

**MAIN OFFICE:**

49 Herring Pond Road  
Buzzards Bay, MA 02532  
TEL: (508) 833-0070  
FAX: (508) 833-2282

**NANTUCKET OFFICE:**

19 Old South Road  
Nantucket, MA 02554  
TEL: (508) 325-0044  
[www.brackeneng.com](http://www.brackeneng.com)

October 17, 2023

Bourne Board of Health  
Terri Guarino, RS, CHO  
24 Perry Avenue  
Bourne, MA 02532

**RECEIVED**

*By Bourne Health Department at 3:22 pm, Oct 17, 2023*

**RE: Septic Upgrade  
85 Salt Marsh Lane (Map 43.1, Parcel 83)**

Dear Members of the Board:

On behalf of the Applicant, CNB Bristow LLC, please accept this letter as a request to modify the existing approved "Sewage Disposal Plan" in Bourne, MA dated October 18, 2022. The proposed change consists of maintaining the existing 1,250 gallon septic tank and installing a proposed 2,000 gallon tank. The two tanks shall be piped together to create a 3,250 gallon tight tank system. This replaces the previously approved 3,000 gallon tight tank as shown on the above referenced plan. This change is requested based on further investigation of the constrictive site conditions as outlined below:

The existing groundwater elevation at the site is restrictive. Per monitoring well readings from the site, groundwater was found to be at elevation 2.7' (Approximately 2.1' below existing grade).

The existing parcel is approximately 21,716 s.f. and is made up of 12,855 s.f. of upland area, most of which falls within the 50-foot buffer zone to Salt Marsh. The Salt Marsh system occupies the remainder of the parcel and is adjacent to the Barlows Landing Conservation Area. Approximately 2,017 s.f. of the upland area is occupied by the existing dwelling and associated decks and steps.

The high groundwater mandates a significant amount of shoring, dewatering and over-excavation. Dewatering was anticipated from the onset of the initial design. In talking to contractors during the bidding process, it was determined that a smaller tank could fit in a smaller shoring structure. Swapping the approved 3,000 tight tank to a smaller 2,000 gallon tank accomplishes this. By reusing the existing 1,250 gallon septic tank and using it in tandem with the proposed 2,000 gallon tank, the required storage capacity is maintained.

The proposed change reduces the impact on the parcel and buffer zones to the above resource areas. It maintains the required storage capacity of the tight tank. Further impacts to the site are reduced by not removing the existing tank. A revised Operations and Maintenance Plan ensures that it is noted that two tanks are on site and shall be maintained in tandem.

In summary, the proposed change minimizes impacts to buffer zones, eases the constructability and economizes the proposed project. As such, BEI is requesting that the Bourne Board of Health allow the requested plan change as outlined above.



Thank you for your time and consideration on this matter. We look forward to reviewing this project with the Board of Health at the October 25th Public Hearing. Should you have any questions regarding this project or require any further information please contact the undersigned at either 508-833-0070 or [zac@brackeneng.com](mailto:zac@brackeneng.com) or [robert@brackeneng.com](mailto:robert@brackeneng.com).

Sincerely,

**BRACKEN ENGINEERING, INC.**

A handwritten signature in black ink, appearing to read 'Zachary L. Basinski', written in a cursive style.

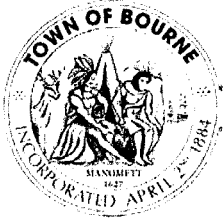
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Zachary L. Basinski, P.E., C.F.M.  
Senior Project Manager

A handwritten signature in black ink, appearing to read 'Robert E. Dewar', written in a cursive style.

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Robert E. Dewar, EIT  
Project Engineer



# TOWN OF BOURNE BOARD OF HEALTH

24 Perry Avenue

Buzzards Bay, MA 02532

www.townofbourne.com/health

Phone (508) 759-0600 ext. 1513

Fax (508) 759-0600



Terri A. Guarino  
Health Agent

## GRANT OF TITLE 5 BEDROOM COUNT DEED RESTRICTION

This Grant of Title 5 Bedroom Count Deed Restriction is made as of 7 day of Oct, 2023 by CNB Bristow, LLC c/o Charles E. Bristow, Jr. ("Grantor"), of 85 Salt Marsh Lane, Bourne, Barnstable County, MA pursuant to M.G.L. c. 21A, §13 and 310 CMR 15.000 (collectively, "Title 5").

WITNESSETH

WHEREAS, Grantor, being the owner in fee simple of that certain parcel of land known as 85 Salt Marsh Lane located in Bourne, Barnstable County, Massachusetts, with the buildings and improvements thereon, pursuant to a deed from Charles E. Bristow, Jr., to Grantor, dated 12/16/2020 **Certificate of Title No. 224768** issued by the Land Registration Office of the Barnstable County Registry District, said parcel of land shown as Lots A & B on Land Court Plan No. 20407-A, on file with the Land Registration Office of Barnstable County Registry District and pursuant to a deed from Charles E. Bristow, Jr. to Grantor, dated 12/16/2020, and recorded with Barnstable County Registry of Deeds in **Book 33581, Page 256** being shown as Lot 28 on a plan entitled, May 1945 Amended Plan of Land in Bourne, Mass. (Pocasset) Platted for Charles H. Sherman, et al, August 1939. The Frank T. Westcott Co., Engrs.", recorded with Barnstable County Registry of Deeds in Plan Book 81, Page 61 and Lots No. A1 and A2 shown on that plan entitled "Plan of Land of Charles and Louise Myrick, situated in Pocasset, Town of Bourne, June 1946, Allen Beale, C.E., recorded with Barnstable County Registry of Deeds in Plan Book 75, Page 35 ("Property"); and

WHEREAS Grantor desires to restrict the number of bedrooms, as the term bedroom is defined at 310 CMR 15.002 ("Bedroom") and the Board of Health regulation dated effective April 24, 1992, and amended on September 21, 2022, regarding bedroom definition, through the granting of this Title 5 Bedroom Count Deed Restriction;

NOW, THEREFORE, Grantor does hereby GRANT to the Town of Bourne of Barnstable County, Massachusetts, a municipal corporation located in Barnstable County, having a mailing address of 24 Perry Avenue, Buzzards Bay, Massachusetts, and acting by and through its Board of Health ("Local Approving Authority"), for nominal and nonmonetary consideration, the sufficiency and receipt of which are hereby acknowledged, with QUITCLAIM COVENANTS, a TITLE 5 BEDROOM COUNT DEED RESTRICTION ("Restriction") in, on, upon, through, over and under the Property.

