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February 19, 2019

ADDENDUM 1

Bridge 8-1HJ.1 Replacement

RE: Revised Plan Quantities and Units

1. Please attach the revised first page of the Unit Price Bid Schedule, page 8 of the proposal, to the proposal reflecting the following changes in the plans. Plan Sheet 3 has also been updated.
 - a. The units shown on plan sheet 3 in the General Summary for Item 601 Rock Channel Protection, Type D without Filter show CU YD. The units should be TON. REF No. 10 on the Unit Price Bid Schedule on page 8 of the proposal is correct.
 - b. The units shown on plan sheet 3 in the General Summary for 304 Aggregate Base (8") show CU YD. The units should be TON. REF No. 12 on the Unit Price Bid Schedule on page 8 of the proposal is correct.
 - c. The quantity and units shown on plan sheet 3 in the General Summary and the Pavement Table "P" for 617 Reconditioning of Shoulders are incorrect. Instead of 6 CU YD, this should be 12 TON. REF No. 16 on the Unit Price Bid Schedule on page 8 of the proposal has been updated to show 12 TON.
2. The above changes will not change the Engineer's Estimate.

End of addendum.

BRIDGE 8-1HJ.1 REPLACEMENT

UNIT PRICE BID SCHEDULE

The undersigned having full knowledge of the site, plans, specifications, and supplemental specifications for the above named improvement and the conditions of this proposal, hereby agrees to furnish all services, labor, materials, and equipment necessary to complete the entire project, according to the plans, specifications, supplemental specifications, and completion dates, and to accept the unit prices specified below for each item as full compensation for the work in this proposal.

Date set for completion: **June 28, 2019**

Engineer's Estimate: \$ **236,000.00**

The "**TOTAL AMOUNT OF THE BID**", BASED ON THE "**Approximate Unit Quantities**" given below times the unit prices specified by the Bidder amounts to the sum of:

_____ and /100 DOLLARS (\$ _____)

BIDDER: _____

REF. NO.	ITEM NO.	QUANTITY	UNITS	DESCRIPTION	UNIT PRICE	TOTAL
ROADWAY						
1	201	1	LUMP	CLEARING AND GRUBBING	\$ _____	\$ _____
2	202	70	SQ YD	PAVEMENT REMOVAL FOR BUTT JOINTS	\$ _____	\$ _____
3	203	94	CU YD	EXCAVATION	\$ _____	\$ _____
4	203	158	CU YD	EMBANKMENT	\$ _____	\$ _____
5	204	331	SQ YD	SUBGRADE COMPACTION	\$ _____	\$ _____
6	606	50	FT	GUARDRAIL, TYPE MGS	\$ _____	\$ _____
7	606	3	EACH	ANCHOR ASSEMBLY, MGS TYPE A	\$ _____	\$ _____
8	606	3	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	\$ _____	\$ _____
9	606	1	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1, AS PER PLAN	\$ _____	\$ _____
EROSION CONTROL						
10	601	30	TON	ROCK CHANNEL PROTECTION, TYPE D WITHOUT FILTER	\$ _____	\$ _____
DRAINAGE						
11	603	25	FT	12" CONDUIT, TYPE D	\$ _____	\$ _____
PAVEMENT						
12	304	92	TON	AGGREGATE BASE (8")	\$ _____	\$ _____
13	407	51	GALLON	TACK COAT	\$ _____	\$ _____
14	441	28	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448), PG64-22	\$ _____	\$ _____
15	441	22	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG64-22	\$ _____	\$ _____
16	617	12	TON	RECONDITIONING OF SHOULDERS	\$ _____	\$ _____
TRAFFIC CONTROL						
17	626	12	EACH	BARRIER REFLECTOR, TYPE A	\$ _____	\$ _____
18	642	0.04	MILE	CENTER LINE, TYPE 1	\$ _____	\$ _____
19	642	0.08	MILE	EDGE LINE, TYPE 1	\$ _____	\$ _____

