

# CONCRETE PAVEMENT

## PROJECT REPORT



### Project: Outer Drive between Ford Road and Hines Drive

Site: Dearborn Heights, MI

#### Project

Description: This project involved constructing a composite pavement section, consisting of four inches of non-reinforced concrete and a one bituminous layer on top of the original concrete pavement constructed in 1928. Over the years, periodic asphalt overlays. This long term overlay solution should provide the community with a fifteen to twenty year fix

Owner: Wayne County

Contractor: Six -S, Inc.  
Waterford Michigan  
Michigan Concrete Paving  
Association Member

#### Special

Feature: Unbonded Concrete Overlay



## Concrete Overlays

### West Outer Drive Wayne County

In July of 2000, Wayne County constructed its first concrete overlay on Outer Drive between Ford Road and Hines Drive in Dearborn Heights, MI. The original concrete pavement had been place in 1928 and had received a number of two to three inch bituminous overlays.

The project was constructed over approximately .84 miles of residential road. The road classification for Outer Drive is Class B Loading, or light trucks only. It consists of four travel lanes and a center turn lane.

In 1997 the county evaluated the pavement and determined that the road again needed additional improvements. This time it was decided to construct a concrete overlay which is anticipated to last more than twice as long as a typical bituminous resurfacing.

The overlay consisted of four inch of non-reinforced concrete. The existing failed asphalt was removed, and a one inch bituminous separator layer was placed between the old concrete and the new concrete overlay to prevent reflective cracks from developing. Where needed the old concrete pavement section was patched with either full-depth-concrete or partial-depth-bituminous.

The project also involved removing the old curb sections and a new integral curb section was designed and constructed as a part of the concrete overlay. Pavement joints played a very important and integral role in the pavement design. Transverse and longitudinal joints were placed at six foot intervals to accommodate the four inch overlay and were left unsealed. Texturing was completed by longitudinally dragging an astroturf mat across the pavement surface.

The cost of the concrete overlay was approximately \$765,000. Estimates for an asphalt resurfacing were at about \$650,000. Even though the cost of the concrete was higher up front, the County expected to benefit from plans on getting at least twice the life expectancy out of the concrete overlay.