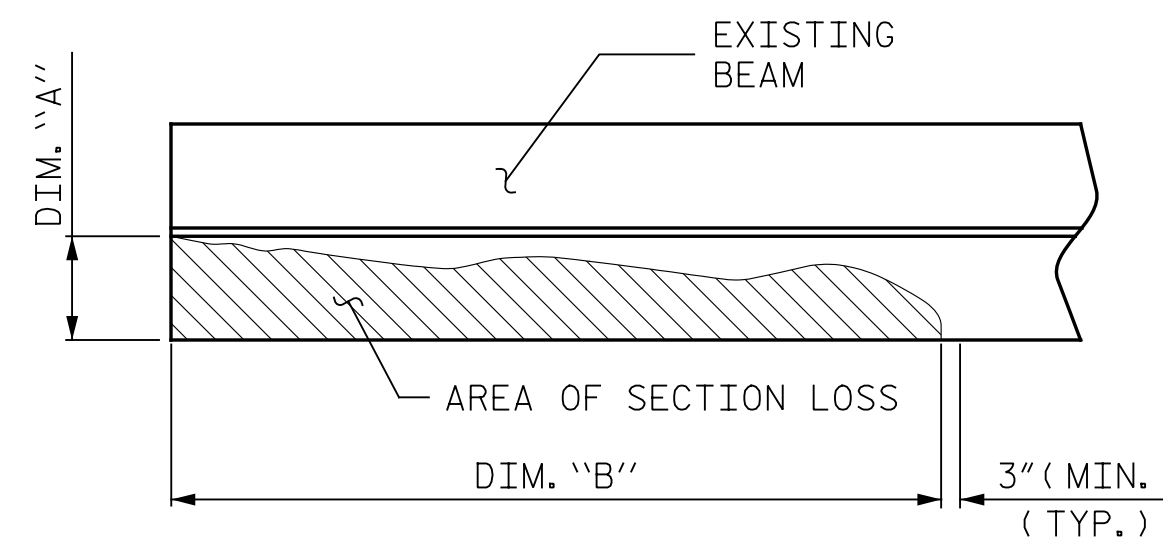
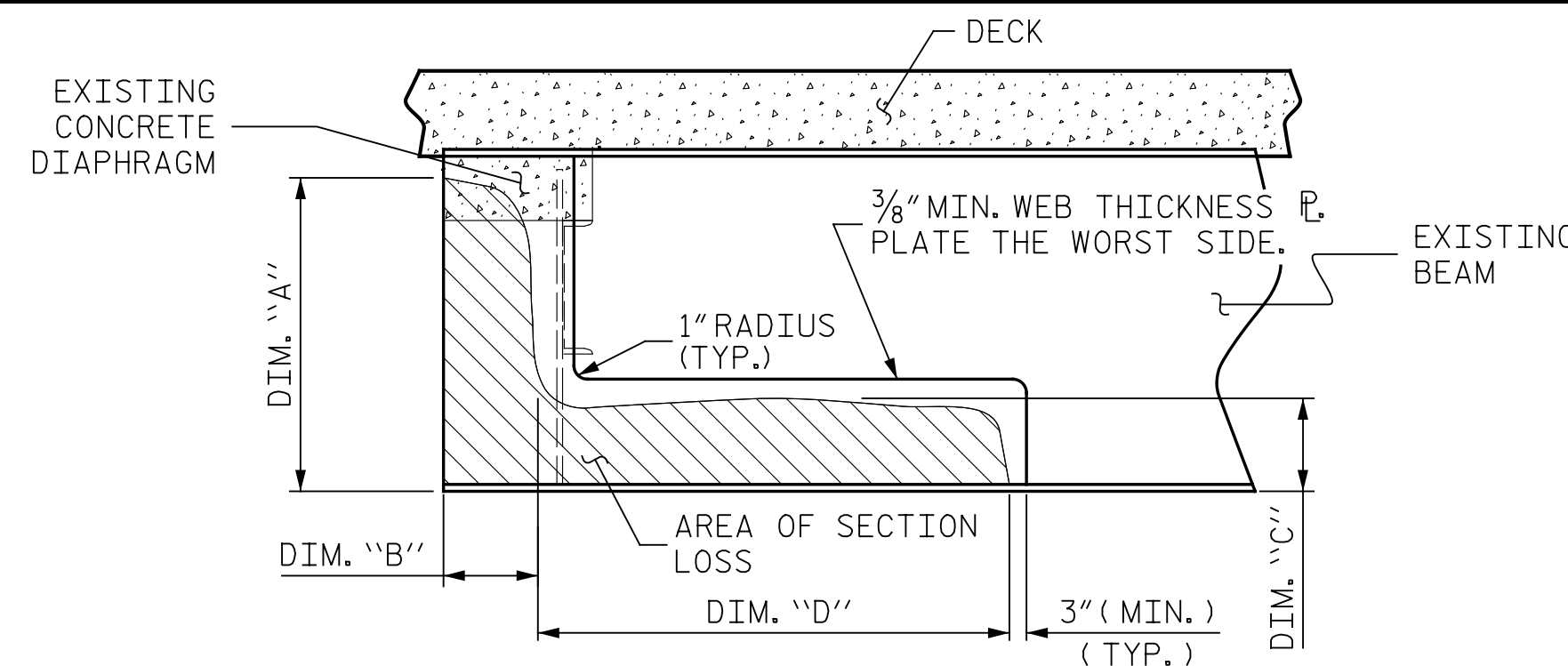


