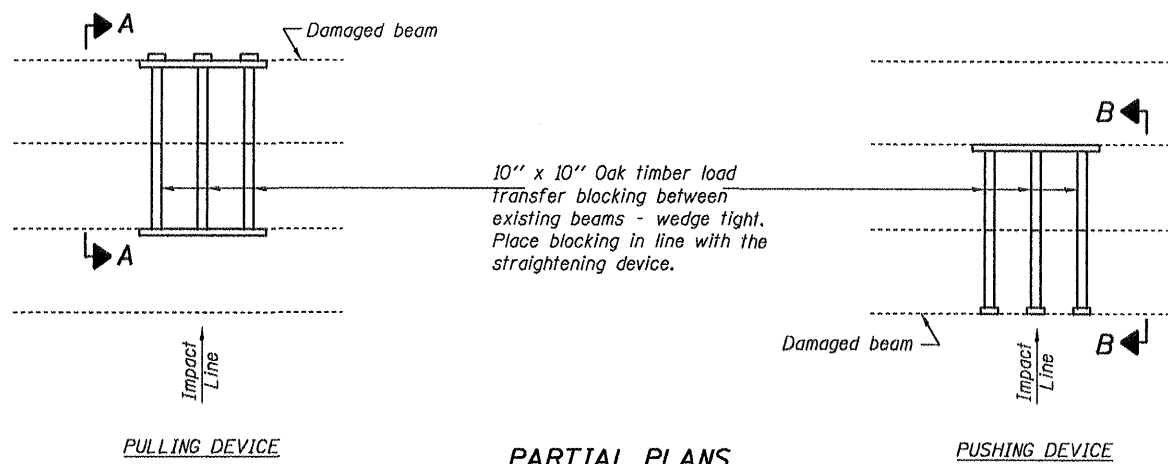
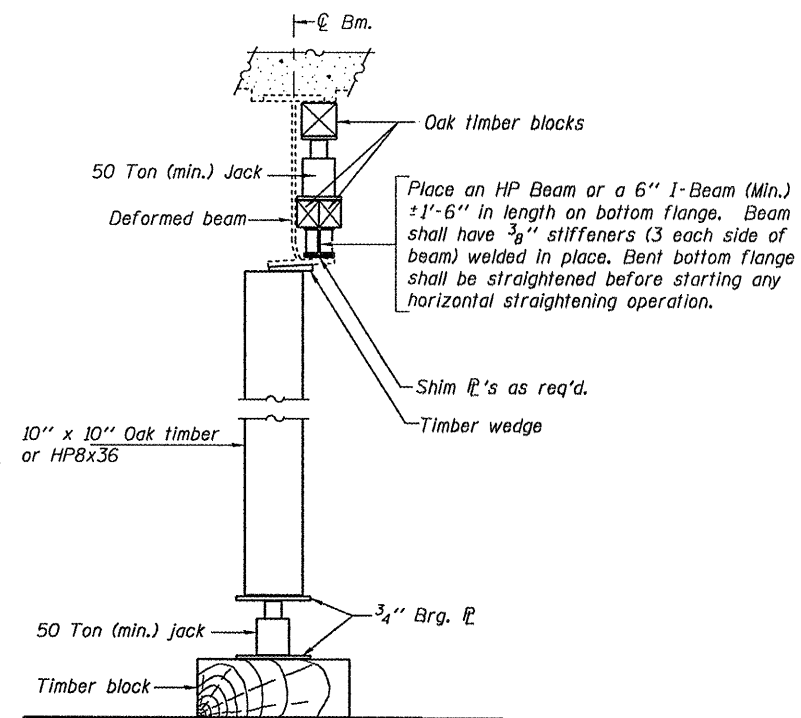


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

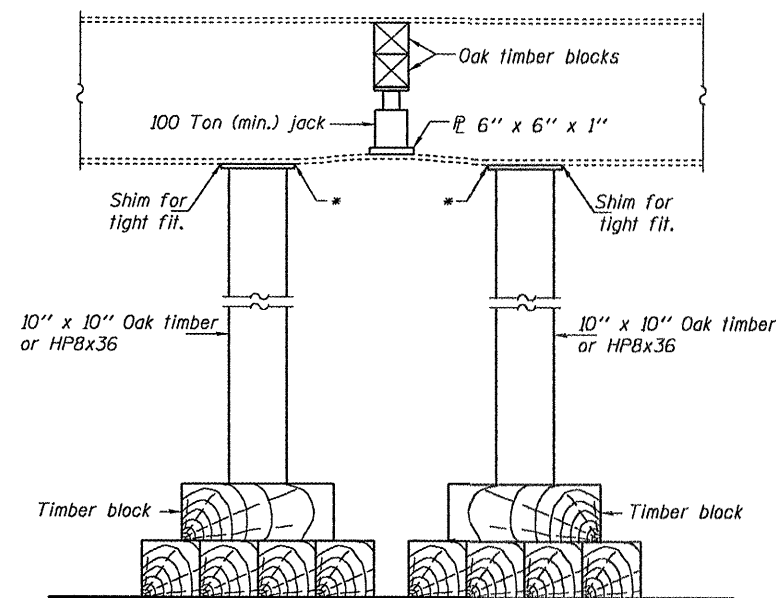


PARTIAL PLANS
SUGGESTED BEAM STRAIGHTENING METHODS

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



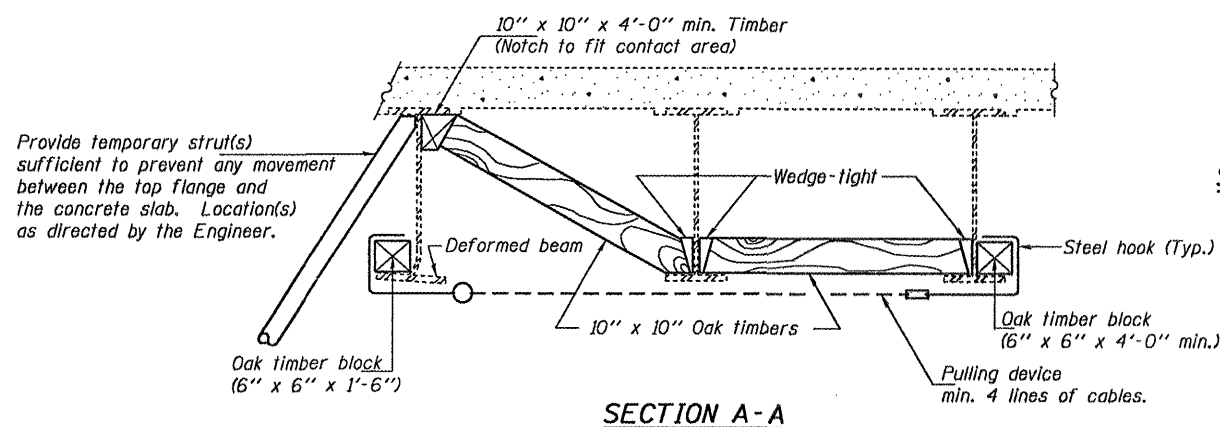
SUGGESTED VERTICAL STRAIGHTENING DETAIL
(To correct flange rotation.)



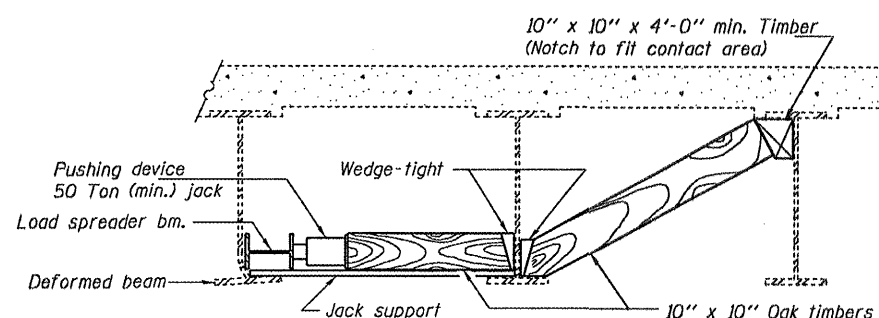
SUGGESTED VERTICAL STRAIGHTENING DETAIL
(To correct localized vertical flange deformations.)

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

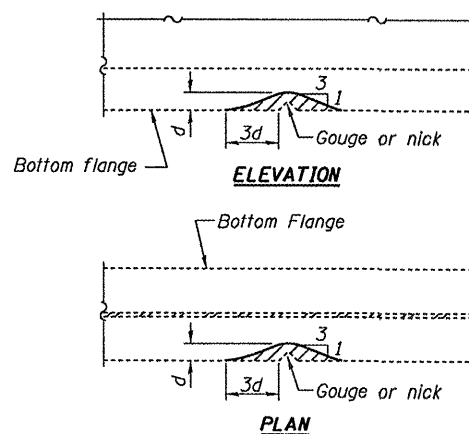
Note:
Braces and jack assembly shall be placed on same side of web.
Bent bottom flange shall be straightened before starting any horizontal straightening operations.



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\"/>

TABLE OF DIMENSIONS

BEAM #	Y	X	L
Beam 1	3/8"	0"	1'-0"
Beam 1	3/8"	0"	2'-0"
Beam 2	1/2"	0"	1'-0"
Beam 3	5/8"	0"	2'-0"
Beam 4	3/4"	0"	2'-0"
Beam 4	1/2"	0"	1'-0"
Beam 5	1 1/4"	0"	4'-0"
Beam 7	1"	0"	3'-0"
Beam 9	1 1/2"	0"	2'-0"
Beam 10	1 3/8"	1/4"	3'-0"
Beam 11	1"	0"	2'-0"
Beam 12	3/4"	9/16"	4'-0"
Beam 12B	1 1/4"	1 3/8"	5'-0"



EXISTING DEFORMATION TO BE STRAIGHTENED

(Looking East)
(Approximate max. deflections)
Deflected length of beam to be straightened is approximately "L"
(See Table for dimensions)

BEAM STRAIGHTENING DETAILS
WASHINGTON STREET OVER US 41
SN 049-0016

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

MAY 1, 2009
EXAMINED *Carl Perry*
ENGINEER OF STRUCTURAL SERVICES
PASSED *Ralph E. Anderson*
ENGINEER OF BRIDGES AND STRUCTURES

REP-11-14-2005

SHEET NO. 2	F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	1223	-	LAKE	10	6
3 SHEETS	CONTRACT NO. 60G34				
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT		