



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

August 13, 2021

Addendum No. 6

Contract No.: C204596
TIP Nos.: I-6064A, B & C / I-5879
County: Robeson
Project Description: I-95 Widening and Pavement Rehabilitation from I-74 (Exit 13) to South of US 301 (Exit 22) and I-95 / SR 1536 (Carthage Road) Interchange Improvements

RE: Addendum No. 6 to Final RFP

September 21, 2021 Letting

To Whom It May Concern:

Reference is made to the Final Request for Proposals with Addendum Nos. 1, 2, 3, 4 and 5 dated July 15, 2021 recently furnished to you on the above project. We have since incorporated changes and have attached a copy of Addendum No. 6 for your information. Please note that all revisions have been highlighted in gray and are as follows:

On the COVER SHEET, change the Federal-Aid Number to 0095078 and 0095079. Please mark through the Federal-Aid Number 0095077 shown on the July 15, 2021 (Labeled) RFP and insert the new numbers. This correction must be done in ink and initialed and dated by your Team's primary contractor (reference the attached example). The corrected Final RFP must be used to submit the Price Proposal for return to this office.

The first, second, third and fourth pages of the *Table of Contents* have been revised. Please void the first, second, third and fourth pages in your proposal and staple the revised first, second, third and fourth pages thereto.

Page No. 1 of the *Contract Time and Liquidated Damages* Project Special Provision has been revised. Please void Page No. 1 in your proposal and staple the revised Page No. 1 thereto.

Page No. 8 of the *Submittal of Quantities, Fuel Base Index Price and Opt-Out Option* Project Special Provision has been revised. Please void Page No. 8 in your proposal and staple the revised Page No. 8 thereto.

Page No. 35 of the *Cooperation between Contractors* Project Special Provision has been revised. Please void Page No. 35 in your proposal and staple the revised Page No. 35 thereto.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
CONTRACT STANDARDS AND
DEVELOPMENT UNIT
1591 MAIL SERVICE CENTER
RALEIGH, NC 27699-1591

Telephone: (919) 707-6900
Fax: (919) 250-4119
Customer Service: 1-877-368-4968
Website: www.ncdot.gov

Location:
CENTURY CENTER COMPLEX
ENTRANCE B-2
1020 BIRCH RIDGE DRIVE
RALEIGH, NC 27610

Page No. 53 of the *Price Adjustments - for Asphalt Binder* Project Special Provision has been revised. Please void Page No. 53 in your proposal and staple the revised Page No. 53 thereto.

Page Nos. 227 and 233 of the *General Section* have been revised. Please void Page Nos. 227 and 233 in your proposal and staple the revised Page Nos. 227 and 233 thereto.

Page Nos. 251, 258 and 259 of the *Roadway Scope of Work* have been revised. Please void Page Nos. 251, 258 and 259 in your proposal and staple the revised Page Nos. 251, 258 and 259 thereto.

Page No. 292 of the *Geotechnical Engineering Scope of Work* has been revised. Please void Page No. 292 in your proposal and staple the revised Page No. 292 thereto.

Page No. 339 of the *Pavement Management Scope of Work* has been revised. Please void Page No. 339 in your proposal and staple the revised Page No. 339 thereto.

Page No. 513 of the *Division One* Standard Special Provision has been revised. Please void Page No. 513 in your proposal and staple the revised Page No. 513 thereto.

If you have any questions or need additional information, I can be reached by telephone at (919) 707-6901.

Sincerely,

DocuSigned by:

F81B6038A47A442...
Ronald E. Davenport, Jr., PE
State Contract Officer

RED/ttm

cc: Chris Peoples, PE
Lamar Sylvester, PE
Drew Cox, PE
Teresa Bruton, PE
Ron McCollum, PE
File

