

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: Charles Baird Telephone #: 3028551930
 Mailing Address: 210309 Berlin Rd. Fax #: _____
 Unit 6 E-mail: Charles.Baird@delaware.gov
Georgetown, DE 19947
2. Consultant's Name: Michael Case Company Name: DNREC Drainage Program
 Mailing Address: 21309 Berlin Rd Telephone #: 3028551939
 Unit 6 Fax #: _____
Georgetown, DE 19947 E-mail: michael.case@delaware.gov
3. Contractor's Name: _____ Company Name: _____
 Mailing Address: _____ 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):
 The purpose of this project is to aid in drainage from Riverdale Park community on River Run Rd. and eliminate the need for continual clearing of sediment from the outfall pipe. The existing pipe will be upgraded to modern standards and supports to keep it in place.
 The outfall pipe will provide an effective means of relocating the water into the Bay. A backflow prevention device will be added to the extended pipe due to the tidal influences on the system; this will reduce the duration of flooding within the vicinity.
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 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 checked="" 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: 32424 River Run Road County: N.C. Kent Sussex
Millsboro, DE Site owner name (if different from applicant): RIVERDALE PARK LLC
19966 Address of site owner: 32424 River Run Road
Millsboro, DE 19966
8. Driving Directions: see attached
 (Attach a vicinity map identifying road names and the project location)
9. Tax Parcel ID Number: 234-34.00-84.00 Subdivision Name: _____

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: \$ _____		Receipt #: _____					
Public Notice #: _____		Public Notice Dates: ON _____		OFF _____					

Section 3: Project Location (Continued)

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

11. Is the waterbody: Tidal Non-tidal Waterbody width at mean low or ordinary high water approx. 7550'

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:

RIVERDALE PARK LLC

(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):

RIVERDALE PARK LLC
MAILING ADDRESS 28301 CHIEF RD
CITY MILLSBORO
STATE DE

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:

Michael Yost- Army Corps of Engineer

Matt Jones - DNREC W&S

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 Q1 2024

Type of Permit: NWP - 3 & 7 Federal Permit or ID #: TBD

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, Charles Baird, hereby designate and authorize Michael Case
 (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: Michael Case Telephone #: 3028551939
 Mailing Address: 21309 Berlin Rd Fax #: _____
Unit 6 georgetown DE 19947 E-mail: michael.case@delaware.gov

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.

M. Case
 Agent's Signature

12/20/2023
 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.

Charles J Baird
 Applicant's Signature

12/20/2023
 Date

Charles J Baird
 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

INTAKE OR OUTFALL STRUCTURES

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

1. How many feet will the intake or outfall structure(s) be placed channelward of the:

Outlet pipe invert will be located at elevation -1.36. Mean high water is at elevation 2.67, and mean low water is at elevation 0.15. The outlet will extend 48' past the existing bulkhead.

Tidal waters: mean high water line? 48 ft.
mean low water line? 48 ft.

Non-tidal waters: ordinary high water line? _____ ft.

2. What type of material(s) will be used to construct the intake or outfall structure(s)?

The outfall pipe will be HDPE.

3. What is the appropriate median stream flow rate at the: N/A

intake site _____ cfs outfall site _____ cfs unknown _____

4. What will be the daily rate of withdrawal at the intake site? N/A gpd

5. What will be the intake velocity? N/A fps

6. What will be the mesh size of the screen used on the intake structure?

_____ inches _____ other (explain) N/A

7. What will be the daily rate of return at the outfall site? N/A gpd

8. Have you applied for the National Pollutant Discharge Elimination System (NPDES) permit for this project?

Yes _____ No If your answer is "No", contact the Surface Water Discharges Section, DNREC.

In progress

9. Will a splash apron be employed at the outfall site? _____ Yes No

If your answer is "Yes" complete Appendix I.

If your answer is "No", explain your proposed method of preventing erosion.

Discharge pipe will extend over the Indian River Bay to provide vertical clearance from sand and sediment.

10. How far will any associated structures for support or erosion control (e.g. wing walls, pile, bents, splash aprons, etc.) extend channelward of the:

Tidal waters: mean high water line? 48 ft. mean low water line? 4.8 ft.

Non-tidal waters: ordinary high water line? _____ ft.

Outfall extends 48 feet out from existing bulkhead over the Indian River Bay and will be supported by wooden piles for that length. Mean high water is at elevation 2.67, and mean low water is at elevation 0.15.

11. How many square feet of any associated structures for support or erosion control will be located:

Channelward of mean high water? 2638 sq. ft. In vegetated wetlands? 0 sq. ft.

12. Is there any dredging or fill associated with this project? Yes _____ No

If yes, please complete the appropriate appendix.

*spoke to Matthew Jones (1/17/20). No dredging will occur.

