

**STRUCTURES SCOPE OF WORK** (03-24-11)

**Project Details:**

The Design-Build Team will be responsible for all structures necessary to complete the project. The following seven (7) low impact structures shall be replaced by the Design-Build Team:

<b>County</b>	<b>Str #</b>	<b>Route</b>	<b>Water Crossing</b>
Bertie	070046	SR 1500	Roquist Creek
Bertie	070066	SR 1500	Branch of Roquist Creek
Bertie	070074	SR 1518	Roanoke River Trib. 1
Bertie	070083	SR 1349	Branch White Oak Swamp
Bertie	070145	SR 1343	Branch White Oak Swamp
Chowan	200019	SR 1316	Pembroke Creek Trib. 5
Martin	570156	SR 1117	Ready Branch

All bridges are anticipated to be cored slab or box beam designs. Cored slab and box beam structures shall have a bituminous concrete overlay riding surface.

All bridge rails, excluding Bridge No. 200019, shall be NCDOT’s Standard Vertical Concrete Barrier Rail. Precast concrete barriers are acceptable if the barriers are approved crash-tested or crash-test equivalent based on AASHTO LRFD Bridge Design Specifications and to a minimum AASHTO Test Level 3 (TL-3) designation. Bridge rails for Bridge No. 200019 in Chowan County shall be NCDOT’s Standard 2-Bar Metal Rail to accommodate bicycle traffic.

The Department will not allow replacement of any existing bridge with a culvert.

Bridge Sites #070046, 070066, and 070074 are designated to be at Corrosive Sites and therefore shall include the corrosion protection measures outlined in the NCDOT *Structure Design Manual*. The use of prestressed concrete piles in interior bents is required at these sites.

All steel piles used in end bents shall be galvanized from the top of the pile to a minimum of 20' below the bottom of the end bent cap. Concrete pile collars are not required. All steel piles used in interior bents shall be galvanized in accordance with the most recent *Structure Design Corrosion Protection For Steel Piles* policy memo.

**Bridge Removal:**

The Design-Build team is responsible for the removal and disposal of all existing bridges, piles, abutments and existing bridge substructure remnants per NCDOT’s *Best Management Practices of Maintenance and Construction Activities*.

Remove and stockpile existing steel crutch bents for Bridge No. 070145. Refer to the “Remove and Stockpile Crutch Bents” Project Special Provision.

For existing bridges that have paint systems containing red lead paint, the Design-Build Team is responsible for handling, removing, shipping, and disposing of these materials in accordance with the 2006 *NCDOT Standard Specifications for Roads and Structures*.