FINAL REQUEST FOR PROPOSALS

DESIGN-BUILD PROJECT

TIP I-6064A, B & C / I-5879



July 15, 2021

Includes

Addendum No. 1 - March 9, 2021

Addendum No. 2 - April 16, 2021

Addendum No. 3 - May 11, 2021

Addendum No. 4 - June 11, 2021

Addendum No. 5 - July 15, 2021

VOID FOR BIDDING

DATE AND TIME OF TECHNICAL PROPOSAL SUBMISSION: **August 31, 2021 BY 4:00 PM**

DATE AND TIME OF PRICE PROPOSAL SUBMISSION: **September 14, 2021 BY 4:00 PM**

DATE AND TIME OF PRICE PROPOSAL OPENING: **September 21, 2021 AT 2:00 PM**

CONTRACT ID: C204596

WBS ELEMENT NOS. 49067.3.1, 49067.3.2 and 49067.3.3

FEDERAL-AID NO. ~~0095077~~ **0095078 and 0095079 Initial, Date**

COUNTY: Robeson

ROUTE NO. I-95

MILES: 8.0

LOCATION: I-95 widening and pavement rehabilitation from I-74 (Exit 13) to south of US 301 (Exit 22) and I-95 / SR 1536 (Carthage Road) interchange improvements

TYPE OF WORK: DESIGN-BUILD AS SPECIFIED IN THE SCOPE OF WORK
CONTAINED IN THE REQUEST FOR PROPOSALS

NOTICE:

ALL PROPOSERS 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 PROPOSER 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. PROPOSERS 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. NOT WITHSTANDING THESE LIMITATIONS ON BIDDING, THE PROPOSER WHO IS AWARDED ANY PROJECT SHALL COMPLY WITH CHAPTER 87 OF THE GENERAL STATUTES OF NORTH CAROLINA FOR LICENSING REQUIREMENTS WITHIN 60 CALENDAR DAYS OF BID OPENING, REGARDLESS OF FUNDING SOURCES.

5% BID BOND OR BID DEPOSIT REQUIRED

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Division One500

PROPOSAL FORMS - ITEMIZED SHEET, ETC.

- Itemized Proposal Sheet (TAN SHEET)
- Fuel Usage Factor Chart and Estimate of Quantities
- Listing of DBE Subcontractors
- Execution of Bid, Non-Collusion Affidavit, Debarment Certification and Gift Ban Certification
- Signature Sheet

***** PROJECT SPECIAL PROVISIONS *****

CONTRACT TIME AND LIQUIDATED DAMAGES

(7-12-7)

DB1 G04A

The date of availability for this contract is November 1, 2021, except that the Design-Build Team shall only begin ground disturbing activities as allowed by this Request for Proposals (RFP). The Design-Build Team shall consider this factor in determining the proposed Substantial Completion Date and proposed Final Completion Date for this project.

The Substantial Completion Date for this contract shall be defined as the date proposed in the Technical Proposal by the proposer who is awarded the project. The Substantial Completion Date thus proposed shall not be later than August 1, 2026. Liquidated damages of **Seven Thousand Dollars (\$7,000.00)** per calendar day will be applicable to the Substantial Completion Date proposed by the proposer. Liquidated damages attributable to a delay in substantial completion shall continue to accrue until such time that substantial completion is achieved, as defined by the *Substantial Completion* Project Special Provision found elsewhere in this RFP.

The Final Completion Date for this contract shall be defined as the date proposed in the Technical Proposal by the proposer who is awarded the project. The Final Completion Date thus proposed shall not be later than November 1, 2026. Liquidated damages of **Twenty-five Hundred Dollars (\$2,500.00)** per calendar day will be applicable to the Final Completion Date proposed by the proposer. Liquidated damages attributable to a delay in final completion shall continue to accrue until such time that final completion is achieved and shall be added to any liquidated damages that accrued as a result in a substantial completion delay.

The Substantial Completion Date and the Final Completion Date proposed in the Technical Proposal by the Design-Build Team who is awarded the contract shall become contract requirements.

When observation periods are required by the special provisions, they are not a part of the work to be completed by the completion date and / or intermediate contract times. Should an observation period extend beyond the Final Completion Date proposed by the Design-Build Team in the Technical Proposal, the performance and payment bonds shall remain in full force and effect until the observation period has been completed and the work accepted by the Department.