STANDARD DRAWINGS AND SUPPLEMENTAL SPECIFICATIONS

REFER TO THE FOLLOWING STANDARD BRIDGE DRAWINGS:

- AS-1-81 REVISED 1-18-13
- DS-1-92 REVISED 7-18-03
- PSBD-2-07 REVISED 7-20-18
- TST-1-99 REVISED 7-20-18

DESIGN SPECIFICATIONS

DESIGN SPECIFICATIONS: THIS STRUCTURE CONFORMS TO THE "LRFD BRIDGE DESIGN SPECIFICATIONS" ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS, 8TH EDITION, AND THE ODOT BRIDGE DESIGN MANUAL, 2007.

DESIGN LOADING

DESIGN LOADING: HL-93
FUTURE WEARING SURFACE (FWS) OF 0.060 KIPS/SQ. FT.

DESIGN DATA

CONCRETE CLASS QC 1 - COMPRESSIVE STRENGTH 4.0 KSI (SUBSTRUCTURE)
CONCRETE CLASS QC2 - COMPRESSIVE STRENGTH 4.5 KSI (SUPERSTRUCTURE)
REINFORCING STEEL - MINIMUM YIELD STRENGTH 60 KSI
CONCRETE FOR PRESTRESSED BEAMS:
COMPRESSIVE STRENGTH (FINAL) - 7 KSI
COMPRESSIVE STRENGTH (RELEASE) - 5 KSI

PRESTRESSING STRAND:
AREA = 0.167 SQ. IN.
ULTIMATE STRENGTH = 270 KSI
INITIAL STRESS = 202.5 KSI (LOW RELAXATION STRANDS)

DECK PROTECTION METHOD

MEMBRANE WATERPROOFING
ASPHALT CONCRETE WEARING SURFACE
STEEL DRIP STRIP
SEALING OF CONCRETE SURFACES

SURVEY DISC ON STRUCTURE

THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST ONE (1) WEEK IN ADVANCE OF POURING THE CONCRETE FOR COMPLETION OF THE WINGWALL. THE ENGINEER WILL PROVIDE THE CONTRACTOR ONE (1) SURVEY DISC FOR THE STRUCTURE WHICH THE CONTRACTOR WILL PLACE IN THE SURFACE OF THE FRESH CONCRETE. THE LOCATION OF THE DISC SHALL BE ON THE WINGWALL AND ON A FLAT, HORIZONTAL SURFACE BEYOND THE EDGE OF THE DECK AND RAILING. THE BENCHMARK SHALL BE ACCESSIBLE TO A SURVEYOR'S ROD WITHOUT ANY OBSTRUCTIONS. COST OF THIS WORK SHALL BE INCLUDED WITH ITEM 511.

ITEM 202, PORTIONS OF STRUCTURE REMOVED, AS PER PLAN

REMOVE CONCRETE BY MEANS OF APPROVED PNEUMATIC HAMMERS EMPLOYING POINTED AND BLUNT CHISEL TOOLS. HYDRAULIC HOE-RAM TYPE HAMMERS WILL NOT BE PERMITTED. THE WEIGHT OF THE HAMMER SHALL NOT BE MORE THAN 35 POUNDS FOR REMOVAL WITHIN 18 INCHES OF PORTIONS TO BE PRESERVED. OUTSIDE THE 18 LIMIT, THE CONTRACTOR MAY USE HAMMERS NOT EXCEEDING 90 POUNDS UPON THE APPROVAL OF THE ENGINEER. DO NOT PLACE PNEUMATIC HAMMERS IN DIRECT CONTACT WITH REINFORCING STEEL THAT IS TO BE RETAINED IN THE REBUILT STRUCTURE.

