

WETLANDS AND SUBAQUEOUS LANDS SECTION PERMIT APPLICATION FORM

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

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

Wetlands and Subaqueous Lands Section



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

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

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

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

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

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

Helpful Information:

1. Tax Parcel Information:

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

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

APPLICANT'S REVIEW BEFORE MAILING

DID YOU COMPLETE THE FOLLOWING?

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

Submit 3 complete copies of the application packet to:

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

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

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

Section 1: Applicant Identification

- | | |
|---|--|
| 1. Applicant's Name: <u>City of Rehoboth - Liz Lingo</u>
Mailing Address: <u>P.O Box 1663</u>
<u>Rehoboth Beach, DE 19971</u> | Telephone #: <u>302.227.6181 x 206</u>
Fax #: _____
E-mail: <u>llingo@cityofrehoboth.com</u> |
| 2. Consultant's Name: <u>Todd Fritchman</u>
Mailing Address: <u>17605 Nassau Commons Blvd, Unit D</u>
<u>Lewes, DE 19958</u> | Company Name: <u>Envirotech Environmental Consulting, Inc.</u>
Telephone #: <u>302.684.5201</u>
Fax #: <u>302.684.5204</u>
E-mail: <u>todd@envirotechcinc.com</u> |
| 3. Contractor's Name: _____
Mailing Address: _____

_____ | Company Name: _____
Telephone #: _____
Fax #: _____
E-mail: _____ |

Section 2: Project Description

4. Check those that apply:
 New Project/addition to existing project? Repair/Replace existing structure? (If checked, must answer #16)
5. Project Purpose (attach additional sheets as necessary):
See Attached Project Description and Details

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

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

Section 3: Project Location

7. Project Site Address: Scarborough Ave Ext.
Rehoboth Beach, DE 19971
- County: N.C. Kent Sussex
 Site owner name (if different from applicant): _____
 Address of site owner: _____
8. Driving Directions: See Attached Document

 (Attach a vicinity map identifying road names and the project location)
9. Tax Parcel ID Number: 334-20.05-358.00 Subdivision Name: _____

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 _____

Section 3: Project Location (Continued)

10. Name of waterbody at Project Location: Silver Lake waterbody is a tributary to: N/A

11. Is the waterbody: Tidal Non-tidal Waterbody width at mean low or ordinary high water 220 ft

12. Is the project: On public subaqueous lands? On private subaqueous lands?*

In State-regulated wetlands? In Federally-regulated wetlands?

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

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

13. Present Zoning: Agricultural Residential Commercial Industrial Other

Section 4: Miscellaneous

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

1001 Scarborough Avenue Ext. - Robert Nejman: 14 Creighton Circle Reading, PA 19607

1002 Scarborough Avenue Ext. - Mary Sharp: 1002 Scarborough Avenue Rehoboth Beach, DE 19971

1004 Scarborough Avenue Ext - Martha Cochran: 405 13th Avenue NE Saint Petersburg, FL 33701

807 Scarborough Avenue - Joan Wallace: 807 Scarborough Avenue Rehoboth Beach, DE 19971

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

N/A

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

Danielle Ellis

A. Have you had a State Jurisdictional Determination performed on the property? Yes No

B. Has the project been reviewed in a monthly Joint Permit Processing Meeting? Yes No

*If yes, what was the date of the meeting? _____

16. Are there existing structures or fill at the project site in subaqueous lands? Yes No

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

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

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

No Pending Issued Denied Date: _____

Type of Permit: NWP# 54 Federal Permit or ID #: _____

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

No Pending Issued Denied Date: _____ Permit or ID #: _____

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

Other: _____

Section 5: Signature Page

19. Agent Authorization:

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

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

I wish to authorize an agent as indicated below

I, City of Rehoboth Beach, hereby designate and authorize Envirotech Environmental Consulting, Inc.
 (Name of Applicant) (Name of Agent)
 to act on my behalf in the processing of this application and to furnish any additional information requested by the Department.

Authorized Agent's Name: Todd Fritchman Telephone #: 302.684.5201
 Mailing Address: 17605 Nassau Commons Blvd, Unit D Fax #: 302.684.5204
Lewes, DE 1958 E-mail: todd@envirotechcinc.com

20. Agent's Signature:

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

Todd Fritchman
 Agent's Signature

June 1, 2023
 Date

21. Applicant's Signature:

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

Yb Lingo
 Applicant's Signature

6-6-23
 Date

Elisabeth Lingo
 Print Name

22. Contractor's Signature:

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

 Contractor's Name

 Date

 Print Name

Vegetative Stabilization

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

1. Submit a brief description of the proposed activity

See attached Project Details and Description

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

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

- a. Tidal Waters: mean high water line? N/A ft²
mean low water line? N/A ft²
- b. Non-tidal waters: ordinary high water line? 65 ft²

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

- a. Tidal Waters: mean high water line? N/A f
mean low water line? N/A ft
- b. Non-tidal waters: ordinary high water line? +/- 1 ft

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

Soft Rush (Juncus Effuses)

6. Describe the sequence of construction and planting.

See Attached Plan Sets and Project Description

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

No plan is in place or required but all necessary measures will be taken to ensure the vegetation thrives



ENVIRONMENTAL CONSULTING, INC.
Providing Environmental Solutions

June 6, 2023

Living Shoreline Stabilization Project

City of Rehoboth Beach
Scarborough Ave Ext.
Rehoboth Beach, DE 19971

To Whom It May Concern,

The proposed project is located northeast of Scarborough Ave Extension (southwestern shoreline of Silver Lake) in Rehoboth Beach, Delaware 19971. This project purpose is to create a living shoreline to stabilize the existing erosive shoreline in the target area. Severe shoreline erosion is occurring and present due to capillary and fetch wave action on exposed soil. The living shoreline will consist of vegetation and other natural components (i.e. sand, bio coir logs, wood stakes). The 16-inch high-density premium coir logs will traverse approximately sixty-five (65) linear feet of the shoreline (half in water and wedged against current erosion). The coir log will be secured with 42-inch wooden stakes, every ten (10) feet. Soft Rush (*Juncus Effuses*) Quart Pots will be installed on both sides of the coir log, with alternating one-foot centers. Additionally, a failed segment of stormwater piping will be removed and replaced with thirty-five (35) linear feet of 15-inch diameter high density polyethylene (HDPE) piping. The 'end wall' of the stormwater HDPE pipe is occurring landward of the Ordinary Water Mark (OWM), where all site activity will occur.

All appropriate risk avoidance measures will be followed to allow practicable alternatives and consideration of impacts were necessary. The work authorized shall be completed in accordance with the terms and conditions of the applicable United States Army Corps of Engineers Permit (Nationwide Permit #54-Living Shoreline). Erosion and sediment control measures shall be implemented in accordance with the specifications and criteria in the current Delaware Erosion and Sediment Control Handbook so as to minimize entry and dispersal of sediment and other contaminants to surface waters. Please note: Site Maps and Property Survey are Attached.

Please contact me with any questions.

Best Regards,

Lyle de la Rosa

Lyle de la Rosa
Environmental Project Technician
Envirotech Environmental Consulting, Inc.
Office Phone: 302.684.5201
Fax: 302.684.5204
email: lyle@envirotechinc.com



ENVIRONMENTAL CONSULTING, INC.
Providing Environmental Solutions



June 6, 2023

**UNITED STATES ARMY CORPS OF ENGINEERS
NWP #54**

APPLICANT

Ms. Liz Lingo
City of Rehoboth
P.O. Box 1663
Rehoboth Beach, DE 19971
302.227.6181
llingo@cityofrehoboth.com

AGENT

Mr. Todd Fritchman
Envirotech Environmental Consulting, Inc. (EECI)
17605 Nassau Commons Boulevard, Unit D
Lewes, DE 19958
302.654.5201
todd@envirotehecinc.com

ATTACHMENT A: Site Maps of the Subject Property

ATTACHMENT B: Subject Property Plans

ATTACHMENT C: Proposed Project Plans

ATTACHMENT D: State and Federal Agency Letters

ATTACHMENT E: NOAA Fisheries Greater Atlantic Regional Fisheries Office Essential Fish Habitat (EFH) Assessment & Fish and Wildlife Coordination Act (FWCA) Consultation Worksheet

SITE LOCATION AND DESCRIPTION

The project site is located along Scarborough Avenue Ext. in Sussex County, Rehoboth Beach, Delaware 19971. Latitude: 38.708266° N, Longitude: -75.084666° West. See attachments for location of subject property and directions to the site. The site is depicted on USGS topographic map, Rehoboth Beach, Delaware quadrangle and is adjacent to Silver Lake. The site is shown on the National Wetlands Inventory Map, and is partially designated uplands, with waters mapped LIUBH (Lacustrine, Limnetic, Unconsolidated Bottom, Permanently Flooded). The site is depicted on State of Delaware DNREC wetland map and is mapped as Upland and W (Water).

PROPOSED PROJECT

The proposed project is to create a living shoreline to stabilize the existing erosive shoreline in the target area. Severe shoreline erosion is occurring and present due to capillary and fetch wave action on exposed soil. The living shoreline will consist of vegetation and other natural components (i.e., sand, coir logs, wood stakes). The 'end wall' of the pipe is occurring landward of the Ordinary Water Mark (OWM), and all onsite activity will occur landward of the OWM. Subject Property and detailed maps are attached.

METHOD OF INSTALLATION

There will be approximately sixty-five (65) linear feet of 16-inch High-Density Premium Coir Log installed halfway in the water and pushed up against the eroding shoreline. The coir log will be secured with 42-inch wooden stakes, placed every ten (10) feet. Soft Rush (*Juncus Effuses*) Quart Pots will be installed on both sides of the coir log, with alternating one (1) foot centers. A concrete precast endwall structure (MD 360.01 Type G) will be installed at the shoreline, with approximately thirty-five (35) linear feet of high-density polyethylene (HDPE) piping.

PROJECT PURPOSE

The purpose of this Living Shoreline project is bank stabilization and environmental enhancement. The site is located in an environment with continuous wave energy, due to storms and high winds.

ENVIRONMENTAL IMPACTS

The project is not expected to have any significant environmental impacts due to the safety measures taken during construction activity. The installation of Delaware native vegetation will positively enhance the environment and create a natural stabilization of the shoreline, which will establish an area of accretion to counter act the current erosion.

AVOIDANCE/MINIMIZATION OF IMPACTS

The project has been designed by Envirotech to maximize environmental benefits and to minimize environmental impacts to the greatest extent feasible. In addition, time restrictions will be followed.

COMPENSATION FOR IMPACTS

Since the proposed project includes the installation of Delaware native vegetation, no further compensation is proposed.

TYPES AND AMOUNT OF FILL MATERIAL

No fill material will be used.

SURFACE AREA TO BE FILLED

Underwater (channelward of MWL): N/A
Intertidal (MHWL-MLWL): N/A
SAV: N/A
Wetlands: N/A

AGENCY COORDINATION

EECI has coordinated with Sarah Carr of DE State Historic Properties Office (DE SHPO), Danielle Ellis of the DNREC Environmental Review, and the US Fish and Wildlife Services in regard to this project.

COMPLIANCE WITH 2023 NATIONWIDE PERMIT GENERAL CONDITIONS

1. **Navigation:** The proposed project will not affect navigational use of Silver Lake.
2. **Aquatic Life Movements:** There is not anticipated to be significant disruption of aquatic life movements as a result of this project.
3. **Spawning Areas:** The proposed activity will not affect any spawning areas.
4. **Migratory Bird Breeding Areas:** The proposed activity will not affect breeding areas.
5. **Shellfish Beds:** The project is located in an area where shellfish beds will not be affected.
6. **Suitable Material:** All material will be free of toxic pollutants and will not affect water quality.
7. **Water Supply Intakes:** The proposed project will not affect public water supply intake.

