


MODIFIED BY EI 79-055 EFFECTIVE 12/5/79	<h1>ENGINEERING INSTRUCTION</h1> <p>NEW YORK STATE DEPARTMENT OF TRANSPORTATION</p>	
SUPERSEDED BY EB 97-020 EFFECTIVE 4/4/97	SUBJECT: LATERAL GUSSET PLATE CONNECTIONS	
Subject Code: 7.35-4		
Distribution: <input checked="" type="checkbox"/> Main Office <input type="checkbox"/> Regions <input type="checkbox"/> Special	Code: <u>EI 79-17</u>	
APPROVED: 	Date: <u>Apr. 30, 1979</u> Supersedes:	

The fatigue life of lateral gusset plate connections to primary members in tension has been a matter of concern for some time. The shop inspection of these weldments are extensive and time consuming. An error in inspection could cause the failure of a primary member. High strength bolted connections shall be used in lieu of welding for the attachment of lateral gusset plates. This revision is effective immediately.

The revised Standard Specifications for Highway Bridges has been issued with EI 79-15 dated April 24, 1979. Please refer to NY 150, titled "Special Note-Lateral Connections."

Revised copies of BDD and GLD sheets will be forwarded when available. Some typical sketches of bolted connections are attached for your guidance. A single line of bolts should be used where possible to keep the reduction in gross section to a minimum. The minimum edge distance shall be two inches for primary members.

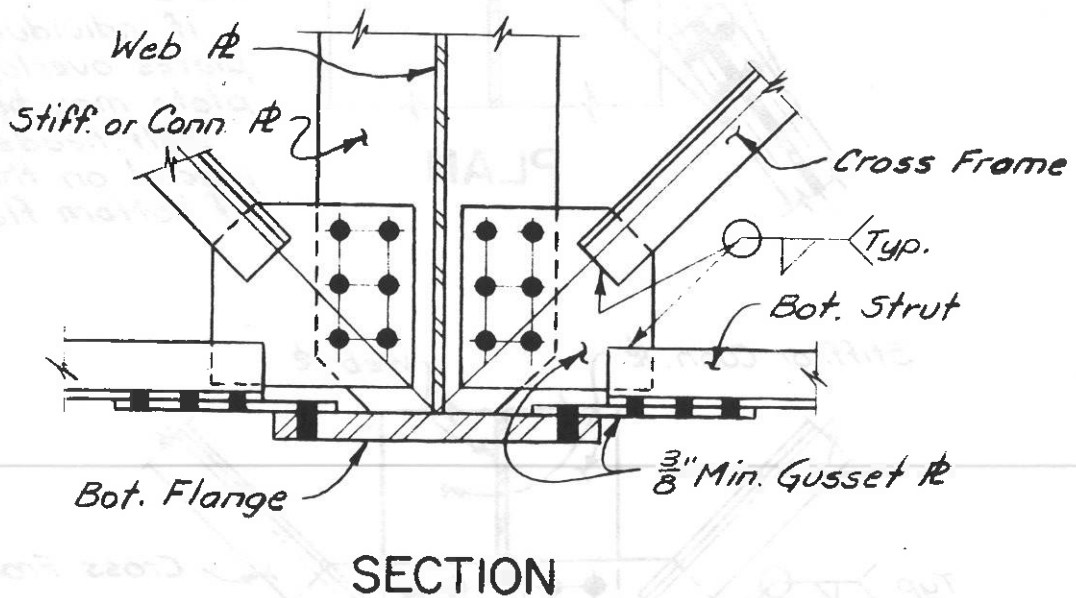
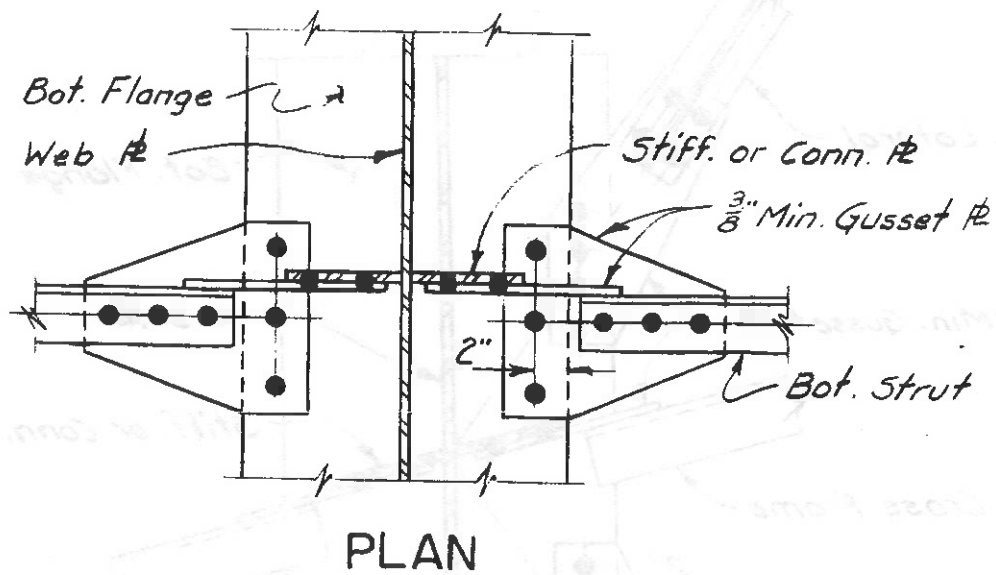
If making the revisions would require postponement of the PS&E, or would be particularly time consuming please provide Mr. D.J. Massimilian (518-457-4452) with the following information:

Sample:

<u>P.I.N.</u>	<u>SUFF. NO.</u>	<u>PROJ. NAME</u>	<u>PS&E</u>	<u>EST. TIME (MANDAY'S)</u> <u>TO MAKE REVISIONS</u>
1357.04	72	I88 over Creek	11/79	2

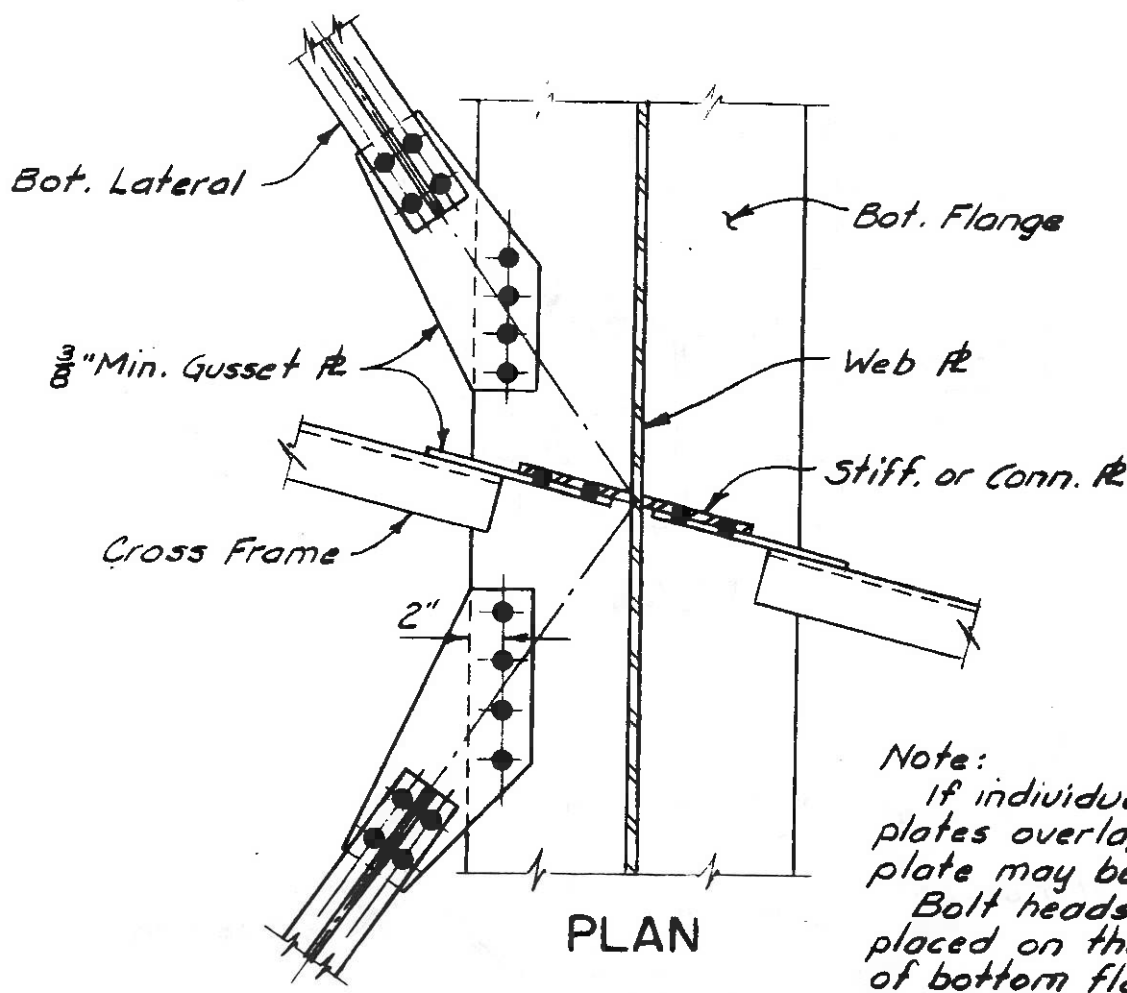
A determination will be made by this office and FHWA regarding such projects considering the above information and the details of the specific structure.

Consulting Engineers preparing plans for new structures shall follow the above notification procedure, as well as designers within the Subdivision.

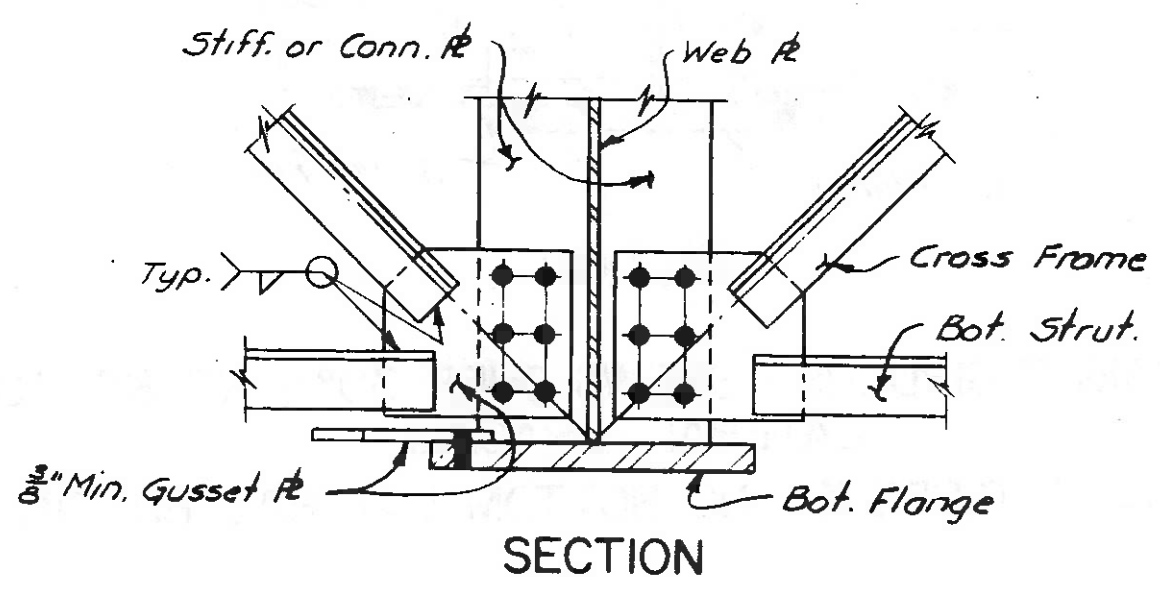


STRAIGHT GIRDERS - SKEWS OVER 30° - NO BOTTOM
LATERAL BRACING

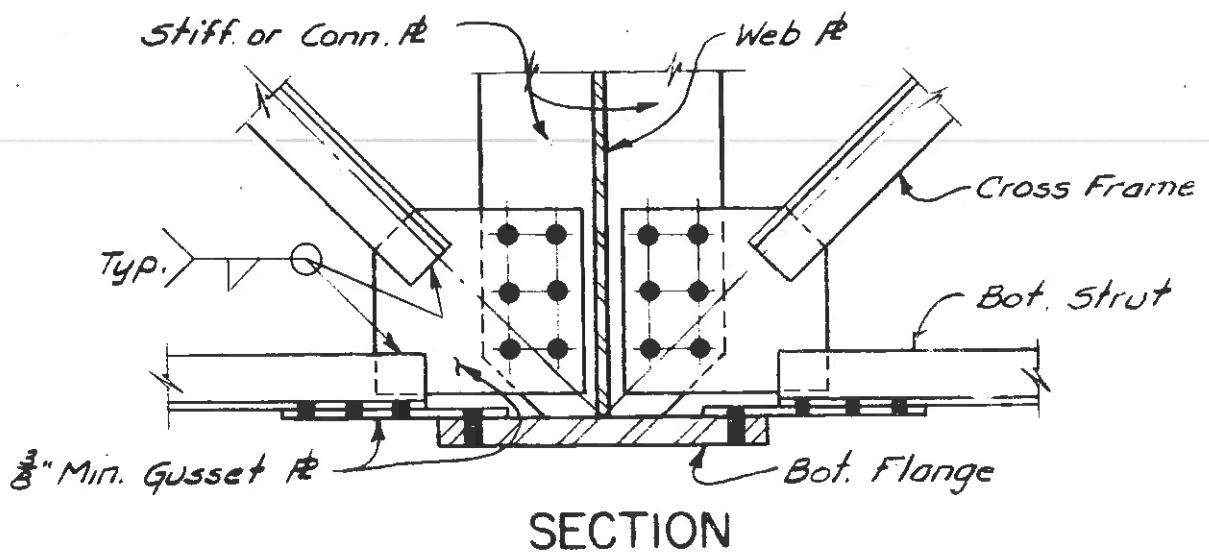
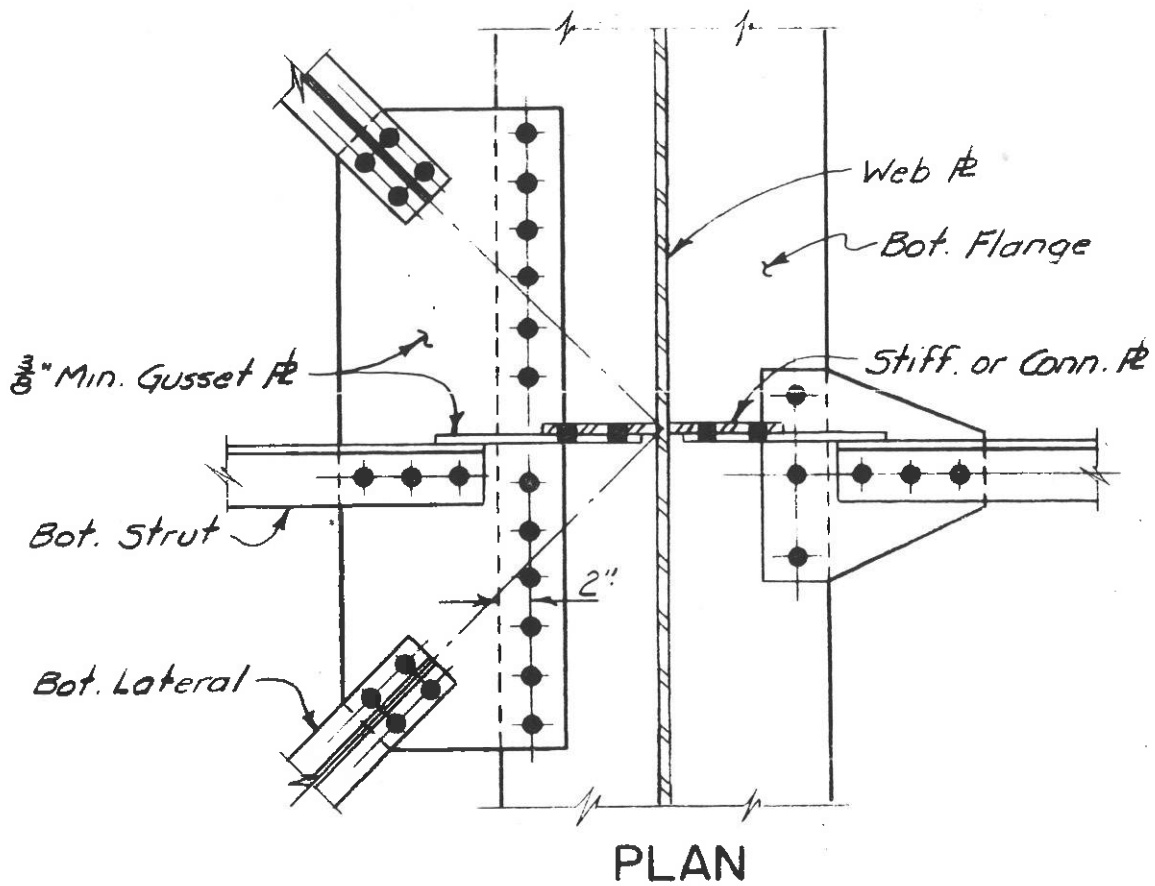
CURVED GIRDERS - NO BOTTOM LATERAL BRACING



Note:
 If individual gusset plates overlap, a single plate may be used.
 Bolt heads shall be placed on the underside of bottom flange. (Typical)



STRAIGHT GIRDERS - SKEWS 30° AND UNDER - WITH BOTTOM LATERAL BRACING



STRAIGHT GIRDERS - SKEWS OVER 30° - WITH BOTTOM LATERAL BRACING
 CURVED GIRDERS - WITH BOTTOM LATERAL BRACING