

M-53 (Van Dyke Ave) & 7 Mile Rd Intersection Safety Improvements

Detroit, Michigan

Spalding DeDecker Associates, Inc. (SDA) was retained by the Michigan Department of Transportation (MDOT) to prepare design documents for intersection safety improvements on M-53 (Van Dyke Ave) and 7 Mile Road in northeastern Detroit. The purpose of this project was to reduce crashes and improve pedestrian safety at the intersection.



Road Design and Survey

The project included survey and design for intersection safety improvements and HMA overlay of 0.05 miles of composite pavement. The design ultimately included radii improvements, NB-to-EB and SB-to-WB right-turn lanes, HMA resurfacing, and replacement/upgrading of the existing signal. The sidewalk ramps on all four quadrants were upgraded to current ADA standards, including placement of pedestrian push buttons to allow pedestrians to more safely cross this seven (7)-lane section of Van Dyke Ave. Extensive utility coordination was also required to install the new traffic signals, as well as relocate several Detroit Public Lighting Department (PLD) street lights adjacent to the new right-turn lanes. All design work was performed following MDOT and PLD design standards and procedures.

Maintaining Traffic Plans and Provisions

SDA prepared the Maintaining Traffic drawings and special provision for the project following MMUTCD and MDOT standard maintaining traffic details. This section of M-53 and 7 Mile Road had extensive commercial development with a large number of established businesses, restaurants, and strip plazas, as well as persistent pedestrian usage. As a result, the Maintaining Traffic Plan required additional care and consideration for accommodating pedestrian mobility during construction, including developing pedestrian detours for all four quadrants of the intersection.

OWNER / CLIENT

Michigan Dept of Transportation

PROJECT START - END

January 2005 – December 2007

SDA PROJECT NO.

RB05-003