



## Riprap Revetment/Shoreline Stabilization Project

Applicants: Mr. Paul Roessel & Mr. Mike Schwartz

7 Venetian Drive & 33 Endless View

Rehoboth Beach, Delaware 19971

Tax Map Parcel #s: 334-20.00-2.02, 334-20.00-98.00 & 334-20.13-233.00.

To Whom It May Concern,

The purpose of this project is to regrade and reinforce the existing shoreline of a man-made canal end. The details include laying geotextile fabric (G-300) and a riprap revetment (R4 stone) design, approximately 50 linear feet by 6 feet (landward), totaling 300 sq. ft (11 cubic yards). The target area is an unconsolidated shoreline of a man-made canal end, located within the Pine Bay Community, between Venetian Drive and Endless View in Rehoboth Beach, Delaware 19971.

All miscellaneous material and debris (concrete and construction material) will be removed and properly disposed. A mini skid-steer/excavator will be used to regrade the shoreline to a 3:1 slope and place riprap stone. All invasive vegetation will be removed from the project area. Geotextile fabric (S-300) will be placed along the regraded shoreline and keyed in with landscaping pins. The riprap stone revetment will be placed on top of geotextile and tie into the existing Roessel bulkhead (SA-099/19 for 7 Venetian Drive) and Pine Bay community stormwater swale.

An Agreement Document has been signed by the Pine Bay HOA, Mr. Roessel and Mr. Schwartz, granting site access and determining financial responsibility for this project is attached. A signed Letter of No Objection from adjacent property owner (3 Bay Bay - Thomas Long). Clean rock material certification provided by Pennsy Supply. Site diagrams, maps and photos are attached as well.

Please contact me with any questions.

Regards,

*L d*

Lyle de la Rosa

Environmental Project Manager

Envirotech Environmental Consulting, Inc.

Phone: 302.684.5201

Fax: 302.684.5204

email: [Lyle@envirotechcinc.com](mailto:Lyle@envirotechcinc.com)



# **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**

**Application Instructions (please read carefully):**

Applicants and/or Agents **must** fill out the following thoroughly. Please note that incomplete or inaccurate applications will be returned.

1. Basic application
2. Appropriate appendices applicable to the project (must fill out all that apply):

A. <a href="#">Boat Docking Facilities</a>	K. <a href="#">Jetties, Groins, Breakwaters</a>
B. <a href="#">Boat Ramps</a>	L. Section 401 - Water Quality Certification
C. <a href="#">Road Crossings</a>	M. <a href="#">Activities in State Wetlands</a>
D. <a href="#">Channel Modifications/Dams</a>	N. <a href="#">Preliminary Marina Screening Checklist</a>
E. <a href="#">Utility Crossings</a>	O. <a href="#">Marinas</a>
F. <a href="#">Intake or Outfall Structures</a>	P. <a href="#">Stormwater Management</a>
G. <a href="#">Bulkheads</a>	Q. <a href="#">Ponds and Impoundments</a>
H. <a href="#">Fill</a>	R. <a href="#">Maintenance Dredging or Excavating</a>
I. <a href="#">Rip-Rap</a>	S. <a href="#">New Dredging</a>
J. <a href="#">Vegetative Stabilization</a>	

The following information **must** accompany the application and appendices:

1. Proof of ownership (deed and survey) or permitted land use agreement.
2. Scaled site plans and cross-section plans that show the location and design details of the proposed project. Full construction plans should be submitted for major projects.
3. List of adjacent property owners (As per item #10 A and B of this basic application form)
4. Original signature page of the application must be submitted.
5. Appropriate application fee and public notice fee (Checks should be prepared separately and made payable to the State of Delaware)

**Submission Information:**

1. Electronic Submission(only one copy is required through electronic submission) and Payment:

<https://epermitting.dnrec.delaware.gov/signin>

OR

**Submission and Payment by Mail:**

Submit an original and two (2) additional completed copies of the application (total of 3) with the appropriate application fee and \$85.00 public notice fee\* prepared in separate checks to:

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

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

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

**Additional Information:**

1. Tax Parcel Information:

New Castle County	(302) 395-5400
<a href="https://www.nccde.org/576/Tax-Assessment-Maps">https://www.nccde.org/576/Tax-Assessment-Maps</a>	
Kent County	(302) 736-2010
<a href="http://kent400.co.kent.de.us/PropInfo/PINAME.HTM">http://kent400.co.kent.de.us/PropInfo/PINAME.HTM</a>	
Sussex County	(302) 855-7878
<a href="https://maps.sussexcountyde.gov/OnlineMap/Map.html">https://maps.sussexcountyde.gov/OnlineMap/Map.html</a>	
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 approval may be required through the Army Corps of Engineers. Applicants are strongly urged to contact the Corps for a determination of their permitting requirements. The contact number for the Regulator of the Day is (215) 656-6728.  
<http://www.nap.usace.army.mil/Missions/Regulatory.aspx>
4. **For questions about this application or program contact the Wetlands and Subaqueous Lands Section at (302)739-9943.** Office hours are Monday through Friday, 8:00 AM to 4:30 PM except State Holidays. <https://dnrec.alpha.delaware.gov/water/wetlands-subaqueous/>

## APPLICANT CHECKLIST

### Did you complete the following?

_____ Yes	BASIC APPLICATION
_____ Yes	APPENDICES
_____ Yes	VICINITY MAP
_____ Yes	PLAN VIEW
_____ Yes	ELEVATION OR SECTION VIEW
_____ Yes	SIGNATURES (Pages 9) with Agent Authorization, if appropriate
_____ Yes	COPY OF PROPERTY DEED & SURVEY
_____ Yes	THREE (3) COMPLETE COPIES (only if submitted by mail)
_____ Yes	LIST OF ADJACENT PROPERTY OWNERS (See #10 A and B of this form)
_____ Yes	PROOF OF PRE-FILING MEETING REQUEST (See #12, needed for WQC only)
_____ Yes	APPROPRIATE APPLICATION FEE & PUBLIC NOTICE FEE

(Checks should be prepared separately and made payable to the State of Delaware)

### BEFORE SIGNING AND MAILING YOUR APPLICATION, 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 construction. This will allow more fair and consistent enforcement of the conditions of the Permit or Lease by ensuring the proper liability of the Contractor.

If you have not yet chosen a contractor by the time of application, you may wish to do so prior to submitting the application for processing. If you choose to submit your application without the signature of your contractor, you will be held solely responsible for all of the terms and conditions relating to construction and which require that the permitted structure or activity be installed or conducted in accordance with the approved plans and permit conditions.

**Section 1: Applicant Identification**

Applicant's Name: \_\_\_\_\_  
 Mailing Address: \_\_\_\_\_  
 \_\_\_\_\_

Telephone#: \_\_\_\_\_  
 Fax #: \_\_\_\_\_  
 E-mail: \_\_\_\_\_

Consultant's Name: \_\_\_\_\_  
 Mailing Address: \_\_\_\_\_  
 \_\_\_\_\_

Company Name: \_\_\_\_\_  
 Telephone#: \_\_\_\_\_  
 Fax #: \_\_\_\_\_  
 E-mail: \_\_\_\_\_

Contractor's Name: \_\_\_\_\_  
 Mailing Address: \_\_\_\_\_  
 \_\_\_\_\_

Company Name: \_\_\_\_\_  
 Telephone #: \_\_\_\_\_  
 Fax #: \_\_\_\_\_  
 E-mail: \_\_\_\_\_

**Section 2: Project Description**

1. Check those that apply:

☐ New Project/addition to existing project?

☐ Repair/Replace existing structure? (complete #13)

2. Project Purpose (Attach additional sheets as necessary):

Check each Appendix that is enclosed with this application:

<input type="checkbox"/>	A. Boat Docking Facilities	<input type="checkbox"/>	H. Fill	<input type="checkbox"/>	O. Marinas
<input type="checkbox"/>	B. Boat Ramps	<input type="checkbox"/>	I. Rip-Rap	<input type="checkbox"/>	P. Stormwater Management
<input type="checkbox"/>	C. Road Crossings	<input type="checkbox"/>	J. Vegetative Stabilization	<input type="checkbox"/>	Q. Ponds and Impoundments
<input type="checkbox"/>	D. Channel Modifications/Dams	<input type="checkbox"/>	K. Jetties, Groins, Breakwaters	<input type="checkbox"/>	R. Maintenance Dredging
<input type="checkbox"/>	E. Utility Crossings	<input type="checkbox"/>	L. Section 401 – Water Quality Certification	<input type="checkbox"/>	S. New Dredging
<input type="checkbox"/>	F. Intake or Outfall Structures	<input type="checkbox"/>	M. Activities in State Wetlands	<input type="checkbox"/>	
<input type="checkbox"/>	G. Bulkheads	<input type="checkbox"/>	N. Preliminary Marina Checklist	<input type="checkbox"/>	

**WSLS Use Only:**

Permit #s: \_\_\_\_\_

Type    SP ☐    SL ☐    SU ☐    WE ☐    WQ ☐    LA ☐    SA ☐    MP ☐    WA ☐

Corps Permit: SPGP 18 20    Nationwide Permit #: \_\_\_\_\_    Individual Permit #: \_\_\_\_\_

Received Date: \_\_\_\_\_    Project Scientist: \_\_\_\_\_

Fee Received? Yes    No    Amt: \$ \_\_\_\_\_    Receipt #: \_\_\_\_\_

Public Notice #: \_\_\_\_\_    Public Notice Dates: ON \_\_\_\_\_ OFF \_\_\_\_\_



11. Indicate the names of all representatives from DNREC and the Army Corps of Engineers with whom you have discussed the project:

- DNREC      Mike Yost - USACE  
\_\_\_\_\_  
Steve Smailer - DNREC      \_\_\_\_\_

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? \_\_\_\_\_

12. FOR WATER QUALITY CERTIFICATION ONLY: Has the applicant requested a pre-filing meeting from the DNREC, Wetlands and Subaqueous Lands Section (WSLS) at least thirty (30) days prior to submitting an application for Water Quality Certification? (Attach written documentation of the pre-filing meeting request.)

☐ Yes

Pre-filing Meeting Request Date? \_\_\_\_\_ Meeting Date? \_\_\_\_\_

☐ WSLS did not grant meeting

☐ No A pre-filing meeting is not required since the Water Quality Certification has been granted, granted with conditions, or waived based on the corresponding general Federal license or permit (e.g. NWP, SPGP). If applying for an individual Federal license or permit, and there is proposed discharge or fill associated with the project, the applicant must request a pre-filing meeting from the WSLS at least thirty (30) days prior to the Water Quality Certification application submission.

13. If there is any existing fill or structures in subaqueous lands at the project site, were the structures constructed or fill placed prior to 1969? Yes No

If no, provide a copy of any prior and/or current authorization(s) for projects at this site. If a copy is not available, provide the permit or lease number(s) if known.

SP-055/11

14. Have you applied for or obtained a federal permit for the project from the Army Corps of Engineers?

☐ None ☐ Pending ☐ Issued ☐ Denied

Date: \_\_\_\_\_ Type of permit: \_\_\_\_\_

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

15. Has a Water Quality Certification already been issued for this project? ☐ Yes ☐ No

If so, when was it issued? \_\_\_\_\_ What is the authorization number? \_\_\_\_\_



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

☐ None

☐ Pending

☐ Issued

☐ Denied

Date: \_\_\_\_\_ Permit or ID #: \_\_\_\_\_

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

**Section 5: Signature Page****Agent Authorization:**

If you elect to complete this agent authorization 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, Paul Roessel & Mike Schwartz, hereby designate and authorize Envirotech Environmental Consulting, Inc. (EECI)  
 Name of Applicant Name of Agent

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

**Agent Signature**

I hereby certify that the information on this form and on the attached plans is 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.

Todd Fritchman  
 Agent's Signature  
Todd Fritchman - EECI  
 Print Name

January 24, 2024  
 Date

**Applicant's Signature:**

I hereby certify that the information on this form and on the attached plans is 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.

Paul Roessel & Mike Schwartz  
 Applicant's Signature  
Paul Roessel & Mike Schwartz  
 Print Name

January 24, 2024  
 Date

**Contractor's Signature:**

I hereby certify that the information on this form and on the attached plans is 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.

\_\_\_\_\_  
 Contractor Signature  
 \_\_\_\_\_  
 Print Name

\_\_\_\_\_  
 Date

**Section 5: Signature Page****Agent Authorization:**

If you elect to complete this agent authorization 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, Paul Roessel & Mike Schwartz, hereby designate and authorize Envirotech Environmental Consulting, Inc. (EECI)  
Name of Applicant Name of Agent

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

**Agent Signature**

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Todd Fritchman  
Agent's Signature  
Todd Fritchman - EECI  
Print Name

January 24, 2024  
Date

**Applicant's Signature:**

I hereby certify that the information on this form and on the attached plans is 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.

Paul J. Roessel  
Applicant's Signature  
Paul Roessel & Mike Schwartz  
Print Name

01/23/2024  
Date

**Contractor's Signature:**

I hereby certify that the information on this form and on the attached plans is 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.

\_\_\_\_\_  
Contractor Signature  
\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Date

**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? +/- 50

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

4. Describe the existing shoreline:

Unconsolidated shoreline with exposed roots, construction material fill and severe undercutting

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5. What is the total number of cubic yards of rip-rap that will be used? 11 Cubic Yards

6. What is the number of cubic yards of rip-rap per running foot of shoreline? 0.22

(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: \_\_\_\_\_ Core stone: \_\_\_\_\_

[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:

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## 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: 50 Mean Low Water: N/AOrdinary High Water: N/A (for non-tidal waters)

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

Channelward of Mean High Water: 300 Channelward of Mean Low Water: 0

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

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

C. Will the revetment be backfilled? \_\_\_\_ Yes X No

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

D. Will filter cloth be used behind the rip-rap structure? X Yes \_\_\_\_ NoE. What is the average slope of the existing bank? 4:1F. What is the proposed slope of the rip-rap revetment? 3:1

(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 \_\_\_\_ No

G. 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   X   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:

Minimal disturbance to the wetlands will be implemented by utilizing wetland mats and not removing any native vegetation.

## 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:

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

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

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

**FILL**

Please make sure answers to all of the questions in this appendix correspond to information on the application drawings.

1. How many linear feet will the fill extend channelward of the:

- a. Tidal waters: mean high water line? 4 ft.  
mean low water line? \_\_\_\_\_ ft.
- b. Non-tidal waters: ordinary high water line? \_\_\_\_\_ ft.

2. What is the area of fill that will be located:

- a. on subaqueous land (channelward of mean high water) 300 sq. ft.
- b. on vegetated wetlands? 200 sq. ft.

3. What is the source of the fill?

- X Hauled in from upland sources: What is the source company/location/parcel number?
- \_\_\_\_\_ Obtained from dredged material: Complete Dredging Appendix.

Pennsy Supply - Elk Mills Quarry - 896 Elk Mills Road - Elk Mills, MD 21920

4. What is the total volume of fill? 11 cubic yards

- a. What is the total fill per running foot of shoreline? 0.22 cubic yards

5. What method will be used to place the fill?

Mini std steer excavator will transport the riprap to project area and will be placed by hand.

6. State the type and composition percentage of the fill material (e.g. sand 80%, silt 5%, clay 15%, etc.)

R4 Riprap stone

7. How will the fill be retained? Complete appropriate appendix.

The riprap will stabilize itself over the geotextile fabric.

8. What type of vegetation or ground cover will be provided for the filled area(s) to prevent soil erosion and help keep sediment from reaching State waters?

N/A

9. Describe the type(s) of structure(s) to be erected on the filled area (if any). Complete appropriate appendix.

The riprap revetment is the only structure

## BACKGROUND:

MICHAEL SCHWARTZ, who resides at 33 ENDLESS VIEW REHOBOTH BEACH DELAWARE, and PAUL ROESSEL, who resides at 7 VENETIAN DRIVE, REHOBOTH BEACH, DELAWARE, Adjacent Neighbors, are entering into a contract (The Contract) with the Pine Bay Homeowners Association (PBHOA).

The Adjacent Neighbors own land on a Lagoon which terminates at Pine Bay. At the endpoint of the Lagoon's Bank, material erosion from the Lagoon's continued movement of coastal waters has altered the edge of the Lagoon at Pine Bay. The Lagoon was developed before Pine Bay, and it is unknown if it terminated at Land owned by the Adjacent Neighbors. Nonetheless, the land has eroded over time and now ends at Pine Bay.

Currently, the bank at Pine Bay includes the end point of a series of drainage swales and a stormwater pipe that sits underneath a small bridge at the lagoon, which is part of the storm water management system from Pine Bay that serves as a release point of water from a "Wet Land and Storm Water Management Area" ("WLASWA") from Pine Bay into the lagoon near the Endless View. The adjacent neighbors acknowledge that Pine Bay's Storm Water Management System is releasing and will continue to release water from the Wet Land and Storm Water Management Area into the Lagoon by design which has occurred since the early 1990's.

Adjoining Neighbors have proposed continuing the rip rap at Endless View and placing new rip rap improvements across Pine Bay's Property to Mr. Roussel's property to stop any further erosion at Pine Bay.

The drainage swale, pipe and the bridge at Pine Bay are not being modified in any way during this process. The rip rap will stop erosion by protecting the shoreline designed and constructed by Envirotech and



approved by agencies pursuant to The Contract. Thus, the Rip Rap will not affect the flow of water from the Pine Bay Storm Water Management System into the Lagoon.

Pine Bay and Envirotech are simultaneously doing a maintenance project to the WLASWA contiguous to Mr. Schwartz's property and the Lagoon. Both projects will be done simultaneously to ensure consistency, efficiency, and success. The work will include design, permitting, and construction for both projects and will be approved by the appropriate agencies that must approve such work in advance.

Permission by Pine Bay for Mr. Schwartz and Mr. Roessel to contract for Erosion Control work on Pine Bay property with Envirotech at the Lagoon:

PBHOA is allowing the Adjacent Neighbors to install the Riprap along the Pine Bay bank property under the following conditions:

- 1) PBHOA shall approve and sign off in advance of all work to be done on the property in Pine Bay (Pine Bay Property).
- 2) The Adjacent Neighbors hereby agree that they are jointly and severally liable for and hold PBHOA and any adjacent homeowners harmless from any and all damage caused by or resulting from work while it is performed on the Pine Bay Property or an individual Pine Bay Owner's property.
- 3) Pine Bay shall have no financial or other obligation to the Mr. Schwartz or Mr. Roessel or Envirotech for any work performed pursuant to The Contract.
- 4) All work performed on Pine Bay Property shall be performed in accordance with Pine Bay rules for contractors, a copy of which is attached hereto and in accordance with governmental authorities' permitting and approval requirements.

5) No work performed by Envirotech pursuant to the Contract shall constrict, impede, or change the existing Wet Land and Storm Water Management Area flow of water from the drainage swale, pipe or bridge that are a part of the current Pine Bay Storm Water Management System that has been in place since the 1990's.

If Michael Schwartz and Paul Roessel agree to these terms and conditions, the PBHOA will execute the necessary permits to allow Envirotech to carry out the work outlined in The Contract.

*Mike Schwartz*  
.....  
Michael Schwartz  
33 Endless View

*Paul Roessel* 9/5/2023  
.....  
Paul Roessel  
7 Venetian Drive

*Glenn Kocher* 8/31/2023  
.....  
Pine Bay Homeowners Association by Glenn Kocher, Treasurer



ENVIRONMENTAL CONSULTING, INC.

*Providing Environmental Solutions*

## LETTER OF NO OBJECTION

February 26, 2025

Roessel & Schwartz Shoreline Stabilization Project  
7 Venetian Drive & 33 Endless View  
Rehoboth Beach, DE 19971  
TMP#s: 334-20.13-233.00 & 334-20.00-2.02

Mr. Thomas Long  
3 Back Bay Court  
Rehoboth Beach, DE 19971:

This letter is in reference to the proposed riprap revetment project located between 33 Endless View and 7 Venetian Drive in Rehoboth Beach, DE 19971. Envirotech Environmental Consulting, Inc. (EECI) is submitting a Subaqueous Lands Permit application to construct a 50 ft by 6 ft riprap revetment along the eroding shoreline in the dead-end lagoon. The objective of the project is to provide stability to the eroding shoreline with waterway directly from their property.

This letter of no objection provides permission from the property owner (Mr. Thomas Long) to the Roessel's Schwartz's, Envirotech Environmental Consulting, Inc. and any other affiliates associated with the project to construct the revetment within the 10-foot easement associated with 3 Bay Bay Court (TMP# 334-20.00-57.00). Please note that any damage to your property grounds will be repaired upon project completion. Examples of possible damage includes possible damage to grass due to equipment and foot traffic.

If you agree to allow the riprap revetment to encroach within the 10-foot easement, please fill out the information below:

3 Bay Back Court	Rehoboth Beach, Delaware 19971		
HOMEOWNER PROPERTY ADDRESS	CITY	STATE	ZIP CODE

334-20.00-57.00
HOMEOWNER TAX PARCEL ID

Mr. Thomas Long
HOMEOWNER NAME(S)

(973) 615-0987
HOMEOWNER PHONE NUMBER

tommyjacksonlong@yahoo.com
HOMEOWNER EMAIL ADDRESS

HOMEOWNER MAILING ADDRESS	CITY	STATE	ZIP CODE
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By signing below, you are confirming that there is No Objection to allowing the Roessel's, Schwartz's, EECI and any other affiliates associated with the project to encroach within 10 feet of the Property Boundary.

