



STATE OF DELAWARE  
DEPARTMENT OF NATURAL RESOURCES AND  
ENVIRONMENTAL CONTROL

DIVISION OF FISH & WILDLIFE  
RICHARDSON & ROBBINS BUILDING  
89 KINGS HIGHWAY  
DOVER, DELAWARE 19901

DIRECTOR'S  
OFFICE

PHONE  
(302) 739-9910

September 5, 2024

Matthew Jones  
Program Manager II  
DNREC Watershed Stewardship

Matt,

I authorize the minimal encroachment for bank stabilization on to state property as depicted in the subaqueous lands application plans for the Carolyn Calio project at 100 Mill Pond Dr. Unit 1 on Records Pond. Sites visits by myself and several staff members from both the Wetlands and Subaqueous Lands Section and Division of Fish and Wildlife has determined a shoreline erosion problem does exist at the site which merits some form of bank stabilization. The proposed use of vegetation utilizing a bio-log sill (as depicted in the subaqueous lands application plans) appears to be the most ecologically conducive method to address the problem while stabilizing erosion, reducing sediment and associated turbidity in the pond water column and enhancing the shoreline with native vegetative species for bio-diversity.

If you have questions or need additional information please do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick J. Emory".

Patrick J. Emory  
Director  
DNREC Division of Fish and Wildlife

# **WETLANDS AND SUBAQUEOUS LANDS SECTION PERMIT APPLICATION FORM**

**For Subaqueous Lands, Wetlands, Marina and  
401 Water Quality Certification Projects**

**State of Delaware  
Department of Natural Resources and Environmental Control  
Division of Water**

**Wetlands and Subaqueous Lands Section**



**APPLICATION FOR APPROVAL OF  
SUBAQUEOUS LANDS, WETLANDS, MARINA  
AND WATER QUALITY CERTIFICATION PROJECTS**

**PLEASE READ THE FOLLOWING INSTRUCTIONS CAREFULLY****Application Instructions:**

1. Complete each section of this basic application and appropriate appendices as thoroughly and accurately as possible. Incomplete or inaccurate applications will be returned.
2. All applications must be accompanied by a scaled plan view and cross-section view plans that show the location and design details for the proposed project. Full construction plans must be submitted for major projects.
3. All applications must have an original signature page and proof of ownership or permitted land use agreement.
4. Submit an original and two (2) additional copies of the application (total of 3) with the appropriate application fee and public notice fee\* (prepared in separate checks) to:

**Department of Natural Resources and Environmental Control  
Wetlands and Subaqueous Lands Section  
89 Kings Highway  
Dover, Delaware 19901**

\*Application and public notice fees are non-refundable regardless of the Permit decision or application status.

5. No construction may begin at the project site before written approval has been received from this office.

**Helpful Information:**

1. Tax Parcel Information:
 

New Castle County	(302) 395-5400
Kent County	(302) 736-2010
Sussex County	(302) 855-7878
2. Recorder of Deeds:
 

New Castle County	(302) 571-7550
Kent County	(302) 744-2314
Sussex County	(302) 855-7785
3. A separate application and/or approval may be required through the Army Corps of Engineers. Applicants are strongly encouraged to contact the Corps for a determination of their permitting requirements. For more information, contact the Philadelphia District Regulator of the Day at (215) 656-6728 or visit their website at: <http://www.nap.usace.army.mil/Missions/Regulatory.aspx>.
4. For questions about this application or the Wetlands and Subaqueous Lands Section, contact us at (302) 739-9943 or visit our website at: <http://www.dnrec.delaware.gov/wr/Services/Pages/WetlandsAndSubaqueousLands.aspx>. Office hours are Monday through Friday 8:00 AM to 4:30 PM, except on State Holidays.

## APPLICANT'S REVIEW BEFORE MAILING

### DID YOU COMPLETE THE FOLLOWING?

YES	_____	Yes	BASIC APPLICATION
YES	_____	Yes	SIGNATURE PAGE (Page 3)
YES	_____	Yes	APPLICABLE APPENDICES
YES	_____	Yes	SCALED PLAN VIEW
YES	_____	Yes	SCALED CROSS-SECTION OR ELEVATION VIEW PLANS
YES	_____	Yes	VICINITY MAP
YES	_____	Yes	COPY OF THE PROPERTY DEED & SURVEY
YES	_____	Yes	THREE (3) COMPLETE COPIES OF THE APPLICATION PACKET
YES	_____	Yes	APPROPRIATE APPLICATION FEE & PUBLIC NOTICE FEE (Separate checks made payable to the State of Delaware)

