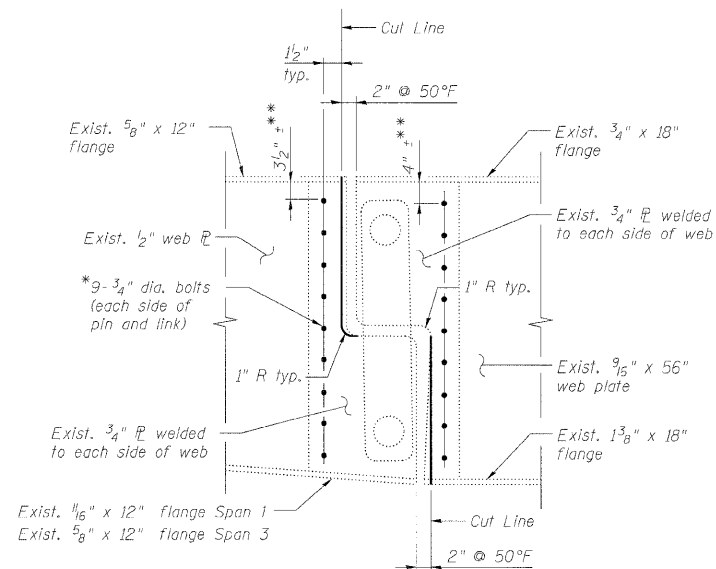
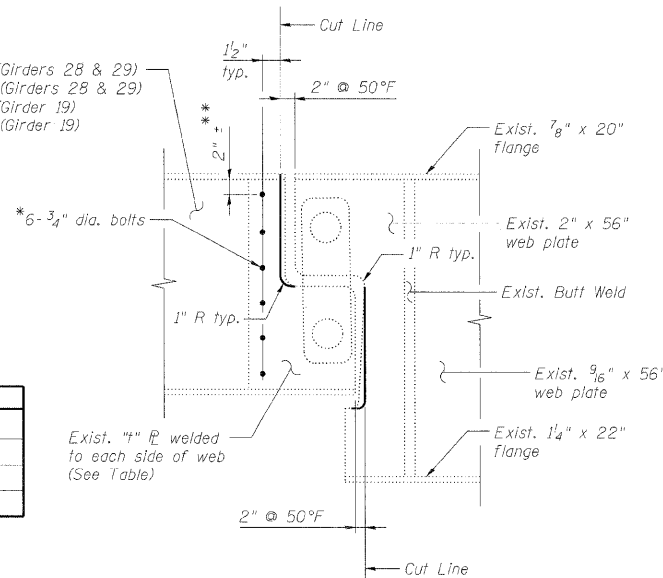


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



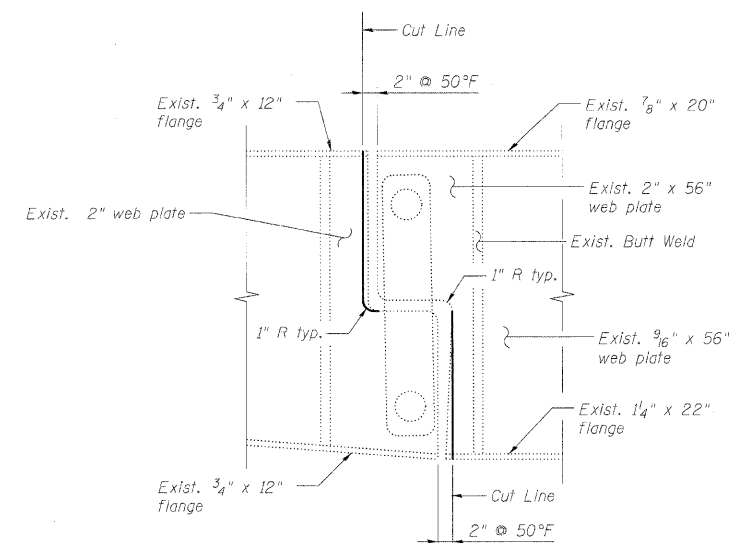
GIRDER MODIFICATION DETAILS - GIRDERS 20 & 27
(18 bolts per connection - 72 thus)

Exist. W36x160 Span 1 (Girders 28 & 29)
Exist. W36x135 Span 3 (Girders 28 & 29)
Exist. W36x194 Span 1 (Girder 19)
Exist. W36x150 Span 3 (Girder 19)

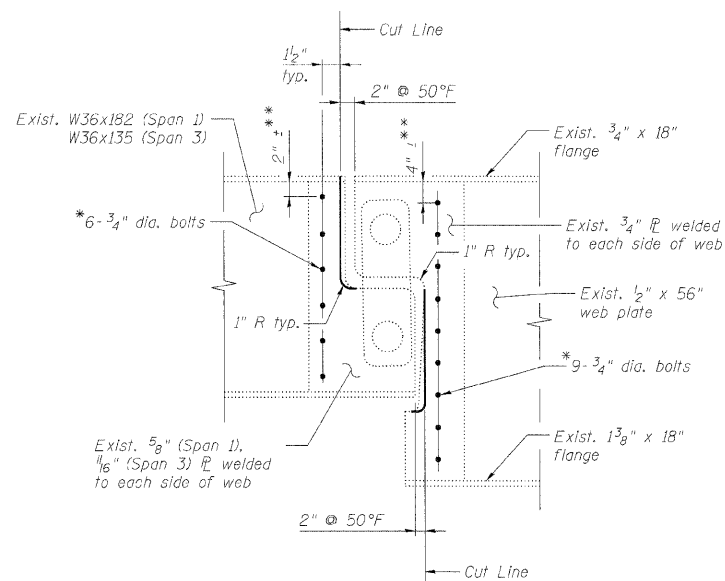


Girder	"I"
W36x194	5/8"
W36x160	5/16"
W36x150	5/16"
W36x135	5/16"

GIRDER MODIFICATION DETAILS - GIRDERS 19, 28 & 29
(6 bolts per connection - 36 thus)



GIRDER MODIFICATION DETAILS - GIRDERS 18 & 30



GIRDER MODIFICATION DETAILS - GIRDERS 21-26
(15 bolts per connection - 180 thus)

* 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.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Modify Existing Pin and Link Connection	L. Sum	0.25

Notes:

- 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.
- See existing plans for girder layout and numbering.
- The Contractor must exercise extreme care so as not to damage the pins or link plate while trimming the girders.
- Some connections may have already been cut therefore the current existing geometries may not match the geometries as shown on the existing plans.
- Pin and Link connections are located near each pier. Thus, there are 2 connections per girder line.

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

benesch

alfred benesch & company
Engineers • Surveyors • Planners
205 North Michigan Avenue, Suite 2400
Chicago, Illinois 60601
312-565-0460 Job No. 10050

SHEET NO. 13	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	290				
32 SHEETS	CONTRACT NO. 60G51				
FED. ROAD DIST. NO.		ILLINOIS		FED. AID PROJECT	

STEEL REPAIR DETAILS
STRUCTURE NO. 022-0137