



**AMBIT ENGINEERING, INC.** CIVIL ENGINEERS AND LAND SURVEYORS  
801 Islington Street, Suite 31, Portsmouth, NH 03801 Phone (603) 430-9282 Fax 436-2315

14 January 2019

Paul Rasmussen, Chair  
Town of Durham Planning Board  
8 Newmarket Road  
Durham, New Hampshire 03824

**Re: Conditional Use Permit Application**  
**Tax Map 12, 1-8**  
**32 Cedar Point Road**  
**Durham, New Hampshire**

Dear Paul:

This letter transmits a Town of Durham Conditional Use Permit Application request for impacts to the Wetland Conservation Overlay District and the Shoreland Protection Overlay District for shoreline stabilization and construction of a stone/granite patio which will provide foot access to the previously approved tidal docking structure.

The lot currently contains an existing single family residence with a detached garage, a storage shed, decking, and a gravel driveway/parking area. However, these structures will be demolished and a new single family residential structure, driveway, and associated septic system will be constructed, per previous Conditional Use Permit approval granted by the Durham Planning Board on May 9, 2018. Prior to construction of the proposed home, the proposed shoreline stabilization project will be completed as the site will be clear of obstacles and allow for equipment access and material storage.

The stabilization of the existing slope consists of placement of rip rap toe protection, followed by a section of Pyrawall (see Pyrawall Detail Sheet and Pyrawall Product Data), followed by a section of Armormax (see Armormax Detail Sheet and Armormax Product Data).

The rip rap toe protection is needed to provide protection from tidal action and wave energy, and also provides a structural foundation for the slope above it. The rip rap toe will be constructed of 2-3 ton stones, a base course of 6"-18" stones located directly landward, and a geotextile fabric which allows water to pass through, yet keeps the fine grained material in place, critical to long term stability. The rip rap toe is essential to a stabilization project such as this, as it serves as the foundation that the slope is built upon (see rip rap toe protection Detail on Sheet C3).

The Pyrawall product is an engineered wrap-face vegetated solution that consists of two components, the Pyramat turf reinforcement mat, and a fiber composite internal bracing. The two components when used together create a reinforced soil wall or slope system that provides permanent erosion protection. The Pyrawall will be vegetated by seeding within the wall lift and hydroseeding on the outside of the product. Live stakes will also be planted in the wall lift composed of native shrub species (see planting notes on Revetment Permit Plan-Sheet C2). The Pyrawall is held in place via backfilling and engineered earth anchors designed specifically for the product.

The Armormax product is a flexible erosion control application designed for steep slope stabilization, in this case approximately 75%-90% slope, yet allowing for vegetation to be planted further improving the functionality. The Armormax is a high performance turf reinforcement mat that will be installed along a portion of the slope, secured by engineered earth anchors. The Armormax product will be vegetated by seeding the soil with 60% of the total seed mix underneath the mat, and then spreading the remaining 40% of the seed mix with a thin layer of soil on top of the mat. The soil placed on top of the Armormax will then be covered with an erosion control blanket (Landlok-see Slope Stability Installation Details), to prevent erosion until vegetation is established. Additionally, live stakes will also be planted within the Armormax mat composed of native shrub species (see planting notes on Revetment Permit Plan-Sheet C2).

It is our belief that construction of a rip rap toe, and utilization of the Pyrawall and Armormax products along the steep slope (approximately 75%-90% slope) demonstrates the need for an engineered solution to provide shoreline stabilization on the site, given the severe slope. It is also our belief that using traditional vegetated and/or biodegradable shoreline stabilization methods would not be applicable to this site as those methods would not provide the necessary structural stability on a 75%-90% slope. The proposed products provide structural stability which will hold the slope in place preventing slope failure, while also providing a vegetative component that will provide an increased erosional and stormwater quality improvement in regards to the adjacent tidal resource.

It is also our belief that this stabilization design represents the least impacting alternative, given site conditions and constraints, while allowing reasonable use of the property. It is our opinion that the proposed project is practical given the severe slope. The unstable bank cannot be cut back to a flatter slope as it would encroach into the fill extension for the previously approved septic leach field. Lastly, the design is practical as the horizontal distance between the bottom of the slope and the top of the slope is limited, the proposed design requires a structural rip rap toe, however the design does incorporate a vegetated stabilization solution above the rip rap toe, ensuring a stable slope, while accommodating seeding/planting which will provide added benefit in terms of water quality entering Little Bay.

