

Milwaukee River Parkway Bridges Over Milwaukee River

WISDOT PROJECTS 2099-00-70 & 2967-04-71

Sigma served as Construction Engineers for WisDOT bridge reconstruction projects on the Milwaukee River Parkway in both the 2008 and 2010 construction seasons. The Milwaukee River Parkway crosses the Milwaukee River at two locations, and each existing bridge was constructed in the 1940's, with the existing stone-clad facades considered both aesthetically pleasing and historical. Each new bridge had precast concrete fascia panels constructed to mimic the existing arches over the river, and three different types of formliner were used to replicate the existing stone facade appearance.

B-40-710

In 2008, Sigma oversaw the removal and replacement of the southern bridge. The existing single-span bridge was widened and lengthened, creating a three-span slab-deck bridge (B-40-710) with two lane vehicle traffic and an isolated bike path.



B-40-748

In 2010, Sigma oversaw the removal and replacement of the northern bridge. The existing single-span bridge was widened and lengthened, utilizing prestressed concrete girders for the new bridge (B-40-748) with two lanes of vehicular traffic and an isolated bike path.



Environmental

Both projects had on and off-site management of contaminated soils. Contaminated material was stockpiled and protected on site, with Sigma helping to ensure that a maximum amount was reused and capped on site with the remaining being hauled off site for landfill disposal. Each project had in-stream construction including pier construction, riprap placement, and dredging, which were achieved with partial to full closure of the waterway with sheet pile walls to facilitate construction in a moderately dry environment. Sigma oversaw the installation of the sheeting and supervised dewatering discharges to the waterway.

Construction Management

Sigma also provided inspection for the demolition of the existing bridges, extensive pile driving, structural concrete, bridge deck overlays, grading, base aggregate, concrete curb and gutter and HMA paving. Sigma prepared contract change orders, material inspection and certification, construction cost accounting, as-built preparation, and meeting and coordination services for both projects.