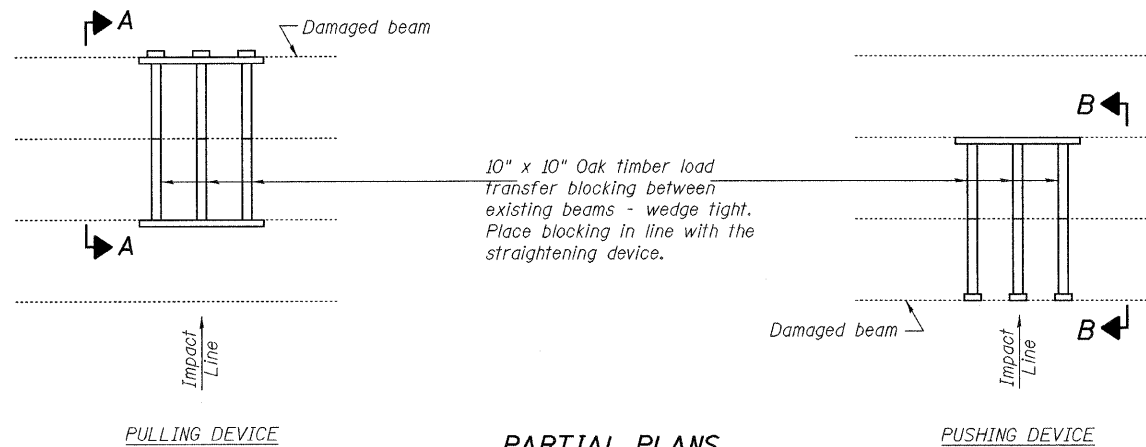
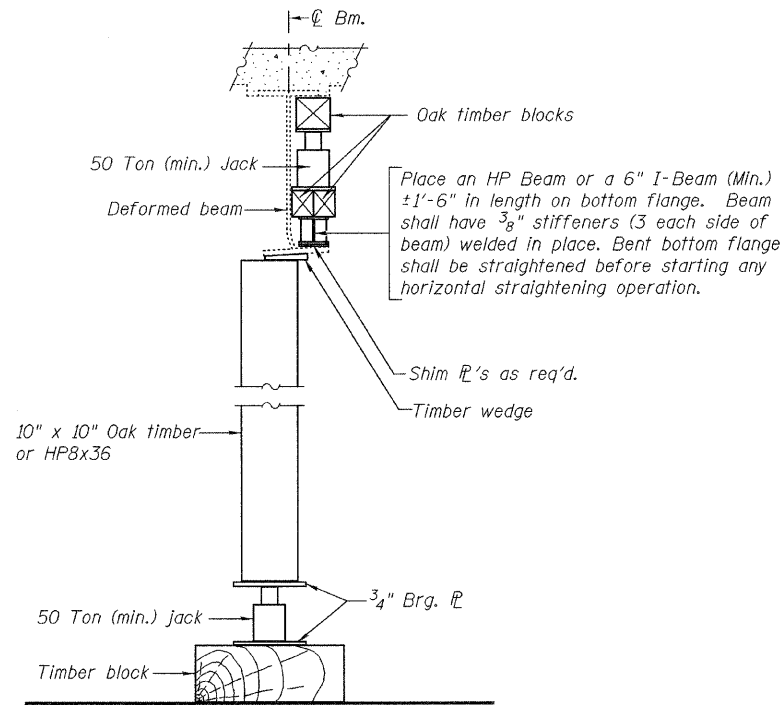


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DEPARTMENT OF TRANSPORTATION

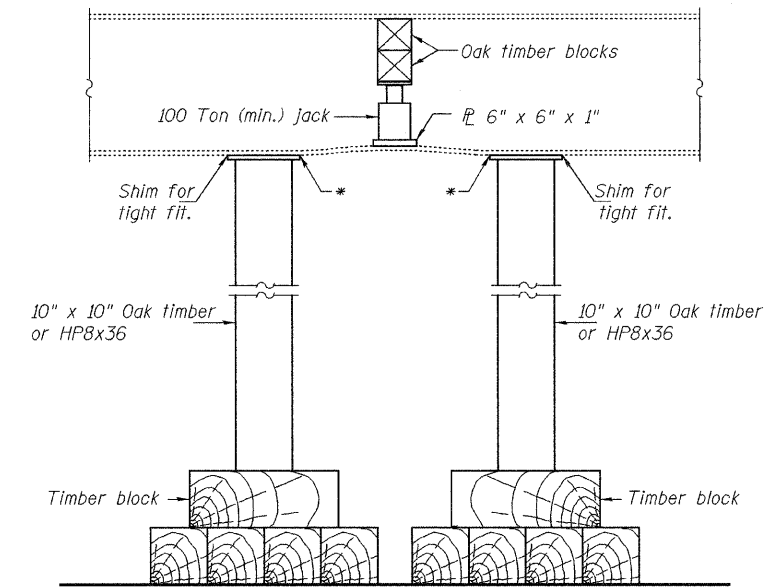


**PARTIAL PLANS  
SUGGESTED BEAM STRAIGHTENING METHODS**

Straightening force shall be maintained on all load transfer blocking during beam straightening.



