

Land Design Solutions

Land Planning, Site Planning and Landscape Architecture

January 31, 2023

Ms. Maureen O'Meara
Town of Cape Elizabeth
P.O. Box 6260, 320 Ocean House Road
Cape Elizabeth, ME 04107

**RE: Workshop Application – Resource Protection Permit
Single Family Residence – 4 Balsam Road**

Dear Maureen,

On behalf of David and Stacy Calabrese the property owners and applicant, Land Design Solutions (agent) respectfully submits the enclosed Workshop Application and supporting documentation.

David and Stacy purchased the lot at 4 Balsam Road in 2019 with the plan to construct their retirement home. Owning a summer home at 12 Farm Hill Road for the past 17 years, and with many Maine roots and connections they felt that Cape Elizabeth was the perfect place to retire and enjoy family.

The lot at 4 Balsam Road was part of the Two Lights Terraces subdivision plan approved in 1968. The lot is shown as parcels 1 & 2 on the original subdivision plan, but were combined into a single lot during previous ownership. The parcel is located in the RA Zoning District and is 29,201 s.f. in size. Under current zoning RA District requires that lots be a minimum of 80,000 s.f. in size, making this lot a legal nonconforming (due to size) vacant lot. A legal opinion from the law office of Robert Danielson is included stating that in his opinion a single family residence can be built upon the property provided that Space and Bulk requirements of Section 19-4-3 A1.b are met.

A wetland delineation has been performed as well as a high intensity soil survey. Both were performed by Dale Brewer of Statewide Surveys Inc. No R.P. 1 areas which impact setbacks on the property were found. However, a number of R.P. 2 wetland areas were found throughout the parcel. Our observations are that these wetlands are primarily due to shallow depth to bedrock and drainage. The proposed concept proposes to fill a number of wetland areas on the high side of the site where we believe the house should be located. Other portions of wetland areas are proposed to be altered based on the septic system location and for grading and drainage purposes to make sure that the existing drainage patterns are maintained.

A septic design was done for the site by Brady Frick, SE#352 of Albert Frick Associates after determining that there is only one location on the site that is suitable. A small amount of wetland is required to be filled to accommodate the septic systems fill slope.

While the site is considered forested/vegetated and does have numerous hardwood and softwood trees it also has many standing dead trees, and many windfalls. Among the understory vegetation are numerous invasives including; wild rose, honeysuckle and bittersweet. Photographs of the site are included with this submission.

The following information is included as part of this submission:

1. Cover letter dated January 31, 2023
2. Workshop Application
3. Letter of Agent Authorization
4. Property Deed
5. Legal Opinion (nonconforming buildable lot)
6. Tax Map
7. Aerial Image
8. Site Photographs
9. Septic System Design
10. Wetland Report
11. Two Lights Terraces subdivision Plan
12. Wetland Delineation
13. High Intensity Soil Survey
14. Existing Conditions & Site Analysis Plan
15. Sketch Plan

We request that this item be placed on the February 7, 2023 Workshop agenda in order for the project team to discuss the project with the Planning Board. Please do not hesitate to contact me with any questions or comments concerning the submitted plans or documentation.

Sincerely,

A handwritten signature in black ink that reads "Peter B. Biegel". The signature is fluid and cursive, with the first name "Peter" and last name "Biegel" clearly legible.

Peter B. Biegel, ASLA
Maine Licensed Landscape Architect

TOWN OF CAPE ELIZABETH
Planning Board
Workshop Application

Applicant Name David and Stacy Calabrese

Email David.Calabrese@optum.com Telephone (508) 944-1443

Address 85 Little Pond Road, Northborough, MA 01532

Do you own the property? Yes x No

If not, do you have written permission from the owner? Yes (please provide) No

Project Contact Person (one only):

Name Peter Biegel (Land Design Solutions) Telephone (207) 939-1717

Address 1 Faraday Drive, Suite 7, Cumberland, ME 04021

Email pbiegel@landdesignsolutions.com

Location of Project 4 Balsam Road Map/Lot U15 / 40

Project description: The construction of a single family residence on an existing legal

nonconforming lot (part of the Two Lights Terraces subdivision approved in January 1968). The

lot has a number of wetland areas throughout that make development challenging.

Peter B. Biegel (Agent)
Signature of Owner

1/31/23
Date

Please return to the town planner, ACP Office, Town Hall
maureen.omeara@capeelizabeth.org, 799-0115

Planning Board workshop requests must be submitted at least 7 days before the workshop.

January 14, 2023

David Calabrese
85 Little Pond Road
Northborough, MA 01532

**RE: Letter of Agent Authorization
4 Balsam Road – Lot Development (Single Family Residence)**

To whom it may concern:

Please consider this letter as authorization for Land Design Solutions to act as the agent relative to local, state and federal permitting required for the referenced project.

Sincerely,



David Calabrese

1/16/23

WARRANTY DEED
Statutory Short Form

DLN: 1001940069817

KNOW ALL BY THESE PRESENTS, That We, Barbara E. Husted and Robert T. Husted, whose mailing address is 9 Wishing Well Lane, Rexford, NY 12148, for consideration paid, grant to Stacy Calabrese and David Calabrese whose mailing address is 85 Little Pond Road, Northborough, MA 01532, as JOINT TENANTS, with Warranty Covenants, the real property in the Town of Cape Elizabeth, County of Cumberland and State of Maine, more particularly described as follows:

A certain lot or parcel of land, in the Town of Cape Elizabeth, County of Cumberland and State of Maine, Lot No. 1 as delineated on a Plan entitled 'Revision of Two Lights Terraces', prepared by Charles C. Wright, dated April 17, 1969, approved by the Town of Cape Elizabeth Planning Board on June 19, 1969 and recorded in the Cumberland County Registry of Deeds in Plan Book 79, Page 34.

AND

A certain parcel of land, in the Town of Cape Elizabeth, County of Cumberland and State of Maine, being the westerly half of the lot shown as Lot No. 2 on a Plan entitled 'Revision of Two Lights Terraces', prepared by Charles C. Wright, dated April 17, 1969, approved by the Town of Cape Elizabeth Planning Board on June 19, 1969 and recorded in the Cumberland County Registry of Deeds in Plan Book 79, Page 34, said half being that portion of Lot No. 2 which lies westerly of the following line, described by reference to points shown on the aforesaid plan, as follows:

Beginning at a point on the northerly boundary line of the Two Lights Terraces Subdivision, which point is 77.22 feet in a direction South 51°-56' -30" West, of a copper bolt in the ledge at the northeasterly corner of Lot No. 2 and also 76.61 feet in a direction North 51° 56' 30" East of a granite monument at the northwesterly corner of Lot No. 2; thence South 37° -38' -15" East, a distance of 130.99 feet to a point on the northerly sideline of Balsam Road, said point being 40 feet distant from and radially opposite Balsam Road street baseline Station 2+81.49 and also 64.51 feet distant: measured along the curved sideline of Balsam Road, from a granite monument marking the point 40 feet right of Balsam Road street baseline P.R.C. Station 2+13.02; said parcel containing 9.070 square feet, more or less.

Said parcel does not include the approximately 40 foot by 40 foot street turn around area as shown on said plan. In the event the Town of Cape Elizabeth should vacate or discontinue its easement in said turnaround area because Balsam Road has been extended westerly, the underlying fee to said turnaround area shall vest in the Grantees.

The lots herein conveyed are conveyed subject to the following provisions which separately and in their entirety shall constitute a covenant running with the land for the benefit of the lots designated on the Plan recorded in the Cumberland County Registry of Deeds, Plan Book 76, Page 8 and in

MAINE REAL ESTATE TAX PAID

Plan Book revisions recorded in Plan Book 75, Page 29 and in Plan Book 79, Page 34, but for no other premises:

1. No building or other structure of any nature or description or any part thereof except existing buildings on lots 16,18 and on the unnumbered West Tower lot shall be erected or maintained on the premises within twenty-five (25) feet from any sideline thereof, or within thirty (30) feet of any street line adjoining said premises; and no conveyance of any portion of the premises hereby conveyed shall be made which would result in a violation of this paragraph as applied to the remaining portion thereof. If an owner owns two (2) or more adjoining numbered lots, such owner may treat such lots as one (1) lot for the purpose of the Paragraph.

2. The premises shall not be used or occupied by other than a single family and shall not be used for other than residential use. Only one (1) residential building for a single family shall be erected or maintained on the premises; one (1) two-car garage or three-car garage (within the residential building or attached thereto, or attached by a breezeway) shall be erected and maintained on the premises as an integral part of the residential building. No other building or structures of any nature or description shall be or maintained on said premises; provided, however, that nothing in this paragraph shall be construed to prevent the construction of a swimming pool, an outdoor fireplace, or fences as herein provided for, directly connected with the residential use of the premises by one (1) family. All buildings and structures shall be architecturally designed in keeping with the residential building.

3. Each building and structure on the premises shall be supported by solid masonry foundation or slab.

4. The ground floor area of the residential building shall not be less than one thousand (1,000) square feet exclusive of garage, breezeway, open porches, and covered walks.

5. The premises shall be used only for residential purposes and without limitation, no commercial, industrial, business, farming or animal husbandry use or enterprise of any nature or description shall be carried on at the premises.

6. No animals, birds, or fowl shall be kept or maintained on any part of the premises except pet dogs, cats, or birds which may be kept thereon in reasonable number for pleasure and use of the occupants, but not for any commercial use or purposes.

7. No owner of the premises shall do or permit to be done any act upon the premises which may be, or is, or may become a nuisance.

8. No boats or trailers, trucks, or other vehicles of any nature (other than personal automobiles of the occupants) or other tangible personal property (other than lawn furniture and items of similar nature for the use and enjoyment of the premises by the occupants) shall be kept on or stored on any part of the premises except wholly within an enclosed structure.

9. No sign of any nature or description shall be displayed or placed upon any part of the premises, except for signs whose total area does not exceed one (1) square foot giving the name of the occupants and the street name and number of the premises, and except for a "for sale" sign referring only to the premises, not to exceed two (2) square feet in size.

10. All driveways and turn-around areas shall be paved with not less than two (2) inches of bituminous concrete or equivalent paving.

11. No fences or free standing walls exceeding three and one half (3-1/2) feet in height shall be erected on the premises except that if a boundary line of the premises is also an exterior boundary line of the entire development as shown on said plans, then a fence or wall not in excess of six (6) feet in height may be erected along such exterior boundary line.

12. The premises shall be served exclusively by underground lines connecting to underground water, electric and telephone mains in the streets and ways shown on said plans. Any street lights serving the premises shall be on poles served by such underground electric mains.

13. When the construction of the buildings on the premises is once begun, work thereon must be prosecuted diligently and must be completed within a reasonable time. No building shall be occupied during construction. The prohibitions contained herein shall not be construed to prevent the use of trailers, vehicles, or temporary structures during the period of actual construction in connection with such construction.

14. No dead trees, underbrush, tall weeds or other unsightly growths shall be permitted to remain on any part of the premises and no refuse pile or unsightly objects shall be allowed to be placed or permitted to remain on any part of the premises.

15. No easements or rights-of-way, across the premises shall be granted except underground rights to permit compliance with the requirements hereof.

16. The provisions herein set forth shall continue in force and effect until January 2, 2020.

17. Each and every provision contained herein shall be considered to be independent and separate and, in the event that any one or more thereof shall for any reason be held to be invalid and unenforceable; all the remainder thereof shall, nevertheless, remain in full force and effect.

18. If the West Tower is used as a residence, Provision No. 4 and the garage requirement of Provision No. 1 shall not apply to said West Tower lot.

19. The Grantors, their heirs and assigns, and any owner or owners of any such numbered lot may institute or prosecute any proceedings at law or in equity against any person or persons violating or threatening to violate the covenants herein set forth for injunctive relief, specific performance or such other relief as may be appropriate; provided, however, that no claim for damages shall be enforceable against the Grantors, their heirs and assigns any other person or persons unless such person or persons is (are) guilty of the violation or the threatened or attempted violation thereof concerned.

20. The provisions hereof may from time to time be revised and/ or amended upon the written consent of the owners of not less than sixteen (16) of said numbered lots. If any lot is owned by more than one (1) person or is mortgaged, the signature of the owner or any one (1) of the owners shall be sufficient evidence of the consent to the revision or amendment.


This conveyance is also subject to the easement of Central Maine Power Company and the New England Telephone and Telegraph Company recorded in Cumberland County Registry of Deeds in Book 3059, Page 341.

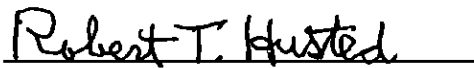
The Grantors herein specifically reserve their title to that portion of Balsam Road, a public way, which abuts the above described property.

Meaning and intending to convey and conveying the real property described in a deed to **Barbara E. Husted and Robert T. Husted** dated 08/24/1973 and recorded with the Cumberland County Registry of Deeds in Book 3449, Page 24 and a deed dated November 28, 1975 and recorded in the Cumberland County Registry of Deeds at Book 3777, Page 81.

Witness our hands and seals this 30th day of August, 2019.

Witness:


Barbara E. Husted

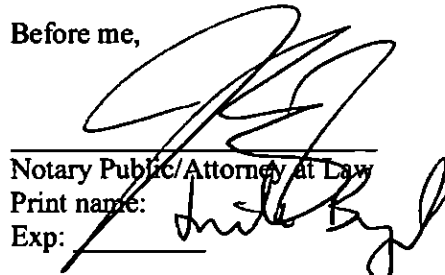

Robert T. Husted

STATE OF MAINE
COUNTY OF CUMBERLAND, ss.

August 30, 2019

Personally appeared on the above date, the above-named **Barbara E. Husted and Robert T. Husted** and acknowledged the foregoing instrument to be their free act and deed.

