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5 **ITEM 3** – 15 Bowen Road– Shoreland Development Plan Review

<u>Action: Accept application. Approve plan or continue review</u>: Pursuant to §16.9.3 Shoreland Development
 Review of the Town of Kittery Land Use and Development Code, Nicole Sanborn, on behalf of
 owner/applicant Eric Dyer, requests approval to stabilize 86 linear feet of existing eroding shoreline with
 riprap along the property of 15 Bowen Road, Tax Map 17, Lot 4, in the Residential-Urban, Shoreland
 Overlay, and Resource Protection Overlay Zones.

Town of Kittery

Planning Board Meeting

January 11, 2024

11

12 **PROCESS SUMMARY**

REQUIRED	ACTION	COMMENTS	STATUS
Yes	KPA Approval for portions below HAT line	Scheduled for 1/4/24	Pending; planning board review contingent on approval
Yes	Staff Review	1/4/24	Complete
No	Site Visit	Optional	Optional
No	Public Hearing	Optional	Optional
Yes	Final Plan Review	Scheduled for 1/11/24	Pending

13

14 **PROJECT INTRODUCTION**

15 15 Bowen Road is an existing lot of record located along the mouth of Spruce Creek in the Residential-Urban Zone. The parcel contains a single-family dwelling partially covered by a Shoreland Overlay Zone, with an existing float and stone rip-rap area located both in the Resource Protection Overlay Zone and a

18 FEMA flood hazard area. Abutting the property directly to the southwest is Bowen Road, a Town-owned

right-of-way which provides public access to the water with a kayak ramp. A stone wall on 15 Bowen

20 separates the property and the Town right-of-way.

21 The plan proposes to reconstruct 86 linear feet of shoreline with riprap and vegetative stabilization 22 The plan proposes to reconstruct 524² to 26² size log log log log to the two stabilization

22 measures. The riprap will consist of 24" to 36" sized rocks built up at a slope from the toe, supported by a 23 base of crushed stone and underlain with a geo-textile fabric. The riprap will reach an elevation of 14 feet

before transitioning to a vegetative slope stabilized with native plants. The plan proposes a vegetated slope

of 1,758 sq ft., followed by 853 sq. ft. of riprap above the HAT line and 446 sq. ft. below the HAT line.

26 Concurrently, the applicant is also seeking approval from the Kittery Port Authority to replace an existing

27 float on the property.

Per §16.9.B.(2), planning board review of the proposal is required due to the lot's proximity within a Resource Protection Overlay Zone and a Flood Hazard Area. §16.9.C.(1).(c) requires KPA to approve all development below the HAT line prior to planning board review. KPA approval is anticipated on January 4th, 2024; if the applicant receives approval on this date, the planning board may review their shoreland development application during their January 11th meeting. <u>Pending Port Authority approval, staff</u> recommend the planning board approve the application.

34 APPLICATION & PLAN REVIEW

36	1.	The survey has a note stating it will "replace an existing stone masonry wall in-kind if found to be
37		structurally deficient during construction," as the applicant does not want to disturb the wall unless
38		necessary. To ensure compliance with all requirements, the applicant is seeking approval for the
39		replacement of the wall during this meeting. Staff suggest a condition of approval stating that any
40		replacement of the wall will be done in-kind, and maintain current height, width, and dimensions.
41	2.	The applicant provided an analysis of alternatives to show the proposed solution is optimal. The
42		first alternative, adding a bulkhead seawall, would only redirect wave energy to exacerbate erosion
43		in abutting properties (including the Town-owned water access road). The second alternative,
44		relying only on vegetation, appears infeasible due to the steep slope of the shoreline and the risk of
45		the site to soil erosion without further stabilization.
46		a. The application includes pictures of the property showing exposed roots which seem to
47		support the argument that vegetative buffers would not provide adequate erosion control.
48	3.	Attachment #6 contains the construction plans including a note confirming erosion control methods
49		will be in place before work may begin.
50	4.	The Shoreland Overlay Zone Ordinance §16.4.28.E.(3).(a). requires new principal and accessory
51		structures to be set back at least 100 feet, horizontal distance, from the HAT line of any water
52		bodies, tributary streams, the upland edge of a coastal wetland, or the upland edge of a freshwater
53		wetlands. Shoreland stabilization is not considered a structure in regards to this setback.
54		a. The proposed float replacement is under the jurisdiction of Kittery Port Authority. Water-
55		dependent uses, such as floats, have a 0-foot setback from any water bodies.
56	5.	§16.4.28.E.(2). allows 20% of total lot area in the shoreland zoning overlay to be comprised of
57		non-vegetated surfaces or structures. The applicant has provided an email from Jeffrey Kalinich at
58		Maine Department of Environmental Protection confirming that land used for shoreline
59		stabilization projects are exempt from devegetation calculations. Because the project proposes only
60		shoreline stabilization, devegetation calculations are not required.
61		a. Staff suggest a condition of approval to be added to the plan noting that all future
62		development not related to shoreline stabilization must include the entire riprap area in
63		devegetation calculations.
64		b. The portions of the float above the HAT line are being replaced in-kind with the same
65		dimensions, and therefore do not increase devegetation of the lot.

