

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
HIGHWAY DIVISION 3

## PROPOSAL

**DATE AND TIME OF BID OPENING:** August 18, 2022 AT 2:00 PM

**CONTRACT ID:** DC00339

**WBS ELEMENT NO.:** 49083.3.1

**FEDERAL AID NO.:** FEDERAL PROVISIONS

**COUNTY:** Onslow County

**TIP NO.:** M-0540A

**MILES:** 0.157 MILES

**ROUTE NO.:** NC 24

**LOCATION:** NC 24 CAUSEWAY BETWEEN THE SWANSBORO BRIDGES &  
CEDAR POINT

**★ TYPE OF WORK:** SHORELINE STABILIZATION, ENVIRONMENTAL  
RESILIENCY ★

**NOTICE:**

ALL BIDDERS SHALL COMPLY WITH ALL APPLICABLE LAWS REGULATING THE PRACTICE OF GENERAL CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA WHICH REQUIRES THE BIDDER TO BE LICENSED BY THE N.C. LICENSING BOARD FOR CONTRACTORS WHEN BIDDING ON ANY NON-FEDERAL AID PROJECT WHERE THE BID IS \$30,000 OR MORE, EXCEPT FOR CERTAIN SPECIALTY WORK AS DETERMINED BY THE LICENSING BOARD. BIDDERS SHALL ALSO COMPLY WITH ALL OTHER APPLICABLE LAWS REGULATING THE PRACTICES OF ELECTRICAL, PLUMBING, HEATING AND AIR CONDITIONING AND REFRIGERATION CONTRACTING AS CONTAINED IN CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA. NOTWITHSTANDING THESE LIMITATIONS ON BIDDING, THE BIDDER WHO IS AWARDED ANY FEDERAL - AID FUNDED PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING.

THIS IS A ROADWAY PROJECT.

BID BONDS ARE REQUIRED.

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NAME OF BIDDER

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ADDRESS OF BIDDER

**PROPOSAL FOR THE CONSTRUCTION OF  
CONTRACT No. DC00339 IN ONSLOW COUNTY, NORTH CAROLINA**

**Date** \_\_\_\_\_ **20** \_\_\_\_\_

**DEPARTMENT OF TRANSPORTATION,  
RALEIGH, NORTH CAROLINA**

The Bidder has carefully examined the location of the proposed work to be known as Contract No. **DC00339**; has carefully examined the plans and specifications, which are acknowledged to be part of the proposal, the special provisions, the proposal, the form of contract, and the forms of contract payment bond and contract performance bond; and thoroughly understands the stipulations, requirements and provisions. The undersigned bidder agrees to bound upon his execution of the bid and subsequent award to him by the Department of Transportation in accordance with this proposal to provide the necessary contract payment bond and contract performance bond within fourteen days after the written notice of award is received by him. The undersigned Bidder further agrees to provide all necessary machinery, tools, labor, and other means of construction; and to do all the work and to furnish all materials, except as otherwise noted, necessary to perform and complete the said contract in accordance with *the 2018 Standard Specifications for Roads and Structures* by the dates(s) specified in the Project Special Provisions and in accordance with the requirements of the Engineer, and at the unit or lump sum prices, as the case may be, for the various items given on the sheets contained herein.

The Bidder shall provide and furnish all the materials, machinery, implements, appliances and tools, and perform the work and required labor to construct and complete State Highway Contract No. **DC00339** in **Onslow County**, for the unit or lump sum prices, as the case may be, bid by the Bidder in his bid and according to the proposal, plans, and specifications prepared by said Department, which proposal, plans, and specifications show the details covering this project, and hereby become a part of this contract.

The published volume entitled *North Carolina Department of Transportation, Raleigh, Standard Specifications for Roads and Structures, January 2018* with all amendments and supplements thereto, is by reference incorporated into and made a part of this contract; that, except as herein modified, all the construction and work included in this contract is to be done in accordance with the specifications contained in said volume, and amendments and supplements thereto, under the direction of the Engineer.

If the proposal is accepted and the award is made, the contract is valid only when signed either by the Contract Officer or such other person as may be designated by the Secretary to sign for the Department of Transportation. The conditions and provisions herein cannot be changed except over the signature of the said Contract Officer or Division Engineer.

The quantities shown in the itemized proposal for the project are considered to be approximate only and are given as the basis for comparison of bids. The Department of Transportation may increase or decrease the quantity of any item or portion of the work as may be deemed necessary or expedient.

An increase or decrease in the quantity of an item will not be regarded as sufficient ground for an increase or decrease in the unit prices, nor in the time allowed for the completion of the work, except as provided for the contract.

Accompanying this bid is a bid bond secured by a corporate surety, or certified check payable to the order of the Department of Transportation, for five percent of the total bid price, which deposit is to be forfeited as liquidated damages in case this bid is accepted and the Bidder shall fail to provide the required payment and performance bonds with the Department of Transportation, under the condition of this proposal, within 14 calendar days after the written notice of award is received by him, as provided in the Standard Specifications; otherwise said deposit will be returned to the Bidder.

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**PROPOSAL ITEM SHEET AND SIGNATURE SHEET**



## **INSTRUCTIONS TO BIDDERS**

**PLEASE READ ALL INSTRUCTIONS CAREFULLY  
BEFORE PREPARING AND SUBMITTING YOUR BID.**

**All bids shall be prepared and submitted in accordance with the following requirements. Failure to comply with any requirement may cause the bid to be considered irregular and may be grounds for rejection of the bid.**

For preparing and submitting the bid electronically, refer to Article 102-8(B) of the *2018 Standard Specifications*.

Bidders that bid electronically on Raleigh Central-Let projects will need a separate Digital Signature from the approved electronic bidding provider for Division Contracts.

### **ELECTRONIC ON-LINE BID:**

1. Download entire proposal from Connect NCDOT website. Download the electronic submittal file from the approved electronic bidding provider website.
2. If the *Interested Parties List* provision SP01 G02 is part of the proposal prior to submitting a bid on a project, the bidder shall sign up on the *Interested Parties List* in conformance with Interested Parties List provision SP01 G02.
3. Prepare and submit the electronic submittal file using the approved electronic bidding provider software.
4. Electronic bidding software necessary for electronic bid preparation may be downloaded from the Connect NCDOT website at: <https://connect.ncdot.gov/letting/Pages/Electronic-Bidding.aspx> or from the approved electronic bidding provider website.

**PROJECT SPECIAL PROVISIONS**

**GENERAL**

**INTERESTED PARTIES LIST:**

(6-21-22)(Rev. 7-19-22)

102

SP1 G02

Revise the 2018 Standard Specifications as follows:

**Page 1-12, Article 102-3 PROPOSALS AND PLAN HOLDER LISTS**, lines 45-49, delete and replace with the following:

**102-3 PROPOSALS AND INTERESTED PARTIES LIST**

On Department projects advertised, the prospective bidder shall sign up on the Interested Parties List no later than one business day prior to the Letting day of that project, for which he intends to submit a bid. There is no cost for signing up on the Interested Parties List that can be found on the Department's website at [connect.ncdot.gov/letting](http://connect.ncdot.gov/letting).

**Page 1-12, Article 102-3 PROPOSALS AND PLAN HOLDER LISTS**, lines 1-3, delete and replace the first sentence of the second paragraph with the following:

The proposal will state the location of the contemplated construction and show a schedule of contract items with the approximate quantity of each of these items for which bid prices are invited.

**Page 1-14, Article 102-8 PREPARATION AND SUBMISSION OF BIDS**, lines 30-31, delete and replace the first paragraph with the following:

Prior to submitting a bid on a project, the bidder shall sign up on the Interested Parties List in conformance with Article 102-3. The bidder shall submit a unit or lump sum price for every item in the proposal other than items that are authorized alternates to those items for which a bid price has been submitted.

**BOND REQUIREMENTS:**

(06-01-16)

102-8, 102-10

SPD 01-420A

A Bid Bond is required in accordance with Article 102-10 of the *2018 Standard Specifications for Roads and Structures*.

Contract Payment and Performance Bonds are required in accordance with Article 103-7 of the *2018 Standard Specifications for Roads and Structures*.

**CONTRACT TIME AND LIQUIDATED DAMAGES:**

(8-15-00) (Rev. 12-18-07)

108

SP1 G07 A

The date of availability for this contract is **September 19, 2022**, except that work in jurisdictional waters and wetlands shall not begin until a meeting between the DOT, Regulatory Agencies, and the Contractor is held as stipulated in the permits contained elsewhere in this proposal. This delay in availability has been considered in determining the contract time for this project.

The completion date for this contract is **June 15, 2024**.

Except where otherwise provided by the contract, observation periods required by the contract will not be a part of the work to be completed by the completion date and/or intermediate contract times stated in the

contract. The acceptable completion of the observation periods that extend beyond the final completion date shall be a part of the work covered by the performance and payment bonds.

The liquidated damages for this contract are **Two Hundred Dollars (\$ 200.00)** per calendar day. These liquidated damages will not be cumulative with any liquidated damages which may become chargeable under Intermediate Contract Time Number 1.

**INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES:**

(7-1-95) (Rev. 2-21-12)

108

SP1 G13 A

Except for that work required under the Project Special Provisions entitled *Planting, Reforestation* and/or *Permanent Vegetation Establishment*, included elsewhere in this proposal, the Contractor will be required to complete all work included in this contract and shall place and maintain traffic on same.

The date of availability for this intermediate contract time is **September 19, 2022**.

The completion date for this intermediate contract time is **April 15, 2023**.

The liquidated damages for this intermediate contract time are **Eight Hundred Fifty Dollars (\$ 850.00)** per calendar day.

Upon apparent completion of all the work required to be completed by this intermediate date, a final inspection will be held in accordance with Article 105-17 and upon acceptance, the Department will assume responsibility for the maintenance of all work except *Planting, Reforestation* and/or *Permanent Vegetation Establishment*. The Contractor will be responsible for and shall make corrections of all damages to the completed roadway caused by his planting operations, whether occurring prior to or after placing traffic through the project.

**INTERMEDIATE CONTRACT TIME NUMBER 2 AND LIQUIDATED DAMAGES:**

(2-20-07)

108

SP1 G14 A

The Contractor shall complete the required work of installing, maintaining, and removing the traffic control devices for lane closures and restoring traffic to the existing traffic pattern. The Contractor shall not close or narrow a lane of traffic on **NC 24** during the following time restrictions:

DAY AND TIME RESTRICTIONS

**MONDAY THROUGH SUNDAY 6:00AM - 9:00AM & 3:00PM - 6:00PM**

In addition, the Contractor shall not close or narrow a lane of traffic on **NC 24**, detain and/or alter the traffic flow on or during holidays, holiday weekends, special events, or any other time when traffic is unusually heavy, including the following schedules:

HOLIDAY AND HOLIDAY WEEKEND LANE CLOSURE RESTRICTIONS

1. For **unexpected occurrence** that creates unusually high traffic volumes, as directed by the Engineer.
2. For **New Year's Day**, between the hours of **2:00 PM** December 31st and **6:00 PM** January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday, then until **6:00 PM** the following Tuesday.

3. For **Easter**, between the hours of **2:00 PM** Thursday and **6:00 PM** Monday.
4. For **Memorial Day**, between the hours of **2:00 PM** Friday and **6:00 PM** Tuesday.
5. For **Independence Day**, between the hours of **2:00 PM** the day before Independence Day and **6:00 PM** the day after Independence Day.

If **Independence Day** is on a Friday, Saturday, Sunday or Monday, then between the hours of **2:00 PM** the Thursday before Independence Day and **6:00 PM** the Tuesday after Independence Day.

6. For **Labor Day**, between the hours of **2:00 PM** Friday and **6:00 PM** Tuesday.
7. For **Thanksgiving Day**, between the hours of **2:00 PM** Tuesday and **6:00 PM** Monday.
8. For **Christmas**, between the hours of **2:00 PM** the Friday before the week of Christmas Day and **6:00 PM** the following Tuesday after the week of Christmas Day.

Holidays and holiday weekends shall include New Year's, Easter, Memorial Day, Independence Day, Labor Day, Thanksgiving, and Christmas. The Contractor shall schedule his work so that lane closures will not be required during these periods, unless otherwise directed by the Engineer.

The time of availability for this intermediate contract work shall be the time the Contractor begins to install all traffic control devices for lane closures according to the time restrictions listed herein.

The completion time for this intermediate contract work shall be the time the Contractor is required to complete the removal of all traffic control devices for lane closures according to the time restrictions stated above and place traffic in the existing traffic pattern.

The liquidated damages are **Eight Hundred Fifty Dollars (\$ 850.00)** per hour.

**INTERMEDIATE CONTRACT TIME NUMBER 3 AND LIQUIDATED DAMAGES:**

(6-18-13)

108

SP1 G14 K

The Contractor shall complete the required work of **Wetland Grass Planting**, as shown on the plans, as directed by the Engineer and within any seasonal limitations for the specific task included herein.

The date of availability for this intermediate contract time is **April 15, 2023**.

The completion date for this intermediate contract time is **June 15, 2023**.

The liquidated damages are **Eight Hundred Fifty Dollars (\$ 850.00)** per day.

**PERMANENT VEGETATION ESTABLISHMENT:**

(2-16-12) (Rev. 10-15-13)

104

SP1 G16

Establish a permanent stand of the vegetation mixture shown in the contract. During the period between initial vegetation planting and final project acceptance, perform all work necessary to establish permanent vegetation on all erodible areas within the project limits, as well as, in borrow and waste pits. This work shall include erosion control device maintenance and installation, repair seeding and mulching, supplemental seeding and mulching, mowing, and fertilizer topdressing, as directed. All work shall be performed in accordance with the applicable section of the *2018 Standard Specifications*. All work required for initial vegetation planting shall be performed as a part of the work necessary for the completion and acceptance of the Intermediate Contract Time (ICT). Between the time of ICT and Final Project acceptance, or otherwise referred to as the vegetation establishment period, the Department will be responsible for preparing the required National Pollutant Discharge Elimination System (NPDES) inspection records.

Once the Engineer has determined that the permanent vegetation establishment requirement has been achieved at an 80% vegetation density (the amount of established vegetation per given area to stabilize the soil) and no erodible areas exist within the project limits, the Contractor will be notified to remove the remaining erosion control devices that are no longer needed. The Contractor will be responsible for, and shall correct any areas disturbed by operations performed in permanent vegetation establishment and the removal of temporary erosion control measures, whether occurring prior to or after placing traffic on the project.

Payment for *Response for Erosion Control, Seeding and Mulching, Repair Seeding, Supplemental Seeding, Mowing, Fertilizer Topdressing, Silt Excavation, and Stone for Erosion Control* will be made at contract unit prices for the affected items. Work required that is not represented by contract line items will be paid in accordance with Articles 104-7 or 104-3 of the *2018 Standard Specifications*. No additional compensation will be made for maintenance and removal of temporary erosion control items.

**MAJOR CONTRACT ITEMS:**

(2-19-02)

104

SP1 G28

The following listed items are the major contract items for this contract (see Article 104-5 of the *2018 Standard Specifications*):

| <b>Line #</b> | <b>Description</b> |
|---------------|--------------------|
| 14            | — Class II RIP RAP |

**SPECIALTY ITEMS:**

(7-1-95)(Rev. 7-20-21)

108-6

SP1 G37

Items listed below will be the specialty items for this contract (see Article 108-6 of the *2018 Standard Specifications*).

| <b>Line #</b> | <b>Description</b>          |
|---------------|-----------------------------|
| 11-12         | Guardrail                   |
| 16-19         | Signing                     |
| 29-31, 33     | Long-Life Pavement Markings |
| 36-37         | Permanent Pavement Markers  |
| 38-39, 42-43  | Erosion Control             |
| 45            | Planting                    |

**FUEL PRICE ADJUSTMENT:**

(11-15-05) (Rev. 7-20-21)

109-8

SP1 G43

Revise the *2018 Standard Specifications* as follows:

**Page 1-87, Article 109-8, Fuel Price Adjustments**, add the following:

The base index price for DIESEL #2 FUEL is \$ **4.5239** per gallon. Where any of the following are included as pay items in the contract, they will be eligible for fuel price adjustment.

The pay items and the fuel factor used in calculating adjustments to be made will be as follows:

| Description                                      | Units   | Fuel Usage Factor Diesel |
|--|---------|--------------------------|
| Unclassified Excavation                          | Gal/CY  | 0.29                     |
| Borrow Excavation                                | Gal/CY  | 0.29                     |
| Class IV Subgrade Stabilization                  | Gal/Ton | 0.55                     |
| Aggregate Base Course                            | Gal/Ton | 0.55                     |
| Sub-Ballast                                      | Gal/Ton | 0.55                     |
| Asphalt Concrete Base Course, Type _____         | Gal/Ton | 0.90 or 2.90             |
| Asphalt Concrete Intermediate Course, Type _____ | Gal/Ton | 0.90 or 2.90             |
| Asphalt Concrete Surface Course, Type _____      | Gal/Ton | 0.90 or 2.90             |
| Open-Graded Asphalt Friction Course              | Gal/Ton | 0.90 or 2.90             |
| Permeable Asphalt Drainage Course, Type _____    | Gal/Ton | 0.90 or 2.90             |
| Sand Asphalt Surface Course, Type _____          | Gal/Ton | 0.90 or 2.90             |
| Aggregate for Cement Treated Base Course         | Gal/Ton | 0.55                     |
| Portland Cement for Cement Treated Base Course   | Gal/Ton | 0.55                     |
| ____ " Portland Cement Concrete Pavement         | Gal/SY  | 0.245                    |
| Concrete Shoulders Adjacent to ____ " Pavement   | Gal/SY  | 0.245                    |

For the asphalt items noted in the chart as eligible for fuel adjustments, the bidder may include the *Fuel Usage Factor Adjustment Form* with their bid submission if they elect to use the fuel usage factor. The *Fuel Usage Factor Adjustment Form* is found at the following link:

<https://connect.ncdot.gov/letting/LetCentral/Fuel%20Usage%20Factor%20Adjustment%20Form.pdf>

Select either 2.90 Gal/Ton fuel factor or 0.90 Gal/Ton fuel factor for each asphalt line item on the *Fuel Usage Factor Adjustment Form*. The selected fuel factor for each asphalt item will remain in effect for the duration of the contract.

Failure to complete the *Fuel Usage Factor Adjustment Form* will result in using 2.90 gallons per ton as the Fuel Usage Factor for Diesel for the asphalt items noted above. The contractor will not be permitted to change the Fuel Usage Factor after the bids are submitted.

**SCHEDULE OF ESTIMATED COMPLETION PROGRESS:**

(7-15-08) (Rev. 5-13-19)

108-2

SP1 G58

The Contractor's attention is directed to the Standard Special Provision entitled *Availability of Funds Termination of Contracts* included elsewhere in this proposal. The Department of Transportation's schedule of estimated completion progress for this project as required by that Standard Special Provision is as follows:

|      | <b><u>Fiscal Year</u></b> | <b><u>Progress (% of Dollar Value)</u></b> |
|------|---------------------------|--|
| 2022 | (7/01/21 - 6/30/22)       | 0% of Total Amount Bid                     |
| 2023 | (7/01/22 - 6/30/23)       | 95% of Total Amount Bid                    |
| 2024 | (7/01/23 - 6/30/24)       | 5% of Total Amount Bid                     |
| 2025 | (7/01/24 - 6/30/25)       | 0% of Total Amount Bid                     |
| 2026 | (7/01/25 - 6/30/26)       | 0% of Total Amount Bid                     |

The Contractor shall also furnish his own progress schedule in accordance with Article 108-2 of the *2018 Standard Specifications*. Any acceleration of the progress as shown by the Contractor's progress schedule over the progress as shown above shall be subject to the approval of the Engineer.

**DISADVANTAGED BUSINESS ENTERPRISE (DIVISIONS):**

(10-16-07)(Rev. 8-17-21)

102-15(J)

SP1 G62

**Description**

The purpose of this Special Provision is to carry out the U.S. Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts financed in whole or in part with Federal funds. This provision is guided by 49 CFR Part 26.

**Definitions**

*Additional DBE Subcontractors* - Any DBE submitted at the time of bid that will not be used to meet the DBE goal. No submittal of a Letter of Intent is required.

*Committed DBE Subcontractor* - Any DBE submitted at the time of bid that is being used to meet the DBE goal by submission of a Letter of Intent. Or any DBE used as a replacement for a previously committed DBE firm.

*Contract Goal Requirement* - The approved DBE participation at time of award, but not greater than the advertised contract goal.

*DBE Goal* - A portion of the total contract, expressed as a percentage, that is to be performed by committed DBE subcontractor(s).

*Disadvantaged Business Enterprise (DBE)* - A firm certified as a Disadvantaged Business Enterprise through the North Carolina Unified Certification Program.

*Goal Confirmation Letter* - Written documentation from the Department to the bidder confirming the Contractor's approved, committed DBE participation along with a listing of the committed DBE firms.

*Manufacturer* - A firm that operates or maintains a factory or establishment that produces on the premises, the materials or supplies obtained by the Contractor.

*Regular Dealer* - A firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. A regular dealer engages in, as its principal business and in its own name, the purchase and sale or lease of the products in question. A regular dealer in such bulk items as steel, cement, gravel, stone, and petroleum products need not keep such products in stock, if it owns and operates distribution equipment for the products. Brokers and packagers are not regarded as manufacturers or regular dealers within the meaning of this section.

*Replacement / Substitution* – A full or partial reduction in the amount of work subcontracted to a committed (or an approved substitute) DBE firm.

*North Carolina Unified Certification Program (NCUCP)* - A program that provides comprehensive services and information to applicants for DBE certification, such that an applicant is required to apply only once for a DBE certification that will be honored by all recipients of USDOT funds in the state and not limited to the Department of Transportation only. The Certification Program is in accordance with 49 CFR Part 26.

*United States Department of Transportation (USDOT)* - Federal agency responsible for issuing regulations (49 CFR Part 26) and official guidance for the DBE program.

#### **Forms and Websites Referenced in this Provision**

*DBE Payment Tracking System* - On-line system in which the Contractor enters the payments made to DBE subcontractors who have performed work on the project.  
<https://apps.dot.state.nc.us/Vendor/PaymentTracking/>

*DBE-IS Subcontractor Payment Information* - Form for reporting the payments made to all DBE firms working on the project. This form is for paper bid projects only.  
<https://connect.ncdot.gov/business/Turnpike/Documents/Form%20DBE-IS%20Subcontractor%20Payment%20Information.pdf>

*RF-1 DBE Replacement Request Form* - Form for replacing a committed DBE.  
<http://connect.ncdot.gov/projects/construction/Construction%20Forms/DBE%20MBE%20WBE%20Replacement%20Request%20Form.pdf>

*SAF Subcontract Approval Form* - Form required for approval to sublet the contract.  
<http://connect.ncdot.gov/projects/construction/Construction%20Forms/Subcontract%20Approval%20Form%20Rev.%202012.zip>

*JC-1 Joint Check Notification Form* - Form and procedures for joint check notification. The form acts as a written joint check agreement among the parties providing full and prompt disclosure of the expected use of joint checks.  
<http://connect.ncdot.gov/projects/construction/Construction%20Forms/Joint%20Check%20Notification%20Form.pdf>

*Letter of Intent* - Form signed by the Contractor and the DBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed DBE for the estimated amount (based on quantities and unit prices) listed at the time of bid.



<http://connect.ncdot.gov/letting/LetCentral/Letter%20of%20Intent%20to%20Perform%20as%20a%20Subcontractor.pdf>

*Listing of DBE Subcontractors Form* - Form for entering DBE subcontractors on a project that will meet this DBE goal. This form is for paper bids only.

[http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/08%20DBE%20Subcontractors%20\(Federal\).docx](http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/08%20DBE%20Subcontractors%20(Federal).docx)

*Subcontractor Quote Comparison Sheet* - Spreadsheet for showing all subcontractor quotes in the work areas where DBEs quoted on the project. This sheet is submitted with good faith effort packages.

<http://connect.ncdot.gov/business/SmallBusiness/Documents/DBE%20Subcontractor%20Quote%20Comparison%20Example.xls>

## **DBE Goal**

The following DBE goal for participation by Disadvantaged Business Enterprises is established for this contract:

Disadvantaged Business Enterprises **3.0 %**

- (A) *If the DBE goal is more than zero*, the Contractor shall exercise all necessary and reasonable steps to ensure that DBEs participate in at least the percent of the contract as set forth above as the DBE goal.
- (B) *If the DBE goal is zero*, the Contractor shall make an effort to recruit and use DBEs during the performance of the contract. Any DBE participation obtained shall be reported to the Department.

## **Directory of Transportation Firms (Directory)**

Real-time information is available about firms doing business with the Department and firms that are certified through NCUCP in the Directory of Transportation Firms. Only firms identified in the Directory as DBE certified shall be used to meet the DBE goal. The Directory can be found at the following link. [https:// www.ebs.nc.gov/VendorDirectory/default.html](https://www.ebs.nc.gov/VendorDirectory/default.html)

The listing of an individual firm in the directory shall not be construed as an endorsement of the firm's capability to perform certain work.

## **Listing of DBE Subcontractors**

At the time of bid, bidders shall submit all DBE participation that they anticipate to use during the life of the contract. Only those identified to meet the DBE goal will be considered committed, even though the listing shall include both committed DBE subcontractors and additional DBE subcontractors. Additional DBE subcontractor participation submitted at the time of bid will be used toward the Department's overall race-neutral goal. Only those firms with current DBE certification at the time of bid opening will be acceptable for listing in the bidder's submittal of DBE participation. The Contractor shall indicate the following required information:

- (A) Electronic Bids

Bidders shall submit a listing of DBE participation in the appropriate section of the electronic submittal file.

- (1) Submit the names and addresses of DBE firms identified to participate in the contract. If the bidder uses the updated listing of DBE firms shown in the electronic submittal file, the bidder may use the dropdown menu to access the name and address of the DBE firm.
- (2) Submit the contract line numbers of work to be performed by each DBE firm. When no figures or firms are entered, the bidder will be considered to have no DBE participation.
- (3) The bidder shall be responsible for ensuring that the DBE is certified at the time of bid by checking the Directory of Transportation Firms. If the firm is not certified at the time of the bid-letting, that DBE's participation will not count towards achieving the DBE goal.

(B) Paper Bids

- (1) *If the DBE goal is more than zero,*
  - (a) Bidders, at the time the bid proposal is submitted, shall submit a listing of DBE participation, including the names and addresses on *Listing of DBE Subcontractors* contained elsewhere in the contract documents in order for the bid to be considered responsive. Bidders shall indicate the total dollar value of the DBE participation for the contract.
  - (b) If bidders have no DBE participation, they shall indicate this on the *Listing of DBE Subcontractors* by entering the word "None" or the number "0." This form shall be completed in its entirety. **Blank forms will not be deemed to represent zero participation.** Bids submitted that do not have DBE participation indicated on the appropriate form will not be read publicly during the opening of bids. The Department will not consider these bids for award and the proposal will be rejected.
  - (c) The bidder shall be responsible for ensuring that the DBE is certified at the time of bid by checking the Directory of Transportation Firms. If the firm is not certified at the time of the bid-letting, that DBE's participation will not count towards achieving the DBE goal.
- (2) *If the DBE goal is zero,* entries on the *Listing of DBE Subcontractors* are not required, however any DBE participation that is achieved during the project shall be reported in accordance with requirements contained elsewhere in the special provision.

**DBE Prime Contractor**

When a certified DBE firm bids on a contract that contains a DBE goal, the DBE firm is responsible for meeting the goal or making good faith efforts to meet the goal, just like any other bidder. In most cases, a DBE bidder on a contract will meet the DBE goal by virtue of the work it performs on the contract with its own forces. However, all the work that is performed by the DBE bidder and any other DBE subcontractors will count toward the DBE goal. The DBE bidder shall list itself along with any DBE subcontractors, if any, in order to receive credit toward the DBE goal.

For example, if the DBE goal is 45% and the DBE bidder will only perform 40% of the contract work, the prime will list itself at 40%, and the additional 5% shall be obtained through additional DBE participation with DBE subcontractors or documented through a good faith effort.

DBE prime contractors shall also follow Sections A or B listed under *Listing of DBE Subcontractor* just as a non-DBE bidder would.

### **Written Documentation – Letter of Intent**

The bidder shall submit written documentation for each DBE that will be used to meet the DBE goal of the contract, indicating the bidder's commitment to use the DBE in the contract. This documentation shall be submitted on the Department's form titled *Letter of Intent*.

The documentation shall be received in the office of the Engineer no later than 2:00 p.m. of the fifth calendar day following opening of bids, unless the fifth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 10:00 a.m. on the next official state business day.

If the bidder fails to submit the Letter of Intent from each committed DBE to be used toward the DBE goal, or if the form is incomplete (i.e. both signatures are not present), the DBE participation will not count toward meeting the DBE goal. If the lack of this participation drops the commitment below the DBE goal, the Contractor shall submit evidence of good faith efforts, completed in its entirety, to the Engineer no later than 2:00 p.m. on the eighth calendar day following opening of bids, unless the eighth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 10:00 a.m. on the next official state business day.

### **Submission of Good Faith Effort**

If the bidder fails to meet or exceed the DBE goal the apparent lowest responsive bidder shall submit to the Department documentation of adequate good faith efforts made to reach the DBE goal.

One complete set and **5** copies of this information shall be received in the office of the Engineer no later than 2:00 p.m. of the fifth calendar day following opening of bids, unless the fifth day falls on Saturday, Sunday or an official state holiday. In that situation, it is due in the office of the Engineer no later than 10:00 a.m. on the next official state business day.

Note: Where the information submitted includes repetitious solicitation letters, it will be acceptable to submit a representative letter along with a distribution list of the firms that were solicited. Documentation of DBE quotations shall be a part of the good faith effort submittal. This documentation may include written subcontractor quotations, telephone log notations of verbal quotations, or other types of quotation documentation.

### **Consideration of Good Faith Effort for Projects with DBE Goals More Than Zero**

Adequate good faith efforts mean that the bidder took all necessary and reasonable steps to achieve the goal which, by their scope, intensity, and appropriateness, could reasonably be expected to obtain sufficient DBE participation. Adequate good faith efforts also mean that the bidder actively and aggressively sought DBE participation. Mere *pro forma* efforts are not considered good faith efforts.

The Department will consider the quality, quantity, and intensity of the different kinds of efforts a bidder has made. Listed below are examples of the types of actions a bidder will take in making a good faith effort to meet the goal and are not intended to be exclusive or exhaustive, nor is it intended to be a mandatory checklist.

- (A) Soliciting through all reasonable and available means (e.g. attendance at pre-bid meetings, advertising, written notices, use of verifiable electronic means through the use of the NCDOT Directory of Transportation Firms) the interest of all certified DBEs who have the capability to perform the work of the contract. The bidder must solicit this interest within at least 10 days prior to bid opening to allow the DBEs to respond to the solicitation. Solicitation shall provide the opportunity to DBEs within the Division and surrounding Divisions where the project is located. The bidder must determine with certainty if the DBEs are interested by taking appropriate steps to follow up initial solicitations.
- (B) Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved.
  - (1) Where appropriate, break out contract work items into economically feasible units to facilitate DBE participation, even when the prime contractor might otherwise prefer to perform these work items with its own forces.
  - (2) Negotiate with subcontractors to assume part of the responsibility to meet the contract DBE goal when the work to be sublet includes potential for DBE participation (2<sup>nd</sup> and 3<sup>rd</sup> tier subcontractors).
- (C) Providing interested DBEs with adequate information about the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation.
- (D)
  - (1) Negotiating in good faith with interested DBEs. It is the bidder's responsibility to make a portion of the work available to DBE subcontractors and suppliers and to select those portions of the work or material needs consistent with the available DBE subcontractors and suppliers, so as to facilitate DBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of DBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for DBEs to perform the work.
  - (2) A bidder using good business judgment would consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and would take a firm's price and capabilities as well as contract goals into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not in itself sufficient reason for a bidder's failure to meet the contract DBE goal, as long as such costs are reasonable. Also, the ability or desire of a prime contractor to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make good faith efforts. Bidding contractors are not, however, required to accept higher quotes from DBEs if the price difference is excessive or unreasonable.
- (E) Not rejecting DBEs as being unqualified without sound reasons based on a thorough investigation of their capabilities. The bidder's standing within its industry, membership in specific groups, organizations, or associates and political or social affiliations (for example, union vs. non-union

- employee status) are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal.
- (F) Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by the recipient or bidder.
  - (G) Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services.
  - (H) Effectively using the services of available minority/women community organizations; minority/women contractors' groups; Federal, State, and local minority/women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and placement of DBEs. Contact within 7 days from the bid opening the Business Opportunity and Work Force Development Unit at BOWD@ncdot.gov to give notification of the bidder's inability to get DBE quotes.
  - (I) Any other evidence that the bidder submits which shows that the bidder has made reasonable good faith efforts to meet the DBE goal.

In addition, the Department may take into account the following:

- (1) Whether the bidder's documentation reflects a clear and realistic plan for achieving the DBE goal.
- (2) The bidders' past performance in meeting the DBE goals.
- (3) The performance of other bidders in meeting the DBE goal. For example, when the apparent successful bidder fails to meet the DBE goal, but others meet it, you may reasonably raise the question of whether, with additional reasonable efforts the apparent successful bidder could have met the goal. If the apparent successful bidder fails to meet the DBE goal, but meets or exceeds the average DBE participation obtained by other bidders, the Department may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made a good faith effort.

If the Department does not award the contract to the apparent lowest responsive bidder, the Department reserves the right to award the contract to the next lowest responsive bidder that can satisfy to the Department that the DBE goal can be met or that an adequate good faith effort has been made to meet the DBE goal.

### **Non-Good Faith Appeal**

The Engineer will notify the contractor verbally and in writing of non-good faith. A contractor may appeal a determination of non-good faith made by the Goal Compliance Committee. If a contractor wishes to appeal the determination made by the Committee, they shall provide written notification to the Engineer. The appeal shall be made within 2 business days of notification of the determination of non-good faith.

## Counting DBE Participation Toward Meeting DBE Goal

### (A) Participation

The total dollar value of the participation by a committed DBE will be counted toward the contract goal requirement. The total dollar value of participation by a committed DBE will be based upon the value of work actually performed by the DBE and the actual payments to DBE firms by the Contractor.

### (B) Joint Checks

Prior notification of joint check use shall be required when counting DBE participation for services or purchases that involves the use of a joint check. Notification shall be through submission of Form JC-1 (*Joint Check Notification Form*) and the use of joint checks shall be in accordance with the Department's Joint Check Procedures.

### (C) Subcontracts (Non-Trucking)

A DBE may enter into subcontracts. Work that a DBE subcontracts to another DBE firm may be counted toward the contract goal requirement. Work that a DBE subcontracts to a non-DBE firm does not count toward the contract goal requirement. If a DBE contractor or subcontractor subcontracts a significantly greater portion of the work of the contract than would be expected on the basis of standard industry practices, it shall be presumed that the DBE is not performing a commercially useful function. The DBE may present evidence to rebut this presumption to the Department. The Department's decision on the rebuttal of this presumption is subject to review by the Federal Highway Administration but is not administratively appealable to USDOT.

### (D) Joint Venture

When a DBE performs as a participant in a joint venture, the Contractor may count toward its contract goal requirement a portion of the total value of participation with the DBE in the joint venture, that portion of the total dollar value being a distinct clearly defined portion of work that the DBE performs with its forces.

### (E) Suppliers

A contractor may count toward its DBE requirement 60 percent of its expenditures for materials and supplies required to complete the contract and obtained from a DBE regular dealer and 100 percent of such expenditures from a DBE manufacturer.

### (F) Manufacturers and Regular Dealers

A contractor may count toward its DBE requirement the following expenditures to DBE firms that are not manufacturers or regular dealers:

- (1) The fees or commissions charged by a DBE firm for providing a *bona fide* service, such as professional, technical, consultant, or managerial services, or for providing bonds or insurance specifically required for the performance of a DOT-assisted contract, provided the fees or commissions are determined to be reasonable and not excessive as compared with fees and commissions customarily allowed for similar services.

- (2) With respect to materials or supplies purchased from a DBE, which is neither a manufacturer nor a regular dealer, count the entire amount of fees or commissions charged for assistance in the procurement of the materials and supplies, or fees or transportation charges for the delivery of materials or supplies required on a job site (but not the cost of the materials and supplies themselves), provided the fees are determined to be reasonable and not excessive as compared with fees customarily allowed for similar services.

### **Commercially Useful Function**

#### **(A) DBE Utilization**

The Contractor may count toward its contract goal requirement only expenditures to DBEs that perform a commercially useful function in the work of a contract. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE shall also be responsible with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material and installing (where applicable) and paying for the material itself. To determine whether a DBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and any other relevant factors.

#### **(B) DBE Utilization in Trucking**

The following factors will be used to determine if a DBE trucking firm is performing a commercially useful function:

- (1) The DBE shall be responsible for the management and supervision of the entire trucking operation for which it is responsible on a particular contract, and there shall not be a contrived arrangement for the purpose of meeting DBE goals.
- (2) The DBE shall itself own and operate at least one fully licensed, insured, and operational truck used on the contract.
- (3) The DBE receives credit for the total value of the transportation services it provides on the contract using trucks it owns, insures, and operates using drivers it employs.
- (4) The DBE may subcontract the work to another DBE firm, including an owner-operator who is certified as a DBE. The DBE who subcontracts work to another DBE receives credit for the total value of the transportation services the subcontracted DBE provides on the contract.
- (5) The DBE may also subcontract the work to a non-DBE firm, including from an owner-operator. The DBE who subcontracts the work to a non-DBE is entitled to credit for the total value of transportation services provided by the non-DBE subcontractor not to exceed the value of transportation services provided by DBE-owned trucks on the contract. Additional participation by non-DBE subcontractors receives credit only for the fee or commission it receives as

a result of the subcontract arrangement. The value of services performed under subcontract agreements between the DBE and the Contractor will not count towards the DBE contract requirement.

- (6) A DBE may lease truck(s) from an established equipment leasing business open to the general public. The lease must indicate that the DBE has exclusive use of and control over the truck. This requirement does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. This type of lease may count toward the DBE's credit as long as the driver is under the DBE's payroll.
- (7) Subcontracted/leased trucks shall display clearly on the dashboard the name of the DBE that they are subcontracted/leased to and their own company name if it is not identified on the truck itself. Magnetic door signs are not permitted.

### **DBE Replacement**

When a Contractor has relied on a commitment to a DBE subcontractor (or an approved substitute DBE subcontractor) to meet all or part of a contract goal requirement, the contractor shall not terminate the DBE subcontractor for convenience. This includes, but is not limited to, instances in which the Contractor seeks to perform the work of the terminated subcontractor with another DBE subcontractor, a non-DBE subcontractor, or with the Contractor's own forces or those of an affiliate.

The Contractor must give notice in writing both by certified mail and email to the DBE subcontractor, with a copy to the Engineer of its intent to request to terminate and/or substitute, and the reason for the request. The Contractor must give the DBE subcontractor five (5) business days to respond to the Contractor's Notice of Intent to Request Termination and/or Substitution. If the DBE subcontractor objects to the intended termination/substitution, the DBE, within five (5) business days must advise the Contractor and the Department of the reasons why the action should not be approved. The five-day notice period shall begin on the next business day after written notice is provided to the DBE subcontractor.

A committed DBE subcontractor may only be terminated after receiving the Department's written approval based upon a finding of good cause for the proposed termination and/or substitution. For purposes of this section, good cause shall include the following circumstances:

- (a) The listed DBE subcontractor fails or refuses to execute a written contract;
- (b) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;
- (c) The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements;
- (d) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
- (e) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment proceedings pursuant to 2 CFR Parts 180, 215 and 1,200 or applicable state law;
- (f) The listed DBE subcontractor is not a responsible contractor;



- (g) The listed DBE voluntarily withdraws from the project and provides written notice of withdrawal;
- (h) The listed DBE is ineligible to receive DBE credit for the type of work required;
- (i) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract;
- (j) Other documented good cause that compels the termination of the DBE subcontractor. Provided, that good cause does not exist if the prime contractor seeks to terminate a DBE it relied upon to obtain the contract so that the prime contractor can self-perform the work for which the DBE contractor was engaged or so that the prime contractor can substitute another DBE or non-DBE contractor after contract award.

The Contractor shall comply with the following for replacement of a committed DBE:

(A) Performance Related Replacement

When a committed DBE is terminated for good cause as stated above, an additional DBE that was submitted at the time of bid may be used to fulfill the DBE commitment. A good faith effort will only be required for removing a committed DBE if there were no additional DBEs submitted at the time of bid to cover the same amount of work as the DBE that was terminated.

If a replacement DBE is not found that can perform at least the same amount of work as the terminated DBE, the Contractor shall submit a good faith effort documenting the steps taken. Such documentation shall include, but not be limited to, the following:

- (1) Copies of written notification to DBEs that their interest is solicited in contracting the work defaulted by the previous DBE or in subcontracting other items of work in the contract.
- (2) Efforts to negotiate with DBEs for specific subbids including, at a minimum:
  - (a) The names, addresses, and telephone numbers of DBEs who were contacted.
  - (b) A description of the information provided to DBEs regarding the plans and specifications for portions of the work to be performed.
- (3) A list of reasons why DBE quotes were not accepted.
- (4) Efforts made to assist the DBEs contacted, if needed, in obtaining bonding or insurance required by the Contractor.

(B) Decertification Replacement

- (1) When a committed DBE is decertified by the Department after the SAF (*Subcontract Approval Form*) has been received by the Department, the Department will not require the Contractor to solicit replacement DBE participation equal to the remaining work to be performed by the decertified firm. The participation equal to the remaining work performed by the decertified firm will count toward the contract goal requirement.
- (2) When a committed DBE is decertified prior to the Department receiving the SAF (*Subcontract Approval Form*) for the named DBE firm, the Contractor shall take all necessary and reasonable steps to replace the DBE subcontractor with another DBE subcontractor to perform at least the same amount of work to meet the DBE goal

requirement. If a DBE firm is not found to do the same amount of work, a good faith effort must be submitted to NCDOT (see A herein for required documentation).

- (3) Exception: If the DBE's ineligibility is caused solely by its having exceeded the size standard during the performance of the contract, the Department will not require the Contractor to solicit replacement DBE participation equal to the remaining work to be performed by the decertified firm. The participation equal to the remaining work performed by the decertified firm will count toward the contract goal requirement and overall goal.

All requests for replacement of a committed DBE firm shall be submitted to the Engineer for approval on Form RF-1 (*DBE Replacement Request*). If the Contractor fails to follow this procedure, the Contractor may be disqualified from further bidding for a period of up to 6 months

### **Changes in the Work**

When the Engineer makes changes that result in the reduction or elimination of work to be performed by a committed DBE, the Contractor will not be required to seek additional participation. When the Engineer makes changes that result in additional work to be performed by a DBE based upon the Contractor's commitment, the DBE shall participate in additional work to the same extent as the DBE participated in the original contract work.

When the Engineer makes changes that result in extra work, which has more than a minimal impact on the contract amount, the Contractor shall seek additional participation by DBEs unless otherwise approved by the Engineer.

When the Engineer makes changes that result in an alteration of plans or details of construction, and a portion or all of the work had been expected to be performed by a committed DBE, the Contractor shall seek participation by DBEs unless otherwise approved by the Engineer.

When the Contractor requests changes in the work that result in the reduction or elimination of work that the Contractor committed to be performed by a DBE, the Contractor shall seek additional participation by DBEs equal to the reduced DBE participation caused by the changes.

### **Reports and Documentation**

A SAF (*Subcontract Approval Form*) shall be submitted for all work which is to be performed by a DBE subcontractor. The Department reserves the right to require copies of actual subcontract agreements involving DBE subcontractors.

When using transportation services to meet the contract commitment, the Contractor shall submit a proposed trucking plan in addition to the SAF. The plan shall be submitted prior to beginning construction on the project. The plan shall include the names of all trucking firms proposed for use, their certification type(s), the number of trucks owned by the firm, as well as the individual truck identification numbers, and the line item(s) being performed.

Within 30 calendar days of entering into an agreement with a DBE for materials, supplies or services, not otherwise documented by the SAF as specified above, the Contractor shall furnish the Engineer a copy of the agreement. The documentation shall also indicate the percentage (60% or 100%) of expenditures claimed for DBE credit.

### **Reporting Disadvantaged Business Enterprise Participation**

The Contractor shall provide the Engineer with an accounting of payments made to all DBE firms, including material suppliers and contractors at all levels (prime, subcontractor, or second tier subcontractor). This accounting shall be furnished to the Engineer for any given month by the end of the following month. Failure to submit this information accordingly may result in the following action:

- (A) Withholding of money due in the next partial pay estimate; or
- (B) Removal of an approved contractor from the prequalified bidders' list or the removal of other entities from the approved subcontractors list.

While each contractor (prime, subcontractor, 2nd tier subcontractor) is responsible for accurate accounting of payments to DBEs, it shall be the prime contractor's responsibility to report all monthly and final payment information in the correct reporting manner.

Failure on the part of the Contractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from further bidding until the required information is submitted.

Failure on the part of any subcontractor to submit the required information in the time frame specified may result in the disqualification of that contractor and any affiliate companies from being approved for work on future projects until the required information is submitted.

Contractors reporting transportation services provided by non-DBE lessees shall evaluate the value of services provided during the month of the reporting period only.

At any time, the Engineer can request written verification of subcontractor payments.

The Contractor shall report the accounting of payments through the Department's DBE Payment Tracking System.

### **Failure to Meet Contract Requirements**

Failure to meet contract requirements in accordance with Subarticle 102-15(J) of the *2018 Standard Specifications* may be cause to disqualify the Contractor.

### **CERTIFICATION FOR FEDERAL-AID CONTRACTS:**

(3-21-90)

SP1 G85

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (A) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

- (B) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, *Disclosure Form to Report Lobbying*, in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by *Section 1352, Title 31, U.S. Code*. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

**RESTRICTIONS ON ITS EQUIPMENT AND SERVICES:**

(11-17-20)

SP01 G090

All telecommunications, video or other ITS equipment or services installed or utilized on this project must be in conformance with UNIFORM ADMINISTRATIVE REQUIREMENTS, COST PRINCIPLES, AND AUDIT REQUIREMENTS FOR FEDERAL AWARDS **2 CFR, § 200.216**  
**Prohibition on certain telecommunications and video surveillance services or equipment.**

**USE OF UNMANNED AIRCRAFT SYSTEM (UAS):**

(8-20-19)

SP1 G092

The Contractor shall adhere to all Federal, State and Local regulations and guidelines for the use of Unmanned Aircraft Systems (UAS). This includes but is not limited to US 14 CFR Part 107 *Small UAS Rule*, NC GS 15A-300.2 *Regulation of launch and recovery sites*, NC GS 63-95 *Training required for the operation of unmanned aircraft systems*, NC GS 63-96 *Permit required for commercial operation of unmanned aircraft system*, and NCDOT UAS Policy. The required operator certifications include possessing a current Federal Aviation Administration (FAA) Remote Pilot Certificate, a NC UAS Operator Permit as well as operating a UAS registered with the FAA.

Prior to beginning operations, the Contractor shall complete the NCDOT UAS – Flight Operation Approval Form and submit it to the Engineer for approval. All UAS operations shall be approved by the Engineer prior to beginning the operations.

All contractors or subcontractors operating UAS shall have UAS specific general liability insurance to cover all operations under this contract.

The use of UAS is at the Contractor's discretion. No measurement or payment will be made for the use of UAS. In the event that the Department directs the Contractor to utilize UAS, payment will be in accordance with Article 104-7 Extra Work.

**EQUIPMENT IDLING GUIDELINES:**

(1-19-21)

107

SP1 G096

Exercise reduced fuel consumption and reduced equipment emissions during the construction of all work associated with this contract. Employees engaged in the construction of this project should turn off vehicles when stopped for more than thirty (30) minutes and off-highway equipment should idle no longer than fifteen (15) consecutive minutes.

These guidelines for turning off vehicles and equipment when idling do not apply to:

1. Idling when queuing.
2. Idling to verify the vehicle is in safe operating condition.
3. Idling for testing, servicing, repairing or diagnostic purposes.
4. Idling necessary to accomplish work for which the vehicle was designed (such as operating a crane, mixing concrete, etc.).
5. Idling required to bring the machine system to operating temperature.
6. Emergency vehicles, utility company, construction, and maintenance vehicles where the engines must run to perform needed work.
7. Idling to ensure safe operation of the vehicle.
8. Idling when the propulsion engine is providing auxiliary power for other than heating or air conditioning. (such as hydraulic systems for pavers)
9. When specific traffic, safety, or emergency situations arise.
10. If the ambient temperature is less than 32 degrees Fahrenheit. Limited idling to provide for the safety of vehicle occupants (e.g. to run the heater).
11. If the ambient temperature is greater than 90 degrees Fahrenheit. Limited idling to provide for the safety of vehicle occupants of off-highway equipment (e.g. to run the air conditioning) no more than 30 minutes.
12. Diesel powered vehicles may idle for up to 30 minutes to minimize restart problems.

Any vehicle, truck, or equipment in which the primary source of fuel is natural gas or electricity is exempt from the idling limitations set forth in this special provision.

**U.S. DEPARTMENT OF TRANSPORTATION HOTLINE:**

(11-22-94)

108-5

SP1 G100

To report bid rigging activities call: **1-800-424-9071**

The U.S. Department of Transportation (DOT) operates the above toll-free hotline Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the hotline to report such activities.

The hotline is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

**CARGO PREFERENCE ACT:**

(2-16-16)

Privately owned United States-flag commercial vessels transporting cargoes are subject to the Cargo Preference Act (CPA) of 1954 requirements and regulations found in 46 CFR 381.7. Contractors are directed to clause (b) of 46 CFR 381.7 as follows:

(b) Contractor and Subcontractor Clauses. "Use of United States-flag vessels: The contractor agrees-

" (1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract."

**PORTABLE CONCRETE BARRIER - (Partial Payments for Materials):**

(7-1-95) (Rev. 8-16-11)

1170-4

SP1 G121

When so authorized by the Engineer, partial materials payments will be made up to 95 percent of the delivered cost of portable concrete barrier, provided that these materials have been delivered on the project and stored in an acceptable manner, and further provided the documents listed in Subarticle 109-5(C) of the *2018 Standard Specifications* have been furnished to the Engineer.