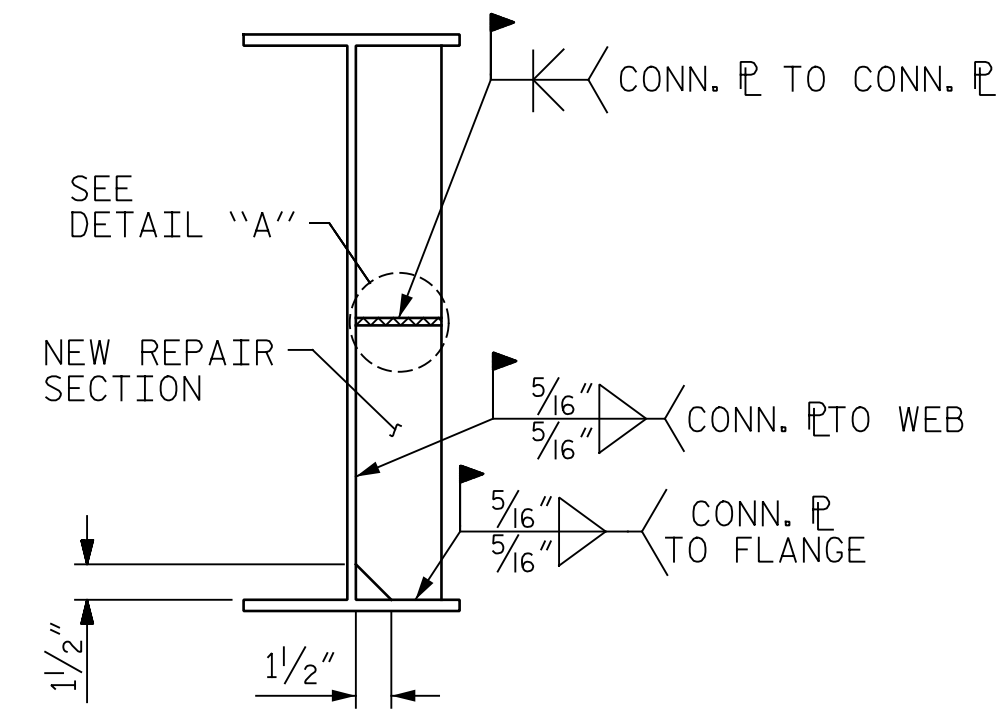
SECTION LOSS  
CONN.  $\perp$  REPAIR  
("S" REPAIR)