Staff reviewed the submitted application and plan and have the following comments:

66 DISCUSSION, NEXT STEPS, AND RECOMMENDATIONS

The proposed plan would improve the safety and well-being of the property owners and shows they are choosing the development option with the least impact to abutting properties. Staff suggest acceptance of the plan and allowing the application to move to final plan approval and meet all other permitting requirements. The Planning Board should discuss the plan and determine if it meets the requirements to accept the plan, and/or direct the applicant to make any changes that are necessary.

72 **Recommended motions**

35

73 Below are motions for the Planning Board's consideration:

74 *Motion to accept the application*

- 75 Move to accept the plan for a shoreland development application from Nicole Sanborn, on behalf of
- 76 owner/applicant Eric Dyer.

77 *Motion to approve the application*

- 78 Move to approve the plan for a shoreland development application from Nicole Sanborn, on behalf of
- 79 owner/applicant Eric Dyer.

Vittom Dlanning Doard	ЛДАЕТ	
Kittery Planning BoardDRAF IFindings of FactM 17 L A		
Findings of Fact MTT/L4		
Shoreland Development Plan Review		
Note: This approval by the Planning Board constitutes an	agreement between the Town and the Developer incorporating the	
Development plan and supporting documentation, the I required by	Findings of Fact, and all waivers and/or conditions approved and the Planning Board.	
WHEREAS: Agent Nicole Sanborn, on behalf of 86 linear feet of existing eroding shoreline with Lot 4, in the Residential-Urban, Shoreland Over	of owner/applicant Eric Dyer, requests approval to stabilize riprap along the property of 15 Bowen Road, Tax Map 17, lay, and Resource Protection Overlay Zones.	
Pursuant to the Plan Review meetings conducted prepared for 1/11/2024.	d by the Planning Board as noted in the plan review notes	
Shoreland Development Plan Staff Review	1/4/23	
Site Walk	None	
Public Hearing	None	
Approval	1/11/23	
Engineering & Surveying. NOW THEREFORE, based on the entire recor applicable standards in the Land Use and Develo factual findings and conclusions: FINDINGS OF FACT	rd before the Planning Board and pursuant to the opment Code, the Planning Board makes the following	
Chapter 16.4 LAND	USE ZONE REGULATIONS	
16.4.28.E. Shoreland Overlay Zone		
(2) The total footprints of the areas devegetated surfaces, must not exceed twenty (20) percent of the following zones:	d for structures, parking lots and other impervious of the lot area, including existing development, except in	
Finding: All surfaces counted within shoreline	stabilization projects are not included in devegetation	
calculations, as confirmed by the Maine Depart	tment of Environmental Protection. All other	
development is replacement-in-kind, and will n	not increase devegetation.	
Conclusion: The requirement appears to be met	t.	
	Vote: in favor against abstaining	
Chanter 9 MADITIME AND SU	ORFLAND RELATED DEVELOPMENT	
Article III Planning Boar	rd Shoreland Development Review	
· · · · · · · · · · · · · · · · · · ·		

 (2) An application will be approved or approved with conditions if the reviewing authority makes a positive finding based on the information presented. It must be demonstrated the proposed use will: (a). Maintain safe and healthful conditions:
positive finding based on the information presented. It must be demonstrated the proposed use will: (a). Maintain safe and healthful conditions:
(a). Maintain safe and healthful conditions:
Γ^{*}_{1} 1 Γ^{*}_{1} T Γ^{*}_{1}
<u>Finding</u> : The proposed shoreline stabilization appears necessary to maintain safe conditions on the
property. The application has endeavored to show the stabilization option chosen will not have adverse
impacts on the safety of adjacent lots.
Conclusion: This requirement appears to be met
<u>Vote:</u> in favor against abstaining
(b) Not result in water pollution, erosion or sedimentation to surface waters:
Finding: The proposed development as represented in the plans and application will reduce the risk of
water pollution, and best practices for erosion and sedimentation will be observed in development.
Conclusion: This requirement appears to be met.
Vote: in favor against abstaining
(c) Adequately provide for the disposal of all wastewater:
<u>Finding</u> : No wastewater is anticipated as a part of this development.
<u>Conclusion</u> : This requirement appears to have been met.
Vote: in favor against abstaining
(d) Not have an advarse impact on snawning grounds, fish, aquatic life, bird or other wildlife habitat
(a) Not have an adverse impact on spawning grounds, fish, aqualic life, bird or other whalle habital.
Finding. The proposed development as represented in the plans appears to reduce the risk of adverse
<u>Finding</u> : The proposed development as represented in the plans appears to reduce the risk of adverse impact on nearby natural resources
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<u>Finding</u> : The proposed development as represented in the plans appears to reduce the risk of adverse impact on nearby natural resources. <u>Conclusion</u> : The requirement appears to be met. Vote: in favor against abstaining (e) Conserve shore cover and visual, as well as actual, points of access to inland and coastal waters:
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Finding: The proposed development as represented in the plans appears to reduce the risk of adverse impact on nearby natural resources. Conclusion: The requirement appears to be met. (e) Conserve shore cover and visual, as well as actual, points of access to inland and coastal waters: Finding: Shore cover is conserved in accordance with the Code. There are no adverse impacts to visual or actual points of access to waters. Conclusion: This requirement appears to be met. (e) Conserve shore cover is conserved in accordance with the Code. There are no adverse impacts to visual or actual points of access to waters. Conclusion: This requirement appears to be met. (f) Protect archaeological and historic resources: Finding: There appear to be neither archaeological nor historic resources impacted. Conclusion: This requirement does not appear applicable. Vote: in favor against abstaining

