AASHTOWare Bridge Design Training

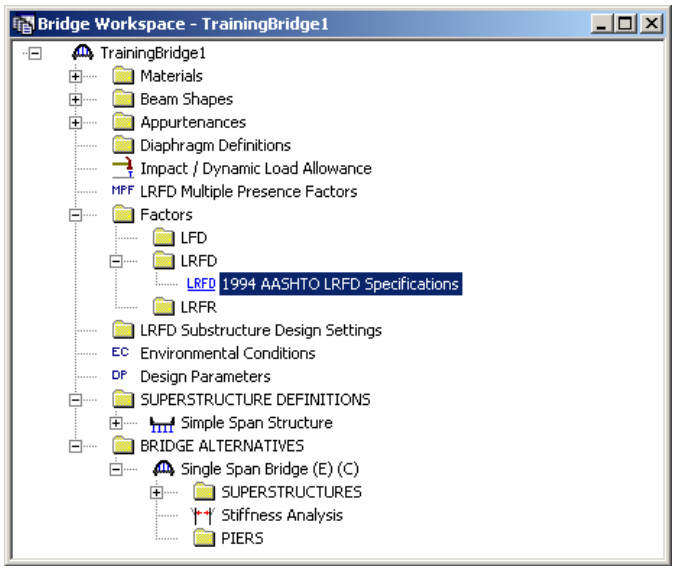
LS1 – Limit State Selection (BrD 6.4)

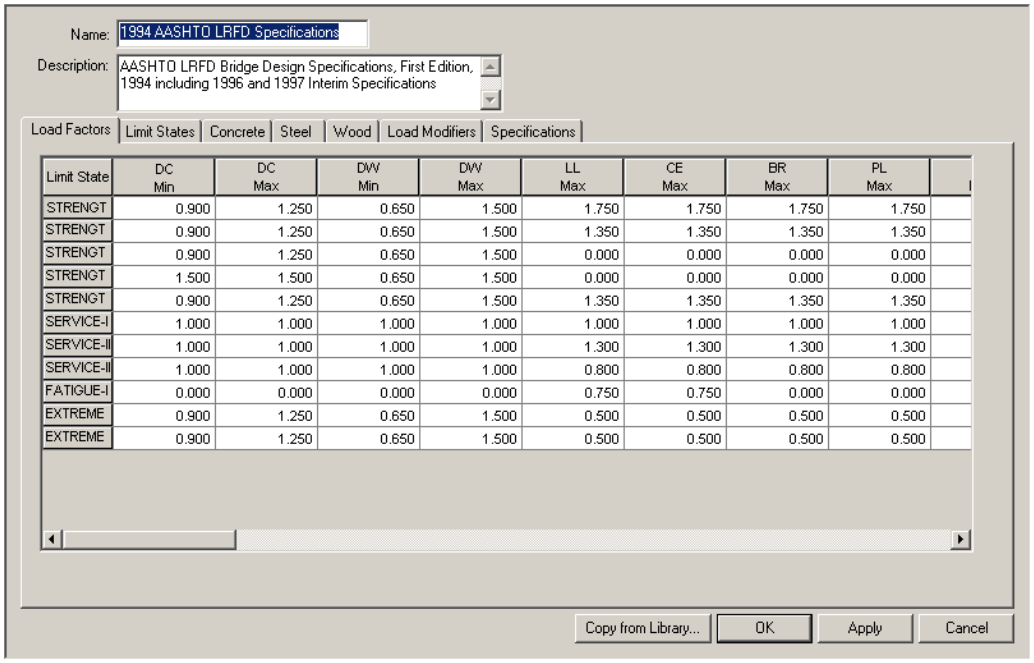
This example describes how to select limit states for LRFD spec check analysis. This example assumes you have access to TrainingBridge1 (BID1) in the teaching database from the installation.