The criterion for consideration of a Conditional Use Permit under Section 175-23 of the Town of Durham Zoning Ordinance is outlined below:

1. Site suitability: The site is suitable for the proposed use. This includes:

- a. Adequate vehicular and pedestrian access for the intended use.

***The proposed use does not require vehicular or pedestrian access.***

- b. The availability of adequate public services to serve the intended use including emergency services, pedestrian facilities, schools, and other municipal services.

***The proposed use does not require public services or other municipal services.***

- c. The absence of environmental constraints (floodplain, steep slope, etc).

***A steep slope located along the southern edge of the property where it meets Little Bay does exist, however; this proposal provides a method of shoreline stabilization for the slope reducing any potential impact of erosion and sedimentation in the future if the slope were to fail.***

- d. The availability of appropriate utilities to serve the intended use including water, sewage disposal, stormwater disposal, electricity and similar utilities.

***The proposed use does not require any utilities.***

2. External impacts:

***The proposed project will not have any impacts greater than the impacts of adjacent existing uses as the abutting parcels and other nearby parcels have similar structures. The proposed project will not increase traffic, noise, odors, vibrations, dust fumes, exterior lighting and glare.***

3. Character of the site development:

***The proposed stabilization project will occupy the existing steep slope located on the property and the project will maintain that slope post construction. The slope will be vegetated post construction and will be in character with the adjacent steep slopes on adjacent properties.***

4. Character of the buildings and structures:

***The proposed project does not include any buildings or other structures.***

5. Preservation of natural, cultural, historic, and scenic resources:

***The proposed project will not degrade any natural, cultural, historic and scenic resources on the site or on abutting properties.***

6. Impact on property values:

***The proposed project will not cause or contribute to a significant decline in property values of adjacent properties as the abutting properties and other nearby properties currently have similar features.***

7. Availability of Public Services & Facilities:

***The site is currently served by electric and communication services, on site septic and a well, however the proposed project will not require an increased demand on any municipal services.***

8. Fiscal Impacts:

***The proposed project will not have a negative fiscal impact on the Town of Durham.***

The Planning Board shall approve a Conditional Use Permit for a use in the SPO only if it finds, with the advice of the Conservation Commission, which all of the following standards have been met in addition to the general standards for conditional uses and any performance standards for the particular use as outlined in 175-72 as below.

1. There is no alternative location on the parcel that is outside of the SPO District that is feasible for the proposed use;

***The existing steep slope to be stabilized is entirely located within the SPO district and therefore there is no alternative location on the lot that is feasible.***

2. The amount of soil disturbance will be the minimum necessary for the construction and operation of the facilities as determined by the Planning Board;

***The proposal includes the stabilization of an existing steep slope that is essential for the use of the remaining property. The design of the slope stabilization will maintain a similar slope post construction. Construction of a rip rap toe and use of an engineered turf reinforcement mat is required to properly stabilize the slope to ensure stabilization of the slope in the future to the greatest extent practicable. We believe the proposed engineering design has been reduced to the minimum necessary to achieve construction goals.***

3. The location, design, construction and maintenance of the facilities will minimize any detrimental impact on the adjacent shoreland and waterbody as well downstream waterbodies, and mitigation activities will be undertaken to counterbalance and adverse impacts, and

***The proposal stabilizes a steep slope on the lot which is poorly vegetated and is providing little buffering value to the nearby wetland resource. We anticipate that the project will greatly improve the stormwater quality that leaves the site and enters the adjacent tidal wetland resource.***

4. Restoration activities will leave the site, as nearly possible in its pre-existing condition and grade at the time of application for the Conditional Use Permit.

***The proposed project will maintain a similar slope to what exists and also provide vegetative coverage using native species which will be an improvement to the site, adjacent properties, and improve the stormwater quality that leaves the site and enters the adjacent tidal wetland resource.***

Please contact me if you have any questions or concerns regarding this application.

Respectfully submitted,



Steven D. Riker, CWS  
NH Certified Wetland Scientist/Permitting Specialist  
Ambit Engineering, Inc.

17 August, 2017

**To Whom It May Concern**

**RE: New Hampshire Department of Environmental Services Application for residential site re-development for Manisha P. Heiderscheidt 2010 Revocable Trust, 32 Cedar Point Road, Durham, NH.**

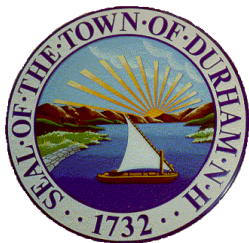
This letter is to inform the New Hampshire Department of Environmental Services and the Town of Durham, in accordance with State Law that Ambit Engineering is authorized to represent me as my agent in the approval process.

