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RESEARCH UPDATE

Number U91-4

DURETHANE ALL-PURPOSE BRITE FENCE

REFERENCE: Work Plan 89-R-6; Work Plan 89-R-11

HISTORY: During the 1990 construction season, two installations of BRITE FENCE were evaluated for its ability to enhance the visibility of traffic control barricades constructed with reflectorized plastic drums.

The product is manufactured by ADPI Enterprises Inc., Philadelphia, PA, and distributed by Plastic Safety Systems Inc., Cleveland OH. The 1990 price for the product was \$179.00 per 150 foot roll.

The installations were on I91 at Interchange 5 in Westminster and at Interchange 8 in Ascutney and were used for lane closure during the rehabilitation of the interchange bridges. At both sites the northbound and southbound exit ramps diverged within the area affected by lane closures. To guide traffic through the closed lanes, standard drum lines were enhanced with BRITE FENCE.

INSTALLATION: At Exit 5 the BRITE FENCE was attached to the standard drums (See Photo 1) because the contractor decided that the manufacturer supplied "Porta Posts" (See Photo 2) might become dangerous flying objects upon vehicular impact. The fence is taller than the drums and tended to sag between drums. The lead drum was struck several times which caused the fencing to intrude into the traffic lane. (See Photo 3)



PHOTO 1. Installation on Drums

At Exit 8 a different contractor elected to use the Porta Posts to erect the fencing. When installed with the posts, the fencing material also tended to sag. The posts themselves are another element in the visual environment for the driver to identify and evaluate. (See Photo 2)

**PERFORMANCE:** Although there is no data to determine the effect of the fencing on the driver's decision / response time, it is known that the fence was struck several times. Agency personnel commented that the BRITE FENCE added to the visual clutter common to work sites during daylight hours and the non-reflectORIZED fence was virtually invisible at night.

Because the mesh of the ALL-PURPOSE BRITE FENCE was so open there was little, if any, visual effect of solidity to impress the driver. If the fencing had been sized to the height of the drums and made taut, the visual effect contemplated might have been achieved.



Photo 2 Installation on Porta Posts



Photo 3 After Impact

**RECOMMENDATION:** Based upon the performance obtained on these two installations, DURETHANE ALL-PURPOSE BRITE FENCE is not recommended for use in the manner described in this study.

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