

Date August 8, 2022


**APPROVING CHANGE ORDER NO. 1 WITH
JASPER CONSTRUCTION SERVICES, INC. FOR ADDITIONAL WORK ON
2nd AVENUE BRIDGE OVER DES MOINES RIVER REHABILITATION AND
2nd AVENUE BRIDGE OVER BIRDLAND DRIVE REPLACEMENT,
IN THE AMOUNT OF \$156,341.16**

BE IT RESOLVED by the City Council of the City of Des Moines, Iowa, that the attached Change Order No. 1 between the City of Des Moines and Jasper Construction Services, Inc., Cliff Rhoads, President, 928 N 19th Avenue East, Newton, Iowa, 50208, for additional work on 2nd Avenue Bridge over Des Moines River Rehabilitation and 2nd Avenue Bridge over Birdland Drive Replacement, in the amount of \$156,341.16, be and is hereby approved, and the City Manager is authorized and directed to execute said change order.

(City Council Communication Number 22-359 attached)
Activity ID 12-2019-001

Moved by _____ to adopt. Second by _____

FORM APPROVED: s/Kathleen Vanderpool
Kathleen Vanderpool
Deputy City Attorney

 Funding Source: 2022-2023 CIP, Page 26, 2nd Ave Bridge over the Des Moines River, BR057,
Being: \$106,307.74 reimbursement from Des Moines Water Works (DMWW), remainder in
G.O. Bonds

COUNCIL ACTION	YEAS	NAYS	PASS	ABSENT
COWNIE				
BOESEN				
GATTO				
MANDELBAUM				
SHEUMAKER				
VOSS				
WESTERGAARD				
TOTAL				

MOTION CARRIED APPROVED

Mayor


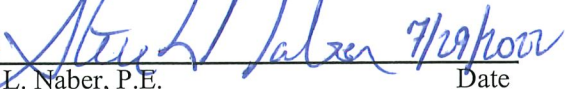
CERTIFICATE


I, Laura Baumgartner, City Clerk of said City hereby certify that at a meeting of the City Council of said City of Des Moines, held on the above date, among other proceedings the above was adopted.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal the day and year first above written.

City Clerk

Original Contract Amount \$9,983,440.85
Previous Change Orders \$0.00
Amount of Change By This Change Order \$156,341.16
New Contract Amount Including This Change Order \$10,139,782.01
Percentage of Change Orders to Original Contract 1.57%

 7-20-22 **DMK**  7/19/2022
 Benjamin M. Cole, P.E. Date Steven L. Naber, P.E. Date
 Civil Engineer II Des Moines City Engineer

 7/19/2022
 Jasper Construction Services, Inc. Date
 Scott E. Sanders Date
 City Manager

 Roll Call No. Date

Distribution: Original - Project File Copy - Benjamin M. Cole, P.E.
 Copy - Prime Contractor Copy - Contract Compliance Copy - Finance Department
 Copy - Inspection Copy - Inspection

FUNDING INFORMATION			
CIP Page	24	Reviewer	<u>DMK</u>
Object Code	543010	Adequate	<u>X</u>
Organization	C032EG	Transfer \$	_____
Project	BR057	Object Code	_____
Activity ID	122019001	Organization	_____
		Project	_____

Refer to Iowa DOT Change Order #1

CHANGE ORDER
For Local Public Agency Projects
No. 1

Non-Substantial:

Substantial:

Administering Office
Concurrence Date

Accounting ID No. (5-digit number): 38218 Project Number: BRM-SWAP-1945(848)--SG-77
Contract Work Type: Bridge Rehabilitation Local Public Agency: City of Des Moines (Act. ID 12-2019-001)
Contractor: Jasper Construction Services, Inc. (JA250) Date Prepared: July 15, 2022

You are hereby authorized to make the following changes to the contract documents.

A – Description of change to be made:

- 8001: Add "Trail Protection", Bid Item #2599-9999010; Quantity of 1 LS. Item includes all equipment, labor, and materials to install a trail protection system as described on Sheet V.2.
- 8002: Add "Clearance Signage", Bid Item #2599-9999010; Quantity of 1 LS. Item includes supplying 6-"Caution" signs and 6-"Low Clearance" signs to be installed on the bridge scaffolding as a warning for boat users. Signs shall be maintained and moved as scaffolding system is erected for Stage II.
- 8003: Add "Connect to Existing Structure", Bid Item #2599-9999010; Quantity of 1 LS. Item includes connecting new 15" storm sewer (P-2) to existing storm sewer box as noted in Tab 104-5B and on Sheet D.5. All work to be similar to Spec. 2435.03, F.
- 8004: Add "Railing Galvanizing Plugs", Bid Item #2599-9999010; Quantity of 1 LS. Item includes necessary materials, equipment, labor to include zinc plugs to cover the galvanizing vent holes on the vertical rail posts by the post caps prior to rail painting. This is for both the ornamental railing and the pedestrian hand railing.
- 8005: Add "Watermain Damage Repair", Bid Item #2599-9999010; Quantity of 1 LS. Item includes all necessary materials, equipment, and labor to repair and restore damage caused by watermain failure as shown on the supplemental plan details as "Attachment 1". Work includes restoring abutment backfill with subdrain, porous backfill, floodable sand backfill, and modified subbase. Slope repair to include minor clearing and grubbing, grading, installation of geotextile fabric and Class E revetment, including accommodating subdrain outlet and re-using existing subdrain outlet. Abutment wing to be backfilled and undermining repaired with flowable mortar. Damaged pavement and sidewalk removed and replaced to restore traffic and east sidewalk. All as-built quantities tabulated.
- 8006: Add "Watermain Coating and Joint Repair", Bid Item #2599-9999010; Quantity 1 LS. Item includes all labor, equipment, and materials for work described and illustrated on "Attachment 2" and completion of the work to be coordinated by the contractor with the painter to utilize containment system for access. The exact extents of the work limits may be field adjusted with consultation and concurrence with Des Moines Water Works, which could impact total cost of labor and materials.
- 8007: Add "Intake Protection – Drop-in", Bid Item #2599-9999005; Quantity 5 EACH. Item includes all labor, equipment, and materials to install a drop-in intake protection device and remove when no longer needed or no longer usable.
- 8008: Add "Intake Protection – Drop-in Maintenance", Bid Item #2599-9999005; Quantity 5 EACH. Item includes all labor, equipment, and materials to clean-out and maintain existing installed protection device and reset the device properly.

B – Reason for change:

- 8001: The bid item for this item of work was not included in the contract bid items and therefore needs to be added.
- 8002: The Des Moines River is navigable in this area of the bridge. With scaffolding and containment systems extending below the bottom beam flange, low clearance and caution signage was added.
- 8003: A bid item for this this item of work was not provided in the contract bid items and therefore needs to be added.
- 8004: During shop drawing review, the galvanizing process requires vent holes in the vertical rail posts towards the post caps. With the ornamental railing and pedestrian hand rail being an aesthetic painted railing, a solution was desired to plug these vent holes after galvanizing and prior to painting.
- 8005: An existing 16" watermain extends across the Des Moines River bridge. The watermain broke behind the existing abutment, causing complete loss of abutment backfill, damaging existing pavement and sidewalks, eroding around the northwest bridge wing and damaging the existing abutment slope. This rupture coincidentally occurred during a road closure period and was not caused by construction work. Due to the nature and location of the rupture, Des Moines Water Works needed the assistance of the contractor to perform the necessary removals and gain access to complete the repairs. DMWW completed the watermain repairs. Since DMWW is not equipped to perform bridge/civil related repairs, it was decided to include these repairs in the contract and DMWW would reimburse the City for their portion of the damage costs.
- 8006: Des Moines Water Works requested the repairs to be completed concurrently with the bridge project to take advantage of access to the watermain.
- 8007: Existing erosion control bid items did not include this type of erosion control.
- 8008: Existing erosion control bid items did not include this type of erosion control.

C – Settlement for cost(s) of change as follows with items addressed in Sections F and/or G:

- 8001: Material, equipment, and labor costs provided by prime contractor = \$32,623.00 Lump Sum.
 - 8002: Material, equipment, and labor costs provided by prime contractor = \$2,270.00 Lump Sum.
 - 8003: Material, equipment, and labor costs provided by prime contractor = \$2,000.00 Lump Sum.
 - 8004: Material, equipment, and labor costs provided by subcontractor = \$950, plus \$100 min. prime markup = \$1,050.00 Lump Sum.
 - 8005: Material, equipment, and labor costs provided by prime contractor = \$56,923.16 Lump Sum. Quantities are noted below.
- Some restoration items are an improvement over existing condition, therefore City agreed to cost share on some items.

