Owner: NH Department of Transportation (Concord, NH)

Entering Firm: McFarland-Johnson, Inc. (Concord, NH)

OSSIPEE SLIDE-IN BRIDGE CONSTRUCTION NH ROUTE 16, OSSIPEE, NH

McFarland Johnson

The New Hampshire Department of Transportation (NHDOT) recently partnered with McFarland Johnson (MJ) on the successful completion of New Hampshire's first project to utilize Slide-in Bridge Construction (SIBC) methods. SIBC, a type of Accelerated Bridge Construction, was used to expedite the replacement of two bridges over and adjacent to the Bearcamp River on NH Route 16 in Ossipee, New Hampshire. The use of SIBC provided an innovative solution to the key challenges at the project site, including extensive natural resources, proximity to businesses, and a locally and regionally critical route that carries an average of 11,000 vehicles per day.

The use of SIBC allowed the existing alignment of NH Route 16 to be retained and eliminated the need for a temporary bypass bridge, minimizing impacts to abutters and natural resources and reducing overall construction costs. This technology also reduced overall traffic impacts, allowing most construction activities to take place with no traffic detours or delays and limiting the full roadway closure to one extended weekend for the lateral slide at each bridge location. SIBC operations consisted of the construction and removal of temporary foundation supports, jacking operations to slide the bridge horizontally, and vertical jacking to install bearings and set the bridge. This project successfully tested and implemented SIBC for the replacement of two bridges, providing invaluable experience with managing and mitigating the additional risks associated with the increased complexity of SIBC projects.