GENERAL NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL LANDOWNERS, UTILITIES AND PIPELINE COMPANIES AT LEAST 5 WORKING DAYS PRIOR TO MOBILIZATION. ALL UNDERGROUND PIPELINES AND UTILITIES SHALL BE MARKED BY THE CONTRACTOR. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN THE CLEARANCES FROM THE PIPELINES AS REQUIRED BY THE PIPELINE COMPANY.
- THE CONTRACTOR SHALL IMMEDIATELY REPAIR ALL DAMAGES TO ANY FACILITY, EQUIPMENT, CABLE, WIRE, PAVEMENT, DITCH OR OTHER STRUCTURES CAUSED BY HIS/HER OPERATIONS WITH ACCEPTABLE SUITABLE MATERIALS, TO ORIGINAL (PRE-CONSTRUCTION) OR BETTER CONDITIONS AND TO THE SATISFACTION OF THE ENGINEER, AT NO COST TO THE OWNER.
- THE CONTRACTOR SHALL FIELD VERIFY ANY EXISTING UTILITIES WITHIN PROJECT LIMITS PRIOR TO THE STARTING OF CONSTRUCTION.
- THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH (OSHA) REGULATIONS DURING THE PERFORMANCE OF THIS PROJECT. SAFETY IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE ENGINEER AND THE OWNER ARE NOT RESPONSIBLE FOR SAFETY IN, ON OR ABOUT THE PROJECT SITE, NOR FOR COMPLIANCE BY THE APPROPRIATE PARTY WITH ANY REGULATIONS RELATING THERETO.
- THE CONTRACTOR SHALL NOT SCALE DRAWINGS FOR CONSTRUCTION. ANY MISSING DIMENSIONS OR DISCREPANCIES IN PLANS, FIELD STAKING OR PHYSICAL FEATURES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER. IF CONTRACTOR PROCEEDS WITH THE WORK WITHOUT NOTIFICATION, HE DOES SO AT HIS OWN RISK.
- THE SCOPE OF WORK SHALL INCLUDE THE FURNISHING AND INSTALLATION OF THE NECESSARY MATERIAL AND LABOR TO ACCOMPLISH THE WORK INDICATED BY THE DRAWINGS AND AS SPECIFIED. ALL WORK BY CONTRACTOR SHALL CONFORM TO ALL APPLICABLE FEDERAL STATE AND LOCAL BUILDING CODES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THE CONTRACT DOCUMENTS AND EXISTING CONDITIONS AT THE JOB SITE BEFORE SUBMITTING PROPOSALS. SUBMISSION OF PROPOSALS SHALL BE TAKEN AS EVIDENCE THAT SUCH INSPECTION HAS TAKEN PLACE. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE COMPLETE SET OF CONSTRUCTION DOCUMENTS.

STRUCTURAL GENERAL NOTES:

- DESIGN CODES AND GENERAL CRITERIA:
 - IBC 2015, INTERNATIONAL BUILDING CODE, 2015 EDITION.
 - ASCE 7-10 - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, 2010, AMERICAN SOCIETY OF CIVIL ENGINEERS.
 - ACI 318-14 - BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
 - ACI MANUAL OF CONCRETE PRACTICE 2010, AMERICAN CONCRETE INSTITUTE.
 - CRSI 2008 HANDBOOK.
 - AISC 14TH EDITION - MANUAL OF STEEL CONSTRUCTION, AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
 - AISC 360-10 - SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
 - AWS D1.1 - STRUCTURAL WELDING CODE, AMERICAN WELDING SOCIETY.
 - ANSI/AWC NDS 2015, NATIONAL DESIGN SPECIFICATION (NDS) FOR WOOD CONSTRUCTION WITH 2015 NDS SUPPLEMENT
- THE CONTRACTOR SHALL SUBMIT FOR REVIEW BY THE ENGINEER SHOP DRAWINGS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS INCLUDING BUT NOT LIMITED TO THE FOLLOWING MINIMUM NOTED ITEMS. REVIEW OF SHOP DRAWINGS BY THE ENGINEER DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY TO REVIEW AND CHECK THE SHOP DRAWINGS FOR ERRORS, OMISSIONS AND CONFLICTS. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS AND DIMENSIONS SPECIFIED ON THE CONSTRUCTION DOCUMENTS.
 - TIMBER PILING
 - TIMBER FRAMING
 - MISCELLANEOUS METALS
 - CONCRETE MIX DESIGN
 - CONCRETE REINFORCEMENT
- THE CONTRACTOR IS RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION. THE STRUCTURE NOTED ON THE CONSTRUCTION DRAWINGS IS ONLY STABLE IN ITS FINAL AND COMPLETE FORM. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, SAFETY AND IMPLEMENTATION OF ALL REQUIRED SEQUENCING, TEMPORARY SHORING AND BRACING REQUIRED TO ERECT THE STRUCTURE.
- THE CONTRACTOR IS RESPONSIBLE FOR DESIGN AND IMPLEMENTATION OF ANY NECESSARY TEMPORARY SHORING, BRACING, SCAFFOLDING OR WALKWAYS REQUIRED TO PERFORM THE WORK AS DESCRIBED ON THESE DRAWINGS.
- ALL SECTIONS AND DETAILS NOTED ARE TYPICAL FOR CONDITIONS NOT SPECIFICALLY NOTED. SIMILAR DETAILS SHALL APPLY AT SIMILAR CONDITIONS, UNLESS NOTED.

MISCELLANEOUS METALS NOTES:

- ALL MISCELLANEOUS METALS, PLATES, BARS AND SHAPES SHALL BE STAINLESS STEEL 316L CONFORMING TO ASTM A 276.
- ALL BOLTS, ANCHORS, THRU-BOLTS AND U-BOLTS SHALL BE STAINLESS STEEL 316L CONFORMING TO ASTM F 593. ALL NUTS SHALL BE STAINLESS STEEL 316L CONFORMING TO ASTM F 594.
- STRUCTURAL STEEL FABRICATION AND ERECTION SHALL CONFORM TO THE AISC "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES", LATEST EDITION.
- DIMENSIONS SHOWN OR CALLED FOR ARE THE FINAL DIMENSIONS, ALLOWANCES MUST BE MADE FOR MACHINING.

REINFORCED CONCRETE NOTES:

- UNLESS NOTED, ALL CONCRETE SHALL BE NORMAL WEIGHT AND HAVE A MINIMUM 28 DAY DESIGN COMPRESSIVE STRENGTHS (f'c) OF 4,000 PSI.
- REINFORCING STEEL SHALL HAVE THE FOLLOWING CONCRETE COVER UNLESS NOTED OTHERWISE:

CONCRETE EXPOSED TO EARTH, LIQUID OR WEATHER: 3" ALL SIDES
- ALL REINFORCING STEEL SHALL CONFORM TO ASTM A-615 WITH A MINIMUM YIELD STRENGTH (Fy) OF 60,000 PSI.
- ALL EXTERIOR FORMED SURFACES NOT COVERED BY BACKFILL SHALL BE CLASS "A" FINISH AND SURFACES COVERED BY BACKFILL SHALL BE CLASS "C" FINISH, UNLESS NOTED OTHERWISE.
- REINFORCING DETAILS SHALL CONFORM WITH "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" ACI 318/318R-14.
- ALL BENDS OF REINFORCEMENT AND ALL BAR SPACERS AND SUPPORTS SHALL BE IN ACCORDANCE WITH SP-66, AMERICAN CONCRETE INSTITUTE DETAILING MANUAL - 2004.
- REINFORCING BAR DESIGNATION NUMBERS SHALL CONFORM TO THE NUMBERING SYSTEM OF THE CONCRETE REINFORCING STEEL INSTITUTE.
- PROVIDE ALL BARS, CHAIRS, ACCESSORIES, ETC. AS REQUIRED TO MAINTAIN REINFORCING IN PROPER LOCATION AND ORIENTATION.
- TACK WELDING REINFORCEMENT BARS IS NOT PERMITTED.