**Submit 3 complete copies of the application packet to:**

**Department of Natural Resources and Environmental Control  
Wetlands and Subaqueous Lands Section  
89 Kings Highway  
Dover, Delaware 19901**

**Before signing and mailing your application packet, please read the following:**

The Department requests that the contractor or party who will perform the construction of your proposed project, if other than the applicant, sign the application signature page along with the applicant in the spaces provided. When the application is signed by the contractor as well as the applicant, the Department will issue the Permit to both parties. For Leases, the contractor will receive a separate construction authorization that will make them subject to all of the terms and conditions of the Lease relating to the construction

**Section 1: Applicant Identification**

1. Applicant's Name: Frank B Calio Trust c/o Rebecca Calio Telephone #: \_\_\_\_\_  
 Mailing Address: 100 Mill Pond Dr. Unit 1 Fax #: \_\_\_\_\_  
Laurel, DE 19956 E-mail: \_\_\_\_\_
2. Consultant's Name: Lucas Hastings Company Name: Hastings Marine Construction LLC  
 Mailing Address: 10372 Old Furnace Rd., Telephone #: 1-888-519-2253 ext. 11  
Seaford, DE 19973 Fax #: 302-536-7677  
 E-mail: Lucas@HastingsMarineConstruction.com
3. Contractor's Name: Bart K. Hastings Company Name: Hastings Marine Construction LLC  
 Mailing Address: 10372 Old Furnace Rd., Telephone #: 1-888-519-2253 ext. 12 / 302-542-5837  
Seaford, DE 19973 Fax #: 302-536-7677  
 E-mail: Bart@HastingsMarineConstruction.com

**Section 2: Project Description**

4. Check those that apply:  
 New Project/addition to existing project?       Repair/Replace existing structure? (If checked, must answer #16)

5. Project Purpose (attach additional sheets as necessary):  
To install 110 linear feet of shoreline protection and water quality improvements on Records Pond  
in Laurel, DE to include bio-log, vegetation, and fill.

6. Check each Appendix that is enclosed with this application:

<input type="checkbox"/>	A. Boat Docking Facilities	<input type="checkbox"/>	G. Bulkheads	<input type="checkbox"/>	N. Preliminary Marina Checklist
<input type="checkbox"/>	B. Boat Ramps	<input checked="" type="checkbox"/>	H. Fill	<input type="checkbox"/>	O. Marinas
<input type="checkbox"/>	C. Road Crossings	<input checked="" type="checkbox"/>	I. Rip-Rap Sills and Revetments	<input type="checkbox"/>	P. Stormwater Management
<input type="checkbox"/>	D. Channel Modifications/Dams	<input checked="" type="checkbox"/>	J. Vegetative Stabilization	<input type="checkbox"/>	Q. Ponds and Impoundments
<input type="checkbox"/>	E. Utility Crossings	<input type="checkbox"/>	K. Jetties, Groins, Breakwaters	<input type="checkbox"/>	R. Maintenance Dredging
<input type="checkbox"/>	F. Intake or Outfall Structures	<input type="checkbox"/>	M. Activities in State Wetlands	<input type="checkbox"/>	S. New Dredging

**Section 3: Project Location**

7. Project Site Address: 100 Mill Pond Dr. Unit 1 County:  N.C.  Kent  Sussex  
Laurel, DE 19956 Site owner name (if different from applicant): \_\_\_\_\_  
 Address of site owner: 100 Mill Pond Dr. Unit 1  
Laurel, DE 19956

8. Driving Directions: Please see attached Google Maps directions  
 \_\_\_\_\_  
 (Attach a vicinity map identifying road names and the project location)

9. Tax Parcel ID Number: 332-1.07-178.04 Subdivision Name: Mill Pond Estates

<b>WSLS Use Only:</b>		Permit #s: _____							
Type	SP <input type="checkbox"/>	SL <input type="checkbox"/>	SU <input type="checkbox"/>	WE <input type="checkbox"/>	WQ <input type="checkbox"/>	LA <input type="checkbox"/>	SA <input type="checkbox"/>	MP <input type="checkbox"/>	WA <input type="checkbox"/>
Corps Permit:	SPGP 18 <input type="checkbox"/> 20 <input type="checkbox"/>		Nationwide Permit #: _____	Individual Permit #: _____					
Received Date:	_____		Project Scientist: _____						
Fee Received?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Amt: \$ _____	Receipt #: _____					
Public Notice #:	_____		Public Notice Dates: ON _____	OFF _____					

**Section 3: Project Location (Continued)**

10. Name of waterbody at Project Location: Records Pond waterbody is a tributary to: N/A - Non-tidal

11. Is the waterbody:  Tidal  Non-tidal Waterbody width at mean low or ordinary high water 770 Feet

12. Is the project:  On public subaqueous lands?  On private subaqueous lands?\*  
 In State-regulated wetlands?  In Federally-regulated wetlands?

