

GENERAL

- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE VERMONT AGENCY OF TRANSPORTATION 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION, THE 2014 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, AND THEIR LATEST REVISIONS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING CONSISTENCY BETWEEN THE FABRICATOR'S SHOP DRAWINGS AND ENSURING THAT ALL PRECAST AND RAIL COMPONENTS FIT TOGETHER.
- ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.
- NO ADJUSTMENTS TO THE BITUMINOUS WEARING SURFACE ON THE BRIDGE SHALL BE MADE TO ACCOUNT FOR THE DIFFERENCE BETWEEN BEAM CAMBER AND THE THEORETICAL ROADWAY PROFILE.
- THE REMOVAL OF EXISTING STRUCTURE WILL BE PAID FOR UNDER ITEM 529.15, "REMOVAL OF STRUCTURE". THIS WORK SHALL INCLUDE REMOVAL OF THE ENTIRE SUPERSTRUCTURE AND ANY PORTIONS OF THE EXISTING ABUTMENTS THAT FALL OUTSIDE THE LIMITS OF STRUCTURE EXCAVATION OR UNCLASSIFIED CHANNEL EXCAVATION.

TRAFFIC CONTROL

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND IMPLEMENTATION OF A SITE SPECIFIC TRAFFIC CONTROL PLAN FOR ALL STAGES OF CONSTRUCTION. THE PLAN SHALL CLEARLY DETAIL HOW TRAFFIC WILL BE MAINTAINED. THE PLAN SHALL SPECIFY ALL CONSTRUCTION ACTIVITIES REQUIRING ALTERNATING ONE WAY TRAFFIC, RELATE THOSE ACTIVITIES TO THE CONSTRUCTION SCHEDULE, AND SHOW APPROPRIATE TEMPORARY TRAFFIC CONTROL. ALL COSTS WILL BE INCLUDED IN ITEM 900.645 "SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE)".
- INSTALLATION OF TEMPORARY TRAFFIC CONTROL SIGNS SHALL NOT BLOCK ANY EXISTING TRAFFIC CONTROL SIGN ASSEMBLIES. THE CONTRACTOR SHALL TRY TO MAINTAIN AT LEAST 200 FEET BETWEEN SIGN ASSEMBLIES.
- TH1, IN PROXIMITY OF THE PROJECT, WILL BE CLOSED DURING THE BRIDGE CLOSURE PERIOD. IF THE TOWN ELECTS TO SIGN A LOCAL DETOUR, THEN NO SIGNS WILL BE PERMITTED IN A STATE HIGHWAY RIGHT OF WAY WITHOUT ACQUIRING A VSA, TITLE 19, SECTION 1111 PERMIT. ANY DETOUR SIGNED IS THE SOLE RESPONSIBILITY OF THE TOWN OF STRAFFORD.

