



## Truro Board of Health

Tuesday August 6, 2024 at 4:30 PM

### **Truro Board of Health Notice of Regular (Hybrid) Meeting**

Meeting will open at 4:30 PM in the Select Board Chambers at Truro Town Hall on the 2nd floor.  
The Truro Town Hall is located at 24 Town Hall Road

This will be a hybrid meeting (in-person and remote access). Citizens in Truro can view the meeting on Channel 8 and on the homepage of the Town of Truro website on the "Truro TV Channel 8" button found under "Helpful Links". Once the meeting has started, click on the green "Watch" button in the upper right of the page. **To join the meeting by phone or to provide comment during the meeting, please call-in toll free at 1-305-224-1968 and enter the following Meeting ID when prompted: Meeting ID: 884 7580 5887** To join this Zoom meeting from your computer, tablet or smartphone enter <https://us02web.zoom.us/j/88475805887> Please note that there may be a slight delay between the meeting and the live-stream (and television broadcast).

If you are watching the meeting and calling in, please lower the volume on your computer or television during public comment so that you may be heard clearly. We ask that you identify yourself when calling in; citizens may also provide public comment for this meeting by emailing the Health Agent at [ebeebe@truro-ma.gov](mailto:ebeebe@truro-ma.gov) with your comments.

**I. PUBLIC COMMENT** Please note that the Commonwealth's Open Meeting Law limits any discussion by members of the Board of an issue raised to whether that issue should be placed on a future agenda

### **II. AGENDA ITEMS**

1. **Renewal of expired, previously approved variances to Title 5 and TBoH regulations:**  
7 Hughes Road, Linnet Hultin
2. **Title 5 and TBOH regulations variance requests:** 32 Shore Road, Christian Union Church
3. **Title 5 and TBOH regulations variance requests:** 2 Adams Way, Adam Luster & Edwidge Yingling, (*continued from 7/16/2024*)
4. **Change of Manager:** Pilgrim Beach Village, 174 Shore Road – Roberta Schnabel/Todd Souza

### **III. MINUTES**

### **IV. REPORTS**

Report of the Chair  
Health Agent's Report



PAID  
CC

✓ 2024 14

Fee: \$75.00



TRURO HEALTH &  
CONSERVATION DEPARTMENT  
24 Town Hall Road, Truro 02666

**APPLICATION FOR BOARD OF HEALTH VARIANCES**

Date: 7/3/24

Property Owner's Name: Linnnet Hultin

Mailing Address: PO BOX 759 N TRURO MA 02652

Address of Property: 7 Hughes Rd

Map and Parcel Number: Map # 39 Parcel # 146

Design Engineer/Sanitarian David Lajoie

Firm/Company Name: FELCO Phone #: NA

Address: NA

Please check type of variance requested:

☒ Title 5 Variance Request: Section 310 CMR 15.211, 15.212, 14.405(1)(c)

☐ Board of Health Variance Request: Section/Article Section VI, Article 9 setbacks to wetlands

Linnnet Hultin  
Signature (Representative)

7/3/24

Date

7/2/24

[Signature]  
Signature (Property Owner)

HEALTH DEPARTMENT  
TOWN OF TRURO

JUL 03 2024

RECEIVED BY:

Linnet Hultin  
7 Hughes Rd  
PO Box 759  
N Truro, MA 02652

07/3/24

To Whom it May Concern:

The variances being applied for (V#2021-09) were previously approved on July 6, 2021, but due to financial constraints the system has not yet been installed. Unfortunately during this time our septic designer (David Lajoie of Felco, Inc) has retired. We are working with JF Noons on re-pricing the proposed septic system and intend to have it installed before the end of 2024, as soon as possible once the variances have been approved.

Thank you for your consideration.



Linnet Hultin  
Property Owner

HEALTH DEPARTMENT  
TOWN OF TRURO

JUL 03 2024

RECEIVED BY:

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July 12, 2021

FELCO, Inc.  
PO Box 1366  
Orleans, MA 02653

**RE: 7 Hughes Rd (39-146), Linnet Hultin, V#2021-09 Variance to 310 CMR 15.211, 15.212, 15.405(1)(c) & Truro BOH Regulations Section VI, Article 9 & 10; plan date 6/21/2021**

Dear Mr. Lajoie,

Please be advised that the Truro Board of Health at their regularly scheduled meeting on July 6, 2021 made a motion regarding the above-referenced variance request.

**FOR YOUR INFORMATION, THE MOTION STATED:**

**Ms. Grimm motioned to approve the variances as requested, noting that the Operation & Maintenance agreement shall conform with our current regulations dated 7/1/2021:**

**310 CMR 15.211**

- 1.) 4' from septic tank to property line (street)
- 2.) 4' from leach area to property line (street)
- 3.) 3' from leach area to property line (parcel 143)

**310 CMR 15.212**

- 4.) 1.8' from bottom of leach area to groundwater

**310 CMR 15.405(1)(c)**

- 5.) 75% leach area capacity

**Truro Board of Health Regulations, Article 9 & 10**

- 6.) 46'+/- from septic tank to wetland
- 7.) 116'+/- from leach area to wetland

**Mr. Koll seconded. Vote: 5-0-0, motion carries.**

Should you have any questions, please feel free to contact me at 508-214-0202.

Sincerely,

Arozana Davis  
Assistant Health & Conservation Agent

HEALTH DEPARTMENT  
TOWN OF TRURO

JUL 03 2024

RECEIVED BY:



**FELCO, INC.**  
**ENGINEERING**  
**LAND SURVEYING**

P.O. Box 1366 ■ 1 Namskaket Road ■ Orleans, MA 02653 ■ Tel: 508-255-8141 ■ Fax: 508-255-2954 ■ info@felcoengineering.com

October 19, 2021

HEALTH DEPARTMENT  
TOWN OF TRURO

JUL 03 2024

RECEIVED BY:

HEALTH DEPARTMENT  
TOWN OF TRURO

OCT 22 2021

RECEIVED BY:

Emily Beebe  
Truro Health and Conservation Department  
P.O. Box 2030  
Truro, MA 02666

Re: Linnet Hultin  
7 Hughes Road, Truro  
Map 39, Parcel 146

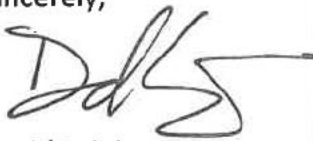
Dear Emily:

Enclosed please find copies of a revised Site & Sewage Plan (dated Rev. 10/13/21) for the property referenced above. These plans have been finalized with the soil testing performed on 7/28/21.

This project received approval from the Board of Health on 7/6/21 and the Conservation Commission on 7/12/21. Since that time, the plan has been revised to remove the retaining wall surrounding the leach area due to the revised high groundwater level. Minor regrading is now part of the design, which is located within the approved work limit. Additionally, the distances to the wetland have not changed.

Please advise if these revisions require a new submittal to the Board.

Sincerely,



David Lajoie  
**FELCO, INC.**

Encls.  
xc: Client

Em, please review  
+ let me know  
if David needs  
to go back  
before BOH or  
Calcom.  
TY  
NO WORRIES  
IT'S A  
BETTER  
PLAN!



# VARIANCE REQUESTS

## 310 CMR 15.211 - DISTANCES

1. 4' FROM SEPTIC TANK TO PROPERTY LINE (STREET)
2. 2' FROM LEACH AREA TO PROPERTY LINE (STREET)
3. 3' FROM LEACH AREA TO PROPERTY LINE (PCL. 143)

## 310 CMR 15.212 - DEPTH TO GROUNDWATER

4. 1.7' FROM BOTTOM OF LEACH AREA TO GROUNDWATER (USE OF INNOVATIVE ALTERNATIVE TECHNOLOGY)

## 310 CMR 15.405 (1)(c) - LEACH AREA CAPACITY

5. 75% LEACH AREA CAPACITY REQUESTED

## TRURO BOARD OF HEALTH REGULATIONS

### SECTION I - ARTICLE 2 - VARIANCES

### SECTION VI - ARTICLE 9 - USE OF I/A TECHNOLOGY

### SECTION VI - ARTICLE 10 - REQUIRED SETBACKS

6. 46' FROM SEPTIC TANK TO WETLAND
7. 116' FROM LEACH AREA TO WETLAND

NOTES: THIS PLAN REQUIRES CONSERVATION COMMISSION APPROVAL.  
ENTIRE LOT WITHIN 100' OF FRESHWATER ISOLATED WETLAND.

HEALTH DEPARTMENT  
TOWN OF TRURO

JUL 03 2024

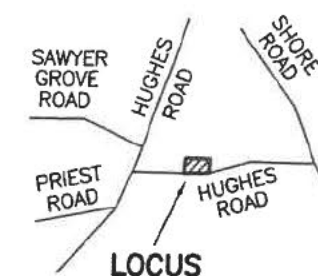
RECEIVED BY: PCL. 142

## PLAN REFERENCES:

DEED BOOK 14938 PAGE 48  
PLAN BOOK 613 PAGE 27 & 28  
PLAN BOOK 422 PAGE 5  
PLAN BOOK 258 PAGE 99  
PLAN BOOK 343 PAGE 73

## LOCUS

(NO SCALE)



LOCUS

## LEGEND

- EXISTING LEACH PIT (APPROX.)
- EXISTING WELL
- EXISTING CONTOUR
- EXISTING WATER LINE (APPROX.)
- EXISTING SEPTIC TANK (APPROX.)
- EXISTING CATCH BASIN
- TEST HOLE
- PROPOSED SEPTIC TANK ADVANTEX UNIT
- PROPOSED CONTOUR
- WORK LIMIT

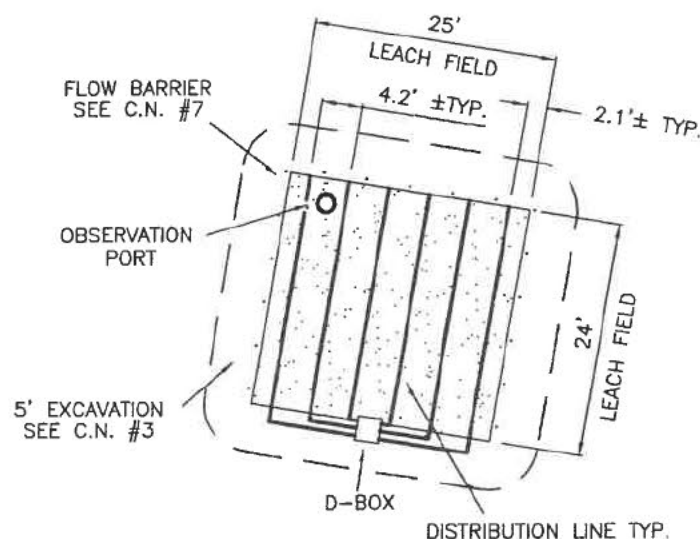
HEALTH DEPARTMENT  
TOWN OF TRURO

OCT 22 2021

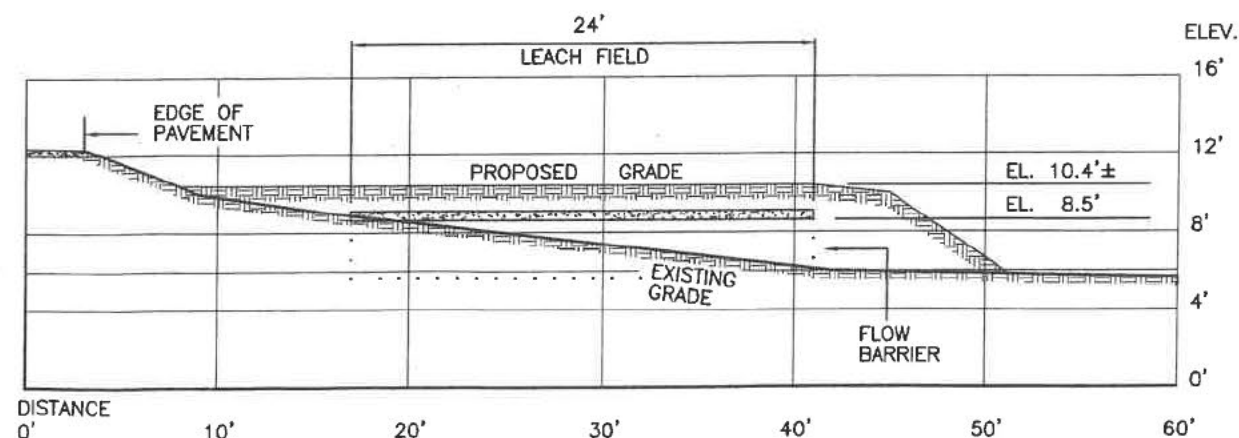
RECEIVED BY:

## SITE & SEWAGE PLAN

LOCUS:	7 HUGHES ROAD		
	TRURO, MA		
PREPARED FOR:	LINNET HULTIN		
	P.O. BOX 759		
	N. TRURO, MA 02652		
REFERENCE: ASSR'S MAP	39	PARCEL	146
SCALE :	1" = 20'	DATE :	5-26-2021
SHEET No. 1 OF 3		JOB No.	21015



LEACH AREA DETAIL  
NO SCALE



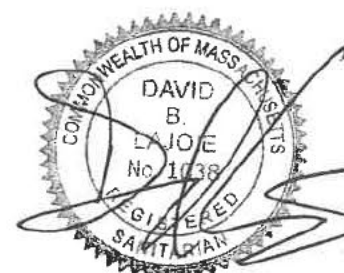
SECTION A-A

SCALE: 1"=10'

THIS PLAN IS PREPARED FOR COMPLIANCE WITH 310 CMR 15.000.  
ALL WELLS NOT SHOWN EXCEED 200' FROM LOCUS SEWAGE.  
VERIFY ZONING AND UTILITY SETBACK DIMENSIONS PRIOR TO CONSTRUCTION.

