



CARROLL BANK STABILIZATION PROJECT
OCEAN VIEW, DE
INLAND BAY WATERSHED
LORD BALTIMORE HUNDRED

PROJECT LOCATION:

The project is located at 805 Hickman Drive in Whites Creek Manor, Ocean View, Delaware. The parcel has a adjoining parcel boundary approximately 90.0 linear ft. with Whites Creek. This parcel is the primary residence for Anges M. Carroll, TM# 134-12.00-875.00. The project latitude and longitude coordinates area as follows: 38.552409, -75.099951.

PROJECT SCOPE:

The project will involve stabilizing 90.0 linear feet of Whites Creek bank by using R6 riprap. This will be accomplished by first establishing the necessary erosion and sediment control device for the project. The bank will be cleared and grubbed of vegetation prior to re-grading to the design slope. Geotextile will be placed on the slope and covered with R6 riprap. The riprap will extend channelward of mean high tide approximately 12.0ft to establish the revetment toe. The riprap will be placed approximately 29" thick over the slope and toe. All upland areas will be finished grades and stabilized with grass seed and mulched using crimped straw. All unsuitable material and vegetation will be removed and disposed of in a DNREC appropriate manner.

All comments provided from the Regional General Conditions notification process have been incorporated into the plan construction notes.

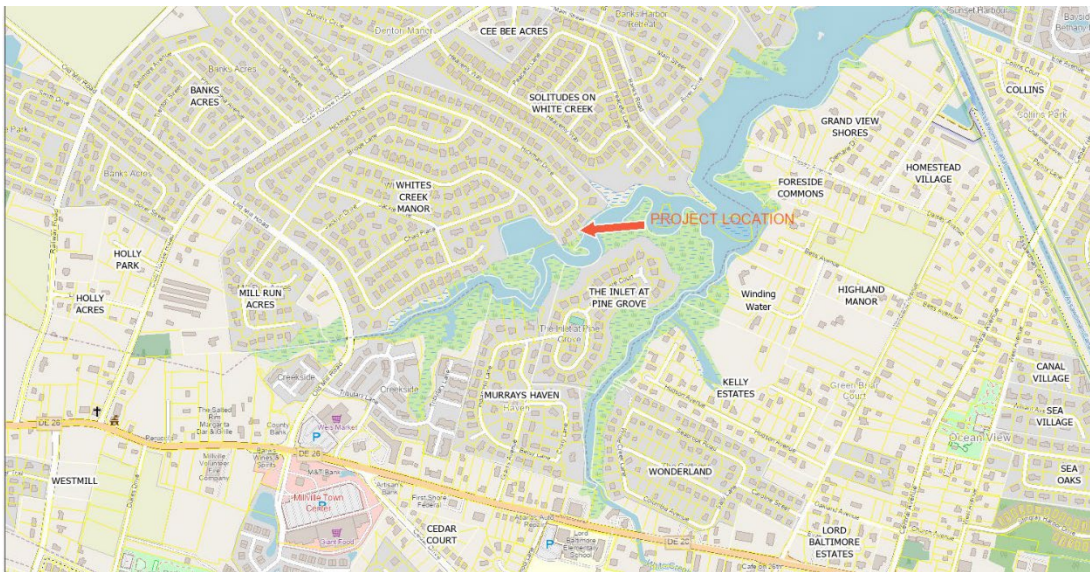
The material being placed will not result in a statistically significant reduction, accounting for natural variations, in biological, chemical, or habitat quality as measured or predicted using appropriate assessment protocols.

The District has concurrently submitted to the State of Delaware for wetland fill impacts and is waiting for their response.

Enclosed you will find the following items for your consideration:

1. ACOE application
2. PDF Project plan link
3. Google Earth directions to the site location.
4. Websoil Survey soil mapping results.
5. PCN submittal emails and their results
6. IPAC Report

VICINITY MAP:



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: Agnes Carroll
 Mailing Address: 805 Hickam Drive
Ocean View, DE 19970

Telephone #: 302-228-5326
 Fax #: _____
 E-mail: carrollagnes@gmail.com

2. Consultant's Name: Jim Elliott
 Mailing Address: 23818 SHORTLY ROAD
Georgetown, DE 19947

Company Name: Sussex Conservation District
 Telephone #: 302-856-2105
 Fax #: 302-856-0951
 E-mail: jim.elliott@sussexconservation.org

3. Contractor's Name: Matt Messina
 Mailing Address: 23818 SHORTLY ROAD
Georgetown, DE 19947

Company Name: Sussex Conservation District
 Telephone #: 302-856-2105
 Fax #: 302-856-0951
 E-mail: matt.messina@sussexconservation.org

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 narrative.

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

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

Section 3: Project Location

7. Project Site Address: 805 Hickam Drive
Ocean View, DE 19970

County: N.C. Kent Sussex
 Site owner name (if different from applicant): _____
 Address of site owner: _____

8. Driving Directions: see attached Google Earth Driving instructions
 (Attach a vicinity map identifying road names and the project location)

9. Tax Parcel ID Number: 134-12.00-875.00 Subdivision Name: Whites Creek Manor

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

Section 3: Project Location (Continued)

10. Name of waterbody at Project Location: Whites Creek waterbody is a tributary to: Indian River Bay

11. Is the waterbody: Tidal Non-tidal Waterbody width at mean low or ordinary high water 100ft

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):

Daniel Collins, 803 Hickman Drive, Ocean View, DE 1997

James F nagel III, 3698 Culer Court, Stewartstown, PA 1736

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):

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

Matt Jones - DNREC

Michael Case - 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? _____

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: submitted to various agencies for regional conditions 1/3/2024

Type of Permit: NWP 13 Bank Stabilization

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: Standard Plan

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, Agnes Carroll, hereby designate and authorize Jim Elliott
 (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: Jim Elliott Telephone #: 302-856-2105 EXT 105
 Mailing Address: 23818 Shortly Roar Fax #: _____
Georgetown, DE 19947 E-mail: jim.elliott@sussexconservation.org

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.

Jim Elliott
 Agent's Signature

1/24/2024
 Date

21. Applicant's Signature:

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

Agnes M. Carroll
 Applicant's Signature

1-15-24
 Date

Agnes M. Carroll
 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.

Matt Messina
 Contractor's Name

1/24/2024
 Date

MAT MESSINA
 Print Name

Rip-Rap Sills and Revetments

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

1. Will the project be:

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

2. How many linear feet of shoreline are proposed to be stabilized? 90.0FT

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

4. Describe the existing shoreline:

The existing shoreline consist of phragmites, which has been treated in the summer 2023 by using an aquatic herbicide. There is evidence of active erosion with Spartina Alterniflora present intermittently at the bottom of the slope and a couple mature trees at the top of bank.

5. What is the total number of cubic yards of rip-rap that will be used? 199.34CY

6. What is the number of cubic yards of rip-rap per running foot of shoreline? 2.21 CY/FT
 (See page 4 for a guide to calculating total cubic yards and cubic yards per running foot).

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

Armor stone: 165 LBS/CF Core stone: 165 LBS/CF

[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:

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: 12.51FT Mean Low Water: 0.0FT

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

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

Channelward of Mean High Water: 1105.34SF Channelward of Mean Low Water: 0.0SFChannelward of Ordinary High Water: 969.4 sf (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? 2.3F. What is the proposed slope of the rip-rap revetment? 2.3

(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:

The material being placed will not result in a statistically significant reduction, accounting for natural variations, in biological, chemical, or habitat quality as measured or predicted using appropriate assessment protocols.

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

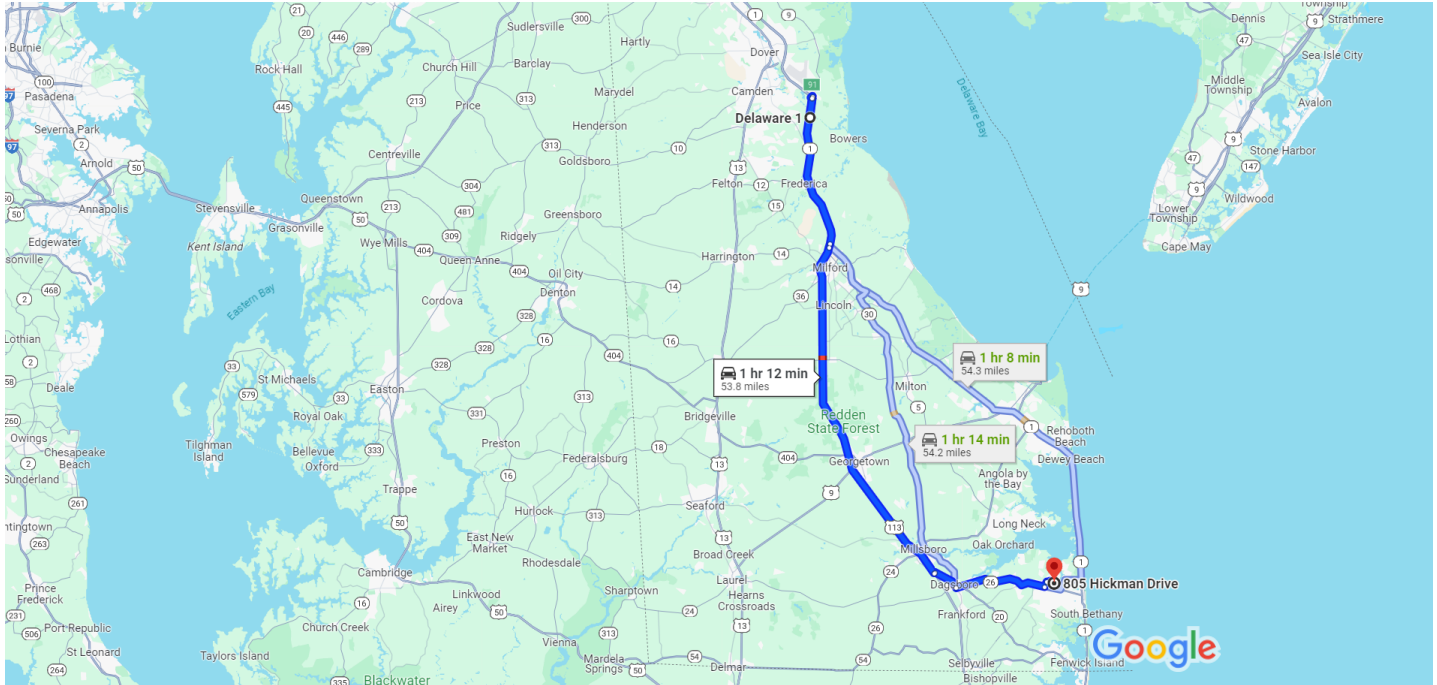
EXAMPLE:

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:

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

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

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



Map data ©2024 Google 5 mi

DE-1

Delaware

Follow DE-1 S/Bay Rd and US-113 S/N Dupont Blvd to Cricket St in Sussex County

53 min (43.0 mi)

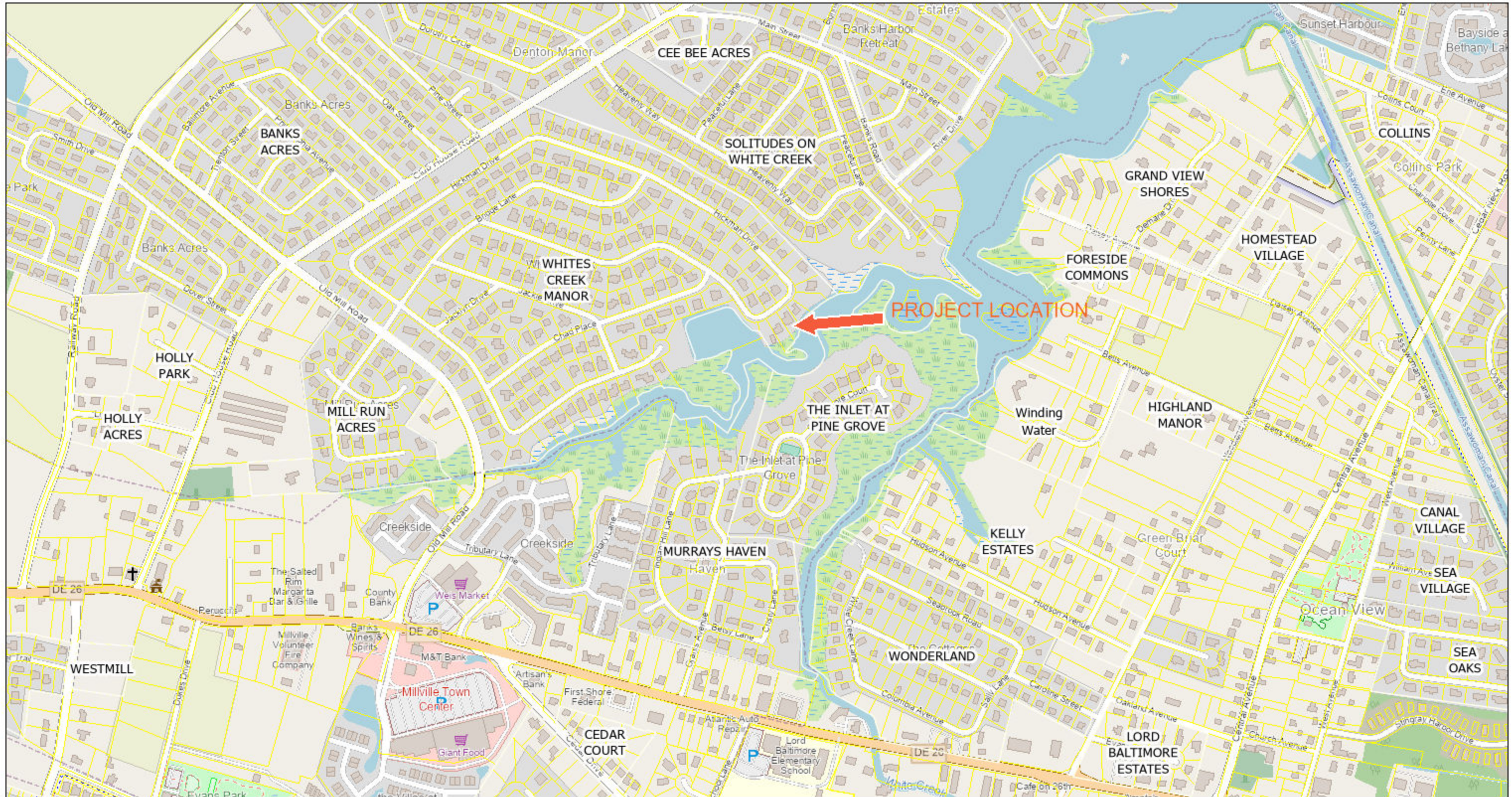
- ↑ 1. Head north on DE-1 N
_____ 1.5 mi
- ↘ 2. Take exit 91 for DE-9 toward Kitts Hummock/Little Creek
_____ 0.2 mi
- ↶ 3. Turn left onto DE-9/Bayside Dr
_____ 0.3 mi
- ↗ 4. Merge onto DE-1 S/Bay Rd
_____ 12.0 mi
- ↗ 5. Use the right lane to take the US-113 S/DE-1BUS ramp to Milford/Georgetown
_____ 0.3 mi

- ↑ 6. Continue onto DE-1 BUS S/US-113 S/N Dupont Blvd
- Continue to follow US-113 S/N Dupont Blvd
 - Pass by AutoZone Auto Parts (on the right in 27.6 mi)
-
- 28.8 mi

Take State Rd 20 and DE-26 E to Harbor Rd

-
- 19 min (10.9 mi)
- ↶ 7. Turn left onto Cricket St
-
- 0.1 mi
- ↷ 8. Turn right onto State Rd 20
-
- 2.2 mi
- ↶ 9. Slight left onto DE-26 E/Vines Creek Rd
- Continue to follow DE-26 E
-
- 7.5 mi
- ↶ 10. Turn left onto Rd 351/Clubhouse Rd
-
- 0.4 mi
- ↷ 11. Turn right onto Old Mill Rd
-
- 0.1 mi
- ↶ 12. Turn left onto Bridge Ln
-
- 0.2 mi
- ↷ 13. Turn right onto Harbor Rd
- Destination will be on the right
-
- 0.4 mi

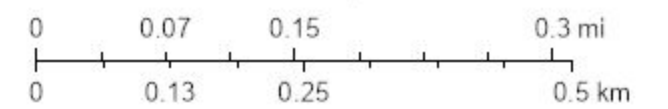
VIC MAP



12/28/2023, 11:00:07 AM

- Communities
- Tax Parcels

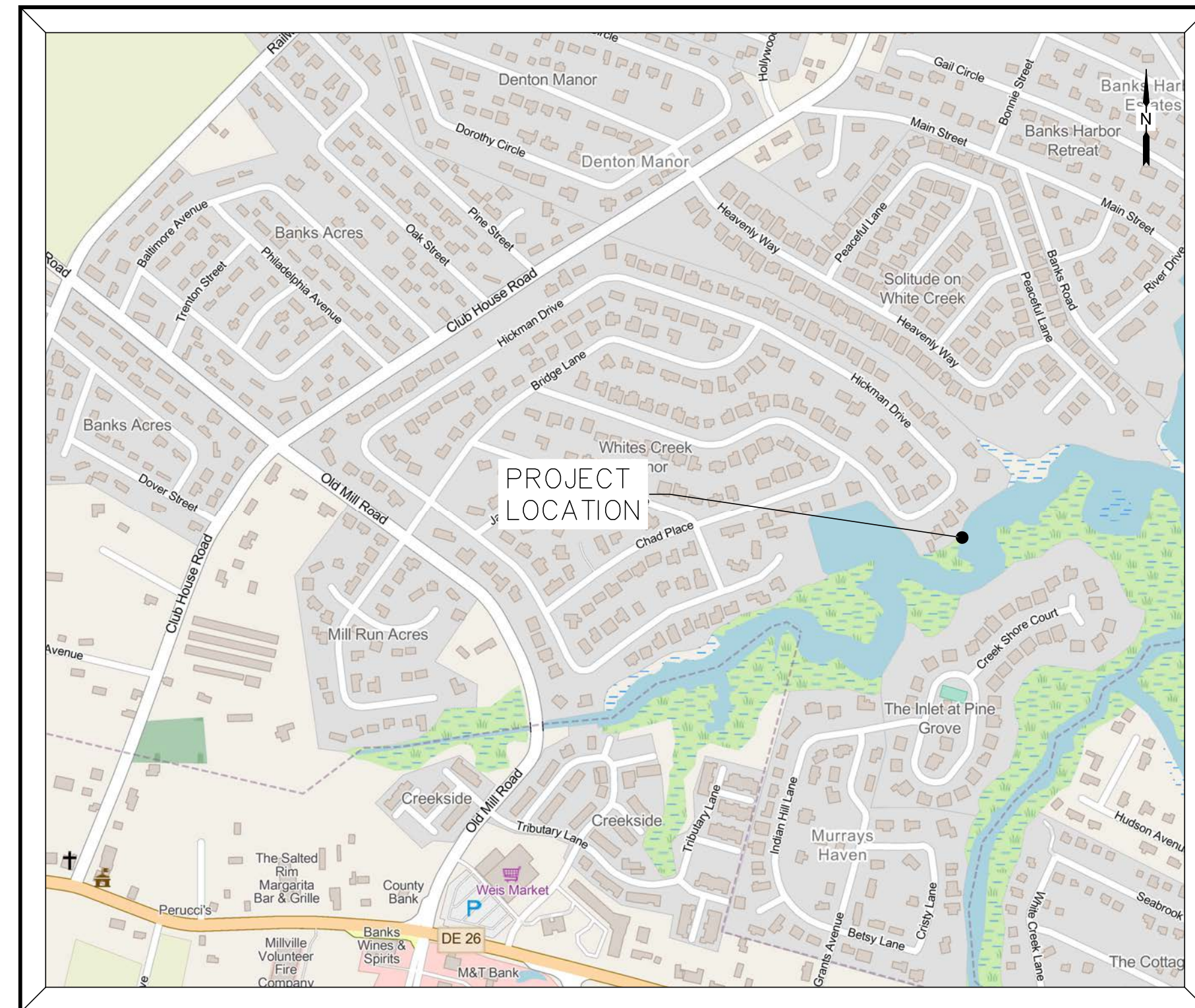
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Map data © OpenStreetMap contributors, Microsoft, Facebook, Inc. and its affiliates, Esri Community Maps contributors, Map layer by Esri, Sussex County Government

CARROLL SHORELINE REVETMENT PROJECT

WHITES CREEK / INLAND BAY WATERSHED
OCEAN VIEW, DELAWARE



PLAN INDEX MAP

SHEET INDEX

SHEET NO.	TITLE
C-000	COVER SHEET
C-100	SITE PLAN
C-200	PROFILE / SECTION VIEW CONSTRUCTION DETAIL
C-300	SECTION VIEW PLAN
C-700	EROSION & SEDIMENT CONTROL PLAN
C-701	EROSION & SEDIMENT CONTROL DETAILS & NOTES
C-702	EROSION & SEDIMENT CONTROL DETAILS & NOTES
C-703	EROSION & SEDIMENT CONTROL DETAILS & NOTES
EX-1	WETLAND SITE PLAN EXHIBIT
EX-2	WETLAND PROFILE / SECTION VIEW DETAILS PLAN EXHIBIT
EX-3	WETLAND SECTION VIEW PLAN EXHIBIT

REGIONAL CONDITION FOR NWP (13) BANK STABILIZATION

CONDITION A ANY PCN TO THE CORPS OF ENGINEERS THAT DOES NOT UTILIZE A NON-STRUCTURAL BANK STABILIZATION METHODS (E.G. VEGETATION OR COMBINATION OF VEGETATION AND ROCK) MUST INCLUDE AN ANALYSIS DEMONSTRATING THAT SUCH MEASURES WERE NOT PRACTICABLE AND/OR APPROPRIATE.