Topics Covered

- Select limit states for LRFD spec check analysis

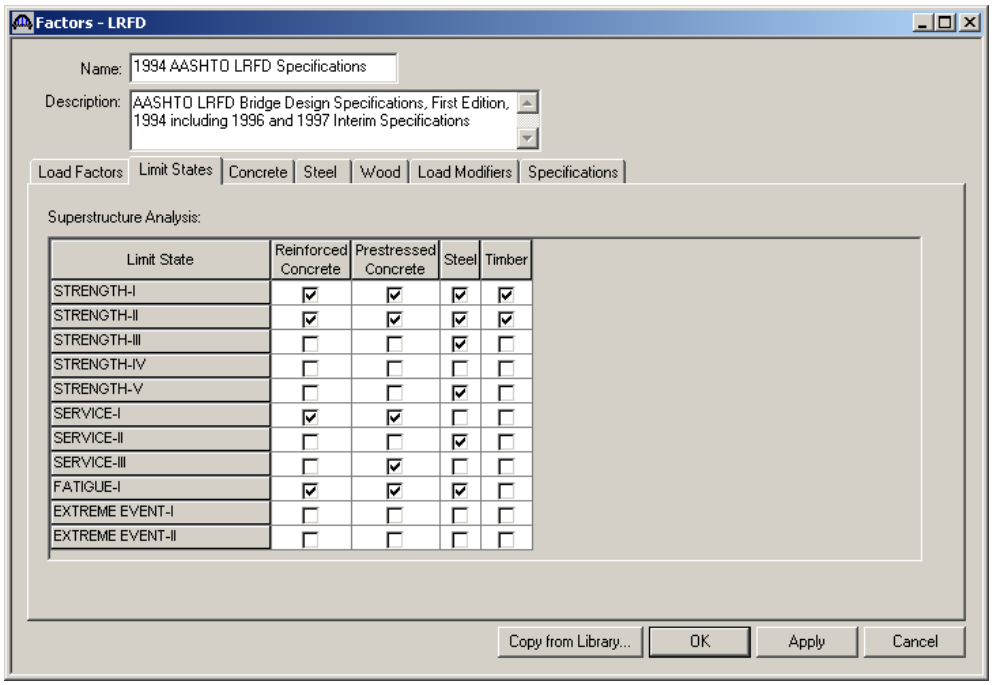
Open TrainingBridge1, open LRFD factors window shown as below.



