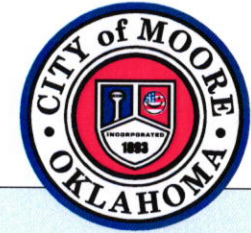




CDBG-DR 13 CHANGE ORDER OR WORK ORDER AMENDMENT



Project Information					
Project Name	Plaza Tower Street Repair				
Work Order Number (CDBG-DR 01)	I-02-W-URG	Project Address	Eagle Dr, SW 10 th , Ridgeway DR, SW 8 th , Cardan Pl.		
Date	4/24/2017	Requested By	Rudy Construction		
Date Requested	4/10/2017	Total Budget	\$4,225,406.82	Cost of Change	\$526,625.84

Change Order Type - Description				
Circle Type:	Field	Change	<div style="border: 2px solid blue; border-radius: 50%; padding: 5px; display: inline-block;"> Work Order Amendment </div>	
Budget Line Items Affected: (List All)				
Change in Quantities:				
200-00 Unclassified Excavation (>500 CY) – Unit Price \$15/CY, Quantity Increased to 23,852.08, New Total \$357,781.20				
812-03 Remove Curb & Gutter – Unit Price \$7/LF, Quantity Increased to 10,914.08, New Total \$76,398.56				
812-03 Concrete Pavement Removal – Unit Price \$10/SY, Quantity Increased to 13,515.68, New Total \$135,156.80				
813-00 Remove Driveway – Unit Price \$10/SY, Quantity Increased to 3,238.73, New Total \$32,287.30				
820-01 Sawcut Pavement – Unit Price \$4/LF, Quantity Increased to 5,785.99, New Total \$23,143.96				
823-03 6" PC Conc. Driveway (HES) – Unit Price \$65/SY, Quantity Increased to 3,434.42, New Total \$29,992.30				
824-01 Temporary Surface Course (TBSC) – Unit Price \$40/Ton, Quantity Increased to 811.43, New Total \$32,457.20				
840-04 Solid Slab Sodding (U-3 Bermuda) – Unit Price \$3/SY, Quantity Increased to 9,789.34, New Total \$29,368.02				
453-04 Reinforced Concrete Pipe (48") – Unit Price \$240/LF, Quantity Decreased to 237.70, New Total \$57,048.00				
454-30 Junction Box (6' X 6') – Unit Price 850/CY, Quantity Increased to 16.54, New Total \$14,059.00				
Survey & Staking as needed – Unit Price \$1,250/day, Quantity Increased to 19, New Total \$23,750.00				

Street Parking Lot Lighting/Infrastructure – Lump sum of \$50,000.00, Quantity decreased to 0, New Total is \$0.00
215-08 Rock Backfill – Unit Price \$40/ton, Quantity Increased to 712, New Total \$28,480.00
222-041 Fly Ash – Unit Price \$100/ton, Quantity Decreased to 0, New Total \$0.00
453-12 Reinforced Concrete Pipe 18" O-Ring – Unit Price \$85/LF, Quantity Increased to 1,683, New Total \$143,055.00
733-00 Square Steel Sign Post – Unit Price \$115/each, Quantity Increased to 14, New Total \$1,610.00
830-00 Wheelchair Ramp – Unit Price \$100/SY, Quantity Increased to 53.34, New Total \$5,334.00

Added Items:

740-03 Construction Sign (0 to 6.25SF) – Unit Price \$1/SD, Quantity 1,131, Total \$1,131.00
740-05 Construction Sign (16 to 32.99SF) – Unit Price \$5/SD, Quantity 1,453, Total \$7,265.00
453-12 Reinforced Concrete Pipe 18" O-Ring – Unit Price \$85/LF, Quantity 175, Total \$14,875.00
453-13.5 Reinforced Concrete Pipe 30" O-Ring - \$132.50/LF, Quantity 56, Total \$7,420.00
460-00 Setting New Manhole Ring & Cover – Unit Price \$750/each, Quantity 4, Total \$3,000.00
464-03 HDPE Pipe (30")(SP) – Unit Price \$110/LF, Quantity 279, Total \$30,690.00
212-01 Trench Excavation & Backfill (0' to 10') – Unit Price \$30/CY, Quantity 905, Total \$27,150.00
213-01 Crushed Rock Foundation – Unit Price \$70/CY, Quantity 110, Total \$7,700.00
215-08 Rock Backfill – Unit Price \$40/ton, Quantity 450, Total \$18,000.00
Field Design Sewer/Junction Box - Lump Sum of \$8,350.00
826-08 Perforated Underdrain Pipe (6") – Unit Price \$20/LF, Quantity 97, Total \$1,940.00
202-00 Borrow – Unit Price \$35/CY, Quantity 336.53, Total \$11,778.55
825-02 3" Surge (Type) Filter Blanket – Unit Price \$60/ton, Quantity 7.08, Total \$424.80
900-03 Filter Fabric Silt Fence – Unit Price \$2/LF, Quantity 32, Total \$64.00
729-10 Remove & Relocate Sign – Unit Price \$100/each, Quantity 5, Total \$500.00
740-05 Construction Signs (6.25 to 15.99SF) – Unit Price \$5/SD, Quantity 697, Total \$3,485.00
828-15 Remove & Replace Fence (6' Wood Panel) – Unit Price \$35/LF, Quantity 224, Total \$7,840.00
1000-22 Front End Loader w/operator – Unit Price \$200/HR, Quantity 50, Total \$10,000.00
Irrigation Repair at 850 Cardan Pl – Lump sum of \$720.00

