

Truro Board of Health

Tuesday September 20, 2022

Meeting in Executive session 4:00 PM

Regular Meeting- 4:30 PM

EXECUTIVE SESSION

<https://meet.goto.com/397209117>

1 877 309 2073 Access Code: 397-209-117

Board of Health Executive Session with Town Counsel 4:00 PM - 4:30 PM

Move that the Board of Health enter into Executive Session, in accordance with the provisions of Massachusetts General Law, Chapter 30A, §21 (a) 3 to discuss strategy with respect to litigation if an open meeting may have a detrimental effect on the litigating position of the Board and the chair so declares, re: Town of Truro v. Delgizzi, Southeast Housing Court, C.A. No. 19H83CV0357CI; and to not reconvene in open session.

REGULAR MEETING

REGULAR MEETING at 4:30 PM

Remote Meeting Access Instructions

This will be a remote meeting. Citizens in Truro can view the meeting on Channel 18 and on the homepage of the Town of Truro website on the "Truro TV Channel 18" button found under "Helpful Links". To view, click on the green "Watch" button in the upper right of the page. **To provide comment during the meeting, please call in toll free at 1-866-899-4679 and enter the following access code when prompted: 972-302-709; or access the meeting from your computer, tablet or smartphone.** <https://global.gotomeeting.com/join/972302709> There may be a slight delay (15-30 seconds) 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 to help us manage multiple callers effectively. Citizens may also provide public comment for this meeting by emailing the Health Agent Emily Beebe at 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. **Variance Request/Local Upgrade Approval- 464 Shore Road**
2. **Water Resources Discussion**
3. **Public Health on proposed revisions to Truro Board of Health Regulations Section 6, local Title 5: final draft- review and discussion**

III. MINUTES: August 16, 2022

IV. REPORTS

- o Report of the Chair
- o Health Agent's Report;



SURVEYING · ENGINEERING
HOME PLANNING & DESIGN

HEALTH DEPARTMENT
TOWN OF TRURO

3 GIDDIAH HILL ROAD · P.O. BOX 439
SO. ORLEANS, MASSACHUSETTS 02662-0439
TEL: 508.255.8312 FAX: 508.240.2306
EMAIL: info@ryder-wilcox.com

SEP 08 2022

RECEIVED BY

September 6, 2022

Truro Board of Health
24 Town Hall Road
Truro, MA 02666

Re: 464 Shore Road (Map 8, Parcel 30)

Dear Board Members,

On behalf of our clients, David and Kathy Murray, please reserve time at your next hearing to consider a request for variances from 310 CMR 15.00 The State Environmental Code Title 5 and the Truro Board of Health Regulations. The variances are being requested in order to allow the installation of a new Title 5 subsurface sewage disposal system (SDS) to serve the existing three-bedroom dwelling located at the above referenced property.

A new Title 5 SDS is proposed for the subject parcel. The parcel is located on a barrier beach within the Beach Point District of Truro and directly abuts Cape Cod Bay to the South. It also lies within Land Subject to Coastal Storm Flowage. A timber bulkhead creates a barrier between the developed portion of the lot and the barrier beach. The system is being installed as required by the Truro Board of Health Regulations Section 6, Article 3, Part 1h which defines cesspools as failed systems and requires the installation and certification of an upgraded Title 5 system by December 31, 2023. The proposed system will also implement Innovative/Alternative Technology for Nitrogen reduction in order to improve the quality of effluent being discharged. The existing system, which is composed of a single cesspool, will be pumped dry and removed.

In order to optimize compliance with setbacks contained within both state and local regulations, the major components of the proposed system are located between the front of the existing dwelling and the northern property boundary. Soil testing performed in this area showed clean sand from approximately 2' to 10.5' below grade; no groundwater was encountered. While groundwater was not encountered within the soil test holes dug by this office, it had been previously observed at elevation = 1.8 on a neighboring property. The resulting estimated maximum seasonal high groundwater is approximately elevation = 3.2. A low-profile soil absorption system (SAS) is proposed, along with the aforementioned placement of the major system components, in order to provide 5.5 ft. of separation from groundwater. The limited suitable space for siting of the proposed SDS, in conjunction with the need to attain prescribed pipe slopes to ensure proper function of the system, necessitates the placement of the SAS deeper than 3 ft. below grade. Given the circumstances described above, the installation of the aforementioned system, as proposed, will provide an improvement to both public health and safety and the environment.

The following variances are requested:

310 CMR 15.00 The State Environmental Code Title 5

310 CMR 15.211(1)

- The proposed septic tank is to be 5 ft. from the northern and eastern property lines (5 ft. variance).
- The proposed septic tank is to be 9 ft. from the existing dwelling (1 ft. variance).
- The proposed SAS is to be 6 ft. from the northern property line (4 ft. variance).
- The proposed SAS is to be 6 ft. from a dwelling on piers (4 ft. variance).
- The proposed SAS is to be 3 ft. from proposed water service (7 ft. variance).

310 CMR 15.240(4)

- The proposed leaching capacity of the SAS is 313 GPD where 330 GPD is required (5.2% reduction).

310 CMR 15.221(7)

- The top of the proposed SAS is to be greater than 3 ft. below finished grade (1 ft. variance).

Town of Truro Board of Health Regulations

Section 6, Article 9

- The proposed septic tank is to be 81 ft. from a coastal beach (19 ft. variance).
- The proposed SAS is to be 79 ft. from a coastal beach (71 ft. variance).

I have included nine (9) sets of the following: Application for Board of Health Variances, an engineered site plan, a Certified List of Abutters, the Abutter's Notice, floor plans, and a check for \$75.00. Please feel free to contact this office if you require any additional information.

Sincerely,



Stephanie J. Sequin, P.E.

cc: Murray
Job #12845

Fee: \$75.00



APPLICATION FOR BOARD OF HEALTH VARIANCES

Date: 8/16/2022

HEALTH DEPARTMENT
TOWN OF TRURO

SEP 08 2022

RECEIVED BY:

#V2002-16

Property Owner's Name: David S. Murray

Mailing Address: Box 809 N. Truro, MA 02652

Address of Property: 464 Shore Road

Map and Parcel Number: Map # 8 Parcel # 30

Design Engineer/Sanitarian Stephanie J. Sequin, P.E.

Firm/Company Name: Ryder & Wilcox, Inc. Phone #: 508-255-8312

Address: Box 439 S. Orleans, MA 02662

Please check type of variance requested:

Title 5 Variance Request: Section See attached

Board of Health Variance Request: Section/Article See attached

Stephanie J. Sequin (Agent) 8/16/22

[Signature]
Signature (Representative)

8/16/2022
Date

[Signature]
Signature (Property Owner)

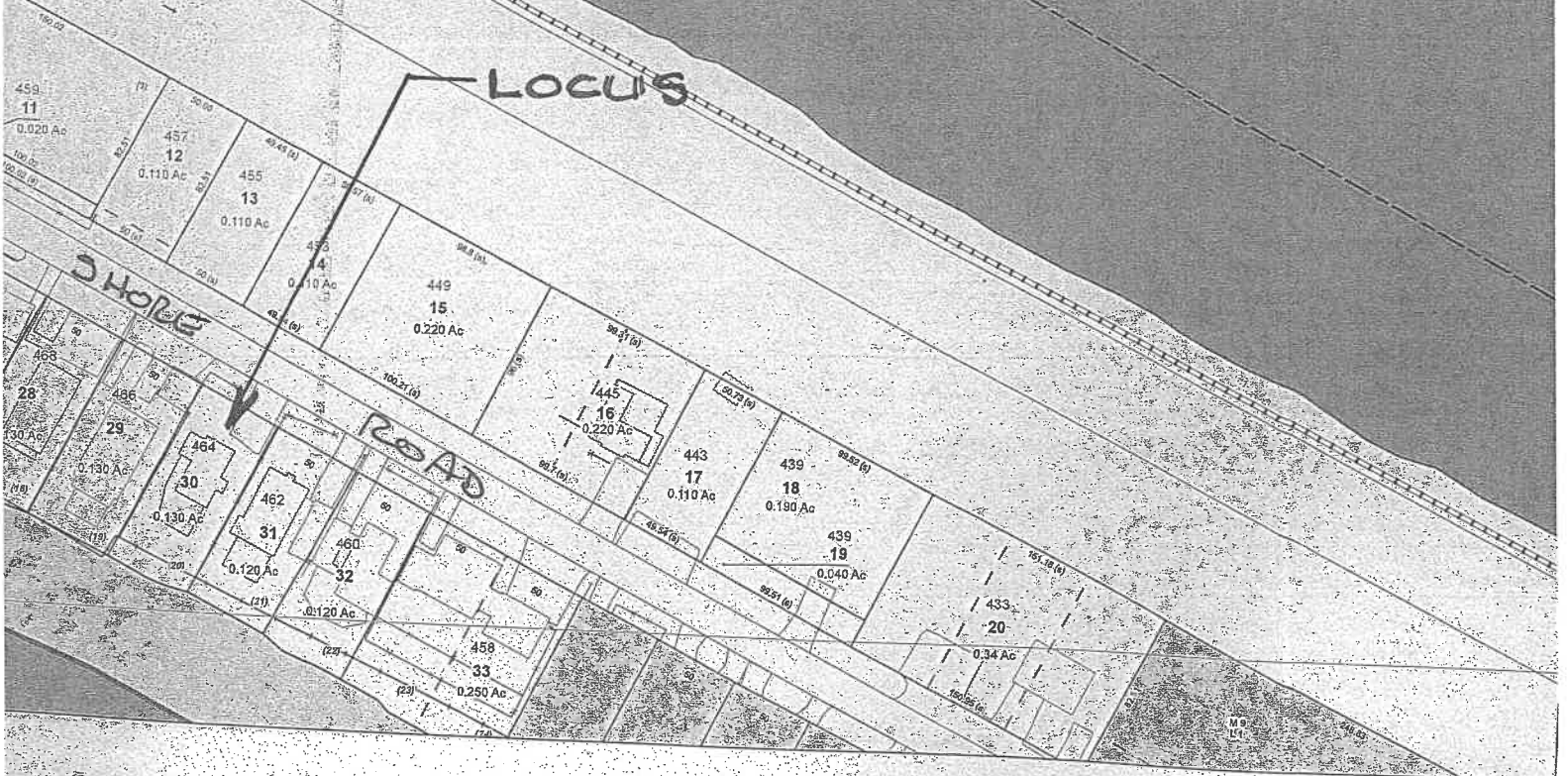
PILGRIM
LAKE

ROUTE 6 GRAND ARMY OF THE REPUBLIC HIGHWAY

LOCUS

SHORE

ROAD





TRURO ASSESSORS OFFICE
PO Box 2012 Truro, MA 02666
Telephone: (508) 214-0921
Fax: (508) 349-5506

Date: August 16, 2022

To: Stephanie Sequin, P.E. Ryder & Wilcox, Inc.

From: Assessors Department

Certified Abutters List: 464 Shore Road (Map 8 Parcel 30)

Board of Health

Attached is a combined list of abutters for 464 Shore Road (Map 8 Parcel 30).

The current owner is David S. Murray.