TIMBER PILING NOTES:

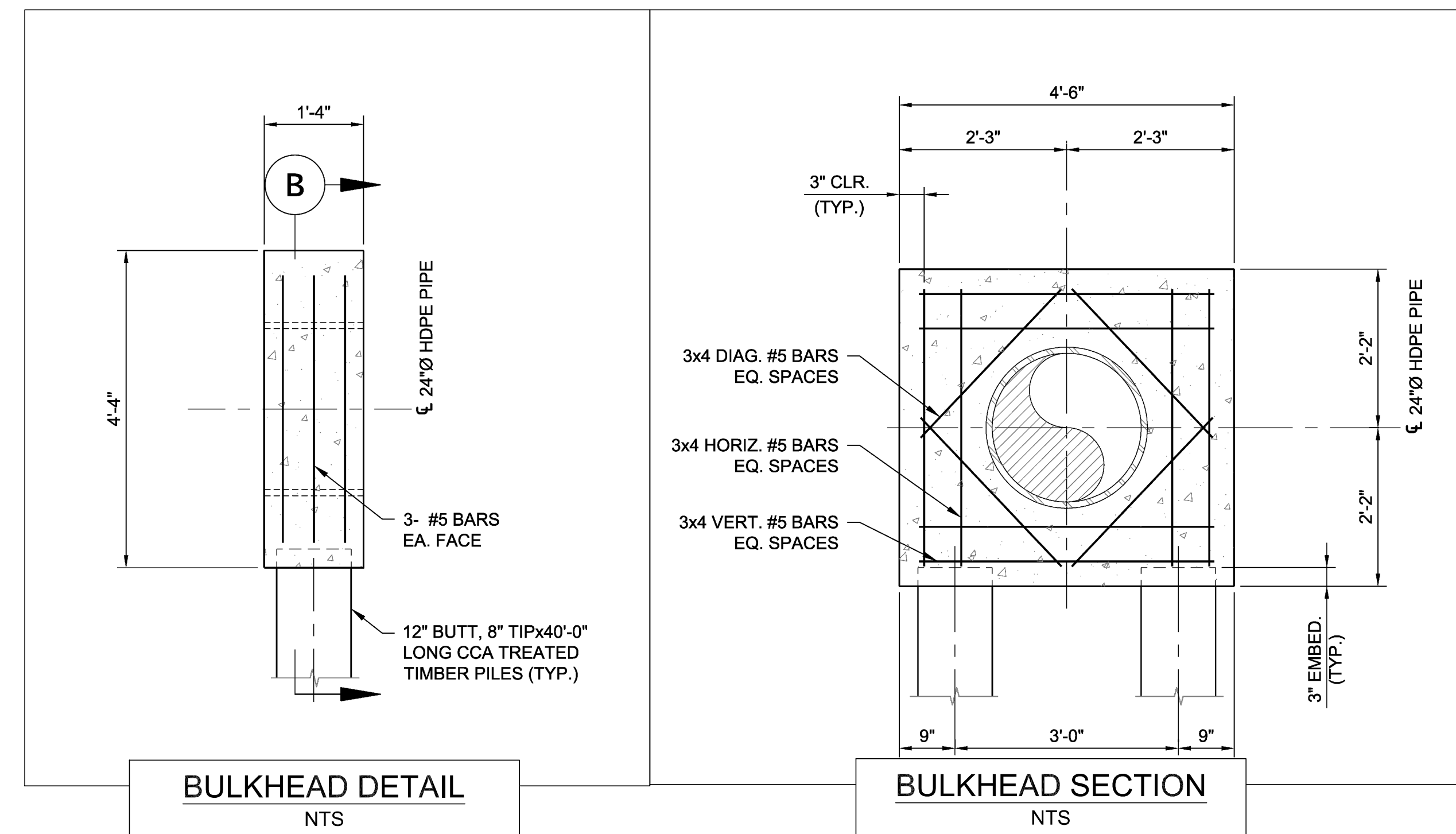
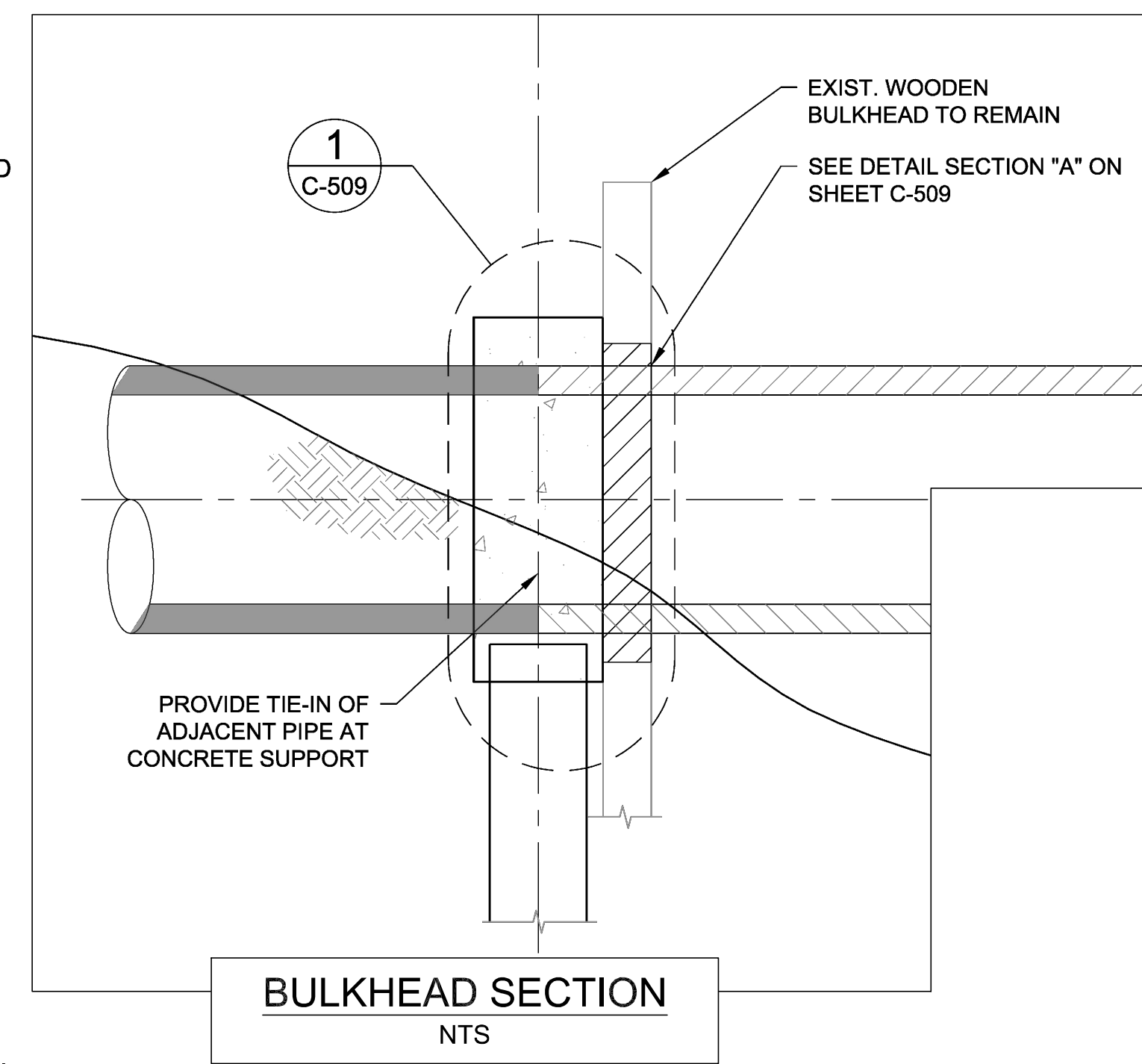
- TIMBER PILES SHALL BE CCA TREATED, 2.5 PCF RETENTION ASTM D25, CLASS B WITH 8" TIP AND 12" BUTT AND INSTALLED AS PER SPECIFICATION SECTION 02351. TIMBER PILE MATERIAL SHALL BE SOUTHERN YELLOW PINE WITH MINIMUM THE FOLLOWING MINIMUM PROPERTIES:

ALLOWABLE COMPRESSIVE STRENGTH:.....1,250 PSI
 ALLOWABLE BENDING STRENGTH:.....1,950 PSI
 ALLOWABLE SHEAR PERPENDICULAR TO THE GRAIN:160 PSI
- ALL TREATED TIMBER MATERIALS SHALL BE PRESSURE TREATED BY THE FULL-CELL PROCESS IN ACCORDANCE WITH THE AMERICAN WOOD-PRESSURE ASSOCIATION, LATEST EDITION.
- CONTRACTOR SHALL SUBMIT MATERIAL AND TREATMENT CERTIFICATIONS FOR ALL TIMBER MATERIALS
- CONTRACTOR TO DETERMINE AND FIELD VERIFY ALL EXISTING UNDERGROUND UTILITIES PRIOR TO DRIVING PILING. CONTRACTOR SHALL CONTACT LANDOWNERS, UTILITIES AND PIPELINE COMPANIES PRIOR TO INSTALLATION OF PILING.
- CONTRACTOR TO PROBE PILE LOCATIONS FOR OBSTRUCTIONS BEFORE DRIVING PILES.

TIMBER FRAMING NOTES:

- ALL BEAMS, WALES, CROSS-BRACING, SPLICES, BLOCKING, AND BRIDGING FOR PIPE SUPPORT SHALL BE CCA TREATED, 2.5 PCF RETENTION INSTALLED AS PER SPECIFICATION SECTION 02310. TIMBER FRAMING MATERIAL SHALL BE No. 1 DENSE SOUTHERN YELLOW PINE WITH MINIMUM THE FOLLOWING MINIMUM PROPERTIES:

ALLOWABLE TENSION STRENGTH PARALLEL TO THE GRAIN:.....800 PSI
 ALLOWABLE BENDING STRENGTH:.....1,200 PSI
 ALLOWABLE SHEAR STRENGTH PARALLEL TO THE GRAIN:.....175 PSI
- ALL TREATED TIMBER MATERIALS SHALL BE PRESSURE TREATED BY THE FULL-CELL PROCESS IN ACCORDANCE WITH THE AMERICAN WOOD-PRESSURE ASSOCIATION, LATEST EDITION.
- CONTRACTOR SHALL SUBMIT MATERIAL AND TREATMENT CERTIFICATIONS FOR ALL TIMBER MATERIALS



REVISIONS	DESCRIPTION	DATE
	additional survey	10.26.2023
	UPDATE DWG WITH UTILITY LOCATE DATA	11.02.2023