	2/26/25
SIGNATURE	DATE

Mr. Thomas Long
PRINT NAME

18663

BOOK 1869 PAGE 171

PREPARED BY:  
HUDSON, JONES, JAYWORTH, WILLIAMS & LIGUORI  
800 REHOBOTH AVENUE  
REHOBOTH BEACH, DE 10801

Tax Map #3-34-20-2

THIS DEED, Made this 10<sup>th</sup> day of June, in  
the year of our Lord one thousand nine hundred and ninety-two (1992)

BETWEEN BCK ASSOCIATES, a Delaware general partnership, of R.D. 1,  
Box 140, Selbyville, Delaware 19975, party of the first part,

- AND -

PINE BAY HOMEOWNERS ASSOCIATION, INC., a Delaware corporation, of c/o  
William H. Vernon, 4421 Highway One, Rehoboth Beach, Delaware 19971,  
party 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) and other good and  
valuable consideration, Current Lawful Money of the United States of  
America and other good and valuable consideration, the receipt whereof  
is hereby acknowledged, hereby grants and conveys unto the said party of  
the second part, its successors and assigns,

ALL those certain Open Space Areas in Pine Bay Section of  
Country Manor Subdivision as more particularly described on Exhibit "A"  
being a verbal survey description prepared by Charles D. Murphy, Jr.,  
Land Surveyor, dated March 5, 1992, and consisting of 15 pages of  
description attached hereto and included herein by specific reference  
thereto.

BEING a part of the same lands conveyed unto BCK Associates, a  
Delaware general partnership, by deed of Raymond S. Smethurst, Jr., et  
al., dated September 12, 1989, of record in the Office of the Recorder  
of Deeds, in and for Sussex County, Delaware, in Deed Book 1672, Page  
107.

IN WITNESS WHEREOF, the said party of the first part has caused  
these presents to be signed by its individual and corporate partners and  
the corporate seal to be affixed hereto the day and year aforesaid.

WITNESS:

BCK ASSOCIATES

By: BUNTING INVESTMENTS, INC., a  
Delaware corporation - General  
Partner

By C. Bunting  
President

Attest Barbara J. Lippell  
Secretary

(CORPORATE SEAL)

By: VILLAGE, INC., a Delaware  
corporation - General Partner

By William H. Vernon  
President

Attest Becky A. Week  
Secretary

7221 333 9/10/92 TX-EX ST .00

9934 111 9/10/92 CTX-EX SU .00

(CORPORATE SEAL)

Dm

Kathryn P. Braun

as to both

Kenneth A. Simpler

(SEAL)  
KENNETH A. SIMPLER - General Partner

Karen P. Simpler

(SEAL)  
KAREN P. SIMPLER - General Partner

By: W & J VERNON TRUST - General Partner

Kathryn P. Braun

By R. Brandon Jones Trustee (SEAL)  
R. BRANDON JONES, Trustee

STATE OF DELAWARE )  
COUNTY OF SUSSEX )

SS:

BE IT REMEMBERED, that on this 10TH day of JUNE, 1992, personally came before me, the Subscriber, a Notary Public for the State and County aforesaid, C. Coleman Bunting, President of BUNTING INVESTMENTS, INC., a corporation existing under the laws of the State of Delaware, a General Partner of BCK ASSOCIATES, a Delaware general partnership, 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 said 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 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 aforesaid.

Charles K. Stewart III  
Notary Public

STATE OF DELAWARE )  
COUNTY OF SUSSEX )

SS:

BE IT REMEMBERED, that on this 24th day of June, 1992, personally came before me, the Subscriber, a Notary Public for the State and County aforesaid, William H. Vernon, President of VILLAGE, INC., a corporation existing under the laws of the State of Delaware, a General Partner of BCK ASSOCIATES, a Delaware general partnership, 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 said 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 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 aforesaid.

Lucinda M. Merritt  
Notary Public

Lucinda M. Merritt  
Notary Public, State of Delaware  
County of Sussex  
My commission expires August 1, 1993

STATE OF DELAWARE )

COUNTY OF SUSSEX )

SS:

BE IT REMEMBERED, that on this 11<sup>th</sup> day of August, A.D. 1992, personally appeared before me, the Subscriber, a Notary Public for the State and County aforesaid, KENNETH A. SIMPLER and KAREN P. SIMPLER, General Partners of BCK ASSOCIATES, a Delaware general partnership, parties to this Indenture, known to me personally to be such, and they acknowledged this Indenture to be their act and deed.

GIVEN under my Hand and Seal of Office, the day and year aforesaid.

Karlyn P. Braun  
Notary Public

KARLYN P. BRAUN  
NOTARY PUBLIC DELAWARE  
MY COMMISSION EXPIRES 12/2/93

STATE OF DELAWARE )

COUNTY OF SUSSEX )

SS:

BE IT REMEMBERED, that on this 26<sup>th</sup> day of August, A.D. 1992, personally appeared before me, the Subscriber, a Notary Public for the State and County aforesaid, R. BRANDON JONES, TRUSTEE, Trustee of W & J VERNON TRUST, a General Partner of BCK ASSOCIATES, a Delaware general partnership, party to this Indenture, known to me personally to be such, and he acknowledged this Indenture to be his act and deed.

GIVEN under my Hand and Seal of Office, the day and year aforesaid.

Karlyn P. Braun  
Notary Public

PURCHASERS REPORT  
MADE TO DATE

SEP 11 1992

ASSESSMENT DIVISION

~~KARLYN P. BRAUN  
NOTARY PUBLIC DELAWARE  
MY COMMISSION EXPIRES 12/2/93~~

KARLYN P. BRAUN  
NOTARY PUBLIC DELAWARE  
MY COMMISSION EXPIRES 12/2/93

Charles D. Murphy, Jr.

14 South Maple Avenue  
Milford, Delaware 19963  
(302) 422-7327

March 05, 1992

DESCRIPTION

Open Space (P-4) to be conveyed to:  
Pine Bay Homeowner's Association, Inc.  
Pine Bay Section of Country Manor  
Leves and Rehoboth Hundred  
Sussex County, Delaware

Reference: Tax map 3-34-20-2

All that certain piece, parcel and tract of land, lying and being situate in Leves and Rehoboth Hundred, Sussex County and the State of Delaware, comprising all of Open Space Area P-4, Pine Bay Section of Country Manor, as filed with the Office of the Recorder of Deeds, at Georgetown, Delaware in Plot Book 46 at page 225, fronting on the southerly right-of-way line of Bay Reach, adjoining lands now or formerly of Anne B. Dodd, of Rehoboth Bay Land Company, Lot #47, Lot #48, Lot #49, Lot #50, Lot #51 and the northerly edge of the Rehoboth Bay, being more fully described as follows, to wit:

Beginning at a point on the southerly right-of-way line of Bay Reach, at fifty (50) feet wide, being the northwesterly corner for Lot #51; thence proceeding with Lot #51 the following three (3) courses and distances: 1) South 17 degrees 41 minutes 29 seconds East 136.88 feet, 2) North 56 degrees 40 minutes 41 seconds East 31.08 feet and 3) North 62 degrees 33 minutes 37 seconds East 47.28 feet to a point on line for lands of Rehoboth Bay Land Company; thence running with said lands of Rehoboth Bay Land Company South 01 degrees 15 minutes 00 seconds West 636.91 feet to a point at the northerly edge of the Rehoboth Bay; thence running with said northerly edge the following eight (8) bearings and distances: 1) South 36 degrees 48 minutes 03 seconds West 54.47 feet, 2) South 68 degrees 36 minutes 43 seconds West 115.23 feet, 3) South 13 degrees 53 minutes 31 seconds East 82.32 feet, 4) South 18 degrees 07 minutes 54 seconds West 154.97 feet, 5) South 88 degrees 45 minutes 26 seconds West 79.98 feet, 6) South 50 degrees 02 minutes 01 seconds West

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226.73 feet, 7) South 87 degrees 50 minutes 32 seconds West 67.17 feet, and 8) North 64 degrees 58 minutes 19 seconds West 83.20 feet to a concrete monument on line for lands of Anne B. Dodd; thence running with said Dodd lands North 03 degrees 02 minutes 26 seconds East 1157.53 feet to a corner for Lot #47; thence running with Lot #47, Lot #48, Lot #49, and Lot #50 the following nine (9) courses and distances:

- 1) South 42 degrees 07 minutes 55 seconds East 48.08 feet,
- 2) South 41 degrees 59 minutes 18 seconds East 51.62 feet,
- 3) South 64 degrees 38 minutes 18 seconds East 65.89 feet,
- 4) South 88 degrees 23 minutes 11 seconds West 25.45 feet,
- 5) South 59 degrees 28 minutes 10 seconds East 60.71 feet,
- 6) South 86 degrees 29 minutes 05 seconds East 72.62 feet,
- 7) South 78 degrees 01 minutes 20 seconds East 47.86 feet,
- 8) South 71 degrees 53 minutes 44 seconds East 68.20 feet,
- and 9) North 57 degrees 32 minutes 45 seconds East 51.63 feet

to a corner for Lot #50; thence continuing with Lot #50 North 17 degrees 41 minutes 29 seconds East 141.10 feet to a point on the aforementioned southerly right-of-way line of Bay Reach; thence finally, running with said right-of-way line and deflecting left along a 175.00 foot radius curve, an arc distance of 20.04 feet to the place of beginning, containing 11.42 Acres (497,867.70 Square Feet) of land, more or less.



Charles D. Murphy, Jr.

14 South Maple Avenue  
Milford, Delaware 19963  
(302) 422-7327

March 05, 1992

DESCRIPTION

Open Space (P-7) to be conveyed to:  
Pine Bay Homeowner's Association, Inc.  
Pine Bay Section of Country Manor  
Leves and Rehoboth Hundred  
Sussex County, Delaware

Reference: Tax map 3-34-20-2

All that certain piece, parcel and tract of land, lying and being situate in Leves and Rehoboth Hundred, Sussex County and the State of Delaware, comprising all of Open Space Area P-7, Pine Bay Section of Country Manor, as filed with the Office of the Recorder of Deeds, at Georgetown, Delaware in Plot Book 46 at page 225, adjoining lands now or formerly of Rehoboth Bay Land Company and Lot #52, being more fully described as follows, to wit:

Beginning at a point on line for lands of Rehoboth Bay Land Company, being a corner for Lot #52, distant the following two (2) courses and distances from the southeasterly right-of-way line of Bay Reach, at fifty (50) feet wide: 1) South 42 degrees 11 minutes 29 seconds East 75.00 feet, and 2) deflecting right along a 150.00 foot radius curve, an arc distance of 11.35 feet; thence proceeding with lands of Rehoboth Bay Land Company and deflecting right along a 150.00 foot radius curve, an arc distance of 102.37 feet to a point; thence continuing with said lands of Rehoboth Bay Land Company North 88 degrees 45 minutes 00 seconds West 83.28 feet to a corner for Lot #52; thence running with Lot #52 the following four (4) courses and distances: 1) North 14 degrees 35 minutes 06 seconds West 24.54 feet, 2) North 30 degrees 15 minutes 28 seconds East 36.08 feet, 3) North 31 degrees 33 minutes 25 seconds East 32.41 feet, and finally, 4) North 64 degrees 16 minutes 09 seconds East 25.27 feet to the place of beginning, containing 5,914.84 Square Feet (0.13 Acre) of land, more or less.

Charles D. Murphy, Jr.

14 South Maple Avenue  
Milford, Delaware 19963  
(302) 422-7327

March 05, 1992

DESCRIPTION

Open Space (P-6) to be conveyed to:  
Pine Bay Homeowner's Association, Inc.  
Pine Bay Section of Country Manor  
Leves and Rehoboth Hundred  
Sussex County, Delaware

Reference: Tax map 3-34-20-2

All that certain piece, parcel and tract of land, lying and being situate in Leves and Rehoboth Hundred, Sussex County and the State of Delaware, comprising all of Open Space Area P-6, Pine Bay Section of Country Manor, as filed with the Office of the Recorder of Deeds, at Georgetown, Delaware in Plot Book 46 at page 225, fronting on the southwesterly right-of-way line of Back Bay, adjoining lands now or formerly of Rehoboth Bay Land Company, of William H. Vernon, Lot #53, Lot #54 and Lot #55, being more fully described as follows, to wit:

Beginning at a point on the southwesterly right-of-way line of Back Bay, at fifty (50) feet wide, being the easterly corner for Lot #54; thence running with said right-of-way line and deflecting right along a 25.00 foot radius curve, an arc distance of 21.03 feet to a point of reverse curvature; thence continuing with said right-of-way line and deflecting left along a 50.00 foot radius curve, an arc distance of 2.00 feet to a corner for Lot #55; thence running with Lot #55 the following eight (8) bearings and distances: 1) South 26 degrees 03 minutes 31 seconds West 65.66 feet, 2) South 58 degrees 20 minutes 46 seconds East 8.17 feet, 3) South 28 degrees 01 minutes 48 seconds West 37.33 feet, 4) South 36 degrees 44 minutes 52 seconds West 41.40 feet, 5) South 16 degrees 58 minutes 43 seconds West 24.12 feet, 6) South 10 degrees 06 minutes 16 seconds East 18.40 feet, 7) South 03 degrees 44 minutes 55 seconds East 20.40 feet, and 8) South 19 degrees 55 minutes 42 seconds West 62.96 feet to a point at a corner for lands of Rehoboth Bay Land Company; thence

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running with said lands of Rehoboth Bay Land Company North 88 degrees 45 minutes 00 seconds West 100.00 feet to a point; thence continuing with said lands of Rehoboth Bay Land Company and deflecting left along a 200.00 foot radius curve, an arc distance of 107.79 feet to a corner for Lot #53; thence running with Lot #53 and Lot #54 the following nine (9) courses and distances: 1) North 48 degrees 22 minutes 29 seconds East 14.56 feet, 2) North 58 degrees 08 minutes 59 seconds East 37.29 feet, 3) South 82 degrees 16 minutes 26 seconds East 40.75 feet, 4) North 66 degrees 23 minutes 09 seconds East 30.12 feet, 5) North 26 degrees 50 minutes 30 seconds East 27.69 feet, 6) North 52 degrees 19 minutes 49 seconds East 39.36 feet, 7) North 32 degrees 40 minutes 13 seconds East 17.25 feet, 8) South 58 degrees 20 minutes 46 seconds East 5.61 feet, and finally, 9) North 26 degrees 03 minutes 31 seconds East 73.51 feet to the place of beginning, containing 21,161.36 Square Feet (0.48 Acre) of land, more or less.

**Charles D. Murphy, Jr.**

14 South Maple Avenue  
Milford, Delaware 19963  
(302) 422-7327

March 05, 1992

**DESCRIPTION**

Open Space (P-5) to be conveyed to:  
Pine Bay Homeowner's Association, Inc.  
Pine Bay Section of Country Manor  
Leves and Rehoboth Hundred  
Sussex County, Delaware

Reference: Tax map 3-34-20-2

All that certain piece, parcel and tract of land, lying and being situate in Leves and Rehoboth Hundred, Sussex County and the State of Delaware, comprising all of Open Space Area P-5, Pine Bay Section of Country Manor, as filed with the Office of the Recorder of Deeds, at Georgetown, Delaware in Plot Book 46 at page 225, fronting on the northerly right-of-way line of Back Bay and the southeasterly right-of-way line of Bay Reach, adjoining Lot #58, Lot #59, and Lot #60, being more fully described as follows, to wit:

Beginning at a point on the southeasterly right-of-way line of Bay Reach, at fifty (50) feet wide, being the westerly corner for Lot #60; thence proceeding with Lot #60 South 54 degrees 26 minutes 29 seconds East 172.00 feet to a corner for Lot #58; thence running with Lot #58 South 03 degrees 27 minutes 12 seconds East 57.77 feet to a point; thence continuing with Lot #58 South 26 degrees 03 minutes 31 seconds West 78.00 feet to a point on the northerly right-of-way line of Back Bay; thence running with said right-of-way line of Back Bay and deflecting left along a 50.00 foot radius curve, an arc distance of 18.26 feet to a point of reverse curvature; thence continuing with said right-of-way line of Back Bay and deflecting right along a 25.00 foot radius curve, an arc distance of 7.36 feet to a corner for Lot #59; thence running with Lot #59 the following three (3) courses and distances: 1) North 26 degrees 03 minutes 31 seconds East 88.53 feet, 2) North 03 degrees 27 minutes 12 seconds West 42.96 feet, and 3) North 54 degrees 26 minutes 29 seconds West 159.12 feet to a point on the aforementioned southeasterly right-of-way line of Bay Reach; thence finally, running with said right-of-way line of Bay Reach North 26 degrees 03 minutes 31 seconds East 20.28 feet to the place of beginning, containing 5,972.69 Square Feet (0.13 Acre) of land, more or less.

**Charles D. Murphy, Jr.**

14 South Maple Avenue  
Millford, Delaware 19963  
(302) 422-7327

March 03, 1992

**DESCRIPTION**

Open Space (P-2) to be conveyed to:  
Pine Bay Homeowner's Association, Inc.  
Pine Bay Section of Country Manor  
Leves and Rehoboth Hundred  
Sussex County, Delaware

Reference: Tax map 3-34-20-2

All that certain piece, parcel and tract of land, lying and being situate in Leves and Rehoboth Hundred, Sussex County and the State of Delaware, comprising all of Open Space Area P-2, Pine Bay Section of Country Manor, as filed with the Office of the Recorder of Deeds, at Georgetown, Delaware in Plot Book 46 at page 225, fronting on the northerly right-of-way line of Bay Reach, adjoining Lot #1, Lot #4, Lot #5, Lot #6, Lot #9, Lot #10 and Lot #11, being more fully described as follows, to wit:

Beginning at a point on the northerly right-of-way line of Bay Reach, at fifty (50) feet wide, being the easterly corner for Lot #9; thence proceeding with Lot 9 North 23 degrees 50 minutes 57 seconds West 112.74 feet to a corner for Lot #10; thence running with Lot #10 and Lot #11 North 00 degrees 47 minutes 45 seconds West 160.05 feet to a corner for Lot #12 and Lot #6; thence running with Lot #6 the following three (3) courses and distances: 1) North 75 degrees 43 minutes 58 seconds East 111.82 feet, 2) North 13 degrees 26 minutes 29 seconds West 110.65 feet, and 3) North 76 degrees 33 minutes 31 seconds East 10.00 feet to a corner for Lot #5; thence running with Lot #5 the following three (3) courses and distances: 1) North 70 degrees 33 minutes 31 seconds East 10.00 feet, 2) South 13 degrees 26 minutes 29 seconds East 110.36 feet, and 3) North 75 degrees 43 minutes 58 seconds East 120.66 feet to a corner for Lot #4; thence running with Lot #4 South 57 degrees 24 seconds 15 seconds East 165.66 feet to a corner for Lot #1; thence running with Lot #1 South 35 degrees 14 minutes 34 seconds East 134.63 feet to a point on the northerly right-of-way line of the seventy (70) foot

Page two (P-2)

portion of Bay Reach; thence running with said right-of-way line the following three (3) courses and distances: 1) South 65 degrees 14 minutes 55 seconds West 50.99 feet to a point, 2) South 76 degrees 33 minutes 31 seconds West 201.48 feet to a point of curvature, and finally, 3) deflecting left along a 1,000.00 foot radius curve, an arc distance of 181.65 feet to the place of beginning, containing 2.25 Acres (97,931.51 Square Feet) of land, more or less

**Charles D. Murphy, Jr.**

14 South Maple Avenue  
Milford, Delaware 19963  
(302) 422-7327

March 05, 1992

**DESCRIPTION**

Open Space (P-1) to be conveyed to:  
Pine Bay Homeowner's Association, Inc.  
Pine Bay Section of Country Manor  
Leves and Rehoboth Hundred  
Sussex County, Delaware

Reference: Tax map 3-34-20-2

All that certain piece, parcel and tract of land, lying and being situate in Leves and Rehoboth Hundred, Sussex County and the State of Delaware, comprising all of Open Space Area P-1, Pine Bay Section of Country Manor, as filed with the Office of the Recorder of Deeds, at Georgetown, Delaware in Plot Book 46 at page 225, fronting on the easterly right-of-way line of Bay Reach and the southerly right-of-way line of Bay Reach, adjoining Lot #67 and Lot #68, being more fully described as follows, to wit:

Beginning at a point on the southerly right-of-way line of Bay Reach, being the northwesterly corner for Lot #68; thence proceeding with Lot #68 South 13 degrees 26 minutes 29 seconds East 90.54 feet to a corner for lot #67; thence running with Lot #67 South 76 degrees 33 minutes 31 seconds West 177.00 feet to a point on the easterly right-of-way line of Bay Reach; thence running with said right-of-way line North 13 degrees 26 minutes 29 seconds West 75.54 feet to a point of curvature; thence continuing with said right-of-way line and deflecting right along a 25.00 foot radius junction curve, an arc distance of 39.27 feet to a point of tangency on the aforementioned southerly right-of-way line of Bay Reach; thence running with said southerly right-of-way line the following three (3) courses and distances: 1) North 76 degrees 33 minutes 31 seconds East 72.00 feet, 2) North 87 degrees 52 minutes 07 seconds East 50.99 feet, and finally, 3) North 76 degrees 33 minutes 31 seconds East 30.00 feet to the place of beginning, containing 17,111.70 Square Feet (0.39 Acre) of land, more or less.

