

Planning & Engineering Office of Project Development

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March 28, 2024

ADDENDUM NO. 2

RE: Item #11, April 4, 2024 Letting - P-PH-B-PT 0010(124)296, PCN 05F4, Brown, Marshall County - Shoulder Widening, Replace Str RCBC (2-10x4 CIP Box or 2-11x4 Precast Box; 4-12x12 CIP Box; 2-11x4 CIP Box; 10-5 CIP or 11x5 Precast), Approach Grading, Modify Intersection, Pipe Work

TO WHOM IT MAY CONCERN:

The following addenda to the plans shall be inserted and made a part of your proposal for the referenced project.

SPECIAL PROVISIONS: NO CHANGE

SDEBS BID PROPOSAL: NO CHANGE

PLANS: Please destroy sheets F2 and F5 and replace with the enclosed sheets, dated 3/27/24.

Sheet F2: CLASS G ASPHALT CONCRETE note was removed, and CLASS E ASPHALT CONCRETE

note was added.

Sheet F5: TABLE OF ADDITIONAL QUANTITIES was revised. The asphalt concrete composite

quantities for the Pipe Replacement were listed in the wrong row and have been

moved to the correct row.

Sincerely,

Sam Weisgram
Engineering Supervisor

SW/cj

CC: Mark Peterson, Aberdeen Region Engineer

Bruce Schroeder, Aberdeen Area Engineer

SECTION F - ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E3320	Checker	Lump Sum	LS
120E6200	Water for Granular Material	1,796.6	MGal
260E1010	Base Course	98,955.8	Ton
260E1030	Base Course, Salvaged	50,754.8	Ton
260E3050	Gravel Surfacing, Salvaged Asphalt Mix	70.0	Ton
320E0005	PG 58-34 Asphalt Binder	1,191.9	Ton
320E1050	Class E Asphalt Concrete	20,536.9	Ton
320E1200	Asphalt Concrete Composite	1,571.9	Ton
320E3000	Compaction Sample	12	Each
320E5020	Saw Joint in Asphalt Concrete	165,038	Ft
320E7012	Grind 12" Rumble Strip or Stripe in Asphalt Concrete	32.8	Mile
330E0010	MC-70 Asphalt for Prime	230.2	Ton
330E0100	SS-1h or CSS-1h Asphalt for Tack	52.3	Ton
330E0210	SS-1h or CSS-1h Asphalt for Flush Seal	37.7	Ton
330E1000	Blotting Sand for Prime	83.3	Ton
330E2000	Sand for Flush Seal	89.6	Ton

SHOULDER WIDENING

The elevation of the subgrade under shoulder widening will be at or below subgrade elevation under existing adjacent mainline pavement that is to remain in place.

BASE COURSE, SALVAGED

Base Course, Salvaged will be obtained from the stockpile site(s) provided by the Contractor and may be used without further gradation testing.

The Contractor will ensure the Base Course, Salvaged material contains no more than 50% salvaged asphalt mix material and at least 50% granular material (salvaged or virgin). Blended material will be to the satisfaction of the Engineer.

All other requirements for Base Course, Salvaged will apply.

CLASS E ASPHALT CONCRETE

Mineral Aggregate for Class E Asphalt Concrete will conform to the requirements for Class E, Type 1.

When directed by the Engineer, the Contractor will saw and remove a total of three undamaged compaction cores (4" dia. min.) per asphalt concrete lift from designated area(s) and repair the hole(s) to the satisfaction of the Engineer. All costs associated with the compaction cores will be incidental to the contract unit price per each for Compaction Sample.

All other requirements for Class E will apply.

CHECKING SPREAD RATES

The Contractor will be responsible for checking the Base Course, Base Course, Salvaged and Asphalt Concrete spread rates and taking the weigh delivery tickets as the surfacing material arrives on the project and is placed onto the roadway.

The Contractor will compute the required spread rates for each typical surfacing section and create a spread chart prior to the start of material delivery and placement. The Engineer will review and check the Contractor's calculations and spread charts. The station to station spread will be written on each ticket as the surfacing material is delivered to the roadway.

At the end of each day's shift, the Contractor will verify the following:

- All tickets are present and accounted for.
- The quantity summary for each item is calculated,
- The amount of material wasted if any,
- Each day's ticket summary is marked with the corresponding 'computed
- The ticket summary is initialed and certified that the delivered and placed quantity is correct.

All daily tickets and the summary by item will be given to the Engineer no later than the following morning.

If the checker is not properly and accurately performing the required duties, the Contractor will correct the problem or replace the checker with an individual capable of performing the duties to the satisfaction of the Engineer. Failure to do so will result in suspension of the work.

The Department will perform depth checks. The Contractor will be responsible for placement of material to the correct depth unless otherwise directed by the Engineer. If the placed material is not within a tolerance of $\pm 1/2$ inch of the plan shown depth, the Contractor will correct the problem at no additional cost to the Department. Excess material above the tolerance will not be paid for. Achieving the correct depth may require picking up and moving material or other action as required by the Engineer. All costs for providing the Contractor furnished checker and performing all related duties will be incidental to the contract lump sum price for the CHECKER. No allowances will be made to the contract lump sum price for CHECKER due to authorized quantity variations unless the quantities for the material being checked vary above or below the estimated quantities by more than 25 percent. Payment for the Checker will then be increased or decreased by the same proportion as the placed material quantity bears to the estimated material quantity.

ASPHALT CONCRETE COMPOSITE

Section 324 will apply except that Class E Asphalt Concrete as specified elsewhere in the plans may be used as Asphalt Concrete Composite.

Plans specified locations for Asphalt Concrete Composite will be paid for at the contract unit price per ton for Asphalt Concrete Composite regardless of the class of asphalt concrete used at such locations.

BLOTTING SAND FOR PRIME

Included in the Estimate of Quantities are 10.0 tons of Blotting Sand for Prime to be used where necessary for maintenance of traffic as directed by the Engineer. (Rate = 10pounds per square yard)

STATE OF	PROJECT	SHEET	TOTAL SHEETS	
SOUTH			SHEETS	
DAKOTA	P-PH-B-PT 0010(124)296	F2	F11	

Plotting Date: 03/27/2024 Revised: 27Mar24, LLR

SAW JOINT IN ASPHALT CONCRETE

Prior to the removal of in place asphalt concrete, the existing pavement will be sawed full depth to a true line with a vertical face, see typical sections. If approved by the Engineer, the Contractor may elect to use a different method to create this vertical face. All costs to saw joint will be incidental to the contract unit price per foot for Saw Joint in Asphalt Concrete.

TABLE OF JOINT SAWING

Station		Station	Asphalt Concrete Joint (feet)		
Lt. & Rt. Shoulder					
477+10	to	1124+35	64,725		
1132+40	to	1310+34	17,794		
	82,519				
Grand Total (Both	165,038				

HAUL ROAD

Included in the Estimate of Quantities are 2,000 tons of Base Course per mile, and 24 MGal of Water for Granular Material per mile for maintenance and repair of the haul road to the Borrow Pit. The use of this material will be at the discretion of the Contractor. Any additional construction for the haul road will be the Contractor's responsibility. The Contractor will receive no additional compensation for this work. The estimated distance to the Borrow Pit is 3.25 miles.

The Base Course used on the haul road will be compacted to the satisfaction of the Engineer.

All costs associated with the maintenance and repair of haul road will be incidental to the "Base Course" quantities provided.

GRIND RUMBLE STRIPS/STRIPES IN ASPHALT CONCRETE

Asphalt Concrete Rumble Strips/Stripes will be constructed on the shoulders. Rumble Strips/Stripes will be paid for at the contract unit price per mile for Grind 12" Rumble Strip or Stripe in Asphalt Concrete. It is estimated that 32.8 miles of asphalt concrete rumble strips/stripes will be required.

Rumble Strip/Stripe installation will be completed prior to application of the Flush Seal and Permanent Pavement Markings. In the event the Flush Seal is eliminated from the contract, the Contractor will still be required to apply a Flush Seal to the newly installed 12" Rumble Strips/Stripes at a width of 1.5' and at the same rate as specified in this plan set. No adjustment in payment will be made and SS-1h or CSS-1h Asphalt for Flush Seal will be paid at the contract unit price per ton.