\*If the project is on private subaqueous lands, provide the name of the subaqueous lands owner:

Delaware F&W - Attached

(Written permission from the private subaqueous lands owner must be included with this application)

13. Present Zoning:  Agricultural  Residential  Commercial  Industrial  Other

**Section 4: Miscellaneous**

14. A. List the names and complete mailing addresses of the immediately adjoining property owners on all sides of the project (attach additional sheets as necessary):

332-1.07-179.00 - George Lodato - 101 Lake Drive, Laurel, DE 19956

332-1.07-178.01 - Billie Schumann - 101 Records Pond Ct. Unit 7, Laurel, DE 19956

B. For wetlands and marina projects, list the names and complete mailing addresses of property owners within a 1,000 foot radius of the project (attach additional sheets as necessary):

N/A

15. Provide the names of DNREC and/or Army Corps of Engineers representatives whom you have discussed the project with:

Matthew Jones - DNREC Wetlands

A. Have you had a State Jurisdictional Determination performed on the property?

Yes  No

B. Has the project been reviewed in a monthly Joint Permit Processing Meeting?

Yes  No

\*If yes, what was the date of the meeting? \_\_\_\_\_

16. Are there existing structures or fill at the project site in subaqueous lands?

Yes  No

\*If yes, provide the permit and/or lease number(s):

Unknown

\*If no, were structures and/or fill in place prior to 1969?

Yes  No

17. Have you applied for or obtained a Federal permit from the Army Corps of Engineers?

No  Pending  Issued  Denied Date: \_\_\_\_\_

Type of Permit: \_\_\_\_\_ Federal Permit or ID #: \_\_\_\_\_

18. Have you applied for permits from other Sections within DNREC?

No  Pending  Issued  Denied Date: \_\_\_\_\_ Permit or ID #: \_\_\_\_\_

Type of permit (circle all that apply): Septic Well NPDES Storm Water

Other: \_\_\_\_\_

**Section 5: Signature Page**

## 19. Agent Authorization:

If you choose to complete this section, all future correspondence to the Department may be signed by the duly authorized agent. In addition, the agent will become the primary point of contact for all correspondence from the Department.

I do not wish to authorize an agent to act on my behalf

I wish to authorize an agent as indicated below

I, Rebecca Calio  
~~Carolyn Calio~~, hereby designate and authorize Lucas Hastings  
(Name of Applicant) (Name of Agent)

to act on my behalf in the processing of this application and to furnish any additional information requested by the Department.

Authorized Agent's Name: Lucas Hastings Telephone #: 888-519-2253 ext. 11  
Mailing Address: 10372 Old Furnace Rd., Seaford, DE 19973 Fax #: 302-536-7677  
E-mail: lucas@hastingsmarineconstruction.com

## 20. Agent's Signature:

I hereby certify that the information on this form and on the attached plans are true and accurate to the best of my knowledge. I further understand that the Department may request information in addition to that set forth herein if deemed necessary to appropriately consider this application.

Lucas Hastings  
Agent's Signature

July 08, 2024  
Date

## 21. Applicant's Signature:

I hereby certify that the information on this form and on the attached plans are true and accurate to the best of my knowledge and that I am required to inform the Department of any changes or updates to the information provided in this application. I further understand that the Department may request information in addition to that set forth herein if deemed necessary to appropriately consider this application. I grant permission to authorized Department representatives to enter upon the premises for inspection purposes during working hours.

L. Rebecca Calio  
Applicant's Signature

7-25-2024  
Date

L. Rebecca Calio  
Print Name

## 22. Contractor's Signature:

I hereby certify that the information on this form and on the attached plans are true and accurate to the best of my knowledge, and that I am required to inform the Department of any changes or updates to the information provided in this application. I further understand that the Department may request information in addition to that set forth herein if deemed necessary to appropriately consider this application.

Hastings Marine Construction LLC  
Contractor's Name

July 08, 2024  
Date

Bart K Hastings - Project Manager  
Print Name





### Rip-Rap Sills and Revetments

Please respond to each question. Questions left blank may result in the application being returned as incomplete. In addition, the answers to all of the questions in this Appendix must correspond accurately to the information on the plan and section view drawings for the project.

1. Will the project be:

- New Construction (un-stabilized shoreline)  
 Repair or Replacement of an Existing Rip-Rap Structure or Rubble  
 Repair or Replacement of an Existing Bulkhead  
 (If repair or replacement, submit photographs of the entire existing structure).

2. How many linear feet of shoreline are proposed to be stabilized? 110

3. Is the project a:  Standard rip-rap revetment  Free-standing sill

4. Describe the existing shoreline:

Strong undermining of bank due to wind-driven water - bank is currently unprotected and eroding  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

5. What is the total number of cubic yards of rip-rap that will be used? 16 cu/yards

6. What is the number of cubic yards of rip-rap per running foot of shoreline? 0.15 cu/yard per ft.  
 (See page 4 for a guide to calculating total cubic yards and cubic yards per running foot).

7. What will be the average weight of the stone used for the:

Armor stone: 75 lbs Core stone: 50 lbs

[If material other than stone, such as prefab geo-grid or other similar product is proposed, please describe here and include photographs or a brochure. The Department strongly discourages the use of broken concrete, cinderblocks or other materials that are less dense than stone, more apt to move off site due to currents or wave action, and/or are not aesthetically pleasing or in keeping with the natural environment.]

Describe:

Del-Dot Rated R4 Rip Rap Stone  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## 8. For Standard Revetments answer A–F, below: (for Sill projects, skip to Question #9)

A. How many linear feet will the structure extend channelward of:

Mean High Water: \_\_\_\_\_ Mean Low Water: \_\_\_\_\_

Ordinary High Water: 1.00 (for non-tidal waters)

B. How many square feet of the structure will be located:

Channelward of Mean High Water: \_\_\_\_\_ Channelward of Mean Low Water: \_\_\_\_\_

Channelward of Ordinary High Water: 110.00 (for non-tidal waters)

On vegetated wetlands: \_\_\_\_\_

C. Will the revetment be backfilled?  Yes  No

If yes, complete Appendix H and include it in your application.

D. Will filter cloth be used behind the rip-rap structure?  Yes  NoE. What is the average slope of the existing bank? 1:1F. What is the proposed slope of the rip-rap revetment? 1:2

(See page 3 for a guide to calculating slopes).

## 9. Sill Projects:

A. What is the base width of the proposed structure: \_\_\_\_\_

B. What is the top width of the proposed structure: \_\_\_\_\_

C. How many square feet of the structure will be located:

Channelward of Mean High Water: \_\_\_\_\_ Channelward of Mean Low Water: \_\_\_\_\_

Channelward of Ordinary High Water: \_\_\_\_\_ (for non-tidal waters)

On vegetated wetlands: \_\_\_\_\_

D. What will be the average height of the structure: \_\_\_\_\_

E. How much of the structure (in inches) will extend vertically above:

Mean High Water: \_\_\_\_\_ Ordinary High Water: \_\_\_\_\_ (for non-tidal waters)

F. Are breaks or notches proposed in the sill to allow for greater flushing?  Yes  NoG. Will fill material be placed behind the sill?  Yes  No If yes, complete appropriate appendix.H. Will wetland vegetation be planted behind the sill?  Yes  No

If yes, complete Appendix H and include it in your application.

## 10. Construction Techniques (Complete for both Revetment and Sill Projects):

A. Will any dredging be required? \_\_\_ Yes  No

If yes, please include appropriate dredging Appendix with your application).

B. Please describe the sequence of construction and any techniques that will be utilized to minimize adverse impacts on the aquatic environment, and to preserve existing vegetation (particularly woody vegetation) along the shoreline:

Cleaning/clearing of shoreline debris, installation of a bio-log sill, installation of filter fabric, installation of bio-log revetment, installation of fill dirt between sill and revetment, installation of rip-rap over revetment.

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## CALCULATIONS

RUN = Base width of the structure (in feet) RISE = Vertical height of the structure (in feet)

I. How to calculate total cubic yards:

$$0.5 * RUN * RISE * \text{Linear feet of shoreline stabilized}/27 = \text{Total Cubic Yards}$$

II. How to calculate cubic yards per running foot of shoreline:

$$\text{Total \# Cubic Yards}/ \text{Linear feet of shoreline} = \text{Cubic yards per running foot}$$

III. How to calculate slope: Slope = RUN/RISE

## EXAMPLE:

If we propose to stabilize 100 linear feet of shoreline with a rip-rap revetment that has a basewidth of 6 feet and a height of 3 feet:

$$0.5 * 6 * 3 * 100/27 = 33.33 \text{ Total Cubic Yards}$$

$$\text{II. } 33.33/100 = 0.333 \text{ Cubic Yards per running foot}$$

$$\text{III. } 6/3 = \text{Slope of 2}$$

### Vegetative Stabilization

- Please make sure that all answers in this appendix correspond to information on the application drawing

1. Submit a brief description of the proposed activity

To stabilize existing shoreline bank from continued erosion and to improve the water quality at the site on Records Pond in Laurel, Delaware

