



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

JAMES H. TROGDON, III
SECRETARY

September 11, 2018

Addendum No. 2

Contract No.: C 204163
TIP No.: I-3819B/U-6039
County: Iredell
Project Description: I-40 / I-77 Interchange: I-40 from SR 2003 (Radio Road) to SR 2158 (Old Mocksville Road); I-77 from SR 2171 (Jane Sowers Road) to SR 2321 (East Broad Street); and SR 2321 (East Broad Street) from Vine Street to SR 2422 (Signal Hill Drive)

RE: Addendum No. 2 to Final RFP

October 25, 2018 Letting

To Whom It May Concern:

Reference is made to the Final Request for Proposals dated July 17, 2018 recently furnished to you on the above project. We have since incorporated changes, and have attached a copy of Addendum No. 2 for your information. Please note that all revisions have been highlighted in gray and are as follows:

On the COVER SHEET, change the date for Technical and Price Proposal Submission to **October 16, 2018** and the date for the Price Proposal Opening to **October 30, 2018**. Please mark through the dates shown on the July 17, 2018 (Labeled) RFP and insert the new dates. 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 and second pages of the *Table of Contents* have been revised. Please void the first and second pages in your proposal and staple the revised first and second pages thereto.

Page No. 2 of the *Other Liquidated Damages and Incentives* Project Special Provision has been revised. Please void Page No. 2 in your proposal and staple the revised Page No. 2 thereto.

Page No. 5 of the *Submittal of Quantities, Fuel Base Index Price and Opt-Out Option* Project Special Provision has been revised. Please void Page No. 5 in your proposal and staple the revised Page No. 5 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. 48 of the *Price Adjustments for Asphalt Binder* Project Special Provision has been revised. Please void Page No. 48 in your proposal and staple the revised Page No. 48 thereto.

Page Nos. 129 and 135 of the *General Section* have been revised. Please void Page Nos. 129 and 135 in your proposal and staple the revised Page Nos. 129 and 135 thereto.

Page Nos. 200 and 201 of the *ITS Scope of Work* have been revised. Please void Page Nos. 200 and 201 in your proposal and staple the revised Page Nos. 200 and 201 thereto.

Page Nos. 207, 210 and 211 of the *Pavement Management Scope of Work* have been revised. Please void Page Nos. 207, 210 and 211 in your proposal and staple the revised Page Nos. 207, 210 and 211 thereto.

Page Nos. 262, 265, 265A and 266 of the *Transportation Management Scope of Work* have been revised. Please void Page Nos. 262, 265, 265A and 266 in your proposal and staple the revised Page Nos. 262, 265, 265A and 266 thereto.

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

Sincerely,



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

RED/mcw

cc: Ron Hancock, PE
Mark Stafford, PE
Teresa Bruton, PE
Zak Hamidi, PE
Tim McFadden, CPM
File

-- STATE OF NORTH CAROLINA--
DEPARTMENT OF TRANSPORTATION
RALEIGH, N.C.

FINAL REQUEST FOR PROPOSALS
DESIGN-BUILD PROJECT



TIP I-3819B / U-6039

July 17, 2018



VOID FOR BIDDING

XYZ Date

October 16, 2018

DATE AND TIME OF TECHNICAL AND PRICE PROPOSAL SUBMISSION: ~~September 27, 2018~~ BY 4:00 PM

DATE AND TIME OF PRICE PROPOSAL OPENING: ~~October 16, 2018~~ AT 2:00 PM

CONTRACT ID: C204163 October 30, 2018

XYZ Date

WBS ELEMENT NO. 34192.3.2

FEDERAL-AID NO. N/A

COUNTY: Iredell

ROUTE NO. I-40 / I-77

MILES: 4.0

LOCATION: Statesville – I-40 / I-77 Interchange: I-40 from SR 2003 (Radio Road) to SR 2158 (Old Mocksville Road); I-77 from SR 2171 (Jane Sowers Road) to SR 2321 (East Broad Street); and SR 2321 (East Broad Street) from Vine Street to SR 2422 (Signal Hill Drive)

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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Liquidated Damages for Intermediate Contract Time #2 for lane narrowing and lane closure time restrictions for Broad Street, US 64, Eastside Drive and Old Mocksville Road are \$1,500.00 per 15-minute period or any portion thereof.

Liquidated Damages for Intermediate Contract Time #3 for road closure time restrictions for I-40 and I-77 including all collector distributors, ramps and loops are \$5,000.00 per 15-minute period or any portion thereof.

Liquidated Damages for Intermediate Contract Time #4 for road closure time restrictions for Broad Street and US 64 are \$2,500.00 per 15-minute period or any portion thereof.

Liquidated Damages for Intermediate Contract Time #5 for road closure time restrictions for Simonton Road are \$1,000.00 per calendar day or any portion thereof.

Liquidated Damages for Intermediate Contract Time #6 for road closure time restrictions for Eastside Drive are \$1500.00 per 15-minute period or any portion thereof.

Liquidated Damages for Intermediate Contract Time #7 for ramp / loop tie-in time restrictions for the I-77 / I-40 existing Loop B are \$5,000 per 15-minute period or any portion thereof.

Liquidated Damages for Intermediate Contract Time #8 for ramp / loop tie-in time restrictions for the I-77 / I-40 existing Loop C are \$5,000 per 15-minute period or any portion thereof.

Liquidated Damages for Intermediate Contract Time #9 for ramp / loop tie-in time restrictions for the I-77 / I-40 existing Loop D are \$5,000 per 15-minute period or any portion thereof.

Liquidated Damages for Intermediate Contract Time #10 for ramp / loop tie-in time restrictions for the Sullivan Road ramp to I-40 eastbound are \$5,000 per 15-minute period or any portion thereof.

Liquidated Damages for Intermediate Contract Time #11 for ramp / loop tie-in time restrictions for the I-77 / I-40 existing Ramp D are \$5,000 per 15-minute period or any portion thereof.

Liquidated Damages for Intermediate Contract Time #12 for the lane reduction duration on the Broad Street Bridge over I-77 are \$1,000.00 per calendar day or any portion thereof.

Liquidated Damages for ITS apply to this project.

Liquidated Damages for Intermediate Contract Time #13 for failure to reestablish ITS fiber optic communications within 72 hours are \$2,500.00 per calendar day or any portion thereof.

Liquidated Damages for Intermediate Contract Time #14 for failure to provide a plan that defines 1) an anticipated ITS cellular communications disruption timeframe and 2) a plan of action for reestablishing ITS cellular communications a minimum of 21 days prior to a proposed disruption in service are \$10,000.00 per failure.

Damages for Erosion and Sedimentation Control efforts apply to this project.

Reference the Erosion and Sedimentation Control Scope of Work found elsewhere in this RFP for additional information under the Liquidated Damages Section.

PAYOUT SCHEDULE

(11-16-09)

DB1 G13

No later than 12:00 o'clock noon on the sixth day after the opening of the Price Proposal, the responsive proposer with the lowest adjusted price shall submit a proposed Anticipated Monthly

certify that the quantities are reasonable for the specified period. The base index price for DIESEL #2 FUEL is **\$2.2450** per gallon.

(C) Opt Out of Fuel Price Adjustment

If the Design-Build Team elects not to pursue reimbursement for Fuel Price Adjustments, a quantity of zero shall be entered for all quantities in the *Fuel Usage Factor Chart and Estimate of Quantities* sheet and the declination box shall be checked. Failure to complete this form will mean that the Design-Build Team is declining the Fuel Price Adjustments for this project.

(D) Change Option

The proposer will not be permitted to change the option after the Price Proposal and the copy of the *Fuel Usage Factor Chart and Estimate of Quantities* sheet are submitted.

(E) Failure to Submit

Failure to submit the completed *Fuel Usage Factor Chart and Estimate of Quantities* sheet separately and in the Price Proposal will result in the Technical and Price Proposal being considered irregular by the Department and the Technical and Price Proposal may be rejected.

INDIVIDUAL MEETINGS WITH PROPOSERS

(9-1-11)

DB1 G048

The Department will provide at least two Question and Answer Sessions to meet with each proposer individually to specifically address questions regarding the draft Requests for Proposals.

After issuance of the First Industry Draft RFP, the Department will attempt to arrange a meeting between each individual proposer and the affected utility owners.

