NMB SPLICE SLEEVE SYSTEM

Construction Data Sheet

Great Road Bridge, Route 119 over B&M Railroad, Littleton, Massachusetts

Owner & Engineer: Massachusetts Highway Dept., Boston, Mass.
Contractor: D. W. White Construction, Acushnet, Mass.
Precaster: Northeast Concrete Products, Plainville, Mass.

This 3-span continuous bridge replaced an old single span, giving the railroad increased headroom for double-deck cars. Utilizing emulation design, the engineer achieved live load continuity and integral abutments at a lower cost and with an easier process than offered by cast-in-place construction.

The NMB Splice-Sleeve® System was used in the top of the abutment walls to connect them rigidly to precast prestressed box beams, eliminating expensive expansion joints at either end of the bridge. Sleeves also connected negative moment reinforcing over the ends of beams at each intermediate pier to create live load continuity without a composite structural topping.

This kept the thickness of the superstructure to a minimum for more clearance below and a flat vertical curve on the roadway to improve driver sight lines.

Total span is 146’-3” by 52’-3” wide.