The provisions of Subarticle 109-5(B) of the *2018 Standard Specifications* will apply to the portable concrete barrier.

**ELECTRONIC BIDDING:**

(2-19-19)

101, 102, 103

SP1 G140

Revise the *2018 Standard Specifications* as follows:

**Page 1-4, Article 101-3, DEFINITIONS, BID (OR PROPOSAL) *Electronic Bid*, line 1,** replace “Bid Express®” with “the approved electronic bidding provider”.

**Page 1-15, Subarticle 102-8(B), *Electronic Bids*, lines 39-40,** replace “to Bid Express®” with “via the approved electronic bidding provider”.

**Page 1-15, Subarticle 102-8(B)(1), *Electronic Bids*, line 41,** delete “from Bid Express®”

**Page 1-17, Subarticle 102-9(C)(2), *Electronic Bids*, line 21,** replace “Bid Express® miscellaneous folder within the .ebs” with “electronic submittal”.

**Page 1-29, Subarticle 103-4(C)(2), *Electronic Bids*, line 32,** replace “.ebs miscellaneous data file of Expedite” with “electronic submittal file”

**AWARD LIMITS:**

(4-19-22)

103

SP1 G141

Revise the *2018 Standard Specifications* as follows:

**Page 1-29, Subarticle 103-4(C), *Award Limits*, line 4-8,** delete and replace the first sentence in the first paragraph with the following:

A bidder who desires to bid on more than one project on which bids are to be opened in the same letting and who desires to avoid receiving an award of more projects than he is equipped to handle, may bid on any number of projects but may limit the total amount of work awarded to him on selected projects by completing the form Award Limits on Multiple Projects for each project subject to the award limit.

**TWELVE MONTH GUARANTEE:**

(7-15-03)

108

SP1 G145

- (A) The Contractor shall guarantee materials and workmanship against latent and patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve months following the date of final acceptance of the work for maintenance and shall replace such defective materials and workmanship without cost to the Department. The Contractor will not be responsible for damage due to faulty design, normal wear and tear, for negligence on the part of the Department, and/or for use in excess of the design.
- (B) Where items of equipment or material carry a manufacturer’s guarantee for any period in excess of twelve months, then the manufacturer’s guarantee shall apply for that particular piece of equipment or material. The Department’s first remedy shall be through the manufacturer although the Contractor is responsible for invoking the warranted repair work with the manufacturer. The Contractor’s responsibility shall be limited to the term of the manufacturer’s guarantee. NCDOT would be afforded the same warranty as provided by the Manufacturer.

This guarantee provision shall be invoked only for major components of work in which the Contractor would be wholly responsible for under the terms of the contract. Examples would include pavement structures, bridge components, and sign structures. This provision will not be used as a mechanism to force

the Contractor to return to the project to make repairs or perform additional work that the Department would normally compensate the Contractor for. In addition, routine maintenance activities (i.e. mowing grass, debris removal, ruts in earth shoulders,) are not parts of this guarantee.

Appropriate provisions of the payment and/or performance bonds shall cover this guarantee for the project.

To ensure uniform application statewide the Division Engineer will forward details regarding the circumstances surrounding any proposed guarantee repairs to the Chief Engineer for review and approval prior to the work being performed.

### **EROSION AND SEDIMENT CONTROL/STORMWATER CERTIFICATION:**

(1-16-07) (Rev 12-15-20)

105-16, 225-2, 16

SP1 G180

#### **General**

Schedule and conduct construction activities in a manner that will minimize soil erosion and the resulting sedimentation and turbidity of surface waters. Comply with the requirements herein regardless of whether or not a National Pollution discharge Elimination System (NPDES) permit for the work is required.

Establish a chain of responsibility for operations and subcontractors' operations to ensure that the *Erosion and Sediment Control/Stormwater Pollution Prevention Plan* is implemented and maintained over the life of the contract.

- (A) *Certified Supervisor* - Provide a certified Erosion and Sediment Control/Stormwater Supervisor to manage the Contractor and subcontractor operations, insure compliance with Federal, State and Local ordinances and regulations, and manage the Quality Control Program.
- (B) *Certified Foreman* - Provide a certified, trained foreman for each construction operation that increases the potential for soil erosion or the possible sedimentation and turbidity of surface waters.
- (C) *Certified Installer* - Provide a certified installer to install or direct the installation for erosion or sediment/stormwater control practices.
- (D) *Certified Designer* - Provide a certified designer for the design of the erosion and sediment control/stormwater component of reclamation plans and, if applicable, for the design of the project erosion and sediment control/stormwater plan.

#### **Roles and Responsibilities**

- (A) *Certified Erosion and Sediment Control/Stormwater Supervisor* - The Certified Supervisor shall be Level II and responsible for ensuring the erosion and sediment control/stormwater plan is adequately implemented and maintained on the project and for conducting the quality control program. The Certified Supervisor shall be on the project within 24 hours notice from initial exposure of an erodible surface to the project's final acceptance. Perform the following duties:
  - (1) *Manage Operations* - Coordinate and schedule the work of subcontractors so that erosion and sediment control/stormwater measures are fully executed for each operation and in a timely manner over the duration of the contract.



- (a) Oversee the work of subcontractors so that appropriate erosion and sediment control/stormwater preventive measures are conformed to at each stage of the work.
  - (b) Prepare the required National Pollutant Discharge Elimination System (NPDES) Inspection Record and submit to the Engineer.
  - (c) Attend all weekly or monthly construction meetings to discuss the findings of the NPDES inspection and other related issues.
  - (d) Implement the erosion and sediment control/stormwater site plans requested.
  - (e) Provide any needed erosion and sediment control/stormwater practices for the Contractor's temporary work not shown on the plans, such as, but not limited to work platforms, temporary construction, pumping operations, plant and storage yards, and cofferdams.
  - (f) Acquire applicable permits and comply with requirements for borrow pits, dewatering, and any temporary work conducted by the Contractor in jurisdictional areas.
  - (g) Conduct all erosion and sediment control/stormwater work in a timely and workmanlike manner.
  - (h) Fully perform and install erosion and sediment control/stormwater work prior to any suspension of the work.
  - (i) Coordinate with Department, Federal, State and Local Regulatory agencies on resolution of erosion and sediment control/stormwater issues due to the Contractor's operations.
  - (j) Ensure that proper cleanup occurs from vehicle tracking on paved surfaces or any location where sediment leaves the Right-of-Way.
  - (k) Have available a set of erosion and sediment control/stormwater plans that are initialed and include the installation date of Best Management Practices. These practices shall include temporary and permanent groundcover and be properly updated to reflect necessary plan and field changes for use and review by Department personnel as well as regulatory agencies.
- (2) Requirements set forth under the NPDES Permit - The Department's NPDES Stormwater permit (NCS000250) outlines certain objectives and management measures pertaining to construction activities. The permit references *NCG010000, General Permit to Discharge Stormwater* under the NPDES, and states that the Department shall incorporate the applicable requirements into its delegated Erosion and Sediment Control Program for construction activities disturbing one or more acres of land. The Department further incorporates these requirements on all contracted bridge and culvert work at jurisdictional waters, regardless of size. Some of the requirements are, but are not limited to:
- (a) Control project site waste to prevent contamination of surface or ground waters of the state, i.e. from equipment operation/maintenance, construction materials, concrete washout, chemicals, litter, fuels, lubricants, coolants, hydraulic fluids, any other petroleum products, and sanitary waste.
  - (b) Inspect erosion and sediment control/stormwater devices and stormwater discharge outfalls at least once every 7 calendar days and within 24 hours after a rainfall event equal to or greater than 1.0 inch that occurs within a 24 hour period. Additional monitoring may be required at the discretion of Division of Water Resources personnel if the receiving stream is 303(d) listed for turbidity and the project has had documented problems managing turbidity.
  - (c) Maintain an onsite rain gauge or use the Department's Multi-Sensor Precipitation Estimate website to maintain a daily record of rainfall amounts and dates.

- (d) Maintain erosion and sediment control/stormwater inspection records for review by Department and Regulatory personnel upon request.
  - (e) Implement approved reclamation plans on all borrow pits, waste sites and staging areas.
  - (f) Maintain a log of turbidity test results as outlined in the Department's Procedure for Monitoring Borrow Pit Discharge.
  - (g) Provide secondary containment for bulk storage of liquid materials.
  - (h) Provide training for employees concerning general erosion and sediment control/stormwater awareness, the Department's NPDES Stormwater Permit NCS000250 requirements, and the applicable requirements of the *General Permit, NCG010000*.
  - (i) Report violations of the NPDES permit to the Engineer immediately who will notify the Division of Water Quality Regional Office within 24 hours of becoming aware of the violation.
- (3) Quality Control Program - Maintain a quality control program to control erosion, prevent sedimentation and follow provisions/conditions of permits. The quality control program shall:
- (a) Follow permit requirements related to the Contractor and subcontractors' construction activities.
  - (b) Ensure that all operators and subcontractors on site have the proper erosion and sediment control/stormwater certification.
  - (c) Notify the Engineer when the required certified erosion and sediment control/stormwater personnel are not available on the job site when needed.
  - (d) Conduct the inspections required by the NPDES permit.
  - (e) Take corrective actions in the proper timeframe as required by the NPDES permit for problem areas identified during the NPDES inspections.
  - (f) Incorporate erosion control into the work in a timely manner and stabilize disturbed areas with mulch/seed or vegetative cover on a section-by-section basis.
  - (g) Use flocculants approved by state regulatory authorities where appropriate and where required for turbidity and sedimentation reduction.
  - (h) Ensure proper installation and maintenance of temporary erosion and sediment control devices.
  - (i) Remove temporary erosion or sediment control devices when they are no longer necessary as agreed upon by the Engineer.
  - (j) The Contractor's quality control and inspection procedures shall be subject to review by the Engineer. Maintain NPDES inspection records and make records available at all times for verification by the Engineer.
- (B) *Certified Foreman* - At least one Certified Foreman shall be onsite for each type of work listed herein during the respective construction activities to control erosion, prevent sedimentation and follow permit provisions:
- (1) Foreman in charge of grading activities
  - (2) Foreman in charge of bridge or culvert construction over jurisdictional areas
  - (3) Foreman in charge of utility activities

The Contractor may request to use the same person as the Level II Supervisor and Level II Foreman. This person shall be onsite whenever construction activities as described above are taking place. This request shall be approved by the Engineer prior to work beginning.

The Contractor may request to name a single Level II Foreman to oversee multiple construction activities on small bridge or culvert replacement projects. This request shall be approved by the Engineer prior to work beginning.

- (C) *Certified Installers* - Provide at least one onsite, Level I Certified Installer for each of the following erosion and sediment control/stormwater crew:
- (1) Seeding and Mulching
  - (2) Temporary Seeding
  - (3) Temporary Mulching
  - (4) Sodding
  - (5) Silt fence or other perimeter erosion/sediment control device installations
  - (6) Erosion control blanket installation
  - (7) Hydraulic tackifier installation
  - (8) Turbidity curtain installation
  - (9) Rock ditch check/sediment dam installation
  - (10) Ditch liner/matting installation
  - (11) Inlet protection
  - (12) Riprap placement
  - (13) Stormwater BMP installations (such as but not limited to level spreaders, retention/detention devices)
  - (14) Pipe installations within jurisdictional areas

If a Level I *Certified Installer* is not onsite, the Contractor may substitute a Level II Foreman for a Level I Installer, provided the Level II Foreman is not tasked to another crew requiring Level II Foreman oversight.

- (D) *Certified Designer* - Include the certification number of the Level III Certified Designer on the erosion and sediment control/stormwater component of all reclamation plans and if applicable, the certification number of the Level III Certified Designer on the design of the project erosion and sediment control/stormwater plan.

### **Preconstruction Meeting**

Furnish the names of the *Certified Erosion and Sediment Control/Stormwater Supervisor*, *Certified Foremen*, *Certified Installers* and *Certified Designer* and notify the Engineer of changes in certified personnel over the life of the contract within 2 days of change.

### **Ethical Responsibility**

Any company performing work for the North Carolina Department of Transportation has the ethical responsibility to fully disclose any reprimand or dismissal of an employee resulting from improper testing or falsification of records.

### **Revocation or Suspension of Certification**

Upon recommendation of the Chief Engineer to the certification entity, certification for *Supervisor*, *Certified Foremen*, *Certified Installers* and *Certified Designer* may be revoked or suspended with the issuance of an *Immediate Corrective Action (ICA)*, *Notice of Violation (NOV)*, or *Cease and Desist Order* for erosion and sediment control/stormwater related issues.

The Chief Engineer may recommend suspension or permanent revocation of certification due to the following:

- (A) Failure to adequately perform the duties as defined within this certification provision.
- (B) Issuance of an ICA, NOV, or Cease and Desist Order.
- (C) Failure to fully perform environmental commitments as detailed within the permit conditions and specifications.
- (D) Demonstration of erroneous documentation or reporting techniques.
- (E) Cheating or copying another candidate's work on an examination.
- (F) Intentional falsification of records.
- (G) Directing a subordinate under direct or indirect supervision to perform any of the above actions.
- (H) Dismissal from a company for any of the above reasons.
- (I) Suspension or revocation of one's certification by another entity.

Suspension or revocation of a certification will be sent by certified mail to the certificant and the Corporate Head of the company that employs the certificant.

A certificant has the right to appeal any adverse action which results in suspension or permanent revocation of certification by responding, in writing, to the Chief Engineer within 10 calendar days after receiving notice of the proposed adverse action.

Chief Engineer  
1536 Mail Service Center  
Raleigh, NC 27699-1536

Failure to appeal within 10 calendar days will result in the proposed adverse action becoming effective on the date specified on the certified notice. Failure to appeal within the time specified will result in a waiver of all future appeal rights regarding the adverse action taken. The certificant will not be allowed to perform duties associated with the certification during the appeal process.

The Chief Engineer will hear the appeal and make a decision within 7 days of hearing the appeal. Decision of the Chief Engineer will be final and will be made in writing to the certificant.

If a certification is temporarily suspended, the certificant shall pass any applicable written examination and any proficiency examination, at the conclusion of the specified suspension period, prior to having the certification reinstated.

### **Measurement and Payment**

*Certified Erosion and Sediment Control/Stormwater Supervisor, Certified Foremen, Certified Installers and Certified Designer* will be incidental to the project for which no direct compensation will be made.

### **PROCEDURE FOR MONITORING BORROW PIT DISCHARGE:**

(2-20-07) (Rev. 4-5-19)

105-16, 230, 801

SP1 G181

Water discharge from borrow pit sites shall not cause surface waters to exceed 50 NTUs (nephelometric turbidity unit) in streams not designated as trout waters and 10 NTUs in streams, lakes or reservoirs designated as trout waters. For lakes and reservoirs not designated as trout waters, the turbidity shall not exceed 25 NTUs. If the turbidity exceeds these levels due to natural background conditions, the existing turbidity level shall not be increased.

If during any operating day, the downstream water quality exceeds the standard, the Contractor shall do all of the following:

- (A) Either cease discharge or modify the discharge volume or turbidity levels to bring the downstream turbidity levels into compliance, or
- (B) Evaluate the upstream conditions to determine if the exceedance of the standard is due to natural background conditions. If the background turbidity measurements exceed the standard, operation of the pit and discharge can continue as long as the stream turbidity levels are not increased due to the discharge.
- (C) Measure and record the turbidity test results (time, date and sampler) at all defined sampling locations 30 minutes after startup and at a minimum, one additional sampling of all sampling locations during that 24-hour period in which the borrow pit is discharging.
- (D) Notify DWQ within 24 hours of any stream turbidity standard exceedances that are not brought into compliance.

During the Environmental Assessment required by Article 230-4 of the *2018 Standard Specifications*, the Contractor shall define the point at which the discharge enters into the State's surface waters and the appropriate sampling locations. Sampling locations shall include points upstream and downstream from the point at which the discharge enters these waters. Upstream sampling location shall be located so that it is not influenced by backwater conditions and represents natural background conditions. Downstream sampling location shall be located at the point where complete mixing of the discharge and receiving water has occurred.

The discharge shall be closely monitored when water from the dewatering activities is introduced into jurisdictional wetlands. Any time visible sedimentation (deposition of sediment) on the wetland surface is observed, the dewatering activity will be suspended until turbidity levels in the stilling basin can be reduced to a level where sediment deposition does not occur. Staining of wetland surfaces from suspended clay particles, occurring after evaporation or infiltration, does not constitute sedimentation. No activities shall occur in wetlands that adversely affect the functioning of a wetland. Visible sedimentation will be considered an indication of possible adverse impacts on wetland use.

The Engineer will perform independent turbidity tests on a random basis. These results will be maintained in a log within the project records. Records will include, at a minimum, turbidity test results, time, date and name of sampler. Should the Department's test results exceed those of the Contractor's test results, an immediate test shall be performed jointly with the results superseding the previous test results of both the Department and the Contractor.

The Contractor shall use the *NCDOT Turbidity Reduction Options for Borrow Pits Matrix*, available at <https://connect.ncdot.gov/resources/roadside/FieldOperationsDocuments/TurbidityReductionOptionSheet.pdf> to plan, design, construct, and maintain BMPs to address water quality standards. Tier I Methods include stilling basins which are standard compensatory BMPs. Other Tier I methods are noncompensatory and shall be used when needed to meet the stream turbidity standards. Tier II Methods are also noncompensatory and are options that may be needed for protection of rare or unique resources or where special environmental conditions exist at the site which have led to additional requirements being placed in the DWQ's 401 Certifications and approval letters, Isolated Wetland Permits, Riparian Buffer Authorization or a DOT Reclamation Plan's Environmental Assessment for the specific site. Should the Contractor exhaust all Tier I Methods on a site exclusive of rare or unique resources or

special environmental conditions, Tier II Methods may be required by regulators on a case by case basis per supplemental agreement.

The Contractor may use cation exchange capacity (CEC) values from proposed site borings to plan and develop the bid for the project. CEC values exceeding 15 milliequivalents per 100 grams of soil may indicate a high potential for turbidity and should be avoided when dewatering into surface water is proposed.

No additional compensation for monitoring borrow pit discharge will be paid.



| <i>Units</i>                  | <i>psi</i>                                      |                  |                  |           |           | <i>inch</i>  | <i>inch</i>            | <i>lb/cy</i> | <i>lb/cy</i> | <i>lb/cy</i> | <i>lb/cy</i> |
|-------------------------------|---|------------------|------------------|-----------|-----------|--|------------------------|--------------|--------------|--------------|--------------|
| AA                            | 4500  | 0.381            | 0.426            | ---       | ---       | 3.5 <sup>A</sup>                                   | ---                    | 639          | 715          | ---          | ---          |
| AA Slip Form                  | 4500  | 0.381            | 0.426            | ---       | ---       | 1.5  | ---                    | 639          | 715          | ---          | ---          |
| Drilled Pier                  | 4500  | ---              | ---              | 0.450     | 0.450     | ---  | 5 - 7 dry<br>7 - 9 wet | ---          | ---          | 640          | 800          |
| A                             | 3000  | 0.488            | 0.532            | 0.550     | 0.594     | 3.5 <sup>A</sup>                                   | 4.0                    | 564          | ---          | 602          | ---          |
| B                             | 2500  | 0.488            | 0.567            | 0.559     | 0.630     | 1.5 machine placed<br>2.5 <sup>A</sup> hand placed | 4.0                    | 508          | ---          | 545          | ---          |
| Sand Light-weight             | 4500  | ---              | 0.420            | ---       | ---       | 4.0 <sup>A</sup>                                   | ---                    | 715          | ---          | ---          | ---          |
| Latex Modified                | 3000 (at 7 days)                                | 0.400            | 0.400            | ---       | ---       | 6.0  | ---                    | 658          | ---          | ---          | ---          |
| Flowable Fill excavatable     | 150 max. (at 56 days)                           | as needed        | as needed        | as needed | as needed | ---  | Flowable               | ---          | ---          | 40           | 100          |
| Flowable Fill non-excavatable | 125   | as needed        | as needed        | as needed | as needed | ---  | Flowable               | ---          | ---          | 100          | as needed    |
| Pavement                      | 4500 Design, field<br>650 flexural, design only | 0.559            | 0.559            | ---       | ---       | 1.5 slip form<br>3.0 hand placed                   | ---                    | 526          | ---          | ---          | ---          |
| Precast                       | See Table 1077-1                                | as needed        | as needed        | ---       | ---       | 6.0  | as needed              | as needed    | as needed    | as needed    | as needed    |
| Prestressed                   | per contract                                    | See Table 1078-1 | See Table 1078-1 | ---       | ---       | 8.0  | ---                    | 564          | as needed    | ---          | ---          |

- A. The slump may be increased to 6 inches, provided the increase in slump is achieved by adding a chemical admixture conforming to Section 1024-3. In no case shall the water-cement ratio on the approved design be exceeded. Concrete exhibiting segregation and/or excessive bleeding will be rejected. Utilizing an Admixture to modify slump does not relinquish the contractor's responsibility to ensure the final product quality and overall configuration meets design specifications. Caution should be taken when placing these modified mixes on steep grades to prevent unintended changes to the set slope.



**THERMOPLASTIC PAVEMENT MARKING MATERIAL – COLOR TESTING:**

3-19-19

1087

SP10 R05

Revise the *2018 Standard Specifications* as follows:

**Pages 10-183 and 10-184, Subarticle 1087-7(D)(1)(b) Yellow**, lines 9-11, delete and replace with the following:

Obtain Color Values Y,x,y per ASTM E1349 using C/2° illuminant/observer.  
Results shall be  $Y \geq 45\%$ , and x,y shall fall within PR#1 chart chromaticity limits.

**POLYUREA PAVEMENT MARKING MATERIAL – TYPE 2 TYPICAL CERTIFIED MILL TEST REPORT:**

3-19-19

1087

SP10 R06

Amend the *2018 Standard Specifications* as follows:

**Page 10-184, Subarticle 1087-8 Material Certification**, in accordance with Subarticle 106-3 provide a Type 2 Typical Certified Mill Test Report and a Type 3 Manufacturer's Certification for Polyurea pavement marking material.

When tested, the material shall meet the physical and chemical characteristics provided by the manufacturer. NCDOT reserves the right to compare these test results to baseline test results gathered by the NCDOT Materials and Test Unit.

**NON-CAST IRON SNOWPLOWABLE PAVEMENT MARKERS:**

10-19-21 (Rev. 11-16-21)

1086, 1250, 1253

SP10 R08

Revise the *2018 Standard Specifications* as follows:

**Pages 10-177 and 10-178, Subarticle 1086-3 SNOWPLOWABLE PAVEMENT MARKERS**, delete items (A), (B) and (C)(1) and replace with the following:

**(A) General**

Use non-cast iron snowplowable pavement markers evaluated by NTPEP. The non-cast iron snowplowable pavement marker shall consist of a housing with one or more glass or plastic face lens type reflective lenses to provide the required color designation. The marker shall be designed or installed in a manner that minimizes damage from snowplow blades. Plastic lens faces shall use an abrasion resistant coating.

**(B) Housings****(1) Dimensions**

The dimension, slope and minimum area of reflecting surface shall conform to dimensions as shown in the plans. The minimum area of each reflecting surface shall be 1.44 sq.in.

**(2) Materials**

Use non-cast iron snowplowable pavement markers that are on the NCDOT Approved Products List.

(3) Surface

The surface of the housing shall be free of scale, dirt, rust, oil, grease or any other contaminant which might reduce its bond to the epoxy adhesive.

(4) Identification

Mark the housing with the manufacturer's name and model number of marker.

**(C) Reflectors**

(1) General

Laminate the reflector to an elastomeric pad and attach with adhesive to the housing. The thickness of the elastomeric pad shall be 0.04".

**Pages 12-14, Subarticle 1250-3(C) Removal of Existing Pavement Markers, lines 19-29, delete and replace with the following:**

Remove the existing raised pavement markers or the snowplowable pavement markers including the housings, before overlaying an existing roadway with pavement. Repair the pavement by filling holes as directed by the Engineer.

When traffic patterns are changed in work zones due to construction or reconstruction, remove all raised pavement markers or snowplowable markers including housings that conflict with the new traffic pattern before switching traffic to the new traffic pattern. Lens removal in lieu of total housing removal is not an acceptable practice for snowplowable markers.

Properly dispose of the removed pavement markers. No direct payment will be made for removal or disposal of existing pavement markers or repair of pavement, as such work will be incidental to other items in the contract.

**Pages 12-16, Subarticle 1253-1 DESCRIPTION, lines 4-5, delete and replace with the following:**

Furnish, install and maintain non-cast iron snowplowable pavement markers in accordance with the contract.

**Pages 12-16 and 12-17, Subarticle 1253-3 CONSTRUCTION METHODS, delete items (A), (B) and (C) and replace with the following:**

**(A) General**

Bond marker housings to the pavement with epoxy adhesive. Mechanically mix and dispense epoxy adhesives as required by the manufacturer's specifications. Place the markers immediately after the adhesive has been mixed and dispensed.

If saw cutting, milling, or grooving operations are used, promptly remove all resulting debris from the pavement surface. Install the marker housings within 7 calendar days after saw

cutting, milling, or grooving the pavement. Remove and dispose of loose material from the slots by brushing, blow cleaning, or vacuuming. Dry the slots before applying the epoxy adhesive. Install non-cast iron snowplowable pavement markers according to the manufacturer's recommendations.

Protect the non-cast iron snowplowable pavement markers until the epoxy has initially cured and is track free.

**(B) Reflector Replacement**

In the event that a reflector is damaged, replace the damaged reflector by using adhesives and methods recommended by the manufacturer of the markers and approved by the Engineer. This work is considered incidental if damage occurs during the initial installation of the marker housings and maintenance of initial non-cast iron snowplowable markers specified in this section. This work will be paid for under the pay item for the type of reflector replacement if the damage occurred after the initial installation of the non-cast iron snowplowable pavement marker.

Missing housings shall be replaced. Broken housings shall be removed and replaced. In both cases the slot for the housings shall be properly prepared prior to installing the new housing; patch the existing marker slots as directed by the Engineer and install the new marker approximately one foot before or after the patch. Removal of broken housings and preparation of slots will be considered incidental to the work of replacing housings.

**Pages 12-17, Subarticle 1253-4 MAINTENANCE, lines 5,** delete and replace with the following:

Maintain all installed non-cast iron snowplowable pavement markers until acceptance.

**Pages 12-17, Subarticle 1253-5 MEASUREMENT AND PAYMENT, lines 7-8,** delete and replace with the following:

*Non-Cast Iron Snowplowable Pavement Markers* will be measured and paid as the actual number of non-cast iron snowplowable pavement markers satisfactorily placed and accepted by the Engineer.

**Pages 12-17, Subarticle 1253-5 MEASUREMENT AND PAYMENT, lines 11,** delete and replace with the following:

Payment will be made under:

| <b>Pay Item</b>                                | <b>Pay Unit</b> |
|--|-----------------|
| Non-Cast Iron Snowplowable Pavement Marker     | Each            |
| Replace Snowplowable Pavement Marker Reflector | Each            |

**MATERIALS FOR PORTLAND CEMENT CONCRETE:**

(9-15-20)

1000, 1024

SP10 R24

Revise the *2018 Standard Specifications* as follows:

**Page 10-52, Article 1024-4, WATER, lines 3-6,** delete and replace with the following:

Test water from wells at all locations. Test public water supplies from all out of state locations and in the following counties: Beaufort, Bertie, Brunswick, Camden, Carteret, Chowan, Craven, Currituck, Dare, Gates, Hyde, New Hanover, Onslow, Pamlico, Pasquotank, Pender, Perquimans, Tyrell and Washington unless the Engineer waives the testing requirements.

**Page 10-52, Table 1024-2, PHYSICAL PROPERTIES OF WATER,** replace with the following:

| <b>Property</b>  | <b>Requirement</b>                      | <b>Test Method</b> |
|--|---|--------------------|
| Compression Strength, minimum percent of control at 3 and 7 days | 90%                                     | ASTM C1602         |
| Time of set, deviation from control                              | From 1:00 hr. earlier to 1:30 hr. later | ASTM C1602         |
| pH   | 4.5 to 8.5                              | ASTM D1293 *       |
| Chloride Ion Content, Max.                                       | 250 ppm                                 | ASTM D512 *        |
| Total Solids Content (Residue), Max.                             | 1,000 ppm                               | SM 2540B *         |
| Resistivity, Min.  | 0.500 kohm-cm                           | ASTM D1125 *       |

\*Denotes an alternate method is acceptable. Test method used shall be referenced in the test report.

**MATERIAL AND EQUIPMENT STORAGE & PARKING OF PERSONAL VEHICLES:**

11-17-21

1101

SP11 R03

Revise the *2018 Standard Specifications* as follows:

**Page 11-2, Article 1101-8 MATERIAL AND EQUIPMENT STORAGE, line 35-38,** delete and replace with the following:

When work is not in progress, keep all personnel, equipment, machinery, tools, construction debris, materials and supplies away from active travel lanes that meets Table 1101-1.

| <b>TABLE 1101-1</b>  |                      |
|--|----------------------|
| <b>MATERIAL AND EQUIPMENT STORAGE FROM ACTIVE TRAVEL LANES</b> |                      |
| <b>Posted Speed Limit (mph)</b>                                | <b>Distance (ft)</b> |
| 40 or less   | ≥ 18                 |
| 45-50  | ≥ 28                 |

|              |           |
|--------------|-----------|
| 55           | $\geq 32$ |
| 60 or higher | $\geq 40$ |

When vehicles, equipment and materials are protected by concrete barrier or guardrail, they shall be offset at least 5 feet from the barrier or guardrail.

**Page 11-2, Article 1101-9 PARKING OF PERSONAL VEHICLES, line 40-41,** delete and replace with the following:

Provide staging areas for personal vehicle parking in accordance with section 1101-8 or as directed by the Engineer before use.

**WORK ZONE INSTALLER:**

(7-20-21)(Rev. 7-19-22)

1101, 1150

SP11 R04

Provide the service of at least one qualified work zone installer during the setup, installation, and removal of temporary traffic control within the highway right of way. The qualified work zone installer shall serve as crew leader and shall be on site and directing the installation and removal of temporary traffic control. If multiple temporary traffic control installations or removals are occurring simultaneously, then each shall have a qualified work zone installer.

The work zone installer shall be qualified by an NCDOT approved training agency or other approved training provider in the safe and competent set up of temporary traffic control. For a complete listing of approved training agencies, see the Work Zone Safety Training webpage.

A work zone supervisor, in accordance with Article 1101-13 of the *Standard Specifications*, may fulfill the role of the work zone installer during the setup, installation, and removal of temporary traffic control within the highway right of way provided they are on site and directing the installation and removal of temporary traffic control.

All other individuals participating in the setup, installation, and removal of temporary traffic control within the highway right of way shall be certified as a qualified flagger in accordance with Article 1150-3 of the *Standard Specifications*, even if flagging is not being performed as part of the traffic control.

Provide the name and contact information of all qualified work zone installers to the Engineer prior to or at the preconstruction conference. Additionally, provide a qualification statement that all other individuals participating in the setup, installation, and removal of temporary traffic control are qualified flaggers that have been properly trained through an NCDOT approved training agency.

All certification records for qualified work zone installers and flaggers shall be uploaded by the approved training agency or other approved training provider to the Department's Work Zone Education Verification App (WZ-EVA) prior to the qualified work zone installer or flagger performing any traffic control duties on the project. For more information about WZ-EVA, see the Work Zone Safety Training webpage.

**EXTRUDED THERMOPLASTIC PAVEMENT MARKING THICKNESS:**

3-19-19 (Rev. 6-21-22)

1205

SP12 R05

Revise the *2018 Standard Specifications* as follows:

**Page 12-6, Subarticle 1205-4(A)(1) General, lines 5-8,** delete the second sentence and replace with the following:

Use application equipment that provides multiple width settings ranging from 4 inches to 12 inches and multiple thickness settings to achieve the required thickness above the surface of the pavement as shown in Table 1205-3.

**Page 12-7, Table 1205-3, THICKNESS REQUIREMENTS FOR THERMOPLASTIC,** replace with the following:

| <b>TABLE 1205-3<br/>MINIMUM THICKNESS REQUIREMENTS FOR THERMOPLASTIC</b> |   |
|--|---|
| <b>Thickness</b>   | <b>Location</b>   |
| 240 mils   | In-lane and shoulder-transverse pavement markings (rumble strips). May be placed in 2 passes.   |
| 90 mils  | Center lines, skip lines, transverse bands, mini-skip lines, characters, bike lane symbols, crosswalk lines, edge lines, gore lines, diagonals, and arrow symbols |

**STANDARD SPECIAL PROVISION**  
**AVAILABILITY OF FUNDS – TERMINATION OF CONTRACTS**

(5-20-08)

Z-2

*General Statute 143C-6-11. (h) Highway Appropriation* is hereby incorporated verbatim in this contract as follows:

(h) Amounts Encumbered. – Transportation project appropriations may be encumbered in the amount of allotments made to the Department of Transportation by the Director for the estimated payments for transportation project contract work to be performed in the appropriation fiscal year. The allotments shall be multiyear allotments and shall be based on estimated revenues and shall be subject to the maximum contract authority contained in *General Statute 143C-6-11(c)*. Payment for transportation project work performed pursuant to contract in any fiscal year other than the current fiscal year is subject to appropriations by the General Assembly. Transportation project contracts shall contain a schedule of estimated completion progress, and any acceleration of this progress shall be subject to the approval of the Department of Transportation provided funds are available. The State reserves the right to terminate or suspend any transportation project contract, and any transportation project contract shall be so terminated or suspended if funds will not be available for payment of the work to be performed during that fiscal year pursuant to the contract. In the event of termination of any contract, the contractor shall be given a written notice of termination at least 60 days before completion of scheduled work for which funds are available. In the event of termination, the contractor shall be paid for the work already performed in accordance with the contract specifications.

Payment will be made on any contract terminated pursuant to the special provision in accordance with Subarticle 108-13(D) of the *2018 Standard Specifications*.

**STANDARD SPECIAL PROVISION****ERRATA**

(10-16-18) (Rev. 7-19-22)

Z-4

Revise the *2018 Standard Specifications* as follows:

**Division 4**

**Page 4-84, Article 458-5 MEASUREMENT AND PAYMENT, line 31,** replace article number “454-1” with “458-1”.

**Division 6**

**Page 6-7, Article 609-1 DESCRIPTION, line 29,** replace article number “609-10” with “609-9”.

**Page 6-26, Subarticle 610-13(A)(1) Acceptance for New Construction, line 31,** replace Table number “610-7” with “610-8”.

**Page 6-29, Subarticle 610-13(B) North Carolina Hearne Straightedge, line 32,** replace Table number “610-8” with “610-9”.

**Page 6-31, Article 610-14 DENSITY ACCEPTANCE, Specified Density prior to line 30 and line 32,** replace Table number “610-6” with “610-7”.

**Division 7**

**Page 7-27, Article 725-1 MEASUREMENT AND PAYMENT, line 4,** replace article number “725-1” with “724-4”.

**Page 7-28, Article 725-1 MEASUREMENT AND PAYMENT, line 10,** replace article number “725-1” with “725-3”.

**Division 10**

**Page 10-78, Article 1056-4 GEOTEXTILES, TABLE 1056-1, Permittivity, Type 2,** replace “Table 6<sup>D</sup>” with “Table 7<sup>D</sup>” and **Permittivity, Type 3<sup>B</sup>,** replace “Table 7<sup>D</sup>” with “Table 8<sup>D</sup>”.

**Page 10-121, Article 1076-7, REPAIR OF GALVANIZING, line 8,** replace article number “1080-9” with “1080-7”.

**Page 10-162, Article 1080-50 PAINT FOR VERTICAL MARKERS, line 1,** replace article number “1080-50” with “1080-10”.

**Page 10-162, Article 1080-61 EPOXY RESIN FOR REINFORCING STEEL, line 5,** replace article number “1080-61” with “1080-11”.

**Page 10-162, Article 1080-72 ABRASIVE MATERIALS FOR BLAST CLEANING STEEL, line 22,** replace article number “1080-72” with “1080-12”.

**Page 10-163, Article 1080-83 FIELD PERFORMANCE AND SERVICES, line 25,** replace article number “1080-83” with “1080-13”.

**Division 17**



**Page 17-15, Article 1715-4 MEASUREMENT AND PAYMENT, lines 42-44,** replace the second sentence with the following:

An example is an installation of a single 1.25 inch HDPE conduit would be paid as:

Directional Drill (1)(1.25") Linear Foot

**Page 17-15, Subarticle 1715-3(E) Bore and Jack, line 5,** replace article number "1540-4" with "1550-4".

**Page 17-15, Subarticle 1715-3(E) Bore and Jack, lines 10 & 11,** replace "*NCDOT Policies and Procedures for Accommodating Utilities on Highway Rights of Way*" with "*NCDOT Utilities Accommodations Manual*".

**STANDARD SPECIAL PROVISION****PLANT AND PEST QUARANTINES****(Imported Fire Ant, Gypsy Moth, Witchweed, Emerald Ash Borer, Guava Root Knot Nematode, And Other Noxious Weeds)**

(3-18-03) (Rev. 5-21-19)

Z-04a

**Within Quarantined Area**

This project may be within a county regulated for plant and/or pests. If the project or any part of the Contractor's operations is located within a quarantined area, thoroughly clean all equipment prior to moving out of the quarantined area. Comply with federal/state regulations by obtaining a certificate or limited permit for any regulated article moving from the quarantined area.

**Originating in a Quarantined County**

Obtain a certificate or limited permit issued by the N.C. Department of Agriculture/United States Department of Agriculture. Have the certificate or limited permit accompany the article when it arrives at the project site.

**Contact**

Contact the N.C. Department of Agriculture/United States Department of Agriculture at 1-800-206-9333, 919-707-3730, or <https://www.ncagr.gov/plantindustry/Plant/quaran/table2.htm> to determine those specific project sites located in the quarantined area or for any regulated article used on this project originating in a quarantined county.

**Regulated Articles Include**

1. Soil, sand, gravel, compost, peat, humus, muck, and decomposed manure, separately or with other articles. This includes movement of articles listed above that may be associated with cut/waste, ditch pulling, and shoulder cutting.
2. Plants with roots including grass sod.
3. Plant crowns and roots.
4. Bulbs, corms, rhizomes, and tubers of ornamental plants.
5. Hay, straw, fodder, and plant litter of any kind.
6. Clearing and grubbing debris.
7. Used agricultural cultivating and harvesting equipment.
8. Used earth-moving equipment.
9. Any other products, articles, or means of conveyance, of any character, if determined by an inspector to present a hazard of spreading imported fire ant, gypsy moth, witchweed, emerald ash borer, guava root knot nematode, or other noxious weeds.

**STANDARD SPECIAL PROVISION****TITLE VI AND NONDISCRIMINATION:**

(6-28-77)(Rev 6/19/2018)

Z-6

Revise the *2018 Standard Specifications* as follows:

Replace Article 103-4(B) with the following:

The North Carolina Department of Transportation is committed to carrying out the U.S. Department of Transportation's policy of ensuring nondiscrimination in the award and administration of contracts.

The provisions of this section related to United States Department of Transportation (US DOT) Order 1050.2A, Title 49 Code of Federal Regulations (CFR) part 21, 23 United States Code (U.S.C.) 140 and 23 CFR part 200 (or 49 CFR 303, 49 U.S.C. 5332 or 49 U.S.C. 47123) are applicable to all North Carolina Department of Transportation (NCDOT) contracts and to all related subcontracts, material supply, engineering, architectural and other service contracts, regardless of dollar amount. Any Federal provision that is specifically required not specifically set forth is hereby incorporated by reference.

**(1) Title VI Assurances (USDOT Order 1050.2A, Appendix A)**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

**(a) Compliance with Regulations**

The contractor (hereinafter includes consultants) shall comply with the Acts and the Regulations relative to Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation, Federal Highway Administration (FHWA), as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.

**(b) Nondiscrimination**

The contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate directly or indirectly in the discrimination prohibited by the Acts and the Regulations, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR Part 21.

**(c) Solicitations for Subcontractors, Including Procurements of Materials and Equipment**

In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Acts and the Regulations relative to Nondiscrimination on the grounds of race, color, or national origin.

**(d) Information and Reports**

The contractor shall provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor shall so certify to the Recipient or the FHWA, as appropriate, and shall set forth what efforts it has made to obtain the information.

**(e) Sanctions for Noncompliance:**

In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the Recipient will impose such contract sanctions as it and/or the FHWA may determine to be appropriate, including, but not limited to:

- (i) Withholding payments to the contractor under the contract until the contractor complies; and/or
  - (ii) Cancelling, terminating, or suspending a contract, in whole or in part.
- (f) Incorporation of Provisions

The contractor shall include the provisions of paragraphs (a) through (f) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor shall take action with respect to any subcontract or procurement as the Recipient or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

**(2) Title VI Nondiscrimination Program (23 CFR 200.5(p))**

The North Carolina Department of Transportation (NCDOT) has assured the USDOT that, as a condition to receiving federal financial assistance, NCDOT will comply with Title VI of the Civil Rights Act of 1964 and all requirements imposed by Title 49 CFR part 21 and related nondiscrimination authorities to ensure that no person shall, on the ground of race, color, national origin, limited English proficiency, sex, age, or disability (including religion/creed or income-level, where applicable), be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any programs, activities, or services conducted or funded by NCDOT. Contractors and other organizations under contract or agreement with NCDOT must also comply with Title VI and related authorities, therefore:

- (a) During the performance of this contract or agreement, contractors (e.g., subcontractors, consultants, vendors, prime contractors) are responsible for complying with NCDOT's Title VI Program. Contractors are not required to prepare or submit Title VI Programs. To comply with this section, the prime contractor shall:
  1. Post NCDOT's Notice of Nondiscrimination and the Contractor's own Equal Employment Opportunity (EEO) Policy in conspicuous locations accessible to all employees, applicants and subcontractors on the jobsite.
  2. Physically incorporate the required Title VI clauses into all subcontracts on federally-assisted and state-funded NCDOT projects, and ensure inclusion by subcontractors into all lower-tier subcontracts.
  3. Required Solicitation Language. The Contractor shall include the following notification in all solicitations for bids and requests for work or material, regardless of funding source:

“The North Carolina Department of Transportation, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award. In accordance with other related nondiscrimination authorities, bidders and contractors will also not be discriminated against on the grounds of sex, age, disability, low-income level, creed/religion, or limited English proficiency in consideration for an award.”

4. Physically incorporate the FHWA-1273, in its entirety, into all subcontracts and subsequent lower tier subcontracts on Federal-aid highway construction contracts only.
  5. Provide language assistance services (i.e., written translation and oral interpretation), free of charge, to LEP employees and applicants. Contact NCDOT OCR for further assistance, if needed.
  6. For assistance with these Title VI requirements, contact the NCDOT Title VI Nondiscrimination Program at 1-800-522-0453.
- (b) Subrecipients (e.g. cities, counties, LGAs, planning organizations) may be required to prepare and submit a Title VI Plan to NCDOT, including Title VI Assurances and/or agreements. Subrecipients must also ensure compliance by their contractors and subrecipients with Title VI. (23 CFR 200.9(b)(7))
- (c) If reviewed or investigated by NCDOT, the contractor or subrecipient agrees to take affirmative action to correct any deficiencies found within a reasonable time period, not to exceed 90 calendar days, unless additional time is granted by NCDOT. (23 CFR 200.9(b)(15))
- (d) The Contractor is responsible for notifying subcontractors of NCDOT's External Discrimination Complaints Process.
1. **Applicability**  
Title VI and related laws protect participants and beneficiaries (e.g., members of the public and contractors) from discrimination by NCDOT employees, subrecipients and contractors, regardless of funding source.
  2. **Eligibility**  
Any person—or class of persons—who believes he/she has been subjected to discrimination based on race, color, national origin, Limited English Proficiency (LEP), sex, age, or disability (and religion in the context of employment, aviation, or transit) may file a written complaint. The law also prohibits intimidation or retaliation of any sort.
  3. **Time Limits and Filing Options**  
Complaints may be filed by the affected individual(s) or a representative and must be filed no later than 180 calendar days after the following:
    - (i) The date of the alleged act of discrimination; or
    - (ii) The date when the person(s) became aware of the alleged discrimination; or
    - (iii) Where there has been a continuing course of conduct, the date on which that conduct was discontinued or the latest instance of the conduct.Title VI and related discrimination complaints may be submitted to the following entities:
    - North Carolina Department of Transportation, Office of Civil Rights, Title VI Program, 1511 Mail Service Center, Raleigh, NC 27699-1511; toll free 1-800-522-0453
    - Federal Highway Administration, North Carolina Division Office, 310 New Bern Avenue, Suite 410, Raleigh, NC 27601, 919-747-7010
    - US Department of Transportation, Departmental Office of Civil Rights, External Civil Rights Programs Division, 1200 New Jersey Avenue, SE, Washington, DC 20590; 202-366-4070
  4. **Format for Complaints**  
Complaints must be in writing and signed by the complainant(s) or a representative, and include the complainant's name, address, and telephone number. Complaints received by fax or e-mail will be acknowledged and processed. Allegations received by telephone will be reduced to writing and provided to the complainant for confirmation or revision before processing. Complaints will be accepted in other languages, including Braille.
  5. **Discrimination Complaint Form**  
Contact NCDOT Civil Rights to receive a full copy of the Discrimination Complaint Form and procedures.

## 6. Complaint Basis

Allegations must be based on issues involving race, color, national origin (LEP), sex, age, disability, or religion (in the context of employment, aviation or transit). “Basis” refers to the complainant’s membership in a protected group category.

| <b>TABLE 103-1<br/>COMPLAINT BASIS</b>  |  |  |  |
|---|--|--|--|
| <b>Protected Categories</b>   | <b>Definition</b>  | <b>Examples</b>  | <b>Applicable Nondiscrimination Authorities</b>  |
| Race and Ethnicity  | An individual belonging to one of the accepted racial groups; or the perception, based usually on physical characteristics that a person is a member of a racial group   | Black/African American, Hispanic/Latino, Asian, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, White | Title VI of the Civil Rights Act of 1964; 49 CFR Part 21; 23 CFR 200; 49 U.S.C. 5332(b); 49 U.S.C. 47123. <i>(Executive Order 13166)</i>   |
| Color   | Color of skin, including shade of skin within a racial group   | Black, White, brown, yellow, etc.  |  |
| National Origin <i>(Limited English Proficiency)</i>  | Place of birth. Citizenship is not a factor. <i>(Discrimination based on language or a person’s accent is also covered)</i>  | Mexican, Cuban, Japanese, Vietnamese, Chinese  |  |
| Sex   | Gender. The sex of an individual. <i>Note: Sex under this program does not include sexual orientation.</i>   | Women and Men  | 1973 Federal-Aid Highway Act; 49 U.S.C. 5332(b); 49 U.S.C. 47123.  |
| Age   | Persons of any age   | 21-year-old person   | Age Discrimination Act of 1975 49 U.S.C. 5332(b); 49 U.S.C. 47123.   |
| Disability  | Physical or mental impairment, permanent or temporary, or perceived.   | Blind, alcoholic, para-amputee, epileptic, diabetic, arthritic   | Section 504 of the Rehabilitation Act of 1973; Americans with Disabilities Act of 1990   |
| Religion (in the context of employment) <i>(Religion/ Creed in all aspects of any aviation or transit-related construction)</i> | An individual belonging to a religious group; or the perception, based on distinguishable characteristics that a person is a member of a religious group. In practice, actions taken as a result of the moral and ethical beliefs as to what is right and wrong, which are sincerely held with the strength of traditional religious views. <i>Note: Does not have to be associated with a recognized religious group or church; if an individual sincerely holds to the belief, it is a protected religious practice.</i> | Muslim, Christian, Sikh, Hindu, etc.   | Title VII of the Civil Rights Act of 1964; 23 CFR 230; FHWA-1273 Required Contract Provisions. <i>(49 U.S.C. 5332(b); 49 U.S.C. 47123)</i> |

**(3) Pertinent Nondiscrimination Authorities**

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest agrees to comply with the following non-discrimination statutes and authorities, including, but not limited to:

- (a) Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21.
- (b) The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- (c) Federal-Aid Highway Act of 1973, (23 U.S.C. § 324 et seq.), (prohibits discrimination on the basis of sex);
- (d) Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability) and 49 CFR Part 27;
- (e) The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
- (f) Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- (g) The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- (h) Titles II and III of the Americans with Disabilities Act, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131-12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;
- (i) The Federal Aviation Administration's Nondiscrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- (j) Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures Nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- (k) Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of Limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- (l) Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).
- (m) Title VII of the Civil Rights Act of 1964 (42 U.S.C. § 2000e et seq., Pub. L. 88-352), (prohibits employment discrimination on the basis of race, color, religion, sex, or national origin).

**(4) Additional Title VI Assurances**

*\*\*The following Title VI Assurances (Appendices B, C and D) shall apply, as applicable*

- (a) Clauses for Deeds Transferring United States Property (1050.2A, Appendix B)  
The following clauses will be included in deeds effecting or recording the transfer of real property, structures, or improvements thereon, or granting interest therein from the United States pursuant to the provisions of Assurance 4.

NOW, THEREFORE, the U.S. Department of Transportation as authorized by law and upon the condition that the North Carolina Department of Transportation (NCDOT) will accept title to the lands and maintain the project constructed thereon in accordance with the North Carolina General Assembly, the Regulations for the Administration of the Federal-Aid Highway Program, and the policies and procedures prescribed by the Federal Highway Administration of the U.S. Department of Transportation in accordance and in compliance with all requirements imposed by Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the U.S. Department of Transportation pertaining to and effectuating the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252; 42 U.S.C. § 2000d to 2000d-4), does hereby remise, release, quitclaim and convey unto the NCDOT all the right, title and interest of the U.S. Department of Transportation in and to said lands described in Exhibit A attached hereto and made a part hereof.

(HABENDUM CLAUSE)

TO HAVE AND TO HOLD said lands and interests therein unto the North Carolina Department of Transportation (NCDOT) and its successors forever, subject, however, to the covenants, conditions, restrictions and reservations herein contained as follows, which will remain in effect for the period during which the real property or structures are used for a purpose for which Federal financial assistance is extended or for another purpose involving the provision of similar services or benefits and will be binding on the NCDOT, its successors and assigns.