Said Restriction operates to restrict the Property as follows:

**1. Restriction.** Grantor hereby restricts the total number of Bedrooms in, on, upon, through, over and under the Property to **Three Bedrooms**, such that at no time shall there exist more than **Three Bedrooms** in, on, upon, through, over and under said Property.

**2. Severability.** Grantor hereby agrees that, in the event that a court or other tribunal determines that any provision of this instrument is invalid or unenforceable:

- (i) That such provision shall be deemed automatically modified to conform to the requirements for validity and enforceability as determined by such court or tribunal; or

- (ii) That any such provision, by its nature, cannot be so modified, shall be deemed deleted from this instrument as though it had never been included herein.

In either case, the remaining provisions of this instrument shall remain in full force and effect.

**3. Enforcement.** Grantor expressly acknowledges that a violation of the terms of this Restriction could result in the following:

(i) upon determination by a court of competent jurisdiction, in the issuance of criminal and civil penalties, and/or equitable remedies, including, but not limited to, injunctive relief, such injunctive relief could include the issuance of an order to modify or remove any improvements constructed upon the Property in violation of the terms of this Restriction; and

(ii) in the initiation of an enforcement action and/or assessment of penalties by the Bourne Board of Health and/or the Massachusetts Department of Environmental Protection, a duly constituted agency with a principal office located at One Winter Street, Boston, MA 02108 (DEP), to enforce the terms of this Restriction pursuant to Title 5; M.G.L. c.111, §§ 2C, 17, 31, 122, 123, 125, 127A-O, inclusive, and 129; and M.G.L. c. 83, §11.

**4. Provisions to Run with the Land.** The rights, liabilities, agreements and obligations created under this Restriction shall run with the Property and any portion thereof for the term of this Restriction. Grantor hereby covenants for [himself/herself/itself] and [his/her/its] executors, administrators, heirs, successors and assigns, to stand seized and to hold title to the Property and any portion thereof subject to this Restriction.

The rights granted to the Bourne Board of Health, its successors and assigns, do not provide, however, that a violation of this Restriction shall result in a forfeiture or reversion of Grantor's title to the Property.

**5. Concurrence Presumed.** It is agreed that:

(i) Grantor and all parties claiming by, through, or under Grantor agree to and shall be subject to the provisions of this Restriction; and

(ii) Grantor and all parties claiming by, through, or under Grantor, and their respective agents, contractors, sub-contractors and employees, agree that the Restriction herein established shall be adhered to and shall not be violated, and that their respective interests in the Property shall be subject to the provisions herein set forth.

**6. Incorporation into Deeds, Mortgages, Leases, and Instruments of Transfer.** Grantor hereby agrees to incorporate this Restriction, in full or by reference, into all deeds, easements, mortgages, leases, licenses, occupancy agreements or any other instrument of transfer by which an interest and/or a right to use the Property, or any portion thereof, is conveyed.

**7. Recordation.** Grantor shall record and/or register this Restriction with the appropriate Registry of Deeds and/or Land Registration Office within 30 days of receiving the approved Restriction from the Local Approving Authority. Grantor shall file with the Bourne Board of Health and the DEP a certified Registry copy of this Restriction as recorded and/or registered within 30 days of its date of recordation and/or registration.

**8. Amendment and Release.** This Restriction may be amended only upon the approval and acceptance of such amendment by the Local Approving Authority. Release of this Restriction shall be granted by the Local Approving Authority upon (i) Grantor's request of such release; and (ii) the Property being connected to a municipal sewer system and the septic system serving the Property being abandoned in accordance with 310 CMR 15.354. Any such amendment or release shall be recorded and/or registered with the appropriate Registry of Deeds and/or Land Registration Office and a certified Registry copy of said amendment or release shall be filed with the Bourne Board of Health and the DEP within 30 days of its date of recordation and/or registration.

**9. Term.** This Restriction shall run in perpetuity and is intended to conform to M.G.L. c.184, §26, as amended.

**10. Rights Reserved.** This Restriction is granted to the Bourne Board of Health. It is expressly agreed that acceptance of this Restriction by the Bourne Board of Health shall not operate to bar, diminish, or in any way affect any legal or equitable right of the Bourne Board of Health or of DEP to issue any future order with respect to the Property or in any way affect any other claim, action, suit, cause of action, or demand which the Bourne Board of Health or DEP may have with respect thereto. Nor shall acceptance of the Restriction serve to impose any obligations, liabilities, or any other duties upon the Bourne Board of Health.

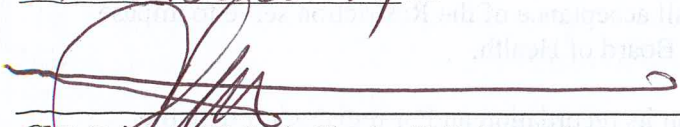
**11. Effective Date.** This Restriction shall become effective upon its recordation and/or registration with the appropriate Registry of Deeds and/or Land Registration Office.

