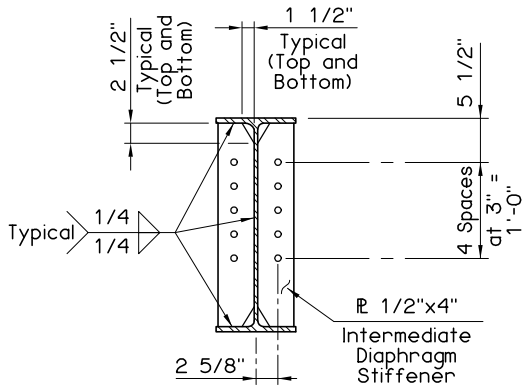
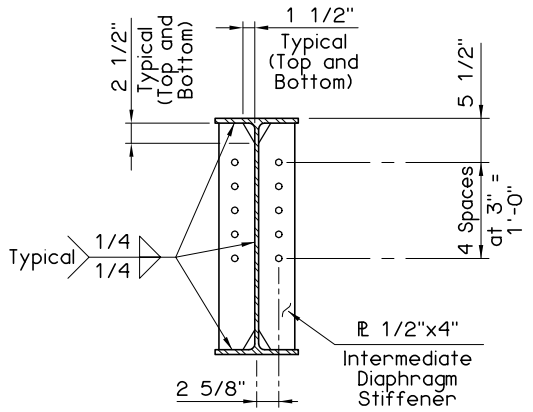
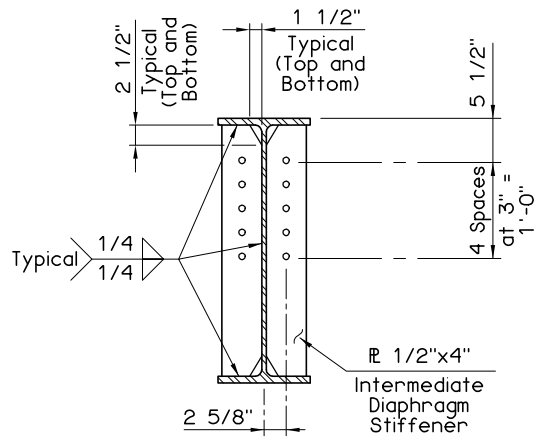


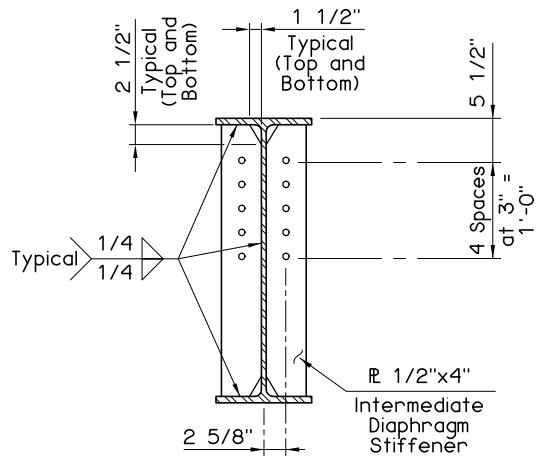
W27 BEAM



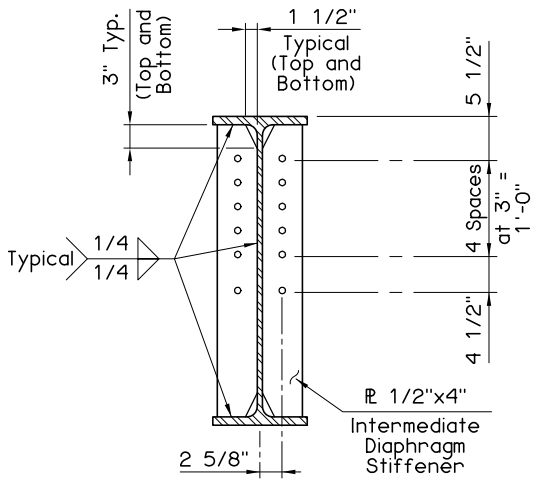
W30 BEAM



W33 BEAM



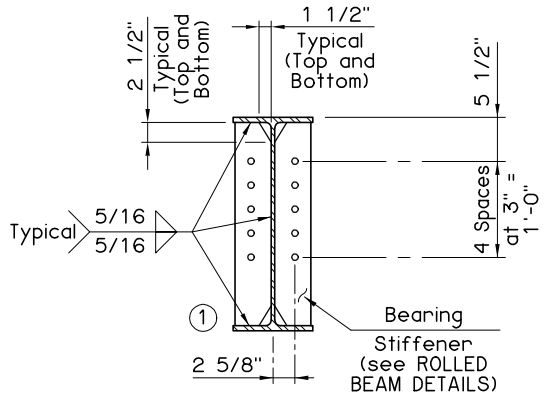
W36 BEAM



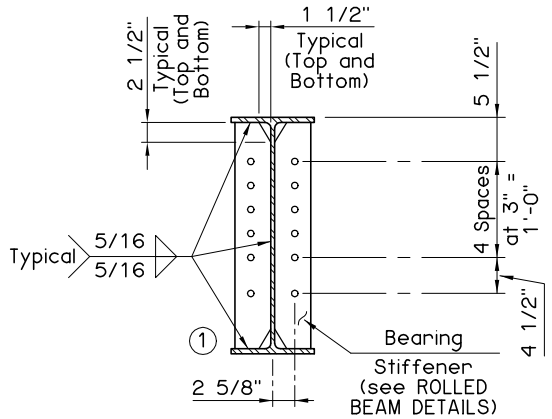
W40 BEAM

INTERMEDIATE DIAPHRAGM STIFFENER DETAILS

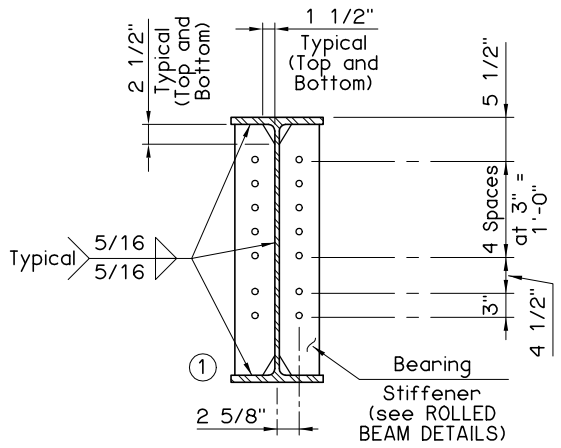
NOTE:
Terminate fillet welds 3/8" from the edge of clipped corners of all stiffener plates and non-clipped corners of Intermediate Diaphragm Stiffeners. Wrap fillet weld around non-clipped corners of Bearing Stiffeners.



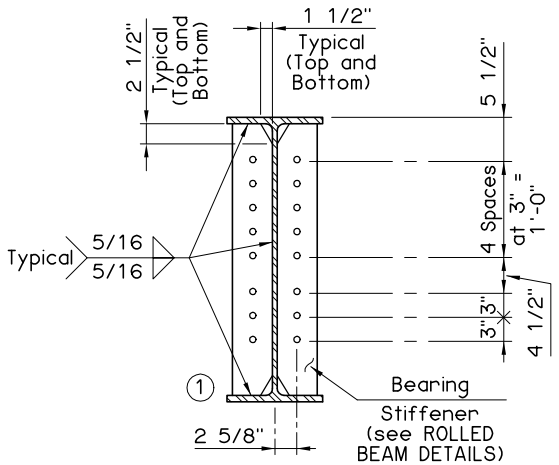
W27 BEAM



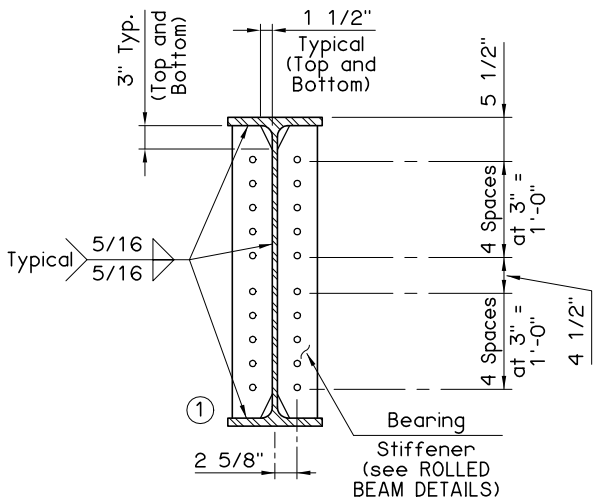
W30 BEAM



W33 BEAM



W36 BEAM



W40 BEAM

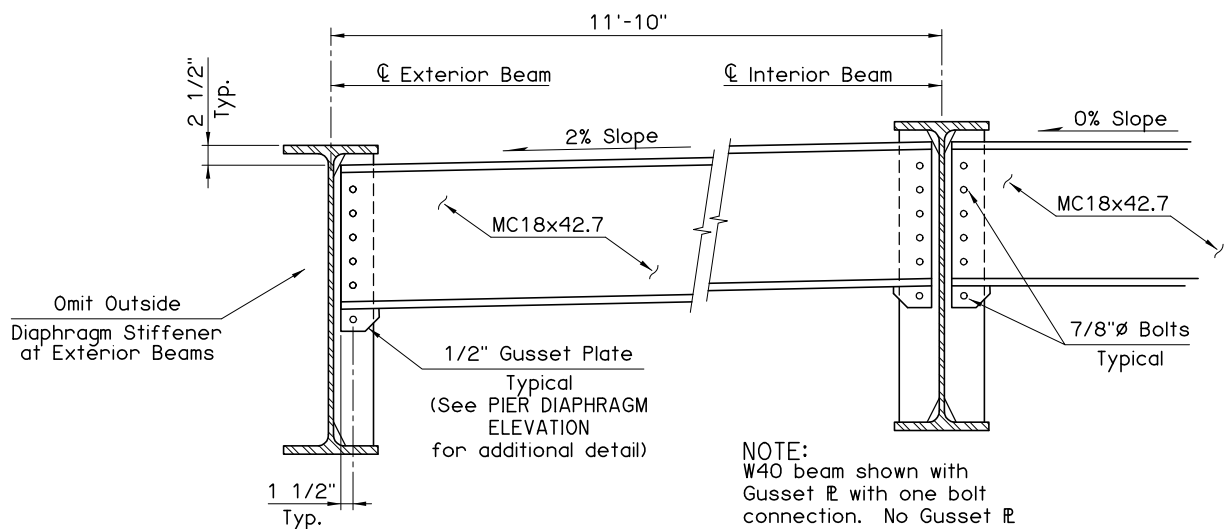
① Mill to bear at bottom flange.

BEARING STIFFENER DETAILS

NOTE:
Contractor may elect to fabricate a Bent Plate Diaphragm in lieu of Channel and Gusset Plate. Plate shall be 1/2" minimum thickness and formed in the shape of channel with minimum 4" flanges. Depth of Bent Plate Diaphragm shall be equal or greater than that shown for combined Channel and Gusset Plate. Cost to construct Bent Plate Diaphragm shall be at Contractor's expense.

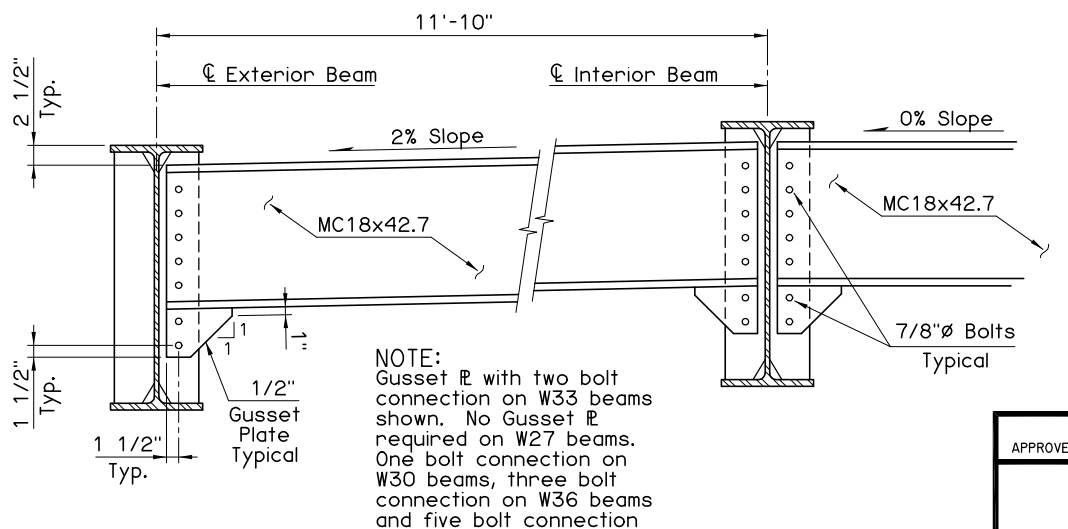
Omit channel diaphragm and bolt holes in Bearing Stiffeners at Abutment Diaphragms of Integral Bridges

NOTE:
Structural steel for channel diaphragms and Gusset Plates shall conform to AASHTO M270 (ASTM A709), Grade 50W (Weathering Steel, Charpy V-Notch testing not required). Bolts shall conform to AASHTO M164 (ASTM A325). All bolts, nuts, washers and welding shall have weathering characteristics.



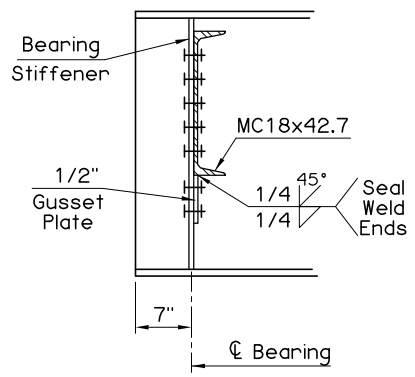
NOTE:
W40 beam shown with Gusset PL with one bolt connection. No Gusset PL required for W27, W30, W33 or W36 beams.

INTERMEDIATE DIAPHRAGM ELEVATION



NOTE:
Gusset PL with two bolt connection on W33 beams shown. No Gusset PL required on W27 beams. One bolt connection on W30 beams, three bolt connection on W36 beams and five bolt connection on W40 beams are similar.

PIER DIAPHRAGM ELEVATION



END DIAPHRAGM SECTION

APPROVED BY BRIDGE ENGINEER — DATE 8/29/03

OKLAHOMA DEPT. OF TRANSPORTATION
BRIDGE STANDARD (ENGLISH)

DIAPHRAGM DETAILS ROLLED BEAMS INTEGRAL

1999 SPECIFICATIONS	B40-I-DIA-RB	OOE

B-191E