



July 26, 2024

608640-126595

#### ADDENDUM NO. 1

To Prospective Bidders and Others on:

# SUTTON-GRAFTON Federal Aid Project No. STP(BR-OFF)-003S(755)X Bridge Replacement, S-33-004, Depot Street over the Blackstone River

THIS PROPOSAL TO BE OPEN AND READ: TUESDAY, AUGUST 13, 2024 at 2:00 P.M.

Transmitting revisions to the Contract Documents as follows:

DOCUMENT 00104: Revised page 3.

DOCUMENT 00813: Deleted document in its entirety and inserted

new document (4 pages).

<u>DOCUMENT A00801:</u> Revised pages 106, 107, 112, and 113.

DOCUMENT B00420: Revised pages 7 through 19.

Take note of the above, substitute revised pages for originals, delete the document indicated, insert new document in proper order, and acknowledge <u>Addendum No. 1</u> in your Expedite Proposal file before submitting your bid.

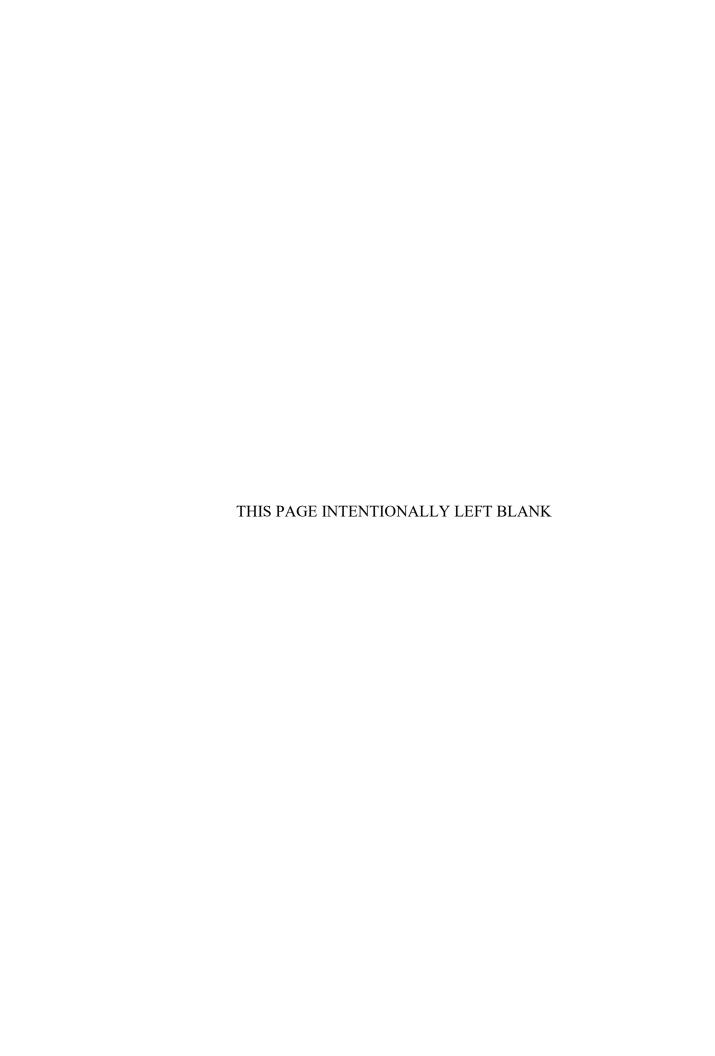
Very truly yours,

for

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

AB

cc: Christopher I. Cameron, Project Manager



## **NOTICE TO CONTRACTORS** (Continued)

## (1) PRICE ADJUSTMENTS

This Contract contains price adjustments for hot mix asphalt and Portland cement mixtures, diesel fuel, and gasoline. For reference the base prices are as follows: liquid asphalt \$585.00 per ton, Portland cement \$425.53 per ton, diesel fuel \$2.865 per gallon, and gasoline \$2.764 per gallon, and Steel Base Price Index 425.7. MassDOT posts the **Price Adjustments** on their Highway Division's website at

https://www.mass.gov/massdot-contract-price-adjustments

This Contract contains Price Adjustments for steel. See Document 00813 - PRICE ADJUSTMENT FOR STRUCTURAL STEEL AND REINFORCING STEEL for their application and base prices.