2. Is grading of bank and/or placement of fill part of this project? Yes  No  
If yes complete Appendix H

3. Indicate the area of proposed planting that is channelward of the:

- a. Tidal Waters: mean high water line? \_\_\_\_\_ ft<sup>2</sup>  
mean low water line? \_\_\_\_\_ ft<sup>2</sup>
- b. Non-tidal waters: ordinary high water line? 220 ft<sup>2</sup>

4. What will the water depth of the plantings be relative to the: (provide the range if it varies)

- a. Tidal Waters: mean high water line? \_\_\_\_\_ f  
mean low water line? \_\_\_\_\_ ft
- b. Non-tidal waters: ordinary high water line? 1.00 ft

5. Provide the list of plant species that will be utilized.

Iris Versicolor - Blue Flag Iris - 75%  
Juncus Effusus - Soft Rush - 25%

6. Describe the sequence of construction and planting.

Planting to be completed upon completion of the installation of the bio-log sill and revement, after the area between sill and revetment has been filled with Del-Dot Select for plant base.

7. Describe the maintenance and monitoring plan for the vegetation.

Plants to be monitored monthly for the first 6 months upon completion and continued to be monitored every 3 months for the 2 years immediately following completion.

NO TITLE SEARCH REQUESTED OR PERFORMED.

30467

#02023 2260

# This Deed, Made this

14 day of December

Prepared By: Alan O'Neal  
P.O. Box 1200  
Seaford, DE 19973  
Tax Map:  
3-32 1.07 178.04  
19 94

BETWEEN,

MILL POND ASSOCIATES, INC., of P.O. Box 693, Laurel, Sussex County, Delaware 19956, party of the first part,

-and-

FRANK B. CALIO, TRUSTEE FOR THE FRANK B. CALIO REVOCABLE TRUST, DATED MARCH 24, 1994 and CAROLYN L. CALIO, TRUSTEE FOR THE CAROLYN L. CALIO REVOCABLE TRUST, DATED MARCH 24, 1994, of 104 Lansing Avenue, Laurel, Sussex County, Delaware 19956, parties of the second part,

**Witnesseth.** That the said party of the first part, for and in consideration of the sum of ONE DOLLAR (\$1.00) ----- lawful money of the United States of America, the receipt whereof is hereby acknowledged, hereby grants and conveys unto the said party of the second part.

## ALL

ALL that certain lot, piece or parcel of land situate, lying and being in the Town of Laurel, Little Creek Hundred, Sussex County, State of Delaware, being known and designated as Lot No. 1, Unit No. 1, "MILL POND ONE, PHASE ONE".

THIS CONVEYANCE SUBJECT to Declaration of Covenants, Conditions and Restrictions of Mill Pond One, dated April 2, 1993 and filed for record in the office of the Recorder of Deeds, in and for Sussex County, Delaware, in Deed Book 1907, page 11.

BEING the same lands conveyed to Mill Pond Associates, Inc., a corporation of the State of Delaware, by deed of Millpond Associates, a partnership, dated April 2, 1993 and recorded in the office of the Recorder of Deeds, in and for Sussex County, Delaware, in Deed Book 1906, page 62.

4772 333 12/16/94 TR-TX ST 1940.00

7521 111 12/16/94 CTX-EX SU .00

ALAN L. O'NEAL  
ATTORNEY AT LAW  
P.O. BOX 1200  
SEAFORD, DELAWARE 19973

#02023 #261

PURCHASERS REPORT  
MADE THIS DATE

DEC 1 1994

ASSESSMENT DIVISION  
OF SUSSEX COUNTY

IN WITNESS WHEREOF, The Said **MILL POND ASSOCIATES, INC.**  
has caused its name by **Bruce Venables** its President to be hereunto set,  
and the corporate seal of the said corporation has been hereunto affixed by its  
Secretary, the day and year first above written.

SIGNED, SEALED, DELIVERED  
AND WITNESSED IN THE  
PRESENCE OF:

BY *[Signature]*

ATTEST:

TOWN OF LAUREL
REALTY TRANSFER TAX
TRANSPORTED <u>114-94</u>
CANCELLED BY <u>RLM</u>
AMOUNT OF TAX <u>970.00</u>
DATE RECORDED <u>12/16/94</u>

*RLM*

STATE OF DELAWARE :  
COUNTY OF SUSSEX :

BE IT REMEMBERED, that on this 14 day of December  
19 94, personally came before me, the Notary Public of the State and County  
aforesaid, **BRUCE VENABLES**  
President of **MILL POND ASSOCIATES, INC.**  
a corporation existing under the laws of the State of Delaware party to this  
Indenture, known to me personally to be such, and acknowledged this Indenture  
to be his act and deed and the act and deed of the corporation, that the signature  
of the President thereto is in his own proper handwriting and the seal affixed is the  
common and corporate seal of the said corporation, and that his act of sealing,  
executing, acknowledging, and delivering said Indenture was duly authorized by  
a resolution of the Board of Directors of said corporation.