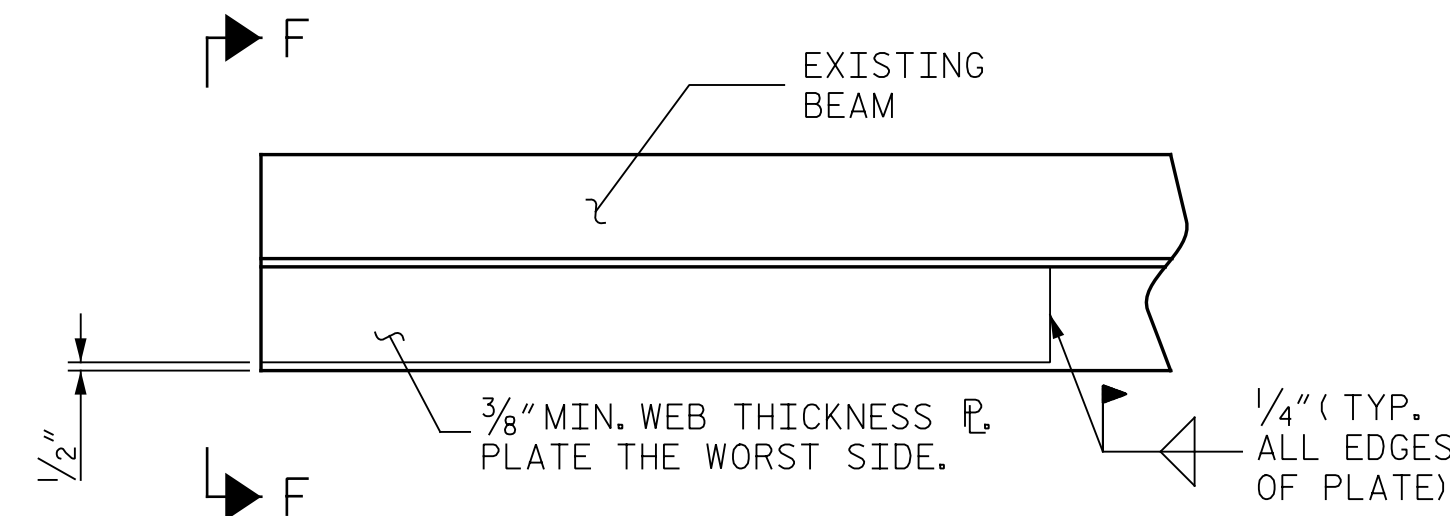
SECTION LOSS  
BEAM PLATING REPAIR  
("PF" REPAIR)



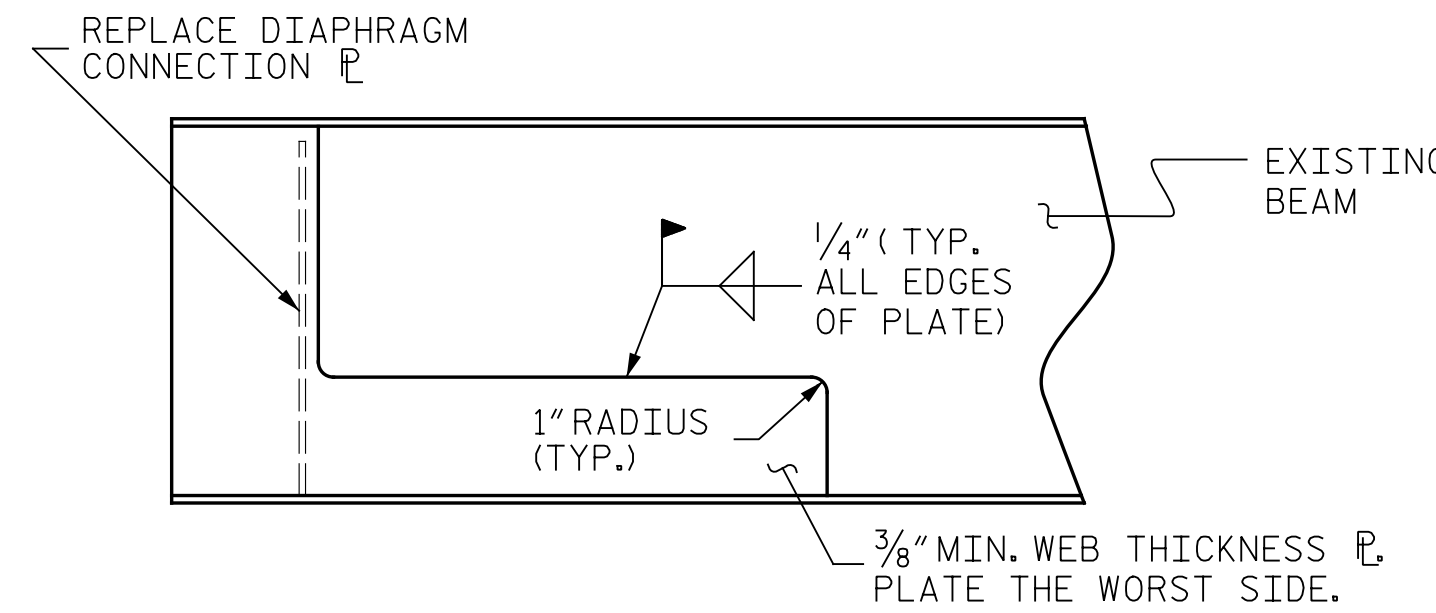
SECTION LOSS  
BEAM PLATING REPAIR  
("PW" REPAIR)



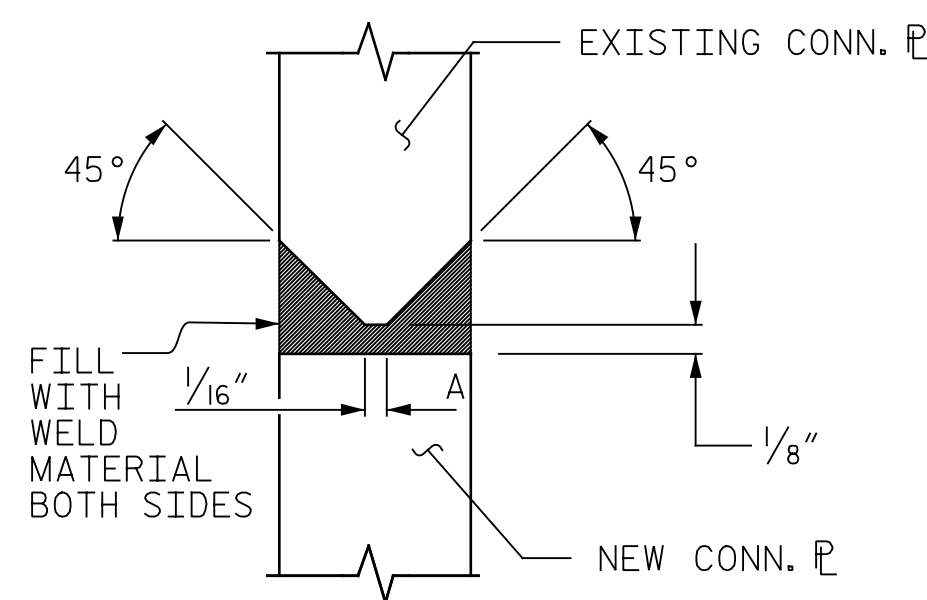
SECTION LOSS CONN.  $\perp$   
REPAIR SECTION  
("S" REPAIR)



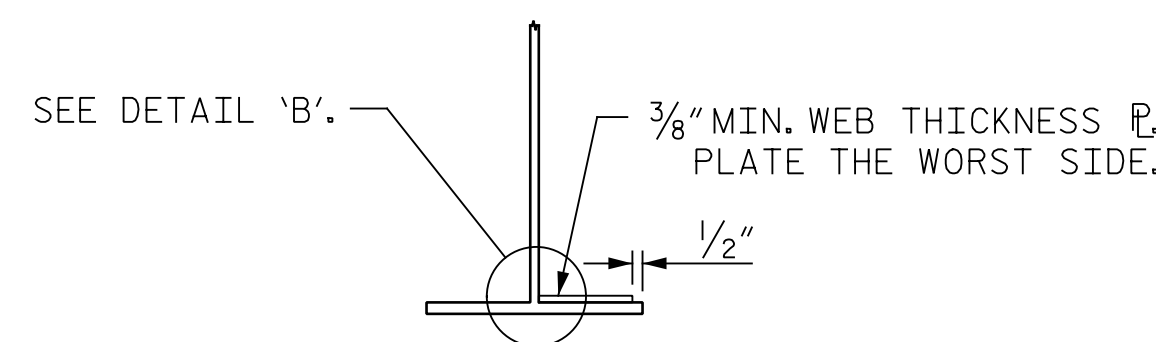
SECTION LOSS  
BEAM PLATING REPAIR  
("PF" REPAIR)



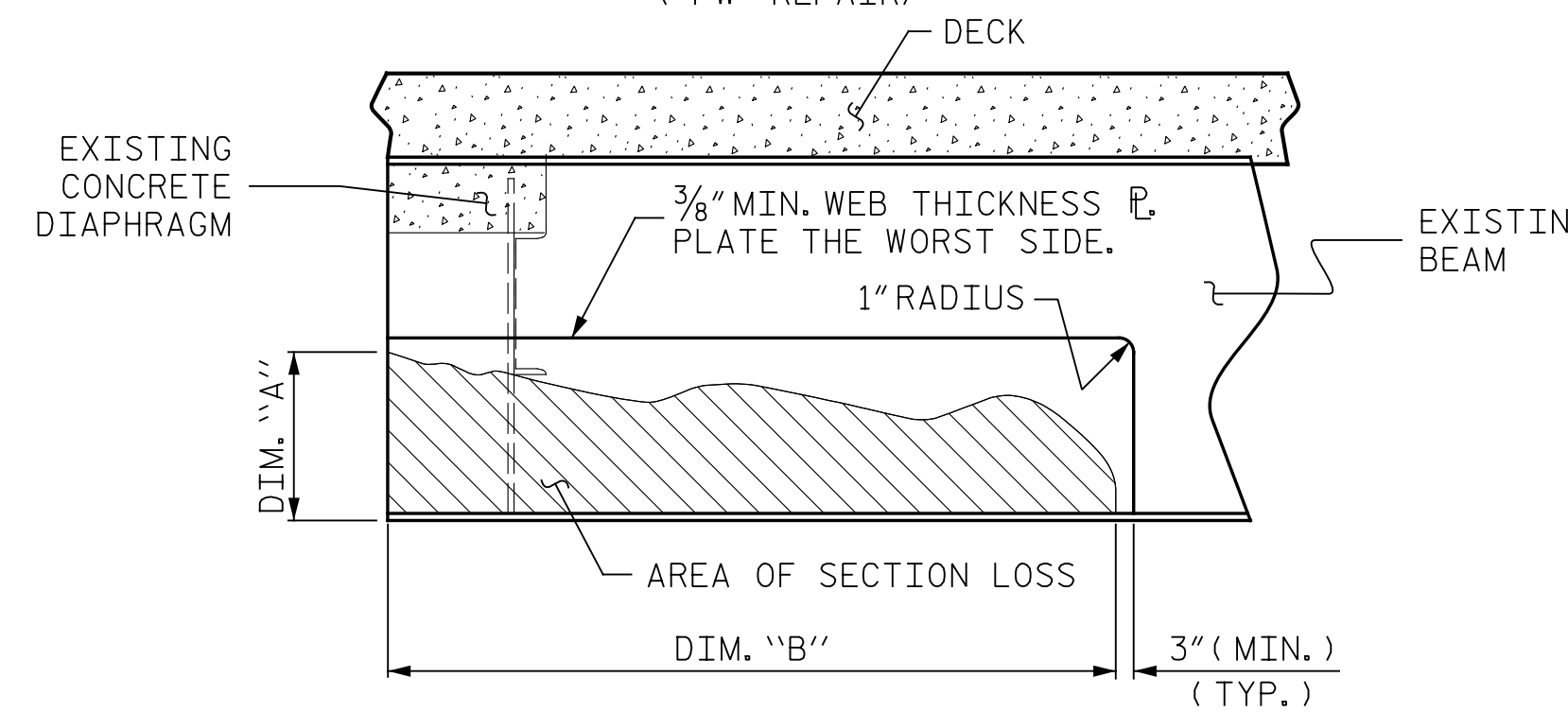
SECTION LOSS  
BEAM PLATING REPAIR  
("PW" REPAIR)



