

**NDOT STRUCTURES MANUAL
REVISION 2014-1
May 2014**

Revision Summary

Page(s)	Manual Subsection	Description
2	12.3.2.7	Specify P-13 for Strength II load combination and delete application of Permit Load for Service I and Service II load combinations.
	12.3.2.8	Clarify P-13 application for fatigue loading.

Revisions indicated by underscored text.

12.3.2.7 Permit Loads for Design (P Load)

NDOT has adopted the P-13 vehicle of the Caltrans “Standard Permit Design Vehicles” for the design of structures to provide a minimum permit-load capacity on all highway structures to account for vehicles that exceed the legal limits and that operate on highways and structures under special transportation permits. This load is commonly called the “P” load, and is illustrated in Figure 12.3-D. Typically, all State-owned bridges are designed for the Strength II load combination with the P load applied simultaneously in all lanes. The multiple presence factors specified in LRFD Table 3.6.1.1.2-1 shall be applied. The application of the P load to non-State owned bridges is determined on a case-by-case basis.

12.3.2.8 Fatigue Loads

The bridge designer shall also apply a single lane of P loading, also with a load factor of 0.75, for the fatigue design of structural steel. In lieu of better information, the average daily truck traffic in a single lane, $ADTT_{SL}$, for the P load shall be taken as 10 trucks per day.