The Department will afford each proposer one additional meeting with the Department (maximum two-hour time limit) to discuss project specifics and address the proposer’s concerns and questions. This meeting may occur at any time after the first Question and Answer Session with the proposers and before two weeks prior to the Technical and Price Proposals submittal date. The proposer shall request this meeting in writing to the State Contract Officer, providing the Department a minimum of one week advance notice of the requested date. The proposer shall also state in the request those disciplines within the Department that are requested to be in attendance. The Department makes no assurance that the request may be honored on that specific date or that all disciplines requested can be in attendance.

Additional individual meetings may be permitted in accordance with the *Alternative Technical Concepts and Confidential Questions* Project Special Provision found elsewhere in this RFP.

The base price index for asphalt binder for plant mix is **\$561.11** per ton.

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on **September 1, 2018.**

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 will 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.

Provide a field office that is weatherproof, tightly floored and roofed, constructed with an air space above the ceiling for ventilation, supported above the ground, has a width of at least ten feet, and the floor-to-ceiling height that is at least 7 feet 6 inches. Provide inside walls and a

within ten business days of the issuance of the Industry Draft RFP, and provide updated lists and Confidentiality Agreements, as appropriate, throughout the project procurement / duration.

Failure to comply with the terms stated above in this section may be grounds for termination of this contract and / or not being considered for selection of work on future contracts for a period of one year.

SUBMITTAL OF TECHNICAL AND PRICE PROPOSALS

Technical and / or Price Proposals that do not adhere to all the requirements noted below may be considered non-responsive and may result in the Department not considering the Design-Build Team for award of the contract or reading their Price Proposal publicly.

GENERAL

Technical and Price Proposals will be accepted until **4:00 p.m. Local Time on Tuesday, October 16, 2018**, at the office of the State Contract Officer:

Mr. Ronald E. Davenport, Jr., P.E.
Contract Standards and Development
1020 Birch Ridge Drive
Century Center Complex - Building B
Raleigh, NC 27610

No Proposals will be accepted after the time specified.

Proposals shall be submitted in two separate, sealed parcels containing the Technical Proposal in one and the Price Proposal in the other parcel.

TECHNICAL PROPOSAL – Hard Copies

Hard Copies of the Technical Proposals shall be submitted in a sealed package. The outer wrapping shall clearly indicate the following information:

Technical Proposal – Hard Copies
Submitted By: (Design-Build Team's Name)
Design-Build Team Address
Contract Number C204163
TIP Number I-3819B / U-6039
Iredell County

I-40 / I-77 Interchange: I-40 from SR 2003 (Radio Road) to SR 2158 (Old Mocksville Road); I-77 from SR 2171 (Jane Sowers Road) to SR 2321 (East Broad Street); and SR 2321 (East Broad Street) from Vine Street to SR 2422 (Signal Hill Drive)

If delivered by mail, the sealed envelope shall be placed in another sealed envelope and the outer envelope addressed to the Contract Officer as stated in the Request for Proposals. The outer envelope shall also bear the statement "Technical Proposal for the Design-Build of State Highway Contract No. C204163".

- Identify types of any retaining walls and / or sound barrier walls, if applicable.
- Describe any geotechnical investigations to be performed by the Design-Build Team and note any deviations to NCDOT requirements for subsurface investigations noted in the Geotechnical Scope of Work.
- If applicable, specify the extent of impacts to properties with contaminated soils, indicating the anticipated contamination excavation limits.
- Identify any aesthetic considerations not required herein that will be part of the design.
- Describe how utility conflicts will be addressed and any special utility design considerations. Describe how the Design-Build Team's design and construction methods minimize the Department's utility relocation costs.
- Describe how the design will affect the Department's right of way costs.

3. Long Term Maintenance – 5 points

- Describe any special materials, not referenced elsewhere in this RFP, incorporated into the project that would result in long term reduction in maintenance.
- Describe any special designs or construction methods that would reduce future maintenance costs to the Department.
- Estimate a minimum ten-year cost saving resulting from incorporation of these special materials, design or construction methods into the project.

4. Schedule and Milestones – 26 points

- Provide a detailed schedule for the project including both design and construction activities. The schedule shall show the sequence and continuity of operations, as well as the month of delivery of usable segments of the project.
- 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 days, for ICT #5.
- Specify the duration, in hours, for ICT #6.
- Specify the duration, in days, for ICT #12.
- The schedule shall also include the Design-Build Team's final completion date and, if proposed, their substantial completion date. **These dates shall be clearly indicated on the Project Schedule and labeled "Final Completion Date" and "Substantial 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.

ITS SCOPE OF WORK (9-7-18)

GENERAL

Relocate Closed Circuit Television Cameras (CCTV) impacted by the construction of this project. Reestablish cellular communications to these CCTVs and reintegrate into the existing computer and network hardware and software at the NCDOT Metrolina Regional Transportation Management Center (MRTMC) located at 2327 Tipton Drive, Charlotte, NC 28206. Major items of work include, but are not limited to, the following:

- Relocation of five (5) existing CCTVs, wood poles, and equipment cabinets
- Conduit system (one – 2-inch conduit for electrical)
- Junction boxes
- Relocation of existing electrical service equipment
- Relocation of existing solar power equipment

Furnish and install guardrail to protect the CCTVs and associated equipment, as required.

Determine the new location of each CCTV, obtain the Engineer’s approval of the locations, relocate and implement test procedures, and reintegrate the devices with the MRTMC.

Prior to any underground work, locate existing utilities, communications cable, power cable, and adjust work activities to protect these facilities. Immediately cease work and notify the Engineer and the affected owners if damage to existing utilities occurs. Repair damages to existing utilities, communications cable, and / or power cable at no cost to the Department.

Perform all work in accordance with the 2018 NCDOT *Standard Specifications for Roads and Structures* and the 2018 NCDOT *Roadway Standard Drawings*.

PROJECT OPERATION REQUIREMENTS

Intermediate Contract Times #13 and #14 for Failure to Reestablish Cellular Communications

During construction, the Design-Build Team shall coordinate any disruption in ITS cellular communications with the Engineer and the MRTMC. The Design-Build Team shall notify the Engineer and the MRTMC a minimum of seven days prior to all proposed disruptions in service. A minimum of 21 days prior to any disruption in ITS cellular communications, the Design-Build Team shall develop and provide a plan for the Department’s approval that defines 1) an anticipated disruption timeframe and 2) a plan of action for reestablishing ITS cellular communications within 72-hours.

Liquidated Damages for Intermediate Contract Time #13 for failure to reestablish ITS cellular communications within 72 hours are \$2,500.00 per calendar day or any portion thereof.

Liquidated Damages for Intermediate Contract Time #14 for failure to provide a plan that defines 1) an anticipated ITS cellular communications disruption timeframe and 2) a plan of action for reestablishing ITS cellular communications a minimum of 21 days prior to a proposed disruption in service are \$10,000.00 per failure.

DESIGN REQUIREMENTS

COMMUNICATIONS

The existing CCTVs communicate with the MRTMC via Department owned cell modems. Project plans developed by the Design-Build Team shall include reestablishing cellular communications.

CCTV CAMERAS

The Design-Build Team shall relocate existing CCTV cameras impacted by the construction of this project. CCTVs are likely to be impacted at the following locations:

- I-40 at I-77 (Exit 152)
- I-40 at Old Mocksville Highway (Exit 154)
- I-77 at Broad Street (Exit 50)
- I-77 north of I-40 Interchange (near mile marker 51)
- I-77 at Jane Sowers Road Overpass (near mile marker 53)

The Design-Build Team shall design new grounding systems in accordance with the 2018 NCDOT *Standard Specifications for Roads and Structures* and the 2018 NCDOT *Roadway Standard Drawings*.

MATERIALS & CONSTRUCTION

Perform all work in accordance with the 2018 NCDOT *Standard Specifications for Roads and Structures* and the 2018 NCDOT *Roadway Standard Drawings*.

The Design-Build Team shall relocate each CCTV camera and existing wood pole impacted by this project. Reinstall the existing CCTV equipment in the relocated 336S equipment cabinet mounted on the pole. Reinstall the following existing equipment in each CCTV equipment cabinet:

- Power equipment including power supplies, circuit breakers, surge protectors, and other related materials.

Prior to any underground work, locate existing utilities, communications cable, power cable, and adjust work activities to protect these facilities. Immediately cease work and notify the Engineer and the affected owners if damage to existing utilities occurs. Repair damages to existing utilities, communications cable, and / or power cable at no cost to the Department.

PAVEMENT MANAGEMENT SCOPE OF WORK (9-10-18)

Within the project limits, the Design-Build Team shall remove and dispose of / recycle the existing I-77 travel lanes, median paved shoulder and outside paved shoulder pavement structures to the top of the soil subgrade. At the south end of I-77, from Station 25+00 -Y- to Station 40+00 -Y- southbound, and from Station 16+20 -Y- to Station 48+00 -Y- northbound, the pavement design for the I-77 travel lanes, median shoulders and outside shoulders shall consist of the following:

3.0" S9.5D
 3.0" I19.0C
 13.5" B25.0C

Throughout the remainder of the project limits, the pavement design for the I-77 travel lanes, median shoulders and outside shoulders shall consist of one of the following alternatives, unless noted otherwise elsewhere in this RFP. The Design-Build Team shall specify the pavement alternate chosen in the Technical Proposal.

ALTERNATE 1 – CONCRETE PAVEMENT (ASPHALT SHOULDERS)

I-77 Travel Lane Pavement Design

The pavement design for the I-77 travel lanes shall consist of the following:

13.5" doweled jointed concrete
 Nonwoven Geotextile Drainage Interlayer *
 1.25" S9.5B
 12" Type 1 Aggregate Subgrade (*Aggregate Subgrade* Standard Special
 Provision found elsewhere in this RFP)

* The Nonwoven Geotextile Drainage Layer shall be in accordance with the *Nonwoven Geotextile Interlayer* Project Special Provision found elsewhere in this RFP. The Nonwoven Geotextile Drainage Interlayer and the S9.5B layer shall extend to the shoulder drains.

For each direction of travel, the I-77 concrete pavement structure width shall extend one-foot into the I-77 outside paved shoulder. The transverse joints shall be uniformly spaced 15 feet apart.

In accordance with the *Diamond Grinding Concrete Pavement* Project Special Provision found elsewhere in this RFP, the Design-Build Team shall diamond grind the new concrete pavement.

I-77 Full-Depth Median Shoulder and I-77 Full-Depth Outside Shoulder Pavement Design

Throughout the project limits, the pavement design for the I-77 median paved shoulder and the I-77 outside paved shoulder shall consist of the following:

3.0" S9.5C
 3.0" I19.0C
 8.75" B25.0C
 12" Type 1 Aggregate Subgrade (*Aggregate Subgrade* Standard Special
 Provision found elsewhere in this RFP)

The I-77 outside paved asphalt shoulder shall be 11 feet wide.

I-40 PAVEMENT DESIGN**I-40 Travel Lane Pavement Design**

Excluding the sections noted below, the pavement design for the I-40 travel lanes shall consist of the following:

- 14.0" doweled jointed concrete
 - 3.0" B25.0C
 - 1.25" S9.5B
- 12" Type 1 Aggregate Subgrade (*Aggregate Subgrade* Standard Special Provision found elsewhere in this RFP)

The transverse joints shall be uniformly spaced 15 feet apart.

I-40 Full-Depth Median Shoulder and I-40 Full-Depth Outside Shoulder Pavement Design

Throughout the project limits, excluding the sections noted below, the pavement design for the I-40 median paved shoulder and the I-40 outside paved shoulder shall consist of the following:

- 14.0" undoweled jointed concrete
 - 3.0" B25.0C
 - 1.25" S9.5B
- 12" Type 1 Aggregate Subgrade (*Aggregate Subgrade* Standard Special Provision found elsewhere in this RFP)

Pavement Design for the Western End of I-40

Within the I-40 sections between 1) Station 7+83 -L- to Station 17+50 -L- westbound, and 2) Station 24+00 -L- to Station 30+00 -L- eastbound, the pavement design for the I-40 travel lanes, I-40 median paved shoulder and I-40 outside paved shoulder shall consist of the following:

- 3.0" S9.5D
- 3.0" I19.0C
- 12.5" B25.0C

Within the two aforementioned sections, the Design-Build Team shall resurface the existing pavement structure with a minimum 1.5" S9.5D.

Pavement Design for the Eastern End of I-40

For both directions of I-40, from Station 210+50 -L- to the western terminus of the bridges over Old Mocksville Road, the Design-Build Team shall remove and dispose of / recycle the existing I-40 travel lanes, median paved shoulder and outside paved shoulder pavement structures to the top of the soil subgrade. Within the aforementioned limits, the pavement design for the I-40 travel lanes, median shoulders and outside shoulders shall consist of the following pavement design:

- 3.0" S9.5D
- 3.0" I19.0C
- 12.5" B25.0C

OTHER REQUIREMENTS

Unless noted otherwise elsewhere in this RFP, all longitudinal joints shall be located on a lane line or lane midpoint. Solely to shift a longitudinal joint to one of the aforementioned locations, a maximum 840-foot transition, that locates the longitudinal joint elsewhere, will be allowed. The Design-Build Team shall indicate in the Technical Proposal how longitudinal joints will be located on a lane line or lane midpoint.

The subgrade stabilization shown in the tables below shall consist of 12" of Type 1 Aggregate Subgrade (Reference the *Aggregate Subgrade* Standard Special Provision found elsewhere in this RFP)

Cement treated base course shall be in accordance with the *Cement Treated Base Course* Project Special Provision found elsewhere in this RFP.

Other pavement designs for this project shall be as listed in the tables below:

I-40 / I-77 Interchange Ramps

LINE	Concrete Depth	B25.0C	S9.5B	Stabilization
-YRPA- -YRPB- -YRPC- -YRPD- -YRPAC- -YRPCA- -YLPC-	11.5"	3.0	1.25"	Yes
-YRPBD-	13.0"	3.0	1.25"	Yes

-Y9- East Broad Street Ramps, Loops and -Y- Lines

LINE	Surface	Intermediate	Base	Stab
-Y9- (East Broad Street) -Y9A- (Knox Street) -Y9B- (Beechwood Road) -Y9C- (Shopping Center Entrance)	3.0" S9.5B	4.0" I19.0C	4.0" B25.0C	No
-Y9RPA-, -Y9RPC-, -Y9LPA-, -Y9LPC-	3.0" S9.5B	4.0" I19.0C	3.0" B25.0C	Yes

-Y15- Old Mocksville Road Ramps

LINE	Surface	Intermediate	Base	Stab
-Y15RPB-, -Y15RPC-	3.0" S9.5B	2.5" I19.0C	3.0" B25.0C	Yes
-Y10B- (US 64)	3.0" S9.5B	4.0" I19.0C	4.0" B25.0C	No

****Note** Deleted -Y15- (Old Mocksville Road) and -Y15A- pavement designs**

-Y10- Davie Avenue -Y- Lines

LINE	Surface	Intermediate	Base	Stab
-Y10- (US 64 / Davie Avenue) -Y11- (Simonton Road)	3.0" S9.5B	4.0" I19.0C	4.0" B25.0C	No

U-6039 -Y- Lines

LINE	Surface	Intermediate	Base	Stab
-Y1- (Eastside Drive) -Y2- (Signal Hill Drive) -Y3- (Carolina Street) -Y5- / -Y6-	3.0" S9.5B	4.0" I19.0C	4.0" B25.0C	No

If an emergency condition should occur, a RCN shall be provided to NCDOT within two (2) days after the event. For non-NCDOT controlled facilities, the Design-Build Team shall immediately notify the controlling government entity.

II. Project Operations Requirements

The following are Time Restrictions and notes that shall be included with the Transportation Management Plan General Notes, unless noted otherwise elsewhere in this RFP:

A. Time Restrictions

1. Intermediate Contract Times #1 and #2 for Lane Narrowing, Lane Closure, Holiday and Special Event Restrictions.

**** NOTE **** Deleted paragraph excluding the existing center turn lane on Broad Street bridge over I-77.

The Design-Build Team shall maintain the existing traffic pattern and shall not close or narrow a lane of traffic during the times below.