MassDOT projects are subject to the rules and regulations of the Architectural Access Board (521 CMR 1.00 et seq.)

Prospective bidders and interested parties can access this information and more via the internet at WWW.COMMBUYS.COM.

BY: Monica G. Tibbits-Nutt, Secretary and CEO, MassDOT Jonathan L. Gulliver, Administrator, MassDOT Highway Division SATURDAY, JUNE 29, 2024

#### DOCUMENT 00813

#### SPECIAL PROVISIONS

#### PRICE ADJUSTMENTS FOR STRUCTURAL STEEL AND REINFORCING STEEL

July 18, 2024

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**

	TABLE	_
Steel	Type	Price per Pound
1	ASTM A615/A615M Grade 60 (AASHTO M31 Grade 60 or 420) Reinforcing Steel	\$0.66
2	ASTM A27 (AASHTO M103) Steel Castings, H-Pile Points & Pipe Pile Shoes (See Note below.)	
3	ASTM A668 / A668M (AASHTO M102) Steel Forgings	\$0.90
4	ASTM A108 (AASHTO M169) Steel Forgings for Shear Studs	\$0.93
5	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Steel Plate	1 \$1.00
6	ASTM A709/A709M Grade 36 / AASHTO M270M/M270 Grade 36 or 250 Structural Stee Shapes	\$0.92
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	\$0.92
9	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Plate	\$1.04
10	ASTM A709/A709M Grade 50WT / AASHTO M270M/M270 Grade 50WT or 345WT Structural Steel Shapes	\$0.93
11	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W 345W Structural Stee Plate	1 \$1.04
12	ASTM A709/A709M Grade 50W / AASHTO M270M/M270 Grade 50W or 345W Structura Steel Shapes	1 \$0.93
13	ASTM A709/A709M Grade HPS 50W / AASHTO M270M/M270 Grade HPS 50W or 345W Structural Steel Plate	\$1.09
14	ASTM A709/A709M Grade HPS 70W / AASHTO M270M/M270 Grade HPS 70W or 485W Structural Steel Plate	\$1.16
15	ASTM A514/A514M-05 Grade HPS 100W / AASHTO M270M/M270 Grade HPS 100W or 690W Structural Steel Plate	s \$1.78
16	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Steel Plate	1 \$1.04
17	ASTM A992/A992M Grade 50S / AASHTO M270M/M270 Grade 50S or 345S Structural Stee Shapes	1 \$0.93
18	ASTM A276 Type 316 Stainless Steel	\$5.30
19	ASTM A240 Type 316 Stainless Steel	\$5.30
20	ASTM A148 Grade 80/50 Steel Castings (See Note below.)	\$1.83
21	ASTM A53 Grade B Structural Steel Pipe	\$1.16
22	ASTM A500 Grades A, B, 36 & 50 Structural Steel Pipe	\$1.16
23	ASTM A252, Grades 240 (36 KSI) & 414 (60 KSI) Pipe Pile	\$0.91
24	ASTM 252, Grade 2 Permanent Steel Casing	\$0.91
25	ASTM A36 (AASHTO M183) for H-piles, steel supports and sign supports	\$0.98
26	ASTM A328 / A328M, Grade 50 (AASHTO M202) Steel Sheetpiling	\$1.75
27	ASTM A572 / A572M, Grade 50 Sheetpiling	\$1.75
28	ASTM A36/36M, Grade 50	\$1.00
29	ASTM A570, Grade 50	\$0.98
30	ASTM A572 (AASHTO M223), Grade 50 H-Piles	\$1.00
31	ASTM A1085 Grade A (50 KSI) Steel Hollow Structural Sections (HSS), heat-treated per ASTM A1085 Supplement S1	
32	AREA 140 LB Rail and Track Accessories	\$0.60

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 251.08**

## 8 INCH TEMPORARY SANITARY SEWER PIPE BYPASS SYSTEM

**LUMP SUM** 

The work under this Item shall conform to the relevant provisions of Subsection 230 of the Standard Specifications and the following:

This Section includes furnishing of all materials, labor, equipment, power, and maintenance, to implement a temporary pumping system for the purpose of diverting existing wastewater flows around the work area for the duration of the project. Work includes removing temporary connections, plugs, and bypasses, and transferring the flows to the new pipes.