Before me,


Notary Public/Attorney at Law
Print name: Jenilee Bryant
Exp: _____

Jenilee Rose Bryant
State of Maine
Notary Public
Commission Expires:
September 16, 2021

Received
Recorded Register of Deeds
Sep 05, 2019 03:05:47P
Cumberland County
Nancy A. Lane

Legal Opinion

LAW OFFICES OF ROBERT E. DANIELSON
ATTORNEYS AT LAW

ROBERT E. DANIELSON*
E-MAIL: rdanielson@optlaw.net
*ALSO ADMITTED IN MA AND NY

65 WEST COMMERCIAL STREET, SUITE 106
P.O. BOX 545
PORTLAND, MAINE 04112-0545
TELEPHONE: (207) 879-1337
FACSIMILE: (207) 879-1579
www.danielsonlawoffice.com

January 26, 2023

VIA E-MAIL
PERSONAL & CONFIDENTIAL

Maureen O'Meara, Town Planner
320 Ocean House Road
Cape Elizabeth, ME 04107

***Re: 4 Balsam Road, Cape Elizabeth
Zoning Review and Title Search***

Dear Maureen,

We have been requested to complete a title search and a review of the Town of Cape Elizabeth Zoning Ordinance in regards to the property located at 4 Balsam Road, Cape Elizabeth, Maine (the "Property"). The purpose of our review is to determine if the Property is a buildable lot in the Town of Cape Elizabeth. The Property contains 28,314 square feet and is located in the Residence A District. We have outlined our findings below.

Identification of Property

The Property is shown as Lot 40 on Cape Elizabeth Tax Map U15 (the "Tax Map"). The Property is also shown and depicted as all of Lot 1 and the westerly one-half of Lot 2 on a plan entitled "Two Lights Terrace" dated January 8, 1968 and recorded in the Cumberland County Registry of Deeds in Plan Book 76, Page 8. This Plan was approved by the Cape Elizabeth Planning Board on March 12, 1968. The Subdivision Lots were then revised as shown on a Plan entitled "Revision of a Portion of Two Lights Terraces", approved by the Cape Elizabeth Planning Board on June 6, 1968 and recorded on June 12, 1968 in the Cumberland County Registry of Deeds in Plan Book 75, Page 9 [sic-29]. The Plan was subsequently revised on a Plan entitled "Revision of a Portion of Two Lights Terraces", approved by the Cape Elizabeth Planning Board on June 12, 1969 and recorded on June 24, 1969 in the Cumberland County Registry of Deeds in Plan Book 79, Page 34 and "Revision of a Portion of Two Lights Terraces" dated May 12, 1972 and recorded in the Cumberland County Registry of Deeds in Plan Book 90, Page 32 (Collectively, the "Subdivision Plan").

A Certificate of Review signed by the Cape Elizabeth Planning Board for the Development of Two Lights Terrace Subdivision in which the Planning Board confirmed that the Subdivision met all the criteria set

Any statements in this communication regarding tax matters are not intended or written by us to be used, and may not be used by any recipient of this communication, for the purpose of avoiding penalties that the Internal Revenue Service may seek to impose. The Internal Revenue Service has issued requirements regarding the formality and level of detail required in written analysis to be relied upon to avoid penalties; this communication does not meet those requirements.

forth in 30-M.R.S.A. §4956.3A-L is dated May 11, 1972, and recorded at the Cumberland County Registry of Deeds in Book 3237, Page 330. ("Planning Board Certificate")

Status of Title

As of January 13, 2022, title to the property is held by:

Stacy Calabrese and David Calabrese by virtue of a Warranty Deed from Barbara E. Husted and Robert T. Husted dated August 30, 2019 and recorded in Book 35953, Page 328 of the Cumberland County Registry of Deeds.

Barbara E. Husted and Robert T. Husted acquired Lot 1 as shown on the Subdivision Plan pursuant to a deed from Charles C. Wright dated August 24, 1973 and recorded in Book 3449, Page 24 of the Cumberland County Registry of Deeds. Two years later, the Husted's acquired the westerly portion of lot 2 as shown on the Original Subdivision Plan by virtue of a deed from Charles C. Wright dated November 28, 1975 and recorded in Book 3777, Page 81. The balance of Lot 2 was conveyed to Ernest J. Wiedman and Myrtle J. Wiedmann (the Owner of Lot 3) by deed dated November 28, 1975 in Book 3777 Page 86.

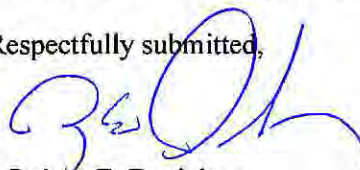
Zoning Review

According to the Cape Elizabeth Zoning Ordinance (Chapter 19) (Last amended October 13, 2022 and in effect as of January 23, 2023) and corresponding Town of Cape Elizabeth Official Zoning Map (Effective 2014) the Property is located in the Residence A District. The Space and Bulk Standards of the Residence A District require lots for single family residences to contain at least 80,000 square feet (Section 19-b-1, of the Zoning Ordinance). The Lot contains only 28,314 square feet but was validly created and in existence prior to the date of the enactment of the Zoning Ordinance as confirmed by the Planning Board Certificate and, is therefore considered a "non-conforming lot" as that term is defined in the Zoning Ordinance. According to Section 19-4-3 of the Zoning Ordinance, a non-conforming lot can be built upon if the lot contains at least 10,000 square feet (public sewer) or 20,000 square feet (on-site sewerage disposal) and meets all of the other criteria the Space and Bulk Standards set forth in Section 19-4-3 A.1.b. of the Zoning Ordinance.

Therefore, it is my opinion that a single family residence can be built upon the Property provided that any plans for improvements meet the Space and Bulk requirements of Section 19-4-3 A.1.b of the Zoning Ordinance.

Copies of all the relevant documents referred to above are attached for your reference.

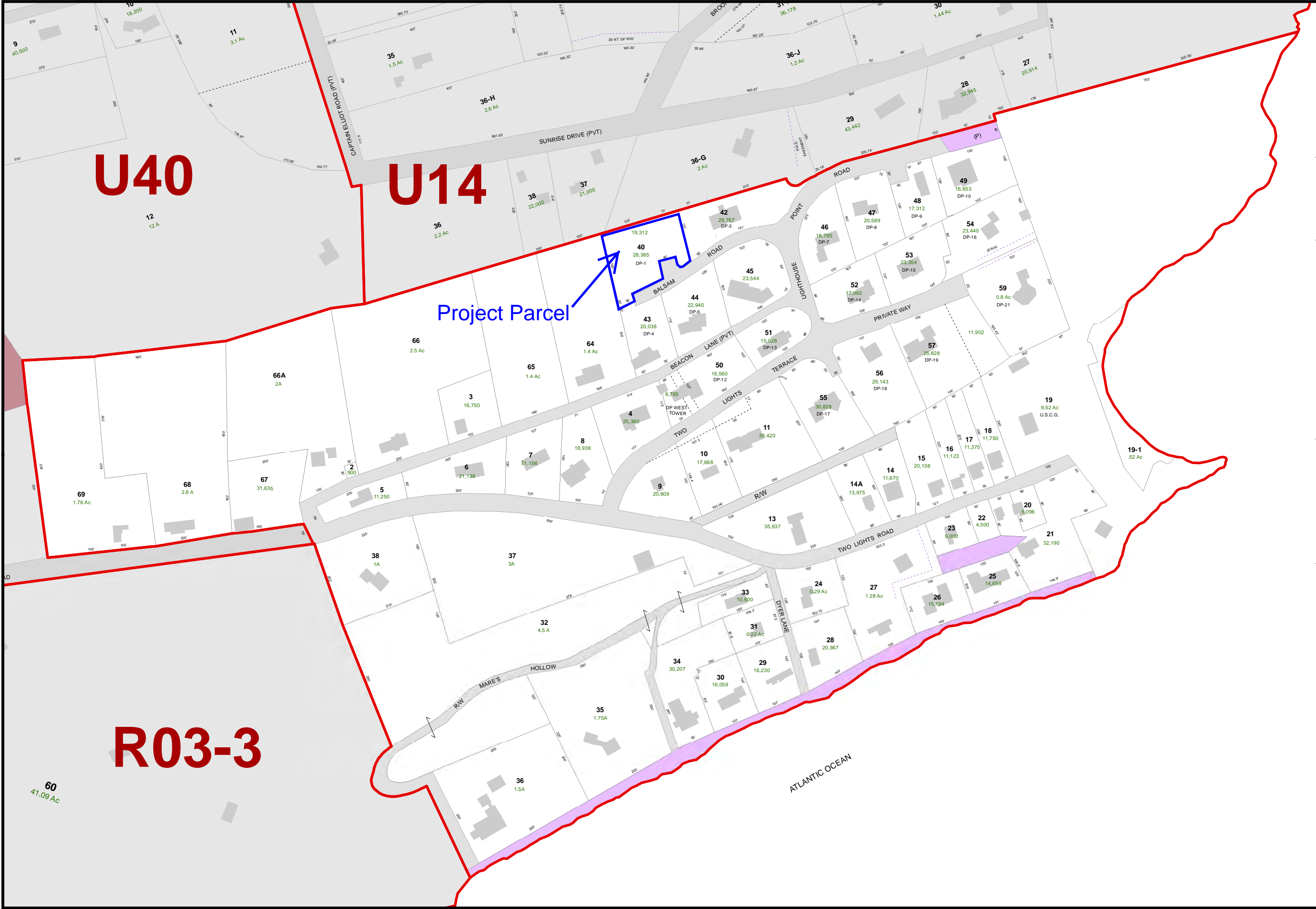
Respectfully submitted,



Robert E. Danielson

RED/bnf
Attachments

CC: Stacy and David Calabrese
Vicki Kennedy, ReMax Oceanside



Legend

- Common
- Easement/ROW
- Stream
- Hook
- Cemetery
- Parcels
- Roads
- ROW / Paper Street
- State
- Town
- Water

Maps Prepared by:

Spatial Alternatives

207.643.2355
www.spatialalternatives.com

Tax Maps

Town of

Cape Elizabeth

Tax Maps are intended for assessing purposes only. Boundary locations are approximate and should not be used for conveyance of property.

U14

MAP **U15**

Maps Updated to April 1, 2020

80 Feet

4 Balsam Road



Property Information	
Property ID	U15040000000
Location	BALSAM ROAD
Owner	CALABRESE STACY



MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT

Town of Cape Elizabeth, ME makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Geometry updated 06/28/2022
Data updated 9/20/20

Print map scale is approximate. Critical layout or measurement activities should not be done using this resource.

4 Balsam Road Photographs
Workshop (photographs taken in January 2023)



View of the end of Balsam road



View of wetland area around manmade pond along the rear property line



View from the hammerhead of a tangle of invasive vegetation (honeysuckle, wild rose & bittersweet)



Wetland at the base of a windthrown tree



View of lot from hammerhead west



View of lot from hammerhead east to abutting property



View of hammerhead projecting into lot



View looking back down Balsam Road past the hammerhead



Developed lot directly across Balsam Road from project lot



View of area of lot where the proposed house is shown on the sketch plan



Department of Health and Human Services
Maine Center for Disease Control and Prevention
286 Water Street
11 State House Station
Augusta, Maine 04333-0011
Tel: (207) 287-5672
Fax: (207) 287-4172; TTY: 1-800-606-0215

SUBSURFACE WASTEWATER DISPOSAL SYSTEM VARIANCE REQUEST

This form must accompany an application (HHE-200 Form) for any subsurface wastewater disposal system which requires a variance to provisions of the Subsurface Wastewater Disposal Rules. The Local Plumbing Inspector must not issue a permit for the installation of a subsurface wastewater disposal system requiring a variance from the Department of Health and Human Services until approval has been received from the Department.

GENERAL INFORMATION		Town of <u>Cape Elizabeth</u>
Property Owner's Name: <u>David Calabrese</u>		
System's Location: <u>4 Balsam Lane</u>		
Property Owner's Address: <u>85 Little Pond Road Northborough, MA</u>		Zip Code <u>01532</u>
e-mail address: _____		

The subsurface wastewater disposal system design for the subject property requires a ☐ replacement system variance ☒ first time system variance to the Subsurface Wastewater Disposal Rules. This variance requires ☒ local approval ☐ local and state approval.

SPECIFIC VARIANCE REQUESTED (To be filled in by Site Evaluator. Use additional sheets if needed.)	SECTION OF RULE
1. <u>30 sq. ft. of RP2 wetland fill required to construct fill extension (RPP required)</u>	<u>SEC. 19-6-9</u>
2. _____	_____
3. _____	_____
SITE EVALUATOR	
When a property is found to be unsuitable for subsurface wastewater disposal by a licensed Site Evaluator, the Evaluator shall so inform the property owner. If the property owner, after exploring all other alternatives, wishes to request a variance to the Rules, and the Evaluator in his professional opinion feels the variance request is justified and the site limitations can be overcome, he shall document the soil and site conditions on the Application. The Evaluator shall list the specific variances necessary plus describe below the proposed system design and function. The Evaluator shall further describe how the specific site limitations are to be overcome, and provide any other support documentation as required prior to consideration by the Department. Attach a separate sheet if necessary.	
<u>I believe the use of tertiary treatment overcomes the proposed modest wetland fill.</u>	
_____ _____ _____	
I, <u>Brady Frick</u> , S.E., certify that a variance to the Rules is necessary since a system cannot be installed which will completely satisfy all the Rule requirements. In my judgment, the proposed system design on the attached Application is the best alternative available; enhances the potential of the site for subsurface wastewater disposal; and that the system should function properly.	
<u>Brady Frick</u> SIGNATURE OF SITE EVALUATOR	<u>1/26/23</u> DATE

PROPERTY OWNER	
I, _____, am the <input type="checkbox"/> owner <input type="checkbox"/> agent for the owner of the subject property. I understand that the installation on the Application is not in total compliance with the Rules. Should the proposed system malfunction, I release all concerned provided they have performed their duties in a reasonable and proper manner, and I will promptly notify the Local Plumbing Inspector and make any corrections required by the Rules. By signing the variance request form, I acknowledge permission for representatives of the Department to enter onto the property to perform such duties as may be necessary to evaluate the variance request.	
<input type="checkbox"/> SIGNATURE OF OWNER <input type="checkbox"/> AGENT FOR THE OWNER	DATE _____

LOCAL PLUMBING INSPECTOR - Approval at local level

The local plumbing inspector shall review all variance requests prior to rendering a decision.

I, _____, the undersigned, have visited the above property and find that the variance request submitted by the applicant does not conform with certain provisions of the wastewater disposal rules. The variance request submitted by the applicant is the best alternative for a subsurface wastewater disposal system on this property. The proposed system (☐ does ☐ does not) conflict with any provisions controlling subsurface wastewater disposal in the shoreland zone. Therefore, I (☐ do ☐ do not) approve the requested variance. I (☐ will ☐ will not) issue a permit for the system's installation as proposed by the application.

LPI Signature_____
Date**LOCAL PLUMBING INSPECTOR - Referral to the Department**

The local plumbing inspector shall review all variance requests prior to forwarding to the Division of Environmental Health.

I, _____, the undersigned, have visited the above property and find that the variance request submitted by the applicant does not conform with certain provisions of the wastewater disposal rules. The variance request submitted by the applicant is the best alternative for a subsurface wastewater disposal system on this property. The proposed system (☐ does ☐ does not) conflict with any provisions controlling subsurface wastewater disposal in the shoreland zone. Therefore, I (☐ do ☐ do not) recommend the issuance of a permit for the system's installation as proposed by the application.

LPI Signature_____
Date**FOR USE BY THE DEPARTMENT ONLY**

The Department has reviewed the variance(s) and (☐ does ☐ does not) give its approval. Any additional requirements, recommendations, or reasons for the Variance denial, are given in the attached letter.

SIGNATURE OF THE DEPARTMENT_____
DATE

- Notes: 1. Variances for soil conditions may be approved at the local level as long as the total point assessment is at least the minimum allowed. (See Section 7.B.4 of the Subsurface Wastewater Disposal Rules for Municipal Review.)
2. Variances for other than soil conditions or soil conditions beyond the limit of the LPI's authority are to be submitted to the Department for review. (See Section 7.B.3 for Department Review.) The LPI's signature is required on these variance requests prior to sending them to the Department.

**SOIL, SITE AND ENGINEERING FACTORS FOR FIRST TIME SYSTEM VARIANCE ASSESSMENT
WITH LIMITING SOIL DRAINAGE CONDITIONS (SEE TABLES 7C THROUGH 7M).**

	CHARACTERISTIC	POINT ASSESSMENT
Soil Profile		
Depth to Groundwater/Restrictive Layer		
Terrain		
Size of Property		
Waterbody Setback		
Water Supply		
Type of Development		
Disposal Area Adjustment		
Vertical Separation Distance		
Additional Treatment		
TOTAL POINT ASSESSMENT:		

Minimum Points (Check One): ☐ Outside Shoreland Zone-50 ☐ Inside Shoreland Zone-65 ☐ Subdivision-65

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Maine Dept. Health & Human Services
Div of Environmental Health, 11 SHS
(207) 287-2070 FAX (207) 287-4172

PROPERTY LOCATION

City, Town, or Plantation **CAPE ELIZABETH**
Street or Road **4 BALSAM LANE**
Subdivision, Lot #

>>CAUTION: LPI APPROVAL REQUIRED<<

Town/City _____ Permit # _____
Date Permit Issued ____/____/____ Fee \$ _____ Double Fee Charged []
L.P.I.# _____

OWNER/APPLICANT INFORMATION

Name (last, first, MI) **CALABRESE DAVID** ☒ Owner ☐ Applicant
Mailing Address of **85 LITTLE POND ROAD**
Owner **NORTHBOROUGH, MA 01532**
Daytime Tel. # **508-944-1443**

Local Plumbing Inspector Signature _____
Fee \$ _____ State Fee _____ Fee \$ _____ Locally Adopted Fee _____
Copy: [] Owner [] Town [] State
The Subsurface Wastewater Disposal System shall not be installed until a Permit is issued by the Local Plumbing Inspector. The Permit shall authorize the owner or installer to install the disposal system in accordance with this application and the Maine Subsurface Wastewater Disposal Rules.

Municipal Tax Map # **014** Lot # **40**

OWNER OR APPLICANT STATEMENT

I state and acknowledge that the information submitted is correct to the best of my knowledge and understand that any falsification is reason for the Department and/or Local Plumbing Inspector to deny a permit.

CAUTION: INSPECTION REQUIRED

I have inspected the installation authorized above and found it to be in compliance with the Subsurface Wastewater Disposal Rules Application.

Signature of Owner/Applicant _____

Date _____

Local Plumbing Inspector Signature _____

(1st) Date Approved _____

(2nd) Date Approved _____

PERMIT INFORMATION

TYPE OF APPLICATION

- ☒ 1. First Time System
☐ 2. Replacement System

Type Replaced: _____

Year Installed: _____

- ☐ 3. Expanded System
☐ a. <25% Expansion
☐ b. >25% Expansion
☐ 4. Experimental System
☐ 5. Seasonal Conversion

THIS APPLICATION REQUIRES

- ☐ 1. No Rule Variance
☒ 2. First Time System Variance
☒ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 3. Replacement System Variance
☐ a. Local Plumbing Inspector Approval
☐ b. State & Local Plumbing Inspector Approval
☐ 4. Minimum Lot Size Variance
☐ 5. Seasonal Conversion Permit

DISPOSAL SYSTEM COMPONENTS

- ☒ 1. Complete Non-Engineered System
☐ 2. Primitive System (graywater & alt toilet)
☐ 3. Alternative Toilet, specify: _____
☐ 4. Non-Engineered Treatment Tank (only)
☐ 5. Holding Tank, _____ gallons
☐ 6. Non-Engineered Disposal Field (only)
☐ 7. Separated Laundry System
☐ 8. Complete Engineered System (2000gpd+)
☐ 9. Engineered Treatment Tank (only)
☐ 10. Engineered Disposal Field (only)
☒ 11. Pre-treatment, specify: **BIOMICROBICS**
☐ 12. Miscellaneous components **BIOBARRIER**
MFR 05 OR EQUIV.

SIZE OF PROPERTY

29,201 ☒ SQ. FT.
☐ ACRES

DISPOSAL SYSTEM TO SERVE

- ☒ 1. Single Family Dwelling Unit, No. of Bedrooms: **4**
☐ 2. Multiple Family Dwelling, No of Units: _____
☐ 3. Other: _____ (specify) _____

TYPE OF WATER SUPPLY

- ☒ 1. Drilled Well ☐ 2. Dug Well ☐ 3. Private
OR ☒ 4. Public ☐ 5. Other: _____

SHORELAND ZONING

- ☐ Yes ☒ No

Current Use ☐ Seasonal ☐ Year Round ☒ Undeveloped

DESIGN DETAILS (SYSTEM LAYOUT SHOWN ON PAGE 3)

TREATMENT TANK

- PROPOSED ****CUSTOM**
☒ 1. Concrete TANK
☒ a. Regular
☐ b. Low Profile
☐ 2. Plastic GENEST
☐ 3. Other: **CONCRETE****
CAPACITY: **2,000** GAL.
SEE NOTE ON PAGE 3

DISPOSAL FIELD TYPE & SIZE

- ☐ 1. Stone Bed ☐ 2. Stone Trench
☒ 3. Proprietary Device
☐ a. Cluster array ☒ c. Linear
☒ b. Regular ☐ d. H-20 loaded
☐ 4. Other: _____
SIZE: **200** ☒ sq. ft. ☐ lin. ft.
4 HIGH CAPACITY PLASTIC CHAMBER UNITS

GARBAGE DISPOSAL UNIT

- ☒ 1. No ☐ 2. Yes ☐ 3. Maybe
If Yes or Maybe, specify one below:
☐ a. Multi-compartment tank
☐ b. _____ tanks in series
☐ c. Increase in tank capacity
☐ d. Filter on tank outlet

DESIGN FLOW

- 360** gallons per day
BASED ON:
☒ 1. Table 4A (dwelling unit(s))
☐ 2. Table 4C (other facilities)
SHOW CALCULATIONS for other facilities

SOIL DATA & DESIGN CLASS

PROFILE **2** / **AIII**

at Observation Hole # **TP 1**
Depth **18** "
of Most Limiting Soil Factor

DISPOSAL FIELD SIZING

- ☐ 1. Medium - 2.6 sq.ft./gpd
☒ 2. Medium-Large - 3.3 sq.ft./gpd
☐ 3. Large - 4.1 sq.ft./gpd
☐ 4. Extra-Large - 5.0 sq.ft./gpd

EFFLUENT/EJECTOR PUMP

- ☐ 1. Not required
☒ 2. May be required
☐ 3. Required
Specify only for engineered systems:
DOSE: _____ gallons

**4 BEDROOMS AT
90 GALLONS PER
DAY EACH**

- ☐ 3. Section 4G (meter readings)
ATTACH WATER-METER DATA

LATITUDE AND LONGITUDE
at center of disposal area
Lat. **N43** d **33** m **54.18** s
Lon. **W70** d **12** m **11.91** s
If g.p.s., state margin of error

SITE EVALUATOR STATEMENT

I certify that on **1/16/22** (date) I completed a site evaluation on this property and state that the data reported are accurate and that the proposed system is in compliance with the Subsurface Wastewater Disposal Rules (10-144A CMR 241).

Site Evaluator Signature _____

352
SE #

Date **1/20/23**

BRADY A. FRICK
Site Evaluator Name Printed

(207) 839-5563
Telephone Number

INFO@ALBERTFRICK.COM
E-mail Address

ALBERT FRICK ASSOCIATES - 731 FOSS ROAD, LIMERICK, MAINE 04048 - (207) 839-5563
Note: Changes to or deviations from the design should be confirmed with the Site Evaluator

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

Department of Health and Human Services
Division of Environmental Health
(207) 287-2070 FAX (207) 287-4172

Town, City, Plantation
CAPE ELIZABETH

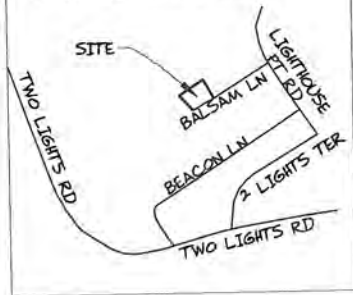
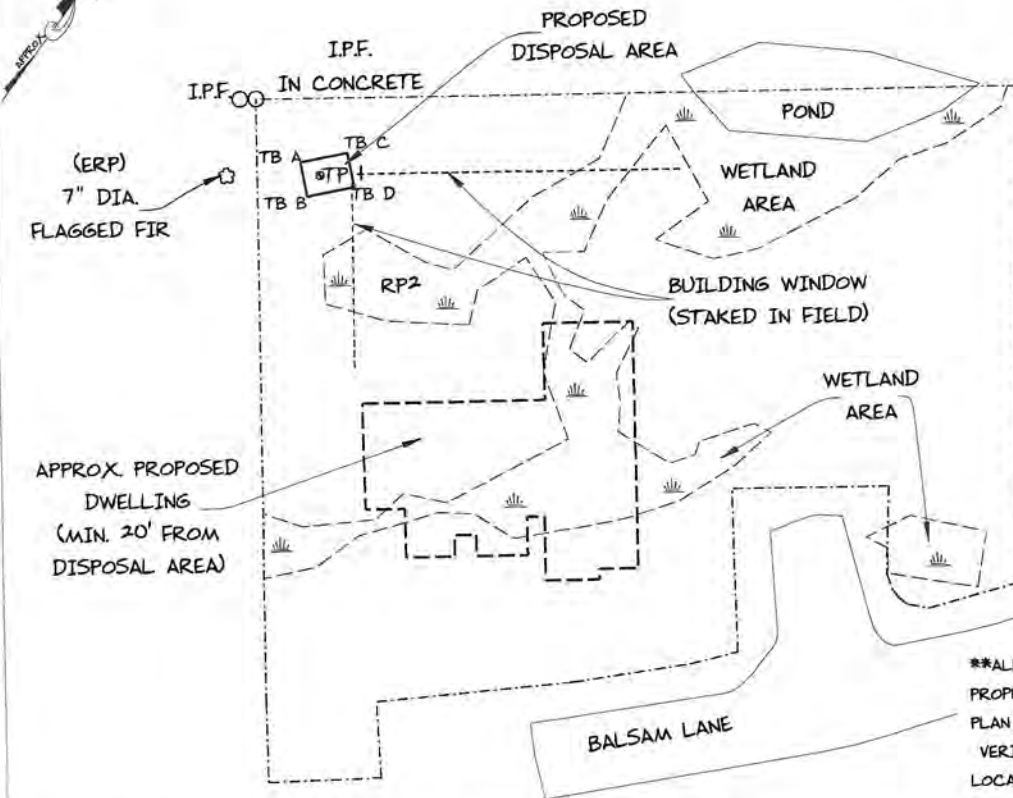
Street, Road Subdivision
4 BALSAM LANE

Owner's Name
DAVID CALABRESE

SITE PLAN

Scale 1" = 50 Ft.
or as shown

SITE LOCATION PLAN
(Attach Map from Maine Atlas Recommended)



****ALBERT FRICK ASSOCIATES ARE NOT SURVEYORS****
PROPERTY INFORMATION PER SURVEY
PLAN BY LAND DESIGN SOLUTIONS DATED NOV 2022
VERIFY PROPERTY LINES TO ASSURE ACCURATE
LOCATION PRIOR TO SYSTEM INSTALLATION

SOIL DESCRIPTION AND CLASSIFICATION (Location of Observation Holes Shown Above)

Observation Hole TP 1 ☒ Test Pit ☐ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
CHANNERY		BROWN	
SANDY LOAM	FRIABLE	YELLOW BROWN	NONE EVIDENT
REFUSAL IN LARGE ROCK OR BEDROCK			

Soil Classification 2 AIII
Profile Condition
Slope 0-3 %
Limiting Factor 18"
☐ Ground Water
☐ Restrictive Layer
☒ Bedrock
☐ Pit Depth

Observation Hole TB's ☐ Test Pit ☒ Boring
" Depth of Organic Horizon Above Mineral Soil

Texture	Consistency	Color	Mottling
TB A = 18" TO REFUSAL / BEDROCK			
TB B = 16" TO REFUSAL / BEDROCK			
TB C = 16" TO REFUSAL / BEDROCK			
TB D = 13" TO REFUSAL / BEDROCK			

Soil Classification 2 AIII
Profile Condition
Slope 0-3 %
Limiting Factor 18"
☐ Ground Water
☐ Restrictive Layer
☒ Bedrock
☐ Pit Depth

Site Evaluator Signature

352
SE #

Date

Page 2 of 3
HHE-200 Rev. 02/11

SUBSURFACE WASTEWATER DISPOSAL SYSTEM APPLICATION

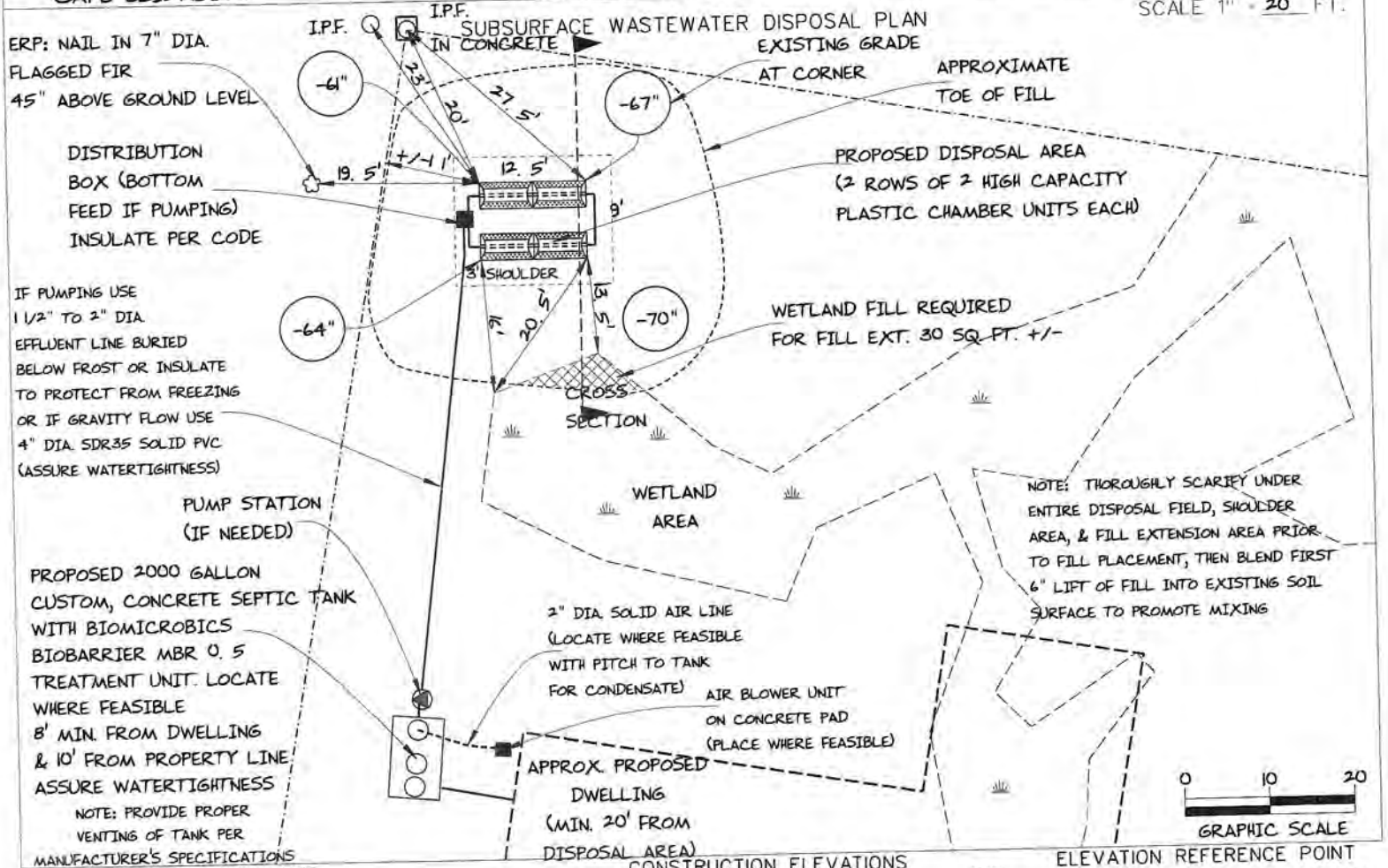
Department of Health and Human Services
Division of Environmental Health
(207) 287-2070 FAX (207) 287-4172

Town, City, Plantation
CAPE ELIZABETH

Street, Road, Subdivision
4 BALSAM LANE

Owner's Name
DAVID CALABRESE

SCALE 1" = 20 FT.



FILL REQUIREMENTS

Depth of Fill (Upslope) : 28" - 34"
Depth of Fill (Downslope) : 31" - 37"

CONSTRUCTION ELEVATIONS

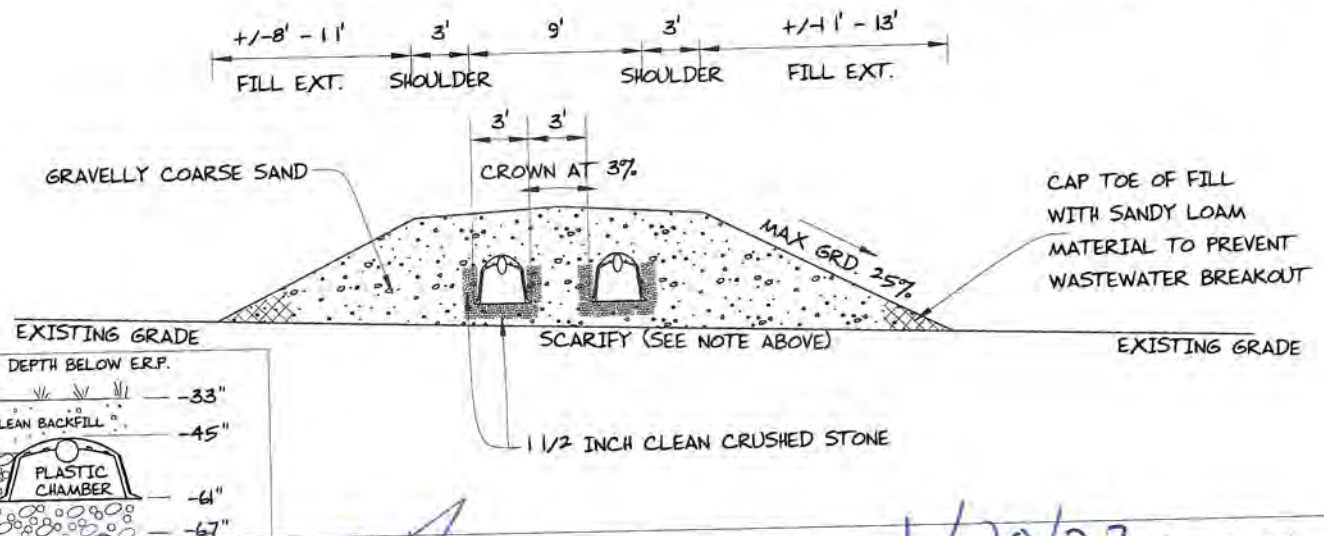
Finished Grade Elevation
Top of Distribution Pipe or Proprietary Device
Bottom of Disposal Area

SEE
DETAIL
BELOW

ELEVATION REFERENCE POINT
Location & Description 7" DIA FLAGGED
FIR, NAIL 45" ABOVE BASE
Reference Elevation is: 0.0" or -----

SCALE:
VERTICAL: 1" = 5 FT
HORIZONTAL: 1" = 10 FT

DISPOSAL AREA CROSS SECTION



Site Evaluator Signature

352
SE *

Date

1/20/23

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HHE-200 Rev. 02/11



Albert Frick Associates, Inc.
Soil Scientists & Site Evaluators
731 Foss Road Limerick, Maine 04048
(207) 839-5563

CAPE ELIZABETH

4 BALSAM LANE

DAVID CALABRESE

TOWN

LOCATION

APPLICANT'S NAME

- 1) The Plumbing and Subsurface Wastewater Disposal Rules adopted by the State of Maine, Division of Health and Human Services pursuant to 22 M.R.S.A. § 42 (the "Rules") are incorporated herein by reference and made a part of this application and shall be consulted by the owner/applicant, the system installer and/or building contractor for further construction details and material specifications. The system Installer should contact Albert Frick Associates, Inc. 839-5563, if there are any questions concerning materials, procedures or designs. The system installer and/or building contractor installing the system shall be solely responsible for compliance with the Rules and with all state and municipal laws and ordinances pertaining to the permitting, inspection and construction of subsurface wastewater disposal systems.
- 2) This application is intended to represent facts pertinent to the Rules only. It shall be the responsibility of the owner/applicant, system Installer and/or building contractor to determine compliance with and to obtain permits under all applicable local, state and/or federal laws and regulations (including, without limitation, Natural Resources Protection Act, wetland regulations, zoning ordinances, subdivision regulations, Site Location of Development Act and Minimum Lot Size law) before installing this system or considering the property on which the system is to be installed a "buildable" lot. It is recommended that a wetland scientist be consulted regarding wetland regulations. Prior to the commencement of construction/installation, the local plumbing inspector or Code Enforcement Officer shall inform the owner/applicant and Albert Frick Associates, Inc of any local ordinances which are more restrictive than the Rules in order that the design may be amended. All designs are subject to review by local, state and/or federal authorities. Albert Frick Associates, Inc.'s liability shall be limited to revisions required by regulatory agencies pursuant to laws or regulations in effect at the time of preparation of this application.
- 3) All information shown on this application relating to property lines, well locations, subsurface structures and underground facilities (such as utility lines, drains, septic systems, water lines, etc.) are based upon information provided by the owner/applicant and has been relied upon by Albert Frick Associates, Inc. in preparing this application. The owner/applicant shall review this application prior to the start of construction and confirm this information. Well locations on abutting properties but not readily visible above grade should be confirmed by the owner/applicant prior to system installation to assure minimum setbacks.
- 4) Installation of a garbage (grinder) disposal is not recommended. If one is installed, an additional 1000 gallon septic tank or a septic tank filter shall be connected in series to the proposed septic tank. Risers and covers should be installed over the septic tank outlet per the "Rules" to allow for easy maintenance of filter.
- 5) The septic tank should be pumped within two years of installation and subsequently as recommended by the pump service, but in no event should the septic tank be pumped less often than every three years.
The system user shall avoid introducing kitchen grease or fats into this system. Chemicals such as septic tank cleaners and/or chlorine or water treatment backwash and controlled or hazardous substances shall not be disposed of in this system. Additives such as yeast or enzymes are discouraged, since they have not been proven to extend system life.
- 6) All septic tanks, pump stations and additional treatment tanks shall be installed to prevent ground water and surface water infiltration. Risers and covers should be properly installed to provide access while preventing surface water intrusion to within 6" of a finished ground surface. Vehicular traffic over disposal system is prohibited unless specifically designed with H-20 rated components.

ATTACHMENT TO SUBSURFACE WASTEWATER DISPOSAL APPLICATION

CAPE ELIZABETH

4 BALSAM LANE

DAVID CALABRESE

TOWN

LOCATION

APPLICANT'S NAME

7) The actual waste water flow or number of bedrooms shall not exceed the design criteria indicated on this application without a re-evaluation of the system as proposed

8) The general minimum setbacks between a well (public or private) and septic system serving a single family residence is 100-300 feet, unless the local municipality has a more stringent requirement. A well installed by an abutter within the minimum setback distances prior to the issuance of a permit for the proposed disposal system may void this design.

9) When a gravity system is proposed: BEFORE CONSTRUCTION/INSTALLATION BEGINS, the system installer or building contractor shall review the elevations of all points given in this application and the elevation of the existing and/or proposed building drain and septic tank inverts for compatibility to minimum pitch requirements. In gravity systems, the invert of the septic tank(s) outlet(s) should be at least 4 inches above the invert of the distribution box outlet at the disposal area.

10) When an effluent pump is required: Pump stations should be sized per manufacturer's specifications to meet lift requirements and friction loss. Provisions shall be made to make certain that surface and ground water does not enter the septic tank or pump station, by sealing/grouting all seams and connections, and by placement of a riser and lid at or above grade. An alarm device warning of a pump failure shall be installed. Also, when pumping is required of a chamber system, install a 'T' connection in the distribution box and place 3 inches of stone or a splash plate in the first chamber. Insulate gravity pipes, pump lines and the distribution box as necessary to prevent freezing.

11) On all systems, remove the vegetation, organic duff and old fill material from under the disposal area and any fill extension. Additional fill beyond indicated on plan may be necessary to replace organic matter. On sites where the proposed system is to be installed in natural soil, scarify the bottom and sides of the excavated disposal area with a rake. Do not use wheeled equipment on the scarified soil surface. For systems installed in fill, scarify the native soil by roto-tilling or scarifying with teeth of backhoe to a depth of at least 8 inches over the entire disposal and fill extension area to prevent glazing and to promote fill bonding. Place fill in loose layers no deeper than 8 inches and compact before placing more fill (this ensures that voids and loose pockets are eliminated to minimize the chance of leakage or differential settling). Do not use wheeled equipment on the scarified soil area until after 12 inches of fill is in place. Keep equipment off proprietary devices. Divert the surface water away from the disposal area by ditching or shallow landscape swales.

12) Unless noted otherwise, fill shall be gravelly coarse sand, which contains no more than 5% fines (silt and clay). Crushed stone shall be clean and free of any rock dust from the crushing process.

13) Do not install systems on loamy, silty, or clayey soils during wet periods since soil smearing/glazing may seal off the soil interface.

14) Seed all filled and disturbed surfaces with perennial grass seed, with 4" min. soil or soil amendment mix suitable for growing, then mulch with hay or equivalent material to prevent erosion. Alternatively, bark or permanent landscape mulch may be used to cover system. Woody trees or shrubs are not permitted on the disposal area or fill extensions.

15) If an advanced wastewater treatment unit is part of the design, the system shall be operated and maintained per manufacturer's specifications.

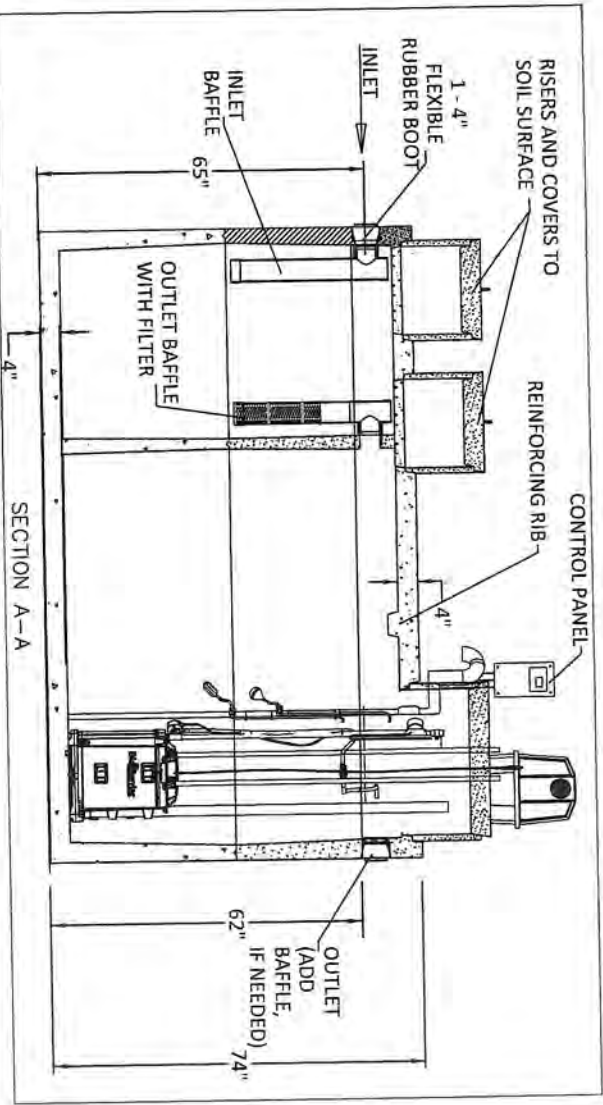
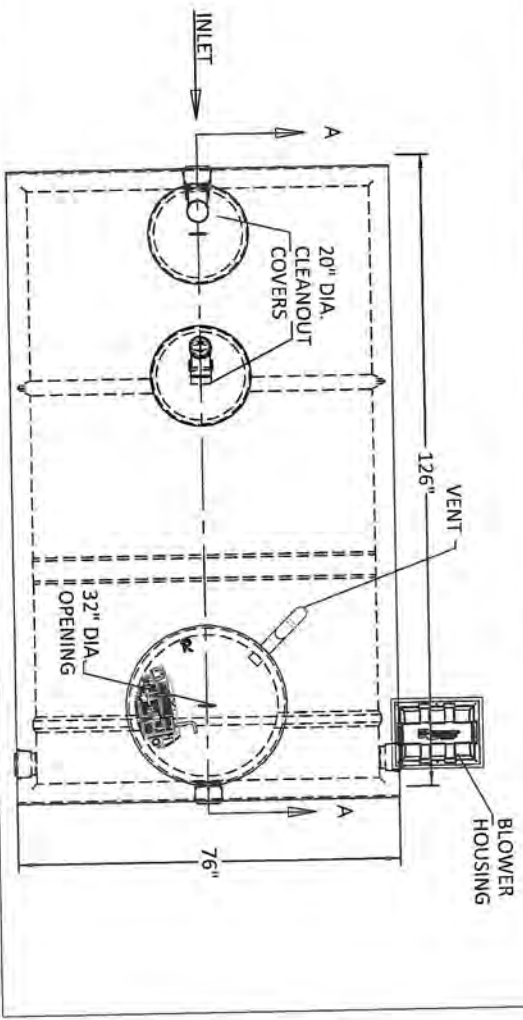


Albert Frick Associates, Inc.

Soil Scientists & Site Evaluators

751 Fox Road Limerick, Maine 04048


(207) 839-5563



TANK CAPACITY GALS.
500 / 1500

NOTES

1. Blower piping to BioBarrier® MBR® may not exceed 40 FT [12 m] total length and use 4 elbows maximum per train. For distances greater than 40 FT [12 m] - consult factory. Blowers must be located above flood/standing water levels on concrete bases 26" X 20" X2" [65 X 50 X 5cm] minimum.
2. Run vent(s) to desired location above finish grade and cover opening(s) with vent grate(s) w/ at least 12 sq in. [77 sq. cm] of total open surface area. Secure with stainless steel screws. Vent piping must not allow excess moisture build up or back pressure.
3. All apertures to BioBarrier® (e.g., tank pump outs, etc.) must conform to all country, state, province, and local plumbing and electrical codes.
4. The BioBarrier® MBR® control systems are provided by Bio-Microbics, Inc.
5. The primary compartments may be a separate tank. The baffle separating the settling and the treatment chambers shall be sealed to the top of the tank, as shown on the drawing. Ventilation for the settling zone shall be provided for in the same manner as a traditional septic tank.
6. All inspection, viewing, access, and pump out ports must be secured, to prevent accidental or unauthorized access. Tank, anchors, piping, conduit, blower housing pads and vents are provided by others.
7. All piping and ancillary equipment installed after BioBarrier® MBR®, must not impede or restrict filtrate pump.
8. BioBarrier® MBR® assemblies must be secured to the tanks to prevent movement or flotation (see installation instructions for details).
9. If less than any of the specified minimums is considered necessary, consult factory for guidance.

SEPTIC TANK and BIOMICROBICS MBR 0.5 UNIT INTERNAL MOUNT		 Albert Frick Associates, Inc. Gorham, Maine 04038 phone 207-839-5563 fax 207-839-5564 brady@albertfrick.com	
Date: Revision Description:	Drawn By: B.J. Date: 2/21/17	Checked By: Brady Frick	Scale: NO SCALE

BioBarrier MBR Treatment Unit

Professional Disclosure

Professional ethics require disclosure that *Albert Frick Associates, Inc.* receives revenue from the sale of a BioBarrier MBR Wastewater Treatment Unit. Our company is authorized to sell the Bio-Microbics products through J & R Sales & Service, Inc., who is an authorized reseller for Bio-Microbics, the manufacturer of BioBarrier MBR Wastewater Treatment Units.

It is the opinion of *Albert Frick Associates, Inc.*, that the BioBarrier MBR Treatment Units have advantages over other treatment units in some situations. Based on our review of the Bio-Microbics products we believe that they have a proven track record and are quality products.

Albert Frick Associates Inc. is first and foremost an environmental consulting firm which strives to provide sound and objective advice regarding wastewater design, and permitting based on the site specific needs of our clients. To avoid the appearance of a conflict of interest, any BioBarrier MBR Treatment Unit that is specified on a HHE-200 Application provided by *Albert Frick Associates, Inc.* may be substituted with an equivalent advanced wastewater treatment unit produced by a different manufacturer, per the State of Maine Subsurface Wastewater Disposal Rules.

WETLAND DELINEATION SUMMARY

4 BALSAM ROAD
CAPE ELIZABETH, MAINE

Prepared for:

DAVID CALABRESE



Prepared by:

STATEWIDE SURVEYS, INC
SOIL SCIENTISTS & LAND SURVEYORS
35 Eastman Road, Cape Elizabeth, ME 04107
Website: www.statewidesurveys.com
Phone: 207 767 4200

STATEWIDE SURVEYS, INC
SOIL SCIENTISTS & LAND SURVEYORS
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Phone: 207-767-4200

CALABRESE PROJECT
WETLAND DELINEATION
4 BALSAM ROAD
CAPE ELIZABETH, ME.

REPORT CONTENT

- 1.0 PROJECT INTRODUCTION
- 2.0 PROJECT METHODOLOGY
- 3.0 WETLAND CHARACTERISTICS
- 4.0 PROJECT SUMMARY

- APPENDIX A: WETLAND DELINEATION LIMITATIONS
- APPENDIX B: WETLAND PLAN (REDUCED)
- APPENDIX C: PHOTOGRAPHS
- APPENDIX D: MWI MAP
- APPENDIX E: NRCS SOIL MAP (MEDIUM-INTENSITY)
- APPENDIX F: FLOOD MAP

STATEWIDE SURVEYS, INC

SOIL SCIENTISTS & LAND SURVEYORS

35 Eastman Road, Cape Elizabeth, ME 04107

Website: www.statewidesurveys.com

Phone: 207-767-4200

January 25, 2023

Mr. David Calabrese
85 Little Pond Road
Northborough, MA.
01532

WETLAND DELINEATION

Proposed Residence

4 Balsam Road, Cape Elizabeth, Maine

Hi David:

Please review the following Wetland Delineation Report prepared for your lot. This report will augment the High-Intensity Soil Survey (HISS) also prepared for the project.

1.0 **INTRODUCTION**

Statewide Surveys, Inc has completed a Wetland Delineation and Wetland Plan for your lot (Tax Map U15 Lot 40) as requested by your team. We visited the lot on November 09, 16 and December 15, 2022 to delineate and locate wetland boundaries. Lot 40 is approximately 29,201 S.F. (0.67 acres) in size with Resource Protection Two (RP-2) Wetlands present. Generally, we identified and delineated some RP-2 Wetlands in the upper reaches of the lot near Balsam Road that drain downslope in a northwesterly direction over some exposed bedrock or shallow soils toward a low-lying shallow inundated area. The narrow shallow drainages **appear to be ephemeral or “seasonal” with surface** water present when the RP-2 Wetlands become saturated to inundated and slowly drain down slope to a low-lying RP-2 Wetland.

We believe this summary will be beneficial to understand the types of wetlands and characteristics of the wetlands present at the site. A prepared wetland summary is also part of the submission requirements listed in Section 19-8-3 Resource Protection Performance Standards of the Town of Cape Elizabeth Zoning Ordinances.

We collected subsurface soil data, observed inundated conditions and documented vegetation from onsite observations at intermittent locations across the lot for the basis of this Report. We understand the following information may be useful in the Stormwater Design of the project in addition to permitting requirements for the Cape Elizabeth Ordinances pertaining to Resource Protection and development. This Wetland Delineation should also be useful for siting a proposed residence and compliance with the Town of **Cape Elizabeth’s adopted** ordinances.

1.1 PROJECT LOCATION

We understand a proposed residence is to be constructed on Lot 40 shown on the Cape Elizabeth Tax Map U15. The unimproved lot is located along the northerly side of Balsam Road from the existing residence at #2 Balsam Road to the end of Balsam Road (paved). The lot is forested except in the shrub dominated wetland areas and where wind-thrown trees have created openings in the tree canopy. The lot slopes in a northwesterly direction from the highest elevations along Balsam Road downslope toward properties off Sunrise Boulevard Extension.

2.0 METHODOLOGY

We understand the following Wetland Report and Wetland Plan will be submitted with other information to the Town of Cape Elizabeth Planning Board for consideration with the permitting process for wetland impacts resulting from the proposed residence. We also understand approximately 3,965 square feet of wetlands may be impacted from the proposed construction however we have not reviewed plans with proposed impacts at this time.

Prior to the site visits, we reviewed the U.S. Fish & Wildlife's National Wetlands Inventory (NWI) mapping, the Medium-Intensity Soil Survey of Cumberland County, Maine by the (Natural Resource Conservation Service) and the Flood Insurance Rate Map (FIRM) Flood Map Panel 230043 0011D.

We delineated and photographed the wetlands after examining the underlying soils, assessing the predominant vegetation and observing evidence of hydrology with inundated or saturated conditions or soil morphology indicative of hydric soils along the wetland boundaries. We used GPS (sub-meter) to locate the wetland flags in the field.

On-site we **"flagged" the wetland/upland boundaries** with sequentially numbered Wetland Boundary Flagging (pink) to the project limits for wetlands in accordance with the Routine Method described in the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual and its Regional Supplement: North-Central and Northeast Region (Version 2).

We used hand tools to examine both upland (non-hydric) soils and wetland (hydric) soil profiles and found soils resembling variants to the poorly drained Brayton and Naskeag soils in the RP-2 wetlands with the potential for very poorly drained in the lowest areas. We also documented vegetative strata in both wetland and uplands. Additionally, the seasonal high-water table (hydrology) was apparent with the presence of water stained leaves, soil saturation and inundated areas.

Jurisdictional wetlands require three parameters, specifically: the presence of hydric soils¹, the predominance of hydrophytes² and evidence of wetland hydrology³. The delineated wetlands have **alluvial "hydric" soil conditions, a presence of hydrology and a prevalence of hydrophytes thereby** meeting the required wetland criteria identified in the USACE manual.

1. **"Hydric" soils formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part (NEIWPCC).**

2. **“Hydrophytes” are plants growing in wetlands** that have adapted in one way or another to life in permanently or periodically inundated or saturated soils (USACE).
3. **“Hydrology” is permanent or periodic inundation, or soil saturation to the surface, at least seasonally** is the driving forces behind wetland formation (USACE).

The NWI Map (enclosed) identifies Palustrine Forested Shrub Wetlands (PFO1E) at or adjacent to the project location. We identified similar wetlands as shown on the NWI Map with freshwater (palustrine) forested and shrub wetland classifications in predominance with limited herbaceous vegetation.

3.0 WETLAND CHARACTERISTICS

Two Wetland Areas were delineated at the site and identified as Wetland “A” and Wetland “B” meeting the Town’s Resource Protection-2 (RP-2) criteria.

Wetland “A” is a small freshwater wet area serving as a “ditch” along Balsam Road and the existing paved turnaround at the lot. The area has hydrophytes including willow (*Salix* sp.) shrubs with soft rush (*Juncus effusus*), sensitive ferns (*Onoclea sensibilis*), meadowsweet (*Spiraea latifolia*) and goldenrod (*Solidago* sp.) in the herbaceous layer. **Wetland “A” appears to be “man-made” or “enhanced”** from the Balsam Road with evident grading or contoured ditch lines around the existing paved turnout and along the ROW.

Wetland “B” consists of interconnected wetland areas on the lot and in the areas of development. **Wetland “B” generally consists of** two small connected **“pocket” wetlands** in the upper elevations near Balsam Road with separate shallow drainages that intermittently convey surface water downslope across shallow soils or bedrock exposures and join at the bottom of slope before entering a small oblong shaped low lying wetland area.

We identified the following species in predominance **within Wetland “B”**: a few scattered red maple (*Acer rubrum*) trees/saplings with highbush blueberry (*Vaccinium corybosum*), alder (*Alnus incana*), winterberry (*Ilex verticillata*), willow (*Salix* sp.), maleberry (*Lyonia ligustrina*), meadowsweet shrubs along its edge with sensitive fern, jewel weed (*Impatiens capensis*), wool grass (*Scirpus cyperinus*), soft rush and goldenrods. We noted several dead trees that are standing or partially leaning in the wetlands. We also noted numerous windthrown trees scattered across the lot that have created openings in the tree canopy.

We found shallow poorly drained soils resembling variants to the typical Brayton and Naskeag series throughout the wetlands with potential for intermixed small areas of very poorly drained soils. The hydric soils in the lowest elevations are stony with inundation present and likely “perched” over underlying rock. This wetland area is not large enough to meet the criteria for Resource Protection 1 Critical Wetland (RP1-CW).

4.0 PROJECT SUMMARY

In summary, the land appears suited for a proposed residence based on observations, on-site septic opportunity (by others), wetlands, adjacent residences and Resource Protection considerations. We found the delineated wetlands to meet RP-2 criteria without a critical wetland buffer. However, as typical with site development in Maine, permits will be required to alter wetland areas. We also have summarized general site development limitations with the following:

Generally, we found the lot to have bedrock exposures or very shallow and shallow soils overlying an undulating bedrock surface. Most of the acreage is underlain with shallow fine textured soils over very weathered bedrock. The largest contiguous area with upland soils at the lot lies in the higher elevations near the Balsam Road right of way. This area appears to be the best location for development whereas **the lower areas are “flatter” with more internal “wetness” along the** drainages and toe slopes. The lower wetland areas also include some ponding within the delineated wetlands.

Narrow drainages connect wetlands from the upper reaches to the lower portions on the lot. These drainages appear to be ephemeral and temporarily convey surface flow once the wetlands fill and discharge. There is potential for underground water movement across the top of underlying bedrock. Controlling stormwater from rain events will be necessary to reduce potential for soil erosion and to protect wetlands on and adjacent to the site.

We observed man altered soils along the Balsam Road right of way and presumed impacts from the Balsam Road construction and subsurface utility placement. Wetland “A” is located easterly of the existing paved turnout and along Balsam Road to the **abutter’s** lawn. This wetland area appears to be man-made and likely created at the time of Balsam Road construction. These areas appear to have been “graded” with evident contoured ditch lines around the existing paved turnout.

In summary, the site should be suitable for a proposed residence considering the site has been approved for subsurface waste disposal (by others). Considerations relating to development should include: shallow hydric soils, seasonal high-water, drainage patterns, erosion potential, wetland regulations and Resource Protection Ordinances with the Town.

Please note additional regulations and permits with the MDEP and USACE are possible dependent upon the proposed impacts to the wetland resources.

Please contact us should questions arise or if further assistance is needed.

Respectfully submitted,

Dale A. Brewer 01/25/2023
STATEWIDE SURVEYS, INC
President-LSS #304

CALABRESE PROJECT

WETLAND DELINEATION
4 BALSAM ROAD
CAPE ELIZABETH, ME.

APPENDIX - A
WETLAND DELINEATION LIMITATIONS

CALABRESE PROJECT
WETLAND DELINEATION LIMITATIONS

Statewide Surveys, Inc obtained subsurface soil data, documented vegetative species and observed hydrology indicators across the lot to develop this Wetland Delineation Report and Plan. In the event, additions or variations arise from more detailed investigations or actual site construction, we will evaluate any said variations and revise this report if necessary.

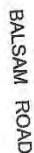
This report was completed for David Calabrese for the specific purpose of Wetland Delineation for a proposed residence. The following soil information should only be used for this purpose. We further understand the following information will be submitted to the Town of Cape Elizabeth as part of the permit review process for this Project.

We also understand this information may be useful for the design and construction of the project. Our findings are based in part on the mapping completed by others Albert Frick Associates, Sebago Technics and Titcomb Associates that were provided to us for use with mapping, site analysis and conclusions. Statewide Surveys, Inc. should be notified of any changes to the provided Boundary and Site Evaluations if different from the work previously provided.

CALABRESE PROJECT

WETLAND DELINEATION
4 BALSAM ROAD
CAPE ELIZABETH, ME.

APPENDIX - B
WETLAND PLAN (REDUCED)



PIPE OR TROUBLE LOCATION

- WATER PRODUCTION
DRAINAGE COURSE

GRAPHIC SCALE



PLAN REFERENCES

1. BOUNDARY SURVEY OF 4 BILSALI ROAD, CAFE ELIZABETH, NE, FOR DAVID OULANGESE AND 2022 BY TITICOME ASSOCIATES.
2. SITE PLAN FOR ELATED BILSALI ROAD MAP UTS LOT 40 CAFE ELIZABETH BY ALBERT FRIED ASSOCIATES, INC. DATED APRIL 11 2005.

WETLAND NOTES

1. THE FOLLOWING STUDIES WERE CONDUCTED IN SEVERAL TOWNS FOLLOWING THE 1994 ARMY CORPS OF ENGINEERS MAP AND HYDROLOGIC RECORDING, SURVEILLANCE, AND MONITORING (HARM) PROJECT. THE HARM PROJECT WAS A JOINT ARMY CORPS OF ENGINEERS AND THE U.S. ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRIID) PROJECT TO INVESTIGATE THE HEALTH EFFECTS OF CONTAMINATED WATER SUPPLY SYSTEMS IN THE ARMY CORPS OF ENGINEERS' WATERSHEDS. THE HARM PROJECT WAS A JOINT ARMY CORPS OF ENGINEERS AND THE U.S. ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRIID) PROJECT TO INVESTIGATE THE HEALTH EFFECTS OF CONTAMINATED WATER SUPPLY SYSTEMS IN THE ARMY CORPS OF ENGINEERS' WATERSHEDS.
2. THE HARM PROJECT WAS A JOINT ARMY CORPS OF ENGINEERS AND THE U.S. ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRIID) PROJECT TO INVESTIGATE THE HEALTH EFFECTS OF CONTAMINATED WATER SUPPLY SYSTEMS IN THE ARMY CORPS OF ENGINEERS' WATERSHEDS.
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4. THE HARM PROJECT WAS A JOINT ARMY CORPS OF ENGINEERS AND THE U.S. ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRIID) PROJECT TO INVESTIGATE THE HEALTH EFFECTS OF CONTAMINATED WATER SUPPLY SYSTEMS IN THE ARMY CORPS OF ENGINEERS' WATERSHEDS.
5. THE HARM PROJECT WAS A JOINT ARMY CORPS OF ENGINEERS AND THE U.S. ARMY MEDICAL RESEARCH AND DEVELOPMENT COMMAND (USAMRIID) PROJECT TO INVESTIGATE THE HEALTH EFFECTS OF CONTAMINATED WATER SUPPLY SYSTEMS IN THE ARMY CORPS OF ENGINEERS' WATERSHEDS.

[illegible]

CALABRESE PROJECT

WETLAND DELINEATION
4 BALSAM ROAD
CAPE ELIZABETH, ME.

APPENDIX - C
PHOTOGRAPHS



Photo 1. Wetlands in the higher areas of the Lot near the turnaround. Photograph date 11/16/22.



Photo 2. Small "pocket" of herbaceous vegetated wetland in the higher sections. The open area is partially resulting from windthrown trees at the lot. Photograph date 11/29/22.



Photo 3. Another small pocket wetland between bedrock controlled ridges. Photograph date: 11/29/22.



Photo 4. Photograph of the shallow inundated area in the lowest portion of the lot. Photo date: 11/11/29/22.



Photo 5. Photo of a section of seasonal drainage at the site. Photograph 11/29/22.



Photo 6. Photo of a section of seasonal drainage at the site. Photograph 11/29/22.



Photo 7. Photo of a portion of Wetland "A" along Balsam Road. The grade stakes indicate the right of way line.



Photo 8. Photo of a hydric soil profile along the wetland upland edge in the lower elevations of the site.

CALABRESE PROJECT

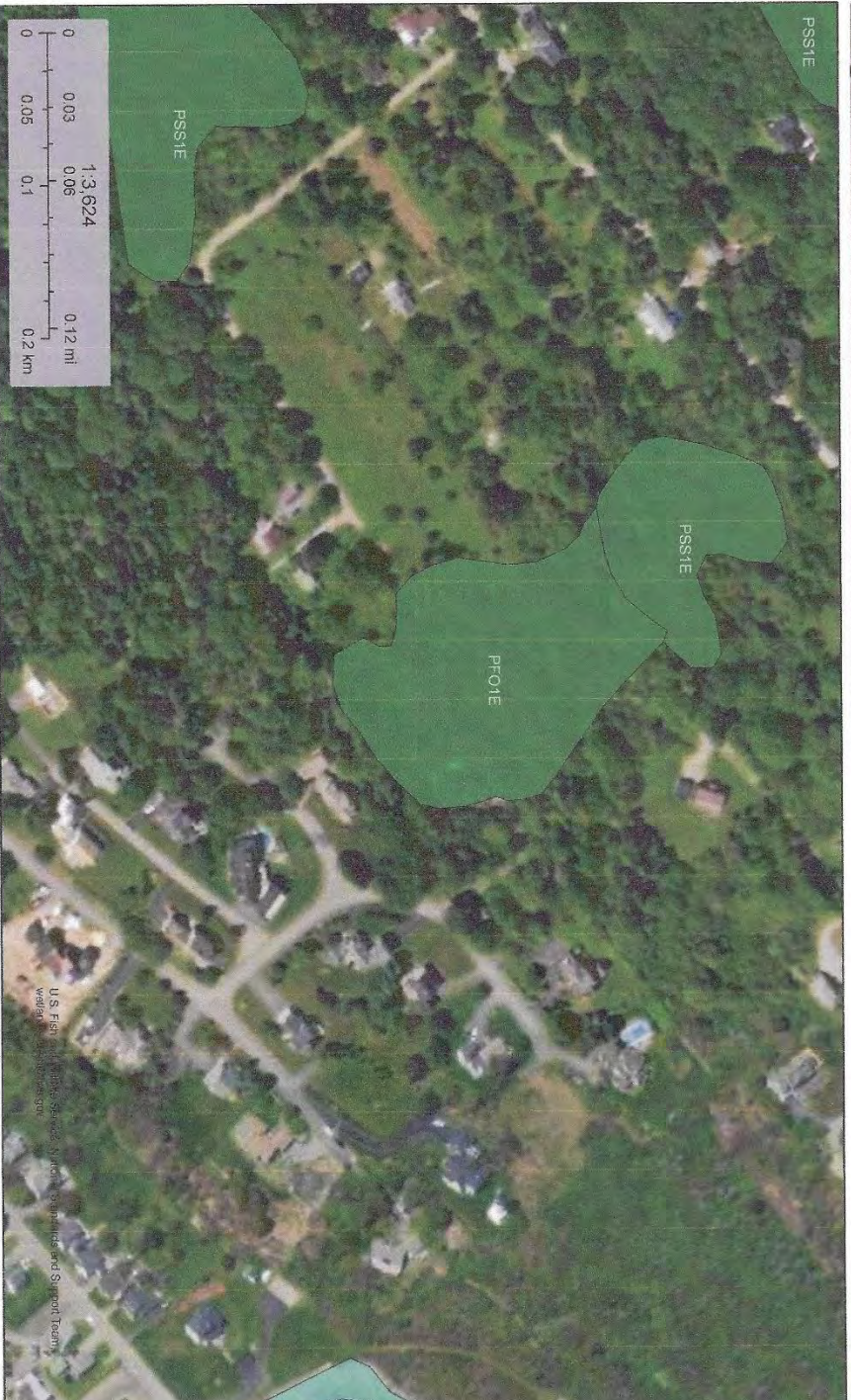
WETLAND DELINEATION
4 BALSAM ROAD
CAPE ELIZABETH, ME.

APPENDIX - D
NWI MAP



U.S. Fish and Wildlife Service
National Wetlands Inventory

CALABRESE



U.S. Fish and Wildlife Service National Wetlands Inventory
Wetlands Mapper web site

This map is for general reference only. The U.S. Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)
This page was produced by the NWI Mapper

- January 16, 2023
- Wetlands**
- Estuarine and Marine Deepwater
 - Estuarine and Marine Wetland
 - Freshwater Emergent Wetland
 - Freshwater Forested/Shrub Wetland
 - Freshwater Pond
 - Lake
 - Other
 - Riverine

CALABRESE PROJECT

WETLAND DELINEATION
4 BALSAM ROAD
CAPE ELIZABETH, ME.