**Charles D. Murphy, Jr.**

14 South Maple Avenue  
Milford, Delaware 19963  
(302) 422-7327

March 05, 1992

**DESCRIPTION**

Open Space (P-3) to be conveyed to:  
Pine Bay Homeowner's Association, Inc.  
Pine Bay Section of Country Manor  
Leves and Rehoboth Hundred  
Sussex County, Delaware

Reference: Tax map 3-34-20-2

All that certain piece, parcel and tract of land, lying and being situate in Leves and Rehoboth Hundred, Sussex County and the State of Delaware, comprising all of Open Space Area P-3, Pine Bay Section of Country Manor, as filed with the Office of the Recorder of Deeds, at Georgetown, Delaware in Plot Book 46 at page 225, adjoining lands now or formerly of Robert M. Hoyt (Trustee), Lot #22, Lot #23, Lot #31, Lot #36, Lot #37, Lot #38, Lot #39, Lot #40, Lot #41, Lot #42 and Lot #43, being more fully described as follows, to wit:

Beginning at the northwesterly corner for Lot #43, distant with said lot the following three (3) courses and distances from the common corner for Lots 43 and 44 on the northwesterly right-of-way line of Bay Reach: 1) North 49 degrees 27 minutes 32 seconds West 222.88 feet, and 2) North 01 degrees 42 minutes 58 seconds East 62.33 feet and 3) North 01 degrees 55 minutes 18 seconds East 154.86 feet; and being a point on line for lands of Robert M. Hoyt (Trustee); thence continuing with Lot #43, Lot #42, Lot #41, Lot #40, Lot #39, Lot #38, Lot #37, Lot #36, Lot #31, Lot #23 and Lot #22 the following seventy-nine (79) bearings and distances:

- 1) South 59 degrees 13 minutes 53 seconds East 8.26 feet,
- 2) South 59 degrees 13 minutes 54 seconds East 14.81 feet,
- 3) South 59 degrees 13 minutes 55 seconds East 22.34 feet,
- 4) South 61 degrees 11 minutes 36 seconds East 16.05 feet,
- 5) South 55 degrees 23 minutes 39 seconds East 21.78 feet,
- 6) South 19 degrees 19 minutes 27 seconds East 23.72 feet,
- 7) South 66 degrees 32 minutes 02 seconds East 14.62 feet,
- 8) South 44 degrees 08 minutes 37 seconds East 23.46 feet,



Page two (P-3)

9) South 10 degrees 05 minutes 57 seconds West 23.00 feet,  
10) South 34 degrees 52 minutes 11 seconds East 68.65 feet,  
11) South 60 degrees 09 minutes 32 seconds East 23.43 feet,  
12) South 73 degrees 20 minutes 13 seconds East 34.01 feet,  
13) North 80 degrees 24 minutes 44 seconds East 26.35 feet,  
14) North 82 degrees 48 minutes 23 seconds East 31.34 feet,  
15) North 71 degrees 03 minutes 29 seconds East 35.67 feet,  
16) South 84 degrees 13 minutes 59 seconds East 11.61 feet,  
17) North 10 degrees 48 minutes 57 seconds East 12.51 feet,  
18) North 09 degrees 09 minutes 48 seconds East 28.44 feet,  
19) North 44 degrees 19 minutes 42 seconds East 16.99 feet,  
20) North 08 degrees 40 minutes 34 seconds East 25.88 feet,  
21) North 00 degrees 10 minutes 45 seconds West 49.67 feet,  
22) North 08 degrees 51 minutes 28 seconds East 10.77 feet,  
23) North 09 degrees 49 minutes 55 seconds West 40.42 feet,  
24) North 46 degrees 40 minutes 16 seconds West 21.47 feet,  
25) North 30 degrees 13 minutes 05 seconds West 28.20 feet,  
26) North 43 degrees 40 minutes 42 seconds West 29.61 feet,  
27) North 15 degrees 03 minutes 30 seconds West 44.37 feet,  
28) South 85 degrees 39 minutes 48 seconds East 40.40 feet,  
29) North 18 degrees 39 minutes 00 seconds East 23.14 feet,  
30) North 00 degrees 14 minutes 40 seconds East 24.95 feet,  
31) North 15 degrees 37 minutes 24 seconds East 19.85 feet,  
32) North 17 degrees 39 minutes 22 seconds East 37.31 feet,  
33) South 62 degrees 32 minutes 27 seconds East 67.03 feet,  
34) North 29 degrees 49 minutes 47 seconds East 15.17 feet,  
35) North 71 degrees 05 minutes 58 seconds East 32.18 feet,  
36) North 68 degrees 48 minutes 33 seconds East 26.19 feet,  
37) North 52 degrees 58 minutes 42 seconds East 26.28 feet,  
38) North 80 degrees 39 minutes 34 seconds East 7.90 feet,  
39) North 48 degrees 26 minutes 12 seconds East 17.17 feet,  
40) North 62 degrees 45 minutes 14 seconds East 15.19 feet,  
41) North 39 degrees 23 minutes 20 seconds East 6.89 feet,  
42) North 55 degrees 09 minutes 34 seconds East 13.84 feet,  
43) North 77 degrees 00 minutes 22 seconds West 15.32 feet,  
44) North 11 degrees 55 minutes 12 seconds East 15.74 feet,  
45) North 52 degrees 17 minutes 05 seconds West 19.38 feet,  
46) North 21 degrees 51 minutes 54 seconds West 27.57 feet,  
47) North 88 degrees 12 minutes 45 seconds West 9.82 feet,  
48) North 45 degrees 01 minutes 03 seconds West 15.81 feet,  
49) North 23 degrees 21 minutes 51 seconds West 37.83 feet,  
50) North 28 degrees 18 minutes 17 seconds West 18.52 feet,  
51) North 33 degrees 50 minutes 38 seconds East 2.24 feet,

Page three (P-3)

52) North 37 degrees 57 minutes 24 seconds West 21.68 feet,  
53) North 86 degrees 49 minutes 02 seconds West 58.20 feet,  
54) South 53 degrees 54 minutes 07 seconds West 22.74 feet,  
55) North 54 degrees 51 minutes 45 seconds West 11.59 feet,  
56) South 34 degrees 21 minutes 21 seconds West 41.67 feet,  
57) North 69 degrees 12 minutes 24 seconds West 31.69 feet,  
58) South 14 degrees 30 minutes 12 seconds West 10.37 feet,  
59) South 85 degrees 15 minutes 31 seconds West 19.39 feet,  
60) North 87 degrees 39 minutes 54 seconds West 22.88 feet,  
61) North 63 degrees 03 minutes 51 seconds West 15.43 feet,  
62) North 82 degrees 58 minutes 32 seconds West 37.20 feet,  
63) North 07 degrees 18 minutes 02 seconds West 43.14 feet,  
64) North 24 degrees 07 minutes 10 seconds East 48.18 feet,  
65) North 26 degrees 48 minutes 28 seconds East 21.50 feet,  
66) North 27 degrees 56 minutes 57 seconds West 54.18 feet,  
67) North 43 degrees 26 minutes 04 seconds West 28.53 feet,  
68) North 70 degrees 48 minutes 55 seconds West 31.68 feet,  
69) South 87 degrees 54 minutes 34 seconds West 57.25 feet,  
70) South 18 degrees 44 minutes 59 seconds West 20.40 feet,  
71) South 34 degrees 58 minutes 19 seconds West 38.25 feet,  
72) South 02 degrees 07 minutes 46 seconds East 30.98 feet,  
73) South 32 degrees 25 minutes 47 seconds East 36.95 feet,  
74) South 46 degrees 25 minutes 43 seconds East 17.75 feet,  
75) South 25 degrees 50 minutes 02 seconds East 37.46 feet,  
76) South 13 degrees 00 minutes 24 seconds West 55.80 feet,  
77) South 53 degrees 32 minutes 40 seconds West 52.70 feet,  
78) South 79 degrees 27 minutes 05 seconds West 26.74 feet,  
and 79) North 70 degrees 33 minutes 22 seconds West 5.19 feet  
to a point on the aforementioned lands of Robert M. Hoyt  
(Trustee); thence finally, running with said Hoyt lands South  
01 degrees 55 minutes 18 seconds West 308.26 feet to the  
place of beginning, containing 4.51 Acres (196,451.97 Square  
Feet) of land, more or less.

**Charles D. Murphy, Jr.**

14 South Maple Avenue  
Milford, Delaware 19963  
(302) 422-7327

March 05, 1992

Open Space to be conveyed to:  
Pine Bay Homeowner's Association, Inc.  
Pine Bay Section of Country Manor  
Leves and Rehoboth Hundred  
Sussex County, Delaware

Reference: Tax map 3-34-20-2

All that certain piece, parcel and tract of land, lying and being situate in Leves and Rehoboth Hundred, Sussex County and the State of Delaware, comprising all of an unnamed area at the terminus of Manor Drive South as depicted on a subdivision plot of Pine Bay Section of Country Manor, as filed with the Office of the Recorder of Deeds, at Georgetown, Delaware in Plot Book 46 at page 225, adjoining lands now or formerly of Kenneth K. Lingo, of Alex Kolobielski, Lot #64 and Lot #65, being more particularly described as follows, to wit:

Beginning at a point at the westerly terminus of Manor Drive South, being a point on line for lands of Kenneth K. Lingo; thence proceeding with said Lingo lands North 89 degrees 26 minutes 58 seconds West 8.20 feet to a corner for said Lingo lands; thence continuing with said Lingo lands South 00 degrees 33 minutes 00 seconds West 15.00 feet to a point at a corner for Lot #64; thence running with Lot #64 North 89 degrees 27 minutes 00 seconds West 40.00 feet to a corner for Lot #65; thence running with Lot #65 North 10 degrees 57 minutes 20 seconds West 80.61 feet to a point; thence continuing with Lot #65 North 76 degrees 33 minutes 31 seconds East 40.00 feet to a point on line for lands of Alex Kolobielski; thence running with said Kolobielski lands South 13 degrees 26 minutes 29 seconds East 5.01 feet to a point of curvature; thence deflecting left along a 25.00 foot radius curve, an arc distance of 33.16 feet to a found concrete monument on the aforementioned westerly terminus of Manor Drive South; thence finally, running with said westerly terminus South 00 degrees 33 minutes 00 seconds West 49.85 feet to the place of beginning, containing 4,291 Square Feet of land, more or less.

Charles D. Murphy, Jr.

14 South Maple Avenue  
Milford, Delaware 19963  
(302) 422-7327

March 05, 1992

DESCRIPTION

Subdivision Street Right-of-Ways  
To be conveyed to:  
Pine Bay Homeowner's Association, Inc.  
Pine Bay Section of Country Manor  
Leves and Rehoboth Hundred  
Sussex County, Delaware

Reference: Tax map 3-334-20-2

All that certain piece, parcel and tract of land, lying and being situate in Leves and Rehoboth Hundred, Sussex County and the State of Delaware, comprising all lands encompassed within the Right-of-Way(s) of the subdivision streets known as Bay Reach, Back Bay, Holly Ridge, Hawk's Nest and Manor Drive North, as shown on a plot of Pine Bay Section of Country Manor, as filed with the Office of the Recorder of Deeds, at Georgetown, Delaware in Plot Book 46 at page 225.

Charles D. Murphy, Jr.

14 South Maple Avenue  
 Milford, Delaware 19963  
 (302) 422-7327

BCK Associates, party of the first part, grants and conveys unto Pine Bay Homeowners Association, Inc., party of the second part, an easement over the hereinafter described lands. Said easement be for the benefit of all property owners in Pine Bay section of Country Manor and the party of the second part for ingress and egress from Bay Reach Road to and from the open space area of the party of the second part designated as "P-3" as described in this Exhibit "A" on pages 10, 11 & 12.

March 05, 1992

DESCRIPTION

Easement to be conveyed to:  
 Pine Bay Homeowner's Association, Inc.  
 Pine Bay Section of Country Manor  
 Leves and Rehoboth Hundred  
 Sussex County, Delaware  
 The easement crosses the following described land:  
 Reference: Tax map 3-34-20-2

All that certain piece, parcel and lot of land, lying and being situate in Leves and Rehoboth Hundred, Sussex County and the State of Delaware, comprising a portion of Lot #41 in a subdivision known as Pine Bay Section of Country Manor, as filed with the Office of the Recorder of Deeds, at Georgetown, Delaware in Plot Book 46 at page 225, fronting on the northwesterly right-of-way line of Bay Reach, adjoining the residue of Lot #41, Lot #40 and Open Space (P-3), being more particularly described as follows, to wit:

Beginning at a point on the northwesterly right-of-way line of Bay Reach, twenty-five (25) feet from the centerline thereof, being the southerly corner for Lot #40; thence proceeding with said right-of-way line South 26 degrees 03 minutes 31 seconds West 10.00 feet to a point; thence running thru Lot #41 North 63 degrees 56 minutes 29 seconds West 106.39 feet to a point on line for Open Space (P-3); thence running with said Open Space North 09 degrees 09 minutes 48 seconds East 8.63 feet to a point; thence continuing with said Open Space (P-3) North 44 degrees 19 minutes 42 seconds East 1.84 feet to a corner for the aforementioned Lot #40; thence finally, running with Lot #40 South 63 degrees 56 minutes 29 seconds East 108.32 feet to the place of beginning, containing 1,078 Square Feet of land, more or less.

DELEWARE DEEDS  
 DOC. SURCHARGE PAID

22 SEP 10 AM 11:14

RECORDER OF DEEDS  
 SUSSEX COUNTY

law offices  
 HJW & A  
 9-21-92

TAX PARCEL NO. 3-34-20.00-2.02

Prepared by:

AERENSON & AERENSON, LLC

2213 CONCORD PIKE

Wilmington, DE 19803

10-020

Return to:

Michael Schwartz

5201 Kennett Pike

Wilmington, DE 19807

11882

BK: 3779 PG: 161

*THIS DEED Made this* 23 *day of April, 2010,*

**BETWEEN, MICHAEL SCHWARTZ AND DEBORAH SCHWARTZ,** parties of the first part,,

**A N D**

**MICHAEL SCHWARTZ,** party of the second part,

**WITNESSETH,** That the said part of the first part for and in consideration of the sum of **Ten Dollars and 00/100 Dollars (\$10.00) and other good and valuable consideration,** lawful money of the United States of America, the receipt and sufficiency whereof is hereby acknowledged, hereby grant and convey unto the said party of the second part, his heirs and assigns,

**ALL** that certain lot, piece or parcel of land with the improvements thereon, situate in Lewes and Rehoboth Hundred, Sussex County and State of Delaware, being Lot Number 2 as shown on the Record Plan of Endless View subdivision, of record in the Office of the Recorder of Deeds in and for Sussex County, Delaware in Plot Book 141, Page 18, said lot also known as 33 Endless View and being more particularly bounded and described in accordance by Miller-Lewis, Inc., as follows, to wit:

**BEGINNING** at a point in the center of a lagoon and on the line of Seabreeze Development; said point being situate on the southeasterly property corner of lot #1 of Endless View; thence with the center of a lagoon South 01 degrees 15 minutes 00 seconds West a distance of 431.53 feet to a point; thence with the Rehoboth Bay the following seven courses and distances: 1) North 88 degrees 45 minutes 00 seconds West a distance of 32.50 feet to a point; 2) South 82 degrees 23 minutes 58 seconds West a distance of 5.94 feet to a point; 3) North 12 degrees 36 minutes 12 seconds West a distance of 6.40 feet to a point; 4) South 65 degrees 28 minutes 25 seconds West a distance of 7.17 feet to a point; 5) South 86 degrees 58 minutes 25 seconds West a distance of 150.14 feet to a point; 6) South 72 degrees 43 minutes 37 seconds West a distance of 47.17 feet to a point; 7) South 60 degrees 15 minutes 26 seconds West a distance of 69.04 feet to a point; thence with the lands of Pine Bay H.O.A., now or formerly, North 01 degrees 15 minutes 26 seconds West a distance of 491.08 feet to a point; thence with lot #1 the following nine courses and distances: 1) South 88 degrees 45 minutes 00 seconds East a distance of 147.14 feet to a point;

2) North 00 degrees 06 minutes 55 seconds West a distance of 8.89 feet to a point; 3) North 01 degree 14 minutes 38 seconds West a distance of 53.63 feet to a point; 4) North 03 degrees 33 minutes 09 seconds West a distance of 25.63 feet to a point; 5) North 89 degrees 16 minutes 59 seconds East a distance of 20.22 feet to a point; 6) South 05 degrees 57 minutes 45 seconds East a distance of 28.77 feet to a point; 7) South 04 degrees 26 minutes 22 seconds West a distance of 42.55 feet to a point; 8) South 01 degree 04 minutes 50 seconds West a distance of 17.67 feet to a point; 9) South 88 degrees 45 minutes 00 seconds East a distance of 136.05 feet home to the point and place of beginning said to contain 3.10 acres of land, be the same more or less.

**INCLUDING** an Ingress/Egress Easement described more particularly:

**BEGINNING** at an iron pipe (found) on the southeasterly right-of-way line of Bay Reach Road (50' R/W); said pipe being situate southwesterly of intersection with Back Bay Road a distance of 205 feet, more or less; thence with the lands of Martin M and Deborah B Zoltick, now or formerly, South 42 degrees 11 minutes 29 seconds East a distance of 75.00 feet to a point; thence continuing with said Zoltick lands and the lands of Pine Bay H.O.A., now or formerly, and along a curve to the right having a radius of 200.00 feet, the central angle being 15 degrees 34 minutes 43 seconds, the arc length being 54.38 feet, the chord bearing South 34 degrees 23 minutes 55 seconds East a distance of 54.21 feet to a point; thence through lot #1 South 00 degrees 30 minutes 17 seconds West a distance of 293.48 feet to a point; thence with lot #2 the following nine courses and distances: 1) North 88 degrees 45 minutes 00 seconds West a distance of 16.69 feet to a point; 2) North 01 degree 04 minutes 50 seconds East a distance of 17.67 feet to a point; 3) North 04 degrees 26 minutes 22 seconds East a distance of 42.55 feet to a point; 4) North 05 degrees 57 minutes 45 seconds West a distance of 28.77 feet to a point; 5) South 89 degrees 16 minutes 59 seconds West a distance of 20.22 feet to a point; 6) South 03 degrees 33 minutes 09 seconds East a distance of 25.63 feet to a point; 7) South 01 degrees 14 minutes 38 seconds East a distance of 53.63 feet to a point; 8) South 00 degrees 06 minutes 55 seconds East a distance of 8.89 feet to a point; 9) North 88 degrees 45 minutes 00 seconds West a distance of 16.50 feet to a point; thence through lot #1 North 00 degrees 30 minutes 17 seconds East a distance of 200.02 feet to a point; thence with the lands of Pine Bay H.O.A., now or formerly, South 88 degrees 45 minutes 00 seconds East a distance of 21.96 feet to an iron pipe (found); thence with the lands of Pine Bay H.O.A., now or formerly, and the lands of William H and Sharon S Vernon, now or formerly, and along a curve to the left having a radius of 150.00 feet, the central angle being 43 degrees 26 minutes 30 seconds, the arc length being 113.73 feet, the chord bearing North 20 degrees 28 minutes 14 seconds West a distance of 111.03 feet to a point; thence continuing with said Vernon lands North 42 degrees 11 minutes 29 seconds West a distance of 75.00 feet to an iron pipe (found); thence with the right-of-way line of Bay Reach Road North 47 degrees 48 minutes 31 seconds East a distance of 50.00 feet home to the point and place of beginning said to contain 1.58 acres of land, be the same more or less.

**SUBJECT** to the restrictions of record as contained in the Office of the Recorder of Deeds in and for Sussex County, Delaware, as follows:

TOGETHER WITH AN EASEMENT FOR INGRESS, EGRESS AND REGRESS as set forth in Deed Record 2770, Page 130.

EASEMENTS AND CONDITIONS as set forth in Plot Book 141, Page 18.

**SUBJECT** to the agreements of record as contained in the Office of the Recorder of Deeds in and for Sussex County, Delaware, as follows:

UTILITY RIGHT OF WAY as set forth in Deed Record 318, Page 387; Deed Record 405, Page 543 and Deed Record 518, Page 341.

DEED OF EASEMENT as set forth in Deed Record 788, Page 216.

RIGHT OF FIRST REFUSAL as set forth in Deed Record 1672, Page 119.

**BEING** a part of the same lands and premises which Seashore Enterprises, Inc., by Deed dated November 8, 2002 and recorded November 12, 2002 in the Office of the Recorder of Deeds in and for Sussex County, Delaware in Deed Record 2770, Page 130, did grant and convey unto Michael Schwartz and Deborah Schwartz, the party of the first part.

Grantee's Address:

~~405 Christiana Landing, Apt 1801~~ 5201 Kennett Pike  
Wilmington, DE 19801

**IN WITNESS WHEREOF**, the said Michael Schwartz and Deborah Schwartz have hereunto set their hands and seals, the day and year aforesaid.

Sealed and Delivered in  
the Presence of:

WITNESS

WITNESS

Michael Schwartz

Deborah Schwartz

(SEAL)

(SEAL)



STATE OF DELAWARE , COUNTY OF NEW CASTLE ) ss.:

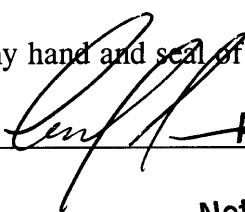
BE IT REMEMBERED, That on this 23 day of April, 2010, personally came before me, the Subscriber, a Notary Public for the County and State aforesaid, **Michael Schwartz**, parties to this Indenture, known to me personally to be such, and he acknowledged this Indenture to be his Act and Deed.

GIVEN under my hand and seal of Office the day and year aforesaid.

Notary Public

Name:

My Commission Expires:  
(SEAL)

  
**Andrew J. Aerenst**  
Attorney at Law  
Notarial Officer - Delaware  
29 Del. C. §4323

Recorder of Deeds  
John F. Brady  
Apr 27, 2010 11:39A  
Sussex County  
Doc. Surcharge Paid

STATE OF DELAWARE , COUNTY OF NEW CASTLE ) ss.:

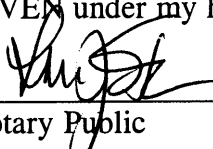
BE IT REMEMBERED, That on this 5 day of April, 2010, personally came before me, the Subscriber, a Notary Public for the County and State aforesaid, **Deborah Schwartz**, parties to this Indenture, known to me personally to be such, and she acknowledged this Indenture to be her Act and Deed.

GIVEN under my hand and seal of Office the day and year aforesaid.

Notary Public

Name:

My Commission Expires:  
(SEAL)

  
**Lori J. Smith**  
Notary Public, State of Delaware  
My Commission Expires on 3/8/13

**RECEIVED**

APR 27 2010

**ASSESSMENT DIVISION  
OF SUSSEX COUNTY**

Consideration: .00

County	.00
State	.00
Town	.00
Total	.00

Received: Mary W Apr 27, 2010

TAX MAP #: 2-34 18.00 382.00  
PREPARED BY:  
Hudson Jones Jaywork & Fisher  
309 Rehoboth Avenue  
Rehoboth Beach, DE 19971  
File No. ELLIS-P-19/JPB

RETURN TO:  
Douglas R. Ellis and Stephanie S. Ellis  
27 Deer Run Circle  
Phoenixville, PA 19460

**THIS DEED**, made this 31st day of July, 2019,

- BETWEEN -

**PAUL J. ROESSEL** and **ELIZABETH A. BROWNING**, of 7 Venetian Drive,  
Rehoboth Beach, DE 19971, parties of the first part,

- AND -

**DOUGLAS R. ELLIS** and **STEPHANIE S. ELLIS**, of 27 Deer Run Circle,  
Phoenixville, PA 19460, as tenants by the entirety, parties of the second part.

**WITNESSETH:** That the said parties of the first part, for and in consideration of the sum of **TEN DOLLARS (\$10.00)**, lawful money of the United States of America and other good and valuable consideration, the receipt whereof is hereby acknowledged, hereby grant and convey unto the parties of the second part, and their heirs and assigns, in fee simple, the following described lands, situate, lying and being in Sussex County, State of Delaware:

**ALL** that certain lot, piece or parcel of land situate, lying and being in Indian River Hundred, Sussex County, State of Delaware, being known as Lot 49, The Villages at Herring Creek, as shown on a plot prepared by Meridian Architects & Engineers, filed for record February 1, 2005 in Plot Book 91, Pages 3-7.

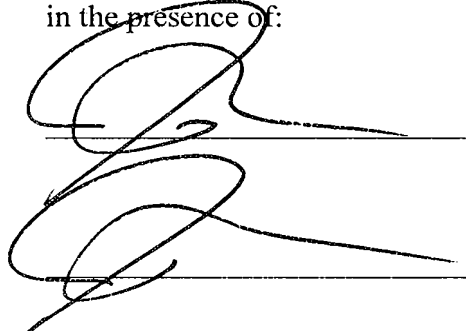
This site contains regulated wetlands, activities within these wetlands may require a permit from the U.S. Army Corp of Engineers and/or State of Delaware.

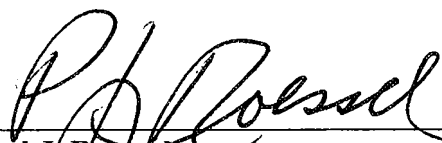
**BEING** the same property conveyed to Paul J. Roessel and Elizabeth A. Browning from Villages at Herring Creek Development Co., L.L.C., by Deed dated September 6, 2005, and recorded in the Office of the Recorder of Deeds in and for Sussex County, Delaware on September 8, 2005, in Dced Book 3197, Page 293.

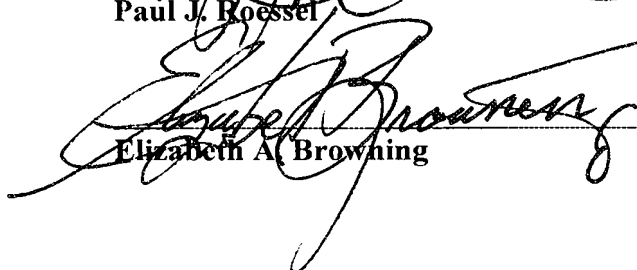
**SUBJECT** to any and all restrictions, reservations, conditions, easements and agreements of record in the Office of the Recorder of Deeds in and for Sussex County, Delaware.

**IN WITNESS WHEREOF**, the parties of the first part have hereunto set their hands and seals the day and year first above written.

Signed, Sealed and Delivered  
in the presence of:



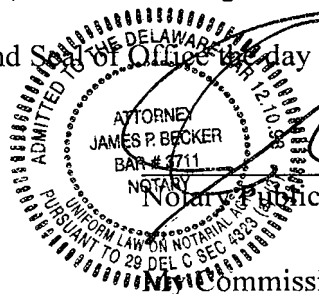
  
Paul J. Roessel (SEAL)

  
Elizabeth A. Browning (SEAL)

STATE OF DELAWARE, COUNTY OF SUSSEX: to-wit

**BE IT REMEMBERED**, that on July 31, 2019, personally came before me, the subscriber, Paul J. Roessel and Elizabeth A. Browning, parties of the first part to this Indenture, known to me personally to be such, and acknowledged this Indenture to be their act and deed.

GIVEN under my Hand and Seal of Office the day and year aforesaid.



My Commission Expires: \_\_\_\_\_

TAX MAP AND PARCEL #:  
334-20.00-57.00  
PREPARED BY & RETURN TO:  
Baird Mandalas Brockstedt LLC  
1413 Savannah Road, Suite 1  
Lewes, Delaware 19958  
File No. RE21-0089/RD

**NO TITLE SEARCH REQUESTED OR PERFORMED**

THIS DEED, made this 6<sup>th</sup> day of April, 2021,

- BETWEEN -

**CHRISTOPHER J. LONG, SUCCESSOR TRUSTEE OF THE RICHARD A. LONG REVOCABLE TRUST DATED JUNE 29, 2012**, of 3 Back Bay Court, Rehoboth Beach, DE 19971, party of the first part,

- AND -

**THOMAS JACKSON LONG**, of 3 Back Bay Court, Rehoboth Beach, DE 19971, as sole owner, party 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 party of the second part, and his heirs and assigns, in fee simple, the following described lands, situate, lying and being in Sussex County, State of Delaware:

**ALL** that certain lot, piece and parcel of land situate, lying and being in Lewes and Rehoboth Hundred, Sussex County, State of Delaware, being more particularly described as **LOT NO. 55**, of **PINE BAY, SECTION of COUNTRY MANOR**, as shown on, and more particularly described on, the plot PINE BAY, SECTION of COUNTRY MANOR, said plot being dated June, 1989, and revised July 12, 1990; the plot being of record in the Office of the Recorder of Deeds at Georgetown, Delaware, in Plot Book No. 44, Page 295.

**SUBJECT TO** the Declaration of Covenants, Conditions and Restrictions of **PINE BAY, SECTION of COUNTRY MANOR**, dated August 16, 1990, of record in the Office of the Recorder of Deeds, in and for Sussex County, Delaware, in Deed Book 1732, Page 337, and re-recorded in Deed Book 1736, Page 250.

**FURTHER SUBJECT** to any and all restrictions, reservations, conditions, easements and agreements of record in the Office of the Recorder of Deeds, in and for Sussex County, Delaware.

The fifty (50.00) feet wide private roads shown upon the aforesaid Record Subdivision Plan of PINE BAY, Section of Country Manor recorded in Plot Book 44, Page 295, designated as Bay Reach, Holly Ridge, Back Bay and Hawk's Nest, are hereby dedicated for the use of the property owners of each lot of PINE BAY, Section of Country Manor. Each such property owner, by the acceptance of a deed to a lot in PINE BAY, Section of Country Manor, hereby assumes the responsibility of maintaining, repairing, and replacing the aforesaid the aforesaid fifty (50.00) feet wide private roads shown upon said plot. This responsibility shall be shared by every property owner in PINE BAY, Section of Country Manor in accordance with the Declaration of Covenants, Conditions and Restrictions of PINE BAY, Section of Country Manor, dated August 16, 1990, and of record in the Office of the Recorder of Deeds, in and for Sussex County, Delaware, in Deed Book 1732, Page 337, as the same may be amended from time to time. The aforesaid roads are private and the State of Delaware assumes no responsibility for future maintenance thereof. Bay Reach roadway is subject to an easement of Rehoboth Bay Land Company, said easement being dated September 8, 1989, and being of record in the Office of the Recorder of Deeds, in and for Sussex County, Delaware, in Deed Book 1671, Page 200.

**BEING** the same lands and premises granted and conveyed unto Richard A. Long, Trustee of the Richard A. Long Revocable Trust dated June 29, 2012, by deed of Richard A. Long, dated June 29, 2012, of record in the Office of the Recorder of Deeds, Georgetown, Delaware, in Deed Book 4015, at Page 141.

**SUBSEQUENTLY** the said Richard A. Long did depart this life on or about November 15, 2020, and according to the Revocable Trust of Richard A. Long, Dated June 29, 2012, Christopher J. Long is named Successor Trustee.

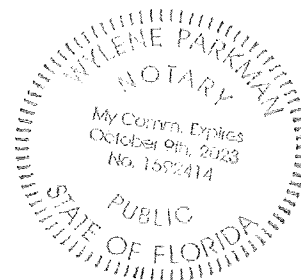
**SIGNATURES TO APPEAR ON FOLLOWING PAGE**

IN WITNESS WHEREOF, the said party of the first part has hereunto set his hand and seal the day and year first above written.

**REVOCABLE TRUST OF RICHARD A.  
LONG DATED JUNE 29, 2012**

Kim E. Eberle  
Witness

By: Christopher J. Long (SEAL)  
Christopher J. Long, Successor Trustee of the  
Richard A. Long Revocable Trust dated June  
29, 2012



STATE OF Florida, COUNTY OF Sumter: to-wit

**BE IT REMEMBERED**, that on this 6th day of April, 2021, personally came before me, the subscriber, Christopher J. Long, Successor Trustee of the Revocable Trust of Richard A. Long dated June 29, 2012, party of the first part to this Indenture, known to me personally to be such, and acknowledged this Indenture to be his act and deed.

GIVEN under my Hand and Seal of Office the day and year aforesaid.

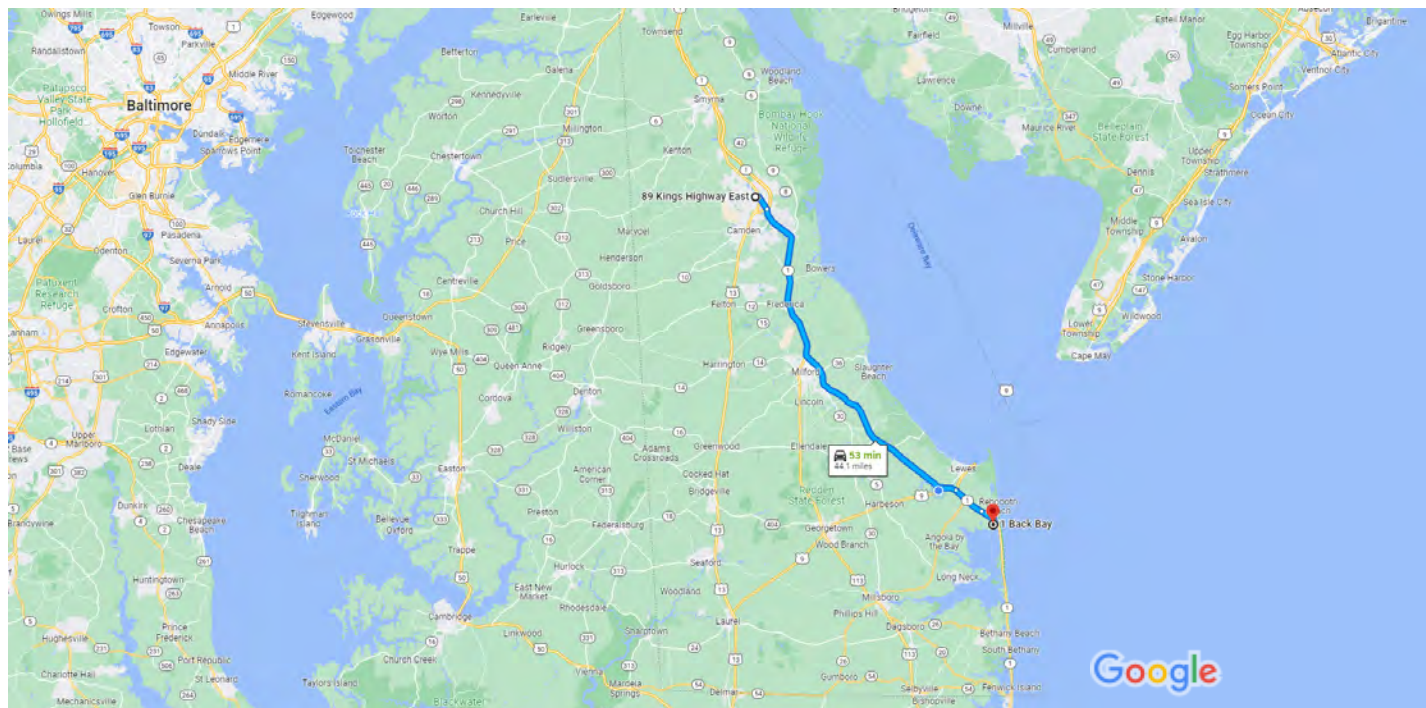
Wylene Parkman  
Notary Public

My Commission Expires: 10/9/2023



89 Kings Hwy E, Dover, DE 19901 to 1 Back Bay,  
Rehoboth Beach, DE 19971

Drive 44.1 miles, 53 min



Map data ©2022 Google 5 mi

89 Kings Hwy E  
Dover, DE 19901

1. Head east on E Division St/Kings Hwy E toward Park Dr

[Continue to follow E Division St](#)

1 min (0.3 mi)

Continue to Sussex County

40 min (38.4 mi)

2. Turn right onto US-13 S

0.2 mi

3. Use the left 2 lanes to turn slightly left onto S Bay Rd

1.3 mi

4. Take the ramp onto DE-1 S

36.9 mi

Continue on DE-1 S. Drive to Back Bay

13 min (5.3 mi)

