INLAID THERMOPLASTIC PAVEMENT MARKINGS

REFERENCE:

WP 95-R-16, U95-6.

HISTORY:

In July of 1995, the Vermont Agency of Transportation (VAOT), as part of the Montpelier NH 9530 project, placed inlaid hot applied thermoplastic markings at the VT 12 and US 2 intersection. The product was LDI SG70 modified hydrocarbon thermoplastic, and was applied by L&D Safety Marking Co.

These markings were to be compared with a control section of like markings applied at 3mm in the standard screed extrusion method. The initial construction observations and cost information were documented in U95-6.

LOCATION:

At the intersection of VT 12 and US 2 in Montpelier. All four crosswalks, three stop bars, and four arrows were inlaid.

OBSERVATIONS:

The project was inspected on October 30, 1996 after one winter maintenance season.

Overall the experimental markings are performing considerably better than the “standard method” markings. 100 percent of the inlaid markings are fully intact compared with 44 percent of control. The control markings also suffered 28 percent moderate loss and 28 percent severe loss. Most of this loss can be attributed to wear. Since the inlaid markings are recessed 3mm into the pavement, it is not unexpected that all of the markings would remain intact after one winter.

FOLLOW-UP:

The inlaid markings will continue to be evaluated with emphasis on durability as compared to the performance of standard thermoplastic applications on other intersections within the Montpelier NH 9530 project.