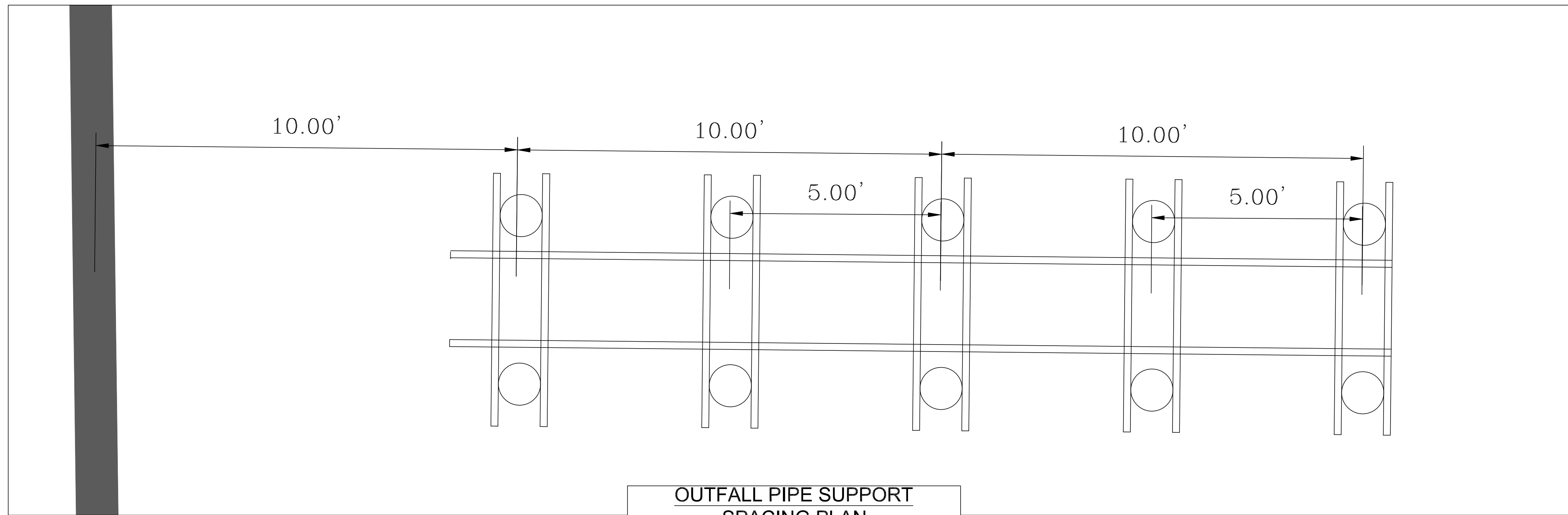
SUSSEX CONSERVATION DISTRICT
 23818 SHORTLY RD., GEORGETOWN, DE 19957
 PHONE: (302)856-2105 FAX: (302)856-0951

DNREC - Division of Watershed Stewardship
 Drainage Program
 Georgetown Office
 2309 Berlin Rd. Unit 6 Phone: (302) 856-1930
 285 Beaver Blvd. Suite 102 Phone: (302) 739-9921 Fax: (302) 739-6724
 Dover DE, 19901