5. Continue straight to stay on DE-1 S

3.3 mi

- ↑

6. Continue straight to stay on DE-1 S

1.4 mi
- ↷

7. Turn right onto Rd 272B/Old Bay Rd

0.3 mi
- ↷

8. Turn right onto Bay Reach

0.1 mi
- ↶

9. Turn left to stay on Bay Reach

0.2 mi
- ↶

10. Turn left onto Back Bay

i

 Destination will be on the right

85 ft

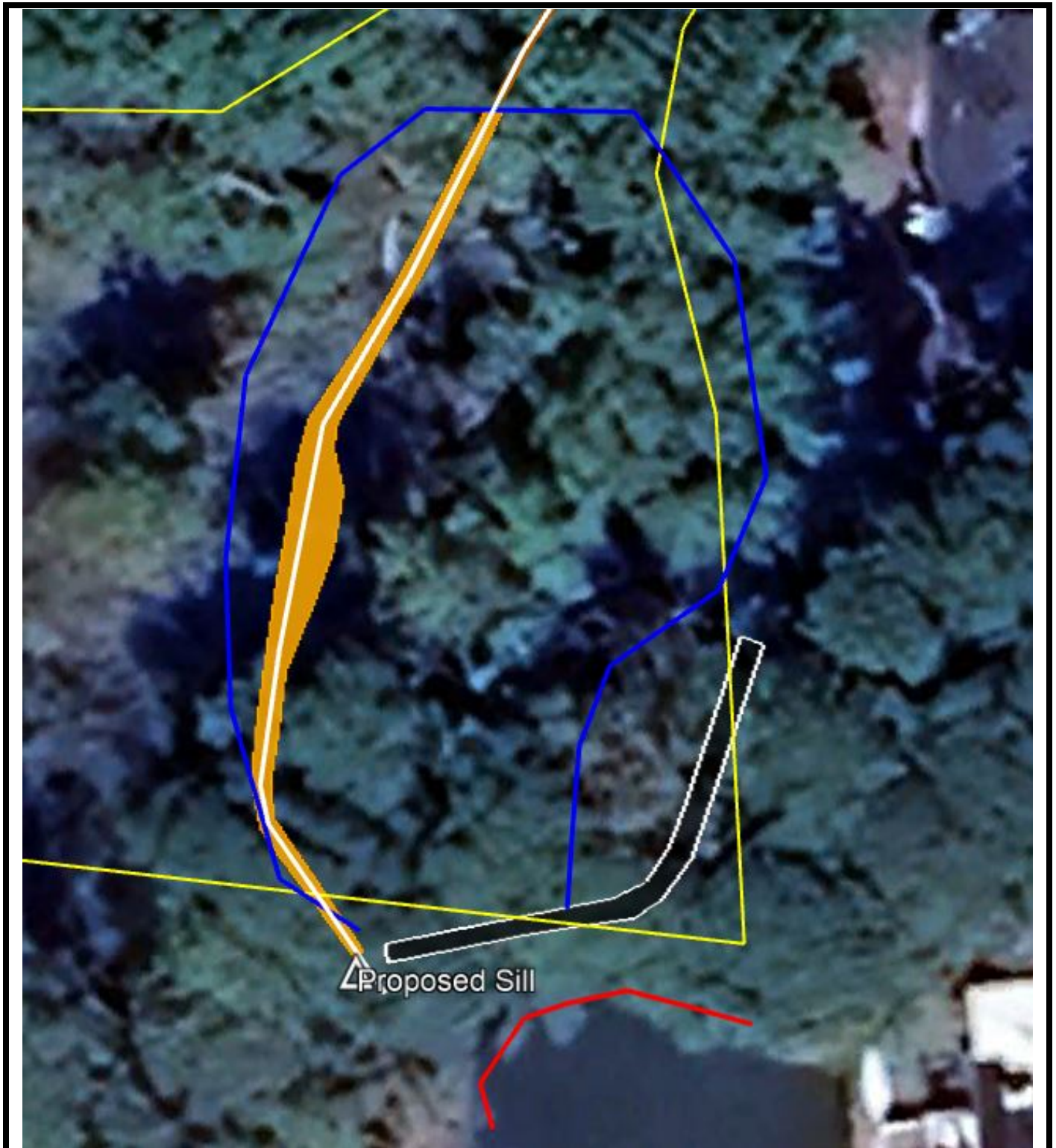
1 Back Bay

Rehoboth Beach, DE 19971



Pine Bay Swale Regrade Properties Within 1,000 Ft Radius

Name	Physical Address	Mailing Address	Town	State	Zip
PINE BAY HOMEOWNERS ASSOCIATION	PARID: 334-20.00-98.00	8 Bay Reach	Rehoboth Beach	DE	19971
SCHWARTZ MICHAEL	PARID: 334-20.00-2.02	609 CAMPBELL RD	WILMINGTON	DE	19807
DUKES HAROLD E JR & CINDY	37 Bay Reach, Rehoboth Beach, DE 19971	37 Bay Reach	Rehoboth Beach	DE	19971
BENKO CAROLYN	39 Bay Reach, Rehoboth Beach, DE 19971	39 Bay Reach	Rehoboth Beach	DE	19971
State of Delaware (Division of Parks and Rec)	PARID: 334-19.00-172.00	89 KINGS HWY	DOVER	DE	19901
MEACCI RICHARD & KAREN	25 Bay Reach, Rehoboth Beach, DE 19971	25 Bay Reach	Rehoboth Beach	DE	19971
HAUS KEVIN J, Lucy K Haus	27 Bay Reach, Rehoboth Beach, DE, 19971	8405 Saunders Road	Lutherville	MD	21093
HEALY R JUSTIN & SARAH HEALY	29 Bay Reach, Rehoboth Beach, De, 19971	330 Rehoboth Ave	Rehoboth Beach	DE	19971
MCCARTHY BERNARD	31 Bay Reach Rehoboth Beach, DE, 19971	9701 KENTSDALE DR	POTOMAC	MD	20854
FRUMAN HARVEY E & ALLYN C	33 Bay Reach, Rehoboth Beach, DE, 19971	33 BAY REACH	REHOBOTH BEACH	DE	19971
LONG LETITIA	35 Bay Reach, Rehoboth Beach, DE, 19971	521 N WASHINGTON ST UNIT 302	ALEXANDRIA	VA	22314
Montgomery Stephen & Diana Montgomery	28 Bay Reach, Rehoboth Beach, De 19971	28 BAY REACH	REHOBOTH BEACH	DE	19971
DUKES HAROLD E JR & CINDY S	30 Bay Reach, Rehoboth Beach, De 19971	4 READ ST	REHOBOTH BEACH	DE	19971
MILLER EMMA S	26 Bay Reach, Rehoboth Beach, DE 19971	319 MUNSON ST	REHOBOTH BEACH	DE	19971
FALCHEK STEPHEN J	24 BAY REACH, Rehoboth Beach, DE 19971	24 OVERBROOK PKWY	WYNNWOOD	PA	19096
BACKMAN ANDREA	22 BAY REACH, Rehoboth Beach, DE,19971	9441 BRENNER CT	VIENNA	VA	22180
BROWN LAWRENCE	32 BAY REACH, Rehoboth Beach, DE, 19971	PO BOX 621	REHOBOTH BEACH	DE	19971
HANNA-CONDRY JOYCE & JAMES D CONDRY	34 BAY REACH, Rehoboth Beach, DE, 19971	34 BAY REACH	REHOBOTH BEACH	DE	19971
GLC 2017 LLC	36 BAY REACH, Rehoboth Beach, DE, 19971	36 BAY REACH	REHOBOTH BEACH	DE	19971
Lopes Frank	38 Bay Reach, Rehoboth Beach, De, 19971	38 BAY REACH	REHOBOTH BEACH	DE	19971
ZOLITCK MARTIN M & DEBORAH B	43 BAY REACH, Rehoboth Beach, DE, 19971	1261 BANYAN RD	BOCA RATON	FL	33432
BOGDAN BARRY G & MARTHA BOGDAN	1 Back Bay Court, Rehoboth Beach, DE, 19971	13143 WEXFORD HOLLOW RD N	JACKSONVILLE	FL	32224
Sussex County	47 BAY REACH, Rehoboth Beach, DE 19971	PO BOX 589	GEORGETOWN	DE	19947
ORBAN DOUGLAS J & JESSIE L	2 BACK BAY CT, Rehoboth Beach, DE 19971	43156 THOROUGHFARE GAP TERR	ASHBURN	VA	20148
WILLHOITE MARK & Cindy Fietelson	4 BACK BAY CT, Rehoboth Beach, DE 19971	4 BACK BAY	REHOBOTH BEACH	DE	19971
MECKS CAROL T	7 BACK BAY CT, Rehoboth Beach, DE 19971	8 BRIAR LN	NEWARK	DE	19711
CONNOLLY MARCIE A	5 BACK BAY CT, Rehoboth Beach, DE 19971	6175 WINDHAM HILL RUN	ALEXANDRIA	VA	22315
LONG THOMAS JACKSON	3 BACK BAY CT, Rehoboth Beach, DE 19971	3 BACK BAY CT	REHOBOTH BEACH	DE	19971
BABIARZ JOHN E JR & LINDA C BABIARZ	5 DRAPER DR, Dewey Beach, DE 19971	7 STIRUP RUN	NEWARK	DE	19711
CARL ELIZABETH L	7 DRAPER DR, Dewey Beach, DE 19971	1414 MONTAGUE ST NW	WASHINGTON	DC	20001
OVERMAN CAROL ANN	9 DRAPER DR, Dewey Beach, DE 19971	7019 CHURCH HILL RD	MCLEAN	VA	22101
FALATKO ANNE DEROSSET	3 VENETIAN DR, Dewey Beach, DE 19971	1532 29TH ST NW#	WASHINGTON	DC	20007
CHARLTON FRANK JOSEPH	5 VENETIAN DR, Dewey Beach, DE 19971	112 FERNWOOD DR	AVONDALE	PA	19311
ROESSEL PAUL J & ELIZABETH A	7 VENETIAN DR, Dewey Beach, DE 19971	7 VENETIAN DR	REHOBOTH BEACH	DE	19971
PRENGER MARY IRENE	9 VENETIAN DR, Dewey Beach, DE 19971	5 KING EDWARD DR	LONDONDERRY	NH	3053
SIMPLER KENNETH A TRUSTEE & ANN H	11 VENETIAN DR, Dewey Beach, DE 19971	11 VENETIAN DR	REHOBOTH BEACH	DE	19971
SCANLON PATRICK & REGINA M SCANLON	13 VENETIAN DR, Dewey Beach, DE 19971	13 VENETIAN DR	REHOBOTH BEACH	DE	19971
WRIGHT BRUCE B & PATRICIA D	15 VENETIAN DR, Dewey Beach, DE 19971	15 VENETIAN DR	REHOBOTH BEACH	DE	19971
WRIGHT BRUCE B & PATRICIA D	17 VENETIAN DR, Dewey Beach, DE 19971	15 VENETIAN DR	REHOBOTH BEACH	DE	19971
BURTON IRWIN G II	16 VENETIAN DR, Dewey Beach, DE 19971	30800 MILLS RIDGE RD	LEWES	DE	19958
WILSON LYNN D	14 VENETIAN DR, Dewey Beach, DE 19971	14 VENETIAN DR	DEWEY BEACH	DE	19971
BOINES DANIEL T	10 VENETIAN DR, Dewey Beach, DE 19971	10 VENETIAN DR	REHOBOTH BEACH	DE	19971
FELDMAN BRIAN JOSEPH & WENDY K FELDMAN	8 VENETIAN DR, Dewey Beach, DE 19971	9616 CHESLEY RD	POTOMAC	MD	20854
SHEHADEH BENJAMIN M & KATHLEEN W	6 VENETIAN DR, Dewey Beach, DE 19971	651 MINE RIDGE RD	GREAT FALLS	VA	22066
WILLIAMS KATHERINE L	4 VENETIAN DR, Dewey Beach, DE 19971	4 VENETIAN DR	REHOBOTH BEACH	DE	19971
COX GLENN L & SARAH A COX	318 BAYVIEW AV, Dewey Beach, DE 19971	318 BAYVIEW AVE	REHOBOTH BEACH	DE	19971
CARMONA THOMAS J	319 DUTCH RD, Dewey Beach, DE 19971	8101 COACH ST	POTOMAC	MD	20854
BETZ JAMES MICHAEL & ROBIN ELAINE BETZ	317 DUTCH RD, Dewey Beach, DE 19971	38179 STEVENS RD	LOVETTSVILLE	VA	20180
DEANDRADE ROBERT G & MARY S DEANDRADE	101 DRAPER DR, Dewey Beach, DE 19971	101 DRAPER DR	REHOBOTH BEACH	DE	19971
BENNETT DEBORAH A & HAROLD L BENNETT JR	103 DRAPER DR, Dewey Beach, DE 19971	103 DRAPER DR	REHOBOTH BEACH	DE	19971
HARRITY-TUN CAROL	105 DRAPER DR, Dewey Beach, DE 19971	3825 PRINCE WILLIAM DR	FAIRFAX	VA	22031
SCHAEFFER PETER K	107 DRAPER DR, Dewey Beach, DE 19971	107 DRAPER DR	DEWEY BEACH	DE	19971
JONES BRANDON R & LOIS P JONES	109 DRAPER DR, Dewey Beach, DE 19971	473 MCGINNIS POND ROAD	FELTON	DE	19943
DONNELLY JOSEPH PATRICK & MAUREEN A DONNELLY	111 DRAPER DR, Dewey Beach, DE 19971	111 DRAPER DR	REHOBOTH BEACH	DE	19971
HAMER KIMBERLY LEAR & JEFFREY ALLAN HAMER	113 DRAPER DR, Dewey Beach, DE 19971	113 DRAPER DR	REHOBOTH BEACH	DE	19971
THOMPSON JAMES BLAIR & TIMARIE K THOMPSON	115 DRAPER DR, Dewey Beach, DE 19971	115 DRAPER DRIVE	REHOBOTH BEACH	DE	19971
EMMERT WILLIAM D & CAROL M	114 DRAPER DR, Dewey Beach, DE 19971	PO BOX 650	REHOBOTH BEACH	DE	19971
MULLEN RUSSELL ELI	322 SALISBURY ST, Dewey Beach, DE,19971	322 SALISBURY ST	REHOBOTH BEACH	DE	19971
HERWIG EUGENIA A & DAVID J	321 SALISBURY ST, Dewey Beach, DE, 19971	321 SALISBURY ST	REHOBOTH BEACH	DE	19971
MAKANI ANIL KUMAR & REGINA POONAM MAKANI	320 SALISBURY ST, Dewey Beach, DE, 19971	88 RIVERVIEW DR	PETERSBURG	WV	26847
JENNEY ERIN C & MARSHALL T JENNEY	318 SALISBURY ST, Dewey Beach, De, 19971	318 SALISBURY ST	REHOBOTH BEACH	DE	19971
TAN KNIGHT LLC	316 SALISBURY ST, Dewey Beach, DE, 19971	PO BOX 711111	HERNDON	VA	20171
BOETCHER KARL L	315 SALISBURY ST, Dewey Beach, DE, 19971	2419 DORVAL RD	WILMINGTON	DE	19810
JENNEY MARSHALL T	317 SALISBURY ST, Dewey Beach, DE, 19971	318 SALISBURY ST	REHOBOTH BEACH	DE	19971
LAUIER EUGENE K ANNA C LAUIER	319 SALISBURY ST, Dewey Beach, DE 19971	302 HIALEAH DR.	MOUNT LAUREL	NJ	8054
SWEDES STREET LLC & MICHEL F FLORAX JOELLE FLORAX	320 SWEDES ST, Rehoboth Beach, DE 19971	15 VENETIAN DR	REHOBOTH BEACH	DE	19971
NACCIA JAMES J & PAULETTE M	318 SWEDES ST, Rehoboth Beach, De 19971	318 SWEDES ST	REHOBOTH BEACH	DE	19971
STICKLE JEFFREY R & ENID L ZAFRAN	316 SWEDES ST, Rehoboth Beach, De 19971	316 SWEDES ST	REHOBOTH BEACH	DE	19971
WALKER ANTHONY & LISA VAUGHAN	313 SWEDES ST, Rehoboth Beach, DE 19971	30752 OMAR RD	FRANKFORD	DE	19945
SUPERATA MICHAEL A	317 SWEDES ST, Rehoboth Beach, DE 19971	1800 N HANCOCK ST	ARLINGTON	VA	22201
MARSHALL JOHN B & KATHLEEN MARSHALL	315 SWEDES ST, Rehoboth Beach, DE 19971	315 SWEDES ST	REHOBOTH BEACH	DE	19971
JONES JONATHAN D & ALICE G	314 DUTCH RD, Dewey Beach, DE 19971	314 DUTCH RD	REHOBOTH BEACH	DE	19971
BURMAN ALLAN V & CHRISTINE A	316 DUTCH RD, Dewey Beach, DE 19971	1515 N HIGHLAND ST	ARLINGTON	VA	22201
HIMES JOHN	318 DUTCH RD, Dewey Beach, DE 19971	318 DUTCH RD	REHOBOTH BEACH	DE	19971



Note: This image was obtained through aerial photograph via Google Earth



Envirotech Environmental Consulting, Inc.  
17605 Nassau Commons Boulevard, Unit D  
Lewes, DE 19958  
Phone: (302) 684-5201 Fax: (302) 684-5204

**FIGURE 3 - Pine Bay Stormwater Swale**

— = Temporary wetland mats  
— = Area of excavation

— = Mean High Water Line  
— = Mean Low Water Line

DATE:	9/25/2024	REF NUMBER:	25802
DRAWN BY:	LAd	SCALE:	As shown
CHECKED BY:		FIGURE NO:	3
PROJECT:	Swale Restoration	SHEET	3 OF 3

## **ATTACHMENT A:**

*Site Maps of Subject Property*



# Riprap Revetment/Shoreline Stabilization Project

## **Roessel and Schwartz Properties**

7 Veneitan Drive & 33 Endless View  
Rehoboth Beach, DE 19971



### **LEGEND:**



= Schwartz Property



= Roessel Property



= Riprap Revetment (50' x 6')



= Pine Bay HOA Property







U.S. Fish and Wildlife Service

# National Wetlands Inventory

## Pine Bay - Back Bay Swale



March 7, 2022

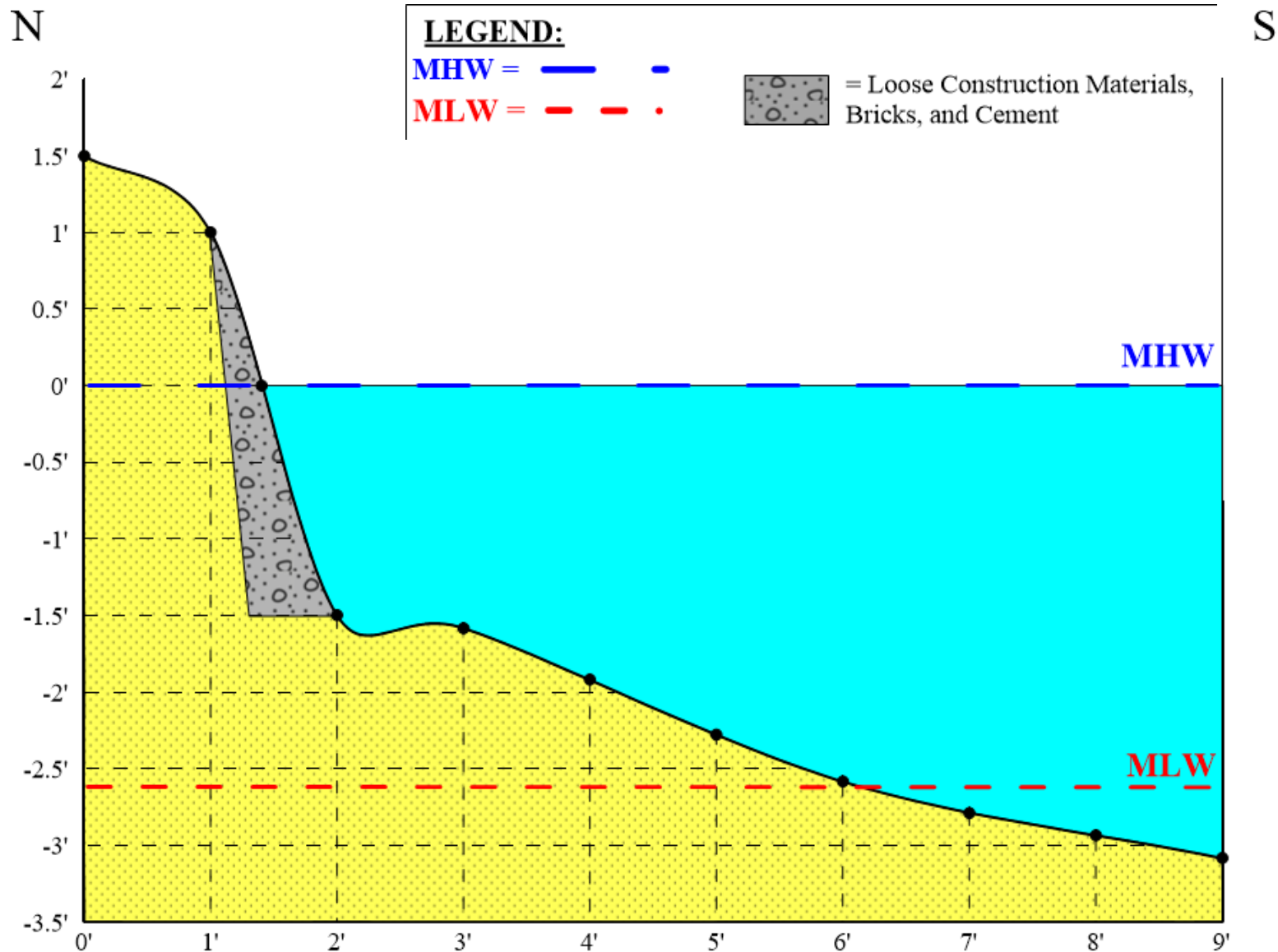
### Wetlands

	Estuarine and Marine Deepwater		Freshwater Emergent Wetland		Lake
	Estuarine and Marine Wetland		Freshwater Forested/Shrub Wetland		Other
			Freshwater Pond		Riverine

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

## **ATTACHMENT B:**

*Subject Property Plans*



**Enviro****tech**<sup>™</sup>  
 ENVIRONMENTAL CONSULTING, INC.  
*Providing Environmental Solutions*

Envirotech Environmental Consulting, Inc. 17605 Nassau  
 Commons Boulevard, Unit D Lewes, DE 19958  
 Phone: (302) 684-5201 Fax: (302) 684-5204

**7 Venetian Drive & 33 Endless View, Rehoboth Beach, Delaware 19971:**

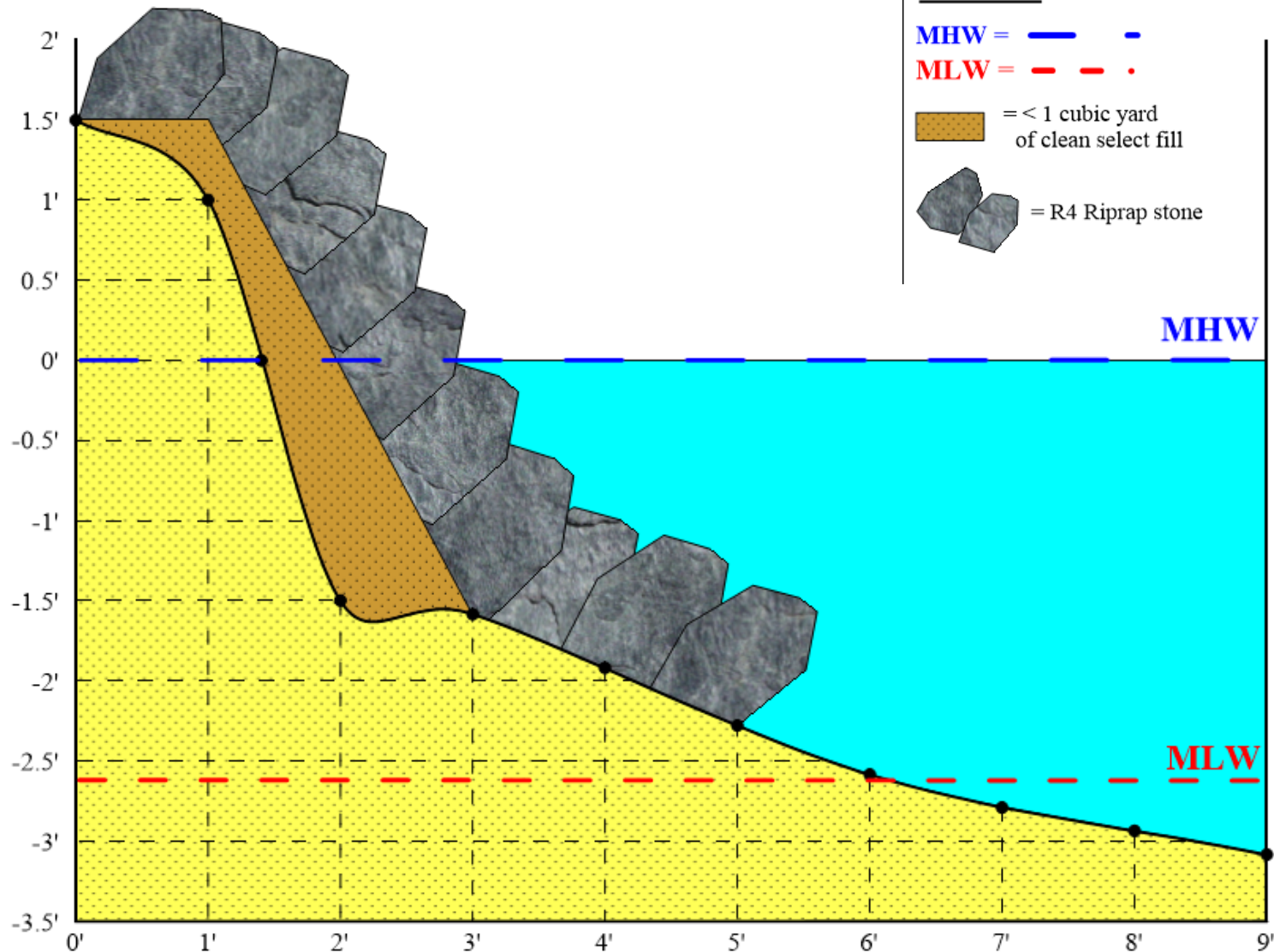
**Cross Section View**

**Tax Map ID #'s: 334-20.00-2.02 & 334-200.13-233.00**

DATE: 1/31/2025	REF NUMBER:
DRAWN BY: NRW	SCALE: As shown
CHECKED BY:	FIGURE NO: 1
PROJECT: Roessel-Schwartz Riprap Revetment Project	SHEET 1 OF 1

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**Enviro**tech<sup>™</sup>

ENVIRONMENTAL CONSULTING, INC.

*Providing Environmental Solutions*

Envirotech Environmental Consulting, Inc. 17605 Nassau  
Commons Boulevard, Unit D Lewes, DE 19958  
Phone: (302) 684-5201 Fax: (302) 684-5204

**7 Venetian Drive & 33 Endless View, Rehoboth Beach, Delaware 19971:**  
**Riprap Revetment Project Design**  
**Tax Map ID #'s: 334-20.00-2.02 & 334-200.13-233.00**

DATE: 1/31/2025	REF NUMBER:
DRAWN BY: NRW	SCALE: As shown
CHECKED BY:	FIGURE NO: 1
PROJECT: Roessel-Schwartz Riprap Revetment Project	SHEET 1 OF 1



# **ATTACHMENT C:**

*Site Photographs*







## **ATTACHMENT D:**

*State and Federal Agency Letters*



# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Chesapeake Bay Ecological Services Field Office  
177 Admiral Cochrane Drive  
Annapolis, MD 21401-7307  
Phone: (410) 573-4599 Fax: (410) 266-9127



In Reply Refer To:

02/25/2025 15:00:19 UTC

Project Code: 2025-0060456

Project Name: Roessel-Schwartz Rip Rap Revetment

Subject: List of threatened and endangered species that may occur in your proposed project location or may be affected by your proposed project

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, proposed, and candidate species, as well as proposed and final designated critical habitat, that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological

evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<https://www.fws.gov/sites/default/files/documents/endangered-species-consultation-handbook.pdf>

**Migratory Birds:** In addition to responsibilities to protect threatened and endangered species under the Endangered Species Act (ESA), there are additional responsibilities under the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA) to protect native birds from project-related impacts. Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)). For more information regarding these Acts, see <https://www.fws.gov/program/migratory-bird-permit/what-we-do>.

The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. It is the responsibility of the project proponent to comply with these Acts by identifying potential impacts to migratory birds and eagles within applicable NEPA documents (when there is a federal nexus) or a Bird/Eagle Conservation Plan (when there is no federal nexus). Proponents should implement conservation measures to avoid or minimize the production of project-related stressors or minimize the exposure of birds and their resources to the project-related stressors. For more information on avian stressors and recommended conservation measures, see <https://www.fws.gov/library/collections/threats-birds>.