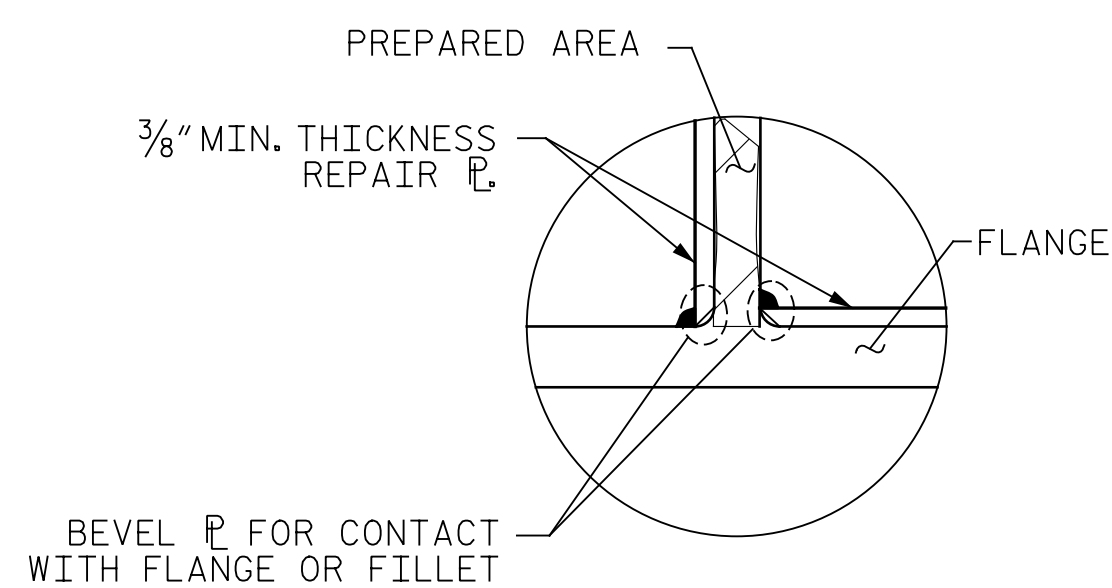
DETAIL "A"



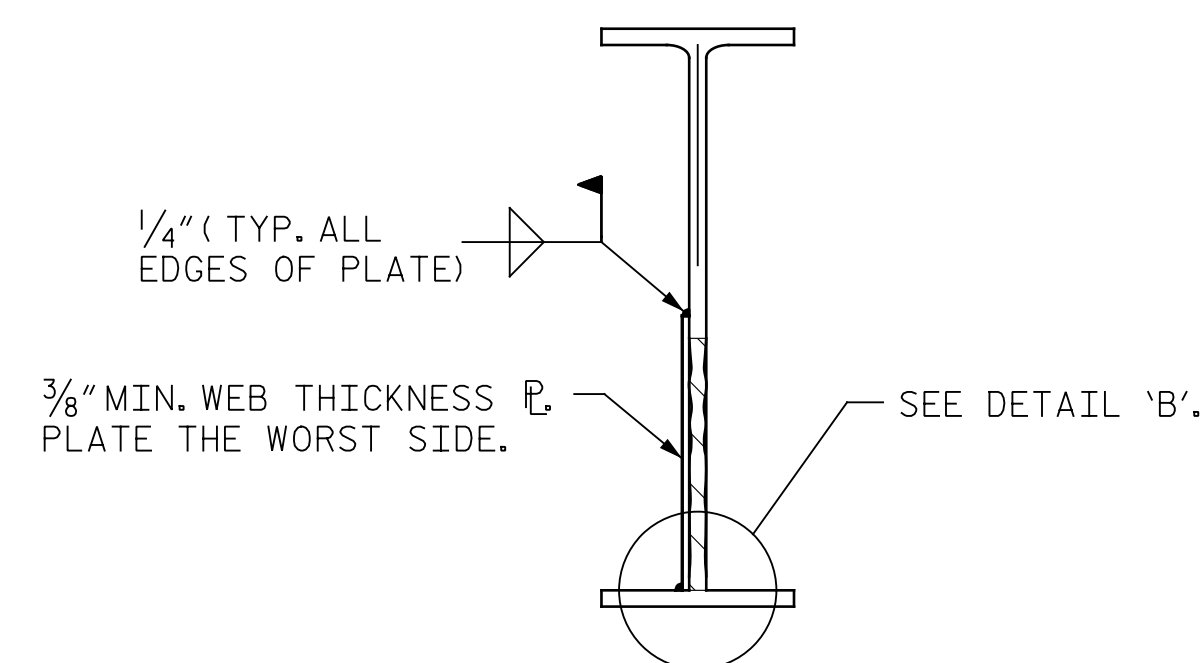
SECTION F-F



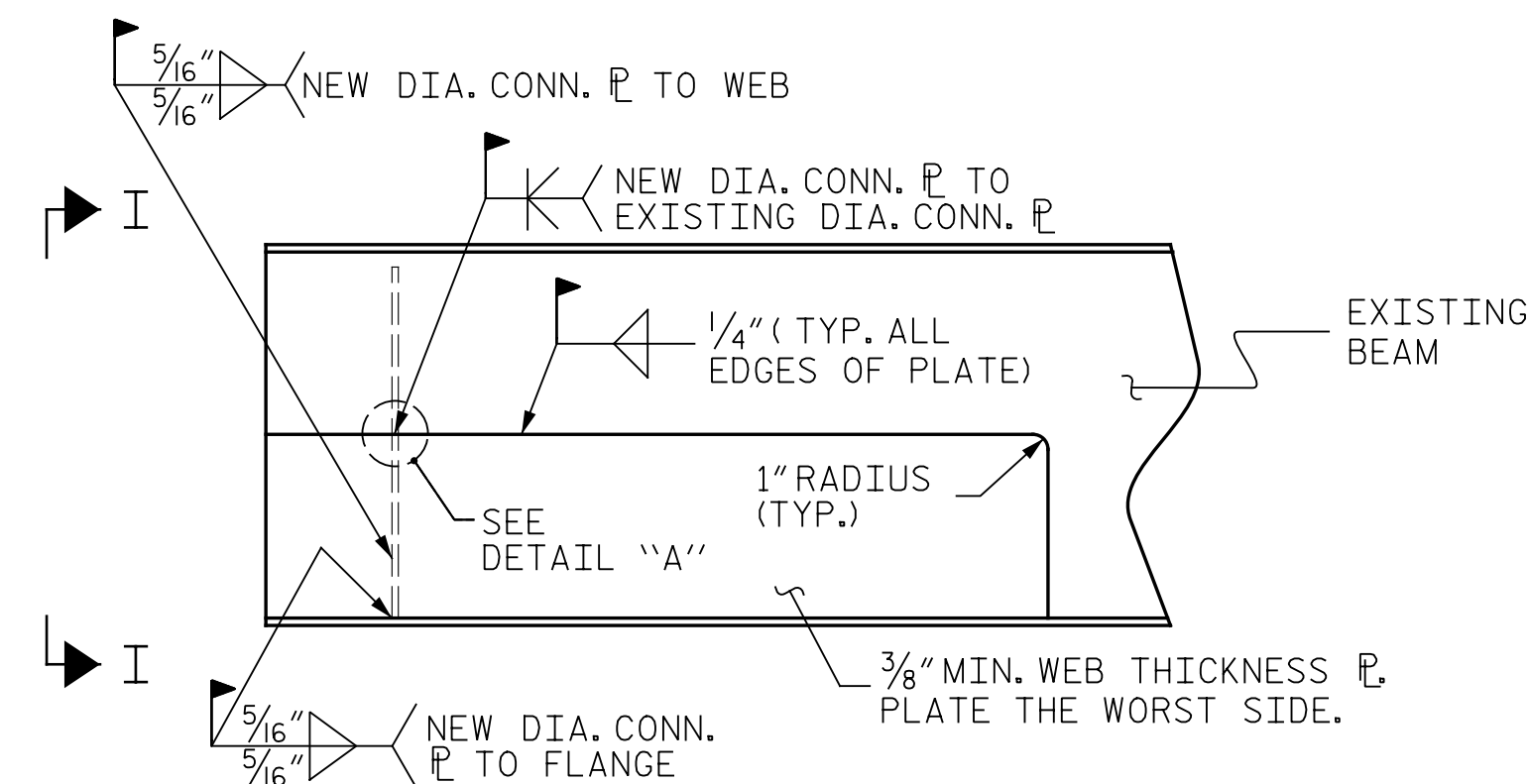
SECTION LOSS  
BEAM PLATING REPAIR  
("PW" REPAIR)



DETAIL "B"



SECTION I-I



SECTION LOSS  
BEAM PLATING REPAIR  
("PW" REPAIR)

BEAM REPAIR

ALL CONDITIONS AND DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO FABRICATION OR INSTALLATION OF ANY COMPONENTS.

REPAIR PLATES SHALL BE MINIMUM 36 KSI STEEL.

REPAIR SEQUENCE:

COORDINATE WITH MATERIALS AND TEST UNIT AT LEAST 4 DAYS PRIOR TO ANTICIPATED WORK.

