

NC Lic. No. F-0270

## BEAM PLATING REPAIR NOTES: ALL CONDITIONS AND DIMENSIONS SHALL BE FIELD VERIFIED PRIOR TO FABRICATION OR INSTALLATION OF ANY COMPONENTS. REPAIR PLATES SHALL BE MINIMUM 36 KSI STEEL.USE NEW OR SALVAGED "LIKE NEW" STEEL ONLY. ALL WELDING SHALL BE IN ACCORDANCE WITH CURRENT APPLICABLE AWS AND NCDOT STANDARD SPECIFICATIONS. ALL WELDS SHALL BE INSPECTED AND TESTED BY THE NCDOT MATERIALS AND TESTS UNIT IN ACCORDANCE WITH THE CURRENT AWS BRIDGE WELDING CODE AND STANDARD SPECIFICATIONS. BEAM PLATING REPAIR SEQUENCE: COORDINATE SCHEDULE WITH MATERIALS AND TESTS UNIT WELD INSPECTOR AT LEAST FOUR DAYS PRIOR TO ANTICIPATED WORK. REMOVE TRAFFIC LOAD FROM REPAIR AREA BY EITHER CLOSING BRIDGE TO TRAFFIC OR SHIFTING TRAFFIC AWAY FROM REPAIR AREA. MECHANICALLY CLEAN RUST, SCALE AND EXISTING PAINT TO AT LEAST 3" BEYOND REPAIR AREA. IF NECESSARY, REMOVE EXISTING STIFFENER TO INSTALL WELDED PLATE REPAIR. REPLACE WITH A NEW STIFFENER PLATE OF SIMILAR SIZE. FOR STIFFENER/CONNECTOR PLATE REPAIR DETAILS, SEE ``BEAM REPAIR DETAILS" SHEET. IF BEAM DETERIORATION EXTENDS INTO THE CONCRETE DIAPHRAGM THEN CHIP AWAY CONCRETE TO DETERMINE THE EXTENT OF THE DAMAGE. PRIME ENTIRE REPAIR AREA AND REPAIR PLATES WITH AN ORGANIC ZINC PRIMER PRIOR TO WELDING NEW PLATES. REMOVE PRIMER IN WELD AREA. ONE PLATE SHALL BE PLACED. AS INDICATED. ON EACH SIDE OF THE BEAM WEB. EACH PLATE SHALL BE APPROXIMATELY ONE-HALF THE ORIGINAL THICKNESS OF THE BEAM WEB. FULLY WELD ALONG TOP AND SIDES OF PLATE. ONCE THE REPAIR IS COMPLETE, GRIND ALL WELDS FLUSH. ANY GOUGES OR INDENTATIONS FROM IMPACT ON BEAMS SHALL BE GROUND SMOOTH. CLEAN AREA TO REMOVE DEBRIS AND OILS FROM REPAIR PROCESS PRIOR TO PAINTING. FOR PAINTING STEEL STRUCTURES, SEE SECTION 442 OF THE STANDARD SPECIFICATIONS. THOROUGHLY CLEAN BEAM PLATING LOCATIONS BY WIRE BRUSHING THE DAMAGED AREAS AND REMOVING ALL LOOSE AND CRACKED COATING, AFTER WHICH GIVE THE CLEANED AREA 2 COATS OF NON-AEROSOL ORGANIC ZINC REPAIR PAINT, IN ACCORDANCE WITH ARTICLE 1076-7 OF THE STANDARD SPECIFICATIONS. SPOT PAINTING OF BEAM PLATING REPAIR LOCATIONS WILL BE INCLUDED IN THE UNIT PRICE BID FOR BEAM PLATING REPAIR. AFTER BEAMS AND/OR STIFFENERS/CONNECTOR PLATES 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 PLATING REPAIR". FOR BEAM PLATING REPAIR, SEE SPECIAL PROVISIONS. RETURN TRAFFIC TO NORMAL PATTERN HALF WEB THICKNESS P EACH SIDE OF WEB 1/4" MIN.— DURING AREA PREPARATION, FILLET AREAS SHALL BE GROUND 90° TO FLANGE TO ALLOW PLATE TO SIT FLUSH, SEE DETAIL ``B'' I-5955 PROJECT NO. GUILFORD COUNTY SECTION I-I 400329 BRIDGE NO. STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH FESS/ON SEAL BEAM PLATING John Ya 032492 1. WGINEER REPAIR DETAILS -781361754678456 YANNA 11/17/202 SHEET NO. REVISIONS OCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED S5-10 NO. DATE: BY: DATE: BY: TOTAL SHEETS 127