In addition to MBTA and BGEPA, Executive Order 13186: *Responsibilities of Federal Agencies to Protect Migratory Birds*, obligates all Federal agencies that engage in or authorize activities that might affect migratory birds, to minimize those effects and encourage conservation measures that will improve bird populations. Executive Order 13186 provides for the protection of both migratory birds and migratory bird habitat. For information regarding the implementation of Executive Order 13186, please visit <https://www.fws.gov/partner/council-conservation-migratory-birds>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Code in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Wetlands

## OFFICIAL SPECIES LIST

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

**Chesapeake Bay Ecological Services Field Office**

177 Admiral Cochrane Drive

Annapolis, MD 21401-7307

(410) 573-4599

## PROJECT SUMMARY

Project Code: 2025-0060456

Project Name: Roessel-Schwartz Rip Rap Revetment

Project Type: Shoreline Stabilization

Project Description: The purpose of this project is to regrade and reinforce the existing shoreline of a man-made canal end. The details include laying geotextile fabric (G-300) and a riprap revetment (R4 stone) design, approximately 50 linear feet by 6 feet (landward), totaling 300 sq. ft (11 cubic yards). The target area is an unconsolidated shoreline of a man-made canal end, located within the Pine Bay Community, between Venetian Drive and Endless View in Rehoboth Beach, Delaware 19971. All miscellaneous material and debris (concrete and construction material) will be removed and properly disposed. A mini skid-steer/ excavator will be used to regrade the shoreline to a 3:1 slope and place riprap stone. All invasive vegetation will be removed from the project area. Geotextile fabric (S-300) will be placed along the regraded shoreline and keyed in with landscaping pins. The riprap stone revetment will be placed on top of geotextile and tie into the existing Roessel bulkhead (SA-099/19 for 7 Venetian Drive) and Pine Bay community stormwater swale (Pine Bay HOA swale regrade permit application pending with DNREC and USACE).

Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.6951422,-75.08529036850048,14z>



Counties: Sussex County, Delaware

## ENDANGERED SPECIES ACT SPECIES

There is a total of 1 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries<sup>1</sup>, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

- 
1. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.



## INSECTS

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> There is <b>proposed</b> critical habitat for this species. Your location does not overlap the critical habitat. Species profile: <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Proposed Threatened

## CRITICAL HABITATS

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

YOU ARE STILL REQUIRED TO DETERMINE IF YOUR PROJECT(S) MAY HAVE EFFECTS ON ALL ABOVE LISTED SPECIES.

## USFWS NATIONAL WILDLIFE REFUGE LANDS AND FISH HATCHERIES

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

## WETLANDS

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

### ESTUARINE AND MARINE WETLAND

- E2EM1P

### ESTUARINE AND MARINE DEEPWATER

- E1UBL

## **IPAC USER CONTACT INFORMATION**

Agency: Envirotech Environmental Consulting Inc.

Name: nick wright

Address: 17605 Nassau Commons Blvd. Unit D, Lewes, Delaware 19958

City: Lewes

State: DE

Zip: 19958

Email: [nick@envirotechecinc.com](mailto:nick@envirotechecinc.com)

Phone: 3026845201



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Chesapeake Bay Ecological Services Field Office  
177 Admiral Cochrane Drive  
Annapolis, MD 21401-7307  
Phone: (410) 573-4599 Fax: (410) 266-9127



In Reply Refer To:  
Project code: 2024-0046259  
Project Name: Pine Bay Rip Rap

February 07, 2024

Federal Nexus: yes  
Federal Action Agency (if applicable): Army Corps of Engineers

Subject: Technical assistance for 'Pine Bay Rip Rap'

Dear Lyle de la Rosa:

This letter records your determination using the Information for Planning and Consultation (IPaC) system provided to the U.S. Fish and Wildlife Service (Service) on February 07, 2024, for "Pine Bay Rip Rap" (here forward, Project). This project has been assigned Project Code 2024-0046259 and all future correspondence should clearly reference this number.

The Service developed the IPaC system and associated species' determination keys in accordance with the Endangered Species Act of 1973 (ESA; 87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) and based on a standing analysis. All information submitted by the Project proponent into the IPaC must accurately represent the full scope and details of the Project. Failure to accurately represent or implement the Project as detailed in IPaC or the Northeast Determination Key (Dkey), invalidates this letter. **Answers to certain questions in the DKey commit the project proponent to implementation of conservation measures that must be followed for the ESA determination to remain valid.**

To make a no effect determination, the full scope of the proposed project implementation (action) should not have any effects (either positive or negative effect(s)), to a federally listed species or designated critical habitat. Effects of the action are all consequences to listed species or critical habitat that are caused by the proposed action, including the consequences of other activities that are caused by the proposed action. A consequence is caused by the proposed action if it would not occur but for the proposed action and it is reasonably certain to occur. Effects of the action may occur later in time and may include consequences occurring outside the immediate area involved in the action. (See § 402.17). Under Section 7 of the ESA, if a federal action agency makes a no effect determination, no further consultation with, or concurrence from, the Service is required (ESA §7). If a proposed Federal action may affect a listed species or designated critical habitat, formal consultation is required (except when the Service concurs, in writing, that a

proposed action "is not likely to adversely affect (NLAA)" listed species or designated critical habitat [50 CFR §402.02, 50 CFR§402.13]).

The IPaC results indicated the following species is (are) potentially present in your project area and, based on your responses to the Service's Northeast DKey, you determined the proposed Project will have the following effect determinations:

Species	Listing Status	Determination
Eastern Black Rail ( <i>Laterallus jamaicensis ssp. jamaicensis</i> )	Threatened	May affect

**Consultation with the Service is not complete.** Further consultation or coordination with the Service is necessary for those species or designated critical habitats with a determination of "May Affect". Please contact our Chesapeake Bay Ecological Services Field Office to discuss methods to avoid or minimize potential adverse effects to those species or designated critical habitats.

In addition to the species listed above, the following species and/or critical habitats may also occur in your project area and are not covered by this conclusion:

- Monarch Butterfly *Danaus plexippus* Candidate

Please Note: If the Action may impact bald or golden eagles, additional coordination with the Service under the Bald and Golden Eagle Protection Act (BGEPA) (54 Stat. 250, as amended, 16 U.S.C. 668a-d) by the prospective permittee may be required. Please contact the Migratory Birds Permit Office, (413) 253-8643, or [PermitsR5MB@fws.gov](mailto:PermitsR5MB@fws.gov), with any questions regarding potential impacts to Eagles.

If you have any questions regarding this letter or need further assistance, please contact the Chesapeake Bay Ecological Services Field Office and reference the Project Code associated with this Project.

**Action Description**

You provided to IPaC the following name and description for the subject Action.

**1. Name**

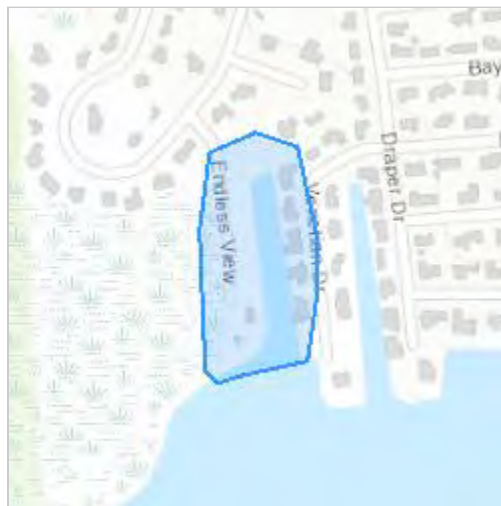
Pine Bay Rip Rap

**2. Description**

The following description was provided for the project 'Pine Bay Rip Rap':

Shoreline stabilization with a low profile vented rock sill

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.695317,-75.08542998111363,14z>



## QUALIFICATION INTERVIEW

1. As a representative of this project, do you agree that all items submitted represent the complete scope of the project details and you will answer questions truthfully?

*Yes*

2. Does the proposed project include, or is it reasonably certain to cause, intentional take of listed species?

**Note:** This question could refer to research, direct species management, surveys, and/or studies that include intentional handling/encountering, harassment, collection, or capturing of any individual of a federally listed threatened, endangered, or proposed species.

*No*

3. Is the action authorized, permitted, licensed, funded, or being carried out by a Federal agency in whole or in part?

*Yes*

4. Is the Federal Highway Administration (FHWA), Federal Railroad Administration (FRA), or Federal Transit Administration (FTA) the lead agency for this project?

*No*

5. Are you including in this analysis all impacts to federally listed species that may result from the entirety of the project (not just the activities under federal jurisdiction)?

**Note:** If there are project activities that will impact listed species that are considered to be outside of the jurisdiction of the federal action agency submitting this key, contact your local Ecological Services Field Office to determine whether it is appropriate to use this key. If your Ecological Services Field Office agrees that impacts to listed species that are outside the federal action agency's jurisdiction will be addressed through a separate process, you can answer yes to this question and continue through the key.

*Yes*

6. Are you the lead federal action agency or designated non-federal representative requesting concurrence on behalf of the lead Federal Action Agency?

*No*

7. Is the lead federal action agency the Environmental Protection Agency (EPA) or Federal Communications Commission (FCC)?

*No*

8. Is the lead federal action agency the Federal Energy Regulatory Commission (FERC)?

*No*

9. Is the lead federal action agency the Natural Resources Conservation Service?

*No*

10. Will the proposed project involve the use of herbicide where listed species are present?

*No*

11. Are there any caves or anthropogenic features suitable for hibernating or roosting bats within the area expected to be impacted by the project?

No

12. Does any component of the project associated with this action include activities or structures that may pose a collision risk to **birds** (e.g., plane-based surveys, land-based or offshore wind turbines, communication towers, high voltage transmission lines, any type of towers with or without guy wires)?

**Note:** For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

13. Does any component of the project associated with this action include activities or structures that may pose a collision risk to **bats** (e.g., plane-based surveys, land-based or offshore wind turbines)?

**Note:** For federal actions, answer 'yes' if the construction or operation of wind power facilities is either (1) part of the federal action or (2) would not occur but for a federal agency action (federal permit, funding, etc.).

No

14. Will the proposed project result in permanent changes to water quantity in a stream or temporary changes that would be sufficient to result in impacts to listed species?

For example, will the proposed project include any activities that would alter stream flow, such as water withdrawal, hydropower energy production, impoundments, intake structures, diversion structures, and/or turbines? Projects that include temporary and limited water reductions that will not displace listed species or appreciably change water availability for listed species (e.g. listed species will experience no changes to feeding, breeding or sheltering) can answer "No". Note: This question refers only to the amount of water present in a stream, other water quality factors, including sedimentation and turbidity, will be addressed in following questions.

No

15. Will the proposed project affect wetlands where listed species are present?

This includes, for example, project activities within wetlands, project activities within 300 feet of wetlands that may have impacts on wetlands, water withdrawals and/or discharge of contaminants (even with a NPDES).

Yes

16. Will the proposed project activities (including upland project activities) occur within 0.5 miles of the water's edge of a stream or tributary of a stream where listed species may be present?

Yes

17. Will the proposed project directly affect a streambed (below ordinary high water mark (OHWM)) of the stream or tributary where listed species may be present?

No

18. Will the proposed project bore underneath (directional bore or horizontal directional drill) a stream where listed species may be present?

No

19. Will the proposed project involve a new point source discharge into a stream or change an existing point source discharge (e.g., outfalls; leachate ponds) where listed species may be present?

No

20. Will the proposed project involve the removal of excess sediment or debris, dredging or in-stream gravel mining where listed species may be present?

No

21. Will the proposed project involve the creation of a new water-borne contaminant source where listed species may be present?

**Note** New water-borne contaminant sources occur through improper storage, usage, or creation of chemicals. For example: leachate ponds and pits containing chemicals that are not NSF/ANSI 60 compliant have contaminated waterways. Sedimentation will be addressed in a separate question.

No

22. Will the proposed project involve perennial stream loss, in a stream or tributary of a stream where listed species may be present, that would require an individual permit under 404 of the Clean Water Act?

No

23. Will the proposed project involve blasting where listed species may be present?

No

24. Will the proposed project include activities that could negatively affect fish movement temporarily or permanently (including fish stocking, harvesting, or creation of barriers to fish passage).

No

25. Will the proposed project involve earth moving that could cause erosion and sedimentation, and/or contamination along a stream or tributary of a stream where listed species may be present?

**Note:** Answer "Yes" to this question if erosion and sediment control measures will be used to protect the stream.

No

26. Will earth moving activities result in sediment being introduced to streams or tributaries of streams where listed species may be present through activities such as, but not limited to, valley fills, large-scale vegetation removal, and/or change in site topography?

No



27. Will the proposed project involve vegetation removal within 200 feet of a perennial stream bank where aquatic listed species may be present?

No

28. Will erosion and sedimentation control Best Management Practices (BMPs) associated with applicable state and/or Federal permits, be applied to the project? If BMPs have been provided by and/or coordinated with and approved by the appropriate Ecological Services Field Office, answer "Yes" to this question.

Yes

29. Is the project being funded, lead, or managed in whole or in part by U.S Fish and Wildlife Restoration and Recovery Program (e.g., Partners, Coastal, Fisheries, Wildlife and Sport Fish Restoration, Refuges)?

No

30. [Semantic] Does the project intersect the Virginia big-eared bat critical habitat?

**Automatically answered**

No

31. [Semantic] Does the project intersect the Indiana bat critical habitat?

**Automatically answered**

No

32. [Semantic] Does the project intersect the candy darter critical habitat?

**Automatically answered**

No

33. [Semantic] Does the project intersect the diamond darter critical habitat?

**Automatically answered**

No

34. [Semantic] Does the project intersect the Big Sandy crayfish critical habitat?

**Automatically answered**

No

35. [Hidden Semantic] Does the project intersect the Guyandotte River crayfish critical habitat?

**Automatically answered**

No

36. [Hidden Semantic] Does the project intersect the Eastern black rail AOI?

**Automatically answered**

Yes

37. Does the action area include persistent emergent wetlands (salt, brackish, or freshwater)?

Yes

38. Have black rails or black rail habitat been identified in sufficient detail in available surveys or records from within the last 2 years to assume presence at the site? (If unsure, select "No".)

Yes

39. Do you have any other documents that you want to include with this submission?

*No*

## PROJECT QUESTIONNAIRE

1. Approximately how many acres of trees would the proposed project remove?  
*0*
2. Approximately how many total acres of disturbance are within the disturbance/  
construction limits of the proposed project?  
*0.001*
3. Briefly describe the habitat within the construction/disturbance limits of the project site.  
*Unstable shoreline, consisting of vegetation, debris and eroding sediment.*

**IPAC USER CONTACT INFORMATION**

Agency: Envirotech Environmental Consulting, Inc.  
Name: Lyle de la Rosa  
Address: 17605 Nassau Commons Blvd  
Address Line 2: Unit D  
City: Lewes  
State: DE  
Zip: 19958  
Email: lyle@envirotechecinc.com  
Phone: 3026845201

**LEAD AGENCY CONTACT INFORMATION**

Lead Agency: Army Corps of Engineers



## DIVISION OF FISH AND WILDLIFE ENVIRONMENTAL REVIEW REQUEST FORM



State of Delaware  
Department of Natural Resources and Environmental Control

**DATE:**

I acknowledge the \$35/hr cost recovery fee

**PROJECT TITLE:**

**CONTACT INFORMATION:**

Applicant Name:

Consulting Company:

Consultant Name:

Consultant Email:

Mailing Address:

**PROJECT DETAILS:**

### Description

Project Type:

Consultation Needed For:

Detailed Project Description:

### Location

Parcel Number(s):

GPS Coordinates of Project:

Address:

County:

Shapefile of LOD Enclosed?

Image of LOD Enclosed?

### Environmental Impacts

Forest: Forest Removal?

Acres of Forest Removal:

Wetlands: Wetland Impacts?

Acres of Impacts (Temporary/Permanent):

Open Water: Water Impacts?

Acres of Impacts (Temporary/Permanent):

*Please email completed form and associated documents to [DNREC\\_EnvReview@delaware.gov](mailto:DNREC_EnvReview@delaware.gov)*



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

March 4, 2024

Lyle de la Rosa  
Envirotech Environmental Consulting, Inc.  
17605 Nassau Commons Boulevard, Unit D  
Lewes, DE 19958

*Re: ETECH 2024 Roessel Schwartz Bulkhead, Tax Parcel # 334-20.00-2.02, 334-20.00-98.00 & 334-20.13-233.00*

Dear Lyle:

Thank you for contacting the Division of Fish and Wildlife (DFW) Species Conservation and Research Program about information on rare, threatened and endangered species, unique natural communities, and other significant natural resources as they relate to the above referenced project.

*State Natural Heritage Site*

A review of our database indicates that there are currently no records of state-rare or federally listed plants, animals or natural communities at this project site. As a result, at present, this project does not lie within a State Natural Heritage Site, nor does it lie within a Delaware National Estuarine Research Reserve which are two criteria used to identify "Designated Critical Resource Waters" in the U.S. Army Corps of Engineers (USACE) Nationwide Permit General Condition No. 22. A copy of this letter shall be included in any permit application or pre-construction notification submitted to the USACE for activities on this property.

*Marsh Nesting Birds*

Currently, there are no records of state-rare or federally-listed marsh bird species at this site. However, aerial imagery and wetland habitat maps indicate that high marsh habitat (i.e., dominated by plants such as *Spartina patens*, *Distichlis spicata*, and *Iva frutescens*) is present. Several state-rare species of conservation concern solely or frequently nest in high marsh habitat, including the saltmarsh sparrow (*Ammospiza caudacutus*), Coastal Plain swamp sparrow (*Melospiza georgiana nigrescens*), willet (*Tringa semipalmata*), state-listed endangered American oystercatcher (*Haematopus palliatus*) and federally-listed threatened black rail (*Laterallus jamaicensis*). We recommend a time of year restriction of **April 1<sup>st</sup> to July 31<sup>st</sup>** to avoid impacts to marsh nesting birds.

*Fisheries*

The Division of Fish and Wildlife does not have fish community data for the project location. However, it is unlikely that habitat occurs in the project site that would support anadromous fish species. No time of year restrictions or other measures are requested for these species or for resident gamefish species.

We are continually updating our records on Delaware's rare, threatened and endangered species, unique natural communities and other significant natural resources. If the start of the project is delayed more than a year past the date of this letter, please contact us again for the latest information.

Please feel free to contact me with any questions or if you require additional information.

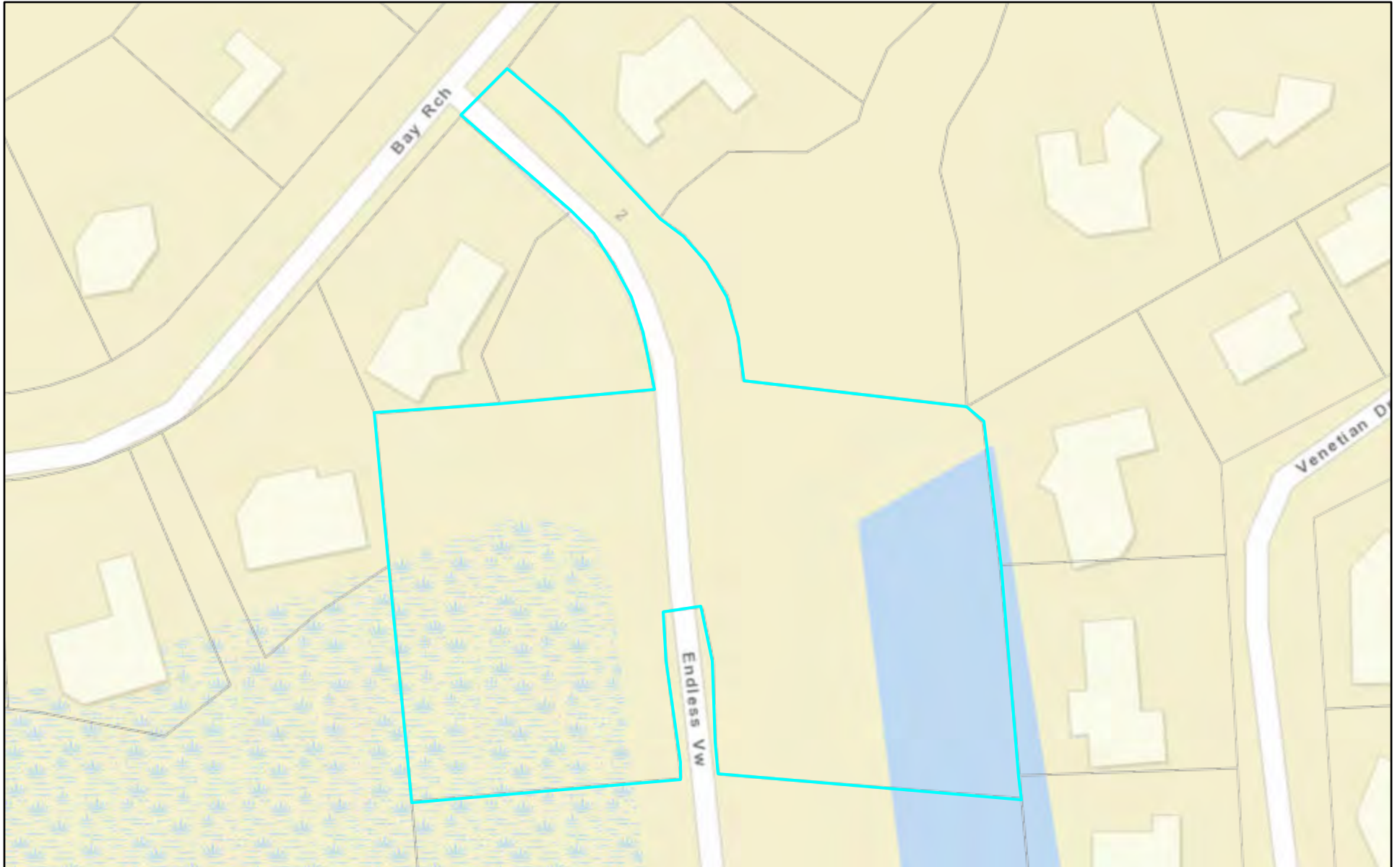
Sincerely,

A handwritten signature in cursive script that reads "Danielle Minter".

