

Beloit Road & Moorland Road

NEW BERLIN, WAUKESHA COUNTY

Sigma provided roadway reconstruction design and construction engineering services for the intersection of Beloit Road (CTH I) and Moorland Road (CTH O) as well as 1,150 LF of CTH I and 1,500 LF of CTH O. A series of private developments had recently been designed and constructed in the area, and reconstruction of the roadways and intersection were required to improve traffic flow and access prior to completion of these private developments.

Coordination

Sigma was tasked with coordinating multiple partners in this project, including utility companies, developers, local businesses, City of New Berlin, Waukesha County, and WisDOT. Construction staging and intersection improvements were major areas of focus for Sigma during both the design and construction phases of the project. Sigma's design plans accounted for continual access to the local business, and coordinated with utility relocations and improvements.



Survey

Sigma prepared a right-of-way acquisition plat to procure the necessary land for making the improvements, as well as performed a full design survey and all construction staking.

Design

Sigma prepared preliminary and final design plans which included the following concepts: temporary and permanent intersection traffic signals and lighting, turn lanes, roadway widening, access driveways, sidewalks and pedestrian access, pavement marking and signage,



and erosion control and stabilization. Some of the design improvements included: adding two through lanes and two turn lanes to CTH I at west leg of CTH O intersection, widening and lengthening SB turn lane of CTH O, and adding signalized intersection at entrance to Target and Children's Hospital drives north of CTH O/CTH I intersection. Sigma prepared a full PS&E package and performed all bidding.

Construction

Sigma provided full contract management and construction staking, engineering and inspection services for the project. Sigma continued utility coordination during construction, coordinating efforts to relocate utilities and working to ensure safety while contractors installed a 72" culvert under a 20" high pressure gas main.

