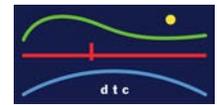


Rehabilitation of the North Avenue Bridge



By: Robert Orton, PE, Senior Structural Engineer

Diversified Technology Consultants (DTC) was contracted by the Town of Westport to provide study, design, permitting, and construction inspection for the rehabilitation of the North Avenue Bridge. All construction was administered by the Connecticut Department of Transportation (CT DOT).



The rehabilitation project was part of the federal local bridge program, which regularly inspects and evaluates bridges across the state. The North Avenue Bridge carries local commuter traffic from Weston and the north end of Westport to I-95 or Route 15. While the bridge was closed down for construction, DTC assisted the town in communicating to the surrounding community important information concerning detours, construction schedules, etc.

During the course of planning, Paul Newman, a local resident, regularly went to town meetings and was instrumental in determining the design direction of the bridge. Today, the completed bridge features rock-faced parapet walls in an effort to respect the town's wishes that the bridge fit into the surrounding community.

The new North Avenue Bridge is six feet wider than its predecessor and features two 12-foot wide travel lanes and a four-foot wide sidewalk. The bridge also utilizes the original abutment walls, which DTC engineers determined were structurally sound.

The new bridge also features an articulated concrete block revetment system to prevent scour. In order to install the block revetment, the flow of the river had to be staged so only half the riverbed was covered. The process was then reversed in order to add the system to the other side. To learn more about these changes, [click here](#).



The project required incredibly detailed record-keeping; DTC was required to create a daily report that documented construction activity, materials received, and testing completed. This type of horizontal construction oversight is common during bridge and highway construction projects.

Thanks to careful planning, the bridge was reopened to traffic on October 25, 2013, just seven months after construction began.