Town of Windham

Planning Department
8 School Road
Windham, ME 04062

voice 207.894.5960 fax 207.892.1916

MEMO

DATE: April 23, 2014

TO: Windham Planning Board
FROM: Amanda Lessard, Planner
Cc: Ben Smith, Planning Director
Rick Jones, Jones Associates Inc.
Shane Brey

RE: Zoning Map Amendment Request – portion of Brey property, Tax Map 22; Lot 7
Resource Protection (RP) to Limited Residential (LR)

At the Town Council meeting on April 8, 2014, the Council sent the attached rezoning request to the Planning Board for review and recommendation.

The applicant is requesting that the 1.7 acre portion of the Brey property at 151 Brown Cove Road on Little Sebago Lake be rezoned from Resource Protection (RP) to Limited Residential (LR). The applicant's representative has stated that a portion of this property does not meet the criteria for the RP zone, and that the LR zone would be more appropriate, based on recent wetland delineation and survey elevation work. All wetlands in the shoreland zone are considered "wetlands of special significance" by the Department of Environmental Protection (DEP), meaning that they may not be disturbed without rigorous review by the DEP.

The purpose of the zone change request is to allow the applicant to build a single family residential structure. If the zone change request is approved, uses that are allowed in LR that are prohibited in RP include: one and two family residential, multi-unit residential, commercial, governmental and institutional, campgrounds, and marinas. Clearing of vegetation is also less restrictive in LR than it is in RP.

Attached is letter from Natalie Burns dated May 16, 2005 for your review. While Ms. Burns' comments are not in response to this particular request, the guidance is still applicable. Ms. Burns notes that in addition to the specifically enumerated criteria for inclusion in the RP zone detailed in Chapter 199 – Town of Windham Shoreland Zoning Ordinance (p. 15), the introductory paragraph for the RP District includes an additional description, so that the RP zone also "includes areas in which development could adversely affect water quality, productive, habitat, biological ecosystems, or scenic and natural values." This wording allows for a more

expansive view of what should be included in the RP district, and doesn't limit the definition to the 5 enumerated items.

Please note that the current application is for the rezoning of property only. Any structure would need to obtain applicable permits.

Zoning Amendment Process
The Planning Board must hold a public hearing prior to making a recommendation on this item to the Town Council. The Town Council will need to vote on the proposed changes to the zoning map for the changes to be officially approved.

There are no specific standards in the Town ordinance by which to judge the proposed zoning change, but State statute requires all proposed zoning changes and zoning map amendments to be consistent with the goals and objectives of the Comprehensive Plan.

Jensen Baird
Gardner & Henry

KENNETH M. COLE III
NICHOLAS S. NADZO
FRANK H. FRYE
DAVID J. JONES
MICHAEL A. NELSON
RICHARD H. SPENCER, JR.
ALAN R. ATKINS
RONALD A. EPSTEIN
WILLIAM H. DALE
JOSEPH H. GROFF III
F. BRUCE SLEEPER
DEBORAH M. MANN

LESLIE E. LOWRY III
PATRICIA MCDONOUGH DUNN
MICHAEL J. QUINLAN
R. LEE IVY
FRANK K. N. CHOWDRY
NATALIE L. BURNS
SALLY J. DAGGETT
BRENDAN P. RIELLY
SUZANNE R. SCOTT
MARCIA G. CORRADINI
J. COLBY WALLACE
JAMES D. LIDDELL

ATTORNEYS AT LAW

TEN FREE STREET
P.O. BOX 4510
PORTLAND, MAINE 04112-4510
(207) 775-7271

TELECOPIER (207) 775-7935

www.jbgh.com

MERTON G. HENRY
WALTER E. WEBBER
JAMES E. KAPLAN
OF COUNSEL

RAYMOND E. JENSEN
(1908-2002)
KENNETH BAIRD
(1914-1987)
M. DONALD GARDNER
(1918-2003)

YORK COUNTY
OFFICE

11 MAIN STREET, SUITE 4
KENNEBUNK, MAINE 04043
(207) 985-4676
TELECOPIER (207) 985-4932

May 16, 2005

Chair Kathleen Brown and Members of the Planning Board
Town of Windham
8 School Road
Windham, Maine 04062-4899

Re: Application for Shoreland Rezoning

Dear Chair Brown and Planning Board Members:

The Town Planner has sent to me questions that have arisen during your review of an application for a rezoning presented by Bauer & Gilman Construction. The property for which the rezoning is requested is currently located in the Resource Protection zoning district. The following is a list of responses to these questions:

1. *What are the state and local regulations that the Planning Board should use to guide its process for a rezoning request? Do the regulations indicate a required timeline for review?* Under Maine law, rezoning of property is a legislative function. 30-A M.R.S.A. § 4352 requires that the Planning Board hold a public hearing and make a recommendation to the Council about the rezoning prior to the Town Council making a legislative determination on a rezoning question. The statute establishes requirements for public notice of the Planning Board meeting but it does not establish any time periods in which a request for rezoning must be heard by either the Board or the Council. The provisions of 30-A M.R.S.A. § 4352 apply to shoreland zoning as well as other zoning and land use ordinances, although 38 M.R.S.A. § 438-A establishes additional notice requirements for properties that are proposed to be rezoned to Resource Protection. It also requires that the Department of Environmental Protection review any amendments to a shoreland zoning ordinance and establishes a maximum time period for that review. Section 140-5 of the Town's Land Use Ordinance and Section 199-8 of the Shoreland Zoning Ordinance do not establish different requirements from those established by State law and they do not establish time frames within which the Board must make its recommendation to the Council.

Other than the requirements of notice and a public hearing, neither State law nor Town Ordinances establish any specific procedures for consideration of a rezoning request. As the Board knows, a rezoning is a different procedure from an application for site plan or subdivision

review. In those types of reviews, the Board is serving in a quasi-judicial capacity; that is, the Board must hear and review the application under the specific standards set forth in the applicable ordinances. For a rezoning, the Board is making a recommendation to the Council on the legislative question of whether to amend the Land Use Ordinance or Shoreland Zoning Ordinance, including map changes. The only statutory limitation upon this legislative function is that zoning amendments must be consistent with the Town's Comprehensive Plan. This does not mean, however, that the Board is limited to consideration of the issue in of consistency making its recommendation. The Board may look at all issues that are relevant to the review of the rezoning request.

2. *Is it appropriate for the Planning Board to contact DEP and/or other state and federal agencies to gain an understanding of both the agencies' role and review process with respect to this petition, and how the agencies' role and review process will relate to any local action taken on this petition?* The only agency that has a role in the shoreland rezoning process is the Maine Department of Environmental Protection. DEP's role is set forth in 38 M.R.S.A. § 438-A (3):

> **Municipal ordinances, amendments and any repeals of ordinances are not effective unless approved by the commissioner. In determining whether to approve municipal ordinances or amendments, the commissioner shall consider the legislative purposes described in section 435, the minimum guidelines and any special local conditions which, in the judgment of the commissioner, justify a departure from the requirements of the minimum guidelines in a manner not inconsistent with the legislative purposes described in section 435. Recognizing that the guidelines are intended as minimum standards, the commissioner shall approve a municipal ordinance that imposes more restrictive standards than those in the guidelines. If an ordinance or an amendment adopted by a municipality contains standards inconsistent with or less stringent than the minimum guidelines, the commissioner, after notice to the municipality, may approve the proposed ordinances or amendment with conditions imposing the minimum guidelines in place of the inconsistent or less stringent standard or standards. Those conditions are effective and binding within the municipality and must be administered and enforced by the municipality. If the commissioner fails to act on any proposed municipal ordinance or amendment within 45 days of the commissioner's receipt of the proposed ordinance or amendment, the ordinance or amendment is automatically approved. Any application for a shoreland zoning permit submitted to a municipality within the 45-day period is governed by the terms of the proposed ordinance or amendment if the ordinance or amendment is approved under this subsection. A municipality may appeal to the board a decision of the commissioner under this subsection.**

3. *Can the Planning Board ask the DEP and/or other state and federal agencies to review the substance of the petition for rezoning and forward written comments to the Planning Board prior to the Planning Board taking formal action on the petition?*

The Board may wish to have input from the Shoreland Zoning division of DEP regarding any questions that the Board has about how to apply the standards for determination of Resource Protection districts. The Board also may determine whether it would like an appropriate professional to review the area. The Board may also inquire as to whether the wetlands have been determined to be of "moderate" or "high" value by the Maine Department of Inland Fisheries and Wildlife.

4. *Is the burden on the Town or the applicants to prove that the property is or is not zoned appropriately with respect to the current shoreland zoning ordinance/zoning map, and what is the standard of proof?* As was discussed above, rezoning is a legislative action. Because of this, there is no burden of proof on the question of whether the current zoning is "appropriate." The Board will review the information provided, may ask for additional information from the applicant, may seek guidance from the DEP or other appropriate persons and then will make its recommendation to the Town Council on whether to rezone the parcel. The Town Council may consider the Board's recommendation, but it is not bound by it.

Under Windham's Shoreland Zoning Ordinance, the question of the applicable zoning classification is resolved by reference to the Shoreland Zoning Map. See Section 199-9. The Board of Appeals makes the final decision as to the precise location of shoreland zoning district boundaries when that question cannot be answered by reference to the map and the rules of interpretation set forth in Section 199-10. While Section 199-13 sets forth descriptions of types of land that are included in each of the zones, these criteria do not override the legislative determination of appropriate zoning classification that was made through the adoption of the Shoreland Zoning Map.

Finally, there has been some argument that areas can only be included in the Resource Protection district if they fall within the three numbered criteria set forth in Section 199-13(A) of the Shoreland Zoning Ordinance. These are:

(1) Areas within 250 feet, horizontal distance, of the upland edge of freshwater wetlands and wetlands associated with great ponds and rivers, which rare rated "moderate" or "high" value by the Maine Department of Inland Fisheries and Wildlife as of January 1, 1973.

(2) Areas of two or more contiguous acres with sustained slopes of 20% or greater.

(3) Land areas along rivers subject to severe bank erosion.

However, under the express language of the Ordinance, these criteria are not exclusive. The introductory language of this section states that the Resource Protection district "includes areas in which development could adversely affect water quality, productive habitat, biological

ecosystems, or scenic and natural values." The Ordinance then goes on to state that areas that fall within the three numbered standards "shall" be included in the RP, unless they are either currently developed or are areas that have been designated non-residential. This means that an area that does not fall within one or more of the three numbered criteria may also be included in the RP if it is an area where development could adversely affect water quality, productive habitat, biological ecosystems or scenic and natural values.

Sincerely,

Natalie

Natalie L. Burns

cc: Anthony T. Plante, Town Manager
George Dycio, Town Planner
Roger Timmons, Director of Community Development

Rec'd 4/14/14
BWS

TOWN OF WINDHAM
ZONE CHANGE APPLICATION

The original signed copy of this application must be accompanied by the required application fee, along with fifteen (15) copies of any and all plans, maps, drawings, and any related information which shall be printed or reproduced on paper. Applications must be submitted to the Town of Windham Planning Department. The Town Council Chair and Vice-Chair shall place the request on the Town Council's agenda at their discretion.

Contact Information

1. Applicant

Name: Shane Brey

Mailing Address: 151 Brown Cove Road, Windham, ME 04062

Telephone: 272-6895 Fax: E-mail: sbrey@me.com

Agent

Name: Jones Associates Inc, Rick Jones

Mailing Address: 63 Tucker Lane, Poland, ME 04274

Telephone: 998-5242 Fax: 998-4061 E-mail: rjones@jonesai.com

2. Record owner of property

__X__ (Check here if same as applicant)

Name:

Mailing Address:

Telephone: Fax: E-mail:

Property Information

Property Address:

151 Brown Cove Road

Assessor's Tax Map & Lot(s) #:

Map: 22 Lot 7

Property size (square feet):

11.5+/- Acres located on the westerly side of Brown Cove Road

Current Zoning District:	Requested Zoning District:
Resource Protection	Limited Residential

Current use of the property:	Requested use of the property:
Undeveloped	Residential

Required Attachments

1. Evidence of right, title, or interest in the property.
2. An explanation of how rezoning the property in question would support the goals and objectives of the Town of Windham Comprehensive Plan.
3. A plan of the lot(s) proposed to be rezoned. This plan may be a Windham Tax Map *or* Survey conducted by a Maine Licensed Surveyor. At a minimum, the plan must contain the following:
    a. Lot lines of the lot(s) proposed to be rezoned,
    b. Approximate location, width, and purpose of easements or restrictions on the property (if applicable),
    c. Streets on and adjacent to the lot(s),
    d. Approximate location of existing buildings, structures, or other improvements to the site (if none, please note).
    e. Major natural features of the site, approximated by the applicant, including wetlands, streams, ponds, floodplains, treelines, and other important natural features (if none, please note).

I certify all the information in this application form and accompanying materials is true and accurate to the best of my knowledge.

Robert D Jones, Agent 4/10/2014

Signature Date

LETTER OF AUTHORIZATION

Shane Brey
151 Brown Cove Road
Windham ME 04062
sbrey@me.com

December 31, 2013

To Whom it May Concern,

Rick Jones and/or Jones and Associates Inc. has been authorized to represent our interests and submit information pertaining to the proposed rezoning request for the property located at 151 Brown Cove Road, Windham ME 04062.

If any additional information is needed, please feel free to contact me.

Sincerely,

Shane, Mike and Jean Brey

ATTACHMENT ITEM #1 -- EVIDENCE OF RIGHT, TITLE, OR INTEREST IN THE PROPERTY

Doc#: 41171 Bk:28896 Pg: 45

QUITCLAIM DEED

KNOW ALL BY THESE PRESENTS, that **BENEFICIAL MAINE, INC.**, with a mailing address of 636 Grand Regency Blvd, Brandon, FL 33509, for good and valuable consideration paid, does hereby grant to **Shane Brey, Mike Brey and Jean Brey,** of 141 Lord Rd, Waterboro, ME 04061, all that parcel of land, with buildings and improvements thereon, known and numbered as 151 Brown Cove Road, County of Cumberland, and State of Maine, more particularly bounded and described on Schedule A attached hereto and made a part hereof.

Any and all other rights, easements, privileges and appurtenances belonging to the granted estate are hereby conveyed.

Meaning and intending to described and convey the same premises conveyed to Beneficial Maine, Inc. by Foreclosure Deed Beneficial Maine, Inc., dated April 6, 2011 and recorded in the Cumberland County Registry of Deeds in Book 28648, Page 221. For further reference see Mortgage Deed from Gregory H. Smart and Gail I. Smart aka Gail Smart dated July 22, 2010 and recorded in said Registry in Book 25681, Page 60.

Witnesseth my hand and seal this 4 day of August 2011, as my free act and deed.

Maria Ahumada
WITNESS Asst. Secretary

Yanet Ramirez V.P
Beneficial Maine, Inc.

By: _____
(Printed name and titled)

STATE OF CA
COUNTY OF _____

_____, 2011

Personally appeared the above named _____, as duly authorized agent of Beneficial Maine, Inc., known or satisfactorily proven to me to be the person whose name is subscribed to the foregoing instrument and executed same in my presence or acknowledged that they executed same for the purposes therein contained as their free act and deed.

Sworn and subscribed before me this _____ day of _____, 2011.

My Commission Expires:

_____
Notary Public

_____
Printed Name

Doc#: 41171 Bk:28896 Pg: 46

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of CA

On 8-4-2011 (Date) before me, Lucero Haros (Here Insert: Name and Title of the Officer),

personally appeared Janet Ramirez (Name(s) of Signer(s)),

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

LUCERO HAROS
Commission # 1909304
Notary Public - California
Los Angeles County
My Comm. Expires Oct 19, 2014

Place Notary Seal Above

Signature _____ (Signature of Notary Public)

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____
- ☐ Individual
- ☐ Corporate Officer — Title(s): _____
- ☐ Partner — ☐ Limited ☐ General
- ☐ Attorney in Fact
- ☐ Trustee
- ☐ Guardian or Conservator
- ☐ Other: _____

Signer Is Representing: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

Signer's Name: _____
- ☐ Individual
- ☐ Corporate Officer — Title(s): _____
- ☐ Partner — ☐ Limited ☐ General
- ☐ Attorney in Fact
- ☐ Trustee
- ☐ Guardian or Conservator
- ☐ Other: _____

Signer Is Representing: _____

RIGHT THUMBPRINT OF SIGNER
Top of thumb here

Doc#: 41171 Bk:28896 Pg: 47

EXHIBIT A

A certain lot or parcel of land situated on the Westerly side of the Smith Road, Windham, ME, Cumberland County, Maine, being more particularly described as follows:

Beginning at a solid iron pin found set in the ground on the assumed Westerly side line of the Smith Road, at the southerly corner of land now or formerly of Philpot (3215/210); thence N 39° 31' 35" W along land of said Philpot 425.60 feet to land now or formerly of Borcla (6267/185); thence N 39° 24' 15" W along land of said Borcla 536.63 feet to land conveyed by this Grantor to Jonathan P. Greenlaw; thence S 50° 38' 50" W along land of said Jonathan P. Greenlaw 121.09 feet to a point; thence N 39° 21' 10' W continuing along land of said Jonathan P. Greenlaw 370.00 feet to a point; thence N 14° 22' 18" E continuing along land or said Jonathan P. Greenlaw 150.00 feet to an iron pipe found set in the ground on the Southwesterly side line of land now or formerly of Larose (5129/226); thence N 39° 21' 10" W along land of said Larose 99.62 feet to an iron pipe found set in the ground at land now or formerly of Jones (6153/330); thence N 39° 29' 25" W along land of said Jones 398.80 feet to an iron pipe found set in the ground at land now or formerly of O'Brien (6294/70) thence N 39° 48' 25" W along land of said O'Brien 71.60 feet to an iron pipe found set in the ground; thence N 60° 11' 40" E along land of the said O'Brien 151.40 feet to land now or formerly of Talbot (6253/115); thence N 60° 10 25" E along land of the said Talbot 39.90 feet to on iron pipe found set in the ground; thence N 60° 11' 25" E continuing along land of said Talbot 84.10 feet to a point; thence N 54° 46' 25" W continuing along land of said Talbot 64.00 feet to land now or formerly of Davison (3793/42), thence S 60° 42' 05" W along land of said Davison 410.00 feet more or less to the shore of Little Sebago Lake; thence Southwesterly along the shore of Little Sebago Lake a distance of 480 feet more or less to land now or formerly of Leighton (3093/628); thence S 36° 44' 20" E along land of said Leighton 860.00 feet more or less to land now or formerly of Graziano (7920/162); thence S 35° 22' 55" E along land of said Graziano 67.10 feet to an iron pine found set in the ground; thence S 36° 01' 10" E continuing along land of said Graziano and land now or formerly of Ent (3816/151) a distance of 873.90 feet to a 5/8" capped rebar found set in the ground; thence N 50° 10' 15" E along land of said Ent 170.30 feet to a 5/8" capped rebar found set in the ground at land now or formerly of Tetrault; thence N 37° 16' 45" W along land of said Tetrault 125.00 feet to a 5/8" capped rebar found set in the ground; thence N 50° 10' 15" E continuing along land of said Tetrault 443.68 feet to a 5/8" capped rebar found set in the ground; thence S 39° 31' 35" E continuing along land of said Tetrault 348.84 feet to a 5/8" capped rebar found set in the ground on said sideline of Smith Road; thence N 06° 11' 50" E along said sideline of Smith Road 132.25 feet to the point of beginning. Containing 26.75 acres. All bearings are Magnetic of the year 1988.

This conveyance is made subject to the rights of others in and to the private road known as the Brown Cove and as it crosses the above described parcel.

Being a portion of the same premises conveyed to the Grantor hereby by deed recorded in the Cumberland County Registry of Deeds at Book 12460, page 27.

This conveyance is made subject to a building encroachment and possible boundary line discrepancy on the common line of land of Davison (3793/42). By acceptance of this deed, the Grantees waive the Warranty Covenants with respect to said encroachment and boundary line discrepancy and hereby assume sole responsibility for and agree to accept the property with these two defects.

ATTACHMENT ITEM #2 -- AN EXPLANATION OF HOW REZONING THE PROPERTY IN QUESTION WOULD SUPPORT THE GOALS AND OBJECTIVES OF THE TOWN OF WINDHAM COMPREHENSIVE PLAN.

Based on a wetland delineation and survey elevation work, Jones Associates Inc has determined that the area does not meet the criteria for Resource Protection (RP) and is better suited to be zoned as Limited Residential (LR). Per the Windham Shoreland Zoning Chapter 199, Section 199-13, A, the Resource Protection District criteria includes the following:

1. Area located within MDIF&W inland wading bird and waterfowl habitat (IWWH) which are rated "moderate" or "high" value.

   Per a review of the State of Maine's GIS and MDIF&W records and consultation with MDEP, the proposed area to be rezoned is not located within the MDIF&W IWWH mapped areas.

2. Area located within the 100 year flood plain.

   Based on the FEMA Flood *Zone Insurance Rate Map #230189-0015B for the Town of Windham, the 100 year flood elevation is at 287.6 feet NGVD 1929. Jones Associates Inc performed a topographic survey to establish the location of the high water elevation and flood plain elevation of Little Sebago Lake adjacent to the proposed rezone area. Development within the proposed rezone area shall be located outside of the 100 year flood plan elevation.*

3. Areas with sustained slopes of 20% or greater.

   The rezone area does not have sustained slopes of 20% or greater. Within the proposed rezone area sustained slopes are approximately 0 to 2%.

4. Areas of two or more acres supporting wetland vegetation and hydric soils.

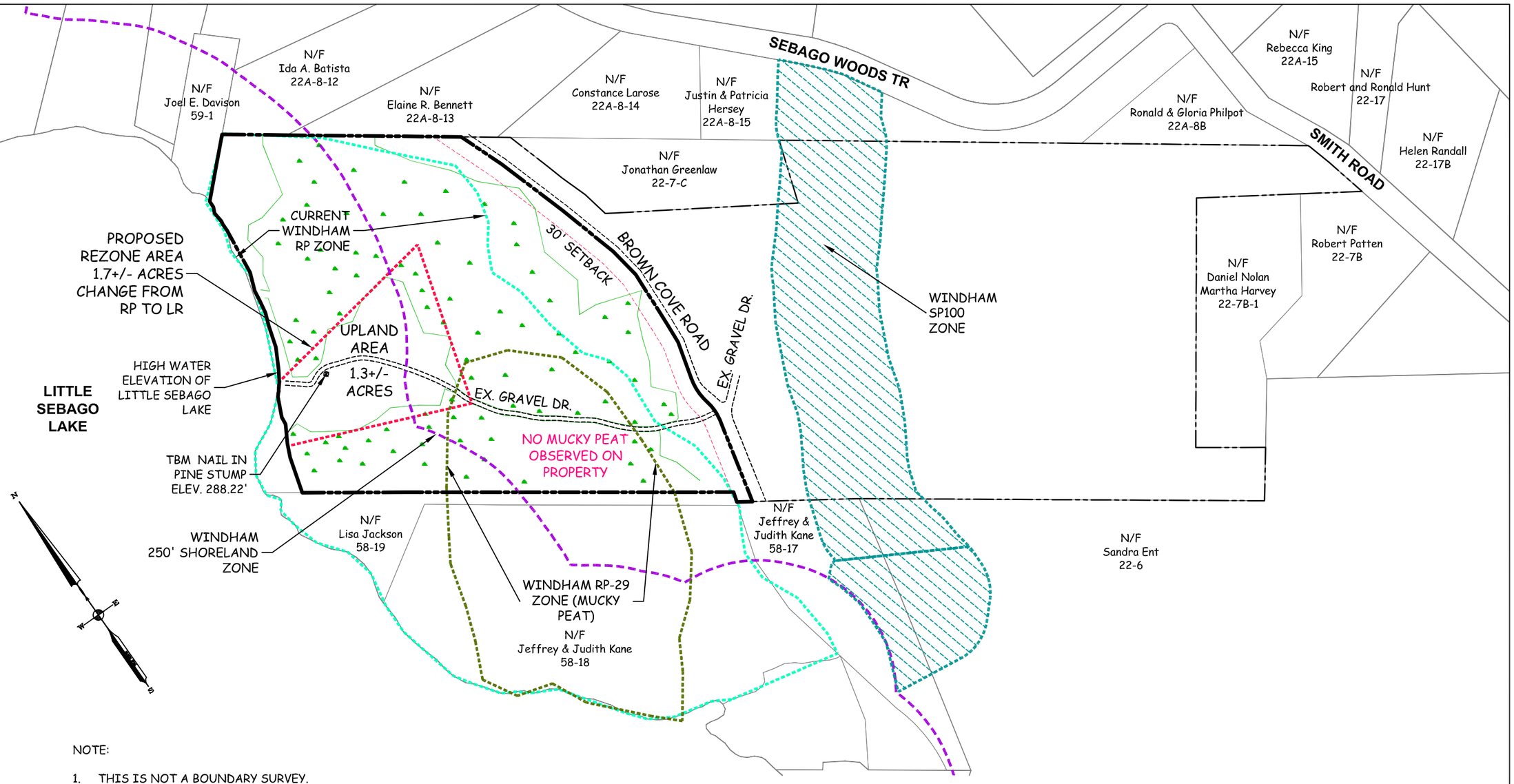
   Jones Assocites Inc performed a wetland delineation for the entire lot that included the proposed 1+/- acre rezone area. The proposed rezone area is considered upland which does not support wetland vegetation and hydric soils. Wetland/upland boundaries were identified and delineated according to U.S. Army Corps of Engineers (ACOE) Wetlands Delineation Manual (Environmental Laboratory 1987) and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, January 2012. Wetlands were identified based on the presence of hydric soil (inundated or saturated soil conditions resulting from permanent or periodic inundation by ground water or surface water), hydrology (movement and distribution of water), and predominance of hydrophytic species (Hydrophytes: vegetation typically adapted for life in saturated soil conditions). Wetland delineation consists of transecting the property, examining periodic soil samples, observing any evidence of hydrology and assessing each stratum of vegetation for its percentage of hydrophytic

species. If all three factors were evident, the study plot was considered wetland habitat.

5. Land areas along rivers subject to severe erosion.

The proposed rezone area is not located within an area that is subject to severe erosion.

ATTACHMENT ITEM #3 – PLAN OF THE LOT PROPOSED TO BE REZONED



NOTE:

1. THIS IS NOT A BOUNDARY SURVEY.
2. PROPERTY BOUNDARY IS BASED ON MAINE GIS COVERAGE OF PARCELS FOR TOWN OF WINDHAM.
3. ZONING BOUNDARIES FROM TOWN OF WINDHAM GIS.
4. LOT SIZE 11.5+/- ACRES
5. NO PEATLAND OBSERVED ON PROPERTY. (MDEP DEFINITION OF PEATLAND: "A FRESHWATER WETLAND, TYPICALLY CALLED A BOG OR FEN, DOMINATED BY ERICACEOUS SHRUBS (HEATH FAMILY), SEDGES AND SPHAGNUM MOSS AND USUALLY HAVING A SATURATED WATER REGIME.")
6. WETLAND BOUNDARIES WERE IDENTIFIED AND DELINEATED BY JONES ASSOCIATES INC ACCORDING TO U.S. CORPS OF ENGINEERS WETLANDS DELINEATION MANUAL (1987) AND INTERIM REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL: NORTHCENTRAL AND NORTHEAST REGION DATED OCTOBER 2009 (ERDC/EL TR-09-19).

GRAPHIC SCALE

0 100 200 400

1 inch = 200 ft.

