

CONCRETE

48. SUBSTRUCTURE CONCRETE EXCLUDING PIER FOOTING AND ABUTMENT #2 FOOTING, APPROACH SLABS, AND THE STAIRS AT STATION 128+50 (RT) AND 129+18 (LT) SHALL BE HIGH PERFORMANCE CLASS B AND SHALL BE PAID FOR UNDER ITEM 501.34, "CONCRETE, HIGH PERFORMANCE CLASS B". DECK (INCLUDING CURTAIN WALLS, BACKWALLS AND APPROACH SLAB BRACKETS ABOVE BRIDGE SEAT ELEVATION), BRIDGE SIDEWALK AND BRIDGE CURB CONCRETE SHALL BE HIGH PERFORMANCE CLASS A AND SHALL BE PAID FOR UNDER ITEM 501.33, "CONCRETE, HIGH PERFORMANCE CLASS A". PIER FOOTING AND ABUTMENT #2 FOOTING WILL BE HIGH PERFORMANCE CONCRETE AND PAID FOR UNDER ITEM 900.608 SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, MASS POUR).
49. PRIOR TO ANY COLD WEATHER CONCRETE PLACEMENT AS DEFINED IN SECTION 501, THE CONTRACTOR SHALL SUBMIT A PLAN TO THE RESIDENT ENGINEER FOR APPROVAL. THE PLAN AT A MINIMUM SHALL PROVIDE METHODS FOR INSULATING, CURING, HEATING, TEMPERATURE MONITORING, AND ANY WEATHER RESTRICTIONS FOR CONCRETE PLACEMENT. THE PLAN SHALL BE SPECIFIC TO THE LOCATION OF THE PLACEMENT AND BE SUBMITTED A MINIMUM OF 14 DAYS PRIOR TO THE ANTICIPATED PLACEMENT DATE. COLD WEATHER CONCRETE SHALL NOT BE PLACED PRIOR TO APPROVAL OF THE PLAN.
50. NO CONCRETE IN ABUTMENTS OR WINGWALLS SHALL BE PLACED ABOVE THE BRIDGE SEAT ELEVATIONS UNTIL THE STRINGERS OR BEAMS HAVE BEEN PROFILED AND THE FINISHED GRADE OF THE DECK HAS BEEN DETERMINED.
51. RELATIVE TO GRADE, ALL DECK POURS SHALL BEGIN FROM THE LOW ELEVATION END AND PROCEED TOWARDS THE HIGH ELEVATION END.
52. THE CONSTRUCTION JOINT AT ABUTMENT #1 LOCATED AT ELEVATION 538.31 SHALL HAVE A MINIMUM OF A 5 DAY WAITING PERIOD BEFORE CONCRETE IS Poured FROM THAT ELEVATION TO THE BRIDGE SEAT TO ALLOW FOR POSSIBLE SETTLEMENT DUE TO THE SOILS AT THIS LOCATION.
53. SURFACES OF BRIDGE SEATS UNDER BEARING DEVICES SHALL BE LEVEL. ALL OTHER AREAS OF BRIDGE SEATS SHALL BE SLOPED DOWN 1/2 INCH PER FOOT TOWARD THE NEAREST OUTSIDE FACE OF THE SUBSTRUCTURE UNIT, SUCH AS TO PREVENT WATER PONDING ON THE BRIDGE SEAT AREA. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE GIVEN A MAGNESIUM FLOAT FINISH.
54. IN ACCORDANCE WITH SUBSECTION 506.23(A) OF THE STANDARD SPECIFICATIONS FOR CONSTRUCTION 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 SHALL 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.
55. THE DECK FOR EACH SPAN IS TO BE Poured IN ONE CONTINUOUS POUR WITH A MAXIMUM DURATION OF EIGHT HOURS. IF CIRCUMSTANCES BEYOND THE CONTRACTOR'S CONTROL PREVENT THIS FROM BEING ACCOMPLISHED, A TRANSVERSE CONSTRUCTION JOINT SHALL BE USED BETWEEN ADJACENT POURS. A MINIMUM 96 HOUR DELAY BETWEEN ADJACENT POURS SHALL BE OBSERVED.
56. LOADING ALLOWANCE ON THE NEW DECK SHALL BE IN ACCORDANCE WITH SUBSECTION 501.18(B) OF THE STANDARD SPECIFICATIONS.
57. WATER REPELLENT, SILANE, SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES, EXCEPT THE UNDERSIDE OF THE DECK BETWEEN DRIP NOTCHES.
58. JOINTS AND SCORE MARKS IN CONCRETE SHALL BE CONSTRUCTED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.
59. THE VERTICAL KEY IN CONCRETE CONSTRUCTION JOINTS SHALL BE MONOLITHIC AND CONTINUOUS FOR THE FULL LENGTH OF THE JOINT.
60. 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 OF THE STANDARD SPECIFICATIONS.

61. MINIMUM COVER FOR REINFORCING STEEL SHALL BE AS INDICATED IN THE PLANS.
62. REINFORCING STEEL PLACEMENT TOLERANCES SHALL BE:
SPACING: +/- 1 INCH
CLEARANCE: +/- 1/4 INCH

PILES

63. TWO DYNAMIC PILE TESTS PER PILE SUPPORTED SUBSTRUCTURE SHALL BE CONDUCTED. THE FIRST TEST SHALL BE ON THE FIRST PILE DRIVEN FOR EACH SUBSTRUCTURE AND THE SECOND TEST SHALL BE ON THE SECOND PILE DRIVEN FOR EACH SUBSTRUCTURE. THE FIRST TWO PILES DRIVEN ON ABUTMENT #2 SHALL BE PILES NUMBER 42 AND NUMBER 19. THE FIRST TWO PILES DRIVEN ON THE PIER SHALL BE PILES NUMBER 1 AND NUMBER 18. THERE WILL BE A TOTAL OF FOUR DYNAMIC PILE TESTS FOR THE PROJECT.
64. FOR ESTIMATING PURPOSES, THE PILE TIP ELEVATIONS WERE ASSUMED AS SHOWN ON THE BORING LOGS. ACTUAL IN PLACE LENGTHS MAY VARY.
65. THE PILES SHALL BE DRIVEN TO A NOMINAL RESISTANCE OF 390 KIPS FOR THE PIER, AND A NOMINAL RESISTANCE OF 252 KIPS FOR ABUTMENT #2.
66. TO PREVENT DAMAGE TO THE PILES, PILE SHOES ARE REQUIRED AND SHALL CONFORM TO SECTION 505.

PROJECT NAME: BETHEL
PROJECT NUMBER: BRF 022-1(14)

FILE NAME: sfi6iforms.dgn
PROJECT LEADER: M. EVANS-MONGEON
DESIGNED BY: S. SCRIBNER
GENERAL NOTES SHEET 2

PLOT DATE: 20-MAY-2011
DRAWN BY: M. LONGSTREET
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