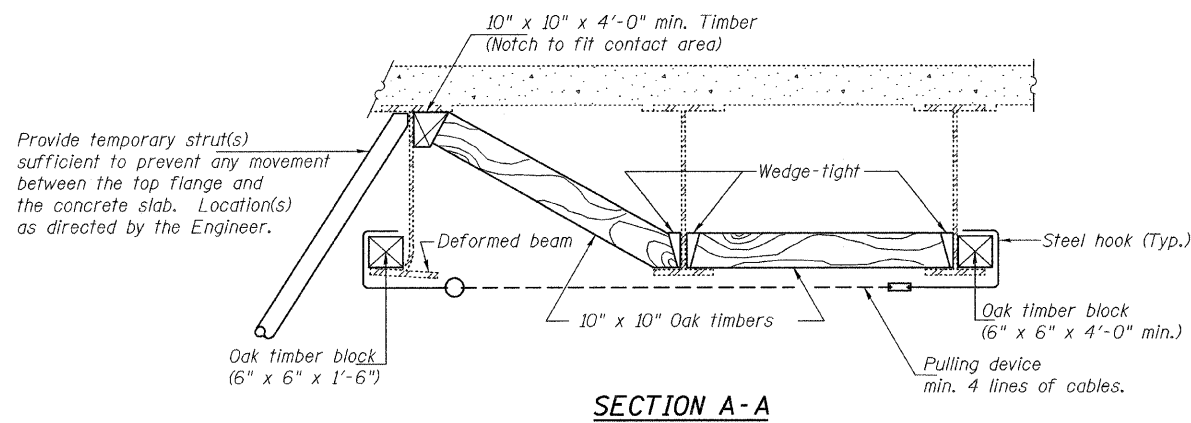
**SUGGESTED VERTICAL STRAIGHTENING DETAIL**  
(To correct flange rotation.)



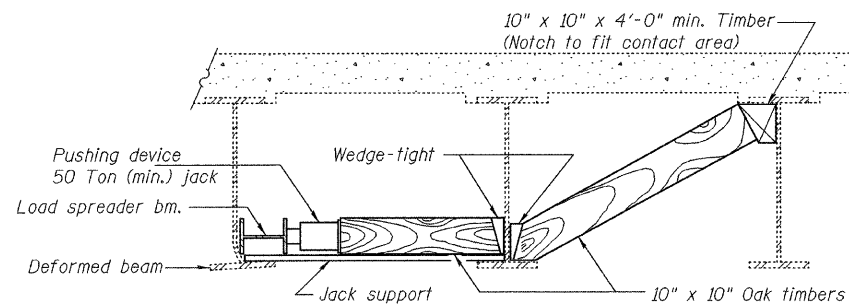
**SUGGESTED VERTICAL STRAIGHTENING DETAIL**  
(To correct localized vertical flange deformations.)

\* Edge of plate shall line up with edge of deformation.

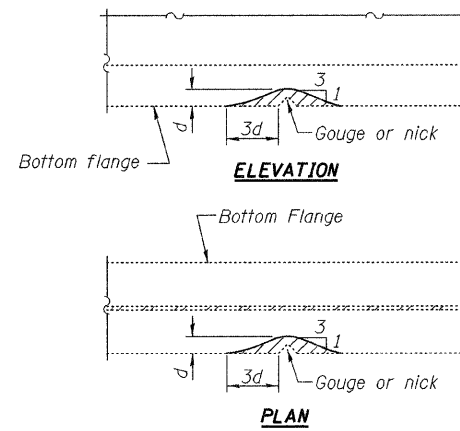
Note:  
Braces and jack assembly shall be placed on same side of web.  
Bent bottom flange shall be straightened before starting any horizontal straightening operations.



**SECTION A-A**

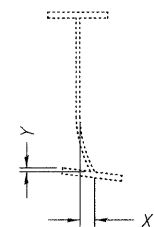


**SECTION B-B**



**GRINDING DETAIL**

Grind existing nicks, gouges and shallow cracks in the damaged beams as detailed. Ground surfaces shall be inspected for cracks using magnetic particle testing prior to initiating any beam straightening operations. Any cracks that cannot be removed by grinding approximately 1/4" deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. Ground surfaces shall be spot cleaned and painted with an aluminum epoxy mastic primer followed by a finish coat to match the color of the existing beam. Cost of grinding, testing and spot painting included with Beam Straightening.



**EXISTING DEFORMATION TO BE STRAIGHTENED**

(Looking East)  
(Approximate max. deflections)  
Deflected length of beam to be straightened is approximately L.

Beam	X	Y	L
3	5 1/2"	1 1/8"	4'-0"
6	4 5/8"	7/8"	4'-0"

**BEAM STRAIGHTENING DETAILS**  
SN 060-0046

DESIGNED	A.T.H.
CHECKED	G.G.E.
DRAWN	Drew Christopher
CHECKED	A.T.H. G.G.E.

EXAMINED	January 21, 2010
PASSED	ENGINEER OF STRUCTURAL SERVICES
	ENGINEER OF BRIDGES AND STRUCTURES

SHEET NO. 2 8 SHEETS	F.A.I. RTE. 270	SECTION 60 B-I-3, 60-1B-I-3, 60-(1,2,3)RS-1, 60-(2HBY, 2VHBY,3HBY-1,3VHBY,3VBY)	COUNTY Madison	TOTAL SHEETS 12	SHEET NO. 6
	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 76D30		