

GENERAL

1. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AND ITS LATEST REVISIONS, AND THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, DATED 2006, AND ITS LATEST REVISIONS.
 2. DURING CONSTRUCTION, TRAFFIC SHALL BE MAINTAINED ON A ONE-WAY TEMPORARY BRIDGE CONSTRUCTED UPSTREAM OF THE PROPOSED STRUCTURE. THE TEMPORARY BRIDGE IS ALREADY IN PLACE. MAINTENANCE OF THE TEMPORARY BRIDGE AND ITS APPROACHES SHALL BE PAID FOR UNDER ITEM 527.10, MAINTENANCE OF STRUCTURES AND APPROACHES. REMOVAL OF THE EXISTING APPROACH SPAN, TEMPORARY BRIDGE AND SUBSTRUCTURE UNITS WILL BE PAID FOR UNDER 529.15, REMOVAL OF STRUCTURE. REMOVAL OF STRUCTURE SHALL INCLUDE PIER #1 ABOVE ELEVATION 429.0', PIER #2 ABOVE ELEVATION 433.0', ABUTMENT #1 ABOVE ELEVATION 436.0 AND ABUTMENT #2 ABOVE ELEVATION 442.0', OR AS DIRECTED BY THE RESIDENT ENGINEER.
 3. THE COST OF RELOCATING THE EXISTING TRAFFIC BARRIER AS SHOWN ON THE TRAFFIC CONTROL SHEET WILL BE PAID FOR UNDER ITEM 900.645 SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
 4. THE CONTRACTOR SHALL ERECT AND MAINTAIN ALL TEMPORARY ON AND OFF-PROJECT SIGNS AND BARRICADES AS SHOWN IN THE PLANS AND AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT FOR THIS WORK WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.645, SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
 5. FULL ACCESS TO ALL SIDE ROADS AND DRIVES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES. THIS WORK WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 900.645, SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
 6. FOR INFORMATION REGARDING UTILITIES, SEE THE SPECIAL PROVISIONS.
 7. ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.
 8. ALL EXISTING SIGNS AND SIGN POSTS NOT RE-USED SHALL REMAIN THE PROPERTY OF THE STATE OF VERMONT. THE CONTRACTOR SHALL STOCKPILE THESE ITEMS AT THE PROJECT SITE FOR REMOVAL BY DISTRICT FORCES. THE CONTRACTOR SHALL CONTACT DOUG NEWTON AT TRANSPORTATION DISTRICT #6 @ 828-2689 WHEN THESE ITEMS ARE READY FOR REMOVAL FROM THE PROJECT SITE.
- ### EARTHWORK AND RELATED ITEMS
9. TEMPORARY CONSTRUCTION FILLS WITHIN THE WATERCOURSE FOR ANY PURPOSE SHALL CONSIST OF CLEAN STONE FILL ONLY. NO OTHER FILLING IN THE STREAM SHALL OCCUR WITHOUT THE APPROVAL OF THE STREAM ALTERATION ENGINEER.
 10. THE COST OF THE TEMPORARY CAUSEWAY FOR CONSTRUCTION OF THE PROPOSED PIER WILL BE INCLUDED IN THE UNIT PRICES BID FOR ITEM 208.40, COFFERDAM (271+30). THE COST OF THE TEMPORARY CAUSEWAY FOR REMOVAL OF THE EXISTING PIER WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 529.15, REMOVAL OF STRUCTURE.
 11. THE "STONE FILL, TYPE II AND IV" UNDER THE BRIDGE AS SHOWN IN THE PLANS SHALL BE PLACED BEFORE THE NEW STEEL GIRDERS ARE SET.
 12. THE HEIGHT OF FILL BEHIND ABUTMENTS WILL BE LIMITED TO THE BRIDGE SEAT ELEVATION UNTIL THE DECK HAS BEEN POURED AND THE CURING PERIOD IS UP.
 13. "STONE FILL, TYPE I" SHALL BE USED FOR EROSION CONTROL AS SHOWN IN THE PLANS AND AT THE DISCRETION OF THE RESIDENT ENGINEER. PAYMENT FOR MATERIAL AND PLACEMENT SHALL BE MADE UNDER ITEM 613.10, "STONE FILL, TYPE I".
 14. THE CONTRACTOR MAY SUBSTITUTE SUBBASE MATERIAL FOR THE SAND BORROW SHOWN ON THE PLANS. THE SUBBASE MATERIAL SHALL BE THE TYPE SPECIFIED IN THE CONTRACT AND SHALL BE PLACED TO MEET THE SUBBASE SPECIFICATIONS. IF SUBBASE IS PLACED IN LIEU OF SAND BORROW, A GEOTEXTILE MEETING THE REQUIREMENTS OF ITEM 649.11 "GEOTEXTILE FOR ROAD BED SEPARATOR" SHALL BE PLACED BETWEEN THE SUBGRADE AND THE SUBBASE MATERIAL. ALL COSTS ASSOCIATED WITH THE SUBSTITUTION INCLUDING THE GEOTEXTILE SHALL BE INCIDENTAL TO 203.31 "SAND BORROW".
 15. THE CONTRACTOR'S ATTENTION IS DIRECTED TO SUBSECTION 301.06 REGARDING THE COMPACTION OF SUBBASE MATERIAL FOR THIS PROJECT.
 16. THE EXISTING ROAD BED CONSISTS OF 7" DEEP CONCRETE SLABS. THESE CONCRETE SLABS AND THE PAVEMENT ON TOP OF THEM WILL BE REMOVED WHERE THEY INTERFERE WITH THE LIMITS OF COMMON EXCAVATION. PAYMENT FOR THIS WORK SHALL BE PAID FOR UNDER ITEM 203.16 "SOLID ROCK EXCAVATION". SEE DETAIL ON TYPICAL SECTIONS SHEET 3 FOR SOLID ROCK EXCAVATION PAY LIMITS.