APPENDIX E
NRCS SOIL MAP

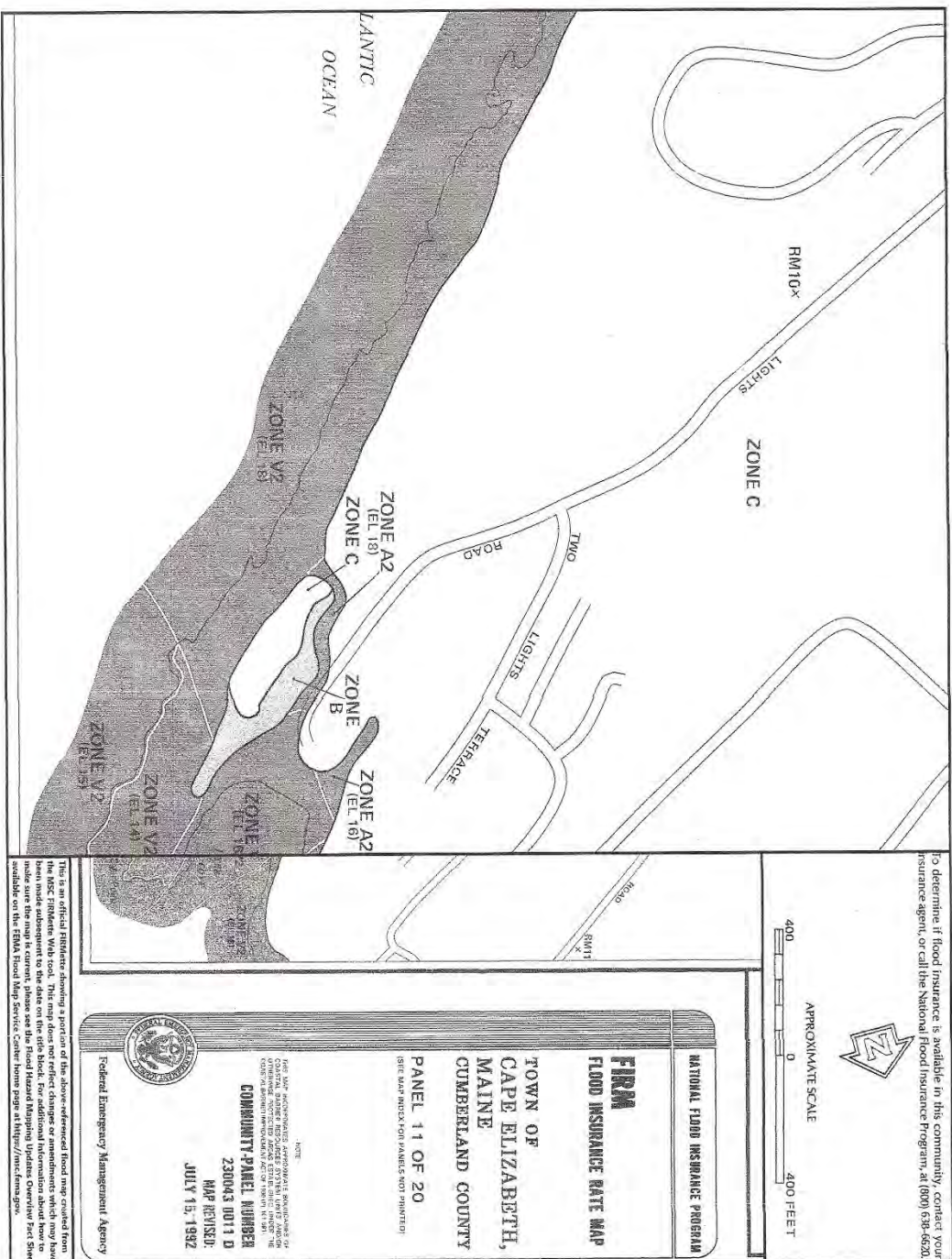
Soil Map—Cumberland County and Part of Oxford County, Maine



CALABRESE PROJECT

WETLAND DELINEATION
4 BALSAM ROAD
CAPE ELIZABETH, ME.

APPENDIX F
FLOOD MAP



APPROXIMATE SCALE

400 0 400 FEET

11

H

19

1

U

77

NATIONAL FLOOD INSURANCE PROGRAM

**FIRM
FLOOD INSURANCE RATE MAP**

TOWN OF
CAPE ELIZABETH,
MAINE
CUMBERLAND COUNTY

PANEL 11 OF 20

(SEE MAP INDEX FOR PANELS NOT PRINTED)

-MONT-

THIS MAP INCORPORATES APPROXIMATE BOUNDARIES OF COASTAL BARRIER RESOURCES SYSTEM UNITS AND OF OTHER PROTECTED AREAS ESTABLISHED UNDER THE COASTAL BARRIER IMPROVEMENT ACT OF 1962 (16 USC).

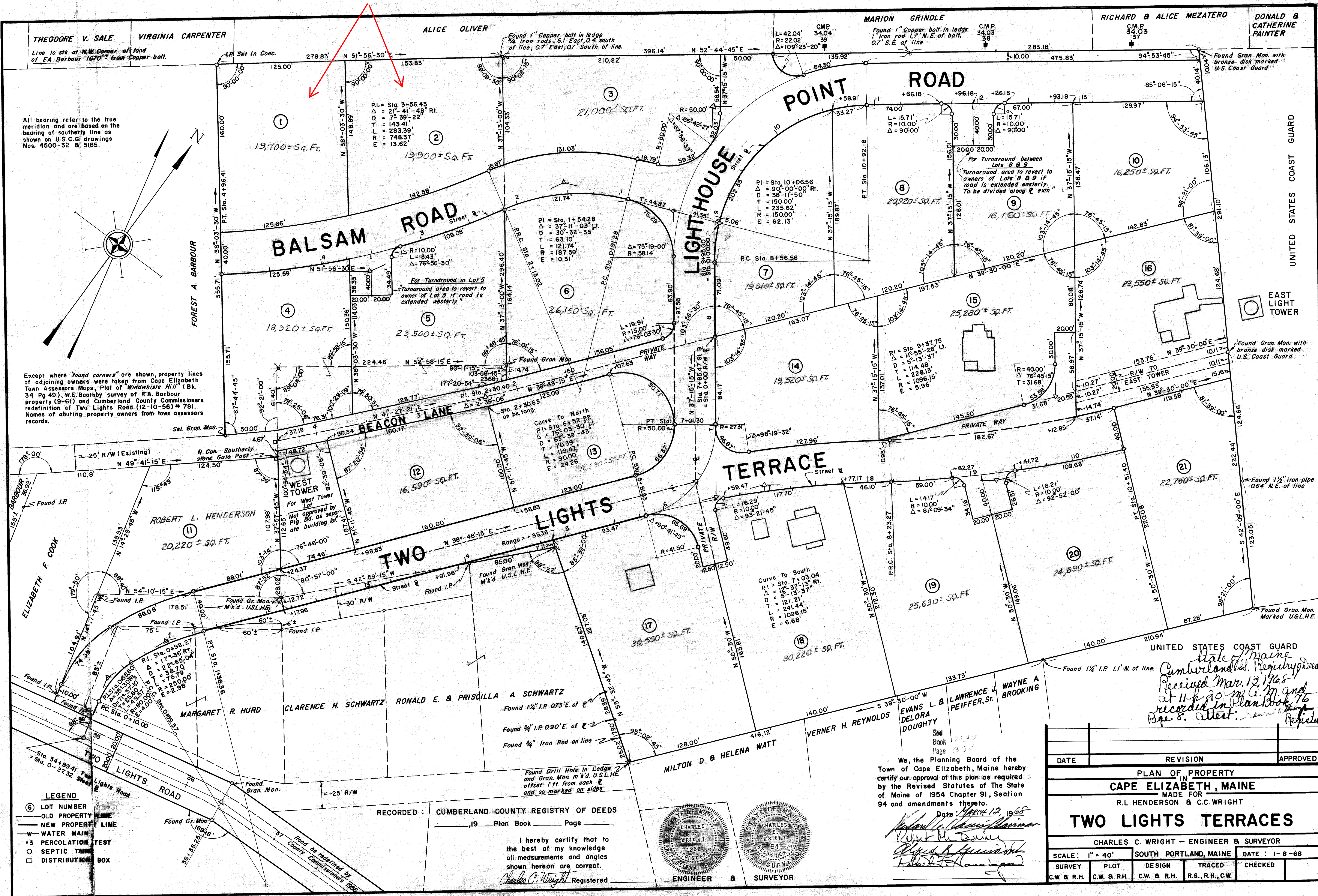
COMMUNITY-PANEL NUMBER
230043 0011 D

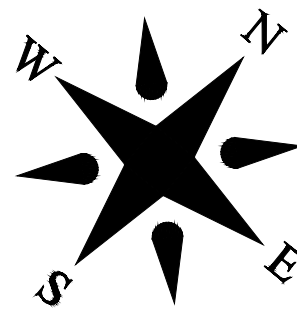
MAP REVISED
JULY 15, 1992

Federal Emergency Management Agency

This is an official FIRMette showing a portion of the above-referenced flood map created from the MSC FIRMette Web tool. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For additional information about how to make sure the map is current, please see the Flood Hazard Mapping Updates Overview Fact Sheet available on the FEMA Flood Map Service Center home page at <http://msc.fema.gov>.

Project Parcel

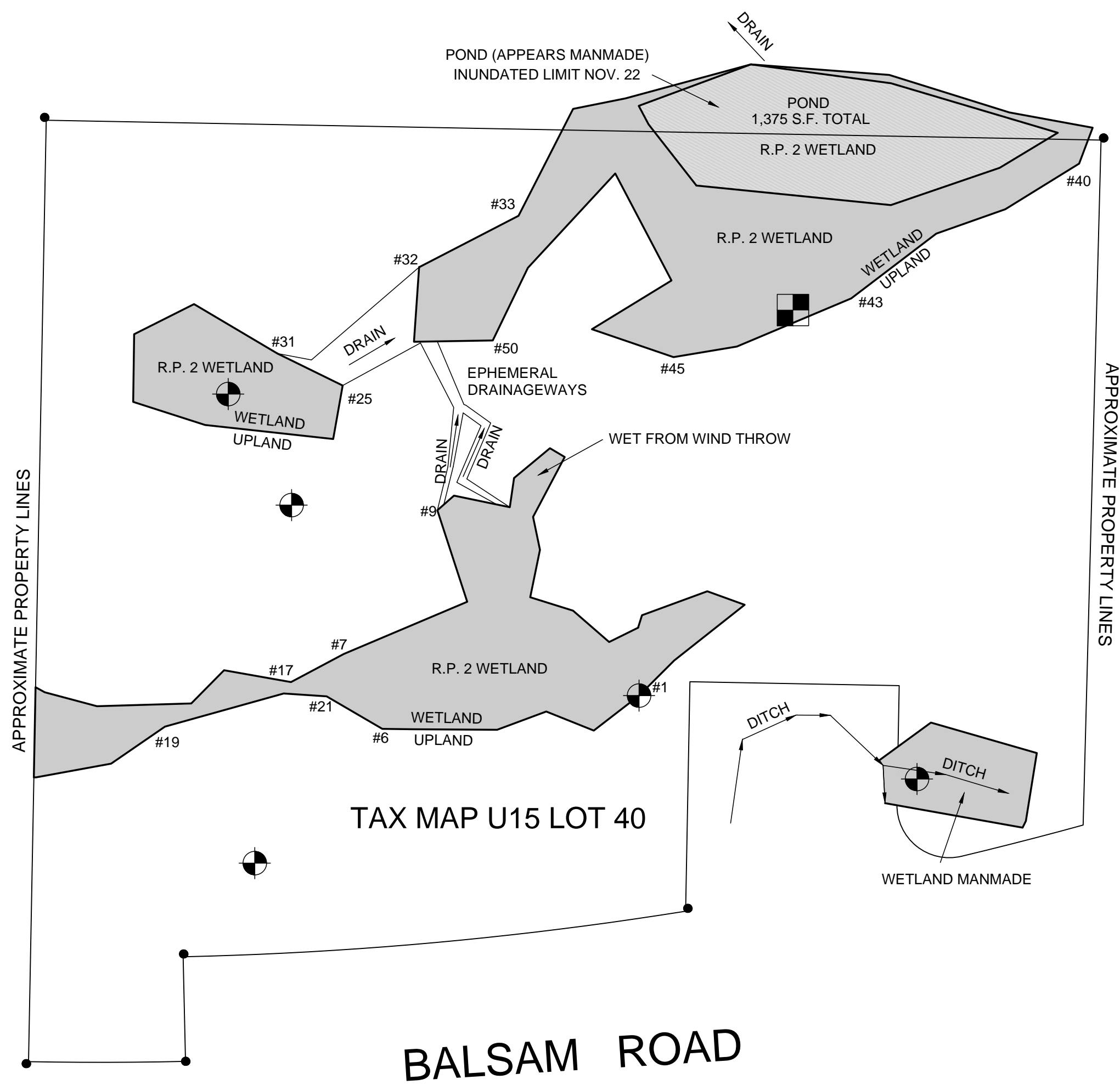




GRID NORTH
MAINE STATE PLANE COORDINATES
NAD83 MAINE WEST



LOCATION MAP
NOT TO SCALE



PLAN REFERENCES

- BOUNDARY SURVEY OF 4 BALSAM ROAD, CAPE ELIZABETH, ME. FOR DAVID CALABRESE DATED SEPT 9, 2022 BY TITCOMB ASSOCIATES.
- SITE PLAN BOB HUSTED BALSAM ROAD MAP U15 LOT 40 CAPE ELIZABETH BY ALBERT FRICK ASSOCIATES, INC. DATED APRIL 11 2005.

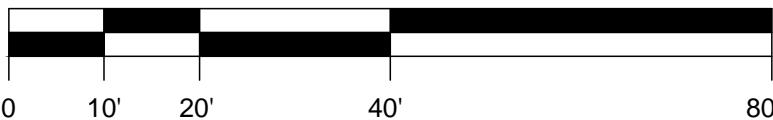
WETLAND NOTES

- THE WETLAND BOUNDARIES WERE DELINEATED IN NOVEMBER 2022 FOLLOWING THE U.S. ARMY CORPS OF ENGINEERS 1987 WETLAND MANUAL AND ITS UPDATED REGIONAL SUPPLEMENT.
- THIS IS NOT A BOUNDARY PLAN AND DOES NOT REPRESENT ACCURATE PROPERTY BOUNDARIES. THE BASE MAP WAS PROVIDED FOR OUR USE AND THE WETLAND LINES SHOWN ARE REGISTERED TO THE PROVIDED MAP USING STATE PLANE COORDINATES AND "HOLDING" MONUMENTATION FOUND. A SITE SURVEY IS RECOMMENDED TO ACCURATELY REGISTER THE WETLAND BOUNDARIES.
- A TRIMBLE GEO-XH GPS UNIT (SUB-METER) WAS USED TO LOCATE THE WETLAND DELINEATION BOUNDARIES AND OTHER SITE FEATURES. THESE LOCATIONS COULD VARY FROM SURVEYED LOCATIONS. WE RECOMMEND THE WETLAND DELINEATION BE LOCATED BY SURVEY IN AREAS FOR LAND DEVELOPMENT AND CONSTRUCTION.
- WETLANDS ARE PROTECTED AND FILLING OR ALTERATIONS TO THEM MAY REQUIRE PERMITS FROM LOCAL, STATE AND OR FEDERAL REGULATORY AGENCIES DEPENDENT ON LEVEL OF IMPACTS.
- WE DID NOT IDENTIFY ANY R.P.1 WETLANDS AND UNDERSTAND PRIOR DETERMINATIONS BY THE TOWN HAVE CONCLUDED THAT R.P.1 WETLANDS DO NOT EXIST ON ADJACENT PROPERTIES TO THE NORTH.

PLAN LEGEND

- APPROXIMATE IRON PIPE OR ROD LOCATION
- DELINEATED WETLAND
- DRAINAGE COURSE

GRAPHIC SCALE



THIS PLAN IS NOT TO BE ALTERED WITHOUT PERMISSION FROM STATEWIDE SURVEYS, INC AND ANY MODIFICATIONS WILL BE AT THE SOLE RESPONSIBILITY OF THE USER WITHOUT LIABILITY TO STATEWIDE SURVEYS, INC.

DEC 20 2022 ADDED BORINGS, WETLANDS, RP1 OFFSITE

WETLAND DELINEATION

BALSAM ROAD
CAPE ELIZABETH, ME.
DAVID CALABRESE

STATEWIDE SURVEYS INC.

PROFESSIONAL LAND SURVEYORS & LICENSED SOIL SCIENTISTS
35 EASTMAN ROAD, CAPE ELIZABETH, ME 04107
PHONE: (207) 767-4200

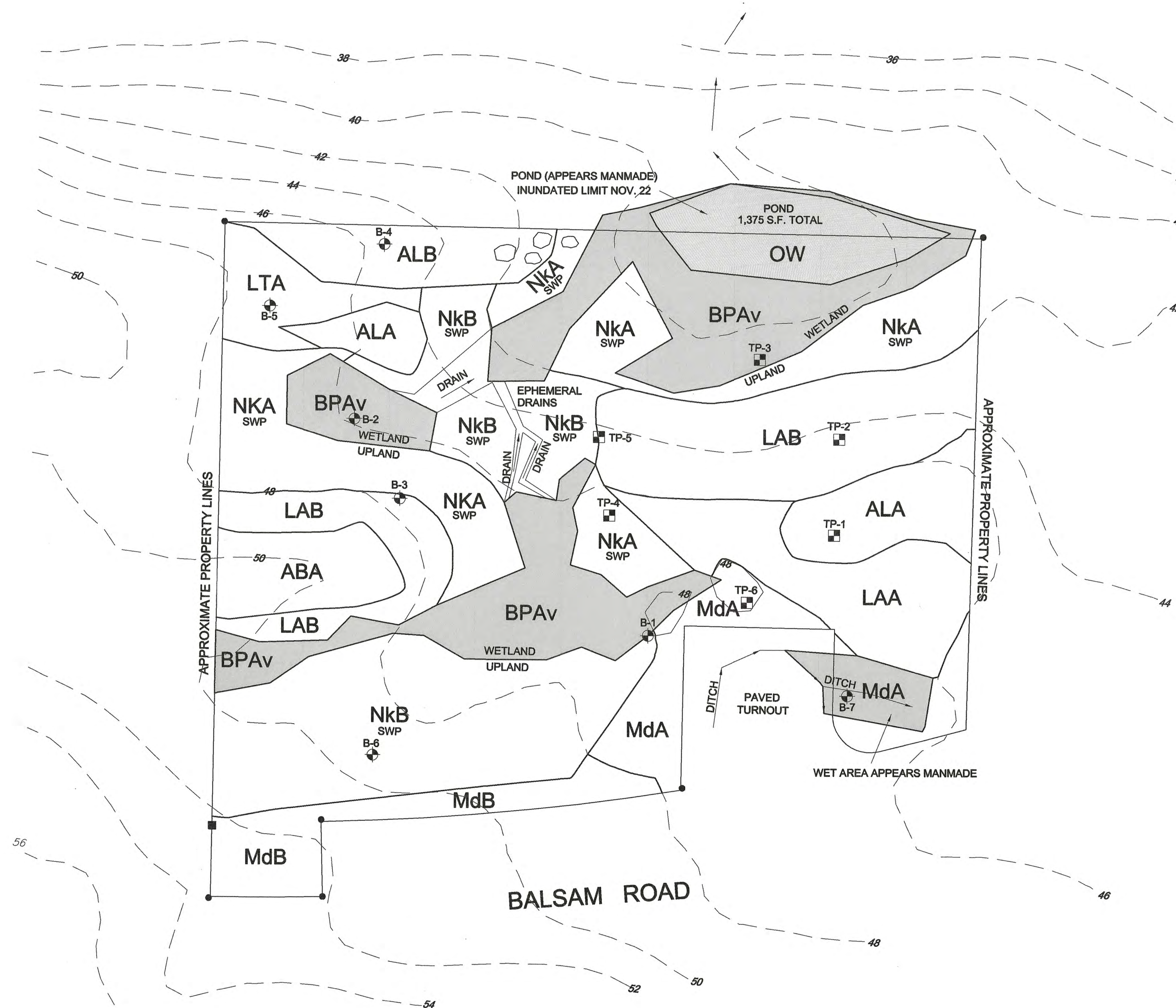
DRAWN BY: ECB	DATE: NOVEMBER 2022	JOB # 22015W
TRACED BY: ECB	SCALE: 1" = 20'	DRAWING # ONE
CHECKED BY: DAB		
FIELD BOOK: N.A.		



GRID NORTH
MAINE STATE PLANE COORDINATES
NAD83 MAINE WEST



LOCATION MAP
NOT TO SCALE



SOIL SURVEY LEGEND

SYMBOL	SOIL SERIES	SLOPE	DRAINAGE	HSG
ABA	ABRAM	0-3%	E	D
ALA	ABRAM-LYMAN	0-3%	E-SWE	D
ALB	ABRAM-LYMAN	3-8%	E-SWE	D
BPAv	BRAYTON-PEACHAM VAR.	0-3%	P-VP	D
LAA	LYMAN-ABRAM	0-3%	SWE-E	D
LAB	LYMAN-ABRAM	3-8%	SWE-E	D
LTA	LYMAN-TUNBRIDGE	0-3%	SWE-W	D-C
MdA	MADE LAND	0-3%	VARIABLE	D
MdB	MADE LAND	3-8%	VARIABLE	D
NkA	NASKEAG	0-3%	SWP-P	C
NkB	NASKEAG	3-8%	SWP-P	C
OW	OPEN WATER	0-3%	VP	D

SOIL SURVEY NOTES

- THIS HYBRID HIGH-INTENSITY SOIL SURVEY AT 4 BALSAM ROAD, CAPE ELIZABETH, ME. WAS MADE FOR DAVID CALABRESE FOR A PROPOSED SINGLE FAMILY HOME. THIS HYBRID SOIL SURVEY WOULD BE "BETWEEN" A CLASS A HIGH-INTENSITY SOIL SURVEY (1/8TH ACRE SOIL MAP UNITS) AND A CLASS B HIGH-INTENSITY SOIL SURVEY (1 ACRE SOIL MAP UNITS).
- THIS SOIL SURVEY PLAN IS INTENDED TO MEET THE CURRENT CAPE ELIZABETH RESOURCE PROTECTION REQUIREMENTS FOR HIGH-INTENSITY SOIL SURVEY, SPECIFICALLY:
 - A. ALL SOIL MAP UNITS USED HAVE NO DISSIMILAR SOILS GREATER THAN 0.25 ACRE.
 - B. DEPICTS SOIL TYPE BOUNDARIES.
 - C. DEPICTS HYDRIC SOIL BOUNDARIES.
 - D. DEPICTS DELINEATED UPLAND AND WETLAND BOUNDARIES.
- THE BASE MAP BOUNDARY AND TOPOGRAPHY WERE PROVIDED BY OTHERS AND ACCEPTED FOR USE WITH THIS PLAN HOWEVER STATEWIDE SURVEYS, INC IS NOT LIABLE FOR ANY ERRORS OR OMISSIONS WITH THESE.
- TEST PITS 1 THROUGH 6 WERE DUG WITH A MACHINE AND ALL OTHER TEST PITS, BORINGS OR PROBES WERE ACCOMPLISHED USING HAND TOOLS.
- TEST PIT LOCATIONS AND OTHER SITE FEATURES WERE LOCATED USING A GPS UNIT (SUB-METER) AND THESE POSITIONS COULD VARY FROM SURVEYED LOCATIONS.
- AREAS WITHIN THE SOIL MAP UNITS MAY HAVE INCLUSIONS OR SHALLOWER, DEEPER, DRIER OR WETTER SOILS PRESENT THAN TYPICAL FOR THE SOIL MAP UNIT SOILS WHERE NOT OBSERVED WITH TEST PITS.
- THE HYDROLOGIC SOIL GROUPS (HSG) PER THE MAINE EROSION AND SEDIMENT CONTROL BMP'S DATED OCT 2018 EXCEPT NASKEAG HSG IS FROM USDA SOIL CONSERVATION SERVICE SOIL INTERPRETATIONS RECORD.

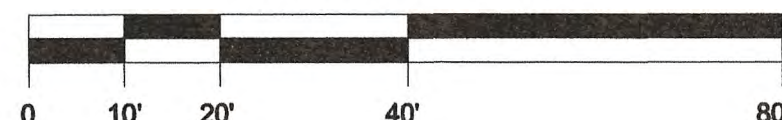
SOIL SURVEY LEGEND

- SOIL MAP UNIT LINE
- SOIL SERIES NAME
- B-3 BORING NUMBER
- TP-3 TEST PIT NUMBER
- TEST PIT LOCATION
- 130 CONTOUR LINE
- WETLAND
- DRAINAGE COURSE
- BOULDERY OR STONY

PLAN REFERENCES

- BOUNDARY SURVEY OF 4 BALSAM ROAD, CAPE ELIZABETH, ME. FOR DAVID CALABRESE DATED SEPT 9, 2022 BY TITCOMB ASSOCIATES.
- SITE PLAN BOB HUSTED BALSAM ROAD MAP U15 LOT 40 CAPE ELIZABETH BY ALBERT FRICK ASSOCIATES, INC. DATED APRIL 11 2005.
- WETLAND PLAN FOR DAVID CALBRESE, DATED NOVEMBER 2022 BY STATEWIDE SURVEYS, INC.

GRAPHIC SCALE



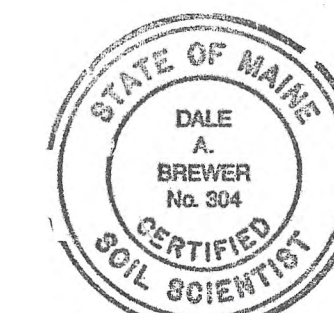
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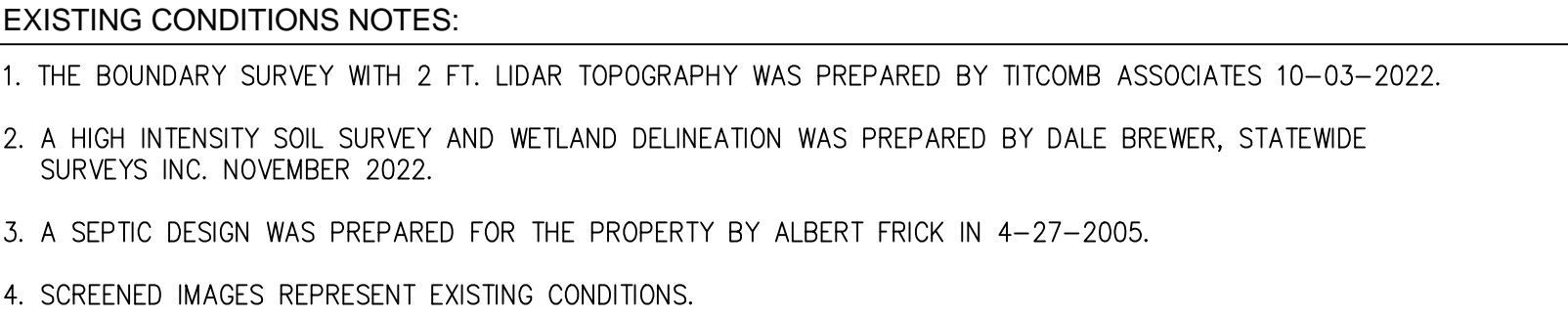
HIGH-INTENSITY SOIL SURVEY

4 BALSAM ROAD
CAPE ELIZABETH, ME.
DAVID CALABRESE

STATEWIDE SURVEYS INC.
PROFESSIONAL LAND SURVEYORS & LICENSED SOIL SCIENTISTS
35 EASTMAN ROAD, CAPE ELIZABETH, ME 04107
PHONE: (207) 767-4200

DRAWN BY: ECB	DATE: DECEMBER 2022	JOB # 22015SS
TRACED BY: ECB	SCALE: 1"= 20'	DRAWING # ONE
CHECKED BY: DAB		
FIELD BOOK: N.A.		





LEGEND:

PROPOSED	EXISTING
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R.P. 2 WETLAND IMPACT

100 FT. BUFFER (R.P.1 LESS THAN 2 ACRES)

BUILDING SETBACK

ORIGINAL SUBDIVISION LOT NUMBER

PROJECT PARCEL BOUNDARY

ABUTTER AND R.O.W. BOUNDARY

PAVEMENT

CAPPED CORNER PIN

GRANITE MONUMENT

CORNER PIN TO BE SET

WATER VALVE

MANHOLE STRUCTURE

CONTOUR LINE

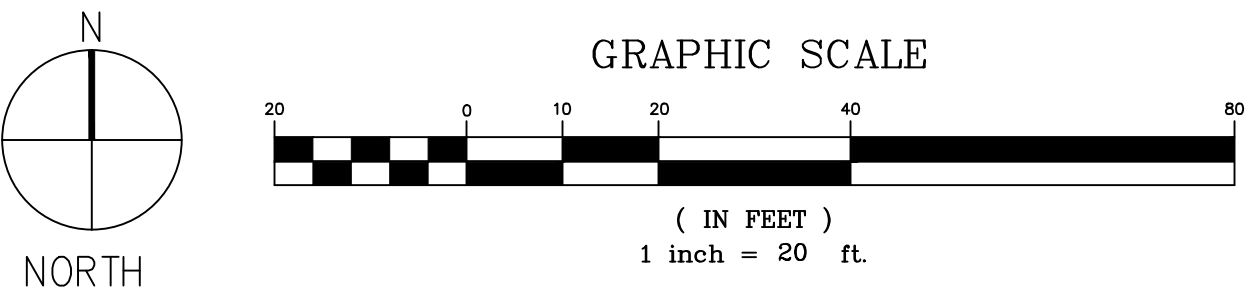
WETLAND

DRAINAGE DITCH

DIRECTION OF DRAINAGE

SOIL TEST PIT

SLOPE OF SITE

[illegible]

