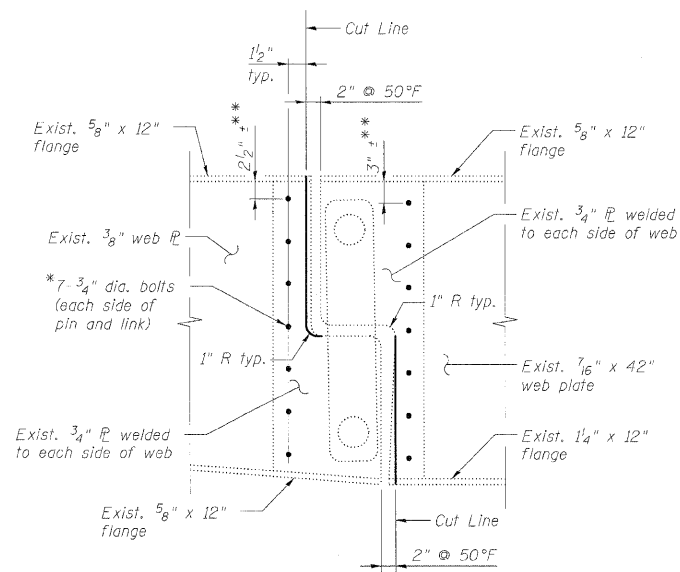
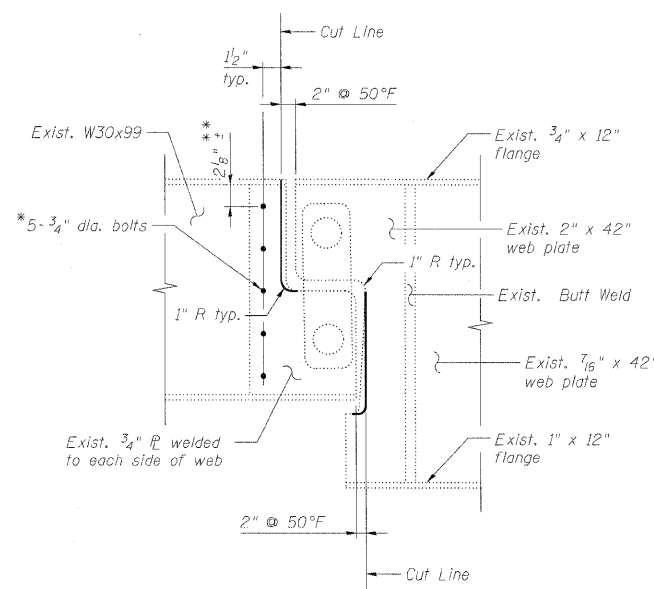


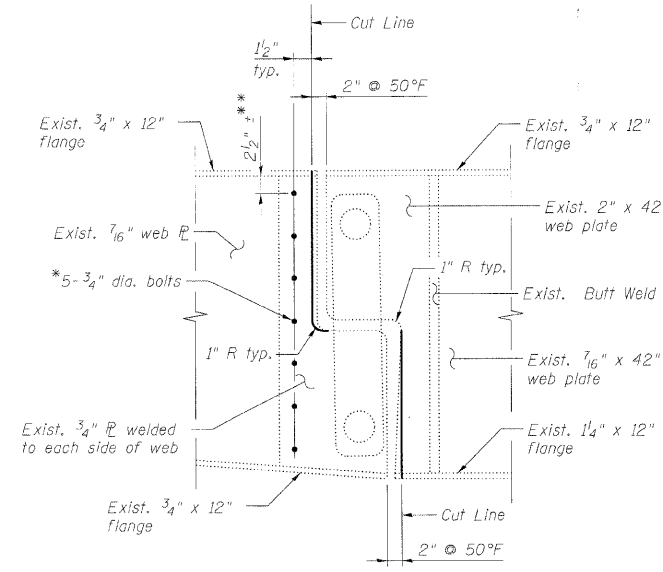
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



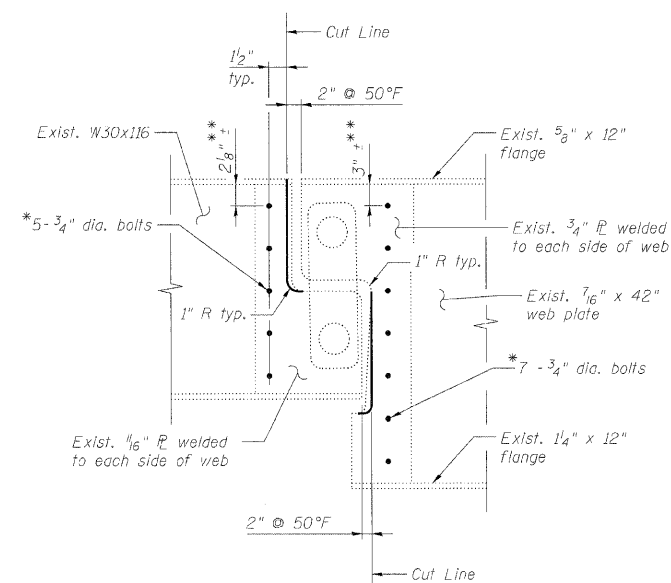
**GIRDER MODIFICATION DETAILS - GIRDER 14**  
(14 bolts per connection - 28 thus)



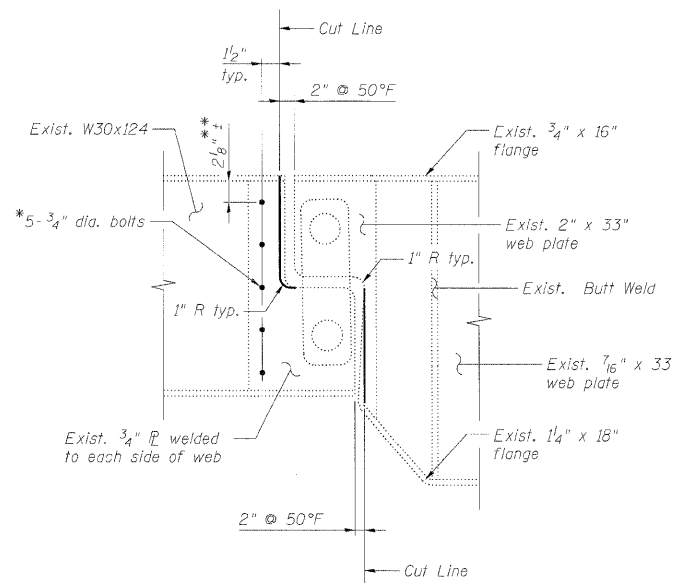
**GIRDER MODIFICATION DETAILS - GIRDERS 12-13**  
(5 bolts per connection - 20 thus)



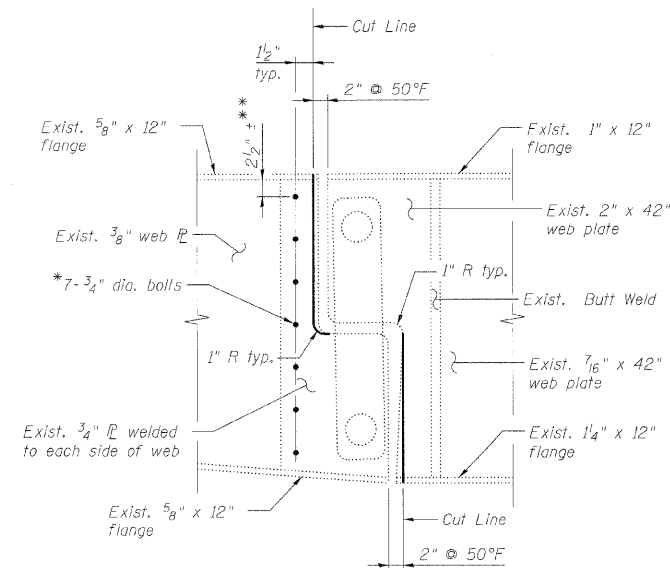
**GIRDER MODIFICATION DETAILS - GIRDER 11**  
(7 bolts per connection - 14 thus)



**GIRDER MODIFICATION DETAILS - GIRDERS 15-19**  
(12 bolts per connection - 120 thus)



**GIRDER MODIFICATION DETAILS - GIRDERS 21 & 22**  
(5 bolts per connection - 20 thus)



**GIRDER MODIFICATION DETAILS - GIRDER 20**  
(7 bolts per connection - 14 thus)

**Notes:**

1. Cut surfaces shall be grinded smooth, spot cleaned, and painted with an aluminum epoxy mastic primer followed by a finish coat to match the color of the existing beam. Paint shall be applied per the requirements of Paint System 2, according to the Special Provision "Cleaning and Painting Existing Steel Structures". Cost included with Modify Existing Pin and Link Connection.
2. See existing plans for girder layout and numbering.
3. The Contractor must exercise extreme care so as not to damage the pins or link plate while trimming the girders.
4. Some connections may have already been cut and, therefore, the current existing geometries may not match the geometries as shown on the existing plans.
5. Pin and Link connections are located near each pier. Thus, there are 2 connections per girder line.

\* Install 3/4" diameter high strength bolts with two hardened washers that conform with ASTM (A-325) and AASHTO-164 with 13/16" diameter holes at 6" (+) centers to hold plates together. Gaps between the plates and web shall be sealed such that no moisture can develop between the plates. Cost included with Modify Existing Pin and Link Connection.

\*\* Verify in field. Distance from flange to first bolt shall be equal at top and bottom of girder.

DESIGNED -	KWS
CHECKED -	MFB/EFS
DRAWN -	RMG
CHECKED -	KWS

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Modify Existing Pin and Link Connection	L. Sum	0.23

**benesch**

alfred benesch & company  
Engineers • Surveyors • Planners  
205 North Michigan Avenue, Suite 2400  
Chicago, Illinois 60601  
312-565-0490 Job No. 10050

**STEEL REPAIR DETAILS  
STRUCTURE NO. 022-0112**

SHEET NO. 13	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	290	22(1, 1-1, 2&3)RS-7	DUPAGE	546	486
28 SHEETS	CONTRACT NO. 60G51				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		