Danielle Minter  
*Environmental Review Coordinator*  
Phone: (302) 223-2446  
6180 Hay Point Landing Road  
Smyrna, DE 19977

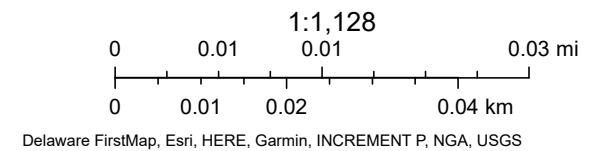
(See invoice on next page)

# National Register-listed Properties (Basemap - World Street Webmap)



February 7, 2024

 State Parcels





## **ATTACHMENT E:**

*Essential Fish Habitat Assessment &  
Fish and Wildlife coordination*

## EFH Mapper Report

### EFH Data Notice

Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional fishery management councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

[Greater Atlantic Regional Office](#)

[Atlantic Highly Migratory Species Management Division](#)

### Query Results

Degrees, Minutes, Seconds: Latitude = 38° 41' 47" N, Longitude = 76° 54' 53" W













Decimal Degrees: Latitude = 38.697, Longitude = -75.085

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

### \*\*\* WARNING \*\*\*

Please note under "Life Stage(s) Found at Location" the category "ALL" indicates that all life stages of that species share the same map and are designated at the queried location.

### EFH

Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
		Atlantic Butterfish	Adult	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
		Atlantic Herring	Adult	New England	Amendment 3 to the Atlantic Herring FMP
		Black Sea Bass	Juvenile	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
		Bluefish	Adult, Juvenile	Mid-Atlantic	Bluefish
		Clearence Skate	Adult, Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
		Little Skate	Adult, Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
		Longfin Inshore Squid	Eggs	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11

Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
		Monkfish	Eggs/Larvae	New England	Amendment 4 to the Monkfish FMP
		Red Hake	Eggs/Larvae/Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
		Scup	Adult, Juvenile	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
		Silver Hake	Adult, Eggs/Larvae	New England	Amendment 14 to the Northeast Multispecies FMP
		Spiny Dogfish	Adult Male, Sub-Adult Female	Mid-Atlantic	Amendment 3 to the Spiny Dogfish FMP
		Summer Flounder	Adult, Juvenile, Larvae	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
		Windowpane Flounder	Adult, Eggs, Juvenile, Larvae	New England	Amendment 14 to the Northeast Multispecies FMP
		Winter Skate	Adult, Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
		Yellowtail Flounder	Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP



### Pacific Salmon EFH

No Pacific Salmon Essential Fish Habitat (EFH) were identified at the report location.

### Atlantic Salmon

No Atlantic Salmon were identified at the report location.

### HAPCs

Link	Data Caveats	HAPC Name	Management Council
		Summer Flounder SAV	Mid-Atlantic Fishery Management Council

### EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

**Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.**

**\*\*For links to all EFH text descriptions see the complete data inventory: [open data inventory -->](#)**

**All EFH species have been mapped for the Greater Atlantic region,**  
**Atlantic Highly Migratory Species EFH,**  
 Bigeye Sand Tiger Shark,  
 Bigeye Sixgill Shark,  
 Caribbean Sharpnose Shark,

**Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.**

**\*\*For links to all EFH text descriptions see the complete data inventory: [open data inventory -->](#)**

Galapagos Shark,  
Narrowtooth Shark,  
Sevengill Shark,  
Sixgill Shark,  
Smooth Hammerhead Shark,  
Smalltail Shark

**NOAA Fisheries Greater Atlantic Regional Fisheries Office  
Essential Fish Habitat (EFH) Assessment & Fish and Wildlife  
Coordination Act (FWCA) Consultation Worksheet  
August 2021 rev.**

### **Authorities**

The Magnuson Stevens Fishery Conservation and Management Act (MSA) requires federal agencies to consult with NOAA Fisheries on any action or proposed action authorized, funded, or undertaken by such agency that may adversely affect essential fish habitat (EFH) identified under the MSA. This process is guided by the requirements of our EFH regulation at 50 CFR 600.905, which mandates the preparation of EFH assessments and generally outlines each agency's obligations in the consultation process.

The Fish and Wildlife Coordination Act (FWCA) requires that all federal agencies consult with NOAA Fisheries when proposed actions might result in modifications to a natural stream or body of water. The FWCA also requires that federal agencies consider the effects that these projects would have on fish and wildlife and must also provide for improvement of these resources. Under the FWCA, we work to protect, conserve and enhance species and habitats for a wide range of aquatic resources such as shellfish, diadromous species, and other commercially and recreationally important species that are not federally managed and do not have designated EFH.

It is important to note that these consultations take place between NOAA Fisheries and federal action agencies. **As a result, EFH assessments, including this worksheet, must be provided to us by the federal agency, not by permit applicants or consultants.**

### **Use of the Worksheet**

This worksheet can serve as an EFH assessment for **Abbreviated EFH Consultations**, and as a means to provide information on potential effects to other NOAA trust resources considered under the FWCA. An abbreviated consultation allows us to determine quickly whether, and to what degree, a federal action may adversely affect EFH. Abbreviated consultation procedures can be used when federal actions do not have the potential to cause substantial adverse effects on EFH and when adverse effects could be alleviated through minor modifications.

The intent of the EFH worksheet is to provide a guide for determining the information needed to fully assess the effects of a proposed action on EFH. In addition, the worksheet may be used as a tool to assist you in developing a more comprehensive EFH assessment for larger projects that may have more substantial adverse effects to EFH. However, for large, complex projects that have the potential for significant adverse effects, an **Expanded EFH Consultation** may be warranted and the use of this worksheet alone is not appropriate as your EFH assessment.

An **adverse effect** is any impact that reduces the quality and/or quantity of EFH. Adverse effects may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components. Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

Consultation under the MSA is not required if there is no adverse effect on EFH or if no EFH has been designated in the project area. However, because the definition of “adverse effect” is very broad, most in-water work will result in some level of adverse effect requiring consultation with us, even if the impact is temporary or the overall result of the project is habitat restoration or enhancement. It is important to remember that an adverse effect determination is a trigger to consult with us. It does not mean that a project cannot proceed as proposed, or that project modifications are necessary. An adverse effect determination under the EFH provisions of the MSA simply means that the effects of the proposed action on EFH must be evaluated to determine if there are ways to avoid, minimize, or offset adverse effects. Additional details on EFH consultations, tools, and resources, including [frequently asked questions](#) can be found on our [website](#).

## Instructions

This worksheet should be used as your EFH assessment for **Abbreviated EFH Consultations** or as a guide to develop your EFH assessment. It is not appropriate to use this worksheet as your EFH assessment for large, complex projects, or those requiring an Expanded EFH Consultation.

When completed fully and with sufficient information to clearly describe the activities proposed, habitats affected, and project impacts, as well as the measures taken to avoid, minimize or offset any unavoidable adverse effects, this worksheet provides us with required components of an EFH assessment including:

1. A description of the proposed action.
2. An analysis of the potential adverse effects on EFH and the federally managed species.
3. The federal agency’s conclusions regarding the effects of the action on EFH.
4. Proposed mitigation, if applicable.

When completing this worksheet and submitting information to us, it is important to ensure that sufficient information is provided to clearly describe the proposed project and the activities proposed. At a minimum, this should include the public notice (if applicable) or project application and project plans showing:

- location map of the project site with area of impact.
- existing and proposed conditions.
- all in-water work and the location of all proposed structures and/or fill.
- all waters of the U.S. on the project site with mean low water (MLW), mean high water (MHW), high tide line (HTL), and water depths clearly marked.
- Habitat Areas of Particular Concern (HAPCs).
- sensitive habitats mapped, including special aquatic sites (submerged aquatic vegetation, saltmarsh, mudflats, riffles and pools, coral reefs, and sanctuaries and refuges), hard bottom or natural rocky habitat areas, and shellfish beds.
- site photographs, if available.

Your analysis of effects **should focus on impacts that reduce the quality and/or quantity of the habitat or result in conversion to a different habitat type** for all life stages of species with designated EFH within the action area. Simply stating that fish will move away or that the project

will only affect a small percentage of the overall population is not a sufficient analysis of the effects of an action on EFH. Also, since the intent of the EFH consultation is to evaluate the direct, indirect, individual and cumulative effects of a particular federal action on EFH and to identify options to avoid, minimize or offset the adverse effects of that action, is it not appropriate to conclude that an impact is minimal just because the area affected is a small percentage of the total area of EFH designated. The focus of the consultation is to reduce impacts resulting from the activities evaluated in the assessment. Similarly, a large area of distribution or range of the fish species is also not appropriate rationale for concluding the impacts of a particular project are minimal.

Use the information on the our [EFH consultation website](#) and [NOAA's EFH Mapper](#) to complete this worksheet. The mapper is a useful tool for viewing the spatial distribution of designated EFH and HAPCs. Because summer flounder HAPC (defined as: “ all native species of macroalgae, seagrasses, and freshwater and tidal macrophytes in any size bed, as well as loose aggregations, within adult and juvenile summer flounder EFH”) does not have region-wide mapping, local sources and on-site surveys may be needed to identify submerged aquatic vegetation beds within the project area. The full designations for each species may be viewed as PDF links provided for each species within the Mapper, or via our website links to the [New England Fishery Management Councils Omnibus Habitat Amendment 2](#) (Omnibus EFH Amendment), the [Mid-Atlantic Fishery Management Councils FMPs](#) (MAMFC - Fish Habitat), or the [Highly Migratory Species](#) website. Additional information on species specific life histories can be found in the EFH source documents accessible through the [Habitat and Ecosystem Services Division website](#). This information can be useful in evaluating the effects of a proposed action. Habitat and Ecosystem Services Division (HESD) staff have also developed a technical memorandum *Impacts to Marine Fisheries Habitat from Non-fishing Activities in the Northeastern United States*, [NOAA Technical Memorandum NMFS-NE-209](#) to assist in evaluating the effects of non-fishing activities on EFH. If you have questions, please contact the [HESD staff member](#) in your area to assist you.

Federal agencies or their non-federal designated lead agency should email the completed worksheet and necessary attachments to the HESD New England (ME, NH, MA, CT, RI) or Mid- Atlantic (NY, NJ, PA, DE, MD, VA) Branch Chief and the regional biologist listed on the [Contact Regional Office Staff section](#) on our [EFH consultation website](#) and listed below.

We will provide our EFH conservation recommendations under the MSA, and recommendations under the FWCA, as appropriate, within 30 days of receipt of a **complete** EFH assessment for an abbreviated consultation. Please ensure that the EFH worksheet is completed in full and includes detail to minimize delays in completing the consultation. If we are unable to assess potential impacts based on the information provided, we may request additional information necessary to assess the effects of the proposed action on our trust resources before we can begin a consultation. If the worksheet is not completely filled out, it may be returned to you for completion. **The EFH consultation and our response clock does not begin until we have sufficient information upon which to consult.**

If this worksheet is not used, you should include all the information required to complete this worksheet in your EFH assessment. The level of detail that you provide should be commensurate with the magnitude of impacts associated with the proposed project. You may need to prepare a more detailed EFH assessment for more substantial or complex projects to fully characterize the effects of the project and the avoidance and minimization of impacts to EFH. The format of the EFH worksheet may not be sufficient to incorporate the extent of detail required for large-scale projects, and a separate EFH assessment may be required.

Regardless of the format, you should include an analysis as outlined in this worksheet for an expanded EFH assessment, along with any additional necessary information including:

- the results of on-site inspections to evaluate habitat and site-specific effects.
- the views of recognized experts on habitat or the species that may be affected.
- a review of pertinent literature and related information.
- an analysis of alternatives that could avoid or minimize adverse effects on EFH.

For these larger scale projects, interagency coordination meetings should be scheduled to discuss the contents of the EFH consultation and the site-specific information that may be needed in order to initiate the consultation.

Please contact our Greater Atlantic Regional Fisheries Office, [Protected Resources Division](#) regarding potential impacts to marine mammals or threatened and endangered species and the appropriate consultation procedures.

### **HESD Contacts\***

#### **New England - ME, NH, MA, RI, CT**

Chris Boelke, Branch Chief

Mike Johnson - ME, NH

Kaitlyn Shaw - ME, NH, MA

Sabrina Pereira -RI, CT

[christopher.boelke@noaa.gov](mailto:christopher.boelke@noaa.gov)

[mike.r.johnson@noaa.gov](mailto:mike.r.johnson@noaa.gov)

[kaitlyn.shaw@noaa.gov](mailto:kaitlyn.shaw@noaa.gov)

[sabrina.pereira@noaa.gov](mailto:sabrina.pereira@noaa.gov)

#### **Mid-Atlantic - NY, NJ, PA, MD, VA**

Karen Greene, Branch Chief

Jessie Murray - NY, Northern NJ (Monmouth Co. and north)

Keith Hanson - NJ (Ocean Co. and south), DE and PA, Mid-Atlantic wind

Maggie Sager - NJ (Ocean Co. and south), DE and PA

Jonathan Watson - MD, DC

David O'Brien - VA

[karen.greene@noaa.gov](mailto:karen.greene@noaa.gov)

[jessie.murray@noaa.gov](mailto:jessie.murray@noaa.gov)

[keith.hanson@noaa.gov](mailto:keith.hanson@noaa.gov)

[lauren.m.sager@noaa.gov](mailto:lauren.m.sager@noaa.gov)

[jonathan.watson@noaa.gov](mailto:jonathan.watson@noaa.gov)

[david.l.obrien@noaa.gov](mailto:david.l.obrien@noaa.gov)

#### **Ecosystem Management (Wind/Aquaculture)**

Peter Burns, Branch Chief

Alison Verkade (NE Wind)

Susan Tuxbury (wind coordinator)

[peter.burns@noaa.gov](mailto:peter.burns@noaa.gov)

[alison.verkade@noaa.gov](mailto:alison.verkade@noaa.gov)

[susan.tuxbury@noaa.gov](mailto:susan.tuxbury@noaa.gov)

**\*Please check for the most current staffing list on our [contact us page](#) prior to submitting your assessment.**



# EFH Assessment Worksheet rev. August 2021

Please read and follow all of the directions provided when filling out this form.

## 1. General Project Information

Date Submitted:

Project/Application Number:

Project Name:

Project Sponsor/Applicant:

Federal Action Agency (or state agency if the federal agency has provided written notice delegating the authority<sup>1</sup>):

Fast-41:            Yes                                  No

Action Agency Contact Name:

Contact Phone:    Contact Email:

Address, City/Town, State:

## 2. Project Description

<sup>2</sup>Latitude:    Longitude:

Body of Water (e.g., HUC 6 name):

Project Purpose:

Project Description:

Anticipated Duration of In-Water Work including planned Start/End Dates and any seasonal restrictions proposed to be included in the schedule:

<sup>1</sup> A federal agency may designate a non-Federal representative to conduct an EFH consultation by giving written notice of such designation to NMFS. If a non-federal representative is used, the Federal action agency remains ultimately responsible for compliance with sections 305(b)(2) and 305(b)(4)(B) of the Magnuson-Stevens Act. <sup>2</sup> Provide the decimal, or the degrees, minutes, seconds values for latitude and longitude using the World Geodetic System 1984 (WGS84) and negative degree values where applicable.

### 3. Site Description

EFH includes the biological, chemical, and physical components of the habitat. This includes the substrate and associated biological resources (e.g., benthic organisms, submerged aquatic vegetation, shellfish beds, salt marsh wetlands), the water column, and prey species.

Is the project in designated EFH<sup>3</sup>? Yes No

Is the project in designated HAPC? Yes No

Does the project contain any Special Aquatic Sites<sup>4</sup>? Yes No

Is this coordination under FWCA only? Yes No

Total area of impact to EFH (indicate sq ft or acres):

Total area of impact to HAPC (indicate sq ft or acres):

Current range of water depths at MLW Salinity range (PPT): Water temperature range (°F):

<sup>3</sup>Use the tables in Sections 5 and 6 to list species within designated EFH or the type of designated HAPC present. See the worksheet instructions to find out where EFH and HAPC designations can be found. <sup>4</sup> Special aquatic sites (SAS) are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region. They include sanctuaries and refuges, wetlands, mudflats, vegetated shallows, coral reefs, and riffle and pool complexes (40 CFR Subpart E). If the project area contains SAS (i.e. sanctuaries and refuges, wetlands, mudflats, vegetated shallows/SAV, coral reefs, and/or riffle and pool complexes, describe the SAS, species or habitat present, and area of impact.

### 4. Habitat Types

In the table below, select the location and type(s) for each habitat your project overlaps. For each habitat type selected, indicate the total area of expected impacts, then what portion of the total is expected to be temporary (less than 12 months) and what portion is expected to be permanent (habitat conversion), and if the portion of temporary impacts will be actively restored to pre- construction conditions by the project proponent or not. A project may overlap with multiple habitat types.

Habitat Location	Habitat Type	Total impacts (lf/ft <sup>2</sup> /ft <sup>3</sup> )	Temporary impacts (lf/ft <sup>2</sup> /ft <sup>3</sup> )	Permanent impacts (lf/ft <sup>2</sup> /ft <sup>3</sup> )	Restored to pre-existing conditions?*

\*Restored to pre-existing conditions means that as part of the project, the temporary impacts will be actively restored, such as restoring the project elevations to pre-existing conditions and replanting. It does not include natural restoration or compensatory mitigation.

**Submerged Aquatic Vegetation (SAV) Present?:**

Yes:

No:

If the project area contains SAV, or has historically contained SAV, list SAV species and provide survey results including plans showing its location, years present and densities if available. Refer to Section 12 below to determine if local SAV mapping resources are available for your project area.

**Sediment Characteristics:**

The level of detail required is dependent on your project – e.g., a grain size analysis may be necessary for dredging. In addition, if the project area contains rocky/hard bottom habitat <sup>6</sup>(pebble, cobble, boulder, bedrock outcrop/ledge) identified as Rocky (coral/rock), Substrate (cobble/gravel), or Substrate (rock) above, describe the composition of the habitat using the following table.

Substrate Type* (grain size)	Present at Site? (Y/N)	Approximate Percentage of Total Substrate on Site
Silt/Mud (<0.063mm)		
Sand (0.063-2mm)		
Rocky: Pebble/Gravel /Cobble(2-256mm)**		
Rocky: Boulder (256-4096mm)**		
Rocky: Coral		
Bedrock**		

<sup>6</sup>The type(s) of rocky habitat will help you determine if the area is cod HAPC.

\* Grain sizes are based on Wentworth grain size classification scale for granules, pebbles, cobbles, and boulders.

\*\* Sediment samples with a content of 10% or more of pebble-gravel-cobble and/or boulder in the top layer (6-12 inches) should be delineated and material with epifauna/macroalgae should be differentiated from bare pebble-gravel-cobble and boulder.

If no grain size analysis has been conducted, please provide a general description of the composition of the sediment. If available please attach images of the substrate.

**Diadromous Fish (migratory or spawning habitat- identify species under Section 10 below):**

Yes:

No:

## 5. EFH and HAPC Designations

Within the Greater Atlantic Region, EFH has been designated by the New England, Mid-Atlantic, and South Atlantic Fisheries Management Councils and NOAA Fisheries. Use the [EFH mapper](#) to determine if EFH may be present in the project area and enter all species and life stages that have designated EFH. Optionally, you may review the EFH text descriptions linked to each species in the EFH mapper and use them to determine if the described habitat is present at your project site. If the habitat characteristics described in the text descriptions do not exist at your site, you may be able to exclude some species or life stages from additional consideration. For example, the water depths at your site are shallower than those described in the text description for a particular species or life stage. We recommend this for larger projects to help you determine what your impacts are.

Species Present	EFH is designated/mapped for:				What is the source of the EFH information included?
	EFH: eggs	EFH: larvae	EFH: juvenile	EFH: adults/spawning adults	

## 6. Habitat Areas of Particular Concern (HAPCs)

HAPCs are subsets of EFH that are important for long-term productivity of federally managed species. HAPCs merit special consideration based their ecological function (current or historic), sensitivity to human-induced degradation, stresses from development, and/or rarity of the habitat. While many HAPC designations have geographic boundaries, there are also habitat specific HAPC designations for certain species, see note below. Use the [EFH mapper](#) to identify HAPCs within your project area. Select all that apply.

Summer flounder: SAV <sup>7</sup>	Alvin & Atlantis Canyons
Sandbar shark	Baltimore Canyon
Sand Tiger Shark (Delaware Bay)	Bear Seamount
Sand Tiger Shark (Plymouth-Duxbury-Kingston Bay)	Heezen Canyon
Inshore 20m Juvenile Cod <sup>8</sup>	Hudson Canyon
Great South Channel Juvenile Cod	Hydrographer Canyon
Northern Edge Juvenile Cod	Jeffreys & Stellwagen
Lydonia Canyon	Lydonia, Gilbert & Oceanographer Canyons
Norfolk Canyon (Mid-Atlantic)	Norfolk Canyon (New England)
Oceanographer Canyon	Retriever Seamount
Veatch Canyon (Mid-Atlantic)	Toms, Middle Toms & Hendrickson Canyons
Veatch Canyon (New England)	Washington Canyon
Cashes Ledge	Wilmington Canyon
Atlantic Salmon	

<sup>7</sup> Summer flounder HAPC is defined as all native species of macroalgae, seagrasses, and freshwater and tidal macrophytes in any size bed, as well as loose aggregations, within adult and juvenile summer flounder EFH. In locations where native species have been eliminated from an area, then exotic species are included. Use local information to determine the locations of HAPC.

