



LOCATION OF REPAIRS

GENERAL NOTES

MATERIALS

ASTM SPECIFICATIONS, CURRENT EDITION, AS DESIGNATED BELOW SHALL GOVERN THE MATERIALS FURNISHED, UNLESS OTHERWISE NOTED IN THE PLANS.

STRUCTURAL STEEL (INCLUDING ALL PLATES AND SHAPES) SHALL BE ASTM A709, GRADE 50 ALL BOLTS, NUTS, AND WASHERS (EXCEPT U-BOLTS FOR HANGER REPLACEMENT) SHALL BE ASTM A325.

HIGH STRENGTH RODS AND U-BOLTS FOR HANGER REPLACEMENT SHALL BE ASTM A354 GR BD, (NUTS AND WASHERS SHALL BE COMPATIBLE PER MANUFACTURER'S RECOMMENDATIONS).

BOLTED CONNECTIONS

ALL BOLTED CONNECTIONS SHALL BE HIGH STRENGTH BOLTS, NUTS, WASHERS, AND DTIS. BOLT THREADS ARE TO BE EXCLUDED FROM THE SHEAR PLANE IN ALL BOLTED CONNECTIONS. OPEN HOLES SHALL BE " LARGER THAN THE NOMINAL DIAMETER OF BOLTS. PROVIDE FASTENERS EQUAL IN DIAMETER TO EXISTING FASTENERS WHEN REPLACING EXISTING OR MISSING FASTENERS. REAM EXISTING HOLES TO FASTENER DIAMETER PLUS ".

ALL HIGH STRENGTH BOLTED FIELD CONNECTIONS ARE TO BE INSTALLED USING "DIRECT TENSION INDICATORS" (DTI'S) IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS. INSTALLATION DETAILS OF THE DTI'S SHALL BE SHOWN ON THE SHOP PLANS. ADJUST BOLT LENGTHS TO ACCOMMODATE BOTH DIRECT TENSION INDICATORS AND HARDENED WASHERS. ALL BOLTED CONNECTIONS SHALL BE GALVANIZED.

VERIFYING FIELD CONDITIONS

EXISTING CONDITIONS DEPICTED ON THE DRAWINGS ARE FOR INFORMATION ONLY. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, SIZES AND CONFIGURATIONS BEFORE ORDERING MATERIAL. NEW MATERIAL THAT IS UNSUITABLE BECAUSE OF VARIATIONS IN THE EXISTING STRUCTURE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

PROHIBITED FIELD WELDING

NO WELDING OF ANY NATURE SHALL BE PERFORMED ON THE BRIDGE WITHOUT THE WRITTEN CONSENT OF THE ENGINEER, AND THEN ONLY IN THE MANNER AND AT THE LOCATIONS DESIGNATED IN THE AUTHORIZATION.

WELDING SPECIFICATIONS

ALL WELDING AND WELDING MATERIALS SHALL CONFORM TO BRIDGE WELDING CODE, AMERICAN WELDING SOCIETY, D 1.5S. ALL WELDS SHALL BE E70XX.

REMOVAL OF EXISTING RIVETS

THE CONTRACTOR SHALL REMOVE RIVETS IN ANY MANNER WHICH DOES NOT DAMAGE ADJACENT STRUCTURAL STEEL. THIS MAY INCLUDE MECHANICAL REMOVAL OR OTHER METHOD APPROVED BY THE ENGINEER. USE OF CUTTING TORCHES TO BURN OUT RIVETS WILL NOT BE PERMITTED.

CLEANING AND PAINTING

NEW STRUCTURAL STEEL SHALL BE BLAST CLEANED IN THE SHOP TO A NEAR WHITE CONDITION AND SHOP PAINTED WITH ONE COAT OF INORGANIC ZINC RICH PRIMER. EXISTING STEEL AREAS OF THE BRIDGE TO BE IN CONTACT WITH NEW STEEL SHALL BE CLEANED OF ALL DIRT, RUST AND FOREIGN MATTER USING HAND CLEANING METHODS BEFORE INSTALLING THE NEW STEEL. UNLESS NOTED OTHERWISE ON THE PLANS, ALL NEW AND EXISTING STEEL WITHIN 12" OF THE WORK LIMITS OF EACH RETROFIT LOCATION SHALL BE CLEANED AS NECESSARY USING HAND METHODS AND PAINTED WITH A URETHANE FINISH COAT AS DIRECTED BY THE ENGINEER. THE FINISH COAT SHALL BE FIELD APPLIED. TO ENSURE COMPATIBILITY BETWEEN COATS, ALL PAINT (PRIMER AND FINISH COAT) SHALL BE SUPPLIED BY THE SAME MANUFACTURER. HAND METHODS FOR FIELD CLEANING SHALL CONSIST OF SCRAPING AND WIRE BRUSHING. NO BLAST CLEANING WILL BE ALLOWED ON THE BRIDGE.

THE COLOR OF THE FIELD COATING SHALL MATCH THE PRESENT COLOR OF THE EXISTING BRIDGE STEEL AS NEAR AS POSSIBLE, AND SHALL BE APPROVED BY THE ENGINEER BEFORE ANY APPLICATION. CLEANING AND PAINTING SHALL BE INCIDENTAL TO THE WORK.

DAMAGE TO THE STRUCTURE

THE CONTRACTOR SHALL BEAR ALL RESPONSIBILITY AND EXPENSE FOR ANY AND ALL DAMAGE TO THE STRUCTURE DURING THE REPAIR WORK, EVEN TO THE REMOVAL AND REPLACEMENT OF A FALLEN SPAN, SHOULD THE DAMAGE RESULT FROM THE CONTRACTOR'S ACTIONS.

LEAD PAINT

RESIDUAL LEAD PAINT MAY STILL BE ON THE BRIDGE. THE CONTRACTOR IS ADVISED TO TAKE ALL NECESSARY PROTECTIVE MEASURES, INCLUDING WORKER SAFETY AND ENVIRONMENTAL REGULATIONS, WHEN REMOVING, CUTTING OR PERFORMING ANY OTHER ACTION ON THE EXISTING STEEL. THE OWNER WILL NOT CONSIDER ANY CLAIMS BASED ON LEAD PAINT.

DISPOSAL OF CONSTRUCTION MATERIALS AND EXISTING DEBRIS

ALL EXISTING MATERIAL WHICH IS REMOVED TO FACILITATE THE REPAIRS INDICATED ON THE PLANS INCLUDING PLATES, ANGLES, RIVETS, BOLTS, EXISTING WOOD DEBRIS AND ANY CONSTRUCTION DEBRIS SUCH AS RUST AND PAINT CHIPS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AND DISPOSED OF PROPERLY IN ACCORDANCE WITH APPLICABLE LAWS AND REGULATIONS.

COMPLETION OF THE WORK

THE CONTRACTOR IS REQUIRED TO COMPLETE THE WORK IN ACCORDANCE WITH THE PLANS AND NOTES. MATERIAL, LABOR, OR CONSTRUCTION OPERATIONS NOT OTHERWISE SPECIFIED, ARE TO BE INCLUDED IN THE BID ITEM MOST APPROPRIATE TO THE WORK INVOLVED. THIS MAY INCLUDE REMOVAL OF ALL OR PARTS OF EXISTING STRUCTURES, INCIDENTAL MATERIALS, LABOR, OR ANYTHING ELSE REQUIRED TO COMPLETE THE WORK.

TEMPORARY SUPPORTS

THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT TEMPORARY SUPPORT SYSTEM PLANS AND SUPPORTING DESIGN CALCULATIONS, AS REQUIRED, TO THE ENGINEER FOR APPROVAL PRIOR TO STARTING WORK.

THE TEMPORARY SUPPORT, AT A MINIMUM, SHALL HAVE 165 KIPS CAPACITY.

THE TEMPORARY SUPPORT PLANS AND DESIGN CALCULATIONS MUST BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF TENNESSEE.

THE DESIGN CALCULATIONS WILL NOT BE CHECKED OR REVIEWED BY THE ENGINEER CONSULTANT, ONLY THE DESIGN LOADINGS WILL BE REVIEWED FOR CONFORMITY TO CUSTOMARY DESIGN LOADINGS.

TEMPORARY SUPPORT SYSTEM PLANS MAY BE SUBMITTED ELECTRONICALLY DIRECTLY TO THE ENGINEER FOR REVIEW.