

GENERAL

- ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE STATE OF VERMONT AGENCY OF TRANSPORTATION 2011 STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND THE 2012 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS AND THEIR LATEST REVISIONS.
- THE BRIDGE IS DESIGNED FOR HL-93 LIVE LOAD.
- ITEM 529.15 "REMOVAL OF STRUCTURE" SHALL BE USED FOR THE REMOVAL OF THE EXISTING STRUCTURE (SUPERSTRUCTURE AND PIER) AND ANY PORTION OF THE ABUTMENTS AND WINGWALLS/RETAINING WALLS OUTSIDE THE LIMITS OF STRUCTURE EXCAVATION OR UNCLASSIFIED CHANNEL EXCAVATION. PIER SHALL BE REMOVED TO 2 FEET BELOW EXISTING GROUND, OR TO BEDROCK IF BEDROCK IS ENCOUNTERED LESS THAN 2 FEET BELOW EXISTING GROUND. ALL WORK RELATED TO THE PIER REMOVAL, INCLUDING INSTALLATION AND REMOVAL OF TEMPORARY STONE FILL (CLEAN) TYPE 1, SHALL BE PAID UNDER ITEM 529.15 "REMOVAL OF STRUCTURE".
- ALL DIMENSIONS SHOWN IN THE PLANS ARE HORIZONTAL OR VERTICAL AND ARE GIVEN AT 68 DEGREES FAHRENHEIT, UNLESS NOTED OTHERWISE.
- SEE THE PROJECT SPECIAL PROVISIONS FOR THE PROJECT SCHEDULE AND ALLOWABLE CLOSURE PERIOD.
- THE EXISTING STRUCTURAL STEEL IS PAINTED WITH 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 DISPOSAL OF THE REMOVED EXISTING STRUCTURAL STEEL.
- ALL CORNERS OF CONCRETE SHALL BE CHAMFERED 3/4" UNLESS NOTED OTHERWISE.
- MODIFICATIONS TO EXISTING UTILITIES, INCLUDING UTILITY POLES AND AERIAL ELECTRIC, SHALL BE THE RESPONSIBILITY OF THE UTILITY COMPANY. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY TO IMPLEMENT ALL MODIFICATIONS. SEE THE UTILITY SPECIAL PROVISIONS AND CONSTRUCTION SEQUENCE NOTES FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- THE METHOD OF FORMING FOR SUBSEQUENT POURS AFTER PLACING PRECAST/PRESTRESSED SUPERSTRUCTURE UNITS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR IS ENCOURAGED TO WORK WITH THE FABRICATOR IF ADDITIONAL SUPPORTS MAY BE REQUIRED. IN NO CASE SHALL THE CONTRACTOR ATTACH ADDITIONAL FORM OR SCREED SUPPORTS BY DRILLING OR SIMILAR MEANS INTO ANY PRECAST/PRESTRESSED SUPERSTRUCTURE UNITS.
- WATER REPELLENT, SILANE, SHALL BE APPLIED TO ALL EXPOSED CONCRETE (CAST-IN-PLACE AND PRECAST) SURFACES, EXCEPT FROM FACE OF CURB TO FACE OF CURB ON TOP OF THE CONCRETE BRIDGE DECK OVERLAY. SILANE SHALL BE APPLIED ON ALL EXPOSED SURFACES TO 1'-0" (MIN.) BELOW FINISH GRADE. SILANE FOR PRECAST ITEMS SHALL BE SHOP APPLIED AND PAYMENT SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE APPROPRIATE PRECAST ITEM. FOR SILANE APPLIED TO THE CAST-IN-PLACE CONCRETE RETAINING WALL AND ANY EXPOSED PORTIONS OF FOOTINGS, AS WELL AS CAST-IN-PLACE SUPERSTRUCTURE ELEMENTS (DECK FASCIA AND CURBS) PAYMENT SHALL BE MADE UNDER ITEM 514.10.

