

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	22-2HB-1-F	DUPAGE	4	1

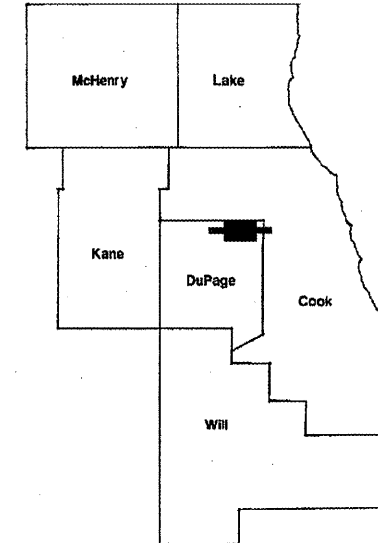
FOR INDEX OF SHEETS SEE SHEET 2

CONTRACT NO. 60H71

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
DISTRICT ONE
PROPOSED HIGHWAY PLANS

FAI ROUTE 290: I-290 (EISENHOWER EXPWY)
 OVER IL 83 (KINGERY HWY)
 SECTION 22-2HB-1-F
 BEAM FABRICATION
 DUPAGE COUNTY
 C-91-769-09
 SN 022-0096,-0097

D-91-768-09



LOCATION OF IMPROVEMENT INDICATED THUS:

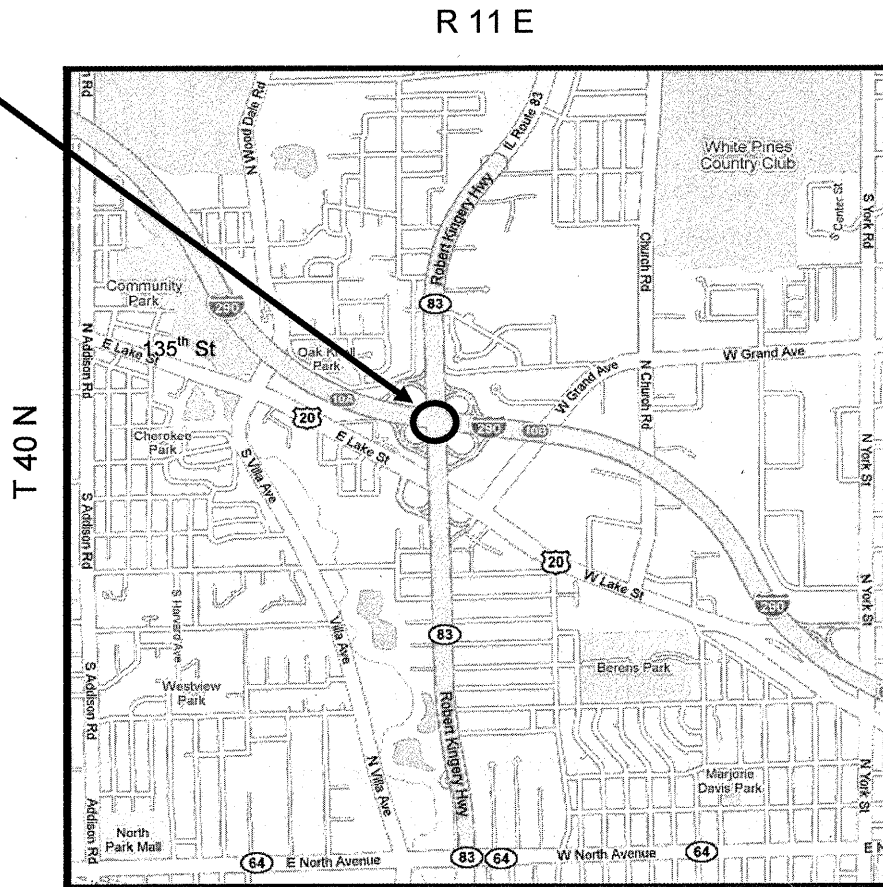
**IMPROVEMENT IS LOCATED
 IN THE VILLAGE OF ADDISON**

**BEAM FABRICATION
 FOR:
 SN 022-0096,-0097**

TRAFFIC DATA:

