



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
1401 EAST BROAD STREET
RICHMOND, VIRGINIA 23219-2000

David S. Ekern, P.E.
COMMISSIONER

Dear District Bridge Engineer:

In order to provide clarity regarding the implementation of Load and Resistance Factor Design (LRFD) on active projects in the SYIP we are providing the attached spreadsheet identifying which projects are to remain as Allowable Stress Design (ASD) which are to use LRFD. Please review the accompanying draft project listing spreadsheet showing design method for conformance with the guidelines below. Suggested revisions should be based on reasons provided below. Please review all the projects in your district, central office project managers will not be receiving a copy of this spreadsheet.

Your spreadsheet sorts the active bridge projects in your district into two categories ASD or LRFD. This decision was based on data available in the Central Office. The guidelines for the listing were as follows:

- All projects with Advertisement dates of 0000/00 and listed as “Unscheduled Construction” were pushed into the LRFD category.
- All projects with Advertisement dates of 2009/04 and later and listed as plans <30% were pushed into the LRFD category. (If the project is a consultant project with an advertisement date before 2009/10 it should be re-categorized as ASD)
- All projects with Advertisement before 2009/04 were pushed into the ASD category.
- Projects with plans 30% or more AND Advertisement before 2013 were pushed into the ASD category (any project which is substantially complete but currently has an Ad date of 0000/00 can be changed back to ASD if the Ad date turns out to be before 2013 provided the district makes the request when the Ad date is determined and if the State Bridge Engineer approves)
- All projects to be advertised in 2013 or later will be LRFD.

When you review the sheet you can consider that the colors in the spreadsheet can be read as follows: red means you don't do anything new and green means go ahead and plan on LRFD.

The intent of the rules is to transition all plans developed in-house to LRFD by April, 2009 and transition all plans developed by consultants to LRFD by October, 2009 if the plans have not already had preliminaries approved. For projects where preliminaries have been approved, it is the intent of the Department to transition all plans by 2013. It has been assumed that even if the plans have been prepared, projects listed with Ad dates of 0000/00 and “unscheduled construction” will not be advertised until 2013 or later. As noted above if the ad date turns out to be before 2013 the district can request that the projects remain ASD.

For the purposes of this division, superstructure replacements will follow the rules listed above.

Projects can be switched from LRFD back to ASD for the following reasons:

1. The plan development is farther along than shown on the spreadsheet (provide documentation that preliminary plans have been approved).
2. The project is a widening or repair and the Ad date is before 2013. (Widenings or repairs with Ad dates in 2013 or later will be designed according to LRFD.)
3. Any reason that the District proposes for a project with an Advertisement before 2013 that can be supported by sufficient engineering and economic rationale.
4. Emergency projects will not be subject to LRFD design unless the advertisement is 2010/10 or later.
5. Design Build and PPTA projects will not be subject to LRFD unless the agreement is signed after 2010/10 or by special request of the contractor.

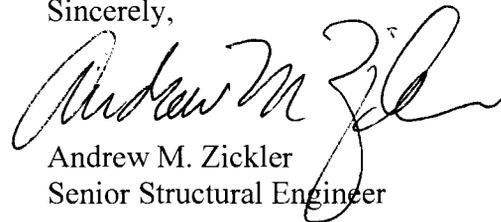
It is the intent of the Department that the first bridges advertised using LRFD will be in April, 2009 and not before, this will allow for sufficient time to bring all contract documents into compliance with LRFD. No project should be categorized as an LRFD project with an advertisement date before April, 2009. Consultant projects with an advertisement date before October, 2009 should not be categorized as an LRFD project. The short delay between in-house and consultant projects shown is meant to provide the additional coordination time that consultant projects generally involve.

The dates and the rules were developed to comply with the FHWA guidelines and yet still represent good engineering and economic sense. It is the intent of the department to phase out the use of ASD, including software, design guides, specifications and processes. Maintaining two sets of documents creates manpower issues, conflicts and confusion.

Please return your suggested changes by close of business Monday, March 26, 2007. If any of your district's projects have been shown with incorrect data please correct the spreadsheet before returning. If projects are missing please add them. Please highlight all changes in yellow.

If you have any questions, please call me, (804) 371-2776. Thanks for your help.

Sincerely,



Andrew M. Zickler
Senior Structural Engineer