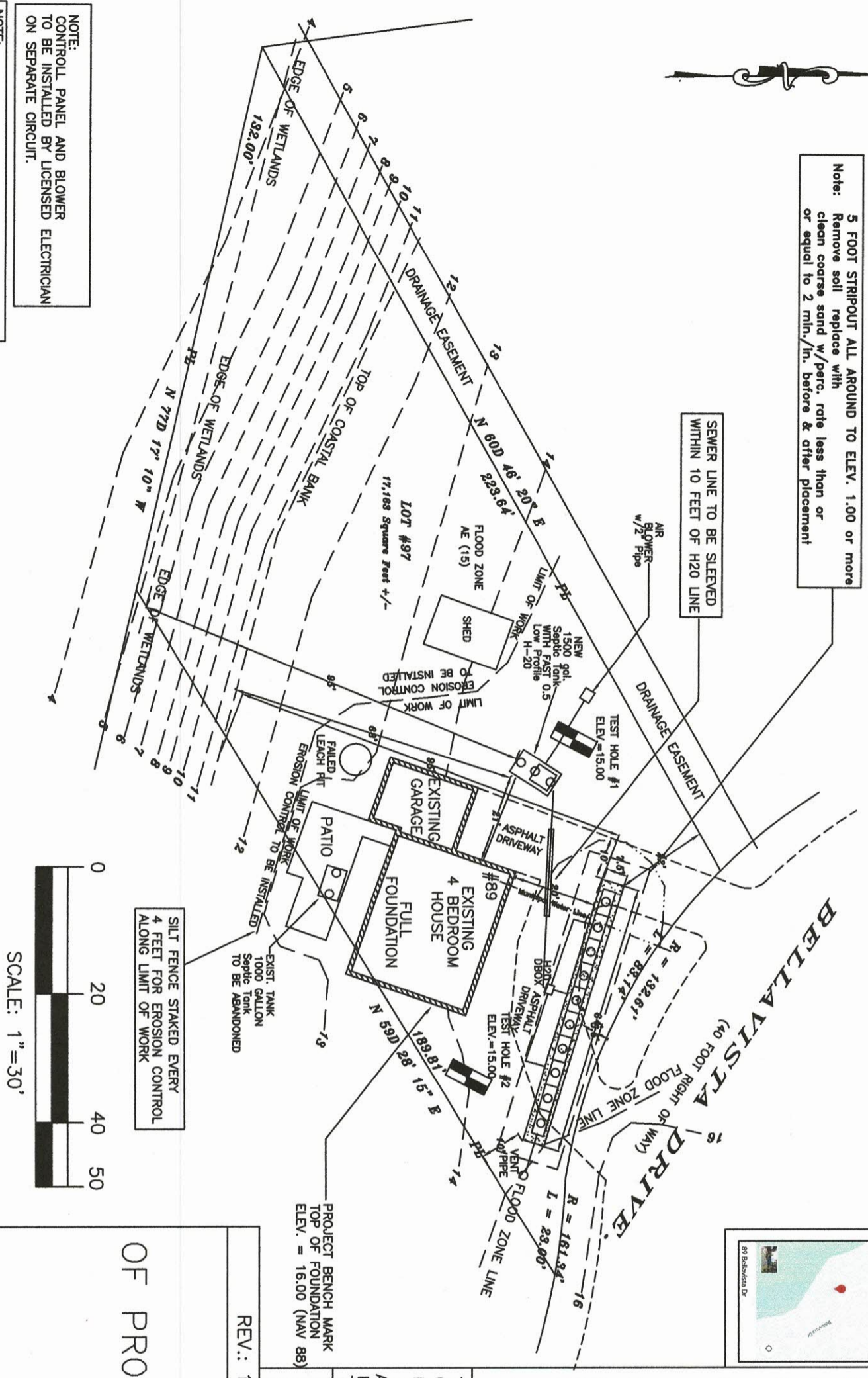
SEWER LINE TO BE SLEEVED WITHIN 10 FEET OF H2O LINE

NOTE: CONTROL PANEL AND BLOWER TO BE INSTALLED BY LICENSED ELECTRICIAN ON SEPARATE CIRCUIT.

NOTE: SYSTEM IS A MICROFAST 0.5 I/A DENITE SYSTEM

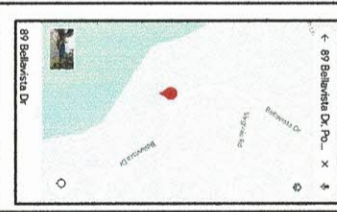
- BOH VARIANCE REQUESTS:**
- VARIANCE DOUBLE SLEEVE SEWER LINE OVER WATER LINE
 - VARIANCE TO INSTALL A SEPTIC TANK 150 FEET FROM A WETLAND AND COASTAL BANK.
 - VARIANCE TO INSTALL AN SAS 5.5 FEET FROM BELLAVISTA AVENUE

- CONSERVATION VARIANCE REQUESTS:**
- VARIANCE REQUESTED TO SITE A SEPTIC TANK AND SAS W/IN 100 FEET OF A COASTAL BANK
 - VARIANCE REQUESTED TO SITE A SEPTIC TANK W/IN 100 FEET OF A WETLAND
 - VARIANCE REQUESTED TO SITE A SEPTIC TANK & AN SAS W/IN AN AE-15 FLOOD ZONE



INNOVATIVE/ALTERNATIVE TREATMENT SYSTEM NOTES:

- A MICROFAST 0.5 I/A Technology has been incorporated into this design to allow an increase in the Nitrogen Loading Rate per Acre of land.
- When installed under the provided use approved issued by MA DEP The Fast 0.5 Technology in conjunction with a Title Compliant Soil Absorption System, will allow an increase in Nitrogen Loading to 880 Gd/Day per Acre.
- The Maximum average flow based on this lot of 33,898 SF is 556 GPD using an I/A technology Fast 0.5 Unit.
- GENERAL Use approved for Microfast 0.5 DATED 8/17/2017 Member: Transmittal No.: X236074
- The Blower and Alarm Panels to be wired on separate Dedicated Circuits.



GENERAL NOTES

- Contractor is responsible for Digsafe notification, Verification of Utilities and protection of all underground utilities and pipes.
- The septic tank and distribution box shall be set level on 6" of 3/4"-1 1/2" stone.
- Backfill should be clean sand or gravel with no stones over 3" in size.
- This system is subject to inspection during installation by Shay Environmental Services
- The contractor shall install this system in accordance with Title V of the Massachusetts state code, the approved plan and Local Regulations.
- If, during installation the contractor encounters any soil conditions or site conditions that are different from those shown on the soil log or in our design installation must halt & immediate notification be made to Shay Environmental Services
- No vehicle or heavy machinery shall drive over the septic system unless noted as H-20 septic components.
- Install Tuf-Tite gas baffles or equals on all outlet tee ends.
- All Distribution Lines shall be 4" diameter Schedule 40 NSF PVC pipes.
- All solid piping, tees & fittings shall be 4" diameter Schedule 40 NSF PVC pipes with water tight joints.
- Municipal Water is Connected to ALL OF The Abutting Properties Within 150 Feet.

THE PROPERTY LINES ARE APPROXIMATE AND COMPILED FROM THE SURVEY PLAN BY NEWELL B SNOW ENTITLED: "SUBDIVISION PLAN OF LAND IN BOURNE MA" DATED JUNE 15, 1967, LC PLAN 12861-0 PAGE 1 AND IS NOT INTENDED TO BE A SURVEY PLOT PLAN IT SHOULD BE USED FOR NO PURPOSE OTHER THAN THE SEPTIC SYSTEM INSTALLATION.

EXISTING SAS TO BE PUMPED OUT AND FILLED IN PLACE NOTE: ANY STRIPPED OUT SOIL CONTAINING LEACHATE FROM THE EXISTING SAS PIT TO BE DISPOSED OF AS PER BOARD OF HEALTH SPECIFICATIONS.

REV: 10/5/23- PER BOH EMAIL 10/4/23

PLOT PLAN OF PROPOSED SEPTIC SYSTEM UPGRADE

PREPARED FOR
JOSEPH FREW
AT
89 BELLAVISTA DRIVE
POCASSET, MA
ASSESSORS ID: 43.1-212-0

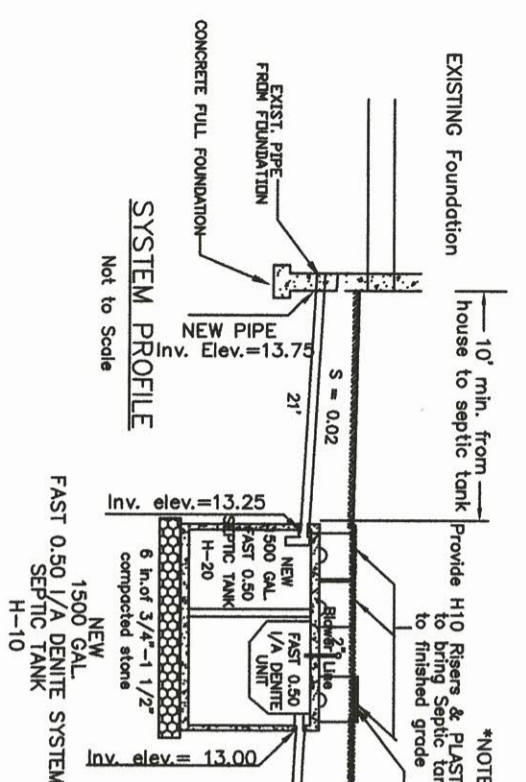
PREPARED BY:
CARMEN E. SHAY
ENVIRONMENTAL SERVICES

P.O. Box 1576
MASHPEE, MA 02649
TEL/FAX : 508-294-7498



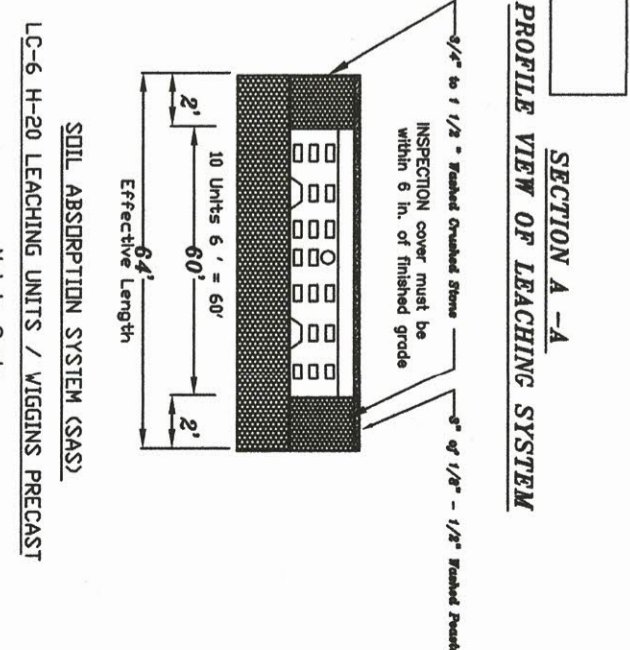
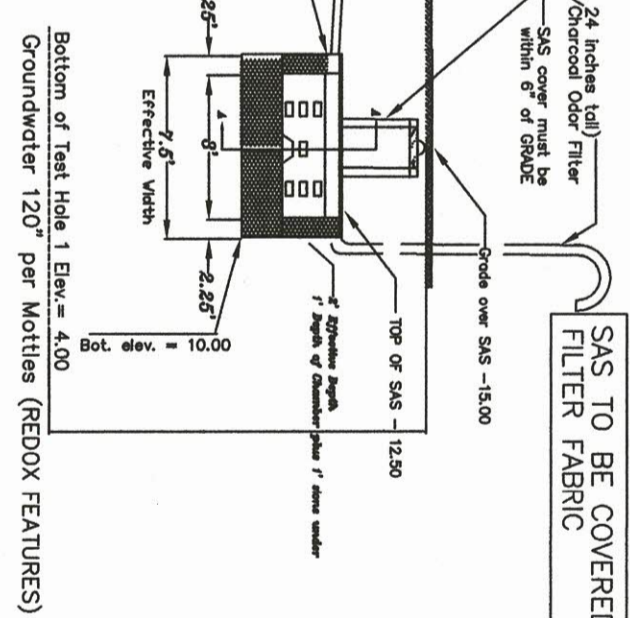
SCALE: 1"=30'
PROJECT#89 BELLAVISTA
DRAWN BY: CES
DATE: JULY 14, 2023
FILENAME: 89 BELLAVISTA.DWG
SHEET 1 OF 2





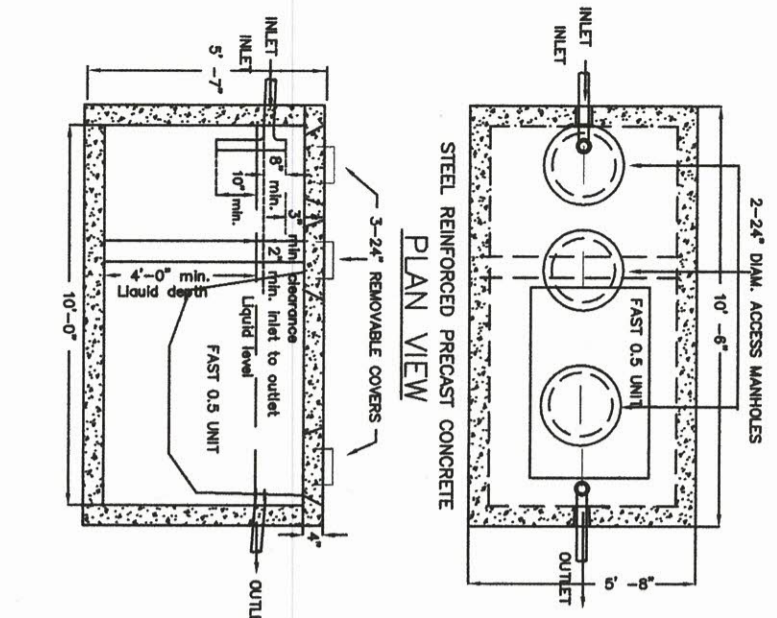
NOTE: ALL COMPONENTS MUST HAVE RISERS TO WITHIN 6" BELOW GRADE

5 FOOT STRIP-OUT ALL AROUND TO ELEV. 1.00 OR MORE
 Note: Remove soil down to Med Sand LAYER & replace with clean coarse sand w/perc. rate less than or equal to 2 min./in. before & after placement.



SOIL ABSORPTION SYSTEM (SAS)
 LC-6 H-20 LEACHING UNITS / WIGGINS PRECAST
 Not to Scale

NEW FAST 0.5 TANK LOW PROFILE SYSTEM I/A DENITE SYSTEM SEPTIC TANK



THE ACCESS COVERS FOR THE SEPTIC TANK, DISTRIBUTION BOX AND LEACHING COMPONENT SHALL BE RAISED TO FINISHED GRADE.

PERCOLATION TEST

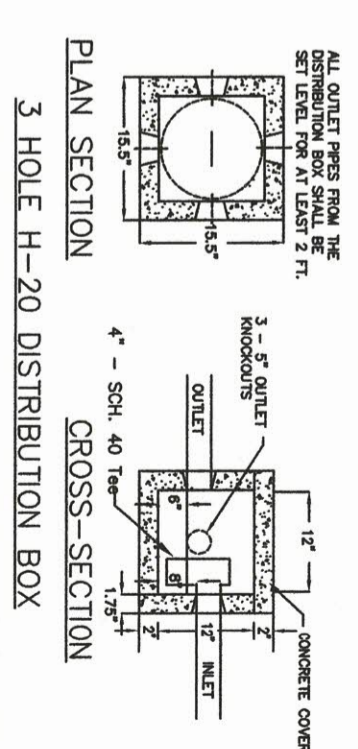
Date of Percolation Test: JUNE 9, 2023
 Test Performed By: CARMEN E. SHAY, R.S., C.S.E.
 Results Witnessed By: TERRI GUARINO (BOURNE BOH)
 EXCAVATOR: CARMEN SHAY
 Percolation Rate: UNKNOWN

DEPTH	SOILS	ELEV.	DEPTH	SOILS	ELEV.
0		15.00	0		15.00
0'-12"	Loamy Sand Ap	14.00	0'-20"	Loamy Sand Ap	13.67
12'-36"	Loamy Sand 10 YR 5/6 Bw	12.00	20'-36"	Loamy Sand 10 YR 5/6 Bw	12.00
36'-52"	MED SAND 2.5 Y 7/4 C1	10.67	36'-132"	FINE LOAMY SAND w/SILT 2.5 Y 8/4 C2	9.00
52'-132"	FINE LOAMY SAND w/SILT 2.5 Y 8/4 C2	9.00			

Perc #1
 Depth to Perc Sieve Taken @ 132"
 Perc Rate= CLASS II SOIL (0.60 LATR)
 Groundwater 120" per Mottles (REDOX FEATURES)
 No Observed ESHWT @ No STANDING WATER
 ADJUSTED H2O Elev. = 120" per MOTTLES

Note: 4 FEET PERMEABLE MATERIAL TO BE VERIFIED AT THE TIME OF INSTALLATION.

REV: 10/5/23 - PER BOH EMAIL 10/4/23



PLOT PLAN OF PROPOSED SEPTIC SYSTEM UPGRADE

PREPARED FOR
 JOSEPH FREW
 AT
 89 BELLAVISTA DRIVE
 PARCEL ID: 32-15-00F-017
 POCASSET, MA

PREPARED BY:
SHAY ENVIRONMENTAL SERVICES



P.O. Box 1576
 MASHPEE, MA 02649
 TEL/FAX : 508-294-7498

SCALE: 1"=20'
 PROJECT#89 BELLAVISTA
 DRAWN BY: CES
 DATE: JULY 14, 2023
 FILENAME: 89 BELLAVISTA.DWG
 SHEET 2 OF 2

TYPICAL (H-20 LOADING) 1500 GALLON FAST SEPTIC TANK

Design Calculations
 Number of Bedrooms: 4 Equivalent to 440 Gal./Day
 Garbage Grinder: No
 Leaching Capacity Proposed: 440 Gal./Day Minimum
 Septic Tank : - 2 x 440 Gal./Day = 880 USE NEW, 1,500 GAL. Septic Tank.

SOIL ABSORPTION AREA: Using percolation rate of <2 min./inch
 Bottom Area: 0.60 gal./day/sq. ft. x 320 sq. ft. = 236.8 gallons/day
 TOTAL PERIMETER Area: 0.60 gal./day/sq. ft. x 276 sq. ft. = 204.24 gallon/day
 Providing: =441.04 gallons/day

Use: (10) LC-6 H-20 CONCRETE CHAMBERS, HAVING A 1' EFFECTIVE DEPTH, (3' W x 6' L) TO BE USED WITH 1' WASHED STONE ON THE SIDES AND 2' WASHED STONE ON THE ENDS AND 1 FOOT OF STONE UNDER ENTIRE SAS AS SHOWN.