CONCRETE

- ALL LIFTING POINTS IN THE SUPERSTRUCTURE SHALL BE REMOVABLE TO THE MINIMUM CLEAR COVER FOR REINFORCING STEEL SPECIFIED IN THE PLANS. THE LIFTING POINTS SHALL BE DETAILED IN THE APPROPRIATE FABRICATION DRAWING. PAYMENT FOR THIS WORK WILL BE CONSIDERED INCIDENTAL TO ITEM "900.640 SPECIAL PROVISION (PREFABRICATED BRIDGE UNIT SUPERSTRUCTURE) (FPQ)".
- ALL RECESSED LIFTING POINTS AND BLOCK OUTS SHALL BE FILLED WITH A TYPE IV MORTAR PER SUBSECTION 707.03. PAYMENT WILL BE CONSIDERED INCIDENTAL TO THE APPROPRIATE PRECAST ITEM.
- THE METHOD OF FORMING FOR SUBSEQUENT POURS AFTER PLACING THE PREFABRICATED BRIDGE UNIT SUPERSTRUCTURE SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR IS ENCOURAGED TO WORK WITH THE FABRICATOR IF ADDITIONAL SUPPORTS ARE REQUIRED. IN NO CASE SHALL THE CONTRACTOR ATTACH ADDITIONAL FORM OR SCREED SUPPORTS BY DRILLING OR SIMILAR MEANS INTO ANY PRECAST SUPERSTRUCTURE UNIT.
- BRIDGE RAIL SHALL NOT BE POURED UNTIL THE CONCRETE IN THE LONGITUDINAL CLOSURE POUR BETWEEN THE BEAMS HAS REACHED A MINIMUM STRENGTH OF 4,000 PSI.
- THE EFFECTIVE CURE TIME OF THE BRIDGE RAIL MAY BE REDUCED TO A MINIMUM OF (7) SEVEN DAYS PROVIDED THAT THE CONCRETE HAS REACHED 85% OF THE 28-DAY COMPRESSIVE STRENGTH. THE BRIDGE RAIL CONCRETE SHALL MEET ALL OTHER SPECIFICATIONS OF SECTION 501 OF THE STANDARD SPECIFICATIONS.
- WATER REPELLENT, SILANE SHALL BE APPLIED TO ALL EXPOSED CONCRETE SURFACES, EXCEPT THE UNDERSIDE OF THE DECK BETWEEN DRIP NOTCHES.
- THE BRIDGE RAIL AND APPROACH SLAB CONCRETE SHALL OBTAIN 85 PERCENT OF THE SPECIFIED 28 DAY COMPRESSIVE STRENGTH PRIOR TO ANY VEHICULAR LOADING.

REINFORCING STEEL

- TEST BARS SHALL BE PROVIDED IN ACCORDANCE WITH THE "VERMONT AGENCY OF TRANSPORTATION MATERIAL SAMPLING MANUAL" AVAILABLE ON THE AGENCY WEBSITE. A MINIMUM OF TWO TEST SECTIONS ARE REQUIRED FOR EACH SIZE, BRAND, AND GRADE OR TYPE OF REINFORCING. SEE THE MANUAL FOR ACCEPTABLE DIMENSIONS OF TEST SECTIONS. ALL COSTS ASSOCIATED WITH PROVIDING BARS FOR TESTING WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPROPRIATE PRECAST ITEM.

17. MINIMUM CLEAR COVER FOR REINFORCING STEEL SHALL BE AS FOLLOWS:

ALONG BACK FACES OF WALLS AGAINST EARTH	2 INCH
ALONG TOP SURFACE OF DECK SLAB:	2 ½ INCH
ALONG BOTTOM SURFACE OF PBU:	1 ½ INCH
ELSEWHERE UNLESS OTHERWISE INDICATED:	3 INCH

PRECAST ABUTMENTS AND POST-TENSIONING

- IF A VERTICAL CONSTRUCTION JOINT IS REQUIRED BY THE CONTRACTOR FOR SHIPMENT OF THE ABUTMENTS, THE SECTIONS SHALL BE KEYED AND MATCH CAST. A JOINT DETAIL SHALL BE SHOWN ON THE FABRICATION DRAWINGS. EACH JOINT SHALL NOT BE LOCATED CLOSER THAN 1'-0" AWAY FROM THE EDGE OF PILE CAVITY. NO LESS THAN TWO PILES SHALL SUPPORT EACH PRECAST ABUTMENT SECTION.
- EPOXY BONDING COMPOUND SHALL BE APPLIED TO ALL VERTICAL MATCH CAST CONSTRUCTION JOINTS. SEE AGENCY WEBSITE FOR A LIST OF APPROVED EPOXY BONDING COMPOUNDS. PAYMENT FOR EPOXY WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPROPRIATE PRECAST ITEM.
- POST-TENSIONING AND ASSOCIATED ITEMS ARE ONLY REQUIRED IF THE PILE CAP IS CONSTRUCTED OF MORE THAN ONE UNIT. POST-TENSIONING STRANDS SHALL BE COVERED WITH SEAMLESS POLYPROPYLENE SHEATH (WITH CORROSION INHIBITOR GREASE BETWEEN SHEATH AND STRAND) FOR THE LENGTH OF THE STRAND, EXCEPT AT ANCHORAGE LOCATIONS. ANY POST-TENSIONING STRANDS AND CONDUITS SHALL ADHERE TO THE REQUIREMENTS OF SECTION 510 - PRESTRESSED CONCRETE. GALVANIZED ANCHOR ASSEMBLIES, CONDUIT, POLYPROPYLENE SHEATH, AND POST-TENSIONING STRANDS WILL BE INCLUDED IN THE UNIT PRICE BID FOR THE APPROPRIATE PRECAST ITEM.
- POST-TENSIONING SHALL BE COMPLETED PRIOR TO POURING THE PILE CAVITY CLOSURE POUR.