FELCO, INC.  
ENGINEERING - LAND SURVEYING

P.O. BOX 1366 ORLEANS, MA 02653  
(508) 255-8141 WWW.FELCOENGINEERING.COM

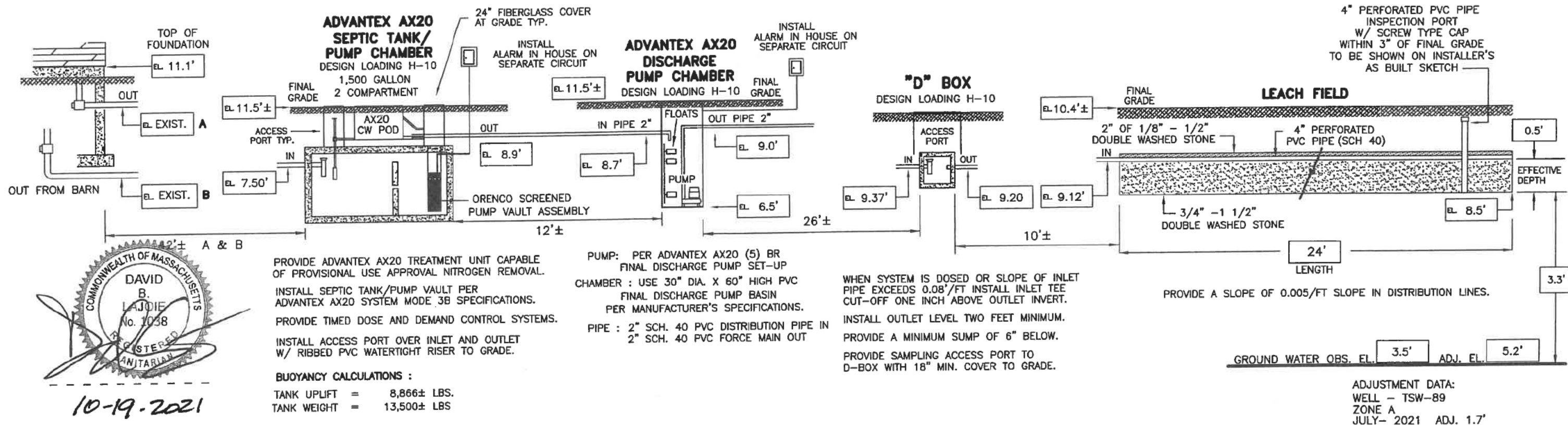


10-19-2021

FILE:21015-OPT.DWG

10-13-2021	MISC. NOTES
8-30-2021	NO RET. WALL
8-10-2021	WORK LIMIT
8-5-2021	SOIL TESTS
6-21-2021	VARIANCES
REVISIONS	





## SECTION VIEW - SEPTIC SYSTEM COMPONENTS

( N. T. S. )

## DEEP OBSERVATION HOLE LOG

1.

EL 7.8'

DATE: 7-28-2021

SOIL EVALUATOR: D. LAJOIE

HEALTH DEPT. WITNESS: A. DAVIS

DEPTH	LOWEST ELEVATION	HORIZON	TEXTURE	STRUCTURE	MOTTUNG	CONSISTENCE
0.0'		A	LOAMY SAND	NO	NO	LOOSE
0.3'	7.5'					
1.5'	6.3'	Cf	FILL			
WATER @ EL. 4.3	3.5'	C	MEDIUM-COARSE SAND	NO	NO	LOOSE
5.5'	2.3'		PERC @ 4.3' <2 MIN/IN			

2.

EL 7.8'

DATE: 7-28-2021

SOIL EVALUATOR: D. LAJOIE

HEALTH DEPT. WITNESS: A. DAVIS

DEPTH	LOWEST ELEVATION	HORIZON	TEXTURE	STRUCTURE	MOTTUNG	CONSISTENCE
0.0'		A	LOAMY SAND	NO	NO	LOOSE
0.5'	6.3'					
1.5'	5.3'	Cf	FILL			
WATER @ 4.3'	3.5'	C	MEDIUM-COARSE SAND	NO	NO	LOOSE
5.5'	2.3'		PERC RATE <2 MIN/IN			

## GENERAL NOTES

- ALL CONTRACTORS AND/OR INSTALLERS ARE RESPONSIBLE FOR PROVIDING AND MAINTAINING A SAFE WORK AREA.
- CONTRACTORS AND/OR INSTALLERS: VERIFY ALL UTILITY LOCATIONS PRIOR TO CONSTRUCTION.
- CONTRACTORS AND/OR INSTALLERS: VERIFY ALL WASTE LINE LOCATIONS PRIOR TO CONSTRUCTION.
- CONSTRUCTION DETAILS TO BE IN ACCORDANCE WITH STATE SANITARY CODE 310 CMR 15.000 AND TOWN BOARD OF HEALTH REQUIREMENTS.
- ELEVATION DATUM IS FROM ☒ U.S.G.S. QUAD. MAP. ☐ N.A.V.D.
- MUNICIPAL WATER IS AVAILABLE ☐ YES ☒ NO
- ANY ALTERATIONS TO DESIGN MUST BE APPROVED BY FELCO, INC. AND TOWN BOARD OF HEALTH.
- ALL EXISTING SEWAGE TO BE PUMPED AND FILLED WITH CLEAN MEDIUM SAND.
- SEPTIC TANKS, DOSING CHAMBERS, GREASE TRAPS, AND DISTRIBUTION BOXES SHALL BE INSTALLED WATERTIGHT.
- WHEN SEPTIC TANK, DOSING CHAMBERS, GREASE TRAPS, AND DISTRIBUTION BOXES ARE PLACED IN FILL, PROVIDE A LEVEL STABLE BASE WHICH HAS BEEN MECHANICALLY COMPACTED. VIRGIN GROUND WITH A 6" CRUSHED STONE BASE IS OTHERWISE ADEQUATE.
- GROUND COVER OVER SEPTIC SYSTEM COMPONENTS SHALL NOT EXCEED 36".
- WHEREVER SEWER LINES MUST CROSS WATER SUPPLY LINES, BOTH PIPES SHALL BE CONSTRUCTED OF CLASS 150 PRESSURE PIPE OR EQUIV. AND SHALL BE PRESSURE TESTED TO ASSURE WATERTIGHTNESS.
- ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED.
- PROVIDE (1) MIN. 4" PERFORATED PVC PIPE INSPECTION PORT PLACED VERTICALLY DOWN TO STONE/SAND INTERFACE W/ SCREW TYPE CAP WITHIN 3" OF FINAL GRADE PER 310 15.240 (13).

## DESIGN

FLOW DETERMINATION ☒ 4 EXISTING BEDROOM DWELLING  
☒ 1 EXISTING BEDROOM BARN  
☒ 5 EXISTING BEDROOM USE TOTAL

GARBAGE GRINDER ☒ NO ☐ YES

FLOW RATE = 550 GAL/DAY

SEPTIC TANK SIZING:  
 550 x 2.0 = 1,100 GAL/DAY

USE: ADVANTEK AX20 1,500 (2) COMPARTMENT TANK

LEACHING FACILITY CALCULATIONS:  
 PERCOLATION RATE IS < 5 MIN/INCH ☐ 1 CLASS

BOTTOM = 600 x 0.74 = 444 GAL/DAY (S.F.)

550 GPD X 25% REDUCTION = 413 GPD REQUIRED  
 444 GPD PROVIDED.

USE: 24' LONG x 25' WIDE LEACH FIELD  
 w/ 0.5' EFFECTIVE DEPTH

NOTE: RESERVE AREA NOT SHOWN. VARIANCE REQUEST NOT REQUIRED PER DEP POLICY LETTER DATED JANUARY 3, 1996 FOR REPAIR DESIGNS ONLY.

## CONSTRUCTION NOTES

- MODIFY WASTE LINES FROM DWELLING AND BARN TO PIPE DIRECTLY TO NEW SEPTIC TANK.
- PUMP EXISTING SEPTIC TANK AND FILL WITH SAND OR REMOVE.
- EXCAVATE ALL UNSUITABLE SOIL 5' AROUND LEACH AREA DOWN TO MEDIUM-COARSE SAND AND REPLACE WITH CLEAN MEDIUM SAND.
- WORK LIMIT TO BE STAKED SILT FENCE.
- ALL DISTURBED AREAS TO BE REVEGETATED WITH NATIVE GRASS UPON WORK COMPLETION.
- UNDERGROUND DRAINAGE PIPE TO BE REMOVED OR MODIFIED AFTER CONSULTATION WITH TOWN D.P.W. AND OWNER.
- INSTALL 40 MIL POLYVINYL FLASHING OR EQUIV. AS FLOW BARRIER AS SHOWN IN LEACH AREA DETAIL FROM EL. 9.6' DOWN TO EL. 5.6'.

JOB No : 21015	NAME : HULTIN
DATE : 5-26-2021	SHEET 2 OF 3
REVISIONS : 6-21-2021 VARIANCES	8-5-2021 SOIL TESTS
8-30-2021 NO RET. WALL	10-13-2021 MISC. NOTES
	8-10-2021 WORK LIMIT

**FELCO, INC.**  
ENGINEERING - LAND SURVEYING

FILE:21015-OPT.DWG

FELCO, INC. DISCLAIMER:

ANY AND ALL PLANS, SPECIFICATIONS, DIMENSIONS, DRAFTS, MODELS, ARCHITECTURAL DRAWINGS, ENGINEERING, INFORMATION, OR DESIGNS PROVIDED HEREIN ARE NOT THE WORK, OR WORK PRODUCT, OF FELCO, INC. AND, AS SUCH, THEY ARE NOT ENDORSED, APPROVED, GUARANTEED, OR WARRANTED BY FELCO, INC.

NOTES:

SEE ORENCO SYSTEMS, INC. FOR MASSACHUSETTS DEP MODIFIED GENERAL USE APPROVAL LETTER REVISED FEBRUARY 7, 2019 FOR RESIDENTIAL ADVANTEX "DETAILS & SPECIFICATIONS AX20 MODE 3B" WASTEWATER TREATMENT SYSTEM. INSTALLATION, MONITORING, OPERATION AND MAINTENANCE MUST BE PROVIDED BY AN ORENCO SYSTEMS, INC. CERTIFIED CONTRACTOR.

THIS SHEET WAS PROVIDED BY ORENCO SYSTEMS, INC. AS A REPRESENTATIVE DESCRIPTION OF THE WASTEWATER TREATMENT SYSTEM AND IS PROVIDED AS A SUPPLEMENT SHEET FOR THE TOWN HEALTH DEPARTMENT. ANY ALTERATIONS OR CHANGES TO THE COMPONENTS ARE TO BE PROVIDED TO THE HEALTH DEPARTMENT PRIOR TO OBTAINING THE DISPOSAL WORKS PERMIT.