GIVEN under my hand and seal of office, the day and year first above  
written.

WILLARD GREEN  
DEEDS DIVISION

94 DEC 16 PM 3:41

RECORDED DEEDS  
SUSSEX COUNTY

*Alan Deal*  
Notary Public

NAME: *Alan Deal*

Commission Expires: *W.A. Haney*

*Alan Deal Notary Attorney*

*12/30/94*

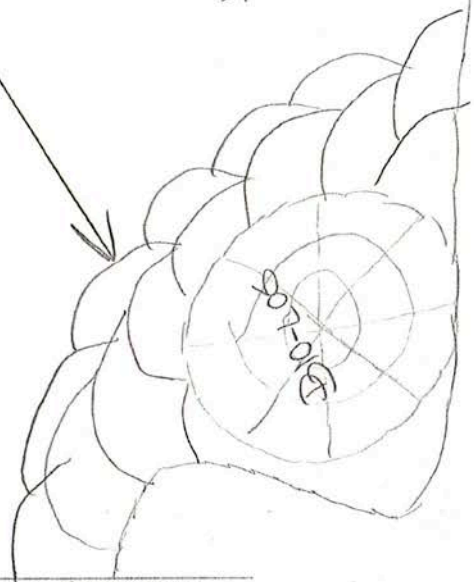
SECTION VIEW

EXISTING FENCE POSTS

SUPPLEMENTAL  
ROCK BANK PROTECTION

VEGETATIVE PLANTING  
AREA

--- ANL



Project Owner:

MILL POND ESTATES

Project Address:

LAKE DRIVE / SOUVENOR'S AVE

Project: RECORDS POND SHORELINE STABILIZATION

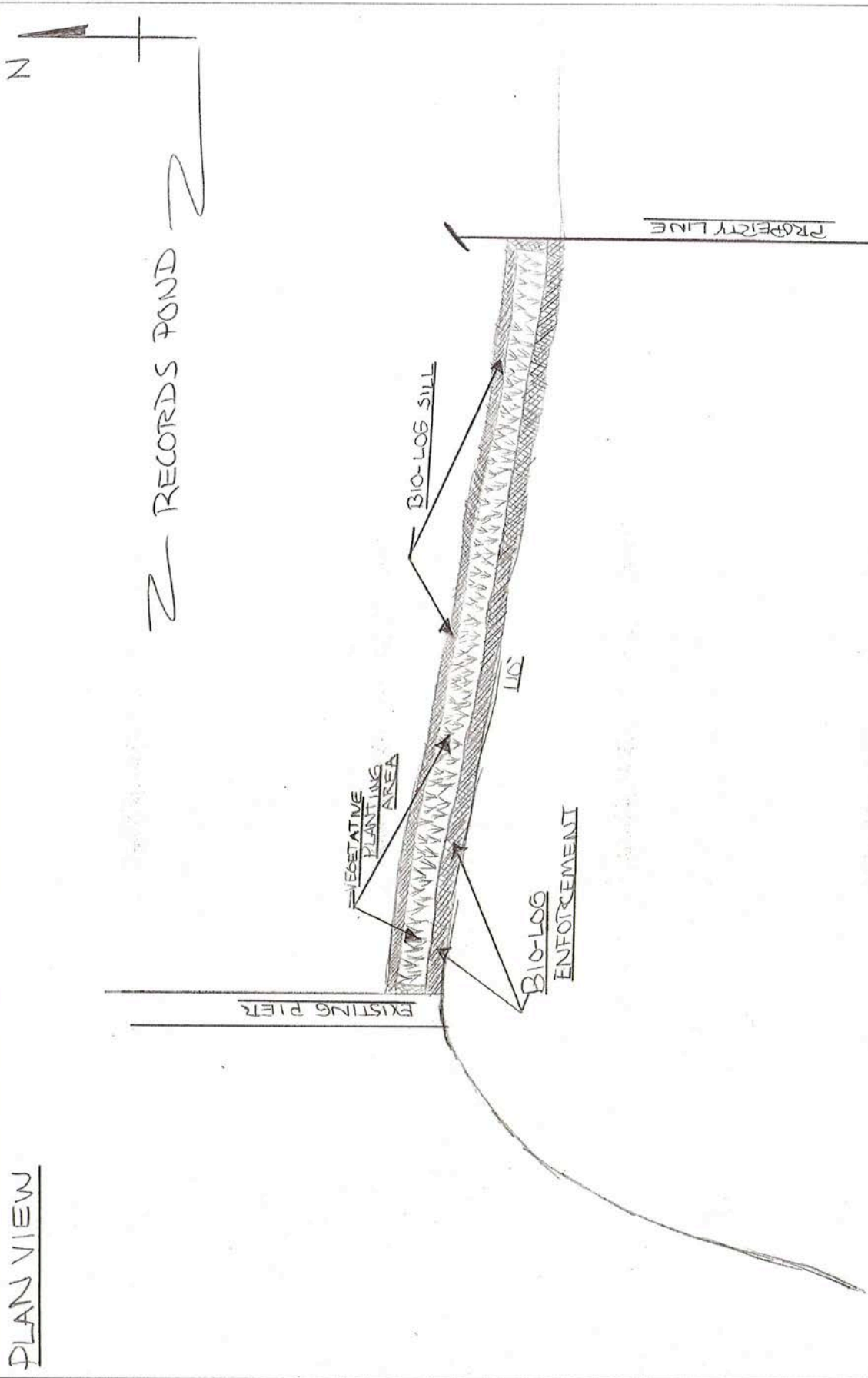
Date: 3/12/2024

Scale: NOTED

Version: SUP. 3/12/2024

Page: ADD-1

PLAN VIEW



Z-RECORDS POND



Project: RECORDS POND SHORELINE STABILIZATION PROJECT

Project Owner: MILL POND ESTATES  
Project Address: LAKE DRIVE / GOVERNORS AVE, LAUREL DE