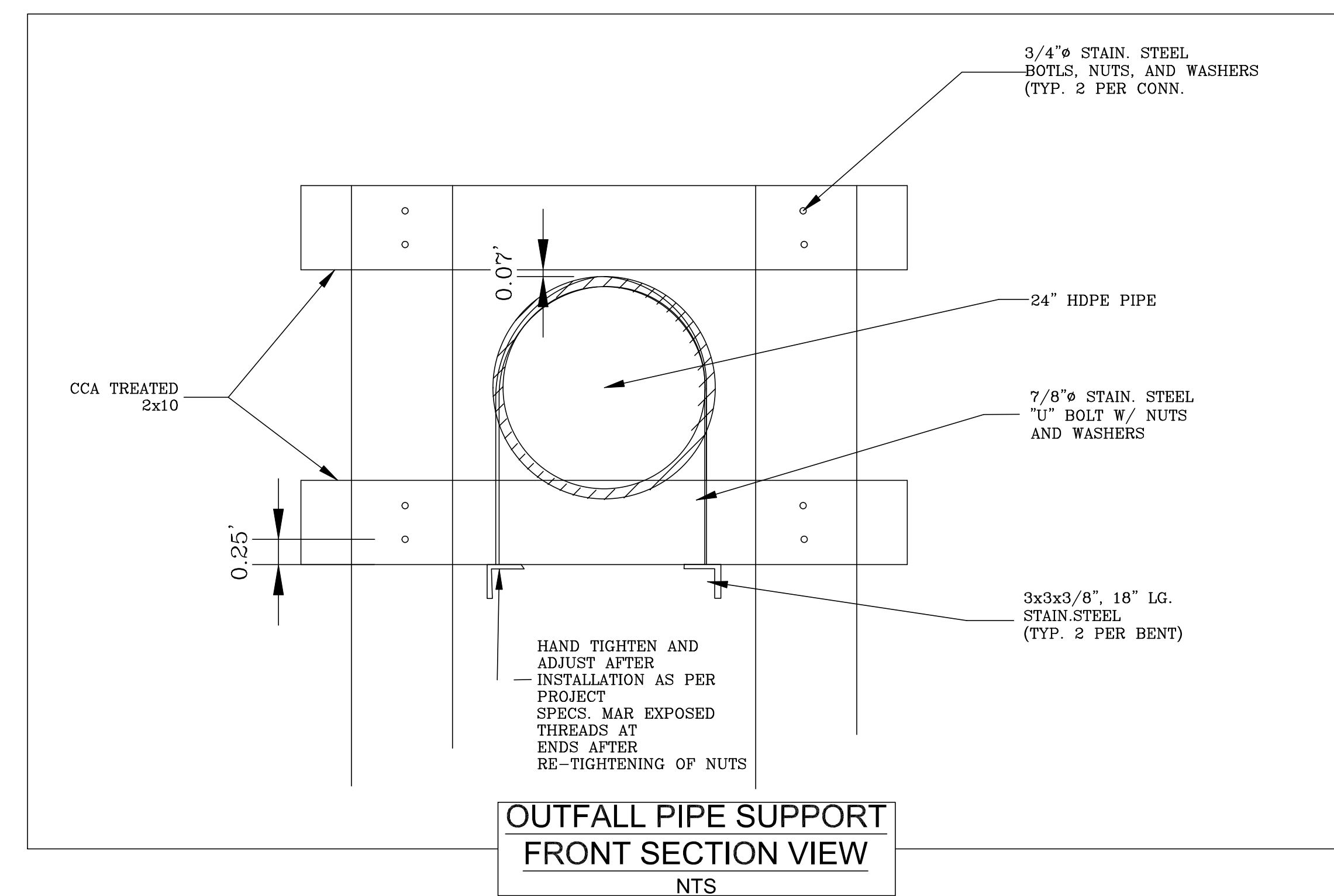
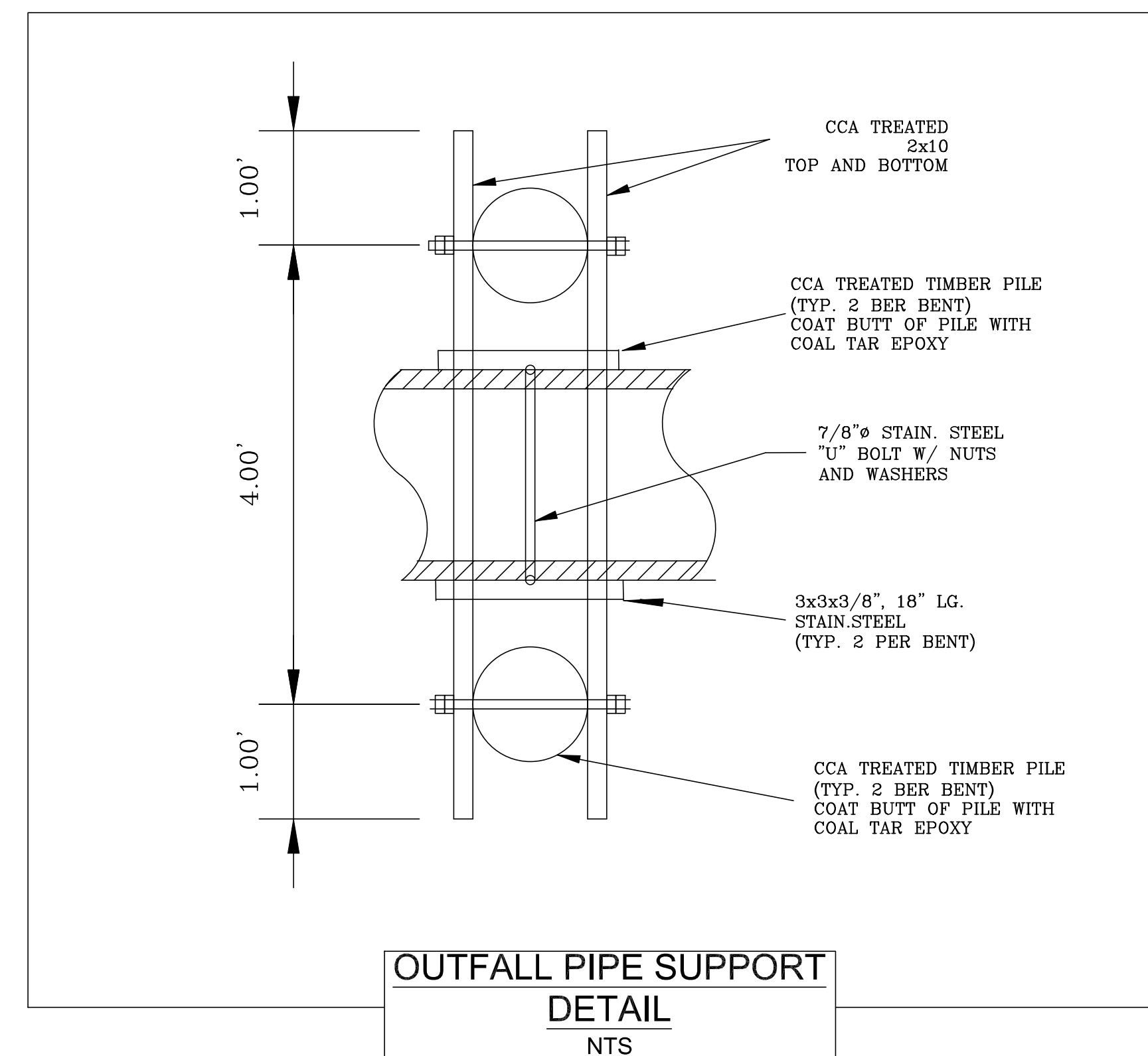
RIVERDALE PARK - RIVER RD - SANTANGELO
 WATER MANAGEMENT PROJECT
 INDIAN RIVER BAY / INLAND BAY WATERSHED
 OAK ORCHARD, DELAWARE
 CONSTRUCTION DETAILS - 4

Date:	11.27.2023
Designed:	AR - JLE
Planned:	TB - KW - JG
Drawn:	JLE
Sheet No.	C-503



NOTES:

1. SEE GENERAL NOTES SHEET C502 AND PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
2. ALL TIMBER CONSTRUCTION AND WORKMANSHIP SHALL BE COMPLETE, SQUARE, ALIGNED, AND FINISHED AND SHALL BE IN ACCORDANCE WITH AMERICAN INSTITUTE OF TIMBER CONSTRUCTION.
3. TIMBER PILES SHALL BE INCIDENTAL TO DELDOT'S 2016 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION ITEM 605000.
4. MAXIMUM SPACING BETWEEN SUPPORTS SHALL BE 10'-0" FOR DESIGN OF STRUCTURAL ELEMENTS. CONTRACTOR TO CONFIRM MAXIMUM ALLOWABLE SPAN LENGTH OF PIPE WHEN FULLY FILLED WITH WATER WITH SELECTED PIPE MANUFACTURER FOR FINAL REQUIRED SPAN SUPPORT SPACING.
5. THE TOP OF TIMBER PILES SHALL EXTEND PAST THE MEAN HIGH WATER ELEVATION BY 6". THE MEAN HIGH WATER ELEVATION IS AT NAVD88 1.19', SO THE TOP OF TIMBER PILES SHALL BE AT LEAST AT NAVD88 ELEVATION 1.69'. PILE DEPTH SHALL BE DETERMINED BY A QUALIFIED PILE INSTALLER.