The Temporary Sanitary Sewer ByPass System is expected to remain operational during the winter shutdown period as the construction schedule is anticipated to take two (2) construction seasons.

The design, installation and operation of the temporary pumping system shall be the Contractor's responsibility. The Contractor shall employ the services of a vendor firm who can demonstrate to the Engineer that it has the required expertise in the design and operation of temporary bypass pumping systems. The vendor firm shall provide at least five references of projects similar in size and complexity to this project that have been performed by the firm within the past three years.

The by-pass system shall meet the requirements of all codes and regulatory agencies having jurisdiction.

#### MATERIALS AND SYSTEM REQUIREMENTS

#### **Equipment**

All pumps used shall be centrifugal, end suction, fully automatic self-priming units that do not require the use of foot-valves, diaphragm pumps, isolation valves or vacuum pumps in the priming system. The pumps may be electric or diesel powered. All pumps used must be constructed to allow dry running for long periods to accommodate the cyclical nature of bypass flows. The pumps shall not be hydraulic submersible type.



The Contractor shall provide the necessary stop/start controls for each pump.

The Contractor shall include one stand-by pump system (including suction and discharge piping) of each size to be maintained on site.

Additional back-up pumps shall be on-line, isolated from the primary system by a valve.

## ITEM 251.08 (Continued)

Discharge Piping - in order to prevent the accidental spillage of flows, all temporary discharge systems shall be constructed of rigid pipe with positive, restrained, watertight or fused joints. Under no circumstances will aluminum "Irrigation" type piping or glued PVC pipe be allowed. Discharge hoses will only be allowed in short sections and with the specific permission of the Engineer.

(1) Allowable piping materials will be steel sewer pipe or fused, high-density polyethylene pipe

## **System Description**

## **Design Requirements**

(1)

(1)

(1)

- 1. Bypass pumping systems shall have sufficient capacity to pump at the following:
- Sutton Sewer at Blackstone Street (From proposed Sewer Manhole identified on the plans)
  - o Peak flow of approximately 10,000 GPD
  - Suction and discharge elevations according to the contract drawings.
- Sutton Sewer at Depot Street (From existing Sewer Manhole identified on the plans)
  - o Peak flow of approximately 20,000 GPD
- ① Suction and discharge elevations according to the contract drawings.
  - 2. The Contractor shall provide all pipeline, plugs, pumps of adequate size to handle peak flow, and discharge piping to ensure that the total flow can be safely diverted around the area of work. Bypass pumping system will be required to operate 24 hours per day.
  - 3. The Contractor shall have adequate standby power and pumping equipment available and ready for immediate operation and use in the event of an emergency or breakdown. One standby pump for each size pump utilized shall be installed at the mainline flow bypassing locations, ready for use in the event of primary pump failure.
  - 4. Bypass pumping system shall be capable of bypassing the flow around the work area and not releasing any amount of flow into the work area for satisfactory performance of work.



#### **ITEM 254.08**

#### 8 INCH SEWER PIPE INSULATION

**FOOT** 

The work under this Item shall conform to the relevant provisions of Section 300 of the Standard Specifications and the following:

Work under this item shall include furnishing of all material, accessories, labor, and equipment necessary to insulate the pipelines as shown on the drawings and where so required by the Engineer.

## **REFERENCES**

American Society for Testing and Materials (ASTM)

