



January 17, 2025

Proposal No. 612097-129070

ADDENDUM NO. 2

To Prospective Bidders and Others on:

WEST SPRINGFIELD - CHICOPEE Federal Aid Project No. NHP(IM)/HIP(BR)-0912(310)X Pavement and Bridge Preservation on I-91

PROPOSAL TO BE OPENED AND READ: TUESDAY, JANUARY 28, 2025 at 2:00 P.M. Transmitting changes to the Contract Documents as follows:

QUESTIONS AND RESPONSES: One page.

DOCUMENT 00813: Deleted document in its entirety and

inserted new document (4 pages).

DOCUMENT A00801: Revised Pages 119 and 120.

DOCUMENT A00802: Revised Page 16.

DOCUMENT B00420: Revised Page 15.

Take note of the above, substitute the revised pages for the originals, delete document as noted, insert new document in proper order, and acknowledge <u>Addendum No. 2</u> in your Expedite Proposal file before submitting your bid.

Very truly yours,

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

MB

c: Koby J Lemrise, Project Manager



WEST SPRINGFIELD - CHICOPEE

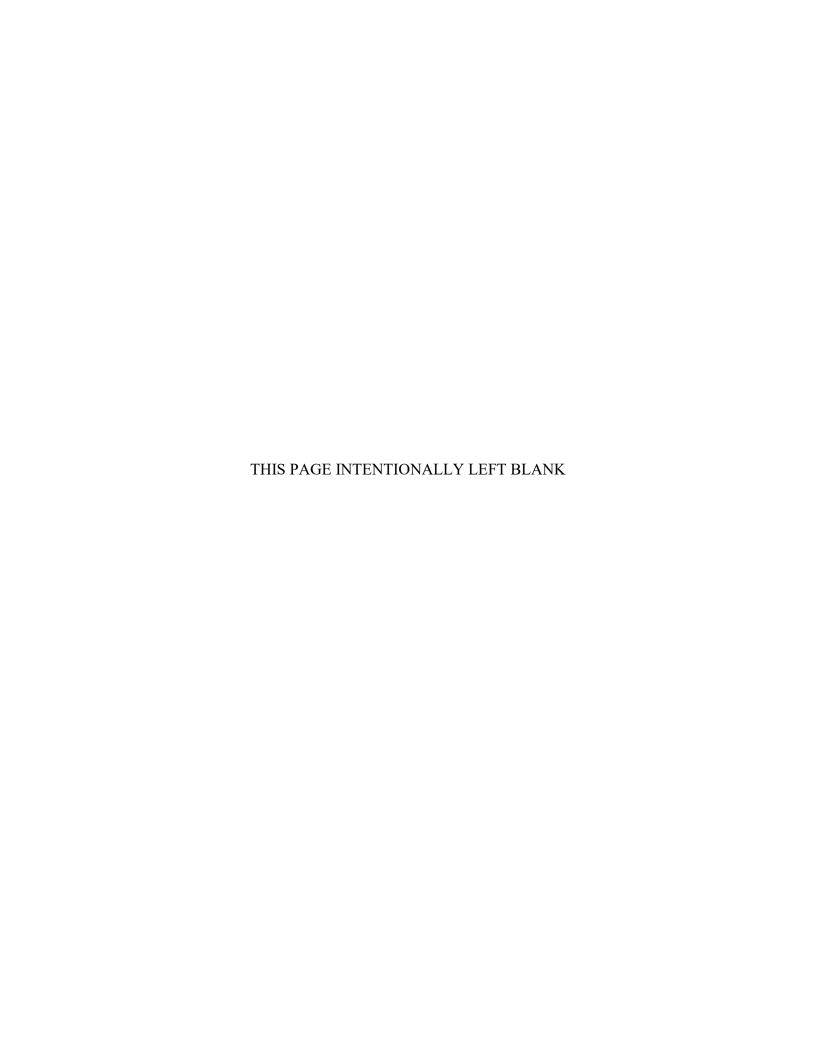
Federal Aid Project No. NHP(IM)/HIP(BR)-0912(310)X Pavement and Bridge Preservation on I-91 (612097-129070)

Questions and Responses

Addendum No. 2, January 17, 2025

Warner Bros. LLC, e-mail dated January 13, 2025

- Question 2) Bridge C-13-034 over the Connecticut River: A note on the Bridge Deck Plan (Sheet 46 of 54) states, "...should any isolated bridge deck deficiencies become apparent... all repair procedures outlined for the other bridges in this project shall be followed." The installation of Temporary Protective Shielding (Item #994.1) over the Connecticut River is more burdensome and costly than the land-based installation of the same item at other bridges on the project.
- Response 2) See revised Special Provisions, Detail Sheets and Proposal pages A00801-119 and 120, A00802-16 and B00420-15.
- Question 3) As stated in Addendum #1, the DBE percentage requirement for this project is set at 15%. This seems high compared to similar projects that have been put out to bid over the past year. Please consider reducing the DBE requirement.
- Response 3) This will be answered in a future addendum.



DOCUMENT 00813

SPECIAL PROVISIONS

PRICE ADJUSTMENTS FOR STRUCTURAL STEEL AND REINFORCING STEEL

January 15, 2025

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 <u>Example of a</u> Period Price Calculation.

Price adjustments will <u>not</u> 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:

<u>Base Prices</u> 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 of the most recent finalized period price index at the time that MassDOT opened bids for the project. The Base Price Index for this contract is the Steel PPI listed in the Notice to Contractors.

<u>Period Prices</u> 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

Stee	l Type	Price per Pound	
1	ASTM A615/A615M Grade 60 (AASHTO M31 Grade 60 or 420) Reinforcing Steel	\$0.57	
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2	ASTM A27 (AASHTO M103) Steel Castings, H-Pile Points & Pipe Pile Shoes (See Note	\$0.79	
<u> </u>	below.)	00.70	
3	ASTM A668 / A668M (AASHTO M102) Steel Forgings	\$0.79	
4	ASTM A108 (AASHTO M169) Steel Forgings for Shear Studs		
5	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Plate		
6	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Shapes		
7	ASTM A709/A709M Grade 50 / AASHTO M270M/M270 Grade 50 or 345 Structural Steel Plate		
8	ASTM A709/A709M Grade 50 / AASHTO M270M/M270 Grade 50 or 345 Structural Steel Shapes		
9	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Plate	\$0.90	
10	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Shapes	\$0.82	
11	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W 345W Structural Steel Plate	\$0.90	
12	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W or 345W Structural Steel Shapes	\$0.82	
13	ASTM A709/A709M Grade HPS 50W / AASHTO M270M/M270 Grade HPS 50W or 345W Structural Steel Plate		
14	ASTM A709/A709M Grade HPS 70W / AASHTO M270M/M270 Grade HPS 70W or 485W Structural Steel Plate		
15	ASTM A514/A514M-05 Grade HPS 100W / AASHTO M270M/M270 Grade HPS 100W or 690W Structural Steel Plate		
16	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Plate		
17	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Shapes		
18	ASTM A276 Type 316 Stainless Steel	\$4.61	
19	ASTM A240 Type 316 Stainless Steel	\$4.61	
20	ASTM A148 Grade 80/50 Steel Castings (See Note below.)	\$1.58	
21	ASTM A53 Grade B Structural Steel Pipe	\$1.01	
22	ASTM A500 Grades A, B, 36 & 50 Structural Steel Pipe	\$1.01	
23	ASTM A252, Grades 240 (36 KSI) & 414 (60 KSI) Pipe Pile	\$0.80	
23 24	ASTM 252, Grade 2 Permanent Steel Casing	\$0.80	
2 4 25	ASTM 232, Grade 2 Fermanent Steet Casing ASTM A36 (AASHTO M183) for H-piles, steel supports and sign supports	\$0.85	
25 26	ASTM A30 (AASHTO M183) for ri-piles, steel supports and sign supports ASTM A328 / A328M, Grade 50 (AASHTO M202) Steel Sheetpiling	\$1.52	
27	ASTM A37/2/M. G. al. 50	\$1.52	
28	ASTM A36/36M, Grade 50	\$0.87	
29	ASTM A570, Grade 50	\$0.85	
30	ASTM A572 (AASHTO M223), Grade 50 H-Piles	\$0.87	
31	ASTM A1085 Grade A (50 KSI) Steel Hollow Structural Sections (HSS), heat-treated per ASTM A1085 Supplement S1	\$1.01	
32	AREA 140 LB Rail and Track Accessories	\$0.52	

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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ITEM 994.1 (Continued)

(2)

Payment of 60% of the Square Foot of this item will be made upon complete installation.

The remaining 40% of the Square Foot of this Item will be paid following complete removal.

Note: Temporary protective shielding has already been installed as a precautionary measure at several locations under the subject bridges. The existing shielding may be retained in lieu of installing new shielding under this Item so long as requirements one (1) through three (3) as listed previously in this Special Provision are met.

Engineering Services, when required, shall be incidental to this Item.

ITEM 994.12 TEMPORARY PROTECTIVE SHIELDING ON BRIDGE C-13-034 = W-21-043

The work under this item consists of furnishing, installing, maintaining, removing and disposing of proposed shielding systems on and under bridge C-13-034 = W-21-043, in locations required by the Engineer.

The work under this Item shall provide for the protection of traffic, persons, and beneath the bridge from falling debris during the removal of the unsound concrete from bridge decks, parapets, and copings.

No portion of the bridge deck shall be removed until the protective shielding is in place and complete.

Note that this bridge, due to its height (vertical clearance), may require special lifting equipment in order to place shielding for the assigned bridge repair work. Any equipment necessary to erect forms will be considered incidental to this Item.

Any existing formwork on the bridge shall also be removed and disposed by the Contractor away from the job area, at no additional expense.

Any existing shielding on the bridge may be retained for the uses outlined in this Item so long as the relevant requirements listed below are met.

All shielding shall meet the following requirements:

- 1. Temporary Protective Shielding must be used on bridges over roadways, railroads, and waterways during full depth excavation and when, in the opinion of the Engineer, there is the possibility of dislodging concrete from the bottom of the deck, parapets or coping. In some cases, the Contractor may be able to utilize the bottom flanges of existing steel beams as supports for the protective shielding. However, the Contractor will not be permitted to weld onto, drill into, or cut any existing structural steel beams.
- 2. The Contractor shall submit drawings and calculations stamped by a Professional Engineer of the appropriate discipline registered in Massachusetts of the proposed temporary shielding to the Engineer for approval prior to its installation. The drawings shall include details of all connections, brackets, and fasteners. However, when the spacing between existing steel beams is 70 inches or less, the Contractor may utilize a wood plank shielding scheme.
- 3. Shielding shall be designed to safely withstand all loads that it will be subjected to. The allowable design stresses shall be in accordance with AASHTO Standard Specifications for Highway Bridges, 17th Edition. The design shall also include a description of the equipment and construction methods proposed for the deck, parapet, or coping excavation and the maximum size of the area being excavated. The shielding shall also be designed to withstand

②Addendum No. 2, January 17, 2025

ITEM 994.1 (Continued)

the maximum size of the excavated area should it fall during excavation or removal. No debris shall be swung over traffic, on or below the bridge.

- 4. Shielding shall be designed such that impact on traffic during installation and removal shall be minimal. The Contractor shall submit the traffic plan to the Engineer for approval.
- 5. The shielding shall extend a sufficient distance above and beyond the deck overhang at the fascia where concrete excavation is required outside the fascia beams. The shielding shall extend the length of the damaged or distressed portion of the deck a length of sufficient distance to do the required deck demolition. Also, the width of shielding shall completely extend over the travel lanes and shoulders of the highway below and shall extend a minimum of one beam width in the transverse direction beyond the limits of the excavation.
- 6. The area for shielding shall be approved by the Engineer prior to any installation of any shielding. The Contractor may utilize the bottom flanges of existing beams as supports for the protective shielding. However, the Contractor will not be permitted to weld onto, drill into, or cut any existing structural steel beams. All spaces along the perimeter of the shielding and at the seams shall be sealed to prevent dust, water, and debris from escaping and falling onto traffic below the bridge.
- 7. The Engineer may request that the shielding be designed so that it may also serve as false work (forms) for all areas of full-depth concrete replacement/repair.
- 8. The shielding shall not decrease the minimum vertical bridge clearance to the roadway unless otherwise approved by the Engineer.
- 9. The shielding shall be maintained and remain in place until the strength of the concrete used to repair the deck has cured and reached the design strength requirement, except where shielding needs to be removed and reset to install formwork for the areas of full depth repair. The shielding shall remain the property of the Contractor and shall be removed by the Contractor from the site when no longer needed.

If the Contractor's operations damage any existing portions of the bridge that are to remain, such damage shall be repaired at the Contractor's own expense. All materials used in the temporary shielding system shall become the property of the Contractor and shall be removed from the site upon the completion of the project.

METHOD OF MEASUREMENT

Item 994.12 will be measured for payment by the Square Foot of temporary protective shielding installed, maintained, and removed upon completion of repair work as required by the Engineer.

BASIS OF PAYMENT

Item 994.12 will be paid for at the Contract unit price per Square Foot, which price shall include all labor, materials, equipment, removal and disposal all debris, shielding installation, maintenance, final removal upon completion of repair work, and all incidental costs required to complete the work.

Payment of 60% of the Square Foot of this item will be made upon complete installation. The remaining 40% of the Square Foot of this Item will be paid following complete removal.

Note: Temporary protective shielding has already been installed as a precautionary measure at several locations under the subject bridges. The existing shielding may be retained in lieu of installing new shielding under this Item so long as requirements one (1) through three (3) as listed previously in this Special Provision are met.

Engineering Services, when required, shall be incidental to this Item.

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ITEM 994.1 TEMPORARY PROTECTIVE SHIELDING

To be installed directly beneath any full depth bridge deck repairs on bridges W-21-045, W-21-046, and W-21-047, and as required by the Engineer. Existing shielding may be utilized beneath bridge deck repairs if appropriate engineering calculations are provided by the contractor as outlined in the Special Provision.

② <u>ITEM 994.12</u> <u>TEMPORARY PROTECTIVE SHIELDING ON BRIDGE C-13-034 = W-21-043</u>

Contingency Item to be used if significant concrete deck deterioration is apparent through the milled surface on bridge C-13-034 = W-21-043. To be installed directly beneath any full depth bridge deck repairs on bridge C-13-034 = W-21-043, and as required by the Engineer. If applicable, existing shielding may be utilized beneath bridge deck repairs if appropriate engineering calculations are provided by the contractor as outlined in the Special Provision.

Project # 612097		Contract # 129070					
Location : CHICOPEE - WEST SPRINGFIELD							
Description: Pavement and Bridge Preservation on I-91							
ITEM#	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT			
973.2	555	PRE-COMPRESSED JOINT SEAL					
		AT PER FOOT					
994.1	4,770	TEMPORARY PROTECTIVE SHIELDING					
		AT PER SQUARE FOOT					
994.12	150	TEMPORARY PROTECTIVE SHIELDING ON BRIDGE C-13- 034 = W-21-043					
		AT PER SQUARE FOOT					
Total Qty:	487,914						