REVISIONS	DESCRIPTION
10.26.2023	additional survey
11.02.2023	UPDATE DWG WITH UTILITY LOCATE DATA



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
 2109 Berlin Rd. Unit 6 Phone: (302) 854-1930
 238 Beaver Blvd., Suite 102 Phone: (302) 739-9921
 Dover, DE 19901 Fax: (302) 739-6724



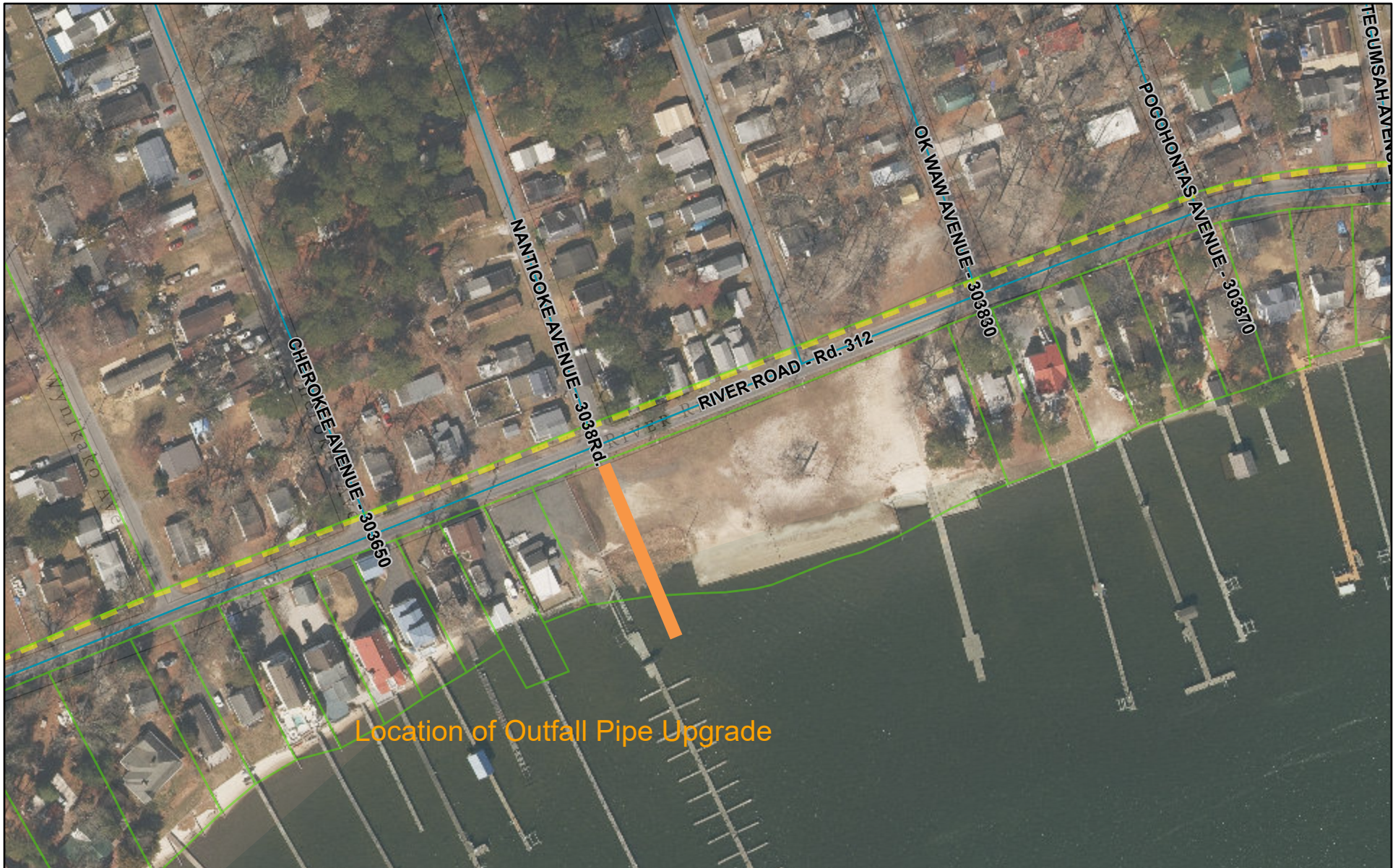
RIVERDALE PARK - RIVER RD - SANGELO
 WATER MANAGEMENT PROJECT
 INDIAN RIVER BAY / INLAND BAY WATERSHED
 OAK ORCHARD, DELAWARE

CONSTRUCTION DETAILS - 3

Date:	11.27.2023
Designed:	AR - JLE
Planned:	TB - KW - JG
Drawn:	JLE

Sheet No. **C-502**

River Road - Nanticoke Ave. Outfall Pipe Upgrade - Aerial Map



12/20/2023, 11:39:52 AM

DE_Imagery_2022

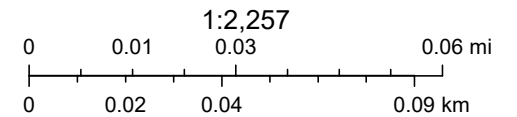
- Red: Red
- Green: Green

Blue: Blue

Parcels - Sussex

Communities

DeIDOT - Road Names



Sources: Esri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodatastyrelsen, Rijkswaterstaat, GSA, Geoland, FEMA,

DNREC, Division of Watershed Stewardship, Drainage Program


These maps do not replace the official documents on file in the Prothonotary Office, and not to be used for engineering purposes

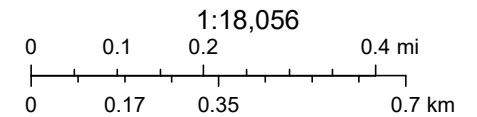
River Road - Nanticoke Ave. Outfall Pipe Upgrade - Street Map



