## TEMPORARY SPAN GENERAL NOTES

- 1. THE TEMPORARY SPAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT EDITION OF AREMA'S "MANUAL FOR RAILWAY ENGINEERING, VOL. 2, STRUCTURES", AND NORFOLK SOUTHERN CORPORATION'S "UNDERPASS GRADE SEPARATION CRITERIA".
- 2. ASSUMED LIVE LOAD: COOPER E80 OR ALTERNATE LIVE LOAD.
- 3. FOR ADDITIONAL NOTES AND DESIGN DATA SEE SHEET "GENERAL DRAWING SHEET 4 OF 5% IN THE EVENT ANY NOTES CONFLICT, THE NOTES ON THIS SHEET SHALL CONTROL FOR THE TEMPORARY SPAN.
- 4. THE TEMPORARY SPAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AASHTO STANDARD SPECIFICATIONS FOR SEISMIC DESIGN OF HIGHWAY BRIDGES FOR SEISMIC ZONE 1.
- 5. REINFORCING STEEL SHALL BE ASTM 615, GRADE 60. ALL DIMENSIONS RELATING TO BAR SPACING ARE TO BAR CENTERS UNLESS NOTED OTHERWISE, FABRICATION IS TO BE IN ACCORDANCE WITH THE "MANUAL OF STANDARD PRACTICE", ACI 315 (CURRENT EDITION). ALL REINFORCING IN THE CONCRETE DECK SLAB AND PARAPETS SHALL BE EPOXY COATED.
- 6. THE CONTRACTOR SHALL PROVIDE INDEPENDENT ASSURANCE SAMPLES OF REINFORCING STEEL AS FOLLOWS: FOR PROJECTS REQUIRING UP TO 400 TONS OF REINFORCING STEEL, ONE 30 INCH SAMPLE OF EACH SIZE BAR USED, AND FOR PROJECTS REQUIRING OVER 400 TONS OF REINFORCING STEEL, TWO 30 INCH SAMPLES OF EACH SIZE BAR USED. THE BARS FROM WHICH THE SAMPLES ARE TAKEN MUST THEN BE SPLICED WITH REPLACEMENT BARS OF THE SIZE AND LENGTH OF THE SAMPLE PLUS A MINIMUM LAP SPLICE OF THIRTY BAR DIAMETERS. PAYMENT FOR THE SAMPLES OF REINFORCING STEEL SHALL BE CONSIDERED INCIDENTAL TO VARIOUS PAY ITEMS.
- 7. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH "STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES", JANUARY 2012, NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (HEREIN CALLED STANDARD SPECIFICATIONS), EXCEPT AS NOTED HEREIN, ELSEWHERE ON PLANS, OR IN THE SPECIAL PROVISIONS. STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH CURRENT AREMA SPECIFICATIONS AND NORFOLK SOUTHERN'S "SPECIFICATIONS FOR
- 8. ALL CONCRETE USED FOR THE TEMPORARY SPAN (DECK AND CURBS) SHALL BE MIN. 5,000 PSI CONCRETE, WITH NO.57 OR 67 COARSE AGGREGATE AND SHALL BE AIR-ENTRAINED. MINIMUM CEMENT PER CUBIC YARD OF CONCRETE SHALL BE 6.5 BAGS. NO SUBSTITUTION OF FLY ASH, BLAST FURNACE SLAG OR OTHER MATERIAL WILL BE PERMITTED IN MEETING THIS MINIMUM CEMENT REQUIREMENT. CHAMFER ALL EXPOSED EDGES AND CORNERS 3/4" EXCEPT AS NOTED ON THE PLANS. THE USE OF GROUND GRANULATED BLAST FURNACE SLAG IS NOT PERMITTED IN THIS STRUCTURE.
- 9. CONTROL OF WORK: ALL WORK INVOLVED IN THE CONSTRUCTION OF THE RAILWAY STRUCTURE SHALL BE PERFORMED SATISFACTORY TO THE ENGINEER AND/OR NORFOLK SOUTHERN RAILWAY COMPANY. ALL METHODS OF HANDLING THE WORK AFFECTING THE SAFETY OF RAIL OPERATIONS MUST BE APPROVED BY THE RAILWAY COMPANY BEFORE PROCEEDING WITH THAT PORTION OF THE WORK, RAIL TRAFFIC SHALL, AT ALL TIMES, BE MAINTAINED AND PROTECTED. THE CONTRACTOR SHALL NOT AT ANY TIME DELAY OR INTERFERE WITH RAIL OPERATIONS.
- 10. NEEDLE BEAMS WILL NOT BE ALLOWED UNLESS OTHERWISE CALLED FOR ON THE PLANS OR APPROVED BY THE ENGINEER.
- 11. FOR PORTLAND CEMENT, SEE SPECIAL PROVISIONS.
- 12. FOR FINE AND COARSE AGGREGATE. SEE SPECIAL PROVISIONS.
- 13. SEE "TEMPORARY SPAN STRUCTURAL STEEL NOTES" SHEET FOR ADDITIONAL NOTES.

- 14. FOR RAILROAD TRACKWORK, SEE RAILROAD TRACKWORK PLANS.
- 15. FOR SUBMITTAL OF WORKING DRAWINGS, SEE SPECIAL PROVISIONS.
- 16. FOR FALSEWORK AND FORMWORK, SEE SPECIAL PROVISIONS.
- 17. FOR CRANE SAFETY, SEE SPECIAL PROVISIONS.
- 18. FOR GROUT FOR STRUCTURES, SEE SPECIAL PROVISIONS.
- 19. FOR CAST-IN-PLACE CONCRETE, SEE SPECIAL PROVISION FOR NORFOLK SOUTHERN SPECIFICATIONS FOR CAST-IN-PLACE CONCRETE.
- 20. FOR PAINTING STRUCTURAL STEEL, SEE SPECIAL PROVISION FOR NORFOLK SOUTHERN SPECIFICATIONS FOR PAINTING SHOP FABRICATED BRIDGE STEEL.
- 21. FOR PROTECTION OF RAILWAY INTERESTS, SEE SPECIAL PROVISIONS.
- 22. FOR RAILROAD ROADBED, SEE RAILROAD ROADBED SPECIAL PROVISIONS.
- 23. FOR MAINTENANCE AND PROTECTION OF TRAFFIC BENEATH PROPOSED STRUCTURE, SEE SPECIAL PROVISIONS.
- 24. SHOCK PADS SHALL BE PREFORMED FABRIC BEARING PADS, 1/2" THICK, AND SHALL BE EITHER SHOCK PAD STYLE 15175, AS MANUFACTURED BY THE ALERT MANUFACTURING AND SUPPLY COMPANY, CHICAGO, IL; OR FABREEKA PADS, AS MANUFACTURED BY THE FABREEKA PRODÚCTS COMPANY, BOSTON, MA; OR SORBTEX PADS, AS MANUFACTURED BY VOSS ENGINEERING, INC., CHICAGO, IL; OR AN APPROVED EQUAL.
- 25. ALL CONSTRUCTION JOINTS SHOWN ON THESE PLANS SHALL BE REQUIRED UNLESS SHOWN OPTIONAL. CONSTRUCTION JOINTS SHALL NOT BE PERMITTED EXCEPT AS SHOWN ON THE PLANS, OR WHERE WRITTEN APPROVAL HAS BEEN OBTAINED.
- 26. BENCHMARK: SEE LOCATION SKETCH.
- 27. DIRECT TENSION INDICATORS (DTI) WILL NOT BE PERMITTED. USE THE TURN-OF-NUT METHOD FOR INSTALLING AND TIGHTENING HIGH STRENGTH BOLTS.
- 28. THE RAILROAD TRACK TOP OF RAIL ELEVATIONS ON THE PLANS ARE FROM THE BEST INFORMATION AVAILABLE, PRIOR TO BEGINNING BRIDGE CONSTRUCTION. VERIFY THE TOP OF RAIL ELEVATIONS AND REPORT ANY VARIATIONS TO THE ENGINEER, ANY PLAN REVISIONS NECESSARY TO ACHIEVE THE REQUIRED MINIMUM CLEARANCE WILL BE PROVIDED BY THE DEPARTMENT.
- 29. THE CONTRACTOR IS REMINDED THAT WORK ON THIS PROJECT REQUIRES WORKING NEAR EXISTING STRUCTURES. EVERY EFFORT HAS BEEN MADE TO IDENTIFY DISCREPANCIES AND ENSURE THAT THE DETAILS ARE DEPICTED CORRECTLY, HOWEVER, SINCE THE PROJECT INVOLVES WORKING NEAR EXISTING STRUCTURES, THE CONTRACTOR CAN EXPECT AND SHOULD PLAN ON ENCOUNTERING VARIANCES AND DEVIATIONS BETWEEN THE INFORMATION FOUND IN THESE DRAWINGS AND THE EXISTING CONDITIONS. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS IN CONSTRUCTION DETAILS AND QUANTITIES. THE CONTRACTOR IS RESPONSIBLE TO FIELD VERIFY ALL DETAILS INCLUDING GEOMETRY AND ELEVATIONS PRIOR TO THE INSTALLATION OF ANY MATERIAL. THE CONTRACTOR SHALL SUBMIT TO NCDOT AND NORFOLK SOUTHERN COPIES OF FIELD SURVEYS AND VERIFICATIONS FOR INCLUSION INTO THE CONSTRUCTION RECORDS FOR THE PROJECT.
- 30. ALL COSTS ASSOCIATED WITH THE TEMPORARY SPAN. INCLUDING BUT NOT LIMITED TO ERECTION, DEMOLITION/REMOVAL, PEDESTALS AND BALLAST CURBS. ALL MATERIALS (INCLUDING BUT NOT LIMITED TO STRUCTURAL STEEL, CONCRETE, REINFORCING STEEL, DECK GRATING, TRACK. TIES. MECHANICAL ANCHORS AND ANCHOR BOLTS. ETC.) AND LABOR SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR THE "CONSTRUCTION, MAINTENANCE AND REMOVAL OF TEMPORARY SPAN". NO ADDITIONAL PAYMENT WILL BE MADE.

PROJECT NO. U-3308

**DURHAM** 

COUNTY

STATION: 24+55.20 -LALT-

13+22.18 -CSXN-SHEET 3 OF 16

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION RALEIGH

TEMPORARY SPAN GENERAL NOTES

19765 4/29/2016

TV / Ralph Whitehead Associates, Inc. 900 W Trade Street, Suite 715 Charlotte, NC 28202 NC License No. F-099

DOCUMENT NOT CONSIDERED FINAL

**UNLESS ALL SIGNATURES COMPLETED** 

**REVISIONS** SHEET NO S4-55 DATE: DATE: BY: IO. BY: TOTAL SHEETS

DATE : 06-14 MTC DRAWN BY : CHECKED BY : DJM DATE : 06-14