Road Name	Day	Time Restrictions
I-40 and I-77 (including all collector distributors, ramps and loops)	Monday through Friday	6:00 a.m. to 8:00 p.m.
	Saturday and Sunday	8:00 a.m. to 9:00 p.m.
US 64, Eastside Drive and Old Mocksville Road	Monday through Friday	6:00 a.m. to 9:00 am and 4:00 pm to 7:00 pm
Broad Street – Applies only when traffic on the Broad Street Bridge is in the existing five-lane traffic pattern or a four-lane traffic pattern that consists of two westbound through lanes and two eastbound through lanes	Monday through Friday	6:00 a.m. to 9:00 am and 4:00 pm to 7:00 pm
Broad Street - Applies only when Broad Street is in the long term temporary traffic pattern permitted in ICT #12	Monday through Friday	6:00 a.m. to 8:00 p.m.
	Saturday and Sunday	8:00 a.m. to 9:00 p.m.

The Design-Build Team shall not install, reset and / or remove any traffic control device during the times listed above.

In addition, the Design-Build Team shall not close or narrow a lane of traffic on I-40 or I-77 (including all collector distributors, ramps, and loops), detain and / or alter the traffic flow on or during holidays, holiday weekends, special events, or any other time when traffic is unusually heavy. At a minimum, these requirements / restrictions shall apply to the following schedules:

- (a) For New Year's between the hours of 6:00 a.m. December 31st and 8:00 p.m. January 2nd. If New Year's Day is on a Friday, Saturday, Sunday or Monday then from 8:00 p.m. the following Tuesday.
- (b) For Easter, between the hours of 6:00 a.m. Thursday and 8:00 p.m. Monday.

Prior to the continuous road closure, the Design-Build Team shall install a Department approved off-site detour route. The Design-Build Team shall maintain access to all driveways within the closure at all times. Simonton Road shall be reopened to traffic within the allotted road closure duration.

The date of availability shall be the date the Design-Build Team elects to close **Simonton Road**. The Design-Build Team shall provide the Engineer a minimum of 30 days written notice prior to the date of availability. The date of completion shall be the number of calendar days proposed by the Design-Build Team in the Technical Proposal, and such number of calendar days proposed shall not be greater than the days noted above.

Liquidated Damages for Intermediate Contract Time #5 for the above road closure time restrictions for Simonton Road are \$1,000.00 per calendar day or any portion thereof.

4. Intermediate Contract Time # 6 for Continuous Road Closure of Eastside Drive

One road closure with an approved offsite detour will be permitted to tie-in the proposed Eastside Drive alignment for no more than 59 consecutive hours. Prior to the continuous road closure, the Design-Build Team shall install a Department approved off-site detour route. Eastside Drive shall be reopened to traffic in the final signalized pattern within the allotted road closure duration.

The time of availability shall be the time the Design-Build Team elects to close Eastside Drive. The Design-Build Team shall provide the Engineer a minimum of 30 days written notice prior to the time of availability. The time of completion shall be the number of consecutive hours proposed by the Design-Build Team in the Technical Proposal, and such number of hours proposed shall not be greater than the hours noted above.

Liquidated Damages for Intermediate Contract Time #6 for the above road closure time restrictions for Eastside Drive are \$1500.00 per 15-minute period or any portion thereof.

5. Intermediate Contract Times #7 through # 11 for Ramp / Loop Tie-Ins

One continuous road closure, with an approved offsite detour, will be permitted to tie-in existing ramps / loops for the maximum durations listed below. Prior to the road closure, the Design-Build Team shall install a Department approved off-site detour route. The existing ramp / loop shall be completely reopened to traffic within the allotted road closure duration.

At the I-40 / I-77 interchange, the Design Build Team shall not concurrently close the entrance ramp and entrance loop for the same direction of I-40 or I-77. The Design-Build Team shall not concurrently close any ramp or loop at adjacent interchanges.

Intermediate Contract Times #7 through #11 for Ramp / Loop Tie-Ins are as listed in the table below:

Intermediate Contract Time #	Ramp / Loop	Day and Time Road Closure Allowed	Duration	Liquidated Damages (per 15-minute period or any portion thereof)
#7	I-40 / I-77 interchange - Existing Loop B (I-40 WB to I-77 SB)	From Friday at 9:00 p.m. until Monday at 5:00 a.m.	56 Consecutive Hours	\$5,000.00
#8	I-40 / I-77 interchange - Existing Loop C (I-77 SB to I-40 EB)	From Friday at 9:00 p.m. until Monday at 5:00 a.m.	56 Consecutive Hours	\$5,000.00
#9	I-40 / I-77 interchange - Existing Loop D (I-40 EB to I-77 NB)	From Friday at 9:00 p.m. until Monday at 5:00 a.m.	56 Consecutive Hours	\$5,000.00
#10	Sullivan Road Ramp to I-40 EB	From Friday at 9:00 p.m. until Monday at 5:00 a.m.	56 Consecutive Hours	\$5,000.00
#11	I-40 / I-77 interchange - Existing Ramp D (I-77 NB to I-40 EB)	From Friday at 9:00 p.m. until Monday at 5:00 a.m.	56 Consecutive Hours	\$5,000.00

