

## **BD-5101H Project Synopsis**

The Design-Build Project consists of replacing eight (8) low-impact bridges located in Martin County. Each of the bridges will be replaced in place with off-site detours. The primary purpose of this project is to begin to replace a large number of structurally deficient bridges in North Carolina. Bridges to be replaced are shown in the following table.

<b>Structure No.</b>	<b>Route</b>	<b>Across</b>
570013	SR 1113	Turkey Swamp
570037	SR 1114	Smithwick Creek
570043	SR 1510	Deep Run Swamp
570046	SR 1552	Cooper Swamp
570047	SR 1552	Branch Cooper Swamp
570049	SR 1516	Hardison Mill Creek
570088	SR 1319	Branch of Conoho Creek
570165	SR 1113	Bear Grass Swamp

It is anticipated that the Technical Proposals for this project will be limited to the narrative (Volume I) and that no plan sheets (Volume II) will be required.

All the bridges for this project are on the sub regional tier. A general overview of the Roadway, Hydraulics, Geotechnical, and Structures Scope of Work is specified in the *Sub Regional Tier Design Guidelines for Bridge Projects* dated February 2008 and the *Low Impact Bridge Replacement Process* dated January 2010. An electronic copy of these documents is located at:

<http://www.ncdot.org/doh/preconstruct/highway/structur/subregional/STGFeb2008.pdf>  
<http://www.ncdot.gov/download/projects/ncbridges/lowimpactbridge/finalmanual.pdf>

The Design-Build Team's replacement bridges are required to meet the requirements of these Guidelines. Unless otherwise noted in the Request for Proposal, the Design-Build Team shall follow the Low Impact Bridge Replacement Process.

The Department is currently preparing a Low Impact Project Data Sheet (serves as the Programmatic Categorical Exclusion (PCE)) for each of the bridges.

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

The Department will provide 2 to 3 borings per bridge to the Design-Build Teams. The Design-Build Team shall be responsible for all geotechnical recommendations, as well as supplemental roadway and structural investigations.

The Design-Build Team shall be responsible for preparing design plan sheets and providing all data necessary for the Department to obtain the environmental permit for each bridge replacement. These will generally include the Nationwide Permit 3 and a Water Quality Certificate.

The Department will provide full surveys and Lidar (Light Detection and Ranging) for each of the bridges. The Design-Build Team shall be responsible for supplemental surveys.

The Design-Build Team shall be responsible for the coordination of all utilities in conflict with the project. However, the cost of the utility relocations will be borne by either the utility owner or the Department.

The Design-Build Team will be responsible for designing and constructing the bridge approaches to tie the new structures into the existing pavement in accordance with Low Impact NCDOT design standards and policies. The pavement design will be provided by the Department.

The Department or others will be responsible for Construction Engineering Inspection (CEI) work.

The replacement structure is anticipated to be built within the existing right of way, if applicable, the Design-Build Team will be responsible for any right of way and easement acquisition.