

Heide, Thunderbird, and Oliver Water Main Replacement

Troy, Michigan



Spalding DeDecker Associates, Inc. (SDA) was contracted by the City of Troy to replace the existing 8" and 12" water mains on Heide, Thunderbird, and Oliver Roads with 16" ductile iron water mains. The existing water mains were located just outside of the road within the road right-of-way (ROW), with the sanitary sewers located on the other side of the ROW. Due to the limited width of the ROW, the new water main was installed underneath the existing concrete roadway.

OWNER / CLIENT

City of Troy

PROJECT START - END

September 2008 – November 2009

SDA PROJECT NO.

TR08-002

Heide, Thunderbird, and Oliver Roads create a loop with only two access points, both on Maple Road. The area is considered light industrial with certain facilities operating 24 hours per day, seven days per week. As a result, traffic maintenance to provide continuous access to the facilities and maintaining water supply at all times became prominent aspects of the design concept.

A survey was mailed out to the property owners early in the design phase to determine hours of operation, water needs, and delivery schedules. Public meetings were held with the Owners as the design concepts were being developed.



The final project consisted of approximately 5,700 ft. of 16" ductile iron water main loop with two connections to the existing 16" pre-stressed concrete water mains on Maple Road. The project also included complete replacement of the existing concrete roadway on Heide Road and partial replacement of the roadway on Oliver and Thunderbird Roads.

SDA also performed construction engineering services for this project.

SPECIAL FEATURES

Special features included the design of water main and road replacement projects while maintaining access to facilities that operate 24 hours per day, seven days per week.