



# INDIANA DEPARTMENT OF TRANSPORTATION

*Driving Indiana's Economic Growth*

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**Mitchell E. Daniels, Jr., Governor**  
**Michael B. Cline, Commissioner**

March 27, 2012

## CONSTRUCTION MEMORANDUM 12-01

TO: District Deputy Commissioners  
District Construction Directors  
District Testing Engineers  
District Area Engineers  
District LPA Coordinators  
Field Engineers  
Technical Services Directors  
Project Engineers/Supervisors  
Office of Materials Management

FROM: Mark A. Miller, Director *Maemiller*  
Construction Management Division

SUBJECT: Cable Barrier System Submittal Requirements

During 2011 there were failures of cable barrier systems on active contracts in at least two Districts. These failures indicate that approved systems perform differently when subjected to soil conditions at specific contract sites.

In order to avoid similar problems in 2012, the following guidance is offered to District Construction personnel.

RSP 627-R-546 contains the requirements associated with cable barrier systems. Submittal requirements are contained in 627.02, including the requirement that the submittal shall be made at least 14 calendar days prior to the beginning of the installation of the barrier system. The PE/S and AE should hold the Contractor to the 14 day requirement in order to provide sufficient time to review the submitted materials.

The PE/S and AE review should include an emphasis on the following items:

1. Verify that all required documents are included in the submittal.
2. Verify that design drawings and calculations are sealed by a Professional Engineer and account for the entire system.

3. Verify that the design calculations for terminal and intermediate line post foundations incorporate anticipated soil conditions as described in the Geotechnical Report. More than one design may be required per project or the submittal should note that the design is for the worst case soil condition.
4. Verify that the design calculations indicate that terminal foundations can resist the tensioning and impact loads associated with the required NCHRP test level and that the factor of safety of 1.5 for these foundations meet or exceed the required value for both overturning and pullout.
5. All foundations are Class A concrete.

If the PE/S or AE review determines that the above contract requirements have not been met or has questions regarding whether the requirements have been met, contact the Project Manager and the Construction Management Division Field Engineer assigned to your District as soon as possible. The Office of Geotechnical Services is also available as a resource to answer any questions the PE/S or AE may have regarding the adequacy of the cable barrier system design.

If there are any questions regarding the content of this memo, please contact the Construction Management Division Field Engineer assigned to your District.

MAM/jgj