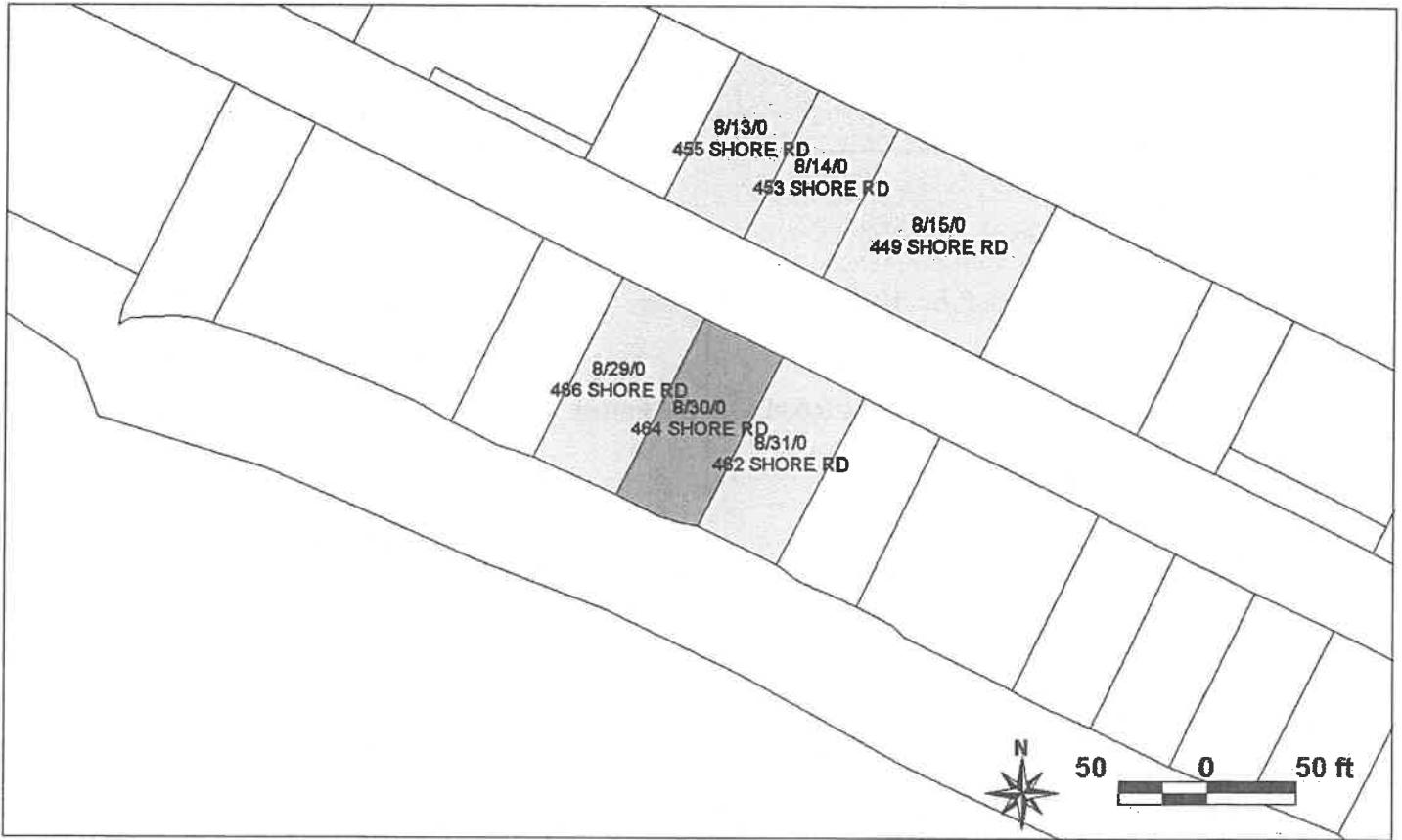
The names and addresses of the abutters are as of August 12, 2022 according to the most recent documents received from the Barnstable County Registry of Deeds.

Certified by: _____

Laura Geiges
Assistant Assessor / Data Collector

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
258	8-13-0-R	COLLINS ELEANOR	455 SHORE RD	PO BOX 36	NO TRURO	MA	02652-0036
259	8-14-0-R	MURRAY DAVID S	453 SHORE RD	PO BOX 809	NO TRURO	MA	02652
260	8-15-0-R	COUSINS FAMILY REVOC TRUST TRS: COUSINS NORMAN A & MARILYN	449 SHORE RD	CAROL KNOX 5569 COMPTON LN	ELDERSBURG	MD	21784
274	8-29-0-R	COLLINS ELEANOR	466 SHORE RD	PO BOX 36	NO TRURO	MA	02652-0036
276	8-31-0-R	COUSINS FAMILY REVOC TRUST TRS: COUSINS MARILYN	462 SHORE RD	CAROL KNOX 5569 COMPTON LN	ELDERSBURG	MD	21784

Ryder & Wilcox

SURVEYING · ENGINEERING
HOME PLANNING & DESIGN

3 GIDDIAH HILL ROAD · P.O. BOX 439
SO. ORLEANS, MASSACHUSETTS 02662-0439
TEL: 508.255.8312 FAX: 508.240.2306
EMAIL: info@ryder-wilcox.com

September 6, 2022

Re: Proposed septic system upgrade
464 Shore Road - Truro, Mass. (Assrs. Map 8 Pcl. 30)

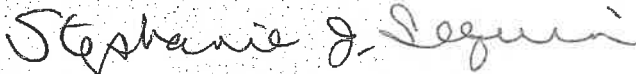
Dear Abutter:

You are being notified pursuant to the State Environmental Code Title 5 and the Truro Board of Health Regulations that the Board of Health will hold a public hearing to hear requests for variances from applicable State and/or Local regulations. The variances are being requested to allow the installation of a sewage disposal system to replace an existing cesspool serving an existing dwelling.

A copy of the letter requesting a hearing is enclosed. Copies of the Site Plan will be on file with the Board of Health by September 9th and may be viewed prior to the public hearing to be held on September 20, 2022. Variance hearings begin at 4:30 P.M. The estimated time of the hearing for this project may be obtained by contacting the Health Department at 508-214-0920.

The meeting will be held remotely. The meeting can be viewed on Channel 18 and on the homepage of the Town of Truro website. Instructions for remote participation will be made available on the Town of Truro website, or by contacting the Health Department.

Sincerely,



Stephanie J. Sequin, P. E.

cc: Murray

12845

Murray #12845

Affix stamp here if issued as certificate of mailing or for additional copies of this bill.
Postmark and Date of Receipt

Check appropriate block for Registered Mail:
 With Postal Insurance
 Without Postal Insurance

Indicate type of mail:
 Registered
 Insured
 COD
 Certified

Article Number	Name of Addressee, Street, and Post-Office Address	Postage Fee	Handling Charge (if Regis.)	Act. Value (if Regis.)	Insured Value	Due Sender If COD	R.R. Fee			S. D. Fee			S. H. Fee			Rest. Del. Fee	Remarks
							Base	Ext.	Ins.	Base	Ext.	Ins.	Base	Ext.	Ins.		
2450 0000	8-13-0-R																
18 4872	COLLINS ELEANOR PO BOX 36 NO TRURO, MA 02652-0036																
11 4896	8-14-0-R																
	8-15-0-R																
	COUSINS FAMILY REVOC TRUST TRS: COUSINS NORMAN A & MARILYN CAROL KNOX 5669 COMPTON LN ELDERSBURG, MD 21784																

SOUTH ORLEANS 02062
 SEP 06 2007
 USPS

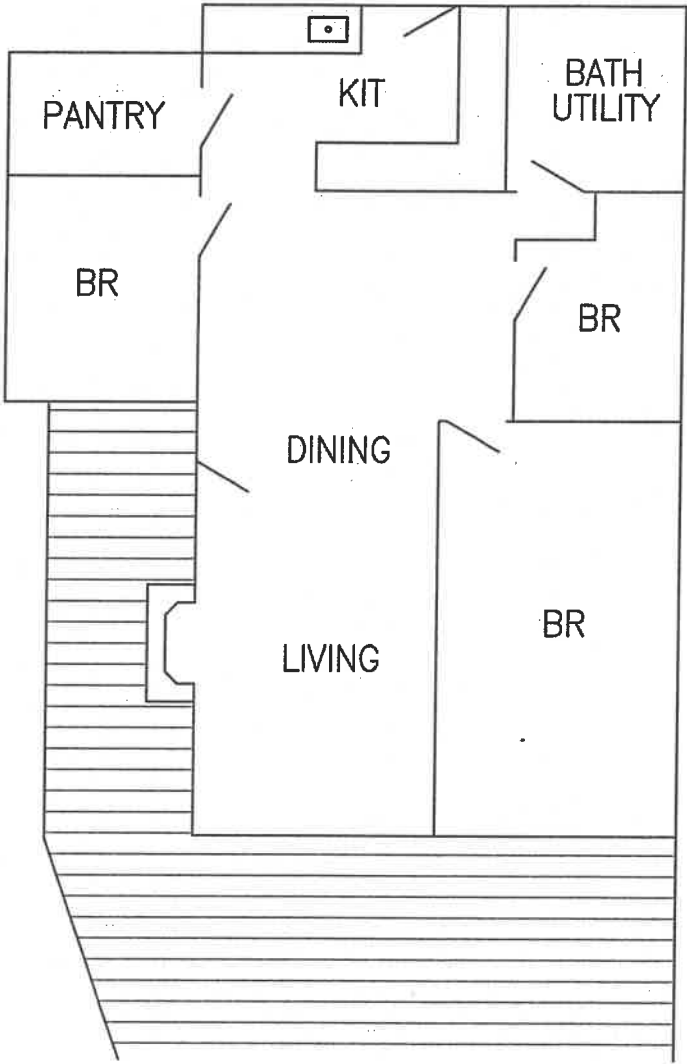
The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstruction insurance is \$50,000 per piece subject to a limit of \$500,000 per occurrence. The maximum indemnity payable on Express Mail merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See *Domestic Mail Manual* R900, S913, and S921 for limitations of coverage on insured and COD mail. See *International Mail Manual* for limitations of coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

Postmaster, Per (Name of Receiving Employee)


Total Number of Pieces Received at Post Office
 2

Form Must Be Completed by Typewriter, Ink, or Ball Point Pen

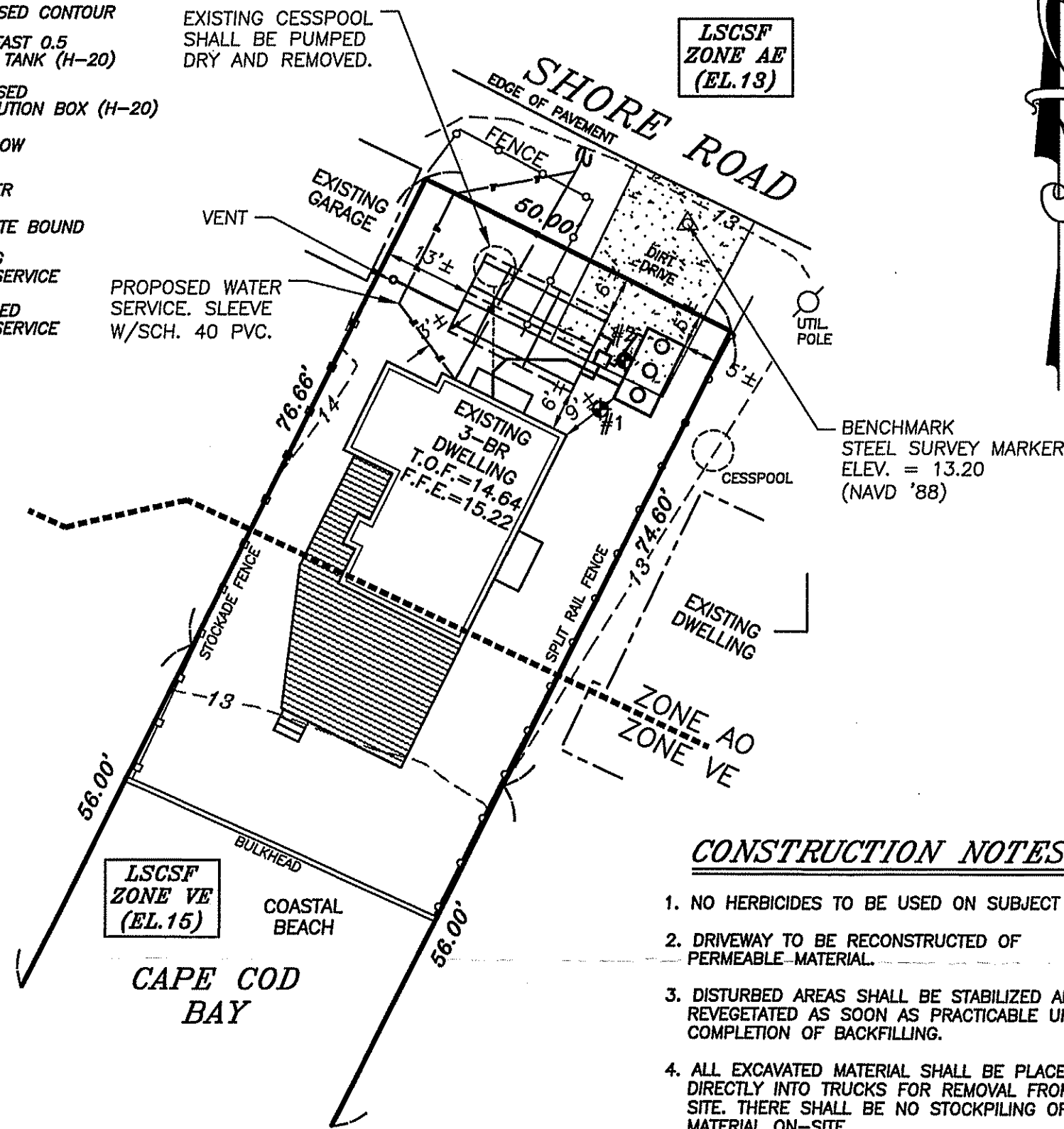
EXISTING DWELLING
464 SHORE ROAD



LEGEND

- ⊕ TEST HOLE LOCATION
- - - - - EXISTING CONTOUR
- 52 — PROPOSED CONTOUR
- MICROFAST 0.5 SEPTIC TANK (H-20)
- PROPOSED DISTRIBUTION BOX (H-20)
- GOODFLOW CTL-12 CHAMBER
- C.B. CONCRETE BOUND
- — — — — EXISTING WATER SERVICE
- — — — — PROPOSED WATER SERVICE

NOTE: PLAN IS FOR SEPTIC UPGRADE ONLY; IT IS NOT INTENDED TO BE A PROPERTY SURVEY



SITE PLAN
1" = 20'

GENERAL NOTES:

1. SYSTEM IS DESIGNED IN ACCORDANCE WITH "COMMONWEALTH OF MASS., DEPT. OF ENVIRONMENTAL PROTECTION, 310 CMR 15.00; THE STATE ENVIRONMENTAL CODE, TITLE 5: STANDARD REQUIREMENTS FOR THE SITING, CONSTRUCTION, INSPECTION, UPGRADE AND EXPANSION OF ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS" AND THE TOWN OF TRURO REGULATIONS, EXCEPT WHERE NOTED.
2. NO WELLS OR WATER SUPPLIES ARE KNOWN TO EXIST WITHIN 100 FEET OF THE PROPOSED SOIL ABSORPTION SYSTEM.
3. PRIOR TO BACKFILLING COMPLETED SYSTEM, NOTIFY THE ENGINEER AND THE HEALTH DEPARTMENT FOR INSPECTION. PROVIDE 24 HOURS (MIN.) NOTICE.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
5. ANY CHANGES TO THIS PLAN MUST BE APPROVED BY THE BOARD OF HEALTH.
6. AREA SERVED BY TOWN WATER.
7. NO RESERVE AREA IS PROVIDED. A REPLACEMENT SYSTEM SHALL BE INSTALLED IN PLACE (REFERENCE DEP POLICY DATED 1/3/96).

TEST HOLE DATA

DATE OF TEST HOLES: 10/25/2021
NO WATER ENCOUNTERED
INSP. BY: D. QUINN (R&W), AROZANA DAVIS (HEALTH DEPT.)

No.1			
DEPTH (IN.)	SOIL HORIZON	SOIL TEXTURE	ELEVATION (FT.)
0 - 9	A	LOAMY SAND	13.7 - 12.9
9 - 16	B	LOAMY SAND	12.9 - 12.4
16 - 126	C	MEDIUM TO COARSE SAND	12.4 - 3.2

No.2			
DEPTH (IN.)	SOIL HORIZON	SOIL TEXTURE	ELEVATION (FT.)
0 - 24	FILL	-	13.3 - 11.3
24 - 126	C	MEDIUM TO COARSE SAND	11.3 - 2.8

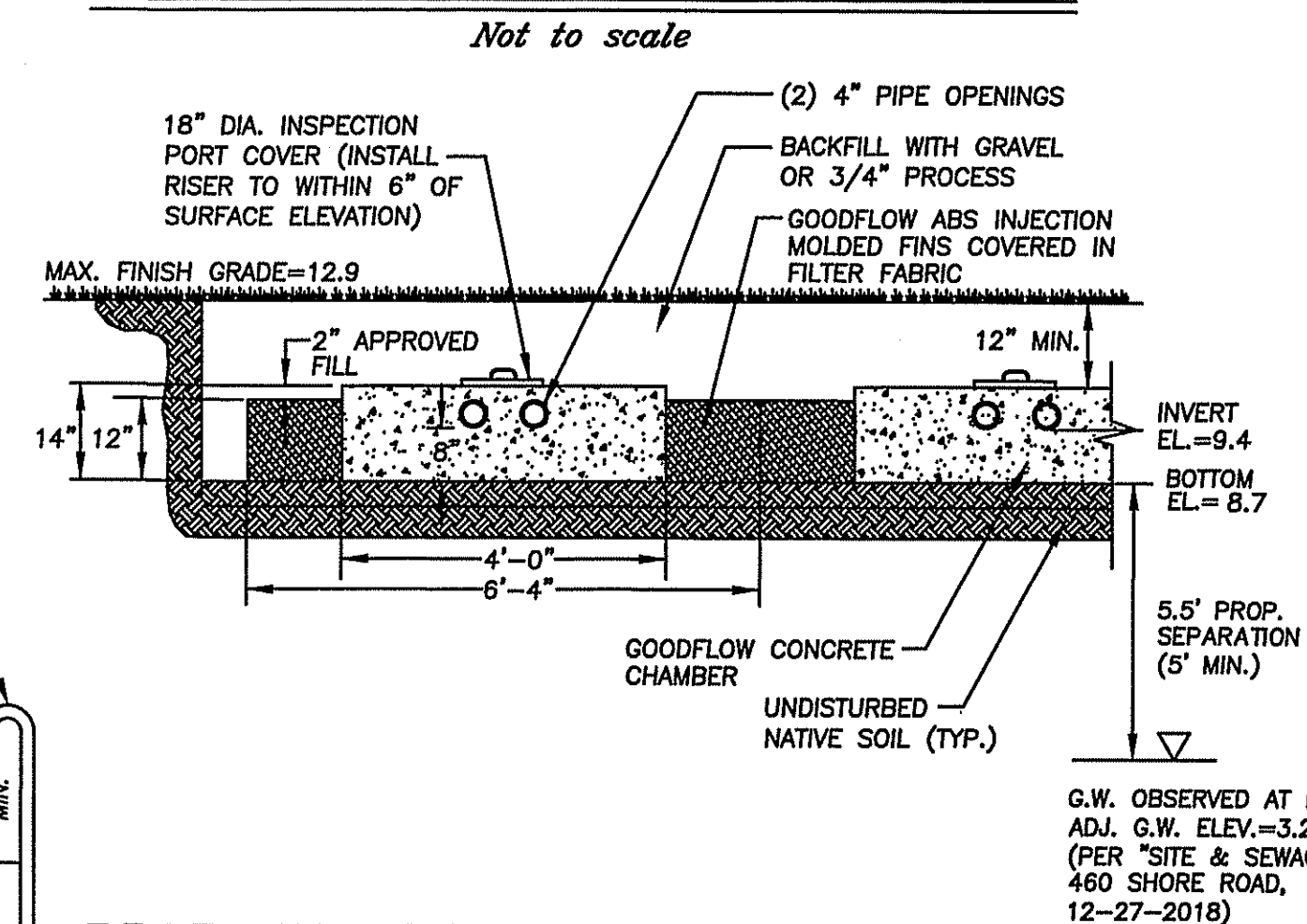
CONSTRUCTION NOTES:

1. NO HERBICIDES TO BE USED ON SUBJECT LOT.
2. DRIVEWAY TO BE RECONSTRUCTED OF PERMEABLE MATERIAL.
3. DISTURBED AREAS SHALL BE STABILIZED AND REVEGETATED AS SOON AS PRACTICABLE UPON COMPLETION OF BACKFILLING.
4. ALL EXCAVATED MATERIAL SHALL BE PLACED DIRECTLY INTO TRUCKS FOR REMOVAL FROM SITE. THERE SHALL BE NO STOCKPILING OF MATERIAL ON-SITE.
5. ANY ADDITIONAL WORK BEYOND THE SCOPE OF THAT WHICH IS SHOWN HEREON WILL REQUIRE CONSERVATION COMMISSION APPROVAL.

DESIGN DATA

NUMBER OF BEDROOMS: 3
ESTIMATED DAILY EFFLUENT: 330 GPD
EFFECTIVE LEACHING AREA AS PROPOSED:
FIELD: 40 LF X 10.57 SF/LF = 422.8 SF
LEACHING CAPACITY AS PROPOSED:
(EFFLUENT LOADING RATE = 0.74 GPD/SF)
FIELD: 422.8 SF X 0.74 = 312.9 GPD
TOTAL = 313 GPD
(5.2% REDUCTION)

GOODFLOW CTL-12 CHAMBER DETAIL



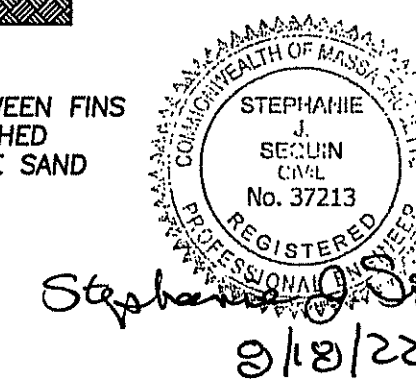
PROPOSED ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM

Prepared for: David & Kathy Murray
Location: 464 Shore Road - Truro, MA

Ryder & Wilcox, Inc., P.E. & P.L.S.