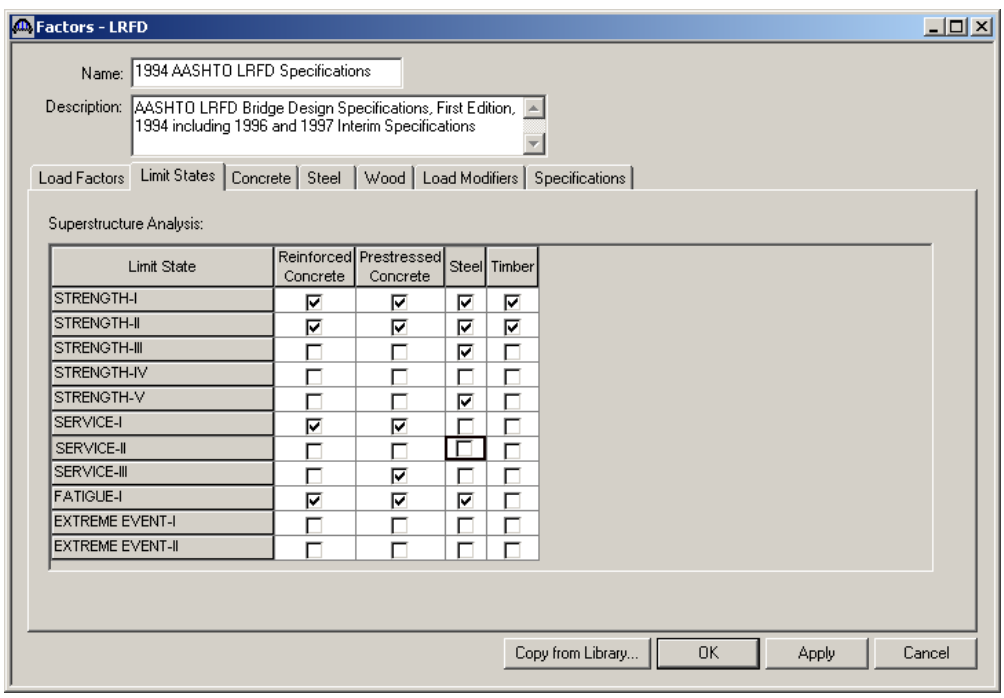


Limit State	DC Min	DC Max	DW Min	DW Max	LL Max	CE Max	BR Max	PL Max
STRENGT	0.900	1.250	0.650	1.500	1.750	1.750	1.750	1.750
STRENGT	0.900	1.250	0.650	1.500	1.350	1.350	1.350	1.350
STRENGT	0.900	1.250	0.650	1.500	0.000	0.000	0.000	0.000
STRENGT	1.500	1.500	0.650	1.500	0.000	0.000	0.000	0.000
STRENGT	0.900	1.250	0.650	1.500	1.350	1.350	1.350	1.350
SERVICE-I	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
SERVICE-II	1.000	1.000	1.000	1.000	1.300	1.300	1.300	1.300
SERVICE-II	1.000	1.000	1.000	1.000	0.800	0.800	0.800	0.800
FATIGUE-I	0.000	0.000	0.000	0.000	0.750	0.750	0.000	0.000
EXTREME	0.900	1.250	0.650	1.500	0.500	0.500	0.500	0.500
EXTREME	0.900	1.250	0.650	1.500	0.500	0.500	0.500	0.500

Select “Limit Sates” tab, default limit states selections are shown as below.

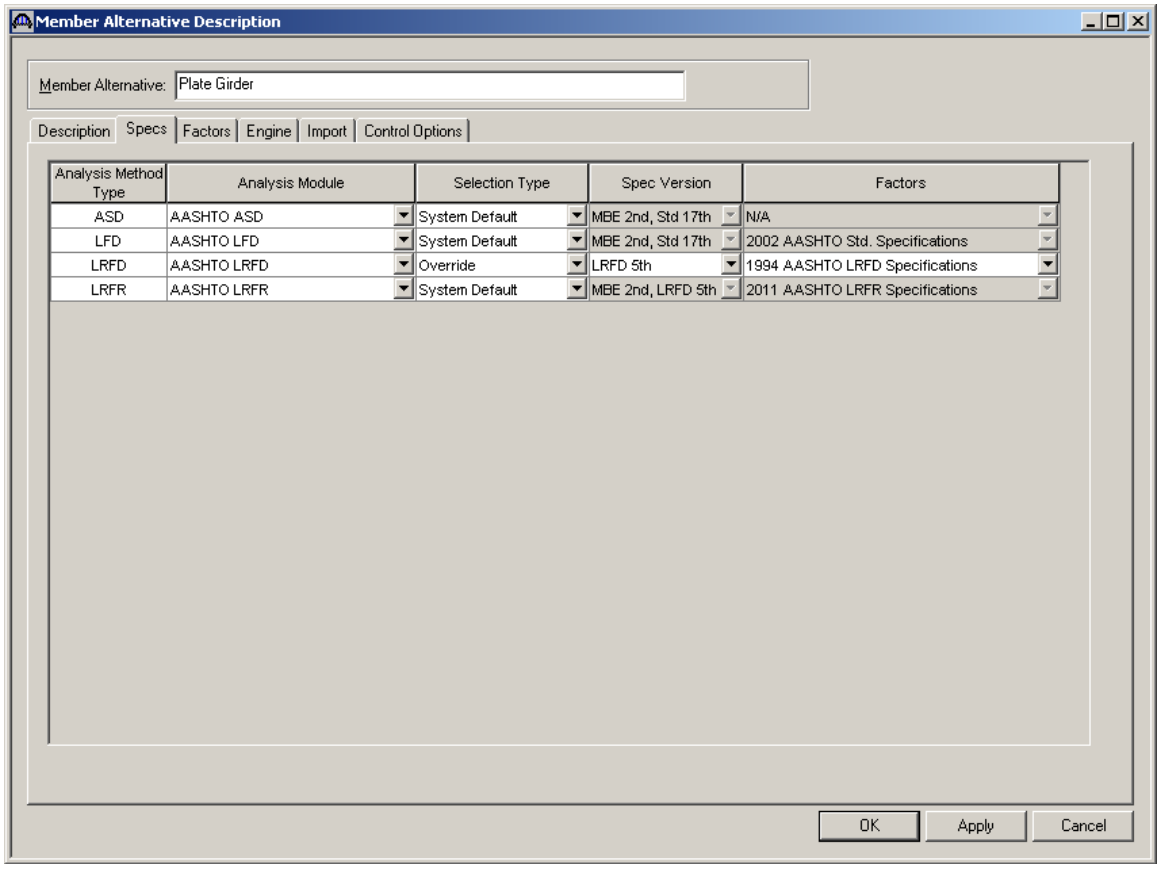


Uncheck Service –II limit state in steel column.

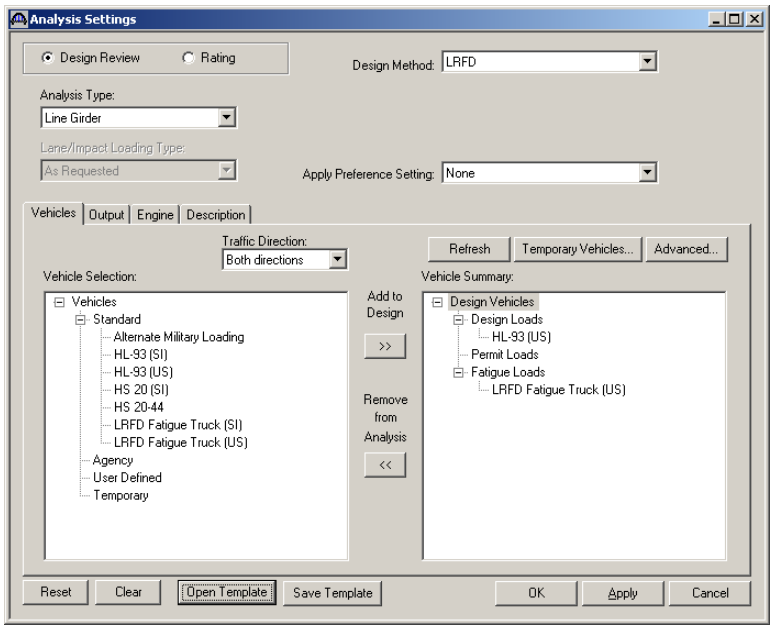


Click OK button to save the change to memory and close the window.

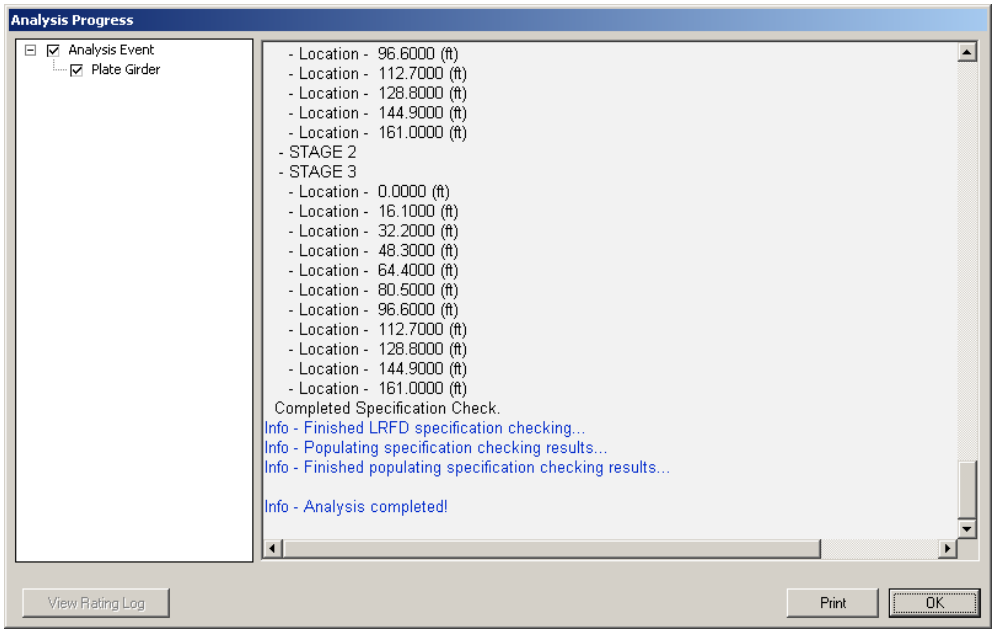
Open member alternative window of “Simple Span Structure/G1/Plate Girder”, select “Spec” tab, change LRFD spec selections as the following window.