Added Items for Little River Park Road:

213-01 Crushed Rock Foundation – Unit Price \$70/CY, Quantity 70, Total \$4,900.00
404-01 Concrete Class A – Unit Price \$850/CY, Quantity 3, Total \$2,550.00
453-00 Reinforced Concrete Pipe (18") – Unit Price \$70/LF, Quantity 100, Total \$7,000.00
454-05 Manhole Added Depth (4' Dia) – Unit Price \$300/VF, Quantity 4.60, Total \$1,380.00
454-06 Manhole Added Depth (6' Dia) – Unit Price \$500/VF, Quantity 8.60, Total \$4,300.00
454-34 Design 2-0 Inlet – Unit Price \$4,000/each, Quantity 1, Total \$4,000.00
825-00 12" (Type 1) Plain riprap – Unit Price \$65/ton, Quantity 25, Total \$1,625.00
454-63 Grated Street Inlet (26' Wide) – Unit Price \$17,500/each, Quantity 1, Total \$17,500.00
713-08 2" Traffic Signal Conduit Trenched – Unit Price \$12/LF, Quantity 1,800, Total \$21,600.00
713-09 2" Traffic Signal Conduit Bored – Unit Price \$26/LF, Quantity 200, Total \$5,200.00
725-00 Structural Concrete – Unit Price \$1,080/CY, Quantity 8.12, Total \$8,769.60

725-01 Reinforcing Steel – Unit Price \$2.50/LBS, Quantity 467.60, Total \$1,169.00
 726-00 Pull Box Type (9) – Unit Price \$780/Each, Quantity 15, Total \$11,700.00
 222-03 Cement Kiln Dust – Unit Price \$90/ton, Quantity 196.53, Total \$17,687.70
 812-01 Sidewalk Removal – Unit Price \$10/SF, Quantity 46.67, Total \$466.70

Mobilization Increased to \$276,428.48

Change Description	<p>Change in Quantities:</p> <p>200-00 Unclassified Excavation – Little River Road quantities included in “to date” measurements but were not included in the original estimate for the area. Also, Cardan Place grade was lowered per plans, but plans didn’t include regrading of the adjacent yards.</p> <p>812-02 Remove Curb & Gutter – Quantities exceeded plan quantity due to grade change on Little River Road</p> <p>812-03 PCC Pavement Removal – Well House Road quantities were added after start of project, not included in original plan quantities.</p> <p>820-01 Saw Cutting – Quantities exceeded plan quantities due to changes in construction sequencing. Added longitudinal cuts in order to maintain resident access to half of the street.</p> <p>832-03 6” PCC Driveway – Per City instruction, driveways carried beyond the approach to back to the property lines.</p> <p>824-01 TBSC – Original quantities for one temporary install & remove at each driveway. Actual construction required multiple movements of driveway access.</p> <p>840-04 Sod – Lowering of Cardan Place roadway also required lowering/sloping of all the front yards. Also the added lot on Well House Road added to sodding quantities.</p> <p>454-30 Junction Boxes Concrete – Additional concrete required to adjust vertical height of junction boxes.</p> <p>Survey – Surveying exceeded original estimate due to added work.</p> <p>Street Parking Lot Lighting was deleted per City Instructions. City instructed contractor to only install light pole bases and OG&E would be doing the install.</p> <p>Added Items:</p> <p>740-03, 05 Construction Signing – Signage varied due to construction requirements on a daily basis.</p> <p>464-03 30” RCP – Not shown on subcontractors plan set when original budget was prepared. It was added after discrepancy noted on two different engineering drawings. Also include the manhole, HDPE pipe, trench & backfill, crushed rock foundation, rock backfill, and field designed junction box.</p>
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826-08 6" Perforated Pipe – Added to create storm water drainage while waiting on notice to proceed on Little River Road

202-00 Borrow – Was used to raise grade on Well House Road. Not included in original quantities.

