## **RESEARCH REPORT DOCUMENTATION PAGE**

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Evaluation of American Polymer's Graffiti Solution System® (GSS)			ick on link to open	report	8. Project No.	
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UND Bismarck ND 58504-6005			300 Airport Road			
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OTHER*						
Heart River Bridge Number 94-915.101; East Abutment and Concrete Girder Ends						
15. Abstract						
Purpose and Need The NDDOT has typically used "sacrificial "coatings or treatments on concrete surfaces to aid in graffiti removal. Research is needed to evaluate products that make graffiti removal faster and easier, without compromising a structure's aesthetics. It would be desirable to use products that were non-sacrificial; thereby eliminating the need to re-treat surfaces after the removal of graffiti. This project proposes an evaluation of American Polymer's <i>Graffiti Solution System</i> <sup>®</sup> ( <i>GSS</i> ), a non-sacrificial anti-graffiti coating.						
Objective The objective of this research is to determine the effort required to install the GSS anti-graffiti system, observe the effectiveness of recommended						
products and methods used in graffiti removal from GSS treated surfaces, and evaluate the condition and appearance of post-removal surfaces. The research will involve observing both the product installation and multiple graffiti removals.						
The GSS <sup>®</sup> product will be evaluated over ten years, the length of time the manufacturer guarantees their product without re-application. The Materials and Research Division will lead the evaluation. Annual field evaluations will be conducted. Evaluation reports will be published every two years.						
Scope The Heart River Bridge, west of Mandan, ND, was rebuilt during the summer of 2008. The GSS <sup>®</sup> product was applied on the east abutment. The						
manufacturer estimated installation of the coating would be completed in three to five days.						
Summary The two day installation was completed on September 30, 2008. The manufacturer directed and assisted with the installation of the transparent and pigmented coatings Personnel from M&R and the Bismarck District assisted and observed the installation.						
A test "tagging" was conducted six days after coating the surfaces to test the product's ability to allow graffiti removal even when the area is tagged before the cure time has passed. Graffiti was successfully removed, using recommended products and methods, from tagged areas on October 14 and October 23, 2008. Since this product is a non-sacrificial treatment, re-treatment was not required.						
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