8. **Adverse Effects from Impoundments:** No impoundments are proposed.
9. **Management of Water Flows:** The proposed project is not anticipated to restrict water flow.
10. **Fills within 100-Year Floodplains:** The proposed project will be implemented in accordance with code requirements.
11. **Equipment:** The equipment will be landward of the Ordinary Water Mark and not come in contact with Silver Lake.
12. **Soil Erosion and Sediment Controls:** Proper soil erosion and sediment controls will be implemented throughout the property area.
13. **Removal of Structures or Temporary Fills:** No temporary structures nor fills are associated with this project.
14. **Proper Maintenance:** The project will be properly maintained by the contractor and/or the applicants upon completion.
15. **Single and Complete Project:** The proposed activity is a single and complete project.
16. **Wild and Scenic Rivers:** The proposed project is not located within any component of the National Wild and Scenic River system (See attached State and Federal Review Documents).
17. **Tribal Rights:** The proposed activity will not impact reserved tribal rights (See attached State and Federal Review Documents).
18. **Endangered Species:** No known threaten or endangered species lay within the Subject Property according to the US F&WS and DNREC Environmental Review (See attached State and Federal Review Documents).
19. **Migratory Birds and Bald and Golden Eagles:** Please see attached is the US F&WS Endangered Species list and Online Certification Letter (See attached State and Federal Review Documents).
20. **Historic Properties:** No historic properties were identified (See attached State and Federal Review Documents).
21. **Discovery of Previously Unknown Remains and Artifacts:** The contractor will notify the District Engineer if any previously unknown historic, cultural, or archaeological remains or artifacts are discovered during construction.
22. **Designated Critical Resource Waters:** A copy of this PCN is being submitted to the Delaware Division of Fish & Wildlife Species Conservation and Research Program for comments on Critical Resource Waters; response will be forwarded to the Corps.
23. **Mitigation:** Erosion and sediment control measures shall be implemented in accordance with the specifications and criteria in the current Delaware Erosion and Sediment Control Handbook so as to minimize entry and dispersal of sediment and other contaminants to surface waters. There will be no impacts in vegetated wetlands (no wetland loss), therefore, no mitigation is proposed.
24. **Safety of Impoundment Structures:** No impoundment structures proposed.
25. **Water Quality:** DE WQC has been issued for NWP #54. Additionally, will follow the conditions of no discharge into an ERES and will contact DNREC Emergency Response if there is a release of material.

26. **Coastal Zone Management:** DE CZM has been issued for NWP #54 and conditions will be followed.
27. **Regional Case-by-Case Conditions:** The project will comply with NWP #54 Regional conditions for Delaware.
28. **Use of Multiple Nationwide Permits:** The proposed project only utilizes NWP #54.
29. **Transfer of Nationwide Permit Verifications:** In the (unlikely) event that the applicants sell the property, a letter will be submitted to the Corps' Philadelphia District Office to validate the transfer.
30. **Compliance Certification:** Upon authorization of Nationwide Permit #54 for the proposed project, the permittees will submit a signed certification regarding the completed work.
31. **Activities Affecting Structures of Works Built by the United States:** The proposed project will not alter, occupy, or use a Federally authorized Civil Works project.
32. **Pre-Construction Notification:** Terms of the General Conditions regarding the timing, contents, form, agency coordination, and District Engineer's decision of the Pre-Construction Notification have been/will be followed.

COMPLIANCE WITH 2023 REGIONAL CONDITIONS FOR DELAWARE

This PCN complies with all applicable NWP Regional Conditions for Delaware:

Condition G-1.

1. Signed application Form 6082 is attached.
2. The PCN describes all activities that the applicants plan to undertake and is accompanied by the required information (location maps; latitude/longitude; tax map parcel number; photographs; delineation of areas within Federal jurisdiction; etc.). State and Federal agencies such as: US Fish & Wildlife Services (US F&WS), Delaware Division of Fish & Wildlife Species Conservation and Research Program, and Delaware Division of Historical and Cultural Affairs have been coordinated with regarding this project. Avoidance, minimization, and compensation have been addressed.

Condition G-2. The site is not located in the National Wild and Scenic Rivers System. (See attached State and Federal Review Documents).

Condition G-3. Review letters from USF & WS and Delaware Division of Fish & Wildlife Species Conservation and Research Program addressing endangered species are attached. (See attached State and Federal Review Documents).

Condition G-4. A review of the NOAA Fisheries ESA Section 7 Mapper found that there are no listed, proposed or candidate species located in the area affected by the proposed action. (See attached State and Federal Review Documents and Essential Fish Habitat Worksheet).

Condition G-5. Review letters from NOAA/NMFS addressing Essential Fish Habitat (EFH) will be forwarded to Army Corps. See Attached NOAA Fisheries Greater Atlantic Regional Fisheries Office Essential Fish Habitat (EFH) Assessment & Fish and Wildlife Coordination Act (FWCA) Consultation Worksheet.

Condition G-6. Fish & Wildlife Coordination Act pertaining to time-of-year restrictions to protect listed species will be followed.

Condition G-7. The Subject Property does not reside in Critical Resource Waters. Please see attached is the review letter from the Delaware Division of Fish & Wildlife Species Conservation and Research Program.

Please contact me if you have any questions or concerns.

Thank you,

Todd Fritchman

Todd Fritchman
President/ Lead Environmental Professional
Envirotech Environmental Consulting, Inc.
17605 Nassau Commons Boulevard, Unit D
Lewes, Delaware 19958
Cell: 302.462.5615
Fax: 302.684.5204

CCR# 2018/10/25/022

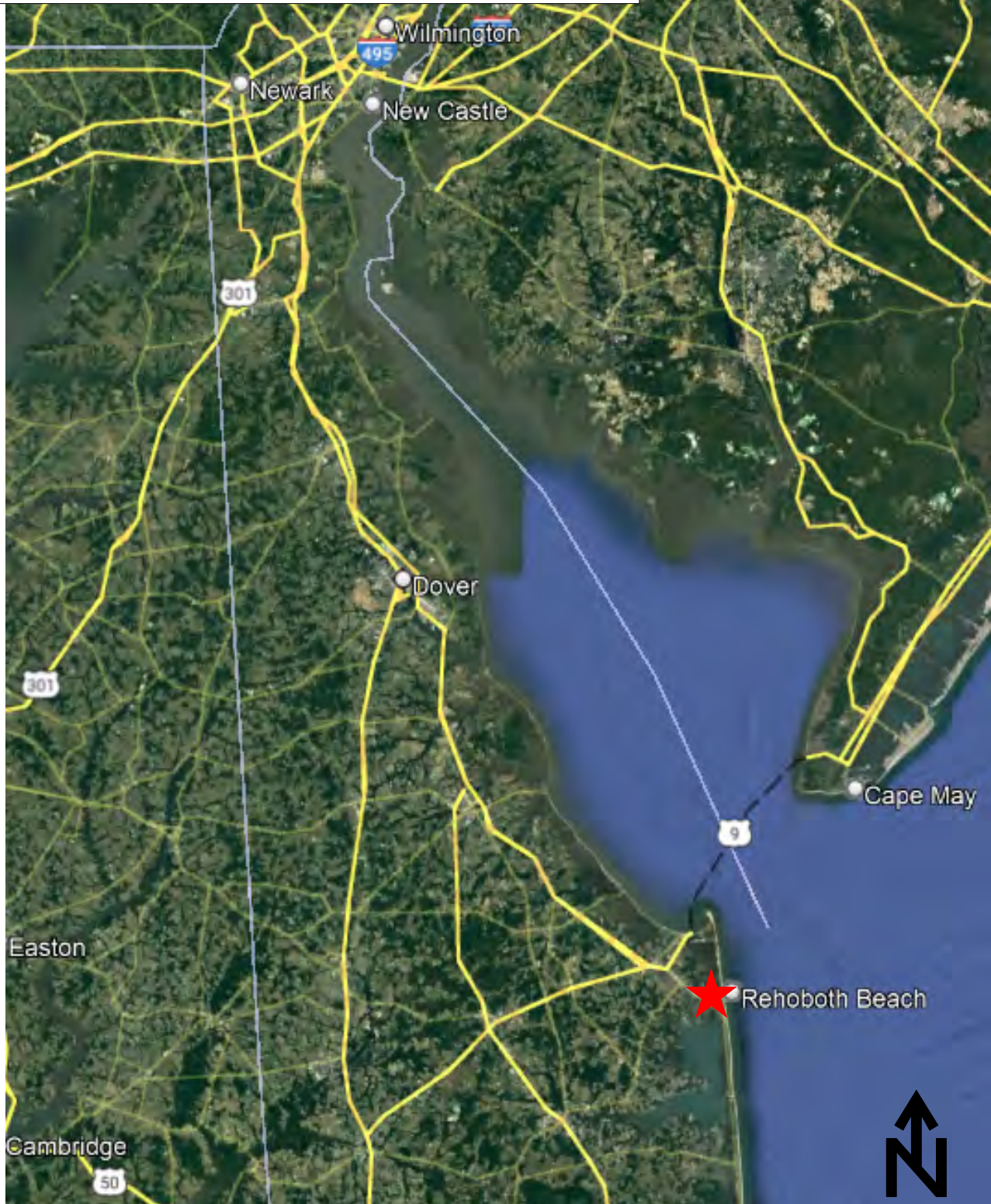


ATTACHMENT A:

Site Maps of the Subject Property


Shoreline Stabilization Project Scarborough Avenue Ext. - Silver Lake

Rehoboth Beach, DE 19971



LEGEND:

NOTE *Imagery Taken From Google Earth Pro*



 = Subject Property Located at Scarborough Avenue Ext., Silver Lake Rehoboth Beach, DE 19971; TMP# 334-20.05-358.00 (+/- 7 acres)