The NCDOT, in consideration of the conveyance of said lands and interests in lands, does hereby covenant and agree as a covenant running with the land for itself, its successors and assigns, that (1) no person will on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination with regard to any facility located wholly or in part on, over, or under such lands hereby conveyed [,] [and]\* (2) that the NCDOT will use the lands and interests in lands and interests in lands so conveyed, in compliance with all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, U.S. Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Non-discrimination in Federally-assisted programs of the U.S. Department of Transportation, Effectuation of Title VI of the Civil Rights Act of 1964, and as said Regulations and Acts may be amended [, and (3) that in the event of breach of any of the above-mentioned nondiscrimination conditions, the Department will have a right to enter or re-enter said lands and facilities on said land, and that above described land and facilities will thereon revert to and vest in and become the absolute property of the U.S. Department of Transportation and its assigns as such interest existed prior to this instruction].\*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary in order to make clear the purpose of Title VI.)

(b) Clauses for Transfer of Real Property Acquired or Improved Under the Activity, Facility, or Program (1050.2A, Appendix C)

The following clauses will be included in deeds, licenses, leases, permits, or similar instruments entered into by the North Carolina Department of Transportation (NCDOT) pursuant to the provisions of Assurance 7(a):

1. The (grantee, lessee, permittee, etc. as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree [in the case of deeds and leases add "as a covenant running with the land"] that:



- (i.) In the event facilities are constructed, maintained, or otherwise operated on the property described in this (deed, license, lease, permit, etc.) for a purpose for which a U.S. Department of Transportation activity, facility, or program is extended or for another purpose involving the provision of similar services or benefits, the (grantee, licensee, lessee, permittee, etc.) will maintain and operate such facilities and services in compliance with all requirements imposed by the Acts and Regulations (as may be amended) such that no person on the grounds of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities.
- 2. With respect to licenses, leases, permits, etc., in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will have the right to terminate the (lease, license, permit, etc.) and to enter, re-enter, and repossess said lands and facilities thereon, and hold the same as if the (lease, license, permit, etc.) had never been made or issued. \*
- 3. With respect to a deed, in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will have the right to enter or re-enter the lands and facilities thereon, and the above described lands and facilities will there upon revert to and vest in and become the absolute property of the NCDOT and its assigns. \*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

(c) Clauses for Construction/Use/Access to Real Property Acquired Under the Activity, Facility or Program (1050.2A, Appendix D)

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by the North Carolina Department of Transportation (NCDOT) pursuant to the provisions of Assurance 7(b):

- 1. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.) will use the premises in compliance with all other requirements imposed by or pursuant to the Acts and Regulations, as amended, set forth in this Assurance.
- 2. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above Non-discrimination covenants, the NCDOT will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued. \*
- 3. With respect to deeds, in the event of breach of any of the above Nondiscrimination covenants, the NCDOT will there upon revert to and vest in and become the absolute property of the NCDOT and its assigns. \*

(\*Reverter clause and related language to be used only when it is determined that such a clause is necessary to make clear the purpose of Title VI.)

**STANDARD SPECIAL PROVISION**

**MINORITY AND FEMALE EMPLOYMENT REQUIREMENTS**

Z-7

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (*EXECUTIVE NUMBER 11246*)

1. The goals and timetables for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, see as shown on the attached sheet entitled "Employment Goals for Minority and Female participation".

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in *41 CFR Part 60-4* shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications set forth in *41 CFR 60-4.3(a)*, and its effort to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the executive Order and the regulations in *41 CFR Part 60-4*. Compliance with the goals will be measured against the total work hours performed.

2. As used in this Notice and in the contract resulting from this solicitation, the "covered area" is the county or counties shown on the cover sheet of the proposal form and contract.

**EMPLOYMENT GOALS FOR MINORITY  
AND FEMALE PARTICIPATION**

Economic Areas

**Area 023 29.7%**

Bertie County  
Camden County  
Chowan County  
Gates County  
Hertford County  
Pasquotank County  
Perquimans County

**Area 024 31.7%**

Beaufort County  
Carteret County  
Craven County  
Dare County  
Edgecombe County  
Green County  
Halifax County  
Hyde County  
Jones County  
Lenoir County  
Martin County  
Nash County  
Northampton County  
Pamlico County  
Pitt County  
Tyrrell County  
Washington County  
Wayne County  
Wilson County

**Area 025 23.5%**

Columbus County  
Duplin County  
Onslow County  
Pender County

**Area 026 33.5%**

Bladen County  
Hoke County  
Richmond County  
Robeson County  
Sampson County  
Scotland County

**Area 027 24.7%**

Chatham County  
Franklin County  
Granville County  
Harnett County  
Johnston County  
Lee County  
Person County  
Vance County  
Warren County

**Area 028 15.5%**

Alleghany County  
Ashe County  
Caswell County  
Davie County  
Montgomery County  
Moore County  
Rockingham County  
Surry County  
Watauga County  
Wilkes County

**Area 029 15.7%**

Alexander County  
Anson County  
Burke County  
Cabarrus County  
Caldwell County  
Catawba County  
Cleveland County  
Iredell County  
Lincoln County  
Polk County  
Rowan County  
Rutherford County  
Stanly County

**Area 0480 8.5%**

Buncombe County  
Madison County

**Area 030 6.3%**

Avery County  
Cherokee County  
Clay County  
Graham County  
Haywood County  
Henderson County  
Jackson County  
McDowell County  
Macon County  
Mitchell County  
Swain County  
Transylvania County  
Yancey County

SMSA AreasArea 5720 26.6%

Currituck County

Area 9200 20.7%

Brunswick County

New Hanover County

Area 2560 24.2%

Cumberland County

Area 6640 22.8%

Durham County

Orange County

Wake County

Area 1300 16.2%

Alamance County

Area 3120 16.4%

Davidson County

Forsyth County

Guilford County

Randolph County

Stokes County

Yadkin County

Area 1520 18.3%

Gaston County

Mecklenburg County

Union County

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Goals for FemaleParticipation in Each Trade

(Statewide) 6.9%

## STANDARD SPECIAL PROVISION

### REQUIRED CONTRACT PROVISIONS FEDERAL - AID CONSTRUCTION CONTRACTS

FHWA - 1273 Electronic Version - May 1, 2012

Z-8

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Compliance with Governmentwide Suspension and Debarment Requirements
- XI. Certification Regarding Use of Contract Funds for Lobbying

#### ATTACHMENTS

- A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

#### I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services).  
The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.  
Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.  
Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).
2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract.
3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.
4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

#### II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. **Equal Employment Opportunity:** Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

- a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.
- b. The contractor will accept as its operating policy the following statement:  
"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."
2. **EEO Officer:** The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.
3. **Dissemination of Policy:** All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:
  - a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.
  - b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.
  - c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.
  - d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.
  - e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.
4. **Recruitment:** When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.
  - a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.
  - b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.
  - c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.
5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:
  - a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.
  - b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.
  - c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.
  - d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.
6. **Training and Promotion:**
  - a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.
  - b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).
  - c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.
  - d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. **Unions:** If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:
  - a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.
  - b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.
  - c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.
  - d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.
8. **Reasonable Accommodation for Applicants / Employees with Disabilities:** The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.
9. **Selection of Subcontractors, Procurement of Materials and Leasing of Equipment:** The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.
  - a. The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.
  - b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.
10. **Assurance Required by 49 CFR 26.13(b):**
  - a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.
  - b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.
11. **Records and Reports:** The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.
  - a. The records kept by the contractor shall document the following:
    - (1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;
    - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
    - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;
  - b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

### III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

### IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

#### 1. Minimum wages

- a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents

thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

- b. (1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
    - (i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
    - (ii) The classification is utilized in the area by the construction industry; and
    - (iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
  - (2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
  - (3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
  - (4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
  - d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
2. **Withholding.** The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.
  3. **Payrolls and basic records**
    - a. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
    - b. (1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee ( e.g. , the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for



this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

- (2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
    - (i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
    - (ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
    - (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
  - (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.
  - (4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency or the State DOT, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.
4. **Apprentices and trainees**
- a. Apprentices (programs of the USDOL). Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.
 

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
  - b. Trainees (programs of the USDOL). Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.
 

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
  - c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
  - d. Apprentices and Trainees (programs of the U.S. DOT). Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs

are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. **Compliance with Copeland Act requirements.** The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.
6. **Subcontracts.** The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
7. **Contract termination:** debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
8. **Compliance with Davis-Bacon and Related Act requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
9. **Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
10. **Certification of eligibility.**
  - a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
  - b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
  - c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

#### V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. **Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
2. **Violation; liability for unpaid wages; liquidated damages.** In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1.) of this section.
3. **Withholding for unpaid wages and liquidated damages.** The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.
4. **Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

#### VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).
  - a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees

from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
  - (2) the prime contractor remains responsible for the quality of the work of the leased employees;
  - (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
  - (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.
- b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.
2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.
  3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.
  4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.
  5. The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

#### **VII. SAFETY: ACCIDENT PREVENTION**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.
2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).
3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

#### **VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

#### **IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.
2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

## X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

### 1. Instructions for Certification – First Tier Participants:

- a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.
- b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.
- c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.
- d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
- h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.
- i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

\* \* \* \* \*

### 2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

- a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:
  - (1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;
  - (2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - (3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and
  - (4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

### 2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.
- b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies

- available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.
  - d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contractor). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
  - e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
  - f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.
  - g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.
  - h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
  - i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

\* \* \* \* \*

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Participants:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

\* \* \* \* \*

**XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING**

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:
  - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
  - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**STANDARD SPECIAL PROVISION****ON-THE-JOB TRAINING**

(10-16-07) (Rev. 4-21-15)

Z-10

**Description**

The North Carolina Department of Transportation will administer a custom version of the Federal On-the-Job Training (OJT) Program, commonly referred to as the Alternate OJT Program. All contractors (existing and newcomers) will be automatically placed in the Alternate Program. Standard OJT requirements typically associated with individual projects will no longer be applied at the project level. Instead, these requirements will be applicable on an annual basis for each contractor administered by the OJT Program Manager.

On the Job Training shall meet the requirements of 23 CFR 230.107 (b), 23 USC – Section 140, this provision and the On-the-Job Training Program Manual.

The Alternate OJT Program will allow a contractor to train employees on Federal, State and privately funded projects located in North Carolina. However, priority shall be given to training employees on NCDOT Federal-Aid funded projects.

**Minorities and Women**

Developing, training and upgrading of minorities and women toward journeyman level status is a primary objective of this special training provision. Accordingly, the Contractor shall make every effort to enroll minority and women as trainees to the extent that such persons are available within a reasonable area of recruitment. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

**Assigning Training Goals**

The Department, through the OJT Program Manager, will assign training goals for a calendar year based on the contractors' past three years' activity and the contractors' anticipated upcoming year's activity with the Department. At the beginning of each year, all contractors eligible will be contacted by the Department to determine the number of trainees that will be assigned for the upcoming calendar year. At that time the Contractor shall enter into an agreement with the Department to provide a self-imposed on-the-job training program for the calendar year. This agreement will include a specific number of annual training goals agreed to by both parties. The number of training assignments may range from 1 to 15 per contractor per calendar year. The Contractor shall sign an agreement to fulfill their annual goal for the year.\

## **Training Classifications**

The Contractor shall provide on-the-job training aimed at developing full journeyman level workers in the construction craft/operator positions. Preference shall be given to providing training in the following skilled work classifications:

|                     |                                  |
|---------------------|----------------------------------|
| Equipment Operators | Office Engineers                 |
| Truck Drivers       | Estimators                       |
| Carpenters          | Iron / Reinforcing Steel Workers |
| Concrete Finishers  | Mechanics                        |
| Pipe Layers         | Welders                          |

The Department has established common training classifications and their respective training requirements that may be used by the contractors. However, the classifications established are not all-inclusive. Where the training is oriented toward construction applications, training will be allowed in lower-level management positions such as office engineers and estimators. Contractors shall submit new classifications for specific job functions that their employees are performing. The Department will review and recommend for acceptance to FHWA the new classifications proposed by contractors, if applicable. New classifications shall meet the following requirements:

Proposed training classifications are reasonable and realistic based on the job skill classification needs, and

The number of training hours specified in the training classification is consistent with common practices and provides enough time for the trainee to obtain journeyman level status.

The Contractor may allow trainees to be trained by a subcontractor provided that the Contractor retains primary responsibility for meeting the training and this provision is made applicable to the subcontract. However, only the Contractor will receive credit towards the annual goal for the trainee.

Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. The number of trainees shall be distributed among the work classifications on the basis of the contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journeyman level status or in which they have been employed as a journeyman.

## **Records and Reports**

The Contractor shall maintain enrollment, monthly and completion reports documenting company compliance under these contract documents. These documents and any other information as requested shall be submitted to the OJT Program Manager.

Upon completion and graduation of the program, the Contractor shall provide each trainee with a certification Certificate showing the type and length of training satisfactorily completed.

## **Trainee Interviews**

All trainees enrolled in the program will receive an initial and Trainee/Post graduate interview conducted by the OJT program staff.

**Trainee Wages**

Contractors shall compensate trainees on a graduating pay scale based upon a percentage of the prevailing minimum journeyman wages (Davis-Bacon Act). Minimum pay shall be as follows:

|            |   |
|------------|---|
| 60 percent | of the journeyman wage for the first half of the training period    |
| 75 percent | of the journeyman wage for the third quarter of the training period |
| 90 percent | of the journeyman wage for the last quarter of the training period  |

In no instance shall a trainee be paid less than the local minimum wage. The Contractor shall adhere to the minimum hourly wage rate that will satisfy both the NC Department of Labor (NCDOL) and the Department.

**Achieving or Failing to Meet Training Goals**

The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and who receives training for at least 50 percent of the specific program requirement. Trainees will be allowed to be transferred between projects if required by the Contractor's scheduled workload to meet training goals.

If a contractor fails to attain their training assignments for the calendar year, they may be taken off the NCDOT's Bidders List.

**Measurement and Payment**

No compensation will be made for providing required training in accordance with these contract documents.



**STANDARD SPECIAL PROVISION**  
**MINIMUM WAGES**  
**GENERAL DECISION NC20220090 02/25/2022 NC90**

Z-090

Date: February 25, 2022

General Decision Number: NC20220090 02/25/2022 NC90

Superseded General Decision Numbers: NC20210090

State: North Carolina

Construction Type: HIGHWAY

**COUNTIES:**

|            |             |        |
|------------|-------------|--------|
| Brunswick  | Greene      | Onslow |
| Cumberland | Hoke        | Pender |
| Currituck  | Johnston    | Pitt   |
| Edgecombe  | Nash        | Wake   |
| Franklin   | New Hanover | Wayne  |

HIGHWAY CONSTRUCTION PROJECTS (excluding tunnels, building structures in rest area projects & railroad construction; bascule, suspension & spandrel arch bridges designed for commercial navigation, bridges involving marine construction; and other major bridges).

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

|   |   |
|---|---|
| If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022: | Executive Order 14026 generally applies to the contract.<br><br>The contractor must pay all covered workers at least \$15.00 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022. |
| If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:         | Executive Order 13658 generally applies to the contract.<br><br>The contractor must pay all covered workers at least \$11.25 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2022. |

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance

of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <https://www.dol.gov/agencies/whd/government-contracts>.

|                     |                  |
|---------------------|------------------|
| Modification Number | Publication Date |
| 0                   | 01/07/2022       |
| 1                   | 02/25/2022       |

SUNC2014-005 11/17/2014

|   | Rates    | Fringes |
|---|----------|---------|
| BLASTER                                   | 21.04    |         |
| CARPENTER                                 | 13.72 ** |         |
| CEMENT MASON/CONCRETE FINISHER            | 14.48 ** |         |
| ELECTRICIAN                               |          |         |
| Electrician                               | 17.97    |         |
| Telecommunications Technician             | 16.79    | .63     |
| IRONWORKER                                | 16.02    |         |
| LABORER                                   |          |         |
| Asphalt Raker and Spreader                | 12.46 ** |         |
| Asphalt Screed/Jackman                    | 14.33 ** |         |
| Carpenter Tender                          | 12.88 ** |         |
| Cement Mason/Concrete Finisher Tender     | 12.54 ** |         |
| Common or General                         | 10.20 ** |         |
| Guardrail/Fence Installer                 | 12.87 ** |         |
| Pipelayer                                 | 12.17 ** |         |
| Traffic Signal/Lighting Installer         | 14.89 ** |         |
| PAINTER                                   |          |         |
| Bridge                                    | 24.57    |         |
| POWER EQUIPMENT OPERATORS                 |          |         |
| Asphalt Broom Tractor                     | 11.85 ** |         |
| Bulldozer Fine                            | 17.04    |         |
| Bulldozer Rough                           | 14.34 ** |         |
| Concrete Grinder/Groover                  | 20.34    | 2.30    |
| Crane Boom Trucks                         | 20.54    |         |
| Crane Other                               | 20.08    |         |
| Crane Rough/All-Terrain                   | 20.67    |         |
| Drill Operator Rock                       | 14.38 ** |         |
| Drill Operator Structure                  | 21.14    |         |
| Excavator Fine                            | 16.60    |         |
| Excavator Rough                           | 14.00 ** |         |
| Grader/Blade Fine                         | 18.47    |         |
| Grader/Blade Rough                        | 14.62 ** |         |
| Loader 2 Cubic Yards or Less              | 13.76 ** |         |
| Loader Greater Than 2 Cubic Yards         | 14.14 ** |         |
| Material Transfer Vehicle (Shuttle Buggy) | 15.18    |         |
| Mechanic                                  | 17.55    |         |
| Milling Machine                           | 15.36    |         |
| Off-Road Hauler/Water Tanker              | 11.36 ** |         |
| Oiler/Greaser                             | 13.55 ** |         |

|                                 | Rates    | Fringes |
|---------------------------------|----------|---------|
| Pavement Marking Equipment      | 12.11 ** |         |
| Paver Asphalt                   | 15.59    |         |
| Paver Concrete                  | 18.20    |         |
| Roller Asphalt Breakdown        | 12.45 ** |         |
| Roller Asphalt Finish           | 13.85 ** |         |
| Roller Other                    | 11.36 ** |         |
| Scraper Finish                  | 12.71 ** |         |
| Scraper Rough                   | 11.35 ** |         |
| Slip Form Machine               | 16.50    |         |
| Tack Truck/Distributor Operator | 14.52 ** |         |
| TRUCK DRIVER                    |          |         |
| GVWR of 26,000 Lbs or Less      | 11.12 ** |         |
| GVWR of 26,001 Lbs or Greater   | 12.37 ** |         |

Welders – Receive rate prescribed for craft performing operation to which welding is incidental.

\*\* Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$15.00) or 13658 (\$11.25). Please see the Note at the top of the wage determination for more information.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR 5.5(a)(1)(ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which

in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the David-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U. S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, D.C. 20210

- 2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, D.C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

- 3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, D.C. 20210

- 4.) All decisions by the Administrative Review Board are final.

END OF GENERAL DECISION

## PROJECT SPECIAL PROVISIONS

### PERMITS

(10-18-95) (Rev. 3-21-17)

Z-1

The Contractor's attention is directed to the following permits, which have been issued to the Department of Transportation by the authority granting the permit.

| <u>PERMIT</u>  | <u>AUTHORITY GRANTING THE PERMIT</u>                                 |
|--|--|
| Dredge and Fill and/or<br>Work in Navigable Waters (404) | U. S. Army Corps of Engineers  |
| Water Quality (401)                                      | Division of Environmental Management, DEQ<br>State of North Carolina |
| State Dredge and Fill and/or<br>CAMA                     | Division of Coastal Management, DEQ<br>State of North Carolina       |
| Navigation   | U. S. Coast Guard  |
| CCPCUA   | Division of Water Resources, DEQ<br>State of North Carolina          |

The Contractor shall comply with all applicable permit conditions during construction of this project. Those conditions marked by \* are the responsibility of the Department and the Contractor has no responsibility in accomplishing those conditions.

Agents of the permitting authority will periodically inspect the project for adherence to the permits.

The Contractor's attention is also directed to Articles 107-10 and 107-13 of the *2018 Standard Specifications* and the following:

Should the Contractor propose to utilize construction methods (such as temporary structures or fill in waters and/or wetlands for haul roads, work platforms, cofferdams, etc.) not specifically identified in the permit (individual, general, or nationwide) authorizing the project it shall be the Contractor's responsibility to coordinate with the Engineer to determine what, if any, additional permit action is required. The Contractor shall also be responsible for initiating the request for the authorization of such construction method by the permitting agency. The request shall be submitted through the Engineer. The Contractor shall not utilize the construction method until it is approved by the permitting agency. The request normally takes approximately 60 days to process; however, no extensions of time or additional compensation will be granted for delays resulting from the Contractor's request for approval of construction methods not specifically identified in the permit.

**Where construction moratoriums are contained in a permit condition which restricts the Contractor's activities to certain times of the year, those moratoriums will apply only to the portions of the work taking place in the restricted waters, wetlands or buffer zones, provided that activities outside those areas is done in such a manner as to not affect the restricted waters, wetlands or buffer zones.**



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J. ERIC BOYETTE  
SECRETARY

July 22, 2022

MEMORANDUM TO: Mr. Chad Kimes, P.E., Division Engineer  
Division 3

DocuSigned by:  
*Mack C. Rivenbark III*  
AAAD1248B309416...

FROM: for Philip S. Harris, III, P.E., C.P.M, Unit Head  
Environmental Analysis Unit

SUBJECT: Environmental Permits for the construction of NC 24 Resiliency and  
Living Shoreline adjacent to the White Oak River, Onslow County.  
WBS No. 48496.1.1 **TIP M-0540A.**

Please find enclosed the following permits for this project:

| Agency   | Permit Type                            | Permit Expiration |
|--|--|-------------------|
| US Army Corps of Engineers<br>Section 404 Clean Water Act        | Regional General Permit 291            | December 31, 2026 |
| NC Division of Water Resources<br>Section 401 Clean Water Act    | Individual Water Quality Certification | December 31, 2026 |
| NC Division of Coastal Management<br>Coastal Area Management Act | CAMA Major Development Permit          | No Expiration     |

Please feel free to contact our Unit for any questions.

ec:  
NCDOT Permit Website (<https://xfer.services.ncdot.gov/pdea/PermIssued/>)

# PROJECT COMMITMENTS

T.I.P. Project No M-0540A  
Construction of Living Shoreline on NC24 Causeway  
Between Cedar Point and Swansboro  
Onslow County

## COMMITMENTS FROM PROJECT DEVELOPMENT AND DESIGN

Concerns during project development from stakeholders including but not limited to: permitting agencies, resource agencies, and the Town of Swansboro have been addressed or incorporated in the final design.

## COMMITMENTS FROM PERMITTING

### CAMA Major Permit Condition(s):

The permittee shall limit in-water work between February 1 to June 30 of any year to the maximum extent practicable to protect juvenile fishes that may be in the vicinity and shall also limit in-water work to the maximum extent practicable from April 1 through October 31 to avoid additional impacts to submerged aquatic vegetation (SAV).

- 18) All temporary fill within wetlands and waters of the State where no stone currently exists shall be placed on geotextile fabric to facilitate total removal of the temporary fill upon completion of the project.
- 20) Turbidity curtains shall be used where practicable to isolate all in-water work areas from the adjacent waters of the White Oak River, including but not limited to installation and removal of the temporary construction trestle and temporary access ramps, and placement of fill material within or adjacent to wetlands or waters of the State. The turbidity curtains shall be of sufficient length and effectiveness to prevent a visible increase in the amount of suspended sediments in adjacent waters. The turbidity curtains shall be properly maintained and retained in the water until construction is complete. The turbidity curtains shall be removed when turbidity within the curtains reaches ambient levels.
- 25) Prior to planting, the permittee shall submit a final planting plan for the authorized Coastal Wetland planting areas in writing to DCM for review and approval. The planting plan shall include a list of proposed species as well as identify different planting zones.
- 26) The permittee has proposed utilizing the anticipated gain in ecosystem functions from the project as compensatory mitigation for the project's authorized impacts to Coastal Wetlands and SAVs. Therefore, prior to initiating construction, the



- permittee shall initiate communication with DCM, USACE, DWR, and appropriate resource agencies to ensure that success criteria are approved that will measure the realized gain in ecosystem function.
- 27) The permittee shall monitor the project for a minimum of five years after construction (including planting of the Coastal Wetlands) is complete. Features to be monitored shall include but not necessarily be limited to, the rock sills, oyster structures, coastal wetland planting areas and impacts to submerged aquatic vegetation (SAVs). The permittee shall provide DCM, the U.S. Army Corps of Engineers (USACE), the N.C. Division of Water Resources (DWR) and appropriate resource agencies with an annual monitoring report. If any potential problems are identified, then the annual monitoring report shall include a recommendation for proposed corrective measures. Progress reports shall also be provided upon request.
- 33) The permittee's proposed timing and frequency of SAV surveys requires additional coordination prior to approval. Therefore, prior to the initiation of construction, the permittee shall coordinate with DCM, USACE, DWR, DMF, and other appropriate resource agencies to finalize details for the timing and frequency of annual SAV surveys. Specifically, the permittee may be required to conduct an annual SAV survey during the July/August timeframe which is the peak period of biological productivity and greatest SAV presence.
- 36) If it is determined that the project has caused permanent SAV impacts, then NCDOT, DCM, USACE, DWR, DMF, and other appropriate resource agencies shall finalize the details of a compensatory mitigation plan for permanent SAV impacts. The SAV compensatory mitigation plan shall include a mitigation ratio that accounts for the consideration of numerous factors, including but not limited to the total amount of permanent SAV impacts, a determination of any SAV recruitment due to the project, the type of compensatory mitigation proposed (in-kind or out-of-kind), and any lapse in habitat function between the time of impact and the time that the compensatory mitigation is anticipated to reach its full function.
- 38) While monitoring of the Coastal Wetland planting areas is ongoing, the permittee shall reserve the equivalent of 0.22 acres of successful Coastal Wetland restoration credits at the Stella Bridge Mitigation Site in Carteret and Onslow County as compensatory mitigation for the authorized 0.22 acres of Coastal Wetland impacts. A revised debit ledger that reflects the reserved amount and the balance of mitigation credits shall be provided to DCM prior to the initiation of construction. The reserved credits may be refunded back to the Stella Bridge Mitigation Site when the on-site Coastal Wetland planting areas have achieved the approved success criteria.

USACE Regional General Permit #291 Condition(s):

- D. The Permittee shall notify the National Ocean Service (NOS) and the Corps, in writing, at least two (2) weeks before beginning work and upon completion of the authorized work. The notification of completion shall include a drawing which certifies the location and configuration of the completed activity (a certified permit drawing may be used). This information must be provided within 30 days of completion of the authorized work. Notifications to NOS shall be sent to the following address: 1315 East West Highway, Silver Spring, Maryland 20910.

Permit Class

NEW

Permit Number

78-22

STATE OF NORTH CAROLINA  
Department of Environmental Quality  
and  
Coastal Resources Commission

# Permit

for

X Major Development in an Area of Environmental Concern  
pursuant to NCGS 113A-118

X Excavation and/or filling pursuant to NCGS 113-229

Issued to N.C. Department of Transportation, 1598 Mail Service Center, Raleigh, NC 27699-1598

Authorizing development in Onslow County at White Oak River, NC 24 causeway between Swansboro and Cedar Point, as requested in the permittee's application dated 1/28/22 and 2/15/22, including the attached workplan drawings (18) dated 4/11/22.

This permit, issued on July 22, 2022, is subject to compliance with the application (where consistent with the permit), all applicable regulations, special conditions and notes set forth below. Any violation of these terms may be subject to fines, imprisonment or civil action; or may cause the permit to be null and void.

**M-0540A, Repair the NC 24 roadway embankment/causeway and adjacent sidewalk, and stabilize the adjacent shoreline by installing a Living Shoreline composed of Coastal Wetland planting areas, Rock Sills, and Oyster Structures**

- 1) An as-built report for Coastal Wetland planting areas and for structures in wetlands and waters of the State shall be submitted to DCM within 90 days after their construction is complete.
- 2) Any development, including utility work, that is not depicted on the attached workplan drawings is not authorized without prior approval by the N.C. Division of Coastal Management (DCM).
- 3) No temporary or permanent impacts shall take place at any time in any vegetated wetlands or surrounding waters outside of the alignment of the fill areas as indicated on the attached workplan drawings, without permit modification.

**(See attached sheets for Additional Conditions)**

This permit action may be appealed by the permittee or other qualified persons within twenty (20) days of the issuing date.

This permit must be accessible on-site to Department personnel when the project is inspected for compliance.

Any maintenance work or project modification not covered hereunder requires further Division approval.

All work must cease when the permit expires on

**No expiration date, pursuant to GS 136-44.7B**

In issuing this permit, the State of North Carolina agrees that your project is consistent with the North Carolina Coastal Management Program.

Signed by the authority of the Secretary of DEQ and the Chair of the Coastal Resources Commission.



Braxton C. Davis, Director  
Division of Coastal Management

This permit and its conditions are hereby accepted.

\_\_\_\_\_  
Signature of Permittee

**ADDITIONAL CONDITIONS**

- NOTE:** The permittee shall limit in-water work between February 1 to June 30 of any year to the maximum extent practicable to protect juvenile fishes that may be in the vicinity and shall also limit in-water work to the maximum extent practicable from April 1 through October 31 to avoid additional impacts to submerged aquatic vegetation (SAV).
- 4) In accordance with commitments made by the permittee, in order to protect the endangered West Indian Manatee, *Trichechus manatus*, the permittee shall implement the U.S. Fish & Wildlife Service's Guidelines, and strictly adhere to all requirements therein. The guidelines can be found at <https://www.fws.gov/raleigh/pdfs/ManateeGuidelines2017.pdf>.
  - 5) The permittee shall notify the N.C. Division of Marine Fisheries (DMF) Shellfish Sanitation and Recreational Water Quality Section at 252-726-7021 before any fill activity occurs due to the potential for runoff or turbidity that could necessitate the need for a temporary closure within the vicinity.
  - 6) In accordance with commitments made by the permittee, the permittee shall conduct a survey for shellfish within authorized fill areas prior to construction. In addition, the permittee shall contact the DMF Habitat Section at 252-726-7021 to request assistance with the relocation of any shellfish located within authorized fill areas into adjacent suitable habitat prior to construction.
  - 7) The authorized temporary construction trestle shall be elevated a minimum of 2 feet above the normal high water level of the White Oak River as measured from the low chord of the structure.
  - 8) Material excavated at the project site may be used in fill areas associated with the project or shall be removed from the site and taken to a high ground location.
  - 9) With the exception of any material that is used in fill areas associated with this project, all excavated materials shall be confined landward of normal high water and landward of regularly or irregularly flooded wetlands behind adequate dikes or other retaining structures to prevent spillover of solids or seepage of effluent into any wetlands or surrounding waters.
  - 10) Placement of riprap, rock sills, and oyster structures shall be limited to the areas as indicated on the attached workplan drawings. The structures shall be made of materials that are of a size, strength and/or durability sufficient to prevent movement from the approved alignment by wave or current action. If any portion of the structures becomes dislodged from the approved alignment at any point in the future, the permittee shall immediately contact DCM to determine the appropriate course of action.
  - 11) The riprap embankment adjacent to the road shoulders shall be in place prior to any backfilling activities, and it shall be structurally tight so as to prevent seepage of fill materials through the structure.
  - 12) All fill material shall be obtained from a high ground source or onsite approved excavation areas and shall be clean and free of any pollutants except in trace quantities. No unconfined backfill shall be discharged into wetlands or waters of the State.
  - 13) All construction equipment access shall be through the use of existing high ground areas, temporary construction trestles and two temporary access ramps.

**ADDITIONAL CONDITIONS**

- 14) Construction staging and stockpile areas shall be located only in upland areas, on the authorized temporary construction trestle, or within the temporary staging area, and not in any wetlands or waters of the State outside of the authorized impact areas.
- 15) The installation of piles for the temporary construction trestle shall be accomplished by pile driving and/or the use of a vibratory hammer. Should the permittee and/or its contractor propose to utilize another type of pile installation, additional authorization from DCM shall be required.
- 16) The permittee shall remove the temporary construction trestle, including piles, and the temporary access ramps, in their entirety within 90 days after they are no longer needed.
- 17) Any voids in wetlands or shallow bottom habitat caused by removal of the temporary construction trestle shall be restored to the elevations of immediately adjacent areas with suitable material, such as any wetland material that is within any hollow pilings after the pilings are removed. The permittee shall notify DCM's Transportation Project Field Representative in Morehead City to provide DCM with an opportunity to inspect the material for suitability prior to its placement.
- 18) All temporary fill within wetlands and waters of the State where no stone currently exists shall be placed on geotextile fabric to facilitate total removal of the temporary fill upon completion of the project.
- 19) Any waste materials or debris associated with construction, demolition, or other activities shall be disposed of at an approved upland site or shall be recycled in an environmentally appropriate manner provided appropriate authorizations from any relevant state, federal, or local authorities are obtained.

**Sedimentation and Erosion Control**

- 20) Turbidity curtains shall be used where practicable to isolate all in-water work areas from the adjacent waters of the White Oak River, including but not limited to installation and removal of the temporary construction trestle and temporary access ramps, and placement of fill material within or adjacent to wetlands or waters of the State. The turbidity curtains shall be of sufficient length and effectiveness to prevent a visible increase in the amount of suspended sediments in adjacent waters. The turbidity curtains shall be properly maintained and retained in the water until construction is complete. The turbidity curtains shall be removed when turbidity within the curtains reaches ambient levels.
- 21) This project shall conform to all requirements of the N.C. Sedimentation Pollution Control Act and the N.C. Department of Transportation's (NCDOT's) Memorandum of Agreement with the N.C. Division of Energy, Mineral and Land Resources.

**Coastal Wetland Planting Areas and Oyster Structures**

- 22) In accordance with commitments made by the permittee, approximately 0.24 acres of Estuarine Waters located between the authorized rock sill structures and the authorized roadway embankment shall be planted with Coastal Wetland species as habitat enhancement and on-site mitigation for Coastal Wetland impacts, as depicted on the attached workplan drawings.

**ADDITIONAL CONDITIONS**

- 23) In accordance with commitments made by the permittee, nine oyster structures that are each approximately 8 feet wide and 82 feet long shall be hand placed immediately waterward of each of the outer sill structures, and they shall be placed without the use of heavy machinery to minimize environmental impacts.
- 24) The marine sand fill material used for the Coastal Wetland planting areas shall be compatible with the immediately surrounding undisturbed, similar wetlands. Prior to its placement, the permittee shall submit information to DCM for review and approval with the source and description of the marine sand fill material and the approximate amount to be used in cubic yards.
- 25) Prior to planting, the permittee shall submit a final planting plan for the authorized Coastal Wetland planting areas in writing to DCM for review and approval. The planting plan shall include a list of proposed species as well as identify different planting zones.

**Success Criteria**

**NOTE:** This project will fill approximately 0.95 acres of surface waters, within which there is approximately 0.56 acres that is occupied by sparse patches of SAV, and this project will fill approximately 0.22 acres of Coastal Wetlands.

- 26) The permittee has proposed utilizing the anticipated gain in ecosystem functions from the project as compensatory mitigation for the project's authorized impacts to Coastal Wetlands and SAVs. Therefore, prior to initiating construction, the permittee shall initiate communication with DCM, USACE, DWR, and appropriate resource agencies to ensure that success criteria are approved that will measure the realized gain in ecosystem function.

**Monitoring**

- 27) The permittee shall monitor the project for a minimum of five years after construction (including planting of the Coastal Wetlands) is complete. Features to be monitored shall include but not necessarily be limited to, the rock sills, oyster structures, coastal wetland planting areas and impacts to submerged aquatic vegetation (SAVs). The permittee shall provide DCM, the U.S. Army Corps of Engineers (USACE), the N.C. Division of Water Resources (DWR) and appropriate resource agencies with an annual monitoring report. If any potential problems are identified, then the annual monitoring report shall include a recommendation for proposed corrective measures. Progress reports shall also be provided upon request.

**ADDITIONAL CONDITIONS**

- 28) Annual monitoring reports shall include, but not be limited to: a clear description of the study area in relation to the authorized project; detailed workplan drawings depicting the Coastal Wetland planting areas, SAV survey areas and SAV impact areas, photographs, an evaluation of monitoring data, an assessment of whether success criteria are being met, and an assessment of whether the project has caused permanent SAV impacts.
- 29) Annual monitoring reports shall also include a section about the rock sills, including the surrounding area, to verify that the structures are intact, and to document any positive and/or negative impacts. Potential negative impacts could include but not be limited to, post construction scour outside of the rock sills and/or an insufficient amount of hydrologic connectivity and aquatic passage through the openings of the rock sills during normal tide fluctuations.
- 30) Annual monitoring reports shall include reference areas in the waters surrounding the authorized project to assist in determining whether the presence of SAV within the footprint of the constructed living shoreline is due to an episodic “mast year”. The reference areas shall be approved by DCM, USACE, and DWR, in consultation with DMF and other appropriate resource agencies as part of the approved SAV monitoring plan.
- 31) Unless specifically altered herein, the Coastal Wetland planting areas and oyster structures shall be monitored in accordance with the attached NC Coastal Federation Monitoring plan dated as received 7/11/22.
- 32) Unless specifically altered herein, monitoring of impacts to submerged aquatic vegetation (SAV), shall be conducted in accordance with the plan dated May 2022, “North Carolina Department of Transportation NC 24 Causeway Living Shoreline Submerged Aquatic Vegetation (SAV) Mitigation and Monitoring Plan”.
- 33) The permittee’s proposed timing and frequency of SAV surveys requires additional coordination prior to approval. Therefore, prior to the initiation of construction, the permittee shall coordinate with DCM, USACE, DWR, DMF, and other appropriate resource agencies to finalize details for the timing and frequency of annual SAV surveys. Specifically, the permittee may be required to conduct an annual SAV survey during the July/August timeframe which is the peak period of biological productivity and greatest SAV presence.
- 34) The permittee shall conduct an annual meeting with DCM and other appropriate regulatory and resource agencies to discuss and review the annual monitoring reports.
- 35) Monitoring may be discontinued when written concurrence is received from DCM, USACE and DWR that approved success criteria have been met, or when written concurrence is received from DCM, USACE and DWR that suitable off-site compensatory mitigation has been provided. Monitoring for SAVs may cease after two years if it is determined by DCM, USACE, and DWR, in consultation with DMF and other appropriate resource agencies that the presence of SAV within the footprint of the constructed rock sills is due to an episodic “mast year”.

**ADDITIONAL CONDITIONS**

**Compensatory Mitigation for Impacts to Submerged Aquatic Vegetation (SAV) and Coastal Wetlands**

- 36) If it is determined that the project has caused permanent SAV impacts, then NCDOT, DCM, USACE, DWR, DMF, and other appropriate resource agencies shall finalize the details of a compensatory mitigation plan for permanent SAV impacts. The SAV compensatory mitigation plan shall include a mitigation ratio that accounts for the consideration of numerous factors, including but not limited to the total amount of permanent SAV impacts, a determination of any SAV recruitment due to the project, the type of compensatory mitigation proposed (in-kind or out-of-kind), and any lapse in habitat function between the time of impact and the time that the compensatory mitigation is anticipated to reach its full function.
- 37) Prior to initiating construction, the permittee shall conduct a wetland delineation to determine the amount of existing Coastal Wetlands currently at the project site and once again after the site has achieved its success criteria. The results of these wetland delineations shall be submitted to DCM for approval to assist in determining the amount of new Coastal Wetlands that are added within the project area.
- 38) While monitoring of the Coastal Wetland planting areas is ongoing, the permittee shall reserve the equivalent of 0.22 acres of successful Coastal Wetland restoration credits at the Stella Bridge Mitigation Site in Carteret and Onslow County as compensatory mitigation for the authorized 0.22 acres of Coastal Wetland impacts. A revised debit ledger that reflects the reserved amount and the balance of mitigation credits shall be provided to DCM prior to the initiation of construction. The reserved credits may be refunded back to the Stella Bridge Mitigation Site when the on-site Coastal Wetland planting areas have achieved the approved success criteria.

**General**

- 39) If it is determined that additional permanent and/or temporary impacts are necessary that are not shown on the attached workplan drawings or described in the authorized permit application, a permit modification and/or additional authorization from DCM and/or USACE shall be required. In addition, any changes in the approved plan may also require a permit modification and/or additional authorization from DCM and/or USACE. The permittee shall contact representatives of DCM and USACE prior to commencement of any such activity for this determination and any permit modification.
- 40) The outer limit of the authorized oyster structures shall be marked at 50-foot intervals with yellow reflectors extending at least three feet above normal high water. The reflectors shall be maintained for the life of the structure.
- 41) The permittee and/or its contractor shall contact the DCM Transportation Project Field Representative at (252) 515-5408 to request a pre-construction conference prior to project initiation.
- 42) The permittee shall exercise all available precautions in the day-to-day operation of the facility to prevent waste from entering the adjacent wetlands and waters of the State.



**ADDITIONAL CONDITIONS**

- 43) This permit does not eliminate the need to obtain any additional permits, approvals or authorizations that may be required.
- 44) The N.C. Division of Water Resources (DWR) authorized the proposed project on 6/22/22 (DWR Project No. 20210539) under an Individual Water Quality Certification No. 004907. Any violation of the Certification approved by DWR shall be considered a violation of this CAMA permit.
- 45) This permit incorporates all of the conditions contained within the U.S. Army Corps of Engineers (USACE) authorization issued under Regional General Permit Number 198000291 (COE Action ID No. SAW-2020-00406), which was issued on 7/18/22. Any violation of the USACE permit shall be considered a violation of this permit.

**NOTE:** The permittee is strongly encouraged to conduct a preconstruction meeting at a time and location, and with at least two weeks advanced notice, that will allow all appropriate agencies to attend. Agencies that should be invited include, but are not necessarily limited to, the N.C. Wildlife Resources Commission (WRC), DMF, DCM, DWR, and USACE.

**NOTE:** Any approved ecosystem function gains generated by the project shall be applied to impacts from the project, and no excess mitigation credit shall be generated.

**NOTE:** Storage of equipment and materials within the authorized on-site staging and stockpile areas shall be limited to the minimum amount necessary to increase the likelihood that they are able to be removed if a coastal flooding event is forecast to impact the project area.

**NOTE:** An application processing fee of \$475 was received by DCM for this project. This fee also satisfied the Section 401 application processing fee requirements of the Division of Water Resources.



IN REPLY REFER TO

**DEPARTMENT OF THE ARMY  
WILMINGTON DISTRICT, CORPS OF ENGINEERS**

Washington Regulatory Field Office  
2407 West 5<sup>th</sup> Street  
Washington, North Carolina 27889

July 18, 2022

Action ID No. SAW-2020-00406

Ms. Cathy Brittingham  
Division of Coastal Management  
North Carolina Department of Environmental Quality  
1617 Mail Service Center  
Raleigh, North Carolina 27699-1617

Dear Ms. Brittingham:

Reference the application of the North Carolina Department of Transportation, (NCDOT) for a Department of the Army permit to protect the roadway shoulder/shoreline to construct a living shoreline project, associated with stabilization of the NC-24 causeway between Cape Carteret, Carteret County and the Town of Swansboro, in Onslow County, North Carolina.

The Federal agencies have completed review of the proposal as presented by the application and your field investigation report.

We recommend that the following conditions be included in the State authorization:

A. All work authorized by this permit must be performed in strict compliance with the attached plans dated April 11, 2022, which are a part of this permit. Any modification to these plans must be approved by the US Army Corps of Engineers (USACE) prior to implementation.

B. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the U.S. Army Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal, relocation, or alteration.

C. The Permittee shall install and maintain, at his expense, any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, on authorized facilities. It is recommended, at a minimum, the completed structure be equipped with reflective structures on both ends to ensure safe navigation within the vicinity of the structure.

D. The Permittee shall notify the National Ocean Service (NOS) and the Corps, in writing, at least two (2) weeks before beginning work and upon completion of the authorized work. The notification of completion shall include a drawing which certifies the location and configuration of the completed activity (a certified permit drawing may be used). This information must be provided within 30 days of completion of the authorized work. Notifications to NOS shall be sent to the following address: 1315 East West Highway, Silver Spring, Maryland 20910.

E. The authorized structure and associated activity must not interfere with the public's right to free navigation on all navigable waters of the United States. No attempt will be made by the Permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work for reasons other than safety.

F. It is possible that the authorized structure may be damaged by wave wash from passing vessels or storm driven erosion and/or over wash. The issuance of this permit does not relieve the Permittee from taking all proper steps to ensure the continued integrity of the permitted structure and the safety of the navigating public. The Permittee will not hold the United States liable for any such damage.

G. Except as specified in the plans attached to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, in such a manner as to impair normal flows and circulation patterns within waters or wetlands or to reduce the reach of waters or wetlands.

H. The permittee will adhere to the Submerged Aquatic Vegetation (SAV) Monitoring Plan, Version 3, dated May 4, 2022 (attached) with the following modification to the "Section 4 Proposed Mitigation and Monitoring Plan" found on page 9:

- The post construction monitoring period for will be for 5 years (instead of the proposed 2 years) to establish whether the success criteria have been met. The SAV success criteria is outlined in Appendix 1 and 2 attached to the above referenced document.

- Ecosystem functional uplift of oyster recruitment and marsh coverage will be monitored as detailed in the following documents:

- Oysters growing on structure (NC Coastal Federation monitoring methodology) <https://xfer.services.ncdot.gov/pdea/Temp/M-540%20SAV/>

- Marsh habitat gained (NC Coastal Federation monitoring methodology) <https://xfer.services.ncdot.gov/pdea/Temp/M-540%20SAV/>

I. Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.

J. All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Quality at (919) 733-5083, Ext. 526 or (800) 662-7956 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

K. If the permittee discovers any previously unknown historic or archeological remains while accomplishing the authorized work, he will immediately notify the Wilmington District Engineer who will initiate the required coordination procedures.

L. The permittee shall advise the Corps in writing at least two weeks prior to beginning

the work authorized by this permit and again upon completion of the work authorized by this permit.

M. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, shall be available at the project site during construction and maintenance of this project.

N. The permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of turbidity curtains, silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

O. The activity will be conducted in such a manner as to prevent a significant increase in turbidity outside the area of construction or construction-related discharge. Increases such that the turbidity in the waterbody is 50 NTU's or less in all rivers not designated as trout waters by the North Carolina Division of Environmental Management (NCDEM), 25 NTU's or less in all saltwater classes and in all lakes and reservoirs, and 10 NTU's or less in trout waters, are not considered significant.

P. The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.

Q. Violations of these conditions or violations of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act must be reported in writing to the Wilmington District U.S. Army Corps of Engineers within 24 hours of the permittee's discovery of the violation.

Questions or comments may be addressed to Mr. Thomas Steffens Washington Field Office, Regulatory Division, telephone (910) 251-4615.

Sincerely,

Monte Matthews  
Lead Project Manager  
US Army Corps of Engineers

E-Copies Furnished:

Ms. Amy Chapman  
North Carolina Division of Water Quality, Transportation Unit  
North Carolina Department of Environmental Quality  
1617 Mail Service Center  
Raleigh, North Carolina 27699-1617

Mr. Pete Benjamin  
U.S. Fish and Wildlife Service  
Fish and Wildlife Enhancement  
Post Office Box 33726  
Raleigh, North Carolina 27636-3726

Mr. Fritz Rhode  
National Marine Fisheries Service  
Habitat Conservation Service  
Pivers Island  
Beaufort, North Carolina 28516

Pace Wilber, Ph.D.  
South Atlantic and Caribbean Branch Chief  
Habitat Conservation Division  
NOAA Fisheries Service  
331 Ft Johnson Road  
Charleston, SC 29412

Mr. Chris Parker  
Wetlands Regulatory Section  
Water Management Division  
U.S. Environmental Protection Agency  
61 Forsyth Street, SW  
Atlanta, Georgia 30303

Mr. Garcy Ward  
N.C. Division of Water Resources  
North Carolina Department of Environmental Quality  
948 Washing Square Mall  
Washington, North Carolina 27889

Mr. Greg Daisey  
Division of Coastal Management  
North Carolina Department of Environmental Quality  
401 South Griffin Street, Suite 300  
Elizabeth City, North Carolina 27909

DEPARTMENT OF THE ARMY  
Wilmington District, Corps of Engineers  
69 Darlington Avenue  
Wilmington, North Carolina 28403-1343  
<http://www.saw.usace.army.mil/Missions/RegulatoryPermitProgram.aspx>

General Permit No. 198000291  
Name of Permittee: General Public  
Effective Date: January 01, 2022  
Expiration Date: December 31, 2026

**DEPARTMENT OF THE ARMY  
REGIONAL GENERAL PERMIT (RGP)**

A RGP to do work in or affecting navigable waters of the U.S. and waters of the U.S., upon recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of March 3, 1899 (U.S.C. 403), and Section 404 of the Clean Water Act (33 U.S.C. 1344), is hereby issued by authority of the Secretary of the Army by

District Engineer  
U.S. Army Engineer District, Wilmington  
Corps of Engineers  
69 Darlington Avenue  
Wilmington, North Carolina 28403-1343

TO AUTHORIZE THOSE CONSTRUCTION ACTIVITIES IN THE 20 COASTAL COUNTIES RECEIVING PRIOR APPROVAL FROM THE STATE OF NORTH CAROLINA IN THE FORM OF A COASTAL AREA MANAGEMENT ACT (CAMA) PERMIT, AND/OR A STATE DREDGE AND FILL PERMIT, AND IF REQUIRED, A WATER QUALITY CERTIFICATION, THAT ARE OTHERWISE NOT ELIGIBLE FOR FEDERAL AUTHORIZATION IN THE FORM OF A NATIONWIDE PERMIT OR ANOTHER RGP.

