



STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
16 STATE HOUSE STATION  
AUGUSTA, MAINE  
04333-0016

JOHN ELIAS BALDACCI  
GOVERNOR

DAVID A. COLE  
COMMISSIONER

September 18, 2007  
Subject: **Milbridge**  
Project No's BR-1006(700)X & STP-  
01006(800)X  
Pin No's 010067.00 & 010068.00  
**Amendment No. 2**

Dear Sir/Ms:

Please make the following change to the Bid Documents:

In the Bid Book, REMOVE the existing: "Schedule of Items" dated 070824, seven pages total and REPLACE with the attached updated: "Schedule of Items" dated 070917, seven pages total.

REMOVE the existing: "Special Provision, Section 502, Class 'A' Permeability" dated August 20, 2007 one page total.

Within the Bid Documents, CHANGE in pen and ink any reference to Class 'A' Concrete to Class 'LP' Concrete, with the exception of the "Structural Concrete Approach Slab".

In the Plans, on sheet two of forty-four titled: "Estimated Quantities and General Construction Notes" under the "General Construction Notes" DELETE in its entirety Note 17 that begins: "All substructure footings and walls...".

On sheet two of forty-four titled: "Estimated Quantities and General Construction Notes" under the "General Construction Notes" ADD the following Note #31 which reads: "All reinforcement couplers used must be capable of developing 520MPa tensile stress for the spliced reinforcement. Lap splices are shown for the pier closure placement, but mechanical couplers of sufficient strength may be used at the Contractor's option; set-screw type couplers are unacceptable. Payment for all reinforcement and any couplers used inside the prestressed beams shall be considered incidental to the respective prestressed concrete pay item. Payment for any couplers and all reinforcement including lap splices in the closure placements at the piers shall be considered incidental to Pay Item 502.25 Structural Concrete Superstructure Slab. Refer to Note #27." Make this change in pen and ink.

On plan sheet forty-one of forty-four titled: "Modified Concrete Transition Barrier" under the: "Reinforcing Steel Schedule" within Bar Mark-TB1952 CHANGE the Quantity from two to five. Make this change in pen and ink.



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REMOVE the existing plan sheet forty-two of forty-four titled: “Superstructure Details” and REPLACE with the attached updated: “Superstructure Details” plan sheet, dated September 12, 2007.

The following questions have been received.

**Question:** “How is the fill concrete under the T-Wall to be paid?”

**Response:** See change earlier in this amendment updating the Schedule of Items.

To better address payment for fill concrete, we have added Pay Item No. 502.56 Concrete Fill to the Schedule of Items and the Estimated Quantities. The estimated quantities are 90 Cubic Meters for Great South Bridge, 230 Cubic Meters for Great North Bridge and 320 Cubic Meters total.

**Question:** “If rock needs to be benched (note #25, p.2) how will that be paid.”

**Response:** Payment for all preparation of rock surfaces below the substructure foundations, including stepping when required and cleaning, is considered incidental to the respective substructure concrete pay items.

**Question:** “Are there any specifications for stay in place forms? (Note #17, p.2)”

**Response:** See change earlier in this amendment deleting Note 17.

**Question:** “Does the contractor have the option of using stay in place wood forms or stay in place sheet piling? (Note #18, p.2) If steel sheet piling is used for a cofferdam and concrete is placed as a seal, why are wood forms required?”

**Response:** Originally the contract required stay-in-place wood forms for the abutment breastwalls and the pier shafts as well as for any exposed vertical faces of the seal/footings. The purpose of the stay-in-place wood forms was to protect these concrete surfaces from accelerated deterioration evident in the range of the salt-water tide. Details for securing and preserving wood forms are problematic, so the requirement for stay-in-place wood forms is rescinded. See the answer above. The Contractor’s option to use stay-in-place piling for the cofferdam has nothing to do with the stay-in-place wood forms.

**Question:** “Why is there no quantity for structural concrete piers (placed under water) for the south bridge?”

**Response:** For practical purposes, the base of the Great South Bridge pier seal is at the Mean Low Water Elevation. The placement of the seal must be started at low tide, essentially in the dry. In other words it shall not be pumped or tremied into standing water. Details for proper disposal of any lime rich water entrapped in any of the cofferdams must be addressed in the Soil Erosion and Water Pollution Control Plan.

**Question:** “Ref. Note #22, p.2: Where does it show where portions of the existing seawall are to be reutilized?”

**Response:** There are no plans of the existing seawall available to the Designer or Contractors. There are no cross-sections of the existing seawall, and no specific details of the wall modifications. The intended work is shown in plan view on the General Plans. Note that on Sheet #3, at the southerly end of the causeway, the construction footprint allows for a riprapped, cone-shaped sideslope to cover the interface between the existing seawall and the Prefabricated Concrete Modular Gravity Wall. At the northerly end, the existing seawall must be butted up to the face of the completed PCMG Wall. At the Resident’s discretion, the reconstructed portion of the seawall may be angled more sharply into the face of the completed PCMG Wall than shown on the Plans. The height of the walls at the north end, ROW limits, and wetland impact limits make the use of a covered sideslope unacceptable at the northerly end causeway seawall to remain. Where the existing seawall exists within the pay limits of the PCMG wall, it shall be entirely removed and properly disposed of.

**Question:** “We request that item 202.01 be paid by the m3 in that there is no way to determine quantity.”

**Response:** See change earlier in this amendment updating the Schedule of Items.

To satisfy this request the Department has changed the Schedule of Items by removing Pay Item #202.01, and substituting it with Pay Item #202.02 Removing Structure and Obstructions, paid for per Cubic Meter. The anticipated removal quantity for this item is all granite block seawall. The estimated quantities are 25 Cubic Meters for Great South Bridge and 250 Cubic Meters for Great North Bridge.

**Question:** “We request that the bid date be extended one week.”

**Response:** See amendment one extending the bid opening to September 26, 2007.

**Question:** “Need bid Item 503.17 Mech Couplings. Since rebar is MMFX2 please specify acceptable product number and supplier #22 couplings 144 ea #29 couplings 189 ea

These are shown on drawings 31, 38, 42.”

**Response:** The Department has not prequalified mechanical couplers for use with MMFX2 or other Grade 75 reinforcing bars. The splices or couplers required must fully develop the 520 MPa (75ksi) #22 and #29 bars. Both Dayton Superior and BarSplice Products, Inc. supply threaded couplers that will develop 160% of a 60 ksi yield, or 660 MPa. Such threaded couplers are acceptable for this project if protected against corrosion with epoxy coating. The coupling device need not be manufactured of high chromium steel.

**Question:** “Specify the 4 transverse bars shown either side of #25 pier anchor bars on both sections Sheet 42. Assume #16.”

**Response:** Yes, the above noted bars are #16’s. See change earlier in this amendment replacing plan sheet #42. The transverse #16 bars identified in the updated plan sheet shall be full length fascia to fascia less 50mm cover at each end. Note that the updated sheet also increases the closure placement’s required concrete strength and provides a practical lap splice length for Great North Bridge.

**Question:** “Drawing Sheet 41 Transition Barrier Rebar Schedule quantity of TB1952 should be 5 not 2.”

**Response:** See change earlier in this amendment. Please note that these quantities are per barrier and there are eight barriers.

**Question:** “Incidental Rebar

526.34 Perm Conc Trans Barriers		794 KG
526.60/62 Prestress Struc Conc Slab/Beam		657 KG
(Long. Curb rebar)		
All other Rebar	Bid Quantity	Harmac
503.24 MMFX2	19100 KG	24669 KG
Abuts, Footings, Wingwalls, Pier Shafts, Pier Caps, Approach Slabs, Pier Closures		
Great South Bridge	10200 KG	13205 KG
Great North Bridge	<u>8900 KG</u>	<u>11464 KG</u>
	19100 KG	24669 KG

**Response:** See change made earlier in this amendment to the Schedule of Items increasing the quantities of Items 503.24 and 503.25 to 11,960 Kg for Great South Bridge, 10660 Kg for Great North Bridge, and 22620 Kg total. Note that the Department estimates 2920 Kg more as incidental reinforcement in the closure placements.

**Question:** "Reference ACOE permit: what does "EEM" and "EUS" mean?"

**Response:** "EEM" stands for Estuarine Emergent Vegetation and "EUS" stands for Estuarine Unconsolidated Substrate.

**Question:** "We request that stay in place forms be paid as a bid item on a m2 basis in that the limits cannot be calculated due to unknown ledge elevations."

**Response:** If the Contractor elects to use stay-in-place sheet pilings for seal/footing cofferdams, payment for the sacrificial sheet piling is considered incidental to the cofferdam pay item. The originally required stay-in-place wood forms for the substructure walls and exposed portions of the seals have been removed from the Contract. See change earlier in this amendment.

**Question:** "Will all abutment footings be paid for under Item #502.229?"

**Response:** No, only the base of Great South Bridge Abutment #1's footing/seal is below Mean Low Water. Only the seals for the Great North Bridge Pier and the Great South Bridge Abutment #1, may be placed in standing water by means of pumping or tremieing as approved by the Resident. Only these seal/footings shall be paid for as underwater concrete.

**Question:** "I can see problems arising from trying to install a mechanical coupler between the #29 bars over the pier. Can a lap splice be used instead (like on the voided slabs)?"

**Response:** Refer to the attached plan sheet #42 replaced earlier in this amendment. The concrete strength and reinforcement splice details at the pier closure concrete placements have been changed to allow for lap splices at Great North Bridge similar to Great South Bridge.

Consider these changes and information prior to submitting your bid on September 26, 2007.

Sincerely,

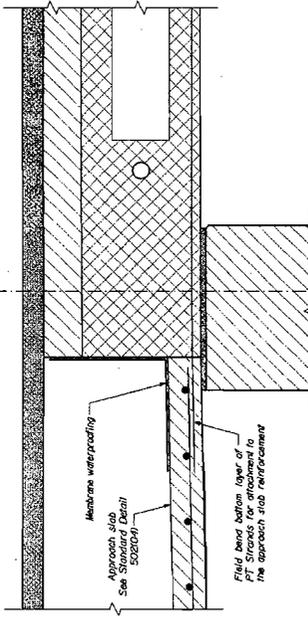


Scott Bickford

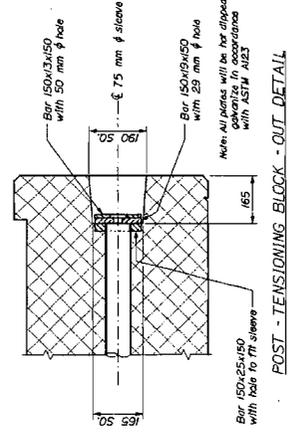
Contracts & Specifications Engineer

**METRIC** 1. All dimensions are in millimeters unless otherwise noted. 2. All elevations and stations are in meters.

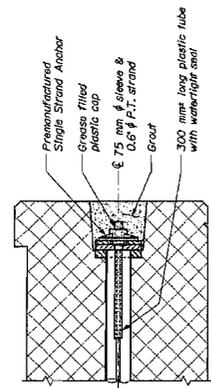
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DATE	10/20/07
SCALE	AS SHOWN
SHEET	44



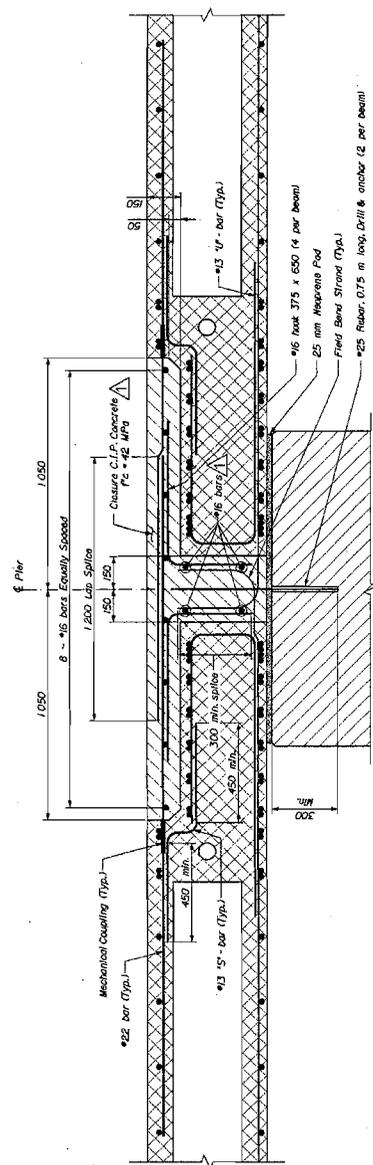
**APPROACH SLAB DETAIL - GREAT SOUTH BRIDGE**  
Great South Bridge abutment



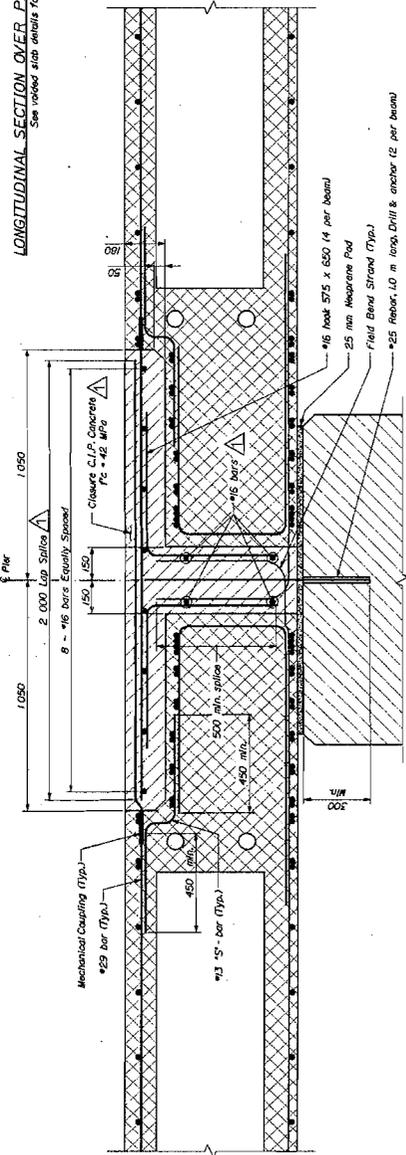
**POST - TENSIONING BLOCK - OUT DETAIL**



**POST - TENSIONING ANCHORAGE DETAIL**



**LONGITUDINAL SECTION OVER PIER - GREAT SOUTH BRIDGE**  
See box beam details for precast reinforcing



**LONGITUDINAL SECTION OVER PIER - GREAT NORTH BRIDGE**  
See box beam details for precast reinforcing

Revised: September 12, 2007

STATE OF MAINE  
DEPARTMENT OF TRANSPORTATION  
**GREAT SOUTH AND GREAT NORTH BRIDGE**  
OVER  
NARRAGANSETT RIVER  
IN THE TOWN OF  
MILBRIDGE  
**SUPERSTRUCTURE DETAILS**

SHEET OF 44

PROJECT DESIGN ENGINEER	DATE
DESIGNED BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE

SCHEDULE OF ITEMS

CONTRACT ID: 010067.00

PROJECT(S): BR-1006(700)X  
STP-1006(800)X

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
SECTION 0001 BRIDGE ITEMS						
0010	202.02 REMOVING STRUCTURES AND OBSTRUCTIONS	M3	275.000			
0020	202.19 REMOVING EXISTING BRIDGE	LUMP		LUMP		
0030	203.20 COMMON EXCAVATION	M3	3150.000			
0040	203.25 GRANULAR BORROW	M3	775.000			
0050	203.28 CHOKE STONE	M3	450.000			
0060	206.082 STRUCTURAL EARTH EXCAVATION - MAJOR STRUCTURES	M3	2000.000			
0070	206.092 STRUCTURAL ROCK EXCAVATION - MAJOR STRUCTURES	M3	40.000			
0080	206.10 STRUCTURAL EARTH EXCAVATION - PIERS	M3	145.000			
0090	304.13 DENSE GRADED CRUSHED AGGREGATE SUBBASE	M3	2750.000			

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CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0100	403.210 HOT MIX ASPHALT 9.5 MM NOMINAL MAX SIZE	680.000 MG				
0110	403.213 HOT MIX ASPHALT 12.5 MM, BASE	430.000 MG				
0120	409.15 BITUMINOUS TACK COAT APPLIED	10.000 L				
0130	502.219 STRUCTURAL CONCRETE, ABUTMENTS AND RETAINING WALLS	LUMP	LUMP			
0140	502.229 STRUCTURAL CONCRETE, ABUTMENTS AND RETAINING WALLS (PLACED UNDER WATER)	LUMP	LUMP			
0150	502.239 STRUCTURAL CONCRETE PIERS	LUMP	LUMP			
0160	502.249 STRUCTURAL CONCRETE PIERS (PLACED UNDER WATER)	LUMP	LUMP			
0170	502.25 STRUCTURAL CONCRETE SUPERSTRUCTURE SLABS	LUMP	LUMP			
0180	502.31 STRUCTURAL CONCRETE APPROACH SLABS	LUMP	LUMP			
0190	502.49 STRUCTURAL CONCRETE CURBS AND SIDEWALKS	LUMP	LUMP			
0200	502.56 CONCRETE FILL	320.000 M3				

SCHEDULE OF ITEMS

REVISED:

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STP-1006(800)X

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0210	503.24 MMFX 2 REINFORCING STEEL, FABRICATED & DELIVERED	22620.000 KG				
0220	503.25 MMFX 2 REINFORCING STEEL, PLACING	22620.000 KG				
0230	507.0811 STEEL BRIDGE RAILING, 2 BAR	LUMP	LUMP			
0240	508.14 HIGH PERFORMANCE WATERPROOFING MEMBRANE	LUMP	LUMP			
0250	510.10 SPECIAL DETOUR 4.3(M) ROADWAY WIDTH VEHICULAR & PEDESTRIAN TRAFFIC NOT SEPARATED GREAT NORTH	LUMP	LUMP			
0260	510.10 SPECIAL DETOUR 4.3(M) ROADWAY WIDTH VEHICULAR & PEDESTRIAN TRAFFIC NOT SEPARATED GREAT SOUTH	LUMP	LUMP			
0270	511.07 COFFERDAM: GREAT NORTH ABUTMENT NO. 1	LUMP	LUMP			
0280	511.07 COFFERDAM: GREAT NORTH ABUTMENT NO. 2	LUMP	LUMP			
0290	511.07 COFFERDAM: GREAT NORTH PIER	LUMP	LUMP			

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STP-1006(800)X

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0300	511.07 COFFERDAM: GREAT SO. ABUTMENT NO. 1	LUMP	LUMP			
0310	511.07 COFFERDAM: GREAT SO. ABUTMENT NO. 2	LUMP	LUMP			
0320	511.07 COFFERDAM: GREAT SOUTH PIER	LUMP	LUMP			
0330	514.06 CURING BOX FOR CONCRETE CYLINDERS	EA 1.000				
0340	515.21 PROTECTIVE COATING FOR CONCRETE SURFACES	LUMP	LUMP			
0350	526.301 TEMPORARY CONCRETE BARRIER TYPE I	LUMP	LUMP			
0360	526.34 PERMANENT CONCRETE TRANSITION BARRIER	EA 8.000				
0370	535.60 PRESTRESSED STRUCTURAL CONCRETE SLAB	LUMP	LUMP			
0380	535.62 PRESTRESSED STRUCTURAL CONCRETE BOX BEAM	LUMP	LUMP			
0390	606.1721 BRIDGE TRANSITION - TYPE 1	EA 8.000				
0400	606.23 GUARDRAIL TYPE 3C - SINGLE RAIL	M 381.000				

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STP-1006(800)X

CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0410	606.232 GUARDRAIL TYPE 3C - OVER 4.5 M RADIUS	8.000 M				
0420	606.265 TERMINAL END - SINGLE RAIL - GALVANIZED STEEL	1.000 EA				
0430	606.353 REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	6.000 EA				
0440	606.79 GUARDRAIL 350 FLARED TERMINAL	2.000 EA				
0450	610.08 PLAIN RIPRAP	675.000 M3				
0460	613.329 EXTENDED USE EROSION CONTROL BLANKETS	300.000 M2				
0470	615.07 LOAM	40.000 M3				
0480	618.1401 SEEDING METHOD NUMBER 2 - PLAN QUANTITY	4.000 UN				
0490	620.60 SEPARATION GEOTEXTILE	8700.000 M2				
0500	627.711 WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE ( PLAN QUANTITY )	1050.000 M				

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CONTRACTOR : \_\_\_\_\_

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0510	627.76 TEMPORARY PAVEMENT MARKING LINE, WHITE OR YELLOW	LUMP	LUMP			
0520	629.05 HAND LABOR, STRAIGHT TIME	40.000 HR				
0530	631.12 ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	20.000 HR				
0540	631.14 GRADER (INCLUDING OPERATOR)	20.000 HR				
0550	631.172 TRUCK - LARGE (INCLUDING OPERATOR)	20.000 HR				
0560	631.22 FRONT END LOADER (INCLUDING OPERATOR)	20.000 HR				
0570	635.30 PREFABRICATED MODULAR GRAVITY WALL	530.000 M2				
0580	637.071 DUST CONTROL	LUMP	LUMP			
0590	639.18 FIELD OFFICE TYPE A	1.000 EA				
0600	652.38 FLAGGER	400.000 HR				
0610	652.39 WORK ZONE TRAFFIC CONTROL	LUMP	LUMP			

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LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE		BID AMOUNT	
			DOLLARS	CTS	DOLLARS	CTS
0620	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	LUMP	LUMP			
0630	659.10 MOBILIZATION	LUMP	LUMP			
	SECTION 0001 TOTAL					
	TOTAL BID					