Shoreline Stabilization Project

Scarborough Avenue Ext. - Silver Lake
Rehoboth Beach, Delaware 19971



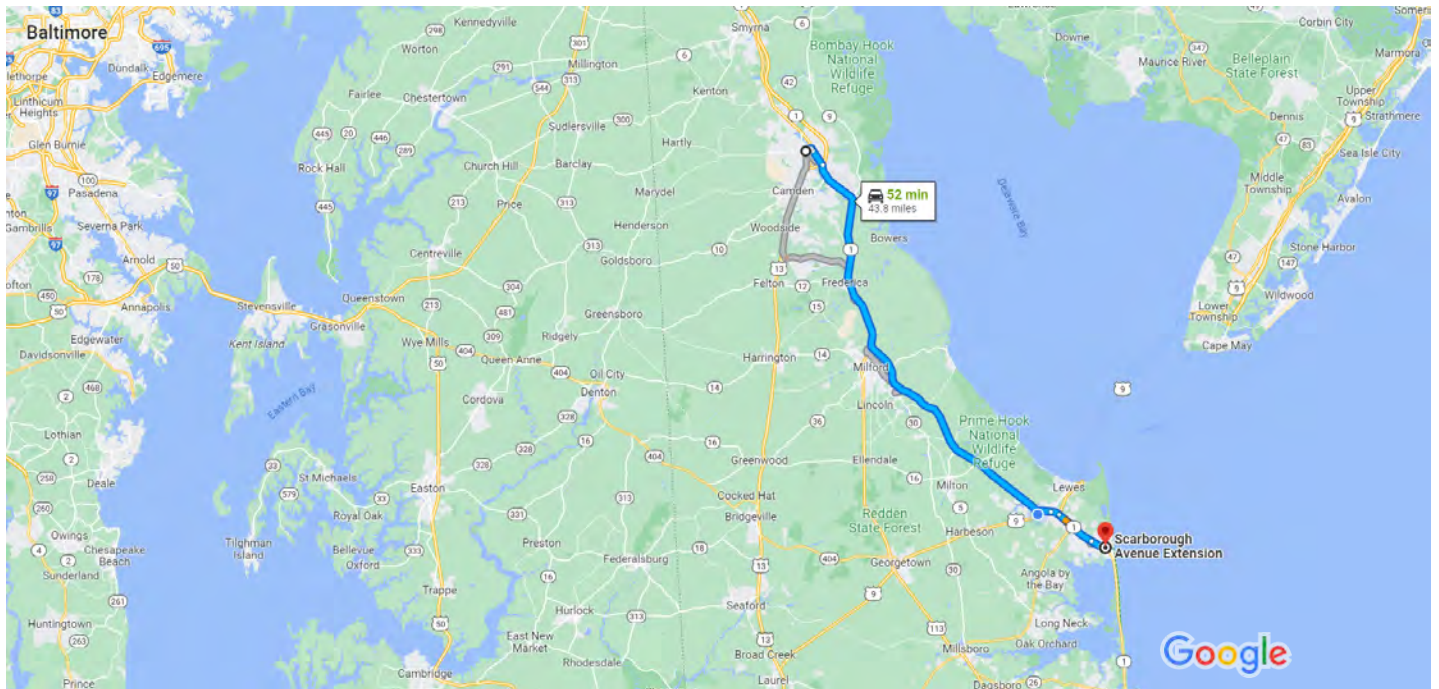
LEGEND:

-  = Project Area
-  = Property Boundary (TMP# 334-20.05-358.00)





Delaware Fish & Wildlife Natural Resources Police, Drive 43.8 miles, 52 min
89 Kings Hwy SW, Dover, DE 19901 to Scarborough Ave Ext, Rehoboth Beach, DE 19971



Map data ©2023 Google 5 mi

Delaware Fish & Wildlife Natural Resources Police

89 Kings Hwy SW, Dover, DE 19901

Take E Division St to US-13 S

- _____ 2 min (0.6 mi)
- ↑ 1. Head north on Kings Hwy SW toward American Ave
- _____ 0.2 mi
- ↘ 2. Turn right onto E Division St/Kings Hwy NE
- 📍 Continue to follow E Division St
- _____ 0.4 mi

Continue to Sussex County

- _____ 40 min (38.4 mi)
- ↘ 3. Turn right onto US-13 S
- _____ 0.2 mi
- ↙ 4. Use the left 2 lanes to turn slightly left onto S Bay Rd
- _____ 1.3 mi
- ⬆️ 5. Take the ramp onto DE-1 S
- _____ 36.1 mi
- ↘ 6. Keep right to continue on US-9 E
- _____ 0.7 mi

Follow DE-1 S to Scarborough Ave Ext in Rehoboth Beach

- ↑ 7. Continue straight onto DE-1 S 10 min (4.8 mi)
- ↑ 8. Continue straight to stay on DE-1 S 3.3 mi
- ↶ 9. Make a U-turn at Spring Lake Dr 1.3 mi
- ↷ 10. Turn right onto Scarborough Ave Ext 0.1 mi
- 0.1 mi

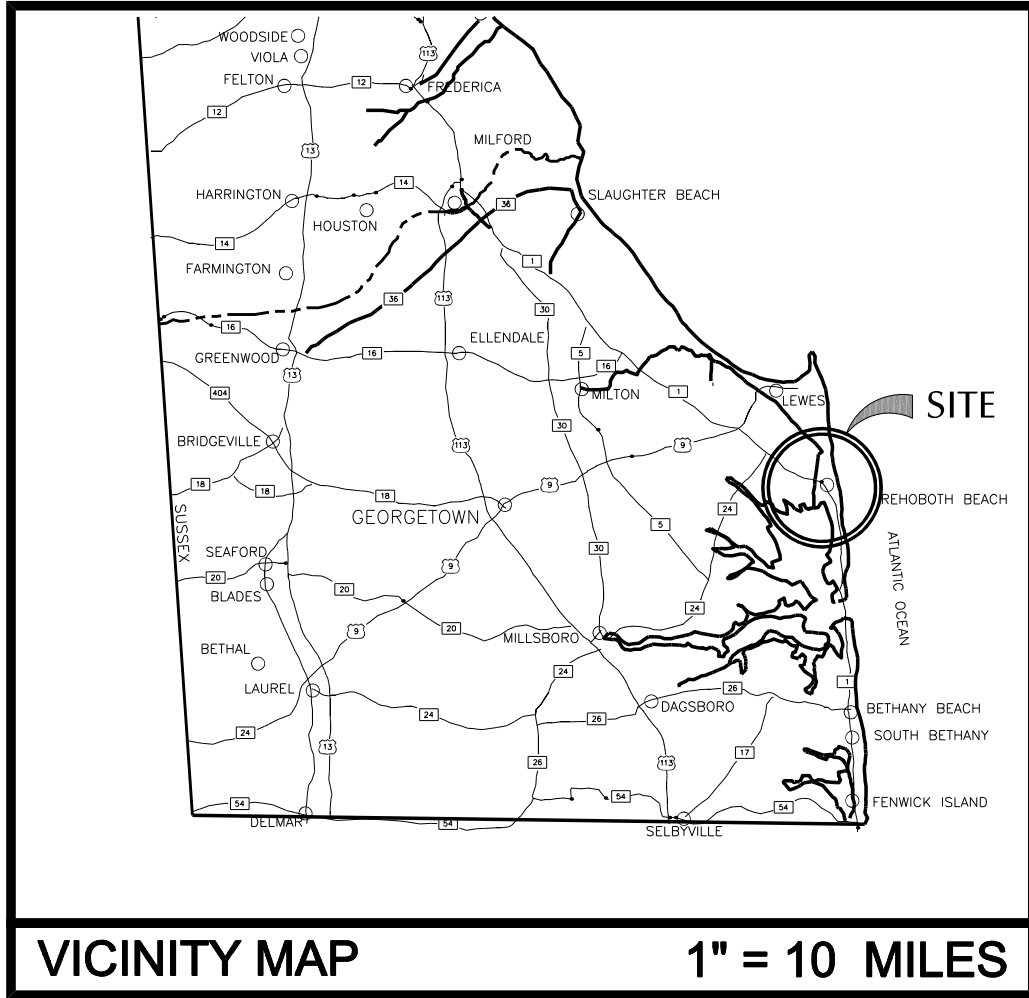
Scarborough Ave Ext
Rehoboth Beach, DE 19971

ATTACHMENT B:

Subject Property Plans

NAD83 FEET

 DE. ST. PLANE

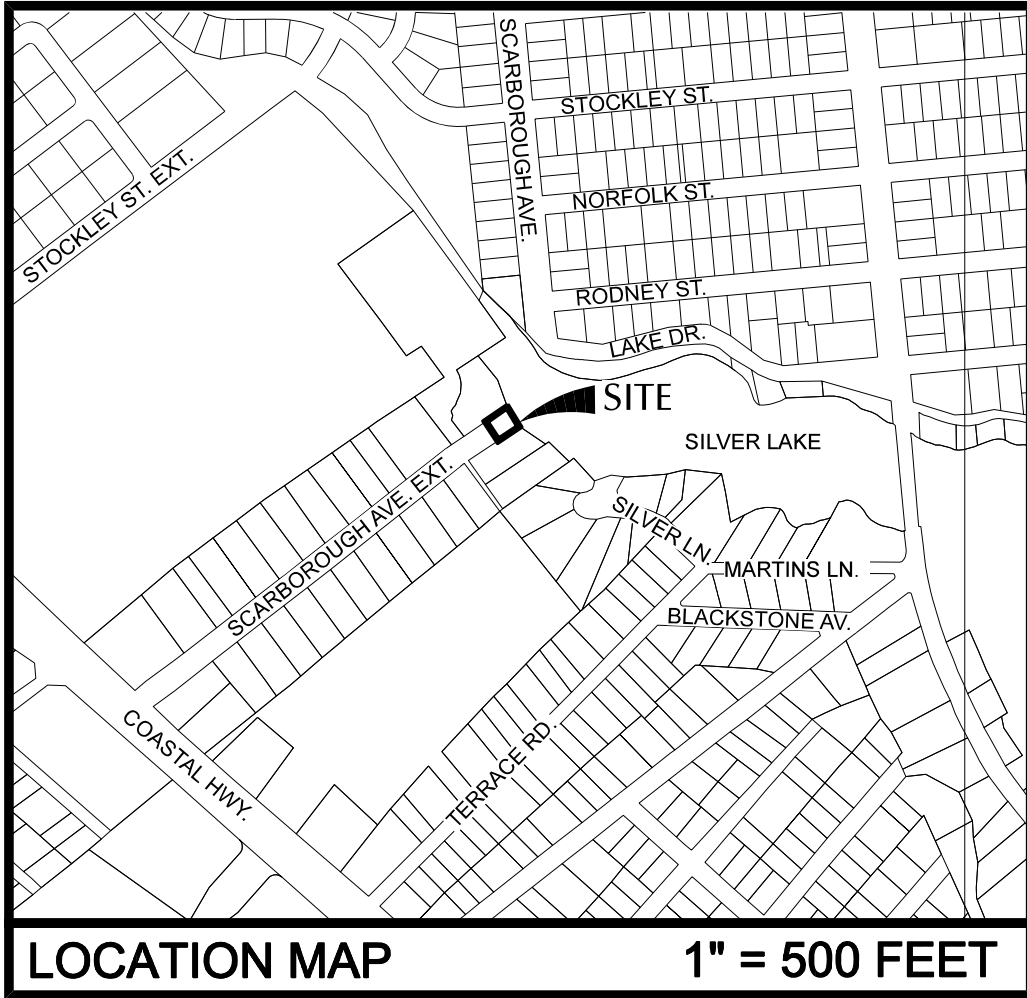


**SCARBOROUGH AVE. EXTENDED
 OUTFALL REPAIR**
 CITY OF REHOBOTH BEACH
 LEWES & REHOBOTH HUNDRED
 SUSSEX COUNTY, DELAWARE 19971



Date:	3-29-23
Scale:	1"=10 MILES
Dwn.By:	BAS
Proj.No.:	REH01-25-01
Dwg.No.:	EX1.2

M:\Projects\REH01-25 Stormwater Outfall Repairs\1 - Scarborough Ave Ext\Construction Docs\DWGs\Construction DWG\REH01-25-1 WETLAND MAP.dwg, Mar 29, 2023 - 1:02pm, (Brian)



SCARBOROUGH AVE. EXTENDED OUTFALL REPAIR

CITY OF REHOBOTH BEACH
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE 19971