INTERMEDIATE CONTRACT TIME NUMBER 1 AND LIQUIDATED DAMAGES

(3-22-07)

DB1 G07

Intermediate Contract Time #1 is for the completion of coring eight-inch diameter PVC sleeves through the existing I-95 concrete median barrier from Station 438+00 -L- to Station 446+00 -L-. The PVC sleeves shall be installed at a spacing of five-foot on center with the invert of the sleeve no more than five inches above the bottom of the concrete median barrier.

The date of availability for Intermediate Contract Time #1 is the date of availability for this contract. The completion date for Intermediate Contract Time #1 is defined as the date proposed

SUBMITTAL OF QUANTITIES, FUEL BASE INDEX PRICE AND OPT-OUT OPTION

1/23/14

DBI G43

(A) Submittal of Quantities

Submit quantities on the *Fuel Usage Factor Chart and Estimate of Quantities* sheets, located in the back of this RFP, following the Itemized Proposal Sheet. Each sheet corresponds to a Lump Sum Pay Item on the Itemized Proposal Sheet.

The Design-Build Team shall prepare Estimate of Quantities that they anticipate incorporating into the completed project and upon which the Price Proposal was based. The quantity breakdown shall include all items of work that appear in the *Fuel Usage Factor Chart and Estimate of Quantities* sheets. Only those items of work which are specifically noted in the *Fuel Usage Factor Chart and Estimate of Quantities* sheets will be subject to fuel price adjustments.

Submittal - The submittal shall be signed and dated by an officer of the Design-Build Team. The information shall be copied and submitted in a separate sealed package with the outer wrapping clearly marked "Fuel Price Adjustment" and shall be delivered at the same time and location as the Technical Proposal. The originals shall be submitted in the Price Proposal.

Trade Secret - Information submitted on the *Fuel Usage Factor Chart and Estimate of Quantities* sheets will be considered "Trade Secret" in accordance with the requirements of G.S. 66-152(3) until such time as the Price Proposal is opened.

(B) Base Index Price

The Design-Build Team's Estimate of Quantities will be used on the various partial payment estimates to determine fuel price adjustments. The Design-Build Team shall submit a payment request for quantities of work completed based on the work completed for that estimate period. The quantities requested for partial payment shall be reflective of the work actually accomplished for the specified period. The Design-Build Team shall certify that the quantities are reasonable for the specified period. The base index price for DIESEL #2 FUEL is **\$2.1637** per gallon.

(C) Opt Out of Fuel Price Adjustment

If the Design-Build Team elects not to pursue reimbursement for Fuel Price Adjustments for the lump sum items on the Itemized Proposal Sheet, a quantity of zero shall be entered for all quantities in the *Fuel Usage Factor Chart and Estimate of Quantities* and the declination box shall be checked on both *Fuel Usage Factor Chart and Estimate of Quantities* sheets. Failure to complete both of these forms will mean that the Design-Build Team is declining the Fuel Price Adjustments for this project.

(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."

SUBSURFACE INFORMATION

(10-2-20)

DB1 G112C

Available subsurface information will be provided on this project. The Design-Build Team shall be responsible for additional investigations and for verifying the accuracy of the subsurface information supplied by the Department.

COOPERATION BETWEEN CONTRACTORS

(9-1-11) (Rev. 9-7-17)

DB1 G133

The Design-Build Team's attention is directed to Article 105-7 of the 2018 *Standard Specifications for Roads and Structures*.

- Project B-5985 is located on NC 41 / NC 72 (2nd Street) and SR 1600 (West 5th Street) east of Project I-6064A, B & C / I-5879 and replaces Bridge Nos. 770125 and 770175 over the Lumber River. Project B-5985 has an anticipated December 2022 Let date.
- Design-Build Project I-5986A / I-5877 is located north of Project I-6064A, B & C / I-5879. Project I-5986A was Let in August 2019 and has an anticipated May 2024 Final Completion date.
- Project I-5986B / I-5878 / I-5883 is located north of Project I-6064A, B & C / I-5879. Project I-5986B / I-5878 / I-5883 was Let in July 2021 and has an anticipated October 2026 Final Completion date.

PRICE ADJUSTMENTS FOR ASPHALT BINDER

(9-1-11) (Rev. 8-23-18)

DB6 R25

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the 2018 *Standard Specifications for Roads and Structures*.

**** NOTE **** Deleted paragraph pertaining to the CEI firm’s responsibilities.

The base price index for asphalt binder for plant mix is **\$509.09** per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on **August 1, 2021**.

PRICE ADJUSTMENTS - ASPHALT CONCRETE PLANT MIX

(9-1-11) (Rev. 9-8-17)

DB6 R26

Revise the 2018 *Standard Specifications for Roads and Structures* as follows:

Page 6-15, Article 609-11 and Page 6-31, Article 610-14

Add the following paragraph before the first paragraph:

The “Asphalt Price” used to calculate any price adjustments set forth in this section shall be \$40.00 per theoretical ton. This price shall apply for all mix types.

FIELD OFFICE

(6-1-07) (Rev. 6-22-15)

DB 08-01

Description

This work consists of furnishing, erecting, equipping, and maintaining a field office for the exclusive use of Department Engineers and Inspectors at a location on the project approved by the Engineer. Provide a field office that complies with the current A.D.A. Design and Accessibility Standards, the National Electric Code, local, state, and federal regulations, and the following:

Procedures

The field office and equipment shall remain the property of the Design-Build Team upon completion of the contract. The field office must be separated from buildings and trailers used by the Design-Build Team and shall be erected and functional as an initial operation. Failure to have the field office functional when work first begins on the project shall result in withholding payment of the Design-Build Team's monthly progress estimate. The field office must be operational throughout the duration of the project and be removed upon completion and final acceptance of the project.

Technical Proposal Requirements

12 Copies

8 ½-inch by 11-inch pages

No fold out sheets allowed - maximum 24-inch by 36-inch fold out sheets shall only be allowed to present interchange plans in the 11-inch by 17-inch plan sheets

Printed on one side only

Double-spaced

Font size 12 - Within embedded tables, charts, and graphics only, minimal font size 10 is permissible

Excluding the introductory letter to Mr. Ronald E. Davenport, Jr., P.E. (two-page maximum length), a copy of the Department's approval letter for each incorporated Formal ATC, and the 11-inch by 17-inch appropriate plan sheets, the maximum number of allowable pages shall be 50 pages.

The aforementioned introductory letter to Mr. Ronald E. Davenport, Jr., PE shall include a statement acknowledging that the NCDOT may destroy all Technical Proposals not retained by the Department, **or** a statement that the NCDOT should return all Technical Proposals not retained by the Department.

Project team members, identified in the Statement of Qualifications, shall not be modified in the Technical Proposal without written approval of the Department. Any such request should be sent to the attention of Mr. Ronald E. Davenport, Jr., PE, at the address below:

NCDOT- Contract Standards and Development
Century Center Complex - Building B
1020 Birch Ridge Drive
Raleigh, NC 27610

TECHNICAL PROPOSAL - Electronic Copy

An electronic copy of the Technical Proposal shall be submitted in a sealed package. The electronic copy 1) shall be in a searchable .pdf format, 2) shall not contain any hyperlinks, 3) shall be scaled to reproduce to the appropriate page format, as defined above, and 4) shall be created by converting the original MicroStation / GeoPak files. The outer wrapping shall clearly indicate the following information:

- Indicate the specific construction activities that will occur outside jurisdictional resources prior to obtaining the environmental permits and their anticipated start date.
- Indicate how the Design-Build Team will maintain the project schedule if the right of way acquisition process, railroad agreements and / or utility relocations are delayed.
- Identify any self-imposed liquidated damages and associated Intermediate Contract Time(s), if applicable.
- Specify the duration, in hours, for ICT #9, ICT #10, ICT #11, ICT #12, ICT #13, ICT #14, ICT #15, ICT #16, ICT #17, ICT #18, ITC #19, ICT #20, ICT #21, ICT # 22, and ICT #23.
- Specify the duration, in calendar days, for ICT #24, ICT # 25, ICT #26, ICT #27, ICT #28, ICT #29, ICT #30 and ICT #31.
- The schedule shall also include the Design-Build Team's Substantial Completion Date and Final Completion Date. **These dates shall be clearly indicated on the Project Schedule and labeled "Final Completion Date" and "Substantial Completion Date".**
- The Intermediate Contract Time #1 completion date shall be clearly indicated on the Project Schedule and labeled "Intermediate Contract Time #1 Completion Date".

