Quandel developed preliminary and final plans, specifications and estimates utilizing state-of-the-art technologies such as Light Detection And Radar (LiDAR) for base mapping creation, Ground Penetrating Radar for subsurface exploration, and Bentley RailTrack for track and civil design for several track improvement projects in the Dearborn-Kalamazoo corridor. One project includes the restoration of a 10 mile double track segment and the reinstallation of previously removed second track for approximately 9 miles in order to enhance the operational interface between freight and passenger rail and to allow Class 6, 110 MPH passenger service.

The 19-mile project between Dearborn and Ypsilanti incorporates multiple high speed crossovers and turnouts, track alignment improvements, and grading and drainage improvements. Preliminary and final grade crossing design plans were prepared to address roadway geometric improvements required at grade crossings.

With the pending sale of 135 miles of railroad property from Norfolk Southern to the State of Michigan and high speed rail development grant funds from the Federal Railroad Administration, Michigan Department of Transportation is undertaking multiple track improvement projects in the Dearborn Subdivision corridor between Dearborn and Kalamazoo.

Railroad Engineering Services Provided:
- Track Design
- Grade Crossings
- LiDAR Data Extraction