**12. No construction permits shall be issued for the Property until a certified Registry copy is submitted to the office of the Bourne Board of Health unless written approval is otherwise granted by the Board of Health.**

[Remainder of Page Intentionally Left Blank]

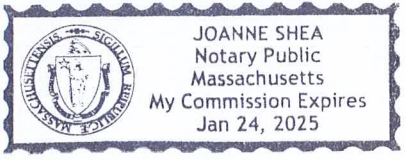
COMMONWEALTH OF MASSACHUSETTS

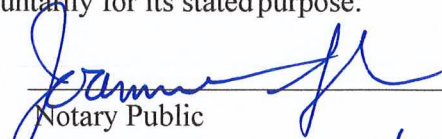
Barstable County ss

  
\_\_\_\_\_  
CNB Bristow, LLC c/o Charles E. Bristow, Jr.

Witness my hand and seals this 7 Oct, 2023.

On this 7<sup>th</sup> day of October 2023, before me, the undersigned notary public, personally appeared: Charles E. Bristow and proved to me through satisfactory evidence of identification which were FL Drivers lic to be the person(s) whose name(s) are signed on the proceeding or attached document, and acknowledged to me that he/she signed it voluntarily for its stated purpose.



  
\_\_\_\_\_  
Notary Public  
My Commission Expires: 1/24/2025

Approved and Accepted By:

\_\_\_\_\_  
Terri A. Guarino, R.S., C.H.O  
Health Director  
Town of Bourne

Date: \_\_\_\_\_

## **TIGHT TANK OPERATIONS AND MAINTENANCE PLAN**

**PROJECT LOCATION:** 85 Salt Marsh Lane (Map 43.1, Parcel 83)

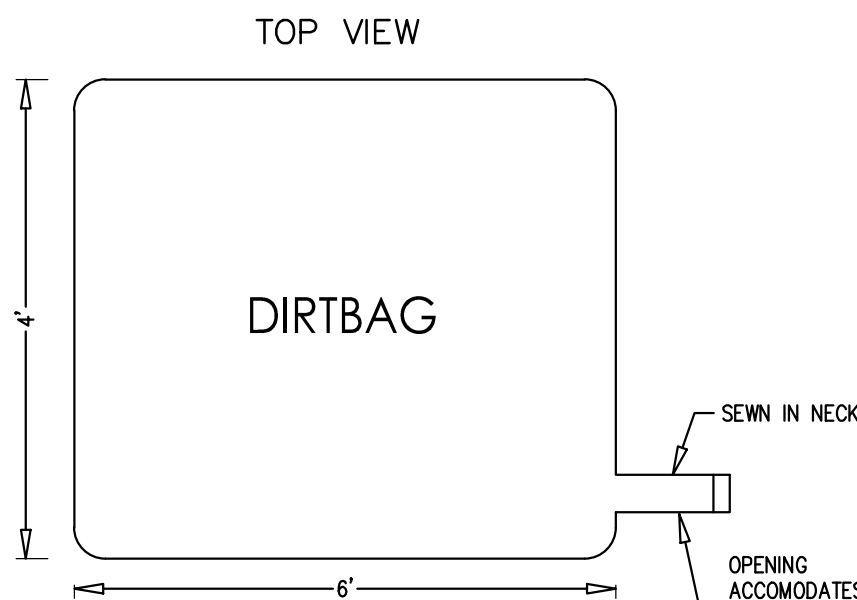
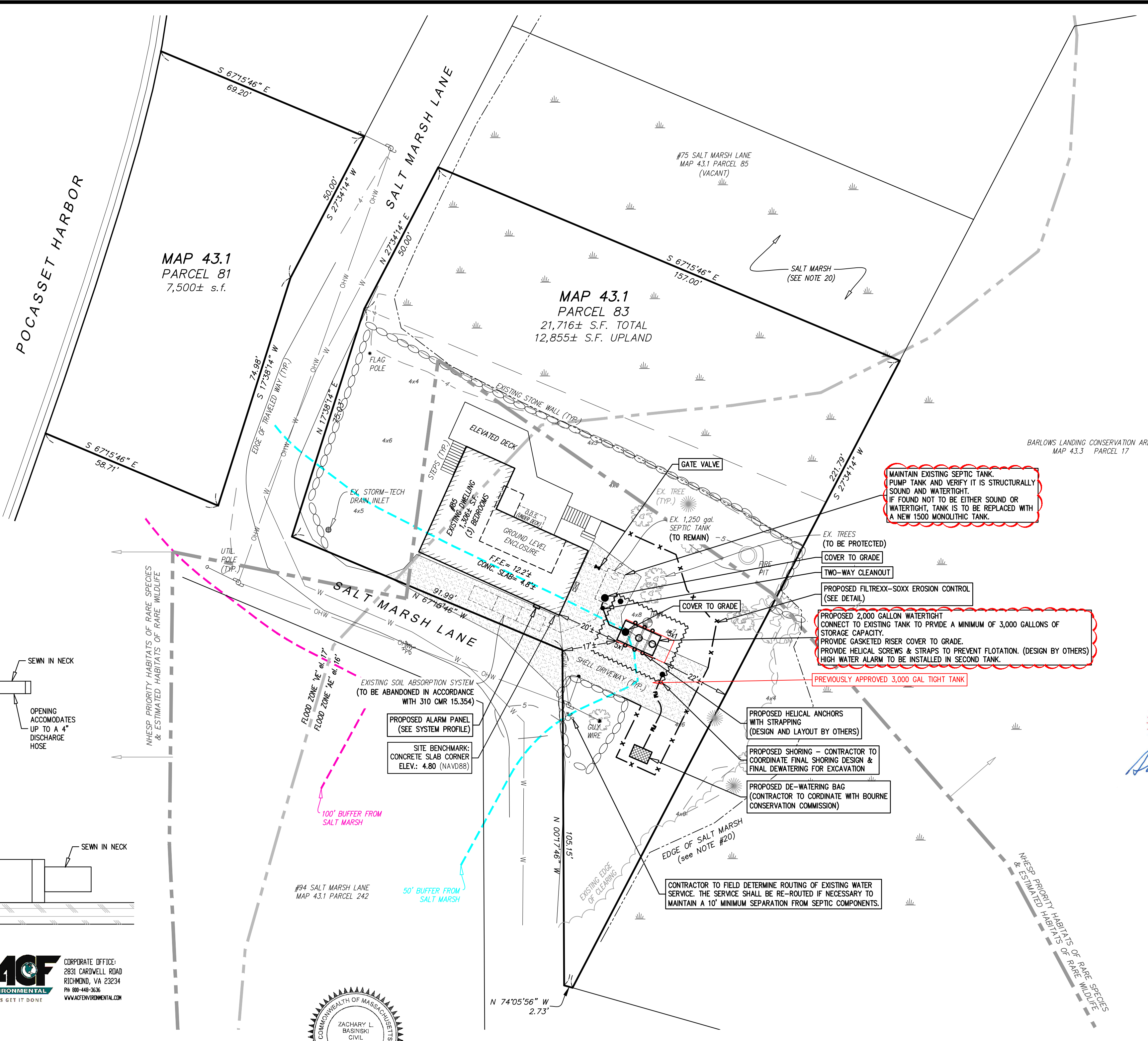
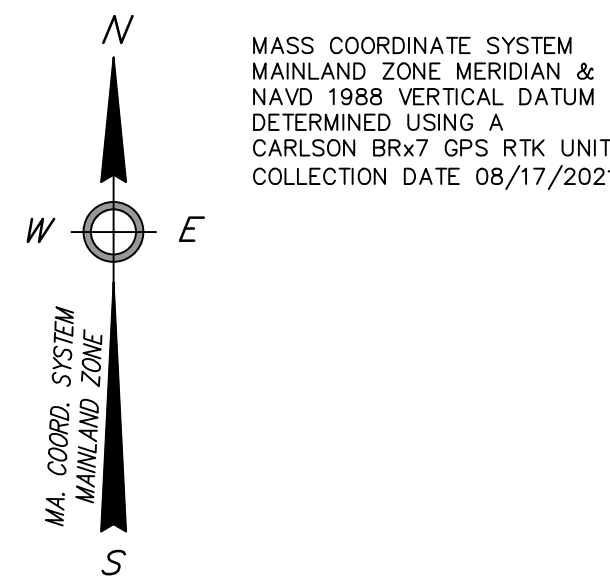
**DESIGN FLOW:** Three (3) bedrooms