CONDITION B THIS NWP MAY NOT BE USED TO AUTHORIZE ANY STABILIZATION ACTIVITY WHERE NO DEMONSTRABLE EROSION IS EVIDENT.

CONDITION C A PCN SHALL BE PROVIDED TO THE CORPS FOR ALL IN-WATER STRUCTURES, SUCH AS BIOENGINEERING, BREAK WATERS, SILLS, GABION BASKETS, WAVE ATTENUATION DEVICES, OR ANY COMBINATION OF BANK STABILIZATION TECHNIQUES, PLACED OFFSHORE OF THE BANKS FOR THE PURPOSE OF EROSION CONTROL OR PREVENTION.

THE PROJECT IS LOCATED IN FEMA FLOOD ZONE AE (ELEV. 7), FEMA MAP # 10005C0511K

EXISTING

BUILDING	
BRIDGE	
BOTTOM WIDTH LEFT	
BOTTOM WIDTH RIGHT	
CENTERLINE DITCH	
CENTERLINE DITCH STATION MAJOR	
CENTERLINE DITCH STATION MINOR	
CENTERLINE ROAD	
CONTOUR MAJOR	
CONTOUR MINOR	
CONCRETE	
EASEMENT	
EDGE OF PAVEMENT	
EDGE OF GRAVEL	
FENCELINE	
GEOMORPHOLOGY FEATURE	
HYDROLOGIC DRAINAGE AREA	
HYDROLOGIC SOIL TYPE	
HYDROLOGIC SOIL GROUP	
HYDROLOGIC TIME OF CONCENTRATION	
MAILBOX	
MARSHLINE	
ORDINARY HIGH WATER	
PROPERTY LINE	
RAILROAD TRACKS	
RIPRAP	
SHEETPILE	
SIDEWALK	
SIGN	
STORMWATER PIPE	
STORMWATER STRUCTURE	
TAX DITCH RIGHT-OF-WAY	
TAX DITCH SPECIAL RIGHT-OF-WAY	
TOP OF BANK RIGHT	
TOP OF BANK LEFT	
TREE	
TEXT	
UTILITY: COMMUNICATION CABLE	
UTILITY: OVERHEAD WIRE	
UTILITY: POLE	
UTILITY: ELECTRIC	
UTILITY: GAS	
UTILITY: SANITARY SEWER	
UTILITY: WATER	
WATERSHED DRAINAGE AREA	
WETLAND	
WOODSLINE	

LEGEND

PROPOSED

BUILDING	
BRIDGE	
BOTTOM WIDTH LEFT	
BOTTOM WIDTH RIGHT	
CENTERLINE DITCH	
CENTERLINE DITCH STATION MAJOR	
CENTERLINE DITCH STATION MINOR	
CONTOUR MAJOR	
CONTOUR MINOR	
CONCRETE	
EASEMENT	
EDGE OF PAVEMENT	
EDGE OF GRAVEL	
FENCELINE	
GEOMORPHOLOGY FEATURE	
GRADE PROFILE	
HYDROLOGIC DRAINAGE AREA	
HYDROLOGIC DRAINAGE AREA HATCH	
HYDROLOGIC DRAINAGE AREA LANDUSE	
HYDROLOGIC TIME OF CONCENTRATION	
NORMAL WATER SURFACE ELEVATION	
RIPRAP	
SIDEWALK	
SIGN	
STORMWATER PIPE	
STORMWATER STRUCTURE	
TAX DITCH RIGHT-OF-WAY	
TAX DITCH SPECIAL RIGHT-OF-WAY	
TOP OF BANK LEFT	
TOP OF BANK RIGHT	
TREE	
TEXT	
WATERSHED DRAINAGE AREA	
WOODSLINE	
ESTIMATED CUT	
ESTIMATED FILL	
COMPOST LOG	
LIMIT OF DISTURBANCE	
TEMPORARY CONSTRUCTION - EASEMENT	
SILT FENCE	
SUPER SILT FENCE	
PLANTING AREA	
SEEDING AREA	



LOCATION MAP

PERMITTEE CERTIFICATION:

I, THE UNDERSIGNED, CERTIFY THAT ALL LAND CLEARING AND CONSTRUCTION SHALL BE DONE PURSUANT TO THE APPROVED PLAN AND THAT RESPONSIBLE PERSONNEL (I.E., BLUE CARD HOLDER) INVOLVED IN THE LAND DISTURBANCE WILL HAVE A CERTIFICATION OF TRAINING PRIOR TO INITIATION OF THE PROJECT. AT A DNREC SPONSORED OR APPROVED TRAINING COURSE FOR THE CONTROL OF EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION. IN ADDITION, I GRANT THE DEPARTMENT OR DELEGATED INSPECTION AGENCY THE RIGHT TO CONDUCT ON-SITE INSPECTIONS, AND I UNDERSTAND MY RESPONSIBILITIES UNDER THE NPDES CONSTRUCTION GENERAL PERMIT.

NAME _____ TITLE _____

SIGNATURE _____ DATE _____

REVISIONS	DESCRIPTION
DATE	



SUSSEX CONSERVATION DISTRICT
23818 SHORTLY RD. GEORGETOWN, DE 19957
PHONE: (302) 856-2105 FAX: (302) 856-0951

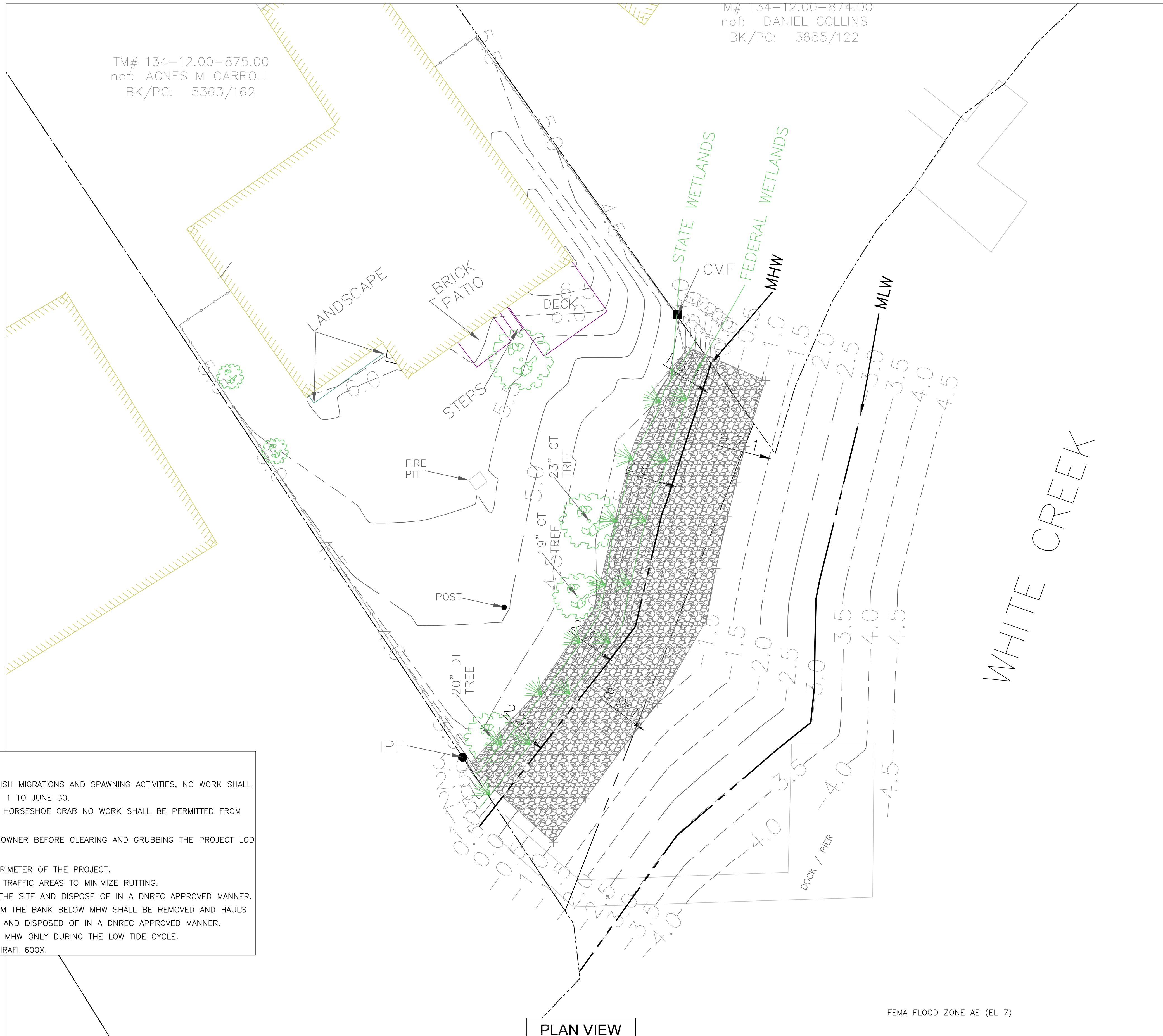
DNREC - Division of Watershed Stewardship
Drainage Program
Georgetown Office
21109 Berlin Rd. Unit 6 Phone: (302) 854-1936
Dover Office
288 Heister Blvd., Suite 102 Phone: (302) 739-9921
Dover DE, 19901 Fax: (302) 739-6724 Fax: (302) 677-7059



CARROLL
SHORELINE REVETMENT PROJECT
WHITES CREEK / INLAND BAY WATERSHED
OCEAN VIEW, DELAWARE
COVERSHEET

PRELIMINARY
FOR REVIEW ONLY

Date:	12/20/2023
Designed:	JLE, WA
Planned:	JLE, WA, MM
Drawn:	JLE
Sheet No.	C-000



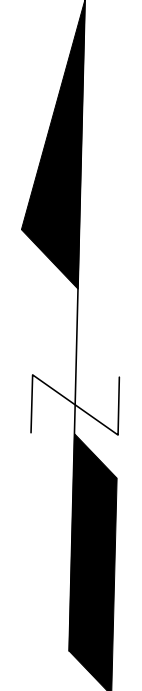
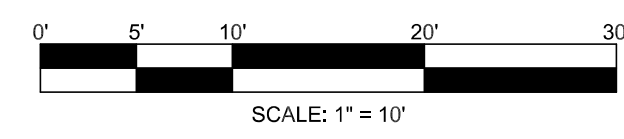
TM# 134-12.00-875.00
 nof: AGNES M CARROLL
 BK/PG: 5363/162

TM# 134-12.00-874.00
 nof: DANIEL COLLINS
 BK/PG: 3655/122

- CONSTRUCTION NOTES:**
1. TO PROTECT DIADROMOUS FISH MIGRATIONS AND SPawning ACTIVITIES, NO WORK SHALL BE PERMITTED FROM MARCH 1 TO JUNE 30.
 2. TO PROTECT THE AMERICAN HORSESHOE CRAB NO WORK SHALL BE PERMITTED FROM APRIL 15 TO AUGUST 30.
 3. COORDINATE WITH THE LANDOWNER BEFORE CLEARING AND GRUBBING THE PROJECT LOD WORK AREA..
 4. INSTALL CFL ALONG THE PERIMETER OF THE PROJECT.
 5. UTILIZE MATTS IN THE HIGH TRAFFIC AREAS TO MINIMIZE RUTTING.
 6. REMOVE ALL SPOILS FROM THE SITE AND DISPOSE OF IN A DNREC APPROVED MANNER.
 7. ALL SPOILS EXCAVATED FROM THE BANK BELOW MHW SHALL BE REMOVED AND HAULS OFFSITE IN SEALED TRUCKS AND DISPOSED OF IN A DNREC APPROVED MANNER.
 8. EXCAVATE ALL SOILS BELOW MHW ONLY DURING THE LOW TIDE CYCLE.
 9. INSTALL R6 RIPRAP OVER MIRAFI 600X.

PLAN VIEW
 SCALE: 1" = 10'

FEMA FLOOD ZONE AE (EL 7)



REVISIONS	DESCRIPTION
DATE	



SUSSEX CONSERVATION DISTRICT
 23818 SHORTLY RD., GEORGETOWN, DE 19957
 PHONE: (302) 685-2008 FAX: (302) 685-0981

DNREC - Division of Watershed Stewardship
 Drainage Program

Dover Office: Georgetown Office
 285 Bester Blvd., Suite 102 Phone: (302) 739-9921 21309 Berlin Rd. Unit 6 Phone: (302) 855-1930
 Dover DE, 19901 Fax: (302) 739-6724 Georgetown DE, 19947 Fax: (302) 677-7059



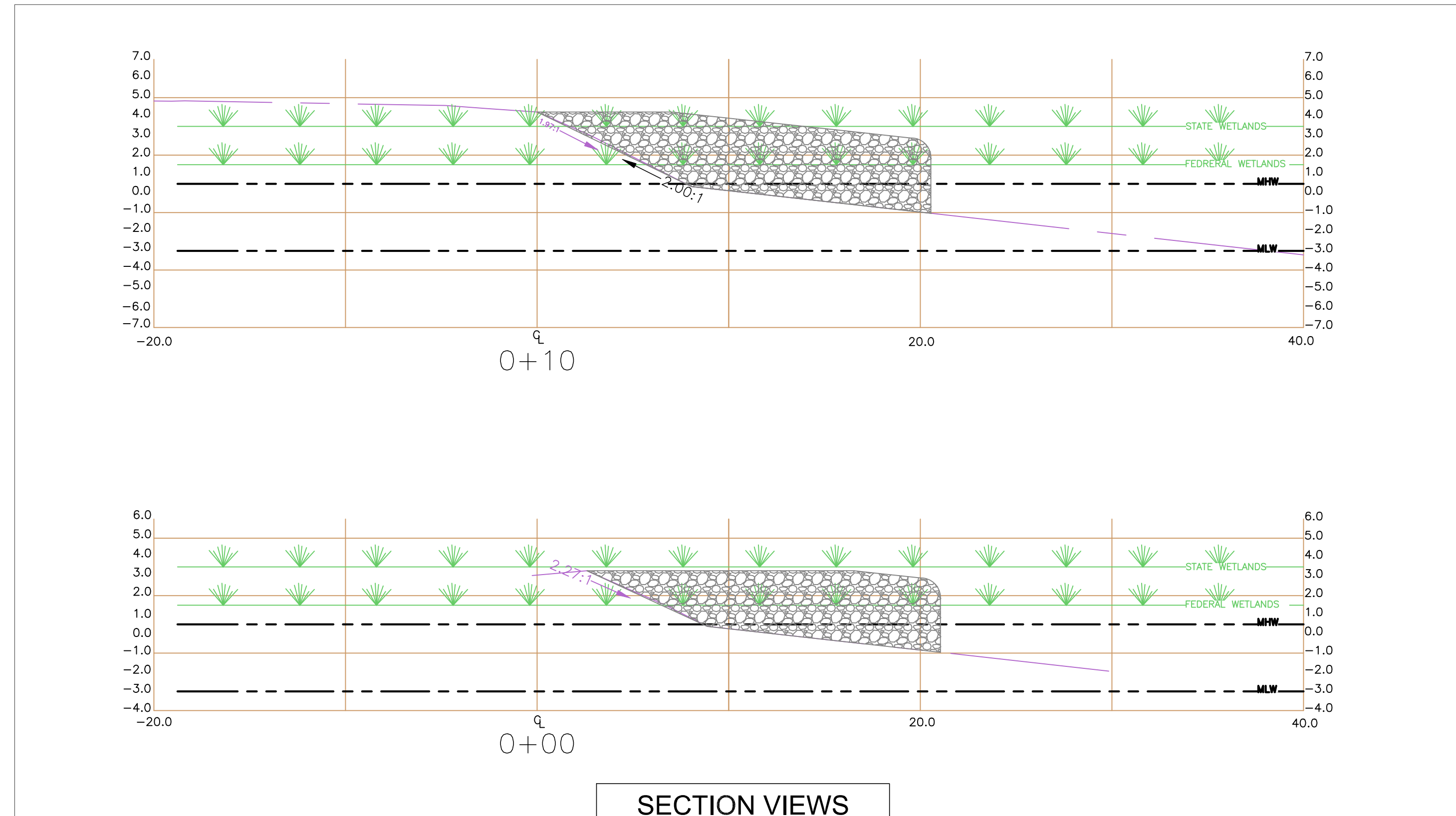
CARROLL
 SHORELINE REVETMENT PROJECT
 WHITE'S CREEK / INLAND BAY WATERSHED
 OCEAN VIEW, DELAWARE

