GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE AGENCY OF TRANSPORTATION'S STANDARD SPECIFICATION FOR CONSTRUCTION, DATED 2011 WITH ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2012 WITH INTERIMS.

2. DESIGN FOR HL-93 LIVE LOADING WITH FUTURE 2 ½" WEARING SURFACE.

3. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES FAHRENHEIT UNLESS OTHERWISE NOTED.

4. ITEM 529.15 REMOVAL OF STRUCTURE IS FOR THE COMPLETE REMOVAL OF THE EXISTING BRIDGE, INCLUDING COMPLETE REMOVAL OF THE EXISTING SUPERSTRUCTURE AND ALL PORTIONS OF THE EXISTING ABUTMENTS NOT REMOVED UNDER STRUCTURE EXCAVATION.

5. THE EXISTING STRUCTURAL STEEL IS PAINTED WITH A MATERIAL THAT MAY CONTAIN LEAD. THE CONTRACTOR SHALL FOLLOW ALL APPLICABLE REGULATIONS WHEN HANDLING AND WORKING WITH THIS STEEL. THE REMOVED STRUCTURAL STEEL IS THE PROPERTY OF THE CONTRACTOR. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE STATE, ITS OFFICERS, AND EMPLOYEES HARMLESS CONCERNING THE CONTRACTOR'S USE OR DISPOSITION OF THE REMOVED EXISTING STRUCTURAL STEEL.

6. FOR INFORMATION REGARDING THE WATER MAIN CHANGES AND RELOCATIONS, REFER TO SPECIAL PROVISIONS AND CONSULTANT WATER MAIN DRAWINGS, INCLUDED IN THIS PLAN SET.

7. ANY DAMAGE TO THE ROADWAY INCURRED DURING CONSTRUCTION OF THE TEMPORARY OR PERMANENT WATER MAIN SHALL BE REPAIRED TO THE ORIGINAL CONDITION. THIS WORK WILL BE INCIDENTAL TO THE CONTRACT ITEMS SPECIAL PROVISION (WATER MAIN ON BRIDGE)(8") AND SPECIAL PROVISION (MAINTENANCE OF EXISTING FLOWS).

8. THE DESIGN AND INSTALLATION OF THE TEMPORARY WATER MAIN SYSTEM SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE DONE IN ACCORDANCE WITH THE PLANS AND SECTION 629. PAYMENT FOR THE TEMPORARY WATER MAIN TO BUILD A COMPLETE FUNCTIONAL SYSTEM TO THE SATISFACTION OF THE ENGINEER WILL BE PAID UNDER CONTRACT ITEM 900.645 SPECIAL PROVISION (MAINTENANCE OF EXISTING WATER FLOWS).

9. THE DETAILS AND DIMENSIONS SHOWN ON THE PROJECT SPECIFIC PLAN AND DETAIL SHEETS TAKE PRECEDENCE OVER THE MORE GENERAL "STRUCTURES DETAIL SHEETS" PROVIDED AFTER THE PLAN SHEETS AS LISTED IN THE INDEX.

10. ALL BRIDGE RAILING, APPROACH RAILING, AND GUARDRAIL SHALL BE PAINTED BLACK (COLOR CHIP #27038) EXCEPT HARDWARE AND ANCHORAGE CAST IN CONCRETE.

11. NESTING SWALLOWS HAVE BEEN NOTED ON THE PROJECT SITE. THE CONTRACTOR SHALL WORK WITH THE VTRANS ENVIRONMENTAL BIOLOGIST IN ORDER TO DETERMINE AN ADEQUATE METHOD FOR SAFELY REMOVING ANY EXISTING NESTS.

TRAFFIC CONTROL

12. CURRENTLY BRIDGE 31 ON SOUTH STREET IS CLOSED. DURING CONSTRUCTION, SOUTH STREET WILL REMAIN CLOSED TO THROUGH TRAFFIC UNTIL COMPLETION OF THE NEW STRUCTURE.

13. FOR ADDITIONAL CONSTRUCTION SIGNING INSTRUCTIONS SEE E-100 SERIES STANDARDS AND THE LATEST EDITION OF THE MUTCD. WHERE CONFLICTS EXIST, THE MUTCD SHALL GOVERN.

EARTHWORK

14. THE STONE FILL, TYPE IV SHALL BE PLACED IN FRONT OF THE ABUTMENTS BEFORE THE STRUCTURAL STEEL HAS BEEN SET.

15. THE HEIGHT OF THE FILL BEHIND THE NEW ABUTMENTS SHALL BE LIMITED TO THE CONSTRUCTION JOINT ELEVATION UNTIL THE DECK HAS BEEN POURED AND CURED.

16. BOTH ABUTMENTS SHALL BE BACKFILLED SIMULTANEOUSLY. NO MORE THAN 2 FEET OF DIFFERENTIAL BACKFILL HEIGHT SHALL BE PERMITTED. BACKFILLING SHALL NOT BEGIN UNTIL THE ABUTMENT AND DECK CONSTRUCTION IS COMPLETE.

CONCRETE

17. THE MINIMUM COVER FOR REINFORCING STEEL IN THE SUBSTRUCTURE SHALL BE TWO INCHES ALONG THE WALL FACES AND AGAINST EARTH, THREE INCHES ALONG SURFACES EXPOSED TO DEICING SALTS AND THREE INCHES ELSEWHERE UNLESS DETAILED OTHERWISE.

18. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE AS FOLLOWS:
    SPACING +/- 1"
    CLEARANCE +/- ¼"

19. ALL REINFORCING STEEL IN THE CONCRETE DECK AND INTEGRAL BACKWALL EXTENDING ABOVE THE BRIDGE SEAT SHALL BE LEVEL II CORROSION RESISTANCE. ALL OTHER REINFORCING STEEL SHALL BE LEVEL I CORROSION RESISTANCE. WHEN REINFORCING STEEL IS CUT, THE UNCOATED ENDS SHALL BE REPAIRED WITH MATERIALS AND PROCEDURES APPROVED BY THE COATING MANUFACTURER. FLAME CUTTING OF COATED REINFORCING STEEL WILL NOT BE PERMITTED.

20. JOINTS AND SCORE MARKS IN THE CONCRETE SHALL BE CONSTRUCTED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

21. WATER REPELLENT, SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES EXCEPT THE UNDERSIDE OF THE DECK BETWEEN THE DRIP NOTCHES.

22. THE CONCRETE IN THE WINGWALLS AND BACKWALLS ABOVE THE CONSTRUCTION JOINT ELEVATION SHALL BE POURED WITH THE DECK.

23. THE TOP SURFACE OF THE PILE CAP SHALL INITIALLY BE GIVEN A FLOAT FINISH TO GRADE. THE CONCRETE WITHIN THE REINFORCING CAGE SHALL THEN BE ROUGHENED BY RAKING PARALLEL TO THE FACE OF THE ABUTMENT TO AN AMPLITUDE OF ½". THE CONCRETE OUTSIDE THE REINFORCING CAGE AND UNDER THE BEARING PADS SHALL REMAIN SMOOTH.

24. FOR THE BRIDGE DECK POURS, THE MAXIMUM TIME LIMIT FOR ANY COMBINATION OF POURS DONE IN ANY ONE DAY SHALL BE EIGHT HOURS. THERE SHALL BE A MINIMUM OF 96 HOURS BETWEEN THE COMPLETION OF ONE DAY'S POUR AND THE BEGINNING OF OTHER ADJACENT POURS. ALL INDIVIDUAL DECK POURS SHALL START FROM THE LOW END OF THE BRIDGE.

25. ALL PORTIONS OF THE APPROACH SLABS AND SUBSTRUCTURE CONCRETE SHALL BE CONCRETE, HIGH PERFORMANCE CLASS B UNLESS OTHERWISE NOTED AND SHALL BE PAID FOR UNDER ITEM 501.34, "CONCRETE, HIGH PERFORMANCE CLASS B". ALL PORTIONS OF THE SUPERSTRUCTURE SHALL BE CONCRETE, HIGH PERFORMANCE CLASS A AND SHALL BE PAID FOR UNDER ITEM 501.33, "CONCRETE, HIGH PERFORMANCE CLASS A".

26. IN ACCORDANCE WITH SUBSECTION 506.23(A) AND AS DIRECTED BY THE RESIDENT ENGINEER, THE CONTRACTOR SHALL TAKE MEASURES NECESSARY TO PROTECT ALL SUBSTRUCTURE CONCRETE FROM STAINING DUE TO OXIDE FORMATION ON THE STRUCTURAL STEEL PRIOR TO PLACEMENT OF THE DECK. THESE MEASURES WILL NOT BE PAID FOR SEPARATELY BUT WILL BE CONSIDERED INCIDENTAL TO ITEM 501.34, "CONCRETE, HIGH PERFORMANCE CLASS B". ANY SUCH STAINING THAT OCCURS PRIOR TO DECK PLACEMENT SHALL BE REMOVED AT NO ADDITIONAL COST TO THE STATE.

STRUCTURAL STEEL

27. ANY CONNECTIONS THAT ARE NOT DETAILED ON THE PLANS SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STRUCTURES ENGINEER FOR APPROVAL.

28. ALL WELDING SHALL CONFORM TO THE PROVISIONS OF SUBSECTION 506.10.

29. ANY HOLES IN THE WEBS OF THE FASCIA GIRDERS THAT ARE NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD BOLTS. THESE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTIONS 506.19.

30. ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" DIAMETER HIGH STRENGTH BOLTS IN 15/16" DIAMETER HOLES, PER SECTION 506 UNLESS OTHERWISE NOTED.

31. THE FAYING SURFACE ON THE CONNECTION PLATES SHALL BE PREPARED AS CLASS "A". THESE SURFACES SHALL BE PROTECTED FROM DAMAGE AND CORROSION PRIOR TO THE CONNECTION.

32. FLEMING BRACKETS OR SIMILAR FALSE WORK SHALL BE PLACED AT A MAXIMUM SPACING OF 4 FEET. THE BRACKETS SHALL BEAR NEAR THE BOTTOM FLANGE AND IN NO CASE SHALL THEY BEAR ABOVE THE BOTTOM QUARTER OF THE WEB.

33. AFTER THE GIRDERS HAVE BEEN ERECTED, ELEVATIONS SHALL BE TAKEN ALONG THE TOP OF THE GIRDERS, AS DIRECTED BY THE RESIDENT ENGINEER, FOR USE IN DETERMINING THE FINISHED GRADE.

34. STRUCTURAL STEEL MEMBERS DESIGNATED "CVN TENSION ZONE" IN THE PLANS SHALL BE CHARPY V-NOTCH TESTED IN ACCORDANCE WITH SUBSECTION 714.01.

35. ENDS OF GIRDERS ARE TO BE VERTICAL UNDER FULL DEAD LOAD.

36. CONNECTION PLATES FOR WATER MAIN SUPPORTS AND ASSOCIATED ATTACHMENT HARDWARE FOR WATER MAIN SHALL BE PAID FOR UNDER ITEM 900.645 SPECIAL PROVISION (WATER MAIN ON BRIDGE).

PILES

37. PROVIDE HP14X89 ASTM A572, GRADE 50 PILES AT ALL PILE LOCATIONS SHOWN ON PLANS. ALL PILES SHALL BE EQUIPPED WITH APPROVED REINFORCED TIPS. THE PILES SHALL BE DRIVEN TO A NOMINAL RESISTANCE OF 627 KIPS AND TO A MINIMUM OF 40 FEET BELOW THE BOTTOM OF THE PILE CAP.

38. A MINIMUM OF ONE DYNAMIC PILE TESTS SHALL BE CONDUCTED ON THE FIRST PILE DRIVEN FOR EACH SUBSTRUCTURE UNIT, FOR A TOTAL OF 2 TESTS. MORE TESTES MAY BE REQUIRED BY THE ENGINEER.

39. PILES SHALL BE DRIVEN WITHIN 3 INCHES OF THE LOCATION SHOWN ON THE PLANS. THE PILE ORIENTATION SHALL NOT VERY BY MORE THAN 5 DEGREES. THE CONTRACTOR SHALL DEMONSTRATE HOW THE TOLERANCE WILL BE MET TO THE SATISFACTION OF THE ENGINEER.

40. FOR ESTIMATING PURPOSES, THE PILE LENGTHS WERE ASSUMED TO BE 102 FEET. ACTUAL IN PLACE LENGTHS MAY VARY.

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GENERAL NOTES	SHEET 31 OF 66