Date: JAN. 12 2023

Version: CONCEPT 2

Scale: NOTED

Page: 1 / 2

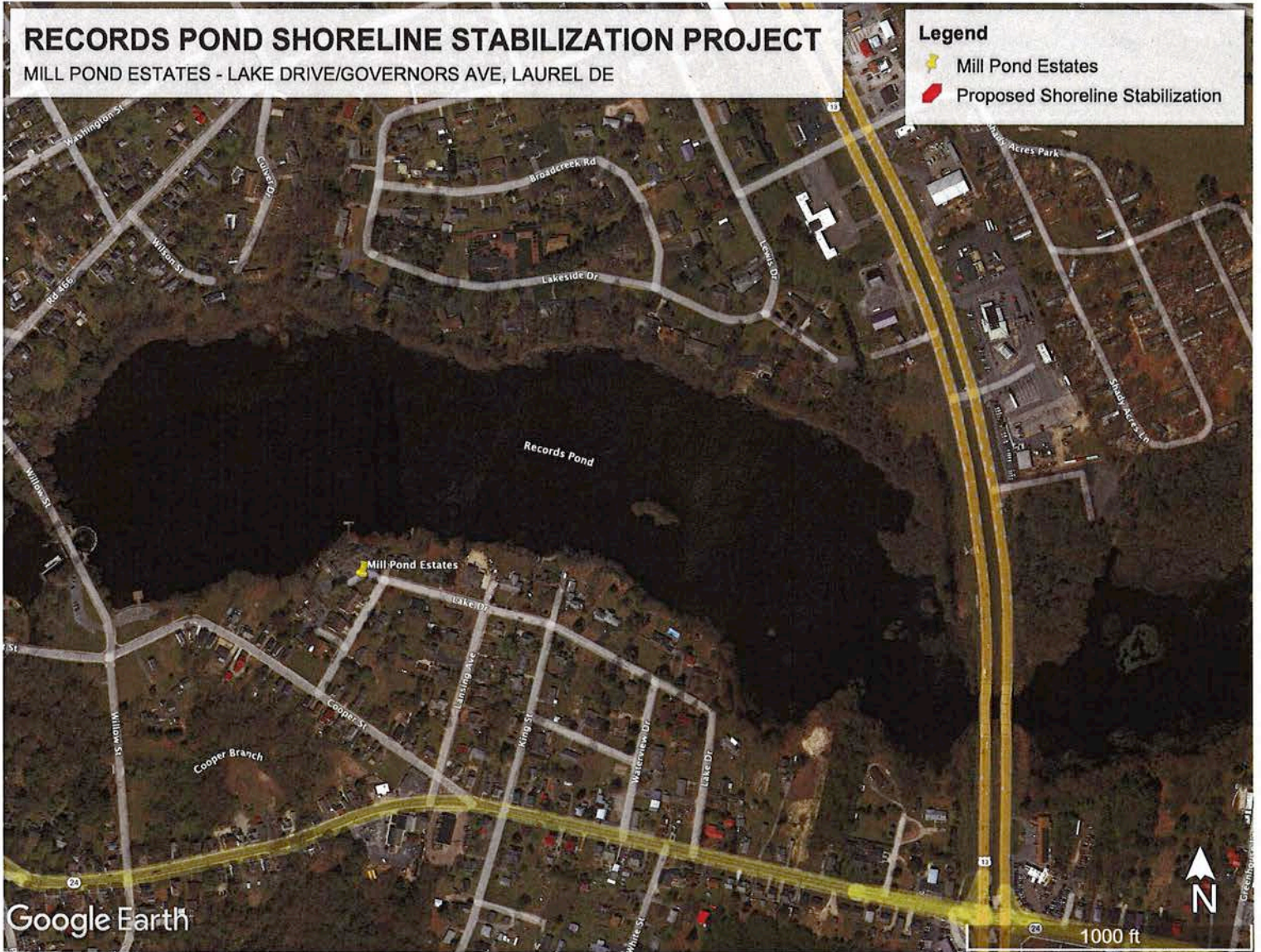


# RECORDS POND SHORELINE STABILIZATION PROJECT

MILL POND ESTATES - LAKE DRIVE/GOVERNORS AVE, LAUREL DE

## Legend

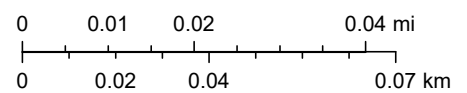
- Mill Pond Estates
- Proposed Shoreline Stabilization





August 2, 2024

1:1,810



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community, Sussex County Government



89 Kings Hwy NE, Dover, DE 19901 to 100 Mill Pond, Laurel, DE 19956 Drive 44.1 miles, 1 hr 3 min

Mill Pond Estate - Carolyn Call

//

89 Kings Hwy NE

Dover, DE 19901

Take E Division St to US-13 S

- 1 min (0.3 mi)
- ↑ 1. Head south on Kings Hwy NE toward E Division St  
413 ft
  - ↶ 2. Turn left onto E Division St  
0.2 mi

Follow US-13 S to E 4th St/E Market St in Sussex County

- 58 min (43.2 mi)
- ↷ 3. Turn right onto US-13 S  
0.2 mi
  - ↷ 4. Use the middle 2 lanes to stay on US-13 S  
56 ft
  - ↑ 5. Continue straight to stay on US-13 S  
ⓘ Pass by NAPA Auto Parts - Harrington Auto Parts  
(on the right in 17.2 mi)  
43.0 mi

Continue on E 4th St/E Market St. Drive to Mill Pond in Laurel

- 2 min (0.6 mi)
- ↷ 6. Turn right onto E 4th St/E Market St  
0.4 mi
  - ↗ 7. Slight right onto Cooper St  
0.1 mi
  - ↷ 8. Turn right onto Governors Ave  
463 ft
  - ↶ 9. Turn left onto Mill Pond  
ⓘ Destination will be on the right  
72 ft

100 Mill Pond

Laurel, DE 19956

**PROPOSED VEGETATION MONITORING PLAN**

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In accordance with the regulations outlined by the State of Delaware Department of Natural Resources and Environmental Control and the program rules for the Sussex Conservation District, we hereby propose the following vegetative stabilization and living shoreline plant monitoring program for the following site:

<b>Applicant:</b>	Mrs. Rebecca Calio / Calio Trust
<b>Site Address:</b>	100 Mill Pond Dr. Unit 1 Laurel, DE 19956
<b>Project Overview:</b>	Installation of 100 linear feet of natural shoreline to include coconut fiber/coir logs, fill, and subaqueous vegetation.

<b>Duration</b>	<b>Activity</b>	<b>Frequency</b>
First Month	Site review for establishment of root growth	Weekly
<b>Corrective Action Plan:</b> Supplement plants with new plugs as needed across site where plants are showing failure to thrive/establish		
<b>Duration</b>	<b>Activity</b>	<b>Frequency</b>
Months 2 - 3	Site review for vegetation growth and spread.	Bi-Weekly
<b>Corrective Action Plan:</b> Supplement plants with new plugs as needed across site where plants are showing failure to thrive and spread. Install wildlife barriers if needed.		
<b>Duration</b>	<b>Activity</b>	<b>Frequency</b>
Months 7 - 12	Site review for second season growth.	Monthly
<b>Corrective Action Plan:</b> Supplement plants with new plugs as needed across site where plants are showing failure to thrive. Remove wildlife barriers if installed.		
<b>Duration</b>	<b>Activity</b>	<b>Frequency</b>
Months 13 - 36	Routine Site Review	Quarterly
<b>Corrective Action Plan:</b> Observe plant growth and patterns and address trouble areas as needed.		