

STAFF REPORT

SUBJECT: Harbin Drive Improvements Project – Change Orders
MEETING: Public Works Committee Meeting – 19 SEP 2023
DEPARTMENT: Public Works
STAFF CONTACT: Nick Williams

RECOMMENDATION:

Staff recommends approval of Change Orders 4, 5, and 6 to the contract with Jay Mills Contracting, Inc. for the Harbin Drive Improvements Project in the amount of \$130,706.

BACKGROUND:

On October 4, 2021, the City of Stephenville awarded the above referenced project to Jay Mills Contracting, Inc. for the Base Bid plus Bid Alternate #1, for concrete pavement, in the total amount of \$10,097,474.50.

The project includes the reconstruction of Harbin Drive from Washington Street to the Northwest Loop. The existing roadway is being reconstructed with concrete paving, curb and gutter, and sidewalks. Storm drainage infrastructure is being installed and existing water and sewer lines are being replaced.

PROJECT:

Below are summaries of Change Orders #1-6.

- Change Order #1: \$24,970.79
 - Adjustments to reflect lowering an existing 12-inch waterline at Swan, instead of an 8-inch, as originally shown.
- Change Order #2: \$11,620.00
 - Realignment of approximately 560 feet of existing sanitary sewer through the cemetery due to a conflict with the regraded drainage channel alignment not originally identified during the design phase.
 - Overruns were applied to existing pay items in the amount of \$106,265.00 for a total change order impact of \$117,885.
- Change Order #3: \$534,397.50
 - Realignment of the storm drain and existing well line from Tarleton Street to Turner Street as requested by Tarleton State University (TSU) to accommodate construction of a Convocation Center.
- Change Order #4: \$54,395.00
 - Additional waterline replacement at Mimosa, Overhill, and Northwest Loop intersections not identified during design phase.
 - Overruns were applied to existing pay items in the amount of \$211,425.00 for a total change order impact of \$265,820.
- Change Order #5: \$32,187.00
 - Signalization: (- \$183,840.75)
 - Modifications to the traffic signal designs for the signal at Washington and at the signal at Northwest Loop were identified during TxDOT's final review which was completed after construction began.
 - Illumination: \$114,015.75
 - Addition of foundations, conduit, and pull boxes necessary to add street lighting in the medians along Harbin. Oncor to install poles and wiring.
 - Irrigation: \$102,012.00
 - Addition of conduit under pavement to allow for future irrigation line installation in the medians.
- Change Order #6: \$44,123.50
 - Adjustments to reflect installation of concrete pavement with monolithic curb (all one piece) instead of separate curb and gutter, resulting in a minor increase in the cost of additional concrete versus reduced labor and time for construction. Concrete paving within medians as identified in the construction plans.

Additional Overruns: \$186,061

- Overruns to existing line items, in addition to those identified in the change orders above, have been incorporated into the project including:
 - Removal and replacement of additional paving, curb and gutter, and sidewalk due the quantities identified for replacement being insufficient to perform the work.
 - Additional replacement and installation of water mains, service lines, and fire hydrants not originally identified during the design phase.
 - Field modifications due to existing conditions/conflicts found during construction.

FISCAL IMPACT SUMMARY:

Below are tabulations of project costs.

	Total Amount	TSU Reimbursement	City Obligation
Original Contract	\$ 10,097,475	\$ 1,400,000	\$ 8,497,475
TSU MOU No. 2		\$ 200,000	
Approved Change Orders	\$ 570,988	\$ 534,397	\$ 36,591
Pending Change Orders	\$ 130,706		\$ 130,706
Revised Contract	\$ 10,799,169	\$ 2,134,397	\$ 8,664,772
Change Order Overruns	\$ 317,690		\$ 317,690
Additional Overruns	\$ 186,061	\$ 26,054	\$ 160,007
Revised Total with Overruns	\$ 11,302,920	\$ 2,160,451	\$ 9,142,469

The below table shows a summary of project costs.

Change Order	Change Order Amount	Amount Applied To Existing Pay Items	Total
No. 1 (Approved)	\$ 24,971		\$ 24,971
No. 2 (Approved)	\$ 11,620	\$ 106,265	\$ 117,885
No. 3 (Approved)	TSU \$ 534,397		\$ 534,397
Approved CO Subtotal	\$ 570,988		\$ 677,253
No. 4 (Pending)	\$ 54,395	\$ 211,425	\$ 265,820
No. 5 (Pending)	\$ 32,187		\$ 32,187
No. 6 (Pending)	\$ 44,124		\$ 44,124
Pending CO Subtotal	\$ 130,706		\$ 342,131
Additional Overruns		\$ 186,061	\$ 186,061
Total	\$ 701,694	\$ 503,751	\$ 1,205,445

TSU agreed to cover university project costs of \$1.4 million, per Amendment #1 to the Memorandum of Understanding (MOU) executed 1/2/2022. The cost of Change Order #3, in the amount of \$534,397, plus \$200,000 for the original scope of work and \$50,000 in contingency, was authorized for reimbursement by TSU in a MOU Number 2 executed 1/3/2023.

The addition of the approved and pending change order amounts as well as the cost overruns to the original contract amount of \$10,097,475 yields a total contract amount of \$11,302,920 comprised of TSU’s obligation of \$2,160,451 and the city’s obligation of \$9,142,469. Original project funding was appropriated with \$8.5 million in FY21-22 bond proceeds. An additional \$807,000 was allocated from the FY21-22 and FY22-23 Annual Street Maintenance Programs to provide \$9.3 million to cover the cost of overruns for the project. The \$9.3 million currently allocated for the city’s portion of the project leaves a positive balance of \$157,531 to address any additional unknowns encountered in the project.

Staff is also exploring options to incorporate brick in the medians.

Project completion is anticipated in the spring of 2024.

It is recommended that Change Orders 4, 5, and 6 be approved for a revised total contact amount of \$11,302,920.

ATTACHMENTS:

[Change Order #4](#), [Change Order #5](#), [Change Order #6](#)

PROJECT:	Harbin Drive Improvements		
OWNER:	City of Stephenville	OWNER PROJ #	ITB 3299
CONTRACTOR:	Jay Mills Contracting, Inc.	CONTRACTOR #	9377
ENGINEER:	Freese and Nichols, Inc.	ENG. PROJ. #	STE19752

CHANGE ORDER NO.	4	CHANGE ORDER DATE:	11/10/2022
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Change Order Description: Additional utility scope.
 Make following additions/deletions or modifications to work described in the Contract Documents:

	Pay Item	Quantity Change	Unit	Unit Cost	Applied to Pay App	Cost
E-02	12-Inch Waterline (AWWA C900, Class 3, DR-18)	170	LF	\$ 121.00	\$ 20,570.00	
E-03	6-Inch Waterline (AWWA C900, Class 3, DR-18)	817	LF	\$ 90.00	\$ 73,530.00	
E-05	12-Inch Gate Valve	2	EA	\$ 5,950.00	\$ 11,900.00	
E-06	6-Inch Gate Valve	9	EA	\$ 1,650.00	\$ 14,850.00	
E-07	Connection to Existing 12-Inch Waterline	2	EA	\$ 8,000.00	\$ 16,000.00	
E-08	Connection to Existing 6-Inch Waterline	7	EA	\$ 4,800.00	\$ 33,600.00	
E-09	1" Short Water Service Re-Connection	7	EA	\$ 825.00	\$ 5,775.00	
E-10	1" Long Water Service Re-Connection	4	EA	\$ 1,525.00	\$ 6,100.00	
E-11	Fire Hydrant	6	EA	\$ 4,850.00	\$ 29,100.00	
NEW	8-Inch Waterline (AWWA C900, Class 3, DR-18)	75	LF	\$ 120.00		\$ 9,000.00
NEW	Connection to Existing 8-Inch Waterline	2	EA	\$ 6,600.00		\$ 13,200.00
NEW	Remove 8-Inch Waterline	75	LF	\$ 66.00		\$ 4,950.00
NEW	Remove and Relocate Existing Fire Hydrant	2	EA	\$ 1,680.00		\$ 3,360.00
NEW	Additional Cut and Plug Waterline	5	EA	\$ 600.00		\$ 3,000.00
NEW	1-1/2" Water Service at Police Department	1	EA	\$ 2,160.00		\$ 2,160.00
NEW	Remove 12" Waterline	55	LF	\$ 66.00		\$ 3,630.00
NEW	Remove 6" Waterline	100	LF	\$ 66.00		\$ 6,600.00
NEW	Trench Safety (Waterline)	170	LF	\$ 5.50		\$ 935.00
NEW	Extra Long Sewer Service at Bank	60	LF	\$ 78.00		\$ 4,680.00
NEW	6" Cleanout	1	EA	\$ 2,160.00		\$ 2,160.00
NEW	Sewer Service Tees	2	EA	\$ 360.00		\$ 720.00

TOTAL COST APPLIED TO PAY APP:	\$ 211,425.00
TOTAL COST CHANGE ORDER 4:	\$54,395.00

The compensation agreed to upon in this change order is full, complete and final payment for all costs the Contractor may incur as a result of or related to this change whether said costs are known, unknown, foreseen or unforeseen at this time, including without limitation, any cost for delay, extended overhead, ripple or impact cost, or any other affect on changed or unchanged work as a result of this Change Order.

Contract Cost and/or Time Impacts:

Original Contract Amount	\$10,097,474.50
Previously Approved Change Order Amount	\$570,988.29
Adjusted Contract Amount	\$10,668,462.79
Proposed Change Order Amount (this change order)	\$54,395.00
Revised Contract Amount	\$10,722,857.79
Previous Contract Time	660
Previous Substantial Completion Date	10-Nov-23
Previous Final Completion Date	9-Jan-24
Proposed Change in Contract Time (this change order)	
Revised Contract Time	660
Revised Substantial Completion Date	10-Nov-23
Revised Final Completion Date	9-Jan-24

Recommended by:
 FREESE AND NICHOLS, INC.
 By _____ Date _____

Approved by:
 Jay Mills Contracting, Inc.
 By _____ Date _____

Approved by:
 City of Stephenville
 By _____ Date _____

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CHANGE ORDER NO.	5	CHANGE ORDER DATE:	
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Change Order Description: Traffic signal revisions requested by TxDOT and addition of illumination foundations/boxes/conduit
 Make following additions/deletions or modifications to work described in the Contract Documents:

	Pay Item	Quantity Change	Unit	Unit Cost	Cost
Traffic Signals					
G-01	Conduit (PVC)(SCH 40)(3")(Bore)	-221	LF	\$ 59.00	\$ (13,039.00)
G-02	Conduit (PVC)(SCH 40)(3")(Trench)	53	LF	\$ 31.00	\$ 1,643.00
G-03	Conduit (PVC)(SCH 40)(4")(Bore)	155	LF	\$ 62.00	\$ 9,610.00
G-04	Electrical Conductors (No.6)(Bare)	-342	LF	\$ 3.25	\$ (1,111.50)
G-05	Electrical Conductors (No.6)(XHHW)	-52	LF	\$ 3.25	\$ (169.00)
G-06	Tray Cable (8 AWG)(4CNDR)	-335	EA	\$ 3.25	\$ (1,088.75)
G-08	Vehicle Signal Section LED (12")(Green)	-1	EA	\$ 810.00	\$ (810.00)
G-10	Vehicle Signal Section LED (12")(Red)	-1	EA	\$ 810.00	\$ (810.00)
G-12	Vehicle Signal Section LED (12")(Yellow)	-1	EA	\$ 810.00	\$ (810.00)
G-13	Vehicle Signal Section LED (12")(Yellow Arrow)	1	EA	\$ 810.00	\$ 810.00
G-14	Back Plate (12")(1 SEC)	-9	EA	\$ 220.00	\$ (1,980.00)
G-15	Back Plate (12")(3 SEC)	-5	EA	\$ 270.00	\$ (1,350.00)
G-16	Back Plate (12")(4 SEC)	-1	LF	\$ 300.00	\$ (300.00)
G-18	Signal Cable (TY-A, 14 AWG)(2 CNDR)	-2,110	LF	\$ 3.25	\$ (6,857.50)
G-19	Signal Cable (TY-A, 14 AWG)(7 CNDR)	294	LF	\$ 4.50	\$ 1,323.00
G-20	Signal Cable (TY-A, 14 AWG)(16 CNDR)	-483	EA	\$ 6.50	\$ (3,139.50)
G-24	Install of (RPD) Vehicle Detectors	-18	EA	\$12,250.00	\$ (220,500.00)
G-25 (NEW)	Replace Luminaire w/ LED (250W EQ)	3	LF	\$ 775.00	\$ 2,325.00
G-26 (NEW)	Conduit (PVC)(SCH 40)(2")(Bore) (Signal)	90	LF	\$ 56.00	\$ 5,040.00
G-27 (NEW)	Conduit (PVC)(SCH 40)(2")(Trench) (Signal)	84	LF	\$ 25.00	\$ 2,100.00
G-28 (NEW)	Conduit (PVC)(SCH 40)(4")(Trench) (Signal)	20	LF	\$ 34.00	\$ 680.00
G-29 (NEW)	Tray Cable (12 AWG)(4 CNDR)	115	EA	\$ 4.50	\$ 517.50
G-30 (NEW)	Backplates (12")(3 SEC)(Refl Border)(Vented)(Aluminum)	9	EA	\$ 316.00	\$ 2,844.00
G-31 (NEW)	Backplates (12")(4 SEC)(Refl Border)(Vented)(Aluminum)	2	EA	\$ 400.00	\$ 800.00
G-32 (NEW)	Backplates (12")(5 SEC)(Refl Border)(Vented)(Aluminum)	1	EA	\$ 468.00	\$ 468.00
G-33 (NEW)	Electrical Service TY D 120/240 060(NS)SS(E)SP(O)	2	LF	\$ 8,850.00	\$ 17,700.00
G-34 (NEW)	Drill Shaft (TRF SIG POLE) (36 IN)	13	LF	\$ 510.00	\$ 6,630.00
G-35 (NEW)	Drill Shaft (TRF SIG POLE) (48 IN)	22	LF	\$ 595.00	\$ 13,090.00
G-36 (NEW)	Conduit (Prepare) (TxDOT 6027)	468	LF	\$ 3.00	\$ 1,404.00
G-37 (NEW)	Ground Box (Prepare) (TxDOT 6027)	3	EA	\$ 380.00	\$ 1,140.00
Illumination/Irrigation					
NEW	Conduit (PVC)(SCH 40)(2")(Trench) (Irrigation)	2,214	LF	\$ 18.00	\$ 39,852.00
NEW	Conduit (PVC)(SCH 40)(2")(Trench) (Illumination)	2,331	LF	\$ 18.25	\$ 42,540.75
NEW	Conduit (PVC)(SCH 40)(4")(Trench) (Irrigation)	2,220	LF	\$ 28.00	\$ 62,160.00
NEW	Illumination Pole Foundation (Installation Only)	13	EA	\$ 2,110.00	\$ 27,430.00
NEW	Illumination Ground Box	13	EA	\$ 1,965.00	\$ 25,545.00
NEW	Mobilization - Electrical	1	LS	\$18,500.00	\$ 18,500.00

TOTAL COST CHANGE ORDER 5:

\$32,187.00

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Contract Cost and/or Time Impacts:

Original Contract Amount	\$10,097,474.50
Previously Approved Change Order Amount	\$625,383.29
Adjusted Contract Amount	\$10,722,857.79
Proposed Change Order Amount (this change order)	\$32,187.00
Revised Contract Amount	\$10,755,044.79
Previous Contract Time	660
Previous Substantial Completion Date	10-Nov-23
Previous Final Completion Date	9-Jan-24
Proposed Change in Contract Time (this change order)	
Revised Contract Time	660
Revised Substantial Completion Date	10-Nov-23
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Recommended by:

FREESE AND NICHOLS, INC.

By _____
Date

Approved by:

Jay Mills Contracting, Inc.

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City of Stephenville

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ENGINEER:	Freese and Nichols, Inc.	ENG. PROJ. #	STE19752

CHANGE ORDER NO.	6	CHANGE ORDER DATE:	
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Change Order Description: Concrete pavement and curb and gutter quantity adjustment to match construction method.

Make following additions/deletions or modifications to work described in the Contract Documents:

	Pay Item	Quantity Change	Unit	Unit Cost	Cost
H-01	8" Reinforced Portland Cement Concrete	6,786	SY	\$ 49.75	\$ 337,603.50
D-05	Concrete Curb and Gutter	-24,360	LF	\$ 22.75	\$ (554,190.00)
NEW	Monolithic Curb	24,360	LF	\$ 9.00	\$ 219,240.00
NEW	Median Concrete Paving (4")	715	SY	\$ 58.00	\$ 41,470.00

TOTAL COST CHANGE ORDER 6:	\$44,123.50
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The compensation agreed to upon in this change order is full, complete and final payment for all costs the Contractor may incur as a result of or related to this change whether said costs are known, unknown, foreseen or unforeseen at this time, including without limitation, any cost for delay, extended overhead, ripple or impact cost, or any other affect on changed or unchanged work as a result of this Change Order.

Contract Cost and/or Time Impacts:

Original Contract Amount	\$10,097,474.50
Previously Approved Change Order Amount	\$657,570.29
Adjusted Contract Amount	\$10,755,044.79
Proposed Change Order Amount (this change order)	\$44,123.50
Revised Contract Amount	\$10,799,168.29
Previous Contract Time	660
Previous Substantial Completion Date	10-Nov-23
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Proposed Change in Contract Time (this change order)	
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