



GRANITE STREET BRIDGE Manchester, NH

CLIENT

City of Manchester
Department of Highways
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Manchester, NH 03103
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PROJECT COMPLETION

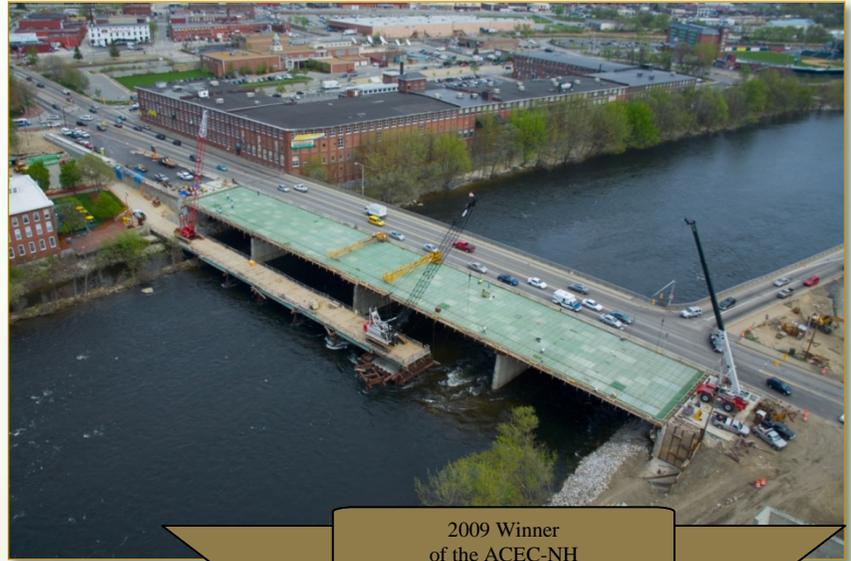
Fall 2008

COST

\$11.8 Million

DESCRIPTION

The City of Manchester widened the existing 466-foot-long Granite Street Bridge across the Merrimack River from four to seven lanes to improve traffic flow into the City, thereby presenting an inviting entrance to the Queen City area. CLD and its partners provided total design services for the project.



2009 Winner
of the ACEC-NH
Overall Engineering Excellence
Award

In order to accommodate the wider Granite Street corridor, the existing bridge was widened from four to seven lanes. The nine existing variable depth plate girders were re-used with the addition of seven new girders to achieve the required bridge width. The bridge has 12'-0" wide sidewalks along with 4'-0" bicycle lanes and seven travel lanes. The existing abutments and piers were widened to accommodate the new girders and seismic isolation bearings were installed at all girder bearing locations. The bridge construction occurred in two phases to allow for two lanes of traffic to be maintained in both directions during construction. The original load capacity for the bridge was HS-20, while the proposed load capacity was designed for HS-25.

- Bridge and Highway Design
- Public Participation
- Section 106 Cultural Resources
- Environmental Permitting
- New and Re-used Variable Depth Plate Girders
- Abutments and Piers Widened
- Seismic Isolation Bearings
- Phased Construction
- Construction Inspection and Administration
- Survey and Right-of-Way
- Traffic Signal System
- Storm Drain System Design
- Water/Sewer/CSO Design

This project also involved coordination between the City of Manchester, the NHDOT and NHDES to design and construct upgrades to existing roadway, bridge, traffic signals, rail crossings, streetscape, water and wastewater services, and a major CSO structure resulting in the creation of an enhanced gateway into the City. CLD provided utility coordination services, which included correspondence, meetings, development of utility specifications and coordination throughout the design and construction process for overhead and subsurface relocations associated with the project. CLD also provided construction administration and full-time resident engineering services, including multiple inspectors during significant work periods. CLD also managed the complete Right-of-Way acquisition process for the project, working with appraisal and legal subconsultants to negotiate and execute required agreements with abutting land owners, including many commercial properties.