825-02 3" Surge Blanket – Required at entrance to Little River Road to prevent tracking mud into the subdivision.

900-03 Filter Fabric Fence – Not Included in original budget.

828-15 Remove & Replace Wooden Fence – Required due to close working conditions between the houses in the subdivision.

1000-22 Front Loader – This was used at the City's request to reposition stockpile materials.

Irrigation Repair – This was required due to placement of 30" pipe in existing yards.

Added Items and Overages for Little River Road:




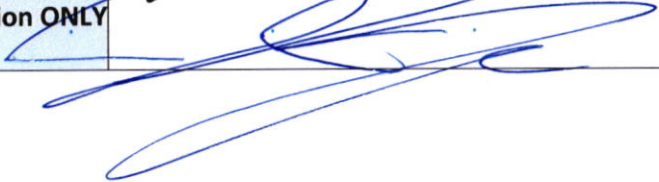
830-00 Wheelchair Ramps – Exceeded plan quantity due to additional ramp.

Lighting & Drainage items – added after design approval. Not shown in original plans.

222-03 CKD – Item used in lieu of the item for Fly Ash

812-01 Sidewalk Removal – Sidewalk removed on Well House Road per City Instruction from project manager.

Field Change Order			
Field Change Order Authorization ONLY Vendor Signature		Date	
Field Change Order Authorization ONLY Project Manager Signature		Date	
Change Order			
Change Order Authorization ONLY Vendor Signature		Date	
Change Order Authorization ONLY Project Manager Signature		Date	
Change Order Authorization ONLY Project Supervisor Signature		Date	
Work Order Amendment			

Work Order Amendment Authorization ONLY Vendor Signature		Date	4/24/2017
Work Order Amendment Authorization ONLY Project Manager Signature		Date	4/24/2017
Work Order Amendment Authorization ONLY Project Supervisor Signature		Date	4/24/2017
Work Order Amendment Authorization ONLY CDBG Manager		Date	4/24/2017

Pay Item # (Column A)	Item Description (Column B)	Unit (C)	Estimated Quantity (D)	Unit Price (E)	(D*E)	(G-D)	(G*E)	(I-F)	
					Estimated Cost (F)	Quantity Used (G)	Difference in Quantity (H)	Cost for Project (I)	Difference in Cost (J)
200-00	Unclassified Excavation (>500 CY)	CY	16,322.00	15.00	244,830.00	23,852.08	7,530.08	357,781.20	112,951.20
213-03	Crushed Rock Foundation (Crusher Run)(1.5")	CY	5,310.00	70.00	371,700.00				
304-04	Portland Cement Conc. Pavement (6")(>500)	SY	23,136.00	55.00	1,272,480.00				
305-00	Curb & Gutter (2'-8")(6" Barrier)(>500')	LF	14,198.00	20.00	283,960.00				
812-02	Remove Curb & Gutter	LF	10,748.00	7.00	75,236.00	10,914.08	166.08	76,398.56	1,162.56
812-03	Concrete Pavement Removal	SY	12,850.00	10.00	128,500.00	13,515.68	665.68	135,156.80	6,656.80
813-00	Remove Driveway	SY	2,973.00	10.00	29,730.00	3,238.73	265.73	32,387.30	2,657.30
820-01	Sawcut Pavement	LF	650.00	4.00	2,600.00	5,785.99	5,135.99	23,143.96	20,543.96
823-00	Sidewalk (5')	SY	1,149.00	55.00	63,195.00				
823-03	6" PC Conc. Driveway (HES)	SY	2,973.00	65.00	193,245.00	3,434.42	461.42	223,237.30	29,992.30
824-01	Temporary Surface Course (TBSC)	Ton	364.00	40.00	14,560.00	811.43	447.43	32,457.20	17,897.20
840-04	Solid Slab Sodding (U-3 Bermuda)	SY	4,791.00	3.00	14,373.00	9,789.34	4,998.34	29,368.02	14,995.02
453-00	Reinforced Concrete Pipe (18")	LF	275.00	70.00	19,250.00				
454-34	Design 2-0 Inlet Complete in Place	EA	2.00	4,000.00	8,000.00				
454-63	Grated Street Inlet (26' Wide)	EA	3.00	17,500.00	52,500.00				
811-16	Structure Removal (RCP)	LF	745.00	15.00	11,175.00				
740-09	Construction Barricades (Type III)	SD	2,200.00	10.00	22,000.00				
740-10	Warning Lights (Type A)	SD	4,400.00	1.00	4,400.00				
740-14	Channelizer Cones	SD	9,000.00	1.50	13,500.00				
453-04	Reinforced Concrete Pipe (48")	LF	570.00	240.00	136,800.00	237.70	-332.30	57,048.00	-79,752.00
454-30	Junction Box (6' x 6')	CY	9.00	850.00	7,650.00	16.54	7.54	14,059.00	6,409.00
	Mailbox Remove & Replace	EA	54.00	500.00	27,000.00				
	Survey & Staking as needed	EA	6.00	1,250.00	7,500.00	19.00	13.00	23,750.00	16,250.00
	CCTV Inspection	LF	571.00	2.00	1,142.00				
Little River Park Road									
	Street Parking Lot Lighting/Infrastructure	LS	1.00	50,000.00	50,000.00	0.00	-1.00	0.00	-50,000.00
212-01	Trench Excavation & Backfill, 0-10'	CY	2,158.00	30.00	64,740.00				
212-07	Structural Excavation	CY	714.00	30.00	21,420.00				
215-08	Rock Backfill	Ton	612.00	40.00	24,480.00	712.00	100.00	28,480.00	4,000.00
222-01	Fly Ash	Ton	290.00	100.00	29,000.00	0.00	-290.00	0.00	-29,000.00
222-05	Cementitious Stabilized Subgrade	SY	5,379.00	5.00	26,895.00				
305-02	Integral Curb (6") >500'	LF	3,283.00	10.00	32,830.00				
453-02	Reinforced Concrete Pipe (36")	LF	777.00	150.00	116,550.00				
453-12	Reinforced Concrete Pipe 18" O-Ring	LF	31.00	85.00	2,635.00	1,683.00	1,652.00	143,055.00	140,420.00
453-14	Reinforced Concrete Pipe 36" O-Ring	LF	75.00	160.00	12,000.00				
453-33	Reinforced Concrete Pipe End Section (36")	EA	1.00	2,100.00	2,100.00				
454-01	Manhole 4' Dia	EA	1.00	3,500.00	3,500.00				
454-03	Manhole 6' Dia	EA	2.00	4,500.00	9,000.00				
454-37	Design 2-1 inlet Complete in Place	EA	1.00	4,500.00	4,500.00				

Project I-02-W-URG Explanation of overages and added items:Overages:

Item 200-00 Unclassified Excavation – Little River Road quantities included in “to date” measurements but were not included in the original estimate for the area. Also, Cardan Place street grade was lowered per plans, but plans didn’t include regrading (lowering) of the adjacent yards.

Item 812-02 Remove Curb & Gutter – Quantities exceeded plan quantity due to grade change on Little River Road.

Item 812-03 PCC Pavement Removal – Well House Road quantities were added after start of project. Not included in original plan quantities.

Item 820-01 Saw Cutting – Quantities exceeded plan quantities due to changes in construction sequencing. Added longitudinal cuts in order to maintain resident access to half of the street.

Item 832-03 6” PCC Driveway – Per city instruction, driveways were carried beyond the approach back to the property lines.

Item 824-01 TBSC – Original quantities for one temporary install & remove at each driveway. Actual construction required multiple movements of driveway access.

Item 840-04 Sod – Lowering of Cardan Place roadway also required lowering/sloping of all the front yards. Also the sodding of an added lot on Well House Road.

Item 454-30 Junction Boxes Concrete – Additional concrete required to adjust vertical height of junction boxes.

No Item Survey – Surveying exceeded original estimate due to added work.

Added Items: (Phase I, not including Little River Road)

740-03,05
No Item Construction Signing – Signage varied due to construction requirements on daily basis.

464-03 No Item 30” RCP – Not shown on subcontractors plan set when original budget prepared. It was added after discrepancy noted on two different engineering drawings. Also include the manhole, HDPE pipe, trench & backfill, crushed rock foundation, rock backfill and field designed junction box.

