



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

JOHN ELIAS BALDACCI
GOVERNOR

DAVID A. COLE
COMMISSIONER

February 3, 2010
Subject: **Boothbay**
State Pin No: 012630.00
Amendment No. 2

Dear Sir/Ms:

Note: An informational session will be held at Harbor Technologies on Wednesday February 10th from 10:00 am to 12:00 noon. There will be a PowerPoint session followed with a question and answer session. This session is not mandatory for bidding. Harbor Technologies is located at 8 Business Parkway, Brunswick, ME 04011.

Make the following changes to the Bid Documents:

In the Bid Book (page 31), "SPECIAL PROVISION, SECTION 104, Utilities", "CONTRACTOR" section, **DELETE**, in its entirety, Note "**8**". Make this change in pen and ink.

In the Bid Book (page 43), "SPECIAL PROVISION, SECTION 107, TIME, (Open to Traffic)", **CHANGE** the date in the third sentence of the first paragraph from October 2, 2010 to read "**October 7, 2011**". Make this change in pen and ink.

In the Bid Book (page 75), **REMOVE** "SPECIAL PROVISION, SECTION 502, CALCIUM NITRATE", 1 page dated July 2, 2009 and **REPLACE** with the attached new "SPECIAL PROVISION, SECTION 502, CALCIUM NITRATE", 1 page dated July 2, 2009

In the Bid Book, after page 122, **ADD** the attached "SPECIAL PROVISION, SECTION 507, RAILINGS (Wyoming Steel Bridge Railing)", 2 pages dated February 1, 2010.

In the Plans, SHEET NUMBER 22 OF 51, TYPICAL ABUTMENT DETAILS, **DELETE** note 12 in its entirety and **REPLACE** in pen and ink with the following:
"12. Waterline sleeve and backer plate shall be furnished and installed by the Contractor; payment shall be incidental to related concrete pay items. The Contractor shall secure the backer plate to the abutment using Tapcons or by another system as approved by the resident."

In the Plans, SHEET NUMBER 41 OF 51, "SUPERSTRUCTURE DETAILS", **DELETE** note 4 in its entirety and **REPLACE** in pen and ink with the following:
"4. Payment for furnishing and installing Utility Support Tubes, Anchor Rods, and filling tubes with concrete to the limits shown shall be made"



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under item 890.01 Special Work No. 1. Also see Special Provision SECTION 890 Special Work Number 1 (Utility Conduit Installation).”

The following questions have been received:

Question: Can this Bridge be imploded?

Response: No, Imploding the bridge will not be allowed.

Question: In the Estimated Quantities, you ask for 1,090 LF for pay item #507.0831 (4 bar bridge rail). However, on plan sheets 41, 42, and 43 you show a 3 bar modified Wyoming Bridge Rail. Which type of bridge rail is required?

Response: This project will use the three bar Wyoming steel bridge rail. Please see the bid amendment.

Question: Will the composite beams support the Bidwell screed machine and forms for the edge of the bridge or do both edges of the bridge require temporary supports?

Response: Bid-Well deck finishers have been supported on HC Beams in the past. What normally is done is a pipe floor flange is screwed to the top of the HCB, then a small piece of pipe is screwed into the flange. The saddles for the Bid-Well are then put into the pipes and adjusted for height. As the deck is poured, either the saddle is removed or the pipe is unscrewed from the flange and any additional concrete is put in by hand and troweled. One caveat is that the flange must be over the main beam and not the flanges. The flange and the pipe, if it is to be left in place, should be galvanized.

Question: Is the bridge rail 3 bar or 4 bar? Bid item says 4 bar, plans show 3 bar.

Response: The Wyoming 3 bar bridge rail shall be used.

Question: Plans say utility supports supplied by others. Special Provision 890 says contract to supply support system?

Response: The utility supports shall be furnished by the contractor.

Question: What is the approximate weight of the composite bridge beams?

Response: The estimated theoretical weight for a 70' unfilled beam is 5.1 kips and for a 70' beam filled with compression reinforcement is 17.9 kips. The theoretical volume of SCC concrete used for a 70' beam is 3.1 yd³. The estimated theoretical weight for a 60'

unfilled beam is 4.4 kips and for a 60' beam filled with compression reinforcement is 15.7 kips. The theoretical volume of SCC concrete used for a 60' beam is 2.8 yd^3 . The actual weights and volumes will vary.

Question: Please provide the weight and length of the composite beams that have had the compression reinforcement installed. Please provide volume of SCC required per beam.

Response: The prefilled beams are just under 70' in length. See response above for weights.

Question: Is the Contractor allowed to fasten a form to the cantilevered fascia deck form to form the vertical fascia of the deck?

Response: Response pending.

Question: Is the Contractor allowed to fasten a screed rail support to the center of the fascia beams to support the bridge deck finishing machine?

Response: See previous response regarding screen rails.

Question: Pier notes indicate the pile to be coated full length. On past projects, coating has only been required just below mud line. Could you please verify that you want coating full length?

Response: Pipe piles may be uncoated from elevation -30 feet to refusal.

Question: Is exploratory drilling subject to in-stream work windows?

Response: Exploratory **drilling** would be allowed anytime and not be restricted to the instream work window, as long as this work was done using conventional drill rig equipment. This would not be the case for exploratory **excavation**. This is sometimes used as a construction technique prior to placing cofferdams in water.

Question: SP 107 has conflicting dates for opening the bridge and roadway, which is correct?

Response: The correct date is October 7th, 2011

Question: Could you confirm the rebar quantity, it appears to be too low unless some of it is incidental to a pay item.

Response: Response Pending

Question: The 24" waterline sleeve at abutment (sheet #22) plans say incidental, specifications say water company supply?

Response: The Contractor shall furnish and install the waterline sleeve and backer plate.

Question: Temporary steel piles for utility poles, plans say incidental to bid item 702.19, no bid item 702.19, is it 202.19?

Response: The temporary piles shall be incidental to item 202.19 REMOVING EXISTING BRIDGE.

Question: Special Provision 107 has two dates, Oct 7, 2011 and Oct 2 2010. At what date do the supplemental liquidated damages of \$500 per day start?

Response: The correct date is October 7th, 2011

Question: Is "Buy America" provision in effect?

Response: Buy American will not apply to this project.

Question: Special Provision 203 explains that 100 CY of Dredging will be beneficially used on site. How is that first 100 CY paid for? The additional above 100 CY is paid under item 203.2318.

Response: The first 100 CY beneficially re-used on site is not disposed of as special waste but is used on site in waste areas as common borrow, and is therefore disposal is paid as common Borrow, item #203.24.

Consider these changes and formation prior to submitting your bid on February 17, 2010.

Sincerely,



Scott Bickford
Contracts & Specifications Engineer

SPECIAL PROVISION
SECTION 502
CALCIUM NITRITE

Table 1 under Subsection 502.05 Composition and Proportioning in Special Provision 502 Structural Concrete is revised as follows:

502.05 Compositioning and Proportioning Table 1 is revised by making Note 3 of the table applicable only to Class A Concrete for Pay Items:

502.219 Structural Concrete Abutments and Retaining Walls

502.239 Structural Concrete Piers

Note #3 shall be replaced with the following: Calcium Nitrate shall be added at the rate of 5.5 gallons per cubic yard.

The Contractor shall also provide materials and equipment and perform field testing to verify presence of Calcium Nitrite in the Class A concrete at the project site. All costs for Calcium Nitrite verification testing shall be incidental to related Contract items.

SPECIAL PROVISION
SECTION 507
RAILINGS
(Wyoming Steel Bridge Railing)

DESCRIPTION

This work shall consist of the furnishing of all materials for, and the construction of, Wyoming Steel Bridge Railing in accordance with these specifications and the lines and grades shown on the plans.

MATERIALS

Materials shall meet the requirements specified in the following subsections of Division 700 of the Standard Specifications:

Structural Steel	713.01
Preformed Pads	713.03

Rail bars shall meet the requirements of ASTM A500, Grade B. Rail posts shall be fabricated from structural steel meeting the requirements of ASTM A572/A572M, Grade 50. All other shapes and plates shall meet the requirements of ASTM A572/A572M, Grade 50.

Anchor rods, washers & nuts shall meet the requirements of ASTM F1554, Grade 105.

Concrete anchorage bars shall meet the requirements of ASTM A36 and shall not be painted or galvanized.

Structural tubing shall meet the longitudinal CVN minimum requirements of 20 N*m at 18 degrees Celsius or proportional values of sub-size specimens. Testing shall be in accordance with ASTM A673. The H frequency shall be used and the material shall be as-rolled.

CONSTRUCTION REQUIREMENTS

Railings shall be fabricated in accordance with the requirements of Section 504--Structural Steel. All steel parts shall be abrasive blast-cleaned to SSPC-SP6 and then hot dipped galvanized in accordance with Special Provision 506. Hardware shall be hot dip galvanized in accordance with Special Provision 506.

Rail bars to be used on a radius of 100 m (1000 ft) or less shall be curved before the application of any galvanizing. Bending tolerance from the theoretical horizontal curvature shall be plus or minus 3 mm per meter (+/-1/8 in/yd), not to exceed 12 mm (1/2 in) total.

Anchor rods shall be set with a template and shall be in their final position prior to the placement of the embedding concrete. Post bearing areas shall be dressed smooth and true to grade.

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Preformed pads shall be used in adjusting the rail posts for height and alignment. The number of pads supplied shall be 10 percent in excess of the theoretical number required. After erection of the railing, the Contractor shall clean the whole assembly, to present a neat and uniform appearance.

METHOD OF MEASUREMENT

Wyoming Steel Bridge Railing will be measured as one lump sum unit; erected and accepted, in accordance with the dimensions shown on the Plans or as directed by the Engineer.

BASIS OF PAYMENT

The accepted Wyoming Steel Bridge Railing will be paid for at the contract lump sum price, complete in place.

Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
507.0834 Wyoming Steel Bridge Railing	Lump Sum