ASTM C552 Specification for Cellular Glass Block and Pipe Thermal Insulation

### **PRODUCTS**

#### INSULATION: DIRECT BURIED PIPE

- A. Insulation shall be cellular glass type. The insulation shall be a cellular glass product that is made specifically for thermal insulation of piping and is compatible with the piping material. Insulation shall be a minimum of 2-inches thick, unless otherwise shown on the drawings.
- B. Insulation shall be composed of all glass sealed cells having no binders or fillers. The completed product shall be rigid and impermeable, with an ultimate compressive strength of at least 90 psi. The thermal conductivity of the cellular glass shall be no higher than 0.29 BTU-in./hr ft2 oF @ 75oF and 0.28 BTU-in./hr ft2 oF @ 50oF.
- C. The cellular glass insulation shall comply with all requirements of ASTM C552. The cellular glass shall be fabricated in half sections whenever possible.
- D. Bands for securing the insulation to the pipe shall be 0.5 inches wide by 0.020 inches thick made of stainless steel.
- E. The jacketing for the insulation shall be one of the following methods:
  - 1. A 125 mil (3mm) thick, heat-sealed high polymer asphaltic membrane with an integral glass scrim and integral 1 mil (.02mm) aluminum foil and a thin Mylar film on the surface.
- ① 2. Mastic asphalt cutback mastic.

(1)

(1) 3. Reinforcing fabric - an open mesh polyester fabric with a 6 x 5.5 mesh/inch configuration.

## ITEM 254.08 (Continued)

- ① F. A minimum of 6" layer of fine sand shall surround the insulated pipe before rock free backfill is used in the trench.
- ① G. The insulation and jacketing shall be installed per the manufacturer instructions included in the approved shop drawings.
  - H. Tees, valves, and bends shall be covered with form fitting factory made sections.

#### INSULATION: ABOVE GROUND PIPING

- A. Insulation shall be cellular glass type. The insulation shall be a cellular glass product that is made specifically for thermal insulation of piping and is compatible with the piping material. Insulation shall be a minimum of 2-inches thick, unless otherwise shown on the drawings.
- B. Insulation shall be composed of all glass sealed cells having no binders or fillers. The completed product shall be rigid and impermeable, with an ultimate compressive strength of at least 100 psi. The thermal conductivity of the cellular glass shall be no higher than 0.40 BTU/(hr)(sq. ft.)(EF/in).
- C. The cellular glass insulation shall comply with all requirements of ASTM C552. The cellular glass shall be fabricated in half sections whenever possible.
- D. The jacketing for the insulation shall be one of the following methods:
  - 1.Metal Jacketing 0.016" smooth aluminum jacket.
  - 2.Metal Bands 0.5" X 0.020" stainless steel bands with matching seals.
- ① E. The insulation and jacketing shall be installed per the manufacturer instructions included in the approved shop drawings.
- 1 F. Tees, valves, and bends shall be covered with form fitting factory made sections.

## **EXECUTION**

(1)

A. Cellular glass shall not be applied to the piping until the piping has been wiped clean and supported so that there is adequate space to apply the full thickness of insulation and the covering completely around the pipe. The Contractor must obtain the Engineer's approval before the installation begins.

Project # 6086	Project # 608640 Contract # 126595						
Location :	GRAFTON - SU	JTTON					
Description :	Description: Bridge Replacement, S-33-004, Depot Street over the Blackstone River						
ITEM#	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT			
202.2	2	MANHOLE (9 TO 14 FOOT DEPTH)  AT EACH					
210.	3	SANITARY SEWER MANHOLE  AT EACH					
210.02	5	SANITARY SEWER MANHOLE REMOVED  AT EACH					
211.	2	SPECIAL SANITARY SEWER MANHOLE  AT EACH					
220.	1	DRAINAGE STRUCTURE ADJUSTED  AT EACH					
220.7	5	SANITARY STRUCTURE ADJUSTED  AT EACH					
221.	9	FRAME AND COVER  AT EACH					
222.3	6	FRAME AND GRATE (OR COVER) MUNICIPAL STANDARD  AT EACH					
223.1	4	FRAME AND GRATE (OR COVER) REMOVED AND STACKED  AT EACH					

Project # 608	640	Contract # 126595		
Location :	GRAFTON - SI	UTTON		
Description :	Bridge Replac	ement, S-33-004, Depot Street over the Blackstone River		
ITEM#	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
225.52	5	TRAP AND HOOD MUNICIPAL STANDARD		
		ATEACH		
227.3	1	REMOVAL OF DRAINAGE STRUCTURE SEDIMENT		
		AT PER CUBIC YARD		
227.31	100	REMOVAL OF DRAINAGE PIPE SEDIMENT		
		AT PER FOOT		
227.4	4	MASONRY PLUG		
		AT PER SQUARE FOOT		
238.08	275	8 INCH EPOXY LINED DUCTILE IRON SANITARY SEWER PIPE		
		AT PER FOOT		
241.12	185	12 INCH REINFORCED CONCRETE PIPE CLASS III		
		AT PER FOOT		
242.12	3	12 INCH REINFORCED CONCRETE PIPE FLARED END		
		ATEACH		
250.08	100	8 INCH POLYVINYL CHLORIDE SANITARY SEWER PIPE		
		AT PER FOOT		
251.08	1	8 INCH TEMPORARY SANITARY SEWER PIPE BYPASS SYSTEM		
		AT		

Project # 608	640	Contract # 126595		
Location :	GRAFTON - SI	UTTON		
Description :	Bridge Replac	ement, S-33-004, Depot Street over the Blackstone River		
ITEM#	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
254.08	145	8 INCH SEWER PIPE INSULATION		
		ATPER FOOT		
258.	15	STONE FOR PIPE ENDS		
		AT PER SQUARE YARD		
271.12	310	12 INCH AND UNDER PIPE REMOVED AND STACKED		
		ATPER FOOT		
302.06	20	6 INCH DUCTILE IRON WATER PIPE (RUBBER GASKET)		
		ATPER FOOT		
302.08	20	8 INCH DUCTILE IRON WATER PIPE (RUBBER GASKET)		
		AT PER FOOT		
302.12	260	12 INCH DUCTILE IRON WATER PIPE (RUBBER GASKET)		
		ATPER FOOT		
309.	1,400	DUCTILE IRON FITTINGS FOR WATER PIPE		
		AT PER POUND		
315.06	15	6 INCH WATER MAIN REMOVED AND STACKED		
		ATPER FOOT		
315.08	210	8 INCH WATER MAIN REMOVED AND STACKED		
		ATPER FOOT		

Project # 608	640	Contract # 126595		
Location :	GRAFTON - SI	UTTON		
Description :	Bridge Replac	ement, S-33-004, Depot Street over the Blackstone River		
ITEM#	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
345.8	300	8 INCH HDPE TEMPORARY SERVICE PIPE		
		ATPER FOOT		
350.06	3	6 INCH GATE AND GATE BOX		
		AT		
350.12	3	12 INCH GATE AND GATE BOX		
		AT		
358.	6	GATE BOX ADJUSTED		
		AT		
363.1	2	1 INCH CORPORATION COCK		
		ATEACH		
371.08	4	8 INCH COUPLING		
		ATEACH		
373.12	130	12 INCH WATER PIPE INSULATION		
		AT PER FOOT		
376.	2	HYDRANT		
		ATEACH		
376.3	2	HYDRANT - REMOVED AND STACKED		
		ATEACH		

Project # 608	3640	Contract # 126595		
Location	: GRAFTON - SI	JTTON		
Description :	: Bridge Replac	ement, S-33-004, Depot Street over the Blackstone River		
ITEM#	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
402.	120	DENSE GRADED CRUSHED STONE FOR SUB-BASE		
		AT PER CUBIC YARD		
415.3	230	PAVEMENT MICRO MILLING		
		AT PER SQUARE YARD		
440.	1,100	CALCIUM CHLORIDE FOR ROADWAY DUST CONTROL		
		AT PER POUND		
443.	2	WATER FOR ROADWAY DUST CONTROL		
		AT PER 1000 GALLONS		
450.31	120	SUPERPAVE INTERMEDIATE COURSE - 12.5 (SIC -12.5)		
		AT PER TON		
450.42	240	SUPERPAVE BASE COURSE - 37.5 (SBC - 37.5)		
		AT PER TON		
450.60	140	SUPERPAVE BRIDGE SURFACE COURSE - 9.5 (SSC-B - 9.5)		
		AT PER TON		
450.70	26	SUPERPAVE BRIDGE PROTECTIVE COURSE - 9.5 (SPC-B - 9.5)		
		AT PER TON		
450.71	5	SUPERPAVE BRIDGE PROTECTIVE COURSE - 12.5 (SPC-B - 12.5)		
		AT PER TON		

