



ALABAMA DEPARTMENT OF TRANSPORTATION

Bureau of County Transportation
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Robert Bentley
Governor

John R. Cooper
Transportation Director

November 6, 2013

MEMORANDUM 2014-02

TO: COUNTY ENGINEERS AND COUNTY BRIDGE INSPECTORS

FROM:

A handwritten signature in black ink, appearing to be "D. E. Phillips, Jr.", written over a horizontal line.

D. E. Phillips, Jr., P.E.
State County Transportation Engineer

RE: Hands on Bridge Inspections
Fracture Critical Structures

During the 2013 Bridge Inspection Compliance Reviews conducted by ALDOT, it was brought to our attention that some counties are having inspection access issues with certain structures. It appears that *hands on inspections* are not being conducted as required due to a combination of factors that include load postings, structure type, structure height, and water depth.

ALDOT requires all structures that qualify as a bridge under the NBIS (20 feet or more in length) must have a *hands on inspection*. A *hands on inspection* means that the bridge inspector **must be** within arms reach of the bridge component that is being inspected. If a *hands on inspection* is not being conducted for any reason, then the structure will have to be closed to all traffic.

Fracture critical structures are of even greater concern in regards to *hands on inspections*. These structures have many critical details that can only be properly inspected when the inspector is within arms reach of the component. Furthermore, most of the fracture critical members are located in areas of the structure that are difficult to access and / or out of sight. It is absolutely imperative that these fracture critical members have a *hands*

on inspection to ensure that a catastrophic failure does not occur. If a *hands on inspection* is not being conducted on a fracture critical structure, then the structure must be closed to all traffic until one can be completed.

Attached is a list of county fracture critical structures (only sent to those counties that currently have open fracture critical structures). If you have any structures on this list, please send a letter to myself indicating how you are conducting a *hands on inspection* for each structure. All letters should be submitted no later than **December 6, 2013**. The letter should include the structure type, load posting, and a brief description of how you are accessing the entire structure (i.e. through truss, 20 tons, snooper to access bottom cord and ladder to access top cord). This letter should also be placed in each bridge file, along with a picture or drawing identifying each fracture critical member (as previously required).

If there are any questions about *hands on inspection* requirements or fracture critical structures, please contact James Boyer at (334)-242-6619.

JFB: jfb
File