SAW CUT BOUNDARIES OF PROPOSED CONCRETE REMOVALS 1 INCH DEEP. REMOVE CONCRETE TO A ROUGH SURFACE. INSTALL DOWEL BARS AS SPECIFIED. PRIOR TO CONCRETE PLACEMENT, ABRASIVELY CLEAN JOINT SURFACES AND ANY EXISTING EXPOSED REINFORCEMENT TO REMOVE LOOSE AND DISINTEGRATED CONCRETE AND LOOSE RUST. THOROUGHLY CLEAN THE JOINT SURFACE AND EXPOSED REINFORCEMENT OF ALL DIRT, DUST, RUST, OR OTHER FOREIGN MATERIAL BY THE USE OF WATER, AIR UNDER PRESSURE, OR OTHER METHODS THAT PRODUCE SATISFACTORY RESULTS. EXISTING REINFORCING STEEL DOES NOT HAVE TO HAVE A BRIGHT STEEL FINISH, BUT REMOVE ALL PACK AND LOOSE RUST. THOROUGHLY DRENCH EXISTING CONCRETE SURFACES WITH CLEAN WATER AND ALLOW TO DRY TO A DAMP CONDITION BEFORE PLACING CONCRETE.

BEARING PAD SHIMS

PLACE 1/2" THICK PREFORMED BEARING PAD SHIMS, PLAN AREA 6 INCHES BY 12 INCHES, UNDER THE ELASTOMERIC BEARING PADS WHERE REQUIRED FOR PROPER BEARING. FURNISH TWO SHIMS PER BEAM. THE COUNTY WILL MEASURE THIS ITEM BY THE TOTAL NUMBER SUPPLIED. THE COUNTY WILL PAY FOR ACCEPTED QUANTITIES AT THE CONTRACT PRICE FOR ITEM 516-3/8" PREFORMED BEARING PADS.

ITEM 503, UNCLASSIFIED EXCAVATION, AS PER PLAN

UNCLASSIFIED EXCAVATION SHALL BE IN ACCORDANCE WITH 503 EXCEPT THAT THE BACKFILL MATERIAL BEHIND THE ABUTMENTS SHALL BE 203 GRANULAR MATERIAL PLACED IN LIFTS NOT TO EXCEED A THICKNESS OF MORE THAN 8 INCHES.

ITEM 512, SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)

A CONCRETE SEALER SHALL BE SHOP APPLIED TO THE SURFACES INDICATED IN THESE PLANS AND AS DESCRIBED BELOW:

THE EXPOSED SURFACES OF THE ABUTMENT DOWN TO THE GROUND LINE, EXCLUDING THE BEARING SEATS;

THE EXPOSED SURFACES OF ALL WINGWALLS INCLUDING TOP AND BOTH SIDES AND END AREAS DOWN TO THE GROUND LINE; AND

THE PRESTRESSED BOX BEAM EXTERIOR FACE PLUS 6 INCHES UNDERDECK (INCIDENTAL TO THE COST OF ITEM 515 - PRESTRESSED CONCRETE NON-COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, B21-48).

ITEM 606 - MGS BRIDGE TERMINAL ASSEMBLY (BTA), TYPE 1, AS PER PLAN

THIS ITEM SHALL CONSIST OF FURNISHING AND INSTALLING THE FIRST EIGHT (8) POSTS AND 12'-6" NESTED THRIE BEAM SECTION OF THE STANDARD MGS BTA, TYPE 1, AND THEN TRANSITION INTO A 12'-6" THRIE BEAM WITH A TEN (10) FOOT RADIUS MAINTAINING THE POST SPACINGS AS PER ODOT STD. DWG. MGS-3.1. INCLUDED WITH THIS BTA IS A FLARED END SECTION INSTALLED AT THE END OF THE RADIUS.