(g) Not adversely affect existing commercial fishing or maritime activities in a commercial fisheries/maritime activities district:

<u>Finding</u>: No commercial fishing takes place on the property, but there is a partial commercial fishery overlay zone on the adjacent Town right-of-way. By providing shoreline stabilization on 15 Bowen Road, the development appears to have a positive impact on the shoreline of the Town right-of-way.

Conclusion: This requirement appears to be met.

Vote: _____in favor _____against _____abstaining

(h) Avoid problems associated with floodplain development and use:

Finding: All floodplain management standards will be followed in the shoreland stabilization process.

Conclusion: This requirement appears to be met.

Vote: _____in favor _____against _____abstaining

(i) Is in conformance with the provisions of this code:

<u>Finding</u>: The proposed development is an accessory to an existing non-conforming dwelling, and proposed improvements will improve the property's conformity to the provisions of Title 16.

Conclusion: This requirement appears to be met.

Vote: _____in favor _____against _____abstaining

(j) Be recorded with the York County Registry of Deeds:

Finding: A plan suitable for recording once the Surveyor's stamp is added has been prepared by **Tidewater Engineering & Surveying.**

<u>Conclusion</u>: As stated in the Notices to Applicant contained herein, a Shoreland Development Plan must be recorded with the York County Registry of Deeds prior to the issuance of a building permit. Vote: ____ in favor ____ against ____ abstaining

34

Based on the foregoing Findings, the Planning Board finds the applicant has satisfied each of the review standards for approval and, therefore, the Planning Board approves the Shoreland Development Plan

- Application subject to any conditions or waivers, as follows:
- 37
- 39 Waivers: None
- 40
- 41 **Conditions of Approval** (to be depicted on final plan to be recorded):
- 42 43

44

- 1. All future developments not related to shoreline stabilization must include the entire riprap area in devegetation calculations.
- Any replacement of the stone wall between 15 Bowen Road and the adjacent southwest property
 must be done in-kind, maintaining current dimensions, or else seek subsequent planning board
 approval.
- Without prior approval, no changes, erasures, modifications or revisions may be made to any
 Planning Board approved final plan per Title 16.9.3.I.

50 51	4. Applicant/contractor will follow Maine DEP <i>Best Management Practices</i> for all work associated with site and construction to ensure adequate erosion control and slope stabilization.
52 53	5. All Notices to Applicant contained herein (Findings of Fact dated <u>1/11/2024</u>).
54	Conditions of Approval (not to be depicted on final plan):
55 56	1. Incorporate any plan revisions on the final plan as recommended by Staff, Planning Board or Peer Review Engineer, and submit for Staff review prior to presentation on final plan.
57 58	2. Surveyor's stamp must be on the final plan.
59 60	Notices to Applicant:
61 62	1. Incorporate any plan revisions on the final plan as required by Planning Board and submit for Staff review prior to presentation of final plan.
63 64 65	2. Prior to the release of the signed plans, the applicant must pay all outstanding fees associated with the permitting, including, but not limited to, Town Attorney fees, peer review, newspaper advertisements and abutter notification.
66 67 68 69 70	3. One (1) copy of the final plan and any and all related state/federal permits or legal documents that may be required, must be submitted to the Town Planning Department for signing. <u>Date of Planning</u> <u>Board approval shall be included on the final plan in the Signature Block</u> . After the signed plan is recorded with the York County Registry of Deeds, a copy of the signed and recorded original must be submitted to the Town Planning Department.
71 72 73	4. This approval by the Town Planning Board constitutes an agreement between the Town and the Developer, incorporating as elements the Development Plan and supporting documentation, the Findings of Fact, and any Conditions of Approval.
74 75	5. Prior to construction, applicant shall obtain any and all permits required by the code enforcement office to complete proposed work.
76 77 78 79	The Planning Board authorizes the Planning Board Chair or Vice chair to sign the Final Plan and the Findings of Fact upon confirmation of required plan changes.
80 81	Vote:in favoragainstabstaining
82 83 84	APPROVED BY THE KITTERY PLANNING BOARD ON
85 86 87 88	Dutch Dunkelberger, Planning Board Chair
89 90 91 92	Per Title 16.2.12 An aggrieved party with legal standing may appeal a final decision of the Planning Board to the York County Superior Court in accordance with Maine Rules of Civil Procedures Section 80B, within forty-five (45) days from the date the decision by the Planning Board was rendered.
93	

LEGEND

	SUBJECT PARCEL BOUNDARY LINE
	EDGE OF PAVEMENT
∞	EXISTING STONE WALL
SS	EXISTING SEWER LINE
<u> </u>	CONTOUR: POSITIVE ELEVATION
— — (10) — —	CONTOUR: NEGATIVE ELEVATION
0	IRON PIPE, ROD, OR DISK FOUND
۲	DRILL HOLE FOUND
	GRANITE/CONCRETE BOUND
-0-	UTILITY POLE
GENERAL NOTES:	