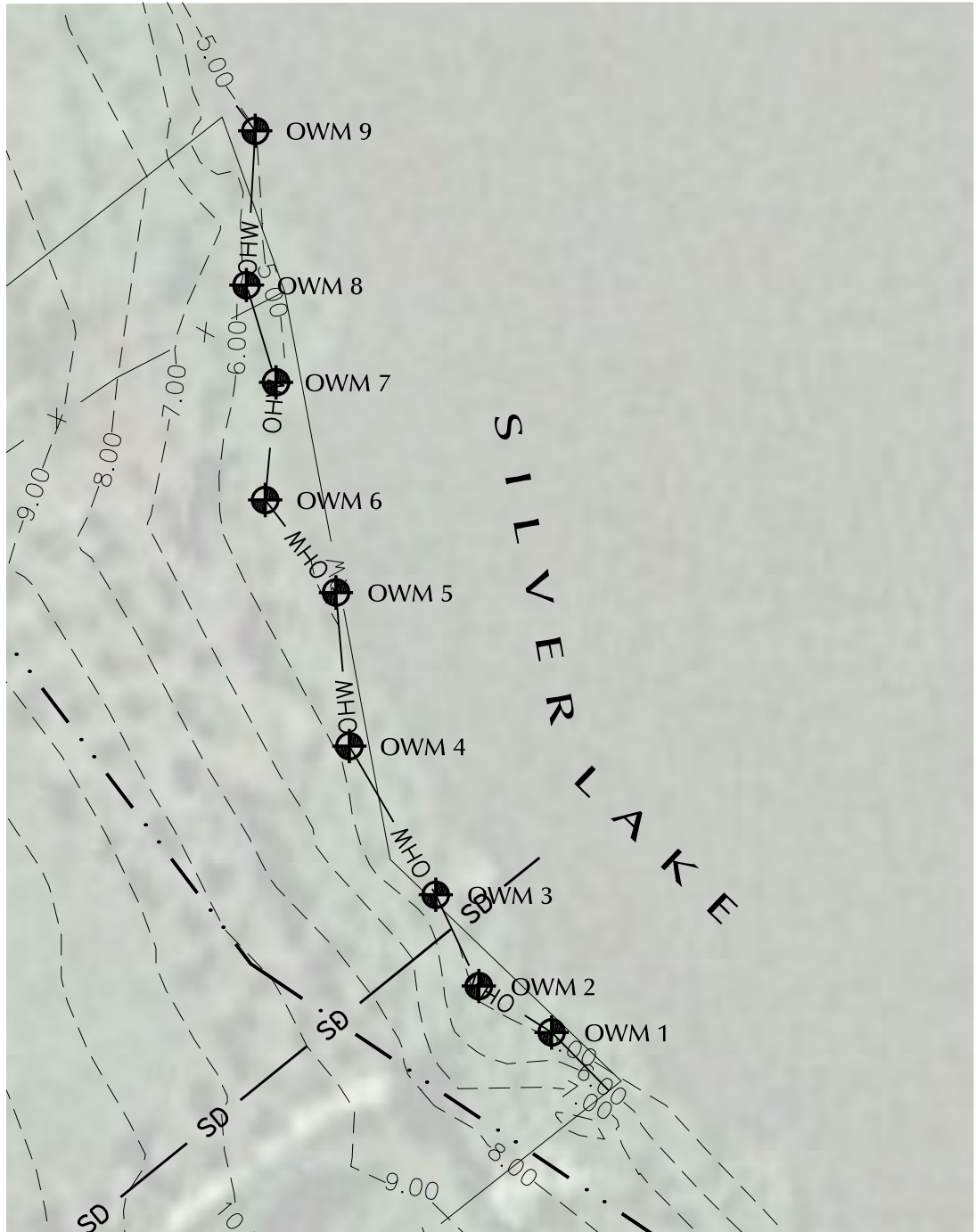
Date:	3-29-23
Scale:	1"=500'
Dwn.By:	BAS
Proj.No.:	REH01-25-01
Dwg.No.:	EX1.1

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ATTACHMENT C:

Proposed Project Plans

NAD83 FEET
Z
DE. ST. PLANE



EXISTING CONDITIONS - WETLAND DELINEATION

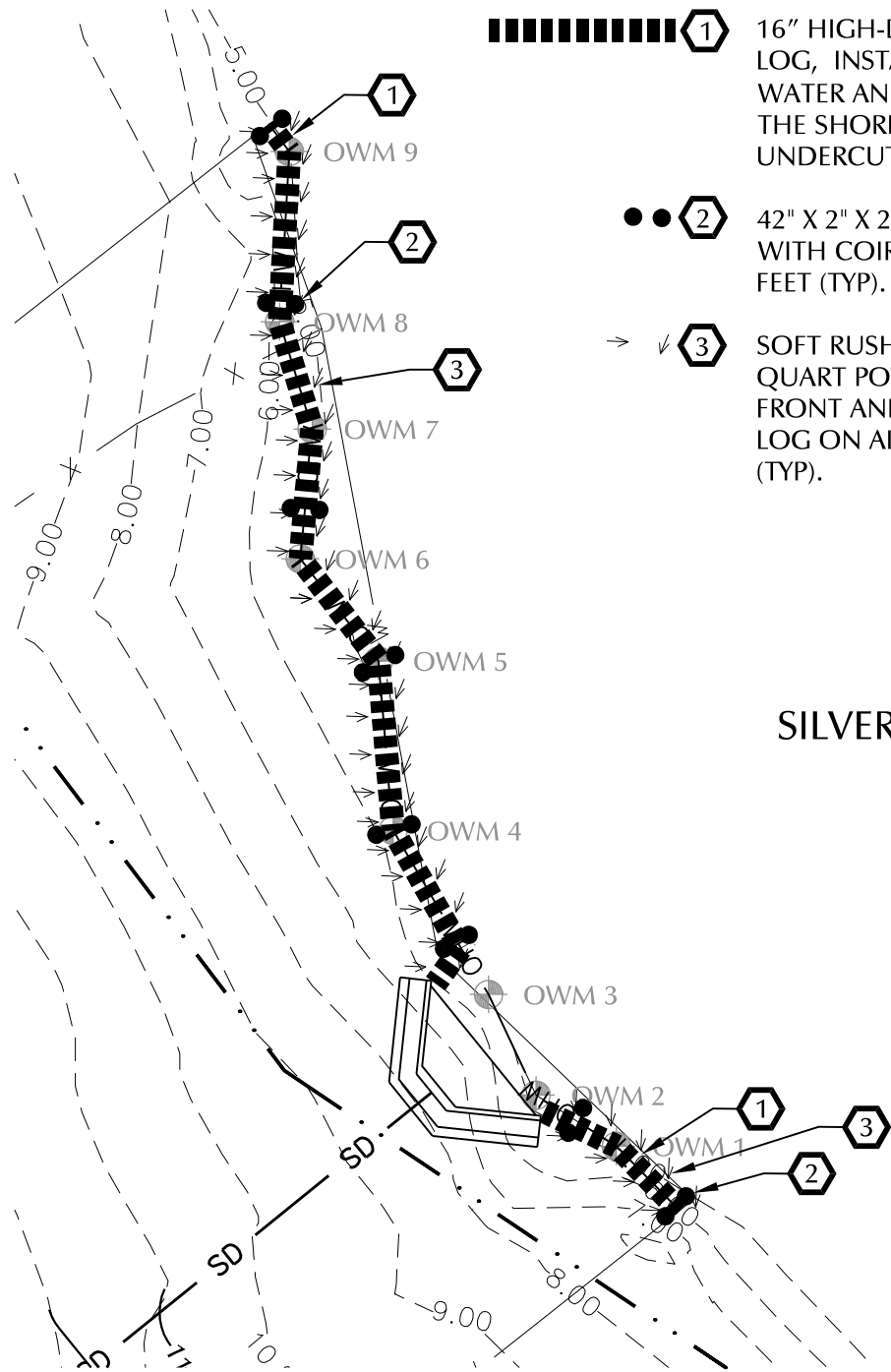





SCARBOROUGH AVE. EXTENDED OUTFALL REPAIR

CITY OF REHOBOTH BEACH
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE 19971



Date:	4-12-23
Scale:	1"=10'
Dwn.By:	BAS
Proj.No.:	REH01-25-01
Dwg.No.:	EX1.3



-  16" HIGH-DENSITY PREMIUM COIR LOG, INSTALLED HALFWAY IN THE WATER AND PUSHED INTO/AGAINST THE SHORELINE INTO UNDERCUTTING EROSION.
-  42" X 2" X 2" WOOD STAKE SECURED WITH COIR TWINE, PLACED EVERY 10 FEET (TYP).
-  SOFT RUSH (JUNCUS EFFUSES) QUART POTS WILL BE INSTALLED IN FRONT AND BEHIND OF THE COIR LOG ON ALTERNATING 1 FT CENTERS (TYP).

SILVER LAKE



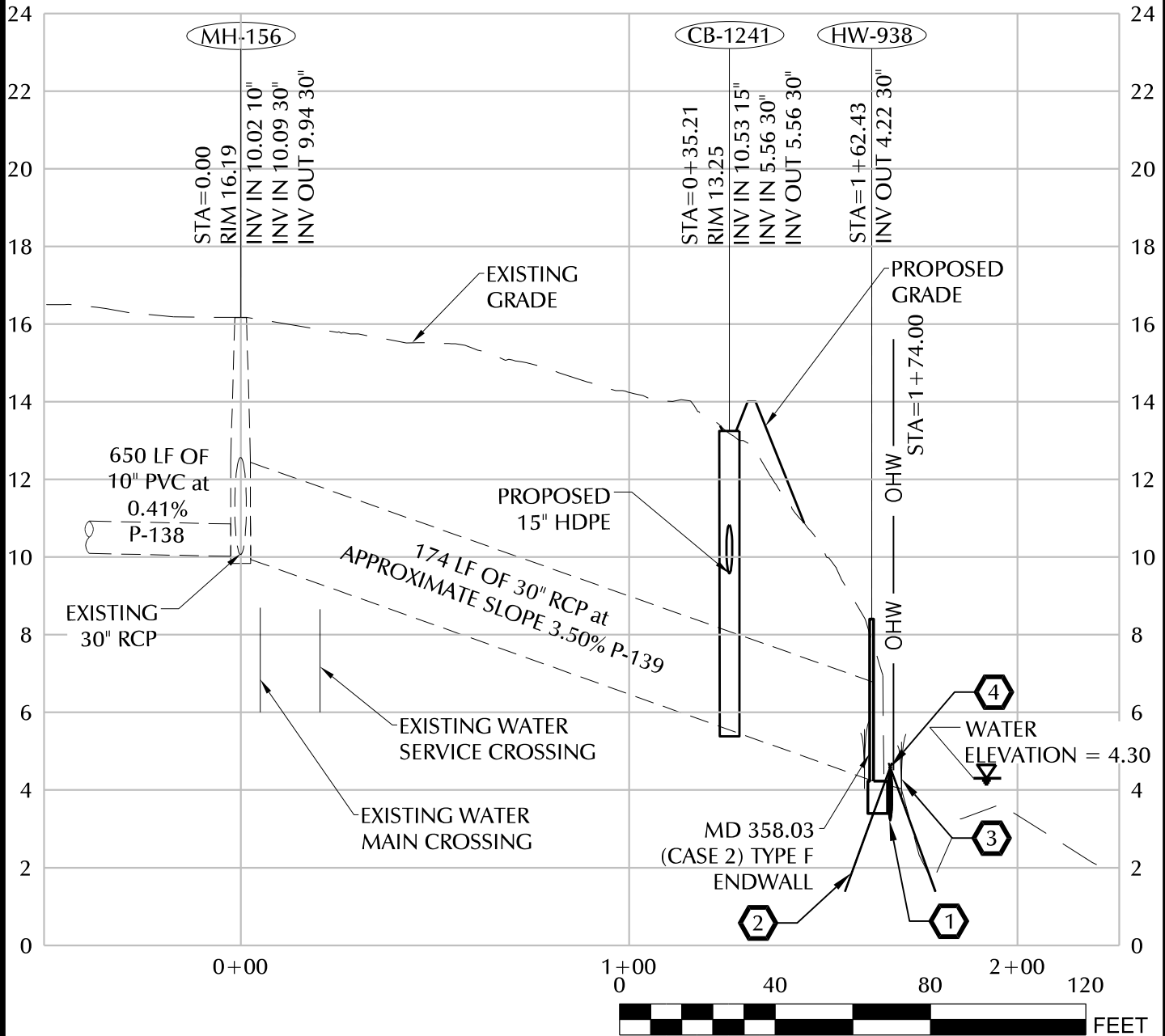
SCARBOROUGH AVE. EXTENDED OUTFALL REPAIR

CITY OF REHOBOTH BEACH
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE 19971



Date:	4-12-23
Scale:	1"=10'
Dwn.By:	BAS
Proj.No.:	REH01-25-01
Dwg.No.:	SP1.1

- ① 16" HIGH-DENSITY PREMIUM COIR LOG, INSTALLED HALFWAY IN THE WATER AND PUSHED INTO/AGAINST THE SHORELINE INTO UNDERCUTTING EROSION.
- ② 42" X 2" X 2" WOOD STAKE SECURED WITH COIR TWINE, PLACED EVERY 10 FEET (TYP).
- ③ SOFT RUSH (JUNCUS EFFUSES) QUART POTS WILL BE INSTALLED IN FRONT AND BEHIND OF THE COIR LOG ON ALTERNATING 1 FT CENTERS (TYP).
- ④ COIR TWINE



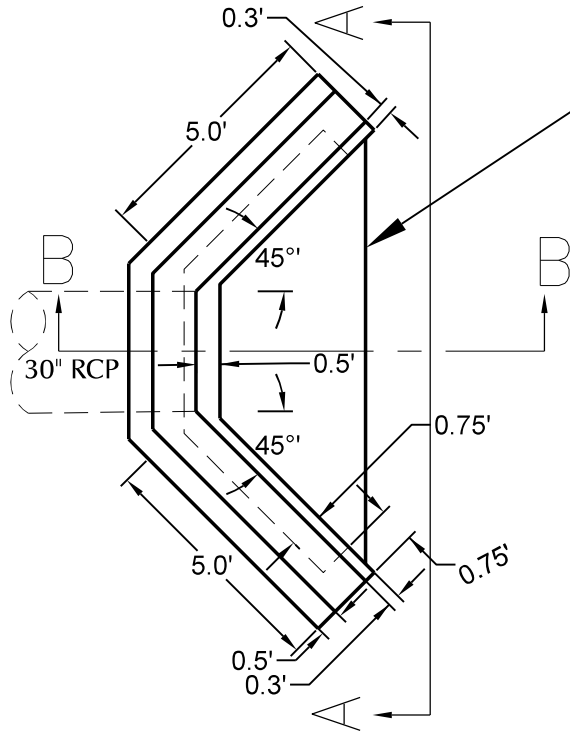
SCARBOROUGH AVE. EXTENDED OUTFALL REPAIR

CITY OF REHOBOTH BEACH
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE 19971



Date:	4-12-23
Scale:	1"=40'
Dwn.By:	BAS
Proj.No.:	REH01-25-01
Dwg.No.:	PR1.1

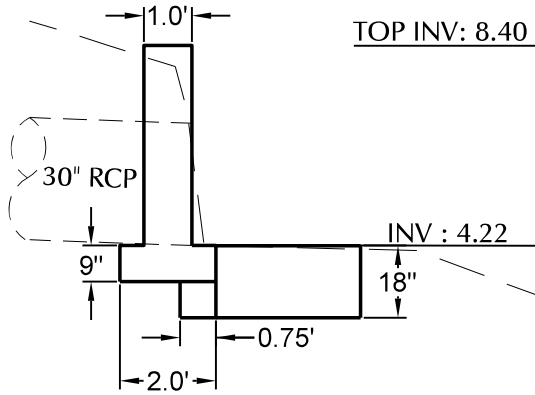
M:\Projects\REH01-25 Stormwater Outfall Repairs\1 - Scarborough Ave Ext\Construction Docs\DWGs\Construction DWG\REH01-25-1 WETLAND EXHIBIT DETAIL.dwg May 02, 2023 - 1:34pm, (Brian)



APRON CAST IN PLACE BY THE CONTRACTOR. USING CONC. MIX NO.2 AND REINFORCED WITH NO.5 BARS AT 8" C/C 2 WAYS. 2" CL.

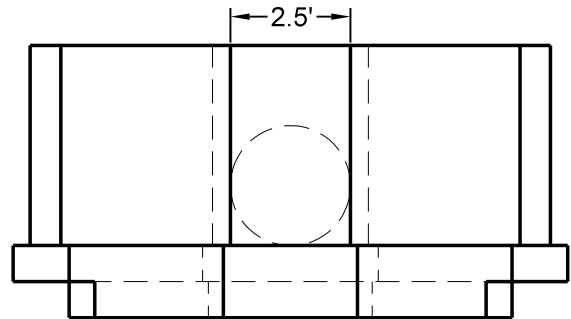
OUTLET STRUCTURE HW-938 PLAN VIEW

SCALE : 1" = 4'



OUTLET STRUCTURE HW-938 B-B

SCALE : 1" = 4'



OUTLET STRUCTURE HW-938 A-A

SCALE : 1" = 4'

SCARBOROUGH AVE. EXTENDED

OUTFALL REPAIR

CITY OF REHOBOTH BEACH
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE 19971



Date:	4-12-23
Scale:	1"=4'
Dwn.By:	BAS
Proj.No.:	REH01-25-01
Dwg.No.:	DT1.1

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ATTACHMENT D:

State and Federal Agency Letters



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

April 13, 2023

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

Re: ETECH 2023 Scarborough Ave Ext Living Shoreline

Dear Lyle:

Thank you for contacting the Species Conservation and Research Program (SCRIP) 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 Army Corps of Engineers (ACOE) 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 Army Corps of Engineers for activities on this property.

Fisheries

Species in the sunfish family, such as Largemouth Bass and Bluegill, utilize shallow water along shorelines for nest building and spawning. If species in this family occur in the lake and impacts are of concern to the pond owner/manager, then in-water activities should be avoided from **April 1st – July 15th** when spawning activities typically occur.

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 black ink that reads "Danielle Ellis". The signature is written in a cursive style with a large, looped initial "D".

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

(See invoice on next page)



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: 2023-0060461
Project Name: Scarborough Ave Ext

March 27, 2023

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 ECOS-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 ECOS-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:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.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/birds/policies-and-regulations.php>.

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/birds/bird-enthusiasts/threats-to-birds.php>.

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/birds/policies-and-regulations/executive-orders/e0-13186.php>.

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
- Coastal Barriers

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: 2023-0060461
Project Name: Scarborough Ave Ext
Project Type: New Constr - Above Ground
Project Description: Living Shoreline
Project Location:

The approximate location of the project can be viewed in Google Maps: <https://www.google.com/maps/@38.70837145,-75.0846970133803,14z>



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. Note that 1 of these species should be considered only under certain conditions.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, 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> No critical habitat has been designated for this species. This species only needs to be considered under the following conditions: <ul style="list-style-type: none"> ▪ The monarch is a candidate species and not yet listed or proposed for listing. There are generally no section 7 requirements for candidate species (FAQ found here: https://www.fws.gov/savethemonarch/FAQ-Section7.html). Species profile: https://ecos.fws.gov/ecp/species/9743	Candidate

CRITICAL HABITATS

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

COASTAL BARRIERS

Projects within the [John H. Chafee Coastal Barrier Resources System](#) (CBRS) may be subject to the restrictions on Federal expenditures and financial assistance and the consultation requirements of the Coastal Barrier Resources Act (CBRA) (16 U.S.C. 3501 et seq.). For more information, please contact the local [Ecological Services Field Office](#) or visit the [CBRA Consultations website](#). The CBRA website provides tools such as a flow chart to help determine whether consultation is required and a template to facilitate the consultation process.

SYSTEM UNIT (SU)

*Most new Federal expenditures and financial assistance, including Federal flood insurance, are prohibited within System Units. **Federally-funded projects within System Units require consultation with the Service.** Consultation is not required for projects using private, state, or local funds.*

UNIT	NAME	TYPE	SYSTEM UNIT ESTABLISHMENT DATE	FLOOD INSURANCE PROHIBITION DATE
DE-06	Silver Lake	SU	11/16/1990	11/16/1990



United States Department of the Interior

U.S. Fish & Wildlife Service
Chesapeake Bay Field Office
177 Admiral Cochrane Drive
Annapolis, MD 21401
410/573 4575



Online Certification Letter

Today's date:

Project:

Dear Applicant for online certification:

Thank you for using the U.S. Fish and Wildlife Service (Service) Chesapeake Bay Field Office online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the referenced project in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

Based on this information and in accordance with section 7 of the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), we certify that except for occasional transient individuals, no federally listed endangered or threatened species are known to exist within the project area. Therefore, no Biological Assessment or further section 7 consultation with the U.S. Fish and Wildlife Service is required. Should project plans change, or if additional information on the distribution of listed or proposed species becomes available, this determination may be reconsidered.

This response relates only to federally protected threatened or endangered species under our jurisdiction. For additional information on threatened or endangered species in Maryland, you should contact the Maryland Wildlife and Heritage Division at (410) 260-8573. For information in Delaware you should contact the Delaware Division of Fish and Wildlife, Wildlife Species Conservation and Research Program at (302) 735-8658. For information in the District of Columbia, you should contact the National Park Service at (202) 339-8309.

The U.S. Fish and Wildlife Service also works with other Federal agencies and states to minimize loss of wetlands, reduce impacts to fish and migratory birds, including bald eagles, and restore habitat for wildlife. Information on these conservation issues and how development projects can avoid affecting these resources can be found on our website (www.fws.gov/chesapeakebay)

We appreciate the opportunity to provide information relative to fish and wildlife issues, and thank you for your interest in these resources. If you have any questions or need further assistance, please contact Chesapeake Bay Field Office Threatened and Endangered Species program at (410) 573-4527.

Sincerely,

Genevieve LaRouche
Field Supervisor

June 5, 2023

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

**Subject: Scarborough Ave Ext Shoreline Stabilization Project
SHPO Project No. 2023.05.08.02**

Dear Mr. de la Rosa:

We understand from your letter that the applicant is seeking a permit from the US Army Corps of Engineers (USACOE) for the proposed undertaking at the Scarborough Avenue Extension in Rehoboth Beach. The applicant is proposing to stabilize the shoreline with coir logs, wood stakes, sand, and natural vegetation. Because of the need for authorization from the USACOE, the project is subject to compliance with Section 106 of the National Historic Preservation Act of 1966 (as amended).

There are no known archaeological sites or historic properties within the area of potential effect (APE). There are 287 recorded historic structures within a half-mile radius of the APE. Due to the limited nature of the proposed undertaking and the distance to known historic resources, there is no anticipated impact to these properties. There are four known archaeological sites within a half-mile radius of the APE. Due to the limited nature of the proposed undertaking and the distance to known archaeological sites, there is no anticipated impact to these properties. Historic aerials show the APE has been previously disturbed by existing residential development so there is low potential for any intact archaeological sites.

Our Office finds there to be No Historic Properties Affected by the proposed undertaking. Please feel free to contact me if you have any questions at (302) 736-7431 or sarah.carr@delaware.gov.

Sincerely,



Sarah Carr
Cultural Preservation Specialist
cc: Gwen Davis, Deputy SHPO

ATTACHMENT E:

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

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 ³ ? | Yes | No |
| Is the project in designated HAPC? | Yes | No |
| Does the project contain any Special Aquatic Sites ⁴ ? | 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):

³Use 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. ⁴ 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 ² /ft ³)	Temporary impacts (lf/ft ² /ft ³)	Permanent impacts (lf/ft ² /ft ³)	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.

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 ⁷	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 ⁸	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	

⁷ 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.

⁸ 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 ⁹ or permanent		Habitat alterations caused by the activity
Temp	Perm	
		Water depth change
		Tidal flow change
		Fill
		Habitat type conversion
		Other:
		Other:

⁹ Temporary in this instance means during construction. ¹⁰ 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:

N/A

2. Is the expected lifespan of the action greater than 10 years? If yes, please describe project lifespan:

N/A

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:

N/A

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:

N/A

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:

N/A

10. Federal Agency Determination

Federal Action Agency's EFH determination (select one)	
	There is no adverse effect ⁷ 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 ⁷ 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 ⁷ 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.

⁷ 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](#)

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° 42' 30" N, Longitude = 76° 54' 56" W
 Decimal Degrees: Latitude = 38.708, Longitude = -75.084

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
		Little Skate	Juvenile Adult	New England	Amendment 2 to the Northeast Skate Complex FMP
		Atlantic Herring	Adult	New England	Amendment 3 to the Atlantic Herring FMP
		Red Hake	Eggs/Larvae/Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
		Silver Hake	Eggs/Larvae Adult	New England	Amendment 14 to the Northeast Multispecies FMP
		Yellowtail Flounder	Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
		Monkfish	Eggs/Larvae	New England	Amendment 4 to the Monkfish FMP

Link	Data Caveats	Species/Management Unit	Lifestage(s) Found at Location	Management Council	FMP
		Windowpane Flounder	Adult Larvae Eggs Juvenile	New England	Amendment 14 to the Northeast Multispecies FMP
		Winter Skate	Adult Juvenile	New England	Amendment 2 to the Northeast Skate Complex FMP
		Clearnose 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
		Bluefish	Adult Juvenile	Mid-Atlantic	Bluefish
		Atlantic Butterfish	Adult	Mid-Atlantic	Atlantic Mackerel, Squid,& Butterfish Amendment 11
		Spiny Dogfish	Sub-Adult Female Adult Male	Mid-Atlantic	Amendment 3 to the Spiny Dogfish FMP
		Scup	Juvenile Adult	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
		Summer Flounder	Larvae Juvenile Adult	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass
		Black Sea Bass	Juvenile	Mid-Atlantic	Summer Flounder, Scup, Black Sea Bass

Salmon EFH

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

HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

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 spatial data is currently available for the Mid-Atlantic and New England councils,

Secretarial EFH,

Bigeye Sand Tiger Shark,

Bigeye Sixgill Shark,

Caribbean Sharpnose Shark,

Galapagos Shark,

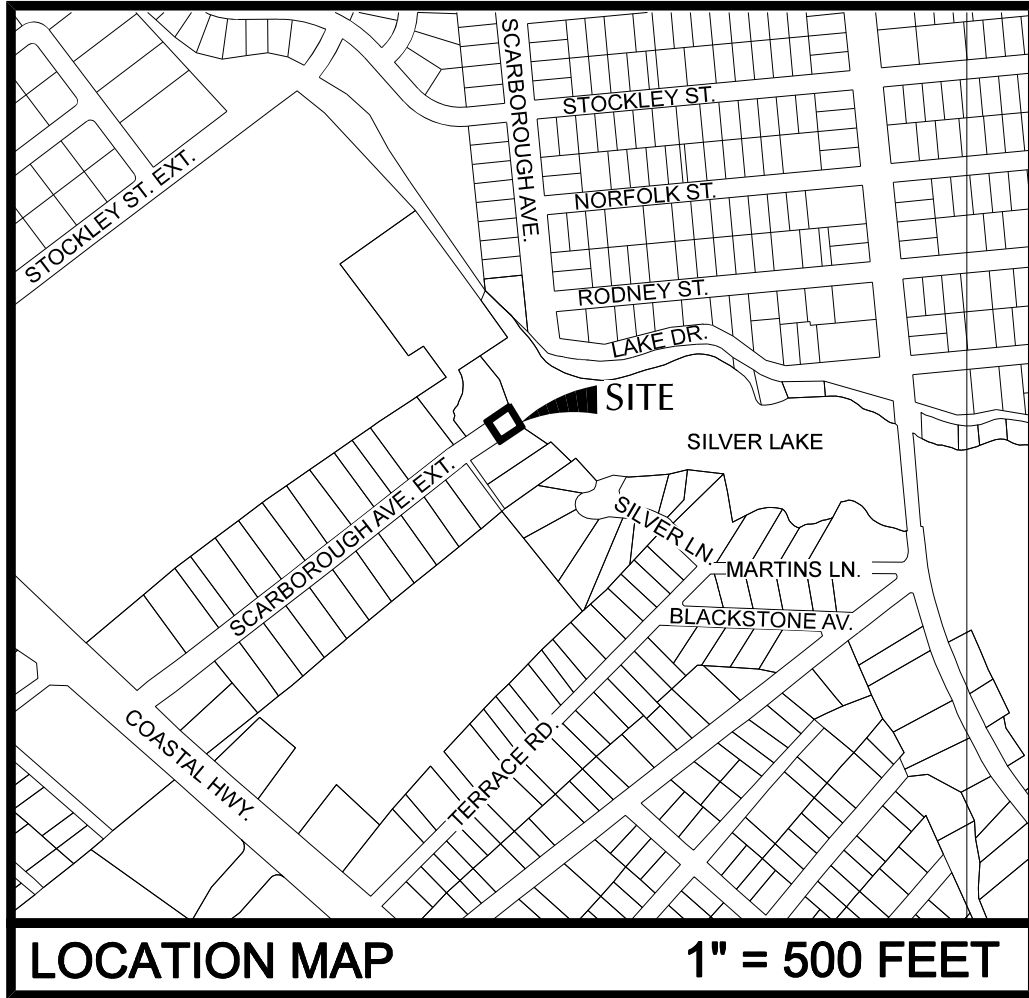
Narrowtooth Shark,

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 -->](#)**

Sevengill Shark,
Sixgill Shark,
Smooth Hammerhead Shark,
Smalltail Shark

M:\Projects\REH01-25 Stormwater Outfall Repairs\1 - Scarborough Ave Ext\Construction Docs\DWGs\Construction DWG\REH01-25-1 WETLAND MAP.dwg, Mar 29, 2023 - 1:02pm, (Brian)



LOCATION MAP

1" = 500 FEET



SCARBOROUGH AVE. EXTENDED OUTFALL REPAIR

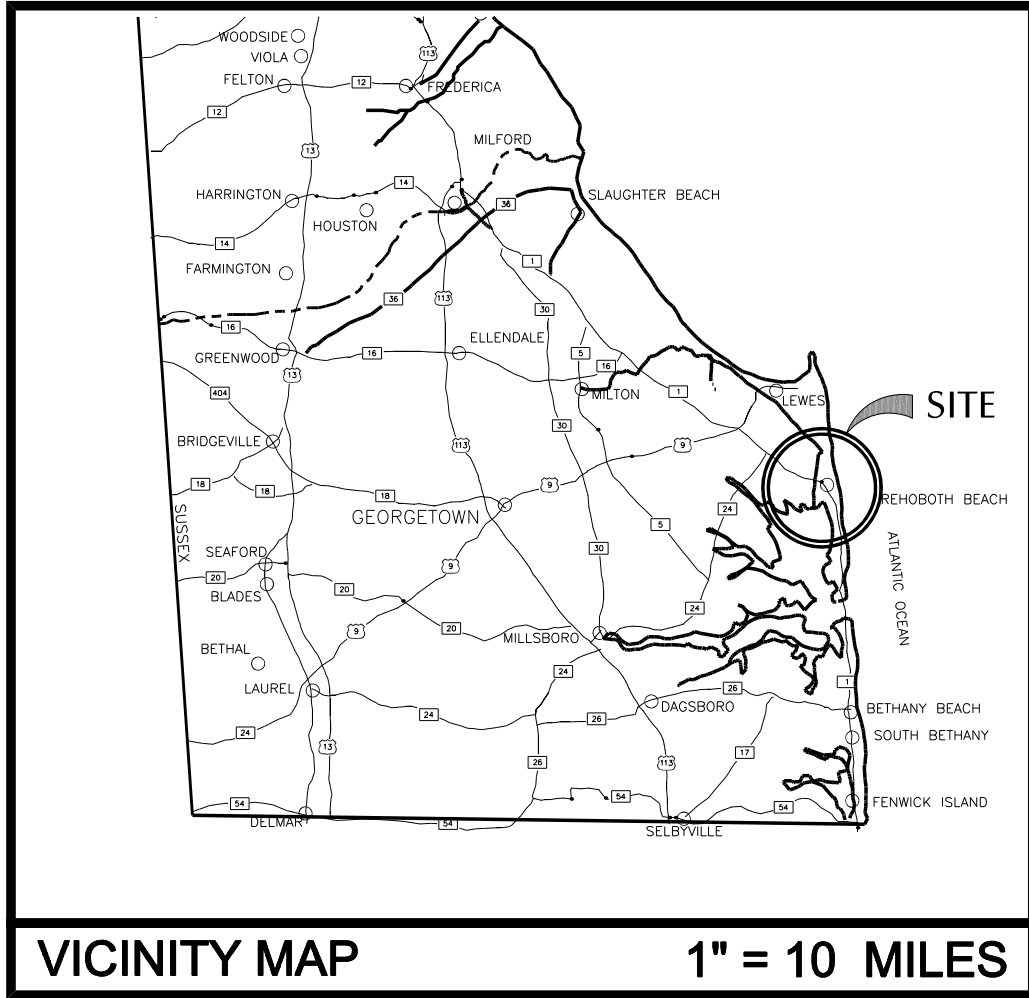
CITY OF REHOBOTH BEACH
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE 19971



Date:	3-29-23
Scale:	1"=500'
Dwn.By:	BAS
Proj.No.:	REH01-25-01
Dwg.No.:	EX1.1

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NAD83 FEET  Z DE. ST. PLANE



**SCARBOROUGH AVE. EXTENDED
OUTFALL REPAIR**
CITY OF REHOBOTH BEACH
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE 19971

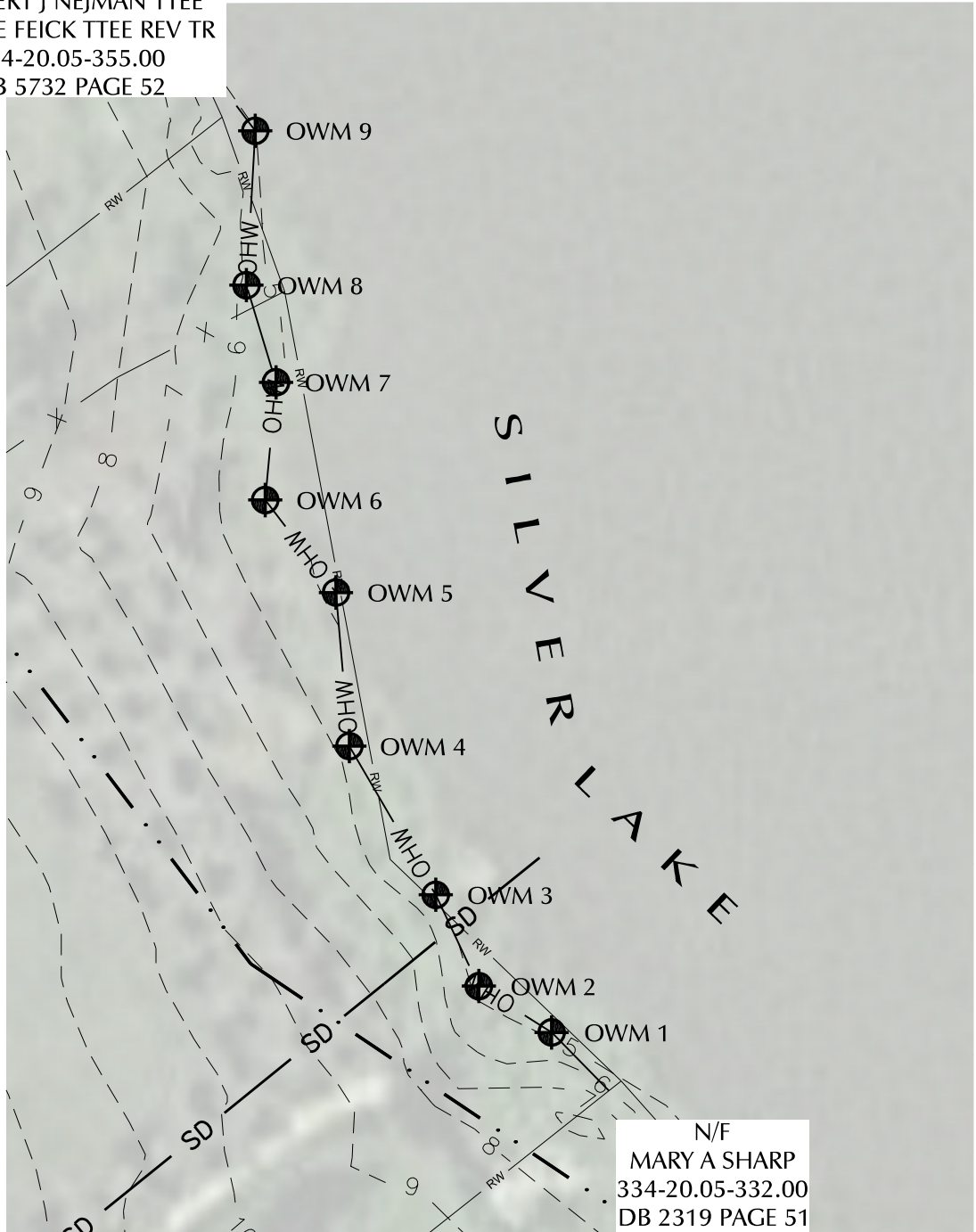


Date:	3-29-23
Scale:	1"=10 MILES
Dwn.By:	BAS
Proj.No.:	REH01-25-01
Dwg.No.:	EX1.2

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NAD83 FEET
Z
DE. ST. PLANE

N/F
ROBERT J NEJMAN TTEE
DEAN E FEICK TTEE REV TR
334-20.05-355.00
DB 5732 PAGE 52



N/F
MARY A SHARP
334-20.05-332.00
DB 2319 PAGE 51

EXISTING CONDITIONS - WETLAND DELINEATION



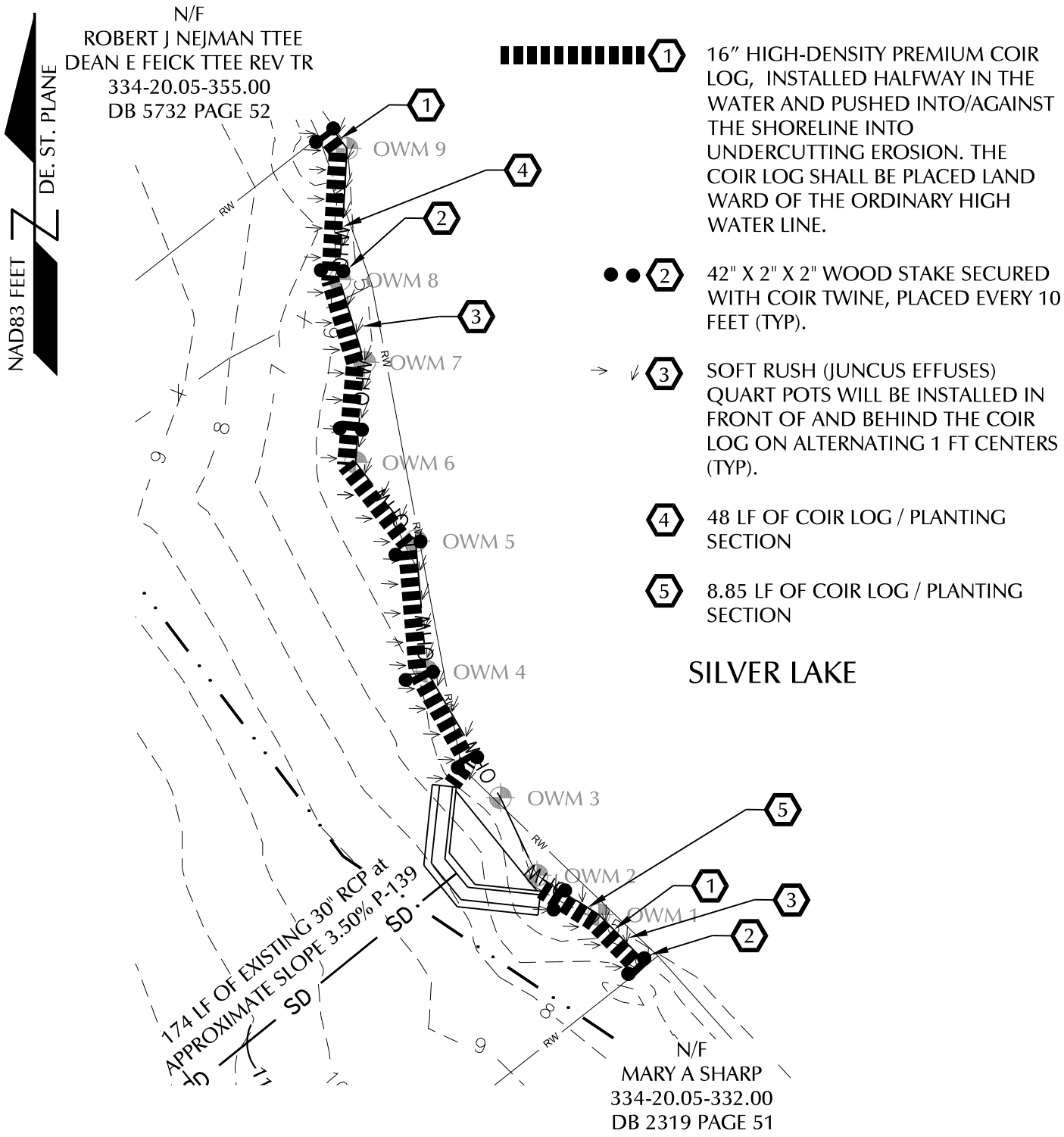
**SCARBOROUGH AVE. EXTENDED
OUTFALL REPAIR**

CITY OF REHOBOTH BEACH
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE 19971



Date:	4-12-23
Scale:	1"=10'
Dwn.By:	BAS
Proj.No.:	REH01-25-01
Dwg.No.:	EX1.3

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- 16" HIGH-DENSITY PREMIUM COIR LOG, INSTALLED HALFWAY IN THE WATER AND PUSHED INTO/AGAINST THE SHORELINE INTO UNDERCUTTING EROSION. THE COIR LOG SHALL BE PLACED LAND WARD OF THE ORDINARY HIGH WATER LINE.
- 42" X 2" X 2" WOOD STAKE SECURED WITH COIR TWINE, PLACED EVERY 10 FEET (TYP).
- SOFT RUSH (JUNCUS EFFUSUS) QUART POTS WILL BE INSTALLED IN FRONT OF AND BEHIND THE COIR LOG ON ALTERNATING 1 FT CENTERS (TYP).
- 48 LF OF COIR LOG / PLANTING SECTION
- 8.85 LF OF COIR LOG / PLANTING SECTION

REVISED 9/18/2023
REVISED 9/29/2023



SCARBOROUGH AVE. EXTENDED

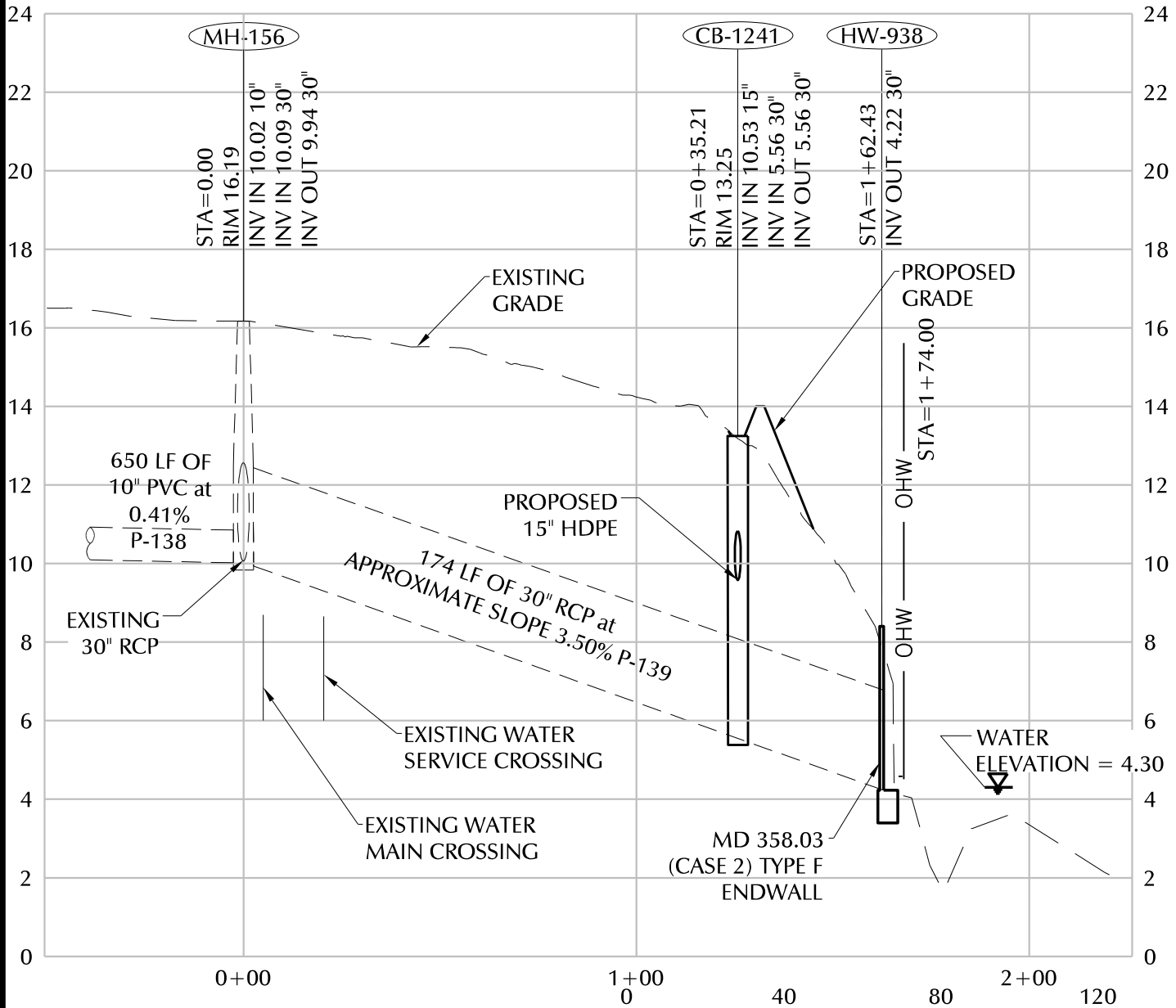
OUTFALL REPAIR
CITY OF REHOBOTH BEACH
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE 19971



Date:	4-12-23
Scale:	1"=10'
Dwn.By:	BAS
Proj.No.:	REH01-25-01
Dwg.No.:	SP1.1

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M:\Projects\REH01-25 Stormwater Outfall Repairs\1 - Scarborough Ave Ext\Construction Docs\DWGs\Construction DWG\REH01-25-1 WETLAND EXHIBIT SITE.dwg Sep 26, 2023 - 5:19pm, (Brian)



REVISED 9/18/2023



SCARBOROUGH AVE. EXTENDED

OUTFALL REPAIR

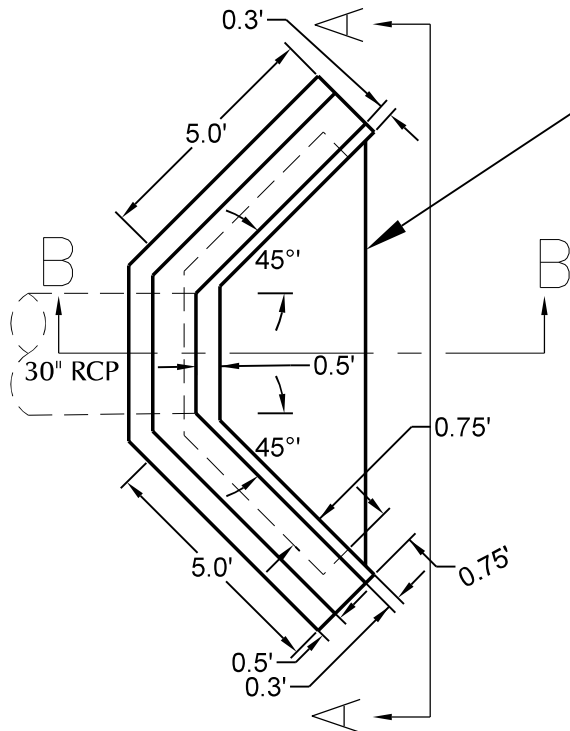
CITY OF REHOBOTH BEACH
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE 19971



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Scale:	1"=40'
Dwn.By:	BAS
Proj.No.:	REH01-25-01
Dwg.No.:	PR1.1

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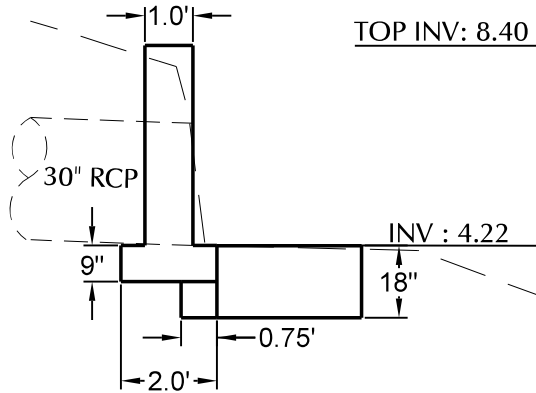
M:\Projects\REH01-25 Stormwater Outfall Repairs\1 - Scarborough Ave Ext\Construction Docs\DWGs\Construction DWG\REH01-25-1 WETLAND EXHIBIT DETAIL.dwg May 02, 2023 - 1:34pm, (Brian)



APRON CAST IN PLACE BY THE CONTRACTOR. USING CONC. MIX NO.2 AND REINFORCED WITH NO.5 BARS AT 8" C/C 2 WAYS. 2" CL.

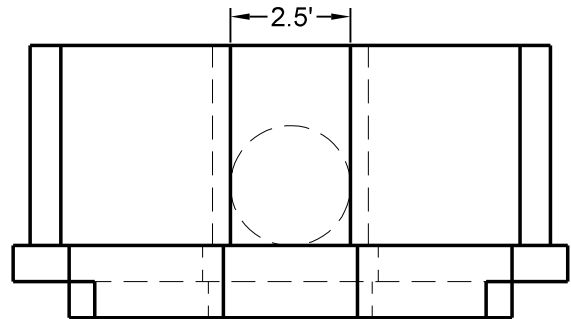
OUTLET STRUCTURE HW-938 PLAN VIEW

SCALE : 1" = 4'



OUTLET STRUCTURE HW-938 B-B

SCALE : 1" = 4'



OUTLET STRUCTURE HW-938 A-A

SCALE : 1" = 4'

SCARBOROUGH AVE. EXTENDED

OUTFALL REPAIR

CITY OF REHOBOTH BEACH
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE 19971

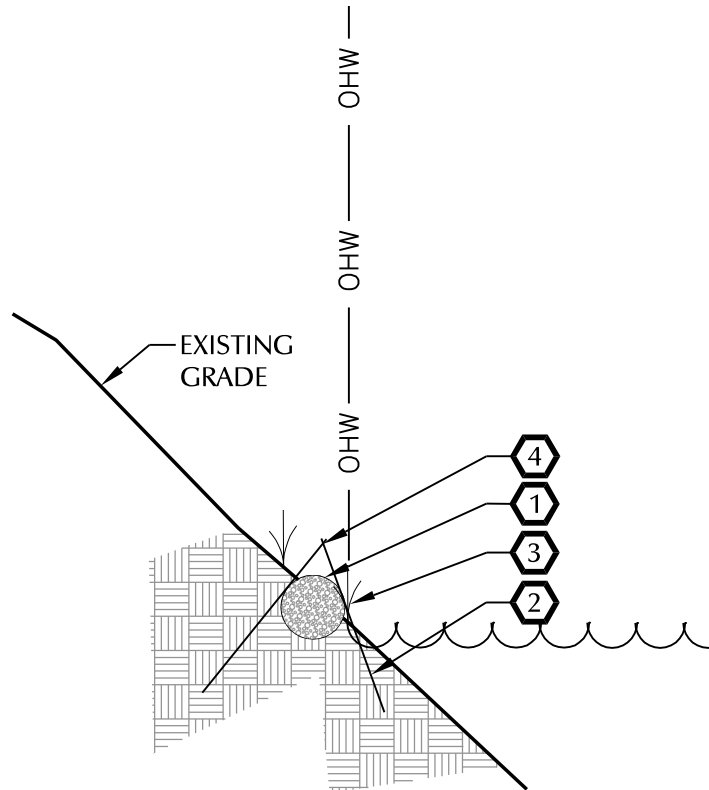


Date:	4-12-23
Scale:	1"=4'
Dwn.By:	BAS
Proj.No.:	REH01-25-01
Dwg.No.:	DT1.1

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M:\Projects\REH01-25 Stormwater Outfall Repairs\1 - Scarborough Ave Ext\Construction Docs\DWGs\Construction DWG\REH01-25-1 WETLAND EXHIBIT DETAIL COIR LOG.dwg Sep 29, 2023 - 3:08pm, (Brian)

- ① 16" HIGH-DENSITY PREMIUM COIR LOG, INSTALLED HALFWAY IN THE WATER AND PUSHED INTO/AGAINST THE SHORELINE INTO UNDERCUTTING EROSION. THE COIR LOG SHALL BE PLACED LAND WARD OF THE ORDINARY HIGH WATER LINE.
- ② 42" X 2" X 2" WOOD STAKE SECURED WITH COIR TWINE, PLACED EVERY 10 FEET (TYP).
- ③ SOFT RUSH (JUNCUS EFFUSES) QUART POTS WILL BE INSTALLED IN FRONT OF AND BEHIND THE COIR LOG ON ALTERNATING 1 FT CENTERS (TYP).
- ④ COIR TWINE



CROSS SECTION VIEW PLAN FOR THE LIVING SHORELINE

SCARBOROUGH AVE. EXTENDED

OUTFALL REPAIR

CITY OF REHOBOTH BEACH
LEWES & REHOBOTH HUNDRED
SUSSEX COUNTY, DELAWARE 19971



Date:	9-28-23
Scale:	NOT TO SCALE
Dwn.By:	BAS
Proj.No.:	REH01-25-01
Dwg.No.:	DT1.2

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ENVIRONMENTAL CONSULTING, INC.
Providing Environmental Solutions

October 2, 2023

City of Rehoboth – Living Shoreline Stabilization:
Scarborough Avenue Extension Rehoboth Beach, Delaware 19971
Monitoring Plan

The living shoreline construction will be monitored to ensure completion in accordance with the designed plans specified in US Army Corps of Engineers (USACE) NWP #54 Verification NAP-2022-00878-85 and Delaware Department of Natural Resources and Environmental Control (DNREC) SL/SP-204/22. Any deviations or changes to these plans will be checked with USACE and DNREC prior to application. Photographic evidence with proof of buildout will be sent with the project completion documents.

The permit applicant or representative shall monitor the living shoreline at the above-mentioned property and submit a post growing season report to DNREC for a period of three (3) consecutive years following the completion of construction to ensure it meets Project Standards. All of the following Project Standards will be used to determine project success: 1) vegetation will be visually monitored for a deduction of relative survival of installed plugs; 2) if 25% or more of the overall plugs are shown to be deceased, replanting will be considered; 3) if deceased plugs are shown in groupings, a deduction of potential causes will produced and other species may be considered; 4) visual deduction of the structural integrity and overall living shoreline condition. Monitoring reports shall include the following: 1) estimation of plug survival; 2) deduction of any causes of plug decease; 3) deduction of the projects structural integrity; 4) description of any other problems observed (i.e., pollution, natural disasters, invasion of undesirable species, etc.); 5) photographic documentation of living shoreline and specified report items. The Monitoring reports shall be submitted no later than December 31st of the observed calendar year in which they are completed to: DNREC Wetlands & Waterways Section, 89 Kings Highway, Dover, Delaware 19901 or emailed to the correct DNREC representative.

Please let me know if you have any questions.

Thank you,

Lyle de la Rosa

Lyle de la Rosa
Environmental Project Manager
Envirotech Environmental Consulting, Inc.
Phone: 302.684.5201
Fax: 302.684.5204
email: lyle@envirotechinc.com

Envirotech
ENVIRONMENTAL CONSULTING, INC.
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Management Triggers in Areas of Concern

Category of Concern	Monitoring Methods	Management Trigger	Expected Timeframe for Decision-Making	Potential Management Action
Vegetation	Visual deduction of relative survival of plug. Photographic records.	Visual deduction of 25% or more dying plugs.	1 month from report of 25% or more deceased vegetation.	Replant or change of species in specified area.
Structural	Visual deduction of the low-profile vented sill, Filtrexx GroSoxx, and overall living shoreline. Photographic records.	Visual deduction of structural integrity (displacement, blowout, erosion, etc.)	ASAP after notification or report to prevent further structural damage to the shoreline.	Return/replace riprap, Filtrexx GroSoxx, and plugs that may have been disturbed by natural or non-natural causes.

