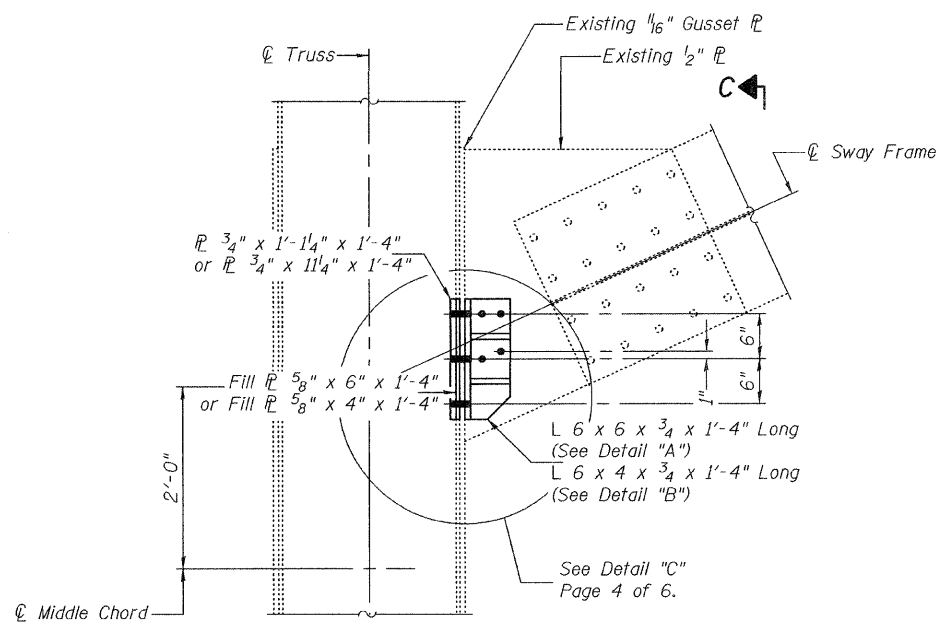


**REPAIR LOCATION AT  
PP21 AND PP21'**  
(Looking South)

**DIMENSION "A"**  
PP21 = 31'-1<sup>9</sup>/<sub>16</sub>"

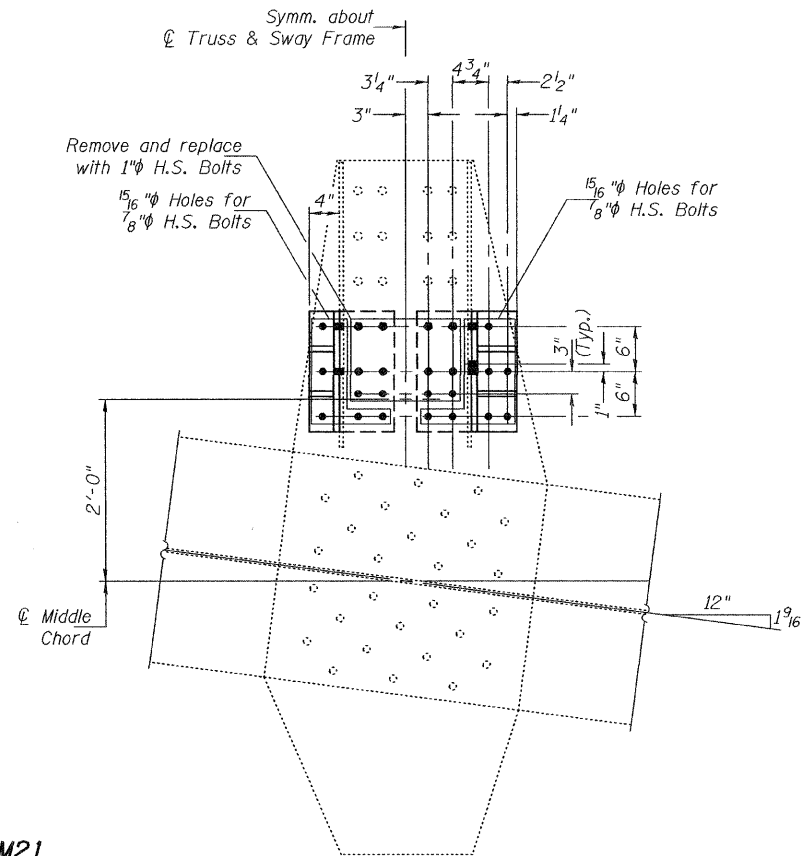
**ANGLE "α"**  
PP21 = 24.595°

Sway bracing work at PP21' is to be done after vertical member U21'-M21' is completed.

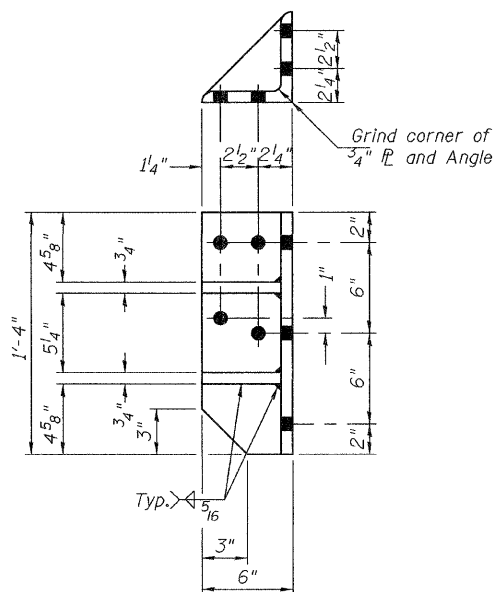


**ELEVATION**  
Looking North at PP21  
Looking South at PP21'

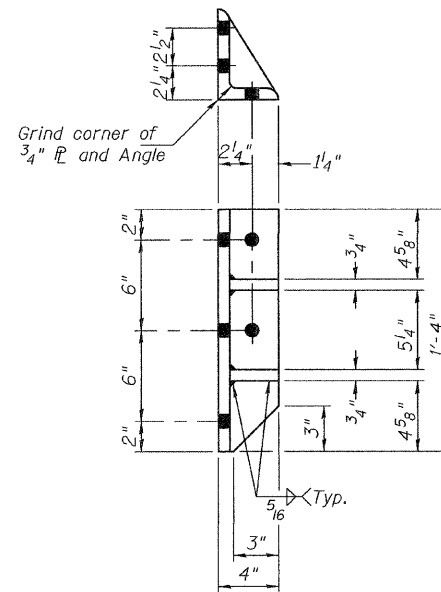
**SWAY BRACING RETROFIT AT LOCATION M21**  
(East Truss, West Truss Similar, 2 locations)



**VIEW C-C**  
Looking West at PP21  
Looking East at PP21'



**DETAIL "A"**  
(2 Req'd)



**DETAIL "B"**  
(2 Req'd)

Notes:  
The cost of plates, angles, bolts and all field drilling required for installation of the steel members is included with Structural Steel Repair. PP = Panel Point

**BILL OF MATERIAL**

Item	Unit	Quantity
Structural Steel Repair	Pound	450

DESIGNED - I.J.L.  
CHECKED - G.G.E.  
DRAWN - **Drew Christopher**  
CHECKED - I.J.L. G.G.E.

EXAMINED *A. Carl Poyner*  
ENGINEER OF STRUCTURAL SERVICES  
PASSED *Ralph E. Anderson*  
ENGINEER OF BRIDGES AND STRUCTURES

DATE - August 11, 2010

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SWAY FRAME DETAILS  
SN 002-0022  
SHEET NO. 5 OF 6 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
57	DR BRIDGE REPAIR 2010-1	Alexander	10	9

CONTRACT NO. 78220  
ILLINOIS FED. AID PROJECT