I-290:
 POSTED SPEED LIMIT = 55 MPH
 2007 ADT = 144,200

IL 83:
 POSTED SPEED LIMIT
 EXPRESS LANES = 50 MPH
 CD LANES = 45 MPH
 2007 ADT = 55,800



ADDISON TOWNSHIP

PROJECT ENGINEER ROBERT BORO (847) 705-4178
PROJECT MANAGER KEN ENG

CONTRACT NO. 60H71

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
 SUBMITTED: MAY 20 , 2009
Diane M. O'Keefe
 DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER
 June 26 , 2009
Charles J. Ingersoll
 ENGINEER OF DESIGN AND ENVIRONMENT
 June 26 , 2009
Christine M. Reed
 DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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 OF THE STATE OF ILLINOIS**

J.U.L.I.E.: JOINT UTILITY LOCATION
 INFORMATION FOR EXCAVATION
 (800) 892-0123 OR 811

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NUMBER
FAI 290	22-2HB-1-F	DUPAGE	4	2

CONTRACT NO: 60H71

INDEX OF SHEETS

- 1 TITLE SHEET
- 2 INDEX OF SHEETS AND SUMMARY OF QUANTITIES
- 3 - 4 BRIDGE FABRICATION PLAN SHEETS

*URBAN
100% STATE*

SUMMARY OF QUANTITIES		CONSTRUCTION TYPE CODE: SFTY - 2A	
CODE NO.	ITEMS	UNITS	TOTAL QUANTITY
50500205	FURNISHING STRUCTURAL STEEL	L SUM	1
50500455	STORAGE OF STRUCTURAL STEEL	CAL DA	30

ILLINOIS DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS
SUMMARY OF QUANTITIES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted. (Calculated weight of Structural Steel = 9260 pounds)
Fasteners shall be high strength bolts. Bolts 7/8"φ, open holes 15/16"φ, unless otherwise noted.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for painting of new structural steel except where otherwise noted. The entire system shall be shop applied, with the exception that masked off connection surfaces, field installed fasteners and damaged areas shall be touched up in the field. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Reddish Brown, Munsell No. 2.5YR 3/4. See Special Provision for "Cleaning and Painting New Metal Structures".

Load carrying components designated "NTR" shall conform to the Supplemental Requirements for Notch Toughness, Zone 2.

Diaphragm connection holes shall be 15/16"φ for 3/4"φ bolts. Two hardened washers shall be required at diaphragm connections.