SITE PLAN

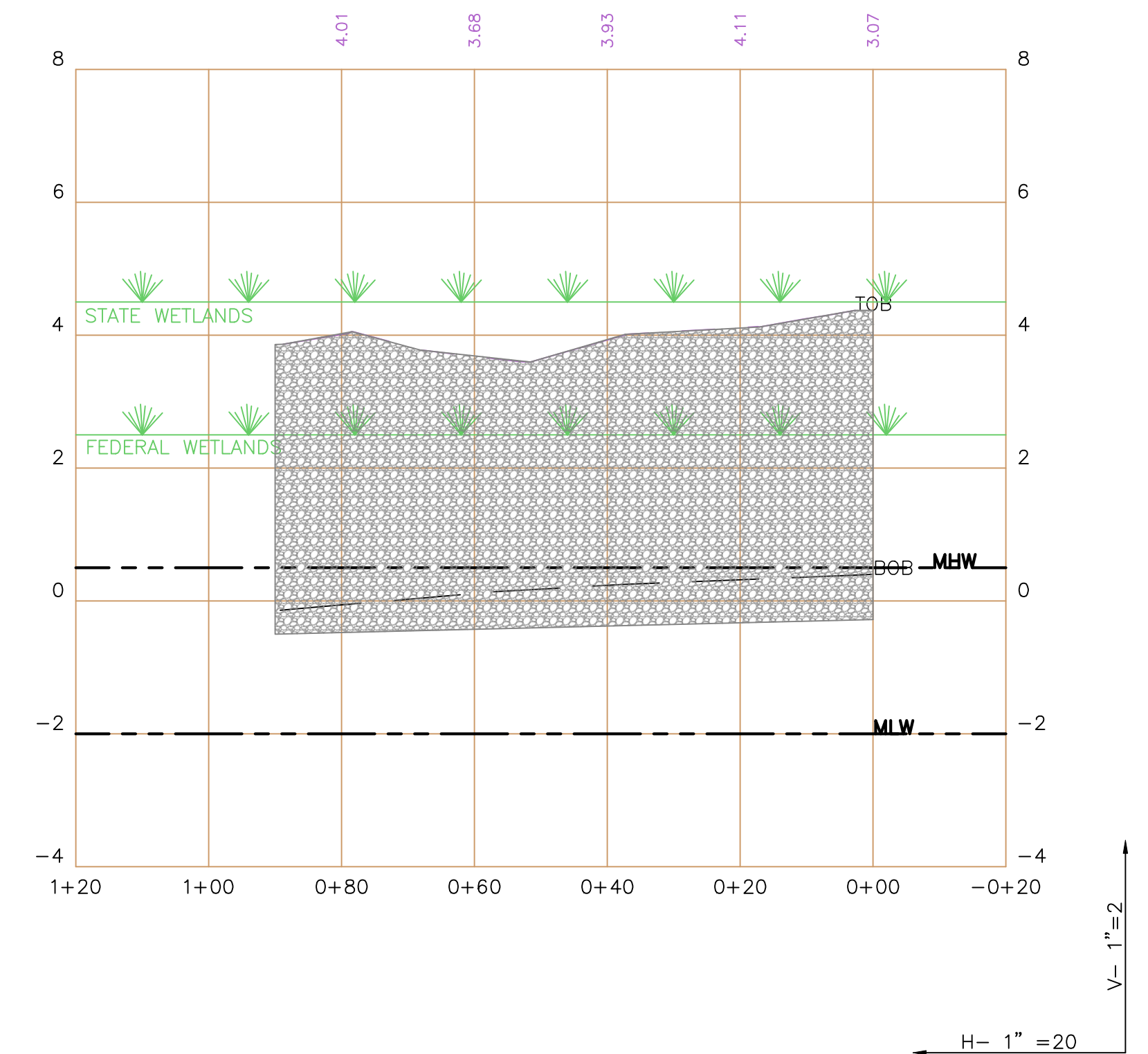
PRELIMINARY
 FOR REVIEW ONLY

Date: 12/20/2023
 Designed: JLE, WA
 Planned: JLE, WA, MM
 Drawn: JLE

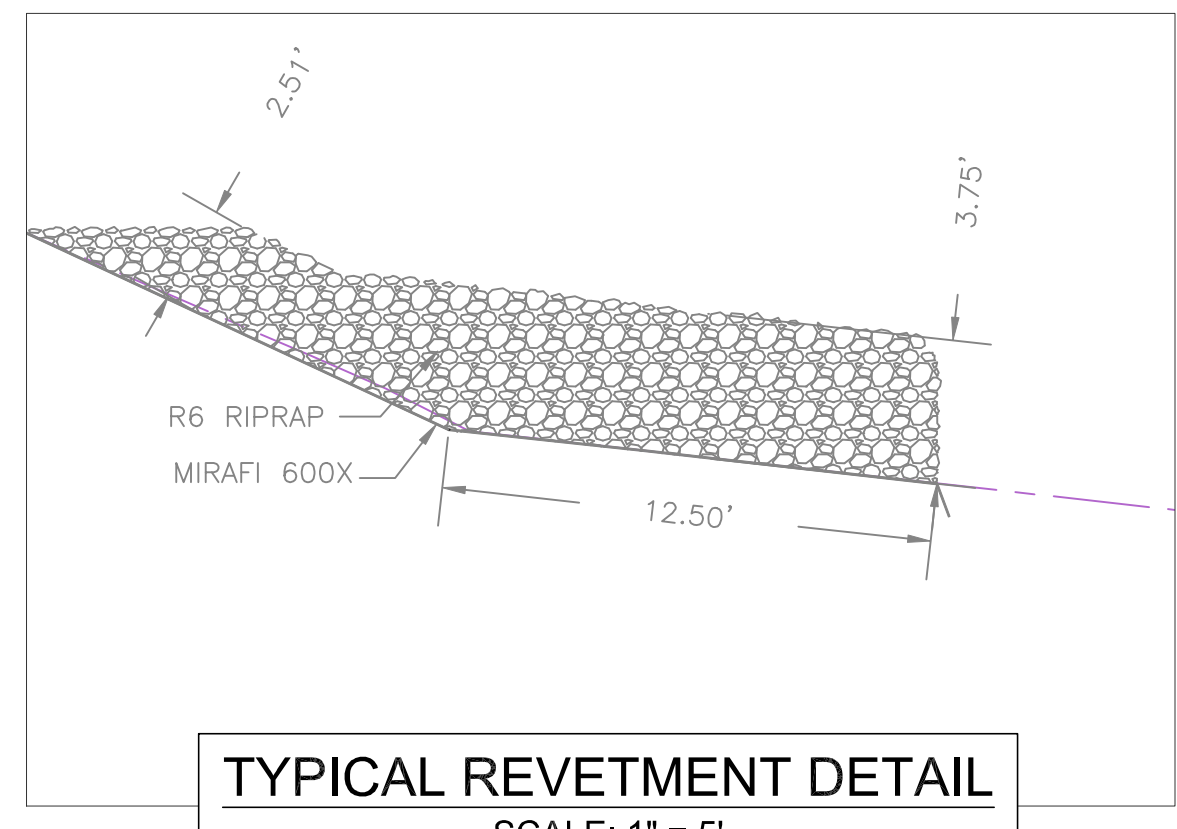
Sheet No. **C-100**



SECTION VIEWS
SCALE: 1" = 5'

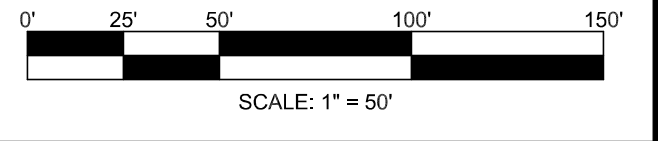


SHORELINE PROFILE VIEW
SCALE: 1" = 20'



TYPICAL REVETMENT DETAIL
SCALE: 1" = 5'

- CONSTRUCTION NOTES:**
- R6 RIPRAP SHALL BE USED FOR THE SHORELINE REVETMENT.
 - THE REVETMENT SHALL BE 30" THICK.
 - CLEAR AND GRUB THE SLOPE AND DISPOSE OF SPOILS IN A DNREC APPROVAL OFFSITE LOCATION.
 - ANY SPOILS GENERATED FROM THE THIS PROJECT SHALL BE REMOVED AND DISPOSED IN A DNREC APPROVED LOCATION AND TRANSPORTED IN SEALED TRUCKS.
 - ALL RIPRAP SHALL BE PLACED OVER A GEOTEXTILE UNDER-LAYMENT MIRAFI 600X.
 - THE GEOTEXTILE UNDER-LAYMENT SHALL BE KEYED IN AT THE TOP OF BANK.



REVISIONS	DESCRIPTION
DATE	



SUSSEX CONSERVATION DISTRICT
2318 SHORTLY RD., GEORGETOWN, DE 19957
PHONE: (302) 856-2105 FAX: (302) 856-0981

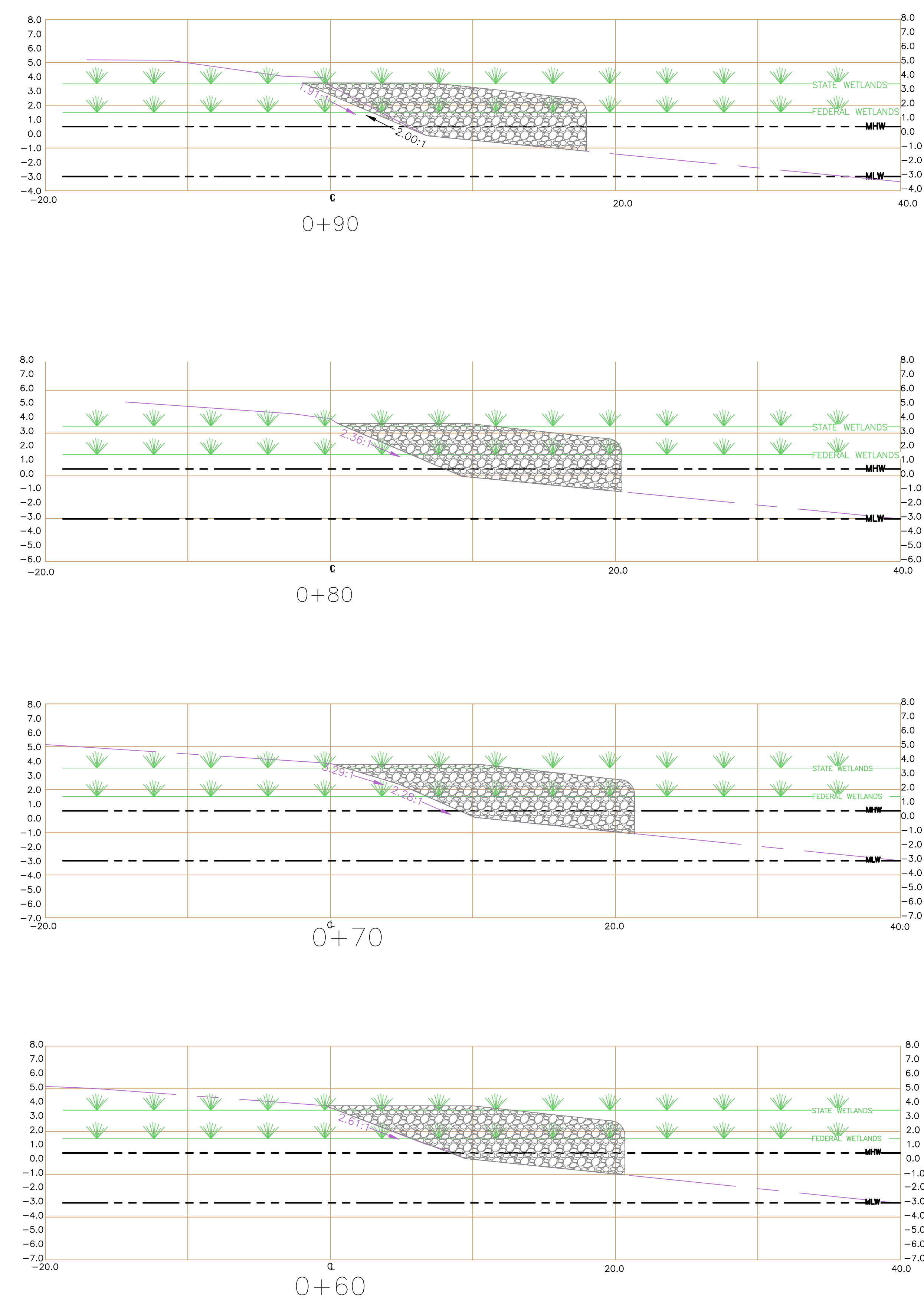
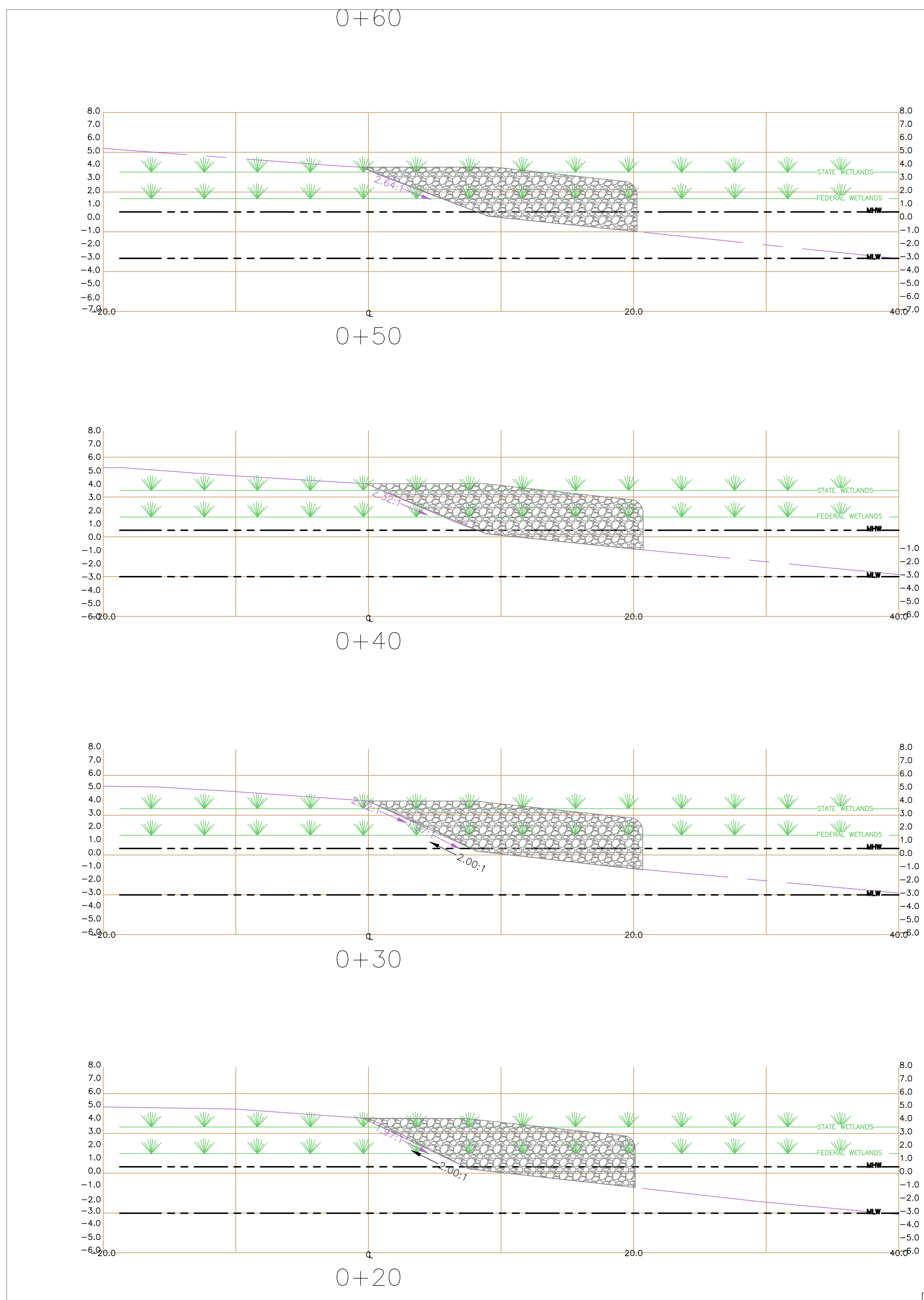
DNREC - Division of Watershed Stewardship
Drainage Program
Dover Office
285 Bezer Blvd., Suite 102 Phone: (302) 739-9921 21399 Bezer Rd. Unit 6 Phone: (302) 855-1930
Dover DE, 19901 Fax: (302) 739-6724 Georgetown DE, 19847 Fax: (302) 677-7099



CARROLL
SHORELINE REVETMENT PROJECT
WHITE'S CREEK / INLAND BAY WATERSHED
OCEAN VIEW, DELAWARE
PROFILE / SECTION VIEW
CONSTRUCTION DETAIL PLAN

PRELIMINARY
FOR REVIEW ONLY

Date:	12/20/2023
Designed:	JLE, WA
Planned:	JLE, WA, MM
Drawn:	JLE
Sheet No.	C-301



SECTION VIEWS
SCALE: 1" = 5'

REVISIONS	DESCRIPTION
DATE	



SUSSEX CONSERVATION DISTRICT
23818 SHORTLY RD. GEORGETOWN, DE 19957
PHONE: (302) 856-2045 FAX: (302) 856-0951

DNREC - Division of Watershed Stewardship
Drainage Program

Dover Office: Georgetown Office
285 Beiter Blvd., Suite 102 Phone: (302) 739-9921 21309 Berlin Rd. Unit 6 Phone: (302) 854-1930
Dover, DE 19901 Fax: (302) 739-9724 Georgetown, DE 19947 Fax: (302) 677-7059

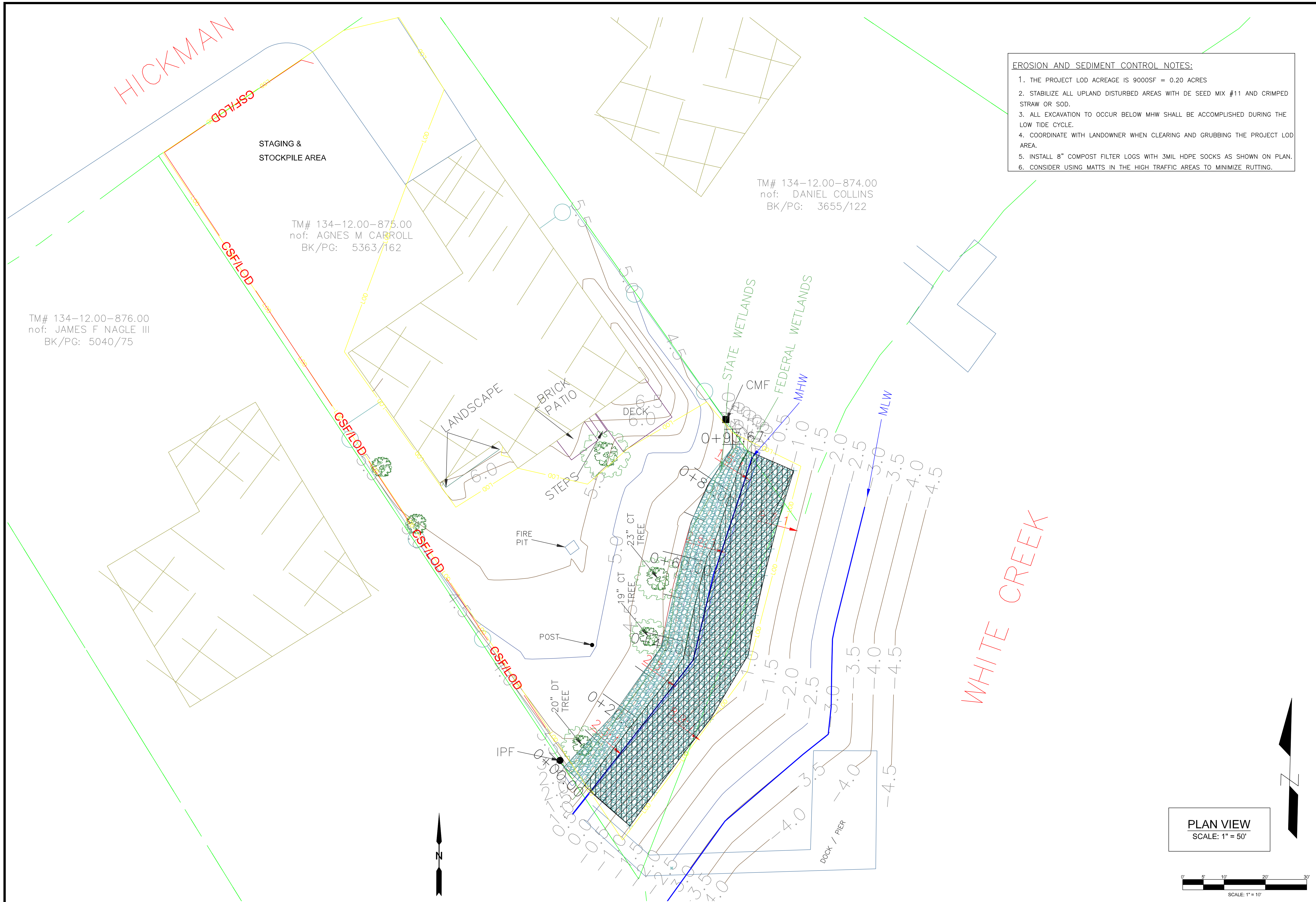


CARROLL
SHORELINE REVITMENT PROJECT
WHITTE'S CREEK / INLAND BAY WATERSHED
OCEAN VIEW, DELAWARE

SECTION VIEW PLAN

PRELIMINARY
FOR REVIEW ONLY

Date:	12/20/2023
Designed:	JLE, WA
Planned:	JLE, WA, MM
Drawn:	JLE
Sheet No.	C-300



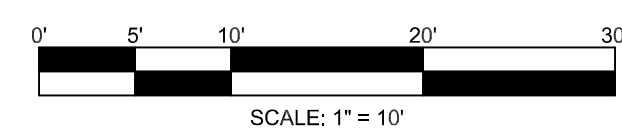
- EROSION AND SEDIMENT CONTROL NOTES:**
1. THE PROJECT LOD ACREAGE IS 9000SF = 0.20 ACRES
 2. STABILIZE ALL UPLAND DISTURBED AREAS WITH DE SEED MIX #11 AND CRIMPED STRAW OR SOD.
 3. ALL EXCAVATION TO OCCUR BELOW MHW SHALL BE ACCOMPLISHED DURING THE LOW TIDE CYCLE.
 4. COORDINATE WITH LANDOWNER WHEN CLEARING AND GRUBBING THE PROJECT LOD AREA.
 5. INSTALL 8" COMPOST FILTER LOGS WITH 3MIL HDPE SOCKS AS SHOWN ON PLAN.
 6. CONSIDER USING MATTS IN THE HIGH TRAFFIC AREAS TO MINIMIZE RUTTING.

TM# 134-12.00-876.00
 nof: JAMES F NAGLE III
 BK/PG: 5040/75

TM# 134-12.00-875.00
 nof: AGNES M CARROLL
 BK/PG: 5363/162

TM# 134-12.00-874.00
 nof: DANIEL COLLINS
 BK/PG: 3655/122

PLAN VIEW
 SCALE: 1" = 50'



REVISIONS	DESCRIPTION
DATE	



SUSSEX CONSERVATION DISTRICT
 23818 SHORTLY RD., GEORGETOWN, DE 19557
 PHONE: (302) 856-2105 FAX: (302) 856-0951

DNREC - Division of Watershed Stewardship
 Drainage Program

Dover Office: Georgetown Office
 285 Beiler Blvd., Suite 102 Phone: (302) 739-9221 21309 Beiba Rd. Unit 6 Phone: (302) 855-1930
 Dover, DE 19901 Fax: (302) 739-6724 Georgetown, DE 19947 Fax: (302) 677-7659



CARROLL
 SHORELINE REVETMENT PROJECT
 WHITE'S CREEK / INLAND BAY WATERSHED
 OCEAN VIEW, DELAWARE

EROSION & SEDIMENT CONTROL PLAN - 1

PRELIMINARY
 FOR REVIEW ONLY

Date: 12/20/2023
 Designer: JLE, WA
 Planner: JLE, WA, MM
 Drawn: JLE

Sheet No. **C-700**

Standard Detail & Specifications Construction Site Pollution Prevention

Delaware NPDES Discharge Permit
General Permit for Discharge of Stormwater from Construction Activities

((Project Name))
 ((NOI Permit Number))
 ((Agency Plan Approval ID))
 ((Contact Name & Number for Additional Site Information))
 ((Contact Name & Number to Obtain Copy of Approved Plan))

If you observe indicators of stormwater pollutants in the discharge or in the receiving waterbody, call the DNREC Spill Notification 24 HR Hotline at
1-800-662-8802

Example Construction General Permits (CGP) Signage

NOTES:
 1. Minimum sign size 2' x 2'
 2. Minimum text size 1"
 3. Sign must be posted at a safe, publicly accessible location close to construction site
 4. Sign must be visible from the public road nearest the active construction site
 5. Signs posted within a DetDOT or other public road right-of-way (ROW) must be in accordance with all local and/or State requirements in regards to safety, location, orientation, etc.

Source: Delaware ESC Handbook	Symbol: _____	Detail No. DE-ESC-3.6.1 Sheet 1 of 4 Effective July 2023
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Standard Detail & Specifications Construction Site Pollution Prevention

Notes:
 The Construction Site Pollution Prevention Plan includes the following elements:

1. Material Inventory
 Document the storage and use of the following materials:
 a. Concrete
 b. Detergents
 c. Paints (enamel and latex)
 d. Cleaning solvents
 e. Pesticides
 f. Wood scraps
 g. Fertilizers
 h. Petroleum based products

2. Good housekeeping practices
 a. Store only enough product required to do the job.
 b. Store all materials in a neat, orderly manner in their original labeled containers and covered.
 c. Do not mix different substances.
 d. When possible, use all of a product prior to disposal of the container.
 e. Manufacturers' instructions for disposal should be strictly adhered to.
 f. Designate someone to inspect all BMPs daily.

3. Waste management practices
 a. Collect and store all waste materials in securely lidded dumpsters in a location that does not drain to a waterbody.
 b. Salvage and/or recycle waste materials whenever possible.
 c. The dumpsters shall be emptied a minimum of twice per week, or more if necessary. The licensed trash hauler is responsible for cleaning out dumpsters.

Source: Adapted from USEPA Pub. 840-B-92-002	Symbol: _____	Detail No. DE-ESC-3.6.1 Sheet 2 of 4 Effective July 2023
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Standard Detail & Specifications Construction Site Pollution Prevention

Notes (cont.)

d. Dispose of all trash in accordance with all applicable Delaware laws.
 e. Littering is strictly prohibited. Trash cans should be placed at all lunch spots and recycle bins should be placed near the construction trailer.
 f. If fertilizer bags can not be stored in a weather-proof location, they should be kept on a pallet and covered with plastic sheeting which is overlapped and anchored.

4. Equipment maintenance practices
 a. If possible, equipment should be taken to off-site commercial facilities for washing and maintenance.
 b. If performed on-site, wash vehicles with high-pressure water spray without detergents in an area contained by an impervious berm.
 c. Use drip pans for all equipment maintenance.
 d. Inspect equipment for leaks on a daily basis.
 e. Direct washout from concrete trucks into a temporary pit for hardening and proper disposal.
 f. Equip fuel nozzles with automatic shut-off valves.
 g. Dispose of all used products such as oil, antifreeze, solvents and tires in accordance with manufacturers' recommendations and local, state and federal laws and regulations.

5. Spill prevention practices
 a. Identify potential spill areas and contain them in covered areas with no connection to the storm drain system.
 b. Post warning signs in hazardous material storage areas.
 c. Perform preventive maintenance on all tanks, valves, pumps, pipes and other equipment as necessary.
 d. Prioritize low or non-toxic substances for use.

Source: Adapted from USEPA Pub. 840-B-92-002	Symbol: _____	Detail No. DE-ESC-3.6.1 Sheet 3 of 4 Effective July 2023
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Standard Detail & Specifications Construction Site Pollution Prevention

Notes (cont.)

e. Prominently post contact information for reporting spills through the DNREC 24-Hour Toll Free Number.

6. Education
 a. Include Best Management Practices (BMPs) for construction site pollution control as part of regular progress meetings.
 b. Information regarding waste management, equipment maintenance and spill prevention should be prominently posted in the construction trailer.

CONTACT INFORMATION

DNREC 24-Hour Toll Free Number 800-662-8802
DNREC Solid & Hazardous Waste Management Section 302-739-9403

Source: Adapted from USEPA Pub. 840-B-92-002	Symbol: _____	Detail No. DE-ESC-3.6.1 Sheet 4 of 4 Effective July 2023
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Standard Detail & Specifications Soil Stockpile

Source: Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3	Symbol: _____ SP _____	Detail No. DE-ESC-3.7.3 Sheet 1 of 2 Effective July 2023
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Standard Detail & Specifications Soil Stockpile

Construction Notes:

- Locate stockpiles so that they are 50 feet from any storm drain inlet, open channel, wetland or waterbody. Redirect any concentrated flow around the stockpile using an approved erosion and sediment control measure.
- Secure the perimeter of the stockpile with an approved erosion and sediment control perimeter device.
- If stockpile is to remain inactive for more than 14 calendar days, the stockpile must be vegetated. Follow the temporary vegetation specifications. The vegetation chosen shall last the duration of the stockpile; the stockpile shall be restabilized if the temporary vegetation dies or erosion results.

Source: Adapted from Colorado Urban Storm Drainage Criteria Manual, Vol 3	Symbol: _____ SP _____	Detail No. DE-ESC-3.7.3 Sheet 2 of 2 Effective July 2023
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Standard Detail & Specifications Compost Filter Log

Surface Option Shown for Slopes less than 8:1
 (NOTE: For steeper slopes, drive stakes perpendicular to surface)

Source: Adapted from MD Stds & Specs for ESC & Filtrax™ International	Symbol: _____ CFL _____	Detail No. DE-ESC-3.1.7 Sheet 1 of 2 Effective July 2023
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Standard Detail & Specifications Compost Filter Log

Construction Notes:

- Prior to installation, clear bedding area of obstructions including rocks or debris larger than 1 inch and fill in any sharp depression areas.
- If socks are prepared on-site, fill the sock fabric using a pneumatic blower so that the logs are rigid and do not deform. Terminate at the desired length.
- For trenched applications, excavate 2 to 4 inches below grade along the width and length of the compost filter log.
- Install the compost filter logs perpendicular to the flow direction and parallel to the slope with the beginning and end of the installation pointing up the slope a minimum of 1 foot elevation difference. On sites where this is not possible, upturn at a minimum length of 10' at a 30 degree angle to prevent runoff bypass.
- For untrenched applications, blow or hand pack soil, mulch, or compost on the upslope side of the log, filling the bottom void area.
- Stake the filled log every 10 feet maximum through the center of the sock for trenched applications, or every 8 feet for untrenched. The stake shall be a 2" by 2" hardwood. It should extend 12" below grade and protrude at least 3" above the top of the sock. If located on a slope greater than 8:1, the stake shall be angled downslope at a 45 degree angle to prevent the force of the water from dislodging to log.
- When the length of the compost filter log needed exceeds the available compost filter sock length, the next sock shall be overlapped a minimum of 12" before being filled, and a stake placed through both socks at the overlap.
- Remove accumulated sediment when it has reached half of the effective height of the log.
- Inspect weekly and after rain event. If sock is degrading or the sock is failing, vegetate to secure the compost, replace the log, or reinforce with an additional log. If the log has been crushed due to construction equipment, it can be "bluffed" back to its effective height. If the effective height can no longer be restored, the log shall be replaced or reinforced with an additional compost filter log.

Source: Adapted from MD Stds & Specs for ESC & Filtrax™ International	Symbol: _____ CFL _____	Detail No. DE-ESC-3.1.7 Sheet 2 of 2 Effective July 2023
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REVISIONS	DESCRIPTION
DATE	

SUSSEX CONSERVATION DISTRICT
 23818 SHORTLY RD., GEORGETOWN, DE 19527
 PHONE: (409) 666-2210 FAX: (409) 666-0951

DNREC - Division of Watershed Stewardship
 Drainage Program
 Dover Office: Georgetown Office
 238 Reister Blvd., Suite 102 Phone: (302) 739-9921 21309 Radin Rd., Unit 6 Phone: (302) 855-1930
 Dover DE, 19901 Fax: (302) 739-6724 Fax: (302) 677-7059

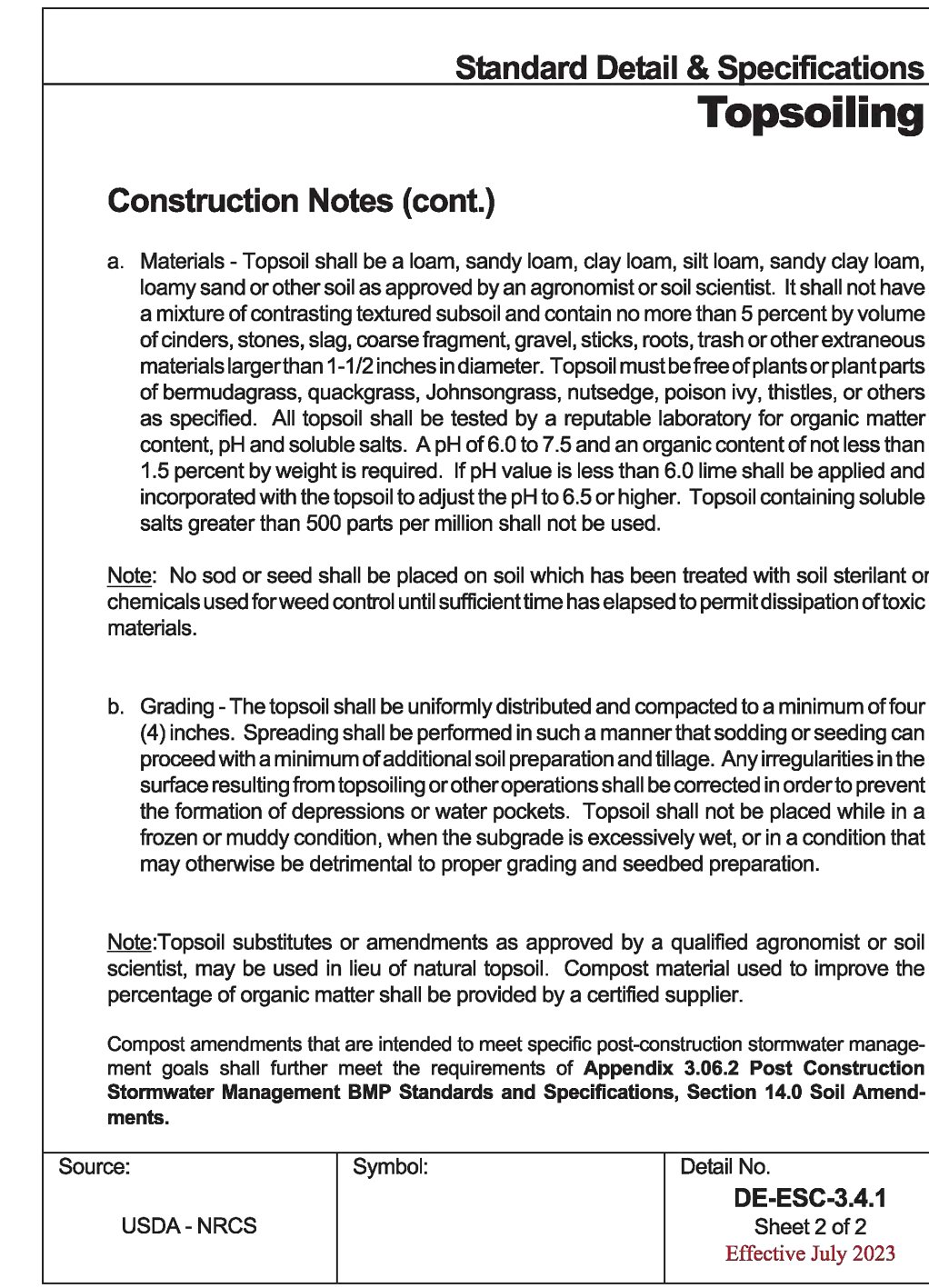
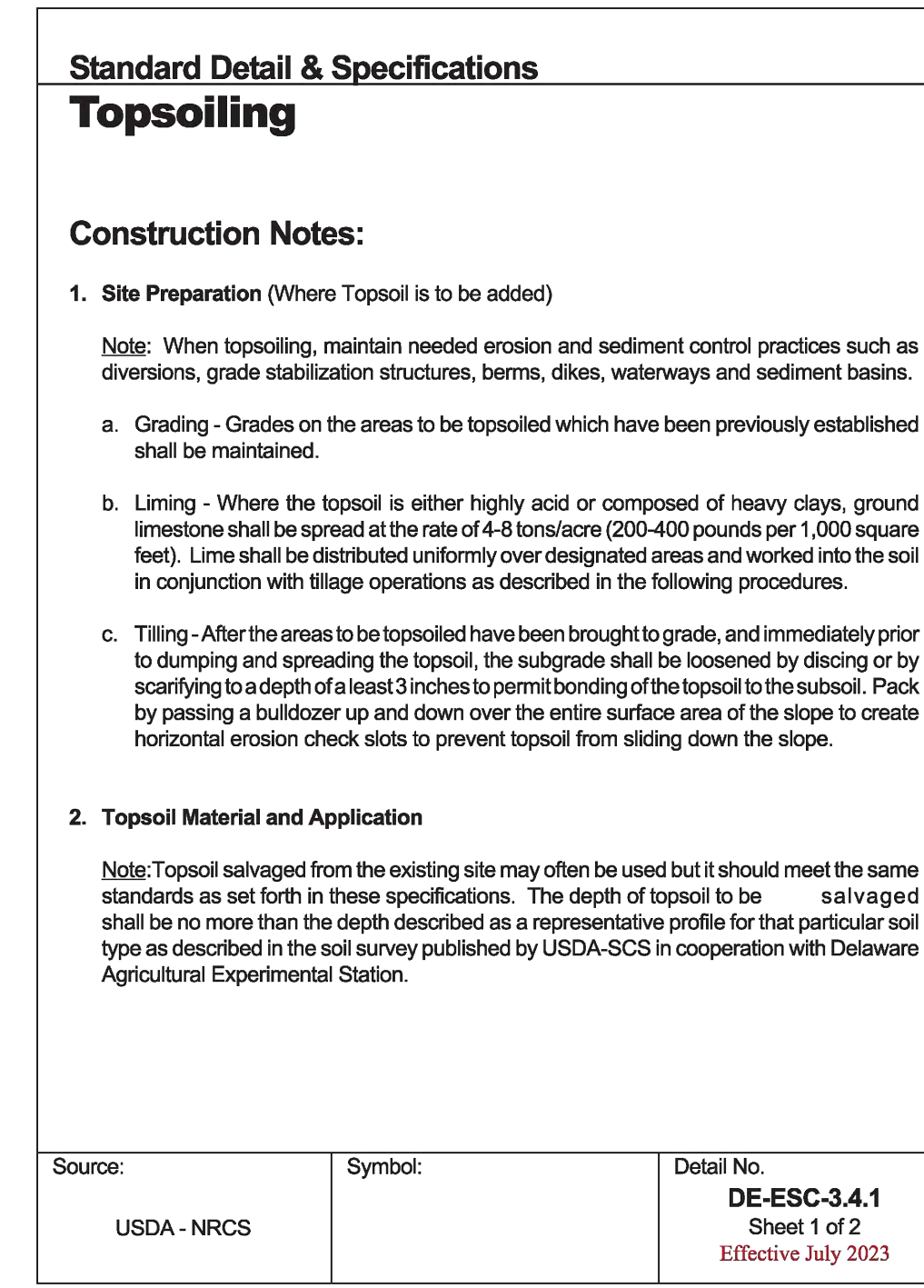
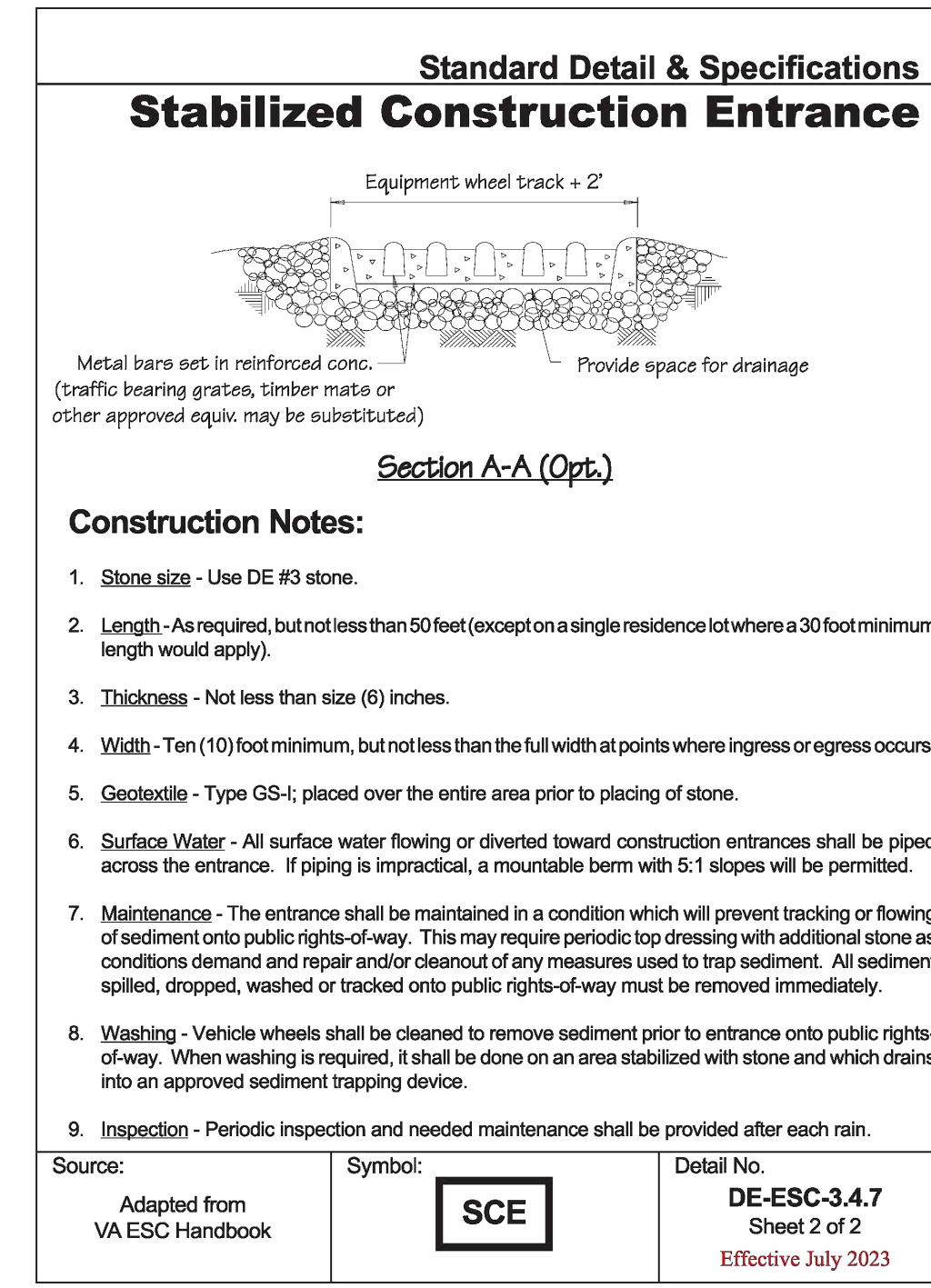
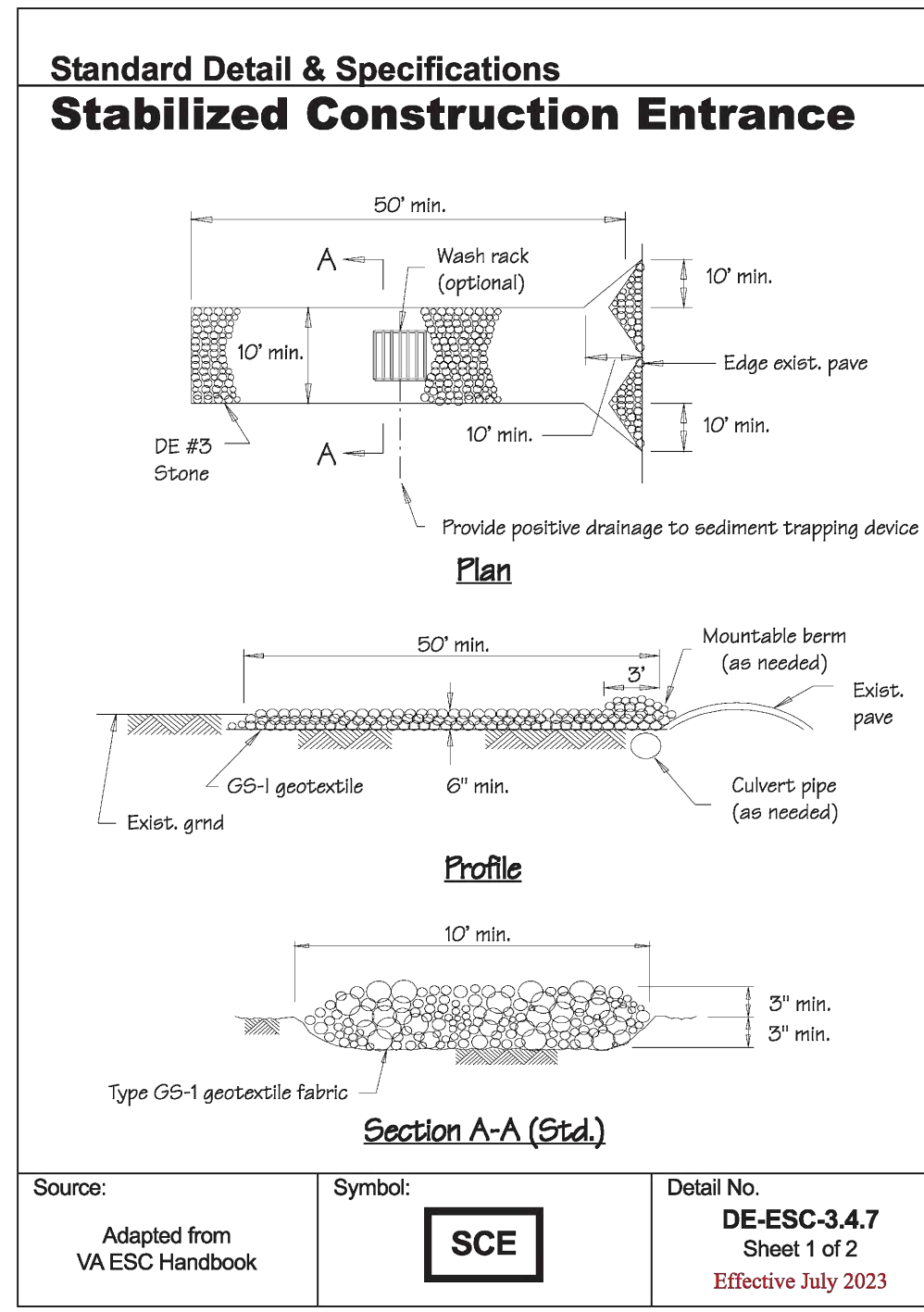
CARROLL
 SHORELINE REVETMENT PROJECT
 WHITES CREEK / INLAND BAY WATERSHED
 OCEAN VIEW, DELAWARE