Plotting Date:

Revised: 27Mar24, LLR

TABLE OF ADDITIONAL QUANTITIES

Water for Granular Material	Base Course or Base Course, Salvaged	Base Course	Asphalt Concrete Composite	Class E Asphalt Concrete (1 st / 2 nd Lift)	PG 58-34 Asphalt Binder (1 st / 2 nd Lift)	MC-70 Asphalt for Prime	Blotting Sand for Prime	SS-1h or CSS-1h Asphalt for Tack (1 st / 2 nd Lift)	SS-1h or CSS-1h Asphalt for Flush Seal	Sand for Flush Seal
Mgal	Ton	Ton	Ton	Ton	Ton	Ton	Ton	Ton	Ton	Ton
	1,312.0			256.5 / 214.2	14.9 / 12.4		6.5	0.5 / 0.5	0.4	4.7
15.7	1,312.0			256.5 / 214.2	14.9 / 12.4		6.5	0.5 / 0.5	0.4	4.7
15.7	1,312.0			256.5 / 214.2	14.9 / 12.4	2.5	6.5	0.5 / 0.5	0.4	4.7
15.7	1,312.0			256.5 / 214.2	14.9 / 12.4	2.5	6.5	0.5 / 0.5	0.4	4.7
5.6	468.0									
6.7	556.7									
5.7	475.7									
5.6	467.3									
21.8	1,818.4			1,142.1	66.2	10.3		1.7	1.5	27.4
4.0	325.0			·						
59.3	5,072.4									
0.5	39.2			25.3	1.5	0.2				0.6
57.2	4.715.7		714.5 / 857.4							
	.,	2,625								
78.0		6,500								
339.7	10 196 4	0.125.0	1 571 0	3.050.2	176.0	20.5	26.0	5.7	2.1	46.8
	Mgal 15.7 15.7 15.7 15.7 15.7 5.6 6.7 5.7 5.6 21.8 4.0 59.3 0.5	Material Base Course, Salvaged Mgal Ton 15.7 1,312.0 15.7 1,312.0 15.7 1,312.0 15.7 1,312.0 5.6 468.0 6.7 556.7 5.7 475.7 5.6 467.3 21.8 1,818.4 4.0 325.0 59.3 5,072.4 0.5 39.2 57.2 4,715.7 31.5 78.0	Material Base Course, Salvaged Base Course Mgal Ton Ton 15.7 1,312.0 15.7 1,312.0 15.7 1,312.0 15.7 1,312.0 15.7 1,312.0 15.7 1,312.0 5.6 468.0 6.7 556.7 5.7 5.6 467.3 5.6 467.3 475.7 5.6 467.3 475.7 5.6 325.0 59.3 5,072.4 0.5 39.2 57.2 4,715.7 31.5 2,625 6,500 78.0 6,500	Material Base Course, Salvaged Course Course Concrete Composite Mgal Ton Ton Ton 15.7 1,312.0 15.7 1,312.0 15.7 1,312.0 15.7 1,312.0 15.7 1,312.0 15.7 1,312.0 5.6 468.0 6.7 556.7 5.7 475.7 5.6 467.3 21.8 1,818.4 4.0 325.0 59.3 5,072.4 0.5 39.2 57.2 4,715.7 714.5 / 857.4 31.5 2,625 78.0	Material Base Course, Salvaged Course Course Concrete Composite Asphalt Concrete (1st / 2nd Lift) Mgal Ton Ton Ton Ton 15.7 1,312.0 256.5 / 214.2 256.5 / 214.2 15.7 1,312.0 256.5 / 214.2 256.5 / 214.2 15.7 1,312.0 256.5 / 214.2 256.5 / 214.2 5.6 468.0 256.5 / 214.2 256.5 / 214.2 5.7 475.7 475.7 1,142.1 5.6 467.3 1,142.1 1,142.1 4.0 325.0 325.0 59.3 5,072.4 0.5 39.2 25.3 57.2 4,715.7 714.5 / 857.4 31.5 78.0 6,500 6,500	Material Base Course, Salvaged Course Course Concrete Composite Asphalt Concrete (1st / 2nd Lift) Asphalt Binder (1st / 2nd Lift) Mgal Ton Ton Ton Ton Ton 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 15.7 475.7 37.0 37.0 37.0 15.6 468.0 467.3 47.0 47.0 47.0 15.0 39.2 25.3 1.5 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 37.0 </td <td>Material Course, Salvaged Base Course Course Salvaged Concrete Composite Asphalt Concrete (1st / 2nd Lift) Asphalt Binder (1st / 2nd Lift) Prime Mgal Ton Ton Ton Ton Ton Ton 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 5.6 468.0 6.7 556.7 5.7 5.7 5.6 467.3 5.6 467.3 5.6 467.3 5.7<!--</td--><td>Material Course Course Salvaged Base Course Salvaged Concrete Composite Asphalt Concrete (1st / 2nd Lift) Asphalt Binder (1st / 2nd Lift) Prime Soluting Sand for Prime Mgal Ton 25.5 6.5 4.5 1.5 1.2.5 6.5 6.5 6.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5</td><td>Material Salvaged Base Course Salvaged Concrete Composite Asphalt Concrete (1st / 2nd Lift) Asphalt Binder (1st / 2nd Lift) Prime for Prime Biotung Sand for Prime Asphalt for Tack (1st / 2nd Lift) Mgal Ton Ton Ton Ton Ton Ton Ton 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 6.5 0.5 / 0.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 6.5 0.5 / 0.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 6.5 0.5 / 0.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 6.5 0.5 / 0.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 6.5 0.5 / 0.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 6.5 0.5 / 0.5 5.6 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0</td><td>Material Save Course Salvaged Base Course Salvaged Concrete Composite Asphalt Concrete (1st / 2nd Lift) Asphalt Binder (1st / 2nd Lift) Prime for Prime Blotting Sand for Prime for Prime Asphalt for Tack (1st / 2nd Lift) Asphalt for Flush Seal Mgal Ton Ton</td></td>	Material Course, Salvaged Base Course Course Salvaged Concrete Composite Asphalt Concrete (1st / 2nd Lift) Asphalt Binder (1st / 2nd Lift) Prime Mgal Ton Ton Ton Ton Ton Ton 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 5.6 468.0 6.7 556.7 5.7 5.7 5.6 467.3 5.6 467.3 5.6 467.3 5.7 </td <td>Material Course Course Salvaged Base Course Salvaged Concrete Composite Asphalt Concrete (1st / 2nd Lift) Asphalt Binder (1st / 2nd Lift) Prime Soluting Sand for Prime Mgal Ton 25.5 6.5 4.5 1.5 1.2.5 6.5 6.5 6.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5</td> <td>Material Salvaged Base Course Salvaged Concrete Composite Asphalt Concrete (1st / 2nd Lift) Asphalt Binder (1st / 2nd Lift) Prime for Prime Biotung Sand for Prime Asphalt for Tack (1st / 2nd Lift) Mgal Ton Ton Ton Ton Ton Ton Ton 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 6.5 0.5 / 0.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 6.5 0.5 / 0.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 6.5 0.5 / 0.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 6.5 0.5 / 0.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 6.5 0.5 / 0.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 6.5 0.5 / 0.5 5.6 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0</td> 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214.2 14.9 / 12.4 2.5 6.5 0.5 / 0.5 15.7 1,312.0 256.5 / 214.2 14.9 / 12.4 2.5 6.5 0.5 / 0.5 5.6 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0 468.0	Material Save Course Salvaged Base Course Salvaged Concrete Composite Asphalt Concrete (1st / 2nd Lift) Asphalt Binder (1st / 2nd Lift) Prime for Prime Blotting Sand for Prime for Prime Asphalt for Tack (1st / 2nd Lift) Asphalt for Flush Seal Mgal Ton Ton

