INDIANA DEPARTMENT OF TRANSPORTATION

INDIANAPOLIS, INDIANA 46204-2249 INTER-DEPARTMENT COMMUNICATION

July 11, 2001

MEMORANDUM 01-08

- TO: District Directors District Operations Engineers District Construction Engineers District Materials & Tests Engineers District Area Engineers Project Engineers/Supervisor
- FROM: Timothy D. Bertram, Chief Contracts & Construction Division

RE: Maintenance of Attenuator & Guardrail End Treatments

As you all know, INDOT has been certifying installers of proprietary guardrail end treatments and attenuators since January of 1992. That certification program seems to be working well in that it gives INDOT confidence that the different units with their unique installation concerns are being erected on projects correctly so that when impacted by a vehicle they perform properly and save lives.

At the maintenance conference held in Michigan City on the first week of May this year, Mr. Dennis Kuchler of my office spoke on the status of the guardrail installers training and the procedure that was to be followed by the project engineers/supervisors and maintenance personnel to insure units were being installed properly on active construction contracts. Many of the individuals present were unaware of the procedures and some of the district operations engineers made some suggestions on ways to improve the program. Those suggestions have been incorporated in our procedures for reporting and checking these specialty units. The purpose of this memorandum is to remind everyone of the program and the procedures that need to be followed by construction and maintenance personnel.

The following outlines the procedure that should be followed in the field:

- 1. INDOT coordinates with the manufacturers of the different systems every two years and works with them to implement a training program so that contractors and certain maintenance personnel from each district are trained in the proper ways to install the different guardrail units.
- 2. Once each person is certified, the manufacturers send certificates (both 8x12 and wallet size) to the persons that completed the training. Those wallet size cards state what units the individual was trained on and is certified to install in the field.

- 3. The state persons that were trained are responsible for training their district personnel. That training will insure INDOT that the different maintenance workers in each district and sub-district that are required to rebuild the different units, once they have been impacted by a vehicle, understand the correct repair procedures.
- 4. The project engineers/supervisors (PE/S) in the field that have units of this nature to be installed on their projects are required to check to see that the crew chief or someone from the contractors' company is certified to install the unit called for by their contract documents. The PE/S should make a copy of the wallet size card for his/her records so that if it is found that the unit has been installed improperly, we want to know who was responsible for the work.
- 5. Once a unit is installed on an active construction project, the PE/S should notify the sub-district office in the area of the project in writing that a new unit has been installed, the type of unit, and its location. (Notifying the sub-district is a change from previous instructions. Earlier we were having the PE/S notify the operations engineer in the district by phone).
- 6. After the PE/S notifies the sub-district that a new unit has been installed in their area, the sub-district manager should make arrangements to add that unit to their list of units and locations. The manager then needs to inform the certified maintenance workers at the sub-district to go to the site of the new unit and perform a visual inspection to insure that the unit was indeed installed correctly.
- 7. If it is determined that there is a problem with the installation, the sub-district personnel should notify the PE/S (if the project is still active) or the district construction engineer. The contractors are made aware at the guardrail certification training that if maintenance finds problems with the installation, the contractor will be required to come back to the site, provide proper traffic controls, and fix the problems at their own expense. (It is encouraged that maintenance reviews the installations as soon as possible so that an improper installation is not left too long under traffic where it could be impacted and not function properly.

I hope that the above outline of the required procedure helps everyone better understand what needs to be done so that INDOT can be assured that the different units are correctly installed.

TDB:dak