**Operating Procedures**

a. Applications for joint state and federal authorization under this programmatic RGP will be accepted through the North Carolina Division of Coastal Management (NCDCM). Receipt of a complete application by the NCDCM will initiate the State's field review that will include a site visit and preparation of a Field Investigation Report and a state Bio-Report. The NCDCM will forward a copy of the complete application, its Field Investigation Report, and its Bio-Report, to the appropriate Corps of Engineers field office, thereby initiating federal review of the project. The Corps, upon receipt of an application, will immediately assign an action identification number, acknowledge receipt thereof, and examine the application to assure that it can be processed pursuant to this programmatic RGP. The applicant and the NCDCM will be furnished written notification of the Corps' determination. Notification to the applicant will include a brief description of the administrative process.

b. For those proposals that may result in a discharge into waters of the U.S., including wetlands, the North Carolina Division of Water Resources (NCDWR) and the applicant will be informed regarding the applicant's need to obtain a Water Quality Certification in accordance with section 401 of the Clean Water Act.

c. If, at any time, the Corps determines that a proposed activity is eligible for authorization under another regional RGP or a nationwide permit (NWP), this procedure may be terminated and the activity authorized pursuant to the terms and conditions of the appropriate RGP or NWP.

d. The permit review process conducted by the NCDCM is a public process involving publication of public notices in local newspapers, public hearings, and various public appeal procedures. The Corps may issue a separate public notice for a specific proposal if it is deemed necessary for compliance with appropriate laws, regulation, and guidance.

e. This RGP does not, in any way, alter established procedures or responsibilities, as required by federal laws, memoranda of agreements (MOA's) or administrative regulations, with respect to the Corps' coordination with appropriate review agencies. The applicant will continue to have the opportunity to rebut any objections to a proposal.

f. The Corps will provide copies of the application and plans, the NCDCM's Field Investigation Report, and the state Bio-Report, to the U.S. Fish and Wildlife Service (USFWS), the National Marine Fisheries Service (NMFS) the U.S. Environmental Protection Agency (EPA), and any other federal agency that the Corps determines to be a necessary review agency (collectively, the "Federal Agencies"). Receipt of this material will initiate the Federal Agencies' review. The Federal Agencies will be allowed sufficient time, normally thirty (30) days, to provide the Corps with their comments and recommendations, including any proposed permit special conditions and recommendations of denial. The Corps may grant extensions of time for Federal Agency review if justified by unusual circumstances. If an extension is granted that would substantially delay an NCDCM decision, the application may be removed from this RGP process.

g. The Corps will receive and review all Federal Agency comments as well as any applicant rebuttal. Provided all Federal Agencies and the Corps are in agreement, the Corps will prepare a coordinated federal position incorporating all Federal Agency comments, including proposed permit special conditions and any recommendations for denial. The Corps will typically furnish this coordinated federal position to the NCDCM within 45 days of its receipt of the complete application, and copies of the Field Investigation Report and Bio-Report.

h. If the Corps does not concur with a Federal Agency's comments or recommendations, the Corps will contact the Federal Agency and advise it of the Corps' position. Attempts to resolve the issue may include initiating the referral procedures outlined by current memoranda of agreement (MOA's) between the Department of the Army and the agency. No coordinated federal position will be furnished to the NCDCM until and unless the Corps receives written agreement from the Federal Agency that all issues have been resolved to the satisfaction of that agency.

i. If any of the recommendations and/or conditions included in the coordinated federal position are unacceptable to the NCDCM, the NCDCM will contact the Corps within ten (10) days of receipt of the coordinated federal position and attempt to resolve the conflict. If resolution of the conflict involves changes to the conditions or recommendations provided by the Federal Agencies, the provisions of paragraphs g. and h. (above) will apply. If the conflict is resolved to the satisfaction of the Corps and any affected Federal Agency, the NCDCM permit will be issued and the authority of this RGP will apply.

j. If a Federal Agency conflict is not resolved within the time necessary for a decision by the NCDCM, the NCDCM may proceed, independently, to conclude the state action without inclusion of the federal position. In such case, the applicant and the NCDCM will be notified immediately, in writing, that the state permit does not satisfy the federal permit requirements and that the proposal in question may not proceed without federal authorization.

k. If the coordinated federal position is not in conflict with state agencies' positions, law, regulation, or policy, and is acceptable to the NCDCM, a state permit will be developed by the NCDCM fully incorporating the state and federal positions. The NCDCM will furnish copies of the final permit to the applicant and the Corps. The NCDWR will furnish a copy of the Section 401 Water Quality Certification, if required, to the applicant and the Corps. The Corps will not confirm the authorization of a proposed project under this RGP until the issuance of the NCDCM permit and, if required, the Section 401 Water Quality Certification.

l. If the NCDCM permit or Section 401 Water Quality Certification is denied, the applicant will be informed that federal authorization is denied without prejudice.

m. No work may proceed under this RGP until the Wilmington District Engineer or his representative provides written verification that the procedures and conditions of the RGP have been satisfied.

n. The NCDCM and the Corps will monitor all permitted work and periodically inspect projects for compliance with permit conditions and applicable state and federal regulations. If any violation of the NCDCM permit is discovered which would also constitute a violation of the federal position, both the NCDCM and the Corps, in accordance with their respective regulations and policies, may take enforcement action.

o. This RGP will not be used to authorize an activity when the Wilmington District Engineer determines that the proposed activity would significantly affect the quality of the human environment and therefore require preparation of an Environmental Impact Statement (EIS).

### **General Conditions**

a. Authorized structures located on or adjacent to Federally authorized waterways will be constructed in accordance with the latest setback criteria established by the Wilmington District Engineer. You may review the setback policy at



<http://www.saw.usace.army.mil/Missions/Navigation/Setbacks.aspx>. This RGP does not authorize the construction of hardened or permanently fixed structures within the Federally Authorized Channel Setback, unless the activity is approved by the Corps. The Permittee must obtain approval from the Corps prior to the construction of any structures within the Federally Authorized Channel Setback.

b. Except as authorized by this RGP or any Corps approved modification to this RGP, no excavation, fill or mechanized land-clearing activities shall take place, at any time in the construction or maintenance of this project, within waters or wetlands. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.

c. Authorization under this RGP does not obviate the need to obtain other federal, state, or local authorizations.

d. All work authorized by this RGP must comply with the terms and conditions of the applicable Clean Water Act Section 401 Water Quality Certification for this RGP issued by the North Carolina Division of Water Resources.

e. The Permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation or turbidity within waters and wetlands outside the permit area. This shall include, but is not limited to, the immediate installation of silt fencing or similar appropriate devices around all areas subject to soil disturbance or the movement of earthen fill, and the immediate stabilization of all disturbed areas. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act of 1973 (North Carolina General Statutes Chapter 113A Article 4).

f. The activities authorized by this RGP must not interfere with the public's right to free navigation on all navigable waters of the U.S. No attempt will be made by the Permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work for a reason other than safety.

g. The Permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his/her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the Permittee will be required, upon due notice from the Corps, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

h. The Permittee, upon receipt of a notice of revocation of the permit for the verified individual activity, may apply for an individual permit, or will, without expense to the United States and in such time and manner as the Secretary of the Army or his/her authorized representative may direct, restore the affected water of the US to its former conditions.

i. This RGP does not authorize any activity that would conflict with a federal project's congressionally authorized purposes, established limitations or restrictions, or limit an agency's ability to conduct necessary operation and maintenance functions. Per Section 14 of the Rivers and Harbors Act of 1899, as amended (33 U.S.C. 408), no project that has the potential to take possession of or make use of for any purpose, or build upon, alter, deface, destroy, move, injure, or obstruct a federally constructed work or project, including, but not limited to, levees, dams, jetties, navigation channels, borrow areas, dredged material disposal sites, flood control projects, etc., shall be permitted unless the project has been reviewed and approved by the appropriate Corps approval authority.

j. The Permittee shall obtain a Consent to Cross Government Easement from the Wilmington District's Land Use Coordinator prior to any crossing of the Corps easement and/or prior to commencing construction of any structures, authorized dredging, or other work within the right-of-way of, or in proximity to, a federally designated disposal area. The Land Use Coordinator may be contacted at: CESA-OP-N, 69 Darlington Avenue, Wilmington, North Carolina 28403-1343, email: [SAWWeb-NAV@usace.army.mil](mailto:SAWWeb-NAV@usace.army.mil).

k. The Permittee will allow the Wilmington District Engineer or his/her representative to inspect the authorized activity at any time deemed necessary to assure that the activity is being performed or maintained in strict accordance with the Special and General Conditions of this permit.

l. This RGP does not grant any property rights or exclusive privileges.

m. This RGP does not authorize any injury to the property or rights of others.

n. This RGP does not authorize the interference with any existing or proposed federal project.

o. In issuing this RGP, the Federal Government does not assume any liability for the following:

(1) Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

(2) Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

(3) Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this RGP.

(4) Design or construction deficiencies associated with the permitted work.

(5) Damage claims associated with any future modification, suspension, or revocation of this RGP.

p. Authorization provided by this RGP may be modified, suspended, or revoked in whole or in part if the Wilmington District Engineer, acting for the Secretary of the Army, determines that such action would be in the best public interest. The term of this RGP shall be five (5) years unless subject to modification, suspension, or revocation. Any modification, suspension or revocation of this authorization will not be the basis for any claim for damages against the United States Government.

q. No activity may occur in a component of the National Wild and Scenic Rivers System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic designation or study status. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or “study river” (e.g., National Park Service, U.S. Forest Service, etc.)

r. This RGP does not authorize any activity within, or directly affecting, a marine sanctuary established by the Secretary of Commerce under authority of Section 302 of the Marine Protection, Research and Sanctuaries Act of 1972, unless the applicant provides the Corps with a certification from the Secretary of Commerce that the proposed activity is consistent with the purposes of Title III of the Marine Protection, Research and Sanctuaries Act. Information on marine sanctuaries may be obtained at <http://sanctuaries.noaa.gov/#MN>. Permittees may not begin work until they provide the Corps with a written certification from the Department of Commerce.

s. In cases where the Wilmington District Engineer determines that the activity may affect properties listed, or eligible for listing, in the National Register of Historic Places and its codified regulations, the National Historic Preservation Amendment Acts of 1980 and 1992, the Abandoned Shipwreck Act of 1987 and the Native American Graves Protection and Repatriation Act, the activity is not authorized, until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied. Permittees may not begin work until notified by the Corps that the requirements of the NHPA have been satisfied and that the activity is authorized.

t. If you discover any previously unknown historic, cultural, or archeological remains and artifacts while accomplishing the activity authorized by this RGP, you must immediately notify the Wilmington District Engineer of what you have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The Wilmington District Engineer will initiate the Federal, tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

u. Endangered Species.

(1) No activity is authorized under this RGP which is likely to jeopardize the continued existence of a threatened or endangered species directly or indirectly or a species proposed for such

designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under this RGP which “may affect” a listed species or critical habitat, unless Section 7 consultation addressing the effects of the proposed activity has been completed.

(2) Federal agencies should follow their own procedures for complying with the requirements of the ESA. Federal prospective Permittees (and when FHWA is the lead federal agency) must provide the District Engineer with the appropriate documentation to demonstrate compliance with those requirements. The District Engineer will review the documentation and determine whether it is sufficient to address ESA compliance for the RGP activity, or whether additional ESA consultation is necessary.

(3) As a result of formal or informal consultation with the U.S. Fish and Wildlife Service (USFWS) or NMFS, the District Engineer may add species-specific endangered species conditions to the RGP verification letter for a project.

(4) Authorization of an activity by a RGP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the USFWS or the NMFS, the ESA prohibits any person subject to the jurisdiction of the U.S. to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.

(5) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the USFWS in Raleigh, North Carolina at the address provided below, or from the USFWS and NMFS via their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.noaa.gov/fisheries.html> respectively.

The Raleigh USFWS Office covers all NC counties east of, and including, Richmond, Montgomery, Randolph, Guilford, and Rockingham Counties.

US Fish and Wildlife Service  
Raleigh Field Office  
Post Office Box 33726  
Raleigh, NC 27636-3726  
Telephone: (919) 856-4520

(6) The Wilmington District, USFWS, NCDOT, and the FHWA have conducted programmatic Section 7(a)(2) consultation for a number of federally listed species and habitat, and programmatic consultation concerning other federally listed species and/or habitat may occur in the future. The result of completed programmatic consultation is a Programmatic Biological Opinion (PBO) issued by the USFWS. These PBOs contain mandatory terms and conditions to implement the reasonable and prudent measures that are associated with “incidental take” of

whichever species or critical habitat is covered by a specific PBO. Authorization under this RGP is conditional upon the Permittee's compliance with all the mandatory terms and conditions associated with incidental take of the applicable PBO (or PBOs), which are incorporated by reference in this RGP. Failure to comply with the terms and conditions associated with incidental take of an applicable PBO, where a take of the federally listed species occurs, would constitute an unauthorized take by the Permittee, and would also constitute Permittee non-compliance with the authorization under this RGP. If the terms and conditions of a specific PBO (or PBOs) apply to a project, the Corps will include this/these requirements in any RGP verification that may be issued for a project. The USFWS is the appropriate authority to determine compliance with the terms and conditions of its PBO, and with the ESA.

(7) Northern long-eared bat (NLEB) (*Myotis septentrionalis*). Standard Local Operating Procedures for Endangered Species (SLOPES) for the NLEB have been approved by the Corps and the U.S. Fish and Wildlife Service. See <http://www.saw.usace.army.mil/Missions/Regulatory-Permit-Program/Agency-Coordination/ESA/>. This SLOPES details how the Corps will make determinations of effect to the NLEB when the Corps is the lead federal agency for an NCDOT project that is located in the western 41 counties of North Carolina. This SLOPES do not address NCDOT projects (either federal or state funded) in the eastern 59 counties in North Carolina. Note that if another federal agency is the lead federal agency for a project in the western 41 counties, procedures for satisfying the requirements of Section 7(a)(2) of the ESA will be dictated by that agency and will not be applicable for consideration under the SLOPES; however, information that demonstrates the lead federal agency's (if other than the Corps) compliance with Section 7(a)(2) / 4(d) Rule for the NLEB, will be required in the PCN. Note that at the time of issuance of this RGP, the federal listing status of the NLEB as "Threatened" is being litigated at the National level. If, as a result of litigation, the NLEB is federally listed as "Endangered", this general condition ("s") will no longer be applicable because the 4(d) Rule, and this NLEB SLOPES, will no longer apply/be valid.

(8) In order to further protect the endangered West Indian Manatee, *Trichechus manatus*, the applicant must implement the U.S. Fish and Wildlife Service's Manatee Guidelines, and strictly adhere to all requirements therein. The guidelines can be found at <https://www.fws.gov/raleigh/pdfs/ManateeGuidelines2017.pdf>

(9) If the Permittee discovers or observes any live, damaged, injured, or dead individual of an endangered or threatened species during construction, the Permittee shall immediately notify the Wilmington District Engineer so that required coordination can be initiated with the U.S. Fish and Wildlife Service and/or National Marine Fisheries Service.

v. Permittees are advised that development activities in or near a floodway may be subject to the National Flood Insurance Program that prohibits any development, including fill, within a floodway that results in any increase in base flood elevations. This RGP does not authorize any activity prohibited by the National Flood Insurance Program.

w. The Permittee must install and maintain, at his/her expense, any signal lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, on authorized

facilities. For further information, the Permittee should contact Coast Guard Sector North Carolina at (910) 772-2191 or email Coast Guard Fifth District at [cgd5waterways@uscg.mil](mailto:cgd5waterways@uscg.mil).

x. If the display of lights and signals on the authorized structure is not otherwise provided for by law, such lights and signals as may be prescribed by the U.S. Coast Guard will be installed and maintained by and at the expense of the Permittee.

y. It is possible that an authorized structure may be damaged by wave wash from passing vessels. The issuance of this RGP does not relieve the Permittee from taking all proper steps to ensure the integrity of the permitted structure and the safety of moored boats. The Permittee will not hold the United States liable for any such damage.

z. Structures and their attendant utilities, authorized by this RGP, located on lands subject to an easement in favor of the United States for the operation, maintenance, improvement, and enlargement of the Atlantic Intracoastal Waterway (AIWW), will be removed at the expense of the Permittee, in the event that, in the judgment of the Corps acting on behalf of the United States, the lands are needed at any time for any purpose within the scope of the easement. Permanent buildings will not be constructed within the easement.

aa. The Permittee must maintain any structure or work authorized by this RGP in good condition and in conformance with the terms and conditions of this RGP. The Permittee is not relieved of this requirement if the Permittee abandons the structure or work. Transfer in fee simple of the work authorized by this RGP will automatically transfer this RGP to the property's new owner, with all of the rights and responsibilities enumerated herein. The Permittee must inform any subsequent owner of all activities undertaken under the authority of this RGP and provide the subsequent owner with a copy of the terms and conditions of this RGP.

bb. At his/her sole discretion, any time during the processing cycle, the Wilmington District Engineer may determine that this RGP will not be applicable to a specific proposal. In such case, the procedures for processing an individual permit in accordance with 33 CFR 325 will be available.

cc. Except as authorized by this RGP or any Corps approved modification to this RGP, all fill material placed in waters or wetlands shall be generated from an upland source and will be clean and free of any pollutants except in trace quantities.

dd. Except as authorized by this RGP or any Corps approved modification to this RGP, all excavated material will be disposed of in approved upland disposal areas.

ee. Activities which have commenced (i.e., are under construction) or are under contract to commence in reliance upon this RGP will remain authorized provided the activity is completed within twelve months of the date of the RGP's expiration, modification, or revocation. Activities completed under the authorization of this RGP that were in effect at the time the activity was completed continue to be authorized by the RGP.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

A handwritten signature in black ink, appearing to read 'B. A. Bennett', with a long horizontal stroke extending to the right.

Benjamin A. Bennett  
Colonel, U.S. Army  
District Commander



# United States Department of the Interior

## FISH AND WILDLIFE SERVICE

Raleigh Field Office

Post Office Box 33726

Raleigh, North Carolina 27636-3726

### **GUIDELINES FOR AVOIDING IMPACTS TO THE WEST INDIAN MANATEE**

#### **Precautionary Measures for Construction Activities in North Carolina Waters**

The West Indian manatee (*Trichechus manatus*), also known as the Florida manatee, is a Federally-listed endangered aquatic mammal protected under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*) and the Marine Mammal Protection Act of 1972, as amended (16 U.S.C 1461 *et seq.*). The manatee is also listed as endangered under the North Carolina Endangered Species Act of 1987 (Article 25 of Chapter 113 of the General Statutes). The U.S. Fish and Wildlife Service (Service) is the lead Federal agency responsible for the protection and recovery of the West Indian manatee under the provisions of the Endangered Species Act.

Adult manatees average 10 feet long and weigh about 2,200 pounds, although some individuals have been recorded at lengths greater than 13 feet and weighing as much as 3,500 pounds. Manatees are commonly found in fresh, brackish, or marine water habitats, including shallow coastal bays, lagoons, estuaries, and inland rivers of varying salinity extremes. Manatees spend much of their time underwater or partly submerged, making them difficult to detect even in shallow water. While the manatee's principal stronghold in the United States is Florida, the species is considered a seasonal inhabitant of North Carolina with most occurrences reported from June through October.

To protect manatees in North Carolina, the Service's Raleigh Field Office has prepared precautionary measures for general construction activities in waters used by the species. Implementation of these measures will allow in-water projects which do not require blasting to proceed without adverse impacts to manatees. In addition, inclusion of these guidelines as conservation measures in a Biological Assessment or Biological Evaluation, or as part of the determination of impacts on the manatee in an environmental document prepared pursuant to the National Environmental Policy Act, will expedite the Service's review of the document for the fulfillment of requirements under Section 7 of the Endangered Species Act. These measures include:

- 1 The project manager and/or contractor will inform all personnel associated with the project that manatees may be present in the project area, and the need to avoid any harm to these endangered mammals. The project manager will ensure that all construction personnel know the general appearance of the species and their habit of moving about completely or partially submerged in shallow water. All construction personnel will be informed that they are responsible for observing water-related activities for the presence of manatees.

2. The project manager and/or the contractor will advise all construction personnel that there are civil and criminal penalties for harming, harassing, or killing manatees which are protected under the Marine Mammal Protection Act and the Endangered Species Act.



3. If a manatee is seen within 100 yards of the active construction and/or dredging operation or vessel movement, all appropriate precautions will be implemented to ensure protection of the manatee. These precautions will include the immediate shutdown of moving equipment if a manatee comes within 50 feet of the operational area of the equipment. Activities will not resume until the manatee has departed the project area on its own volition (i.e., it may not be herded or harassed from the area).

4. Any collision with and/or injury to a manatee will be reported immediately. The report must be made to the U.S. Fish and Wildlife Service (ph. 919-856-4520), the National Marine Fisheries Service (ph. 252-728-8762), and the North Carolina Wildlife Resources Commission (ph. 252-448-1546).

5. A sign will be posted in all vessels associated with the project where it is clearly visible to the vessel operator. The sign should state:

CAUTION: The endangered manatee may occur in these waters during the warmer months, primarily from June through October. Idle speed is required if operating this vessel in shallow water during these months. All equipment must be shut down if a manatee comes within 50 feet of the vessel or operating equipment. A collision with and/or injury to the manatee must be reported immediately to the U.S. Fish and Wildlife Service (919-856-4520), the National Marine Fisheries Service (252-728-8762), and the North Carolina Wildlife Resources Commission (252-448-1546).

6. The contractor will maintain a log detailing sightings, collisions, and/or injuries to manatees during project activities. Upon completion of the action, the project manager will prepare a report which summarizes all information on manatees encountered and submit the report to the Service's Raleigh Field Office.

7. All vessels associated with the construction project will operate at "no wake/idle" speeds at all times while in water where the draft of the vessel provides less than a four foot clearance from the bottom. All vessels will follow routes of deep water whenever possible.

8. If siltation barriers must be placed in shallow water, these barriers will be: (a) made of material in which manatees cannot become entangled; (b) secured in a manner that they cannot break free and entangle manatees; and, (c) regularly monitored to ensure that manatees have not become entangled. Barriers will be placed in a manner to allow manatees entry to or exit from essential habitat.

Prepared by (rev. 02/2017):  
U.S. Fish and Wildlife Service  
Raleigh Field Office  
Post Office Box 33726  
Raleigh, North Carolina 27636-3726  
919/856-4520

Figure 1. The whole body of the West Indian manatee may be visible in clear water; but in the dark and muddy waters of coastal North Carolina, one normally sees only a small part of the head when the manatee raises its nose to breathe.

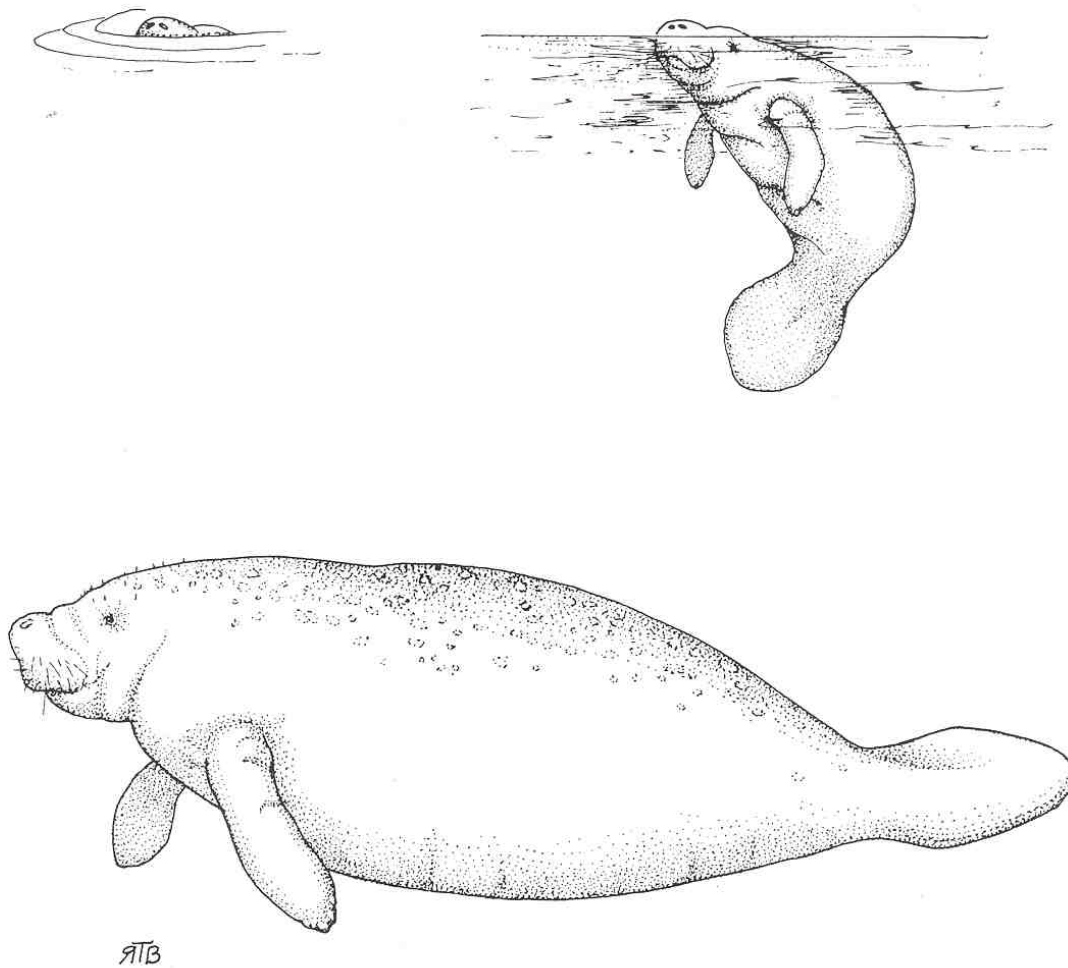


Illustration used with the permission of the North Carolina State Museum of Natural Sciences.

Source: Clark, M. K. 1987. Endangered, Threatened, and Rare Fauna of North Carolina: Part I. A re-evaluation of the mammals. Occasional Papers of the North Carolina Biological Survey 1987-3. North Carolina State Museum of Natural Sciences. Raleigh, NC. pp. 52.



NORTH CAROLINA  
Environmental Quality

ROY COOPER  
Governor

ELIZABETH S. BISER  
Secretary

RICHARD E. ROGERS, JR.  
Director

June 22, 2022

Mr. Philip S. Harris, III, P.E., CPM  
Natural Environment Section Head  
Project Development and Environmental Analysis  
North Carolina Department of Transportation  
1598 Mail Service Center  
Raleigh, North Carolina, 27699-1598

Subject: 401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act ADDITIONAL CONDITIONS for proposed NC 24 Resiliency and Living Shoreline Project in Onslow County, TIP M-0540A.  
NCDWR Project No. 20210539

Dear Mr. Harris:

Attached hereto is a copy of Certification No. 004907 issued to The North Carolina Department of Transportation (NCDOT) dated June 22, 2022.

If we can be of further assistance, do not hesitate to contact us.

Sincerely,  
DocuSigned by:  
*Amy Chapman*

9C9886312DCD474...

Richard E. Rogers, Jr., Director  
Division of Water Resources

#### Attachments

#### Electronic copy only distribution:

Tom Steffens, US Army Corps of Engineers, Wilmington Field Office  
Chris Rivenbark, NC Department of Transportation  
Jason Dilday, NC Department of Transportation  
Gary Jordan, US Fish and Wildlife Service  
Travis Wilson, NC Wildlife Resources Commission  
James A Harrison, NC Division of Marine Fisheries  
Steven Lane, NC Division of Coastal Management  
Cathy Brittingham, NC Division of Coastal Management  
Hannah Sprinkle, NC Division of Water Resources Wilmington Regional Office  
File Copy



**401 Water Quality Certification Pursuant to Section 401 of the Federal Clean Water Act with ADDITIONAL CONDITIONS**

**THIS CERTIFICATION** is issued in conformity with the requirements of Section 401 Public Laws 92-500 and 95-217 of the United States and subject to the North Carolina Division of Water Resources (NCDWR) Regulations in 15 NCAC 2H .0500. This certification authorizes the NCDOT to impact 0.22 acres of jurisdictional wetlands and 0.95 acres of open waters in Onslow County. The project shall be constructed pursuant to the application dated received January 28, 2022. The authorized impacts are as described below:

**Wetland Impacts in the White Oak River Basin**

| Site | Fill (ac) | Fill (temporary) (ac) | Excavation (ac) | Mechanized Clearing (ac) | Hand Clearing (ac) | Total Wetland Impact (ac) |
|------|-----------|-----------------------|-----------------|--------------------------|--------------------|---------------------------|
| 3    | 0.22*     | ---                   | ---             | ---                      | ---                | <b>0.22*</b>              |

**Total Wetland Impact for Project: 0.22 acres. \*Impacts to Coastal Marsh**

**Open Water Impacts in the White Oak River Basin**

| Site         | Type             | Permanent Fill in Open Waters (ac) | Temporary Fill in Open Waters (ac) | Total Fill in Open Waters (ac) |
|--------------|------------------|------------------------------------|------------------------------------|--------------------------------|
| 3            | Rock Sill        | 0.37                               | ---                                | 0.37                           |
| 3            | Oyster Structure | 0.10                               | ---                                | 0.10                           |
| 3            | Fill             | 0.48                               | ---                                | 0.48                           |
| <b>Total</b> |                  | <b>0.95</b>                        | <b>---</b>                         | <b>0.95</b>                    |

**Total Open Water Impact for Project: 95 acres.**

The application provides adequate assurance that the discharge of fill material into the waters of the White Oak River Basin in conjunction with the proposed development will not result in a violation of applicable Water Quality Standards and discharge guidelines. Therefore, the State of North Carolina certifies that this activity will not violate the applicable portions of Sections 301, 302, 303, 306, 307 of PL 92-500 and PL 95-217 if conducted in accordance with the application and conditions hereinafter set forth.

This approval is only valid for the purpose and design that you submitted in your application dated received January 28, 2022. Should your project change, you are required to notify the NCDWR and submit a new application. If the property is sold, the new owner must be given a copy of this Certification and approval letter, and is thereby responsible for complying with all the conditions. If any additional wetland impacts, or stream impacts, for this project (now or in the future) exceed 0.10 acre or 300 linear feet, respectively, additional compensatory mitigation may be required as described in 15A NCAC 2H .0506 (h) (6) and (7).

For this approval to remain valid, you are required to comply with all the conditions listed below. In addition, you should obtain all other federal, state or local permits before proceeding with your project including (but not limited to) Sediment and Erosion control, Coastal Stormwater, Non-discharge and Water Supply watershed regulations. This Certification shall expire on the same day as the expiration date of the corresponding Corps of Engineers Permit.

**Condition(s) of Certification:**

**Project Specific Conditions**

1. The impacts covered in this Individual Certification are associated with the Regional General Permit 291 issued by the Corps of Engineers.
2. If project is deemed unsuccessful, compensatory mitigation for impacts to 0.22 acres of coastal marsh has been reserved from the Stella Bridge Mitigation Site.
3. For living shorelines, the sills shall have at least one eight-foot opening every 100 feet and may be staggered or overlapped or left open as long as the separation between sections is maintained. Overlapping sections shall not overlap more than 10 feet. [15A NCAC 02H .0506(b)(4) and (c)(4)]
4. For living shorelines, the permittee shall employ all sedimentation and erosion control measures necessary to prevent an increase in sedimentation and turbidity within waters and wetlands outside the permitted area. This shall include, but is not limited to, the immediate installation of silt fencing, turbidity curtains or similar appropriate devices around all areas subject to soil disturbance. Additionally, the project must remain in full compliance with all aspects of the Sedimentation Pollution Control Act and the Mining Act of 1971. [15A NCAC 02H .0506(b)(4) and (c)(4)]
5. All backfill will consist of suitable, clean material free of any pollutants except in trace quantities. Metal products, organic materials, rock, concrete, bricks, or other non-earthen debris shall not be used. [15A NCAC 02H .0506-(b)(1)-(3)]
6. Approximately six (6) months after the installation of rock sill structure in waters, streams, and/or wetlands the structure shall be inspected for erosional areas, headcutting, shifts or movement of rocks within sill structure, etc. Eighteen (18) months after installation another visual inspection shall be conducted. Written notification is required after these inspections; any problems found during inspections shall be documented and the appropriate DWR Wilmington Regional Office staff member contacted to arrange a field visit. The permittees (property owners) shall consult with the Regional DWR staff member to determine if a permit modification is needed to correct the problem. The property owner and/or owners shall assume responsibility of repairs and maintenance of rock sill structure. [15A NCAC 02H .0501 and .0502 and 15A NCAC 02H .0506 (b)(1)-(3)]
7. The permittee shall undertake compliance monitoring for five (5) full years from the date of implementation or until the success criteria have been met, whichever is later. The permittee shall provide monitoring reports to the DWR by December 31 of each monitoring year. [15A NCAC 02H .0507(c)]
8. If monitoring indicates that all or portions of the project are failing to meet one or more of the required success criteria, the monitoring report must provide a remedial action plan to address the deficiency. The remedial action plan, at a minimum, must describe the failure, the source or reason for the failure, a concise description of the corrective measures that are proposed, and a timeframe for the implementation of the corrective measures. [15A NCAC 02H .0507(c)]
9. If initial planting efforts fail and the project area must be replanted, the vegetative monitoring timeframe is reset to year one. [15A NCAC 02H .0507(c)]
10. At the end of the 5th year of monitoring, the permittee shall notify the DWR in writing. If it is determined that the project is failing, the permittee shall be given the opportunity to express their intentions in writing regarding the future of the project. Should the permittee no longer wish to maintain the project pursuant to

the marsh restoration/creation plan, at the permittee's expense, all construction materials and backfill shall be removed for placement on approved upland disposal site. Pre-project elevations and contours shall be restored to the affected area(s). [15A NCAC 02H .0507(c)]

11. SAVs have been determined to be present within the project area. The applicant shall avoid impacts to SAVs wherever possible. [15A NCAC 07H .0208(b)-(a)(6)]
12. If activities must occur during periods of high biological activity (e.g. sea turtle nesting, fish spawning, or bird nesting), then biological monitoring may be required at the request of other state or federal agencies and coordinated with these activities. [15A NCAC 02H .0506(b)(2) and 15A NCAC 04B .0125]
13. For projects impacting waters classified by the NC Environmental Management Commission as Trout (Tr), High Quality Waters (HQW), or Water Supply I or II (WSI, WSII) stormwater shall be directed to vegetated buffer areas, grass-lined ditches or other means appropriate to the site for the purpose of pre-treating storm water runoff prior to discharging directly into streams. Mowing of existing vegetated buffers is strongly discouraged. [15A NCAC 02B.0224 and 0225]
14. NCDOT shall be in compliance with the NCS000250 issued to the NCDOT, including the applicable requirements of the NCG010000. Please note the extra protections for the sensitive watersheds.

#### **General Conditions**

15. A copy of this Water Quality Certification shall be maintained on the construction site at all times. In addition, the Water Quality Certification and all subsequent modifications, if any, shall be maintained with the Division Engineer and the on-site project manager. [15A NCAC 02H .0507(c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]
16. The issuance of this certification does not exempt the Permittee from complying with any and all statutes, rules, regulations, or ordinances that may be imposed by other government agencies (i.e. local, state, and federal) having jurisdiction, including but not limited to applicable buffer rules, stormwater management rules, soil erosion and sedimentation control requirements, etc.
17. The Permittee shall report any violations of this certification to the Division of Water Resources within 24 hours of discovery. [15A NCAC 02B.0506(b)(2)]
18. During the construction of the project, no staging of equipment of any kind is permitted in waters of the U.S., or protected riparian buffers. [15A NCAC 02H.0506(b)(2)]
19. No waste, spoil, solids, or fill of any kind shall occur in wetlands or waters beyond the footprint of the impacts (including temporary impacts) as authorized in the written approval from DWR; or beyond the thresholds established for use of this Certification without written authorization. [15A NCAC 02H .0501 and .0502]
20. Fueling, lubrication and general equipment maintenance should not take place within 50 feet of a waterbody or wetlands to prevent contamination by fuel and oils. [15A NCAC 02H .0506 (b)(3) and (c)(3) and 15A NCAC 02B .0200 (3)(f)].
21. Sediment and erosion control measures shall not be placed in wetlands or waters except within the footprint of temporary or permanent impacts authorized under this Certification. Exceptions to this condition require application to and written approval from DWR. [15A NCAC 02H .0501 and .0502]

22. Heavy equipment working in wetlands shall be placed on mats or other measures shall be taken to minimize soil disturbance and compaction. *[15A NCAC 02H .0506(b); 15A NCAC 02H .0507(c); 15A NCAC 02B .023]*
23. There shall be no excavation from, or waste disposal into, jurisdictional wetlands or waters associated with this permit without appropriate modification. Should waste or borrow sites, or access roads to waste or borrow sites, be located in wetlands or streams, compensatory mitigation will be required since that is a direct impact from road construction activities. *[15A NCAC 02H.0506(b)(3) and (c)(3)]*
24. Erosion and sediment control practices must be in full compliance with all specifications governing the proper design, installation and operation and maintenance of such Best Management Practices in order to protect surface waters standards *[15A NCAC 02H.0506(b)(3) and (c)(3)]*:
  - a. The erosion and sediment control measures for the project must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Sediment and Erosion Control Planning and Design Manual*.
  - b. The design, installation, operation, and maintenance of the sediment and erosion control measures must be such that they equal, or exceed, the requirements specified in the most recent version of the *North Carolina Sediment and Erosion Control Manual*. The devices shall be maintained on all construction sites, borrow sites, and waste pile (spoil) projects, including contractor-owned or leased borrow pits associated with the project.
  - c. For borrow pit sites, the erosion and sediment control measures must be designed, installed, operated, and maintained in accordance with the most recent version of the *North Carolina Surface Mining Manual*.
  - d. The reclamation measures and implementation must comply with the reclamation in accordance with the requirements of the Sedimentation Pollution Control Act.
25. If the project occurs in waters or watersheds classified as Primary Nursery Areas (PNAs), SA, WS-I, WS-II, High Quality Waters (HQW), or Outstanding Resource Waters (ORW), then the sedimentation and erosion control designs shall comply with the requirements set forth in 15A NCAC 04B .0124, *Design Standards in Sensitive Watershed*. *[15A NCAC 02H.0506(b)(3) and (c)(3); GC 4135]*
26. The permittee and its authorized agents shall conduct its activities in a manner consistent with State water quality standards (including any requirements resulting from compliance with §303(d) of the Clean Water Act) and any other appropriate requirements of State and Federal law. If the NCDWR determines that such standards or laws are not being met (including the failure to sustain a designated or achieved use) or that State or federal law is being violated, or that further conditions are necessary to assure compliance, the NCDWR may reevaluate and modify this certification. *[15A NCAC 02B.0200]*
27. The Permittee shall ensure that the final design drawings adhere to the permit and to the permit drawings submitted for approval. *[15A NCAC 02H .0507 (c) and 15A NCAC 02H .0506 (b)(2) and (c)(2)]*
28. The NCDOT will conduct a pre-construction meeting with all appropriate staff to ensure that the project supervisor and essential staff understand the permit conditions and any potential issues at the permitted site. NCDWR staff shall be invited to the pre-construction meeting. *[15A NCAC 02H.0506(b)(2) and (b)(3)]*
29. Upon completion of the project (including any impacts at associated borrow or waste sites), the NCDOT Division Engineer shall complete and return the enclosed "Certification of Completion Form" to notify the NCDWR when all work included in the 401 Certification has been completed. *[15A NCAC 02H.0502(f)]*

Violations of any condition herein set forth may result in revocation of this Certification and may result in criminal and/or civil penalties. This Certification shall become null and void unless the above conditions are made



conditions of the Federal 404 and/or Coastal Area Management Act Permit. This Certification shall expire upon the expiration of the 404 or CAMA permit.

If you wish to contest any statement in the attached Certification you must file a petition for an administrative hearing. You may obtain the petition form from the office of Administrative hearings. You must file the petition with the office of Administrative Hearings within sixty (60) days of receipt of this notice. A petition is considered filed when it is received in the office of Administrative Hearings during normal office hours. The Office of Administrative Hearings accepts filings Monday through Friday between the hours of 8:00am and 5:00pm, except for official state holidays. The original and one (1) copy of the petition must be filed with the Office of Administrative Hearings.

The petition may be faxed-provided the original and one copy of the document is received by the Office of Administrative Hearings within five (5) business days following the faxed transmission. The mailing address for the Office of Administrative Hearings is:

Office of Administrative Hearings  
6714 Mail Service Center  
Raleigh, NC 27699-6714  
Telephone: (919) 431-3000, Facsimile: (919) 431-3100

A copy of the petition must also be served on DEQ as follows:

Mr. Bill F. Lane, General Counsel  
Department of Environmental Quality  
1601 Mail Service Center

This the 22nd day of June 2022

DIVISION OF WATER RESOURCES

DocuSigned by:  
*Amy Chapman*  
9C9886312DCC474...

Richard E. Rogers, Jr., Director

WQC No. 004907



STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**PLANS FOR NC-24 RESILIENCY AND LIVING SHORELINES  
ONSLOW COUNTY**

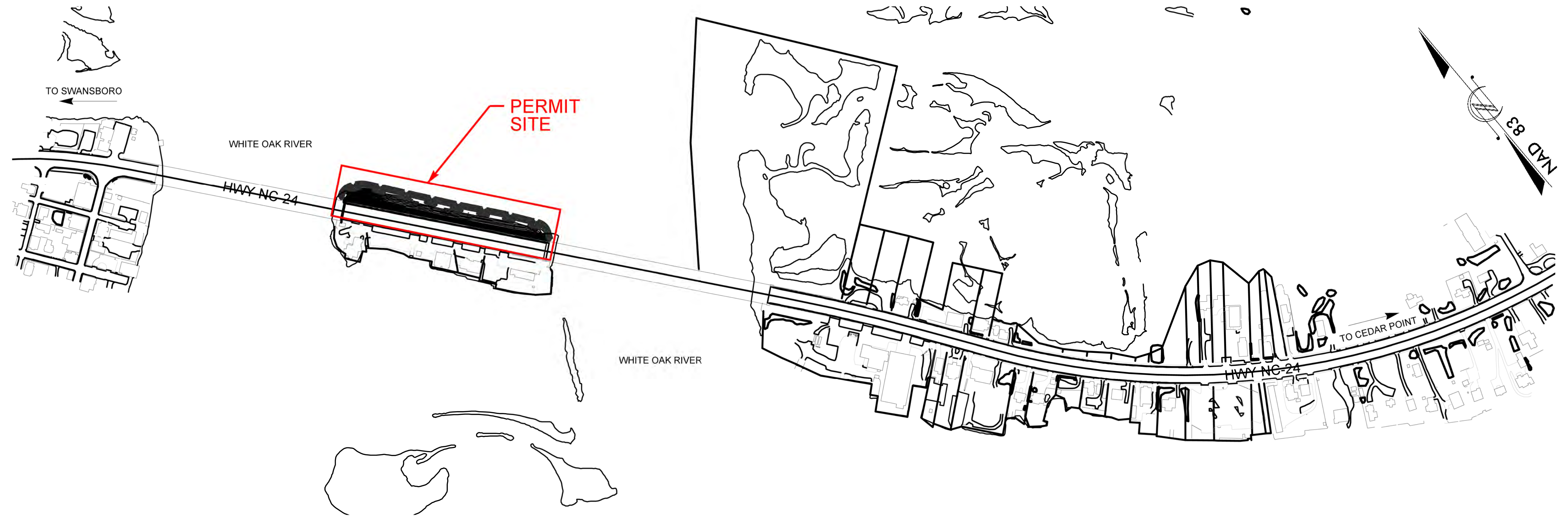
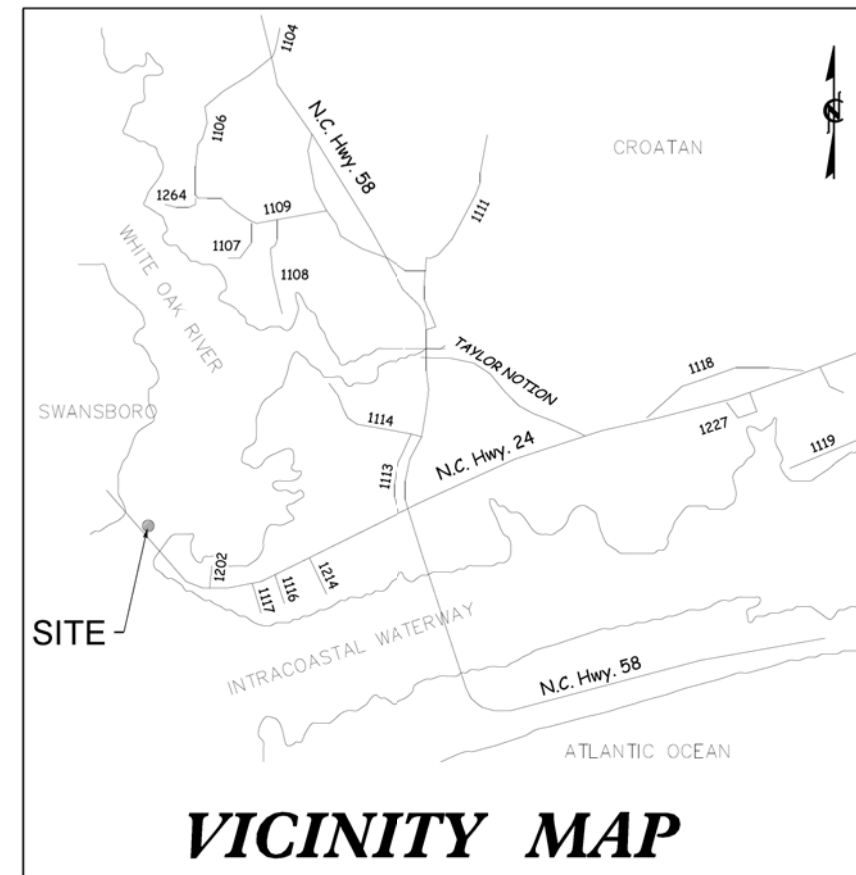
LOCATION: NC-24 CAUSEWAY BETWEEN THE SWANSBORO BRIDGES  
AND CEDAR POINT

TYPE OF WORK: SHORELINE STABILIZATION, ENVIRONMENTAL RESILIENCY

**WETLAND AND SURFACE WATER IMPACTS PERMIT**

| STATE           | STATE PROJECT REFERENCE NO. | SHEET NO.   | TOTAL SHEETS |
|-----------------|-----------------------------|-------------|--------------|
| N.C.            | M-0540A                     | 1           |              |
| STATE PROJ. NO. | F.A. PROJ. NO.              | DESCRIPTION |              |
|                 |                             |             |              |
|                 |                             |             |              |
|                 |                             |             |              |
|                 |                             |             |              |
|                 |                             |             |              |

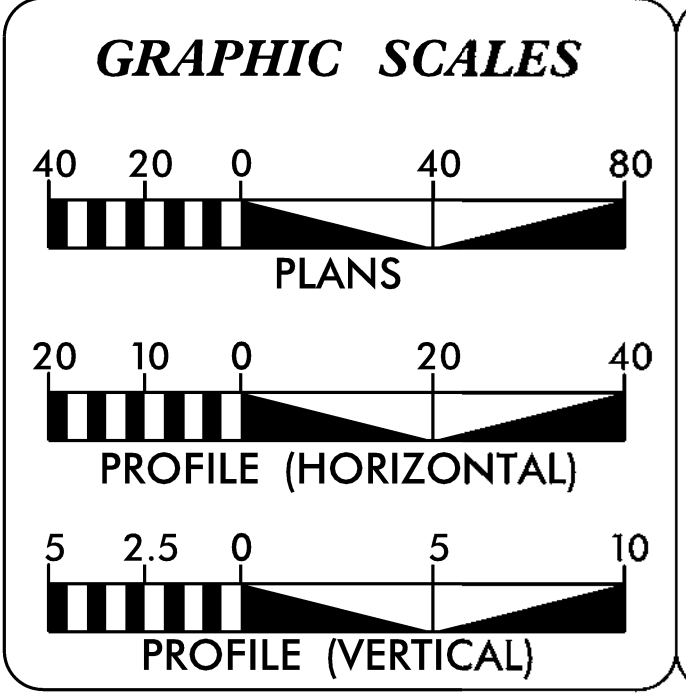
**PERMIT DRAWING  
SHEET 1 OF 18**



**INCOMPLETE PLANS**  
DO NOT USE FOR R/W ACQUISITION  
DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

TIP PROJECT: M-0540A

CONTRACT: DC00339



**DESIGN DATA**

**PROJECT LENGTH**  
CAUSEWAY SITE ± 830 LF

Prepared in the Office of:  
**SWCA** Environmental Consultants  
201 Chatham Street, Suite 3  
Sanford, NC 27330  
(p) 919.292.2200  
www.swca.com

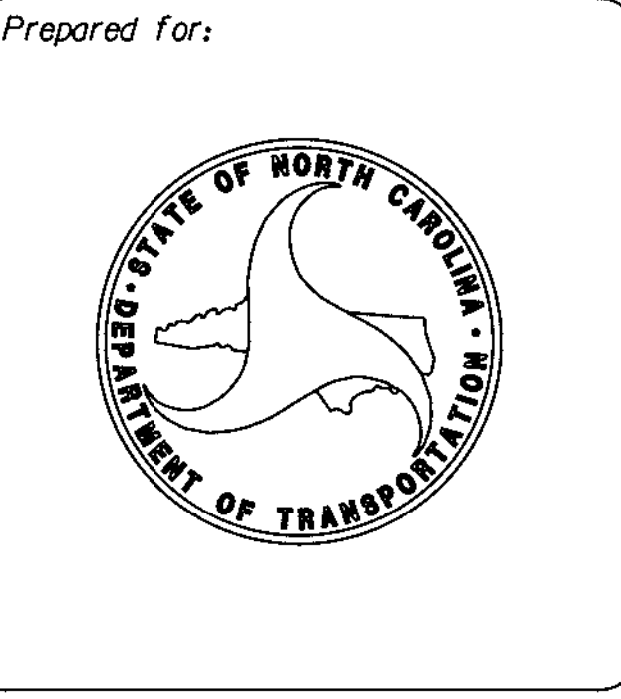
2018 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:  
N/A

LETTING DATE:  
XXXX/XXX

**PROJECT ENGINEER**

SIGNATURE: \_\_\_\_\_ P.E.