HEALTH DEPARTMENT  
TOWN OF TRURO

JUL 03 2024

RECEIVED BY:

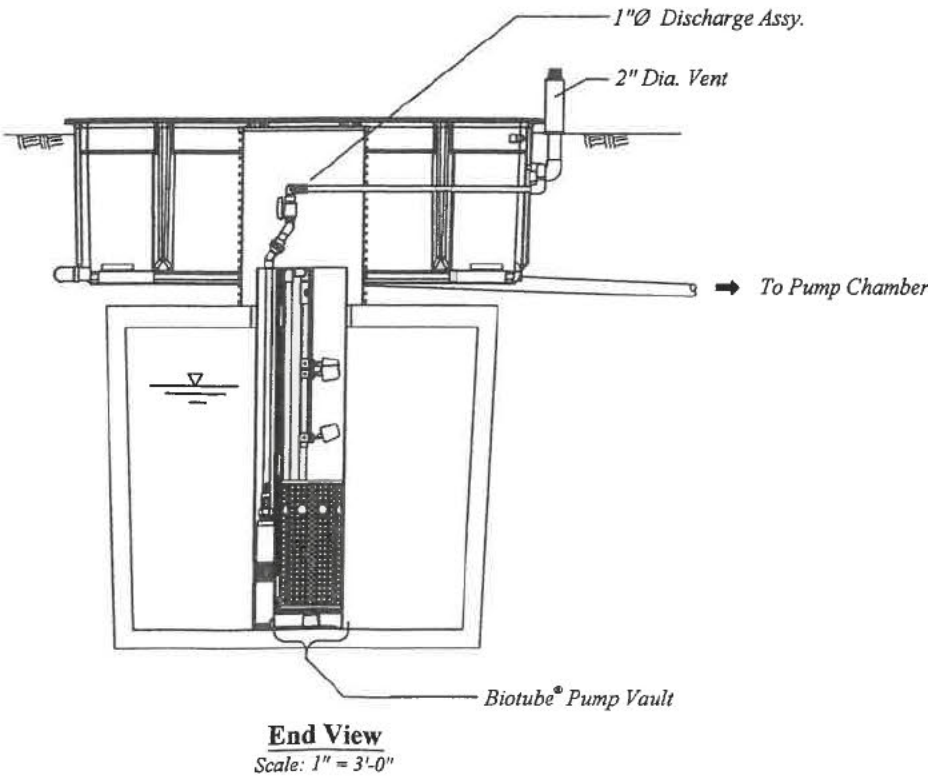
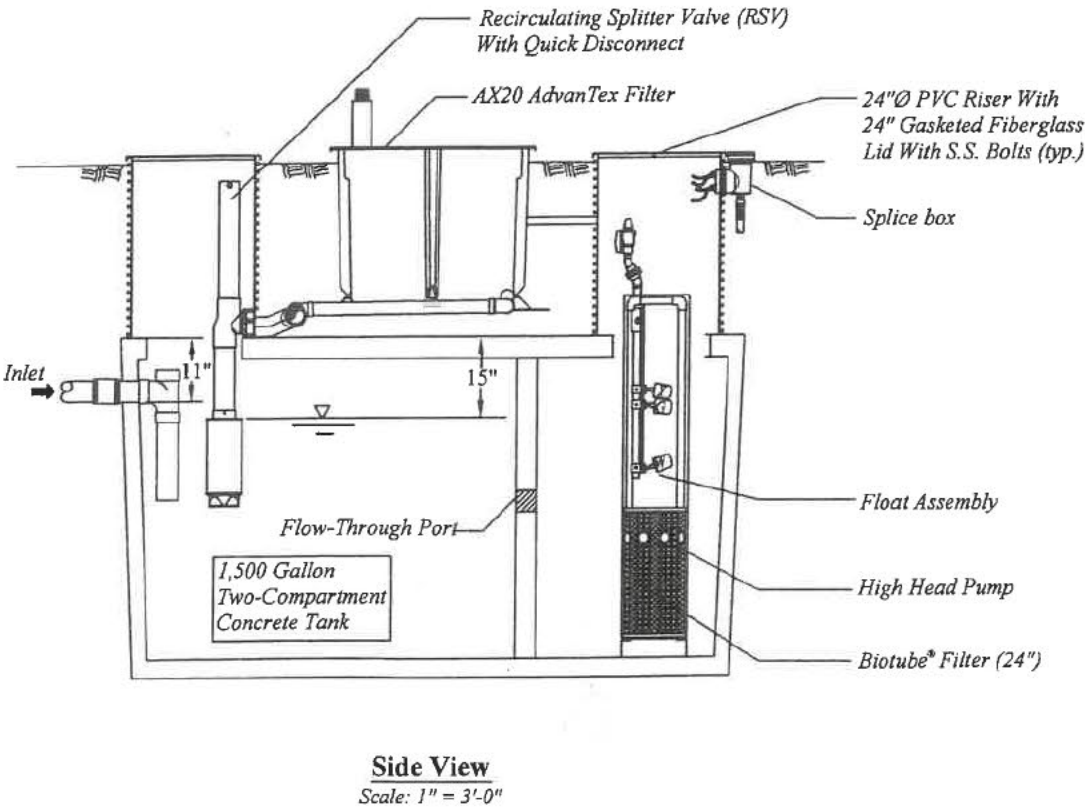
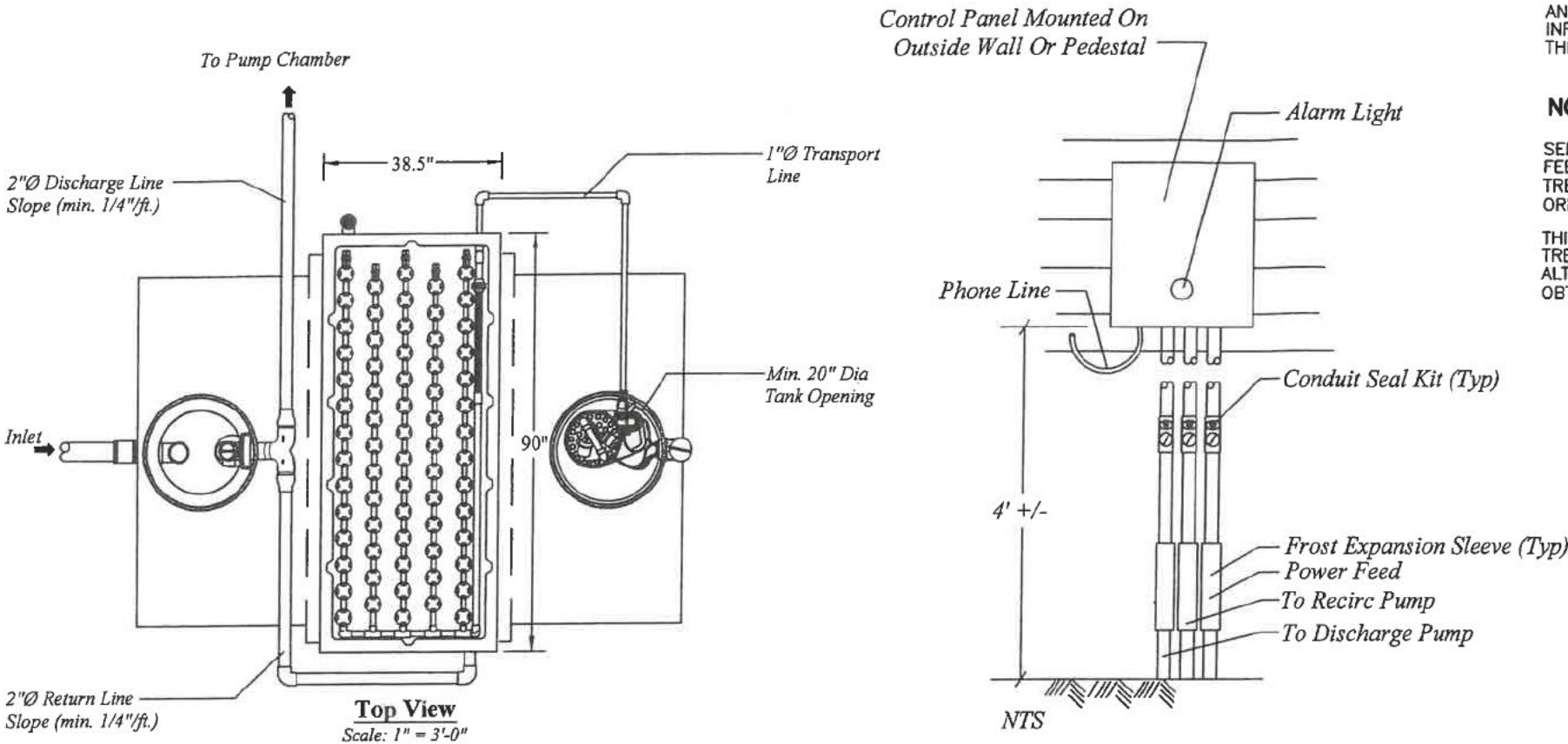
General Notes:

1. Phone Line with minimum service is required. Does NOT need to be a dedicated line.
2. Set Treatment Pod over tank on solid level base of 6" - 8" clean sand or pea stone.
3. Tank coordination and approval by Orenco, Inc. representative is required prior to construction. Tank must meet minimum structural standards and be tested for watertightness.
4. Float and RSV settings based on typical tank dimensions - to be verified upon tank approval.
5. Manufacturer requires this system to be installed and maintained by a trained/authorized installer/maintenance provider. Failure to maintain an ongoing O&M contract may result in voiding of any/all warranties. Other State and/or Local requirements or regulations may apply.

HEALTH DEPARTMENT  
TOWN OF TRURO

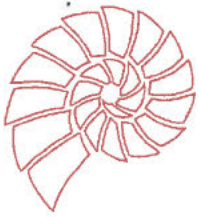
OCT 22 2021

RECEIVED BY:



JOB No : 21015	NAME : HULTIN
DATE : 5-26-2021	SHEET 3 OF 3
REVISIONS : 6-21-2021 8-5-2021 8-10-2021 VARIANCES SOIL TESTS WORK LIMIT 8-30-2021 10-13-2021 NO RET. WALL MISC. NOTES	





# J.M. O'REILLY & ASSOCIATES, INC.

V 2024-13

PROFESSIONAL ENGINEERING, LAND SURVEYING & ENVIRONMENTAL SERVICES

Site Development • Property Line • Subdivision • Sanitary • Land Court • Environmental Permitting

July 25, 2024

Truro Board of Health  
24 Town Hall Road  
Truro, MA 02536

RE: **Board of Health Variance Request**  
32 Shore Road, Truro, MA  
Map: 36 Parcel: 132

JMO # 9607

HEALTH DEPARTMENT  
TOWN OF TRURO

JUL 26 2024

RECEIVED BY:

Dear Board Members,

On behalf of our client, the Christian Union Church, J.M. O'REILLY & ASSOCIATES, INC. is filing a request for Variance from Title 5 and Truro Board of Health Regulations for the proposed sewage system upgrade at the above referenced property. The property is currently served by a cesspool.

The project proposes to replace the cesspool currently serving the existing 6-bedroom dwelling with a Title 5 sewage disposal system which will include an Advantex AX-20 treatment unit. Due to the proximity of groundwater, the proposed soil absorption system (SAS) is to be raised within a containment wall. Since Advantex AX-20 has both General Use and Remedial Use approvals from MassDEP, the proposed system makes use of both the nitrogen reduction credit and the 50% SAS reduction credit. Due to the proximity of wetland resources, the following variances are being requested from Massachusetts 310 CMR 15.000 (Title 5) and Truro Board of Health Regulations:

**VARIANCES: 310 CMR 15.211 (Setbacks)**

1. Variance of 2' requested from the 10' separation requirement from the SAS to the property lines.
2. Variance of 3' requested from the 10' separation requirement from the septic tank to the foundation.
3. Variance of 4' requested from the 10' separation requirement from the pump basin to the foundation.

**VARIANCE: 310 CMR 15.227(5) (Septic Inverts)**

4. Variance of 12" requested from the 12" separation requirement from groundwater to septic tank invert.

**VARIANCE: 310 CMR 15.248(1) (Reserve Area)**

5. Variance requested to allow for no provision of the required reserve area.

**VARIANCE: 310 CMR 15.255(5) (Soil Removal)**

6. Variance requested to allow removal of soil directly under the SAS only with no 5' extension.

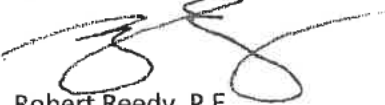
**VARIANCES - Truro Board of Health Regulations, Section VI, Article 9:**

1. Variance requested from the above referenced regulation, which requires 100' setback from Septic Tank to Wetlands. Setback distance of 47' is provided, 53' variance is requested.
2. Variance requested from the above referenced regulation, which requires 150' setback from Soil Absorption System to Wetlands. Setback distance of 63' is provided, 87' variance is requested.

A representative from our office will be present at the August 6, 2024 public hearing so as to further review the proposal and answer any questions the Board may have.

Very truly yours,

J.M. O'REILLY & ASSOCIATES, INC.



Robert Reedy, P.E.

Project Engineer

Cc: Client  
John M. O'Reilly, PE, PLS

Encl: Variance Application Package

RFR/aw



**Fee: \$75.00**



**TRURO HEALTH &  
CONSERVATION DEPARTMENT**  
24 Town Hall Road, Truro 02666

**APPLICATION FOR BOARD OF HEALTH VARIANCES**

**Date:** 7/25/2024

**Property Owner's Name:** Christian Union Church

**Mailing Address:** P.O. Box 187, N. Truro, MA 02652

**Address of Property:** 32 Shore Road

**Map and Parcel Number:** Map # 36 Parcel # 132

**Design Engineer/Sanitarian** Robert F. Reedy, P.E.

**Firm/Company Name:** J.M. O'Reilly & Associates, Inc. Phone #: 508-896-6601

**Address:** 1573 Main St., P.O. Box 1773, Brewster, MA 02631

Please check type of variance requested:

☒ **Title 5 Variance Request: Section** (7) Variances requested from Title 5. See Plan.