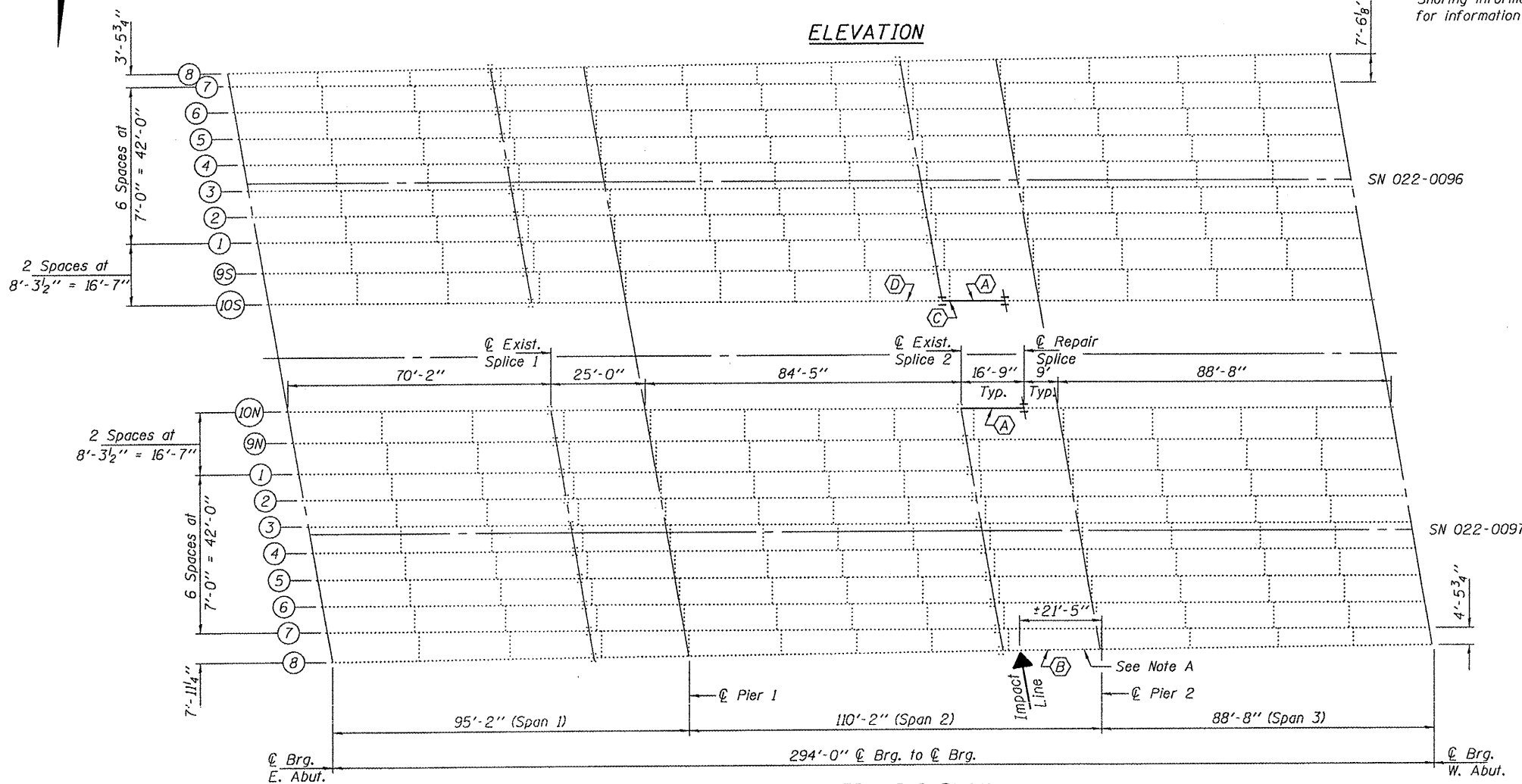
* The Contractor shall provide support and/or shoring systems for the slab and beam in the area of existing beam removal. See Special Provisions "Temporary Shoring and Cribbing" and "Temporary Slab Support System."

* Temporary shoring is required for Beams 10S & 10N. The shoring shall be removed as soon as possible after the splice is completed to minimize Traffic Control.

* Temporary shoring may be required to facilitate alignment of existing splice. Use 12" x 12" Timbers or HP's to be paid for as Temporary Shoring and Cribbing.

* Shoring information is provided for information only.

ELEVATION



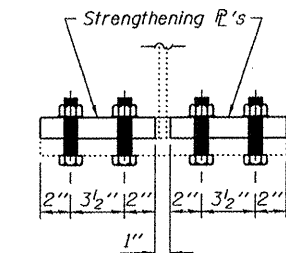
FRAMING PLAN

- (A) - Existing Beam to be Replaced.
- (B) - Existing Beam to be Straightened & Strengthened.
- (C) - Replace Bottom Clip Angle.
- (D) - Existing Beam to be Straightened.

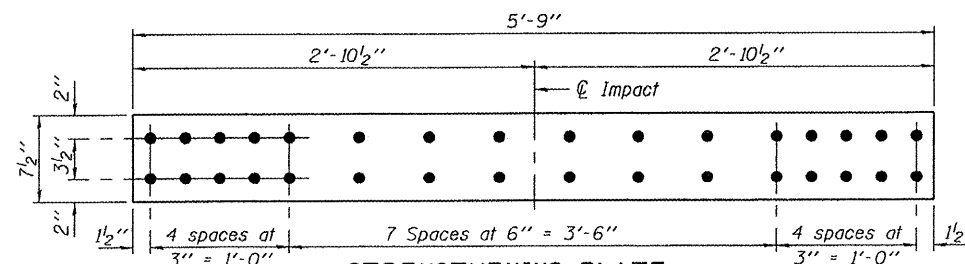
Note A:
Conduit welded to the bottom flange may need to be removed and replaced to facilitate placement of strengthening \bar{r} .

