

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

DAVID A. COLE

COMMISSIONER

January 11, 2008 Subject: **Cumberland** Project No. BR-1267(900)X Pin No. 012679.00 **Amendment No. 2**

Dear Sir/Ms:

Please make the following changes to the Bid Documents:

In the bid Book, REMOVE the existing: "Schedule of Items" dated 071212, four pages total (pages 3 thru 6 of the book) and REPLACE with the attached updated: "Schedule of Items" dated 080109, four pages total.

REMOVE the existing: "Special Provision, Section 107, Prosecution of Work and Supplemental Liquidated Damages" dated August 1, 2007, one page total (page 38 in the book) and REPLACE with the attached updated: "Special Provision, Section 107, Prosecution of Work and Supplemental Liquidated Damages" dated January 9, 2008, one page total.

REMOVE the existing: "Special Provision, Section 203, Excavation and Embankment, (Dredge Materials)" dated October 2, 2007, two pages total (pages 41 and 42 of the book) and REPLACE with the attached: "Special Provision, Section 203, Excavation and Embankment, (Dredge Materials)" dated January 8, 2008, two pages total.

REMOVE the existing: "Special Provision, 203.33 Special Fill, (In-Culvert Fill- Work)" dated October 11, 2007 one page total (page 40 of the book) and REPLACE with the attached updated: "Special Provision, 203.33 Special Fill, (In-Culvert Fill- Work)" dated January 8, 2008 one page total.

REMOVE the existing: "Special Provision, Section 403, Hot Mix Asphalt" dated August 6th, 2007 one page total (page 66 in the book) and REPLACE with the attached updated: "Special Provision, Section 403, Hot Mix Asphalt" dated January 9, 2008, one page total.

REMOVE the existing: "Special Provision, Section 652, Maintenance of Traffic, (Work Zone Traffic Control)" dated December 14, 2007, three pages total (pages 77 thru 79 in the book) and REPLACE with the attached updated: "Special Provision, Section 652, Maintenance of Traffic, (Work Zone Traffic Control)" dated January 9, 2008, three pages total.



In the Plans, on sheet two of fourteen titled: "Estimated Quantities" under the "General Construction Notes" DELETE in its entirety note eighteen that begins: "All costs for cofferdams...". Make this change in pen and ink.

The following questions have been received.

Question: Do you have any type of soils report available for the above referenced project?

Response: A soils report is not available for Cumberland, Doughty Bridge #2233

Question: Special Provision 107 - Will penalties be assessed should the contractor exceed the 14 calendar days allowed, if so at what rate?

Response: Please see change earlier in this amendment updating Special Provision, Section 107, Prosecution of Work and Supplemental Liquidated Damages.

Question: Can you please define where item 203.2317 - Disposal of 190 CY of "Special Waste" is anticipated? Also, this item does not show up in the standard specifications, special provisions or construction notes. Is it for disposal of river bottom or concrete from the old bridge?

Response: Item 203.2317 has been eliminated and replaced with item 203.2318. See change earlier in this amendment replacing the Schedule of Items. Item 203.2318 Disposal of Special Waste refers to disposal of dredge materials (see Maine DOT Standard Specifications section 101.2 page 1-9). Also please see the attached updated Special Provision Section 203, EXCAVATION AND EMBANKMENT (Dredge Materials), dated January 8, 2008 added earlier in this amendment.

Question: Is there any more information available for item 203.2317 Disposal of Special Waste? What makes it "special"? Typically the unit is ton and not cubic yards, which is also how a disposal group typically charges (price per ton). Need information to be able to convert cubic yards of materials to tons of material.

Response: Dredge material is a MaineDEP regulated special waste. Specific reference to its classification as a special waste can be found in MDEP's Solid Waste Management Regulations, Chapter 400 – Definitions. Empirical data suggests that a cubic yard of dredge material weighs approximately two tons. This weight may be lowered if

aggressive dewatering actions are employed; however, our experience has shown that this will not result in a significant weight reduction.

Question: Special Provision 652, in the 3rd sentence it refers to "professional engineer". Is the intent for the contractor to solicit a PE to sign and seal or the DOT?

Response: The traffic control plan does not need to be signed and stamped by a professional engineer. Please see change earlier in this amendment updating Special Provision, Section 652, Maintenance of Traffic, (Work Zone Traffic Control).

Question: Special provision 652 refers to a temporary traffic signal. Will this item be required for the project?

Response: Use of a temporary traffic signal is not required.

Question: Can you please clarify who is responsible for setting up the detour package for the Road Closure for the above referenced project. We recently completed a project in China for the MDOT and they were responsible for setting up and maintaining the detour package and we were responsible for maintaining the work zone signage. If it is our responsibility under item 652.39 can you please supply me with the MDOT estimated square footage for signs required.

Response: The Contractor is responsible for providing continuous and effective traffic control through out the project including the detour route. The Contractor is responsible for determining a lump sum cost for item 652.39 Work Zone Traffic Control. MaineDOT will not provide an estimated square footage for signs.

Question: What is the live load on this project HS-25 or HS-30?

Response: The design live load for the aluminum box culvert is HS-25.

Consider these changes and information prior to submitting your bid on January 16, 2008.

Sincerely,

Scott Bickford

Contracts & Specifications Engineer

SCHEDULE OF ITEMS **REVISED:**

LINE	ITEM DESCRIPTION	·	UNIT PRICE		BID AMOUNT	
ио 	DESCRIPTION	QUANTITY AND UNITS	DOLLARS		DOLLARS	CT
	SECTION	N 0001 PROJECT	ITEMS			
	202.19 REMOVING EXISTING BRIDGE	 LUMP 	 LUMP 		 	
0020	203.20 COMMON EXCAVATION	 1350.00 CY	0 			
	203.2318 DISPOSAL OF SPECIAL WASTE	 45.00 T	o 		 	
0040	203.24 COMMON BORROW	 60.00 CY	o 		 	
0050	203.25 GRANULAR BORROW	 265.00 CY	o 			
0060	203.33 SPECIAL FILL	 45.00 CY	o 			
	304.10 AGGREGATE SUBBASE COURSE - GRAVEL	 1385.00 CY	o 			
	403.207 HOT MIX ASPHALT 19.0 MM HMA	 203.00 T	o 			
	403.208 HOT MIX ASPHALT 12.5 MM HMA SURFACE	 268.00 T	0 			
0100	403.209 HOT MIX ASPHALT 9.5 MM HMA (SIDEWALKS, DRIVES, INCIDENTALS)	 15.00 T	 0 		 	

SCHEDULE OF ITEMS

REVISED:

LINE NO	ITEM DESCRIPTION	APPROX.	UNIT PRICE	BID AMOUNT
NO DESCRIPTION		QUANTITY - AND UNITS	DOLLARS CTS	DOLLARS CT
	409.15 BITUMINOUS TACK COAT - APPLIED 	 42.000 G		
0120	509.411 ALUMINUM STRUCTURAL PLATE BOX CULVERT	 LUMP 	 LUMP	
	511.07 COFFERDAM: Downstream 	 LUMP 	 LUMP	
	511.07 COFFERDAM: Upstream 	 LUMP 	 LUMP	
	603.16 15 INCH CULVERT PIPE OPTION I 	 50.000 LF	 	
	606.23 GUARDRAIL TYPE 3C - SINGLE RAIL 	 262.500 LF	 	
	606.232 GUARDRAIL TYPE 3C - OVER 15 FOOT RADIUS 	 32.000 LF		
0180	606.353 REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	 8.000 EA		
	606.79 GUARDRAIL 350 FLARED TERMINAL 	 3.000 EA		
0200	610.08 PLAIN RIPRAP 	 280.000 CY		
	610.18 STONE DITCH PROTECTION 	 72.000 CY	 	

SCHEDULE OF ITEMS

REVISED:

CONTRA	ACTOR :			
LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY - AND UNITS	UNIT PRICE DOLLARS CTS	BID AMOUNT DOLLARS CTS
	 613.319 EROSION CONTROL BLANKET	100.000 sy	i 	
0230	615.07 LOAM 	 35.000 CY	 	
	618.1401 SEEDING METHOD NUMBER 2 - PLAN QUANTITY	 5.000 UN		
	619.1201 MULCH - PLAN QUANTITY 	 5.000 UN		
0260	619.1401 EROSION CONTROL MIX	 20.000 CY		
	627.711 WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE (PLAN QUANTITY)	 975.000 LF		
	629.05 HAND LABOR, STRAIGHT TIME	 40.000 HR		
0290	631.12 ALL PURPOSE EXCAVATOR (INCLUDING OPERATOR)	 20.000 HR		
	631.132 SMALL BULLDOZER (INCLUDING OPERATOR)	 10.000 HR		
	631.14 GRADER (INCLUDING OPERATOR)	 20.000 HR	 	
	631.172 TRUCK - LARGE (INCLUDING OPERATOR) 	 20.000 HR		

PAGE: 4 DATE: 080109

SCHEDULE OF ITEMS

REVISED:

LINE	ITEM	APPROX.	•		BID AMOUNT	
NO DESCRIPTION		201111111	DOLLARS		DOLLARS	CTS
0330	639.19 FIELD OFFICE TYPE B 	 1.00 EA	 0 	 	 	
0340	652.38 FLAGGER 	 150.00 HR	 0 	 	 	
	652.39 WORK ZONE TRAFFIC CONTROL 	 LUMP 	 LUMP 	 	 	
	652.41 PORTABLE - CHANGEABLE MESSAGE SIGN 	 3.00 EA	 0 	 	 	
0370	656.75 TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL	 LUMP 	 LUMP 	 	 	
0380	659.10 MOBILIZATION 	 LUMP 	 LUMP 	 		
	830.10 WATER MAIN BRIDGE CROSSING 	 LUMP	 LUMP 	 	 	
	 SECTION 0001 TOTAL					
	 TOTAL BID		 			

Cumberland Doughty Bridge PIN 12679.00 January 9, 2008

SPECIAL PROVISION SECTION 107

PROSECUTION OF WORK AND SUPPLEMENTAL LIQUIDATED DAMAGES

The Contractor shall close Doughty Bridge to traffic for no more than (14) consecutive calendar days to remove the existing bridge and complete the installation of the new steel plate pipe arch. The said road closure may occur only between **July 15**, **2008 and August 22**th, **2008**.

Once the Contractor commences work on this project, the work shall be continuous through completion.

Supplemental liquidated damages will be assessed to the contract at the rate of five hundred (\$500.00) U.S. dollars per calendar day for each day that the road is closed beyond the 14 day road closure.

Supplemental liquidated damages will be assessed to the contract at the rate of five hundred (\$500.00) U.S. dollars per calendar day for each the project remains incomplete beyond the specified contract completion date.

This assessment of supplemental liquidated damages will be in addition to the liquidated damages specified in section 107 of the Department of Transportation Standard specification.

CUMBERLAND-12679.00 DOUGHTY BRIDGE (2233) JANUARY 8, 2008

SPECIAL PROVISION <u>SECTION 203</u> EXCAVATION AND EMBANKMENT (Dredge Materials)

<u>Description:</u> Dredge Material (See MaineDOT Standard Specifications § 101.2) is regulated as a Special Waste.

In accordance with Maine Solid Waste Regulations, Chapter 418, one hundred cubic yards or less of Dredge Material Beneficially Used in the area adjacent to and draining into the dredged water body is exempt from Beneficial Use Permits. Further, the Maine Department of Environmental Protection has ruled that river bottom material moved solely to allow construction and then replaced essentially in the location from which it was moved is not deemed to be a regulated Dredge Material. The river bottom material moved to allow placement of the structure associated with the Doughty River Bridge project and then replaced in essentially the location from which it was moved and to the original river bottom profile shall not be deemed a Dredge Material. This includes the use of material for placement as channel substrate within the bridge structure.

It is anticipated that approximately 45 cubic yards of river bottom material will be moved and replaced in essentially the same location from which it was excavated. These materials shall not be included in the Dredge Material quantities. It is estimated that an additional 145 cubic yards of Dredge Material will be excavated. One hundred cubic yards of this Dredge Material shall be Beneficially Used in areas adjacent to and draining into the dredged water body. The remaining dredge material must be managed as a special waste as defined in Maine Solid Waste Regulations, Chapter 400. The Contractor shall dispose of all Dredge Material from the Doughty Bridge site that is not Beneficially Used on site at a landfill licensed by the Maine Department of Environmental Protection for the disposal of Special Waste. The Contractor shall be responsible for making all necessary arrangements for dewatering and proper disposal of the Dredge Material, including any laboratory testing, in accordance with the landfill's license. No analytical testing has been completed on the dredge material associated with the Doughty River Bridge project. The Contractor shall provide documentation to the Resident that the Dredge Material was disposed of as specified. The submitted documentation shall consist of truck manifests, waybills or such documentation as may be acceptable to the Resident and shall clearly document the disposal site location and the quantity of Dredge Material.

CONSTRUCTION REQUIREMENTS

<u>Management:</u> It is anticipated that roughly 190 cubic yards of Dredge Material will be excavated for this project. Approximately 45 cubic yards of river bottom material will be moved to allow placement of the structure associated with the Doughty River Bridge project and then replaced in essentially the same location from which it was moved and to the original river bottom profile. The contractor shall Beneficially Use up to 100 cubic yards of Dredge Material excavated at the Doughty River Bridge project in the area adjacent to and draining into the dredged water body. The remaining Dredge Material shall be managed as a MDEP regulated special waste.

<u>Method of Measurement:</u> Dredge and river bottom materials will be measured by the cubic yard of material removed. Special Waste properly disposed of will be measured by the ton.

<u>Basis of Payment:</u> Payment for the excavation and placement of river bottom material and the Beneficial Use of Dredge Material will be incidental to the Contract Pay Items.

The accepted quantity of Dredge Material properly disposed of, as <u>Special Waste</u>, will be paid for at the contract unit price bid for Disposal of Special Waste.

Payment shall be full compensation for excavation, dewatering, testing, managing, transporting, disposal or placement, and all associated fees.

Payment will be made under:

Pay Item		Pay Unit
203.2318	Disposal of Special Waste	Ton

SPECIAL PROVISION 203.33 Special Fill

(In-Culvert Fill - Work)

Description

This work shall consist of placing site excavated river bottom material inside the culvert to create a natural stream bottom as shown on the contract plans and described herein or as directed by the Resident.

Construction

Once the culvert is placed to final grade, the bottom course of in-culvert fill shall be placed in one foot lifts to an elevation as shown on plans or as directed by the Resident. The in-culvert fill shall be constructed of site-excavated river bottom materials. Compaction of the Bottom Course is not necessary.

The contractor shall be careful not the damage the culvert during installation of the in-culvert fill material. Any damage to the culvert shall be paid for by the contractor.

Method of Measurement

Payment for placing river bottom materials shall be measured in place by the cubic yard.

Basis of Payment

All work associated with placing the river bottom materials to form the in-culvert streambed shall be paid for at the contract unit price per cubic yard.

Payments will be made under:

<u>Pay Item</u> <u>Pay Unit</u>

203.33 Special Fill Cubic yard

Cumberland BR-1267(900)X Blackstrap Rd Bridge Replacement January 9, 2008

SPECIAL PROVISION SECTION 403 HOT MIX ASPHALT

Desc. Of Course	Grad Design.	Item Number	Bit Cont. % of Mix	Total Thick	No. Of Layers	Comp. Notes		
		Bridge	Approaches I	<u> Mainline</u>				
Wearing	12.5 mm	403.208	N/A	3.0 in	2	4,8,13		
Base	19.0 mm	403.207	N/A	5.5 in	3	4,8		
	Bridge Approaches Shoulders							
Wearing	Wearing $12.5 \text{ mm} 40\overline{3.208} \text{N/A} 3.0 \text{ in} 2 4,8,13$							
Sidewalks, Drives, Islands & Incidentals								
Wearing	9.5 mm	403.209	N/A	2 in	2/more	2,3,10,14		

COMPLEMENTARY NOTES

- 2. The density requirements are waived.
- 3. The design traffic level for mix placed shall be <0.3 million ESALS.
- 4. The design traffic level for mix placed shall be 0.3 to <3 million ESALS. The design, verification, Quality Control, and Acceptance tests for this mix will be performed at **50 gyrations.**
- 8. Section 106.6 Acceptance, (2) Method B.
- 10. Section 106.6 Acceptance, (2) Method D.
- 13. A mixture meeting the gradation of 9.5 mm hot mix asphalt may be used at the option of the contractor.
- 14. A mixture meeting the requirements of section 703.09 Grading 'D', with a minimum PGAB content of 6%, and the limits of Special Provision 401, Table 9 (Drives and Sidewalks) for PGAB content and gradation may be substituted for this item. A job mix formula shall be submitted to the department for approval.

Tack Coat

A tack coat of emulsified asphalt, RS-1 or HFMS-1, Item 409.15 shall be applied to any existing pavement at a rate of approximately 0.025 gal/yd², and on milled pavement approximately 0.05 gal/yd², prior to placing a new course. A fog coat of emulsified asphalt shall be applied between shim / intermediate course and the surface course, at a rate not to exceed 0.025 gal/yd².

Tack used between layers of pavement will be paid for at the contract unit price for Item 409.15 Bituminous Tack Coat.

Cumberland Doughty Bridge #2233 PIN 012679.00 January 9, 2008

SPECIAL PROVISION <u>SECTION 652</u> MAINTENANCE OF TRAFFIC (Work Zone Traffic Control)

<u>652.1 Description</u> The following paragraphs are added:

The Contractor shall provide a Traffic Control Plan (TCP) to the Resident, in accordance with Subsection 105.7 of the Standard Specifications. The Contractor shall not commence work in the field until the Department approves the TCP. The Contractor shall provide a Traffic Control Supervisor who will be responsible for providing traffic control management in compliance with the contract and the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD), including supervision of personnel for the installation, inspection and maintenance of all traffic control devices. The Traffic Control Supervisor, or a qualified substitute, shall monitor traffic control details 7 days a week. Work Zone Traffic Control will also include construction -signing, channelization devices, temporary pavement markings and removal.

No disruptions to traffic will be allowed before the TCP is reviewed and approved by the Department. The Contractor should allow ten Business Days in his/her schedule for MaineDOT to review and approve the first submission of the TCP after the preconstruction traffic control meeting. If the initial TCP is rejected, the Contractor should allow five Business Days in his/her schedule for the Department to review and approve the second submission of the TCP after it is resubmitted.

In addition to other TCP Requirements enumerated herein, the TCP shall show all Construction Signs, Detour Route Signs, Emergency/alternate Route Signs, Speed Signs, Channelization Devices, Work Zone Crash Cushions, Temporary Traffic Signal, and Portable – Change Message Signs.

652.3.4 General –The following paragraphs are added:

<u>Portable - Change Message Signs</u> A total of 3 Portable - Change Message Signs shall be used at the following locations during construction:

- 1. Maine Turnpike Exit 53
- 2. Route 100/26 approximately ½ mile north of the Blackstrap Road intersection
- 3. Route 100/26 approximately ½ mile south of the Lambert Avenue intersection

Cumberland Doughty Bridge #2233 PIN 012679.00 January 9, 2008

The exact location of the portable changeable message boards shall be as directed by the Resident.

All Portable - Change Message Signs shall be in place and operating a minimum of 2 weeks before the road closure. The Portable - Change Message Signs shall be paid for under item 652.41. The Portable - Change Message Sign shall remain in place a minimum of 1 week after the road is reopened to traffic.

Sign spacing shall be in accordance with the MUTCD.

<u>652.7 Method of Measurement</u> This entire Subsection is revised to read:

Work Zone Traffic Control, including the Contractor's Traffic Control Plan, Traffic Control Supervisor, flaggers, furnishing, installation and maintenance of traffic control devices, will be measured as one lump sum for all work authorized and performed.

652.8 Basis of Payment This entire Subsection is revised to read:

Work Zone Traffic Control will be paid for at the contract lump sum price. Payment will be full compensation for the Traffic Control Plan, Traffic Control Supervisor, all signs including detour route signs, channelization devices including temporary concrete barriers, night lighting, removing and resetting channelization devices, removal of pavement marking, temporary pavement marking lines, removal of temporary pavement markings and restoring the original pavement markings in areas with no new pavement and maintenance thereof. Maintenance of signs includes: replacing devices damaged, lost, or stolen; and cleaning and moving as many times as necessary throughout the life of the contract, regardless whether the work areas or projects are geographically separated or not separated.

The following related work will be paid for under their respective contract bid items:

- 1. Flaggers
- 2. Portable Change Message Signs

Partial payments for Work Zone Traffic Control will be made as follows:

- (a) After the Traffic Control Plan is submitted and approved, 15% of the amount bid for Work Zone Traffic Control will be paid.
- (b) 1 week before the road closure, an additional 35% of the amount bid for Work Zone Traffic Control will be paid.
- (c) After the road is reopened to traffic, an additional 35% of the amount bid for Work Zone Traffic Control will be paid.

Cumberland Doughty Bridge #2233 PIN 012679.00 January 9, 2008

(d) Upon completion of all work on the project, the remaining 15% of the amount bid for Work Zone Traffic Control will be paid.

Failure by the contractor to follow the Contract 652 Special Provision and/or The Manual of Uniform Traffic Control Devices (MUTCD) will result in a reduction in the payment, computed by reducing the lump sum total by 5% per occurrence. The Resident will provide the Traffic Control Supervisor with a written warning of a possible occurrence. The written warning from the Resident will be date and time stamped. The Contractor shall immediately fix the problem. If the problem(s) is not corrected immediately or repeatedly occurs, then a violation has taken place and a reduction in payment of the lump sum total of 5% will occur. The Department reserves the right to suspend the work and request a meeting to discuss violations and remedies. There will be no payment for work done under this item after the expiration of contract time.

Payment will be made under:

<u>Pay Item</u> 652.39 Work Zone Traffic Control

Pay Unit Lump Sum