# **B-5554 and B-5555 Project Synopsis**

The Design-Build Project consists of replacing two (2) bridges located in Transylvania County. Bridges to be replaced are shown in the following table.

County	Structure No.	Route	Across
Transylvania	870046	NC 215	North Fork French Broad River
Transylvania	870073	NC 215	Beetree Fork

All the bridges for this project are on the Regional Tier.

# Planning

The Department is currently preparing a Project Data Sheet for each bridge which will serve as the Programmatic Categorical Exclusion (PCE). The Design-Build Team will be responsible for providing impact quantities to complete these environmental documents.

# Roadway

Roadway Plans will be the responsibility of the Design-Build Team. Pavement designs will be provided by the Department

# Hydraulics

The Design-Build Team shall be responsible for all hydraulic designs and shall provide signed and sealed Bridge Survey Reports for all bridge replacements. The Design-Build Team shall be responsible for all storm drainage design, permit drawings and construction and shall obtain FEMA compliance for the regulated floodways.

The Department will provide information prior to issuance of the Final Request for Proposals to establish the type and size of bridges to be bid.

# Permitting

The Design-Build Team shall be responsible for preparing design plan sheets and providing all data necessary for the Department to obtain the required environmental permits. It is anticipated that each bridge site will require a Nationwide Permit 3 and a Water Quality Certificate.

# Structures

The Design-Build Team will be responsible for the design and construction of all structures necessary to complete the projects. Standard bridge plans will be made available and may be used at certain sites; however, the design must be signed and sealed by the Design-Build Team.

Certain structure types will be disallowed or prescribed within the Request for Proposal.

# Geotechnical

The Department will provide 2 to 4 borings per bridge to the Design-Build Teams. The Design-Build Team shall be responsible for all geotechnical recommendations, as well as any necessary supplemental borings, roadway and structural investigations.

# **Traffic Management**

These bridges will require a staged construction. The Design-Build Team will be responsible for Traffic Control Plans as appropriate for the bridge sites as will be detailed in the Requests for Proposals.

A list of parameters, such as lane closures, time restrictions and general guidelines will be provided in the Request for Proposals.

# **Erosion and Sedimentation Control**

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

# **Signing and Pavement Markings**

Pavement Marking plans will be the responsibility of the Design-Build Team. Permanent signing on these projects will be minimal and will be the responsibility of the Design-Build Team.

# **Right of Way and Utilities**

All Right of Way acquisitions for this project will be performed by the Department or its agent.

The Design-Build Team will be responsible for the coordination of all utility relocations necessary for construction. It is anticipated that the cost of utility relocations will be paid by the utility owners or the Department.

# Surveys

The Department will provide initial survey information pre-bid. The Design-Build Team shall be responsible for any supplemental location and construction surveys.

# **Construction Engineering Inspection**

CEI on this project will be performed by the Department or its agent.

# **Contract Completion Date**

As this is an Express Design-Build Project without a Technical Proposal, the Request for Proposals will define an overall contract completion date, with associated liquidated damages. The completion date will be established to allow greater flexibility in the Design-Build Team's scheduling and completion of the work.

Intermediate contract times for road closures or for early completion of certain bridges, with associated liquidated damages, will be outlined in the Request for Proposals.

# Compensation

To reduce the amount of pre-bid work performed by the Design-Build Teams, and to ensure to the greatest extent possible that all Design-Build Teams are bidding on similar designs, the Department will include an estimated bridge length, bridge width and assumed geotechnical design parameters (e.g. point of fixity, embedment, bearing elevation) in the Request for Proposals. The Design-Build Team will then bid a unit price for these high level pay item quantities. However, the Department will allow the Design-Build Team to bid a lump sum for all work at certain bridge site to enhance the opportunity for innovation in the procurement.

It is likely that the bridge length will change from that estimated in the contract. In such event, a supplemental agreement will be entered into for the additional (or lesser) bridge length, foundation depth, etc. from those quantities placed in the Request for Proposals.

A lump sum item will most likely be included to provide for all design work and other ancillary construction work including but not limited to minor approach work, approach slabs, supplemental investigations, drainage, erosion control, traffic control, etc.