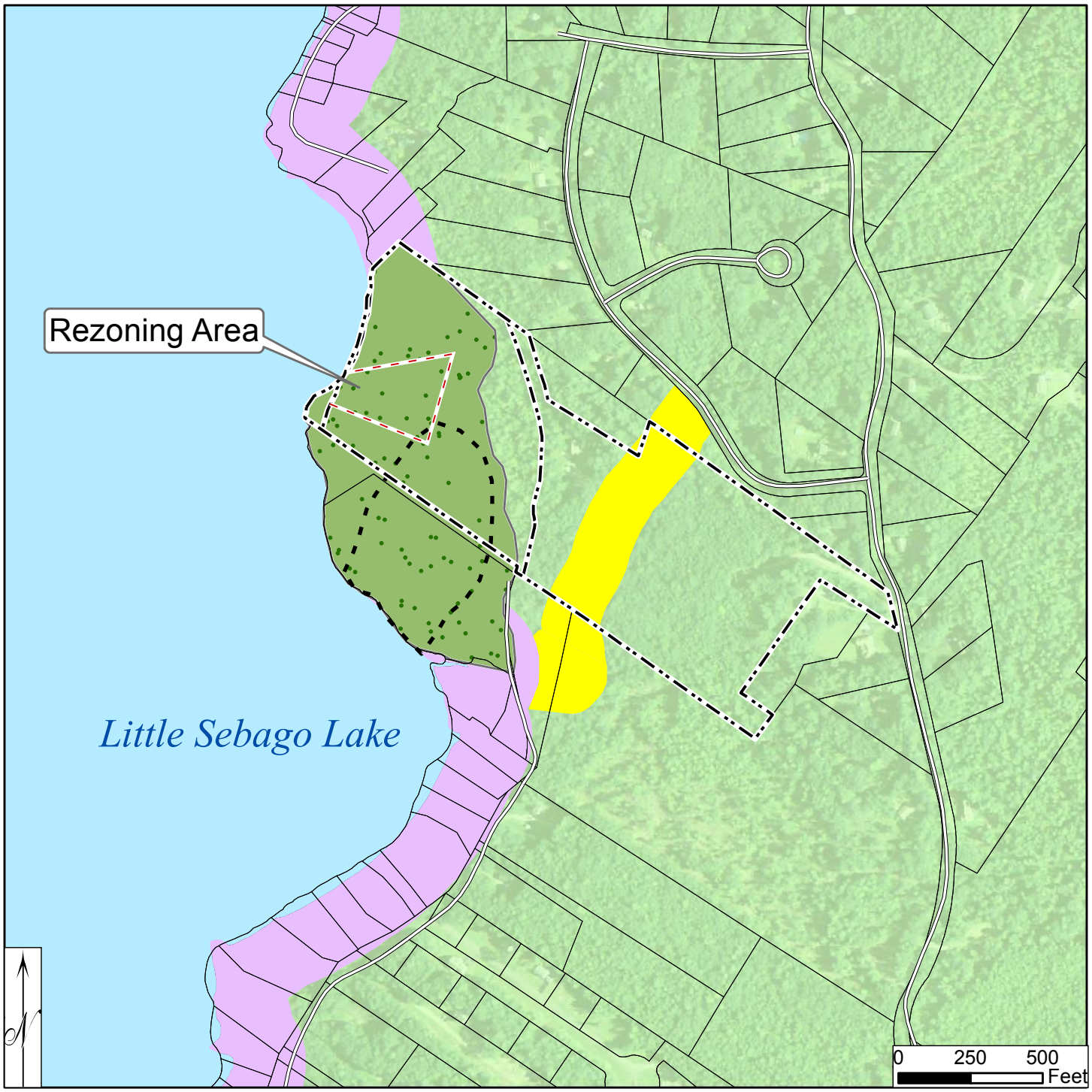
REVISIONS			
NO.	DATE	DESCRIPTION	BY
01	3/13/2014	ADDED ABUTTERS	DH

SKETCH PLAN

PREPARED FOR:
SHANE BREY
151 BROWN COVE ROAD
WINDHAM, ME

PREPARED BY:
JONES ASSOCIATES INC.
Foresters, Surveyors And Environmental Consultants
63 TUCKER LANE, POLAND SPRING, MAINE 04274
(207) 998-5242

PLAN DATE: 12/10/2013
REVISED: 3/13/2014
FIELD WORK DATE: 10/29/2013
SCALE: 1"=200'
PROJ. #: 13-063WI



JONES ASSOCIATES
Foresters, Surveyors and Environmental Consultants

Shane Brey Zoning Map

Notes:

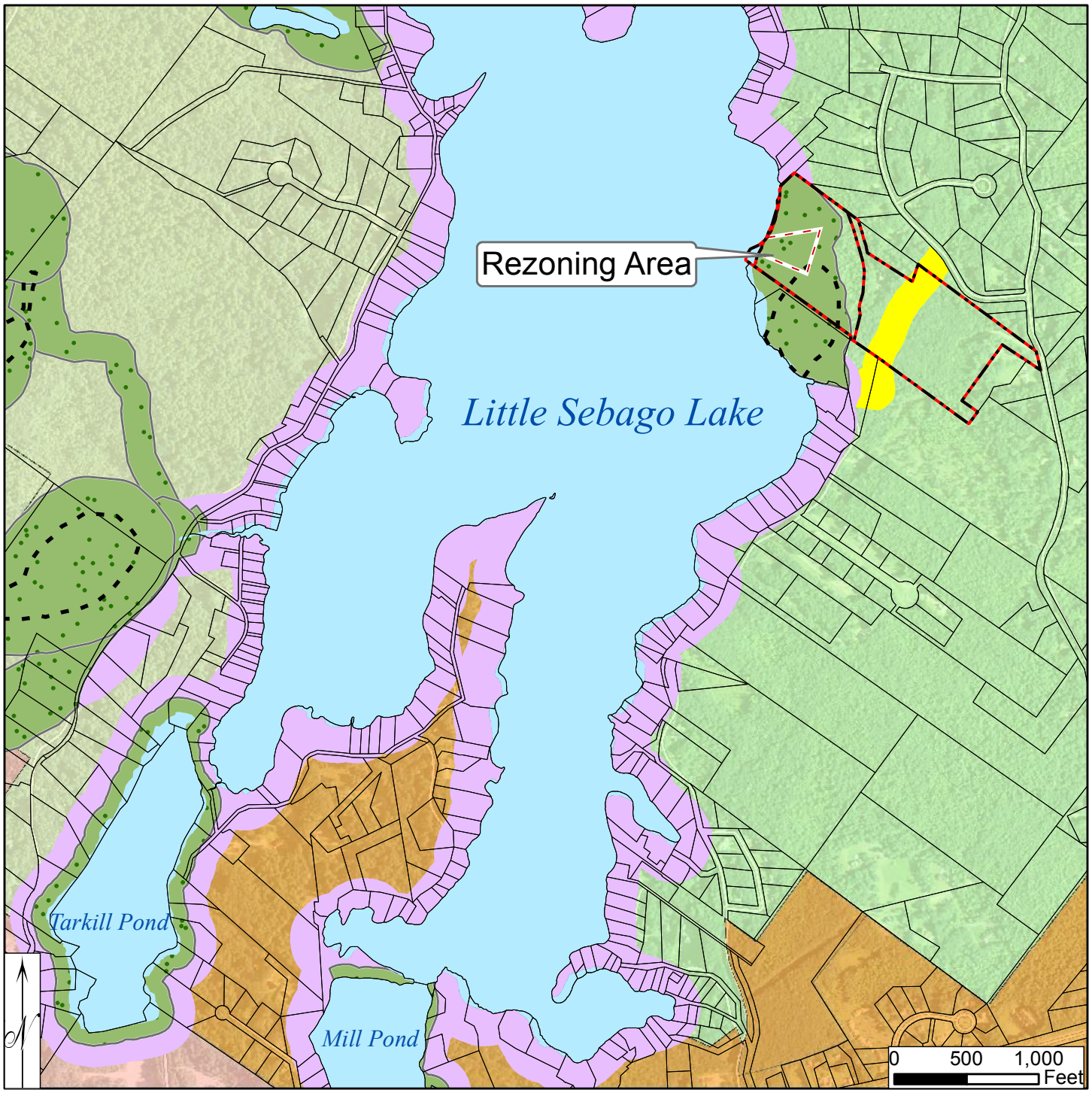
1. This is not a Survey.
2. Property boundary is based on OGIS Parcel Data
3. Zoning Boundaries from the Town of Windham GIS
4. Lot size: 11.5+/- acres
5. No peatland was observed on the Brey property.
6. Wetland Boundaries were identified and deelineated by Jones Associates Inc.
7. Scale 1:500

Legend

- OGIS Parcels
- Brey Rezoning
- Windham Roads
- Western and Eastern Brey Property

Zone

- FR
- 250 ft shorland zone
- Windham SP100 zone
- Windham RP Zone
- Windham RP-29 Zone (Mucky Peat)



JONES ASSOCIATES
Foresters, Surveyors and Environmental Consultants

Shane Brey Zoning Map

Notes:
1. This is not a Survey.
2. Property boundary is based on OGIS Parcel Data
3. Zoning Boundaries from the Town of Windham GIS
4. Lot size: 11.5+/- acres
5. No peatland was observed on the Brey property.
6. Wetland Boundaries were identified and deelineated by Jones Associates Inc.
7. Scale 1:1000

Legend

- OGIS Parcels
- Brey Rezoning
- Windham Roads
- Western Brey Property

Zone

- 250 ft shorland zone
- Windham SP100 zone
- Western and Eastern Brey Property
- Windham RPZone
- Windham RP-29 Zone (Mucky Peat)
- C-1
- C-2
- C-3
- ED
- F
- FR
- I
- RL
- RM
- VC

ADDITIONAL INFORMATION:

- Wetland Report for Shane Brey dated October 2013
- Preliminary Soil Report from Summit Environmental Consultants concerning Subsurface Waste Water Disposal System dated October 18, 2013

JONES ASSOCIATES

Foresters, Surveyors and Environmental Consultants

WETLAND REPORT

SHANE BREY

BROWN COVE ROAD

WINDHAM, MAINE

Prepared for:
Shane Brey
151 Brown Cove Road
Windham, ME

Prepared by:
Jones Associates, Inc.
63 Tucker Lane
Poland Spring, Maine 04274
(207) 998-5242

JA Job # 13-063WI
October 2013

TABLE OF CONTENTS

INTRODUCTION

Jones Associates Inc. was contracted to provide wetland delineation services for your property off Brown Cove Road in Windham, Maine. The following report summarizes site conditions observed during site visits in November of 2007 and October of 2013. In accordance with DEP standards the site was visited again in October of 2013 to reevaluate hydrologic conditions. We found no significant alteration or disturbance in soils or hydrology on the property.

Wetland/upland boundaries were identified and delineated according to U.S. Army Corps of Engineers (ACOE) Wetlands Delineation Manual (Environmental Laboratory 1987) and the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, October 2009. Wetlands were identified based on the presence of hydric soil (inundated or saturated soil conditions resulting from permanent or periodic inundation by ground water or surface water), hydrology (movement and distribution of water), and predominance of hydrophytic species (Hydrophytes: vegetation typically adapted for life in saturated soil conditions).

Wetland delineation consists of transecting the property, examining periodic soil samples, observing any evidence of hydrology and assessing each stratum of vegetation for its percentage of hydrophytic species. If all three factors were evident, the study plot was considered wetland habitat. Transitions between upland and wetland were clearly marked with blue sub-zero flagging every 30-40 feet, and labeled with alphanumeric codes to identify individual systems (A1, A2, A3….).

Wetland flags were located with survey equipment by JAI. This method is recognized by both state and federal agencies.

EXISTING CONDITIONS

The subject property is approximately 27.9 +/- acres in size and lies on the west shore of Little Sebago Lake in the town of Windham. The property is rectangular and is oriented toward the lake in a northwesterly direction. The parcel has road frontage on Smith Road as well as Brown Cove Road which transects the property. Timber has been recently harvested on the site within the last year, many skid trails, fresh stumps and limbs were observed. Most of the site is forested with the exception of one house along the northern boundary line.

For the most part, the topography is rolling between low wetlands and two distinct ridges that parallel Brown Cove Road. Wetland areas are found along the shore of the lake and at the bottom of the ridges in the middle of the property. The wetlands are mostly forested except for immediately adjacent to the lake. The ridges are uplands, somewhat bouldery and are dominated by Eastern White Pine (*Pinus strobus)*, Northern Red Oak (*Quercus rubra)*, American Beech (*Fagus grandifolia)*, Eastern Hemlock (*Tsuga canadensis)*, and Paper Birch (*Betula papyrifera)*.

A stream dissects the middle of the property flowing southerly to the lake. The stream is mapped by the United States Geologic Survey (USGS), however it appeared to be more diffuse than channelized during our visit. A second stream which is not mapped, was observed connecting two forested wetlands.

Jones Associates, Inc. did not observe any vernal pools during our onsite investigation.

SOILS

According to U.S. Department of Agriculture, Natural Resources Conservation Service, the soils series typed on the parcel include Sebago mucky peat, Walpole fine sandy loam, Hinckley gravelly sandy loam, Deerfield loamy sand, Peru very stony fine sandy loam, Hermon very stony sandy loam and Hollis very rocky fine sandy loam. Characteristics of each series are described in the soil report according to: Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture, Official Soil Series Descriptions, http://soils.usda.gov/technical/classification/osd/index.html.

The Sebago series consists of very deep, very poorly drained soils formed in herbaceous and woody organic deposits more than 51 inches thick. They are in bogs and swamps. Slope is less than 2 percent. The Sebago soils are found in the wetland area closest to the lake.

The Walpole Series consists of very deep, poorly drained sandy soils formed in outwash and stratified drift. They are nearly level to gently sloping soils in low-lying positions on terraces and plains. Slope ranges from 0 to 8 percent. The Walpole soils are found around Brown Cove Road.

The Hinckley series consists of very deep, excessively drained soils formed in water-sorted material. They are nearly level to very steep soils on terraces, outwash plains, deltas, kames, and eskers. The Hinckley soils are found on high uplands associated with the house along the northern property boundary.

The Deerfield series consists of very deep, moderately well drained soils formed in glaciofluvial deposits. They are nearly level to strongly sloping soils on terraces, deltas, and outwash plains. Slope ranges from 0 to 15 percent. The Deerfield soils are associated with the larger wetland complex in the middle of the property, south of the house site.

The Peru series consists of very deep, moderately well drained soils that formed in dense, loamy glacial till. Permeability is moderate in the solum, and moderately slow in slow in the dense substratum. Slope ranges from 0 to 35 percent. The Peru soils are associated with the upland ridge between Brown Cove Road and Smith Road.

The Hermon series consists of very deep, somewhat excessively drained soils on upland till plains, hills and ridges. These soils formed in glacial till. Estimated saturated hydraulic

conductivity is high or very high throughout the mineral soil. Slope ranges from 0 to 60 percent. The Hermon soils are found in the low area that has been cleared around an old road or snowmobile trail.

The Hollis series consists of shallow, well drained and somewhat excessively drained soils formed in a thin mantle of till derived mainly from gneiss, schist, and granite. They are nearly level to very steep upland soils on bedrock-controlled hills and ridges. Slope ranges from 0 to 60 percent. The Hollis soils are found at the very southern end of the property along the Smith Road frontage.

WETLAND CHARACTERISTICS

The term "wetlands" means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

--Corps of Engineers Wetlands Delineation Manual (U.S. Army Corps of Engineers 1987)

There are two distinct wetland areas on the property. The first wetland complex is found as you follow the snowmobile trail from Smith Road to the lake. As you follow the road downhill, there are wetlands on both sides of the road at the lowest point in the road. The wetland areas are both forested, dominated by Red Maple (*Acer rubrum)*, Yellow Birch (*Betula allegheniensis),* Balsam Fir (*Abies balsamea),* Royal Fern (*Osmunda regalis)*, Highbush Blueberry (*Vaccinium corymbosum)* and Winterberry (*Ilex verticillata).* Pit and mound topography is found throughout this area. Eastern Hemlock (*Tsuga canadensis)* and American Beech (*Fagus grandifolia)* were observed growing on the mounds and standing water was observed in the pits. A small stream flows out of this wetland and into another larger wetland in the middle of the property. The stream is not consistently channelized from wetland to wetland and becomes diffuse as it flows into the larger forested wetland dominated by large Red Maple some of which are approaching 24"+/-. This wetland area is very flat and extends out of the property on both ends. The wetland lies in between two ridges and flows to the southwest, eventually into the lake.

The second wetland complex is adjacent to the lake and to the northwest of Brown Cove Road. This wetland area is mostly forested with pockets of scrub-shrub and emergent wetland. The larger, forested portion of the wetland is dominated by Red Maple, Speckled Alder (*Alnus rugosa)*, Winterberry, Gray Birch (*Betula populifolia)* and Highbush Blueberry.

RARE OR UNUSUAL FEATURES

During our investigations of the above site, Jones Associates, Inc. did not observe any rare or unusual plant or animal species within the mapped wetland area. Portions of the area described in this report had been previously altered through clearing and excavation activities. The wetlands on this property were dominated by plant communities typical of this region of Maine. There were no vernal pools found within the area of investigation. Wetlands found within the 250 foot of the high-water mark of Little Sebago or within the FEMA designated flood zone are defined by DEP as wetlands of special significance (WSS).

WETLAND RULES AND INFORMATION

WETLANDS OF SPECIAL SIGNIFICANCE

Maine's Department of Environmental Protection considers some wetlands to be of higher significance than others. These wetlands are referred to as Wetlands of Special Significance (WSS). In order to be considered a WSS they must have one or more of the following characteristics:

(1) Critically imperiled or imperiled community. The freshwater wetland contains a natural community that is critically imperiled (S1) or imperiled (S2) as defined by the Natural Areas Program.

(2) Significant wildlife habitat. The freshwater wetland contains significant wildlife habitat as defined by 38 M.R.S.A. § 480-B (10).

(3) Location near coastal wetland. The freshwater wetland area is located within 250 feet of a coastal wetland.

(4) Location near GPA great pond. The freshwater wetland area is located within 250 feet of the normal high water line, and within the same watershed, of any lake or pond classified as GPA under 38 M.R.S.A. § 465-A.

(5) Aquatic vegetation, emergent marsh vegetation or open water. The freshwater wetland contains, under normal circumstances, at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation or open water, unless the 20,000 or more square foot area is the result of an artificial pond or impoundment.

(6) Wetlands subject to flooding. The freshwater wetland area is inundated with floodwater during a 100-year flood event based on flood insurance maps produced by the Federal Emergency Management Agency or other site-specific information.

(7) Peatlands. The freshwater wetland is or contains peatlands, except that the department may determine that a previously mined peatland, or portion thereof, is not a wetland of special significance.

(8) River, stream or brook. The freshwater wetland area is located within 25 feet of a river, stream or brook.

STREAM CHANNELS

According to Maine's Natural Resource Protection Act, Title 38, Article 5-A, Protection of Natural Resources, §480-B Definitions:

"River, stream or brook" means a channel between defined banks. A channel is created by the action of surface water and has two or more of the following characteristics:

(1) It is depicted as a solid or broken blue line on the most recent edition of the U.S. Geological Survey 7.5-minute series topographic map or, if that is not available, a 15-minute series topographic map.

(2) It contains or is known to contain flowing water continuously for a period of at least 6 months of the year in most years.

(3) The channel bed is primarily composed of mineral material such as sand and gravel, parent material or bedrock that has been deposited or scoured by water.

(4) The channel contains aquatic animals such as fish, aquatic insects or mollusks in the water or, if no surface water is present, within the stream bed.

(5) The channel contains aquatic vegetation and is essentially devoid of upland vegetation.

"River, stream or brook" does not mean a ditch or other drainage way constructed, or constructed and maintained, solely for the purpose of draining storm water or a grassy swale.

VERNAL POOLS

As defined by Maine's Department of Environmental Protection (MDEP): A vernal pool, also referred to as a seasonal forest pool, is a natural, temporary to semi-permanent body of water occurring in a shallow depression that typically fills during the spring or fall and may dry during the summer. Vernal pools have no permanent inlet and no viable populations of predatory fish. A vernal pool may provide the primary breeding habitat for wood frogs (*Rana sylvatica*), spotted salamanders (*Ambystoma maculatum*), blue-spotted salamanders (*Ambystoma laterale*), and fairy shrimp (*Eubranchipus spp.*), as well as valuable habitat for other plants and wildlife, including several rare, threatened, and endangered species. A vernal pool intentionally created for the purposes of compensatory mitigation is included in this definition.

As of September 1, 2007, "Significant Vernal Pools" are defined by MDEP as "Significant Wildlife Habitat." As read in MDEP's Chapter 335 -- Significant Wildlife Habitat Rules, "Whether a vernal pool is a significant vernal pool is determined by the number and type

of pool-breeding amphibian egg masses in a pool, or the presence of fairy shrimp, or use by threatened or endangered species as specified in Section 9(B). Significant vernal pool habitat consists of a vernal pool depression and a portion of the critical terrestrial habitat within a 250 foot radius of the spring or fall high water mark of the depression. An activity that takes place in, on, over, or adjacent to a significant vernal pool habitat must meet the standards of this chapter."

Species and abundance criteria required for Significant Vernal Pools.

Species	Abundance Criteria
Fairy shrimp	Presence in any life stage.
Blue spotted salamanders	Presence of 10 or more egg masses.
Spotted salamanders	Presence of 20 or more egg masses.
Wood frogs	Presence of 40 or more egg masses.

MDEP habitat management standards for significant vernal pools: To the greatest extent practicable, the following management practices must be followed within significant vernal pool habitat.

(1) No disturbance within the vernal pool depression;

(2) Maintain a minimum of 75% of the critical terrestrial habitat as unfragmented forest with at least a partly-closed canopy of overstory trees to provide shade, deep litter and woody debris.

(3) Maintain or restore forest corridors connecting wetlands and significant vernal pools;

(4) Minimize forest floor disturbance; and

(5) Maintain native understory vegetation and downed woody debris.

If more than 25% of the critical terrestrial habitat has been previously developed, restoring a portion of that area through supplemental planting or regrowth of native forest species may be considered toward meeting these standards, or towards standards for avoidance, minimization, or compensation. For purposes of Chapter 355, developed area includes disturbed areas excluding areas that are returned to a condition with the same drainage patterns and the same or improved cover type that existed prior to the disturbance;

Currently, Army Corps of Engineers (ACOE) regulate vernal pools but do not have specific characteristics that define a vernal pool, or a definition of which vernal pools require protection or buffering. They review each site on a case by case basis. ACOE's jurisdiction does not begin until the waters of the United States are impacted.

NATURAL RESOURCES PROTECTION ACT

Jones Associates, Inc. has many years of experience working with and interpreting Maine's environmental laws; however MDEP has several unwritten policies that may change without public notice, therefore, certain project specific questions may need review by MDEP staff.

The Natural Resources Protection Act (NRPA) became effective on August 4, 1988. The law is focused on "protected natural resources". A permit is required when an "activity" will be:

(1) Located in, on or over any protected natural resource, or

(2) Located adjacent to (A) a coastal wetland, great pond, river, stream or brook or significant wildlife habitat contained within a freshwater wetland, or (B) certain freshwater wetlands.

An "activity" is (A) dredging, bulldozing, removing or displacing soil, sand, vegetation or other materials; (B) draining or otherwise dewatering; (C) filling, including adding sand or other material to a sand dune; or (D) any construction, repair or alteration of any permanent structure.

The Maine Department of Environmental Protection (MDEP) does not have to be contacted for projects involving minor wetland impacts. Single, complete activities that impact less than 4,300 square feet of freshwater wetland and do NOT occur within: another type of protected natural resource; 25 feet of another protected natural resource and erosion controls are used; a municipal shoreland zone; a wetland normally containing at least 20,000 sq. ft. of open water, aquatic or emergent marsh vegetation; or a peatland are exempt under the Natural Resources Protection Act, 38 M.R.S.A. Section 480-Q(17).

NRPA - PERMIT BY RULE

A "permit by rule" or "PBR", when approved by MDEP, is an approval for an activity that requires a permit under the Natural Resources Protection Act (NRPA). Only those activities described in Chapter 305 may proceed under the PBR process. A PBR activity will not significantly affect the environment if carried out in accordance with this chapter, and generally has less of an impact on the environment than an activity requiring an individual permit. A PBR satisfies the NRPA permit requirement and Water Quality Certification requirement. The following projects may be eligible as PBR activities:

(1) Activity Adjacent to Protected Natural Resource
(An activity adjacent to (any land area within 75 feet, measured horizontally, of the normal high water line), but not in: a coastal wetland, great pond, river, stream or brook or significant wildlife habitat contained within a freshwater wetland; or freshwater wetlands consisting of or containing: under normal circumstances, at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation or open water, except for artificial ponds or impoundments; or peatlands dominated by shrubs, sedges and sphagnum moss.

(2) Placement of permanent intake pipes and water monitoring devices (including drilled wells)

(3) Replacement of Structures

(4) Movement of Rocks or Vegetation

(5) Placement of outfall pipes (including ditches and drain tiles)

(6) Shoreline stabilization using vegetation or riprap

(7) Construction of crossings (utility lines, pipes and cables)

(8) Construction of stream crossings (bridges, culverts and fords)

(9) State Transportation Facilities

(10) Restoration of natural areas (i.e., "undoing" human alteration)

(11) Fisheries & wildlife habitat creation or enhancement and water quality improvement projects

(12) Piers, wharves and pilings in coastal wetlands

(13) Public Boat Ramps

(14) Selected activities in coastal sand dunes

(15) Transfers and Permit Extensions

(16) One-time renewals of maintenance dredging permits

(17) Activities in/on/over significant vernal pool habitat

(18) Activities in existing dev. Areas located in/on/over high or moderate value inland waterfowl & wading bird habitat or shorebird nesting, feeding & staging areas

NRPA - TIER REVIEW PROCESS

NRPA's Tier Review process constitutes a joint application to both the Maine Department of Environmental Protection (MDEP) and the U.S. Army Corps of Engineers (USACOE) for a proposed alteration to a freshwater wetland that qualifies for Tier 1, 2 or 3 review. The square footage of impact is based on the alteration or impact of the whole activity in the wetland. If any part of the overall activity requires a higher tier review, then the whole activity will be reviewed under that higher tier.

The Tier Review process is required for impacts larger than 4,300 square feet, and for requesting a permit for activities in, on, or over a protected natural resource. It is also used for activities adjacent to certain protected natural resources (38 MRSA 480-C(1)). The Tier Review process is required when the activity is not eligible for a PBR.

According to 38 M.R.S.A. Section 480-X(2), an application for a permit to undertake activities altering freshwater wetlands must be reviewed in accordance with the following:

(1) A Tier 1 review process applies to any activity that involves a freshwater wetland alteration up to 15,000 square feet and does not involve the alteration of freshwater wetlands listed in 38 M.R.S.A. Section 480-X(4);

(2) A Tier 2 review process applies to any activity that involves a freshwater wetland alteration of 15,000 square feet up to one acre and does not involve the alteration of freshwater wetlands listed in 38 M.R.S.A. Section 480-X (4 or 5);

(3) A Tier 3 review process applies to any activity that does involve a freshwater wetland alteration greater than one acre, or an alteration of a freshwater wetland listed in 38 M.R.S.A. Section 480-X (4 or 5).

According to 38 M.R.S.A. Section 480-X(4), the following activities are not eligible for Tier 1 or Tier 2 review unless MDEP determines that the activity will not negatively affect the freshwater wetlands and other protected natural resources present.

(1) Activities located within 250 feet of a coastal wetland;

(2) Activities located within 250 feet of the normal high-water line, and within the same watershed, of any lake or pond classified as GPA under section 465-A;

(3) Activities occurring in freshwater wetlands, other than artificial ponds or impoundments, containing under normal circumstances at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation or open water;

(4) Activities occurring in freshwater wetlands that are inundated with floodwater during a 100-year flood event based on flood insurance maps produced by the Federal Emergency Management Agency or other site-specific information;

(5) Activities occurring in freshwater wetlands containing significant wildlife habitat that has been mapped, identified or defined, as required pursuant to section 480-B(10), at the time of the filing by the applicant;

(6) Activities occurring in peatlands dominated by shrubs, sedges and sphagnum moss, except that applications proposing work in previously mined peatlands may be considered by the department for Tier 1 or Tier 2 review, as applicable;

(7) Activities occurring within 25 feet of a river, stream or brook.

According to 38 M.R.S.A. Section 480-X(5), an activity in freshwater wetlands containing a natural community that is imperiled (S2) or critically imperiled (S1), as defined by the Natural Areas Program pursuant to Title 12, Section 544 is not eligible for Tier 2 review unless the department determines that the activity will not negatively affect the freshwater wetlands and other protected natural resources present.

NRPA General Requirements for both the Tier 1 and Tier 2 review process require that the proposed freshwater wetland alteration must be avoided, if feasible, after considering cost, logistics, technology and the overall purpose of the project. However, if unavoidable, the alteration must be limited to the minimum amount necessary to complete the project. The project must utilize both temporary and permanent erosion control measures to prevent sedimentation of any protected natural resource. In addition, the alteration site must maintain an undisturbed 25 foot buffer strip between the activity and any river, stream or brook and must not violate any state water quality law, including those governing the classification of the State's waters.

JONES ASSOCIATES
Foresters And Environmental Consultants

WETLAND DELINEATION CHECKLIST

Job #:	13-063	Map/Lot:	22/7	Acreage:	+/- 27.9
Client:	Shane Brey				
Site Address:	151 Brown Cove Road in Windham, ME, on the left				

Wetland Scientist:	Kyle Ball
Date of Office Review:	11/6/2013
Date(s) of Field Delineation:	10/24/2013

Wetlands of Special Significance

Yes	No	
	X	Does the on site or immediately adjacent wetland contain a mapped and numbered DWA?
	X	Does the on site or immediately adjacent wetland contain an Inland Waterfowl Wading Bird Habitat?
	X	Does the on site or immediately adjacent wetland contain a potential significant vernal pool?
X		Does the recent aerial photos of the on site or immediately adjacent wetland show or are there any open water or emergent wetlands with areas greater than 20,000 sq. ft.?
X		Does the on site or immediately adjacent wetland contain a 100 year flood plain?
	X	Does the on site or immediately adjacent wetland contain a S1 or S2 community?
	X	Does the on site or immediately adjacent wetland contain a significant wildlife habitat?
	X	Is the on site wetland within 250' of a coastal wetland?
X		Is the on site wetland within 250' of a great pond?
	X	Does the site contain peatlands?

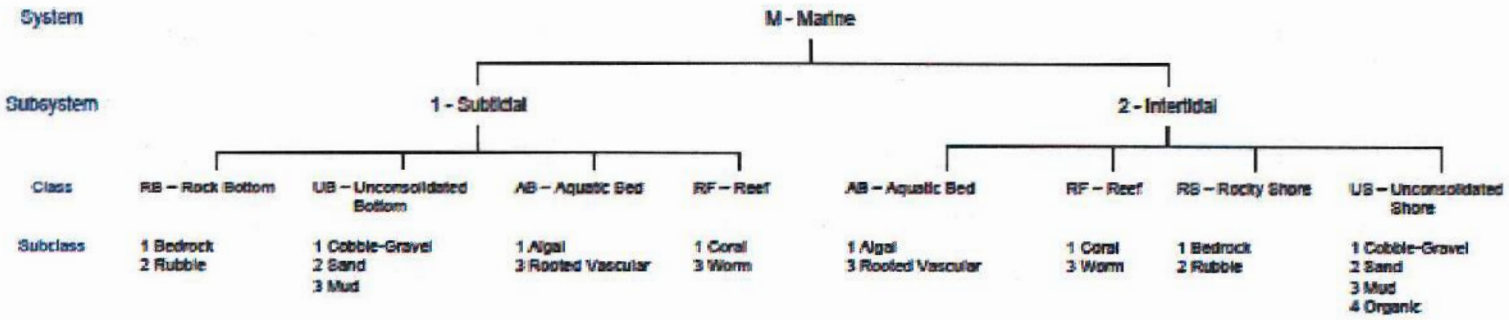
Stormwater Qualifications

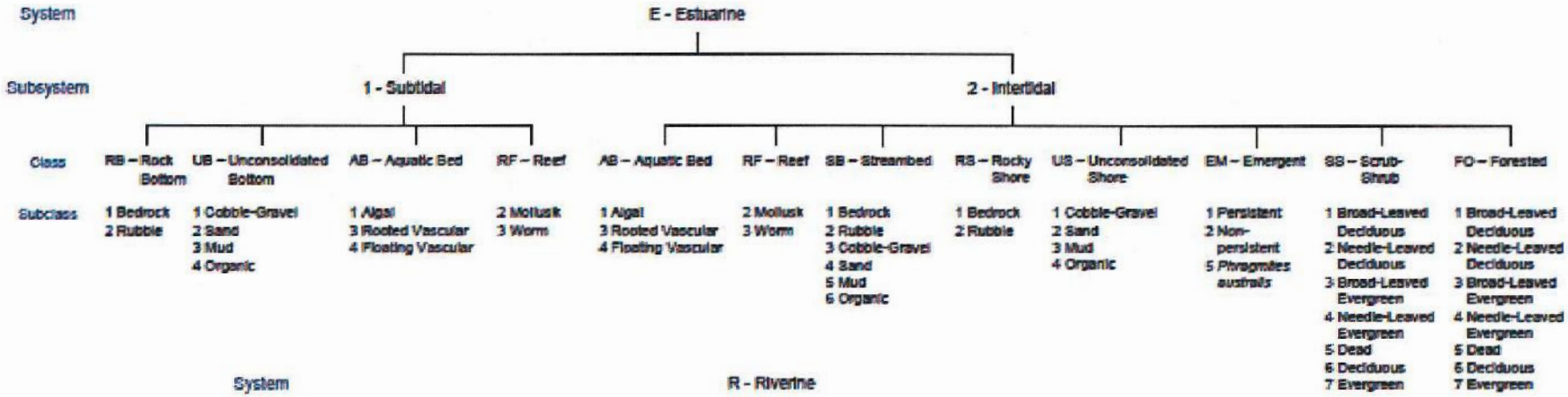
X		Is the site in the watershed of a Great Pond or Impaired stream?
X		Is the site in a lake watershed?
	X	Is the site in a watershed most at risk?

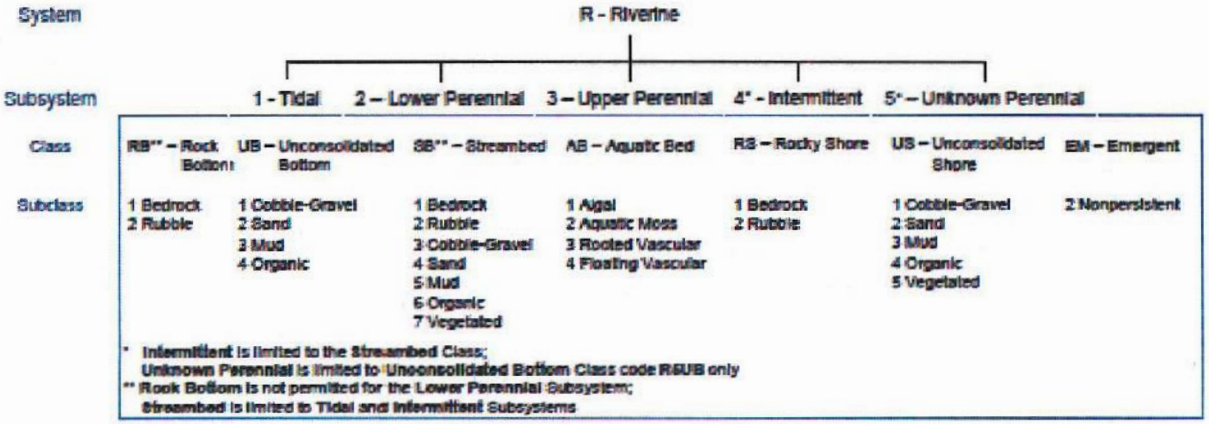
Additional Comments:

FEMA flood zone firmette ID: 2301890015B
Presumpscot HUC: 01060001
Great Pond: Little Sebago

WETLANDS AND DEEPWATER HABITATS CLASSIFICATION

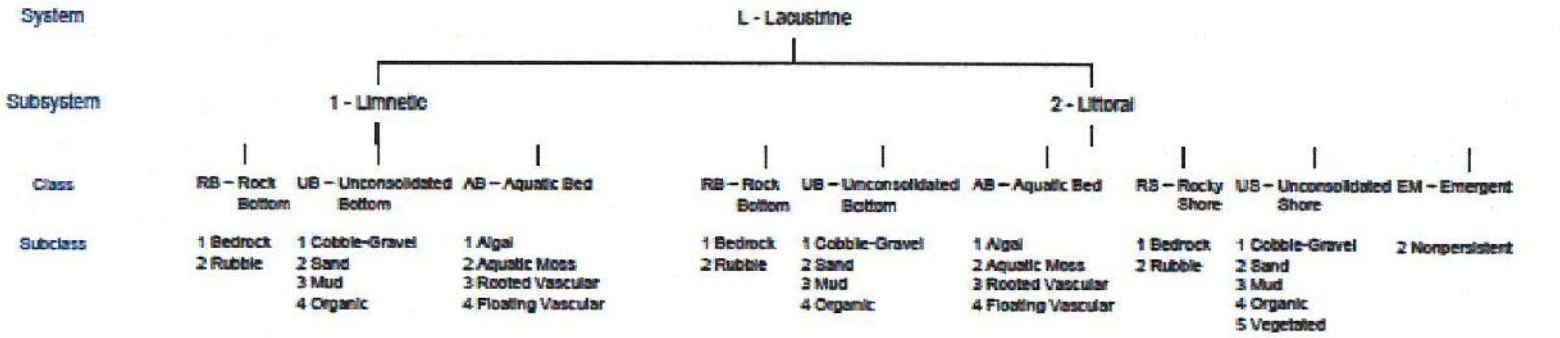


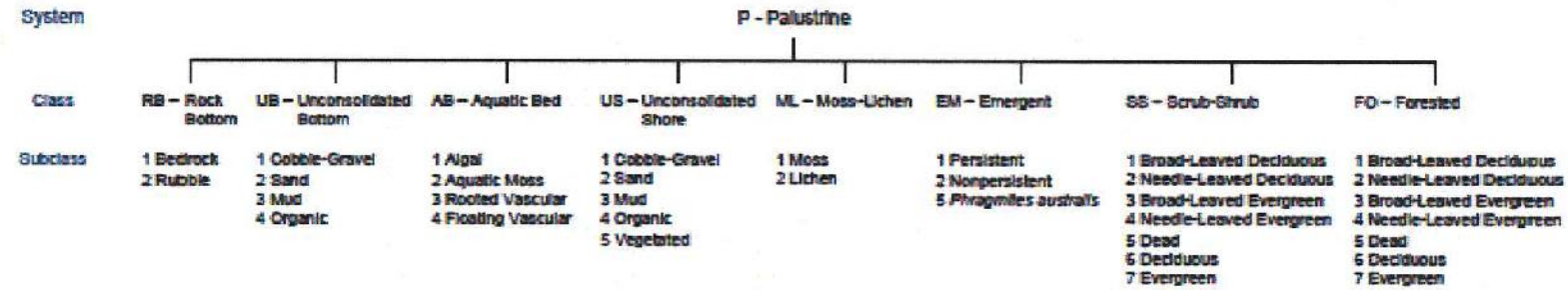




Classification of Wetlands and Deepwater Habitats of the United States, Cowardin *et al.* 1979

WETLANDS AND DEEPWATER HABITATS CLASSIFICATION





MODIFIERS

In order to more adequately describe the wetland and deepwater habitats, one or more of the water regime, water chemistry, soil, or special modifiers may be applied at the class or lower level in the hierarchy. The farmed modifier may also be applied to the ecological system.

Water Regime			Special Modifiers	Water Chemistry			Soil
Nontidal	Saltwater Tidal	Freshwater Tidal		Coastal Salinity	Inland Salinity	pH Modifiers for all Fresh Water	
A Temporarily Flooded	L Subtidal	S Temporarily Flooded-Tidal	b Beaver	1 Hyperhaline	7 Hypersaline	a Acid	g Organic
B Saturated	M Irregularly Exposed	R Seasonally Flooded-Tidal	d Partly Drained/Ditched	2 Euhaline	8 Eusaline	t Circumneutral	n Mineral
C Seasonally Flooded	N Regularly Flooded	T Semipermanently Flooded-Tidal	f Farmed	3 Mixohaline (Brackish)	9 Mixosaline	i Alkaline	
E Seasonally Flooded/ Saturated	P Irregularly Flooded	V Permanently Flooded-Tidal	h Diked/Impounded	4 Polyhaline	0 Fresh		
F Semipermanently Flooded			r Artificial	5 Mesohaline			
G Intermittently Exposed			s Spoil	6 Oligohaline			
H Permanently Flooded			x Excavated	0 Fresh			
J Intermittently Flooded							
K Artificially Flooded							

ATTACHMENT 1: U.S. ACOE WETLAND DATASHEETS

Job #13-063WI

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Shane Brey City/County: Windham, Cumberland Sampling Date: 10-24-13

Applicant/Owner: Shane Brey State: ME Sampling Point: Wet 1

Investigator(s): Kyle Ball Section, Township, Range: Windham

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 43d 51' 16.39" Long: -70d 24' 51.04" Datum: WGS 84

Soil Map Unit Name: Walpole fine sandy loam NWI classification: PFO1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓ No _____	**Is the Sampled Area within a Wetland?** Yes ✓ No _____
Hydric Soil Present?	Yes ✓ No _____	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes ✓ No _____	

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✓ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ✓ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ✓ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes ✓	No _____	Depth (inches): 0

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Job #13-063WI

VEGETATION – Use scientific names of plants. Sampling Point: Wet 1

Tree Stratum (Plot size: 30)	Absolute % Cover	Dominant Species?	Indicator Status
1. Pinus strobus	40	Yes	FacU*
2. Tsuga canadensis	20	Yes	FacU*
3.			
4.			
5.			
6.			
7.			
	60	= Total Cover	
Sapling/Shrub Stratum (Plot size: 12)			
1. Tsuga canadensis	10	Yes	FacU*
2. Fagus grandifolia	5	Yes	FacU*
3. Alnus incana	5	Yes	FacW
4. Ilex verticillata	5	Yes	Facw
5.			
6.			
7.			
	25	= Total Cover	
Herb Stratum (Plot size: 6)			
1. Sphagnum spp.	10	Yes	OBL
2. Onoclea sensibilis	5	Yes	FacW
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	15	= Total Cover	
Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 8 (A)

Total Number of Dominant Species Across All Strata: 8 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species		x 1 =	
FACW species		x 2 =	
FAC species		x 3 =	
FACU species		x 4 =	
UPL species		x 5 =	
Column Totals:	0 (A)		0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid Test for Hydrophytic Vegetation
- ✓ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ✓ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ✓ No ___

Remarks: (Include photo numbers here or on a separate sheet.)

* shallow rooting and buttressing

Job #13-063WI Wet 1

Sampling Point: _____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-20	2.5 Y 4/2	100	7.5 YR 4/6	5	C	M	Sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ✓ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (**F2**)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (LRR K, L, R)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ✓ No ____

Remarks:

Job #13-063WI

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: Shane Brey City/County: Windham, Cumberland Sampling Date: 10-24-13

Applicant/Owner: Shane Brey State: ME Sampling Point: Up 1

Investigator(s): Kyle Ball Section, Township, Range: Windham

Landform (hillslope, terrace, etc.): Depression Local relief (concave, convex, none): Concave

Slope (%): 0 Lat: 43d 51' 16.39" Long: -70d 24' 51.04" Datum: WGS 84

Soil Map Unit Name: Walpole fine sandy loam NWI classification: PFO1E

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✓	**Is the Sampled Area within a Wetland?** Yes _____ No ✓
Hydric Soil Present?	Yes _____	No ✓	
Wetland Hydrology Present?	Yes _____	No ✓	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✓	Depth (inches): _____
Water Table Present?	Yes _____	No ✓	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✓	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Job #13-063WI

Sampling Point: Up 1

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 30')	Absolute % Cover	Dominant Species?	Indicator Status
1. Tsuga canadensis	50	Yes	FacU
2. Pinus strobus	15	Yes	FacU
3. Betula alleghaniensis	15	Yes	FacU
4.			
5.			
6.			
7.			
	70	= Total Cover	

Sapling/Shrub Stratum (Plot size: 12')			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
		= Total Cover	

Herb Stratum (Plot size: 6')			
1. Gaultheria procumbens	5	Yes	FacU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
		= Total Cover	

Woody Vine Stratum (Plot size:)			
1.			
2.			
3.			
4.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

	Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0	
FACW species		x 2 =		
FAC species		x 3 =		
FACU species		x 4 =		
UPL species		x 5 =		
Column Totals:	0	(A)	0	(B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators:

- ___ Rapid Test for Hydrophytic Vegetation
- ✓ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
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Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✓

Remarks: (Include photo numbers here or on a separate sheet.)

Job #13-063WI Up 1

Sampling Point: _____

SOIL

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0-8	2.5 Y 4/3	100					sandy	
8-16	2.5Y5/6	100					sandy	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR R, MLRA 149B)**
- ___ Polyvalue Below Surface (S8) **(LRR R, MLRA 149B)**
- ___ Thin Dark Surface (S9) **(LRR R, MLRA 149B)**
- ___ Loamy Mucky Mineral (F1) **(LRR K, L)**
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) **(LRR K, L, MLRA 149B)**
- ___ Coast Prairie Redox (A16) **(LRR K, L, R)**
- ___ 5 cm Mucky Peat or Peat (S3) **(LRR K, L, R)**
- ___ Dark Surface (S7) **(LRR K, L)**
- ___ Polyvalue Below Surface (S8) **(LRR K, L)**
- ___ Thin Dark Surface (S9) **(LRR K, L)**
- ___ Iron-Manganese Masses (F12) **(LRR K, L, R)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149B)**
- ___ Mesic Spodic (TA6) **(MLRA 144A, 145, 149B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No ✓

Remarks:

Summit
Environmental Consultants
A CES, Inc. Company

PN: 10382.002

October 18, 2013

Mr. Rick Jones
Jones Associates, Inc.
280 Poland Spring Road
Auburn, Maine 04210

RE: Preliminary Soil Report
151 Brown Cove Road in Windham, Maine

Dear Rick:

At your request, Summit Environmental Consultants (Summit) completed a Preliminary Soil investigation at the above referenced location.

The purpose of the investigation was to determine the suitability of soil for installation of a "First Time" Subsurface Waste Water Disposal System to serve a single family residence (assumed to be a 4-bedroom home) with a design flow of 360 gallons per day (gpd) in accordance with the State of Maine Subsurface Waste Water Disposal Rules (SWWDR-10 CMR 241).

Date of Investigation: October 17, 2013. Weather conditions were partly-sunny with a temperature of about 60 degrees. The Lot is approximately 10 acres in size *(it is our understanding that the property may be divided into 2 Lots in the future)*, undeveloped and consists of woodland and wetland abutting Little Sebago Lake. Based on email correspondence with the Windham Code Enforcement Officer, Heather McNally (copy attached), the Shoreland Zone at this location extends 250 feet from the Lake.

Jones Associates is establishing the flood elevation. For the purposes of our evaluation, it is assumed that the flood elevation will not change the measured setbacks with respect to the Shoreland Zone 250 feet setback.

Method of Investigation: Test borings were advanced with a hand auger. Soil samples were collected in the 3-inch diameter core barrel attached to the head of the hand auger.

Method of Ground Control: Test borings were located in relation to site features (access trail and lake). The property owner indicated that property lines were greater than 200 feet from the area being investigated.

Findings: Three test borings were advanced in the Shoreland Zone and encountered a brown fine to medium sand. Evidence of a seasonal high water table was found at depths ranging from 11 to 14 inches below ground.

Two test borings were advanced outside of the Shoreland Zone (i.e., beyond the 250 feet setback). The test borings encountered similar soil conditions with evidence of seasonal high water at 11- 13 inches below ground.

Soil is classified as Profile 5, Condition AIII/D.

Recommendations: Soil conditions *within the Shoreland Zone* are **not suitable** for a "First Time" Subsurface Waste Water Disposal System without a Variance. We have not assessed whether a Variance could be approved.

Soil conditions outside the Shoreland Zone would be **suitable** for a First Time Waste Water Disposal System serving a residence. Note that useable area outside the Shoreland Zone is constrained by a wetland. Based on our preliminary estimate of the location of the edge of wetland and the assumption that it is not a Wetland of Special Significance, sufficient area appears to be available to design a disposal field, although a proprietary device may be required to maintain setback requirements. Flood elevation and the actual location of the 250 feet setback on the Lot could alter these findings.

Note that prior to any installation of a Subsurface Waste Water Disposal System, a complete Site and soil evaluation is required to develop specific designs, sizes, setbacks and locations of disposal system components. Designs must be provided on HHE-200 applications by a Licensed Site Evaluator and approved by the Local Plumbing Inspector prior to installation.

If you have any questions concerning this letter, please feel free to contact me.

Sincerely,
SUMMIT ENVIRONMENTAL CONSULTANTS

Michael A. Deyling, C.G., LSE
Certified Geologist, Licensed Site Evaluator

attachment

Michael Deyling

From: Heather McNally <hmcnally@town.windham.me.us>
Sent: Thursday, October 17, 2013 4:53 PM
To: Michael Deyling
Subject: RE: septic system

It is 250' so you are outside at the 275. Happy designing!

Heather McNally
Director of Code Enforcement and Zoning Administration
Town of Windham
8 School Rd.
Windham, ME 04062
hmcnally@town.windham.me.us
(207) 894-5900 ext. 6111

From: Michael Deyling [mailto:mdeyling@ces-maine.com]
Sent: Thursday, October 17, 2013 3:23 PM
To: Heather McNally
Subject: septic system

Hi Heather,

I visited a Site today at 151 Brown Cove Road. A portion of the Site abuts Little Sebago Lake. I have 2 questions that you might be able to help me with.

1) I assume that the "Shoreland Zone" extends 250 feet back from the Lake. Is that correct? I would like to use a location that is approximately 275 feet from the Lake for the disposal system and want to confirm that I am outside of the Shoreland Zone.

2) Is there any other local restriction (ordinances, zoning, etc) to septic system design beyond the 250 feet at this Site? If not, I will proceed using the State Rules.

Thanks for your help.

Mike Deyling