PAYMENT FOR THIS WORK SHALL BE MADE A THE UNIT PRICE BID FOR ITEM 606, MGS BTA, TYPE 1, AS PER PLAN, EACH, AND SHALL INCLUDE ALL LABOR, TOOLS, EQUIPMENT, AND MATERIALS NECESSARY TO CONSTRUCT A COMPLETE AND FUNCTIONAL BRIDGE TERMINAL ASSEMBLY SYSTEM.

GUARDRAIL TABLE "G"									
REFERENCE NUMBER	SHEET NO.	STATION		OUT TO FACE	SIDE	517 RAILING (TWIN STEEL TUBE) FT	606		626 BARRIER REFLECTOR, TYPE A EACH
		FROM	TO				GUARDRAIL TYPE MGS	ANCHOR ASSEMBLY, MGS TYPE A EACH	
G-1	5	3+99.96	4+63.88	14.0	LT.		12.50	1	3
G-2	5	4+42.12	4+63.88	14.0	RT.				2
G-3	5	4+63.88	5+05.01	14.0	LT.	41.13			
G-4	5	4+63.88	5+05.01	14.0	RT.	41.13			
G-5	5	5+05.01	5+81.44	14.0	LT.		25.00	1	4
G-6	5	5+05.01	5+68.94	14.0	RT.		12.50	1	3
TOTALS TO GENERAL SUMMARY						82.25	50.00	3	12

PAVEMENT MARKINGS TABLE "M"						
REFERENCE NUMBER	SHEET NO.	STATION		LENGTH (L) FT	642	
		FROM	TO		CENTER LINE, TYPE 1 = L / 5280 MILE	EDGE LINE, TYPE 1 MILE
M-1	5	4+00	6+00	200.00	0.04	0.08
TOTALS TO GENERAL SUMMARY					0.04	0.08

PAVEMENT TABLE "P"															
REFERENCE NO.	SHEET NO.	STATION		LENGTH L.F.	EXISTING PAVEMENT WIDTH FEET	PROPOSED PAVEMENT WIDTH FEET	202 PAVEMENT REMOVAL FOR BUTT JOINTS SQ YD	202 WEARING COURSE REMOVED SQ YD	204 SUBGRADE COMPACTION SQ YD	304 304 AGGREGATE BASE (6") TON	407 TACK COAT (0.1 GAL./S.Y.) GALLON	441 ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448), PG 64-22, (2.00") CU YD			
		FROM	TO										441 ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG 64- 22, (1.5") CU YD	526 REINFORCED CONCRETE APPROACH SLAB (T=13") SQ YD	617 RECONDITIONING OF SHOULDERS TON
P-1	5	4+00.00	4+17.50	17.5	18.0	18.0	35.0				3.5	1.5	1.2		
P-2	5	4+17.50	4+46.11	28.6	18.0	20.0			66.8	29.7	6.4	3.6	2.0		
P-3	5	4+46.11	4+66.11	20.0	18.0	28.0			62.2		6.2	4.3	1.4		
P-4	5	4+66.11	5+02.78	36.7	18.0	28.0		73.3			11.4	7.9	1.4		
P-5	5	5+02.78	5+22.78	20.0	18.0	28.0			62.2		6.2	4.3	1.4		
P-6	5	5+22.78	5+82.50	59.7	18.0	20.0			139.3	61.9	13.3	7.6	4.2		
P-7	5	5+82.50	6+00.00	17.5	18.0	18.0	35.0				3.5	1.5	1.2		
TOTALS TO GENERAL SUMMARY							70.00	73.34	330.55	91.61	50.48	27.74	21.03	124.44	11.49