THE PURPOSE OF THIS PLAN IS TO DEPICT THE LOCATION OF A PROPOSED FIXED PIER, SEASONAL GANGWAY, SEASONAL MAIN FLOAT AND ASSOCIATED ACCESS RAMP TO BE LOCATED ON MAP 17 LOT 4 IN KITTERY, ME. THE EXISTING PIER STRUCTURE IS BEING FULLY REPLACED AND THE MAIN FLOAT IS BEING EXPANDED. SAID PLAN SHALL BE USED FOR APPLYING FOR PERMITS FROM THE TOWN OF KITTERY, MAINE DEPT. OF ENVIRONMENTAL PROTECTION AND U.S. ARMY CORPS OF ENGINEERS.

OWNER OF RECORD:

TAX MAP 17 LOT 4 ERIC DYER 15 BOWEN ROAD KITTERY, MAINE 03904 Y.C.R.D. BOOK 17735 PAGE 0077

- THE PROPERTY IS LOCATED WITHIN THE TOWN OF KITTERY RESIDENTIAL-URBAN ZONING DISTRICT AND SHORELAND PROTECTION OVERLAY 250' DISTRICT. ZONING REGULATIONS ARE SUBJECT TO CHANGE. OWNER SHALL CONFIRM ALL ZONING REGULATIONS WITH THE TOWN OF KITTERY PRIOR ANY DEVELOPMENT.
- BASIS OF BEARING IS MAINE STATE PLANE (NAD83) WEST ZONE, US FOOT.
- ELEVATIONS AND TOPOGRAPHY SHOWN HEREON CORRESPOND TO NAVD88.
- THE BOUNDARY SHOWN HEREON IS BASED ON REFERENCE PLAN 1.
- THE RIPARIAN LIMITS SHOWN HEREON WERE CALCULATED USING THE COLONIAL METHOD.
- ABUTTER LINES SHOWN HEREON SHALL BE CONSIDERED APPROXIMATE AND ARE FOR REFERENCE PURPOSES ONLY. ABUTTER LINES SHALL NOT BE RELIED UPON AS BOUNDARY INFORMATION.
- THE 2018 HIGHEST ANNUAL TIDE (H.A.T.) ELEVATION PUBLISHED BY MAINE DEP FOR TIDAL STATION 8423898 FORT POINT IS ELEV. = 6.4' (NAVD88). THE H.A.T. ELEVATION IS USED TO DELINEATE THE UPLAND EDGE OF THE COASTAL RESOURCE FOR REGULATORY PURPOSES UNDER THE MANDATORY SHORELAND ZONING ACT.
- 0. TIDAL ELEVATIONS: THE FOLLOWING TIDAL ELEVATIONS WERE WERE OBTAINED FROM DATA PUBLISHED BY N.O.A.A. FOR TIDE STATION 8423898, FORT POINT. ALL ELEVATIONS CORRESPOND TO NAVD88.

MEAN HIGHER-HIGH WATER	(MHHW)	4.39'
MEAN HIGH WATER	(MHW)	3.97'
MEAN LOW WATER	(MLW)	-4.66'
MEAN LOWER-LOW WATER	(MLLW)	-5.00'
LOWEST ASTRONOMICAL TIDE	E (LAT)	-7.14'

- 1. THE 100-YEAR FLOOD ELEVATION OF THE PISCATAQUA RIVER IS ELEVATION 11.0' (NGVD29) PER FEMA FIRM MAP 230171 0005D. THIS ELEVATION CONVERTED TO THE DATUM SHOWN HEREON IS 10.25' (NAVD88).
- 12. UTILITY LOCATIONS SHOWN ON THESE PLANS ARE APPROXIMATE AND MAY NOT BE ENTIRELY ACCURATE OR COMPLETE.
- 13. THE PROPOSED DEVELOPMENT SHOWN HEREON IS SUBJECT TO REVIEW AND APPROVAL BY THE TOWN OF KITTERY, MAINE DEP AND U.S. ARMY CORPS OF ENGINEERS. OWNER/CONTRACTOR SHALL OBTAIN ALL PERMITS NECESSARY PRIOR TO ANY CONSTRUCTION AND IS RESPONSIBLE FOR COMPLYING WITH ALL CONDITIONS OF SAID PERMITS.
- 4. REFLECTOR SHALL BE NO LESS THAN 3 INCH DIAMETER AND SHALL BE INSTALLED AS FOLLOWS: • PIER: EVERY 20 FEET FROM END OF PIER, BOTH SIDES
- FLOATS: WITHIN 12 INCHES OF EACH CORNER REFERENCE PLANS:
- "TOPOGRAPHIC SITE PLAN" PREPARED BY EASTERLY SURVEYING, INC. DATED JUNE 22, 2005 AND RECORDED IN THE YORK COUNTY REGISTRY OF DEEDS PLAN BOOK 17735 PAGE 0077.





DATE:

SCALE:

SHEET:

SEPT.11, 2023

1" = 10'

1 OF 2





November 13, 2023

Mr. Maxim Zakian Kittery Town Planner 200 Rogers Road Kittery, Maine 03904



Shoreland Application: Proposed Shoreline Stabilization 15 Bowen Road, Kittery ME 03904 (Tax Map 17 Lot 4)- Reference No. 23-114

Dear Mr. Zakian:

Re:

Tidewater Engineering & Surveying, Inc. is pleased to submit the enclosed Shoreland Application on behalf of Eric Dyer. The applicant is seeking to stabilize approximately 86 linear feet of existing eroding shoreline along their property at 15 Bowen Road, Kittery ME 03904 (Tax Map 17 Lot 4).

A Natural Resources Protection Act permit application was submitted to the Maine Department of Environmental Protection and the U.S. Army Corps of Engineers for review on October 6, 2023 and is currently being reviewed. We will submit their determinations to the Town once received.

We respectfully request that the review by the Town occur concurrently with Maine DEP and U.S. Army Corps of Engineers review to expedite the permitting process. Please note, a separate application for the pier replacement has been submitted to the Port Authority.

Thank you for considering this application. Should you have any questions while reviewing the enclosed documents, please do not hesitate to contact me.

Sincerely,

~ Milan

Ryan M. McCarthy, P.E., P.L.S. President Tidewater Engineering & Surveying, Inc. (207) 439-2222 ryan@tidewatercivil.com

Enclosures



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AGENT LETTER OF AUTHORIZATION

September 1, 2023 Letter of Agent Authorization Re: Proposed Shoreline Stabilization, Pier & Gangway Replacement, and Float Extension 15 Bowen Road, Kittery, ME 03904 Reference Job No. 23-114 To Whom It May Concern: This letter is to inform the Town of Kittery, the Maine Department of Environmental Protection, and the U.S. Army Corps of Engineers that Tidewater Engineering & Surveying, Inc. and Riverside & Pickering Marine Contractors, Inc. are hereby authorized to represent us as our agents in permitting a proposed shoreline stabilization, pier and gangway replacement, and float extension within the previously developed 100' Tidal Buffer Zone and jurisdictional wetlands on our property. Said property is located at 15 Bowen Road in Kittery, Maine. Please contact me if there is any question regarding this authorization. Sincerely, Eric Dyer 15 Bowen Road Kittery, ME 03904



Property Deed

INDERSON, REGISTER OF DEEDS Bk 17735 PG 77 Inst # 2018022310 Oralizo118 11:38:17 AM Pages 2 YORK CO P Return to: Keric W. Dyer and Jane S. Dyer 54 Kingswood Road Westwood, MA 02090 WARRANTY DEED KNOW ALL MEN BY THESE PRESENTS: That Donna Lorange Ruddy, Trustee of the Donna Lorange Ruddy Revocable Trust and Mark Sutherland Ruddy, Trustee of the Mark Sutherland Ruddy Revocable Trust, both of PO Box 513, Portsmouth, NH 03802, for consideration paid grant to Eric W. Dyer and Jane S. Dyer, A Married Couple, of 54 Maine R.E. Transfer Tax Paid Kingswood Road, Westwood, MA 02090, as joint tenants with rights of survivorship, with WARRANTY COVENANTS: A certain lot or parcel of land, together with the buildings and improvements thereon, situated in Kittery, County of York and State of Maine, being formerly known as the Fernald Homestead, bounded and described as follows: Southeasterly by the waters of Spruce Creek and the Piscataqua River; Southwesterly by the old road leading to the former landing of the Kittery Point Ferry; Northwesterly by Bowen Avenue, sometimes known as Bowen Road; and Northeasterly by land formerly of Florence Cleaves and now of Andrews. Said premises being conveyed together with the benefit of the rights and easements granted by the Town of Kittery in the Municipal Easement Deed recorded in the York County Registry of Deeds at Book 15150, Page 180. Subject to the following: 1. Subject to the Sewer Easement Deed recorded with said Registry at Book 5593, Page 283. Subject to the Town Building Code notice recorded in said Registry at Book 9755, Page 288. 2. Subject to the Municipal Easement Deed recorded with said Registry at Book 15150, Page 3. 180. 4. Rights of upper and lower riparian owners in and to the waters of the Piscataqua River and the natural flow thereof. Meaning and intending to describe and convey the same premises conveyed to Donna Lorange Ruddy, Trustee of the Donna Lorange Ruddy Revocable Trust and Mark Sutherland Ruddy, Trustee of the Mark Sutherland Ruddy Revocable Trust, by virtue of a Deed from Donna Lorange Ruddy, Trustee of the Donna Lorange Ruddy Revocable Trust, dated November 7, 2016, and recorded in the York County Registry of Deeds in Book 17360, Page 278. RE: 2018-6759 Page 1 of 2



The undersigned are the Trustees individually under The Donna Lorange Ruddy Revocable Trust, created under a certain Declaration of Trust dated May 27, 1999 and The Mark Sutherland Ruddy Revocable Trust, created under a certain Declaration of Trust dated May 27, 1999, and thereto have full and absolute power in said Trust Agreements to convey any interest in real estate and improvements thereon, and pledge said property as security, held in said Trusts and no purchaser or third party shall be bound to inquire whether the Trustees have said power or is properly exercising said power or to see to the application of any Trusts asset paid to the Trustees as a conveyance thereof.

Executed this 15th day of June 2018.

Jonna Lorance Ruddy trustie Donna Lorange Ruddy, Mustee of the Donna Lorange Ruddy Revocable Trust

<u>Mark Sutherland Ruddy</u>, Trustee of the Mark Sutherland Ruddy, Trustee of the Mark

State of New Hampshire County of Rockingham

Then personally appeared before me on this 15th day of June 2018, the said Donna Lorange Ruddy, Trustee of the Donna Lorange Ruddy Revocable Trust and Mark Sutherland Ruddy, Trustee of the Mark Sutherland Ruddy Revocable Trust and acknowledged the foregoing to be their voluntary act and deed.

ىر 10 > Notary Public/Justice of the Peace Commission expiration:



RE: 2018-6759

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ATTACHMENT #1- PROJECT DESCRIPTION:

A. Introduction/Purpose:

Major weather events have accelerated the erosion process along the shoreline of the property exposing root systems and washing away soil. If the shoreline along the property is left in its current state, the slope will continue to deteriorate putting the vegetation and uplands at risk, therefore the owner is seeking to stabilize the shoreline to help prevent future erosion and protect their property.

B. Project Summary:

The owners of the property have witnessed their shoreline erode and degrade over time putting the existing vegetation at risk and exposing root systems. To protect the embankments and uplands along Spruce Creek, approximately 86 linear feet of shoreline will be reconstructed with riprap and vegetative stabilization measures. The riprap will consist of 24" to 36" sized rocks built up at a 1:1 slope from the toe, up to an elevation of 14 feet before transitioning to a vegetated slope. All riprap will be supported by a crushed stone base located 2' below existing grade and underlain with a geo-textile fabric. The vegetative slope will be stabilized with native plants, promoting healthy growth along the shoreline, supporting existing root systems, and preventing further upland soil from eroding into the coastal habitat. The proposed impact below the HAT is approximately 446 sf. See attached plans for additional details.

C. Historical Knowledge:

The property was purchased by the applicant in 2018. The previous owners installed the existing pier, gangway, and float in 1995.

D. Impact Calculations:

The total permanent impacts below the H.A.T. is estimated as follows...

Total area of rip-rap impact = 446 sf +/- (Below HAT)

Disturbance area of the adjacent uplands are as follows...

Area of rip-rap impact = 853 sf +/-Graded vegetative slope = 1758 sf +/-Total Disturbance Area = 2611 sf +/- (Uplands: Above HAT)



E. Location-Based Impact Mitigation:

After thoroughly evaluating the shoreline and intertidal zones along this property, we are recommending the shoreline stabilization location shown on the enclosed plans for the following reasons:

- 1) Reestablishes and re-enforces the existing shape of the edge of shoreline.
- 2) The elevation of the top of the proposed riprap slope will be above the current 100year flood elevation designated by FEMA to improve protection from erosion during major storm events and wave action.
- 3) The uplands adjacent to the shoreline are developed as shrubs and lawn area and will not require the unnecessary removal of any trees for construction access.



ATTACHMENT #2- ALTERNATIVES ANALYSIS:

- 1) Vertical Bulkhead: This alternative would provide structural retaining walls between the coastal resource and the uplands. This alternative was not pursued for following reasons:
 - a. Bulkheads reflect wave energy, which can cause unintended impacts to nearby shorelines.
 - b. A timber bulkhead would be built using a pressure treated wood which is treated with chemicals that are harmful to the environment. Riprap stabilization in a marine environment typically has a longer lifespan than timber. The shorter lifespan would increase the impact to the resource by shortening the time span between replacements of the structure.
- 2) Do Nothing: This alternative would be for the applicant to continue to allow the shoreline on their property to erode into the coastal resource, further undermining existing root systems and vegetation. This option was not pursued for the following reasons:
 - a. Storm events and tide fluctuations will continue to erode the shoreline.
 - b. Existing vegetation and root systems will continue to be undermined, exposing soils, and causing additional vegetation and upland soils to fall into the intertidal zone.
 - c. The shoreline will become increasingly unstable, posing a hazard to the owners and the uplands on the property.
- 3) Vegetative Stabilization: This alternative would attempt to utilize solely vegetative measures to stabilize the slope. This alternative was not pursued for the following reasons:
 - a. The existing slope is too steep for vegetation to be used for stabilization.
 - b. The underlying soils will continue to erode and fail under the root systems.
 - c. Vegetative measures are not appropriate for this location due to its direct exposure to wind, wave, and ocean swells. Vegetative measures would not be able to withstand this exposure level.