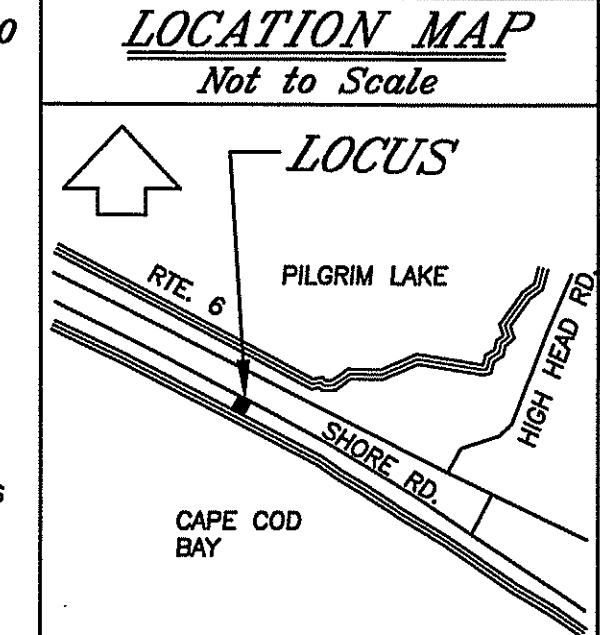
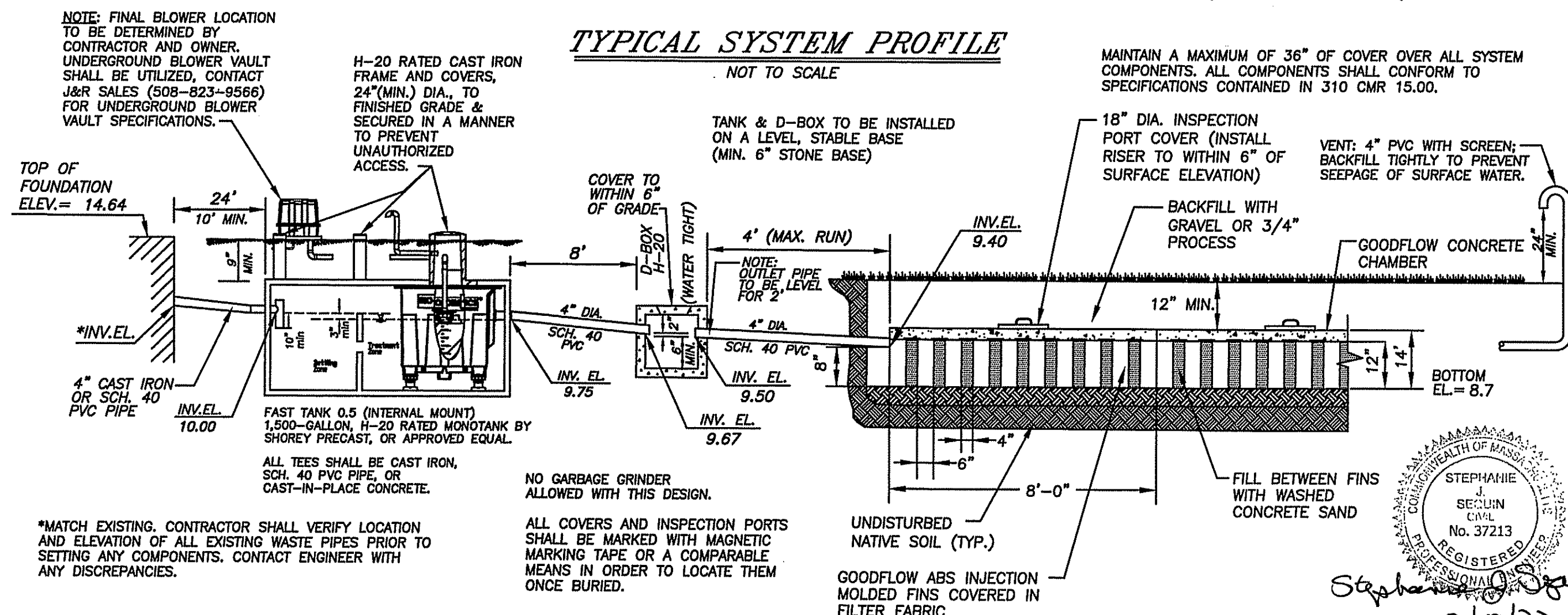
3 Ciddiah Hill Rd.
P.O. Box 439
So. Orleans, MA, 02662
Tel. (508) 255-8312
Fax. (508) 240-2306

Scale: 1" = 20'
Drawn by - NMA
Date - August 18, 2022



TYPICAL SYSTEM PROFILE

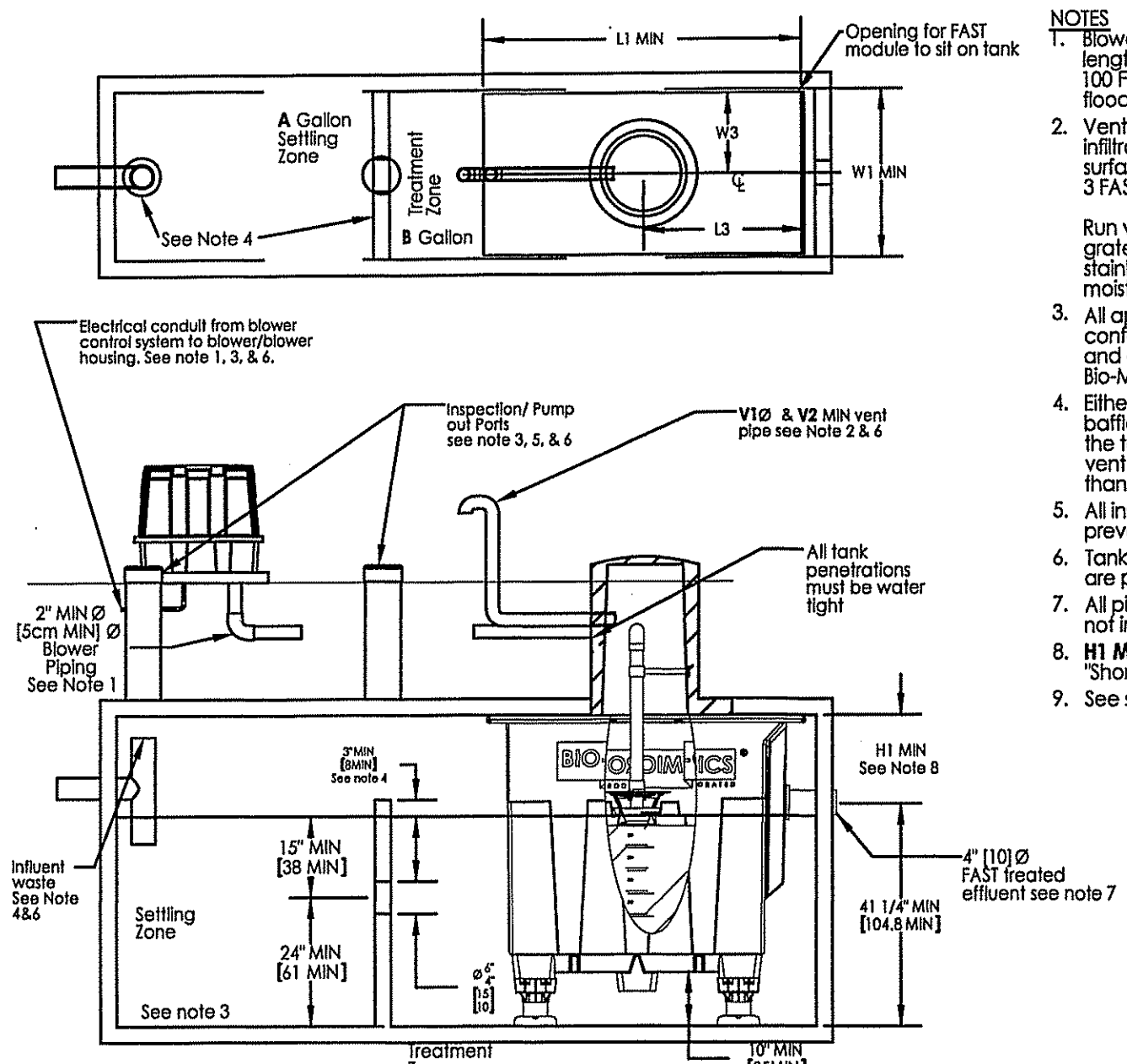
NOT TO SCALE



Reference
Assr's Map 8, Pcl. 30
Pl. Bk. 33, Pg. 127-F2

Unrecorded plan prepared for
Proctor and Mildred Murray
November 1946 by W.C. Slade

HEALTH DEPARTMENT
TOWN OF TRURO
RECEIVED BY:
SEP 08 2022



- NOTES**
- Blower piping to FAST@ may not exceed 100 FT [30.5m] total length and use 4 elbows maximum. For distances greater than 100 FT [30.5m] - consult factory. Blower must be located above flood/standing water levels on a concrete base.
 - Vent to be located above finish grade or higher to avoid infiltration. Cap with vent grate with at least V2 sq in. of open surface area. Secure with stainless steel screws (see sheet 3 of 3 FAST Details.)
or
Run vent to desired location and cover opening with vent grate with at least V2 sq in. of open surface area. Secure with stainless steel screws. Vent piping must not allow excess moisture build up or back pressure.
 - All appurtenances to FAST@ (e.g. tank pump outs, etc.) must conform to all country, state, province, and local plumbing and electrical codes. The blower control system is provided by Bio-Microbics, Inc.
 - Either the influent pipe tee shall be fitted with a pipe cap or the baffle separating the two zones shall be extended to the top of the tank. If choosing to use the pipe cap; drill a 1/4" [0.6cm] vent hole in the cap and the baffle shall be at least 3" [8] higher than the water level as shown on the drawing.
 - All inspection, viewing and pump out ports must be secured to prevent accidental or unauthorized access
 - Tank, anchors, piping, conduit, blower housing pad and vents are provided by others.
 - All piping and ancillary equipment installed after FAST@ must not impede or restrict free flow of effluent.
 - H1 Min Height may be reduced, consult factory and reference "Short-FASTModule-Procedure.pdf."
 - See sheet 3 of 4 for required dimensions.

Unit Size	A MIN	B MIN	V1 MIN	V2 MIN	L1	L2	L3	W1 MIN	W2	W3	H1 MIN
0.5	500	1000	3"	7.1 in sq	59.5"	54"	29.75"	31.25"	25"	15.125"	16.375"
0.75	500	1000	3"	7.1 in sq	60"	54"	31.5"	44.25"	37"	21.5	16.375"
0.9	500	1000	3"	7.1 in sq	59"	54"	31.25"	54.5"	49"	26.625	16.375"
1.0	500	1000	4"	9 in sq	59"	54"	31.25"	54.5"	49"	26.625	16.375"
1.5	750	2000	4"	9 in sq	83.5"	75.75"	42.875"	55.75"	49"	27.625	16.25"

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BIO-MICROBICS © 2011

DO NOT SCALE
UNLESS NOTED DIMENSIONS ARE IN INCHES [CENTIMETERS] TOLERANCES ± 0.02 IN/IN [± 0.05 CM/CM]

BIO-MICROBICS
INCORPORATED
MA 0.5-1.5 FAST Units

WEIGHT	lb	SIZE	DRAWING NUMBER	SHEET
NAME	DATE	A	FAST@ with feet	2 OF 4
DRAWN	CIC	2/18/2004	REVISED	4/19/2011
CHECKED	PF	4/19/2011	REV.	INI-04-D

A MIN	Settling Zone (MIN Liquid Capacity)
B MIN	FAST@ Chamber (MIN Liquid Capacity)
V1 MIN	Vent Diameter (MIN)
V2 MIN	Vent grate open area (MIN).
L1	FAST@ Length and MIN Tank Length
L2	Length of tank opening for hanging FAST@
L3	FAST@ Length from edge of liner to center of airline.
W1 MIN	FAST@ MIN Tank Width.
W2	Width of tank opening for hanging FAST@.
W3	FAST@ Width from edge of liner to center of airline.
H1 MIN	Clearance from center of outlet to inside top of tank (for feet install only)

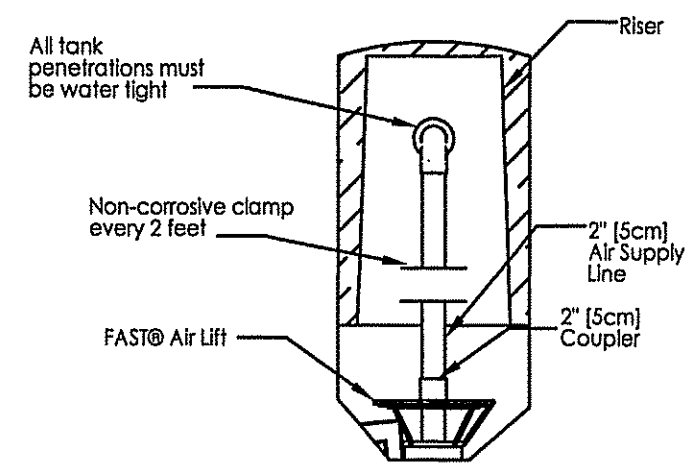
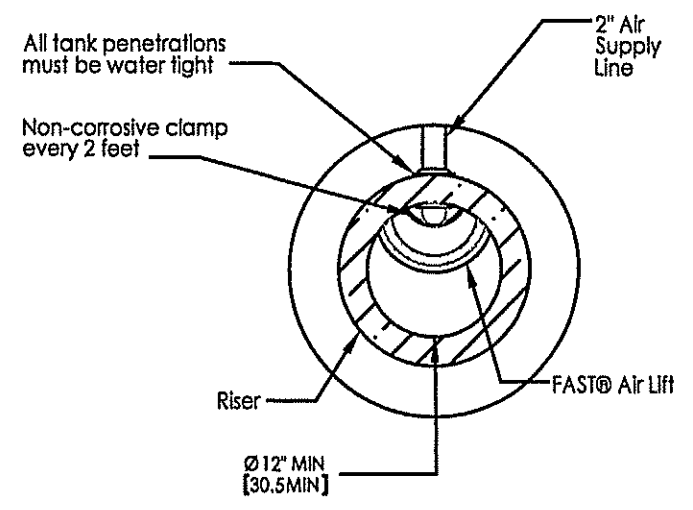
DO NOT SCALE
UNLESS NOTED DIMENSIONS ARE IN INCHES [CENTIMETERS] TOLERANCES ± 0.02 IN/IN [± 0.05 CM/CM]

BIO-MICROBICS
INCORPORATED
MA 0.5-1.5 FAST Units

WEIGHT	lb	SIZE	DRAWING NUMBER	SHEET
NAME	DATE	A	Chart	
DRAWN	CIC	2/18/2004	REVISED	4/19/2011
CHECKED	PF	4/19/2011	REV.	INI-04-D

BIO-MICROBICS © 2011

- Notes**
- Secure leg extension to the FAST@ unit by placing two screws on each side of the leg extension (4 screws per foot are included).
 - Cut 4" schd. 40 PVC pipe (not included) to obtain the desired height. Minimum pipe length of 6 1/8" [15.56cm]. For heights greater than 18" [45.7cm] use schd. 80 PVC pipe (not included). Consult factory for extending leg beyond 36" [9cm].
 - Anchor the leg extensions to the tank with non-corrosive hardware (not included) at the provided mounting points.
 - The air supply line into the FAST@ unit must be secured to prevent vibration induced damage. The air supply line should be secured with a non-corrosive clamp every 2' MIN.
 - Tank, anchors, piping conduit, blower housing pad, and tank vents are provided by others.



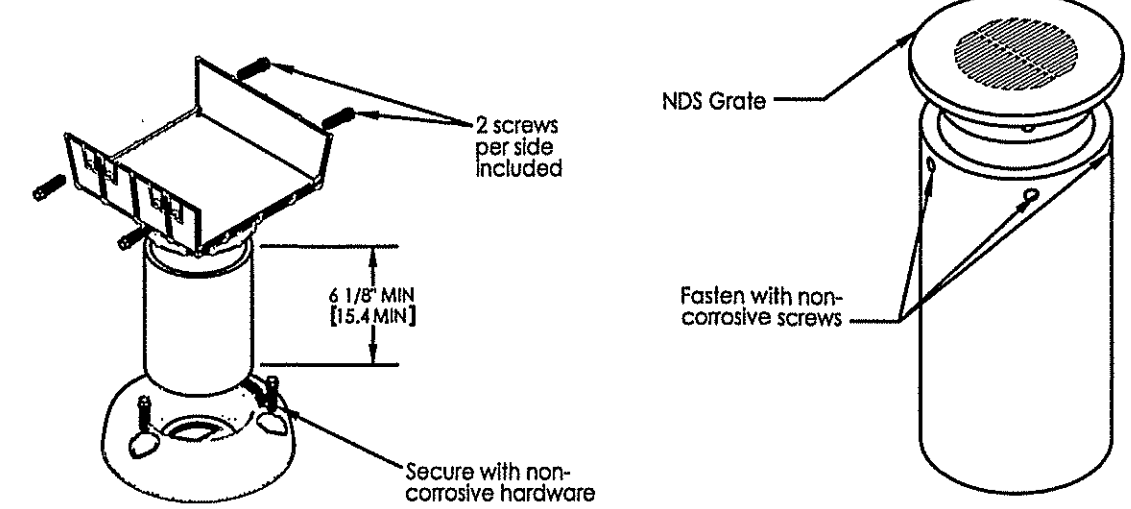
Alternate Air Supply Option

DO NOT SCALE
UNLESS NOTED DIMENSIONS ARE IN INCHES [CENTIMETERS] TOLERANCES ± 0.02 IN/IN [± 0.05 CM/CM]

BIO-MICROBICS
INCORPORATED
MA 0.5-1.5 FAST Units

WEIGHT	lb	SIZE	DRAWING NUMBER	SHEET
NAME	DATE	A	FAST@ Details	4 OF 4
DRAWN	CIC	2/18/2004	REVISED	4/19/2011
CHECKED	PF	4/19/2011	REV.	INI-04-D

Minimum leg extension assembly see note 2, 3, & 4



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PROPOSED MicroFAST 0.5

Prepared for: **David & Kathy Murray**
 Location: **464 Shore Road - Truro, MA**
Ryder & Wilcox, Inc., P.E. & P.L.S.
3 Ciddiah Hill Rd.
P.O. Box 439
So. Orleans, MA., 02662
Tel.(508) 255-8312
Fax.(508) 240-2306

Scale: **As Shown**
 Drawn by - **NMA**
 Date - **August 18, 2022**

Sh. 2 of 2
 Job No. 12845

RECEIVED BY: [Signature]
 SEP 08 2022
 TOWN OF TRURO

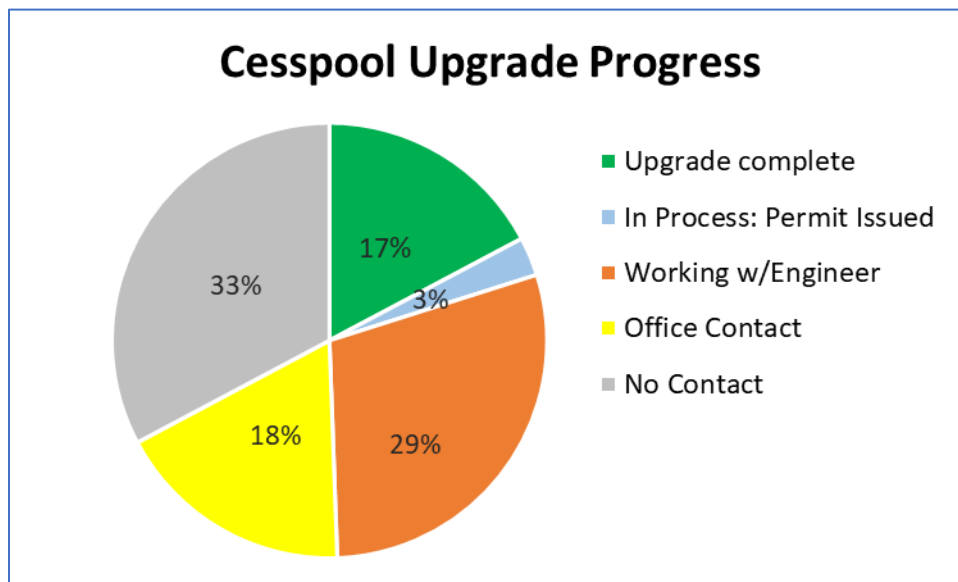


**TOWN OF TRURO
HEALTH & CONSERVATION DEPARTMENT
24 Town Hall Road, Truro 02666
508-349-7004 x119**

Memo to: Truro Board of Health
From: Emily Beebe, Truro Health & Conservation Agent
Date: September 16, 2022
Re: **Water Resources Update: September 2022**

Regarding cesspool upgrades to Title 5

The recent mailings about the cesspool upgrade process have resulted in many phone calls, office visits, and even some site visits. To date, 67% of the properties with cesspools have begun the upgrade process. Twenty percent of the properties with cesspools have either been upgraded or have permits issued to do so. 29% are working with engineers and 18% have contacted our office with questions and are not yet under contract with an Engineer/designer. Concerns have been raised by some of the homeowners on Beach Point about the expense of design plans/system installs given the uncertainty about possible extension of the Provincetown sewer system; these properties may be “eligible” for an ACO, and this is a topic for future discussion with the Board of Health. Our current challenge is making direct contact with the 57 homeowners who we have not yet heard from, so that we may assist them in their efforts to comply.



FINANCING:

The Barnstable County Health department appears to have secured grant funding to enhance their septic loan program. Currently loans are available with a 5% interest rate. An update as a result of new grant funding will be announced later this fall. The Housing Rehab Program now has a new administrator, TRI. We have met the new program director and she is happy to meet with homeowners in person at town hall. This program (previously administered by the CDP) provides income-based assistance for homeowners needing to make critical home repairs including septic system upgrades.

Regarding Administrative Consent Orders (ACO's)

We are scheduling in-office meetings with property owners to discuss the terms of their agreements. Once we have an understanding that can proceed, we will schedule a hearing with the Board to discuss the situation triggering the ACO.

Regarding the Massachusetts Estuaries project (MEP)

We have no additional information about the MEP since our August report was submitted but we continue to reach out.

Regarding stormwater management

H&C staff have completed field work for all roads south of the Pamet, and the area around Little Pamet. Mapping the data is underway. Regulatory review is

Regarding Pond water quality:

Snow pond was closed to swimming under a Public Health Advisory issued by the Cape Cod National Seashore on September 7. The algal bloom was qualified as cyanobacteria, and was observed as green globs and some green slime on the shoreline the pond by NRMS staff conducting routine pond monitoring. Photos were shared with regional experts at APCC. The Public Health advisory was posted at the pond access to avoid any human or pet exposure to the cyanobacteria

Pilgrim/Village Pond was regularly tested through the summer by the APCC cyanobacteria bacteria monitoring program and had no cyanobacteria issues this year.

Regarding Private well water quality:

The Town ran a courier service for well water samples on Wednesdays from July 6 - September 7, 2022. In total 30 water samples were delivered to the Barnstable County water quality lab.

Water testing kits are available at the Truro Health Department. Please call for a kit on Mondays, as the building is closed to the public on that day. A courier from Barnstable County lab picks up water samples on Tuesday and Thursday mornings each week at the Wellfleet Health Department at 220 West Main Street in Wellfleet. Please refer to the Truro Health department web page for more information on water testing your private well.

Regarding MA DOT:

This topic is being discussed with the Outer Cape Conservation Agents, and a coordinated approach to engage the DOT is being planned.

SECTION VI - LOCAL SEPTIC REGULATIONS TO SUPPLEMENT

TITLE 5, STATE ENVIRONMENTAL CODE

Amended February 2, 2010; June 5, 2012; October 2, 2018, December 4, 2018, May 18, 2021

Article 1 - General Provisions

- 1) **Authority.** In accordance with Massachusetts General Laws, Chapter 111, Sections 31 and 127A, the Truro Board of Health hereby adopts the following regulations to supplement the provisions of the State Environmental Code, Title 5: Standard Requirements for the Siting, Construction, Inspection, Upgrade and Expansion of On-Site Sewage Treatment and Disposal Systems and for the Transport and Disposal of Septage (hereinafter, "Title 5"), and shall take effect upon passage.
- 2) **Purpose.** The purpose of this article is to ~~provide a greater degree of~~ provide protection to the environmental and public health, prevent the spread of disease, and provide ~~greater~~ clarification of the definitions used by the Board in applying the provisions of Title 5 and the Truro Board of Health Regulations pertaining to on-site sewage treatment and disposal systems. Of specific concern is the need to protect the groundwater, which is the sole source of drinking water for Truro, Wellfleet and Provincetown.
- 3) **Enforcement.** Enforcement of the provisions contained in this Section VI will be carried out in accordance with the provisions of Title 5 of the State Environmental Code set forth at 310 C.M.R. 15.000, et seq. and all enforcement methods outlined in Section I of these Board of Health Regulations.
- 4) **Definitions.** With the exceptions listed below, the definitions provided in the State Building and Sanitary Codes, Title 5 and the Wetland Protection regulations shall apply. All time frames referenced herein shall be counted as calendar days. The following terms used by the Board in applying the provisions of Title 5 and the Truro Board of Health Regulations pertaining to on-site sewage treatment and disposal systems, shall be defined as follows:

Accessory Dwelling Unit (ADU): A complete, separate housekeeping unit containing both a kitchen and sanitary facilities, as defined by the Truro Zoning Bylaws section 40.2.

Alter or Alteration: To make different by changing, adding and/or subtracting components, piping or location.

Bedroom

- a) Any room that meets the definition of a bedroom under Title 5 or any room or enclosed addition with at least 70 square feet of floor area and a building code conforming egress window, that provides minimum isolation necessary for use as a sleeping area. Rooms such as a finished basement with building code conforming egress may be considered a bedroom if it meets the definition. The definition does not apply to a bathroom, kitchen, hall, unfinished cellar, unfinished basement, unfinished attic, garage, unfinished area above a garage, unheated porch and open deck.

- b) Notwithstanding the foregoing, any existing dwelling with six (6) rooms shall be construed to have at least three (3) bedrooms. Any dwelling with seven (7) rooms shall be construed to have at least four (4) bedrooms. Any dwelling with eight (8) or nine (9) rooms shall be construed to have at least five (5) bedrooms. Any dwelling with ten (10) or eleven (11) rooms shall be construed to have at least six (6) bedrooms. Each additional room beyond eleven (11) shall be construed as an additional bedroom and the number of bedrooms for the purpose of sizing a subsurface sewage disposal system (proposed and existing) shall be adjusted accordingly.
- c) All lofts that do not meet the criteria above, finished basements that do not have a building code conforming egress, and rooms and with cased openings at least 60 inches wide shall be considered rooms for the purposes of this definition.
- d) Dwellings built before the 1978 Building Code will have their bedrooms determined on a case-by-case basis.

Buildable Upland: The area of contiguous upland on a lot exclusive of Wetland as defined herein.

Change of Use: With respect to properties with existing systems, a change in use will result when the use of the structure or the land is changed from one use group to another use groups as described in the Table of Uses in the Town’s Zoning Bylaws, as may be amended from time-to-time; an alteration of the structure or the land within the same use group that changes the intensity of the use, i.e. a business use changing from retail to office space or a residential use changing from single-family or multi-family; or any change or alteration to the land or structure that results in an increase in actual or design flow to the system.

Design Flow: The quantity of sanitary sewage, expressed in gallons per day (gpd), for which a system shall be designed in accordance with 310 CMR 15.203.

Failed System: Any Septic System which fails to protect the public health, safety and environment as determined by the Truro Board of Health, including but not limited to:

- a) any system which must be pumped in excess of two (2) times in a twelve-month period;
- b) any system which includes a component that the Board of Health determines is structurally unsound;
- c) any system which discharges effluent directly or indirectly to the surface of the ground through ponding, surface breakout or damp soils above the disposal area or to a wetland;
- d) any system which meets any of the failure criteria itemized on the Title 5 Official Inspection form as described in 310 CMR 15.303 or 310 CMR 15.304;
- e) any system with a leaching area with less than 4-feet (for 1978-code systems) or 5-feet (for 1995-code systems) of vertical separation to ground water; this distance shall be measured in the field (not “per plan”) by the inspector.
- f) any cesspool as defined in title 5 shall be deemed failed and shall be replaced with a title 5 compliant system no later than December 31, 2023.
- g) any systems with leaching areas/pits that are ~~essentially~~ at capacity, as defined in this section 6 article 3.1.i;
- h) any systems that were not designed to accommodate the use;
- i) any system deemed as failing to protect public health, safety and the environment.

To the extent such a waiver would be consistent with the provisions of Title 5, the Board of Health may waive a finding that any of the foregoing systems have failed if the Board determines, at its sole discretion, that the system will continue to protect the public health, safety and environment.

Innovative/Alternative (I/A) Technology: Technology that is certified for enhanced nutrient removal that is described in 310 C.M.R. 15.202 and 15.217, and which is approved by the Massachusetts Department of Environmental Protection pursuant to 310 CMR 15.280 through 15.289.

Living space: excludes screened in porches and sunrooms

Remedial Use: Use of I/A systems for the upgrade of a Failed or Nonconforming Septic System and there shall be no increase in the design flow served by the proposed I/A systems and no increase in habitable space or change use that, in the Board's judgement has the potential to increase sewage flow. The Board may consider a variance to this provision to allow the increase in flow from an "accessory dwelling unit" as defined herein and compliant with the Town of Truro conditions for the unit.

Nitrogen Credit the use of I/A technology for development of a property beyond the standard of 110 gpd of wastewater flow per 10,000 sf of area. Nitrogen credit shall not be allowed for new construction, unless an ADU is being created.

Nitrogen Loading limitations: The 440 gpd per acre of land requirement for septic system design as described in title 5.

Non-conforming Septic System: Any system which, when installed did not comply with provisions of either the 1978 or 1995 iterations of Title 5, including cesspools and all similar systems in use prior to the adoption of the 1978 Code.

Title 5: Refers to Title 5 of the Massachusetts State Environmental Code, 310 CMR 15.000, et seq.

Title 5 Septic System: Includes any system installed in compliance with the 1978 or 1995 iterations of Title 5 but shall not mean cesspools or any similar system in use prior to the adoption of the 1978 Code.

TN: Means Total Nitrogen

Watersheds of Special Concern: Mapped watersheds designated by the Truro Board of Health and the Zone 1 and Zone II of public water supplies.

Wetlands: Any area that contains swamp, bog, dry bog, fresh or salt marsh, areas of exposed groundwater, embayment's, rivers, ponds, lakes, streams, inland banks, coastal banks, and coastal dunes, or any other area subject to the jurisdiction of the Conservation Commission as defined in G.L. c. 131, §40, 310 CMR 10.00, the Town of Truro Conservation Bylaw and/or regulations of the Conservation Commission, but not including buffer zones abutting such resources.

Article 2 - Variances

1. In addition to the variance criteria set forth in Section I of the Board of Health Regulations, an applicant may apply, and the Board of Health may grant a variance from this Section VI provided all of the following minimum criteria for said variance are also met:
 - a) A satisfactory inspection by a licensed system inspector of all system components if the variance sought pertains to an existing system.
 - b) The proposed or existing leaching facility has a minimum of five (5) feet of separation between the bottom of the leaching facility and the highest groundwater level as determined in 310 CMR 15.103(3);

- c) The proposed or existing leaching facility meets the minimum Title 5 requirements regarding setback distances for Soil Absorption Systems (SAS) as set forth in 310 C.M.R. 15.211;
 - d) The existing system does not allow surface breakout of the wastewater; ~~and~~,
 - e) The existing system does not require pump-outs in excess of two (2) times in a twelve-month period;
 - f) The Board of Health determines that the grant of the variance will not pose a risk to the public health, safety or the environment and meets all the variance requirements contained in Section I of the Truro Board of Health Regulations.
2. All applications for variance must be accompanied by plans prepared by a qualified Professional Engineer or Registered Sanitarian and include all information required under 310 C.M.R. 15.220.
 3. All application for variance shall include current routine water quality analysis results from the on-site well at the locus property.
 4. Expiration of variances shall occur after 24 months if the approved septic design has not been installed, or, at such time as determined by the Board of Health.