EARTHWORK:

- BEDROCK IS PRESENT AT THE ABUTMENTS, WINGWALLS AND THE RETAINING WALL. REMOVAL OF BEDROCK TO ACCOMMODATE THE MINIMUM FOOTING THICKNESSES DETAILED IN THE PLANS SHALL BE PAID FOR UNDER ITEM 204.25 "STRUCTURE EXCAVATION".
- "STONE FILL, TYPE IV", "GEOTEXTILE UNDER STONE FILL", AND "GRUBBING MATERIAL" UNDER THE BRIDGE AS SHOWN IN THE PLANS SHALL BE PLACED BEFORE THE NEW BEAMS ARE SET.
- DO NOT EXCAVATE BEDROCK IN ORDER TO PLACE THE SPECIFIED DEPTH OF "STONE FILL, TYPE IV". FOR LOCATIONS WHERE THE SPECIFIED DEPTH OF "STONE FILL, TYPE IV" CAN NOT BE PLACED DUE TO PRESENCE OF BEDROCK, CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AND SHALL PLACE "STONE FILL, TYPE IV" AND RELATED ITEMS AS DIRECTED BY THE ENGINEER.
- UPON COMPLETION OF THE EXCAVATION FOR SUBSTRUCTURES FOUNDED ON BEDROCK AND PRIOR TO PLACING FORMWORK, THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER SO THAT THE RESIDENT ENGINEER MAY NOTIFY THE PROJECT MANAGER AND THE VTRANS STATE GEOLOGIST. THE GEOLOGIST WILL DETERMINE IF THE BEDROCK IS COMPETENT TO OBTAIN THE NOMINAL BEARING RESISTANCE AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AT LEAST 72 HRS PRIOR TO NEED FOR ANALYSIS.
- BEDROCK THAT IS EXCAVATED FOR FOOTINGS SHALL BE EXCAVATED TO PROVIDE A LEVEL SURFACE, OR AS DIRECTED BY THE ENGINEER.
- FOOTINGS SHALL BE FOUNDED ON BEDROCK WHICH HAS BEEN CLEANED OF ALL LOOSE ROCK AND DEBRIS TO ENSURE THAT SUBSTRUCTURES ARE PLACED ON COMPETENT ROCK.
- IF SUITABLE BEDROCK ISN'T ENCOUNTERED UNTIL ELEVATIONS AS LOW AS THE FOLLOWING, THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER SO THAT THE SUITABILITY OF THE SUBSTRUCTURE DESIGNS CAN BE EVALUATED FOR THE UNFORESEEN DESIGN CONDITIONS:
 - ELEV. = 981.7 FOR ABUTMENT 1, INCLUDING WW1 & WW2
 - ELEV. = 982.2 FOR ABUTMENT 2, INCLUDING WW3 & WW4
 - ELEV. = 985.3 FOR TALLEST SECTION OF RETAINING WALL ADJACENT TO WW3
 - ELEV. = 989.6 FOR SHORTEST SECTION OF CANTILEVER RETAINING WALL
- IF BEDROCK IS ENCOUNTERED UNDER ROADWAY, IT SHALL BE REMOVED TO THE SUBGRADE ELEVATION AND SHALL BE PAID FOR UNDER ITEM 203.16. BEDROCK AT THE SUBGRADE ELEVATION SHALL BE DRILLED AND BLASTED AND SHALL BE PAID FOR UNDER ITEM 205.20.

SUBSTRUCTURES AND APPROACH SLABS:

- THE UNIT PRICE FOR EACH PRECAST ABUTMENT SHALL INCLUDE ALL SEGMENTS INCLUDING THE ASSOCIATED PRECAST WINGWALLS AND ALL LABOR AND MATERIALS TO CONNECT WINGWALLS. THIS WORK SHALL BE PAID FOR UNDER ITEM 540.10, "PRECAST CONCRETE STRUCTURE (ABUTMENT #1)" OR "PRECAST CONCRETE STRUCTURE (ABUTMENT #2)" AS APPROPRIATE.
- IF VERTICAL CONSTRUCTION JOINTS ARE REQUIRED BY THE CONTRACTOR FOR SHIPMENT OF THE ABUTMENTS AND/OR WINGWALLS, THEN THE SECTIONS SHALL BE KEYED AND MATCH CAST. A JOINT DETAIL SHALL BE SHOWN ON THE FABRICATION DRAWINGS.