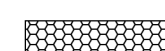


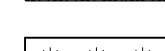


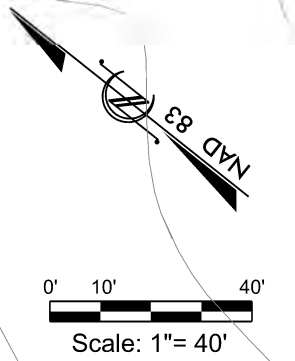
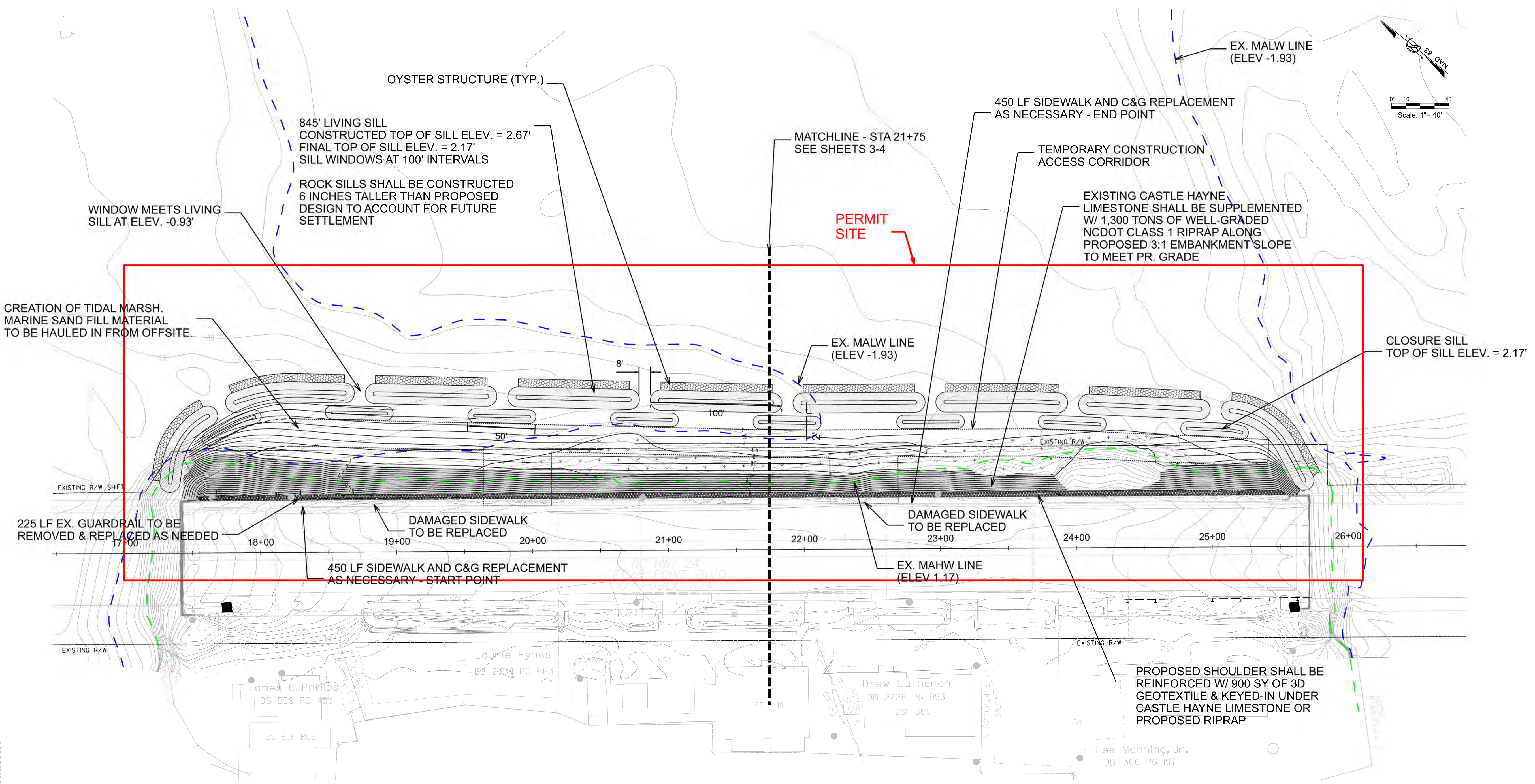
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| M-0540A               | 4         |
| PROJECT ENGINEER      | APPROVED  |
|                       | DATE      |

OVERALL SITE PLAN

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING  
SHEET 2 OF 18

- LEGEND**
-  PROPOSED SILL
  -  PROPOSED OYSTER STRUCTURE
  -  PROPOSED RIPRAP
  -  PROPOSED GEOTEXTILE
  -  EXISTING MARSH



4/7/2022 - Document: NC0001\_NC24\_Current Drawings\vdgn\Permit\Site 3\MS40A\_HYD\_PSH.dgn  
 User: kshirah



5/14/99

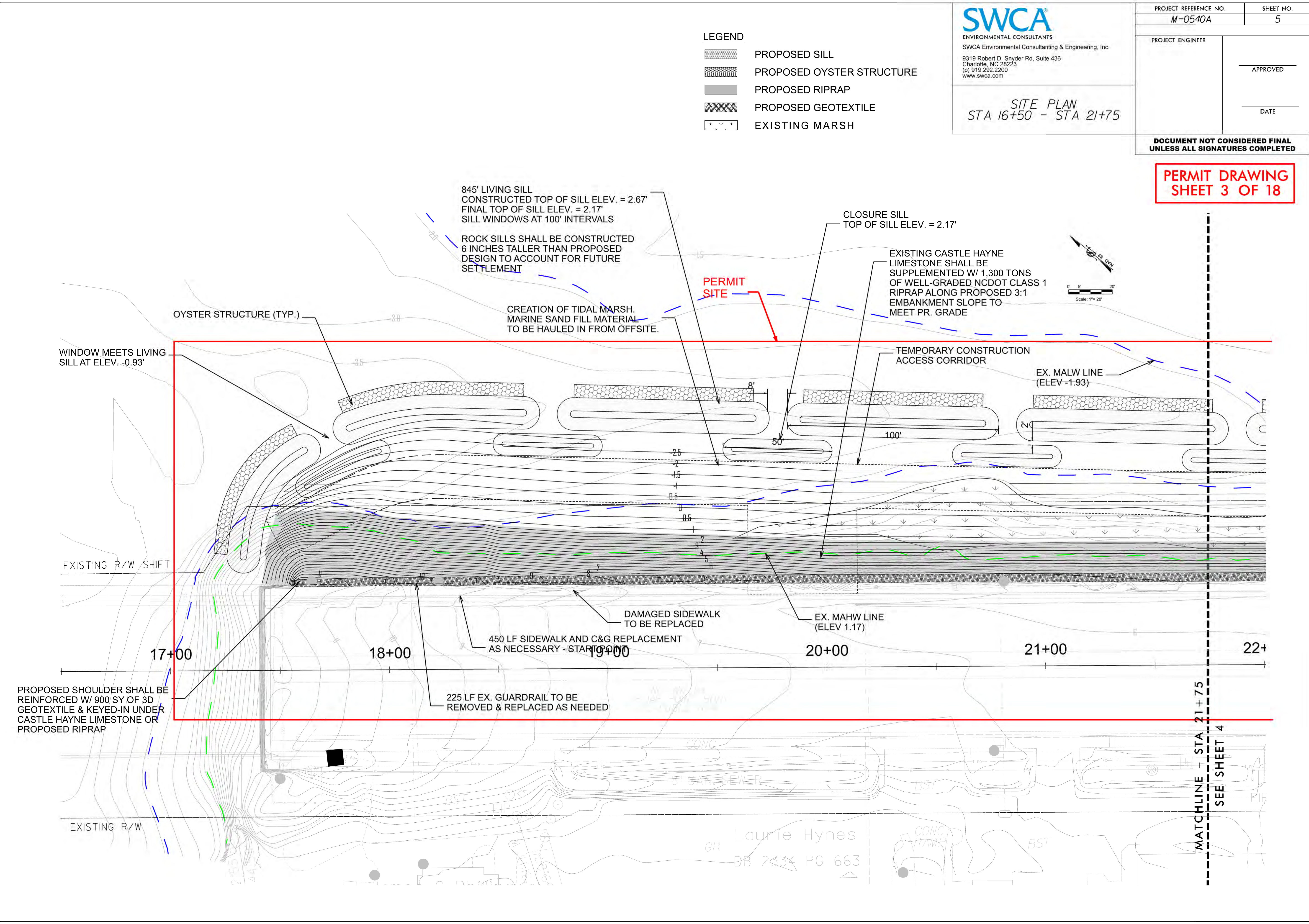
**SWCA**  
 ENVIRONMENTAL CONSULTANTS  
 SWCA Environmental Consulting & Engineering, Inc.  
 9319 Robert D. Snyder Rd, Suite 436  
 Charlotte, NC 28223  
 (p) 919.292.2200  
 www.swca.com

|   |                       |
|---|-----------------------|
| PROJECT REFERENCE NO.<br><b>M-0540A</b> | SHEET NO.<br><b>5</b> |
| PROJECT ENGINEER                        | APPROVED              |
|   | DATE                  |

**SITE PLAN**  
STA 16+50 - STA 21+75

- LEGEND**
- PROPOSED SILL
  - PROPOSED OYSTER STRUCTURE
  - PROPOSED RIPRAP
  - PROPOSED GEOTEXTILE
  - EXISTING MARSH

**PERMIT DRAWING**  
**SHEET 3 OF 18**



4/7/2022 10:00:00 AM C:\Users\kshelton\Documents\Projects\2022\04\01\NC24\Current Drawings\dgn\Permit\Site 3\M540A\_HYD\_PSH.dgn



5/14/99

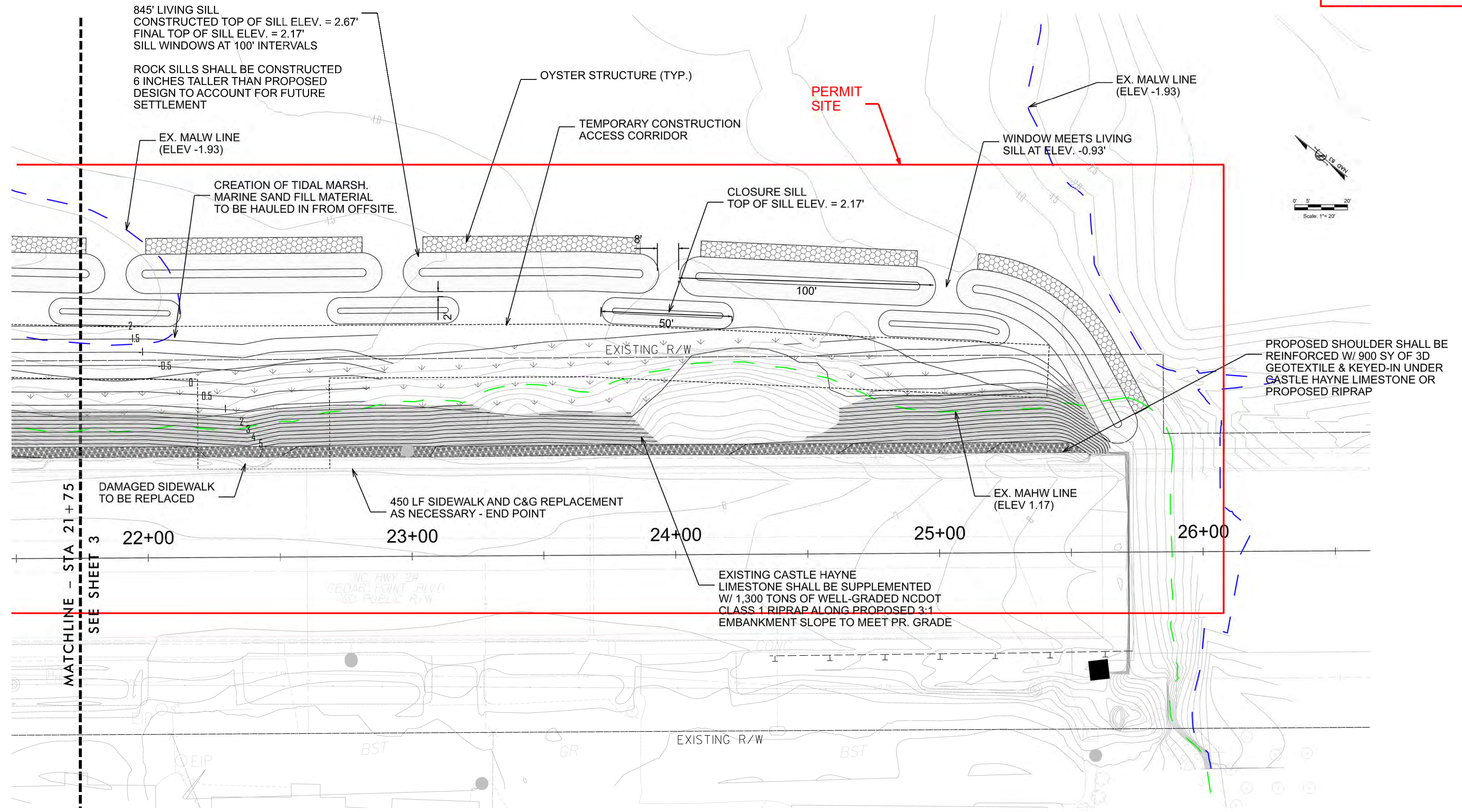
**SWCA**  
 ENVIRONMENTAL CONSULTANTS  
 SWCA Environmental Consulting & Engineering, Inc.  
 9319 Robert D. Snyder Rd, Suite 436  
 Charlotte, NC 28223  
 (p) 919.292.2200  
 www.swca.com

|                       |           |
|-----------------------|-----------|
| PROJECT REFERENCE NO. | SHEET NO. |
| M-0540A               | 6         |
| PROJECT ENGINEER      | APPROVED  |
|                       | DATE      |

SITE PLAN  
STA 21+75 - 26+50

- LEGEND**
- PROPOSED SILL
  - PROPOSED OYSTER STRUCTURE
  - PROPOSED RIPRAP
  - PROPOSED GEOTEXTILE
  - EXISTING MARSH

**PERMIT DRAWING  
SHEET 4 OF 18**



4/7/2022  
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User:ksullivan



5/14/99

**SWCA**  
 ENVIRONMENTAL CONSULTANTS  
 SWCA Environmental Consulting & Engineering, Inc.  
 9319 Robert D. Snyder Rd, Suite 436  
 Charlotte, NC 28223  
 (p) 919.292.2200  
 www.swca.com

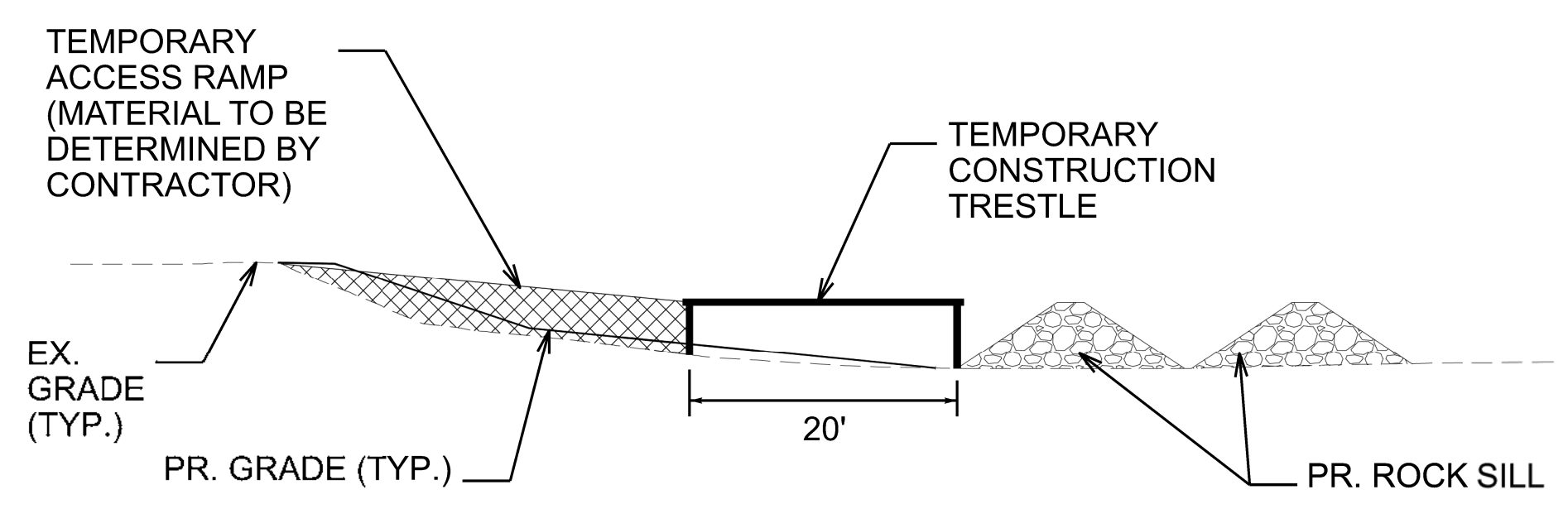
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|-----------------------|-----------|
| PROJECT REFERENCE NO. | SHEET NO. |
| M-0540A               | 7         |
| PROJECT ENGINEER      | APPROVED  |
|                       | DATE      |

CONSTRUCTION ACCESS PLAN

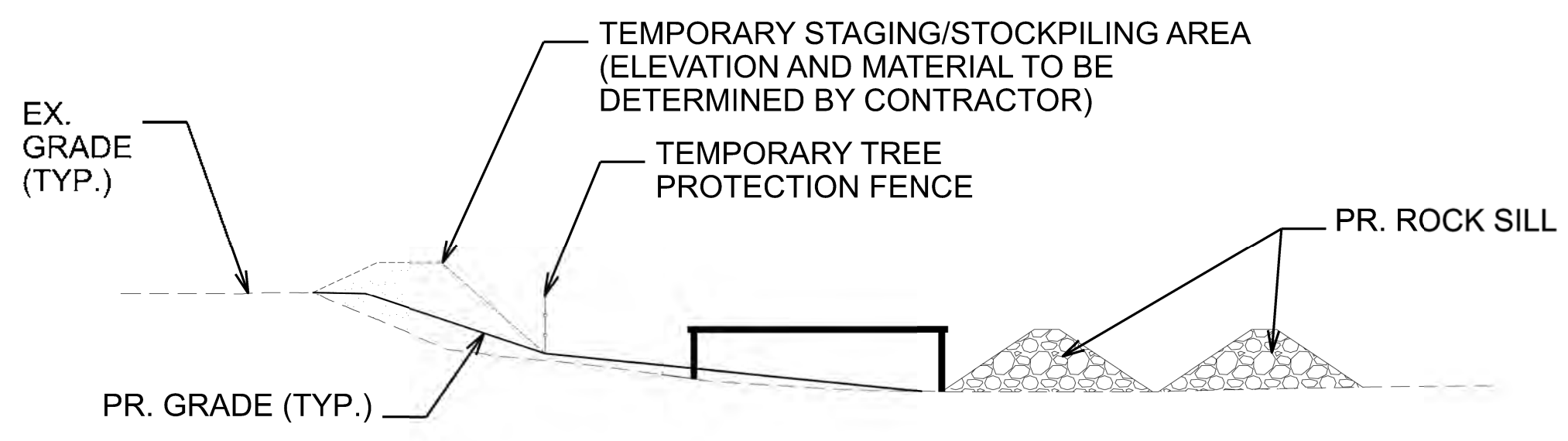
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PERMIT DRAWING SHEET 5 OF 18

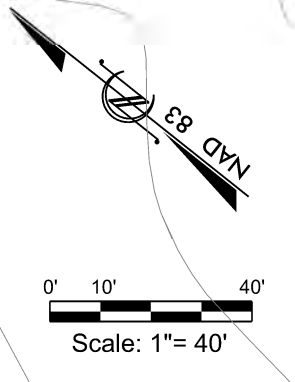
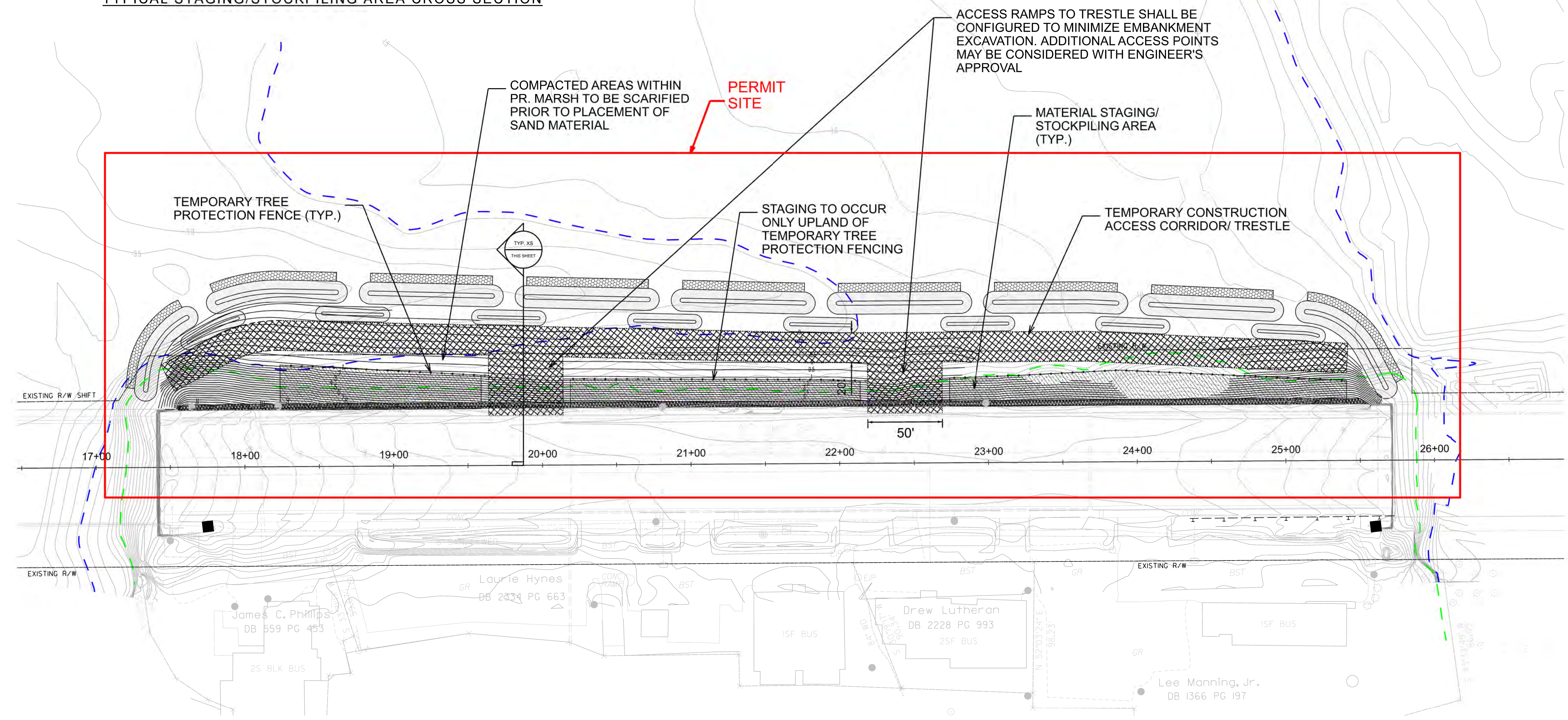
- LEGEND**
- PROPOSED SILL
  - PROPOSED OYSTER STRUCTURE
  - TEMPORARY CONSTRUCTION ACCESS CORRIDOR
  - EXISTING MARSH



TYPICAL CONSTRUCTION ACCESS CROSS SECTION



TYPICAL STAGING/STOCKPILING AREA CROSS SECTION



4/7/2022 - Document: NC0001\_NC24\_Current Drawings\ dgn\ Permit\ Site 3\ M540A\_HYD\_P5H.dgn User: kelli@swca.com







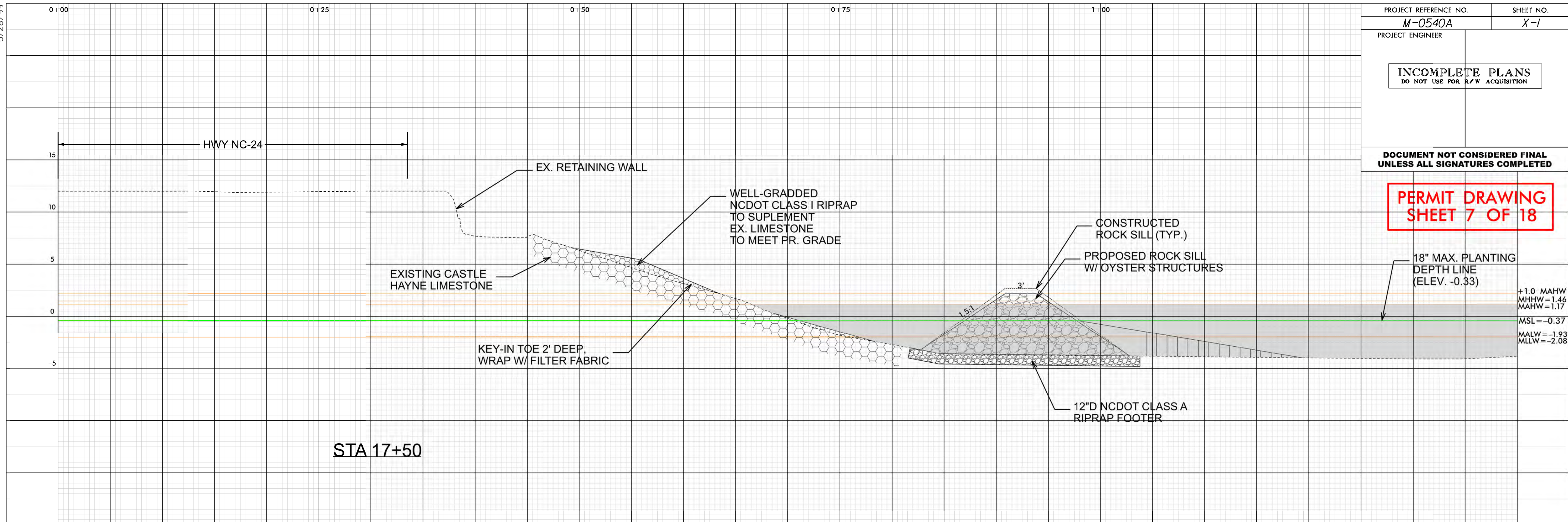
5/28/99

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| PROJECT ENGINEER                        |                         |

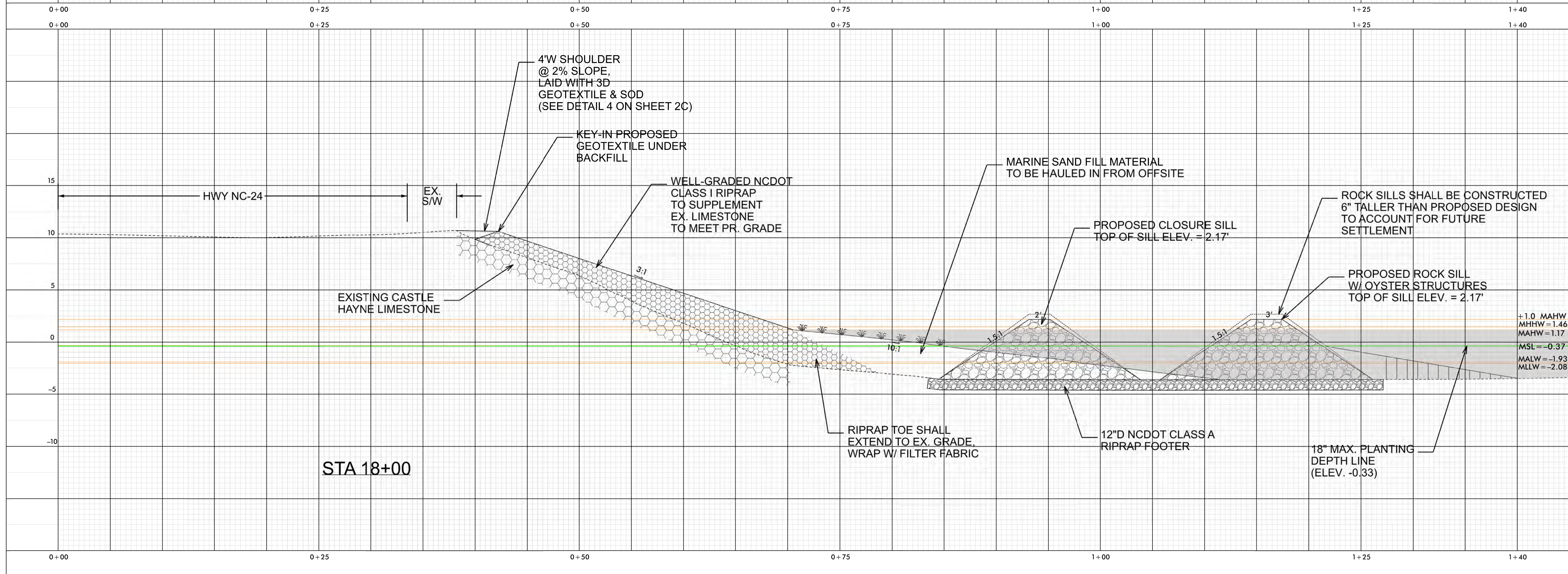
**INCOMPLETE PLANS**  
DO NOT USE FOR R/W ACQUISITION

**DOCUMENT NOT CONSIDERED FINAL**  
UNLESS ALL SIGNATURES COMPLETED

**PERMIT DRAWING**  
**SHEET 7 OF 18**

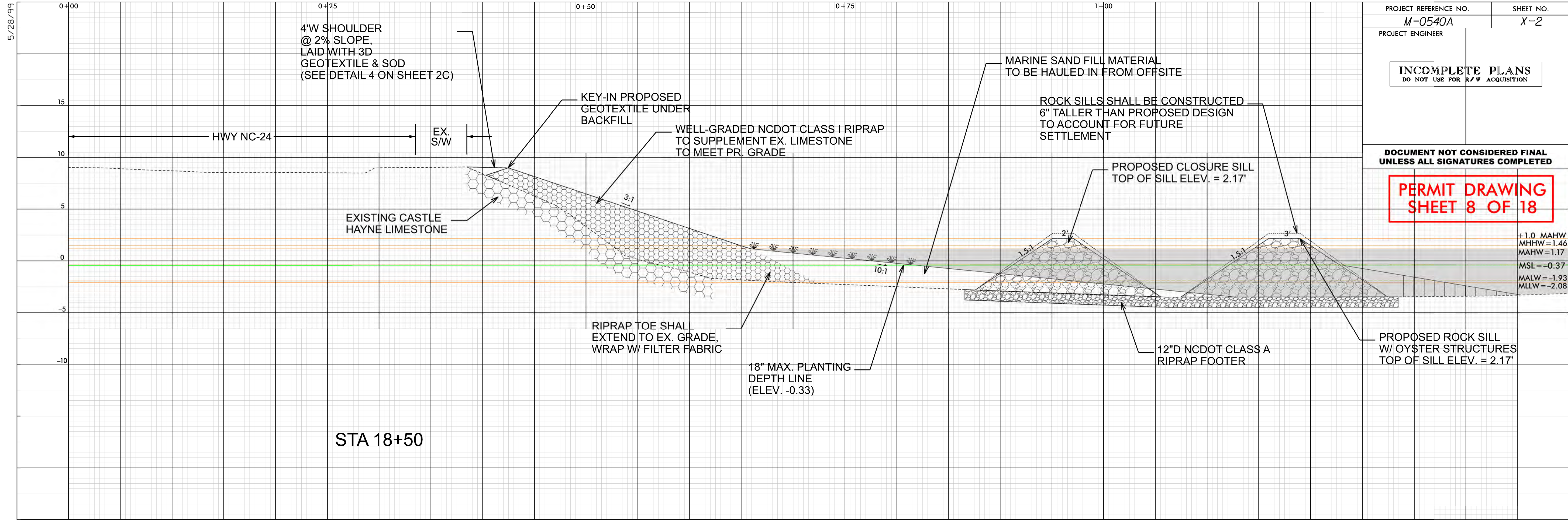


STA 17+50



STA 18+00



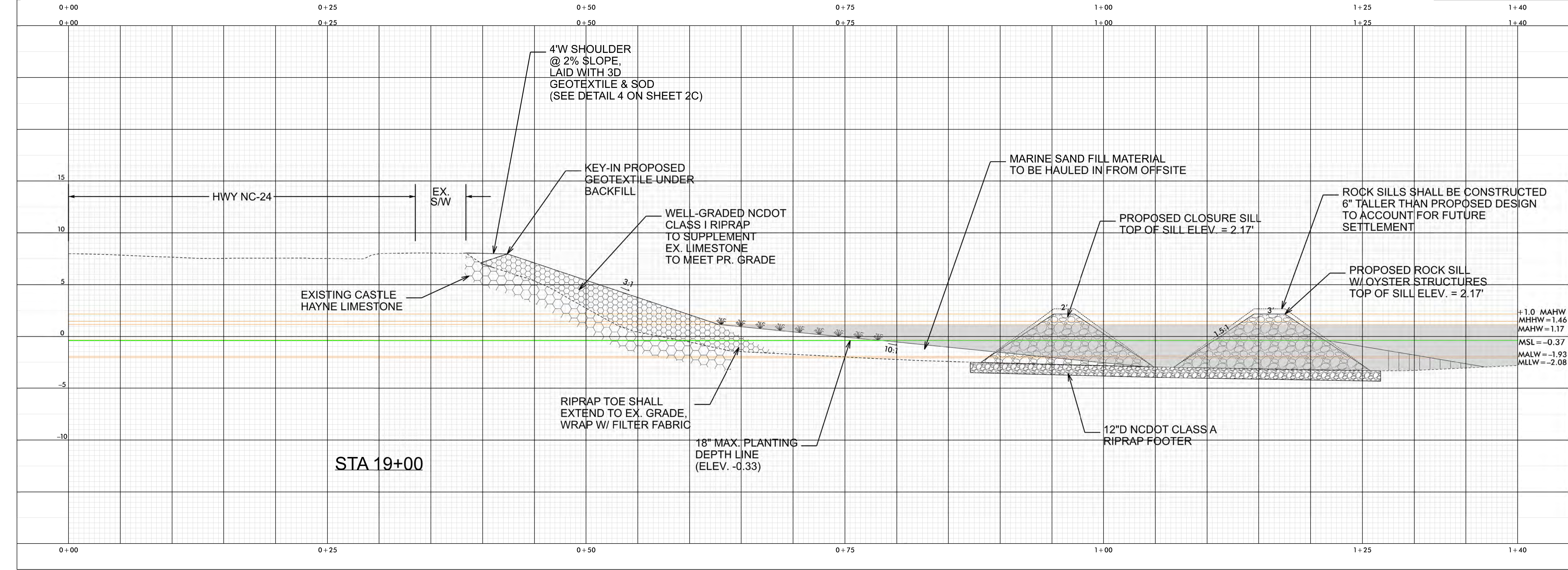


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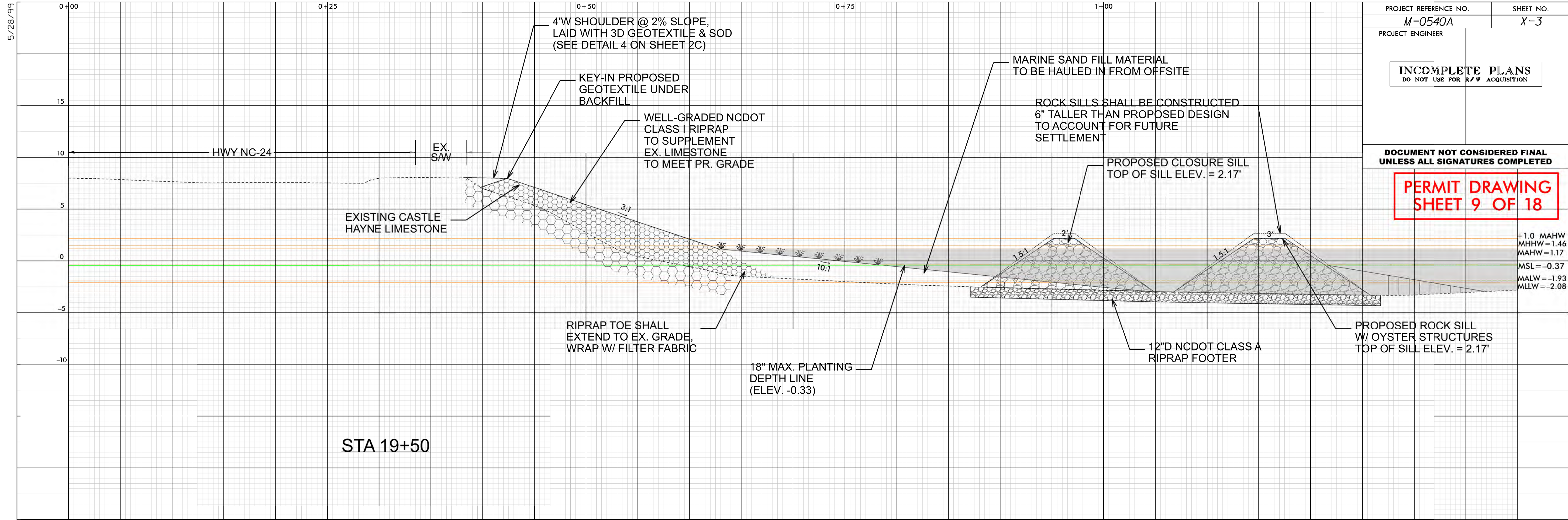
**INCOMPLETE PLANS**  
DO NOT USE FOR R/W ACQUISITION

**DOCUMENT NOT CONSIDERED FINAL**  
UNLESS ALL SIGNATURES COMPLETED

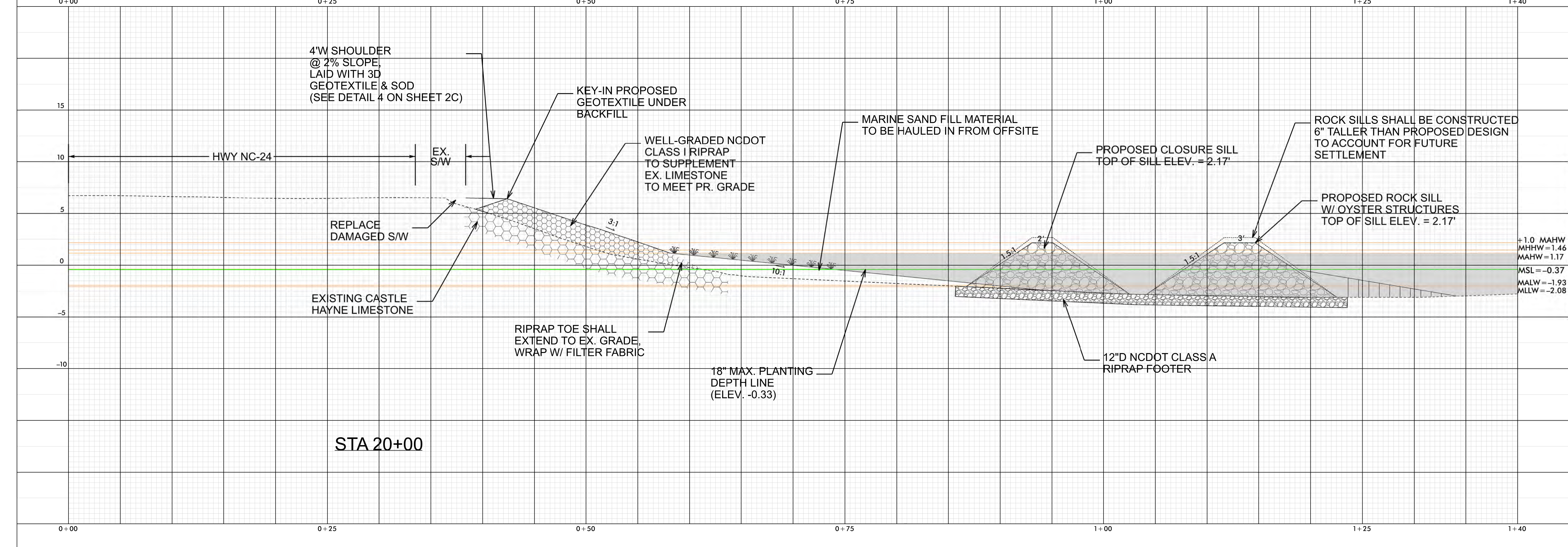
**PERMIT DRAWING**  
**SHEET 8 OF 18**



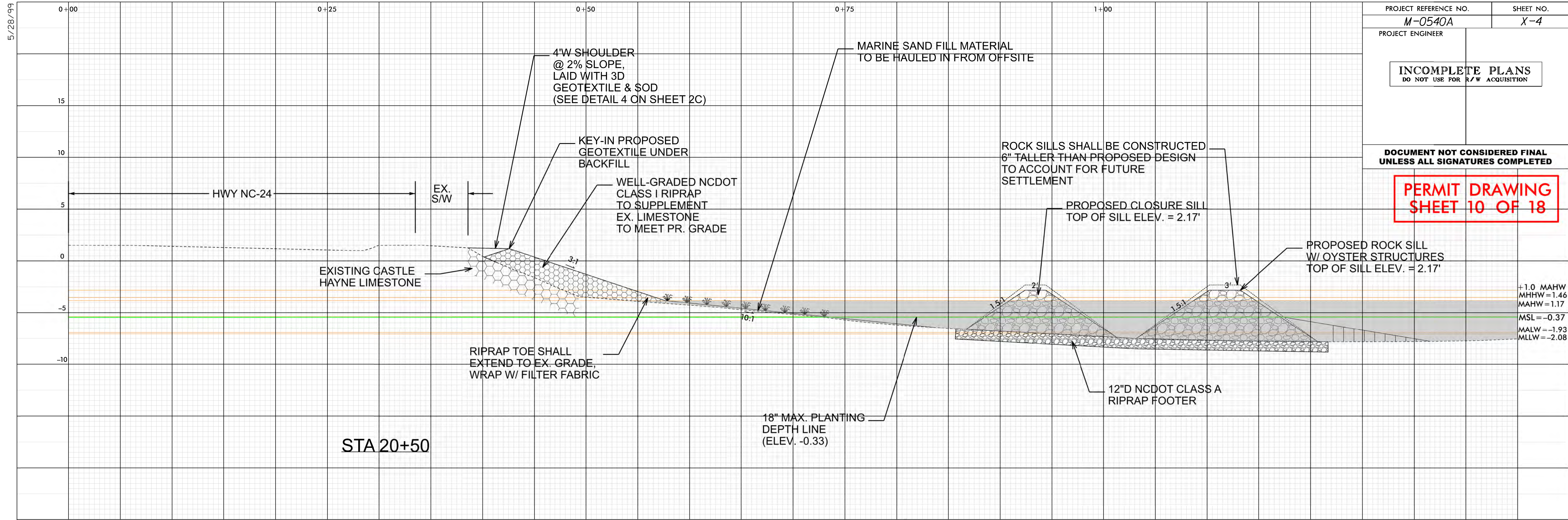




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| PROJECT REFERENCE NO.<br>M-0540A  | SHEET NO.<br>X-3 |
| PROJECT ENGINEER  |                  |
| <b>INCOMPLETE PLANS</b><br>DO NOT USE FOR R/W ACQUISITION               |                  |
| <b>DOCUMENT NOT CONSIDERED FINAL</b><br>UNLESS ALL SIGNATURES COMPLETED |                  |
| <b>PERMIT DRAWING</b><br><b>SHEET 9 OF 18</b>                           |                  |

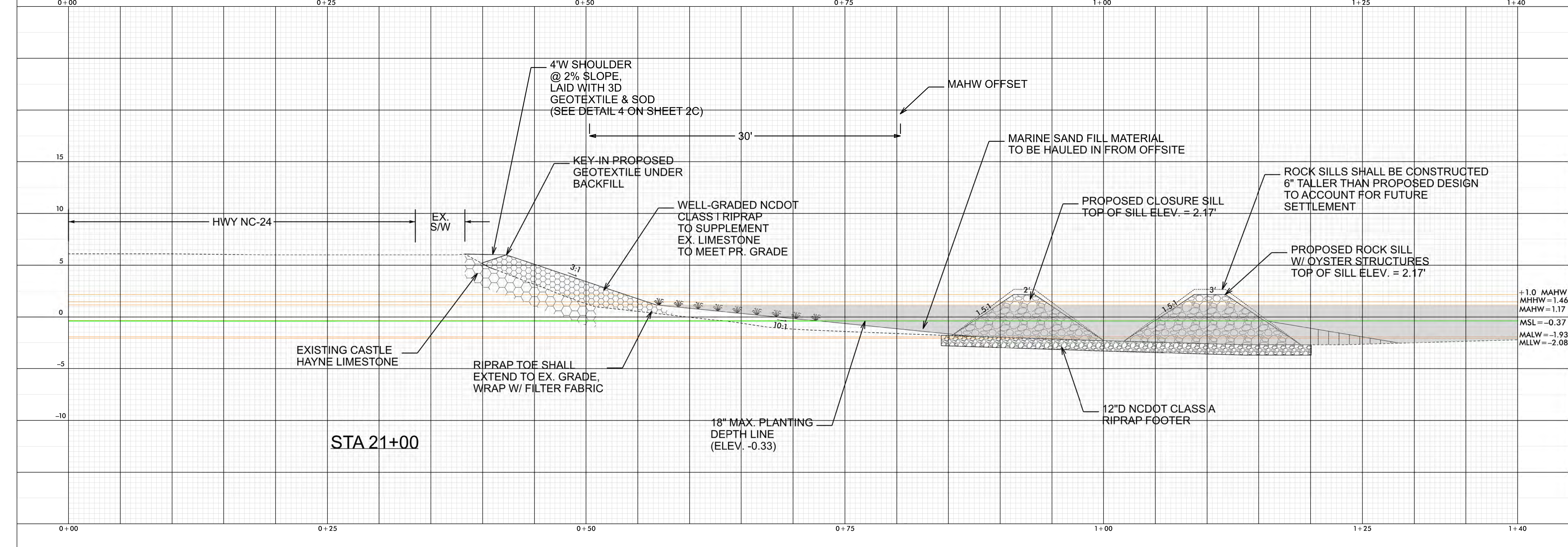




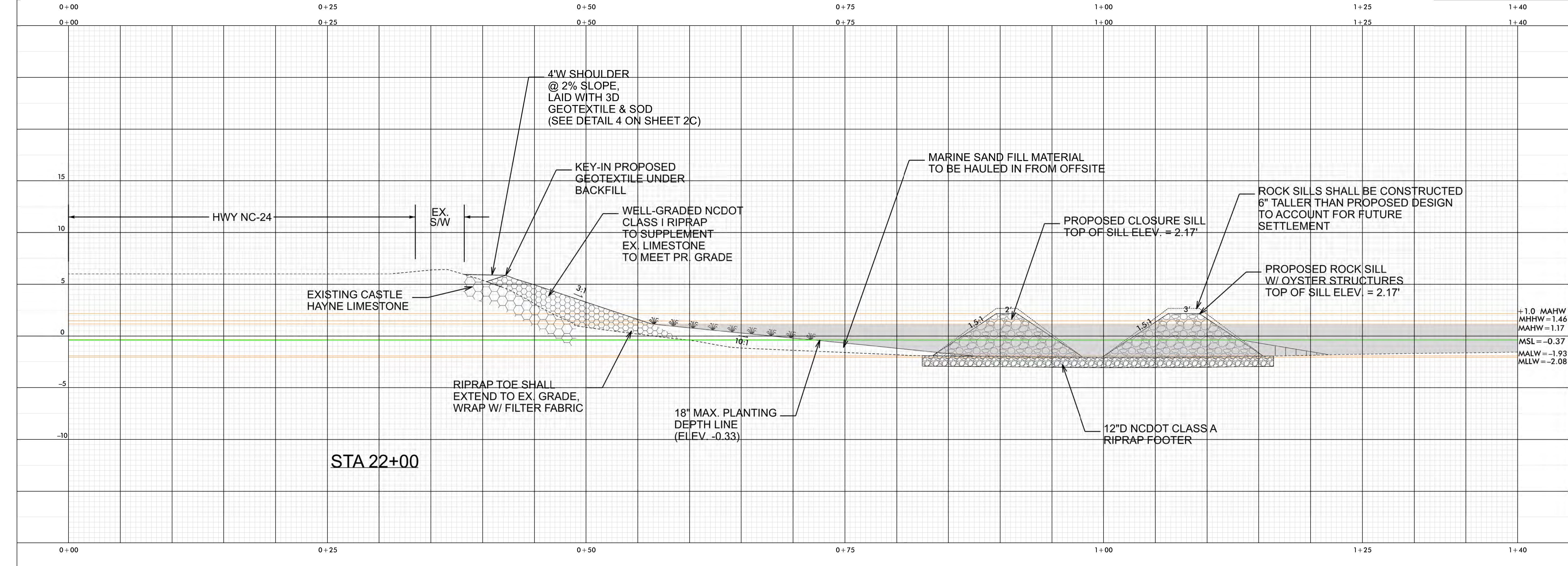
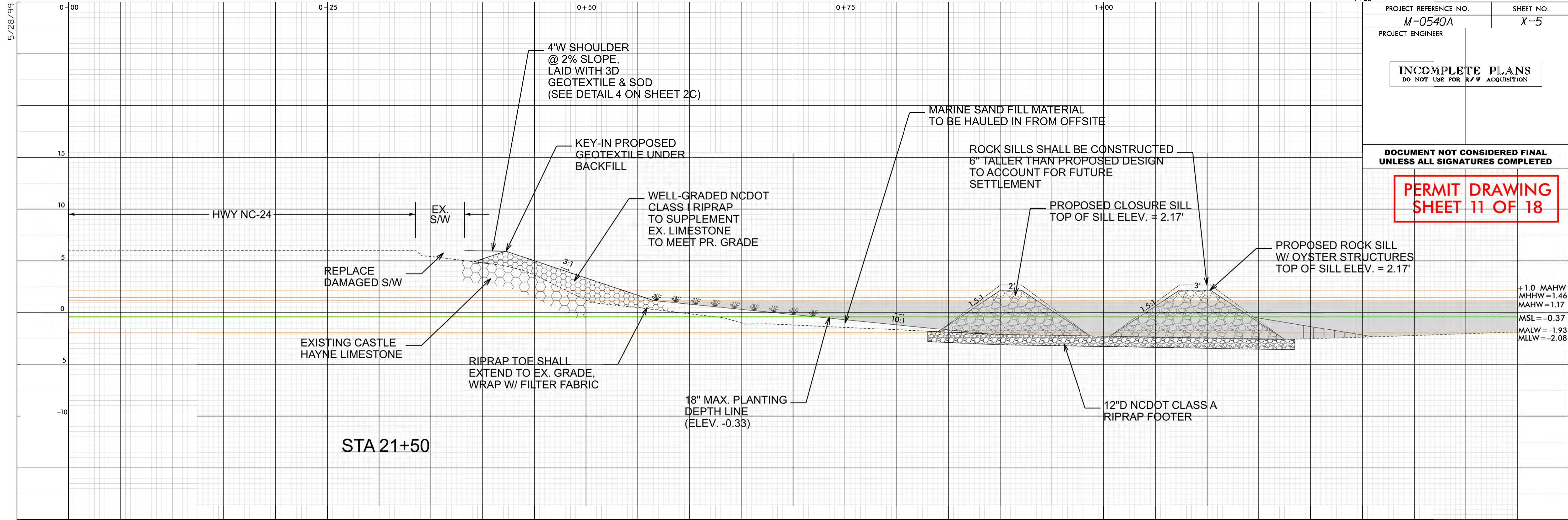