Project # 608	640	Contract # 126595		
Location :	GRAFTON - SI	JTTON		
Description :	Bridge Replac	ement, S-33-004, Depot Street over the Blackstone River		
ITEM#	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
451.	1	HMA FOR PATCHING		
		AT PER TON		
452.	210	ASPHALT EMULSION FOR TACK COAT		
		AT PER GALLON		
453.	900	HMA JOINT ADHESIVE		
		ATPER FOOT		
470.	5	HOT MIX ASPHALT BERM		
		ATPER TON		
472.	25	TEMPORARY ASPHALT PATCHING		
		AT PER TON		
482.31	50	SAWING AND SEALING JOINTS IN ASPHALT PAVEMENT AT BRIDGES		
		AT PER FOOT		
503.	50	GRANITE CURB TYPE VA3 - STRAIGHT		
		AT PER FOOT		
504.	170	GRANITE CURB TYPE VA4 - STRAIGHT		
		AT PER FOOT		
509.	20	GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS - STRAIGHT		
		AT PER FOOT		

Project # 608	640	Contract # 126595						
Location :	GRAFTON - SI	JTTON						
Description :	Description: Bridge Replacement, S-33-004, Depot Street over the Blackstone River							
ITEM#	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT				
509.1	20	GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS - CURVED AT						
		AT PER FOOT						
620.12	145	GUARDRAIL, TL-2 (SINGLE FACED)  AT  PER FOOT						
627.1	2	TRAILING ANCHORAGE  AT EACH						
627.82	3	GUARDRAIL TANGENT END TREATMENT, TL-2  AT EACH						
628.21	1	TRANSITION TO NCHRP 350 GUARDRAIL  AT EACH						
628.24	4	TRANSITION TO BRIDGE RAIL  AT EACH						
628.314	2	TEMPORARY IMPACT ATTENUATOR, REDIRECTIVE, TL-2  AT EACH						
630.2	265	HIGHWAY GUARD REMOVED AND DISCARDED  AT PER FOOT						
657.	330	ATPER FOOT						

Project # 608	640	Contract # 126595						
Location :	GRAFTON - SI	JTTON						
Description :	Description: Bridge Replacement, S-33-004, Depot Street over the Blackstone River							
ITEM#	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT				
697.1	7	SILT SACK						
		AT EACH						
697.2	400	FLOATING SILT FENCE						
		AT PER FOOT						
698.4	415	GEOTEXTILE FABRIC FOR PERMANENT EROSION CONTROL						
		AT PER SQUARE YARD						
701.	220	CEMENT CONCRETE SIDEWALK						
		AT PER SQUARE YARD						
701.2	30	CEMENT CONCRETE PEDESTRIAN CURB RAMP						
		AT PER SQUARE YARD						
702.	100	HOT MIX ASPHALT SIDEWALK OR DRIVEWAY						
		AT PER TON						
710.4	14	BOUND - PLAIN GRANITE						
		ATEACH						
715.	1	RURAL MAIL BOX REMOVED AND RESET						
		ATEACH						
740.	25	ENGINEER'S FIELD OFFICE AND EQUIPMENT (TYPE A)						
		AT PER MONTH						

Project # 608	640	Contract # 126595		
Location :	GRAFTON - SI	JTTON		
Description :	Bridge Replac	ement, S-33-004, Depot Street over the Blackstone River		
ITEM #	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
748.	1	MOBILIZATION		
		ATLUMP SUM		
751.	180	LOAM FOR ROADSIDES		
		AT PER CUBIC YARD		
756.	1	NPDES STORMWATER POLLUTION PREVENTION PLAN		
		AT		
765.	1,400	SEEDING		
		AT PER SQUARE YARD		
767.121	1,060	SEDIMENT CONTROL BARRIER		
		AT PER FOOT		
767.9	1,260	JUTE MESH		
		AT PER SQUARE YARD		
769.	145	PAVEMENT MILLING MULCH UNDER GUARD RAIL		
		AT PER FOOT		
832.	6.25	WARNING-REGULATORY AND ROUTE MARKER - ALUMINUM PANEL (TYPE A)		
		AT PER SQUARE FOOT		
833.5	6	DEMOUNTABLE REFLECTORIZED DELINEATOR - GUARD RAIL		
		AT EACH		

Project # 608	8640	Contract # 126595		
Location	: GRAFTON - SI	UTTON		
Description	Bridge Replac	ement, S-33-004, Depot Street over the Blackstone River		
ITEM#	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
833.7	4	DELINEATION FOR GUARD RAIL TERMINI		
		AT		
847.1	3	SIGN SUP (N/GUIDE)+RTE MKR W/1 BRKWAY POST ASSEMBLY - STEEL		
		ATEACH		
850.41	4,030	ROADWAY FLAGGER		
		AT PER HOUR		
851.1	755	TRAFFIC CONES FOR TRAFFIC MANAGEMENT		
		AT PER DAY		
852.	700	SAFETY SIGNING FOR TRAFFIC MANAGEMENT		
		AT PER SQUARE FOOT		
853.1	7	PORTABLE BREAKAWAY BARRICADE TYPE III		
		ATEACH		
853.2	150	TEMPORARY BARRIER (TL-2)		
		AT PER FOOT		
853.21	150	TEMPORARY BARRIER REMOVED AND RESET		
		ATPER FOOT		
853.8	755	TEMPORARY ILLUMINATION FOR WORK ZONE		
		AT PER DAY		

Project # 608	640	Contract # 126595		
Location :	GRAFTON - SI	JTTON		
Description :	Bridge Replace	ement, S-33-004, Depot Street over the Blackstone River		
ITEM#	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT
854.036	25	TEMPORARY PAVING MARKINGS - 6 INCH (TAPE)		
		AT PER FOOT		
854.1	125	PAVEMENT MARKING REMOVAL		
		AT PER SQUARE FOOT		
856.	1,510	ARROW BOARD		
		AT PER DAY		
856.12	50	PORTABLE CHANGEABLE MESSAGE SIGN		
		AT PER DAY		
859.	11,310	REFLECTORIZED DRUM		
		AT PER DAY		
866.206	660	6 INCH REFLECTORIZED WHITE LINE (POLYUREA) (RECESSED)		
		AT PER FOOT		
866.212	20	12 INCH REFLECTORIZED WHITE LINE (POLYUREA) (RECESSED)		
		AT PER FOOT		
867.206	640	6 INCH REFLECTORIZED YELLOW LINE (POLYUREA) (RECESSED)		
		AT PER FOOT		
874.	3	STREET NAME SIGN		
		ATEACH		

Project # 608640 Contract # 126595							
Location	GRAFTON - SUTTON						
Description :	Bridge Replac	ridge Replacement, S-33-004, Depot Street over the Blackstone River					
ITEM#	QUANTITY	ITEM WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT PRICE	AMOUNT			
874.2	4	TRAFFIC SIGN REMOVED AND RESET					
		AT					
874.4	3	TRAFFIC SIGN REMOVED AND STACKED					
		AT EACH					
874.8	2	MISCELLANEOUS SIGNS REMOVED AND RESET					
		AT					
877.1	1	SIGN POST REMOVED AND DISCARDED					
		ATEACH					
903.	2	3000 PSI, 1.5 INCH, 470 CEMENT CONCRETE					
		AT PER CUBIC YARD					
945.10	4,020	DRILLED MICROPILES					
		AT PER FOOT					
948.60	1	MICROPILE VERIFICATION LOAD TEST					
		ATEACH					
948.61	6	MICROPILE PROOF LOAD TEST					
		ATEACH					
953.1	1	TEMPORARY SUPPORT OF EXCAVATION					
		AT					

Project # 608640		Contract # 126595					
Location : GRAFTON - SUTTON  Description : Bridge Replacement, S-33-004, Depot Street over the Blackstone River							
983.	610	DUMPED RIPRAP					
		ATPER TON					
983.521	1	STREAMBED RESTORATION					
		ATLUMP SUM					
991.1	1	CONTROL OF WATER - STRUCTURE NO. S-33-004 (C92)					
		AT					
993.2	1	TEMPORARY UTILITY BRIDGE					
		ATLUMP SUM					
995.01	1	BRIDGE STRUCTURE, BRIDGE NO. S-33-004 (C92)					
		AT					
Total Qty:	49,670.55						