5. Innovation - 5 points

- Identify any aspects of the design or construction elements that the Design-Build Team considers innovative. Include a description of alternatives that were considered whether implemented or not.

6. Maintenance of Traffic and Safety Plan - 25 points

Maintenance of Traffic

- Provide a Transportation Management Phasing Concept (TMPC).
- Identify the type of positive median cross-over protection proposed and replacement / resetting requirements.
- Describe the traffic control measures that will be used for each construction phase.
- Describe how traffic will be maintained as appropriate and describe the Design-Build Team's understanding of any time restrictions noted in the RFP.
- Describe the Design-Build Team's approach to site access and material staging.
- Specifically describe how business, school and residential access will be maintained, if applicable.
- Address how hauling will be conducted, including but not limited to, hauling of materials to and from the site and hauling of materials within NCDOT right of way.
- Describe the Design-Build Team's approach to providing the public access to project personnel for inquiries on vehicular and pedestrian traffic impacts.
- If a temporary portable barrier system will be utilized, provide the type and why it is needed.
- If temporary shoring will be required, provide the type and why it is required.
- Include all proposed road closures, detour routes, durations and justifications.
- Address where and how law enforcement officers will be used.

2012 AASHTO Guide for the Development of Bicycle Facilities, except those sections of greenways / multi-use paths that are steeper than five percent shall be designed and constructed in accordance with the FHWA Designing Sidewalks and Trails for Access. (Reference the *Greenways and Multi-Use Paths* Project Special Provision and the Pavement Management Scope of Work found elsewhere in this RFP) The Design-Build Team shall design and construct all greenways / multi-use paths located on berms adjacent to curb and gutter as minimum ten-foot wide sidewalks with a minimum 15-foot berm.

- All proposed sidewalk, including but not limited to sidewalk that replaces existing narrower sidewalk, shall be a minimum of five feet wide.
- Excluding the modifications required herein, the Design-Build Team shall inform the Design-Build Unit, in writing, of all proposed design revisions, including but not limited to the following:
 - The Design-Build Team shall note in the Technical Proposal any proposed deviations to the preliminary design shown on the Preliminary Roadway Plans provided by the Department. The Design-Build Team shall be responsible for all activities, as deemed necessary by the Department or the FHWA, resulting from changes to the NCDOT preliminary design, including but not limited to, public involvement, NEPA re-evaluation and / or coordination with other stakeholders. The Department will not honor any requests for additional contract time or compensation for completion of the required activities resulting from changes to the NCDOT preliminary design.
 - After the contract has been Awarded, the Design-Build Team shall inform the Design-Build Unit, in writing, of all proposed changes to the design shown in the Technical Proposal.
 - After the Department has reviewed and accepted the Design-Build Team's design submittals, the Design-Build Team shall inform the Design-Build Unit, in writing, of any changes to previously reviewed submittals, including but not limited to changes to RFC Plans.

The proposed design revisions noted above shall be subject to the Department's review and acceptance.

- Excluding locations where horizontal curvature reduces the mainline stopping sight distance along the median paved shoulder, and locations where bridge piers, concrete barrier, or overhead sign assemblies reduce the mainline median shoulder width to less than ten feet (excluding the median shoulder width at the US 74 Alt. Bridge) design exceptions will not be allowed for the -L- Line, including all ramps and loops. Design exceptions will not be allowed for service road vertical alignments over drainage pipes. The Department prefers not to have design exceptions for the -Y- Lines and service roads. If the Design-Build Team anticipates any allowable design exceptions, they shall be clearly noted in the Technical Proposal. Prior to requesting / incorporating a design exception into the Preliminary Plans developed by the Design-Build Team, the Design-Build Team must obtain prior conceptual approval from the Design-Build Unit. If conceptual approval is obtained, the Design-Build Team shall be responsible for the development and approval of all design exceptions. A design exception will only be approved if the design exception request demonstrates, in the Department's sole

of the Design-Build Team. The Department will not allow any contract time extensions or additional compensation associated with any coordination or approval process resulting from design and / or construction modifications. (Reference the Environmental Permits Scope of Work found elsewhere in this RFP)