REMOVE LIVE LOAD FROM REPAIR AREA BY EITHER CLOSING BRIDGE TO TRAFFIC OR SHIFTING TRAFFIC AWAY FROM REPAIR AREA.

IF NECESSARY, REMOVE EXISTING CONNECTOR PLATE TO INSTALL WELDED PLATE REPAIR. REPLACE WITH A NEW CONNECTOR PLATE OF SIMILAR SIZE.

IF BEAM DETERIORATION EXTENDS INTO THE CONCRETE DIAPHRAGM THEN CHIP AWAY CONCRETE TO DETERMINE THE EXTENT OF THE DAMAGE.

MECHANICALLY CLEAN RUST, SCALE, AND EXISTING PAINT TO AT LEAST 3" BEYOND REPAIR AREA.

PRIME ENTIRE REPAIR AREA WITH AN ORGANIC ZINC PRIMER PRIOR TO WELDING NEW PLATES. REMOVE PRIMER IN WELD AREA.

ONE PLATE SHALL BE PLACED, AS INDICATED ON ONE SIDE OF THE BEAM WEB UNLESS OTHERWISE NOTED. PLACE PLATE ON SIDE WITH GREATER SECTION LOSS.

EACH PLATE SHALL BE APPROXIMATELY ONE-HALF THE ORIGINAL THICKNESS OF THE BEAM WEB.

FULLY WELD ALONG TOP AND SIDES OF THE PLATES AS SHOWN.

ALL WELDING SHALL BE IN ACCORDANCE WITH CURRENT APPLICABLE AWS AND NCDOT STANDARD SPECIFICATIONS.

ALL WELDS SHALL BE INSPECTED BY THE NCDOT MATERIALS AND TEST UNIT IN ACCORDANCE WITH THE CURRENT AWS BRIDGE WELDING CODE AND STANDARD SPECIFICATIONS.

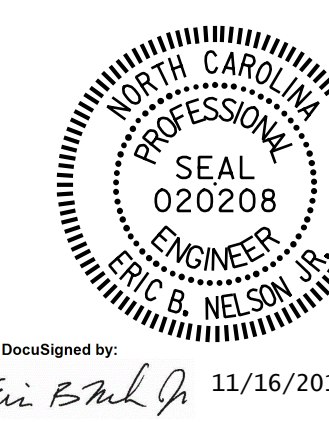
CLEANING AND PAINTING OF REPAIRED STRUCTURAL STEEL SHALL BE PERFORMED AS PART OF THE OVERALL CLEANING AND PAINTING CONTRACT.

FOR CLEANING AND PAINTING, SEE ZONE PAINTING OF EXISTING STRUCTURE SPECIAL PROVISION.

AFTER BEAMS ARE REPAIRED AND PAINTED, ANY CONCRETE REMOVED FROM THE BENT DIAPHRAGMS SHALL BE CAST BACK. ANY REINFORCING STEEL CUT DURING THE REMOVAL PROCESS SHALL BE SPLICED WITH A SIMILAR SIZE BAR WITH AT LEAST A ONE FOOT SPlice TO THE EXISTING STEEL. NO SEPARATE PAYMENT SHALL BE MADE FOR CONCRETE AND REINFORCING STEEL AS THIS IS CONSIDERED INCIDENTAL TO THE PAY ITEM "BEAM REPAIR". FOR BEAM REPAIR, SEE SPECIAL PROVISIONS.

REMOVE ALL TRAFFIC CONTROL DEVICES.

PROJECT NO. I-5889A  
BUNCOMBE COUNTY  
BRIDGE NO. 347



DocuSigned by:  
*Eric B. Nelson*  
11/16/2017

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH					
BEAM PLATING REPAIR DETAILS					
SHEET NO. S-40					
TOTAL SHEETS 208					
REVISIONS					
NO.	BY:	DATE:	NO.	BY:	DATE:
1			3		
2			4		

DRAWN BY: M.A. LEE DATE: 10/2017  
CHECKED BY: R. NELSON DATE: 10/2017

PLANS PREPARED BY:  
**Gannett Fleming**  
2610 Wycliff Road  
Suite 102  
Raleigh, NC 27607-3073  
(919) 420-7660  
Excellence Delivered As Promised NC Lic. No. F-0270

DOCUMENT NOT CONSIDERED  
FINAL UNLESS ALL  
SIGNATURES COMPLETED