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Furnishing Structural Steel	L.S.	1
Storage of Structural Steel	Cal. Da	30



STRENGTHENING DETAIL



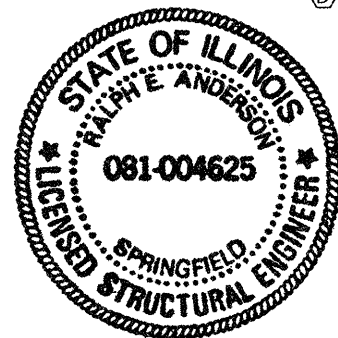
STRENGTHENING PLATE

\bar{r} 1 3/8" x 7 1/2" x 5'-9" (NTR)
(2 Required)

PLAN & ELEVATION
SN 022-0096 & 0097

DESIGNED *A. J. B.* JUN 18, 2009
CHECKED *A. J. B.*
DRAWN *Kyle M. Steffen*
CHECKED *AJB ATH*

EXAMINED *Carl P. ...*
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

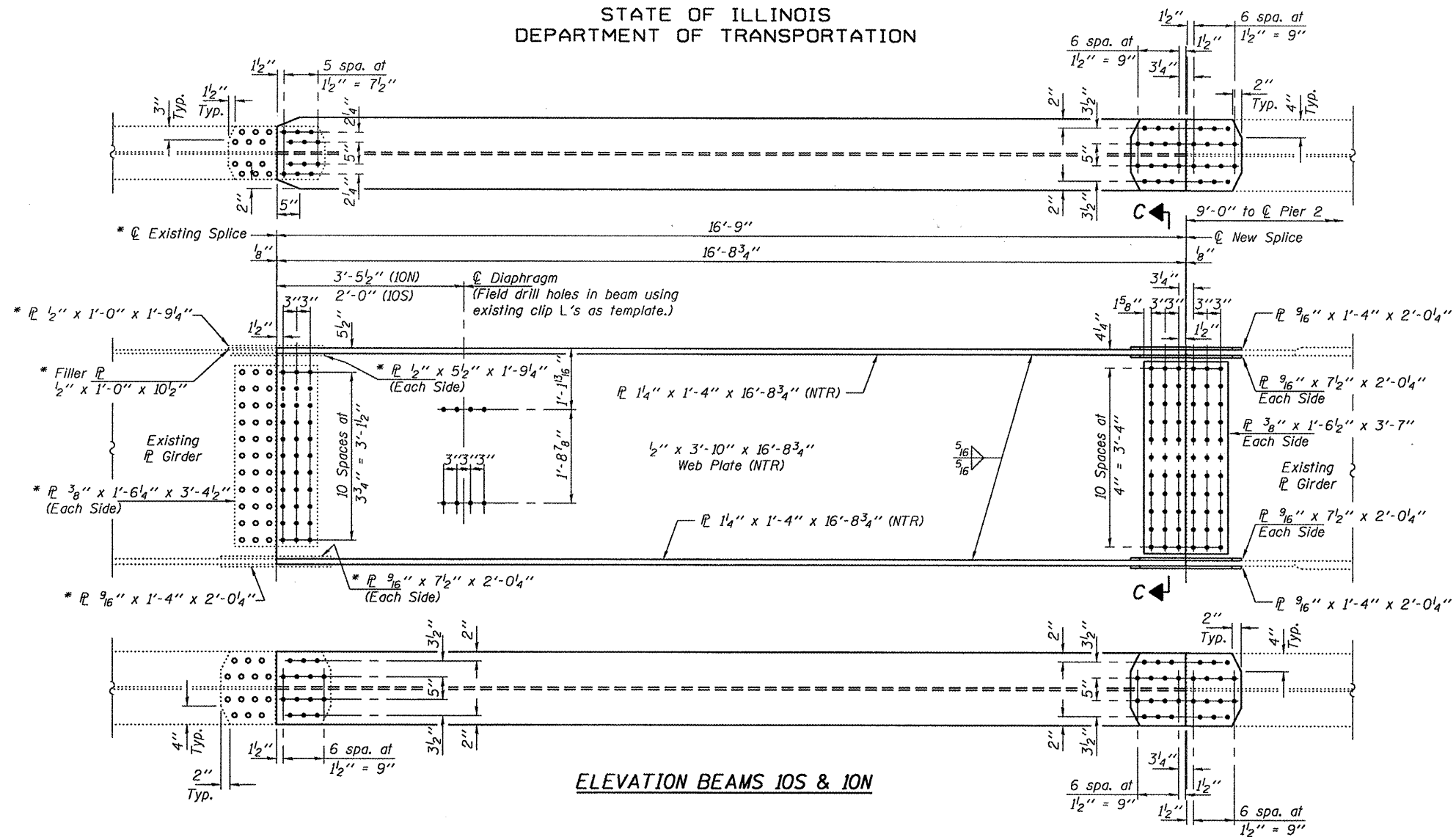


Expires: November 30, 2010

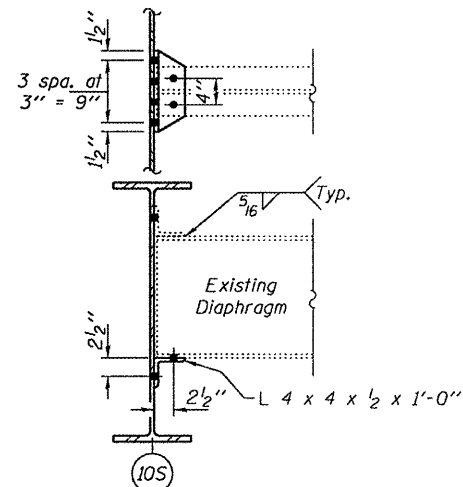
SHEET NO. 1	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2 SHEETS	290	22-2HB-1-F	DuPAGE	4	3
FED. ROAD DIST. NO.			ILLINOIS FED. AID PROJECT		
			CONTRACT NO. 60H71		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

* Use new Flange and web splice L's at Beam 10S. Use existing Flange and web splice L's at Beam 10N and use existing L's as template to field drill holes into new beam.

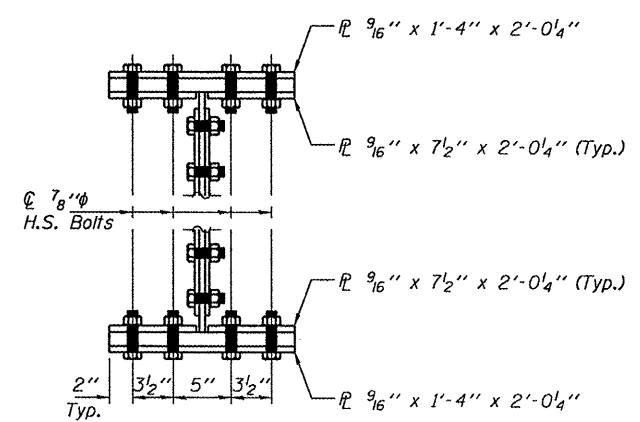


ELEVATION BEAMS 10S & 10N



CLIP ANGLE
REPLACEMENT DETAIL

Field drill holes in new beam and existing diaphragm using holes in new Clip L as template.



SECTION C-C

BEAM REPLACEMENT DETAILS
SN 022-0096 & 0097

DESIGNED	AJB
CHECKED	ATH
DRAWN	Kyle M. Steffen
CHECKED	AJB ATH

JUNE 18, 2009
EXAMINED *Carl Hoyer*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 2 2 SHEETS	F.A.I. RTE. 290	SECTION 22-2HB-1-F	COUNTY DuPAGE	TOTAL SHEETS 4	SHEET NO. 4
	CONTRACT NO. 60H71				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		