NOTES:
1. Provide excavation support whenever the 1.5:1 slope line would be disturbed in the placement of the structure or when track is on embankment and excavation of embankment toe would be required.
2. If elevation of Bottom of Footing falls at or above the 1:5:1 slope line, and track is on level ground or in a cut section and on stable soil, excavation support is not required.
3. Excavation Support shall be cut off at top of footing or intersection with the slope line, which ever is higher.
4. Excavation Support for the protection of railroad shall be designed in accordance with provisions of AREMA specifications. Extent of excavation support shall be dimensioned on plan view of bridge.
5. Excavation Support is to be designed for a lateral earth pressure from E−80 vertical loading surcharge plus 50% impact in addition to active earth pressure. The 80 kips surcharge shall be uniformly distributed over the tie length (8′−6") and axle spacing (5′−0"). Horizontal pressure on the excavation support due to the E−80 surcharge shall be determined using the strip load formula shown in the AREMA specifications. Allowable stresses for materials shall be in accordance with AREMA.