

**DORCHESTER COUNTY
SPECIFICATIONS FOR ALUMINUM BOX CULVERT
LITTLE WALNUT BRANCH-JOHNSON ROAD**

1. **DESCRIPTION:** Culvert shall be an Aluminum Structural Plate Box Culvert by Contech or approved equal, exhibiting a span and rise of 31'4" x 9'11", a cross section of 254 sq. ft., and a length of 27'. An aluminum structural plate invert and aluminum toe walls shall be included. Structure shall be designed to accommodate fill heights of 1.4' to 3.7'.

A headwall of aluminum structural plate, 38.6" long x 14'3" high with 9.0' wingwalls on each corner shall be provided for inlet and outlet ends. All appropriate reinforcing and anchor systems shall be included.

The aluminum box culvert shall consist of plates, ribs, and appurtenant items as described in these specifications and shall conform to the requirements of AASHTO M2119 and ASTM B 864. Aluminum structural plate gauges and reinforcing rib spacing shall be in accordance with Aluminum Structural Plate Design Guidelines by Contech.

Bolts and nuts shall conform to the requirements of ASTM A 307 or ASTM A 449, and shall be galvanized in accordance with ASTM A 153.

The assembly of the structure shall be accomplished by a licensed, insured contractor or by the County's own forces with the assistance of a factory representative for as long as is needed. The factory representative shall provide such hand tools as are uniquely required for the assembly of the structure for as long as is necessary.

2. **OTHER REQUIREMENTS:** Bridge shall be able to support H520 loading. All drawings shall be approved and stamped by a Registered Professional Engineer in the State of South Carolina.
3. **INSTALLATION:** Contractor shall provide, as an alternate bid quote, the cost of installing the bridge. Installation shall be in accordance with the manufacturer's recommendations, and the AASHTO Standard Specification for Highway Bridges, Section 26 (Division II).
4. **ASSEMBLY:** The box culvert shall be assembled in accordance with the shop drawings provided by the manufacturer and per the manufacturer's recommendations. Bolts shall be tightened using an applied torque of between 100 and 150 ft.-lbs.
5. **EXISTING BRIDGE:** It is the responsibility of Dorchester County to remove and demolish the existing bridge.

6. **TRAFFIC CONTROL:** Road will be closed for a period of no more than three (3) weeks; road will be open to local traffic only. Contractor shall make the necessary arrangements.
7. **WARRANTY:** Bidder shall provide warranty information with bid submittal.
8. **DELIVERY:** Dorchester County Public Works Department
 2120 East Main Street
 Dorchester, SC 29437

NOTE: Construction loads that exceed highway load limits are not allowed on the structure without approval from the Engineer. Live load traffic is not allowed on the structure until the structure has been backfilled. All construction must comply to SCDOT specifications.