



RESEARCH NOTES HIGHWAY DIVISION RESEARCH SECTION

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RSN 85-5

PUT A RAINCOAT ON YOUR BRIDGE

RUB-R-ROAD(TM) is a rubberized (latex-reinforced) asphalt concrete waterproofing membrane. It provides a way to protect bridge decks from rain and chlorides, and is now approved as a "permitted alternative" for Oregon bridge deck overlays.

The approval stems from a 1979 test overlay on the I-5 Columbia River Bridge. Resurfacing began after the old asphalt concrete was removed from the northbound structure. Then, a tack coat containing liquid rubber was applied immediately before the overlay. Next, a one-inch "RUB-R-ROAD" wearing course was placed on the northbound structure and a 2 1/2 inch "RUB-R-ROAD" wearing course was overlaid onto the southbound bridge.

Overall, the "RUB-R-ROAD" was quite difficult to work. This was especially true in the hand-placed areas, where smooth raking was nearly impossible and repairs had to be made with a standard Oregon "C" mix.

Since construction, the "RUB-R-ROAD" surface has performed well. Resistivity testing has shown the wearing course to be satisfactorily impermeable -- an indication it should provide good protection against intrusion of water and chlorides. As a wearing surface there has been some rutting, and skid resistance is less than desired. Attention to design and specifications should help alleviate these problems.

If you need to put a "raincoat" on your bridge, or would like additional information on "RUB-R-ROAD," contact the Research Section of the Oregon State Department of Transportation, 378-2318, and ask for:

"DECK OVERLAY FIRESTONE RUB-R-ROAD, Experimental Features Final Report" May 1985, by Tom Hardy, William Quinn, and Leon Brock. Oregon State Highway Division, Research Section, Salem, OR 97310; OR 79-02.