**OWNER &**

**RESPONSIBLE PARTY:** CNB Bristow, LLC  
c/o Charles E. Bristow, Jr.  
P.O. Box 1135  
Pocasset, MA 02559

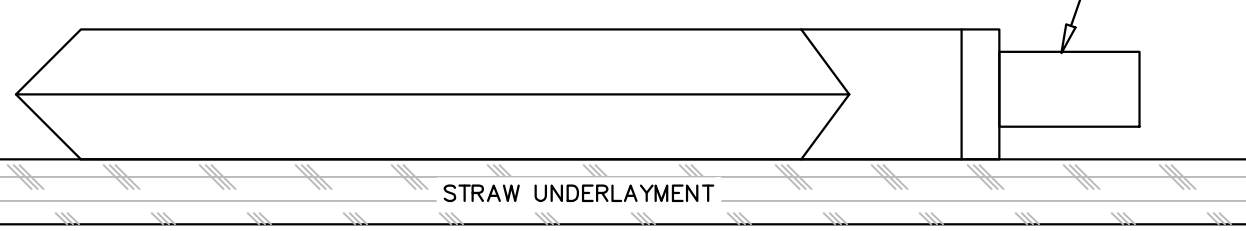
The design, installation, and maintenance of the tight tanks shall be in conformance with 310 CMR 15.260 and 310 CMR 15.351 of the State Environmental Code, Title 5, and the approved design plans. The tight tank system is meant to hold and store the discharge of **sanitary sewage only and** can be permitted for a year-round residential facility. The tight tanks shall be maintained as follows:

1. The property owner shall maintain a contract with a septage hauler that is licensed in the Town of Bourne. The tight tanks shall be inspected and pumped on a weekly basis. More frequent pumping may be required depending upon the use of the structure. A copy of the contract shall be provided to the Town of Bourne Health Department.
2. An accessible, watertight 24" (min.) cover to grade over each tank shall be maintained for year-round access.
3. The high-water alarm shall be installed in the 2,000-gallon tank to allow for at least 660 gallons of emergency storage above the alarm level. The alarm system shall include both audio and visual alarms.
4. The high-water alarm shall be inspected and tested once a year by a licensed septage hauler or licensed electrician. A report shall be submitted to the Town of Bourne Health Department specifying the condition of the alarms and, if any, the necessary requirements for service or maintenance.
5. The tight tanks shall be thoroughly pumped, cleaned, and inspected for structural integrity and water tightness by a licensed professional engineer every five (5) years from the date of installation. Inspection and repair records shall be sent to the Town of Bourne Health Department.



- NOTES:**
- DIRTBAG TO BE MANUFACTURED BY ACF ENVIRONMENTAL OR APPROVED EQUAL.
  - DIRTBAG TO BE PLACED ON STRAW BASE (CONTRACTOR TO COORDINATE WITH OWNER) LOCATE ABOVE FLOODPLAIN ELEVATION.
  - SEAMS MUST BE HIGH STRENGTH DOUBLE STITCHED "J" SEAMS.
  - SEAM MUST BE TESTED UNDER ASTM-4884.

**CROSS SECTION**



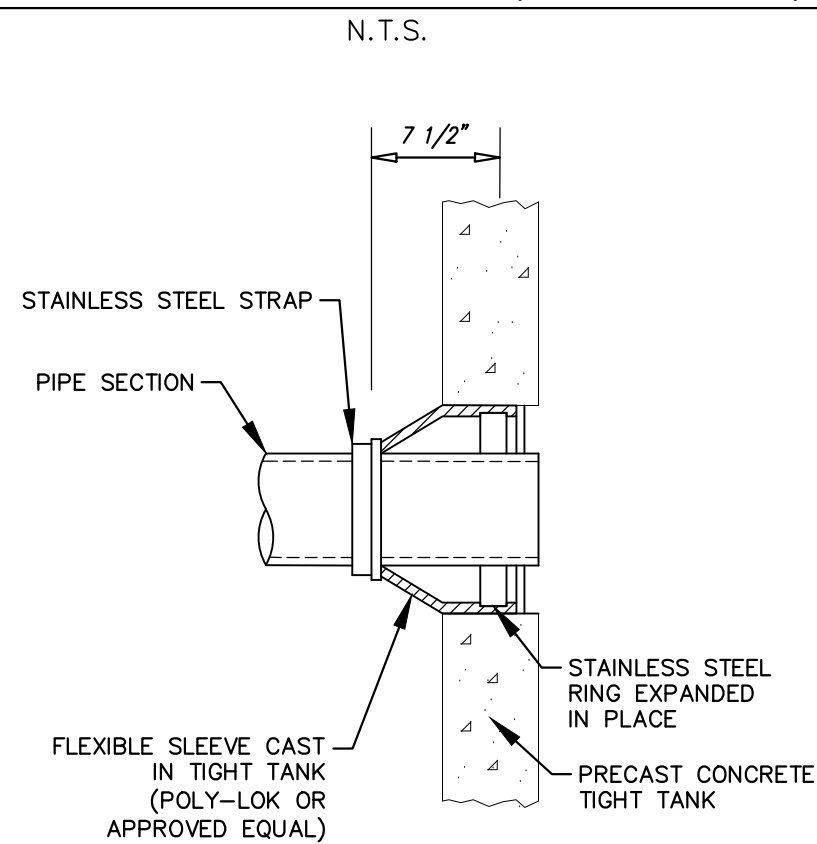
DB55 FABRIC PROPERTIES		
PROPERTY	TEST METHOD	MARV
TENSILE STRENGTH	ASTM D-4632	205 LBS
ELONGATION	ASTM D-4632	50%
CBR PUNCTURE	ASTM D-6241	525 LBS
UV RESISTANCE	ASTM D-4355	70%
AOS	ASTM D-4751	80 US SIEVE
PERMITTIVITY	ASTM D-4491	1.4 SEC-1
FLOW RATE	ASTM D-4491	90 GPM/SF



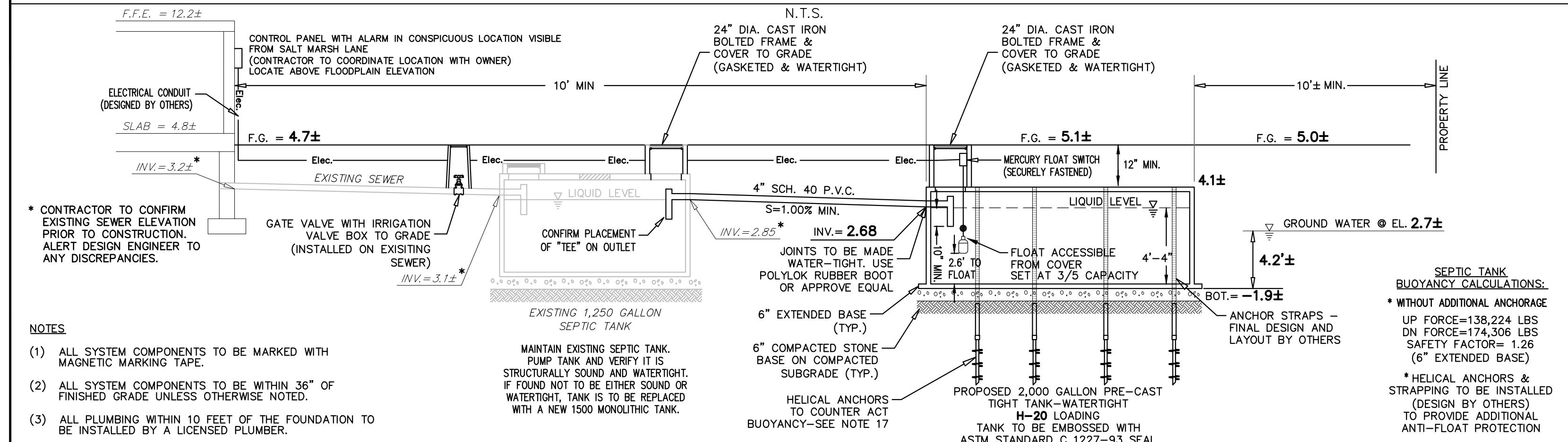
**DIRTBAG DETWATERING BAG DETAIL**

NOT TO SCALE

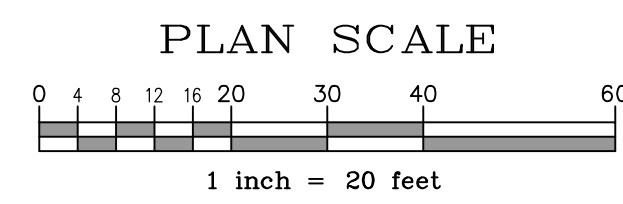
**TANK INLET BOOT DETAIL (FLEX SLEEVE)**



**SYSTEM PROFILE**



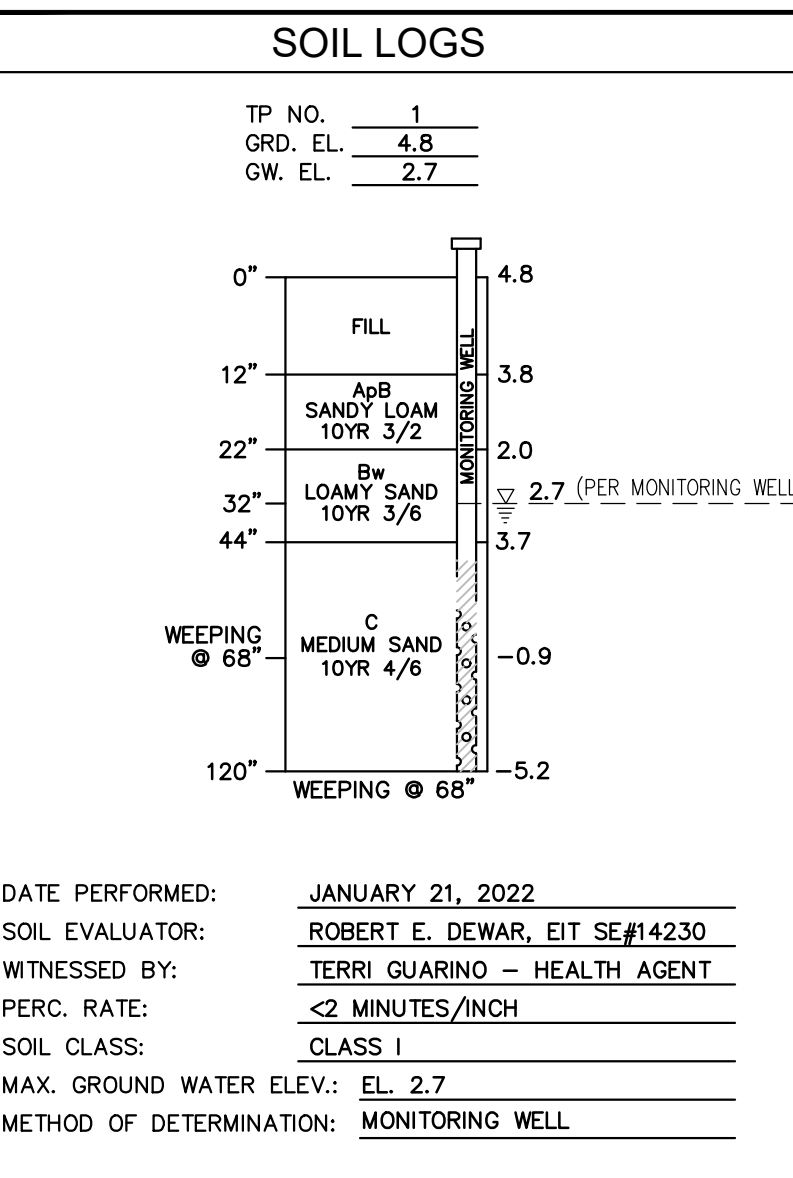
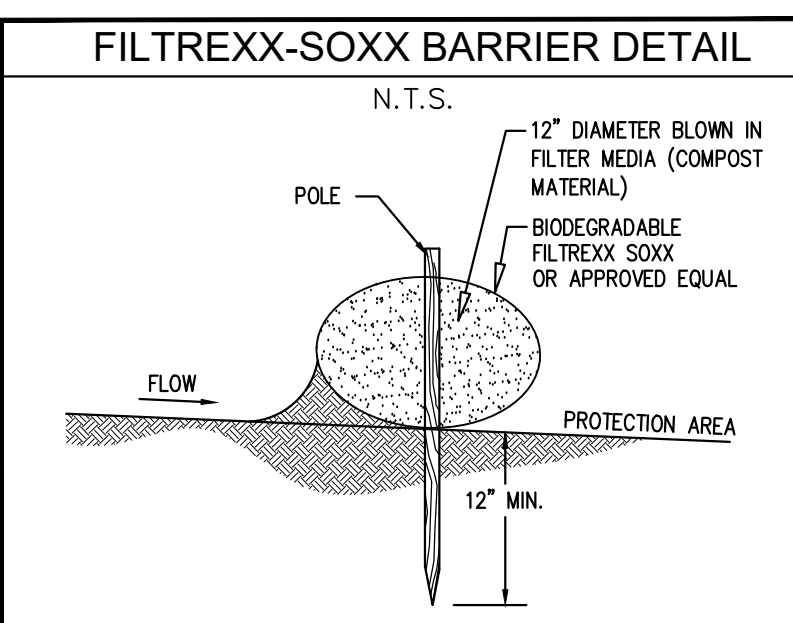
- NOTES**
- ALL SYSTEM COMPONENTS TO BE MARKED WITH MAGNETIC MARKING TAPE.
  - ALL SYSTEM COMPONENTS TO BE WITHIN 36" OF FINISHED GRADE UNLESS OTHERWISE NOTED.
  - ALL PLUMBING WITHIN 10 FEET OF THE FOUNDATION TO BE INSTALLED BY A LICENSED PLUMBER.



**LOCAL UPGRADE APPROVAL REQUESTED:**

15.405.3(b) - LOCAL UPGRADE APPROVAL IS REQUESTED FOR THE USE OF A TIGHT TANK IN ACCORDANCE WITH THE PROVISIONS OF 310 CMR 15.260.

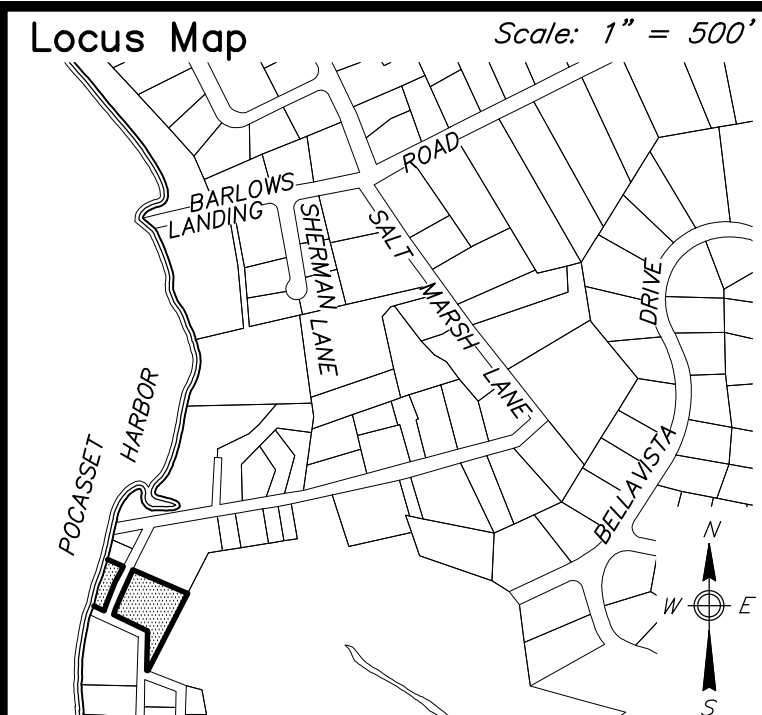
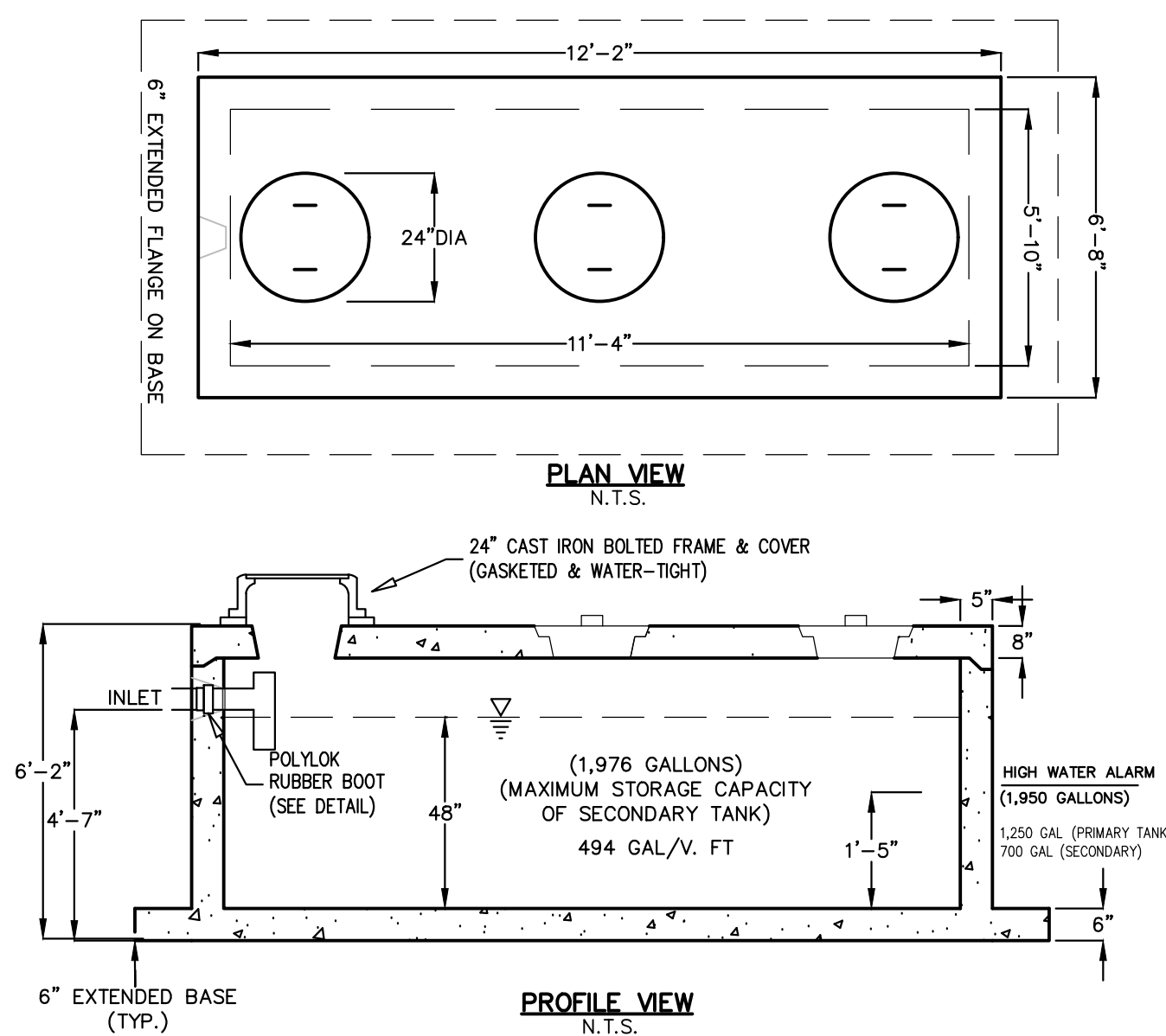
15.405.1(j) - LOCAL UPGRADE APPROVAL IS REQUESTED FOR THE REDUCTION OF A 12" SEPARATION FROM HIGH GROUNDWATER TO THE INLET TEE.