- Excluding parcels restricted by Control of Access and undeveloped parcels, the Design-Build Team shall design and construct a minimum of one driveway per parcel. The Design-Build Team shall design and construct all driveways to adhere to the NCDOT *Policy on Street and Driveway Access to North Carolina Highways* and the minimum requirements noted below. Excluding the maximum grade requirement, if the NCDOT *Policy on Street and Driveway Access to North Carolina Highways* and the requirements noted below have conflicting design parameters, the proposed design shall adhere to the aforementioned Policy:
 - The Design-Build Team shall provide horizontal and vertical alignments for all driveways that require 100 feet or longer to tie to existing.
 - Unless shown on the Preliminary Roadway Plans provided by the Department, driveways shall not be installed in roundabouts, right turn lanes, including their taper, or within the limits of splitter islands and chicanes.
 - Excluding grades required to tie to existing, the maximum driveway grade shall be 10.0%.
 - For shoulder sections, the minimum driveway turnout for residential and commercial properties shall be 16'-0" and 24'-0", respectively, or the existing width, whichever is greater. For curb and gutter sections, the minimum driveway turnout for residential and commercial properties shall be 20'-0" and 28'-0", respectively, or the existing width, whichever is greater.
- The Design-Build Team shall contact Mr. Gary W. Thompson, North Carolina Geodetic Survey Director, prior to disturbing any geodetic monument.
- The project shall follow the NCDOT-FHWA Oversight Agreement. This Agreement will be provided. Any changes that affect previous approvals shall be re-submitted by the Design-Build Team for FHWA acceptance.
- The Design-Build Team shall identify the need for any special roadway design details (i.e. any special drainage structures, rock embankment, rock plating, special guardrail, retaining walls, concrete barrier designs, etc.) and shall provide special design drawings. The Contract Standards and Development Unit may have special details available that can be provided to the Design-Build Team upon request.
- A 4:1 back slope shall extend from the back of the expressway gutter to the clear zone limit. Beyond that, a maximum 3:1 cut slope will be acceptable. The expressway gutter centerline shall be located at the hinge / shoulder point. Expressway gutter shall not be installed in fill sections. Expressway gutter shall only be used to minimize impacts to 1) existing structures; and / or 2) cultural, historical or otherwise protected landmarks.

- Excluding locations to minimize impacts to existing 1) natural gas regulator stations; 2) sanitary sewer lift / pump stations; 3) structures; and / or 4) cultural, historical or otherwise protected landmarks, the front slope of all roadway ditches, including special drainage cut ditches, shall be in accordance with the desirable front slopes for the facility classification. Ditches located adjacent to I-95 shall be designed and constructed in accordance with the desirable Ditch Type “A”, as shown in the NCDOT *Roadway Design Manual* Section 1-2A, Figure F-1. Along -Y- Lines and along the outside of existing service roads that are modified, realigned and / or improved, the Design-Build Team will be allowed to use the minimum ditch widths for the facility classification.
- At all locations with paved shoulders that extend beyond the typical width (e.g. to the face of single face barrier, guardrail, edge of expressway / shoulder berm gutter, etc.), the Design-Build Team shall taper the wider paved shoulder width to the typical paved shoulder width using an 8:1 taper. (Reference the Pavement Management Scope of Work found elsewhere in this RFP)
- Unless noted otherwise elsewhere this RFP, the minimum berm width along 2’-6” curb and gutter sections shall be ten feet.
- Shoulder berm gutter shall be installed in fill sections with guardrail and fill slopes steeper than 4:1. Shoulder berm gutter shall not be installed in cut sections.
- Cut and fill slope transitions shall not exceed one increment (e.g. 3:1 to 4:1) per 50 feet.
- The Design-Build Team shall design and construct horizontal and vertical curves at all Points of Intersections (PIs) on the horizontal and vertical alignments, respectively.
- All paved shoulders shall be tapered at 8:1 to the existing pavement at tie-in points.

NCDOT Information Supplied

- The NCDOT will provide copies of the I-6064 and I-5879 Categorical Exclusions, the latest list of environmental commitments, municipal agreements and all pertinent approvals and correspondence. Unless noted otherwise elsewhere in this RFP, the Design-Build Team shall adhere to all commitments stated in the environmental documents.
- The NCDOT will provide electronic surveys to the Design-Build Team. Any supplemental surveys, including but not limited to additional topography, existing and proposed roadway, structure sites, underground and overhead utilities, existing and proposed drainage, wetland delineation, right of way, parcel names, and deed research and descriptions shall be the responsibility of the Design-Build Team to acquire and process. All supplemental surveys shall adhere to the Location and Survey Unit’s September 28, 2018 *Proc 2018-4 - L&S Implementation of SharePoint Site Guidelines* and *Proc 2018-6 - L&S Required PEF Attestations for Individually Developed Survey Products* Memorandums. The Design-Build Team shall modify / incorporate boundary information used for the determination and

B. Roadway Foundations

- The Design-Build Team shall design and construct cut and fill slopes in accordance with the following requirements:
 - Excluding cut and fill slopes for the railroad track and railroad ditches, all unreinforced and non-rock plated / riprapped proposed cut and fill slopes shall be 3:1 (H:V) or flatter.
 - Roadway cut and fill slopes shall have a minimum factor of safety of 1.3 for global stability.
 - From Station 315+00 -L- to the bridge(s) on I-95 over the Lumber River, the proposed I-95 cut and fill slopes shall adhere to the following requirements:
 - From Station 347+00 -L- to the bridge(s) on I-95 over the Lumber River, the proposed roadway embankment on the west side of I-95 shall be 2:1 (H:V) fill slopes.
 - Excluding 1) the area required to transition to the aforementioned 2:1 (H:V) fill slopes, and 2) the areas required to transition to the 2:1 (H:V) bridge end bent slopes, all other proposed I-95 roadway cut and fill slopes shall be 4:1 (H:V) or flatter.
 - In accordance with the 2018 Roadway Standard Drawing No. 275.01, the Design-Build Team shall rock plate **all** fill slopes steeper than 3:1 (H:V) with Class II riprap.
- Reinforced soil fill slopes shall only be used to minimize impacts to 1) natural gas regulator stations; 2) sanitary sewer lift / pump stations; and 3) cultural, historical or otherwise protected landmarks; and will only be allowed in areas that specific fill slope design parameters are not required elsewhere in this RFP (e.g. a reinforced soil fill slope shall not be used to avoid the existing Cox Road sanitary sewer pump station located left of Station 316+00 -L-).
- In accordance with the project specifications, Roadway Standard Drawings, and the Erosion and Sedimentation Control Scope of Work found elsewhere in this RFP, provide drainage recommendations, including but not limited to lateral ditches, underdrains, and shoulder drains, for the new I-95 through lanes, existing mainline through lanes, and all -Y- Lines, ramps, loops and service roads designed and constructed on new location, excluding the transitions required to tie to existing, to meet the following conditions:
 - Maintain a minimum three-foot vertical separation between the groundwater table and the bottom of the pavement structure (asphalt base course, ABC, or cement treated base course, as applicable for the pavement design).

shoulder with 6" ABC (or 4" B25.0C), a split seal and at least two lifts of surface course. If a split seal is not used, the ABC pavement design shall require prime coat at the normal application rate. In these areas, the Design-Build Team's installation of ABC or black base shall be consistent with the pavement type for the specific roadway. As an alternative to the above pavement design for paving the shoulders to the face of the aforementioned features, the Design-Build Team may use the adjacent travel lane pavement design. Along I-95, within the elevated sections, the Design-Build Team shall use the adjacent travel lane pavement design for paving the shoulders to the face of the aforementioned features. Along ramps, the Design-Build Team shall provide a continuous paved shoulder width between segments of single face concrete barrier and /or guardrail when the segments are less than 800 feet apart.

In accordance with the NCDOT Roadway Standard Drawing No. 862.01, Sheet 2 of 11, 1) the Design-Build Team will not be required to pave to the face of guardrail protecting median sign supports; and 2) the special layer of pavement shall consist of 1.5" S9.5C and 6" ABC - prime coat will not be required.

The Design-Build Team shall place a minimum of 6" ABC or 4" B25.0C under all single face barrier, expressway / shoulder berm gutter, curb and gutter, and concrete truck aprons.

All driveways, up to the radius point, shall be constructed with the full-depth pavement design of the intersecting roadway. The entire impacted length of all non-concrete driveways with a 10% grade shall be constructed with 1.5" S9.5B (or S9.5C) and 8" ABC with prime coat. Unless otherwise noted above, the Design-Build Team shall adhere to the following for all driveway construction:

- For existing gravel and soil driveways, use 8" ABC.
- For existing asphalt driveways, use 1.5" S9.5B (or S9.5C) and 8" ABC with prime coat, or 2.0" S9.5B (or S9.5C) and 6" ABC with prime coat.
- For existing concrete driveways, use 6" jointed concrete reinforced with woven wire mesh.

The Design-Build Team shall be responsible for the design of all temporary pavements and for the evaluation of existing shoulders and roadways regarding their suitability for carrying traffic during construction, if necessary. In the event that the existing shoulders and / or roadways are found to be inadequate for the proposed temporary traffic volumes and duration, the Design-Build Team shall be responsible for upgrading the pavement to an acceptable level in accordance with the NCDOT *Pavement Design Procedure - AASHTO 1993 Method* dated January 4, 2019, including all revisions. Temporary pavement designs and associated calculations shall be submitted for review and acceptance using the Design-Build submittal process prior to incorporation. The expected duration for traffic on temporary pavement must be included as part of the submittal.

The rate of application and the maximum and minimum thickness per application and layer shall be in accordance with the NCDOT Roadway Design Manual and 2020 Asphalt QMS manual.

- (i) Critical permitting dates
- (j) Completion of right of way acquisition
- (k) Completion of utility relocation and construction

Page 1-69, Article 108-2, add the following:

(D) The Design-Build Team shall provide a written narrative each month detailing the work and percentage of work completed, anticipated sequence of upcoming work (two-month forecast), controlling operation(s), intermediate completion dates, and milestones. If any milestones are exceeded or will not be achieved, the Design-Build Team shall provide in the written narrative details of the delay; controlling operation affected, impacts to other operations, revisions to future intermediate completion dates and milestones, and remedial action necessary to get the project back to the **original Substantial Completion Date and Final Completion Date.**

Page 1-69, delete Article 108-3 and replace with the following:

108-3 PRECONSTRUCTION AND PRE-DESIGN CONFERENCES

The selected Design-Build Team shall meet with the Engineer for a pre-design conference concerning the design phase of the work. This conference shall be held prior to the commencement of work, as it is determined according to Article 108-1, and will be scheduled by the Engineer. At the predesign conference, the Design-Build Team shall furnish authorized signature forms and a list of all proposed subcontractors associated with the project design.

A preconstruction conference shall be held at least ten working days before construction activity begins. This second conference, concerning the construction phase, shall also be scheduled by the Engineer. The Design-Build Team shall give the Engineer a minimum of 45 days written notice before the Design-Build Team plans to begin construction activities. This will allow the Engineer time for any environmental agency representatives involved in the permitting process, as well as any other pertinent entities, to be scheduled to attend the preconstruction conference. If the Design-Build Team is responsible for utilities in accordance with Article 105-8 and the Request for Proposals, the Design-Build Team shall be responsible for coordinating with the Engineer in scheduling the utility owners attendance and for notifying the utility owners. The Design-Build Team shall also be responsible for coordinating with the Engineer in scheduling the attendance of subcontractors and others deemed appropriate, and for notifying them.

At the preconstruction conference, a list of any proposed subcontractors and major material suppliers associated with the construction of the project will be submitted.

If the contract has a DBE or WBE / MBE requirement, the Design-Build Team shall submit copies of completed and signed DBE or WBE / MBE subcontracts, purchase orders, or invoices to the Department.