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| PROJECT ENGINEER  |                  |
| <b>INCOMPLETE PLANS</b><br>DO NOT USE FOR R/W ACQUISITION               |                  |
| <b>DOCUMENT NOT CONSIDERED FINAL</b><br>UNLESS ALL SIGNATURES COMPLETED |                  |

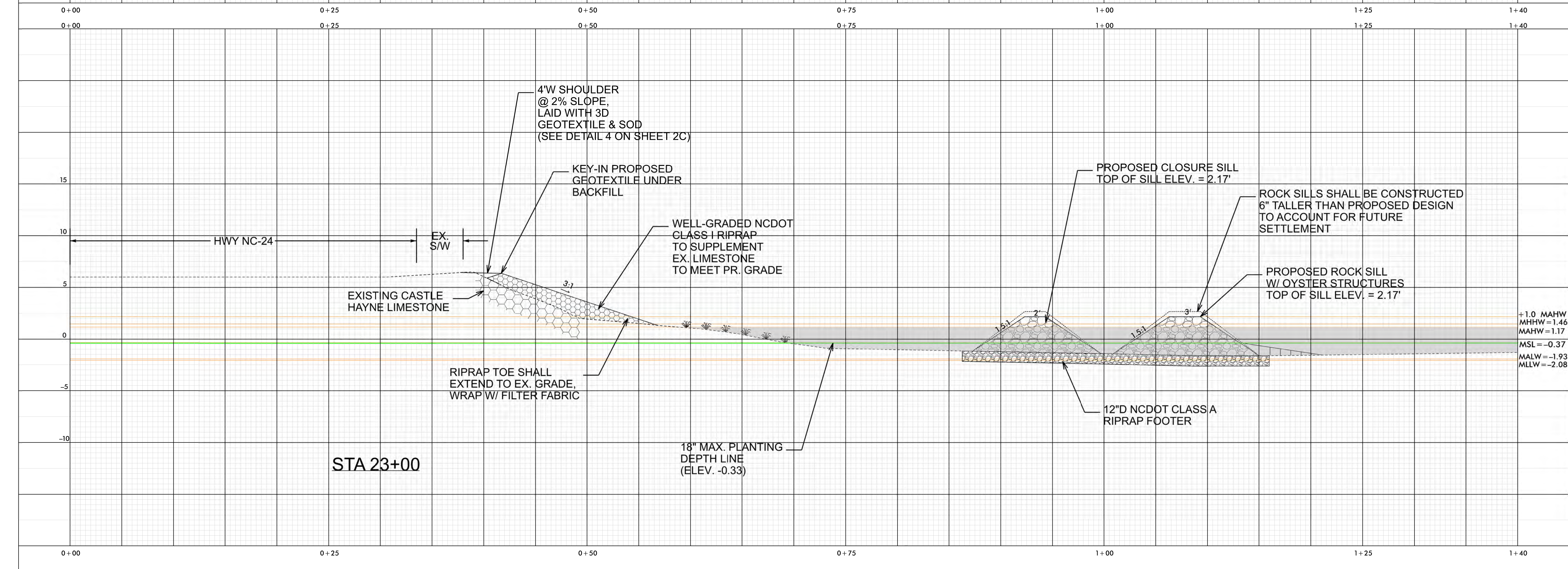
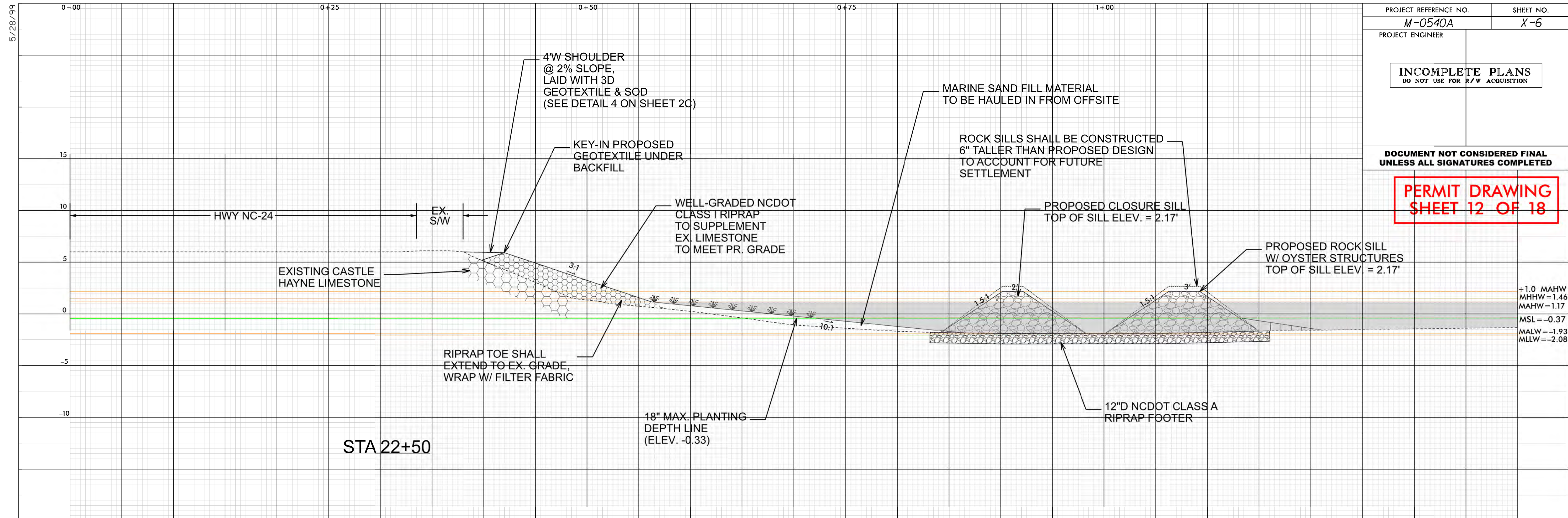
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**SHEET 10 OF 18**









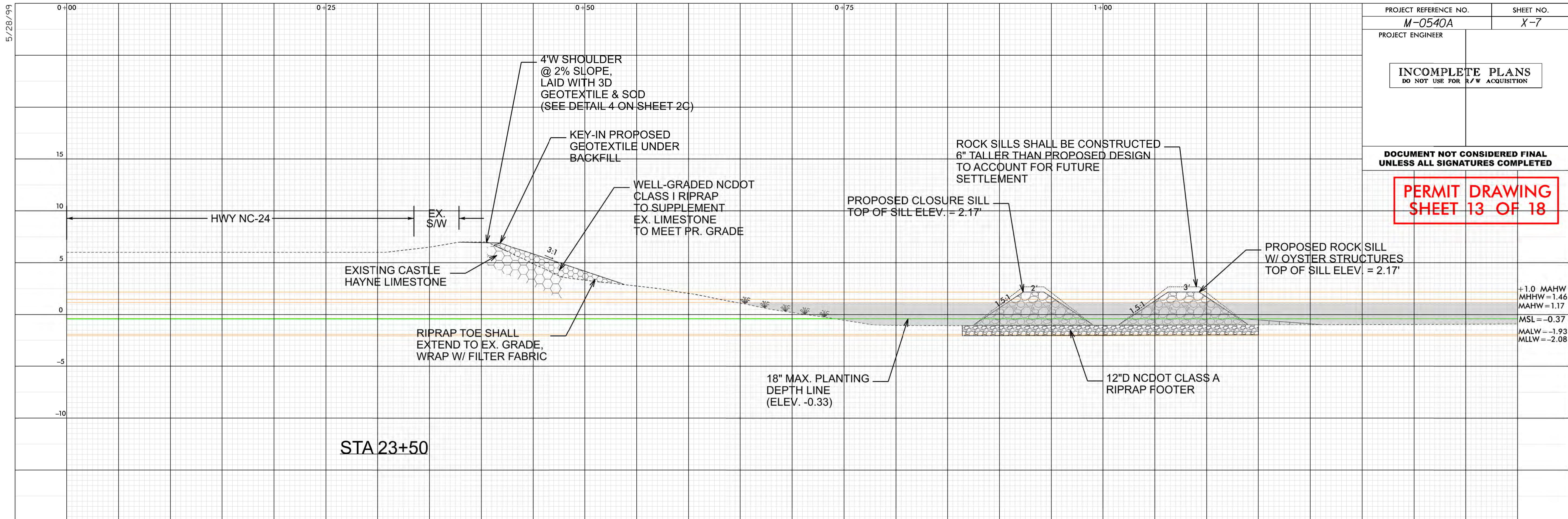




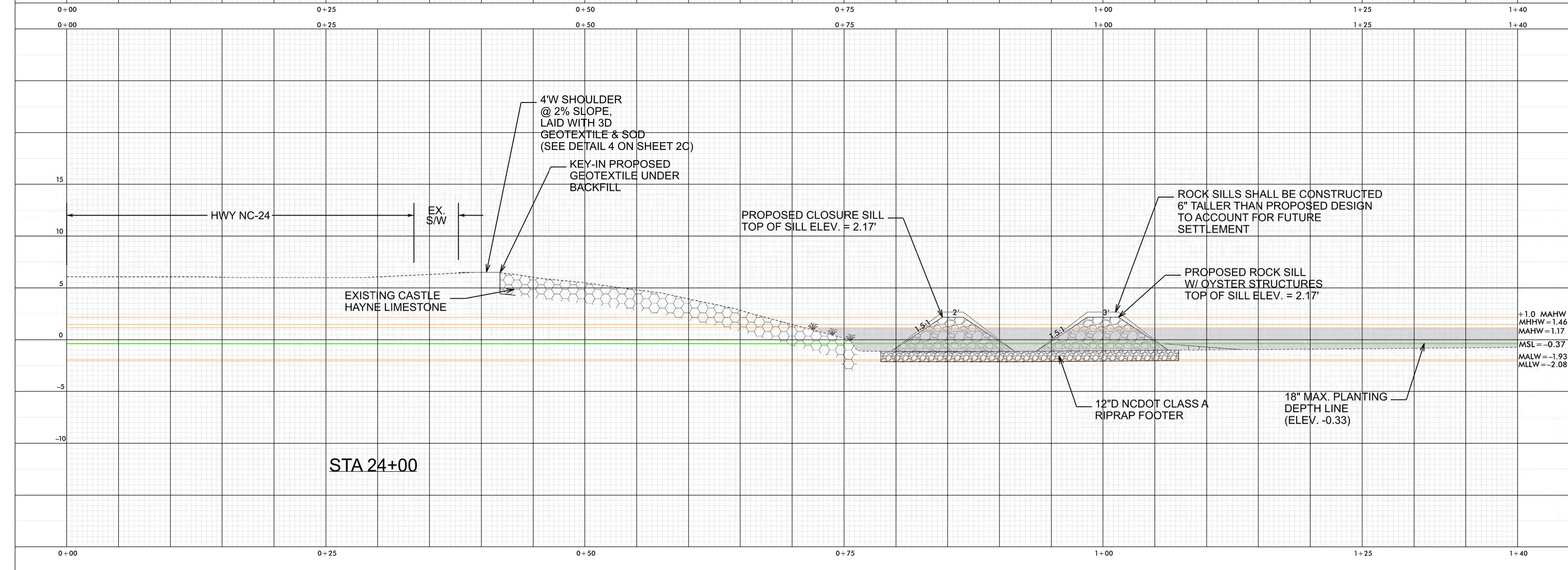
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| PROJECT ENGINEER  |                         |
| <b>INCOMPLETE PLANS</b><br>DO NOT USE FOR R/W ACQUISITION |                         |

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

PERMIT DRAWING  
SHEET 13 OF 18



**STA 23+50**



**STA 24+00**

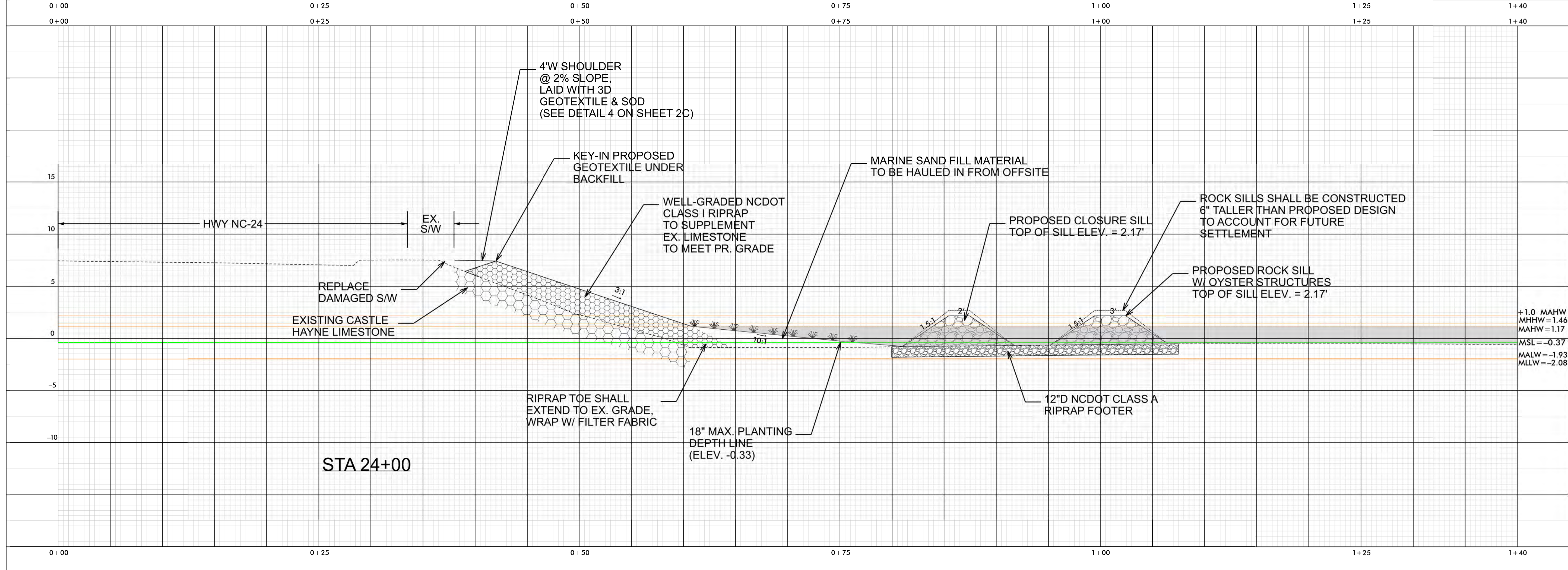
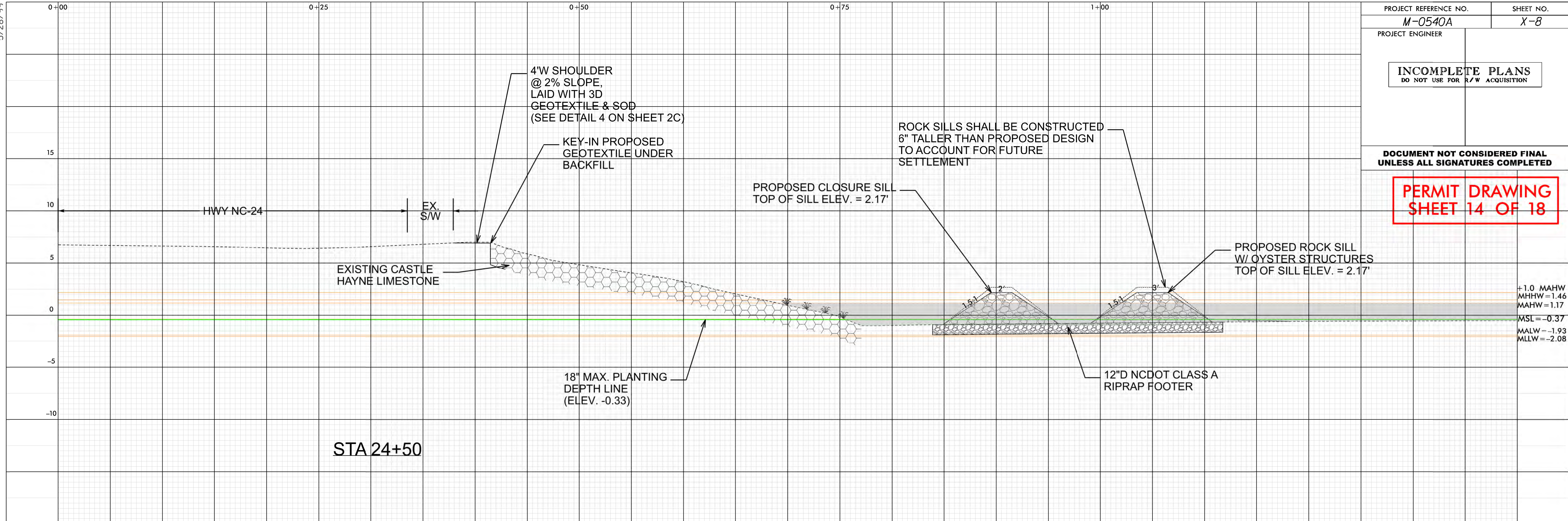


5/28/99

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| PROJECT REFERENCE NO.<br><b>M-0540A</b>                   | SHEET NO.<br><b>X-8</b> |
| PROJECT ENGINEER  |                         |
| <b>INCOMPLETE PLANS</b><br>DO NOT USE FOR R/W ACQUISITION |                         |

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**

**PERMIT DRAWING  
SHEET 14 OF 18**





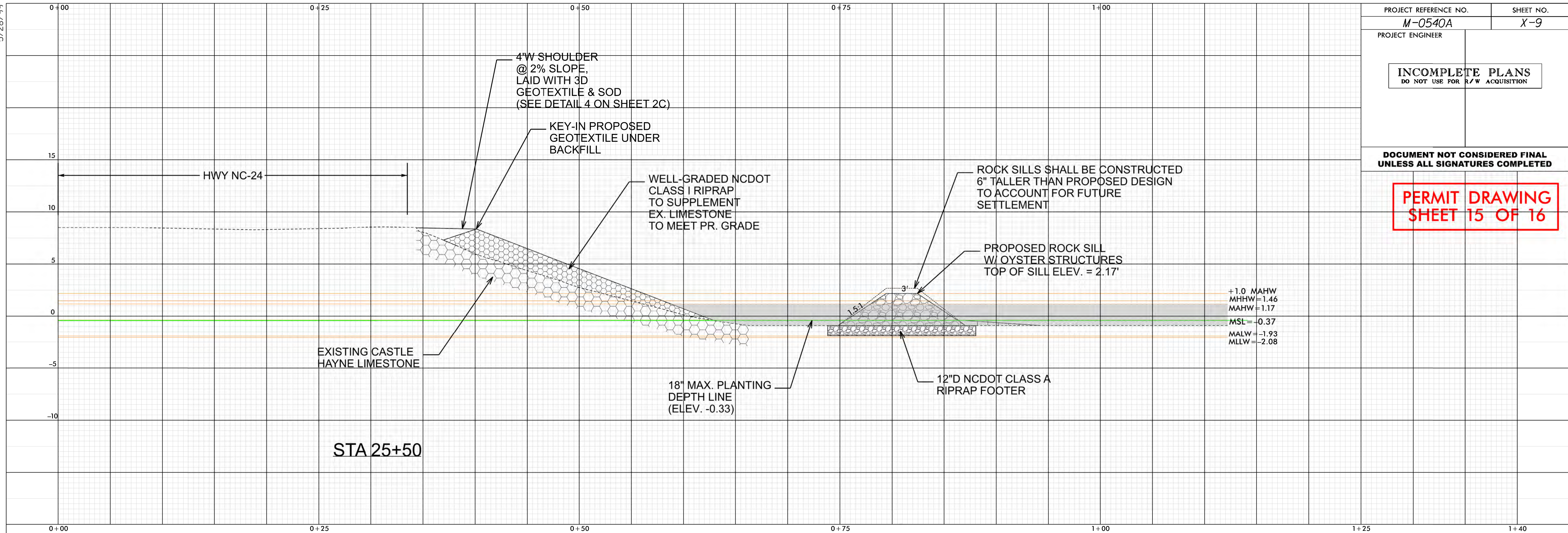
5/28/99

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| PROJECT ENGINEER                        |                         |

**INCOMPLETE PLANS**  
DO NOT USE FOR R/W ACQUISITION

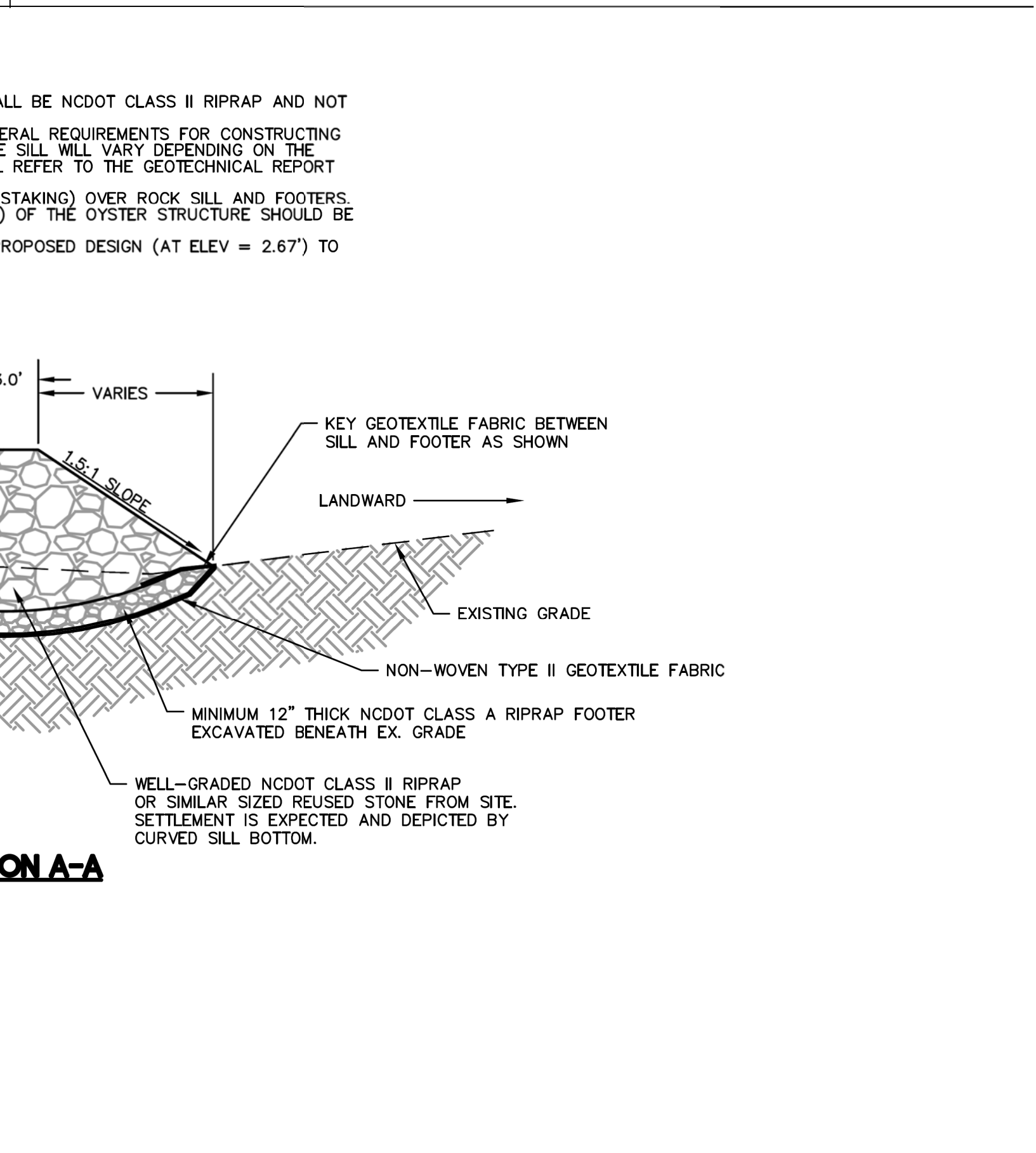
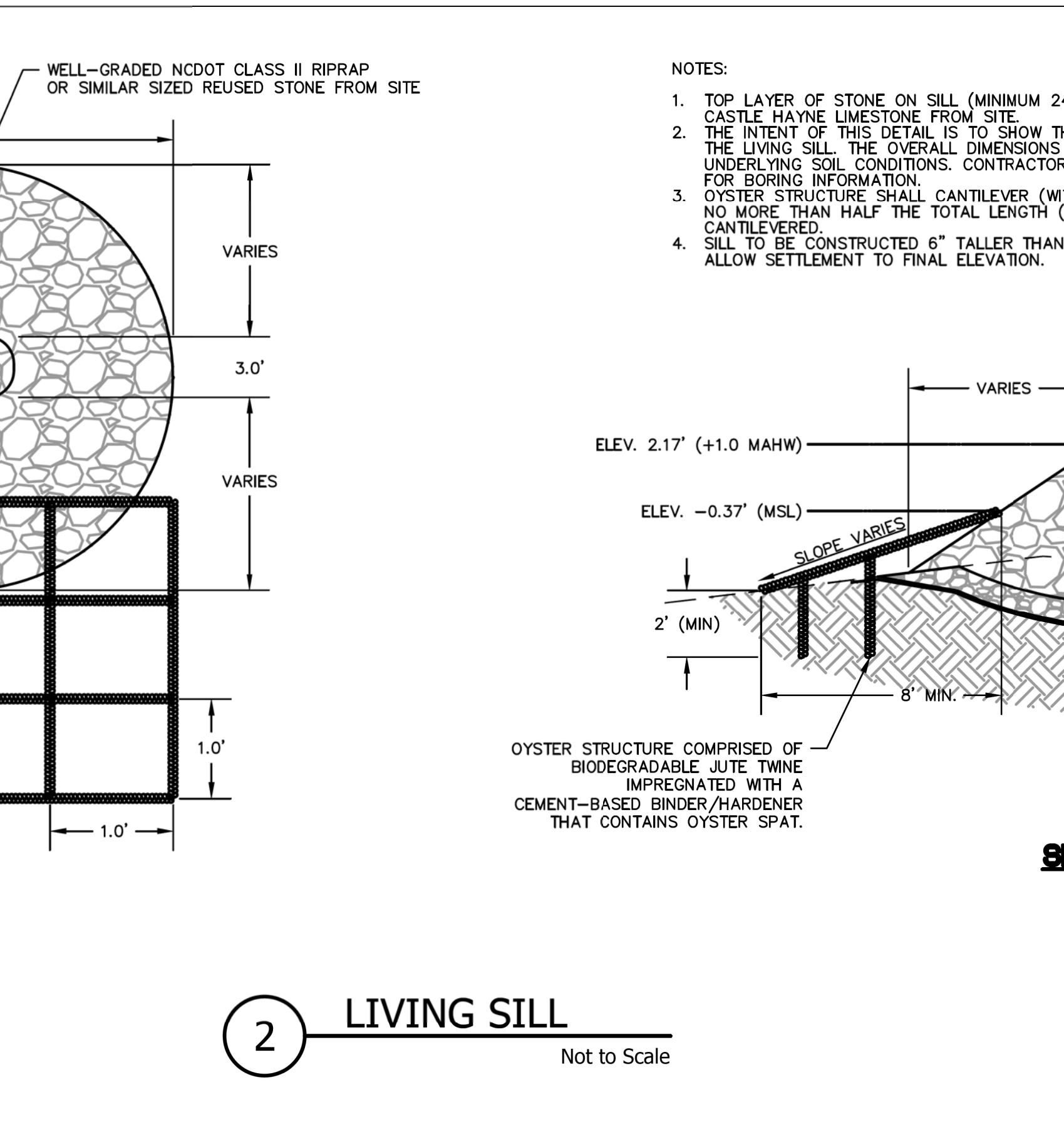
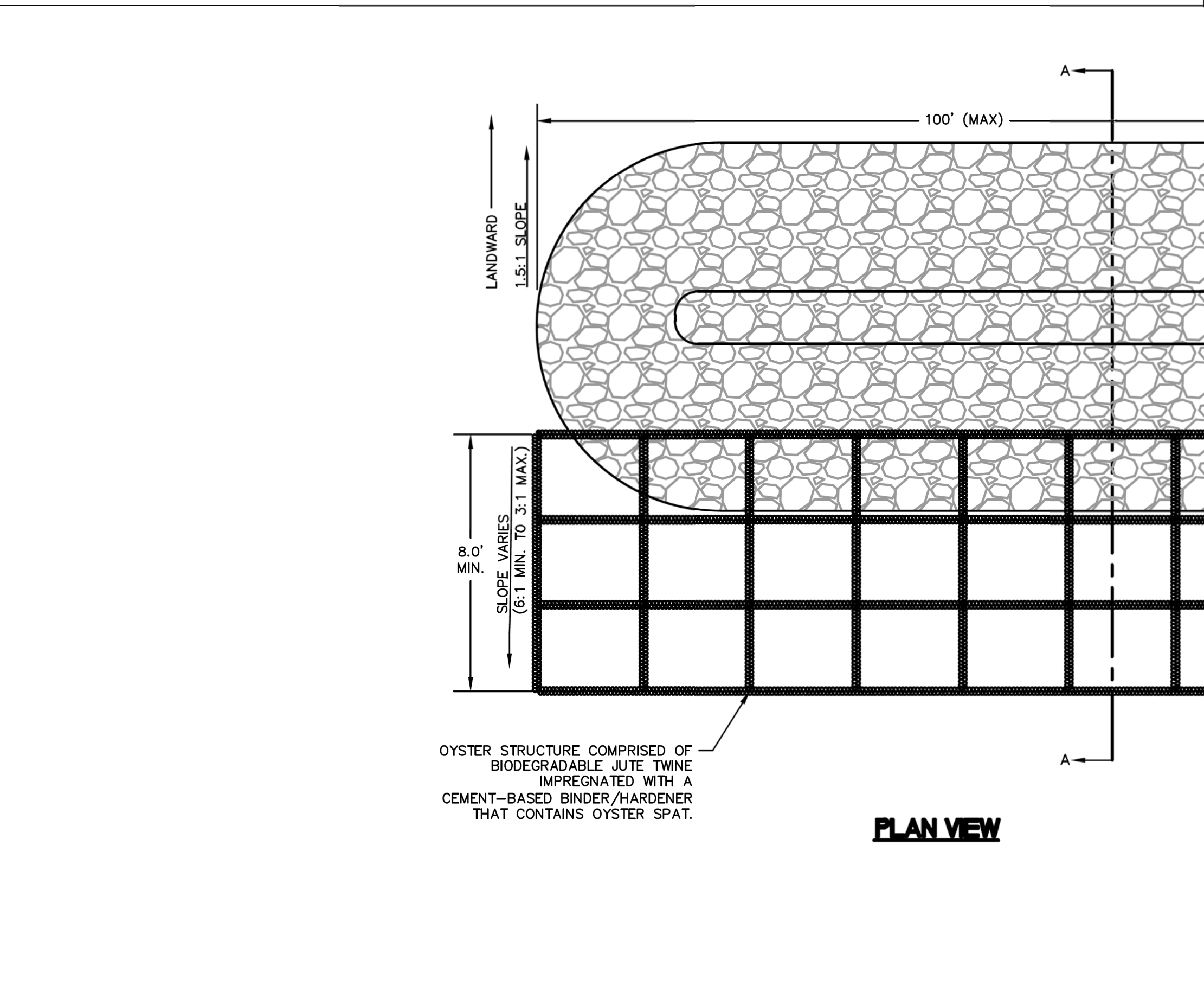
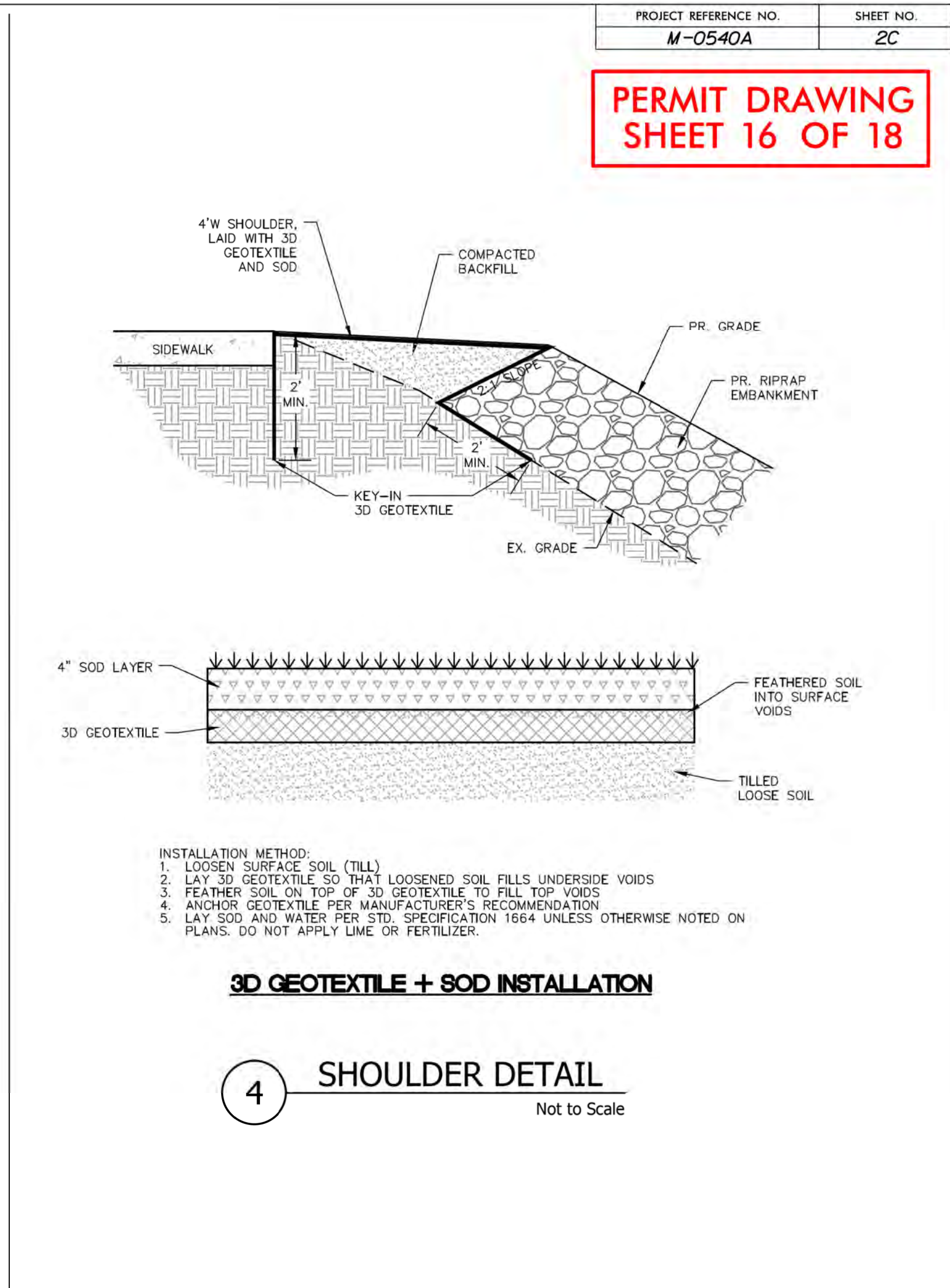
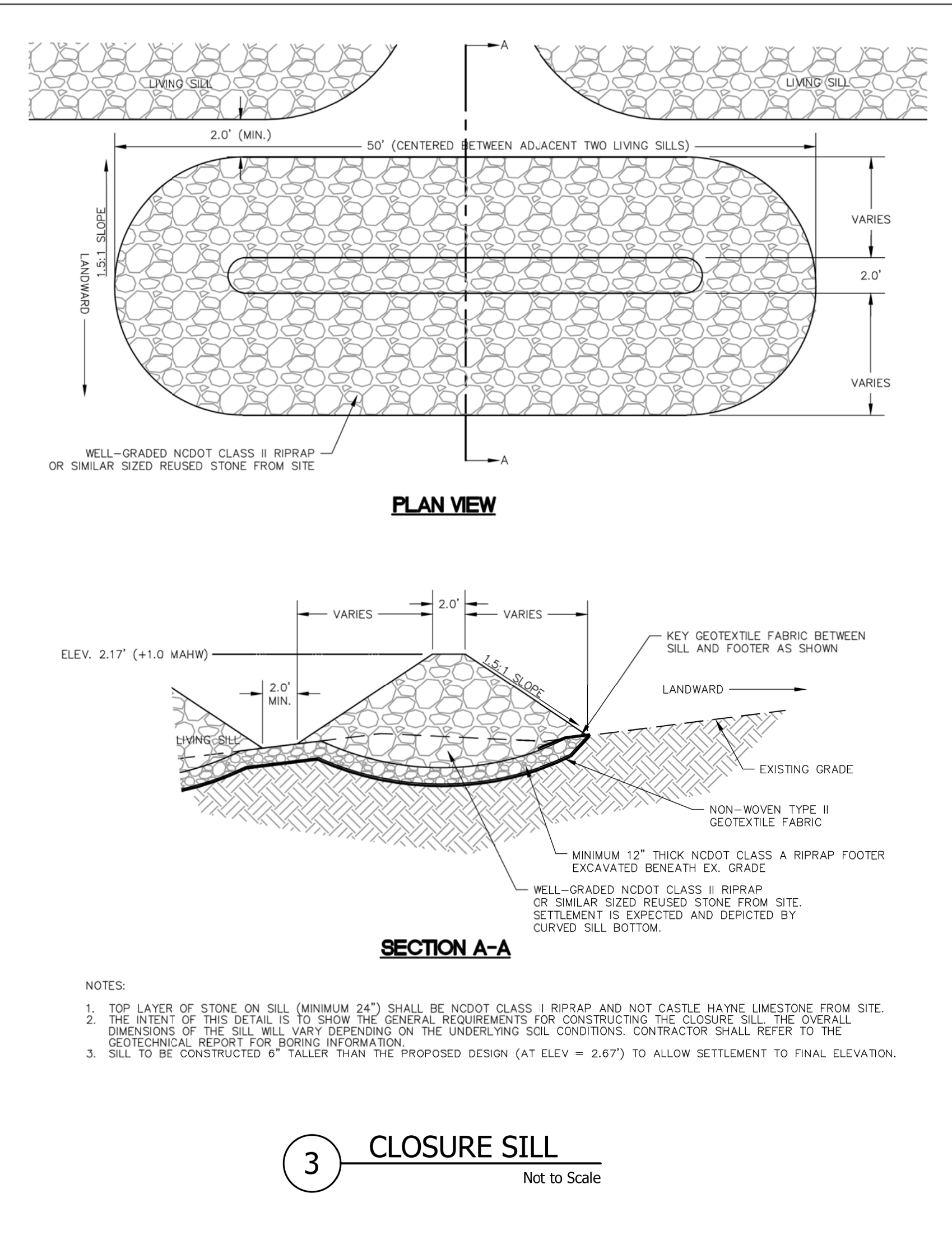
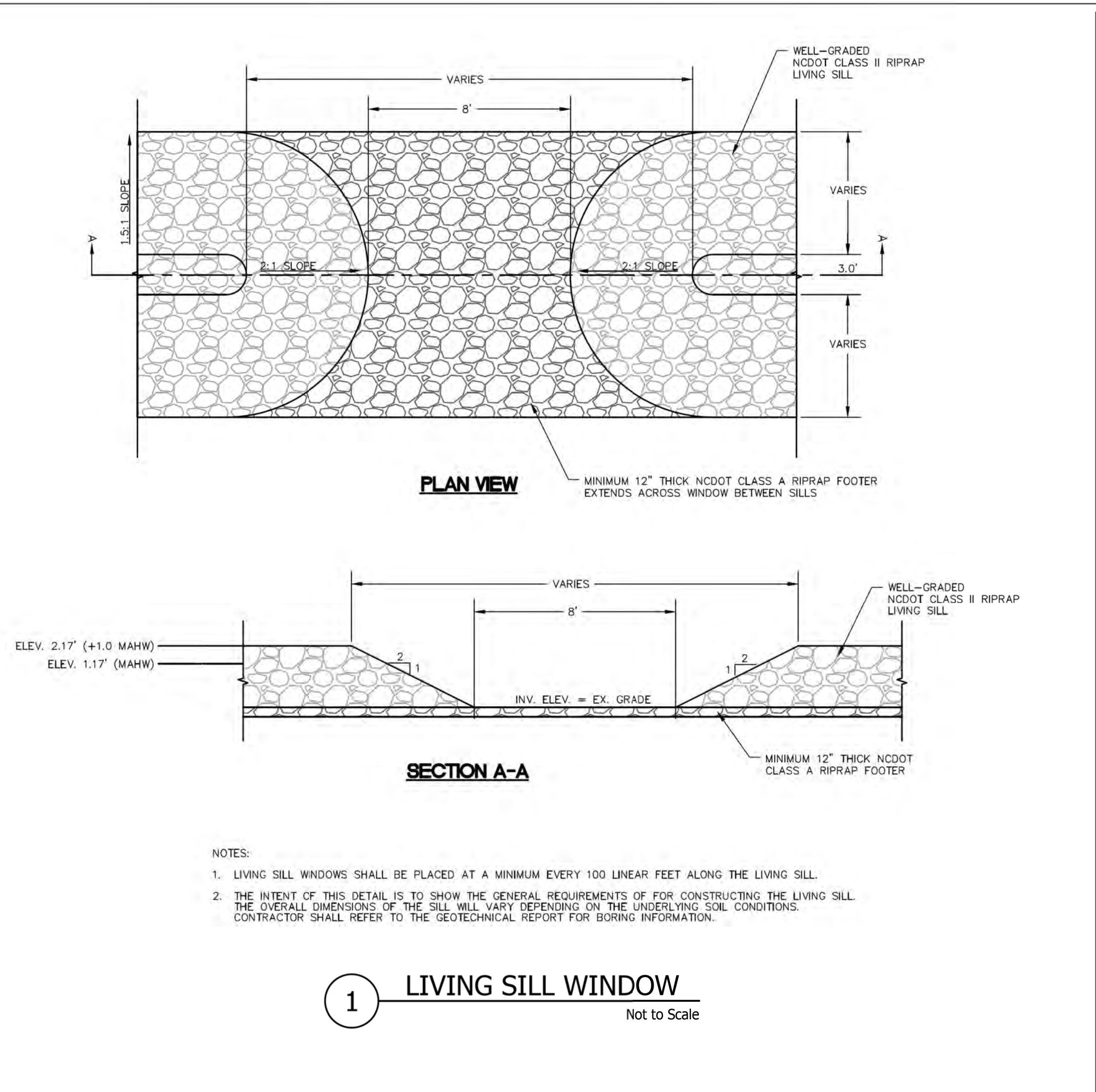
**DOCUMENT NOT CONSIDERED FINAL**  
UNLESS ALL SIGNATURES COMPLETED

**PERMIT DRAWING**  
**SHEET 15 OF 16**



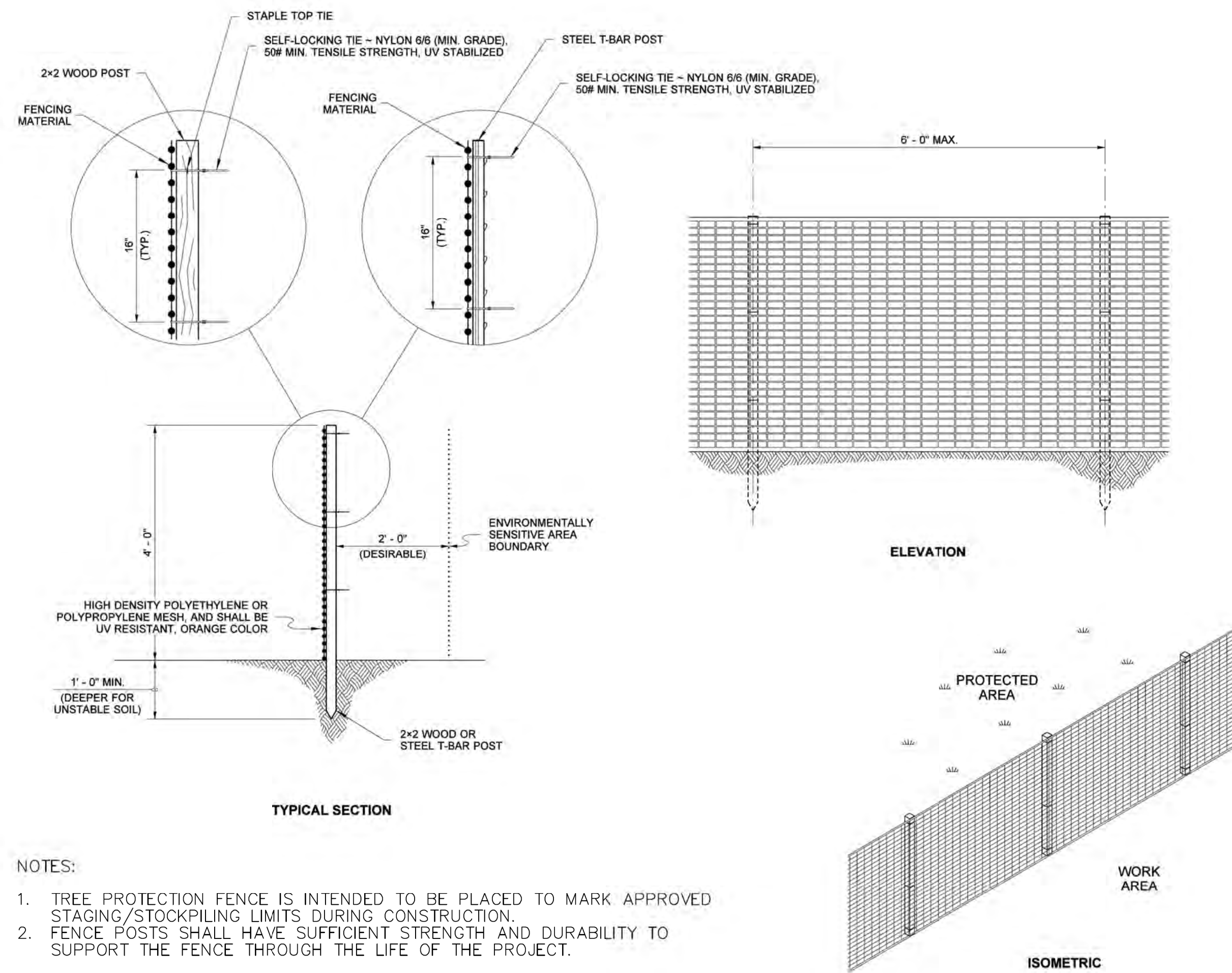


12/2/2016





12/2/2016



NOTES:

1. TREE PROTECTION FENCE IS INTENDED TO BE PLACED TO MARK APPROVED STAGING/STOCKPILING LIMITS DURING CONSTRUCTION.
2. FENCE POSTS SHALL HAVE SUFFICIENT STRENGTH AND DURABILITY TO SUPPORT THE FENCE THROUGH THE LIFE OF THE PROJECT.

TP
**TREE PROTECTION FENCE**  
 Not to Scale

**WETLAND AND SURFACE WATER IMPACTS SUMMARY**

| Site No.        | Station (From/To) | Structure Size / Type | WETLAND IMPACTS                 |                             |                             |                                      |                                | SURFACE WATER IMPACTS     |                       |   |                                     |                            |
|-----------------|-------------------|-----------------------|---------------------------------|-----------------------------|-----------------------------|--------------------------------------|--------------------------------|---------------------------|-----------------------|---|-------------------------------------|----------------------------|
|                 |                   |                       | Permanent Fill In Wetlands (ac) | Temp. Fill In Wetlands (ac) | Excavation in Wetlands (ac) | Mechanized Clearing in Wetlands (ac) | Hand Clearing in Wetlands (ac) | Permanent SW impacts (ac) | Temp. SW impacts (ac) | Existing Channel Impacts Permanent (ft) | Existing Channel Impacts Temp. (ft) | Natural Stream Design (ft) |
| 3               |                   | Rock Sill             |                                 |                             |                             |                                      |                                | 0.37                      |                       |   |                                     |                            |
|                 |                   | Oyster Structure      |                                 |                             |                             |                                      |                                | 0.10                      |                       |   |                                     |                            |
|                 |                   | Fill                  | 0.22                            |                             |                             |                                      |                                | 0.48                      |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
|                 |                   |                       |                                 |                             |                             |                                      |                                |                           |                       |   |                                     |                            |
| <b>TOTALS*:</b> |                   |                       | <b>0.22</b>                     | <b>0.00</b>                 | <b>0.00</b>                 | <b>0.00</b>                          | <b>0.00</b>                    | <b>0.95</b>               | <b>0.00</b>           | <b>0</b>                                | <b>0</b>                            | <b>0</b>                   |

\*Rounded totals are sum of actual impacts

- NOTES:
1. OYSTER STRUCTURES TO BE HAND PLACED WITHOUT THE USE OF HEAVY MACHINERY TO MINIMIZE IMPACTS TO THE EXISTING ENVIRONMENT.
  2. ALL PROPOSED STABILIZATION WORK ON EMBANKMENT TO BE COMPLETED FROM THE NC-24 RIGHT-OF-WAY TO MINIMIZE IMPACTS TO THE EXISTING ENVIRONMENT.
  3. ACCESS FOR CONSTRUCTION OF THE PROPOSED LIVING SILL AND TIDAL LOW MARSH TO UTILIZE A TEMPORARY TRESTLE BRIDGE IN AN EFFORT TO MINIMIZE IMPACTS TO THE EXISTING ENVIRONMENT.

NC DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 4/27/2021  
 CARTERET/ONSLow  
 M-0540A  
 WBS #N/A

**LISTING OF DBE SUBCONTRACTORS**

Sheet of

| Firm Name and Address      | Item No. | Item Description | * Agreed upon Unit Price | ** Dollar Volume of Item |
|----------------------------|----------|------------------|--------------------------|--------------------------|
| <b>Name</b><br><br>Address |          |                  |                          |                          |
| <b>Name</b><br><br>Address |          |                  |                          |                          |
| <b>Name</b><br><br>Address |          |                  |                          |                          |
| <b>Name</b><br><br>Address |          |                  |                          |                          |
| <b>Name</b><br><br>Address |          |                  |                          |                          |
| <b>Name</b><br><br>Address |          |                  |                          |                          |
| <b>Name</b><br><br>Address |          |                  |                          |                          |

\* The Dollar Volume shown in this column shall be the Actual Price Agreed Upon by the Prime Contractor and the DBE subcontractor, and these prices will be used to determine the percentage of the DBE participation in the contract.

\*\* Dollar Volume of DBE Subcontractor Percentage of Total Contract Bid Price:

*If firm is a Material Supplier Only, show Dollar Volume as 60% of Agreed Upon Amount from Letter of Intent.*

*If firm is a Manufacturer, show Dollar Volume as 100% of Agreed Upon Amount from Letter of Intent.*

**LISTING OF DBE SUBCONTRACTORS**

Sheet of

| Firm Name and Address      | Item No. | Item Description | * Agreed upon Unit Price | ** Dollar Volume of Item |
|----------------------------|----------|------------------|--------------------------|--------------------------|
| <b>Name</b><br><br>Address |          |                  |                          |                          |
| <b>Name</b><br><br>Address |          |                  |                          |                          |
| <b>Name</b><br><br>Address |          |                  |                          |                          |
| <b>Name</b><br><br>Address |          |                  |                          |                          |
| <b>Name</b><br><br>Address |          |                  |                          |                          |

**\*\* Dollar Volume of DBE Subcontractor \$ \_\_\_\_\_**

**Percentage of Total Contract Bid Price \_\_\_\_\_%**

**\* The Dollar Volume shown in this column shall be the Actual Price Agreed Upon by the Prime Contractor and the DBE subcontractor, and these prices will be used to determine the percentage of the DBE participation in the contract.**

**\*\* Dollar Volume of DBE Subcontractor Percentage of Total Contract Bid Price:  
 If firm is a Material Supplier Only, show Dollar Volume as 60% of Agreed Upon Amount from Letter of Intent.  
 If firm is a Manufacturer, show Dollar Volume as 100% of Agreed Upon Amount from Letter of Intent.**

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH, NC

CONTRACT PAYMENT BOND

Date of Payment Bond Execution \_\_\_\_\_

Name of Principal Contractor \_\_\_\_\_

Name of Surety: \_\_\_\_\_

Name of Contracting Body: \_\_\_\_\_

Amount of Bond: \_\_\_\_\_

Contract ID No.: DC00339

County Name: Onslow County

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL CONTRACTOR (hereafter, PRINCIPAL) and SURETY above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the Contracting Body, numbered as shown above and hereto attached:

NOW THEREFORE, if the principal shall promptly make payment to all persons supplying labor and material in the prosecution of the work provided for in said contract, and any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

**CONTRACT PAYMENT BOND**

*Affix Seal of Surety Company*

\_\_\_\_\_  
Print or type Surety Company Name

By \_\_\_\_\_  
Print, stamp or type name of Attorney-in-Fact

\_\_\_\_\_  
Signature of Attorney-in-Fact

\_\_\_\_\_  
Signature of Witness

\_\_\_\_\_  
Print or type Signer's name

\_\_\_\_\_  
Address of Attorney-in-Fact

**CONTRACT PAYMENT BOND**

**CORPORATION**

SIGNATURE OF CONTRACTOR (Principal)

\_\_\_\_\_  
Full name of Corporation

\_\_\_\_\_  
Address as prequalified

By

\_\_\_\_\_  
Signature of President, Vice President, Assistant Vice President  
*Select appropriate title*

\_\_\_\_\_  
Print or type Signer's name

*Affix Corporate Seal*

Attest

\_\_\_\_\_  
Signature of Secretary, Assistant Secretary  
*Select appropriate title*

\_\_\_\_\_  
Print or type Signer's name

**CONTRACT PAYMENT BOND**

**LIMITED LIABILITY COMPANY**

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

\_\_\_\_\_  
Full name of Firm

\_\_\_\_\_  
Address as prequalified

By:

\_\_\_\_\_  
Signature of Member, Manager, Authorized Agent  
*Select appropriate title*

\_\_\_\_\_  
Print or type Signer's name



**CONTRACT PAYMENT BOND**

**INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME**

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

\_\_\_\_\_  
Individual Name

Trading and doing business as

\_\_\_\_\_  
Full name of Firm

\_\_\_\_\_  
Address as prequalified

Signature of Contractor

\_\_\_\_\_  
Individually

\_\_\_\_\_  
Print or type Signer's name

\_\_\_\_\_  
Signature of Witness

\_\_\_\_\_  
Print or type Signer's name

**CONTRACT PAYMENT BOND**

**INDIVIDUAL DOING BUSINESS IN HIS OWN NAME**

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

\_\_\_\_\_  
Print or type Individual name

\_\_\_\_\_  
Address as prequalified

Signature of Contractor

\_\_\_\_\_  
Individually

\_\_\_\_\_  
Print or type Signer's name

\_\_\_\_\_  
Signature of Witness

\_\_\_\_\_  
Print or type Signer's name

**CONTRACT PAYMENT BOND**

**PARTNERSHIP**

SIGNATURE OF CONTRACTOR (Principal)

---

Full name of Partnership

---

Address as prequalified

By

---

Signature of Partner

---

Print or type Signer's name

---

Signature of Witness

---

Print or type Signer's name

**CONTRACT PAYMENT BOND**  
**JOINT VENTURE (2) or (3)**  
SIGNATURE OF CONTRACTORS (Principal)

Instructions to Bidders: 2 Joint Ventures, Fill in lines (1), (2) and (3) and execute. 3 Joint Venturers Fill in lines (1), (2), (3), (4) and execute. On Line (1), print or type the name of Joint Venture. On line (2), print or type the name of one of the joint venturers and execute below in the appropriate manner required by Article 102-8 of the *NC DOT Standard Specifications*. On Line (3), print or type the name of second joint venturer and execute below in the appropriate manner required by said article of the Specifications. On Line (4), print or type the name of the third joint venturer, if applicable and execute below in the appropriate manner required by said article of the Specifications. This form of execution must be strictly followed.

|   |    |                                      |
|---|----|--------------------------------------|
| _____<br>Signature of Witness or Attest | By | _____<br>Signature of Contractor     |
| _____<br>Print or type Signer's name    |    | _____<br>Print or type Signer's name |

and

|   |    |                                      |
|---|----|--------------------------------------|
| _____<br>Signature of Witness or Attest | By | _____<br>Signature of Contractor     |
| _____<br>Print or type Signer's name    |    | _____<br>Print or type Signer's name |

and

|   |    |                                      |
|---|----|--------------------------------------|
| _____<br>Signature of Witness or Attest | By | _____<br>Signature of Contractor     |
| _____<br>Print or type Signer's name    |    | _____<br>Print or type Signer's name |

**CONTRACT PAYMENT BOND**

Attach certified copy of Power of Attorney to this sheet

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH, NC

CONTRACT PERFORMANCE BOND

Date of Performance Bond Execution: \_\_\_\_\_

Name of Principal Contractor: \_\_\_\_\_

Name of Surety: \_\_\_\_\_

Name of Contracting Body: \_\_\_\_\_  
\_\_\_\_\_

Amount of Bond: \_\_\_\_\_

Contract ID No.: DC00339

County Name: Onslow County

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL CONTRACTOR (hereafter, PRINCIPAL) and SURETY above named, are held and firmly bound unto the above named Contracting Body, hereinafter called the Contracting Body, in the penal sum of the amount stated above for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the principal entered into a certain contract with the Contracting Body, numbered as shown above and hereto attached:

NOW THEREFORE, if the principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term of said contract and any extensions thereof that may be granted by the Contracting Body, with or without notice to the Surety, and during the life of any guaranty required under the contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all duly authorized modifications of said contract that may hereafter be made, notice of which modifications to the surety being hereby waived, then this obligation to be void; otherwise to remain in full force and virtue.

IN WITNESS WHEREOF, the above-bound parties have executed this instrument under their several seals on the date indicated above, the name and corporate seal of each corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

**CONTRACT PERFORMANCE BOND**

*Affix Seal of Surety Company*

\_\_\_\_\_  
Print or type Surety Company Name

By \_\_\_\_\_  
Print, stamp or type name of Attorney-in-Fact

\_\_\_\_\_  
Signature of Attorney-in-Fact

\_\_\_\_\_  
Signature of Witness

\_\_\_\_\_  
Print or type Signer's name

\_\_\_\_\_  
Address of Attorney-in-Fact

**CONTRACT PERFORMANCE BOND**

**CORPORATION**

SIGNATURE OF CONTRACTOR (Principal)

\_\_\_\_\_  
Full name of Corporation

\_\_\_\_\_  
Address as prequalified

By

\_\_\_\_\_  
Signature of President, Vice President, Assistant Vice President  
*Select appropriate title*

\_\_\_\_\_  
Print or type Signer's name

*Affix Corporate Seal*

Attest

\_\_\_\_\_  
Signature of Secretary, Assistant Secretary  
*Select appropriate title*

\_\_\_\_\_  
Print or type Signer's name



**CONTRACT PERFORMANCE BOND**

**LIMITED LIABILITY COMPANY**

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

\_\_\_\_\_  
Full name of Firm

\_\_\_\_\_  
Address as prequalified

By:

\_\_\_\_\_  
Signature of Member, Manager, Authorized Agent  
*Select appropriate title*

\_\_\_\_\_  
Print or type Signer's name

**CONTRACT PERFORMANCE BOND**

**INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME**

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

\_\_\_\_\_  
Individual Name

Trading and doing business as

\_\_\_\_\_  
Full name of Firm

\_\_\_\_\_  
Address as prequalified

Signature of Contractor

\_\_\_\_\_  
Individually

\_\_\_\_\_  
Print or type Signer's name

\_\_\_\_\_  
Signature of Witness

\_\_\_\_\_  
Print or type Signer's name

**CONTRACT PERFORMANCE BOND**

**INDIVIDUAL DOING BUSINESS IN HIS OWN NAME**

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

\_\_\_\_\_   
 Print or type Individual name

\_\_\_\_\_   
 Address as prequalified

Signature of Contractor

\_\_\_\_\_   
 Individually

\_\_\_\_\_   
 Print or type Signer's name

\_\_\_\_\_   
 Signature of Witness

\_\_\_\_\_   
 Print or type Signer's name

**CONTRACT PERFORMANCE BOND**

**PARTNERSHIP**

SIGNATURE OF CONTRACTOR (Principal)

---

Full name of Partnership

---

Address as prequalified

By

---

Signature of Partner

---

Print or type Signer's name

---

Signature of Witness

---

Print or type Signer's name

**CONTRACT PERFORMANCE BOND  
JOINT VENTURE (2) OR (3)  
SIGNATURE OF CONTRACTORS (Principal)**

Instructions to Bidders: 2 Joint Ventures, Fill in lines (1), (2) and (3) and execute. 3 Joint Venturers Fill in lines (1), (2), (3), (4) and execute. On Line (1), print or type the name of Joint Venture. On line (2), print or type the name of one of the joint venturers and execute below in the appropriate manner required by Article 102-8 of the *NCDOT Standard Specifications*. On Line (3), print or type the name of second joint venturer and execute below in the appropriate manner required by said article of the Specifications. On Line (4), print or type the name of the third joint venturer, if applicable and execute below in the appropriate manner required by said article of the Specifications. This form of execution must be strictly followed.

|                                |    |                             |
|--------------------------------|----|-----------------------------|
| Signature of Witness or Attest | By | Signature of Contractor     |
| Print or type Signer's name    |    | Print or type Signer's name |

and

|                                |    |                             |
|--------------------------------|----|-----------------------------|
| Signature of Witness or Attest | By | Signature of Contractor     |
| Print or type Signer's name    |    | Print or type Signer's name |

and

|                                |    |                             |
|--------------------------------|----|-----------------------------|
| Signature of Witness or Attest | By | Signature of Contractor     |
| Print or type Signer's name    |    | Print or type Signer's name |

**CONTRACT PERFORMANCE BOND**

Attach certified copy of Power of Attorney to this sheet

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH, NC

**BID BOND**

Contract Number: DC00339 County: Onslow County

KNOW ALL MEN BY THESE PRESENTS, That we, the PRINCIPAL CONTRACTOR (hereafter, PRINCIPAL) and SURETY above named, are held and firmly bound unto the Department of Transportation in the full and just sum of five (5) percent of the total amount bid by the Principal for the project stated above, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

NOW, THEREFORE, the condition of this obligation is: the Principal shall not withdraw its bid within sixty (60) days after the opening of the bids, or within such other time period as may be provided in the proposal, and if the Board of Transportation shall award a contract to the Principal, the Principal shall, within fourteen (14) calendar days after written notice of award is received by him, provide bonds with good and sufficient surety, as required for the faithful performance of the contract and for the protection of all persons supplying labor, material, and equipment for the prosecution of the work. In the event the Principal requests permission to withdraw his bid due to mistake in accordance with the provisions of Article 103-3 of the *Standard Specifications for Roads and Structures*, the conditions and obligations of this Bid Bond shall remain in full force and effect until the Department of Transportation makes a final determination to either allow the bid to be withdrawn or to proceed with award of the contract. In the event a determination is made to award the contract, the Principal shall have fourteen (14) calendar days to comply with the requirements set forth above. In the event the Principal withdraws its bid after bids are opened except as provided in Article 103-3, or after award of the contract has been made fails to execute such additional documents as may be required and to provide the required bonds within the time period specified above, then the amount of the bid bond shall be immediately paid to the Department of Transportation as liquidated damages.

IN TESTIMONY WHEREOF, the Principal and Surety have caused these presents to be duly signed and sealed.

This the \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_

\_\_\_\_\_  
Surety

By \_\_\_\_\_  
General Agent or Attorney-in-Fact Signature

*Seal of Surety*

\_\_\_\_\_  
Print or type Signer's Name

**BID BOND**  
**CORPORATION**

SIGNATURE OF CONTRACTOR (Principal)

\_\_\_\_\_  
Full name of Corporation

\_\_\_\_\_  
Address as prequalified

By \_\_\_\_\_  
Signature of **President, Vice President, Assistant Vice President**  
*Select appropriate title*

\_\_\_\_\_  
Print or type Signer's name

*Affix Corporate Seal*

Attest \_\_\_\_\_  
Signature of **Secretary, Assistant Secretary**  
*Select appropriate title*

\_\_\_\_\_  
Print or type Signer's name



**BID BOND**

**LIMITED LIABILITY COMPANY**

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

\_\_\_\_\_  
Full name of Firm

\_\_\_\_\_  
Address as prequalified

**Signature of Member/  
Manager/Authorized Agent**

\_\_\_\_\_  
Individually

\_\_\_\_\_  
Print or type Signer's name

**BID BOND**

**INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME**

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

\_\_\_\_\_ Individual Name

Trading and doing business as

\_\_\_\_\_ Full name of Firm

\_\_\_\_\_ Address as prequalified

Signature of Contractor

\_\_\_\_\_ Individually

\_\_\_\_\_ Print or type Signer's name

\_\_\_\_\_ Signature of Witness

\_\_\_\_\_ Print or type Signer's name

**BID BOND**

**INDIVIDUAL DOING BUSINESS IN HIS OWN NAME**

SIGNATURE OF CONTRACTOR (Principal)

Name of Contractor

\_\_\_\_\_

Print or type Individual Name

\_\_\_\_\_

Address as prequalified

Signature of Contractor

\_\_\_\_\_

Individually

\_\_\_\_\_

Print or type Signer's name

\_\_\_\_\_

Signature of Witness

\_\_\_\_\_

Print or type Signer's name

**BID BOND**

**PARTNERSHIP**

SIGNATURE OF CONTRACTOR (Principal)

---

Full name of Partnership

---

Address as prequalified

By \_\_\_\_\_  
Signature of Partner

---

Print or type Signer's name

---

Signature of Witness

---

Print or type Signer's name

**BID BOND**  
**JOINT VENTURE (2 or 3)**  
SIGNATURE OF CONTRACTORS (Principal)

Instructions to Bidders: **2 Joint Ventures**, Fill in lines (1), (2) and (3) and execute. **3 Joint Venturers** Fill in lines (1), (2), (3), (4) and execute. Line (1), print or type the name of Joint Venture. On line (2), print or type the name of one of the joint venturers and execute below in the appropriate manner required by Article 102-8 of the *Specifications*. On Line (3), print or type the name of second joint venturer and execute below in the appropriate manner required by said article of the *Specifications*. On Line (4), print or type the name of the third joint venturer, if applicable and execute below in the appropriate manner required by said article of the *Specifications*. This form of execution must be strictly followed.

|                                |    |                             |
|--------------------------------|----|-----------------------------|
| Signature of Witness or Attest | By | Signature of Contractor     |
| Print or type Signer's name    |    | Print or type Signer's name |

and

|                                |    |                             |
|--------------------------------|----|-----------------------------|
| Signature of Witness or Attest | By | Signature of Contractor     |
| Print or type Signer's name    |    | Print or type Signer's name |

and

|                                |    |                             |
|--------------------------------|----|-----------------------------|
| Signature of Witness or Attest | By | Signature of Contractor     |
| Print or type Signer's name    |    | Print or type Signer's name |

**ADDENDUM(S)**

ADDENDUM #1

I, \_\_\_\_\_  
(SIGNATURE)

representing \_\_\_\_\_

Acknowledge receipt of Addendum #1.

ADDENDUM #2

I, \_\_\_\_\_  
(SIGNATURE)

representing \_\_\_\_\_

Acknowledge receipt of Addendum #2.

ADDENDUM #3

I, \_\_\_\_\_  
(SIGNATURE)

representing \_\_\_\_\_

Acknowledge receipt of Addendum #3.

**\*AWARD LIMITS ON MULTIPLE PROJECTS\***

It is the desire of the Proposer to be awarded contracts, the value of which will not exceed a total of \$ \_\_\_\_\_, for those projects indicated below on which bids are being opened on the same date as shown in the Proposal Form. Individual projects shall be indicated by placing the project number and county in the appropriate place below. Projects not selected will not be subject to an award limit.

\_\_\_\_\_  
(Project Number)

\_\_\_\_\_  
(County)

\_\_\_\_\_  
(Project Number)

\_\_\_\_\_  
(County)

\_\_\_\_\_  
(Project Number)

\_\_\_\_\_  
(County)

\_\_\_\_\_  
(Project Number)

\_\_\_\_\_  
(County)

\*If a Proposer desires to limit the total amount of work awarded to him in this letting, he shall state such limit in the space provided above in the second line of this form.

It is agreed that in the event that I am (we are) the successful bidder on indicated projects, the total value of which is more than the above stipulated award limits, the Board of Transportation will award me (us) projects from among those indicated which have a total value not exceeding the award limit and which will result in the best advantage to the Department of Transportation.

\_\_\_\_\_  
\*\*Signature of Authorized Person

\*\*Only those persons authorized to sign bids under the provisions of Article 102-8, Item 7, shall be authorized to sign this form.

**EXECUTION OF BID**

**NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION**

**CORPORATION**

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. §133-24* within the last three years, and that the prequalified bidder intends to do the work with his own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

*N.C.G.S. §133-32* and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

**SIGNATURE OF PREQUALIFIED BIDDER**

\_\_\_\_\_  
Full name of Corporation

\_\_\_\_\_  
Address as Prequalified

Attest \_\_\_\_\_ By \_\_\_\_\_  
Secretary/Assistant Secretary President/Vice President/Assistant Vice President  
(Select appropriate title) (Select appropriate title)

\_\_\_\_\_  
Print or type Signer's name

\_\_\_\_\_  
Print or type Signer's name

**CORPORATE SEAL**



**NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION**

**PARTNERSHIP**

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

*N.C.G.S. § 133-32* and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

**SIGNATURE OF PREQUALIFIED BIDDER**

---

Full Name of  
Partnership

---

Address as  
Prequalified

---

Signature of Witness

---

Signature of Partner

---

Print or Type Signer's Name

---

Print or Type Signer's Name

**NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION**

**LIMITED LIABILITY COMPANY**

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

*N.C.G.S. § 133-32* and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

**SIGNATURE OF PREQUALIFIED BIDDER**

\_\_\_\_\_  
Full Name of Firm

\_\_\_\_\_  
Address as Prequalified

\_\_\_\_\_  
Signature of Witness

\_\_\_\_\_  
Signature of Member/Manager/Authorized Agent  
(Select appropriate Title)

\_\_\_\_\_  
Print or Type Signer's Name

\_\_\_\_\_  
Print or Type Signer's Name

NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION

JOINT VENTURE (2) or (3)

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating N.C.G.S. § 133-24 within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

N.C.G.S. § 133-32 and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

SIGNATURE OF PREQUALIFIED BIDDER

Instructions: 2 Joint Venturers Fill in lines (1), (2) and (3) and execute. 3 Joint Venturers Fill in lines (1), (2), (3) and (4) and execute. On Line (1), fill in the name of the Joint Venture Company. On Line (2), fill in the name of one of the joint venturers and execute below in the appropriate manner. On Line (3), print or type the name of the other joint venturer and execute below in the appropriate manner. On Line (4), fill in the name of the third joint venturer, if applicable and execute below in the appropriate manner.

(1) \_\_\_\_\_  
Name of Joint Venture

(2) \_\_\_\_\_  
Name of Contractor

\_\_\_\_\_  
Address as Prequalified

\_\_\_\_\_  
Signature of Witness or Attest

 BY \_\_\_\_\_  
Signature of Contractor

\_\_\_\_\_  
Print or Type Signer's Name

 \_\_\_\_\_  
Print or Type Signer's Name

*If Corporation, affix Corporate Seal* AND

(3) \_\_\_\_\_  
Name of Contractor

\_\_\_\_\_  
Address as Prequalified

\_\_\_\_\_  
Signature of Witness or Attest

 BY \_\_\_\_\_  
Signature of Contractor

\_\_\_\_\_  
Print or Type Signer's Name

 \_\_\_\_\_  
Print or Type Signer's Name

*If Corporation, affix Corporate Seal* AND

(4) \_\_\_\_\_  
Name of Contractor

\_\_\_\_\_  
Address as Prequalified

\_\_\_\_\_  
Signature of Witness or Attest

 BY \_\_\_\_\_  
Signature of Contractor

\_\_\_\_\_  
Print or Type Signer's Name

 \_\_\_\_\_  
Print or Type Signer's Name

*If Corporation, affix Corporate Seal*

**NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION  
INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME**

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

*N.C.G.S. § 133-32* and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

**SIGNATURE OF PREQUALIFIED BIDDER**

Name of Prequalified Bidder

\_\_\_\_\_ Individual Name

Trading and Doing Business As

\_\_\_\_\_ Full name of Firm

\_\_\_\_\_ Address as Prequalified

\_\_\_\_\_ Signature of Witness

\_\_\_\_\_ Signature of Prequalified Bidder, Individual

\_\_\_\_\_ Print or Type Signer's Name

\_\_\_\_\_ Print or Type Signer's Name

**NON-COLLUSION, DEBARMENT AND GIFT BAN CERTIFICATION**

**INDIVIDUAL DOING BUSINESS IN HIS OWN NAME**

The prequalified bidder, declares (or certifies, verifies, or states) under penalty of perjury under the laws of the United States that neither he, nor any official, agent or employee has entered into any agreement, participated in any collusion, or otherwise taken any action which is in restraint of free competitive bidding in connection with any bid or contract, that the prequalified bidder has not been convicted of violating *N.C.G.S. § 133-24* within the last three years, and that the prequalified bidder intends to do the work with its own bona fide employees or subcontractors and will not bid for the benefit of another contractor.

By submitting this non-collusion, debarment and gift ban certification, the Contractor is attesting his status under penalty of perjury under the laws of the United States in accordance with the Debarment Certification attached, provided that the Debarment Certification also includes any required statements concerning exceptions that are applicable.

*N.C.G.S. § 133-32* and Executive Order 24 prohibit the offer to, or acceptance by, any State Employee of any gift from anyone with a contract with the State, or from any person seeking to do business with the State. By execution of any response in this procurement, you attest, for your entire organization and its employees or agents, that you are not aware that any such gift has been offered, accepted, or promised by any employees of your organization.

**SIGNATURE OF PREQUALIFIED BIDDER**

Name of Prequalified Bidder

\_\_\_\_\_   
 Print or Type Name

\_\_\_\_\_   
 Address as Prequalified

\_\_\_\_\_   
 Signature of Prequalified Bidder, Individually

\_\_\_\_\_   
 Print or type Signer's Name

\_\_\_\_\_   
 Signature of Witness

\_\_\_\_\_   
 Print or type Signer's name

## DEBARMENT CERTIFICATION

### Conditions for certification:

1. The prequalified bidder shall provide immediate written notice to the Department if at any time the bidder learns that his certification was erroneous when he submitted his debarment certification or explanation filed with the Department, or has become erroneous because of changed circumstances.
2. The terms *covered transaction, debarred, suspended, ineligible, lower tier covered transaction, participant, person, primary covered transaction, principal, proposal, and voluntarily excluded*, as used in this provision, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. A copy of the Federal Rules requiring this certification and detailing the definitions and coverages may be obtained from the Contract Officer of the Department.
3. The prequalified bidder agrees by submitting this form, that he will not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in NCDOT contracts, unless authorized by the Department.
4. For Federal Aid projects, the prequalified bidder further agrees that by submitting this form he will include the Federal-Aid Provision titled *Required Contract Provisions Federal-Aid Construction Contract (Form FHWA PR 1273)* provided by the Department, without subsequent modification, in all lower tier covered transactions.
5. The prequalified bidder may rely upon a certification of a participant in a lower tier covered transaction that he is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless he knows that the certification is erroneous. The bidder may decide the method and frequency by which he will determine the eligibility of his subcontractors.
6. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this provision. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
7. Except as authorized in paragraph 6 herein, the Department may terminate any contract if the bidder knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available by the Federal Government.

**DEBARMENT CERTIFICATION**

The prequalified bidder certifies to the best of his knowledge and belief, that he and his principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
- b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records; making false statements; or receiving stolen property;
- c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph b. of this certification; and
- d. Have not within a three-year period preceding this proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- e. Will submit a revised Debarment Certification immediately if his status changes and will show in his bid proposal an explanation for the change in status.

If the prequalified bidder cannot certify that he is not debarred, he shall provide an explanation with this submittal. An explanation will not necessarily result in denial of participation in a contract.

Failure to submit a non-collusion and debarment certification will result in the prequalified bidder's bid being considered non-responsive.

Check here if an explanation is attached to this certification.

# TC-1

M-0540A

Carteret and Onslow Counties

## WORK ZONE TRAFFIC CONTROL Project Special Provisions Table of Contents

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| ADA Compliant Pedestrian Traffic Control Devices | TC-2 |
| Pedestrian Transport Service                     | TC-3 |





## TC-2

M-0540A

Carteret and Onslow Counties

### ADA COMPLIANT PEDESTRIAN TRAFFIC CONTROL DEVICES:

(10/31/2017)

#### **Description**

Furnish, install, and maintain all ADA compliant pedestrian traffic control devices for existing pedestrian facilities that are disrupted, closed, or relocated by planned work activities.

The ADA compliant pedestrian traffic control devices used to either close, redirect, divert or detour pedestrian traffic are Pedestrian Channelizing Devices, Audible Warning Devices and Temporary Curb Ramps.

#### **Construction Methods**

The ADA compliant pedestrian traffic control devices involved in the closing or redirecting of pedestrians as designated on the Transportation Management Plan (TMP) shall be manufactured and assembled in accordance with the requirements of the Americans with Disabilities Act (ADA) and be on the NCDOT approved products list.

Pedestrian Channelizing Devices shall be manufactured and assembled to be connected as to eliminate any gaps that allow pedestrians to stray from the channelizing path. Any Pedestrian Channelizing Devices used to close or block a pedestrian facility shall have a "SIDEWALK CLOSED" sign affixed to it and any audible warning devices, if designated on the TMP.

Audible Warning Devices shall be manufactured to include a locator tone activated by a motion sensor and have the ability to program a message for a duration of at least 1 minute. The motion sensor shall have the ability to detect pedestrians a minimum of 10' away. The voice module may be automatic, or it may be push button activated. If push button activated, it shall be mounted at a height of approximately 3.5 feet, but no more than 4 feet, above the pedestrian facility.

#### **Measurement and Payment**

*Pedestrian Channelizing Devices* will be measured and paid as the maximum number of linear feet of *Pedestrian Channelizing Devices* furnished, acceptably placed, and in use at any one time during the life of the project.

No direct payment will be made for any sign affixed to a pedestrian channelizing device. Signs mounted to pedestrian channelizing devices will be considered incidental to the device.

# TC-3

M-0540A

Carteret and Onslow Counties

*Audible Warning Devices* will be measured and paid as the maximum number of *Audible Warning Devices* furnished, acceptably installed, and in use at any one time during the life of the project.

Relocation, replacement, repair, maintenance, or disposal of *Pedestrian Channelizing Devices* and *Audible Warning Devices* will be incidental to the pay item.

Payment will be made under:

| <b>Pay Item</b>                 | <b>Pay Unit</b> |
|---------------------------------|-----------------|
| Pedestrian Channelizing Devices | Linear Foot     |
| Audible Warning Devices         | Each            |

## **PEDESTRIAN TRANSPORT SERVICE:**

(09/07/2018)

### **Description**

The Contractor shall provide a Pedestrian Transport Service through and/or around the project when a traversable, firm, stable, and slip-resistant path for pedestrians cannot be maintained through the work area. At minimum, the Pedestrian Transport Service shall be on-call 24 hours per day Monday thru Sunday and operate at no-cost to the users.

### **Construction Methods**

The Contractor shall enlist the services of a registered, licensed, and insured transportation service (which may include ridesharing or taxi services) during the times listed above.

The Pedestrian Transport Service shall operate on an on-call basis with wait times not exceeding 15 minutes. Pedestrians shall be able to request a ride by calling or text messaging a conspicuously posted number using standard cellular phone. The posted number shall either automatically dispatch a transport vehicle to the pedestrian's location or shall connect to a responsible individual who can manually dispatch a transport vehicle to the pedestrian's location.

Solely requiring pedestrians to use a third-party cellular phone application (smart phone app) to dispatch the transport vehicle shall be considered non-compliant with this section but offering a smart phone app to directly dispatch the service is encouraged as a supplement to the posted number.

# TC-4

M-0540A

Carteret and Onslow Counties

Pedestrians shall not be required to present any form of payment for the service and shall not be required to provide any form of identification other than their name.

The Contractor shall install notification signage and Audible Warning Devices at pedestrian path closure points to notify pedestrians of the Pedestrian Transport Service, instruct them how to dispatch the service (by either texting or calling the posted number), and where to wait. Both the Audible Warning Devices and notification signage shall convey the same message and be approved by the Engineer.

The Pedestrian Transport Service shall operate at a prudent speed and have designated, safe, accessible, and traversable areas for pedestrians to wait for the pedestrian transport vehicle. There shall be a location for the Pedestrian Transport Service to safely pull the transport vehicle off the roadway traffic lane or into a closed traffic lane to load or unload passengers. Pedestrians with ADA needs shall not be unloaded in a location where the surface or facility is not accessible or traversable. Pedestrian Transport Service plan narrative, drop-off, pick-up locations will be submitted to the Engineer for approval prior to closing the sidewalk. Drop-off and pick-up locations shall not be located within the work zone, must be located away from traffic and provide ADA accessible access to pedestrians.

If flaggers are present on the job, the flaggers shall direct pedestrians to use the Pedestrian Transport Service to pass through or around the work zone.

## Measurement and Payment

*Pedestrian Transport Service (per trip)* will be measured and paid as the actual number of completed trips provided to pedestrians. Multiple pedestrians transported using a single trip will be paid as a single trip. No direct payment will be made for the responsible individual dispatching the vehicle the smart phone app, pedestrian loading and unloading areas, or notification signage as these items will be considered incidental to the Pedestrian Transport Service.

*Audible Warning Devices* will be measured and paid under the ADA Compliant Pedestrian Traffic Control Devices special provision.

Payment will be made under:

| <b>Pay Item</b>                         | <b>Pay Unit</b> |
|---|-----------------|
| Pedestrian Transport Service (per trip) | Each            |

## **MOBILIZATION**

### **Description**

This work consists of preparatory work and operations to mobilize personnel, materials and equipment to the project site.

### Measurement and Payment

*Mobilization* will be paid as contract lump sum price.

Partial payments for *Mobilization* will be made with the first and second partial pay estimates paid on the contract and will be made at the rate of 50% lump sum price on each of these partial pay estimates, provided the amount bid for *Mobilization* does not exceed 5% of the total amount bid for the contract. Where the amount bid for *Mobilization* exceeds 5% of the total amount bid for the contract, 2.5% of the total amount bid will be paid on each of the first 2 partial pay estimates. That portion exceeding 5% will be paid on the last partial pay estimate.

As an exception to the above, where the work covered by the contract is limited exclusively to the resurfacing of an existing pavement, payment of the entire lump sum price for *Mobilization* will be made with the first partial pay estimate paid on the contract, provided the amount bid does not exceed 5% of the total amount bid for the contract. Where the amount bid for *Mobilization* exceeds 5% of the total amount bid for the contract, 5% of the total amount bid will be paid on the first partial pay estimate. That portion exceeding 5% will be paid on the last partial pay estimate.

Such price and payment includes, but is not limited to, the movement of personnel, equipment, supplies and incidentals to the project site, for the establishment of offices, buildings and other facilities necessary for work on the project; the removal and disbandment of those personnel, equipment, supplies, incidentals or other facilities that were established for the prosecution of work on the project; and for all other work and operations that shall be performed for costs incurred before beginning work on the various items on the project site.

Payment will be made under:

### **Pay Item**

Mobilization

### **Pay Unit**

Lump Sum

## **CONSTRUCTION STAKES, LINES AND GRADE**

### **Description**

When required by the contract, provide all construction layout, surveying, stakeout, supplemental surveying and engineering necessary for the proper control of construction operations in accordance with this section and the *Manual for Construction Layout*. Provide

a stakeout of areas where an environmental permit is required before performing any construction in or adjacent to these areas. Stake out limits of the permitted work areas according to the approved permit drawings. Provide clear delineation by use of highly visible flagging. Insure construction limits do not exceed approved permitted work areas. Immediately notify the Engineer of any variations of the stakeout limits when compared to the approved permit drawings.

The *Manual for Construction Layout* and the *Guidelines for Drainage Studies and Hydraulic Design* may be obtained from the Contract Standards and Development Unit.

## **Construction Methods**

### **A. General**

Furnish personnel who are under the direct supervision of an engineer or land surveyor licensed by the State of North Carolina in conformance with NCGS § 89C.

Furnish personnel who are experienced in highway construction surveying and are capable of accurately establishing all line and grade points necessary to complete the work in accordance with the plan dimensions within the precision established in the *Manual for Construction Layout*. Consult the Engineer for clarifications of the plans.

Perform work in safe manner and conform to Article 107-21. Perform all flagging operations in accordance with Section 1150.

The Contractor may elect to use global positioning system (GPS) surveying, either static or kinematic. Perform GPS surveys with same or higher order of accuracy as conventional surveys detailed in the *Manual for Construction Layout*. Department projects use a localized coordinate system developed by the Location and Surveys Unit specifically for each individual project. Obtain the control information that the Location and Surveys Unit used in establishing the localized coordinate system, specifically the rotation, scaling, translation and coordinates for the azimuth pairs. Newly developed GPS procedures and techniques that do not conform with this section may be used, if approved.

Investigate the plan horizontal alignment, vertical profile and superelevation of existing facilities that tie to proposed roadways. Investigate 100 ft beyond all paving limits and revise grades as needed to establish smooth transitions to the existing facilities.

Tie existing driveways to proposed facilities within the limits detailed in the plans and within the gradients detailed in the *Roadway Standard Drawings*.

The Engineer reserves the right to check, correct where necessary or require any layout work to be revised. The Engineer will perform checks to ensure the roadway, structure and incidental items are surveyed in accordance with the plans and the *Manual for Construction Layout*.

The Department's review of the Contractor's work in no way relieves the Contractor of responsibility for conformance with the contract. Failure by the Engineer or inspector to point out unsatisfactory work, from lack of discovery or for any other reason, in no way prevents later rejection or corrections to the unsatisfactory work, when discovered. No claims will be allowed for losses suffered due to any necessary removals or repairs resulting from the unsatisfactory work.

When requested by the Engineer, check the accuracy of the stakeout. Correct all inaccuracies in the construction stakeout before performing the affected work.

When the Contractor proposes an alteration to the plans to rectify a construction stakeout error, submit alterations to the Engineer for review and approval. Include design calculations and drawings sealed by an engineer licensed by the State of North Carolina along with a narrative describing justification for the alteration.

When surveying is required, which in the Contractor's opinion could not have been reasonably anticipated and is not customary or inherent to the construction industry, notify the Engineer in writing before beginning such surveying. After investigation, the following will occur:

1. When the Engineer determines that the surveying could not have been anticipated or is not customary or inherent to the construction industry, the Contractor will be notified in writing that the work is considered supplemental and measurement and payment will be made in accordance with Article 801-3.
2. When the Engineer determines that the surveying could have been anticipated or is customary or inherent to the construction industry, he will notify the Contractor, in writing, of his determination. If the Contractor intends to file a claim for additional compensation by reason of such surveying, notify the Engineer in writing of such intent before beginning any of the alleged supplemental surveying. Strictly adhere to Subarticle 104-8(B).

#### B. Records

Submit proposed method for setting up survey books or electronic data files to the Engineer before beginning work to assure clarity and adequacy.

Promptly make available to the Engineer all requested survey records.

Provide updates to the Engineer monthly of the electronic and/or manuscript survey records. Submit remaining records upon completion of the work. Attest the work was performed in accordance with the contract by providing all receivable information signed by an engineer or land surveyor licensed by the State of North Carolina and in responsible charge.

#### C. Horizontal and Vertical Control

The Department will furnish and set horizontal baseline control on approximate 1,000 ft intervals and vertical control on approximate 2,500 ft intervals within the project limits. Obtain a copy of the electronic survey control files from the Engineer. Clearing limits may be established during original traverse of baseline control provided the accuracy ratio does not exceed 1 ft per 5,000 ft of perimeter and all Department established baseline control is protected and preserved during clearing operations. Before performing any additional construction layout, verify the horizontal baseline control by a closed traverse survey or alternate approved method. The accuracy ratio shall not exceed an error of closure of 1 ft per 20,000 ft of perimeter. Verify the vertical control by performing a closed loop survey using differential leveling. For the error of closure, do not exceed 0.05 ft times the square root of the miles:

$$\text{Error of Closure} \leq 0.05 \text{ ft} \sqrt{(x) \text{ miles}}$$

Notify the Engineer of any discrepancies in either the horizontal or vertical control. Reference, outside of the proposed construction limits and evenly distributed throughout the project limits, a minimum of 50% of the Department's horizontal and vertical control. Provide reference information to the Engineer.

If GPS is used, occupy the azimuth pairs with the base station during verification of baseline control, otherwise, occupy baseline. Verify remaining baseline control using a Rover. Submit coordinate data showing differences between supplied baseline coordinates and field obtained GPS coordinates. Include report detailing the use of preliminary input data, specifically rotation, scaling and translation.

Using the horizontal and vertical control established by the Department, provide surveying necessary to construct all roadway, structure and miscellaneous items as detailed in the plans. Perform staking in accordance with the *Manual for Construction Layout*. Layout the work and provide all measurements that may be required for the execution of the construction in conformity with the contract.

#### D. Right of Way, Control of Access and Easements

The Department will establish the location of all proposed right-of-way markers, control of access markers and permanent drainage easements.

Reference the location of all proposed markers and permanent drainage easements. Restore right-of-way and control-of-access monument positions after completion of construction. Set a right-of-way or control-of-access monument cap on an 18" long #5 reinforcing bar and a carsonite witness stake unless concrete right-of-way and control of access markers are specified in the contract. The Department will provide the monument cap and witness stake. Re-establish location of permanent drainage easements after completion of construction and install an 18" long #5 reinforcing bar for monumentation.

Validate the position of the markers and permanent drainage easement locations with those detailed in the plans. Report any discrepancies to the Engineer.

## E. Cross sections for Earthwork Quantities

The Engineer may elect to obtain cross sections either by hand or aerial methods. If the Engineer elects to obtain cross sections by aerial methods, furnish materials and install photogrammetric control panels in accordance with the *Manual for Construction Layout* or as otherwise directed.

### 1. Borrow Pits

Establish a baseline alignment or establish horizontal and vertical control on approximate 1,000 ft intervals within each borrow pit, as necessary, to allow the Engineer to obtain measurement of quantities for payment. Stake these alignments just before field cross sections are taken by the Engineer for original, intermediate and final cross sections.

### 2. Roadway

Unless otherwise directed, stakeout the survey lines for original and final cross sections. The stakeout of the survey lines will consist of surveying and staking all alignments within the plans on 50 ft intervals, including all cardinal points. When the alignments are inaccessible, install offset alignments. Begin the staking of these alignments within 48 hours of the Engineer's notice to proceed. Upon the completion of the entire project, with the exception of the survey line for final cross sections, and upon request by the Contractor, the project may be accepted for maintenance by the Department, excluding the survey line.

## F. Drainage and Utility Construction Systems

### 1. General

Where underground conflicts are suspected, contact utility owners and locate all utilities horizontally and vertically. Consider the utilities' locations and elevations in the layout of the drainage systems and utility construction systems. Utilities may exist that are not depicted in the plans.

Submit 2 copies of all layout drawings for drainage systems and utility construction systems to the Engineer for his review and approval. The Engineer will note the review and approval by adding an appropriate note to the drawings along with the date and his signature. The Engineer will retain a copy of the drawings and a copy will be returned to the Contractor.

### 2. Drainage Systems

Provide construction layout of drainage systems, as depicted in the plans and in accordance with the *Guidelines for Drainage Studies and Hydraulic Design*. Consider the locations and elevations of all existing and proposed utilities, proposed utility



construction and existing and proposed drainage systems, in the layout of the drainage system. Modifications of the drainage plan may be necessary to properly collect and transport water. Advise the Engineer if modifications are needed to achieve the original design functionality and the intent of the drainage plans, such as adjusting the location of a drainage structure, adding a drainage structure and increasing or decreasing pipe lengths. The Engineer will review any major modifications.

Provide layout drawing of the drainage system including calculations of flow line elevations for all drainage structures; pipe invert elevations, both inlet and outlet of the drainage structure; grade of each pipe within the drainage system; elevation of any existing facility connection, such as stream or pipe; if necessary; headwall location, if depicted in the plans; and locations and elevations of any existing or proposed utilities to the Engineer for review and approval at least 7 days before beginning work on the drainage system. Modification of the submitted drainage layout drawing by the Engineer will not eliminate the Contractor's liability for the accuracy of the information submitted. Any restaking or additional staking required to conform with the approved drainage layout drawing is incidental to the work.

### 3. Utility Construction

Provide utility construction layout as detailed in the contract. Consider the locations and elevations of all existing and proposed utilities, proposed utility construction and existing and proposed drainage systems in the layout of the utility construction. Advise the Engineer if modifications to the utility construction plans are necessary. The Engineer will review any major modifications.

Provide layout drawing of the utility construction system including elevations of any existing utilities, drainage systems and/or proposed drainage systems to the Engineer for review and approval at least 7 days before beginning work on the utility construction system. Modification of the submitted utility construction layout drawing by the Engineer will not eliminate the Contractor's liability for the accuracy of the information submitted. Any restaking or additional staking required to conform with the approved utility layout drawing is incidental to the work.

### G. Structures

Provide surveying and calculations necessary to construct structures in accordance with the plans. Provide staking in accordance with the *Manual for Construction Layout*. Establish horizontal alignment of entire structure. Set at least one benchmark adjacent to the structure site that will be retained throughout the structure construction. The Engineer will furnish the finished construction elevations for use in determining the required construction elevations for bridges. Provide method for computing buildups over beams, screed grades and overhang form elevations to the Engineer for review before staking these items to assure clarity and adequacy.

Submit 2 copies of structure layout drawings to the Engineer for his review and approval. The Engineer will independently verify and accept the structure layout before the structure construction may begin. The Engineer will note the review and approval by adding an appropriate note to the drawings along with the date and his signature. The Engineer will retain a copy of the drawings and a copy will be returned to the Contractor. If structure phasing or damaged stakes require significant resurveying during the life of the structure, provide revised layout drawing for the Engineer's verification and acceptance.

#### H. Signs

Stake horizontal locations of all overhead and Type A and B ground-mounted signs for Engineer's verification before obtaining S-dimensions. Measure or calculate overhead and ground-mounted sign S-dimensions in accordance with the plans and the *Manual for Construction Layout*. Perform investigation of proposed sign locations and notify the Engineer of any obstructions, either existing or proposed, that may interfere with the proposed sign installation. Provide an 11" x 17" drawing depicting the theoretical finished section at each proposed overhead sign assembly location. Include within the submittal the roadway, shoulder and slope gradients. Include the proposed finish elevations of the edges of pavement, each lane line and the ground at each proposed sign footing location. Set a slope stake at each proposed overhead sign location to ensure the slopes are constructed as calculated and detailed in the above submittal. Submit sign information to the Engineer. Stake horizontal locations of all ground mounted and barrier mounted signs.

#### **Measurement and Payment**

*Construction Surveying* will be paid at the contract lump sum price for the work detailed in this section.

Partial payments will be made on each particular payment estimate based upon the percentage complete of *Construction Surveying* as determined by the Engineer. The Contractor shall submit a certified statement each month indicating the percentage of *Construction Surveying* work completed. The Engineer will determine if the amount indicated is reasonably correct and the Engineer will pay accordingly on the next partial pay estimate.

Establishment of baseline alignments within each borrow pit is incidental to *Construction Surveying*.

*Supplemental Field Surveying* will be measured and paid as the actual number of hours the Contractor's survey crew is actively engaged in performing the following:

- A. Investigative surveying, in excess of 100 ft of horizontal alignment, vertical profile and superelevation of existing facilities that tie to proposed roadways.
- B. Surveying specifically for the relocation of utility conflicts.
- C. Investigation of a previous stakeout when such stakeout is found to be correct.
- D. Surveying that the Engineer has deemed could not have been anticipated or is not customary or inherent to the construction industry.

- E. The stakeout of the roadway survey alignments for intermediate cross sections when deemed necessary by the Engineer.

If the Engineer determines intermediate cross sections are not necessary for computing partial payments, the intermediate stakeout of the survey line is incidental to the work.

*Supplemental Surveying Office Calculations* will be measured and paid as the actual number of hours the Contractor's survey personnel is actively engaged in performing office calculations specifically associated with Subarticles 801-3(A) through 801-3(E).

*Supplemental Surveying Office Calculations* will be paid at the stated price of \$60.00 per hour. *Supplemental Field Surveying* will be paid at the stated price of \$110.00 per hour. The payment includes furnishing personnel, all surveying equipment, stakes, layout drawings, calculations, stakeout records and any materials and equipment necessary to perform the surveying and engineering work.

If the Engineer directs that the accuracy of the original stakeout be checked and the stakeout is found to be in error, perform the work required to check and correct the stakeout at no cost to the Department.

*Exploratory Excavation* required to locate a utility will be paid in accordance with Article 104-7.

*Work Zone Signs (Portable)* will be paid in accordance with Article 1110-4.

*Flaggers* will be paid by either the hour or day in accordance with Article 1150-4.

Any payments for *Supplemental Field Surveying* or *Supplemental Surveying Office Calculations* required by this section will be paid on the appropriate partial payment estimate.

Payment will be made under:

| <b>Pay Item</b>                            | <b>Pay Unit</b> |
|--|-----------------|
| Construction Surveying                     | Lump Sum        |
| Supplemental Field Surveying               | Hour            |
| Supplemental Surveying Office Calculations | Hour            |

## **COMPREHENSIVE GRADING**

### **Description**

The work covered by this section consists of all elements of work covered by Sections 200, 225, 230, 235, 250, 500 and 560, except that the requirements of the above-referenced sections pertaining to measurement and payment will not apply unless specific reference is made to such.

## **Construction Methods**

Perform the work in accordance with Sections 200, 225, 230, 235, 250, 500 and 560.

## **Measurement and Payment**

Seeding and mulching of all borrow sources will be measured and paid at the contract unit prices for such items established in the contract.

Payment for material that the Engineer directs the Contractor to obtain from borrow sources to backfill box culverts, drainage structures or structure bents will be made in accordance with Article 104-7.

Payment for material that the Engineer directs to be removed beyond the limits of the original slope stakes will be made in accordance with Article 104-3.

*Grading* will be paid at the contract lump sum price. Partial payments will be equal to the percentage of such item that is complete as estimated by the Engineer. No separate payment will be made for clearing and grubbing, shoulder and fill slope material or draining borrow sources as such work will be incidental to the work covered by this section.

Clearing and Grubbing work that is directed to be performed on areas outside the limits originally staked or beyond the limits of the right of way or easements shown on the original plans will be measured and paid at the contract unit price per acre for *Supplementary Clearing and Grubbing*. All measurements will be made horizontally. Where the contract does not include this item, a unit price per acre will be established by supplemental agreement.

Payment will be made under:

| <b>Pay Item</b>                     | <b>Pay Unit</b> |
|-------------------------------------|-----------------|
| Grading                             | Lump Sum        |
| Supplementary Clearing and Grubbing | Acre            |

## **EARTHWORK (FILL)**

### **Description**

Hauling, placement, and grading, including fine grading, of fill material should be considered incidental to this line item. The Contractor shall perform grading as shown on the construction plans and typical cross-sections. Field conditions may dictate necessary adjustments to grading plans. In such cases, the Engineer shall indicate adjustments to the Contractor. The project will utilize fill material hauled in from offsite.

