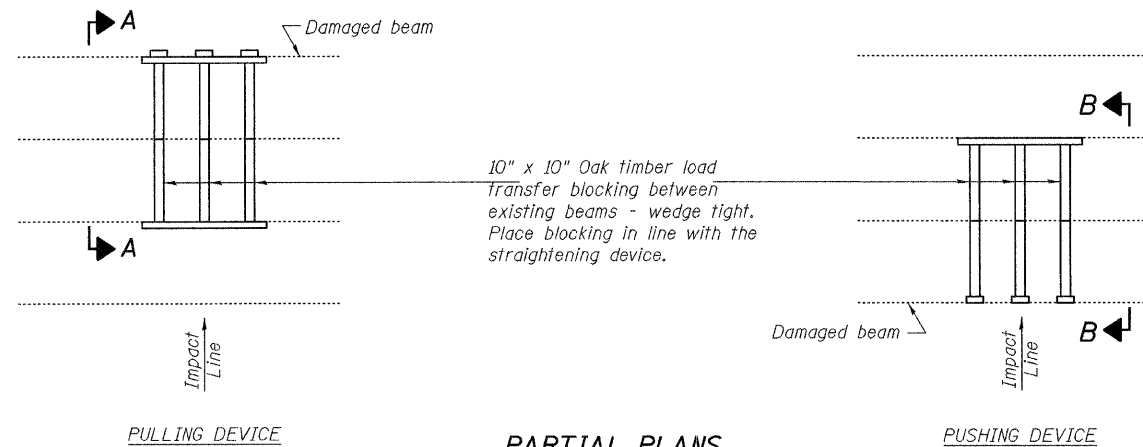
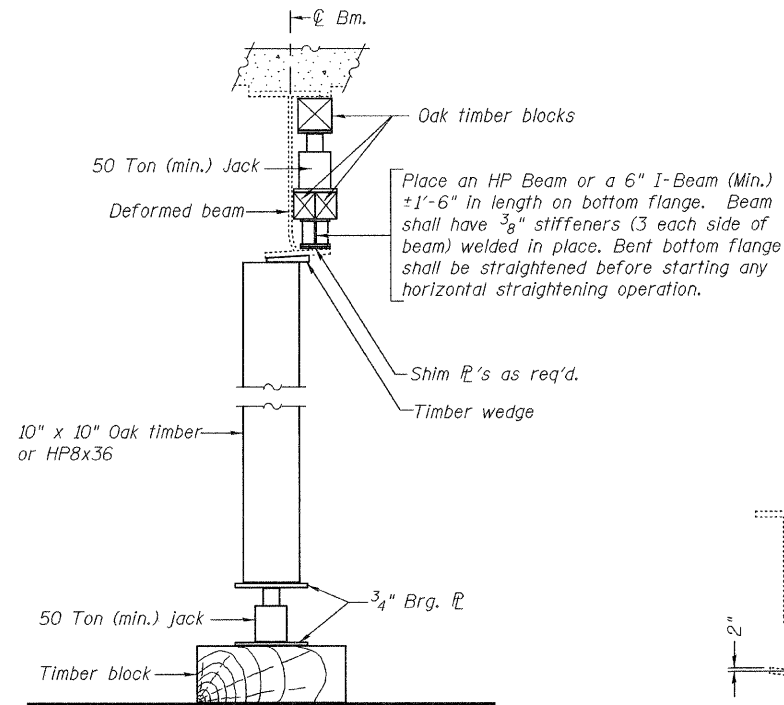


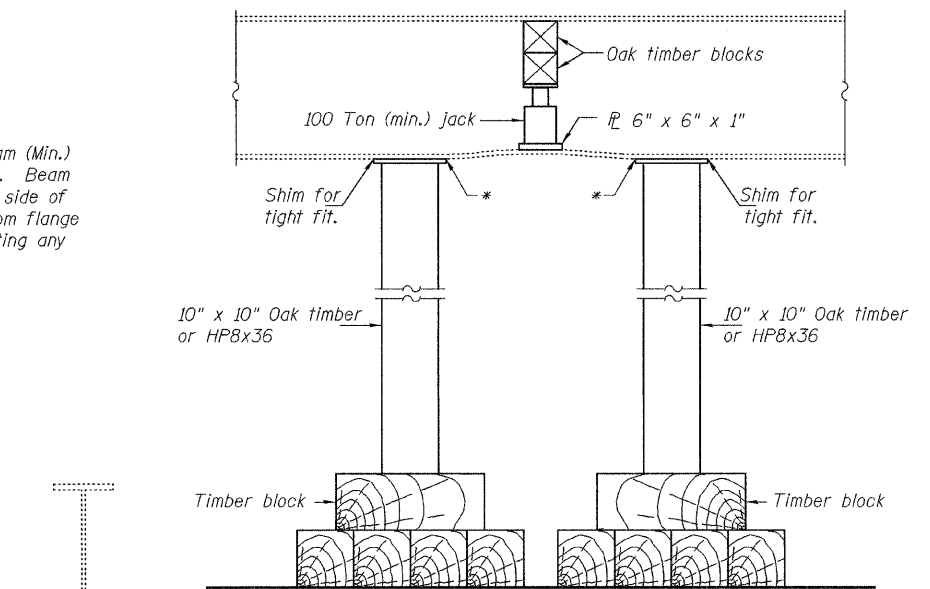
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION



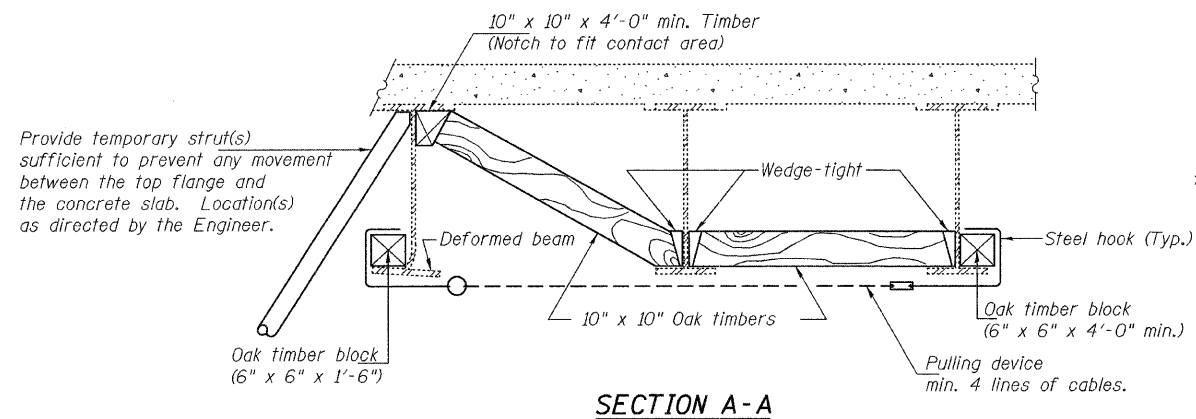
**PARTIAL PLANS**  
**SUGGESTED BEAM STRAIGHTENING METHODS**  
Straightening force shall be maintained on all load transfer blocking during beam straightening.



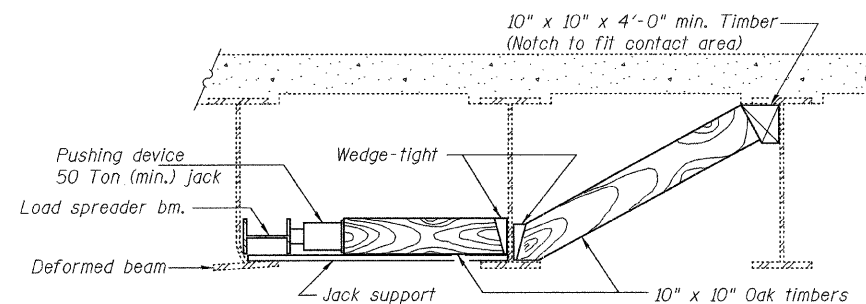
**SUGGESTED VERTICAL STRAIGHTENING DETAIL**  
(To correct flange rotation.)



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



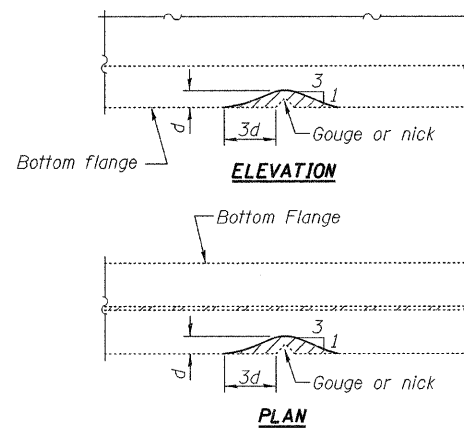
**SECTION A-A**



**SECTION B-B**

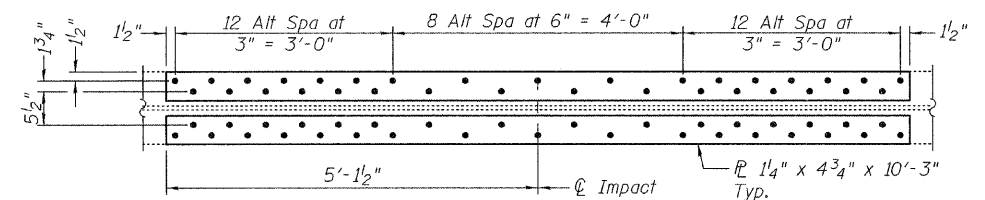
**EXISTING DEFORMATION TO BE STRAIGHTENED**  
(Looking South)  
(Approximate max. deflections)  
Deflected length of beam to be straightened is approximately 4'-0".

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.

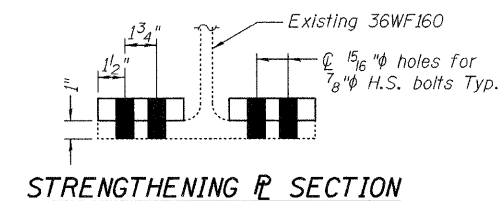


**GRINDING DETAIL**

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.



**REPAIR/STRENGTHENING P SECTION**  
(Beams 18, 20 and 22)



**STRENGTHENING P SECTION**

**BEAM STRAIGHTENING AND STRENGTHENING DETAILS**  
**SN 016-0316**

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

EXAMINED	January 22, 2010
PASSED	Carl Krueger ENGINEER OF STRUCTURAL SERVICES
	Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES

REP-1 1-14-2005  
SLT-91-001-09

SHEET NO. 2 5 SHEETS	F.A.I. RTE. 55	SECTION 2009-070BR	COUNTY Cook	TOTAL SHEETS 17	SHEET NO. 5
	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT	CONTRACT NO. 60H78		