☐ **Board of Health Variance Request: Section/Article** Section VI, Article 9: Setbacks

(for owner)  
Signature (Representative)

7/25/2024  
Date

Signature (Property Owner)

## RESIDENTIAL NITROGEN LOADING CALCULATIONS - PROPOSED (6 BR + I/A)

Home: 660 GPD

Job - #9495

Impervious Surfaces:      Roof Area: 1,163 ft<sup>2</sup>      Paving Area: 0 ft<sup>2</sup>  
    Lot Size: 21,780 ft<sup>2</sup>  
    Natural Area: 20,617 ft<sup>2</sup>      Lawn Area: 1,000 ft<sup>2</sup>  
    Title V Flow:

### WASTEWATER

Title V

$$\underline{6} \text{ bedrooms} \times \frac{110}{\text{bedroom}} \times \frac{3.785}{\text{gal}} = \underline{2,498.1} \text{ L/d} \times 19 \frac{\text{mg}}{\text{L}} = \underline{47,463.9} \text{ mg/d}$$

Actual (assume 2.5 people/unit average occupancy within the town)

$$\underline{6} \text{ bedrooms} \times \frac{110}{\text{bedroom}} \times \frac{3.785}{\text{gal}} \times \frac{2.5}{12} = \underline{520.4} \text{ L/d} \times 19 \frac{\text{mg}}{\text{L}} = \underline{9,888.3} \text{ mg/d}$$

### IMPERVIOUS SURFACES

Roof

$$\underline{1,163} \times \frac{40 \text{ in}}{\text{yr}} \times \frac{\text{ft}}{12 \text{ in}} \times \frac{28.32 \text{ L}}{\text{ft}^3} \times \frac{1 \text{ yr}}{365 \text{ d}} = \underline{300.8} \text{ L/d} \times 0.75 \frac{\text{mg}}{\text{L}} = \underline{225.6} \text{ mg/d}$$

Paving

$$\underline{0} \times \frac{40 \text{ in}}{\text{yr}} \times \frac{\text{ft}}{12 \text{ in}} \times \frac{28.32 \text{ L}}{\text{ft}^3} \times \frac{1 \text{ yr}}{365 \text{ d}} = \underline{0.0} \text{ L/d} \times 1.5 \frac{\text{mg}}{\text{L}} = \underline{0.0} \text{ mg/d}$$

### LAWN

$$\underline{1,000} \times \frac{3 \text{ lbs}}{1,000 \text{ ft}^2/\text{yr}} \times \frac{1 \text{ yr}}{365 \text{ d}} \times \frac{454,000}{\text{lb}} \times 0.25 = \underline{932.9} \text{ mg/d}$$

### NATURAL

$$21,780 - 1,163 = 20,617 \text{ ft}^2$$

$$\underline{20,617} \times \frac{1.33}{\text{yr}} \times \frac{28.32 \text{ L}}{\text{ft}^3} \times \frac{1 \text{ yr}}{365 \text{ d}} = \underline{2,127.5} \text{ L/d}$$

### SUMMARY

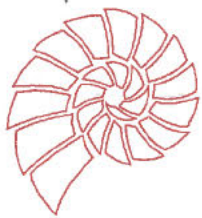
Title V Flow	$\frac{47,463.9}{2,498.1}$	+	$\frac{225.6}{300.8}$	+	$\frac{0.0}{0.0}$	+	$\frac{932.9 \text{ mg}}{2,127.5 \text{ L}}$	=	$\frac{48,622.4 \text{ mg}}{4,926.4 \text{ L}}$	=	9.87 ppm
--------------	----------------------------	---	-----------------------	---	-------------------	---	--	---	---	---	----------

Actual	$\frac{9,888.3}{520.4}$	+	$\frac{225.6}{300.8}$	+	$\frac{0.0}{0.0}$	+	$\frac{932.9 \text{ mg}}{2,127.5 \text{ L}}$	=	$\frac{11,046.8 \text{ mg}}{2,948.8 \text{ L}}$	=	3.75 ppm
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Final Calculation

= 6.81 ppm





# J.M. O'REILLY & ASSOCIATES, INC.

PROFESSIONAL ENGINEERING, LAND SURVEYING & ENVIRONMENTAL SERVICES

Site Development • Property Line • Subdivision • Sanitary • Land Court • Environmental Permitting

TO: Abutters

FROM: J. M. O'REILLY & ASSOCIATES, INC.  
1573 MAIN STREET  
BREWSTER, MA 02631

RE: 32 Shore Road, Truro, MA  
**Board of Health Variance Request**

DATE: July 25, 2024

On behalf of our client, the Christian Union Church, J. M. O'REILLY & ASSOCIATES, INC. is requesting the Truro Board of Health to review and grant the following variances from Massachusetts 310 CMR 15.000 (Title 5) and Truro Board of Health regulations for the proposed sewage system upgrade at the above referenced property. The following variances are being requested:

**VARIANCES: 310 CMR 15.211 (Setbacks)**

1. Variance of 2' requested from the 10' separation requirement from the SAS to the property lines.
2. Variance of 3' requested from the 10' separation requirement from the septic tank to the foundation.
3. Variance of 4' requested from the 10' separation requirement from the pump basin to the foundation.

**VARIANCE: 310 CMR 15.227(5) (Septic Inverts)**

4. Variance of 12" requested from the 12" separation requirement from groundwater to septic tank invert.

**VARIANCE: 310 CMR 15.248(1) (Reserve Area)**

5. Variance requested to allow for no provision of the required reserve area.

**VARIANCE: 310 CMR 15.255(5) (Soil Removal)**

6. Variance requested to allow removal of soil directly under the SAS only with no 5' extension.

**VARIANCES - Truro Board of Health Regulations, Section VI, Article 9:**

1. Variance requested from the above referenced regulation, which requires 100' setback from Septic Tank to Wetlands. Setback distance of 47' is provided, 53' variance is requested.
2. Variance requested from the above referenced regulation, which requires 150' setback from Soil Absorption System to Wetlands. Setback distance of 63' is provided, 87' variance is requested.

A meeting has been scheduled with the Board of Health at Truro Town Hall on August 6, 2024 at 4:30 pm to discuss the proposal in greater detail. If you plan to attend, please contact the Town or visit the Truro Health Department webpage for further details.



**TOWN OF TRURO**  
**Assessors Office**  
**Certified Abutters List**  
**Request Form**



DATE: 7/18/24

NAME OF APPLICANT: The Resource Inc (Christian Union Church)

NAME OF AGENT (if any): J.M. O'Reilly & Associates Inc. c/o Alyson Wright

MAILING ADDRESS: PO Box 1773, Brewster, MA 02631

CONTACT: HOME/CELL 508-896-6601 EMAIL awright@jmoreillyassoc.com

PROPERTY LOCATION: 32 Shore Road

(street address)

PROPERTY IDENTIFICATION NUMBER: MAP 36 PARCEL 132 EXT. \_\_\_\_\_  
(if condominium)

**ABUTTERS LIST NEEDED FOR:**

(please check all applicable)

**FEE: \$15.00 per checked item**

(Fee must accompany the application unless other arrangements are made)

☒ Board of Health<sup>5</sup>

Planning Board (PB)

Zoning Board of Appeals (ZBA)

\_\_\_ Cape Cod Commission

\_\_\_ Special Permit<sup>1</sup>

\_\_\_ Special Permit<sup>1</sup>

\_\_\_ Conservation Commission<sup>4</sup>

\_\_\_ Site Plan<sup>2</sup>

\_\_\_ Variance<sup>1</sup>

\_\_\_ Licensing

\_\_\_ Preliminary Subdivision<sup>3</sup>

Type: \_\_\_\_\_

\_\_\_ Definitive Subdivision<sup>3</sup>

\_\_\_ Accessory Dwelling Unit (ADU)<sup>2</sup>

\_\_\_ Other \_\_\_\_\_

(Fee: Inquire with Assessors)

(Please Specify)

**Note: Per M.G.L., processing may take up to 10 calendar days. Please plan accordingly.**

**THIS SECTION FOR ASSESSORS OFFICE USE ONLY**

Date request received by Assessors: 7/18/2024

Date completed: 7/18/2024

List completed by: [Signature]

Date paid: 7/18/2024 Cash/Check online CC

<sup>1</sup>Abutters, owners of land directly opposite on any public or private street or way, and abutters to the abutters within 300 feet of the property line.

<sup>2</sup>Abutters to the subject property, abutters to the abutters, and owners of properties across the street from the subject property.

<sup>3</sup>Landowners immediately bordering the proposed subdivision, landowners immediately bordering the immediate abutters, and landowners located across the streets and ways bordering the proposed subdivision. **Note:** For Definitive Subdivision only, responsibility of applicant to notify abutters and produce evidence as required.

<sup>4</sup>All abutters within 300 feet of parcel, except Beach Point between Knowles Heights Road and Provincetown border, in which case it is all abutters within 100 feet. **Note:** Responsibility of applicant to notify abutters and produce evidence as required.

<sup>5</sup>Abutters sharing any boundary or corner in any direction – including land across a street, river or stream. **Note:** Responsibility of applicant to notify abutters and produce evidence as required.





**TRURO ASSESSORS OFFICE**

PO Box 2012 Truro, MA 02666

Telephone: (508) 214-0921

Fax: (508) 349-5506

**Date:** July 18, 2024

**To:** JM O'Reilly & Assoc., Inc., Agents for The Resource, Inc./Christian Union Church

**From:** Assessors Department

**Certified Abutters List:** 32 Shore Road (Map 36, Parcel 132)

**Board of Health**

Attached is a combined list of abutters for 32 Shore Road.

The current owner is The Resource, Inc./Christian Union Church.

The names and addresses of the abutters are as of July 12, 2024 according to the most recent documents received from the Barnstable County Registry of Deeds.

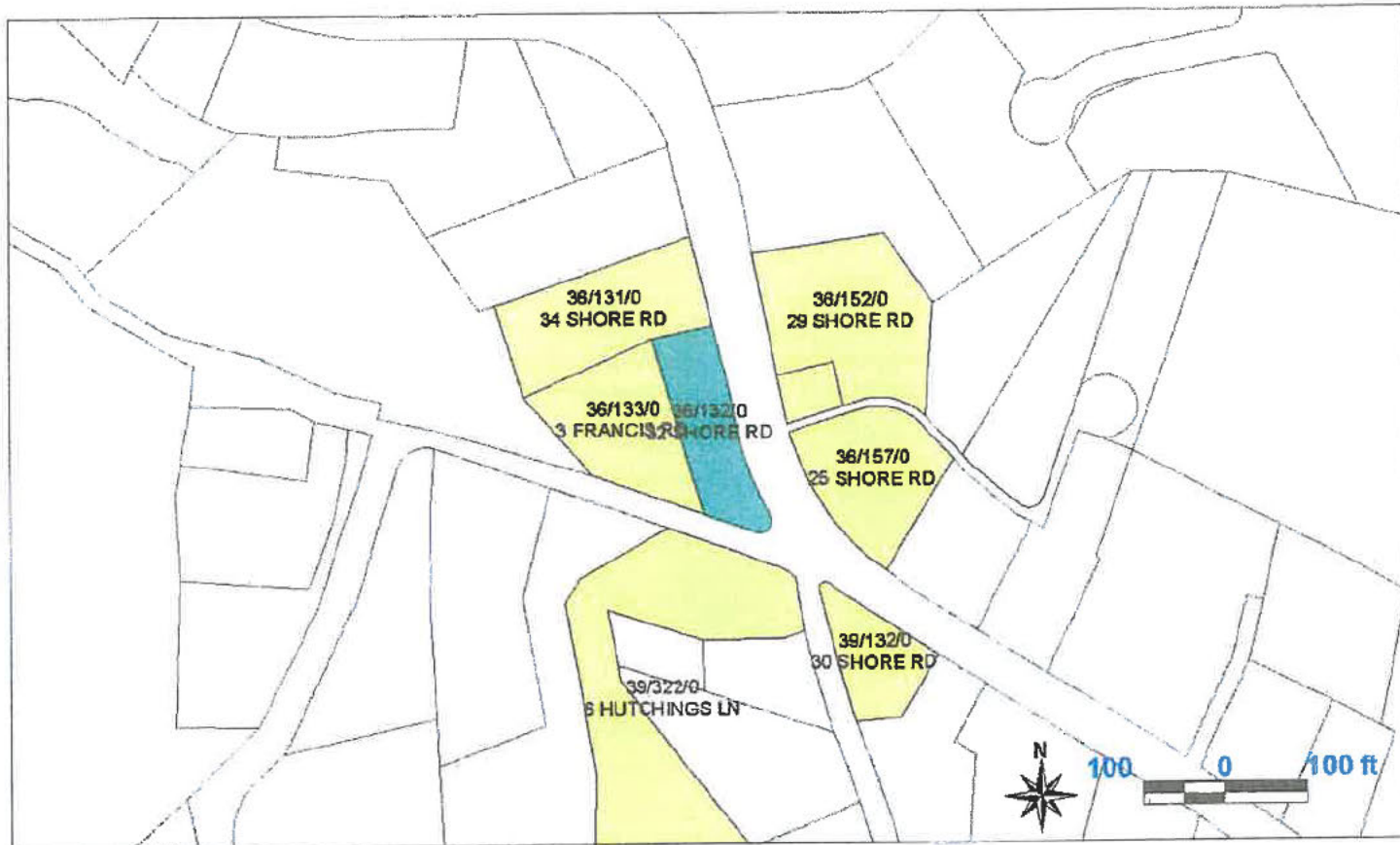
Certified by:

Olga Farrell  
Assessing Clerk

32 Shore Road  
Map 36, Parcel 132  
Board of Health

TOWN OF TRURO, MA  
BOARD OF ASSESSORS  
P.O. BOX 2012, TRURO MA 02666

### Custom Abutters List



Key	Parcel ID	Owner	Location	Mailing Street	Mailing City	ST	ZipCd/Country
1018	35-131-0-R	THOLEN GRETCHEN M	34 SHORE RD	2031 RYANS RUN	LANDSDALE	PA	19446
1020	36-133-0-R	HIGGINS CHRISTMAS	3 FRANCIS RD	C/O MADDEN JOAN 25 CLIFF STREET	WESTON	MA	02493
1038	36-152-0-R	HOLWAY JEFFREY M & MCCABE KAREN A	29 SHORE RD	PO BOX 584	NO TRURO	MA	02652-0584
1042	36-156-0-E	CHRISTIAN UNION CHURCH	27 SHORE RD	PO BOX 187	NO TRURO	MA	02652-0187
1043	36-157-0-R	SOUZA CRAIG M & DEBRA S	25 SHORE RD	PO BOX 81	NO TRURO	MA	02652-0081
1257	39-132-0-R	30 SHORE RD NOMINEE TRUST TRS: ANNE & ADRIAN WEBB-JOHNSON	30 SHORE RD	PO BOX 364	NO TRURO	MA	02652
6309	39-322-0-R	6 HUTCHINGS LN REALTY TRUST TRS: JOAN L HUTCHINGS ET AL	6 HUTCHINGS LN	10 PINE ISLAND RD	MATTAPOISETT	MA	02739

*Handwritten signature*  
7/19/2024



36-131-0-R

THOLEN GRETCHEN M  
2031 RYANS RUN  
LANDSDALE, PA 19446

36-133-0-R

HIGGINS CHRISTMAS  
C/O MADDEN JOAN  
25 CLIFF STREET  
WESTON, MA 02493

36-152-0-R

HOLWAY JEFFREY M &  
MCCABE KAREN A  
PO BOX 584  
NO TRURO, MA 02652-0584

36-156-0-E

CHRISTIAN UNION CHURCH  
PO BOX 187  
NO TRURO, MA 02652-0187

36-157-0-R

SOUZA CRAIG M & DEBRA S  
PO BOX 81  
NO TRURO, MA 02652-0081

39-132-0-R

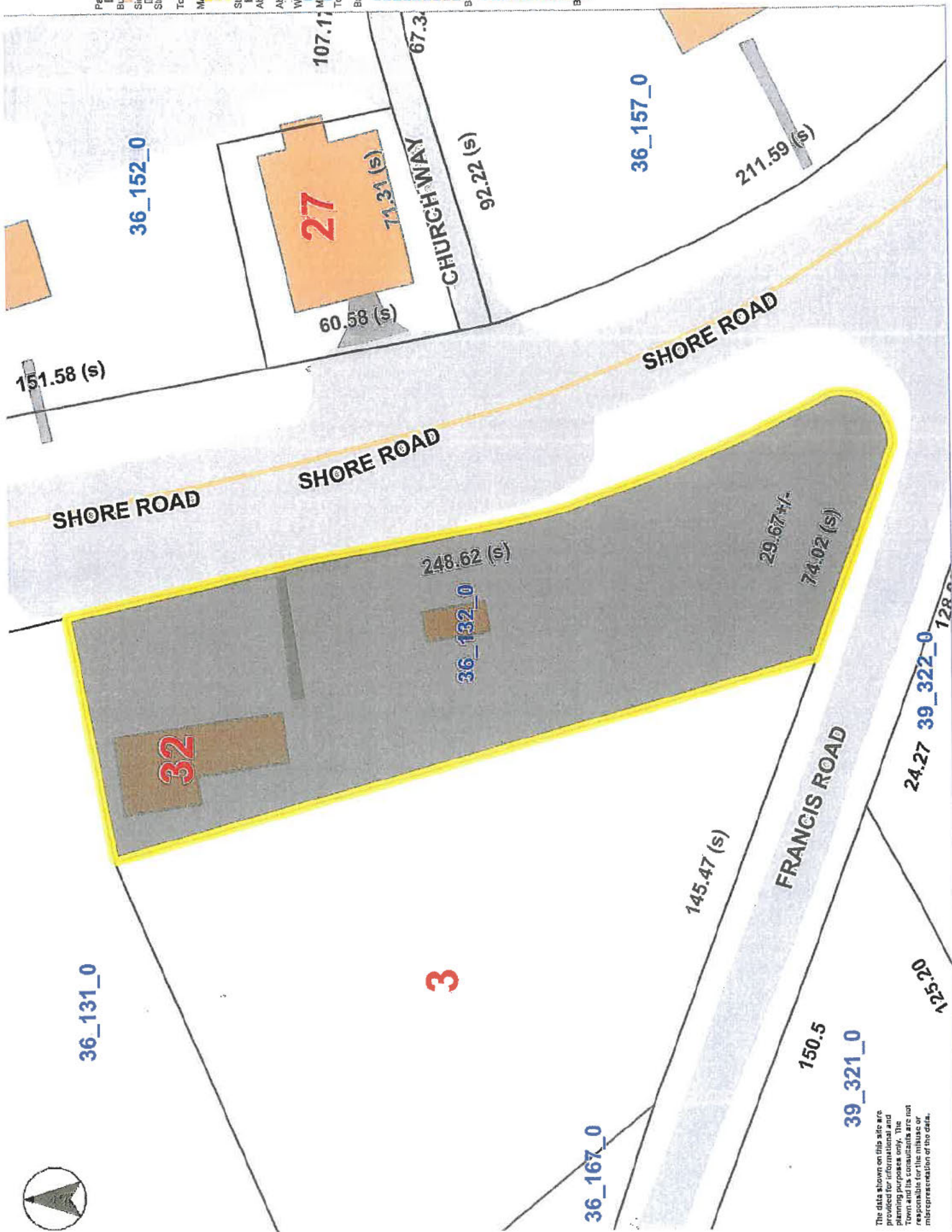
30 SHORE RD NOMINEE TRUST  
TRS: ANNE & ADRIAN WEBB-JOHNSON  
PO BOX 364  
NO TRURO, MA 02652

39-322-0-R

6 HUTCHINGS LN REALTY TRUST  
TRS: JOAN L HUTCHINGS ET AL  
10 PINE ISLAND RD  
MATTAPOISETT, MA 02739



- Parcels
- Buildings
- Sidewalks
- Street Pavement
- Town Boundary
- MA Highways
  - Interstate
  - US Highway
  - Numbered Route
  - Street Centerlines
- Abutting Towns Label:
- Abutting Towns
- Waterbodies
- Major Streams
- Town Mask
- Bath Donut2
  - 0-5 ft
  - 5-10 ft
  - 10-15 ft
  - 15-20 ft
  - 20-30 ft
  - 30-40 ft
  - 40-50 ft
  - 50-60 ft
  - 60-70 ft
  - 70+ ft
- Bathymetry
  - 0-5 ft
  - 5-10 ft
  - 10-15 ft
  - 15-20 ft
  - 20-30 ft
  - 30-40 ft
  - 40-50 ft
  - 50-60 ft
  - 60-70 ft
  - 70+ ft
- Background



The data shown on this site are provided for informational and planning purposes only. The Town and its consultants are not responsible for the misuse or misrepresentation of the data.



Printed on 10/28/2022 at 11:02 AM

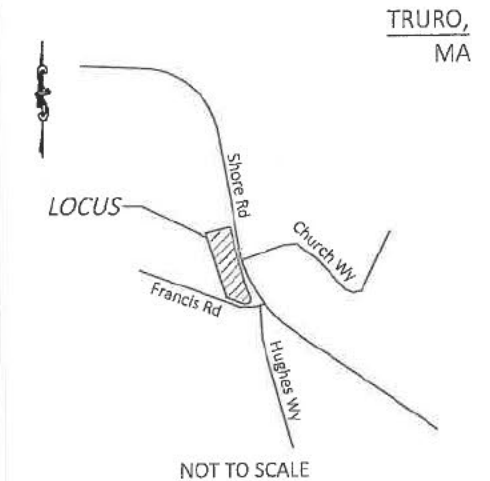
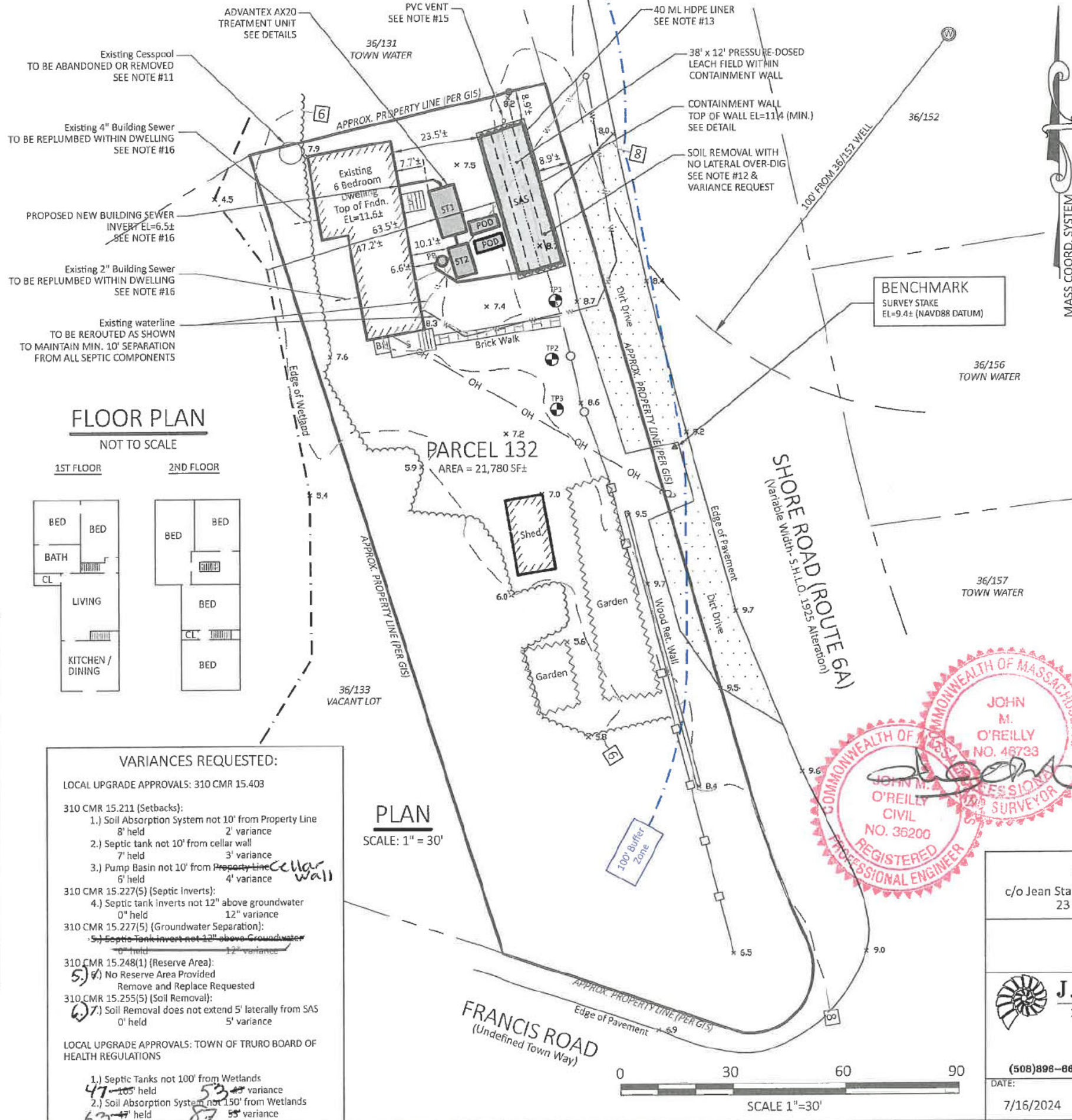


## GENERAL NOTES:

- A.) NEITHER DRIVEWAYS NOR PARKING AREAS ARE ALLOWED OVER SEPTIC SYSTEM UNLESS H-20 COMPONENTS ARE USED.
- B.) THE DESIGNER WILL NOT BE RESPONSIBLE FOR THE SYSTEM AS DESIGNED UNLESS CONSTRUCTED AS SHOWN. ANY CHANGES SHALL BE APPROVED IN WRITING.
- C.) CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION OF ALL UNDERGROUND AND OVERHEAD UTILITIES PRIOR TO COMMENCEMENT OF WORK.