826-08 No Item 6” Perforated Pipe – Added to create storm water drainage while waiting on notice to proceed on Little River Road.

202-00 No Item Borrow – Was used to raise grade on Well House Road. Not included in original quantities.

825-02 No Item 3” Surge Blanket – Required at entrance to Little River Road to prevent tracking mud into the subdivision.

900-03 No Item Filter Fabric Fence – Not included in original budget.

No Item Construction Signs – Exceeded plan quantity due to daily changing operations.

PAGE 2:

- 828-15 No Item Remove & Replace Wooden Fence – Required due to close working conditions between the houses in the subdivision.
- 1000 - 22 No Item Front Loader – This used at the City's request to reposition stockpile materials.
- No Item Irrigation Repair – This was required due to placement of 30" pipe in existing yards.

Little River Road Overages & Added Items:

- 830-00 No Item Wheel Chair Ramps – Exceeded plan quantity due to additional ramp.
- No Item Lighting & Drainage Items – Added after design approval. Not shown on original plans.
- 222-03 No Item CKD – Item used in lieu of the item for fly ash.
Deleting 22-a
- No Item Sidewalk Removal – Sidewalk removed on Well House Road per City instruction from project manager.

Cost Reasonableness Certification

Project Name	Plaza Towers Street Repair	
Work Order Number	I-02-W-URG	Date 3/28/2016

Line Item	Contract Amount	Industry Standard	Vendor
Drainage	\$ 554,191.80	Infrastructure Recovery and Implementation Plan Appendix B1 Table B1.8-SubArea PT5	Cardinal Engineering
Paving	\$ 3,179,601.29	Infrastructure Recovery and Implementation Plan Appendix B1 Table B1.8-SubArea PT5	Cardinal Engineering
Traffic	\$ 111,873.20	Infrastructure Recovery and Implementation Plan Appendix B1 Table B1.8-SubArea PT5	Cardinal Engineering
Mailbox Remove and Replace	\$ 27,000.00	Infrastructure Recovery and Implementation Plan Appendix B1 Table B1.8-SubArea PT5	Cardinal Engineering
Survey & Staking	\$ 23,750.00	Infrastructure Recovery and Implementation Plan Appendix B1 Table B1.8-SubArea PT5	Cardinal Engineering
CCTV Inspection	\$ 1,142.00	Infrastructure Recovery and Implementation Plan Appendix B1 Table B1.8-SubArea PT5	Cardinal Engineering
Mobilization	\$ 276,428.48	Infrastructure Recovery and Implementation Plan Appendix B1 Table B1.8-SubArea PT5	Cardinal Engineering
Field Design Sewer/Junction Box	\$ 8,350.00	Engineer Concurrence	Cardinal Engineering
Front End Loader w/ operator	\$ 10,000.00	Engineer Concurrence	Cardinal Engineering
Irrigation Repair	\$ 720.00	Engineer Concurrence	Cardinal Engineering
Seeding in lieu of sodding	\$ 32,350.05	City of Moore Standard	City Of Moore
Total	\$ 4,225,406.82		

Certification: The Project Supervisor (PS) of the City of Moore, Oklahoma certifies that the Cost Reasonableness summary provided above for the stated project is accurate, complete, and in conformance with Office of Management and Budget requirements on the date certified.

Signature

Stan Drake, Project Supervisor

Date

3/28/2016





August 10, 2017

City of Moore
Attention Mr. Jared Jakubowski
Capital Planning & Resiliency
301 North Broadway
Moore, Oklahoma 73160

Subject: Reasonable Cost Analysis for Project I-02-W-URG, Plaza Towers Street Repair

Mr. Jakubowski;

Pursuant to a request from the City of Moore, Cabbiness Engineering has investigated the cost of various pay items for the subject project due to revisions in the scope of work for the construction phase and has found those costs to be reasonable. The pay items and unit prices were compared to the City of Moore's 2015-2016 On-Demand Construction Services Bid tabulations list, the June 2017 ODOT Price History List and the 2017 Davis-Bacon wage rates for cost "reasonableness". This review is only for general conformance with the design concept of the project and with the information given in the owner provided documents. Additionally, this review determined neither accuracy of quantities nor substantiates the proper installation of those pay items.

If you have any questions, please feel free to contact us.

Sincerely,
Cabbiness Engineering, LLC

A handwritten signature in black ink that reads 'J. Bret Cabbiness'.

J. Bret Cabbiness, PE
President

JBC/gks
cc: File 261