ATTACHMENT #3- LOCATION MAPS:

A. USGS Project Location Map





15 Bowen Road CAI Technologies Kittery, ME 1 inch = 150 Feet August 22, 2023 www.cai-tech.com Subject Parcel: 15 Bowen Road

B. Town GIS Project Location Map



ATTACHMENT #4- PROJECT SITE PHOTOS:

Photo 1: View showing slope failure, exposed soils, eroding vegetation, and exposed root systems (01/18/2023)





Photo 2: View showing exposed soils and root systems, shifted riprap, and a broken pipe (07/13/2023)





ATTACHMENT #5- SHORELINE STABILIZATION PLAN:

TIDEWATER ENGINEERING & SURVEYING, INC. | 1021 GOODWIN ROAD, UNIT #1, ELIOT, ME 03903



ATTACHMENT #6- CONSTRUCTION PLAN:

Approximately 86 linear feet of riprap armoring will be installed along the existing embankment to mitigate further erosion. Prior to any soil disturbing activities, the Contractor shall install all erosion and sediment control measures which includes a filter sock barrier just seaward of the toe of the slope. The Contractor will then proceed with excavating the existing rubble/rocks to dig out a keyway for the toe of the riprap. If ledge is encountered, the keyway shall be cut into the ledge as shown on the plans. The toe of the riprap will then be established using a base of 24"-36" stone that is 3-4 feet wide, supported by an 8" gravel base. When the excavator digs out a keyway toe for the riprap, a non-woven, geo-textile filter fabric will be installed between the exposed soil and the riprap to help prevent erosion of fine particulates from the upland and promote healthy drainage. Once the toe is established, riprap of various sizes will be built up at a 1:1 slope up to an approximate elevation of 14.0'. From there, the slope will transition to a maximum 3:1 graded vegetative slope. After the work is completed and the site is established, the filter sock shall be removed in its entirety. The total time of the site work will be completed from the uplands in approximately three weeks.



ATTACHMENT #7- EROSION CONTROL PLAN:

Throughout the entire construction period for the slope stabilization a silt sock will be placed seaward of the proposed riprap toe location. This will be in place to reduce sedimentation of the resource during high tide when bare soil may be exposed to the river. After completion of the project the silt sock will be removed completely.



ATTACHMENT #8- SITE CONDITION REPORT:

The site plans enclosed as Attachment 5 depicts one-foot contours, existing resource boundaries, the area of the resource to be altered, activity location and dimensions and wetland/waterbody classification. The slope to be stabilized and the proposed docking system to be replaced is located within both upland areas and the intertidal zone.

As this project is associated with a coastal resource subject to tidal action, the upland edge of the resource was delineated by the highest annual tide (HAT) elevation published by Maine DEP for 2018. The HAT for Kittery Point is elevation 6.4' referenced to the North American Vertical Datum of 1988 (NAVD88). This method for delineating the coastal resource is widely accepted by the State of Maine pursuant to the Mandatory Shoreland Zoning Act.

The adjacent uplands are developed with landscaped areas and residential structures. Existing upland vegetation will be impacted by the proposed slope stabilization, however, additional vegetation will be planted to reestablish the disturbed areas to the pre-construction conditions.

The permanent section of the proposed docking system is located within both upland areas and the intertidal zone. The fixed pier is supported on timber pilings and extends approximately 52 feet beyond the highest annual tide line. As depicted in the site plan, the replacement pier does not extend beyond mean low water.

The surface of the resource and intertidal zone within the project limits is comprised primarily of ledge and cobble stones. Large boulders are scattered close to the shoreline embankment and rest on a mixed cobble and gravel surfaces. Extending toward Spruce Creek, large rock becomes less prevalent and a cobble/gravel surface predominates to the low waterline. Beyond low water is primarily mud flat. For more detailed information, please refer to the enclosed *Appendix B: MDEP Coastal Wetland Characterization: Intertidal and Shallow Subtidal Field Survey Checklist.*

A survey conducted by Maine DEP in 2021 discovered the extents of an eelgrass bed. Tidewater Engineering performed a field verification eelgrass survey on 07/13/2023 and discovered no evidence of eelgrass within the survey limits or around the docking structure and mooring system. The survey was completed by snorkeling methods.



A profile view of the proposed docking system is provided within Attachment 5. This view provides a clear representation of the proposed docking system with respect to the substrate and the tidal elevations experienced at this site, including LAT, MLW, MHW, HAT and the 100-year flood elevation. The 100-year flood elevation published by FEMA is elevation 11' (NGVD29) which corresponds to elevation 10.25' (NAVD88), the elevation datum depicted on the plans. As depicted in the profile view, the bottom surface of the lowest horizontal member of the pier is located approximately 8 inches above the 100-year flood elevation.



ATTACHMENT #9- ABUTTERS:

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50 foot Abutters List Report Kittery, ME August 23, 2023

Subject Property:

Parcel Number: 17-4 CAMA Number: 17-4 Property Address: 15 BOWEN ROAD

Mailing Address: DYER, ERIC W. DYER, ERIC W. 54 KINGSWOOD ROAD WESTWOOD, MA 02090

Abutters:

Parcel Number: CAMA Number: Property Address:	17-3 17-3 9 BOWEN ROAD	Mailing Address:	REINHOLD, LEE REINHOLD, LEE PO BOX 752 WEST NEWBURY, MA 01985
Parcel Number: CAMA Number: Property Address:	17-44 17-44 8 BOWEN ROAD	Mailing Address:	CLAINOS,TR, CYNTHIA K. CLAINOS,TR, CYNTHIA K. PO BOX 219 KITTERY, ME 03904
Parcel Number: CAMA Number: Property Address:	17-5 17-5 BOWEN ROAD	Mailing Address:	INHABITANTS OF KITTERY INHABITANTS OF KITTERY 200 ROGERS ROAD KITTERY, ME 03904-1428
Parcel Number: CAMA Number: Property Address:	17-51 17-51 27 OLD FERRY LANE	Mailing Address:	HALL, REBECCA HALL, REBECCA 140 STATE ROAD KITTERY, ME 03904
Parcel Number: CAMA Number: Property Address:	17-6 17-6 23 BOWEN ROAD	Mailing Address:	MCKEON, PAUL J JR MCKEON, PAUL J JR 233 VAUGHAN STREET UNIT 402 PORTSMOUTH, NH 03801



8/23/2023

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Page 1 of 1

Abutters List Report - Kittery, ME

ryan@tidewatercivil.com

From: Sent: To: Cc: Subject: Kalinich, Jeffrey C < Jeffrey.C.Kalinich@maine.gov> Friday, December 1, 2023 9:51 AM ryan; Clark, Colin A Nicole Sanborn RE: Shoreline Stabilization and Devegetated Coverage

Ryan,

You are correct that the situation you describe is not addressed directly in Chapter 1000 and raises serious questions regarding the implementation of the rule. Typically the lower bank portion of a stabilization project is unvegetated when the application is submitted. There may be a tree or two or some shrubs hanging on but it is just a matter of time before they fall in. For most projects I review the placement of riprap is limited to these areas. For some projects riprap placement is proposed on lower banks where vegetation is still substantially present because it has not gotten to the point where it has all been eroded away yet. As long as the placement of riprap is necessary for bank stabilization, the department's policy is to not count the non-vegetated surface of the riprap for the stabilization project. However, it is part of the non-vegetated surface of the lot for other projects. For example, if the lot owners want to expand a structure in a vegetated area they must include the non-vegetated surface of the riprap above the HAT in the total for the lot.

I agree adding this policy to Chapter 1000 should be considered when it is opened up for review. I'm not aware of any current plans to open up Chapter 1000 for review. My understanding is when that occurs stakeholders are part of the review.

Thanks for reaching out. Let me know if you have any questions.

Jeff

Jeffrey C. Kalinich Assistant Shoreland Zoning Coordinator Maine Department of Environmental Protection 312 Canco Road Portland, Maine 04103 Ph. (207) 615-7044 Fax. (207) 822-6303 www.Maine.gov/dep

From: ryan@tidewatercivil.com <ryan@tidewatercivil.com>
Sent: Wednesday, November 29, 2023 1:06 PM
To: Kalinich, Jeffrey C <Jeffrey.C.Kalinich@maine.gov>; Clark, Colin A <Colin.A.Clark@maine.gov>
Cc: Nicole Sanborn <nicole@tidewatercivil.com>
Subject: Shoreline Stabilization and Devegetated Coverage

EXTERNAL: This email originated from outside of the State of Maine Mail System. Do not click links or open attachments unless you recognize the sender and know the content is safe. Jeff & Colin,

Hope you are both doing well. This past year Tidewater has been designing more coastal shoreline stabilization projects than ever, mostly due to last year's December 2022 storm. Most of these stabilization projects result in stabilizing what

we call the "lower bank" (areas exposed to flood and wave action) with a 1:1 riprap slope and then stabilizing the "upper bank" (areas above flood and wave action) with a 3:1 vegetated slope. This inevitably results in a portion of the riprapped lower bank being located above the HAT line. The question that we've debated here at Tidewater is whether or not the portion of the riprap above the HAT line needs to be included in the 20% non-vegetated coverage on the parcel as a whole. In situations where the existing non-vegetated coverage is far enough below the 20% limit, this hasn't been an issue so it became a moot point. However we have a couple upcoming projects where the existing nonvegetated coverage is non-conforming and over 20% which means they would need to remove existing coverage somewhere on the property to offset the proposed new coverage due to the riprap. In the simplest form, this may be removing some walkways or some excess driveway area, however in the extreme scenario, this could require someone to choose between removing a portion of their house in order to be able to not increase non-conformance w.r.t. nonvegetated coverage or not stabilizing their shoreline. I assume this must have come up in the past so I scoured Chapter 1000 to try to find an exemption in shoreland regulations but couldn't find one. The only thing I found was 15.C.(10) pertaining to vegetation removal in excess of Section 15(P) which doesn't apply to non-vegetated coverage and the exemption for naturally occurring ledge and rock outcropping in 15.B.(4) which doesn't seem to apply to riprap placed for stabilization purposes either.

What is the Department's position or recommendation on this? Does the newly placed riprap placed for stabilization purposes need to be included in non-vegetated coverage which in non-conforming situations, require the removal of other structures on the property to offset the added coverage? Are there any exemptions for situations these situations? It's hard for us as consultants to tell someone that they need to remove existing structures from their property in order for them to be able to improve coastal resiliency of their shoreline. Please let me know your thoughts and if there's any future consideration to address these situations clearly in the regs.

As always, we appreciate your time and input.

Ryan

Ryan M. McCarthy, P.E., P.L.S. *President*



1021 Goodwin Rd Unit 1 | Eliot, ME 03903 www.tidewatercivil.com | (207) 439-2222