STRUCTURAL ELEMENT	CONCRETE		REINFORCING STEEL	
	TO MEET THE REQUIREMENTS FOR:	PAYMENT TO BE INCLUDED IN:	TO MEET THE REQUIREMENTS FOR:	PAYMENT TO BE INCLUDED IN:
PREFABRICATED BRIDGE UNITS (INCLUDES REINFORCING STEEL LABELED SR2-SR6 AND ER1-ER5)	900.640 "SPECIAL PROVISION (PREFABRICATED BRIDGE UNIT SUPERSTRUCTURE)"	ITEM 900.640 "SPECIAL PROVISION (PREFABRICATED BRIDGE UNIT SUPERSTRUCTURE) (FPQ)"	507.11 "REINFORCING STEEL, LEVEL I (EPOXY COATED)"	ITEM 900.640 "SPECIAL PROVISION (PREFABRICATED BRIDGE UNIT SUPERSTRUCTURE) (FPQ)"
SUPERSTRUCTURE LONGITUDINAL CLOSURE POURS (INCLUDES REINFORCING STEEL LABELED SR1)	900.608 "SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, RAPID SET)"	900.608 "SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, RAPID SET) (FPQ)"	507.11 "REINFORCING STEEL, LEVEL I (EPOXY COATED)"	507.11 "REINFORCING STEEL, LEVEL I (EPOXY COATED) (FPQ)"
PCU 1 (INCLUDES REINFORCING STEEL LABELED A1-A10)	540.10 "PRECAST CONCRETE STRUCTURE" OR 900.645 "SPECIAL PROVISION (CONTRACTOR FABRICATED PRECAST CONCRETE STRUCTURE)"	ITEM 540.10 "PRECAST CONCRETE STRUCTURE (ABUTMENT #1)" OR ITEM 900.645 "SPECIAL PROVISION (CONTRACTOR FABRICATED PRECAST CONCRETE STRUCTURE) (ABUTMENT #1)"	507.11 "REINFORCING STEEL, LEVEL I" FOR REINFORCING COMPLETELY BELOW BRIDGE SEAT. 507.11 "REINFORCING STEEL, LEVEL I (EPOXY COATED)" FOR REINFORCING STEEL EXTENDING ABOVE BRIDGE SEAT.	ITEM 540.10 "PRECAST CONCRETE STRUCTURE (ABUTMENT #1)" OR ITEM 900.645 "SPECIAL PROVISION (CONTRACTOR FABRICATED PRECAST CONCRETE STRUCTURE) (ABUTMENT #1)"
PCU 2 (INCLUDES REINFORCING STEEL LABELED A1, A3-A6, AND A8-A10)	540.10 "PRECAST CONCRETE STRUCTURE" OR 900.645 "SPECIAL PROVISION (CONTRACTOR FABRICATED PRECAST CONCRETE STRUCTURE)"	ITEM 540.10 "PRECAST CONCRETE STRUCTURE (ABUTMENT #2)" OR ITEM 900.645 "SPECIAL PROVISION (CONTRACTOR FABRICATED PRECAST CONCRETE STRUCTURE) (ABUTMENT #2)"	507.11 "REINFORCING STEEL, LEVEL I" FOR REINFORCING COMPLETELY BELOW BRIDGE SEAT. 507.11 "REINFORCING STEEL, LEVEL I (EPOXY COATED)" FOR REINFORCING STEEL EXTENDING ABOVE BRIDGE SEAT.	ITEM 540.10 "PRECAST CONCRETE STRUCTURE (ABUTMENT #2)" OR ITEM 900.645 "SPECIAL PROVISION (CONTRACTOR FABRICATED PRECAST CONCRETE STRUCTURE) (ABUTMENT #2)"
PCU 3 (INCLUDES REINFORCING STEEL LABELED WR1-WR3)	540.10 "PRECAST CONCRETE STRUCTURE" OR 900.645 "SPECIAL PROVISION (CONTRACTOR FABRICATED PRECAST CONCRETE STRUCTURE)"	ITEM 540.10 "PRECAST CONCRETE STRUCTURE (ABUTMENT #1)" OR ITEM 900.645 "SPECIAL PROVISION (CONTRACTOR FABRICATED PRECAST CONCRETE STRUCTURE) (ABUTMENT #1)"	507.11 "REINFORCING STEEL, LEVEL I" FOR REINFORCING COMPLETELY BELOW BRIDGE SEAT. 507.11 "REINFORCING STEEL, LEVEL I (EPOXY COATED)" FOR REINFORCING STEEL EXTENDING ABOVE BRIDGE SEAT.	ITEM 540.10 "PRECAST CONCRETE STRUCTURE (ABUTMENT #1)" OR ITEM 900.645 "SPECIAL PROVISION (CONTRACTOR FABRICATED PRECAST CONCRETE STRUCTURE) (ABUTMENT #1)"
PCU 4-5 (INCLUDES REINFORCING STEEL LABELED WR1-WR3)	540.10 "PRECAST CONCRETE STRUCTURE" OR 900.645 "SPECIAL PROVISION (CONTRACTOR FABRICATED PRECAST CONCRETE STRUCTURE)"	ITEM 540.10 "PRECAST CONCRETE STRUCTURE (ABUTMENT #2)" OR ITEM 900.645 "SPECIAL PROVISION (CONTRACTOR FABRICATED PRECAST CONCRETE STRUCTURE) (ABUTMENT #2)"	507.11 "REINFORCING STEEL, LEVEL I" FOR REINFORCING COMPLETELY BELOW BRIDGE SEAT. 507.11 "REINFORCING STEEL, LEVEL I (EPOXY COATED)" FOR REINFORCING STEEL EXTENDING ABOVE BRIDGE SEAT.	ITEM 540.10 "PRECAST CONCRETE STRUCTURE (ABUTMENT #2)" OR ITEM 900.645 "SPECIAL PROVISION (CONTRACTOR FABRICATED PRECAST CONCRETE STRUCTURE) (ABUTMENT #2)"
ABUTMENT PILE CAVITIES	900.608 "SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, RAPID SET)"	ITEM 900.608 "SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, RAPID SET) (FPQ)"	N/A	N/A
ABUTMENT CLOSURE/END DIAPHRAGM CLOSURE POUR (INCLUDES REINFORCING STEEL LABELED C1-C7)	900.608 "SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, RAPID SET)"	ITEM 900.608 "SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, RAPID SET) (FPQ)"	507.11 "REINFORCING STEEL, LEVEL I (EPOXY COATED)"	507.11 "REINFORCING STEEL, LEVEL I (EPOXY COATED) (FPQ)"
CAST-IN-PLACE APPROACH SLABS (INCLUDES REINFORCING STEEL DETAILED IN APPROACH SLAB DETAILS SHEET)	501.34 "CONCRETE, HIGH PERFORMANCE CLASS B"	ITEM "501.34 CONCRETE, HIGH PERFORMANCE CLASS B (FPQ)"	507.11 "REINFORCING STEEL, LEVEL I (EPOXY COATED)"	507.11 "REINFORCING STEEL, LEVEL I (EPOXY COATED) (FPQ)"
TEXAS STYLE BRIDGE RAIL (INCLUDES REINFORCING STEEL LABELED BR1-BR3)	501.34 "CONCRETE, HIGH PERFORMANCE CLASS A"	ITEM 900.640 "SPECIAL PROVISION (BRIDGE RAILING, TEXAS)"	507.11 "REINFORCING STEEL, LEVEL I (EPOXY COATED)"	ITEM 900.640 "SPECIAL PROVISION (BRIDGE RAILING, TEXAS)"

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