- CONTRACTOR/FABRICATOR SHALL SHOP VERIFY PROPER FIT OF ALL BRIDGE SUBSTRUCTURE ELEMENTS TO BE CONNECTED.
- 4" DIAMETER WEEPHOLES SHALL BE PROVIDED IN ALL ABUTMENTS, WINGWALLS AND THE RETAINING WALL AT A MAXIMUM SPACING OF 10'-0". WEEPHOLES SHALL BE LEVEL AND SHALL BE LOCATED 1'-0" ABOVE THE TOP OF FOOTING ELEVATION.
- REINFORCEMENT IN TOP OF ABUTMENTS SHALL BE CENTERED ABOUT THE ANCHOR RODS SO THAT NO REINFORCEMENT IS DAMAGED DURING ANCHOR ROD INSTALLATION.
- CONTRACTOR SHALL PLACE LOAD DISTRIBUTING MATS BEHIND THE SUBSTRUCTURES FOR CONSTRUCTION ACTIVITIES SUCH AS DELIVERY AND INSTALLATION OF PRESTRESSED BOX BEAMS, ETC., WHEN LOADS ARE WITHIN 25' FROM THE BACK OF THE ABUTMENT AND/OR WINGWALLS. CONTRACTOR SHALL PROVIDE CALCULATIONS AND PLANS TO DOCUMENT SUITABILITY OF THE SUBSTRUCTURES FOR ALL CONSTRUCTION LOADS IN ACCORDANCE WITH SECTION 105. LOAD DISTRIBUTING MATS SHALL BE PAID UNDER ITEM 510.21.
- CONTRACTOR IS ADVISED THAT THE BEDROCK ELEVATIONS SHOWN IN THE BORINGS VARY. TO REDUCE EXCAVATION OF BEDROCK, TOP OF FOOTING ELEVATIONS WERE SET AND FOOTING THICKNESSES ARE EXPECTED TO VARY. IT IS LIKELY THAT FOOTING THICKNESSES GREATER THAN 5' WILL OCCUR. AT LOCATIONS WHERE FOOTING THICKNESSES ARE 3'-0" OR GREATER, CONTRACTOR SHALL PLACE A GRID OF #5@12" HORIZONTAL AND VERTICAL REINFORCING IN THE FACE OF THE FOOTING AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT FOR THESE ADDITIONAL #5 BARS SHALL BE PAID UNDER ITEM 900.608, "SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, MASS POUR)".
- PLACE JOINT FILLER/CORK BETWEEN EXTERIOR BEAMS/CURBS AND ABUTMENT CHEEKWALLS AT ALL FOUR CORNERS OF BRIDGE. PAYMENT FOR JOINT FILLER/CORK SHALL BE PAID FOR UNDER ITEM 510.21.
- DRAIN PIPES SHALL BE PLACED AT ALL LOW POINTS OF THE APPROACH SLAB SEATS IN THE CURTAIN WALLS AT EACH END OF THE BRIDGE.
- FOR CAST-IN-PLACE FOOTINGS, CONTRACTOR MAY SUBMIT AN ALTERNATE CONCRETE MIX DESIGN WITH A HIGHER STRENGTH IF ALL OTHER PROVISIONS OF ITEM 900.608, SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, MASS POUR) ARE MET.
- PRIOR TO BACKFILLING, GROUT IN GROUTED SPLICE COUPLERS SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 3500 PSI BASED ON MANUFACTURER'S RECOMMENDATIONS. PROVIDE APPROPRIATE CUBE MOLDS AS DESCRIBED IN AASHTO T106 FOR 3 SETS OF 3 DAY CUBES, 3 SETS OF 28 DAY CUBES, AND A MINIMUM OF 3 MORE CUBES TO TEST FOR THE 3500 PSI MINIMUM (PRIOR TO BACKFILLING) IN ACCORDANCE WITH SUBSECTION 540.11.
- ABUTMENTS SHALL BE BACKFILLED TO 1'-6" BELOW TOP OF ABUTMENT BEAM SEATS PRIOR TO ERECTING BEAMS.

BRIDGE DECK:

- CONCRETE FOR BRIDGE DECK OVERLAY AND CURTAIN WALLS SHALL BE PLACED IN ONE PLACEMENT STARTING AT THE ABUTMENT 1 CURTAIN WALL AND SHALL PROCEED CONTINUOUSLY TO THE ABUTMENT 2 CURTAIN WALL. BRIDGE DECK OVERLAY SHALL HAVE A BROOM FINISH AND LONGITUDINAL DECK GROOVING.

REINFORCEMENT:

- ALL REINFORCING STEEL SHALL BE DETAILED AND FABRICATED USING PROCEDURES AND TOLERANCES IN ACCORDANCE WITH APPLICABLE PUBLICATIONS OF THE "CONCRETE REINFORCING STEEL INSTITUTE".
- ALL LEVEL REINFORCING STEEL SHALL BE EPOXY COATED, EXCEPT FOR REINFORCEMENT IN FOOTINGS.
- ALL MECHANICAL CONNECTORS IN ABUTMENTS AND WINGWALLS SHALL BE GROUTED SPLICE COUPLERS. ALL MECHANICAL CONNECTORS SHALL BE CAPABLE OF ATTAINING 125% OF THE SPECIFIED YIELD STRENGTH OF THE REINFORCING BAR BEING SPLICED. ADDITIONAL MECHANICAL CONNECTORS SHALL BE PROVIDED TO TRANSFER LOADS FOR THE PURPOSE OF MATERIAL TESTING. STAINLESS STEEL REBAR CONNECTORS MAY BE USED WITH DUAL COATED REBAR.
- GROUT PORTS FOR GROUTED SPLICE COUPLERS SHALL BE ON THE BACK FACE OF ELEMENTS (HIDDEN FROM VIEW) WHENEVER POSSIBLE.
- GROUTED SPLICE COUPLERS SHALL HAVE A CLEAR COVER OF 3", EXCEPT CLEAR COVER SHALL BE 2" AT THE BACK OF ABUTMENT AND WINGWALL STEMS, UNLESS SPECIFIED OTHERWISE ON THE PLANS. CLEAR COVER SHALL BE DETAILED ON THE FABRICATION DRAWINGS. DIAMETER OF GROUTED SPLICE COUPLERS SHALL BE PER MANUFACTURER STANDARD.
- GROUT FOR GROUTED SPLICE COUPLERS SHALL MEET THE REQUIREMENTS OF SUBSECTION 540.11. GROUT AND PLASTIC SHIMS, INCLUDING INSTALLATION, SHALL BE INCIDENTAL TO THE APPROPRIATE PRECAST UNIT PAID UNDER ITEM 540.10.
- PRECAST FABRICATOR SHALL PROVIDE TEMPLATES OF ACTUAL GROUTED SPLICE COUPLER LOCATIONS IN THE ABUTMENTS AND WINGWALLS TO THE CONTRACTOR FOR THE PURPOSE OF PLACING FOOTING REINFORCEMENT TO MATCH.
- ALL REINFORCEMENT SHALL HAVE A CLEAR COVER OF 3" UNLESS SPECIFIED OTHERWISE ON THE PLANS.
- DOWELS SHALL BE DRILLED AND GROUTED IN TO BED ROCK AS SHOWN ON THE PLANS OR AS ORDERED BY THE ENGINEER. THE DOWELS SHALL HAVE A 2'-0" MINIMUM EMBEDMENT IN THE BED ROCK AND SHALL EXTEND IN THE FOOTING A MINIMUM OF 1'-6", UNLESS NOTED OTHERWISE.

PRESTRESSED BOX BEAMS:

- CONCRETE IN BOX BEAMS SHALL ATTAIN F'c = 8 KSI (MINIMUM) AT 28 DAYS.
- PRESTRESS SHALL NOT BE TRANSFERRED TO THE CONCRETE UNTIL THE CONCRETE HAS ATTAINED A COMPRESSIVE STRENGTH, AS SHOWN BY CYLINDER TEST, OF AT LEAST F'ci = 6 KSI (MINIMUM RELEASE STRENGTH).
- ALL PRETENSIONING STRANDS SHALL BE 0.6 INCH DIAMETER, UNCOATED, SEVEN-WIRE, LOW RELAXATION STEEL STRANDS AND SHALL CONFORM TO AASHTO M 203. THE TENSILE STRENGTH OF THE PRETENSIONING STRANDS SHALL BE 270 KSI AND THE INITIAL TENSION PER 0.6 INCH DIAMETER STRAND SHALL BE 44 KIPS.
- ALL POST-TENSIONING STRANDS SHALL BE 0.6 INCH DIAMETER, SEVEN-WIRE, LOW RELAXATION STEEL STRANDS AND SHALL CONFORM TO AASHTO M 203. THE TENSILE STRENGTH OF THE POSTTENSIONING STRANDS SHALL BE 270 KSI AND THE TENSION PER 0.6 INCH DIA. STRAND SHALL BE 47 KIPS.
- THE TOP OF ALL BOX BEAMS SHALL BE GIVEN A RAKE FINISH (1/4 INCH AMPLITUDE) TRANSVERSELY ACROSS THE WIDTH.

- THE FABRICATOR IS FULLY RESPONSIBLE FOR THE DESIGN OF THE LIFTING DEVICES, WHICH SHALL BE ADEQUATE FOR THE SAFETY FACTORS REQUIRED BY THE ERECTION PROCEDURE.
- PRECASTER SHALL SANDBLAST EACH SHEAR KEY FACE OF ALL BEAMS PRIOR TO DELIVERY TO THE BRIDGE LOCATION.
- VOID DRAINS IN BOX BEAMS SHALL BE NONFERROUS 3/4 INCH DIAMETER DRAIN MATERIAL. CONTRACTOR SHALL CLEAN ALL VOID DRAINS AFTER ERECTION.
- ANCHOR RODS ARE INCLUDED IN ITEM 510.21, PRESTRESSED CONCRETE BOX BEAMS. ANCHOR RODS SHALL BE AASHTO M314/ASTM F1554 GRADE 55 AND SHALL BE ZINC COATED IN ACCORDANCE WITH SUBSECTION 714.06. DUE TO THE LONG BEAM LENGTHS, FABRICATOR AND CONTRACTOR SHALL USE BEST PRECAST PRESTRESSED PRACTICES TO KEEP THE BOX BEAM CAMBERS AS CLOSE TO THOSE SHOWN IN THE PLANS AS PRACTICALLY POSSIBLE. ADDITIONALLY, AT ERECTION, THE MIDSPAN CAMBER FOR THE BOX BEAM WITH THE LEAST CAMBER SHALL BE WITHIN 1" OF THE MIDSPAN CAMBER FOR THE BOX BEAM WITH THE GREATEST CAMBER.
- ITEM 510.24, "GROUTING SHEAR KEYS", APPLIES EXCLUSIVELY TO THE SHEAR KEYS IN THE PRESTRESSED BOX BEAMS.
- ENDS OF BOX BEAMS SHALL BE VERTICAL PRIOR TO PLACEMENT OF CAST-IN-PLACE DECK AND CURTAIN WALLS.
- AT LEAST 3 BUSINESS DAYS PRIOR TO DECK PLACEMENT, CONTRACTOR SHALL PROVIDE TO THE ENGINEER FOR APPROVAL ACTUAL TOP OF BEAM ELEVATIONS ALONG BEAM CENTERLINE AT CENTERLINE OF BEARINGS ABUT 1 & ABUT 2, AS WELL AS AT 1/4, 1/2 AND 3/4 SPAN LOCATIONS FOR EACH BEAM TO VERIFY ACTUAL DECK THICKNESSES. VALUES FOR MIDSPAN CAMBER AT TRANSFER SHALL BE DETAILED ON THE FABRICATION DRAWINGS.

PRESTRESSED BOX BEAM INSTALLATION AND POST-TENSIONING:

- INSTALL BEARINGS AT SPECIFIED BEAM SEAT ELEVATIONS.
- VERIFY THAT ALL SHEAR KEY FASCIAS OF THE BOX BEAMS HAVE BEEN SANDBLASTED.
- IMMEDIATELY PRIOR TO ERECTING THE BOX BEAMS, THE CONTRACTOR SHALL POWER WASH THE BOX BEAM FASCIAS WITH WATER TO REMOVE DUST AND OTHER DEBRIS.
- PLACE BOX BEAMS TO FIT WITHIN THE WORKING LINES.
- AS WORK PROGRESSES, INSTALL HARDWOOD WEDGES BETWEEN ADJACENT BEAMS TO MAINTAIN PROPER JOINT OPENING WITH A MINIMUM OF ONE WEDGE AT EACH LATERAL TIE.
- PLACE AND GROUT ANCHOR RODS INTO ABUTMENTS. DO NOT GROUT ANCHOR RODS TO BOX BEAMS AT THIS TIME (SEE NOTE 16).
- INSTALL OAKUM OR EQUIVALENT JOINT FILLER AT THE BOTTOM OF THE SHEAR KEYS AS SHOWN ON THE PLANS.
- AFTER ALL BOX BEAMS HAVE BEEN ERECTED, INSTALL THE TRANSVERSE POST-TENSIONING TENDONS INTO THE DUCTS. EACH TRANSVERSE TENDON SHALL BE COVERED BY A SEAMLESS POLYPROPYLENE SHEATH (WITH CORROSION INHIBITER GREASE BETWEEN SHEATH AND STRAND) FOR THE LENGTH OF STRAND EXCEPT AT ANCHORAGE LOCATIONS.
- VERIFY THAT HARDWOOD WEDGES ARE IN PLACE.
- USING A CALIBRATED JACK, POST-TENSION TENDONS TO APPROXIMATELY 5 KIPS TO REMOVE SAG IN THE TIE AND TO SEAT THE CHUCK. DUE TO THE SIGNIFICANT SKEW, CONTRACTOR SHALL ENSURE THAT BEAMS ARE SUFFICIENTLY BRACED TO AVOID SLIPPAGE OF THE BEAMS, AS WELL AS TO AVOID APPLYING HORIZONTAL LOADS TO THE BEARINGS DURING POST-TENSIONING.
- CLEAN EACH SHEAR KEY JOINT WITH AN OIL FREE AIR-BLAST IMMEDIATELY PRIOR TO GROUT PLACEMENT. VERIFY THAT THE JOINT FILLER (BACKER ROD) IS STILL IN PLACE.
- GROUT FOR SHEAR KEYS SHALL BE A PREPACKAGED GROUT PRODUCT THAT PROVIDES HIGH BOND STRENGTH. PLACEMENT OF GROUT IN THE BOX BEAM SHEAR KEYS SHALL FOLLOW VTRANS SUBSECTION 510.13, AND SHALL BE PLACED MANUALLY. ADDITIONAL JOINT PREPARATION AND GROUT PLACEMENT SHALL FOLLOW THE GROUT MANUFACTURER'S RECOMMENDATIONS.
- CAREFULLY ROD SHEAR KEY JOINTS TO ELIMINATE ANY POSSIBILITY OF VOIDS.
- GROUT SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 1500 PSI AND SHALL HAVE CURED FOR A MINIMUM OF 3 DAYS, BASED ON THE MANUFACTURER'S RECOMMENDATIONS, PRIOR TO STRESSING THE TRANSVERSE TENDONS.
- USING A CALIBRATED JACK, POST-TENSION TENDONS TO 47 KIPS FOR EACH 0.6 INCH DIAMETER STRAND. (SEE CAUTION IN NOTE 10). BEGIN WITH THE TENDONS AT EACH END OF THE BRIDGE AND THEN WORK SYMMETRICALLY TOWARDS MIDSPAN FROM EACH END.
- AFTER BRIDGE IS FULLY POST-TENSIONED FILL THE ANCHOR ROD SLEEVES AT EACH END OF BEAMS AS SHOWN IN THE PLANS.
- CLEAN ALL BOX BEAM DRAINS.
- REMOVE HARDWOOD WEDGES AND PATCH FASCIA BEAMS AT TRANSVERSE TIES WITH GROUT.
- NO TRAFFIC OR HEAVY EQUIPMENT SHALL BE PERMITTED ON THE BRIDGE UNTIL ALL TRANSVERSE TIES HAVE BEEN PROPERLY AND FULLY TENSIONED.

CONSTRUCTION SEQUENCE:

- THE PROJECT WILL REQUIRE CAREFUL PLANNING AND SEQUENCING TO PERFORM ALL CONSTRUCTION TASKS AND MEET ALL REQUIRED SAFETY PROVISIONS. THE CONTRACTOR IS DIRECTED TO THE SUGGESTED CONSTRUCTION SEQUENCE BELOW:
 - MOBILIZE TO THE SITE AND INSTALL TRAFFIC CONTROL DEVICES AND TEMPORARY EPSC MEASURES.
 - INITIATE TRAFFIC CONTROL PHASE 1 - SINGLE LANE ALTERNATING 1-WAY TRAFFIC DURING WORKING HOURS.
 - COMPLETE BEDROCK/LEDGE REMOVAL OPERATIONS STA 504+50 RT TO STA 506+50 RT.
 - NOTIFY UTILITY COMPANIES TO PERFORM PERMANENT UTILITY RELOCATIONS.
 - INITIATE TRAFFIC CONTROL PHASE 2 - BRIDGE CLOSURE PERIOD.
 - REMOVE AND REPLACE BRIDGE NO. 19.
 - COMPLETE ASSOCIATED ROADWAY APPROACH WORK.
 - END BRIDGE CLOSURE PERIOD.
 - COMPLETE FINAL TREATMENTS AND ADDRESS PUNCHLIST ITEMS.
 - DEMOLIBLIZE FROM SITE AND REMOVE ALL TRAFFIC CONTROL AND TEMPORARY EPSC MEASURES.

CONCRETE:		REINFORCING STEEL:	
STRUCTURAL ELEMENT	CONTRACT PAY ITEM	SHALL MEET THE REQUIREMENTS OF:	PAYMENT TO BE INCLUDED IN:
PRESTRESSED CONCRETE BOX BEAMS (F'c = 8000 PSI)	ITEM 510.21, "PRESTRESSED CONCRETE BOX BEAMS (45" X 48")"	REINFORCING STEEL, LEVEL II	ITEM 510.21, "PRESTRESSED CONCRETE BOX BEAMS (45" X 48" BEAMS)"
CAST-IN-PLACE CONCRETE OVERLAY, CURBS AND CURTAIN WALLS (F'c = 4000 PSI)	ITEM 501.33, "CONCRETE, HIGH PERFORMANCE CLASS A" *	REINFORCING STEEL, LEVEL II	ITEM 507.12, "REINFORCING STEEL, LEVEL II"
CAST-IN-PLACE CONCRETE CLOSURE POURS FOR PRECAST APPROACH SLABS (F'c = 5000 PSI)	ITEM 900.608, "SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, RAPID SET) (FPQ)"	REINFORCING STEEL, LEVEL II	ITEM 507.12, "REINFORCING STEEL, LEVEL II"
ABUTMENT AND WINGWALL STEMS (F'c = 5000 PSI)	ITEM 540.10, "PRECAST CONCRETE STRUCTURE (ABUTMENT #1)" OR "PRECAST CONCRETE STRUCTURE (ABUTMENT #2)"	REINFORCING STEEL, LEVEL I	ITEM 540.10, "PRECAST CONCRETE STRUCTURE (ABUTMENT #1)" OR "PRECAST CONCRETE STRUCTURE (ABUTMENT #2)"
FOOTINGS FOR ABUTMENTS, WINGWALLS, & RETAINING WALL (F'c = 3500 PSI)	ITEM 900.608, "SPECIAL PROVISION (HIGH PERFORMANCE CONCRETE, MASS POUR)"	REINFORCING STEEL, LEVEL I	ITEM 507.11, "REINFORCING STEEL, LEVEL I" **
RETAINING WALL STEMS (F'c = 3500 PSI)	ITEM 501.34, "CONCRETE, HIGH PERFORMANCE CLASS B"	REINFORCING STEEL, LEVEL I	ITEM 507.11, "REINFORCING STEEL, LEVEL I"
APPROACH SLABS (F'c = 5000 PSI)	ITEM 540.10, "PRECAST CONCRETE STRUCTURE (APPROACH SLAB #1)" OR "PRECAST CONCRETE STRUCTURE (APPROACH SLAB #2)"	REINFORCING STEEL, LEVEL II	ITEM 540.10, "PRECAST CONCRETE STRUCTURE (APPROACH SLAB #1)" OR "PRECAST CONCRETE STRUCTURE (APPROACH SLAB #2)"

* WITH SHRINKAGE REDUCING ADMIXTURE. MAXIMUM AGGREGATE SIZE SHALL BE 3/4".
 ** EXCEPT AS NOTED ABOVE IN SUBSTRUCTURES AND APPROACH SLABS NOTE 7



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