TABLE OF MATERIAL QUANTITIES

Location-Description	Water for Granular Material	Base Course or Base Course, Salvaged	Base Course	Gravel Surfacing, Salvaged Asphalt Mix	Asphalt Concrete Composite	Class E Asphalt Concrete (1st / 2nd Lift)	PG 58-34 Asphalt Binder (1st / 2nd Lift)	MC-70 Asphalt for Prime	Blotting Sand for Prime	SS-1h or CSS-1h Asphalt for Tack (1 st / 2 nd Lift)	SS-1h or CSS-1h Asphalt for Flush Seal	Sand for Flush Seal
	Mgal	Ton	Ton	Ton	Ton	Ton	Ton	Ton	Ton	Ton	Ton	Ton
Section 8 – Rates of Materials	82.4	6,858.8				1,372.6 / 1,140.2	79.6 / 66.0	13.2	36.6	2.8 / 2.8	2.4	27.0
Section 9 – Rates of Materials	1,305.1	108,725.3				13,585.7	788.6	186.0		37.6	29.7	
Section 10 – Rates of Materials	31.4	2,619.6				449.5 / 484.2	26.1 / 28.1	4.6	10.7	1.0 / 1.0	1.6	15.8
Section 11 – Rates of Materials	38.3	3,195.5				454.5	26.6	5.9		1.4	0.9	
Additional Quantities Table	338.7	19,186.4	9,125.0		1,571.9	3,050.2	176.9	20.5	26.0	5.7	3.1	46.8
Quantities from Notes	0.7			70.0					10.0			
TOTAL	1,796.6	140,585.6	9,125.0	70.0	1,571.9	20,536.9	1,191.9	230.2	83.3	52.3	37.7	89.6