



CPAM Photo – July 2014

Olmsted County's 30-year, maintenance-free concrete overlay

An interview with Mike Sheehan and Kaye Bieniek

What was the problem?

The farming community of Chatfield, Minnesota, is located 21 miles southeast of Rochester in Olmsted County. In 1982, about eight miles of bituminous surface of CSAH 10, a major truck route, was deteriorating and in need of major repair. The county was aware that truck traffic would continue to increase and that CSAH 10 needed to be a 10-ton route.

What was the solution?

About seven miles of the project needed reconstruction due to geometrics, but the southern-most segment had an adequate alignment and typical section. The county chose to do a concrete overlay (whitertopping) on the 1.1-mile stretch. "We did a cost analysis and felt the concrete was the best buy at that time," said Director of Public Works, Mike Sheehan. "We don't spend any maintenance time on it at all." The county has since paved some 75 miles of their roads with concrete, including all of CSAH 10.

"As a general rule, during the first 25 years we don't go back to [repair] the concrete," said County Engineer Kaye Bieniek. "Right around that 25-year mark, we've gone back to do a dowel bar retrofit on a couple of roadways or typical concrete rehabilitation."

Key facts about the project

- ▶ The average daily traffic (ADT) in 1982 was 252; the ADT in 2010 was 950.
- ▶ Used 3,500 cubic yards of structural concrete.
- ▶ Laid 6.5 inches of concrete over two inches of bituminous and a 10-inch aggregate base; no milling.

Final comments

"There's a time and place where concrete is very appropriate, and the initial expenditure of dollars is well worth it in the long run," said Bieniek. "For truck routes, concrete is the better buy when we use a cost analysis."

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- Owner: Olmsted County
 - 1982 County Engineer: Mike Sheehan
 - Project S.A.P. 55-610-12
 - 1982 Contractor: F.F. Mengel Company

- For more information, contact Kaye Bieniek:
507-328-7070 bieniek.kaye@co.olmsted.mn.us