

## **4.7.4 ANALYSIS FOR EARTHQUAKE LOADS**

### **4.7.4.1 General**

The soil spring constants for piles, drilled shafts, or deep foundations can be modeled using the procedure in the FHWA Manual "Seismic Design of Highway Bridge Foundations" Report No. FHWA/RD-86/101.

Existing structures that require major rehabilitation and are in Seismic Zones 2, 3, and 4 shall be evaluated for seismic retrofit in accordance with the FHWA Manual "Seismic Retrofitting Guidelines for Highway Bridges" Report No. FHWA/RD-83/007.

Revisions:

April 2008

Deleted requirement for multi-mode analysis.