Article 3 - Triggers for upgrading septic systems

1. **Required Upgrades:** In order to improve the quality of water for the Town of Truro by elimination of septic systems which do not comply with Title 5 and the more protective regulations adopted by the Truro Board of Health the following situations trigger an upgrade:
 - a) Any system inspected prior to any sale or transfer of title to the facility served by the system in all circumstances described in 310 CMR 15.301.
 - b) Notwithstanding any exceptions set forth in 310 CMR 15.301(2), inspection prior to transfer of deed and upgrade of nonconforming or failed systems shall occur prior to: transfers by inheritance, transfers between parents and their children, between full siblings, and where the grantor transfers the real property to be held in a revocable or irrevocable trust, where at least one of the designated beneficiaries is of the first degree of relationship to the grantor; and transfer shall include creation of an LLC;
 - c) Prior to any change of use or increase in design flow of the facility served by a system;
 - d) Prior to the subdivision or partitioning of a parcel on which a nonconforming or failed septic system is located;
 - e) Any system demonstrating the characteristics of a failed system as defined in this Section VI;
 - f) Any septic system that was not constructed according to the approved plan;
 - g) Any system with a soil absorption system with inadequate design capacity to serve the facility;
 - h) **When a facility served by a 1978-code system that is replaced, relocated or demolished, except when**

destroyed by fire. A compliant system serving a facility destroyed by fire does not need to be upgraded to serve a new facility if the new facility is built in the same footprint as the original provided that there is no change in use or increase in design flow of the facility and the system is not a failed system;

- i) The **liquid depth** in a leach pit is less than six inches from the inlet pipe invert or the remaining available volume within a leach pit above the liquid depth is less than ½ of one day's design flow.
- j) **All non-conforming** septic systems in the Beach Point and Pamet River Protection District or located within two hundred (200') feet of any Wetland or within the floodplain as mapped by FEMA shall be considered failing to protect public health, safety, welfare and the environment and shall be upgraded to meet the requirements of this Section VI and/or Title 5.
- k) **Cesspools** in Truro are herein defined as failed systems and shall be upgraded to meet the requirements of Title 5 prior to December 31, 2023. All new systems replacing cesspools shall be installed and certified by that date.

2. Multiple Systems on One Lot.

- a) On a parcel with more than one non-conforming septic system and a total design flow on the parcel less than 2000 gallons, the failing system shall be upgraded and the remaining non-conforming septic systems shall be inspected by a licensed inspector. If any of the remaining non-conforming septic systems fail inspection as defined in the Title 5 Inspection Form, and the Truro “addendum to MA title 5 inspection form” that system must be upgraded to a fully conforming Title 5 septic system.
- b) If the design flow on a parcel is over 2000 gallons per day, then all systems shall be upgraded with pressure distribution in accordance with Title 5.

3. Time for Upgrades and Administrative Consent Orders

PURPOSE: To allow the Town to execute an agreement with private property owners who need to upgrade or repair their cesspools or septic systems during the Municipal wastewater planning process.

DEFINITIONS:

ADMINISTRATIVE CONSENT ORDER (ACO) is a duly executed and recorded document that affords a property owner in Truro an opportunity to defer major repair, replacement and /or upgrade of a failed on-site wastewater treatment system until a municipal plan is available to direct the course of action for that owner or until a time frame specified and requires funds for a septic upgrade be placed in an escrow account.

SYSTEM INSPECTION REPORTS: Inspections of septic systems shall report on the functioning and condition of the system, and a description of the components. This report will be the basis to determine whether a property is eligible for an Administrative Consent Order (ACO) or will be required to upgrade immediately. If an inspection is required by Order of the Board of

Health, or by the Truro Board of Health regulations, those properties with a cesspool system will not be required to submit a title 5 inspection form; however, a licensed inspector must provide the Board of Health with a letter describing the condition of the cesspool system and a description of its components.

TIME FOR UPGRADES

All onsite septic systems shall be upgraded within one hundred and eighty (180) days from completion of an inspection of the system whenever an inspection determines that the system requires upgrade due to a condition identified in Section VI, Article 3 of the Truro Board of Health Regulation or Title 5.

The Board of Health may grant a variance extending the time for completing the required upgrade, subject to the property owner entering into an Administrative Consent Order within thirty (30) days from completion of the inspection.

ADMINISTRATIVE CONSENT ORDER

Administrative Consent Orders shall be on such terms and conditions as the Board determines are in the best interests of protecting public health and the environment until such time as the system is upgraded.

All Administrative Consent Orders shall have the following minimum terms:

1. The Board of Health agrees to extend the time for upgrading the system for (*a specified period of time*), provided that there is compliance with the terms of the ACO;
2. The Property owner agrees to deposit (*a predetermined sum of money*) into an interest-bearing escrow account in an amount sufficient to (*TASK=complete the required upgrade/have design plans developed/have a sewer connection plan developed/satisfy the sewer connection fees*); said sum may be paid in installments;
3. (This sum will be based on estimated costs for plans, estimated costs for I/A system installation or cost to connect to a wastewater sewer)
- 4.
5. The Property owner agrees to upgrade the system upon expiration of the stay;
6. The Property owner agrees to periodic inspections and pumping of the system as needed;
7. The Property owner agrees to abate any imminent health hazards arising prior to upgrade of the system, which may require earlier repairs or upgrade; and
8. The Property owner agrees to record the ACO in the chain of title to the property and that the ACO will be binding on any successors in interest.

Notwithstanding the terms of this Regulation or an ACO issued pursuant thereto, the Board reserves the right to issue any such order as may be deemed necessary to protect public health and the environment from an imminent hazard caused by any onsite septic system, including

requiring pumping, repairs, or immediate upgrades.

All requests for an ACO shall be processed in accordance with Article I of the Truro Board of Health Regulations and Title 5 and shall be within the sole discretion of the Board.

Article 4– Required Septic System Inspections

1. A current Inspection Report completed by a MA licensed Septic System Inspector shall be filed in the following circumstances:

- a. At or within two years prior to the time of sale or transfer of title to the facility as defined in Article 4 of this Section VI and title 5, 310 CMR 15.301;
- b. With an application for a building permit that proposes an increase in living space as determined by the Truro Health Agent. If an applicant or a direct abutter is aggrieved by the determination of “increase of living space” by the Health Agent, the applicant may appeal this determination to the Truro Board of Health;
- c. With an application for a *special permit* that allows uses not otherwise permitted by the Truro Zoning Bylaw;
- d. With an application for a new license or transfer of an existing license,;
- e. Every three years at the renewal of the annual operating permit for the operation of a motel, cottage colony, cabin, campgrounds, lodging house or restaurant.
- f. Prior to renewal of permits for a facility served by a shared system. Inspections for all shared systems are required once every 3 years. Shared systems include condominiums, motels and camps and cabins.
- g. Prior to any change in use as defined in these regulations.
- h. At such time as a property owner/business owner is so ordered by the Board of Health.

2. Inspection Criteria:

All system inspections shall be documented in an official Title 5 inspection form and a Town of Truro “addendum to MA title 5 inspection form”. An inspection shall not be considered complete unless all information required on both forms is provided. In addition to the inspection criteria set forth in Title 5, the following criteria shall be observed in conducting system inspections:

- a) An open inspection of all components of the system is required. If a component cannot be found or uncovered after a reasonable search, the inspector must provide evidence for the system’s success or failure. Replacement or installation of the component is required in this instance.
- b) The septic tank shall be pumped at the time of inspection if it has not been pumped within the past 3 years.
- c) Leach pits must have at least 6 inches of leaching capacity below the outlet invert in order to pass the inspection. The 6 inches of leaching capacity is determined by clean sidewall absent of staining or evidence of high water. The Inspector must clearly indicate on the inspection form the height of standing liquid in any leaching component, the level of staining in any leaching component, and the description of

- both sanitary tees in any inspected tank. In the case of missing sanitary tees, no passing report shall be issued unless there is proof (copy of permit) of the correction of the deficiency.
- d) Any work for the correction of component failures, such as, but not limited to, eroded distribution-boxes, new piping, sealing a tank or installing new tees will require a valid disposal works construction permit, inspection and issuance of a certificate of compliance.
 - e) If the inspector finds that the access port covers of the septic tank inlet and outlet, distribution box and soil absorption system are not within 6 inches to grade, risers shall be provided as needed and the installation of risers shall be indicated in the septic system report.
3. **Failed systems shall include:** cesspools; non-conforming systems as defined in Article 2; systems without adequate separation to groundwater; systems with leaching areas/pits that are essentially at capacity, as defined herein; systems that were not designed to accommodate the use; any system deemed as failing to protect public health, safety and the environment.
 4. **All Inspections** shall be conducted by a MA licensed Title 5 inspector, using both the local and state inspection forms; the local form and required water test results shall be attached to the State form when filed in accordance with, and addition to, the requirements of Title 5 for septic inspection reporting.
 5. **The septic inspector** must verify that the use of the facility (ie; # of bedrooms) matches the design flow of the system (ie; a 4 bedroom dwelling should have at least 440 gpd design flow). Design flow shall be based on the records on file at the office of the Board of Health and use of the facility, including the number of bedrooms, shall be based on a visual inspection at the time of inspection.
 6. **Difficulty in Locating Components:** If a complete inspection cannot be performed, the inspector must provide adequate documentation of the specific conditions which prevented a complete inspection and should indicate on the inspection form how the inspector attempted to locate components; in this instance the report shall indicate that the system “Needs Further Evaluation from the Local Approving Authority.” The Local Approving Authority shall evaluate all “Needs Further Evaluation” entries on the inspection form and determine whether further investigation is required to adequately evaluate the system.

Article 5- Subdivision Plans

- 1) All new subdivision plans shall have the proposed well location and septic system on each lot. These locations shall meet all sideline and other setback and distance requirements.
- 2) The Plan shall be on file with the Building Commissioner and Health Agent.
- 3) Applications for septic and well permits shall adhere to the plan unless sufficient data are presented to the Board of Health to justify the change.

Article 6 - Bedroom Count

- (1) **Bedroom Count Determination.** Notwithstanding the general provisions of Section 15.002 of Chapter 310 of the Code of Massachusetts Regulations, there shall be no presumption that single-family dwellings have at least three bedrooms in the Town of Truro. In each instance, a specific determination relative to bedroom count must be made without reliance upon any presumptions. The Health Agent shall have the authority to make the initial bedroom count determination. If the Health Agent finds the determination in a specific instance should be made by the Board of Health, the Agent may, in their sole discretion, refer the matter to the Board of Health for a final determination. The Agent may also, in their sole discretion, refer the bedroom count determination to the Board of Health upon request of the applicant.
- (2) **Deed Restriction.** A deed restriction may be required by the Board of Health to ensure that use of the septic system as proposed will not negatively impact the public health, safety, welfare or the environment.
- (3) **Building Permits.** No building permit, shall be issued until a Disposal Works Construction Permit has been issued for installation of a subsurface sewage disposal system designed to accommodate the bedroom count or the Board of Health has issued a written determination that the existing system is adequate for what is proposed.
- (4) **Floor Plans and Inspections.** For existing facilities, in order to determine compliance with any provision of the foregoing regulations, a floor plan may be requested by the Health Agent to make a determination as to bedroom count. If the Health Agent deems it necessary, they may refer the determination of the bedroom count to the Board of Health for a vote.
- (5)
- (6) **Assessors' records,** and unstamped plans will not be considered sufficient evidence of the size of the facility for purposes of determining design flow. In the event of a discrepancy between the results of the visual inspection and existing records, an in-person inspection by the Health Agent will be required and the Health Agent's determination of the size of the facility will be final.

Article 7 - Regulation of Separate Site Systems

- 1) Septic systems shall be constructed on the same lot as the facility to be served.
- 2) Variances from this Article may be granted by the Truro Board of Health for structures in existence prior to March 31, 1995, provided all of the following conditions are met:
 - a. The system can be installed on a contiguous property owned by the same person and title to the lots is merged by virtue of a deed recorded at the Barnstable County Registry of Deeds;

- b. The system is not being installed for the purpose of increasing the size or use of the existing structure; and,
- c. The system will replace or repair a pre-existing, non-conforming septic system or components.

3) Any grant of variance pursuant to this Article must also be made in accordance with Article 2 of this Section VI and Section I of the Truro Board of Health Regulations.