GENERAL SUMMARY					
SHEET NO.	ITEM	GRAND TOTAL	UNIT	DESCRIPTION	ORIGIN
ROADWAY					
3	201	1	LUMP	CLEARING AND GRUBBING	PLANS
3	202	70	SQ YD	PAVEMENT REMOVED FOR BUTT JOINTS	TABLE P
3	203	94	CU YD	EXCAVATION	PLANS
3	203	158	CU YD	EMBANKMENT	PLANS
3	204	331	SQ YD	SUBGRADE COMPACTION	TABLE P
3	606	50	FT	GUARDRAIL, TYPE MGS	TABLE G
3	606	3	EACH	ANCHOR ASSEMBLY, MGS TYPE A	TABLE G
3	606	3	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1	TABLE G
3	606	1	EACH	MGS BRIDGE TERMINAL ASSEMBLY, TYPE 1, AS PER PLAN	TABLE G
EROSION CONTROL					
5	601	30	TON	ROCK CHANNEL PROTECTION, TYPE D WITHOUT FILTER	PLANS
DRAINAGE					
3	603	25	FT	12" CONDUIT, TYPE D	PLANS
PAVEMENT					
3	304	92	TON	AGGREGATE BASE (6")	TABLE P
3	407	51	GALLON	TACK COAT	TABLE P
3	441	28	CU YD	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2 (448), PG64-22	TABLE P
3	441	22	CU YD	ASPHALT CONCRETE SURFACE COURSE, TYPE 1 (448), PG64-22	TABLE P
3	617	12	TON	RECONDITIONING OF SHOULDERS	TABLE P
TRAFFIC CONTROL					
3	626	12	EACH	BARRIER REFLECTOR, TYPE A	TABLE G
3	642	0.04	MILE	CENTER LINE, TYPE 1	TABLE M
3	642	0.08	MILE	EDGE LINE, TYPE 1	TABLE M
FOR STRUCTURE GENERAL SUMMARY, SEE SHEET 3					
INCIDENTALS					
103	1	LUMP		PREMIUM FOR CONTRACT PERFORMANCE BOND AND MAINTENANCE GUARANTEE BOND	
614	1	LUMP		MAINTAINING TRAFFIC	
623	1	LUMP		CONSTRUCTION LAYOUT AND STAKING	

GENERAL SUMMARY, BRIDGE 8-1HJ.1					
SHEET NO.	ITEM	GRAND TOTAL	UNIT	DESCRIPTION	ORIGIN
2, 7	202	1	LUMP	STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN	PLAN
3	202	73	SQ YD	WEARING COURSE REMOVED	TABLE P
7	503	175	CU YD	UNCLASSIFIED EXCAVATION	PLAN
9	509	3,296	POUND	EPOXY COATED REINFORCING STEEL	TABLE RS
8, 9	510	188	EACH	DOWEL HOLES WITH NONSHRINK, NONMETALLIC GROUT	PLAN
8	511	32	CU YD	CLASS C CONCRETE, ABUTMENT	PLAN
3, 8, 10	512	135	SQ YD	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	PLAN
8	512	134	SQ YD	TYPE 3 WATERPROOFING	PLAN
10, 11	515	7	EACH	PRESTRESSED CONCRETE NON-COMPOSITE BOX BEAM BRIDGE MEMBERS, LEVEL 1, B21-48	PLAN
8	516	98	SQ FT	1" PREFORMED EXPANSION JOINT FILLER	PLAN
8	516	56	FT	2" DEEP JOINT SEALER, AS PER PLAN	PLAN
8	516	56	FT	SPECIAL - SAWING AND SEALING BITUMINOUS CONCRETE JOINTS	PLAN
3	516	14	EACH	1/8" PREFORMED BEARING PAD	PLAN
11	516	28	EACH	ELASTOMERIC BEARING WITH INTERNAL LAMINATES ONLY (NEOPRENE) (6" X 12" X 1.0" THICK)	PLAN
5, 10	517	82.25	FT	RAILING (TWIN STEEL TUBE)	TABLE G
8	518	70	CU YD	POROUS BACKFILL WITH FILTER FABRIC	PLAN
10	518	75	FT	SPECIAL - STEEL DRIP STRIP	PLAN
3	526	125	SQ YD	REINFORCED CONCRETE APPROACH SLABS (T=13")	TABLE P