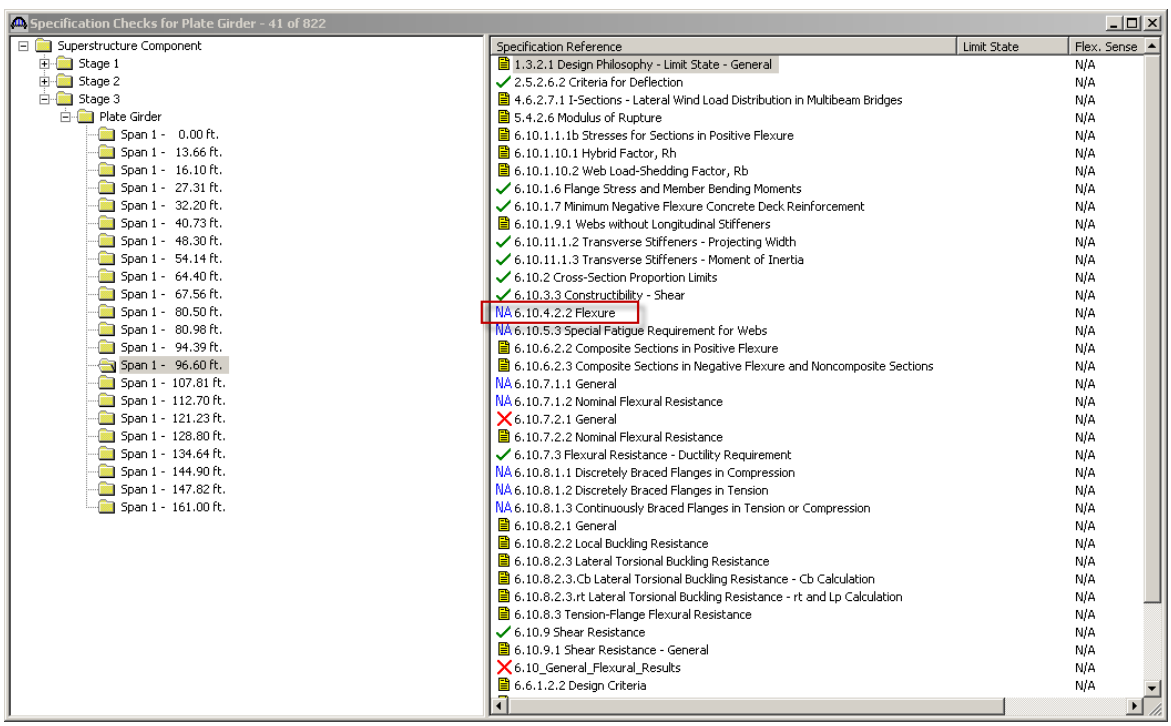
Click OK button to save the change to memory and close the window.
Do design review with HL93 for “Simple Span Structure/G1/Plate Girder”.



Click OK in analysis progress window when analysis is complete.



Click "View Spec Check" button to view article list.



Since Service –II limit state is not selected for LRFD spec check, article 6.10.4.2.2 is not applicable.