Article 8- Innovative/Alternative Technology



In considering the permitting and use of various alternative septic treatment technologies in the Town of Truro, the Board of Health of the Town of Truro recognizes that there may be specific local circumstances which warrant the Board to require more stringent conditions for the installation and monitoring of these alternative systems than may be required by the Massachusetts Department of Environmental Protection. As allowed under Massachusetts General Laws Chapter 111, Section 31 and as required by the revised 310 CMR Section 15.285 (2d), 15.286 (5) and 15.288 (4), the Board of Health of the Town of Truro hereby reserves the right to impose any additional conditions or monitoring requirements it views as necessary to ensure the safe performance of any alternative onsite septic system which the Board agrees to permit in the Town of Truro.

- 1). **Applicability:** The use of I/A technology is required in the following circumstances:
- a) for flows greater than 600 GPD;
 - b) for nitrogen credit applications (these are only allowed by request in limited circumstances in Truro);
 - c) for upgrade of certain non-conforming systems as determined by the Board of Health;
 - d) for upgrades of previously approved systems that exceed current nitrogen loading standards of 110 gpd/10,000sf of lot area;
 - e) in certain cases where a variance is required and circumstances support the use of I/A to mitigate the environmental impact of the proposed system, as determined by the Board of Health.

2. Standards:

- a) In all of the circumstances described above, the I/A System shall be designed to achieve/produce no greater than 19 mg/l total nitrogen (TN) concentration in the effluent by using the secondary treatment achieved with an approved innovative/alternative (I/A) septic system.
- b)
- c) I/A Systems shall be tested and reported on a quarterly basis, unless approved for reduced testing in accordance with O&M requirements, by means of obtaining an effluent sample from the distribution box or pump chamber to determine if the system meets the post-treatment standard of less than 19 mg/l total nitrogen. The results of such evaluations shall be submitted to the Board of Health within forty-eight hours of receipt thereof.

3) Non-Performance.

- a) Non-performance includes any I/A system that has been determined to be failing to protect public health and safety, and the environment, an I/A system with equipment failure or an unresolved alarm event, or components that are not functioning as designed, or components that are not functioning in accordance with the manufacturers specifications, or a system that is in violation of the terms of its approval by the Truro Board of Health.
- b) Non-performance requires written notification by the operator to the Truro Health Department within 48 hours receipt of lab test, along with a statement describing what corrective actions will be taken.
- c) Corrective actions must be taken within 48 hours of a lab report or field test) to address performance that does not meet the standards as defined herein, or specific to the approval by the Truro Board of Health.
- d) Lab tests showing exceedance of TN triggers a re-test immediately following corrective actions taken to address the exceedance, until the corrective measures are shown to have improved performance to meet the standards.
- e) Failure to comply with the process as described may result in a written warning from the Truro Health Department, followed by possible fines and a hearing with the Truro Board of Health that must be attended by the property owner and the licensed inspector.

4)Applications and Hearings.

- a) All applications shall include a copy of the Massachusetts Department of Environmental Protection approval letter appropriate to the I/A technology being used and the level of approval (i.e., General Use, Provisional Use, Remedial Use, Piloting Use, or site-specific Pilot Approval).
- b) All applications for Pilot Approval shall include performance data from piloting sites where the I/A technology has been similarly configured and utilized.
- c) Notice of the public hearing of the Board of Health for the consideration of applications requiring I/A approval shall be in accordance with the provisions of the Open Meeting Laws in Massachusetts. Abutter notification will not be required unless mandated by Title 5.

5)Monitoring and Reporting.

- a) If an I/A system is approved, the applicant will be required to submit a proposed monitoring and reporting plan to evaluate the performance of the system to the Board of Health for approval. This plan shall include a description of any long-term operational or maintenance requirements needed to keep the system operational, and any educational, financial assurance or other mechanism proposed to ensure effective long-term operation and maintenance.
- b) Owners and operators of all I/A systems shall report the results of all operation, maintenance, and monitoring activities required by the foregoing provision or by the Department of Environmental Protection to the Truro Board of Health and to the Barnstable County Department of Health and Environment. Reporting must be performed in the manner specified by the Board of Health or in the form approved by the Barnstable County Department of Health and Environment and must occur within forty-eight hours after each maintenance or monitoring event.

- c) The Board of Health requires that when a system operator performs a system inspection and finds that a sewage treatment technology has malfunctioning components which have compromised the system's ability to treat sewage as designed, the operator shall report on the system's status and any planned corrective action, including a proposed deadline for said corrective action, to the Truro Board of Health and the Barnstable County Department of Health and Environment within 48 hours of inspection.
- d) If at any time a monitoring or maintenance report indicates that an I/A system needs corrective action, the Truro Board of Health may hold a hearing to determine corrective action is needed. If at such hearing, the Truro Board of Health determines that such system needs corrective action, it may take enforcement action, including but not limited to, an order to cease operation of said system or any other action otherwise necessary to protect public health, safety, welfare, and the environment.
- e) I/A Systems that do not perform are required to be immediately evaluated by the licensed operator for the purpose of the inspector forming a diagnostic opinion of what corrective actions would address the non-performance.

6) Record Notice at Barnstable Registry of Deeds.

- a) All applicants gaining Board of Health approval for the installation of any I/A systems shall be required to record at the Barnstable County Registry of Deeds a Notice that the property is served by an I/A system..
- b) **No Certificate of Compliance** for the installation of an I/A system will be issued until proof of recording is filed with the Health Department.

Article 9 - Required Setbacks for System Components

Notwithstanding the provisions of Title 5, 310 C.M.R. 2.11, all systems shall conform to the following minimum setback distances for septic tanks and soil absorption systems (SAS), including reserve areas, as measured in feet and set forth below:

	<u>Septic Tank or Pump Chamber</u>	<u>SAS</u>
Surface Water (except Wetlands)	50'	100'
Wetlands	100'	150'

Article 10 - Existing Systems Serving New Construction

For systems designed and approved prior to March 31, 1995, the size of the existing system shall not be considered in determining whether a change in use or new construction in the facility served by the system will result in an increase in design flow, i.e. an increase in the number of bedrooms, restaurant seats, retail space, office space etc. for facilities listed in 310 CMR 15.203(2) through (5), rather review of the existing use of the facility (i.e., existing bedroom count; existing restaurant seats; existing retail space, etc.) at the time of the change, as determined by the Truro Health Agent, will be used to make such determination.

No increase in design flow to any system shall be allowed unless the lot meets the requirements of 15.214, Nitrogen Loading Limitations, and Article 11 and Article 13 below. Should an

increase in design flow be allowed, the system shall be upgraded in full compliance with Title 5 for new construction.

Article 11 - Buildable Upland Calculations for Nitrogen Loading Limitations

When applying the nitrogen loading limitations set forth in Title 5 and this Section VI of the Truro Board of Health Regulations (see Article 14), only Buildable Uplands shall be included in the lot area calculations.

Article 12 - Deed Restrictions

- 1) Any deed restrictions required under this Section VI or under Title 5 shall be submitted to the Health Agent for review before they are finalized and executed.
- 2) Each deed restriction shall describe the property and all restrictions placed thereon (i.e., bedroom count limitations shall include the number and location of approved bedrooms; monitoring agreements shall describe the specific monitoring and maintenance requirements, etc.).
- 3) All deed restrictions may contain a provision permitting the Truro Health Agent to inspect the premises to ensure compliance with the provisions of the deed restriction at reasonable intervals and upon reasonable prior notice.
- 4) A deed restriction required by the Board of Health, or their Agent shall be recorded at the Barnstable County Registry of Deeds . Proof of recording shall be submitted to the Health Department prior to the issuance of the Certificate of Compliance for the system.
- 5) A deed restriction required by the Board of Health, or their Agent shall be recorded prior to the approval/sign-off on any building permit, as determined to be required for compliance with these local regulations and Title 5 by the Board of Health or its Agent.
- 6) A deed restriction is required by the Board of Health or their Agent prior to sign -off on all ADU specifying approval and the requirement for year-round rental in perpetuity.

Article 13 - Nitrogen Loading Limitations

- 1) The Truro Board of Health requires that all properties within the Town of Truro meet the loading restrictions set forth in 310 CMR 15.214 and contain at least ten thousand (10,000) square feet of Buildable Upland (as defined in Article 1 hereunder) for every 110 gallons per day of design flow. All systems designed to serve said facilities must meet the same restrictions and requirements contained in Title 5 as the “Nitrogen Sensitive Areas” defined in 310 CMR 15.215 irrespective of whether the properties are located within “Nitrogen Sensitive Areas” as so defined.

- 2) Upgrades for systems that exceed current nitrogen loading shall include the use of I/A technology. Pressure distribution may be required when indicated and determined by the Board, to mitigate certain variances such as depth to groundwater, lateral separation to marine water bodies or private wells.

Article 14 - Septage Haulers and Septic Installers Licenses

1. A **Septic Installers license** is required in the Town of Truro for any work done to alter a septic system or its components, such as replacement of or connection to a building sewer, piping, tee replacement, tank and d-box replacement and tank sealing.
2. **Septage Haulers License Application:** The Board of Health will issue Septage Haulers Licenses only upon written application that includes the following information:
 - a) name and address of applicant and business name under which applicant will operate.
 - b) written description of all equipment utilized in the business, including the capacity of any tanks; and an emergency contact name and number of a person available for contact 24 hours a day in cases of emergency.
3. **Septage Coupons:** Septage coupons must be properly filled out. The name, date, location and volume for each system serviced must be provided. The signature of the hauler and the customer must be executed on each coupon in order to validate the origin of the waste in the Town of Truro. Septage haulers are required to supply **accurate/legible** information to the Board of Health as a condition of their License.
4. **Chemicals and Acids.** Use of chemicals and acids for cleaning cesspools and septic systems is prohibited.
5. **Failing Systems.** As a condition of their License, all Licensees shall accurately report all malfunctioning systems to the Board of Health, including but not limited to, the address of the malfunctioning system, the nature of the problem and the repairs,
6. **Licenses.** Licenses go into effect January 1st of each year. The annual fee for Licenses shall be determined by the Board of Health each year.
7. **Violations.** Failure to comply with any of these regulations shall constitute a violation which may result in a show cause hearing before the Board of Health to determine whether the License should be revoked. Violations may also result in the imposition of fines and/or any necessary legal action to be undertaken by the Board.

Article 15- Maintenance requirements

1. Leach areas with pressure distribution must be inspected annually, by a PE per Title 5;
2. Maintenance of a septic tank must be completed when ordered by the Board of Health. If a septic tank has not been pumped within 3 years of a transfer of deed, the tank must be pumped as part of the septic inspection.
3. Maintenance by pumping septic tanks is recommended every 3- 5 years for residential systems, depending on the amount of use.
4. Maintenance of Grease traps includes quarterly pumping as required by Title 5.

Article 16- Miscellaneous Provisions

1. **As-Built Cards.** The measured location of all components of each septic system shall be recorded on a septic “As Built” card and filed with the Health Agent prior to the issuance of a Certificate of Compliance. The installer shall verify on said “As Built” card that the components are installed in accordance with the locations shown on the approved septic plan.
2. **Severability.** If any Article, section, paragraph, sentence, clause or phrase of these regulations should be declared invalid for any reason, such declaration shall not affect the remainder of these regulations which shall remain in full force and effect.