ATTACHMENT 2

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

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SECRETARY

MEMO TO: Mr. Greg Thorpe, PhD
Project Development and Environmental Branch, Director

FROM: Jay A. Bennett, PE
State Roadway Design Engineer

DATE: June 6, 2006

SUBJECT: Discontinued Usage of Weathered Steel Beam Guardrail

The purpose of this memo is to advise you of a recent recommendation by the Guardrail Committee to discontinue the usage of Weathered Steel Beam Guardrail (WSBG). While we understand there is a need for a Steel Beam Guardrail product that blends in with the natural environment of the project site, the long-term maintenance of WSBG and its performance is a concern.

During one of the Guardrail Committee Meetings, Mr. Randy Pace with the Materials and Test Unit brought to our attention that WSBG creates a long-term maintenance concern. The North Eastern States' Material Engineers Associate prepared a power point presentation that summarized the maintenance concerns with WSBG. You can connect to the following link to see the power point slides: http://www.nesmea.uconn.edu/nesmea 10-04perkins.pdf. As noted in the slides, research was conducted and the results noted there was a considerable amount of failure associated with the long-term placement of WSBG. The failures were noted at the mid-span and the lap connections.

Due to the documented failure and subsequent safety concerns with WSBG, it is our recommendation that the Department implement the usage of Painted Galvanized Steel Beam Guardrail (PGSBG) and discontinue the use of WSBG. PGSBG can be painted a shade of brown to give a rustic appearance. The only piece of hardware that cannot be painted brown is the impact head for the end terminal units.

Effective immediately please do not make any project "Greensheet" commitments for the usage of Weathered Steel Beam Guardrail. Instead pursue the usage of Painted Galvanized Steel Beam Guardrail.

If you have any questions, please contact Ron Allen, PE, or me.

JAB/rdt

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