## CONSTRUCTION NOTES:

- 1.) ALL CONSTRUCTION SHALL CONFORM TO THE STATE ENVIRONMENTAL CODE, TITLE 5, AND THE REQUIREMENTS OF THE LOCAL BOARD OF HEALTH.
- 2.) SEPTIC TANK(S), GREASE TRAP(S), DOSING CHAMBER(S) AND DISTRIBUTION BOX(ES) SHALL BE SET ON A LEVEL STABLE BASE WHICH HAS BEEN MECHANICALLY COMPACTED, OR ON A 6 INCH CRUSHED STONE BASE.
- 3.) SEPTIC TANK(S) SHALL MEET ASTM STANDARD C1127-93 AND SHALL HAVE AT LEAST THREE 20" DIAMETER MANHOLES. THE MINIMUM DEPTH FROM THE BOTTOM OF THE SEPTIC TANK TO THE FLOW LINE SHALL BE 48".
- 4.) SCHEDULE 40 PVC INLET AND OUTLET TEES SHALL EXTEND A MINIMUM OF 6" ABOVE THE FLOW LINE OF THE SEPTIC TANK AND SHALL BE INSTALLED ON THE CENTERLINE OF THE TANK DIRECTLY UNDER THE CLEANOUT MANHOLE.
- 5.) RAISE COVERS OF THE SEPTIC TANK WITH PRECAST CONCRETE WATER TIGHT RISERS OVER INLET AND OUTLET TEES TO WITHIN 6" OF FINISH GRADE, OR AS APPROVED BY THE LOCAL BOARD OF HEALTH AGENT.
- 6.) PIPING SHALL CONSIST OF 4" SCHEDULE 40 PVC OR EQUIVALENT. PIPE SHALL BE LAID ON A MINIMUM CONTINUOUS GRADE OF NOT LESS THAN 1%.
- 7.) BASE AGGREGATE FOR THE LEACHING FACILITY SHALL CONSIST OF 3/4" TO 1-1/2" DOUBLE WASHED NATIVE STONE FREE OF IRON, FINES AND DUST AND SHALL BE INSTALLED BELOW THE CROWN OF THE DISTRIBUTION LINE TO THE BOTTOM OF THE SOIL ABSORPTION SYSTEM. BASE AGGREGATE SHALL BE COVERED WITH A LAYER OF FILTER FABRIC OR APPROVED EQUIVALENT.
- 8.) VENT SOIL ABSORPTION SYSTEM WHEN DISTRIBUTION LINES EXCEED 50 FEET; WHEN LOCATED EITHER IN WHOLE OR IN PART UNDER DRIVEWAYS, PARKING AREAS, TURNING AREAS OR OTHER IMPERVIOUS MATERIAL; OR WHEN PRESSURE DOSED.
- 9.) SOIL ABSORPTION SYSTEM SHALL BE COVERED WITH A MINIMUM OF 9" OF CLEAN MEDIUM SAND (EXCLUDING TOPSOIL).
- 10.) FROM THE DATE OF INSTALLATION OF THE SOIL ABSORPTION SYSTEM UNTIL RECEIPT OF A CERTIFICATE OF COMPLIANCE, THE PERIMETER OF THE SOIL ABSORPTION SYSTEM SHALL BE STAKED AND FLAGGED TO PREVENT THE USE OF SUCH AREA FOR ALL ACTIVITIES THAT MIGHT DAMAGE THE SYSTEM.
- 11.) EXISTING CESSPOOL(S) TO BE REMOVED OR ABANDONED-IN-PLACE IN ACCORDANCE WITH 310 CMR 15.354. ANY CONTAMINATED SOIL WITHIN 5' OF THE PROPOSED SOIL ABSORPTION SYSTEM SHALL BE REMOVED AND REPLACED WITH CLEAN SAND. AREA TO BE COMPACTED TO MINIMIZE SETTLING.
- 12.) SOIL REMOVAL: ALL UNSUITABLE SOILS SHALL BE REMOVED FROM UNDERNEATH THE SOIL ABSORPTION SYSTEM DOWN TO THE CLEAN SAND LAYER (C1' IN TH#2 AND TH#3). AREA TO BE BACKFILLED WITH CLEAN SAND AND COMPACTED TO MINIMIZE SETTLING. NO LATERAL OVER-DIG BEYOND LIMITS OF SOIL ABSORPTION SYSTEM. SEE VARIANCE REQUEST.
- 13.) INSTALL A 40 ML HDPE LINER ALONG EDGE OF CONTAINMENT WALL, AS SHOWN ON PLAN, FROM EL=11.0 TO EL=7.0. LENGTH OF LINER = 100'±.
- 14.) WATER PROOF NOTE: INSTALLER SHALL ENSURE ALL SEWAGE DISPOSAL SYSTEM CONNECTIONS, COMPONENTS, AND RISERS ARE ALL WATER PROOF. ALL CONNECTIONS SHALL BE MADE WITH HYDRAULIC CEMENT.
- 15.) PASSIVE PVC VENTILATION SYSTEM SHALL BE PIPED TO A 4" PVC VENT WITH 'SWEET-AIR' MUSHROOM CAP. VENT TO BE LOCATED OUTSIDE CONTAINMENT WALL, AS SHOWN ON PLAN. CONTRACTOR SHALL CUT A 3/8" DIAMETER WEEP HOLE IN BOTTOM OF VENT PIPING AT ITS LOWEST POINT, TO PREVENT WATER BUILDUP IN PIPE. INSTALL 12" x 12" x 6" DEEP SECTION OF 3/4" - 1-1/2" STONE BASE LAYER UNDERNEATH VENT PIPE WEEP HOLE. VENT SHALL BE SET 3' ABOVE FINISH GRADE.
- 16.) THE EXISTING 2" PVC BUILDING SEWER AND THE EXISTING 4" PVC BUILDING SEWER, BOTH NOTED ON THE PLAN, SHALL BE REPLUMBED TO EXIT THE FRONT OF THE BUILDING VIA (1) PROPOSED 4" PVC BUILDING SEWER, AS SHOWN ON THE PLAN. ALL PLUMBING WORK SHALL BE COMPLETED BY A LICENSED PLUMBER AND SHALL MEET STATE PLUMBING CODE 248 CMR 2.0 STANDARDS AND REQUIREMENTS.



S.H.L.O. 1925 ALTERATION, SHEET 9 OF 11  
DEED BOOK 923 PAGE 338  
ASSESSORS' MAP 36 PARCEL 132

## LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING SPOT GRADE
- PROPOSED SPOT GRADE
- WATER SERVICE LINE
- OVERHEAD UTILITY SERVICE
- TEST HOLE / BORING LOCATION
- SEPTIC TANK
- PUMP BASIN
- SOIL ABSORPTION SYSTEM
- RESERVED FOR FUTURE
- UTILITY POLE
- WELL
- SURVEY STAKE
- IRON PIPE, FOUND
- LIMIT OF WORK
- CHAIN LINK FENCE
- SPLIT RAIL FENCE
- EDGE OF GARDEN
- EDGE OF CLEARING

JUL 26 2024

SHEET 1 OF 3

## Christian Union Church

c/o Jean Stanley, Director of Housing Rehab Programs, The Resource Inc.  
23 White's Path Suite G2, South Yarmouth, MA 02664

**SITE PLAN**  
32 SHORE ROAD, TRURO, MA

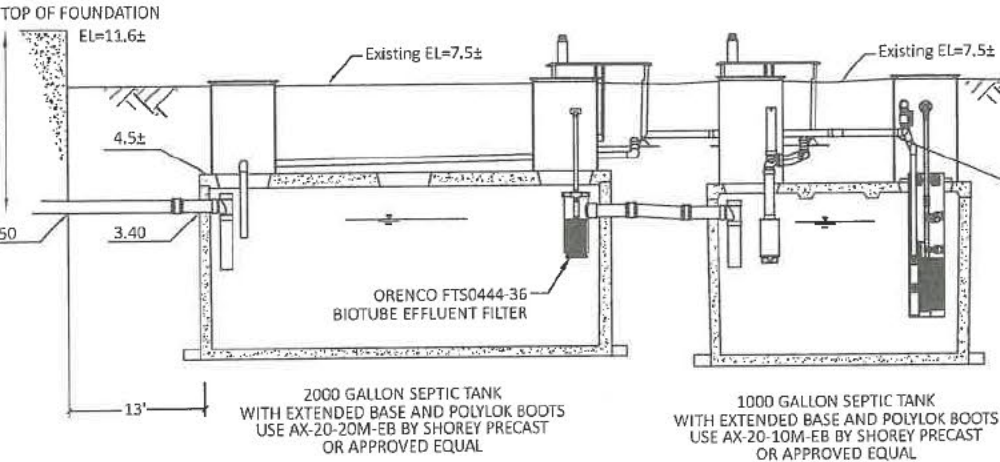


**J.M. O'REILLY & ASSOCIATES, INC.**  
Professional Engineering & Land Surveying Services

1573 Main Street - Route 6A  
P.O. Box 1773  
(508)896-8801 Office Brewster, MA 02631 (508)896-8802 Fax  
DATE: 7/16/2024 SCALE: As Noted BY: RFR CHECK: JMO JOB NUMBER: JMO-9607



FLOW PROFILE:  
NOT TO SCALE



ADVANTEX AX-20  
TREATMENT UNIT (2 POD MODE 3B)

SOIL TEST LOGS:

TEST HOLE 1: EL=8.4± (<4' PERVIOUS SOIL)					
DEPTH FROM SURFACE (INCHES)	SOIL HORIZON	SOIL TEXTURE (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING	OTHER
0-14	A	Fine Loamy Sand	10YR3/1	NONE	
14-49	B	Loamy Sand	10YR5/8	NONE	
49-55	C1	Sandy Loam	10YR6/6	NONE	
55-70	C2	Medium-Coarse Sand	10YR5/8	NONE	GW @ 51"

TEST HOLE 2: EL=8.2± (>4' PERVIOUS SOIL)					
DEPTH FROM SURFACE (INCHES)	SOIL HORIZON	SOIL TEXTURE (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING	OTHER
0-18	Cf	---	---	---	
18-24	Ab	Fine Loamy Sand	10YR7/1	NONE	
24-75	C1	Medium-Coarse Sand	10YR5/8	NONE	GW @ 48"

TEST HOLE 3: EL=8.2± (>4' PERVIOUS SOIL)					
DEPTH FROM SURFACE (INCHES)	SOIL HORIZON	SOIL TEXTURE (USDA)	SOIL COLOR (MUNSELL)	SOIL MOTTLING	OTHER
0-17	Cf	---	---	---	
17-22	Ab	Fine Loamy Sand	10YR7/1	NONE	
22-72	C1	Medium-Coarse Sand	10YR5/8	NONE	GW @ 48"

DATE OF TESTING: 6/6/2024  
PERCOLATION RATE: PERC @ 36" IN TH#3. LESS THAN 2 MIN/INCH IN MED.-CRS. SAND LAYER.  
WITNESSED BY: ROBERT REEDY, P.E., J.M. O'REILLY & ASSOCIATES, INC.  
AROZANA DAVIS, TRURO HEALTH DEPARTMENT  
GROUNDWATER ENCOUNTERED @ 48", EL=4.2.  
USE A LOADING RATE OF 0.74 GPD/SF FOR SIZING OF SOIL ABSORPTION SYSTEM.

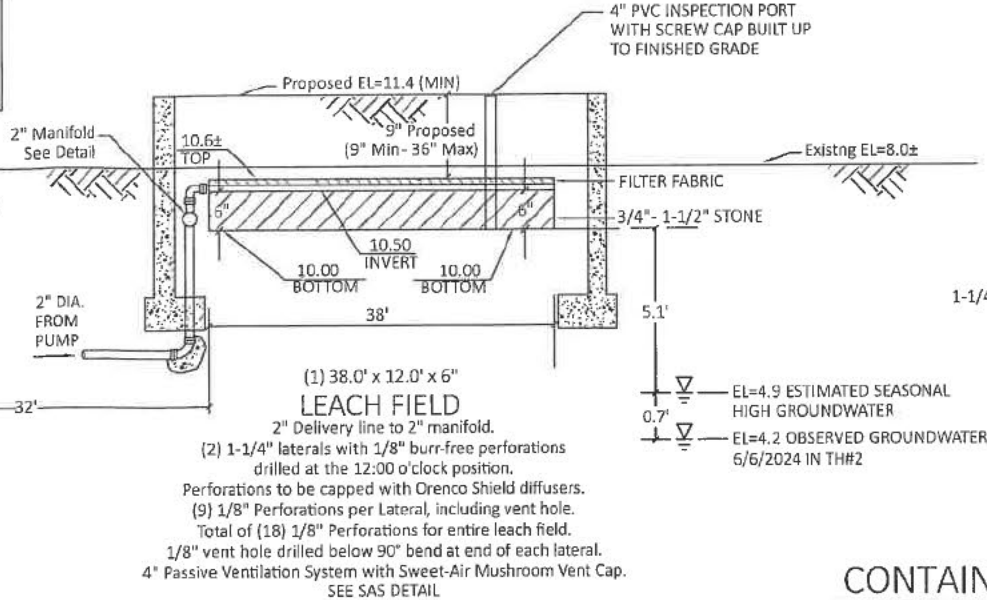
HIGH GROUNDWATER LEVEL CALCULATIONS:

Depth To Water Table (6/6/2024):	4.0', EL=4.2
Appropriate Index Well:	TSW-89
Water Level Range Zone:	A (0'-2')
Current Depth To Water Level For Index Well (11/23):	10.9'
Water Level Adjustment:	0.7'
Estimated Depth To High Water:	3.3', EL=4.9

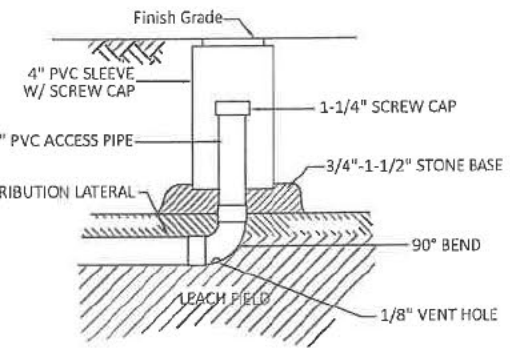
SYSTEM DESIGN CALCULATIONS:

SEWAGE DESIGN FLOW:  
6 BEDROOM DWELLING @ 110 GPD = 660 GPD  
LEACHING CAPACITY REQUIRED:  
6 BEDROOMS (MAX.) @ 110 GPD = \*660 GPD REQUIRED  
SEPTIC TANK CAPACITY REQUIRED:  
DAILY FLOW = 660 GPD @ 200% = 1,320 GAL. REQUIRED  
SEPTIC TANK CAPACITY PROVIDED:  
2000 GALLON ADVANTEX AX-20 PRIMARY SEPTIC TANK AND  
1000 GALLON ADVANTEX AX-20 SECONDARY SEPTIC TANK (3000 GALLON TOTAL CAPACITY)  
LEACHING CAPACITY PROVIDED:  
ONE (1) 38.0' X 12.0' X 6" LEACH FIELD CAN LEACH:  
VL=(38' X 12') X 0.74 GPD/SF=337.44 GPD  
337 GPD>\*330 GPD REQUIRED  
NOTE: A GARBAGE DISPOSAL IS NOT PERMITTED WITH THIS DESIGN.  
INSTALL:  
ONE (1)- 2000 GALLON CONCRETE SEPTIC TANK WITH EXTENDED BASE AND POLYLOK BOOTS  
(USE AX-20-20M-EB ADVANTEX PROCESS TANK FROM SHOREY PRECAST OR APPROVED EQUAL)  
ONE (1)- 1000 GALLON CONCRETE SEPTIC TANK WITH EXTENDED BASE AND POLYLOK BOOTS  
(USE AX-20-10M-EB ADVANTEX RECIRCULATION TANK FROM SHOREY PRECAST OR APPROVED EQUAL)  
ONE (1)- ADVANTEX AX-20 MODE 3B TREATMENT UNIT WITH 2 PODS  
ONE (1)- ADVANTEX DISCHARGE PUMP BASIN WITH LIBERTY 4/10 HP HIGH HEAD EFFLUENT PUMP OR  
EQUAL MEETING MINIMUM REQUIREMENTS OF 14 FEET OF TOTAL DYNAMIC HEAD AT A  
6 GALLON PER MINUTE FLOW RATE.  
ONE (1)- ORENCO FTS0444-36 BIOTUBE EFFLUENT FILTER AT OUTLET OF 2000 GALLON SEPTIC TANK.  
ONE (1)- 38' X 12' X 6" PRESSURE DOSED LEACH FIELD  
ONE (1)- PASSIVE 4" PVC VENT SYSTEM WITH 'SWEET-AIR' MUSHROOM CAP  
\*PER MASS DEP 'STANDARD CONDITIONS FOR SECONDARY TREATMENT UNITS CERTIFIED FOR REMEDIAL  
USE' SECTION II.5.A., THE REQUIRED EFFECTIVE LEACHING AREA MAY BE REDUCED UP TO 50%.  
660 GPD X 50% = 330 GPD. NITROGEN REDUCTION CREDIT OBTAINED VIA MASS DEP 'STANDARD  
CONDITIONS FOR SECONDARY TREATMENT UNITS CERTIFIED FOR GENERAL USE'.

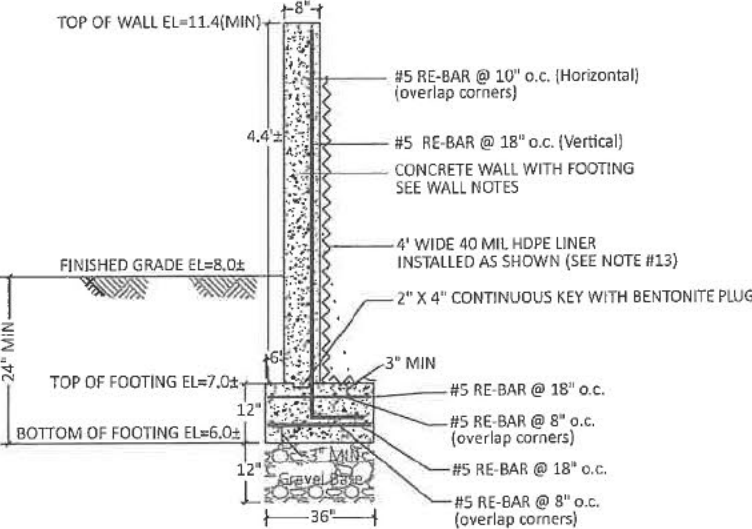
INSPECTION NOTE:  
PRIOR TO FINAL INSPECTION BY THE ENGINEER,  
SYSTEM NEEDS TO BE COMPLETE INCLUDING  
BUILDUP FOR COVERS.



VENT ACCESS CAP DETAIL:  
NOT TO SCALE



CONTAINMENT WALL DETAIL:  
NOT TO SCALE

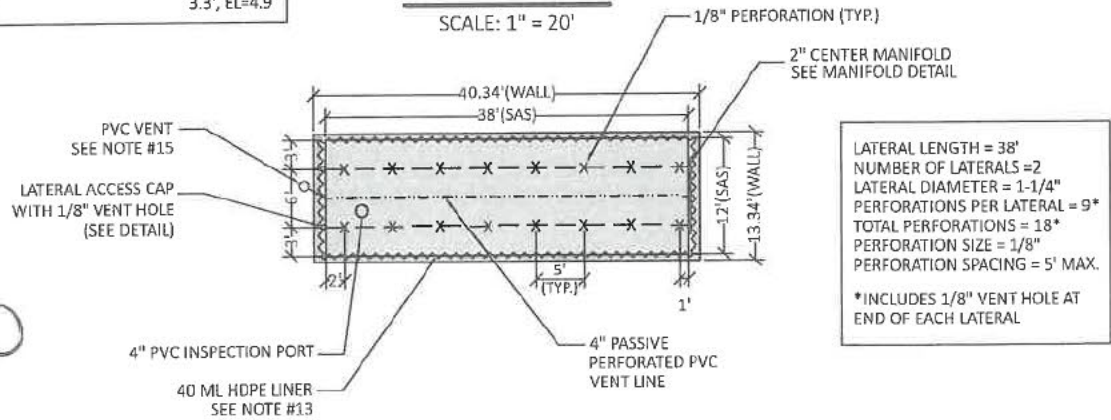


WALL NOTES:

- 1.) ALL CONCRETE SHALL BE CLASS A, 4000 PSI @ 28 DAYS WITH TYPE 1 PORTLAND CEMENT.
- 2.) 2" MINIMUM COVER ON ALL REINFORCING STEEL.
- 3.) ALL STEEL SHALL BE GRADE 60.
- 4.) FOOTING SHALL BE PLACED ON AN UNDISTURBED BASE.
- 5.) NO PORTION OF WALL SHALL BE BACKFILLED FOR 28 DAYS AFTER CONCRETE POUR.
- 6.) HORIZONTAL RE-BAR SHALL WRAP AROUND CORNERS OF WALL TO PROVIDE SOLID CONTINUOUS SUPPORT.
- 7.) DESIGN ENGINEER TO CERTIFY REINFORCING STEEL IN FOOTING AND WALL PRIOR TO POURING CONCRETE.

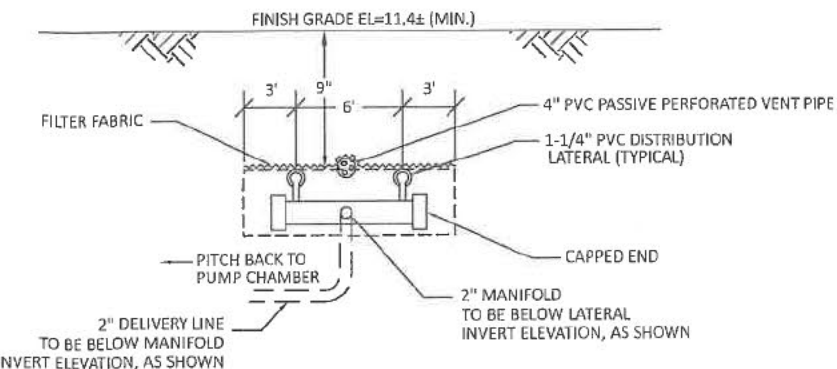
SAS DETAIL

SCALE: 1" = 20'



MANIFOLD CROSS-SECTION DETAIL

NOT TO SCALE



SHEET 2 OF 3

Christian Union Church  
c/o Jean Stanley, Director of Housing Rehab Programs, The Resource Inc.  
23 White's Path Suite G2, South Yarmouth, MA 02664

SEWAGE DISPOSAL SYSTEM DESIGN & NOTES  
32 SHORE ROAD, TRURO, MA

J.M. O'REILLY & ASSOCIATES, INC.  
Professional Engineering & Land Surveying Services

1573 Main Street - Route 6A  
P.O. Box 1773  
(508)896-8801 Office Brewster, MA 02631 (508)896-8602 Fax

DATE:	SCALE:	BY:	CHECK:	JOB NUMBER:
7/16/2024	As Noted	RFR	JMO	JMO-9607





BUOYANCY CALCULATIONS:

1000 GALLON CONCRETE ADVANTEX AX-20 SEPTIC TANK (H-10) WITH 6" EXTENDED BASE  
(Based On Tank Completely Submerged)

$F_B = [8.2' \times 5.4' \times 5.7' + (9.2' + 9.2' + 5.4' + 5.4') \times 0.5' \times 0.5'] 62.4 \text{ LB/CF}$   
 $= 16,205 \text{ lbs}$   
 $F_W = \text{TANK WEIGHT (PER SPEC.)} + \text{SOIL COVER}$   
 $= 8,500 \text{ lbs.} + [5.2' \times 5.4' \times 3.0' + (9.2' + 9.2' + 5.4' + 5.4') \times 0.5' \times 8.2'] 100 \text{ LB/CF}$   
 $= 28,896 \text{ lbs}$   
 $F_W = 28,896 \text{ lbs} > F_B = 16,205 \text{ lbs OK}$  **USE MODEL AX20-10M-EB TANK BY ACME-SHOREY**

\*Dimension reduced to account for the portion of the tank covered by the treatment pod unit.

2000 GALLON CONCRETE ADVANTEX AX-20 SEPTIC TANK (H-10) WITH 6" EXTENDED BASE  
(Based On Tank Completely Submerged)

$F_B = [12.8' \times 6.8' \times 5.8' + (13.8' + 13.8' + 6.8' + 6.8') \times 0.5' \times 0.5'] 62.4 \text{ LB/CF}$   
 $= 32,144 \text{ lbs}$   
 $F_W = \text{TANK WEIGHT (PER SPEC.)} + \text{SOIL COVER}$   
 $= 20,600 \text{ lbs.} + [9.8' \times 6.8' \times 3.0' + (13.8' + 13.8' + 6.8' + 6.8') \times 0.5' \times 9.3'] 100 \text{ LB/CF}$   
 $= 59,750 \text{ lbs}$   
 $F_W = 59,750 \text{ lbs} > F_B = 32,144 \text{ lbs OK}$  **USE MODEL AX20-20M-EB TANK BY ACME-SHOREY**

\*Dimension reduced to account for the portion of the tank covered by the treatment pod unit.

AdvanTex AX20 2 Pod Mode 3B

PUMP DOSING NOTES:

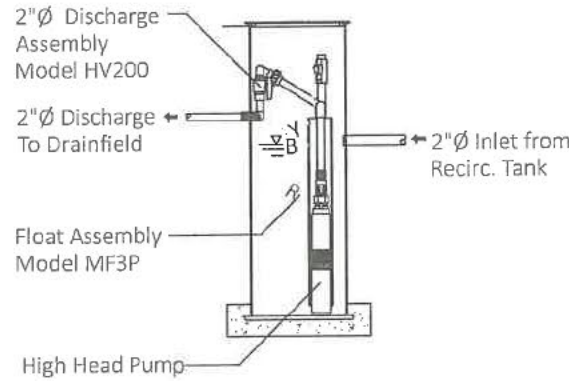
- 1.) PUMP SHALL BE LIBERTY 4/10 HP EFFLUENT PUMP (OR APPROVED EQUAL) MEETING MINIMUM REQUIREMENTS OF 14 FEET OF TOTAL DYNAMIC HEAD AT A 6 GALLON PER MINUTE FLOW RATE.
- 2.) SET 9" FLOAT SEPARATION BETWEEN PUMP ON AND PUMP OFF FLOATS. DOSING VOLUME = 18 GALLONS PER DOSE.
- 3.) SET ALARM FLOAT 2" ABOVE PUMP OFF FLOAT.
- 4.) ALL PUMP, WIRING, ALARM, AND FLOAT INSTALLATIONS SHALL CONFORM TO MASSACHUSETTS STATE PLUMBING AND MASSACHUSETTS STATE ELECTRICAL CODES AS WELL AS TO MANUFACTURER'S SPECIFICATIONS.

Design Notes

For residential strength waste up to 6 bedrooms. Applications greater than 6 bedrooms requires a design review by Orenco.

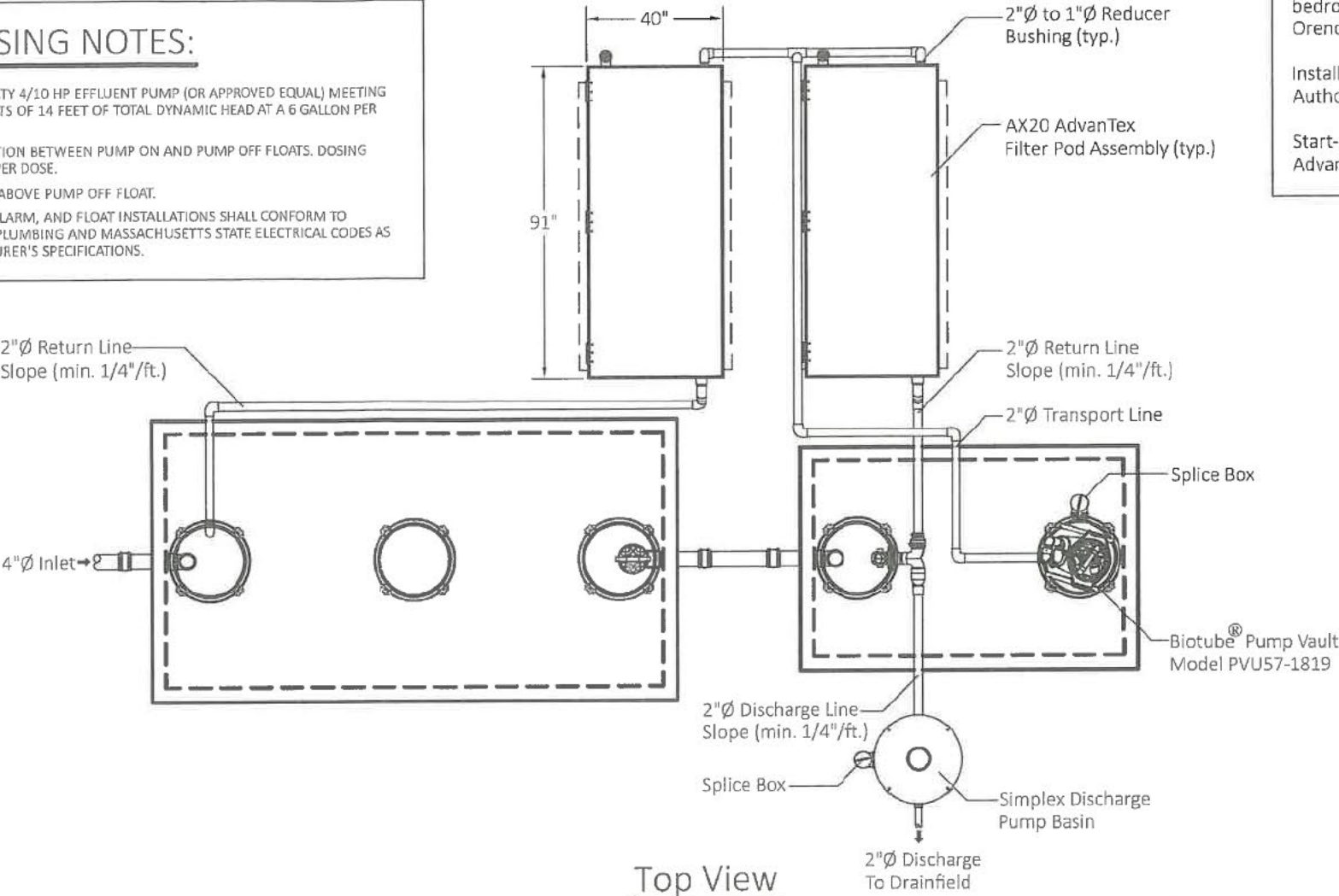
Installation to be performed by an AdvanTex Authorized Installer only.

Start-up and service to be performed by an AdvanTex Authorized Service Provider only.

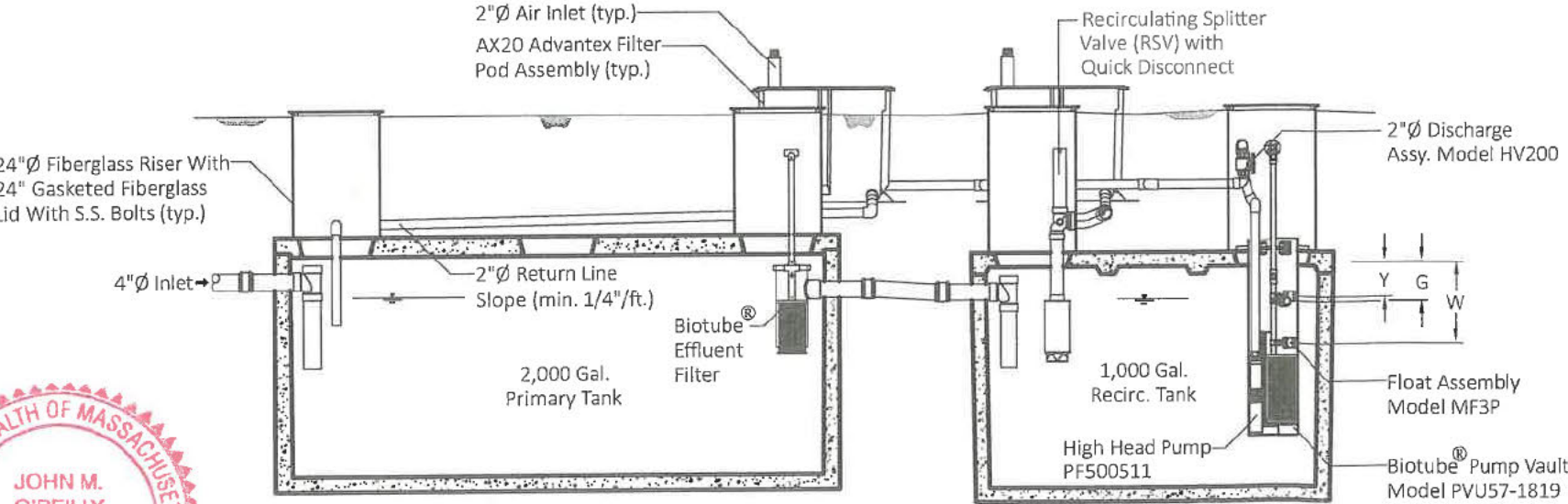


Pump Basin  
NOT TO SCALE

Float Functions	
Y	High Level Alarm
G	Override Timer ON/OFF
W	LLA/RO
B	Pump On
R	Pump Off



Top View  
NOT TO SCALE



Side View  
NOT TO SCALE

SHEET 3 OF 3

Christian Union Church  
c/o Jean Stanley, Director of Housing Rehab Programs, The Resource Inc.  
23 White's Path Suite G2, South Yarmouth, MA 02664

ADVANTEX DESIGN & NOTES  
32 SHORE ROAD, TRURO, MA

**J.M. O'REILLY & ASSOCIATES, INC.**  
Professional Engineering & Land Surveying Services

1573 Main Street - Route 6A  
P.O. Box 1773  
(508)896-8801 Office Brewster, MA 02631 (508)896-8602 Fax

DATE:	SCALE:	BY:	CHECK:	JOB NUMBER:
7/16/2024	As Noted	RFR	JMO	JMO-9607





JUL 24 2024

RECEIVED BY



## TOWN OF TRURO

Health Department  
P.O. Box 2030, Truro, MA 02666

PH: 508-349-7004, Ext. 131 Fax: 508-349-5508  
Email: [ebeebe@truro-ma.gov](mailto:ebeebe@truro-ma.gov) ; [adavis@truro-ma.gov](mailto:adavis@truro-ma.gov) ; [lbudnick@truro-ma.gov](mailto:lbudnick@truro-ma.gov)

**PAID**  
Co 7/25/24

### APPLICATION TO NAME A MANAGER

This application is used for a Change of Manager, Add Co-Managers or to Name a

#### Section 1 - Business Information

Date: JULY 22, 2024

Print Name of Applicant: ROBERTA SCHNABEL

Business Name or DBA to be managed: PILGRIM BEACH VILLAGE Number of Units: 19

Street Address of Business: 174 SHORE RD, NO. TRURO, MA Business Email: PILGRIM-BEACH-VILLAGE

Mailing Address of Business: ( ☐ Check if New Address ) P.O. Box 83, NO. TRURO, MA 02652

#### Section 2 - Manager Information

Name of Previous Manager: PAUL FOLEY On-Site Manager Unit #: 16

Name of New Onsite Manager: ROBERTA SCHNABEL On-Site Manager Unit #: 16

Name of Property Management (10 Units or less): N/A

Mailing Address of New Manager and/or Property Management Company: P.O. Box 266 NO. TRURO MA. OR

P.O. Box 83, NO. TRURO, MA Phone (24 hours/day) [REDACTED] mail [REDACTED] (office)

Name of Co-Managers:

Todd Souza

Unit # 16 Phone (24hrs/day): [REDACTED]

PO Box 83

N. Truro, MA 02652

Unit # \_\_\_\_\_ Phone (24hrs/day): \_\_\_\_\_

I have read & understand the Board of Health Manager Regulation, Section III, Article 4. Signature of New Manager, Co-Managers or Contact Person for Property Management is required.

Roberta Schnabel  
SIGNATURE

ROBERTA SCHNABEL  
PRINT NAME

JULY 22, 2024  
DATE

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
PRINT NAME

\_\_\_\_\_  
DATE

\_\_\_\_\_  
SIGNATURE

\_\_\_\_\_  
PRINT NAME

\_\_\_\_\_  
DATE

#### Section 3 - \*\*Office Use Only\*\*

	Scheduled	Date	Fee	Paid
Team Inspection (If over 3yrs since last one)	<input type="checkbox"/>	_____	\$45.00	<input checked="" type="checkbox"/>
Board of Health Hearing	<input type="checkbox"/>	_____	\$75.00	<input checked="" type="checkbox"/>

**PAID**

508-487-3418



## Arozana Davis

---

**From:** Rich Small <[REDACTED]>  
**Sent:** Thursday, July 25, 2024 10:08 AM  
**To:** Arozana Davis  
**Cc:** Courtney Warren; Emily Beebe; [REDACTED]; Lynne Budnick  
**Subject:** Re: Change of Manager: Pilgrim Beach Village

RE: Pilgrim Beach Manager change

Hello All,

Pilgrim Beach Villages former manager Paul Foley left his position in late June, 2024 and we hired back our former Manager Roberta Schnabel. Roberta came back out of retirement to bail us out and not intending to stay longer than the season.

We started our job search and found a great replacement manager Todd Sousa who currently manages the Sand Dunes in Truro so he has plenty of experience. He will be coming on board sometime in late October at which time I will work with him to set up getting the site inspection team to come out and we won't have a full house.

I will have Todd come down to Town Hall to add his name and info to the change of manager form and add him as co-manager and have him attend the Board of Health meeting on 8/6/24 @ 4:30.

Any questions at all please feel free to call me on [REDACTED]

Thank you.

Pat Small

On Wed, Jul 24, 2024 at 6:01 PM Rich Small <[REDACTED]> wrote:  
Thanx I'll give Lynn a call tomorrow

On Wed, Jul 24, 2024 at 2:37 PM Arozana Davis <[ADavis@truro-ma.gov](mailto:ADavis@truro-ma.gov)> wrote:

Pat,

I've cc'd Lynne in on this email; the credit card machine is right next to her. I will let you two communicate about the \$120 payment for the Change of Manager.

Be well!

Arozana