### **Materials**



Fill material shall be classified as dead/marine sand.

**Construction Methods**

Fine grading shall be performed to the indicated elevation as per Plans. Prior to planting, final grading in all areas where planting is required shall be ripped to a depth of 6 inches with excavator teeth.

Tolerances of grading: +/- 0.2 ft.

**Measurement and Payment**

The quantity to be measured for payment shall be the total volume of fill material which has been graded.

Payment will be based on volume of graded material. Payment will not be issued for double handling of material. Payment will be made in accordance with the Bid Schedule to the nearest cubic yard of graded material and shall include all necessary surveying, excavation, shaping, finishing, transportation, and disposal in accordance with the Plans and Specifications.

Payment as specified above shall be considered full compensation for all labor, materials, equipment, and incidentals necessary to complete the Work.

Payment will be made under:

**Pay Item**

Earthwork (Fill)

**Pay Unit**

Cubic Yard

**PSP-1 3-D GEOTEXTILE (PERMANENT SOIL REINFORCEMENT MAT):**

**Description**

This work consists of furnishing and placing the 3-D Geotextile Permanent Soil Reinforcement Mat, of the type specified, over previously prepared areas as directed.

**Materials**

The product shall be a high performance turf reinforcement mat that is a three-dimensional, lofty, woven polypropylene geotextile designed for erosion control.

The mat shall have the following minimum physical properties:

| PROPERTY                      | TEST METHOD | ENGLISH                 |
|-------------------------------|-------------|-------------------------|
| Mass/Unit Area                | ASTM D-6566 | 13.5 oz/yd <sup>2</sup> |
| Thickness                     | ASTM D-6525 | 0.4 in                  |
| Light Penetration (% Passing) | ASTM D-6567 | 15% (Max)               |
| Color                         | Visual      | Green                   |
|                               |             |                         |

|                                    |                |                      |
|------------------------------------|----------------|----------------------|
| Tensile Strength (Grab)            | ASTM D-6818    | 4000 x 3000<br>lb/ft |
| Elongation                         | ASTM D-6818    | 40 x 35%             |
| Resiliency                         | ASTM D-6524    | 80%                  |
| Flexibility                        | ASTM D-6575    | 0.534 in-lb<br>(avg) |
| UV Resistance % Retained 6000 hrs  | ASTM D-4355    | 90%                  |
| UV Resistance % Retained 10000 hrs | ASTM D-4355    | 85%                  |
| ROLL SIZES                         | 8.5 ft x 90 ft |                      |

**Construction Methods**

Matting shall be installed in accordance with manufacturer’s specifications.

All areas to be protected with the mat shall be brought to final grade and sodded in accordance with the construction drawings and the *Standard Specifications*. The surface of the soil shall be smooth, firm, stable and free of rocks, clods, roots or other obstructions that would prevent the mat from lying in direct contact with the soil surface. Areas where the mat is to be placed will be sodded per the details and notes on the construction drawings.

**Measurement and Payment**

3-D Geotextile (Permanent Soil Reinforcement Mat) will be measured and paid for as the actual number of square yards measured along the surface of the ground over which Permanent Soil Reinforcement Mat is installed and accepted. Overlaps will not be included in the measurement, and will be considered as incidental to the work. Such payment shall be full compensation for furnishing and installing the mat, including overlaps, and for all required maintenance.

Payment will be made under:

3-D Geotextile (Permanent Soil Reinforcement Mat).....SY

**GEOSYNTHETICS**

**Description**

Provide geosynthetics for subsurface drainage, separation, stabilization, reinforcement, erosion control, filtration and other applications in accordance with the contract. Use geotextiles, geocomposite drains and geocells that are on the NCDOT APL. Prefabricated geocomposite drains include sheet, strip and vertical drains (PVDs), i.e., “wick drains” consisting of a geotextile attached to and/or encapsulating a plastic drainage core. Geocells are comprised of ultrasonically welded polymer strips that when expanded form a 3D honeycomb grid that is typically filled with material to support vegetation. Define geotextiles, geogrids, geocomposite drains and geocells as geosynthetics.

If necessary or required, hold geotextiles, geogrids and sheet drains in place with new wire staples, i.e., “sod staples” that meet Subarticle 1060-8(D) or new anchor pins. Use steel anchor pins with a diameter of at least 3/16 inch and a length of at least 18 inches and with a point at one end and a head at the other end that will retain a steel washer with an outside diameter of at least 1.5 inches.

### **Handling and Storing**

Load, transport, unload and store geosynthetics so geosynthetics are kept clean and free of damage. Label, ship and store geosynthetics in accordance with Section 7 of AASHTO M 288. Geosynthetics with defects, flaws, deterioration or damage will be rejected. Do not unwrap geosynthetics until just before installation. Do not leave geosynthetics exposed for more than 7 days before covering except for geotextiles for temporary wall faces and erosion control.

### **Certifications and Identification**

Provide Type 1, Type 2 or Type 4 material certifications in accordance with Article 106-3 for geosynthetics except certifications are not required for Type 1 through Type 4 geotextiles marked with the product name. Define “machine direction” (MD), “cross-machine direction” (CD) and “minimum average roll value” (MARV) in accordance with ASTM D4439. Provide certifications with MARV for geosynthetic properties as required. Test geosynthetics using laboratories accredited by the Geosynthetic Accreditation Institute (GAI) to perform the required test methods. Sample geosynthetics in accordance with ASTM D4354.

Geotextiles will be identified by the product name printed directly on the geotextile by the Manufacturer. For all other geosynthetics and when geotextiles are not marked with a product name, geosynthetics will be identified by the product label attached to the original packaging or the geosynthetic itself by the Manufacturer.

Allow the Engineer to visually verify geosynthetic products before installation. Open packaged geosynthetics just before use in the presence of the Engineer to confirm the correct product. Geotextile rolls without the product name printed on the geotextile or the product label affixed to the geotextile or roll core by the Manufacturer will be rejected. Any other geosynthetics that are unwrapped, missing original packaging or previously opened may not be used unless approved by the Engineer.

### **Geotextiles**

When required, sew geotextiles together in accordance with Article X1.1.4 of AASHTO M 288. Provide sewn seams with seam strengths meeting the required strengths for the geotextile type and class specified.

Provide geotextile types and classes in accordance with the contract.

Use woven or nonwoven geotextiles with properties that meet Table 1056-1.

| <b>TABLE 1056-1<br/>GEOTEXTILE REQUIREMENTS</b> |  |   |                           |                                |  |                    |
|---|--|---|---------------------------|--------------------------------|--|--------------------|
| <b>Property<sup>A</sup></b>                     | <b>Requirement (MARV<sup>A</sup>)</b>                                  |   |                           |                                |  | <b>Test Method</b> |
|   | <b>Type 1</b>  | <b>Type 2</b>   | <b>Type 3<sup>B</sup></b> | <b>Type 4</b>                  | <b>Type 5<sup>C</sup></b>  |                    |
| <i>Typical Application</i>                      | <i>Shoulder Drains</i>   | <i>Under Rip Rap</i>  | <i>Silt Fence Fabric</i>  | <i>Soil Stabilization</i>      | <i>Temporary Walls</i>   |                    |
| Elongation (MD & CD)                            | ≥ 50%  | ≥ 50%   | ≤ 25%                     | < 50%                          | < 50%  | ASTM D4632         |
| Grab Strength (MD & CD)                         | Table 1 <sup>D</sup> , Class 3   | Table 1 <sup>D</sup> , Class 1  | 100 lb <sup>A</sup>       | Table 1 <sup>D</sup> , Class 3 | -  | ASTM D4632         |
| Tear Strength (MD & CD)                         |  |   | -                         |                                |  | ASTM D4533         |
| Puncture Strength                               |  |   | -                         |                                |  | ASTM D6241         |
| Ultimate Tensile Strength (MD & CD)             | -  | -   | -                         | -                              | 2,400 lb/ft <sup>A</sup> (unless required otherwise in the contract) | ASTM D4595         |
| Permittivity                                    | Table 2 <sup>D</sup> , 15% to 50% <i>in Situ</i> Soil Passing 0.075 mm | Table 6 <sup>D</sup> , 15% to 50% <i>in Situ</i> Soil Passing 0.075mm | Table 7 <sup>D</sup>      | Table 5 <sup>D</sup>           | 0.20 sec <sup>-1,A</sup>   | ASTM D4491         |
| Apparent Opening Size                           |  |   |                           |                                | 0.60 mm <sup>E</sup>   | ASTM D4751         |
| UV Stability (Retained Strength)                |  |   |                           |                                | 70% <sup>A</sup> (after 500 hr of exposure)                          | ASTM D4355         |

- A.** MD, CD and MARV per Article 1056-3.
- B.** Minimum roll width of 36 inches required.
- C.** Minimum roll width of 13 feet required.
- D.** AASHTO M 288
- E.** Maximum average roll value.

### **Geocomposite Drains**

Provide geocomposite drain types in accordance with the contract and with properties that meet Table 1056-2.



| <b>TABLE 1056-2<br/>GEOCOMPOSITE DRAIN REQUIREMENTS</b>                              |   |  |   |                    |
|--|---|--|---|--------------------|
| <b>Property</b>  | <b>Requirement</b>  |  |   | <b>Test Method</b> |
|  | <b>Sheet Drain</b>  | <b>Strip Drain</b>   | <b>Wick Drain</b>   |                    |
| Width  | ≥ 12"<br>(unless required otherwise in the contract)      | 12" ±1/4"  | 4" ±1/4"  | N/A                |
| In-Plane Flow Rate <sup>A</sup><br>(with gradient of 1.0 and 24-hour seating period) | 6 gpm/ft<br>@ applied normal compressive stress of 10 psi | 15 gpm/ft<br>@ applied normal compressive stress of 7.26 psi | 1.5 gpm <sup>B</sup><br>@ applied normal compressive stress of 1.45 psi | ASTM D4716         |

A. MARV does not apply to thickness

B. Per foot of width tested

For sheet and strip drains, use accessories (e.g., pipe outlets, connectors, fittings, etc.) recommended by the Drain Manufacturer. Provide sheet and strip drains with Type 1 geotextiles heat bonded or glued to HDPE, polypropylene or high impact polystyrene drainage cores that meet Table 1056-3.

| <b>TABLE 1056-3<br/>DRAINAGE CORE REQUIREMENTS</b> |                           |                    |                     |
|--|---------------------------|--------------------|---------------------|
| <b>Property</b>                                    | <b>Requirement (MARV)</b> |                    | <b>Test Method</b>  |
|  | <b>Sheet Drain</b>        | <b>Strip Drain</b> |                     |
| Thickness  | 1/4"                      | 1"                 | ASTM D1777 or D5199 |
| Compressive Strength                               | 40 psi                    | 30 psi             | ASTM D6364          |

For wick drains with a geotextile wrapped around a corrugated drainage core and seamed to itself, use drainage cores with an ultimate tensile strength of at least 225 lbs. per 4 inch width in accordance with ASTM D4595 and geotextiles with properties that meet Table 1056-4.

| <b>TABLE 1056-4<br/>WICK DRAIN GEOTEXTILE REQUIREMENTS</b> |   |                    |
|--|---|--------------------|
| <b>Property</b>  | <b>Requirement</b>                            | <b>Test Method</b> |
| Elongation   | ≥ 50%   | ASTM D4632         |
| Grab Strength  | Table 1 <sup>A</sup> ,                        | ASTM D4632         |
| Tear Strength  |   | ASTM D4533         |
| Puncture Strength  |   | ASTM D6241         |
| Permittivity   | 0.7 sec <sup>-1</sup> . <sup>B</sup>          | ASTM D4491         |
| Apparent Opening Size (AOS)                                | Table 2 <sup>A</sup> ,                        | ASTM D4751         |
| UV Stability (Retained Strength)                           | > 50% <i>in Situ</i> Soil<br>Passing 0.075 mm | ASTM D4355         |

A. AASHTO M 288.

B. MARV per Article 1056-3

For wick drains with a geotextile fused to both faces of a corrugated drainage core along the peaks of the corrugations, use wick drains with an ultimate tensile strength of at least 1,650 lbs/ft in accordance with ASTM D4595 and geotextiles with a permittivity, AOS and UV stability that meet Table 1056-4.

## Geocells

Manufacture geocells from virgin polyethylene resin with no more than 10% rework, also called “regrind”, materials. Use geocells made from textured and perforated HDPE strips with an open area of 10% to 20% and properties that meet Table 1056-5.

| Property   | Minimum Requirement | Test Method  |
|--|---------------------|--|
| Cell Depth   | 4"                  | N/A  |
| Sheet Thickness  | 50 mil -5%, +10%    | ASTM D5199   |
| Density  | 58.4 lb/cf          | ASTM D1505   |
| Carbon Black Content   | 1.5%                | ASTM D1603 or D4218  |
| ESCR <sup>A</sup>  | 5000 hr             | ASTM D1693   |
| Coefficient of Direct Sliding<br>(with material that meets<br>AASHTO M 145 for soil<br>classification A-2) | 0.85                | ASTM D5321   |
| Short-Term Seam (Peel)<br>Strength (for 4" seam)   | 320 lb              | USACE <sup>C</sup> Technical<br>Report GL-86-19,<br>Appendix A |
| Long-Term Seam (Hang)<br>Strength <sup>B</sup> (for 4" seam)   | 160 lb              |  |

A. Environmental Stress Crack Resistance.

B. Minimum test period of 168 hours with a temperature change from 74°F to 130°F in 1-hour cycles.

C. US Army Corps of Engineers

Provide geocell accessories (e.g., stakes, pins, clips, staples, rings, tendons, anchors, deadmen, etc.) recommended by the Geocell Manufacturer.

## **CONCRETE CURB, CURB AND GUTTER, CONCRETE GUTTER, SHOULDER BERM GUTTER, CONCRETE EXPRESSWAY GUTTER AND CONCRETE VALLEY GUTTER**

### **Description**

Construct Portland cement concrete curb, concrete curb and gutter, concrete gutter, shoulder berm gutter, concrete expressway gutter and 4" concrete valley gutter as shown in the contract.

## Materials

Refer to Division 10 of the *2018 Standard Specifications*.

| Item                              | Section        |
|-----------------------------------|----------------|
| Curing Agents                     | 1026           |
| Joint Fillers                     | 1028-1         |
| Joint Sealers                     | 1028-2, 1028-3 |
| Portland Cement Concrete, Class B | 1000           |

## Construction Methods

### A. General

Construct concrete in accordance with Section 825, except as provided herein.

Give surface a light broom finish with brush marks parallel to the curb line or gutter line.

Prepare foundation and compact base or subgrade to the degree required by the applicable section of the *Standard Specifications* before placing forms.

### B. Forms

Use forms that have no more than 1/8" in 10 ft deflection from true line horizontally and vertically to adequately support the concrete and construction equipment.

Obtain approval before placing concrete.

### C. Joints

Locate joints as shown in the plans except as provided herein.

Space joints no closer than 5 ft.

Locate joints to line up with the joints in concrete pavement when placed adjacent to concrete pavement.

Form grooved contraction joints as required by Subarticle 825-10(B).

Construct grooved butt joint between the work and adjacent pavement except where expansion joints are required by the plans. Form butt joints as required by Subarticle 825-10(B) for grooved contraction joints and seal.

Seal all joints except for joints in curb sections not having an integral gutter.

Fill joints in gutter with joint sealer to the top surface of the gutter.

Seal joints before backfilling or performing adjacent operations.

D. Surface Tolerances

Finish surface within 1/4" when checked longitudinally with a 10 ft straightedge.

E. Backfilling

Do not place backfill or pavement adjacent to the curb, curb and gutter, gutter, shoulder berm gutter, expressway gutter or concrete valley gutter until at least 3 curing days, as defined in Article 825-9, have elapsed.

Complete backfill within 4 calendar days after the completion of the 3 day curing period unless otherwise approved.

Compact backfill to an approved density.

F. Opening to Traffic

Vehicles may be permitted on the completed work after the following curing days, as defined in Article 825-9, have elapsed. For regular strength concrete, cure for at least 7 curing days. For high early strength concrete, cure for at least 3 curing days.

**Measurement and Payment**

   " x    " *Concrete Curb* will be measured and paid in linear feet, accepted in place, along the surface of the top of the curb.

   '    " *Concrete Curb and Gutter* will be measured and paid in linear feet, accepted in place. Measurement will be made along the surface of the top of the curb.

   ' *Concrete Gutter* will be measured and paid in linear feet accepted in place. Measurement will be made along the surface of the top of the curb.

*Shoulder Berm Gutter* will be measured and paid in linear feet, accepted in place. Measurement will be made along the surface of the top of the curb.

*Concrete Expressway Gutter* will be measured and paid in linear feet, accepted in place. Measurement will be made along the surface of the top of the curb.

*Concrete Valley Gutter* will be measured and paid in linear feet, accepted in place. Measurement will be made along the surface of the top of the curb.

Work includes providing all materials, placing all concrete, excavating and backfilling,



forming, finishing, constructing and sealing joints, and all incidentals necessary to complete the work.

Payment will be made under:

| <b>Pay Item</b>                    | <b>Pay Unit</b> |
|------------------------------------|-----------------|
| ___" x ___" Concrete Curb          | Linear Foot     |
| ___' ___" Concrete Curb and Gutter | Linear Foot     |
| ___' Concrete Gutter               | Linear Foot     |
| Shoulder Berm Gutter               | Linear Foot     |
| Concrete Expressway Gutter         | Linear Foot     |
| Concrete Valley Gutter             | Linear Foot     |

## **CONCRETE SIDEWALKS, DRIVEWAYS AND CURB RAMPS**

### **Description**

Construct Portland cement concrete sidewalks, driveways and curb ramps in accordance with the contract.

### **Materials**

Refer to Division 10 of the *2018 Standard Specifications*.

| <b>Item</b>                       | <b>Section</b> |
|-----------------------------------|----------------|
| Curing Agents                     | 1026           |
| Joint Fillers                     | 1028-1         |
| Joint Sealers                     | 1028-2, 1028-3 |
| Portland Cement Concrete, Class B | 1000           |

Detectable warnings may be precast concrete blocks or other approved material. Construct detectable warning truncated domes in accordance with details and plan.

### **Construction Methods**

Where it is necessary to remove a portion of existing sidewalks or driveways, saw a neat edge along the pavement to be retained approximately 2" deep with a concrete saw before breaking the adjacent pavement away.

Construct concrete in accordance with Section 825 and give a sidewalk finish, except as otherwise provided herein.

Broom the concrete surface in a transverse direction to traffic. Make joint spacing no less than 5 ft. Where existing sidewalks are being widened, line up new transverse joints with existing joints in the adjacent sidewalk. Seal expansion joints where sidewalk and curb ramps

are placed adjacent to concrete curb and/or gutter. Do not seal grooved joints.

Do not place backfill adjacent to the sidewalk, driveway or curb ramp until at least 3 curing days, as defined in Article 825-9, have elapsed unless otherwise approved. Compact backfill to a degree comparable to the adjacent undisturbed material.

Do not place vehicles on the completed work until 7 curing days, as defined in Article 825-9, have elapsed. When high early strength concrete is used, vehicles will be permitted on the completed work after 3 curing days have elapsed.

Install detectable warnings 24" in length of truncated dome paving blocks along the bottom of the curb ramps in accordance with the plans and details. The surface of the domes shall contrast visibly with adjoining surfaces, either light-on-dark or dark-on-light sequence covering the entire ramp.

### **Measurement and Payment**

\_\_\_" *Concrete Sidewalk* will be measured and paid in square yards, measured along the surface of the completed and accepted work. Such price includes, but is not limited to, excavating and backfilling, sawing the existing sidewalk, furnishing and placing concrete, and constructing and sealing joints.

\_\_\_" *Concrete Driveway* will be measured and paid in square yards, measured along the surface of the completed and accepted work. Such price includes, but is not limited to, excavating and backfilling, sawing the existing driveway, furnishing and placing concrete, and constructing and sealing joints.

*Concrete Curb Ramps* will be measured and paid in units of each. Such price includes, but is not limited to, excavating and backfilling, sawing the existing sidewalk or driveway, furnishing and placing concrete, curb and gutter, constructing and sealing joints and furnishing and installing truncated domes shown in the *Roadway Standard Drawings*.

Payment will be made under:

| <b>Pay Item</b>        | <b>Pay Unit</b> |
|------------------------|-----------------|
| ___" Concrete Sidewalk | Square Yard     |
| ___" Concrete Driveway | Square Yard     |
| Concrete Curb Ramps    | Each            |

### **REMOVE AND RESET EXISTING GUARDRAIL AND GUIDERAIL**

#### **Description**

Remove and reset existing guardrail, guiderail and anchors of any type at locations shown in the plans and the contract.

## **Construction Methods**

Exercise care not to damage adjoining structures or other appurtenances. Fill any void created by post or anchor removal and repair all damage at no cost to the Department. Reset existing guardrail and guiderail in accordance with Articles 862-3 and 865-3. Reset guardrail and guiderail in a condition that is equal to or better than the condition that exists before the guardrail and guiderail is removed. Replace any of the guardrail and guiderail components unnecessarily damaged.

## **Measurement and Payment**

*Remove and Reset Existing Guardrail* will be measured and paid in linear feet of guardrail and anchors that has been removed, reset and accepted. Measurement will be made after the guardrail has been reset.

*Remove and Reset Existing Guiderail* will be measured and paid in linear feet of guiderail and anchors that has been removed, reset and accepted. Measurement will be made after the guiderail has been reset.

Such price will include, but is not limited to, removing and resetting the guardrail, guiderail and anchors and for furnishing all equipment, labor and incidentals necessary to complete the work.

Payment will be made under:

| <b>Pay Item</b>                              | <b>Pay Unit</b> |
|--|-----------------|
| Remove and Reset Existing Guardrail          | Linear Foot     |
| Remove and Reset Existing Guiderail End Unit | Each            |

## **RIP RAP**

### **Description**

Furnish and place rip rap and, if necessary, filtration geotextiles in accordance with the contract and as directed.

### **Materials**

Refer to Division 10 of the *2018 Standard Specifications*.

Rip rap shall be of granite material.

| <b>Item</b>                     | <b>Section</b> |
|---------------------------------|----------------|
| Geotextile for Drainage, Type 2 | 1056           |

Provide Type 2 geotextile for filtration geotextiles and plain rip rap classes in accordance with the contract.

### **Plain Riprap**

Grade locations for rip rap as shown in the plans. Use filtration geotextiles under rip rap when shown in the plans and as directed. Do not leave geotextiles exposed for more than 7 days before covering with rip rap. Place filtration geotextiles on surfaces free of obstructions, debris and soft pockets.

Overlap adjacent geotextiles at least 18" in the downhill and downstream direction to prevent flow from lifting the edge of the top geotextile. Place filtration geotextiles in slight tension free of kinks, folds, wrinkles or creases. Use wire staples or anchor pins as needed to hold geotextiles in place until covered. Do not displace or damage filtration geotextiles while placing rip rap. Replace any damaged geotextiles to the satisfaction of the Engineer.

For rip rap at pipe outlets, place rip rap immediately after installing pipes. When rip rap is required for channel changes and drainage ditches, place rip rap before diverting water into channels and ditches.

Place rip rap such that the smaller stones are uniformly distributed throughout rip rap. Install 36 rip rap with mechanical methods and if necessary, by hand to form a well-graded, dense and 36 neat layer of rip rap.

### **Measurement and Payment**

*Rip Rap, Class \_\_\_\_* will be measured and paid in tons. Plain rip rap will be measured by weighing rip rap in trucks in accordance with 106-7.

*Geotextile for Drainage* will be measured and paid in square yards. Filtration geotextiles will be measured along the ground surface as the square yards of exposed geotextiles before placing rip rap. No measurement will be made for overlapping geotextiles.

The contract unit prices for *Rip Rap, Class \_\_\_\_* and *Geotextile for Drainage* will be full compensation for providing, transporting and placing rip rap, filtration geotextiles, wire staples and anchor pins.

Payment will be made under:

#### **Pay Item**

Rip Rap, Class \_\_\_\_  
Geotextile for Drainage

#### **Pay Unit**

Ton  
Square Yard



## **OYSTER STRUCTURE**

### **Description**

This work consists of all work necessary to construct *Oyster Structures* in accordance with these provisions, the plans, and as directed.

### **Materials**

*Oyster Structures* are composed of biodegradable jute twine impregnated with a cement-based binder/hardener that contains oyster spat.

### **Construction Methods**

*Oyster Structures* shall be constructed in the configuration and in the location as indicated on the plans. *Oyster Structures* can be constructed off-site and then installed or constructed on-site at the time of installation.

### **Measurement and Payment**

At locations where *Oyster Structures* are called for on the plans and a pay item for *Oyster Structure* is included in the contract, *Oyster Structure* will be measured in linear feet and paid as the actual number of linear feet that have been satisfactorily placed and accepted. Such price and payment will be full compensation for all work covered by this provision including, but not limited to, the furnishing, hauling, and placing the *Oyster Structure*.

Payment will be made under:

| <b>Pay Item</b>  | <b>Pay Unit</b> |
|------------------|-----------------|
| Oyster Structure | Linear Foot     |

## **GRAVEL CONSTRUCTION ENTRANCE**

### **Description**

Furnish, install, maintain, and remove all material required for the construction of a gravel construction entrance.

### **Materials**

Refer to Division 10 of the *2018 Standard Specifications*.

| <b>Item</b>                        | <b>Section</b> |
|------------------------------------|----------------|
| Stone for Erosion Control, Class A | 1042           |
| Geotextile for Drainage, Type 2    | 1056           |

## **Construction Methods**

Install a gravel construction entrance in accordance with Roadway Standard Drawings and at locations as directed. Install gravel construction entrances in a way to prevent vehicles from bypassing the construction entrance when leaving the project site.

## **Measurement and Payment**

*Geotextile for Drainage* will be measured and paid in accordance with Article 876-4.

*Stone for Erosion Control, Class \_\_\_\_* will be measured and paid in accordance with Article 1610-4.

Such price and payment shall be full compensation for all work covered by this section including all materials, construction, maintenance, and removal of a gravel construction entrance.

Payment will be made under:

| <b>Pay Item</b>              | <b>Pay Unit</b> |
|------------------------------|-----------------|
| Gravel Construction Entrance | Each            |

## **TREE PROTECTION FENCE:**

### **Description**

*Tree Protection Fence* shall consist of furnishing materials, installing and maintaining polyethylene or polypropylene fence along the staging boundary located within the construction corridor to mark the areas that have been approved to infringe within wetland areas or water. The fence shall be installed prior to any land disturbing activities.

Interior boundaries for jurisdictional areas noted above shall be delineated by stakes and highly visible flagging.

### **Materials**

Polyethylene or polypropylene fence shall be a highly visible preconstructed safety fence approved by the Engineer. The fence material shall have an ultraviolet coating and orange in color.

Either wood posts or steel posts may be used. Wood posts shall be hardwood with a wedge or pencil tip at one end, and shall be at least 5 ft. in length with a minimum nominal 2" x 2" cross section. Steel posts shall be at least 5 ft. in length, and have a minimum weight of 0.85 lb/ft of length.

## **Construction Methods**

No additional clearing and grubbing is anticipated for the installation of this fence. The fence shall be erected to conform to the general contour of the ground.

(A) Tree Protection Fencing

Posts shall be set at a maximum spacing of 6 ft., maintained in a vertical position and hand set or set with a post driver. Posts shall be installed a minimum of 1 ft. into the ground. If hand set, all backfill material shall be thoroughly tamped. Wood posts may be sharpened to a dull point if power driven. Posts damaged by power driving shall be removed and replaced prior to final acceptance. The tops of all wood posts shall be cut at a 30-degree angle. The wood posts may, at the option of the Contractor, be cut at this angle either before or after the posts are erected.

The fence geotextile shall be attached to the wood posts with one 2" galvanized wire staple across each cable or to the steel posts with wire or other acceptable means.

Place construction stakes to establish the location of the safety fence in accordance with Article 105-9 or Article 801-1 of the *Standard Specifications*. No direct pay will be made for the staking of the safety fence. All stakeouts for safety fence shall be considered incidental to the work being paid for as "Construction Surveying", except that where there is no pay item for construction surveying, all safety fence stakeout will be performed by state forces.

The Contractor shall be required to maintain the fence in a satisfactory condition for the duration of the project as determined by the Engineer.

(B) Boundary Flagging

Boundary flagging delineation of interior boundaries shall consist of wooden stakes on 25 feet maximum intervals with highly visible orange flagging attached. Stakes shall be installed a minimum of 6" into the ground. Interior boundaries may be staked on a tangent that runs parallel to buffer but must not encroach on the buffer at any location. Interior boundaries of hand clearing shall be identified with a different colored flagging to distinguish it from mechanized clearing.

Boundary flagging delineation of interior boundaries will be placed in accordance with Article 105-9 or Article 801-1 of the *Standard Specifications*. No direct pay will be made for delineation of the interior boundaries. This delineation will be considered incidental to the work being paid for as *Construction Surveying*, except that where there is no pay item or construction surveying the cost of boundary flagging delineation shall be included in the unit prices bid for the various items in the contract. Installation for delineation of all jurisdictional boundaries at staging areas, waste sites, or borrow pits shall consist of wooden stakes on 25 feet maximum intervals with highly visible orange flagging attached. Stakes shall be installed a minimum of 6" into the ground. Additional flagging may be placed on overhanging vegetation to enhance visibility but does not substitute for installation of stakes.

Installation of boundary flagging for delineation of all jurisdictional boundaries at staging areas, waste sites, or borrow pits shall be performed in accordance with Subarticle 230-4(B)(5) or

Subarticle 802-2(F) of the *Standard Specifications*. No direct pay will be made for this delineation, as the cost of same shall be included in the unit prices bid for the various items in the contract.

The Contractor shall be required to maintain alternative stakes and highly visible flagging in a satisfactory condition for the duration of the project as determined by the Engineer.

### **Measurement and Payment**

*Tree Protection Fence* will be measured and paid as the actual number of linear feet of polyethylene or polypropylene fence installed in place and accepted. Such payment will be full compensation including but not limited to furnishing and installing fence geotextile with necessary posts and post bracing, staples, tie wires, tools, equipment and incidentals necessary to complete this work.

Payment will be made under:

| <b>Pay Item</b>       | <b>Pay Unit</b> |
|-----------------------|-----------------|
| Tree Protection Fence | Linear Foot     |

## **TEMPORARY CONSTRUCTION ACCESS**

### **Description**

This work consists of all work necessary to construct and remove the *Temporary Construction Access Structure* in accordance with these provisions, the plans, and as directed.

### **Materials**

Refer to Division 10 of the *2018 Standard Specifications*.

### **Construction Methods**

*Temporary Construction Access* shall be constructed in the configuration and in the location as indicated on the plans.

### **Measurement and Payment**

*Temporary Construction Access* will be paid at the contract lump sum price for the work detailed in this section.

Partial payments will be made on each particular payment estimate based upon the percentage complete of *Temporary Construction Access* as determined by the Engineer. The Contractor shall submit a certified statement each month indicating the percentage of *Temporary Construction Access* work completed. The Engineer will determine if the amount indicated is reasonably correct and the Engineer will pay accordingly on the next partial pay estimate.



Payment will be made under:

**Pay Item**  
Temporary Construction Access

**Pay Unit**  
Lump Sum

**FABRIC INSERT INLET PROTECTION DEVICE (HIGH FLOW)**

**Description**

This work shall consist of installing, maintaining, and removing *Fabric Inlet Protection Device*, of the type specified, in inlet structures (catch basins, drop inlets, etc) in areas where asphalt or concrete may prevent the proper installation of a Rock Inlet Sediment Traps Type C, or as directed.

**Materials**

The product shall be a fabric inlet protection device composed of a fitted woven polypropylene geotextile double sewn with nylon thread suspended sack. The *Fabric Inlet Protection Device* shall be manufactured to fit the opening of the catch basin or drop inlet or shall have a deflector to direct runoff from the curb opening into the fabric sack. The *Fabric Inlet Protection Device* shall have a rigid frame or support system to support the loaded weight of the product. The product shall have lifting loops for removing the device from the basin and will have dump straps attached at the bottom to facilitate the emptying of the device. The *Fabric Inlet Protection Device* shall have an overflow system to allow stormwater to enter the inlet structure and avoid ponding on the roadway when the device reaches capacity.

The stitching shall meet the following physical properties:

| <b>Physical</b>                    | <b>Test Method</b> | <b>English</b> |
|------------------------------------|--------------------|----------------|
| <b>Average Wide Width Strength</b> | ASTM D-4884        | 165 lb/in      |

The fitted filter assembly shall have the following physical properties:

| <b>Physical</b>           | <b>Test Method</b> | <b>English</b>              |
|---------------------------|--------------------|-----------------------------|
| Grab Tensile              | ASTM D-4632        | 255 x 275 lbs               |
| Minimum Puncture Strength | ASTM D-4833        | 125 lbs                     |
| Mullen Burst              | ASTM D-3786        | 420 PSI                     |
| Minimum UV Resistance     | ASTM D-4355        | 70 %.                       |
| Flow Rate                 | ASTM D-4491        | 200 gal/min/ft <sup>2</sup> |
| Apparent Opening          | ASTM D-4751        | 20 US Sieve                 |
| Permittivity              | ASTM D-4491        | 1.5 sec <sup>-1</sup>       |

**Construction Methods**

Strictly comply with manufacturer’s installation instructions and recommendations. Maintenance shall include regular daily inspections and after each qualifying rain event. The *Fabric Insert Inlet Protection Device* shall be emptied, cleaned and placed back into the basin when it reaches 50% capacity or as directed.

**Measurement and Payment**

This work will be paid for at the contract unit price per *Fabric Insert Inlet Protection Device* of the type specified, complete in place and accepted. Such payment shall be full compensation for furnishing and installing the *Fabric Insert Inlet Protection Device* in accordance with this specification and for all required maintenance.

Maintenance of the device, cleanout and disposal of accumulated sediments shall be paid for by *Fabric Insert Inlet Protection Device Cleanout*.

Payment will be made under:

| <b>Pay Item</b>                                | <b>Pay Unit</b> |
|--|-----------------|
| Fabric Insert Inlet Protection Device          | Each            |
| Fabric Insert Inlet Protection Device Cleanout | Each            |

**FLOATING TURBIDITY CURTAIN**

**Description**

This work shall consist of installing, maintaining, and removing *Floating Turbidity Curtain*, of the type specified. This floating geotextile barrier shall minimize sediment transport from a disturbed area adjacent to or within a non-tidal or tidal body of water.

**Materials**

The *Floating Turbidity Curtain* shall be composed of a geotextile curtain bright in color and made of non-deteriorating material (plastic or nylon), load lines and flotation devices fabricated to the top of the fabric, and anchors or piles to minimize curtain movement. Buoyancy provided by the flotation devices shall be sufficient to support the weight of the curtain and maintain three inches of freeboard above water surface level. Load lines should consist of woven webbing or vinyl-sheathed steel cable and shall have a break strength greater than 10,000 pounds.

Seams in the geotextile fabric shall be vulcanized welded or sewn and shall develop full strength of the fabric. The fabric shall meet the following physical properties:

| <b>Physical</b>       | <b>English</b> |
|-----------------------|----------------|
| Thickness             | 45 mils        |
| Weight                | 18 oz/sq yd    |
| Grab Tensile Strength | 300 lbs        |

## **Construction Methods**

Set curtain anchor points and ensure sufficient holding power against current conditions prior to placing the furled curtain in the water. Unfurl curtain once in position indicated on the plans. Attach anchor lines to the flotation device. Strictly comply with manufacturer's maintenance and repair instructions and recommendations. The *Floating Turbidity Curtain* shall be removed in a manner to minimize turbidity following the completion of all land disturbing activity.

## **Measurement and Payment**

This work will be paid for at the contract unit price per *Floating Turbidity Curtain* of the type specified, complete in place and accepted. Such payment shall be full compensation for furnishing, installing, maintaining, and disposing of the *Floating Turbidity Curtain* in accordance with this specification.

Payment will be made under:

### **Pay Item**

Floating Turbidity Curtain

### **Pay Unit**

Square Yard

## **SODDING**

### **Description**

Prepare soil, furnish and place limestone, fertilizer, sod and water; and other operations necessary for the permanent establishment of vegetation from sod on shoulders, slopes, ditches or other roadside areas.

Adapt operations to variations in weather and soil conditions so as to assure the successful establishment and growth of grasses.

Preserve the required line, grade and cross section of the area treated.

The actual conditions which occur during the construction of the project will determine the quantity of water used and mowing required. The quantity of water or mowing may be increased, decreased or eliminated entirely at the direction of the Engineer. Such variations in quantity will not be considered alterations in the details of construction or a change in the character of the work.

## **Materials**

Sod type shall be Bermuda Tifway 419 per Standard Specification 1664. No lime or fertilizer shall be applied.

Refer to Division 10 of the *2018 Standard Specifications*.

| <b>Item</b> | <b>Section</b> |
|-------------|----------------|
| Fertilizer  | 1060-2         |
| Limestone   | 1060-3         |
| Sod         | 1060-7         |
| Water       | 1060-9         |

The contract will state the analysis of fertilizer and the kinds of sod.

## **Construction Methods**

### **A. Handling and Storing Sod**

Exercise extreme care during all operations of loading, transporting, unloading, storing, placing, tamping and staking sod, to prevent breaking the sod sections and to prevent the sod from drying out. Any sod that is torn, broken or too dry will be rejected. Torn or broken sod, if kept moist, may be used for filling unavoidable small gaps in sod cover as permitted.

Place sod on the designated areas within 48 hours after being cut unless otherwise directed.

### **B. Soil Preparation**

Remove litter and other debris. Mow and satisfactorily dispose of weeds or other unacceptable growth on the areas to be sodded.

Bring the area to be sodded to a firm uniform surface at such elevation that the surface of the complete sodding conforms to the finished grade and cross section as shown in the plans.

Scarify or otherwise loosen soil to a depth of not less than 5". Break clods and work the top 2" to 3" of soil into an acceptable soil bed by using soil pulverizers, drags or harrows.



Place limestone and fertilizer before placing the sod. The contract will state the kind and grade of fertilizer, and the rates of application of limestone and fertilizer. Distribute the limestone and fertilizer uniformly over the area and thoroughly mix in the top 5" of the soil by discing, harrowing or other approved methods.

Prepare the area by harrowing, dragging, raking or other approved methods to give a lawn type finish. Remove all trash, debris and stones larger than 1 1/2" in diameter or other obstructions that could interfere with the placing of the sod. Moisten the finished surface with water before placing the sod.

### C. Placing Sod

The contract will state the seasonal limitations for sodding and the kind of sod to use.

Sod handling and placement will be a continuous process of cutting, transporting and installing without appreciable delays. Install sod within 48 hours after being cut and water immediately after installation.

Place sod firmly and carefully by hand within 24 hours after soil preparation is completed and accepted by the Engineer. Pack each piece of sod tightly against the edge of adjacent pieces so that the fewest possible gaps will be left between the pieces. Close unavoidable gaps with small pieces of sod.

When placing sod on a slope, begin at either the top or the toe of the slope. Place sod with the long edge horizontal and with staggered vertical joints. Turn the edge of the sod slightly into the ground at the top of a slope and place a layer of earth over it and compact so as to divert the surface water over and onto the top of the sod.

Stake sod in place by driving stakes flush with the sod, on all slopes 2:1 or steeper, in drainage channels, on other areas shown in the plans, and on any areas that are in such condition that there is danger of sod slipping. Perform staking concurrently with sod placement and before tamping with sound wooden stakes which are approximately one inch square or one inch in diameter and not less than 12" in length. Place enough stakes to prevent slipping or displacement of the sod. Drive stakes perpendicular to the slope.

Where backfill is necessary on cut slopes to obtain a uniform sodding area, provide stakes of sufficient length to reach at least 3" into the solid earth underneath the backfill. On all other areas, use metal staples in place of wooden stakes. The metal staples should be 12" long, made of 11 gauge new steel wire so as not to bend when pinned or driven through the sod. Shorter staples may be used with the approval of the Engineer.

Place, stake and staple the sod where necessary, then tamp or roll carefully and firmly by acceptable means. If rolled, roller shall weigh 150 lb/ft of roller width. Take extreme care to prevent the installed sod from being torn or displaced.

Do not place sod when the atmospheric temperature is below 32°F. Do not use frozen sod or place on frozen soil.

D. Watering Sod

Water carefully and thoroughly after sod has been placed and tamped. Perform watering as directed until final acceptance. Application of water may be made by the use of hydraulic seeding equipment, farm type irrigation equipment or by other acceptable means.

**Maintenance**

Maintain sod in a satisfactory and live condition until final acceptance of the project. Maintenance includes watering and mowing at the locations and times as directed.

**Measurement and Payment**

*Sodding* will be measured and paid in square yards, measured along the surface of the ground completed and accepted. No direct payment will be made for mowing the sodding areas before soil preparation as such work will be incidental to sodding. No direct payment will be made for furnishing and applying limestone and fertilizer, as such will be incidental to the work covered by sodding.

*Water* will be measured and paid in 1,000 gallon units. Measurement of water will be made by means of an approved metering device at the source of supply, or by determining the volumetric capacity of tank trucks used to deliver water to the project and recording the number of loads delivered by each truck.

*Mowing* will be measured and paid in accordance with Section 1660.

The above prices and payment will be full compensation for all work covered by this section.

Payment will be made under:

| <b>Pay Item</b> | <b>Pay Unit</b> |
|-----------------|-----------------|
| Sodding         | Square Yard     |
| Water           | 1,000 Gallons   |

**WETLAND GRASS PLANTING:**

**Description**

*Wetland Grass Planting* will be planted in areas where the existing causeway fill is removed down to the adjacent marsh elevation, and in other areas as directed. See the Overall Landscape Plan Sheet for more details.

## **Materials**

Plant material shall be delivered as plugs in cell packs of approximately 50 plants per tray. Plant material shall consist of 3 to 5 stems per plant and shall be rooted through the sides and bottom of the peat pot.

## **Construction Methods**

The Contractor shall be responsible for taking sufficient soil samples for testing by the North Carolina Department of Agriculture and Consumer Services, Agronomic Division, Soil Testing Section, to determine the soil pH and nutrient content. Samples shall be taken in the presence of the Engineer. Results shall be received by the Engineer directly from the North Carolina Department of Agriculture and Consumer Services. The Contractor shall be responsible for the addition of fertilizer and/or other soil amendments as needed to ensure livability of the wetland grass planting.

The plant plugs shall be planted using the Dibble Planting Method. Plants shall be upright, not at an angle. Planting holes shall be dug large enough and deep enough to accommodate the entire root mass. The plant plugs shall be planted without twisted, balled, *j* or *u* roots. The plant plugs shall be planted with no roots exposed above the ground line. Soil shall be packed firmly around the entire root mass.

Seasonal limitations: *Wetland Grass Planting* shall be completed between April 15 and June 15. No planting shall be done when the temperature is below 32 degrees F, when the soil to be excavated for the planting hole is frozen, or when the bottoms of the plant holes are frozen.

## **Measurement and Payment**

*Wetland Grass Planting* will be measured and paid for as the actual number of acres of plugs planted in accordance with these specifications.

Payment will be made under:

| <b>Pay Item</b>        | <b>Pay Unit</b> |
|------------------------|-----------------|
| Wetland Grass Planting | Per Acre        |

County: ONSLOW

| Line #        | Item Number  | Sec # | Description  | Quantity     | Unit Cost | Amount |
|---------------|--------------|-------|--|--------------|-----------|--------|
| ROADWAY ITEMS |              |       |  |              |           |        |
| 0001          | 0000100000-N | 800   | MOBILIZATION   | Lump Sum     | L.S.      |        |
| 0002          | 0000400000-N | 801   | CONSTRUCTION SURVEYING   | Lump Sum     | L.S.      |        |
| 0003          | 0000900000-N | SP    | GENERIC MISCELLANEOUS ITEM<br>TEMPORARY CONSTRUCTION<br>ACCESS | Lump Sum     | L.S.      |        |
| 0004          | 0000930000-E | SP    | GENERIC MISCELLANEOUS ITEM<br>TREE PROTECTION FENCE            | 620<br>LF    |           |        |
| 0005          | 0043000000-N | 226   | GRADING  | Lump Sum     | L.S.      |        |
| 0006          | 0196000000-E | 270   | GEOTEXTILE FOR SOIL<br>STABILIZATION                           | 900<br>SY    |           |        |
| 0007          | 0234000000-E | SP    | GENERIC GRADING ITEM<br>EARTHWORK FILL                         | 800<br>CY    |           |        |
| 0008          | 0320000000-E | 300   | FOUNDATION CONDITIONING<br>GEOTEXTILE                          | 1,800<br>SY  |           |        |
| 0009          | 2549000000-E | 846   | 2'-6" CONCRETE CURB & GUTTER                                   | 450<br>LF    |           |        |
| 0010          | 2591000000-E | 848   | 4" CONCRETE SIDEWALK   | 250<br>SY    |           |        |
| 0011          | 3345000000-E | 864   | REMOVE & RESET EXISTING<br>GUARDRAIL                           | 225<br>LF    |           |        |
| 0012          | 3435000000-N | SP    | GENERIC GUARDRAIL ITEM<br>REMOVE & RESET GUARDRAIL END<br>UNIT | 2<br>EA      |           |        |
| 0013          | 3628000000-E | 876   | RIP RAP, CLASS I   | 1,300<br>TON |           |        |
| 0014          | 3635000000-E | 876   | RIP RAP, CLASS II  | 2,400<br>TON |           |        |
| 0015          | 3642000000-E | 876   | RIP RAP, CLASS A   | 800<br>TON   |           |        |
| 0016          | 4400000000-E | 1110  | WORK ZONE SIGNS (STATIONARY)                                   | 80<br>SF     |           |        |
| 0017          | 4405000000-E | 1110  | WORK ZONE SIGNS (PORTABLE)                                     | 48<br>SF     |           |        |



County: ONSLOW

| Line # | Item Number  | Sec # | Description  | Quantity    | Unit Cost | Amount |
|--------|--------------|-------|--|-------------|-----------|--------|
| 0018   | 4415000000-N | 1115  | FLASHING ARROW BOARD   | 1<br>EA     |           |        |
| 0019   | 4420000000-N | 1120  | PORTABLE CHANGEABLE MESSAGE SIGN                                   | 1<br>EA     |           |        |
| 0020   | 4430000000-N | 1130  | DRUMS  | 25<br>EA    |           |        |
| 0021   | 4435000000-N | 1135  | CONES  | 45<br>EA    |           |        |
| 0022   | 4447000000-E | SP    | PEDESTRIAN CHANNELIZING DEVICES                                    | 8<br>LF     |           |        |
| 0023   | 4465000000-N | 1160  | TEMPORARY CRASH CUSHIONS   | 2<br>EA     |           |        |
| 0024   | 4480000000-N | 1165  | TMA  | 1<br>EA     |           |        |
| 0025   | 4485000000-E | 1170  | PORTABLE CONCRETE BARRIER  | 640<br>LF   |           |        |
| 0026   | 4600000000-N | SP    | GENERIC TRAFFIC CONTROL ITEM AUDIBLE WARNING DEVICE                | 2<br>EA     |           |        |
| 0027   | 4600000000-N | SP    | GENERIC TRAFFIC CONTROL ITEM PEDESTRIAN TRANSPORT SERVICE PER TRIP | 45<br>EA    |           |        |
| 0028   | 4650000000-N | 1251  | TEMPORARY RAISED PAVEMENT MARKERS                                  | 39<br>EA    |           |        |
| 0029   | 4685000000-E | 1205  | THERMOPLASTIC PAVEMENT MARKING LINES (4", 90 MILS)                 | 2,404<br>LF |           |        |
| 0030   | 4695000000-E | 1205  | THERMOPLASTIC PAVEMENT MARKING LINES (8", 90 MILS)                 | 500<br>LF   |           |        |
| 0031   | 4725000000-E | 1205  | THERMOPLASTIC PAVEMENT MARKING SYMBOL (90 MILS)                    | 2<br>EA     |           |        |
| 0032   | 4810000000-E | 1205  | PAINT PAVEMENT MARKING LINES (4")                                  | 9,736<br>LF |           |        |
| 0033   | 4847020000-E | 1205  | POLYUREA PAVEMENT MARKING LINES (4", 30 MILS)                      | 3,250<br>LF |           |        |
| 0034   | 4850000000-E | 1205  | REMOVAL OF PAVEMENT MARKING LINES (4")                             | 9,784<br>LF |           |        |

County: ONSLOW

| Line # | Item Number  | Sec # | Description  | Quantity    | Unit Cost | Amount |
|--------|--------------|-------|--|-------------|-----------|--------|
| 0035   | 4860000000-E | 1205  | REMOVAL OF PAVEMENT MARKING LINES (8")                               | 900<br>LF   |           |        |
| 0036   | 4900000000-N | 1251  | PERMANENT RAISED PAVEMENT MARKERS                                    | 26<br>EA    |           |        |
| 0037   | 4905100000-N | SP    | NON-CAST IRON SNOWPLOWABLE PAVEMENT MARKER                           | 30<br>EA    |           |        |
| 0038   | 6000000000-E | 1605  | TEMPORARY SILT FENCE   | 500<br>LF   |           |        |
| 0039   | 6048000000-E | SP    | FLOATING TURBIDITY CURTAIN   | 530<br>SY   |           |        |
| 0040   | 6102000000-E | 1664  | SODDING  | 350<br>SY   |           |        |
| 0041   | 6105000000-E | 1664  | WATER  | 17<br>M/G   |           |        |
| 0042   | 6132000000-N | SP    | GENERIC EROSION CONTROL ITEM FABRIC INSERT INLET PROTECTION CLEANOUT | 2<br>EA     |           |        |
| 0043   | 6132000000-N | SP    | GENERIC EROSION CONTROL ITEM FABRIC INSERT INLET PROTECTION DEVICE   | 2<br>EA     |           |        |
| 0044   | 6132000000-N | SP    | GENERIC EROSION CONTROL ITEM GRAVEL CONSTRUCTION ENTRANCE            | 2<br>EA     |           |        |
| 0045   | 6135000000-E | SP    | GENERIC EROSION CONTROL ITEM WETLAND GRASS PLANTING                  | 0.24<br>ACR |           |        |
| 0046   | 8522000000-E | 460   | GENERIC STRUCTURE ITEM OYSTER STRUCTURE                              | 800<br>LF   |           |        |

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Total Amount Of Bid For Entire Project :