Traffic Control Devices Committee:

To:  
H. H. Cooper, Chairman  
J. J. Becker  
J. L. Byers  
W. W. McLaughlin  
H. J. Rathfoot  
F. W. Gillespie

From:  
A. J. Permoda


As an outgrowth of its April 8, 1965 and subsequent meetings, the Metropolitan Freeway Study Committee for Maintenance Operations arranged for experimental application of fast-drying Niteliner paint on the Edsel Ford Freeway from Schaeffer Highway to Eight Mile Road. The fast drying of this paint is due to its low thimer content. This yields a putty-like consistency, requiring modified spray equipment during application. The paint is formulated to dry track-free in 3 minutes or less, using a complement of drop-on beads applied in ratio of 8 lb per gal of high-solids paint.

To minimize traffic hazards, the test application was arranged for Sundays, September 19 and 26, 1965, in the hours from 3 to 10 a.m., with one complete loop of lane striping applied each Sunday in the test area, proceeding from Schaeffer to Eight Mile and then returning to Schaeffer. The special application equipment was furnished by the producer (Wald Industries). R. C. Harp and R. L. Snider, observing the application, stated that the paint did dry within 3 minutes or less, depending on the weather conditions. Cones were not placed back of the striping to protect the fresh stripes. Instead, several vehicles trailed the striping, in a column of varying length extending up to a half-mile when the drying reached the 3-minute maximum. The striping travelled at about 10 mph, heated the thick paint to 160 F for application, and utilized pressure to force the drop-on beads into the paint. The paint was applied in the standard broken-line pattern, without applying the black paint in the skip. The requisitioned quantity of paint was 450 gallons, supplied with the bead complement, for $2,902.50. This is equivalent to $6.45 per gallon, and included application by the producer.

The application was considered satisfactory, with the fast drying time facilitating the striping operation. There was some minor tracking by traffic crossing the fresh striping, confined mostly to on-ramp areas, which were not closed during the striping application. The durability will be determined by Traffic Paint Subcommittee inspection.
A smaller-scale field test with the Niteliner paint, arranged by the Metropolitan District office, was conducted last year on I 696 in the Eight Mile Road area. The paint was applied in October 1964 on northbound I 696, with the adjoining southbound lanes receiving the standard striping. Both paints gave about equivalent performance with a somewhat reduced service life, which was ascribed to being initial striping on new concrete roadway.

OFFICE OF TESTING AND RESEARCH

A. J. Permoda, Chairman
Traffic Paint Subcommittee

AJP: nw

cc: R. C. Harp
    M. N. Clyde
    R. L. Snider