Please feel free to call me if there is any question regarding this authorization.

Sincerely,

A handwritten signature in black ink, appearing to read "Benedict G. & Manisha P. Heiderscheidt", with a long horizontal flourish extending to the right.

**Benedict G. & Manisha P. Heiderscheidt, Trustees**  
**Manisha P. Heiderscheidt 2010 Revocable Trust**  
21 Caverno Drive  
Lee, NH 03861  
603-988-8128



## PLANNING DEPARTMENT

### Town of Durham

8 Newmarket Road

Durham, NH 03824-2898

Phone (603) 868-8064

[www.ci.durham.nh.us](http://www.ci.durham.nh.us)

## **CONDITIONAL USE APPLICATION**

Date: January 14, 2019

### **Property information**

Property address/location: 32 Cedar Point Road

Tax map #: 12; lot #(s): 1-8; Zoning District: Residence Coastal/Shoreland Overlay

### **Property owner**

Name (include name of individual): Manisha P. Heiderscheidt 2010 Revocable Trust  
Manisha P. Heiderscheidt & Benedict G. Heiderscheidt, Trustees

Mailing address: 21 Caverno Drive, Lee, NH 03824

Telephone #: 603-988-8128 Email: bheiderscheidt@comcast.net

### **Engineer, Surveyor, or Other Professional**

Name (include name of individual): Steven D. Riker, CWS Ambit Engineering, Inc.

Mailing address: 200 Griffin Road, Unit 3, Portsmouth, NH 03801

Telephone #: 603-430-9282 Email address: sdr@ambitengineering.com

### **Proposed project**

What is the proposed project? The project proposes shoreline stabilization and re-vegetation of the shoreline. The project also proposes a stone/granite landing for the previously approved tidal docking structure.

Which provision in the zoning ordinance calls for this conditional use? Section 175-23 and  
Section 175-72.

Justification for granting the conditional use: Please see attached letter.

Have you completed the conditional use checklist? Yes

Have you addressed the eight conditional use criteria? Yes, please see attached letter.

(over)

## Other Information

Please note the following:

- Coordinate with Michael Behrendt, the Durham Town Planner, at 868-8064 or [mbehrendt@ci.durham.nh.us](mailto:mbehrendt@ci.durham.nh.us) about the process and any additional information that may be needed.
- Coordinate with the Karen Edwards, the Planning Department Administrative Assistant, at 868-8064 or [kedwards@ci.durham.nh.us](mailto:kedwards@ci.durham.nh.us) about preparing the list of abutters. All property owners within 300 feet of the site will be notified of the application and public hearing.
- Please be sure to attend all meetings of the Planning Board and the Conservation Commission, if the latter will be making a recommendation.
- The Planning Board may schedule a site walk after the first meeting.
- A public hearing will be held on the application. A sign must be placed on the property at least 10 days prior to the hearing.
- The applicant will need to address the eight general conditional use criteria. For conditional uses within the Wetland or Shoreland Overlay Districts additional criteria must be addressed by the applicant.
- For conditional uses within the Wetland or Shoreland Overlay Districts, the application will be presented to the Conservation Commission for a recommendation.
- See Article VII in the Durham Zoning Ordinance for additional information about conditional uses.

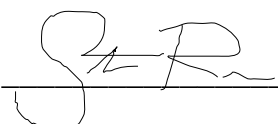
## Submission of application

This application must be signed by the property owner(s) *and/or* the agent.

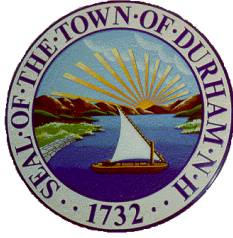
*I(we) attest to the best of my(our) knowledge that all of the information on this application form and in the accompanying application materials and documentation is true and accurate. As agent, I attest that I am duly authorized to act in this capacity.*

Signature of property owner: \_\_\_\_\_

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

Signature of agent:  \_\_\_\_\_ Agent-See Authorization

Date: 1/11/19



**TOWN OF DURHAM**  
8 NEWMARKET RD  
DURHAM, NH 03824-2898  
603/868-8064  
[www.ci.durham.nh.us](http://www.ci.durham.nh.us)

## CONDITIONAL USE PERMIT APPLICATION CHECKLIST

Date: January 14, 2019

Name of Applicant: Manisha P. Heiderscheidt 2010 Revocable Trust  
Manisha P. Heiderscheidt and Benedict G. Heiderscheidt, Trustees

Location of Property: 32 Cedar Point Road, Durham, NH.

Tax Map and Lot Number: Tax Map 12, Lot 1-8

Name of Plan: Plan set attached. Revetment Permit Plan-Sheet C2.

- ☒ a Conditional Use Permit application
- ☒ a letter of intent detailing the proposal
- ☒ a letter of authorization (if applicable)
- ☒ all applicable fees
- ☒ a list of the names and addresses of all the abutters within 300' feet of the subject property, as shown in town records not more than five (5) days before the day of filing; and a listing of all holders of conservation, preservation, or agricultural preservation restrictions on the subject property
- ☒ Copies of the current deed, purchase and sale agreement, and copies of all easements, deed restrictions, rights-of-ways, or other encumbrances currently affecting the property.
- ☒ five copies, 24" x 36" and ten additional copies at 11" x 17" of the plat.

The Plan shall show (only if applicant is not submitting a Site Plan Review or Subdivision Application):

- ☒ Title Block with title, owner's name and address, date, scale and name, address and seal of the preparer of the plan
- ☒ names of owners of abutting properties
- ☒ North Arrow and bar scale
- ☒ locus plan sat a minimum scale of one (1) inch equals one thousand (1,000) feet showing required information
- ☒ Surveyed property lines of the parcel showing their bearings;
- ☒ Location and layout of existing and proposed structures and buildings;



- x   Existing and proposed contours at two (2) foot intervals for the entire site. Where a change in grade is proposed, existing contours shall be dotted lines and finished elevations solid;
  - x   Area of entire parcel in acres and square feet;
  - x   Zoning and special district boundaries;
  - x   Deed reference and tax map number;
  - x   Location width, curbing and paving of access ways, egress ways and streets within the site;
  - N/A  Location and layout of all on-site parking and loading facilities;
  - x   Location and size of all municipal and non-municipal utilities and appurtenances including: water, sewer, electric, telephone, gas lines and fire alarm connections, indicating whether overhead or underground, and the location of wells and septic systems;
  - N/A  Type and location of solid waste disposal facilities;
  - N/A  Location, elevation and layout of catch basin and other surface drainage features;
  - x   Location of all physical/natural features including: water bodies, watercourses, wetlands, vegetation/foilage lines, soil types, railroads, rock outcroppings and stone walls;
  - N/A  Dimensions and area of all property to be dedicated for public use of common ownership;
  - x   Location of 100 year flood hazard boundaries;
  - x   Date and permit numbers of all required state and federal permits.
  - x   Location of all buildings, wells and leach fields within one hundred and fifty (150) feet of the parcel;
  - x   Dimensions, area and minimum setback requirements on all existing and proposed lots;
  - x   Proposed landscaping plan including size and type of plant material;
  - N/A  Pedestrian walks providing circulation through the site;
  - N/A  Location and size of proposed and existing signs, walls and fences;
  - N/A  Location and type of lighting for outdoor activities; and
  - N/A  Location, widths and purposes of any easements or rights-of-way.
  - x   Total on-site square footage of impervious surfaces.
- x   Letter to Planning Board detailing how application meets the criteria for approval set out in Section 175-23(C)
- x   Applicant has met with neighbors to discuss project and concerns.

**Written waivers from these requirements may be requested with specific justification to the requirements of Section 12.02 of the Site Plan Review Regulations for the Town of Durham.**

**The applicant is reminded that they need to place a sign on the property measuring 2'x3' at least ten (10) calendar days prior to the time of the public hearing by the Planning Board. The sign shall remain on the property until the conclusion of the public hearing. The sign shall be visible from the most heavily traveled street right-of-way adjacent to the property. The sign shall state the date of the public hearing, the time, the location and the action to be considered.**

## **ABUTTER'S LIST**

**JN 2812**

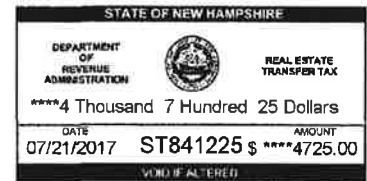
**Client: Manisha P. Heiderscheidt 2010 Revocable Trust**