SUBSTRUCTURES ON BEDROCK

17. FOOTINGS OR SUBFOOTINGS FOR SUBSTRUCTURES FOUNDED ON BEDROCK SHALL BE PLACED ON CLEAN COMPETENT ROCK. ALL LOOSE ROCK AND DEBRIS SHALL BE REMOVED.
18. UPON COMPLETION OF THE EXCAVATION FOR SUBSTRUCTURES FOUNDED ON BEDROCK AND PRIOR TO PLACING FORMWORK, THE RESIDENT ENGINEER SHALL CONTACT THE VTRANS SOILS AND FOUNDATION ENGINEER TO INSPECT THE BEDROCK. THE STRUCTURES ENGINEER WILL ALSO BE NOTIFIED THAT THE BEDROCK IS READY FOR INSPECTION. THE SOILS AND FOUNDATION ENGINEER WILL DETERMINE IF THE BEDROCK IS COMPETENT TO OBTAIN THE NOMINAL BEARING RESISTANCE AS SHOWN ON THE PLANS. FIVE (5) WORKING DAYS FROM NOTIFICATION SHALL BE ALLOWED TO MAKE THE INSPECTION AND THE DETERMINATION FOR THE COMPETENCY OF THE BEDROCK.
19. THE TOP SURFACE OF ALL SUBFOOTINGS SHALL BE INTENTIONALLY ROUGHENED TO ¼" AMPLITUDE.
20. WHERE COMPETENT BEDROCK IS ABOVE THE DESIGN BOTTOM OF FOOTING ELEVATION, IT SHALL BE REMOVED WITH CONTRACT PAY ITEMS OR A BEDROCK PROFILE SHALL BE PROVIDED BY THE CONTRACTOR TO THE STRUCTURES ENGINEER TO DETERMINE WHETHER THE DESIGN BOTTOM OF FOOTING ELEVATION MAY BE RAISED. THREE (3) WORKING DAYS FROM RECEIPT OF THE BEDROCK PROFILE SHALL BE ALLOWED TO MAKE THE DETERMINATION. FOOTING ELEVATIONS SHALL NOT BE ADJUSTED WITHOUT APPROVAL OF THE STRUCTURES ENGINEER.
21. OVERBREAKAGE AND REPLACEMENT WITH THE FOOTING CONCRETE BEYOND THE AVERAGE MAXIMUM ALLOWANCE SPECIFIED IN SUBSECTIONS 204.09(B) (1) AND 208.11(C) WILL BE AT THE CONTRACTOR'S EXPENSE.
22. DOWELS SHALL BE DRILLED AND GROUTED INTO BEDROCK WHEN SHOWN ON THE PLANS OR AS ORDERED BY THE ENGINEER. THE DOWELS SHALL HAVE A 2'-0" MINIMUM EMBEDMENT IN THE BEDROCK AND SHALL EXTEND IN THE FOOTING A MINIMUM OF 1'-6", UNLESS NOTED OTHERWISE.

STRUCTURAL STEEL

23. AFTER THE DECK HAS BEEN PLACED AND CURED, GIRDERS AT ABUTMENT 1 AND ABUTMENT 2 WILL BE JACKED UP TO ALLOW THE ELASTOMERIC BEARINGS TO RETURN TO THEIR ORIGINAL POSITION BEFORE WELDING THE SOLE PLATES TO THE BOTTOM FLANGE. FINAL POSITION OF THE VERTICAL BEARING FACES WILL BE STRAIGHT. PAYMENT FOR THIS WORK WILL BE INCIDENTAL TO CONTRACT ITEM 531.11. NO GIRDER WILL BE JACKED MORE THAN ½" FROM ITS ORIGINAL POSITION.
24. THE DOWNSPOUTS LOCATED AT ABUTMENT #1, THE PIER, AND ABUTMENT #2 WILL BE PAID FOR UNDER ITEM 506.60, STRUCTURAL STEEL.
25. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF THE GIRDERS SHALL BE TAKEN AS DIRECTED BY THE RESIDENT ENGINEER FOR USE IN DETERMINING FINISHED GRADES.
26. FLEMING BRACKETS OR SIMILAR FALSEWORK SHALL BE SPACED AS REQUIRED BY DESIGN, BUT SHALL BE LIMITED TO A MAXIMUM SPACING OF 4 FEET. THE DESIGN OF FALSEWORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
27. ANY BOLT HOLES IN THE WEBS OF FASCIA GIRDERS NOT OTHERWISE FILLED SHALL BE FILLED WITH BUTTON HEAD OR HEX HEAD BOLTS. THE BOLTS SHALL BE TIGHTENED IN ACCORDANCE WITH SUBSECTION 506.19.

CONCRETE

28. ABUTMENTS, PORTION OF BACKWALLS BELOW THE CONSTRUCTION JOINT, PIER STEM AND APPROACH SLABS SHALL BE HIGH PERFORMANCE CLASS B AND SHALL BE PAID FOR UNDER ITEM 501.34, "CONCRETE, HIGH PERFORMANCE CLASS B". DECK, CURB, AND PORTION OF BACKWALL ABOVE THE CONSTRUCTION JOINT CONCRETE SHALL BE HIGH PERFORMANCE CONCRETE, CLASS A LOW CEMENT AND SHALL BE PAID FOR UNDER ITEM 900.608 SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, CLASS A LOW CEMENT). PIER FOOTING WILL BE HIGH PERFORMANCE CONCRETE AND PAID FOR UNDER ITEM 900.608 SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, MASS POUR).
29. CONCRETE FOR SUBFOOTING IF REQUIRED SHALL BE PAID FOR UNDER ITEM 541.30, "CONCRETE, CLASS C". PAYMENT FOR SUBFOOTING CONCRETE WILL BE MADE ONLY FOR CONCRETE WITHIN THE LIMITS FOR SUBFOOTING SHOWN ON THE PLANS.
30. SURFACES OF ABUTMENT BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. ALL OTHER AREAS OF ABUTMENT BRIDGE SEATS SHALL BE SLOPED 1/2 INCH PER FOOT. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE GIVEN A MAGNESIUM FLOAT FINISH. PIER BRIDGE SEATS SHALL BE LEVEL.
31. THE ABANDONED PIPE ON THE MIDDLESEX SIDE WILL BE FILLED WITH FLOWABLE CONCRETE AND WILL PAID UNDER ITEM 900.608 SPECIAL PROVISION (CONTROLLED DENSITY (FLOWABLE) FILL).

32. CONCRETE PORTIONS OF ABUTMENTS AND WINGWALLS ABOVE ADJACENT BRIDGE SEAT ELEVATIONS SHALL NOT BE PLACED UNTIL FINISH GRADES HAVE BEEN DETERMINED BY THE RESIDENT ENGINEER.

33. 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 INCLUDED IN THE UNIT PRICE BID FOR 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.

34. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 1 INCH X 1 INCH.

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

36. RELATIVE TO GRADE ALL INDIVIDUAL DECK PLACEMENTS SHOULD START ON THE LOW END.

37. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.

38. THE KEY IN CONCRETE EXPANSION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT.

39. ALL SUPERSTRUCTURE REINFORCING STEEL SHALL BE EPOXY COATED AND PAID FOR UNDER ITEM 507.17, "EPOXY COATED REINFORCING STEEL". CUTTING AND REPAIRING DAMAGED AREAS OF COATED REINFORCING STEEL SHALL BE PERFORMED IN ACCORDANCE WITH SUBSECTION 507.04.

40. MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS INDICATED IN THE PLANS.

PILES

41. THE PILES SHALL BE DRIVEN TO A NOMINAL RESISTANCE OF 330 kips. TO PREVENT DAMAGE TO THE PILES, PILE SHOES ARE REQUIRED AND SHALL CONFORM TO SECTION 505.

42. A MINIMUM OF ONE DYNAMIC PILE TEST SHALL BE CONDUCTED ON THE FIRST PILE DRIVEN FOR EACH SUBSTRUCTURE UNIT.

43. FOR ESTIMATING PURPOSES, THE PILE TIP ELEVATIONS WERE ASSUMED AS SHOWN ON THE BORING LOGS. ACTUAL IN PLACE LENGTHS MAY VARY.

GENERAL NOTES SHEET

PROJECT NAME: MORETOWN-MIDDLESEX
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FILE NAME: 78f219/str/sf219pl.dgn PLOT DATE: 15-JUN-2009
PROJECT LEADER: M. EVANS-MONGEON DRAWN BY: L. DUQUETTE
DESIGNED BY: S. SCRIBNER CHECKED BY: EVANS-MONGEON
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