**DESIGN CALCULATIONS**

NUMBER OF BEDROOMS:	3 BEDROOMS
DESIGN FLOW REQUIRED:	110 GPD PER BEDROOM = 330 GPD
TIGHT TANK REQUIRED:	500% DAILY FLOW = 1,650 GPD (2,000 GAL. MIN.)
TIGHT TANK PROVIDED:	3,000 GALLONS
PUMPING SCHEDULE:	IN ACCORDANCE WITH APPROVAL

**2,000 GALLON TIGHT TANK DETAIL**



- BENCHMARK: ELEVATION = 4.80 (NAVD88) CONCRETE SLAB CORNER
- ALL CONSTRUCTION METHODS AND MATERIALS TO CONFORM TO TITLE 5 AND THE TOWN OF BOURNE BOARD OF HEALTH REGULATIONS.
- ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED.
- NO FIELD MODIFICATION TO THE SYSTEM SHALL BE MADE WITHOUT PRIOR WRITTEN APPROVAL OF THE DESIGN ENGINEER AND BOARD OF HEALTH.
- ALL JOINTS AND COVERS TO BE WATERTIGHT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES.
- A CERTIFICATE OF COMPLIANCE MUST BE OBTAINED PRIOR TO BACKFILLING SYSTEM.
- OWNER: CNB BRISTOW, LLC, 85 SALT MARSH LANE BOURNE, MA 02532
- DEED REFERENCE: Deed Bk: 33581 Pg: 256 L.C. Cert. #224768
- PLAN REFERENCE: Plan Bk: 75 Pg: 35 (LOTS A1 & A2) Plan Bk: 81 Pg: 51 (LOT 38) L.C.C. #20407-A (LOTS A & B)
- THE DESIGN IS INTENDED TO MEET TITLE 5 AND OTHER APPLICABLE REQUIREMENTS. THIS PLAN DOES NOT GUARANTEE THAT THE SYSTEM WILL BE INSTALLED AS DESIGNED, NOR DOES THIS PLAN GUARANTEE THE OPERATION OF THE SYSTEM.
- THIS SYSTEM IS NOT DESIGNED NOR INTENDED FOR USE WITH A GARBAGE GRINDER.
- LOCUS DOES NOT FALL WITHIN A ZONE II WELLHEAD PROTECTION AREA.
- LOCUS PARTIALLY FALLS WITHIN AN HSP ESTIMATED HABITAT OF RARE WILDLIFE AND PRIORITY HABITAT OF RARE SPECIES.
- LOCUS DOES FALL WITHIN SPECIAL FLOOD HAZARD ZONES AE (el. 16) and VE (el. 17) AS SHOWN ON FEMA FLOOD INSURANCE RATE MAP No. 25001C-0484-J dated 7/16/14.
- THE VISUAL/AUDIO ALARM PANEL IS TO BE MOUNTED ON THE SIDE OF THE BUILDING IN AN EXTERNAL SPOT VISIBLE FROM SALT MARSH LANE ABOVE THE DESIGN FLOOD ELEVATION 19.
- TIGHT TANK SHALL BE ADDITIONALLY SECURED THROUGH THE INSTALLATION OF HELICAL ANCHORS - DESIGN BY OTHERS.
- PRIOR TO THE ISSUANCE OF THE DISPOSAL WORKS CONSTRUCTION PERMIT, A COPY OF EITHER THE LOCAL APPROVING AUTHORITIES OR THE DEPARTMENT WRITTEN APPROVAL SHALL BE REGISTERED IN THE CHAIN OF TITLE AT THE BARNSTABLE COUNTY REGISTRY OF DEEDS.
- PRIOR TO THE CERTIFICATE OF COMPLIANCE BEING ISSUED, THE SYSTEM OWNER IS TO REGISTER A DEED RESTRICTION LIMITING THE DWELLING TO THREE (3) BEDROOMS MAX AT THE BARNSTABLE COUNTY REGISTRY OF DEEDS ALONG WITH A NOTICE IDENTIFYING THE USE OF A TIGHT TANK ON THE PROPERTY.
- EDGE OF SALT MARSH LINE TAKEN FROM A PLAN ENTITLED "BETTERMENT PLAN BOURNE WATER DISTRICT" PREPARED BY WARWICK & ASSOCIATES, Inc. dated FEBRUARY 11, 2010. (SEE Plan Bk: 633 Pg: 74)

Prepared By:

49 HERRING POND ROAD BUZZARDS BAY, MA 02532 (tel) 508.833.0070 (fax) 508.833.2282

19 OLD SOUTH ROAD NANTUCKET, MA 02554 (tel) 508.325.0044 (www.brackeneng.com)

**PROPOSED SEWAGE DISPOSAL PLAN IN BOURNE, MA**

Prepared For:

**CNB BRISTOW, LLC.**

#85 SALT MARSH LANE  
 MAP 43.1 PARCEL 83 & 81

No.	Date	Revision Description	By
4	10/17/23	REVISED NOTES	RED
3	9/29/23	REVISE TIGHT TANK DESIGN	RED
2	1/11/23	REVISE BEDROOM COUNT TO THREE (3) BEDROOMS	JPH
1	1/9/23	ADD RUBBER BOOT SPECIFICATION	JPH

No. \_\_\_\_\_ Date \_\_\_\_\_ Revision Description \_\_\_\_\_ By \_\_\_\_\_

Date: OCTOBER 18, 2022 Drawn: JPH/BEI Checked: ZLB/AMG Sheet: 1 of 1