2.5.2.6.3 CRITERIA FOR SPAN -TO-DEPTH RATIOS

Flexural members of bridge structures shall be designed to have adequate stiffness to limit deflections or any deformations that may adversely affect the strength or serviceability of the structure at service load plus impact.

The minimum span to depth ratios are recommended unless computation of deflection indicates that lesser depths may be used without adverse effects.

The span length of members that are not built integrally with their supports shall be considered the clear span plus the depth of the member but need not exceed the distance between centers of supports.

The span length of continuous members shall be considered at the faces of support. When fillets making an angle of 45 degrees or more with the axis of the member are built monolithic with the member and support, the face of support shall be considered at a section where the combined depth of the member and fillet is at least 1.5 times the thickness of the member.

Reference: Span length definitions are from Article 8.8 of the AASHTO Standard Specifications, 16th Edition.