**Project Address: 32 Cedar Point Road, Durham, NH**

<b>MAP</b>	<b>LOT</b>	<b>NAME(S)</b>	<b>PO BOX</b>	<b>STREET ADDRESS</b>	<b>CITY/STATE/ZIP</b>
12	1-15	Michael J. Cleary Revocable Trust Michael J. Cleary, Trustee		26 Cedar Point Road	Durham, NH 03824
12	1-14	Brenda C. Nelson Trust		27 Cedar Point Road	Durham, NH 03824
12	1-13	Christopher D. Dennen & Sarah Dennen-Larson		29 Cedar Point Road	Durham, NH 03824
12	1-12	Donald M. & Karen Roy Jr.		28 Cedar Point Road	Durham, NH 03824
12	1-11	Sullivan Family Revocable Trust		42 Cedar Point Road	Durham, NH 03824
12	1-10	Thomas J. Fleming & Deborah A. Masse		30 Cedar Point Road	Durham, NH 03824
12	1-9	Gerard Family Revocable Trust of 2018		33 Cedar Point Road	Durham, NH 03824
12	1-7	Robert M. Walker		35 Cedar Point Road	Durham, NH 03824
12	1-6	Craig S. Harris		34 Cedar Point Road	Durham, NH 03824
12	1-5	Joanne Tremaine		37 Cedar Point Road	Durham, NH 03824
12	1-4	Luis M. Chaves		36 Cedar Point Road	Durham, NH 03824
12	1-3	Ingo Roemer Revocable Trust		40 Cedar Point Road	Durham, NH 03824
12	1-2	Margaret Shea		11 Gibson Road	Hillsborough, NH 03244
12	1-1	Ingo Roemer Revocable Trust		40 Cedar Point Road	Durham, NH 03824
12	1-0	State of NH			
12	2-14	Eleanor J. Barber & Jane A. Murphy		41 Cedar Point Road	Durham, NH 03824



RETURN TO:  
Trombley Kfoury, P.A.  
166 South River Road, Suite 250  
Bedford, NH 03110



### **WARRANTY DEED**

**KNOW ALL MEN BY THESE PRESENTS**, That we, Timothy Morgan and Lisa A. Desmarais, husband and wife, of 14 Nicole Street, Rochester, County of Strafford, State of New Hampshire 03867,

for consideration paid, grant to Manisha P. Heiderscheidt and Benedict G. Heiderscheidt, Trustees of the Manisha P. Heiderscheidt 2010 Revocable Trust, of 21 Caverno Drive, Lee, County of Strafford, State of New Hampshire 03861,

with Warranty Covenants:

A certain parcel of land, with the buildings and furnishings thereon situated in the Town of Durham, County of Strafford and State of New Hampshire, on the Northerly side of the Piscataqua River, bounded and described as follows:

BEGINNING at an iron pipe driven into the ground at the Northwestern corner of the parcel herein conveyed at the Northeasterly corner of land of Louis and Ruth E. Crafts; thence running Southerly along said Crafts land one hundred fifteen (115) feet, more or less, to an iron pipe at the high water mark at the Piscataqua River; thence running in an Easterly direction along said high water mark seventy-five (75) feet, more or less, to land of William L. Wilby; thence running Northerly along said Wilby land one hundred fifteen (115) feet, more or less, to the Southerly side of a right-of-way hereinafter referred to; thence running along said right-of-way in a Westerly direction seventy-five (75) feet, more or less, to the point of beginning.

The Deed also conveys to the said Grantees an easement in a proposed right-of-way which will extend along the Northerly side of the premises herein conveyed from the Old Piscataqua Bridge Road to the road known as U.S. Route No. 4, said right-of-way being eighteen (18) feet wide and is to be used in common by the Grantees with other owners of property in the immediate vicinity of the property herein conveyed.

Meaning and intending to describe and convey the same premises conveyed to Timothy Morgan and Lisa A. Desmarais by Quitclaim Deed of Timothy Morgan, which Deed is dated January 22, 2016 and recorded at the Strafford County Registry of Deeds on January 26, 2016 at Book 4354, Page 0584.

THIS IS NOT HOMESTEAD PROPERTY OF THE GRANTORS.

Witness our hands this 21<sup>st</sup> day of July, 2017.

Witness

Timothy Morgan

Witness

Lisa A. Desmarais

STATE OF NEW HAMPSHIRE  
COUNTY OF STRAFFORD

July 21, 2017

Personally appeared Timothy Morgan and Lisa A. Desmarais known to me, or satisfactorily proven to be the persons whose names are subscribed to the within instrument and acknowledged that they executed the same for the purposes therein contained.

Before me,

Notary Public/Justice of the Peace

My Commission Expires:

**J. KIRK TROMBLEY, Notary Public**  
My Commission Expires June 5, 2018

