Neuse River Bridge
New Bern, NC

Location: New Bern, NC
Designer: Ralph Whitehead Associates
Contractor: Traylor Bros., Inc.

Owner: NCDOT

The Neuse River Bridge carries U.S. 17 across the Neuse River in New Bern, North Carolina. It is a conventional design utilizing lightweight decks on normal weight AASHTO beams, and was the largest bridge contract ever offered by the state of North Carolina at the time of its letting. Because the site is crowded by New Bern’s historic district on the south side, and surrounded by sensitive wetlands on the north, alignment selection was especially difficult. This caused the interchanges with acceleration and deceleration lanes to be constructed as elevated structures over the river, substantially increasing the cost of the project. The lightweight concrete was proportioned using STALITE to produce a 4,500 psi compressive strength with a maximum water-cementitious materials ratio of 0.42 and a maximum air-dried equilibrium density of 115 pounds per cubic foot.