12/20/2023, 11:42:58 AM

 Communities

 DeIDOT - Road Names

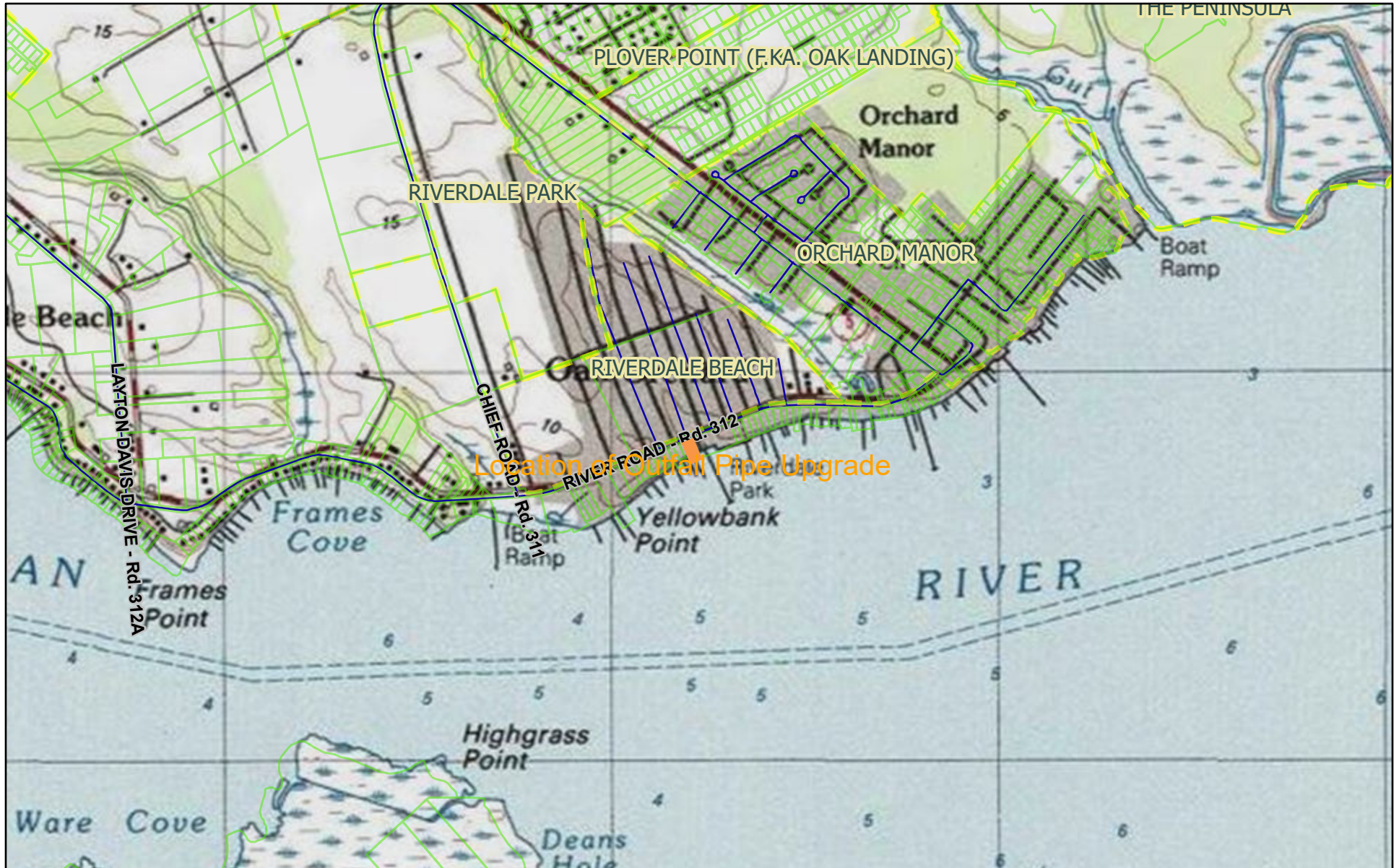


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DNREC, Division of Watershed Stewardship, Drainage Program

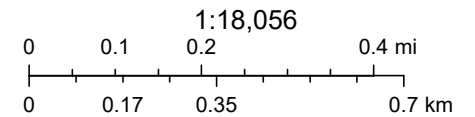
These maps do not replace the official documents on file in the Prothonotary Office, and not to be used for engineering purposes

River Road - Nanticoke Ave. Outfall Pipe Upgrade - Topo Map



12/20/2023, 11:41:47 AM

-  Parcels - Sussex
-  DeIDOT - Road Names
-  Communities



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BK: 4073 PG: 222

TAX MAP AND PARCEL #:
2-34 34.00 84.00
PREPARED BY & RETURN TO:
Moore & Rutt, P.A.
122 West Market Street
P.O. Box 554
Georgetown, DE 19947

NO TITLE EXAMINATION REQUESTED OR PERFORMED

THIS DEED, made this 14th day of December, 2012,

- BETWEEN -

KENNETH S. CLARK, of 28301 Chief Road, Millsboro, Delaware 19966, party of the first part,

- AND -

KENNETH S. CLARK and ELLA KATHERINE CLARK, husband and wife, of 28301 Chief Road, Millsboro, Delaware 19966, parties of the second part,

WITNESSETH: That the said party of the first part, for and in consideration of the sum of TEN and 00/100 Dollars (\$10.00), lawful money of the United States of America, the receipt whereof is hereby acknowledged, and hereby grants and conveys unto the parties of the second part, and their heirs and assigns, in fee simple, the following described lands, situate, lying and being in Sussex County, State of Delaware:

ALL that certain tract, piece or parcel of land lying and being in Indian River Hundred, Sussex County, Delaware, and lying on both sides of River Road; that area lying to the South of River Road being referred to as "the beach area", bounded by lands now or formerly of Elva and Charles Short and by the Indian River Water Sports Club and those lands on the North side of River Road being bounded by North Avenue on the North, Wynykako Avenue on the West and by a gut on the East and being all those lands on both sides of Cherokee, Nanticoke, Clark, Ok-Waw, Pocohontas and Tecumseh Avenues within the aforementioned bounds and said to contain 38.64 acres of lands, be the same more or less, and known as Riverdale Park and being all those lands contained on Tax Map No. 2-34 34.00 84.00, as more fully and largely appears as follows, to wit:

BEGINNING at a stake in the center line of State Highway No. 312 (30 foot road) with the center line of Wynykako Avenue; thence along the center line of Wynykako Avenue and other lands of Charles C. Clark, North 14 degrees 57 minutes West 955 feet to the center line of North Avenue (30 foot road) and corner for other lands of Charles C. Clark; thence along the center