I-5701 / I-5703
Project Synopsis

Stipend

- A stipulated fee of **$560,000.00** will be awarded to each short-listed Design-Build Team that provides a responsive, but unsuccessful, Design-Build Proposal in response to the Final Request for Proposals and all associated Addenda. If a contract award is not made, all short-listed Design-Build Teams that provide a responsive Design-Build Proposal shall receive the stipulated fee. If the Department suspends or discontinues the procurement process prior to the Design-Build Proposal submittal date current at the time of the suspension, no stipulated fee will be paid.

Project Description and Purpose

- The I-5701 / I-5703 Design-Build Project adds lanes on I-40 from the I-440 / US 1 / US 64 interchange to Lake Wheeler Road (SR 1009) and reconstructs the existing interchange of I-40 with I-440 / US-1 / US-64 within the City of Raleigh and the Town of Cary in Wake County. The approximately 4.9-mile project provides an eight-lane divided facility along I-40.

- The purpose of this project is to substantially improve traffic operations in the I-40 corridor in both directions of travel and to improve traffic flow, operational efficiency and mobility through the interchange area. The project aims to improve the traffic operations at critical movements that are consistently congested during the peak travel periods and cause delays for travelers.

Planning

- The I-5701 Type III Categorical Exclusion was signed January 19, 2024.
- The I-5703 Type III Categorical Exclusion was signed January 19, 2024
- The Design-Build Team shall adhere to all environmental document commitments. A copy of the environmental documents noted above will be made available to the short-listed Design-Build Teams.

Public Information

- During the project's construction, the Design-Build Team shall coordinate with the Division 5 Office and the Construction Unit to inform the public of lane closures, construction progress, etc.

Roadway

- The Design-Build Team shall design and construct one new through lane in each direction along I-40 from the I-440 / US 1 / US 64 interchange to Lake Wheeler Road (SR 1009) by converting the existing I-40 auxiliary lanes located between the interchanges into through lanes. The new lanes on I-40 shall be designed and

constructed to meet a 70-mph design speed for a freeway designed to interstate standards.

- The Design-Build Team shall add new I-40 auxiliary lanes between the I-40 / I-440 / US 1 / US 64 and Lake Wheeler Road (SR 1009) interchanges to replace the auxiliary lanes that will be converted to through lanes.

- The Design-Build Team shall design and construct interchange modifications at the I-40 / I-440 / US 1 / US 64 interchange.

- The Department will provide a Traffic Noise Report. The Design-Build Team shall develop the Final Design Noise Report based on the final roadway plans developed by the Design-Build Team.

Structures

- The Design-Build Team shall design and construct all structures necessary to complete the project, including but not limited to, structures at the following locations:

    - Bridge on I-40 west off-ramp to US 1 south
    - Bridge on I-40 east off-ramp to US 1 south
    - Bridge on US 1 north off-ramp to I-40 west

- The Design-Build Team shall design and construct all reinforced concrete box culverts, including but not limited to extending, supplementing / replacing existing reinforced concrete box culverts impacted by the project's design and / or construction.

- The Design-Build Team shall design and construct all required sound barrier walls and retaining walls.

Environmental

- The Design-Build Team shall prepare all documents necessary for the Department to obtain the environmental permits. The anticipated required environmental permits include a US Army Corps of Engineers Section 404 Individual Permit; and a NC Department of Environment and Natural Resources, Division of Water Quality (DWQ) Section 401 Water Quality Certification.

- Project I-5701 / I-5703 is not in the Merger Process used by the environmental agencies and the Department to obtain environmental permits. However, the Design-Build Team shall coordinate with the typical Merger agencies to host a Hydraulic Design (4B) meeting and a Permit Drawing Review (4C) meeting prior to construction

Erosion Control

- The Design-Build Team shall be responsible for all erosion control designs and implementation.

- The Design-Build Team shall develop a Stormwater Management Plan.

Geotechnical

- Roadway and structure subsurface investigations will be provided to the short-listed Design-Build Teams. The Design-Build Team shall be responsible for all recommendations, as well as supplemental roadway and structural investigations.

- The Design-Build Team shall design and construct all foundations, embankments, slopes, retaining walls and temporary structures.

Geoenvironmental

- The Department has identified 20 sites of concern within the proposed project study area.

- The Design-Build Team and NCDOT responsibilities for geoenvironmental remediation will be outlined in the Request for Proposals.

Hydraulics

- The Design-Build Team shall design and construct all storm drainage.

- The Design-Build Team shall obtain FEMA compliance for the regulated stream crossing.

- The Design-Build Team shall develop all Bridge and Culvert Survey Reports.

ITS

- The Design-Build Team shall design and install ITS infrastructure, including but not limited to conduit, fiber optic communications cable, and components for a future high-speed fiber optic communications cable.

- The Design-Build Team shall design, install and integrate ITS communication equipment, including but not limited to Local Area Network Equipment, Dynamic Message Signs and Closed-Circuit Television Cameras.

Traffic Signals

- The Design-Build Team shall design and install all temporary and permanent traffic signals.

- The Design-Build Team shall install one (1) new traffic signal

Lighting

- The Department will provide signed and sealed Lighting Plans
- The Design-Build Team shall install all Lighting.
- The Design-Build Team shall design, provide, and install a lighting system in the interior barrier between the railway and greenway to aid visibility of pedestrians using the greenway during nighttime hours.
- The Design-Build Team shall design, provide, and install a complete conduit system for future lighting on all Y-line bridges located within the limits of the project.

Location and Surveys

- The Department will provide electronic surveys. The Design-Build Team shall be responsible for all supplemental surveys.
- Known existing utilities have been located and will be included with the survey data provided by the Department. The Design-Build Team shall be responsible for all supplemental SUE work.
- The Design-Build Team shall be responsible for all structure surveys.

Pavement Markings

- The Design-Build Team shall develop Pavement Marking Plans and install all temporary and permanent pavement markings / markers.

Pavement Design

- Alternate asphalt and concrete mainline pavement designs will be provided in the Request for Proposals.
- Asphalt -Y- Line pavement designs will be provided in the Request for Proposals.
- The Design-Build Team shall design all temporary pavements and evaluate existing shoulders and roadways regarding their suitability for carrying traffic during construction, if necessary.

R/W Utilities, Conflicts and / or Construction

- The Design-Build Team shall be responsible for all utility conflicts / relocations and utility construction plans. Coordination shall include, but not be limited to, preparations and / or obtaining all necessary utility agreements.

- The Design-Build Team shall coordinate the construction / relocation of private utilities with the appropriate owners.

Right of Way

- The Design-Build Team shall acquire all right-of-way, easements and control of access required by the proposed design and / or construction.

Signing

- The Design-Build Team shall design, fabricate and install all roadway signs.

Transportation Management

- The Design-Build Team shall develop and implement the Transportation Management Plans. A list of parameters, such as lane closures, time restrictions and general guidelines will be provided in the Request for Proposals.

Utility Construction

- For all water and sewer facilities in conflict with the project, the Design-Build Team shall design and construct the required relocations.

Cost-Loaded Critical Path Method Project Schedule (CPM Schedule)

- The Design-Build Team will be required to provide a Cost-Loaded Critical Path Method Project Schedule.

Construction Engineering Inspection (CEI) Scope of Work

- The Department will be responsible for CEI work.

Utility Owner Contact

- After issuance of the First Industry Draft Requests for Proposals (RFP) contact with affected utility owners and the Design-Build Teams will be allowed.