EROSION & SEDIMENT CONTROL
DETAILS & NOTES

PRELIMINARY FOR REVIEW ONLY

Date:	12/20/2023
Designed:	JLE, WA
Planned:	JLE, WA, MM
Drawn:	JLE

C-701



REVISIONS	DESCRIPTION
DATE	



SUSSEX CONSERVATION DISTRICT
23818 SHORTLY RD., GEORGETOWN, DE 19957
PHONE: (302) 856-2105 FAX: (302) 856-0951

DNREC - Division of Watershed Stewardship
Drainage Program

Dover Office
285 Beiser Blvd., Suite 102 Phone: (302) 739-9921
Dover, DE, 19901

Georgetown Office
21309 Betha Rd. Unit 6 Phone: (302) 855-1930
Georgetown, DE, 19947 Fax: (302) 677-7659



CARROLL
SHORELINE REVETMENT PROJECT
WHITE'S CREEK / INLAND BAY WATERSHED
OCEAN VIEW, DELAWARE

**EROSION & SEDIMENT CONTROL
DETAILS AND NOTES**

**PRELIMINARY
FOR REVIEW ONLY**

Date:	12/20/2023
Designed:	JLE, WA
Planned:	JLE, WA, MM
Drawn:	JLE

Sheet No. **C-703**

GRADING NOTES:

- BEDDING REQUIREMENTS SPECIFIED HEREIN ARE TO BE CONSIDERED AS MINIMUMS FOR RELATIVELY DRY, STABLE EARTH CONDITIONS. ADDITIONAL BEDDING SHALL BE REQUIRED FOR ROCK TRENCHES AND WET AREAS. CONTRACTOR SHALL HAVE THE RESPONSIBILITY TO PROVIDE SUCH ADDITIONAL BEDDING AS MAY BE REQUIRED TO PROPERLY CONSTRUCT THE WORK.
- COMPACTION OF THE BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY OF 95% OF THEORETICAL MAXIMUM DRY DENSITY (ASTM D698). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS, OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED IN LIFTS NOT TO EXCEED 8 INCHES IN COMPACTED FILL THICKNESS. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR. MATERIAL THAT CANNOT BE COMPACTED AS REQUIRED SHALL BE BROUGHT TO THE ATTENTION OF A GEO-TECHNICAL ENGINEER, OVER EXCAVATED, AND THEN REPLACED WITH SUITABLE FILL.
- THE CONTRACTOR WILL INSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT BE LIMITED TO, REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED OR REGRADING AS REQUIRED BY THE ENGINEER, EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC LOCATIONS AND HAVING SPECIFIC PAY ITEMS IN THE DETAILED ESTIMATE. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COSTS INCURRED TO COMPLY WITH THIS REQUIREMENT.
- THE CONTRACTOR SHALL PROVIDE ANY AND ALL EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- SOILS TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT GEO-TECHNICAL ENGINEER. THE SOILS ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, THE OWNER AND THE OWNER'S REPRESENTATIVE AND SHALL PROMPTLY NOTIFY THE OWNER, HIS REPRESENTATIVE AND THE CONTRACTOR, SHOULD WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET BUILDING STANDARDS.
- CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES AROUND THE WORK AREA AND SHALL PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION.
- VERTICAL ELEVATIONS ARE BASED ON NAVD 88.
- ALL SLOPES MAXIMUM 3:1 UNLESS OTHERWISE NOTED.
- HDPE PIPE SHALL COMPLY WITH AASHTO M252, M294, MP7, AND ASTM 3350. PIPE SHALL BE INSTALLED PER ASTM D2321 AND AS RECOMMENDED BY THE MANUFACTURER. ALL HDPE SHALL HAVE SOIL TIGHT CONNECTIONS.
- DRAINAGE INLETS SHALL BE MANUFACTURED IN ACCORDANCE WITH THE LATEST STANDARDS OF DELDOT'S STANDARD CONSTRUCTION DETAILS UNLESS NOTED OTHERWISE ON THE PLANS.
- ALL HDPE PIPE SHALL MEET OR EXCEED THAT AASHTO M-330 PIPE SPECIFICATION.
- CONTRACTOR IS RESPONSIBLE FOR REMOVING AND DISPOSING OF EXCESS DIRT FROM THE SITE. THIS CAN BE COORDINATED WITH OWNER TO DETERMINE IF LONG TERM STORAGE ON SITE IS APPLICABLE.
- CONTRACTOR IS RESPONSIBLE TO ENSURE POSITIVE DRAINAGE AND PREVENT PONDING FOR ALL PROPOSED IMPROVEMENTS ALONG WITH NOT NEGATIVE IMPACTING EXISTING CONDITIONS.
- CONTRACTOR MUST DISCUSS WITH THE DNREC, SCD, AND DESIGN ENGINEER IF FIELD ISSUES ARISE. HE IS NOT TO PROCEED UNTIL THE ISSUE HAS BEEN RECTIFIED.
- CONTRACTOR IS RESPONSIBLE FOR PROJECT STAKE OUT.

CONSTRUCTION NOTES:

- THE SITE SHALL BE GRADED TO THE FINAL ELEVATIONS SHOWN ON THE STORMWATER MANAGEMENT, GRADING, EROSION AND SEDIMENT CONTROL PLAN PREPARED BY SCD. THE CONTRACTOR SHALL PERFORM GRADING TO PROVIDE POSITIVE DRAINAGE AND PRECLUDE PONDING OF WATER.
 - THE CONTRACTOR WILL BE RESPONSIBLE FOR CLEARING AND GRADING AND GRUBBING THE SITE TO LIMITS SHOWN ON THE PLANS. THIS WILL INCLUDE THE REMOVAL AND DISPOSAL OF ANY EXISTING PAVEMENT, FENCES, BUILDING DEBRIS AND TRASH ON THE SITE. DISPOSAL WILL BE OFFSITE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS; AND AT THE CONTRACTOR'S EXPENSE.
 - THE CONTRACTOR SHALL EXERCISE CARE AND CONSIDERATION IN CONSTRUCTION IN THE VICINITY OF ADJACENT PROPERTY OWNERS.
 - ALL DISTURBED R.O.W./PROPERTY CORNER MONUMENTS ARE TO BE VERIFIED BY A PROFESSIONAL ENGINEER OR A REGISTERED PROFESSIONAL LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE AND REPLACED/RESET IF NEEDED.
 - RIPRAP ROCK SHALL AS A MINIMUM: D50 STONE SIZE = 6", DEPTH = 18".
 - DUST CONTROL DURING DEMOLITION AND CONSTRUCTION – CONTRACTOR IS RESPONSIBLE FOR WETTING DUST GENERATING DEBRIS FROM TIME OF FIRST CONTACT UNTIL PLACING INTO APPROPRIATE WASTE OR HAULING CONTAINERS OR TRUCKS. DEBRIS SHALL NOT BE ALLOWED TO DRY BEFORE REMOVED FROM SITE. REFER TO DETAIL DE-ESC 3.4.8 SHEET CS8502 FOR ADDITIONAL INFORMATION. THIS PRACTICE SHALL ALSO BE FOLLOWED FOR ANY BARE SOIL LEFT EXPOSED PRIOR TO PROPER VEGETATION OCCURS.
 - ALL MATERIALS AND WORKMANSHIP WITHIN THE STATE OF DELAWARE RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH CURRENT STATE OF DELAWARE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, SUPPLEMENTAL SPECIFICATIONS, STANDARD CONSTRUCTION DETAILS, SPECIAL PROVISIONS, PAS MANUAL AND DESIGN GUIDANCE MEMORANDUMS.
 - ALL NYLOPLAST BASINS AND INLINE DRAIN BASINS INSTALLED W/IN THE DELDOT RIGHT-A-WAY SHALL BE INSTALL PER THE NYLOPLAST H-20 TRAFFIC LOADING INSTALLATION DETAIL W/ CONC. COLLAR.
 - ALL DRIVEWAYS SHALL BE REPLACED AND OR REPAIRED IN KIND. COORDINATE WITH OWNER TO MAINTAIN ACCESS TO RESPECTIVE PROPERTIES.
 - ALL MAILBOXES SHALL BE REPLACED AND OR REPAIRED IN KIND. COORDINATE WITH OWNER TO MAINTAIN MAIL SERVICE DURING CONSTRUCTION.
 - ELEVATIONS ARE BASED ON NAVD 88, AND DE STATE PLANE COORDINATE SYSTEM NAD 83 HORIZONTAL DATUM.
 - UNLESS SPECIFICALLY STATED OR SHOWN HEREON TO THE CONTRARY, THIS SURVEY IS MADE SUBJECT TO AND DOES NOT LOCATE OR DELINEATE:
 - RIGHTS OR INTEREST OF THE UNITED STATES OF AMERICA OR STATE OF DELAWARE OVER LANDS NOW OR FORMERLY FLOWED BY TIDEWATER, BUT NO LONGER VISIBLE OR PHYSICALLY EVIDENT, OR LANDS CONTAINING ANY ANIMAL, MARINE OR BOTANICAL SPECIES REGULATED BY OR UNDER THE JURISDICTION OR ANY FEDERAL, STATE, OR LOCAL AGENCY.
 - BUILDING SETBACK LINES, ZONING REGULATIONS OR LINES ESTABLISHED BY ANY FEDERAL, STATE OR LOCAL AGENCY WHICH MAY AFFECT THE BUILDING OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.
 - ANY SUBSURFACE OR SUBTERRANEAN CONDITION, EASEMENTS OR RIGHTS, INCLUDING, BUT NOT LIMITED TO MINERAL OR MINING RIGHTS, OR THE LOCATION OF OR RIGHTS TO ANY SUBSURFACE STRUCTURES, CONTAINERS OR FACILITIES OR ANY OTHER NATURAL OR MAN-MADE SUBSURFACE CONDITION WHICH MAY OR MAY NOT AFFECT THE USE OR DEVELOPMENT POTENTIAL OF THE SUBJECT PROPERTY.
 - UTILITY NOTES:
 - THE LOCATION OF THE EXISTING UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN TAKEN FROM EXISTING UTILITY RECORDS AVAILABLE AT THE TIME THESE PLANS WERE PREPARED AND FROM SURFACE OBSERVATION OF THE SITE. LOCATIONS OF UTILITIES AS SHOWN AND MAY OR MAY NOT BE COMPLETE. THE NATURE AND EXACT LOCATION OF EXISTING UTILITIES SHOULD BE VERIFIED PRIOR TO INITIATING ANY ACTIVITY THAT MAY AFFECT THEIR USE OR LOCATION.
 - COMPLETENESS OR ACCURACY OF LOCATION AND DEPTH OF UNDERGROUND UTILITIES AND STRUCTURES IS NOT GUARANTEED.
 - BEFORE ANY EARTHWORK OR EXCAVATION TAKES PLACE, THE CONTRACTOR SHALL CALL MISS UTILITY AT 811 OR 1.800.282.8555 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION, TO HAVE ALL EXISTING UTILITIES MARKED ONSITE.
 - THE CONTRACTORS SHALL TEST PIT TO VERIFY LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND STRUCTURES BEFORE THE START OF WORK.
 - IF CONFLICTS ARE FOUND THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER AND DESIGN ENGINEER FOR INSTRUCTION BEFORE PROCEEDING WITH WORK.
 - STATE WETLAND FLAG SHOWN WAS PER DNREC DRAINAGE SECTION DELINEATION.
- REFERENCE:
- EXISTING CONDITIONS SURVEY PERFORMED BY DNREC/KCD.
 - THE PARCEL BOUNDARY LINES ARE FROM BEST AVAILABLE GIS DATA.

EROSION AND SEDIMENT CONTROL SEQUENCE OF CONSTRUCTION:

- NOTIFY THE DNREC DRAINAGE PROGRAM IN WRITING AT LEAST FIVE (5) DAYS PRIOR TO THE START OF CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
- PRIOR TO ANY CLEARING, INSTALLATION OF SEDIMENT CONTROL MEASURES, OR GRADING, A PRE-CONSTRUCTION MEETING MUST BE CONDUCTED WITH THE CONSTRUCTION SITE REVIEWER. THE LANDOWNER, CONTRACTOR AND CERTIFIED CONSTRUCTION REVIEWER ARE REQUIRED TO BE IN ATTENDANCE AT THE PRE-CONSTRUCTION MEETING; THE DESIGNER IS RECOMMENDED TO ATTEND.
- INSTALL THE STABILIZED CONSTRUCTION ENTRANCE(S) AS INDICATED ON THE PLAN, FOLLOWED BY THE PERIMETER CONTROLS (I.E., BERMS, SILT FENCE, COMPOST LOGS) AND INLET PROTECTION ON ANY EXISTING INLETS. MARK THE LIMITS OF SENSITIVE AREAS, SUCH AS PRESERVED TREES, INFILTRATION AREAS, AND OTHER SECTIONS THAT ARE NOT TO BE DISTURBED WITH A PHYSICAL BARRIER. ONLY CLEAR WOODS THAT ARE NEEDED TO INSTALL THE PERIMETER CONTROLS.
- SCHEDULE A PERIMETER CONTROL REVIEW WITH THE DNREC CONSTRUCTION SITE REVIEWER.
- ALL PERIMETER CONTROLS ARE TO BE REVIEWED BY THE DNREC CONSTRUCTION SITE REVIEWER AND APPROVED PRIOR TO PROCEEDING WITH FURTHER SITE DISTURBANCE OR CONSTRUCTION.
- THE CONTRACTOR SHALL AT ALL TIMES PROTECT AGAINST SEDIMENT LADEN RUNOFF OR WIND FROM LEAVING THE SITE. PERIMETER CONTROLS SHOULD BE CHECKED DAILY AND ADJUSTED AND/OR REPAIRED TO FULLY CONTAIN AND CONTROL SEDIMENTATION ON THE SITE. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED HALF OF THE EFFECTIVE CAPACITY OF THE CONTROL. IN ADDITION, THE CONTRACTOR MAY NEED TO ADJUST, REPAIR OR ALTER MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE DNREC CONSTRUCTION SITE REVIEWER.
- CLEAR AND GRUB THE CONSTRUCTION PROJECT LOD AREA AFTER COORDINATING WITH LANDOWNER ON ITEMS TO BE REMOVED.
- STOCKPILE TOPSOIL AND EXCAVATED SUBSOILS. STOCKPILES SHOULD BE SURROUNDED WITH A PERIMETER CONTROL, LOCATED ON LAND WITH SLIGHT TO NO SLOPE, AND STABILIZED ONCE INACTIVE.
- ALL SPOILS SHALL BE REMOVED FROM THE SITE IN SEALED TRUCKS AND DISPOSED OF IN A DNREC APPROVED MANNER.
- INSTALL R6 RIPRAP REVETMENT TO THE DETAILS SHOWN IN THE PROFILE, SECTION VIEW AND DETAILS.
- FINAL GRADE ALL DITCHES AND DISTURBED AREAS AND APPLY PERMANENT SEEDING AND STABILIZATION AS SOON AS FINAL GRADE IS ACHIEVED.
- THE EROSION AND SEDIMENT CONTROL DEVICES SHOULD BE REMOVED ONLY AFTER WORK IN AN AREA HAS BEEN COMPLETED AND STABILIZED, WITH WRITTEN APPROVAL FROM THE DNREC CONSTRUCTION SITE REVIEWER. COORDINATE THE INSPECTION, AND AFTER THE WRITTEN APPROVAL, REMOVE THE REMAINING CONSTRUCTION SITE CONTROLS.
- TERMINATE COVERAGE OF THE CONSTRUCTION GENERAL PERMIT, WHICH REQUIRES SUBMISSION AND ACCEPTANCE OF THE POST CONSTRUCTION VERIFICATION DOCUMENTS, INCLUDING FINAL STABILIZATION THROUGHOUT THE SITE, ALL ELEMENTS OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN IMPLEMENTED, ACCEPTANCE OF THE FINAL OPERATION AND MAINTENANCE PLAN, AND SUBMITTAL OF THE NOTICE OF TERMINATION.

EROSION AND SEDIMENT CONTROL GENERAL NOTES:

- THE DNREC SEDIMENT AND STORMWATER MANAGEMENT PROGRAM MUST BE NOTIFIED IN WRITING FIVE (5) DAYS PRIOR TO COMMENCING WITH CONSTRUCTION. FAILURE TO DO SO CONSTITUTES A VIOLATION OF THE APPROVED SEDIMENT AND STORMWATER MANAGEMENT PLAN.
- REVIEW AND OR APPROVAL OF THE SEDIMENT AND STORMWATER MANAGEMENT PLAN SHALL NOT RELIEVE THE CONTRACTOR FROM HIS OR HER RESPONSIBILITIES FOR COMPLIANCE WITH THE REQUIREMENTS OF THE SEDIMENT AND STORMWATER REGULATIONS, NOR SHALL IT RELIEVE THE CONTRACTOR FROM ERRORS OR OMISSIONS IN THE APPROVED PLAN.
- IF THE APPROVED PLAN NEEDS TO BE MODIFIED, ADDITIONAL SEDIMENT AND STORMWATER CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY DNREC.
- FOLLOWING SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED FOR ALL PERIMETER SEDIMENT CONTROLS, SOIL STOCKPILES, AND ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE WITHIN 14 CALENDAR DAYS UNLESS MORE RESTRICTIVE FEDERAL REQUIREMENTS APPLY, OR IF A MORE RESTRICTIVE REQUIREMENTS NOTED ON THE PLANS.
- ALL EROSION AND SEDIMENT CONTROL PRACTICES SHALL COMPLY WITH THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
- AT ANY TIME A DEWATERING OPERATION IS USED, IT SHALL BE PREVIOUSLY APPROVED BY THE AGENCY CONSTRUCTION SITE REVIEWER FOR A NON-EROSIVE POINT OF DISCHARGE, AND A DEWATERING PERMIT SHALL BE APPROVED BY THE DNREC WELL PERMITTING BRANCH.
- APPROVED PLANS REMAIN VALID FOR 5 YEARS FROM THE DATE OF APPROVAL.
- THE NOTICE OF INTENT FOR STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER A NPDES GENERAL PERMIT FOR THIS PROJECT IS #_____ . AT ANY TIME THE OWNERSHIP FOR THIS PROJECT CHANGES, A TRANSFER OF AUTHORIZATION OR A CO-PERMITTEE APPLICATION MUST BE SUBMITTED TO DNREC. THE PERMITTEE OF RECORD SHALL NOT BE RELIEVED OF THEIR RESPONSIBILITIES UNTIL A NOTICE OF TERMINATION HAS BEEN PROCESSED BY DNREC. [OR] A NOTICE OF INTENT IS NOT REQUIRED FOR THIS PROJECT SINCE DISTURBANCE IS LESS THAN 1 ACRE.
- THE OWNER SHALL BE FAMILIAR WITH AND COMPLY WITH ALL ASPECTS OF THE NPDES CONSTRUCTION GENERAL PERMIT ASSOCIATED WITH THE PROJECT, INCLUDING, BUT NOT LIMITED TO, PERFORMING WEEKLY SITE INSPECTIONS DURING CONSTRUCTION AND AFTER RAIN EVENTS, AND MAINTAINING WRITTEN LOGS OF THESE INSPECTIONS.
- THE CONTRACTOR SHALL AT ALL TIMES PROTECT AGAINST SEDIMENT OF DEBRIS LADEN RUNOFF OR WIND FROM LEAVING THE SITE. PERIMETER CONTROLS SHALL BE CHECKED DAILY AND ADJUSTED AND/OR REPAIRED TO FULLY CONTAIN AND CONTROL SEDIMENT FROM LEAVING THE SITE. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT HAS REACHED HALF OF THE EFFECTIVE CAPACITY OF THE CONTROL. IN ADDITION, THE CONTRACTOR MAY NEED TO ADJUST OR ALTER MEASURES IN TIMES OF ADVERSE WEATHER CONDITIONS, OR AS DIRECTED BY THE AGENCY SITE REVIEWER.
- BEST AVAILABLE TECHNOLOGY (BAT) SHALL BE EMPLOYED TO MANAGE TURBID DISCHARGES IN ACCORDANCE WITH REQUIREMENTS OF 7. DEL C. CH 60, REGULATIONS GOVERNING THE CONTROL OF WATER POLLUTION, SECTION 9.1.02, KNOWN AS SPECIAL CONDITIONS FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES AND DEPARTMENT POLICIES, PROCEDURES, AND GUIDANCE.
- DOCUMENTATION OF SOIL TESTING AND MATERIALS USED FOR TEMPORARY OR PERMANENT STABILIZATION INCLUDING BUT NOT LIMITED TO SOIL TEST RESULTS, SEED TAGS, SOIL AMENDMENT TAGS, ETC, SHALL BE PROVIDED TO THE DEPARTMENT OR DELEGATED AGENCY TO VERIFY THAT THE PERMANENT OR TEMPORARY STABILIZATION HAS BEEN COMPLETED IN ACCORDANCE WITH THE APPROVED PLAN AND THE STANDARDS AND SPECIFICATIONS OF THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. THE DEPARTMENT OF THE DELEGATED AGENCY SHALL HAVE THE DISCRETION TO REQUIRE ADDITIONAL SOIL TESTING AND REAPPLICATION OF PERMANENT OR TEMPORARY STABILIZATION IN ACCORDANCE WITH THE SPECIFICATION PROVIDED WITHIN THE DELAWARE EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

REVISIONS	DESCRIPTION	DATE



SUSSEX CONSERVATION DISTRICT
 23818 SHORTLY RD., GEORGETOWN, DE 19557
 PHONE: (0302)552-1105 FAX: (0302)552-0951

DNREC - Division of Watershed Stewardship
 Drainage Program
 Dover Office
 285 Beiser Blvd., Suite 102 Phone: (302) 739-9921 21309 Berth Rd. Unit 6 Phone: (302) 855-1930
 Dover DE, 19901 Fax: (302) 739-6724 Georgetown DE, 19447 Fax: (302) 677-7659

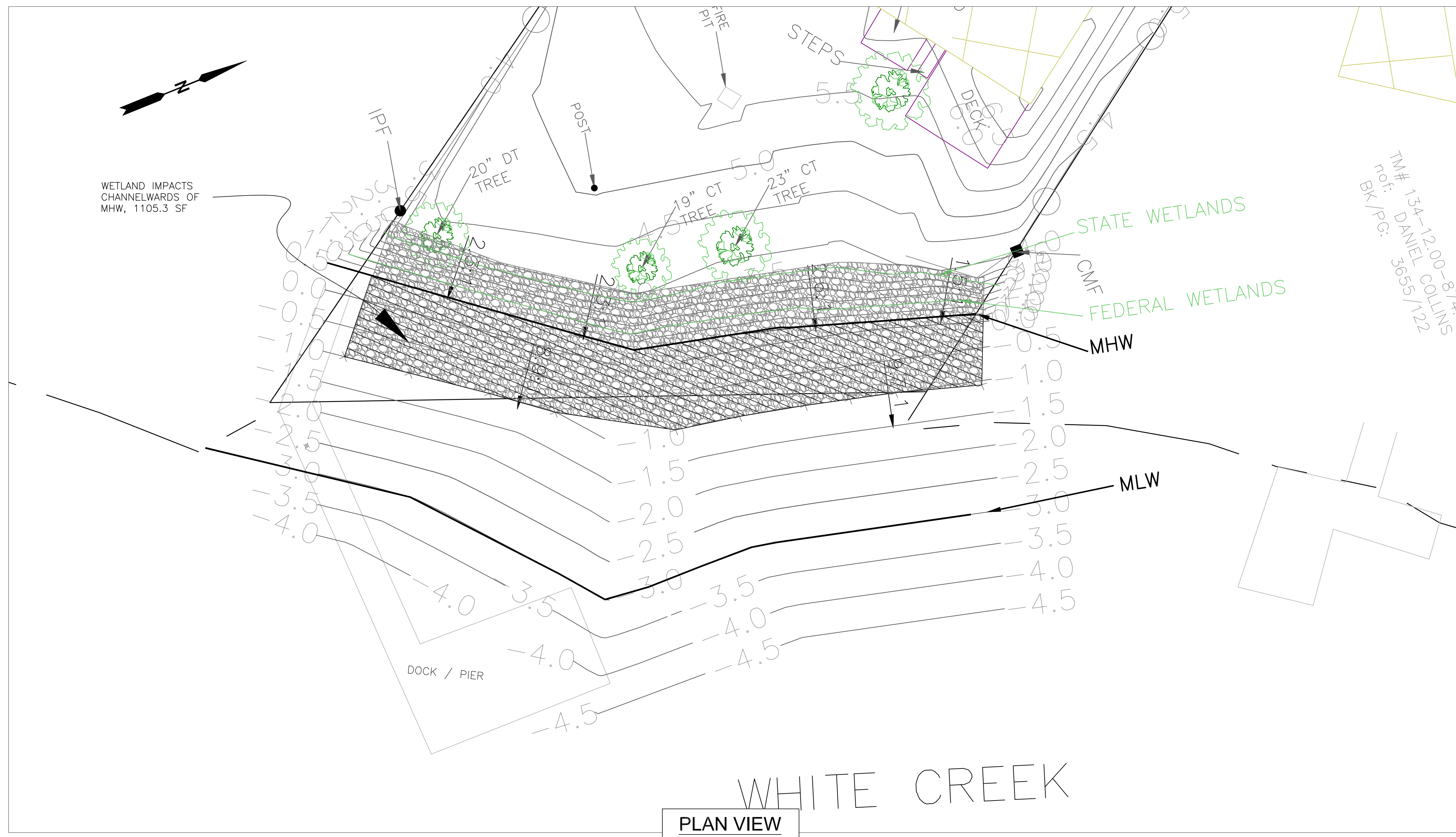


CARROLL
 SHORELINE REVETMENT PROJECT
 WHITE'S CREEK / INLAND BAY WATERSHED
 OCEAN VIEW, DELAWARE

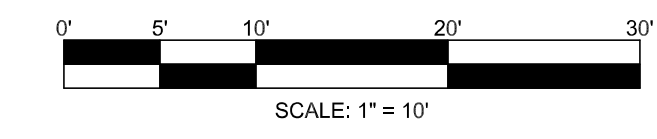
**EROSION & SEDIMENT CONTROL
 DETAILS AND NOTES**

**PRELIMINARY
 FOR REVIEW ONLY**

Date:	12/20/2023
Designed:	JLE, WA
Planned:	JLE, WA, MM
Drawn:	JLE



PLAN VIEW
SCALE: 1" = 10'



DATE	REVISIONS	DESCRIPTION



SUSSEX CONSERVATION DISTRICT
23818 SHORTLY RD., GEORGETOWN, DE 19957
PHONE: (800) 856-2008 FAX: (800) 856-6981

DNREC - Division of Watershed Stewardship
Drainage Program
Georgetown Office
21309 Berlin Rd. Unit 6 Phone: (302) 855-1930
Georgetown DE, 19947 Fax: (302) 677-7059

Dover Office
285 Baister Blvd., Suite 102 Phone: (302) 739-9921
Dover DE, 19901 Fax: (302) 739-6724

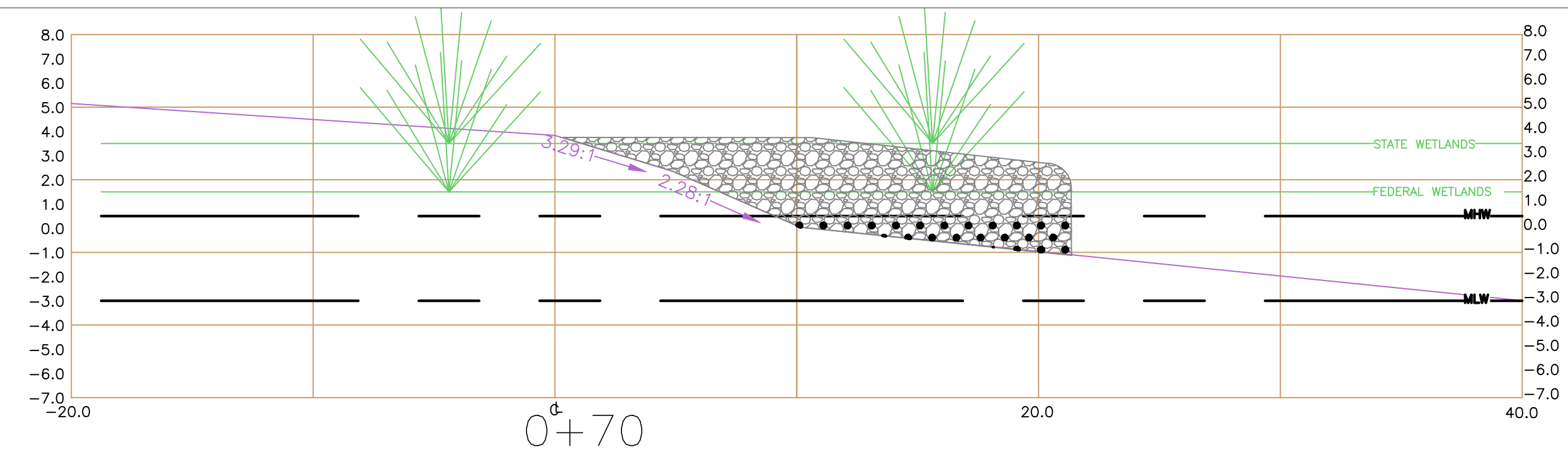


CARROLL
SHORELINE REVITMENT PROJECT
WHITE'S CREEK / INLAND BAY WATERSHED
OCEAN VIEW, DELAWARE
WETLAND PLAN VIEW
EXHIBIT

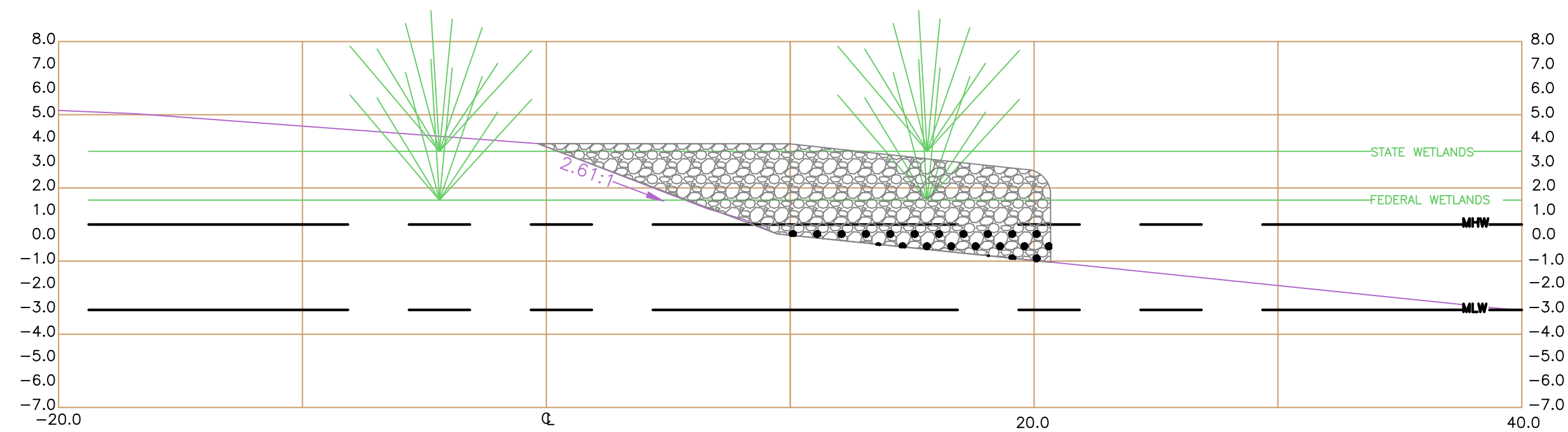
**PRELIMINARY
FOR REVIEW ONLY**

Date:	12/20/2023
Designed:	JLE, WA
Planned:	JLE, WA, MM
Drawn:	JLE

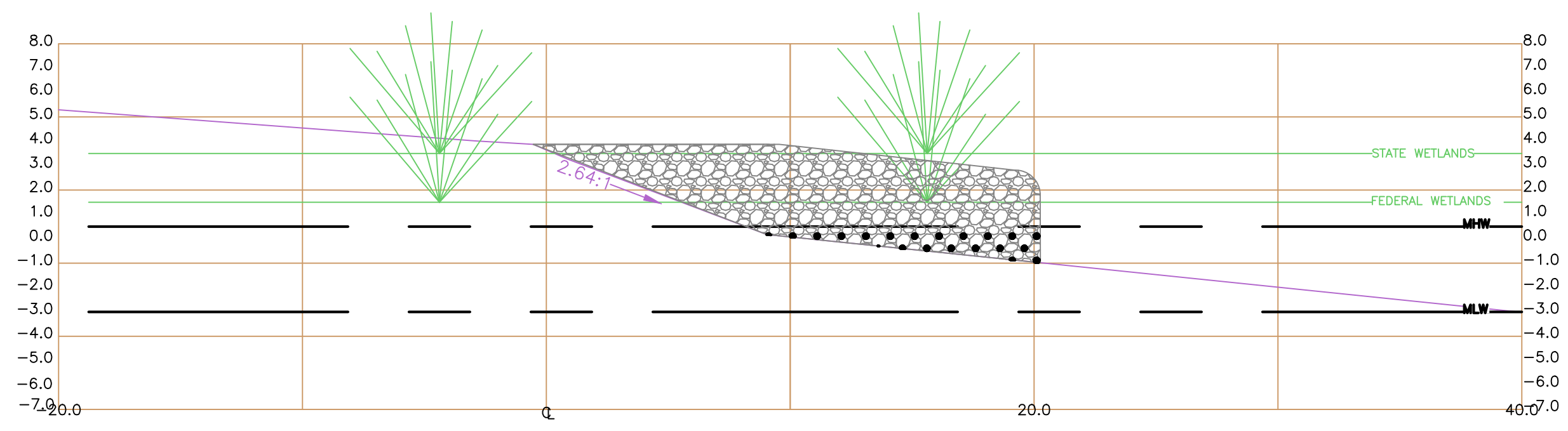
Sheet No. **EX-1**



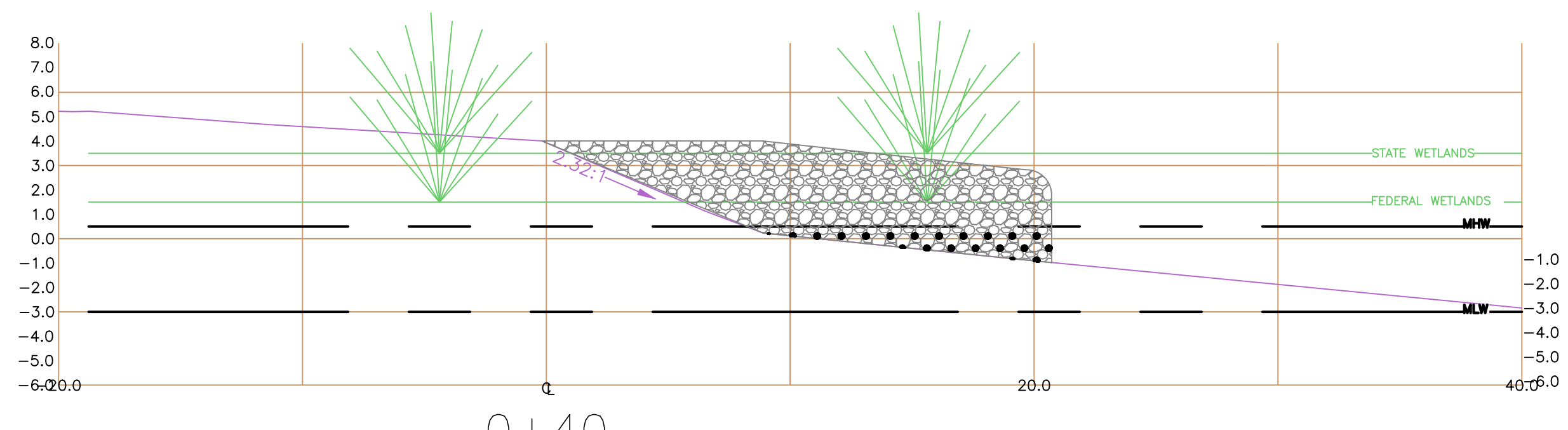
MHW CHANNELWARD WETLAND Fill 11.98sf



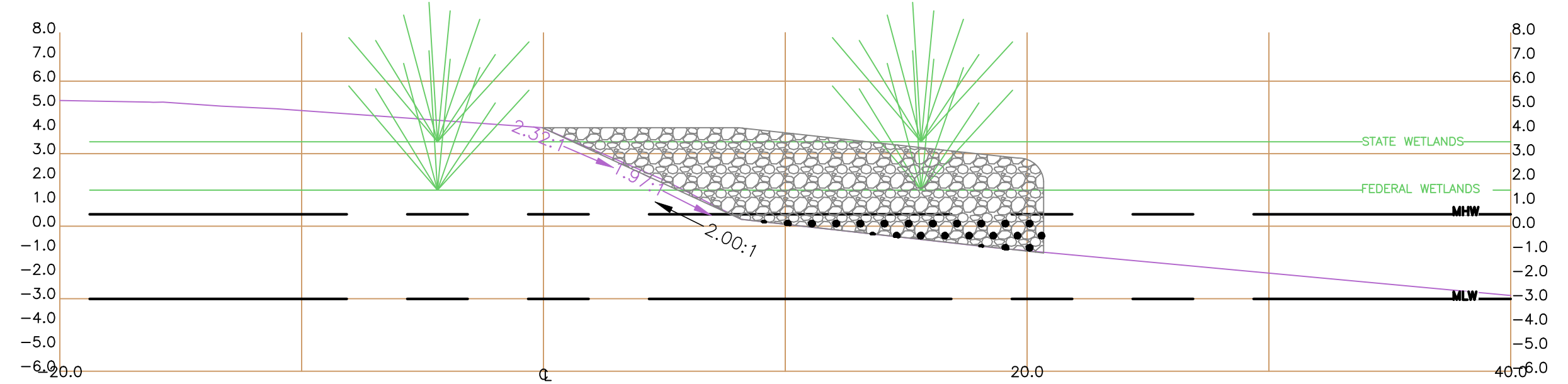
MHW CHANNELWARD WETLAND Fill 11.08sf



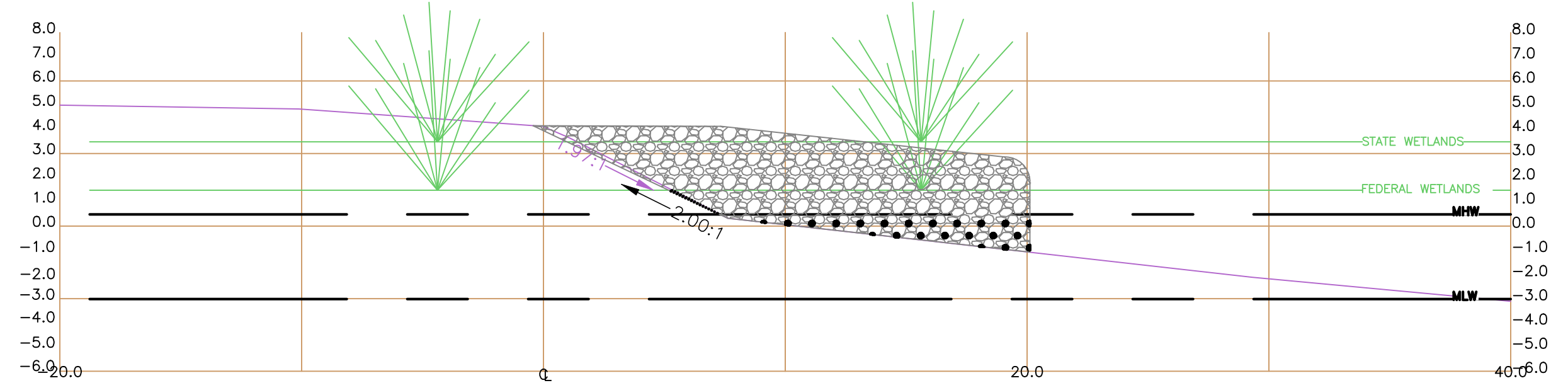
MHW CHANNELWARD WETLAND Fill 10.30sf



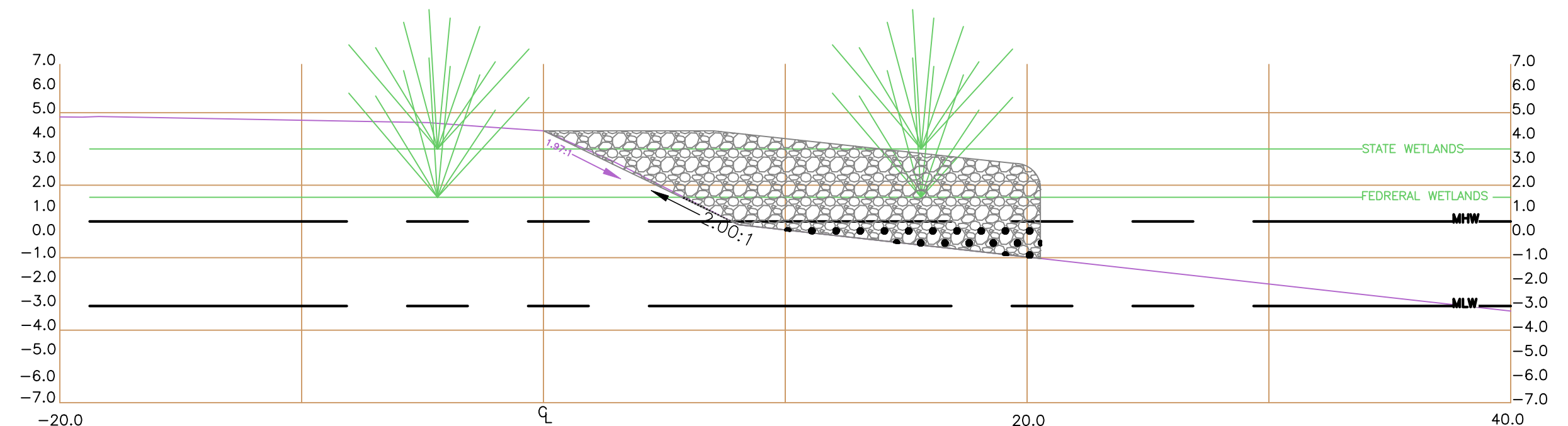
MHW CHANNELWARD WETLAND Fill 10.45sf



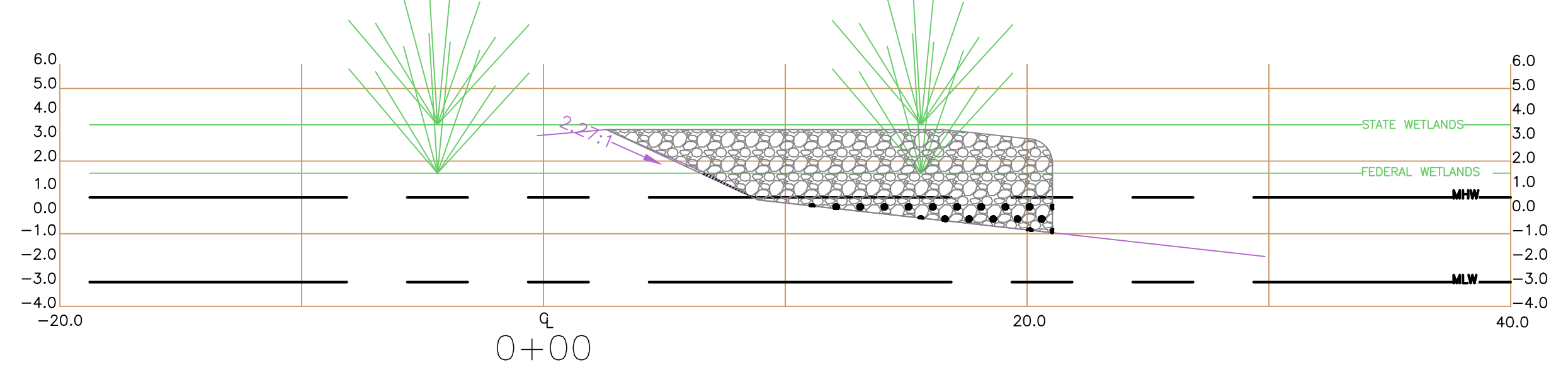
MHW CHANNELWARD WETLAND Fill 11.38sf



MHW CHANNELWARD WETLAND Fill 10.81sf



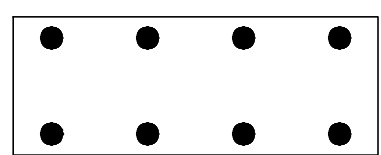
MHW CHANNELWARD WETLAND Fill 10.42sf



MHW CHANNELWARD WETLAND Fill 9.52sf

SECTION VIEWS
SCALE: 1" = 5'

WETLAND IMPACTS
CHANNELWARDS OF
MHW



REVISIONS	DESCRIPTION
DATE	



SUSSEX CONSERVATION DISTRICT
23818 SHORTLY RD. GEORGETOWN, DE 19957
PHONE: (302) 856-2065 FAX: (302) 856-0951

DNREC - Division of Watershed Stewardship
Drainage Program
Georgetown Office
21309 Berlin Rd. Unit 6 Phone: (302) 854-1930
Dover Office
285 Beiter Blvd., Suite 102 Phone: (302) 739-9921
Dover, DE 19901
Fax: (302) 739-6724
Georgetown, DE 19947 Fax: (302) 677-7059

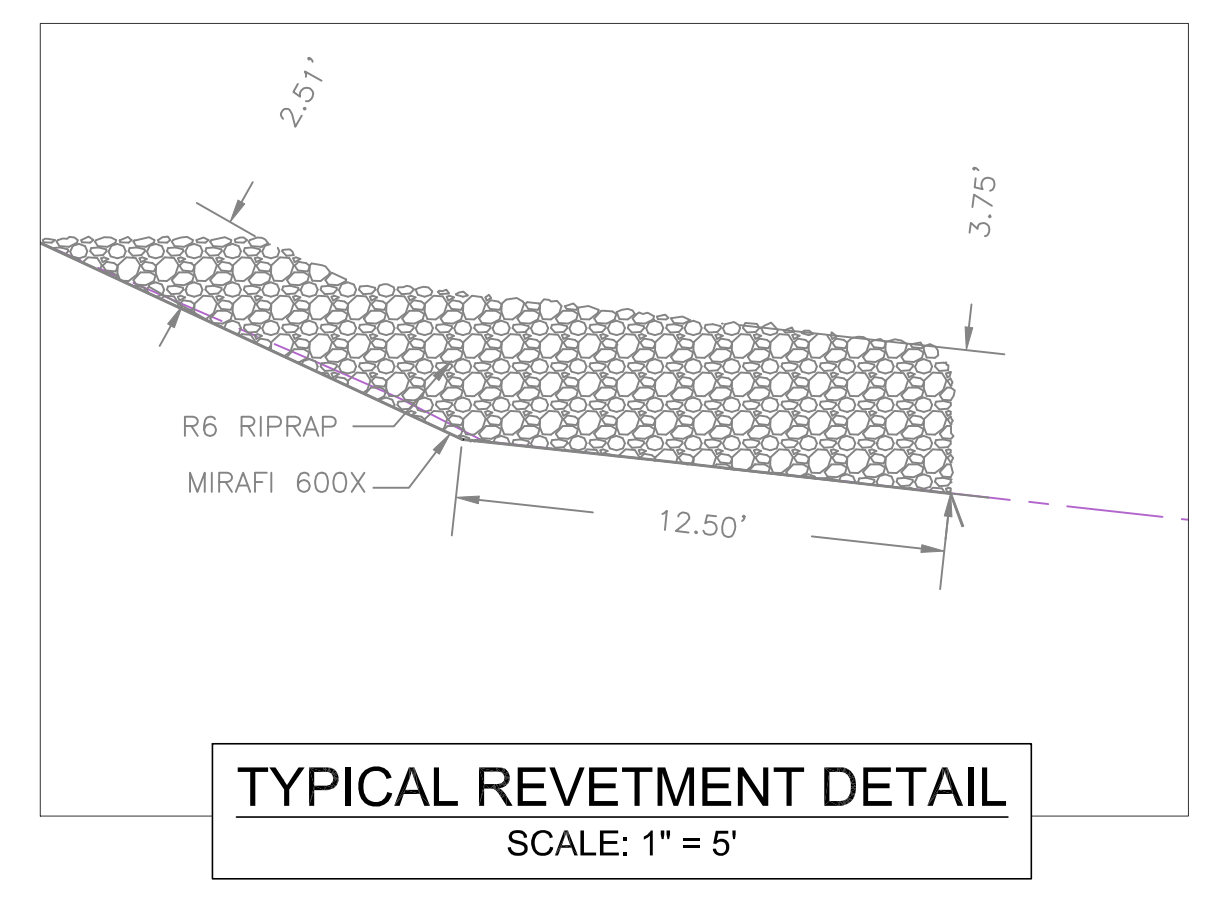
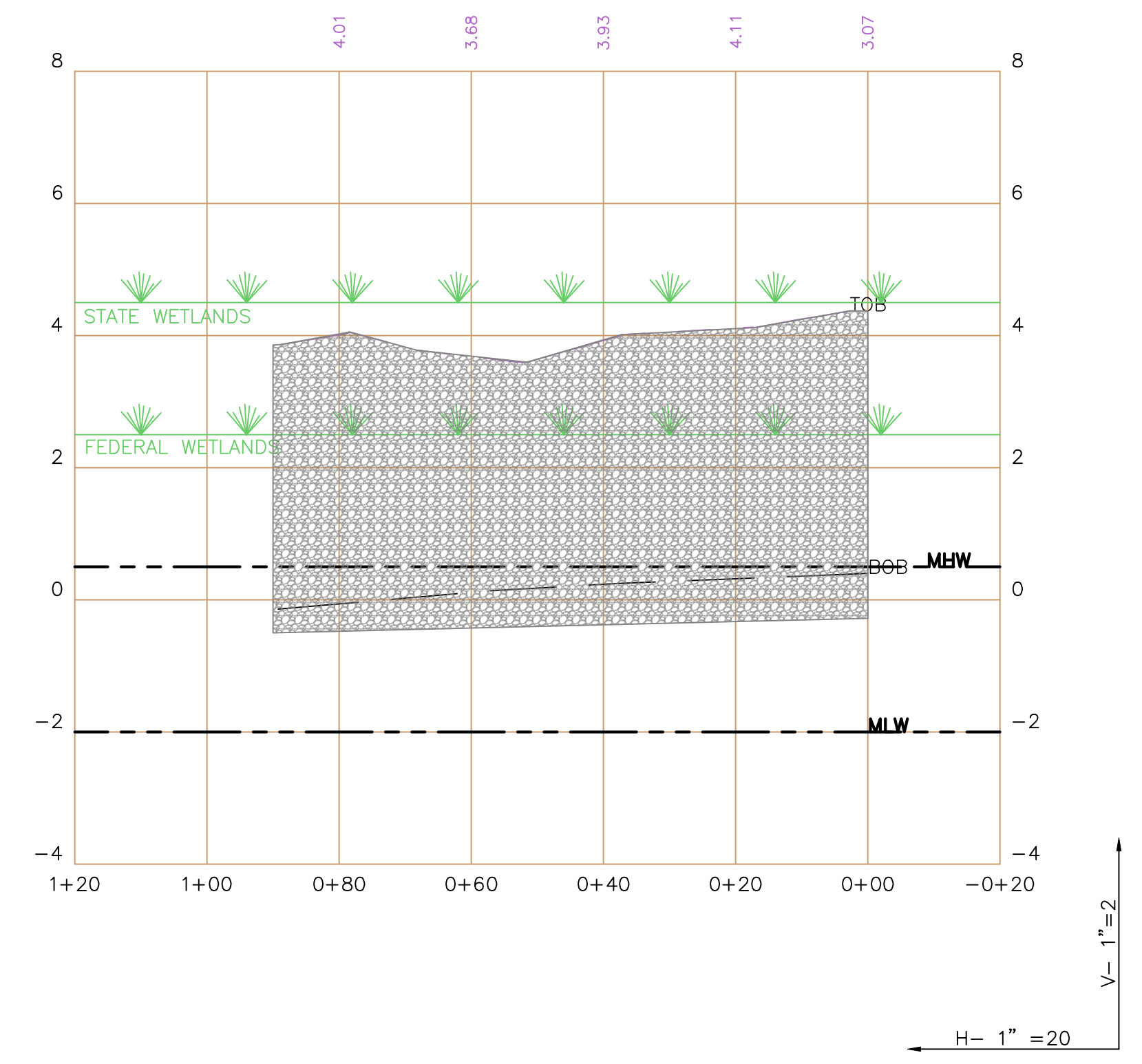
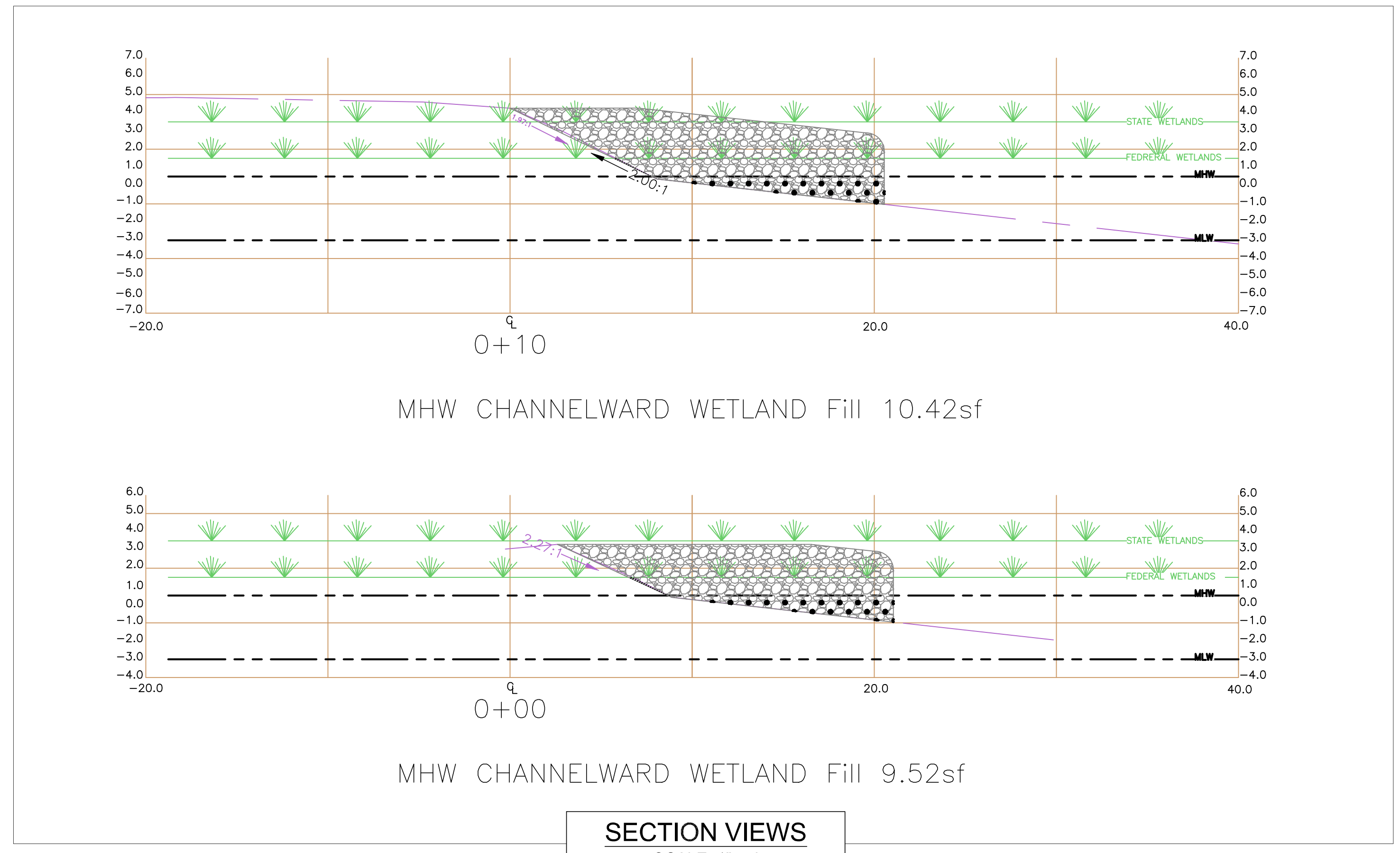


CARROLL
SHORELINE REVETMENT PROJECT
WHITE'S CREEK / INLAND BAY WATERSHED
OCEAN VIEW, DELAWARE
WETLAND SECTION VIEW PLAN
EXHIBIT

PRELIMINARY
FOR REVIEW ONLY

Date:	12/20/2023
Designed:	JLE, WA
Planned:	JLE, WA, MM
Drawn:	JLE

EX-2



- CONSTRUCTION NOTES:**
- R6 RIPRAP SHALL BE USED FOR THE SHORELINE REVETMENT.
 - THE REVETMENT SHALL BE 30" THICK.
 - CLEAR AND GRUB THE SLOPE AND DISPOSE OF SPOILS IN A DNREC APPROVAL OFFSITE LOCATION.
 - ANY SPOILS GENERATED FROM THE THIS PROJECT SHALL BE REMOVED AND DISPOSED IN A DNREC APPROVED LOCATION AND TRANSPORTED IN SEALED TRUCKS.
 - ALL RIPRAP SHALL BE PLACED OVER A GEOTEXTILE UNDER-LAYMENT MIRAFI 600X.
 - THE GEOTEXTILE UNDER-LAYMENT SHALL BE KEYED IN AT THE TOP OF BANK.

END AREA VOLUME CALCULATION
(from section views)

STATION	END AREA (SF)	VOLUME (CF)
0	9.52	0
10	10.42	99.7
20	10.81	106.15
30	11.38	110.95
40	10.45	109.15
50	10.3	103.75
60	11.08	106.9
70	11.98	115.3
80	12.24	121.1
90	13.77	130.05

CUM. VOLUME (CF)	1003.05
CY	37.15
WETLAND FILL (CY/FT)	0.41

$((sf1 + sf2) * length) / 2 = CF$

REVISIONS	DESCRIPTION
DATE	



SUSSEX CONSERVATION DISTRICT
23818 SHORTLY RD., GEORGETOWN, DE 19957
PHONE: (302) 855-2105 FAX: (302) 855-0951

DNREC - Division of Watershed Stewardship
Drainage Program
Georgetown Office
21309 Berlin Rd. Unit 6 Phone: (302) 855-1930
Dover Office
385 Reister Blvd., Suite 102 Phone: (302) 739-9921
Dover DE, 19901 Fax: (302) 739-6724 Georgetown DE, 19847 Fax: (302) 677-7059

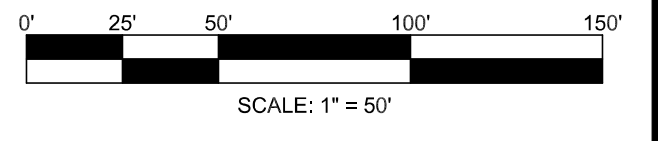


CARROLL
SHORELINE REVETMENT PROJECT
WHITE'S CREEK / INLAND BAY WATERSHED
OCEAN VIEW, DELAWARE
WETLAND PROFILE / SECTION VIEW
CONSTRUCTION DETAIL PLAN
EXHIBIT

PRELIMINARY FOR REVIEW ONLY

Date: 12/20/2023
Designed: JLE, WA
Planned: JLE, WA, MM
Drawn: JLE

Sheet No. **EX-3**



1-34 12.00 875.00
PREPARED BY & RETURN TO:
Sergovic Carmean Weidman
McCartney & Owens, P.A.
25 Chestnut Street
P.O. Box 751
Georgetown, DE 19947-0751
File No. RE-11925

THIS DEED, made this 23 day of November, 2020,

- BETWEEN -

PENNY LYNN DEITH of 30891 Cedar Neck Road, Ocean View, DE 19970, PENNY LYNN DEITH, ATTORNEY-IN-FACT FOR BONITA ANN MCBRIDE of 308 Steamboat Lane, Dagsboro, DE 19939, PENNY LYNN DEITH, ATTORNEY-IN-FACT FOR DONNA LEE NUGENT of 30619 Cedar Neck Road, Unit 1304, Ocean View, DE 19970 and PENNY LYNN DEITH, ATTORNEY-IN-FACT FOR JOANNE MCBRIDE A/K/A JOANN MCBRIDE of 250 S. Whiting Street, Apt, 420, Alexandria, VA 22304, parties of the first part,

- AND -

AGNES M. CARROLL, of 805 Hickman Drive, Ocean View, DE 19970, as sole owner, party 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), lawful money of the United States of America, the receipt whereof is hereby acknowledged, hereby grant and convey unto the party of the second part, and her heirs and assigns:

ALL that certain lot, piece or parcel of land situate, lying and being in Baltimore Hundred, Sussex County, Delaware, being known and designated as LOT NUMBER THIRTY-THREE (33), BLOCK A, SECTION ONE (1), WHITE'S CREEK MANOR, as shown on a plot of White's Creek Manor, Section 1, prepared by Mann Associates, Registered Surveyors, dated March 29, 1973, which said plot is filed for record in the Office of the Recorder of Deeds in and for Sussex County, at Georgetown, Delaware, in Plot Book 8, at Page 649, and being more particularly described in accordance with a recent survey prepared by Cotten Engineering LLC, Michael Soule Cotten, Professional Engineer, November 2, 2020, as follows, to wit:

COMMENCING at a concrete monument found, said monument having coordinates in the Delaware State Plane coordinate system of N: 201471.69 and E:746672.91, said monument also being the point and place of **BEGINNING** and a corner for the lands described herein and the lands now or formerly of Daniel Collins and lying on the southeasterly right of way line of

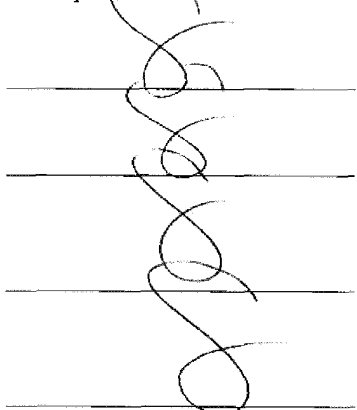
Hickman Drive (40' wide), thence with the lands now or formerly of Collins, having a bearing of South 35°29'33" East for a distance of 155.00 feet, passing over a concrete monument found at 130.11 feet, said monument being the first point in a tie line, to a point, thence turning and running with the meanderings of White Creek in a southwesterly direction for a distance of 97.29 feet, running approximately parallel to a tie line having a bearing of South 25°42'50" West for a distance of 91.59 feet, to a point, thence with the lands now or formerly of James F. Nagel III, having a bearing of North 33°46'15" West for a distance of 210.00 feet, passing over an iron pipe found at 34.49 feet, said pipe being the termination point of the previously mentioned tie line, to a concrete monument found, thence with the right of way line of Hickman Drive, thence with a curve to the left having a chord bearing of North 55°25'34" East for a distance of 75.00 feet, having a radius of 2,335.00 feet and an arc length of 75.00 feet, to the point and place of **BEGINNING, CONTAINING** 14,160± square feet or 0.325± acres, more or less, together with all of the improvements located thereon.

BEING the same lands conveyed to Byron M. McBride and Barbara A. McBride by Deed of Riley S. Williamson and Doreen S. Williamson dated September 25, 1997 and filed for record in the Office of the Recorder of Deeds, in and for Sussex County at Georgetown, Delaware, in Deed Book 2235, page 263. Barbara A. McBride departed this life June 28, 2008 at which time the property passed unto Bryon M. McBride, in its entirety by right of survivorship. Byron M. McBride departed this life intestate April 14, 2020 at which time the property passed unto his only heirs at law, Penny Lynn Deith, Bonita Ann McBride, Donna Lee Nugent and Joanne McBride under the intestate laws of the State of Delaware.

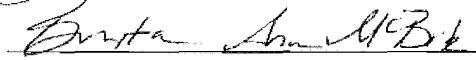
SUBJECT to any and all restrictions, reservations, conditions, easements and agreements of record in the Office of the Recorder of Deeds, in and for Sussex County, Delaware.

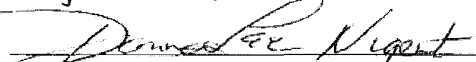
IN WITNESS WHEREOF, the parties of the first part have hereunto set their hands and seals the day and year first above written.

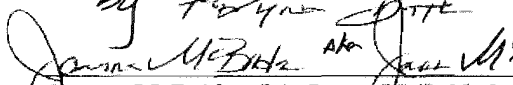
Signed, Sealed and Delivered
in the presence of:



 (SEAL)
Penny Lynn Deith

 (SEAL)
Bonita Ann McBride by Penny Lynn Deith, AIF
by Penny Lynn Deith A.I.F.

 (SEAL)
Donna Lee Nugent by Penny Lynn Deith, AIF
by Penny Lynn Deith A.I.F.

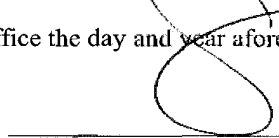
 (SEAL)
Joanne McBride a/k/a Joann McBride by Penny
Lynn Deith, AIF
by Penny Lynn Deith A.I.F.

STATE OF DE, COUNTY OF Sussex : to-wit

BE IT REMEMBERED, that on November 23, 2020, personally came before me, the subscriber, Penny Lynn Deith and Penny Lynn Deith, Attorney-in-Fact for Bonita Ann McBride, Donna Lee Nugent and Joanne McBride, party of the first part to this Indenture, known to me personally to be such, and acknowledged this Indenture to be her act and deed.

Given under my Hand and Seal of office the day and year aforesaid.

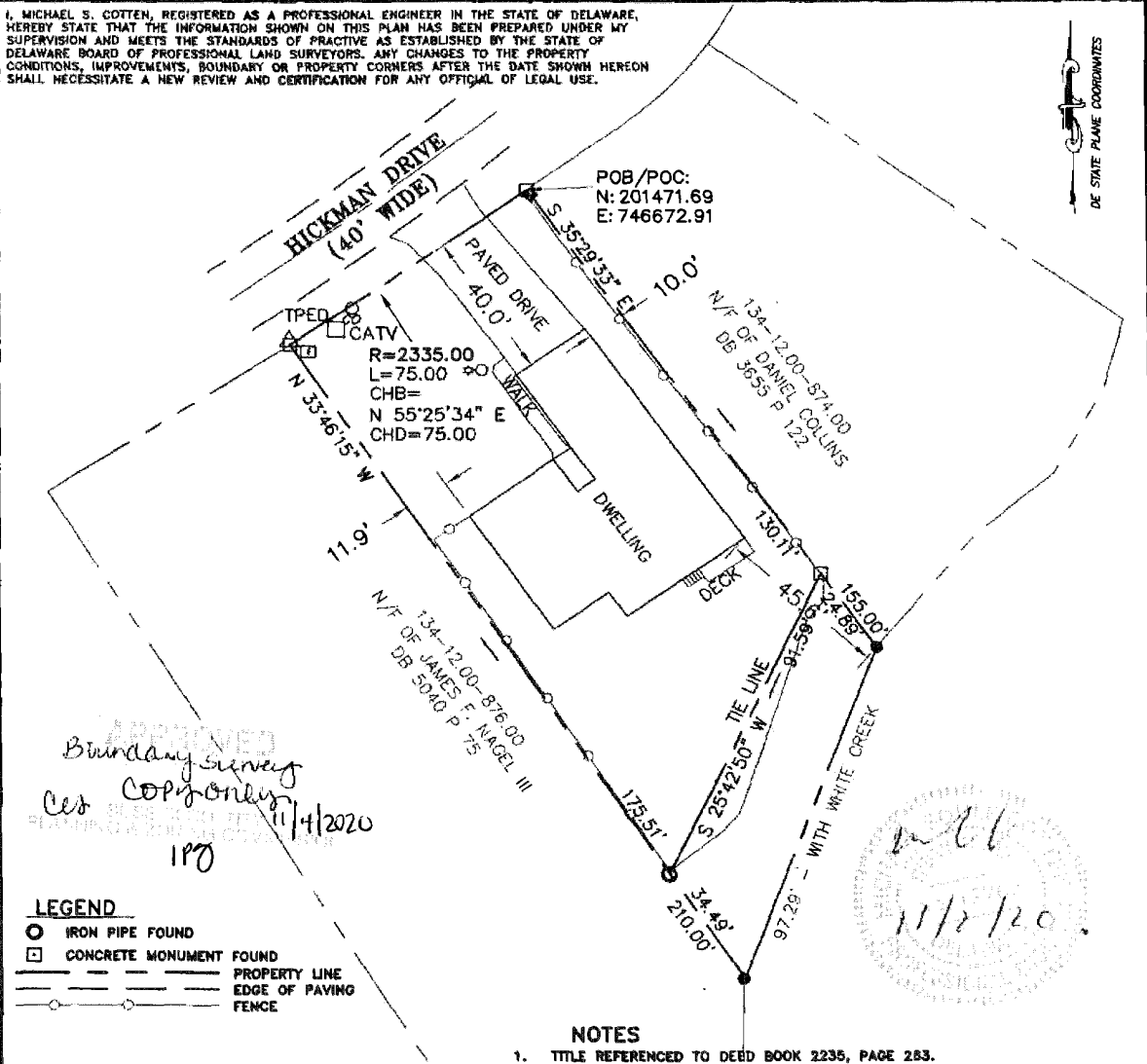
Shannon Carmean Eurtan
Attorney
Admitted to the Delaware Bar 12-15-03
Bar ID #004386
Uniform Law on Notarial Acts
Pursuant to 20 Del C Sec. 4323(a)(3)



Notary Public
Printed Name: _____
My Commission Expires: _____

I, MICHAEL S. COTTEN, REGISTERED AS A PROFESSIONAL ENGINEER IN THE STATE OF DELAWARE, HEREBY STATE THAT THE INFORMATION SHOWN ON THIS PLAN HAS BEEN PREPARED UNDER MY SUPERVISION AND MEETS THE STANDARDS OF PRACTICE AS ESTABLISHED BY THE STATE OF DELAWARE BOARD OF PROFESSIONAL LAND SURVEYORS. ANY CHANGES TO THE PROPERTY CONDITIONS, IMPROVEMENTS, BOUNDARY OR PROPERTY CORNERS AFTER THE DATE SHOWN HEREON SHALL NECESSITATE A NEW REVIEW AND CERTIFICATION FOR ANY OFFICIAL OF LEGAL USE.

DE STATE PLANE COORDINATES



APPROVED
 Boundary Survey
 ces copy only
 11/4/2020
 190

mll
 11/2/20

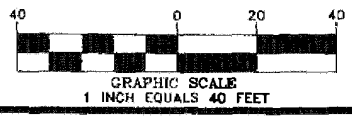
- LEGEND**
- IRON PIPE FOUND
 - CONCRETE MONUMENT FOUND
 - PROPERTY LINE
 - - - EDGE OF PAVING
 - FENCE

NOTES

1. TITLE REFERENCED TO DEED BOOK 2235, PAGE 253.
2. "SUBURBAN" SURVEY.
3. SUBJECT TO ANY AND ALL RESTRICTIONS, RESERVATIONS, CONDITIONS, EASEMENTS & AGREEMENTS OF RECORD IN THE OFFICE OF RECORDER OF DEEDS, SUSSEX COUNTY, DE. NO TITLE SEARCH PROVIDED.
4. THIS SURVEY DOES NOT CERTIFY THE EXISTENCE OR NON EXISTENCE OF ANY EASEMENTS OR RIGHT OF WAYS AFFECTING THIS PROPERTY. NO TITLE SEARCH WAS PERFORMED OR PROVIDED.
5. FEMA FLOOD ZONE 'AE' ELEVATION 7.0 FEET PER FEMA PANEL 10D05C0511K, EFF 03/16/2015

BOUNDARY SURVEY
 FOR AGNES CARROLL
 OF LANDS N/F OF
 BYRON & BARBARA MCBRIDE
 LOT 33, BLOCK A, SEC 1,
 WHITE CREEK MANOR SUBDIVISION
 805 HICKMAN DRIVE
 OCEAN VIEW, DE 19970
 BALTIMORE HUNDRED
 TAX MAP #134-12.00-875.00
 AREA: 14,160±SF OR 0.325±ACRES

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 CIVIL ENGINEERS
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DESIGNED BY: CE	REV:	JOB # 20-518
DRAWN BY: JCD	DATE: 11/02/2020	SHEET 1 OF 1
CHECKED BY: MSC	SCALE: AS-SHOWN	