

East Avenue/I-290 Water Main Slip-Lining

PROJECT HIGHLIGHTS

Challenge

An existing 12-inch water main spanning I-290 had been out-of-service due to water main leakage under IDOT and CTA right-of-way. Since the water main crosses under I-290, it could not be open cut for repair. The cost of installing a new water main would be over three times the cost of trenchless rehabilitation. Numerous trenchless technologies were evaluated but each was rejected due to various project constraints.

Solution

Rehabilitating the existing water main using trenchless slip-lining was the only feasible solution that could be completed prior to IDOT's advancing progress of the I-290 road resurfacing project.

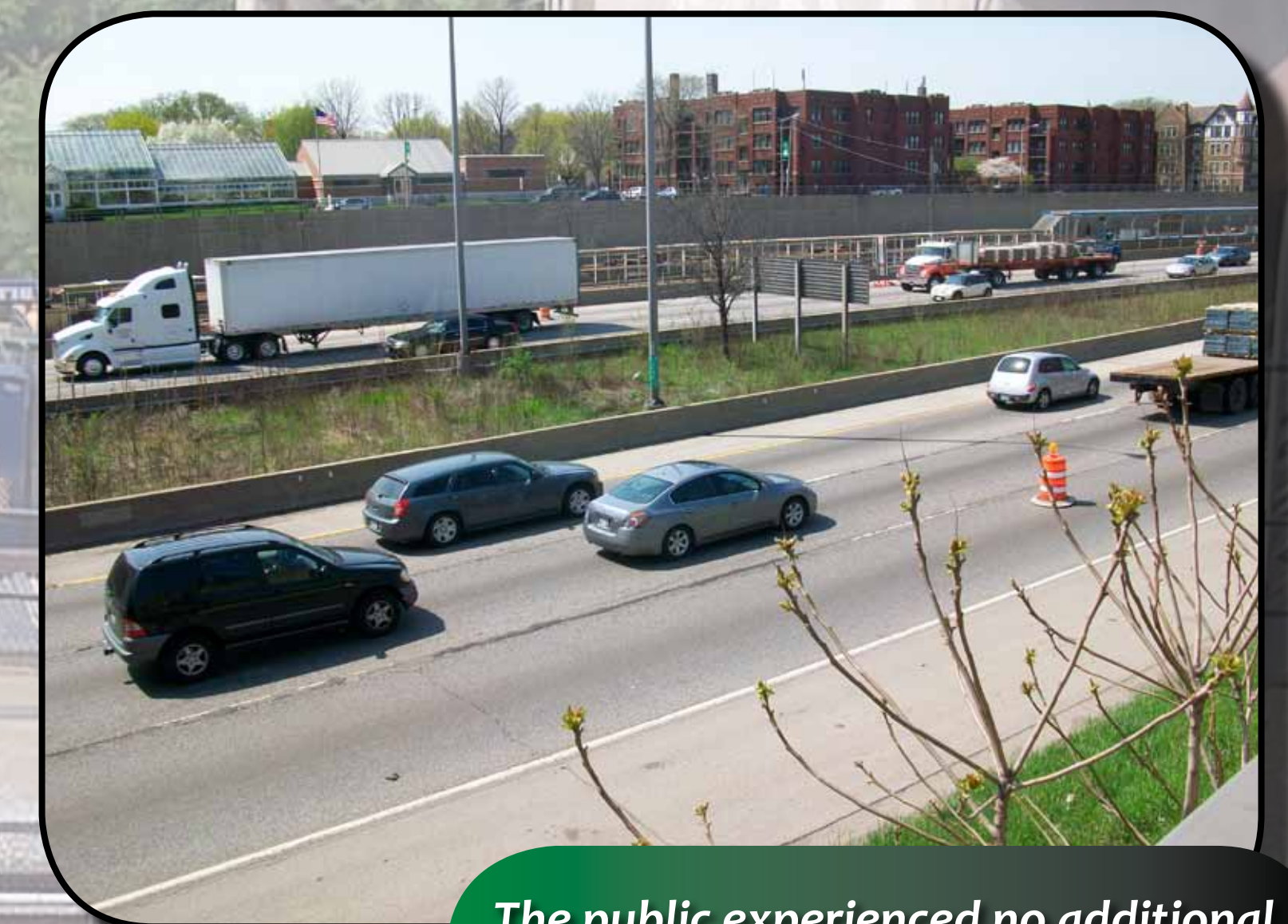
Results

Slip-lining the water main eliminated the need to install a costly new water main, minimized impact on the public during construction, and increased fire flows to the south side of Oak Park improving the safety and security to the residents in this service area.

With the resurfacing of I-290 looming, there was intense pressure to complete the project on schedule and seal the lining access pit before IDOT resurfaced the water main site. To meet this deadline, the project was fast-tracked. Approximately 400 feet of water main was slip-lined in 4 days. The contractor worked 24/7 for 3+ days to ensure that the water main work was completed prior to the I-290 resurfacing.



George W. Kennedy Construction worked through the night to meet IDOT's tight timeframe.



The public experienced no additional road closures during construction.



PVC pipe was fused in the access pit and slip-lined into the northerly pipe crossing the CTA Blue Line.

Managing Agency:
Village of Oak Park, IL



Design and Construction Engineer:
Baxter & Woodman, Inc.



Constructed by:
George W. Kennedy Construction

