



WISWALL BRIDGE REPLACEMENT Durham, NH

CLIENT

Town of Durham
100 Stone Quarry Drive
Durham, NH 03824
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Contact: David Cedarholm,
Town Engineer

COST

\$1.3 Million

PROJECT COMPLETION

June 2010

DESCRIPTION

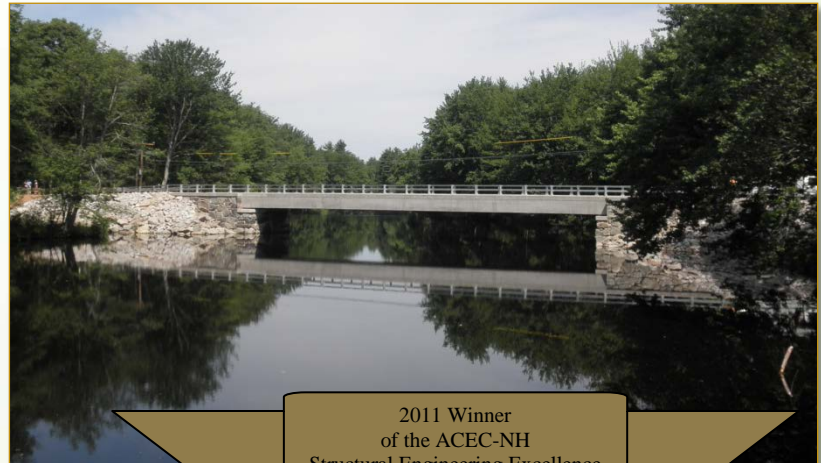
The Town of Durham wished to replace the historic bridges at the crossing of Wiswall Road over the Lamprey River, which were two single-span, single-lane bridges (NHDOT#s 069/072 and 070/072).

During the May 2006 flooding, the Wiswall Bridge sustained severe structural damage and was closed to traffic. A temporary Bailey Bridge was installed on top of the damaged bridge to maintain traffic while design of a replacement bridge was performed. The Preliminary Engineering Study showed that re-using the existing historic bridge abutments was not practical or cost-effective; therefore, an extensive historic review and mitigation process was required.

CLD completed the Engineering Study as required by the NHDOT Municipally Managed Bridge Aid Program. In addition, CLD completed the final design of the bridge, preparing plans and contract documents, and also completed construction administration and observation.

The potential solutions to the unique challenges of this project were numerous and required structural, hydraulic, roadway, cultural, and geotechnical considerations. The replacement bridge is a single, 108-

- Engineering Study
- Survey
- Section 106 and 4F Cultural Resource Review
- Public Participation
- Historic Bridge Permitting
- Hydraulic Analysis
- Preliminary Plans
- Roadway Profile Adjustments
- Right-of-Way
- Environmental Permitting
- Extensive Federal and State Regulatory Agency Coordination



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foot-span bridge using precast concrete box beams; founded on new concrete abutments in the same location as the existing abutments. The existing island/pier was removed to alleviate debris issues. As part of historic mitigation, existing abutment stones were used as a façade for the new substructure. The new structure preserves the character of the river, protects its beauty, and will co-exist with the surrounding uses and sparse development.