

6.10.10.2 Shear Connectors – Fatigue Resistance

Where the girders satisfy the Fatigue I Limit State (i.e., infinite fatigue life), ITD prefers the shear connectors be designed for the same limit state regardless of the $ADTT_{SL}$. Where girders are designed to the Fatigue II Limit State, design the shear connectors per the code.

Commentary:

The language above prevents a bridge where the girders are designed for infinite fatigue life but the shear connectors are designed for a finite fatigue life. This is an undesirable method of failure as the shear studs are controlling the fatigue life of the bridge.

Revisions:

Oct 2023 Added new article.