STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

August 13, 2018

Addendum No. 5

Contract No.:	C 203970
TIP No.:	I-5507 / R-0211EC / U-4714AB
County:	Mecklenburg
Project Description:	I-485 from I-77 to US 74 (Independence Boulevard); I-485 / Weddington Road Interchange; and I-485 / East John Street – Old Monroe Road Interchange

RE: Addendum No. 5 to Final RFP

September 18, 2018 Letting

To Whom It May Concern:

Reference is made to the Final Request for Proposals dated May 7, 2018 recently furnished to you on the above project. We have since incorporated changes, and have attached a copy of Addendum No. 5 for your information. Please note that all revisions have been highlighted in gray and are as follows:

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

Page Nos. 280, 281, 282, and 283 of the *Roadway* Scope of Work have been revised. Please void Page Nos. 280, 281, 282, and 283 in your proposal and staple the revised Page Nos. 280, 281, 282, and 283 thereto.

Page No. 363 of the *Signing* Scope of Work has been revised. Please void Page No. 363 in your proposal and staple the revised Page No. 363 thereto.

Page No. 500 of the *Title VI and Nondiscrimination* Standard Special Provision has been revised. Please void Page No. 500 in your proposal and staple the revised Page No. 500 thereto.

Mailing Address:
NC DEPARTMENT OF TRANSPORTATION
CONTRACT STANDARDS AND
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RALEIGH, NC 27699-1591

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Website: www.ncdot.gov

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

If you have any questions or need additional information, I can be reached by telephone at (919) 707-6900.

Sincerely,

DocuSigned by:
Ronald E. Davenport, Jr.
F81B6038A47A442...

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

Cc: Ron Hancock, PE
Scott Cole, PE
Teresa Bruton, PE
File

STANDARD SPECIAL PROVISIONS

ROADWAY SCOPE OF WORK (8-13-18)

It should be noted that TIP Project, I-5507, as referenced throughout this Request for Proposals (RFP), represents TIP Project I-5507, R-0211EC and U-4714AB. All references to TIP Projects I-5507, R-0211EC and U-4714 in material provided by the Department shall apply to this project.

Throughout this RFP, references to the Design Map shall denote the I-5507 / R-0211EC / U-4714AB Design Public Meeting Map dated July 2018.

Project Details

- The Design-Build Team shall design and construct an eastbound and westbound express lane within the I-485 median from I-77 to US 74 (Independence Boulevard). Unless noted otherwise elsewhere in this RFP, the Design-Build Team shall design and construct the -L- Line providing the same or better access, widening, improvements and traffic measures of effectiveness, in the Department's sole discretion, included in the Design Map provided by the Department. The limits of -L- Line construction shall be of sufficient length to tie to existing based upon the current NCDOT guidelines and standards. Unless noted otherwise elsewhere in this RFP, the -L- Line shall be designed and constructed to meet a 75 mph design speed for a rolling urban freeway designed to interstate standards. The Design-Build Team shall provide all other design criteria in the Technical Proposal.
- Within the section of I-485 constructed under TIP Project R-4902, the Design-Build Team will not be required to modify the -L- Line solely to adhere to the aforementioned 75 mph design speed. However, the Design-Build Team shall design and construct new and modified ramps / loops within the section of I-485 constructed under TIP Project R-4902 that adhere to a 75 mph design speed.
- Excluding the section of I-485 constructed under TIP Project R-4902, the Design-Build Team shall design and construct minimum 12-foot outside shoulders, ten-foot of which shall be full depth paved shoulders along the -L- Line including all acceleration, deceleration and auxiliary lanes, and ramps / loops / Direct Connections to the back of the gore (12-foot width Within the section of I-485 constructed under TIP Project R-4902, the Design-Build Team shall not reduce the existing -L- Line outside shoulder width, including but not limited to the paved shoulder width. From NC 16 (Providence Road) to the end of the project, the Design-Build Team will not be required to remove the existing shoulder section beyond the minimum shoulder widths noted above. (Reference the Pavement Management Scope of Work found elsewhere in this RFP)
- The Design-Build Team shall design and construct the I-485 / Rea Road Interchange Loop A and Loop C acceleration lengths to meet a 75 mph design speed.
- The Design-Build Team shall design and construct the Johnston Road Loop C acceleration length to meet a 75 mph design speed.
- From the beginning of the project to Rea Road, the Design-Build Team shall design and construct a full-depth paved median along the -L- Line at the minimum widths shown on the Design Map. Unless required otherwise elsewhere in this RFP, the Design-Build Team shall design and construct a minimum 26-foot full-depth paved mainline median from Rea Road to the end of the project. Unless allowed otherwise elsewhere in this RFP, the Design-Build Team shall design and construct Type "T" double-faced concrete median barrier on the aforementioned full depth median pavement throughout the project limits,.
- In accordance with the following requirements, the Design-Build Team shall design and construct a minimum 105-foot mainline median west of US 74:
  - On the left side of I-485, the Design-Build Team shall design and construct a 60.5-foot median width from Station 896+00.00 -L- to Station 908+00.00 -L-.
  - On the right side of I-485, the Design-Build Team shall design and construct a 44.5-foot median width from Station 893+00.00 -L- to Station 911+00.00 -L-.

- The left and right median widths defined above shall be measured from the I-485 centerline to the Express Lane edge of travel.
- East of the 105-foot median width, the Design-Build Team shall transition to a minimum 38-foot symmetrical median width.
- Post Award, the Design-Build Team shall coordinate the final median design with the U-2509 Project to ensure that a Direct Connector can be accommodated from the bridge on US 74 to the I-485 median.
- The 105-foot mainline median, and the sections of the 105-foot mainline median transitions that adhere to the cable guiderail placement design criteria (minimum 46-foot width with 6:1 or flatter slopes, or minimum 60-foot width), shall be turf with cable guiderail. The remaining sections of the 105-foot mainline median transitions shall be full-depth pavement with Type "T" double-faced concrete barrier.

If the 105-foot mainline median transitions impact the East John Street ramps, the bridge over the CSX Railroad, or the bridge on US 74 over I-485, the associated construction costs will be paid for as extra work in accordance with Subarticle 104-8-(A) of the NCDOT Standard Specifications for Roads and Structures. The Design-Build Team shall include all other construction costs, as well as all design costs, required to design and construct the 105-foot mainline median in the lump sum price bid for the entire project. The Design-Build Team will not be required to include any designs associated with the 105-foot median in the Technical Proposal.

- Throughout the project limits, the Design-Build Team shall design and construct a delineation area between the express lane and the general purpose lanes at the minimum widths shown on the Design Map. Unless noted otherwise elsewhere in this RFP, the Design-Build Team may shift the express lane entry and exit points a maximum of 500 feet, in either direction, from the locations shown on the Design Map. (Reference the Pavement Marking Scope of Work found elsewhere in this RFP). For the weave lanes between Johnston Road and Rea Road, the entry and exit points shall adhere to the location requirements noted below:

  - For the I-485 westbound express lane exit point, the 1000-foot lane change (to move from the weave lane to the general purpose lane) shall be located between Station 429+00 -L- and Station 439+00 -L-.
  - For the I-485 westbound express lane exit point, the 500-foot lane change (to move from the express lane to the weave lane) shall be located between Station 439+00 -L- and Station 444+00 -L-.
  - For the I-485 eastbound express lane entry point, the 500-foot lane change (to move from the general purpose lane to the weave lane) shall be located between Station 439+50 -L- and Station 444+50 -L-.
  - For the I-485 eastbound express lane entry point, the 1000-foot lane change (to move from the weave lane to the express lane) shall be located between Station 444+50 -L- and Station 454+50 -L-.

  The Design-Build Team shall include all preconstruction costs and construction costs required to design and construct the entry and exit points between Johnston Road and Rea Road at the locations noted above in the lump sum price bid for the entire project. The Design-Build Team will not be required to include any designs associated with the aforementioned entry or exit points in the Technical Proposal.

- From Endhaven Lane to Elmstone Drive, the Design-Build Team shall design and construct Elm Lane with 1) two 12-foot travel lanes, 2) one 12-foot center turn lane, 3) 2'-6" curb and gutter on both sides of the roadway, 4) a minimum 21-foot berm with 12-foot sidewalk on the west side and, 5) a minimum 17-foot berm with eight-foot sidewalk on the east side. (Reference the Structures Scope of Work found elsewhere in this RFP)

- Immediately beyond the guardrail anchor units, the Design-Build Team shall transition the proposed Ballantyne Road bridge width to the existing roadway facility with 8:1 tapers. (Reference the Structures Scope of Work found elsewhere in this RFP)

- The Design-Build Team shall design and construct a minimum 450-foot long exclusive northbound left turn lane and taper on East Westinghouse Boulevard that accesses Old Nations Ford Road.
- The Design-Build Team shall design and construct a minimum 350-foot long exclusive northbound right turn lane and taper on East Westinghouse Boulevard that accesses the -Y1DCA- Direct Connector (I-485 eastbound).
- The Design-Build Team shall design and construct a minimum 300-foot long exclusive westbound right turn lane and taper on the -Y1DCA- Direct Connector that accommodates the I-485 westbound to East Westinghouse Boulevard northbound movement.
- The Design-Build Team shall design and construct observation and enforcement areas that adhere to the design parameters in the December 1, 2016 Concept Plan for *I-5507 Observation and Enforcement Areas Memorandum*. West of Rae Road, the Design-Build Team shall not overlap any portion of the eastbound and westbound observation and enforcement areas. The Design Build Team shall design and construct observation and enforcement areas at the following locations:
  - I-485 Eastbound
    - AET 1.2 - The observation area shall be 100 feet beyond the tolling point. The enforcement area shall be between Westinghouse Boulevard and NC 51 / Pineville-Matthews Road.
    - AET 2.2 – The observation area shall be 100 feet beyond the tolling point. The enforcement area shall be within the wider median shoulder section east of Rea Road.
    - AET 3.2 – The observation area shall be 100 feet beyond the tolling point. The enforcement area shall be immediately beyond the observation area, between Providence Road and Weddington Road.
  - I-485 Westbound
    - AET 3.1 – The observation area shall be 100 feet beyond the tolling point. The enforcement area shall be immediately beyond the observation area, between John Street and Weddington Road.
    - AET 2.1 – The observation area shall be 100 feet beyond the tolling point located west of the Ballantyne Commons Parkway overpass. The enforcement area shall be immediately beyond the observation area, east of the Rea Road interchange.
    - AET 1.1 – The observation area shall be 100 feet beyond the tolling point. The enforcement area shall be immediately beyond the observation area, between Johnston Road and NC 51 / Pineville-Matthews Road
- The Design-Build Team shall design and construct Weddington Road in accordance with the June 18, 2018 Weddington Road typical section provided by the Department.
- The Design-Build Team shall coordinate with Projects U-4714A and U-4714B design and construction to ensure accurate hydrology, capacity, and horizontal and vertical ties that adhere to the design criteria. The Design-Build Team shall not make any design or construction revisions that impact the design or construction of projects U-4714A and U-4714B without prior written approval from the Design-Build Unit (Reference the *Cooperation Between Contractors* Project Special Provision found elsewhere in this RFP).
- Unless noted otherwise elsewhere in this RFP, the Design-Build Team shall design and construct -Y- Lines, ramps, loops and Direct Connections providing the same or better access, widening, improvements and traffic measures of effectiveness, in the Department's sole discretion, included in the Design Map provided by the Department. The limits of -Y- Line construction shall be of sufficient length to tie to existing based upon the current NCDOT guidelines and standards.
- The Design-Build Team shall design and construct all -Y- Lines such that the through movement is not required to change lanes throughout the limits of construction.

- Excluding Direct Connectors, the Design-Build Team shall design and construct one-lane ramps that provide a minimum 16-foot lane width, and two lane ramps that provide minimum 12-foot lanes. Excluding Direct Connectors, all ramps shall have 14-foot outside shoulders, four-foot of which shall be full depth paved shoulders and 12-foot inside shoulders, four-foot of which shall be full depth paved shoulders.
- The Design-Build Team shall design and construct Direct Connectors in accordance with the requirements noted below:
  - At East Westinghouse Boulevard, a two-lane / two-way Direct Connector shall be designed and constructed with minimum 16-foot lanes and 14-foot outside shoulders, 12-foot of which shall be full depth paved shoulders. The lanes shall be separated by a minimum ten-foot full depth paved shoulder and appropriate double-face concrete barrier of sufficient height to provide a glare screen. The bridge section shall be designed and constructed with a 12-foot bridge rail offset on both sides of the bridge.
  - At Johnston Road, the eastbound Direct Connector (-Y2DCC-) shall be designed and constructed with 1) a minimum 16-foot lane, 2) a 14-foot outside shoulders, four-foot of which shall be full depth paved shoulder, and 3) a 12-foot inside shoulder, four-foot of which shall be full depth paved shoulder. The bridge section shall be designed and constructed with a 12-foot bridge rail offset on both sides of the bridge.
  - At Johnston Road, the westbound Direct Connector (-Y2DCD-) shall be designed and constructed with 1) a minimum 16-foot lane, 2) a 14-foot outside shoulder, 12-foot of which shall be full depth paved shoulder, and 3) a 12-foot inside shoulder, four-foot of which shall be full depth paved shoulder. The bridge section shall be designed and constructed with a 12-foot inside bridge rail offset and a four-foot outside bridge rail offset.
  - Excluding the East Westinghouse Boulevard Direct Connector, the minimum design speed for all Direct Connectors shall adhere to the middle range design speed noted in Table 10-1, *Guide Values for Ramp Design Speed as Related to Highway Design Speed* shown in AASHTO's *A Policy on Geometric Design of Highways and Streets* (2011). The East Westinghouse Boulevard Direct Connector shall be designed and constructed to meet a minimum 45-mph design speed for a rolling urban freeway designed to interstate standards.
  - The 0.06 Maximum Superelevation Table in AASHTO's *A Policy on Geometric Design of Highways and Streets* (2011) shall be used for all Direct Connectors.
- The Design-Build Team shall develop the I-485 westbound express lane in advance of the Johnston Road exit by converting the second northbound lane from the inside into an option lane.
- In lieu of the five Johnston Road northbound lanes between Brixham Hill Avenue and the exit ramp to I-485 westbound shown on the Design Map, the Design-Build Team shall match the existing four northbound lanes. In lieu of the three Johnston Road northbound lanes north of the exit ramp to I-485 westbound shown on the Design Map, the Design-Build Team shall match the existing two northbound lanes.
- The Design-Build Team shall design and construct loops that adhere to Table 3-29, *Design Widths of Pavements for Turning Roadways,* shown in AASHTO's *A Policy on Geometric Design of Highways and Streets* - Case II / Condition C for one-lane loops; Case III / Condition C for two-lane loops. All loops shall have 12-foot outside shoulders, four-foot of which shall be full depth paved shoulders. All loops shall have 2'-6" curb and gutter along the inside edge of pavement, with a 14-foot berm. The minimum loop design shall be 30-mph with a minimum 230-foot radius.
- Excluding transitions required to tie to existing and steeper cross slopes (0.025 maximum) required to eliminate hydroplaning, the I-485 normal crown cross slope shall be 0.02. Excluding the section of I-485 constructed under TIP Project R-4902, the I-485 crown point

Drawings. Type D signs shall not exceed eight feet in width and / or 24 square feet. Unless positively protected, all Type D, E and F signs and sign assemblies shall be installed on a maximum of two U-channel posts.

Type B route sign assemblies shall be mounted on steel support(s) with foundation(s) designed with the latest support design software.

The Design-Build Team shall design all ground mounted sign supports on concrete median barriers.

Proposed Overhead Sign Structures

The Design-Build Team shall consider the proposed roadway geometry, number of lanes, and all advisory signing needs when selecting the type of overhead signing for a given location. At a minimum, the Design-Build Team shall provide overhead signing as shown in the I-485 Express Lane Alt. 2C Schematic dated February 13, 2018 and March 28, 2018, at the locations identified in the MUTCD, Section 2E.24 – Signing for Interchange Lane Drops, Section 2A.17 - Overhead Sign Installations, Items A – M, and the following locations, unless allowed otherwise elsewhere in this RFP:

- An option lane at a multi-lane exit or freeway / ramp split (use Arrow Per Lane signs)
- A freeway ends and "All Traffic Exit"
- A freeway lane ends (freeway lane drop)
- Three or more lanes on a freeway ramp
- For the US 521 northbound (Johnston Road) to I-485 westbound movement - One Arrow-per-Lane Guide Sign at the exit directional and one Cantilever Advance Guide Sign (two overhead sign structures **in addition to** the overhead sign structures shown on the I-485 Express Lane Alt. 2C Schematic dated February 13, 2018 and March 28, 2018)

The wind speed for the overhead sign structure and foundation designs shall be 90 mph.

The Design-Build Team shall design, fabricate and install overhead sign supports and foundations in accordance with Section 906 of the NCDOT *Standard Specifications for Roads and Structures*, the *Foundations and Anchor Rod Assemblies for Metal Poles*, and *Overhead and Dynamic Message Sign Foundations* Project Special Provisions found elsewhere in this RFP

For all overhead sign assemblies mounted on concrete median barrier, the Design-Build Team shall design, fabricate and install median barrier footing and median transitional barrier in accordance with the NCDOT Roadway Standard Drawing No. 854.05.

The vertical clearance beneath all proposed overhead sign assemblies shall be no less than 17 feet and no greater than 18 feet. For all proposed overhead sign assemblies, the Design-Build Team shall submit documentation that verifies the actual vertical clearance at all critical points.

The maximum span length for cantilever overhead sign structures shall be 52 feet.

Lighting and walkways will not be required on any overhead sign assembly.

Overhead signs shall not be attached to existing or proposed bridges.

(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: