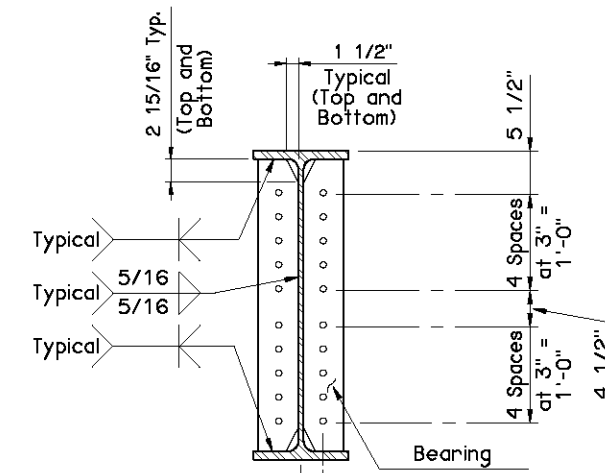
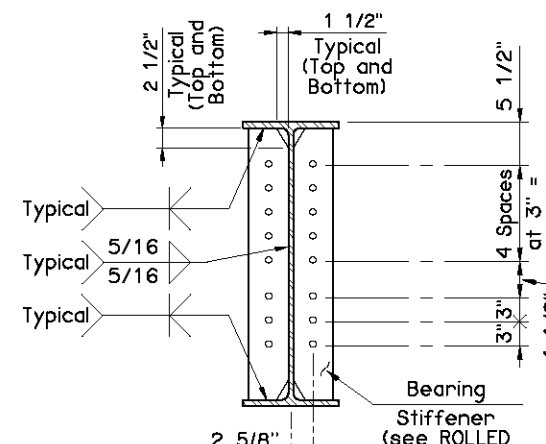
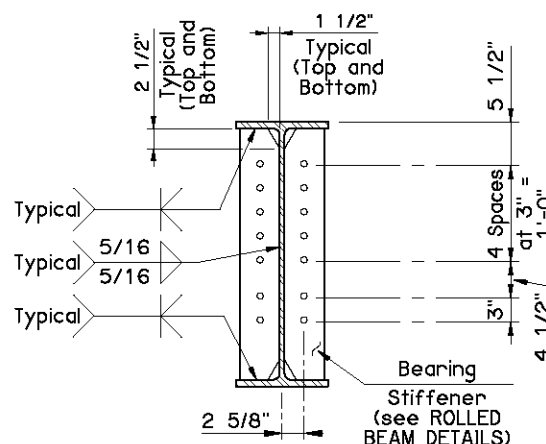
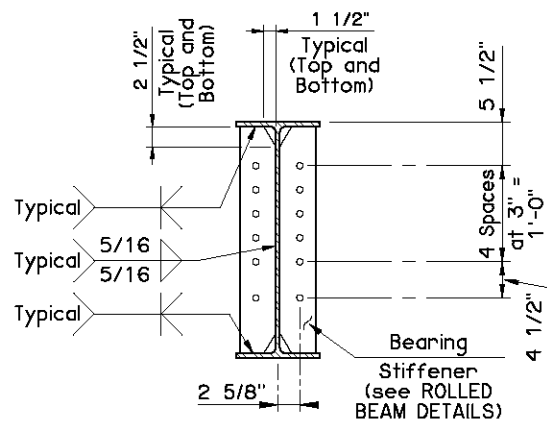
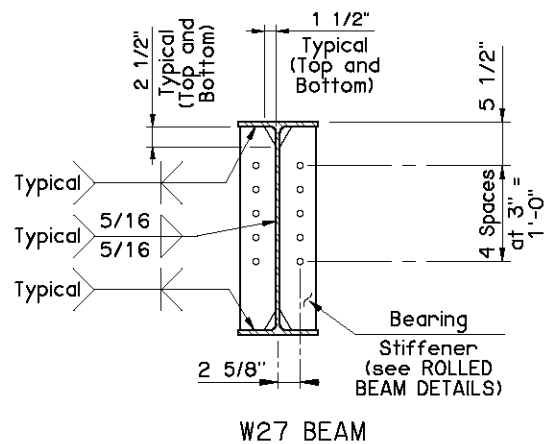


NOTE:
Terminate fillet welds 3/8" from the edge of clipped corners of all stiffener plates and non-clipped corners of Intermediate Diaphragm Stiffeners.

INTERMEDIATE DIAPHRAGM STIFFENER DETAILS

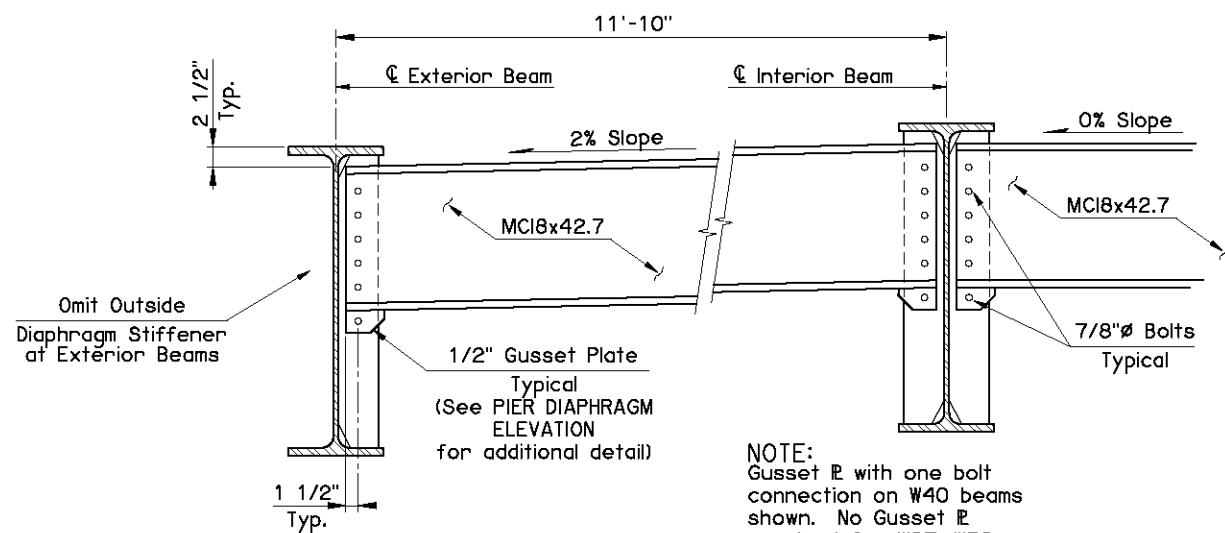


NOTE:
The Contractor may substitute a Bent Plate Diaphragm in lieu of Channel and Gusset Plate shown at no additional cost to the Department. Provide 1/2" minimum plate thickness formed in the shape of the channel with 4" minimum flanges. Fabricate Bent Plate Diaphragm to a depth equal or greater than that shown for the combined Channel and Gusset Plate.

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

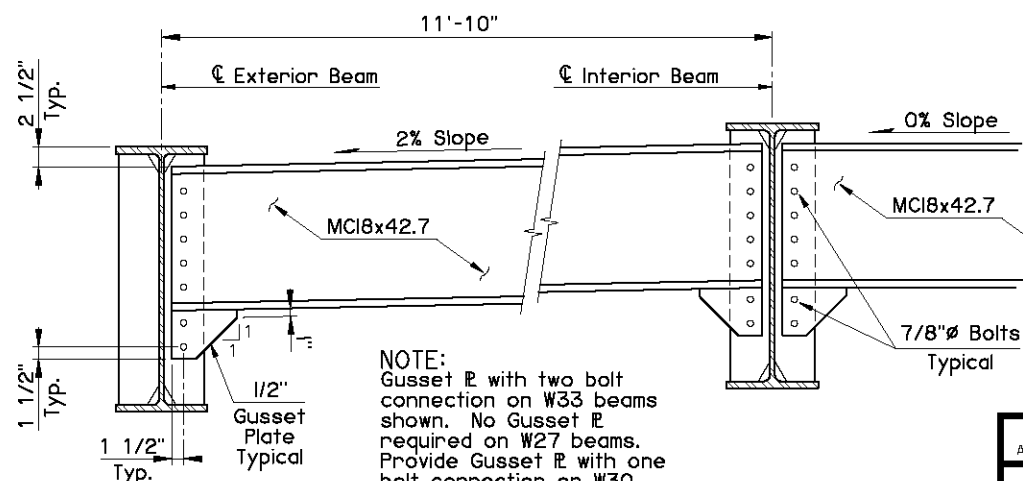
BEARING STIFFENER DETAILS

NOTE:
Provide structural steel for channel diaphragms and Gusset Plates in accordance with AASHTO M270 (ASTM A709), Grade 50W (Weathering Steel, Charpy V-Notch testing not required). Use bolts conforming to AASHTO M164 (ASTM A325). Provide all bolts, nuts, washers and welding with weathering characteristics.



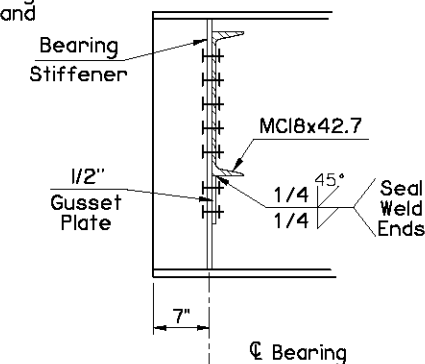
NOTE:
Gusset R with one bolt connection on W40 beams shown. No Gusset R required for W27, W30, W33 or W36 beams.

INTERMEDIATE DIAPHRAGM ELEVATION



NOTE:
Gusset R with two bolt connection on W33 beams shown. No Gusset R required on W27 beams. Provide Gusset R with one bolt connection on W30 beams, three bolt connection on W36 beams and five bolt connection on W40 beams.

PIER DIAPHRAGM ELEVATION



END DIAPHRAGM SECTION

APPROVED BY BRIDGE ENGINEER *Scott J. Smith* DATE *4/2/10*

OKLAHOMA DEPT. OF TRANSPORTATION
BRIDGE STANDARD (ENGLISH)
DIAPHRAGM DETAILS
ROLLED BEAMS
INTEGRAL

2009 SPECIFICATIONS | B40-I-DIA-RB | 01E | B-191E