<sup>8</sup> The purpose of this HAPC is to recognize the importance of inshore areas to juvenile Atlantic cod. The coastal areas of the Gulf of Maine and Southern New England contain structurally complex rocky-bottom habitat that supports a wide variety of emergent epifauna and benthic invertebrates. Although this habitat type is not rare in the coastal Gulf of Maine, it provides two key ecological functions for juvenile cod: protection from predation, and readily available prey. See [EFH mapper](#) for links to text descriptions for HAPCs.

## 7. Activity Details

Select all that apply	Project Type/Category
	Agriculture
	Aquaculture - <u>List species here:</u>
	Bank/shoreline stabilization (e.g., living shoreline, groin, breakwater, bulkhead)
	Beach renourishment
	Dredging/excavation
	Energy development/use e.g., hydropower, oil and gas, pipeline, transmission line, tidal or wave power, wind
	Fill
	Forestry
	Infrastructure/transportation (e.g., culvert construction, bridge repair, highway, port, railroad)
	Intake/outfall
	Military (e.g., acoustic testing, training exercises)
	Mining (e.g., sand, gravel)
	Overboard dredged material placement
	Piers, ramps, floats, and other structures
	Restoration or fish/wildlife enhancement (e.g., fish passage, wetlands, mitigation bank/ILF creation)
	Survey (e.g., geotechnical, geophysical, habitat, fisheries)
	Water quality (e.g., storm water drainage, NPDES, TMDL, wastewater, sediment remediation)
	Other:

## 8. Effects Evaluation

Select all that apply	Potential Stressors Caused by the Activity
	Underwater noise
	Water quality/turbidity/contaminant release
	Vessel traffic/barge grounding
	Impingement/entrainment
	Prevent fish passage/spawning
	Benthic community disturbance
	Impacts to prey species

Select all that apply and if temporary <sup>9</sup> or permanent		Habitat alterations caused by the activity
Temp	Perm	
		Water depth change
		Tidal flow change
		Fill
		Habitat type conversion
		Other:
		Other:

<sup>9</sup> Temporary in this instance means during construction. <sup>10</sup> Entrainment is the voluntary or involuntary movement of aquatic organisms from a water body into a surface diversion or through, under, or around screens and results in the loss of the organisms from the population. Impingement is the involuntary contact and entrapment of aquatic organisms on the surface of intake screens caused when the approach velocity exceeds the swimming capability of the organism.

### Details - project impacts and mitigation

Briefly describe how the project would impact each of the habitat types selected above and the amount (i.e., acreage or sf) of each habitat impacted. Include temporary and permanent impact descriptions and direct and indirect impacts. For example, dredging has a direct impact on bottom sediments and associated benthic communities. The turbidity generated can result in a temporary impact to water quality which may have an indirect effect on some species and habitats such as winter flounder eggs, SAV or rocky habitats. The level of detail that you provide should be commensurate with the magnitude of impacts associated with the proposed project. Attach supplemental information if necessary.

What specific measures will be used to avoid and minimize impacts, including project design, turbidity controls, acoustic controls, and time of year restrictions? If impacts cannot be avoided or minimized, why not?

Is compensatory mitigation proposed?      Yes                      No

If compensatory mitigation is not proposed, why not? If yes, describe plans for compensatory mitigation (e.g. permittee responsible, mitigation bank, in-lieu fee) and how this will offset impacts to EFH and other aquatic resources. Include a proposed compensatory mitigation and monitoring plan as applicable.

## 9. Effects of Climate Change

Effects of climate change should be included in the EFH assessment if the effects of climate change may amplify or exacerbate the adverse effects of the proposed action on EFH. Use the [Intergovernmental Panel on Climate Change \(IPCC\) Representative Concentration Pathways \(RCP\) 8.5/high greenhouse gas emission scenario \(IPCC 2014\)](#), at a minimum, to evaluate the future effects of climate change on the proposed projections. For sea level rise effects, use the intermediate-high and extreme scenario projections as defined in [Sweet et al. \(2017\)](#). For more information on climate change effects to species and habitats relative to NMFS trust resources, see [Guidance for Integrating Climate Change Information in Greater Atlantic Region Habitat Conservation Division Consultation Processes](#).

1. Could species or habitats be adversely affected by the proposed action due to projected changes in the climate? If yes, please describe how:
  
2. Is the expected lifespan of the action greater than 10 years? If yes, please describe project lifespan:
  
3. Is climate change currently affecting vulnerable species or habitats, and would the effects of a proposed action be amplified by climate change? If yes, please describe how:
  
4. Do the results of the assessment indicate the effects of the action on habitats and species will be amplified by climate change? If yes, please describe how:
  
5. Can adaptive management strategies (AMS) be integrated into the action to avoid or minimize adverse effects of the proposed action as a result of climate? If yes, please describe how:



## 10. Federal Agency Determination

Federal Action Agency's EFH determination (select one)	
	There is no adverse effect <sup>7</sup> on EFH or EFH is not designated at the project site.  EFH Consultation is not required. This is a FWCA only request.
	The adverse effect <sup>7</sup> on EFH is not substantial. This means that the adverse effects are no more than minimal, temporary, or can be alleviated with minor project modifications or conservation recommendations.  This is a request for an abbreviated EFH consultation.
	The adverse effect <sup>7</sup> on EFH is substantial.  This is a request for an expanded EFH consultation. We will provide more detailed information, including an alternatives analysis and NEPA documents, if applicable.

<sup>7</sup> An adverse effect is any impact that reduces the quality and/or quantity of EFH. Adverse effects may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species and their habitat, and other ecosystem components. Adverse effects to EFH may result from actions occurring within EFH or outside of EFH and may include site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions.

## 11. Fish and Wildlife Coordination Act

Under the FWCA, federal agencies are required to consult with us if actions that the authorize, fund, or undertake will result in modifications to a natural stream or body of water. Federal agencies are required to consider the effects these modifications may have on fish and wildlife resources, as well as provide for the improvement of those resources. Under this authority, we consider the effects of actions on NOAA-trust resources, such as anadromous fish, shellfish, crustaceans, or their habitats, that are not managed under a federal fisheries management plan. Some examples of other NOAA-trust resources are listed below. Some of these species, including diadromous fishes, serve as prey for a number of federally-managed species and are therefore considered a component of EFH pursuant to the MSA. We will be considering the effects of your project on these species and their habitats as part of the EFH/FWCA consultation process and may make recommendations to avoid, minimize or offset and adverse effects concurrently with our EFH conservation recommendations.

Please contact our Greater Atlantic Regional Fisheries Office, [Protected Resources Division](#) regarding potential impacts to marine mammals or species listed under the Endangered Species Act and the appropriate consultation procedures.

## Fish and Wildlife Coordination Act Resources

Species known to occur at site (list others that may apply)	Describe habitat impact type (i.e., physical, chemical, or biological disruption of spawning and/or egg development habitat, juvenile nursery and/or adult feeding or migration habitat). Please note, impacts to federally listed species of fish, sea turtles, and marine mammals must be coordinated with the GARFO Protected Resources Division.
alewife	
American eel	
American shad	
Atlantic menhaden	
blue crab	
blue mussel	
blueback herring	
Eastern oyster	
horseshoe crab	
quahog	
soft-shell clams	
striped bass	
other species:	
other species:	
other species:	

## **12. Useful Links**

[National Wetland Inventory Maps](#)

[EPA's National Estuary Program \(NEP\)](#)

[Northeast Regional Ocean Council \(NROC\) Data Portal](#)

[Mid-Atlantic Regional Council on the Ocean \(MARCO\) Data Portal](#)

### **Resources by State**

#### **Maine**

[Maine Office of GIS Data Catalog](#)

[Town shellfish information including shellfish conservation area maps](#)

[State of Maine Shellfish Sanitation and Management](#)

[Eelgrass maps](#)

[Casco Bay Estuary Partnership](#)

[Maine GIS Stream Habitat Viewer](#)

#### **New Hampshire**

[NH Statewide GIS Clearinghouse, NH GRANIT](#)

[NH Coastal Viewer](#)

[State of NH Shellfish Program](#)

#### **Massachusetts**

[MA DMF Shellfish Sanitation and Management Program](#)

[MassGIS Data \(Including Eelgrass Maps\)](#)

[MA DMF Recommended TOY Restrictions Document](#) [Massachusetts](#)

[Bays National Estuary Program](#)

[Buzzards Bay National Estuary Program](#)

[Massachusetts Division of Marine Fisheries](#)

[Massachusetts Office of Coastal Zone Management](#)

#### **Rhode Island**

[RI Shellfish and Aquaculture](#)

[RI Shellfish Management Plan](#)

[RI Eelgrass Maps](#)

[Narragansett Bay Estuary Program](#)

[Rhode Island Division of Marine Fisheries](#)

[Rhode Island Coastal Resources Management Council](#)

**Connecticut**

[CT Bureau of Aquaculture](#)

[Natural Shellfish Beds in CT](#)

[Eelgrass Maps](#)

[Long Island Sound Study](#)

[CT GIS Resources](#)

[CT DEEP Office of Long Island Sound Programs and Fisheries](#)

[CT River Watershed Council](#)

**New York**

[Eelgrass Report](#)

[Peconic Estuary Program](#)

[NY/NJ Harbor Estuary Program](#)

[New York GIS Clearinghouse](#)

**New Jersey**

[Submerged Aquatic Vegetation Mapping](#)

[Barnegat Bay Partnership](#)

[NJ GeoWeb](#)

[NJ DEP Shellfish Maps](#)

**Pennsylvania**

[Delaware River Management Plan](#)

[PA DEP Coastal Resources Management Program](#)

[PA DEP GIS Mapping Tools](#)

**Delaware**

[Partnership for the Delaware Estuary](#)

[Center for Delaware Inland Bays](#)

[Delaware FirstMap](#)

**Maryland**

[Submerged Aquatic Vegetation Mapping](#)

[MERLIN \(Maryland's Environmental Resources and Land Information Network\)](#)

[Maryland Coastal Atlas](#)

[Maryland Coastal Bays Program](#)

**Virginia**

[VMRC Habitat Management Division](#)

[Submerged Aquatic Vegetation mapping](#)

## **ATTACHMENT F:**

*Clean Fill Certification from Penny Supply*



Elk Mills Quarry  
896 Elk Mills Road  
Elk Mills, MD 21920

12/31/2023

### Elk Mills-RIPRAP

Procedure	Sieve/Test	Average	Unit	DeIDOT R-4 RIPRAP
	42" (1050mm)	100.0	%	
	12" (300mm)	100.0	%	100-100
	6" (150mm)	39.0	%	15-50
	3" (75mm)	10.0	%	0-15
ASTM C131	LA Abrasion (2,1000)	27.79	%	
ASTM C 88	Soundness (Na2SO4) Coarse	0.39	%	
AASHTO T85	Absorption	0.37	%	
AASHTO T85	SPGR (Dry,Gsb)	2.617		
ASTM C128	SPGR (SSD)	2.656		
AASHTO T85	SPGR (Apparent,Gsa)	2.642		
ASTM C29	Unit Wt (Jigged)	92.0		
ASTM C29	Unit Wt (Loose)	80.3		
ASTM C29	Unit Wt SSD (Jigged)	93.0		
ASTM C29	Unit Wt SSD (Loose)	81.0		

We certify that the RipRap produced at the Elk Mills Quarry conforms to the standards stated above:

We also certify that our stone is produced from one hundred percent virgin quarry material and is free from deleterious substances.

This submittal does not guarantee availability of product. Please contact appropriate salesperson for this information.

**\* Disclaimer:** *The physical property test results represent annual qualification data and it may vary for delivered material. Your project may require additional or more recent testing.*

*Allan Myers will not be responsible for undersize caused by shipping and handling.*

**Prepared by:** Burton Carr **Email:** Burt.Carr@allanmyers.com **Cell:** 484-572-9542 **PA Cert #** 2717 **MD Cert #** 1307

Signature

Name/Title

Burt Carr / Aggregate QC Technician

23853

02006 2307

PREPARED BY:  
HUDSON, JONES, JAYWORK, WILLIAMS & LIGOT  
309 REHOBOTH AVENUE  
REHOBOTH BEACH, DE 19971

Tax Map # 3-34 20.13 233

THIS DEED, Made this 24<sup>th</sup> day of September, in the year of our Lord one thousand nine hundred and ninety-four (1994).

BETWEEN JAMES P. PRENGER and IRENE PRENGER, his wife, of 9 Venetian Drive, Rehoboth Beach, DE 19971 and WILLIAM H. VERNON and SHARON S. VERNON, his wife, of 7 Venetian Drive, Rehoboth Beach, DE 19971, parties of the first part,

- AND -

PAUL J. ROESSEL and ELIZABETH A. BROWNING, husband and wife, of 1003 N. Broom Street, Wilmington, DE 19806, parties of the second part.

WITNESSETH, that the said parties of the first part, for and in consideration of the sum of ONE DOLLAR (\$1.00) and other good and valuable consideration, Current Lawful Money of the United States of America and other good and valuable consideration, the receipt whereof is hereby acknowledged, hereby grants and conveys unto the said parties of the second part, their heirs and assigns,

ALL that certain lot, piece or parcel of land situate in Lewes and Rehoboth Hundred, Sussex County, State of Delaware, being designated as LOT NO. B-6, in SEABREEZE DEVELOPMENT, as same more fully appears upon a certain plot plan thereof entitled "Revised Plot 1 of Seabreeze Development, near Dewey Beach, Sussex County, Delaware," as prepared by Jay D. Wingate and Sam P. Eschenbach, Surveyors, May 10, 1958, which is now of record in the Office of the Recorder of Deeds, in and for Sussex County, at Georgetown, Delaware, in Plot Book 3, Page 5; said lands and premises being more particularly described in accordance with a survey of Wingate and Eschenbach, Registered Surveyors, dated February 20, 1989, as follows, to wit:

BEGINNING at an iron pipe in concrete located on the westerly side of Venetian Drive (50.00 feet wide), said pipe being further located in the common boundary line between Lot B-6, conveyed herein, and Lot B-7; thence proceeding from said point and place of beginning along line of Lot B-7, North 22 degrees 30 minutes West, a distance of 100.00 feet to a pipe in concrete; thence turning and running along line of lands now or formerly of Louise R. Smethurst and Raymond S. Smethurst, Jr., South 67 degrees 30 minutes West, a distance of 99.29 feet to a point; thence turning and running along (and including) a wood bulkhead bordering the easterly side of a canal following its various meanderings in a southerly direction to a nail located in the common boundary line between Lot B-6 (conveyed herein) and Lot B-5; thence turning and running along line of B-5, South 88 degrees 20 minutes East, a distance of 94.30 feet to an iron rod at the westerly side of Venetian Drive, aforesaid; thence turning and running along the said westerly side of Venetian Drive, North 01 degrees 40 minutes East, a distance of 50.00 feet back to the point and place of beginning, and containing therein 12,258 square feet of land, be the same more or less.

AND BEING the same lands and premises as conveyed unto James P. Prenger and Irene Prenger, his wife, by deed of Arthur G. Guy and Ann M. Guy, his wife, dated the 8th day of August, 1977, and being recorded in the Office of the Recorder of Deeds, in and for Sussex County, Delaware, in Deed Book 855, Page 139. William H. Vernon and Sharon S. Vernon join herein to convey their interest in said property as acquired by them from James P. Prenger and Irene Prenger in "Lease - Purchase Agreement" and "Addendum to Lease - Purchase Agreement" each respectively dated and recorded as follows: March 30, 1988 in Deed Book 1565 at page 223, and May 19-24, 1993 in Deed Book 1915 at page 210.

2961 333

9/26/94

TR-TX ST 7500.00

5692 111

9/26/94

CTR-TX SU 3750.00

02006 2308

IN WITNESS WHEREOF, the said parties of the first part have hereunto set their hands and seals the day and year aforesaid.

WITNESS:

Karlyn P. Braun  
Karlyn P. Braun  
[Signature]  
[Signature]

[Signature] (SEAL)  
JAMES P. PRENGER

[Signature] (SEAL)  
IRENE PRENGER

[Signature] (SEAL)  
WILLIAM H. VERNON

[Signature] (SEAL)  
SHARON S. VERNON

STATE OF DELAWARE

COUNTY OF SUSSEX

SS:

BE IT REMEMBERED, that on this 23rd day of September, A.D. 1994, personally appeared before me, the Subscriber, a Notary Public for the State and County aforesaid, James P. Prenger and Irene Prenger, parties to this Indenture, known to me personally to be such, and they acknowledged this Indenture to be their act and deed.

GIVEN under my Hand and Seal of Office, the day and year aforesaid.

[Signature]  
Notary Public  
KARLYN P. BRAUN  
NOTARY PUBLIC Date  
STATE OF DELAWARE  
My commission expires 12-02-97  
Print Name

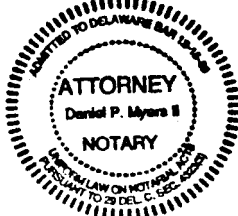
STATE OF DELAWARE

COUNTY OF SUSSEX

SS:

BE IT REMEMBERED, that on this 24th day of September, A.D. 1994, personally appeared before me, the Subscriber, a Notary Public for the State and County aforesaid, William H. Vernon and Sharon S. Vernon, parties to this Indenture, known to me personally to be such, and they acknowledged this Indenture to be their act and deed.

GIVEN under my Hand and Seal of Office, the day and year aforesaid.

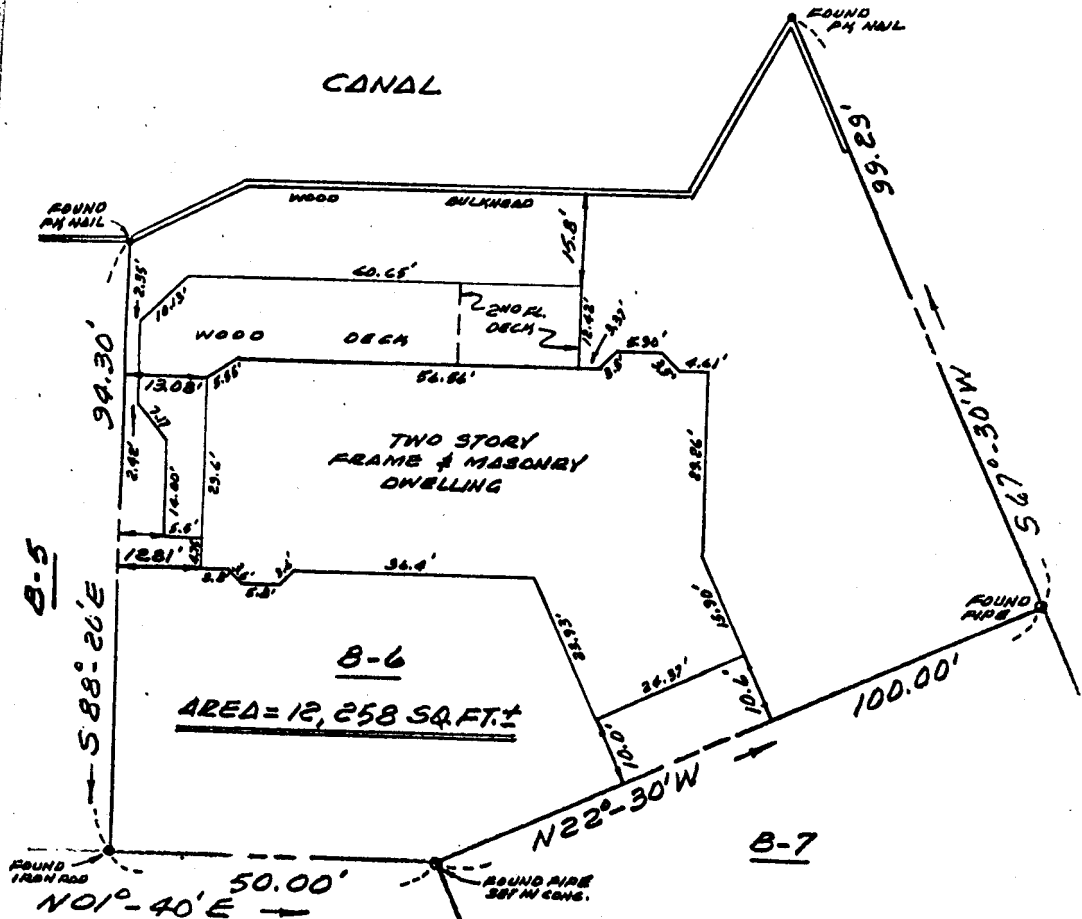


[Signature]  
Notary Public  
Expiration Date  
Print Name



BK 02006 PG 309

SUSSEX CO. TAX MAP REF.:  
3-34-20.13-233



VENETIAN DRIVE (50')

APPROVED  
EXISTING LOT

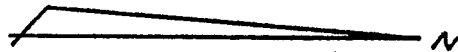
LBL  
9.20.94

COUNTY PLANNING & ZONING COM.  
OF SUSSEX COUNTY

PURCHASERS REPORT  
MADE THIS DATE

SEP 27 1994

ASSESSMENT DIVISION  
OF SUSSEX CTY.



PROPERTY & PLACEMENT SURVEY  
PREPARED FOR  
PAUL J. ROESSEL & ELIZABETH BROWNING

LOT B-6, SEABREEZE DEVL.  
(K/A #7 VENETIAN DRIVE)  
LEWES & REHOBOTH HUND, SUSSEX CO., DEL.

WINGATE & ESCHENBACH, REG. SURV., REHOBOTH BCH., DE.

SCALE: 1" = 20'

SEP 26 PM 3:21 9 SEPT 1994

RECORDS & DEEDS  
SUSSEX COUNTY

Young, Conway, Stargatt & Taylor, Attys.  
10-6-94