6. Intermediate Contract Time #12 for Long Term Lane Reduction on Broad Street Bridge over I-77

With implementation of the following temporary traffic pattern, the Design Build Team will be permitted one long term reduction in the number of travel lanes on the Broad Street Bridge over I-77 for no more than **365 consecutive calendar days**:

- a) Two westbound through lanes across the Broad Street Bridge over I-77
- b) One eastbound through lane across the Broad Street Bridge over I-77
- c) No center turn lane across the Broad Street Bridge over I-77
- d) An exclusive left turn lane, with a minimum 100-foot storage at the signalized entrance, from eastbound Broad Street to Newtowne Plaza
- e) An exclusive left turn lane, with a minimum 100-foot storage at the signalized intersection, from eastbound Broad Street to the I-77 southbound loop
- f) An exclusive left turn lane, with a minimum 100-foot storage at the signalized intersection, from westbound Broad Street to the I-77 northbound loop
- g) Pedestrian access across the Broad Street Bridge over I-77 shall be maintained at all times. (The Design-Build Team will not be allowed to detour pedestrians off-site.)

Traffic shall be placed into the final pattern on the proposed bridge within the allotted lane reduction duration.

The date of availability shall be the date the Design-Build Team elects to reduce the number of travel lanes and shift traffic into the temporary pattern noted above. The Design-Build

Team shall provide the Engineer a minimum of 30 days written notice prior to the date of availability. The date of completion shall be the number of calendar days proposed by the Design-Build Team in the Technical Proposal, and such number of calendar days proposed shall not be greater than the days noted above.

Liquidated Damages for Intermediate Contract Time #12 for the above lane reduction duration on the Broad Street Bridge over I-77 are \$1,000.00 per calendar day or any portion thereof.

B. Hauling Restrictions

The Design-Build Team shall adhere to the hauling restrictions noted in the 2018 NCDOT *Standard Specifications for Roads and Structures*.

The Design-Build Team shall conduct all hauling operations as follows:

- The Design-Build Team shall not conduct any hauling operations against the flow of traffic of an open travelway unless an approved temporary traffic barrier or guardrail separates the traffic from the hauling operation.
- The Design-Build Team shall not haul during the holiday time and special events time restrictions listed in ICT #1 and ICT #2, unless the hauling operation occurs completely behind temporary traffic barrier or guardrail and does not impact traffic operations.
- All hauling entrances, exits, and crossings shall be shown on the TMP and be in accordance with the 2018 NCDOT Roadway Standard Drawings or the *Typical Median Access Areas* Project Special Provision found elsewhere in this RFP. All hauling entrances, exits, and median access point locations shall be approved by the Department prior to installation.
- Haul vehicles shall not enter and / or exit an open travel lane at speeds more than 10 mph below the posted speed limit.
- Hauling operations that perpendicularly cross a roadway shall require TMP and shall be subject to the time restrictions, and holiday, holiday weekend and special event time restrictions listed in ICT #1 and ICT #2.

The Design-Build Team shall address how hauling will be conducted in the Technical Proposal, including but not limited to, hauling of any materials to and from the site and hauling material within the NCDOT right of way.

Excluding hauling operations that are conducted entirely behind a temporary traffic barrier or guardrail, single vehicle hauling shall not be allowed ingress and egress from any open travel lane during the following time restrictions:

For Single Vehicle Hauling

Road Name	Day	Time Restrictions
I-40 and I-77 (including all collector distributors, ramps and loops)	Monday through Friday	6:00 am. To 9:00 am and 4:00 pm to 7:00 pm

Excluding hauling operations that are conducted entirely behind a temporary traffic barrier or guardrail, multi-vehicle hauling shall not be allowed ingress and egress from any open travel lane during the following time restrictions: