Charles D. Baker, Governor
Karyn E. Polito, Lieutenant Governor
Jamey Tesler, Secretary & CEO
Jonathan L. Gulliver, Highway Administrator

MassDOT
Massachusetts Department of Transportation
Highway Division

September 19, 2022

612188-120085

ADDENDUM NO. 2

To Prospective Bidders and Others on:

RANDOLPH
Federal Aid Project No. NHP(BRR-ON)-003S(586)X
Bridge Superstructure Replacement Br. No. R-01-004 (Pre-Fabricated Bridge Units) Route 24 (NB & SB) over Canton Street

BIDS TO BE OPENED AND READ: TUESDAY, OCTOBER 4, 2022 at 2:00 P.M.
Transmitting revisions to the Contract Documents as follows:

RESPONSES TO BIDDER'S QUESTIONS:	One page attached.
DOCUMENT 00813:	Deleted document in its entirety and inserted new document (4 pages).
DOCUMENT A00801:	Revised Page 171.

Please take note of the above, substitute the revised page for the original, delete document as noted, insert new document in proper order, and acknowledge Addendum No. 2 in your Expedite Proposal file before submitting your bid.

Very truly yours,

Eric M. Cardone Digitally signed by Eric M. Cardone Date: 2022.09.19 12:17:12 -04'00'

Eric M. Cardone, P.E.
Construction Contracts Engineer

MB
c: Christopher I Cameron, Project Manager

Ten Park Plaza, Suite 4160, Boston, MA 02116
Tel: 857-368-4636, TTY: 857-368-0655
www.mass.gov/massdot

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SPS, e-mail dated September 14, 2022

Question 3) Please refer to specification 995 page A801-241, the bid item breakdown does not contain an item for the 4000 psi ¾" 585 HP concrete shown on bridge drawing 2 of 20. Please confirm if this concrete is intended to be paid under the PBU breakdown items.

Response 3) The deck and end diaphragm concrete (4000 psi ¾" 585 HP concrete) are part of the PBU sub items 930.1 and 930.2

Question 4) Please refer to bridge drawing 11 of 20. Section 7 appears to show an end diaphragm connection in plan view however the plans appear to show that no end diaphragms are required. Please clarify.

Response 4) Concrete end diaphragms are required, see sheet 15 for details. Section 7 on sheet 11 should show an intermediate diaphragm plan view. Steel end diaphragms are not required.

Question 5) Please refer to bridge drawing 11 of 20. The beam elevation does not appear to show a bearing stiffener but section as noted above appears to show one, please confirm.

Response 5) Bearing stiffeners are not required.

Question 6) Please refer to specification 995 page A801-241, the bid item breakdown shows 4000 psi ¾" 610, 2 cy; what work is this mix intended to cover?

Response 6) See the revised Special Provisions, page A00801-171. 4000 psi ¾" 610, 2 cy, is used for the CIP keeper blocks.

Question 7) Please refer to specification 995 page A801-171 and bridge drawing 2 of 20. The specification calls for the barrier concrete to be 5000 ¾" 685 HP but the plans call for 5000 3/8" 710 HP, please clarify.

Response 7) See the revised Special Provisions, page A00801-171. 5000 ¾" 685 HP concrete is for the highway guardrail transitions.

5000 3/8" 710 HP (Subitem 905.2) concrete is for the bridge traffic barriers.

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DOCUMENT 00813

SPECIAL PROVISIONS

PRICE ADJUSTMENTS FOR STRUCTURAL STEEL AND REINFORCING STEEL

September 15, 2022

This special provision applies to all projects containing the use of structural steel and/or reinforcing steel as specified elsewhere in the Contract work. It applies to all structural steel and all reinforcing steel, as defined below, on the project. Compliance with this provision is mandatory, i.e., there are no "opt-in" or "opt-out" clauses. Price adjustments will be handled as described below and shall only apply to unfabricated reinforcing steel bars and unfabricated structural steel material, consisting of rolled shapes, plate steel, sheet piling, pipe piles, steel castings and steel forgings.

Price adjustments will be variances between Base Prices and Period Prices. Base Prices and Period Prices are defined below.

Price adjustments will only be made if the variances between Base Prices and Period Prices are 5% or more. A variance can result in the Period Price being either higher or lower than the Base Price. Once the 5% threshold has been achieved, the adjustment will apply to the full variance between the Base Price and the Period Price.

Price adjustments will be calculated by multiplying the number of pounds of unfabricated structural steel material or unfabricated reinforcing steel bars on a project by the index factor calculated as shown below under Example of a Period Price Calculation.

Price adjustments will ***not*** include guardrail panels or the costs of shop drawing preparation, handling, fabrication, coatings, transportation, storage, installation, profit, overhead, fuel costs, fuel surcharges, or other such charges not related to the cost of the unfabricated structural steel and unfabricated reinforcing steel.

The weight of steel subject to a price adjustment shall not exceed the final shipping weight of the fabricated part by more than 10%.

Base Prices and Period Prices are defined as follows:

Base Prices of unfabricated structural steel and unfabricated reinforcing steel on a project are fixed prices determined by the Department and found in the table below. While it is the intention of the Department to make this table comprehensive, some of a project's unfabricated structural steel and/or unfabricated reinforcing steel may be inadvertently omitted. Should this occur, the Contractor shall bring the omission to the Department's attention so that a contract alteration may be processed that adds the missing steel to the table and its price adjustments to the Contract.

The Base Price Date is the month and year in which MassDOT opened bids for the project. This date is used to select the Base Price Index.

Period Prices of unfabricated structural steel and unfabricated reinforcing steel on a project are variable prices that have been calculated using the Period Price Date and an index of steel prices to adjust the Base Price.

The Period Price Date is the date the steel was delivered to the fabricator as evidenced by an official bill of lading submitted to the Department containing a description of the shipped materials, weights of the shipped materials and the date of shipment. This date is used to select the Period Price Index.

The index used for the calculation of Period Prices is the U.S. Department of Labor Bureau of Labor Statistics Producer Price Index (PPI) Series ID WPU101702 (Not Seasonally Adjusted, Group: Metals and Metal Products, Item: Semi-finished Steel Mill Products.) As this index is subject to revision for a period of up to four (4) months after its original publication, no price adjustments will be made until the index for the period is finalized, i.e., the index is no longer suffixed with a "(P)".

Period Prices are determined as follows:

Period Price = Base Price X Index Factor
Index Factor = Period Price Index / Base Price Index

Example of a Period Price Calculation:

Calculate the Period Price for December 2009 using a Base Price from March 2009 of $0.82/Pound for 1,000 Pounds of ASTM A709 (AASHTO M270) Grade A36 Structural Steel Plate.

The Period Price Date is December 2009. From the PPI website*, the Period Price Index = 218.0.

The Base Price Date is March 2009. From the PPI website*, the Base Price Index = 229.4.

Index Factor = Period Price Index / Base Price Index = 218.0 / 229.4 = 0.950
Period Price = Base Price X Index Factor = $0.82/Pound X 0.950 = $0.78/Pound

Since $0.82 - $0.78 = $0.04 is less than 5% of $0.82, no price adjustment is required.

If the $0.04 difference shown above was greater than 5% of the Base Price, then the price adjustment would be 1,000 Pounds X $0.04/Pound = $40.00. Since the Period Price of $0.78/Pound is less than the Base Price of $0.82/Pound, indicating a drop in the price of steel between the bid and the delivery of material, a credit of $40.00 would be owed to MassDOT. When the Period Price is higher than the Base Price, the price adjustment is owed to the Contractor.

* To access the PPI website and obtain a Base Price Index or a Period Price Index, go to http://data.bls.gov/cgi-bin/srgate

End of example.

The Contractor will be paid for unfabricated structural steel and unfabricated reinforcing steel under the respective contract pay items for all components constructed of either structural steel or reinforced Portland cement concrete under their respective Contract Pay Items.

Price adjustments, as herein provided for, will be paid separately as follows:

Structural Steel
Pay Item Number 999.449 for positive (+) pay adjustments (payments to the Contractor)

Pay Item Number 999.457 for negative (-) pay adjustments (credits to MassDOT Highway Division)

Reinforcing Steel
Pay Item Number 999.466 for positive (+) pay adjustments (payments to the Contractor)

Pay Item Number 999.467 for negative (-) pay adjustments (credits to MassDOT Highway Division)

No price adjustment will be made for price changes after the Contract Completion Date, unless the MassDOT Highway Division has approved an extension of Contract Time for the Contract.

TABLE

Steel Type		Price per Pound
1	ASTM A615/A615M Grade 60 (AASHTO M31 Grade 60 or 420) Reinforcing Steel	$0.77
2	ASTM A27 (AASHTO M103) Steel Castings, H-Pile Points & Pipe Pile Shoes (See Note below.)	$1.07
3	ASTM A668 / A668M (AASHTO M102) Steel Forgings	$1.07
4	ASTM A108 (AASHTO M169) Steel Forgings for Shear Studs	$1.13
5	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Plate	$1.19
6	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Shapes	$1.11
7	ASTM A709/A709M Grade 50 / AASHTO M270M/M270 Grade 50 or 345 Structural Steel Plate	$1.19
8	ASTM A709/A709M Grade 50 / AASHTO M270M/M270 Grade 50 or 345 Structural Steel Shapes	$1.11
9	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Plate	$1.23
10	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Shapes	$1.13
11	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W 345W Structural Steel Plate	$1.23
12	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W or 345W Structural Steel Shapes	$1.13
13	ASTM A709/A709M Grade HPS 50W / AASHTO M270M/M270 Grade HPS 50W or 345W Structural Steel Plate	$1.32
14	ASTM A709/A709M Grade HPS 70W / AASHTO M270M/M270 Grade HPS 70W or 485W Structural Steel Plate	$1.39
15	ASTM A514/A514M-05 Grade HPS 100W / AASHTO M270M/M270 Grade HPS 100W or 690W Structural Steel Plate	$2.11
16	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Plate	$1.23
17	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Shapes	$1.13
18	ASTM A276 Type 316 Stainless Steel	$6.30
19	ASTM A240 Type 316 Stainless Steel	$6.30
20	ASTM A148 Grade 80/50 Steel Castings (See Note below.)	$2.17
21	ASTM A53 Grade B Structural Steel Pipe	$1.40
22	ASTM A500 Grades A, B, 36 & 50 Structural Steel Pipe	$1.40
23	ASTM A252, Grades 240 (36 KSI) & 414 (60 KSI) Pipe Pile	$1.10
24	ASTM 252, Grade 2 Permanent Steel Casing	$1.10
25	ASTM A36 (AASHTO M183) for H-piles, steel supports and sign supports	$1.18
26	ASTM A328 / A328M, Grade 50 (AASHTO M202) Steel Sheetpiling	$2.07
27	ASTM A572 / A572M, Grade 50 Sheetpiling	$2.07
28	ASTM A36/36M, Grade 50	$1.19
29	ASTM A570, Grade 50	$1.18
30	ASTM A572 (AASHTO M223), Grade 50 H-Piles	$1.19
31	ASTM A1085 Grade A (50 KSI) Steel Hollow Structural Sections (HSS), heat-treated per ASTM A1085 Supplement S1	$1.40
32	AREA 140 LB Rail and Track Accessories	$0.70

NOTE: Steel Castings are generally used only on moveable bridges. Cast iron frames, grates and pipe are not “steel” castings and will not be considered for price adjustments.

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②Addendum No. 2, September 19, 2022

ITEM 995. BRIDGE SUPERSTRUCTURE, BRIDGE NO. R-01-004 LUMP SUM

The work under this Item shall conform to the applicable provisions of Subsection 995 of the Standard Specifications and the specific requirements stipulated below for component parts of this Item. For those component parts where no specific requirement is stipulated, the Standard Specifications shall apply, except for payment.

DESCRIPTION

Work under this Item shall include all materials, equipment, and labor needed to construct the bridge, including, but not limited to, the following: Prefabricated Bridge Units (PBU) and associated closure pours; precast approach slabs; precast moment slabs; keeper blocks; precast abutment caps; plastic shims; membrane waterproofing (spray-applied); elastomeric bearings; concrete bridge railing (Type Modified CF-PL3) with snow fence; and highway guardrail transitions and transition bases.

The work does not include any Items listed separately in the proposal. Payment for materials shown on the Plans as being part of this bridge structure or which may be incidental to its construction and are not specifically included for payment under another Item shall be considered incidental to the work performed under these Items and shall be included in the unit price of the component of which they are a part.

5000 PSI, 3/4 IN, 685 HP CEMENT CONCRETE
② 4000 PSI, 3/4 IN, 610 CEMENT CONCRETE

The work under this heading shall conform to the relevant provisions of Subsection 901, all material requirements contained in Subsection M4.06.1 of the Standard Specifications and the following:

② Work shall consist of furnishing and installing 5000 PSI, 3/4 IN, 685 HP cement concrete for the precast highway guardrail transitions, as shown on the Plans.

② Work shall consist of furnishing and installing 4000 PSI, 3/4 IN, 610 cement concrete for the cast-in-place keeper blocks as shown on the Plans.

MECHANICAL REINFORCING BAR SPLICER

The work under this heading shall conform to the applicable provisions of Subsection 901, Subsection M8.01.9 Mechanical Reinforcing Bar Splicer and the following:

Mechanical Reinforcing Bar Splicers shall be used where indicated on the Contract Plans and generally as required where lap splicing in not practical or possible.

Mechanical Reinforcing Bar Splicers shall conform to the material requirements contained in Subsection M8.01.9 of the Standard Specifications. The mechanical reinforcing bar splicers shall be listed on the MassDOT QCML. The mechanical reinforcing bar splicers shall be epoxy coated.