					DMWW Share	City Share
Abutment Excavation, Cleanup	1	LS	\$1,800.00	\$1,800.00	\$1,800.00	
4" Subdrain	75	LF	\$15.00	\$1,125.00	\$1,125.00	
Geotextile Fabric (for Floodable Backfill)	40.6	SY	\$15.00	\$609.00	\$609.00	
Porous Backfill	29.48	TON	\$65.35	\$1,926.52	\$1,926.52	
Floodable Backfill	166.34	TON	\$68.50	\$11,394.29	\$11,394.29	
Modified Subbase	121.92	TON	\$56.25	\$6,858.00	\$6,858.00	
Pavement Removal	64.9	SY	\$25.00	\$1,622.50	\$1,622.50	
Sidewalk Removal	5.5	SY	\$15.00	\$82.50	\$82.50	
Temporary Approach Pavement	64.9	SY	\$130.00	\$8,437.00	\$8,437.00	
Pavement Patching	1	LS	\$250.00	\$250.00		\$250.00
PCC Sidewalk	5.5	SY	\$125.00	\$687.50	\$687.50	
Flowable Mortar	1.5	CY	\$600.00	\$900.00	\$900.00	
NW Bank Shaping, Clearing & Grubbing	1	LS	\$9,500.00	\$9,500.00	\$4,750.00	\$4,750.00
Revetment, Class E	104.33	TON	\$95.00	\$9,911.35	\$4,955.68	\$4,955.67
Geotextile Fabric (for Revetment)	121.3	SY	\$15.00	\$1,819.50	\$909.75	\$909.75
			Total =	\$56,923.16	\$46,057.74	\$10,865.42

8006: Material, equipment, and labor costs is estimated by the subcontractor to include approximately \$35,000 in labor and equipment/tools, plus an additional \$20,000 in materials, for an initial Lump Sum estimate of \$55,000. Prime markup = 10% x \$50,000 + 5% x \$5,000 for total estimated Lump Sum = \$55,000 + \$5,250 = \$60,250 estimate. Final cost will be tracked and documented and any necessary adjustments to this estimated cost will be established in a future contract modification. Costs for this item will be reimbursed by Des Moines Water Works to the City of Des Moines as noted in the above breakdown.

8007: Material, equipment, and labor costs provided by subcontractor = \$200 EACH x 5 = \$1,000, plus \$100 min. prime markup = \$1,100.00
 \$1,100 / 5 = \$220.00 EACH.

8008: Material, equipment, and labor costs provided by subcontractor = \$25 EACH. Prime-markup waived for this item.

D – Justification for cost(s) (See I.M. 6.000, Attachment D, Chapter 2.36, for acceptable justification):

- 8001: This is a custom item and was missed in the Engineer's cost opinion. Contractor did provide a couple options to consider and the City elected the most economical trail protection system.
- 8002: Proposed item cost is reasonable for the requested scope of providing 6 total signs.
- 8003: Proposed item cost is within the range of Awarded Contract prices, similar to 2435-0700010.
- 8004: This is a custom item requested during shop drawing review, with cost provided by fabricator.
- 8005: Total cost is itemized by sub-quantities. Unit prices for sub-quantities are similar to contracted items on other projects and/or within the range of Awarded Contract prices for similar items.
- 8006: Total/final cost will be verified through material invoice purchases and tracking of labor/materials.
- 8007/8008: Proposed item costs are similar and within the expected range for similar erosion control items.

E - Contract time adjustment: No Time added Time added: _____ Unknown at this time

Justification for selection:
 Time is not being added for this additional work added.

F – Items included in contract:

Participating			Item Description	For deductions enter as "-x.xx"		"(x.xx)" = Deduction
Federal-aid	State-aid	Line Number		Unit Price .xx	Quantity .xxx	Amount .xx
TOTAL						

Accounting ID No. (5-digit number): 38218

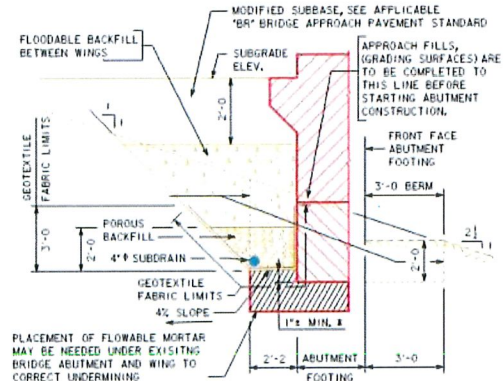
Change Order No: 1

G – Items not included in contract:

Participating					For deductions enter as "-x.xx"		
Fed -aid	State- aid	Change Number	Item Number	Item Description	Unit Price .xx	Quantity .xxx	Amount .xx
	X	8001	2599-9999010	Trail Protection	\$32,623.00	1.000	\$32,623.00
	X	8002	2599-9999010	Clearance Signage	\$2,270.00	1.000	\$2,270.00
	X	8003	2599-9999010	Connect to Existing Structure	\$2,000.00	1.000	\$2,000.00
	X	8004	2599-9999010	Galvanizing Vent Hole Plugs	1,050.00	1.000	1,050.00
	X	8005	2599-9999010	Watermain Damage Repair	\$56,923.16	1.000	\$56,923.16
	X	8006	2599-9999010	Watermain Coating and Joint Repair	\$60,250.00	1.000	\$60,250.00
	X	8007	2599-9999005	Intake Protection – Drop-in	\$220.00	5.000	\$1,100.00
	X	8008	2599-9999005	Intake Protection – Drop-in Maintenance	\$25.00	5.000	\$125.00
						TOTAL	\$156,341.16

H. Signatures

Signatures will be applied through DocExpress.



Place flowable mortar in areas of undermining.

**SECTION A-A
BACKFILL DETAILS**

NOTE: GEOTEXTILE FABRIC WILL BE ATTACHED TO FACE OF ABUTMENT FOOTING AND WINGS.
* DIMENSION VARIES DUE TO 2% SUBDRAIN SLOPE.

Quantities (as-built)

Abutment Excavation, Cleanup	1	LS
4" Subdrain	75	LF
Geotextile Fabric (for Floodable Backfill)	40.6	SY
Porous Backfill	29.48	TON
Floodable Backfill	166.34	TON
Modifield Subbase	121.92	TON
Pavement Removal	64.9	SY
Sidewalk Removal	5.5	SY
Temporary Approach Pavement	64.9	SY
Pavement Patching	1	LS
PCC Sidewalk	5.5	SY
Flowable Mortar	1.5	CY
NW Bank Shaping, Clearing & Grubbing	1	LS
Revetment, Class E	104.33	TON
Geotextile Fabric (for Revetment)	121.3	SY



Previous slope condition



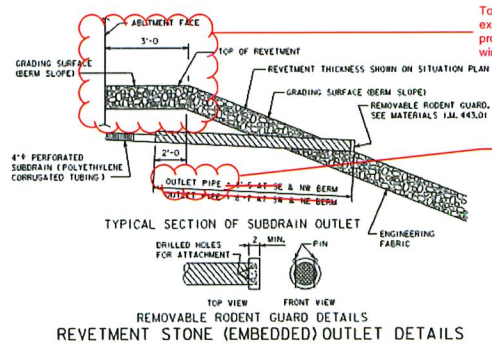
Erosion and undermining around bridge wing and abutment slope

Restore grade behind wing with suitable fill



Remove sand

Remove existing concrete debris, shrubs, roots and place 2 ft. thick Class E revetment protection with engineering fabric w/ new subdrain outlet.



Top of revetment slope to tie into existing concrete slope protection and side of bridge wing extension

Existing outlet pipe may be re-used if salvagable

2nd Ave Bridge – Des Moines Water Works Work Request:

Remove Instrument Panel & Conduit:

Remove existing temperature sensor instrument panel (SE Bridge abutment) and conduit (approximately 40 ft.).
Leave temperature sensor in place, removed or cut instrument wiring to sensor.



Install & Repair Pipe Wrapping:

Couplings (5 estimated – 3 visible from abutments, 2 anticipated in center spans).

Replace bolts in short coupling adjacent to North Abutment. Match existing bolt type or install stainless steel bolts with suitable stainless steel nuts & washers. Replace bolts 1 at a time to avoid destabilizing coupling. Replacement of additional bolts may be requested on other expansion couplings, not visible from the abutments.

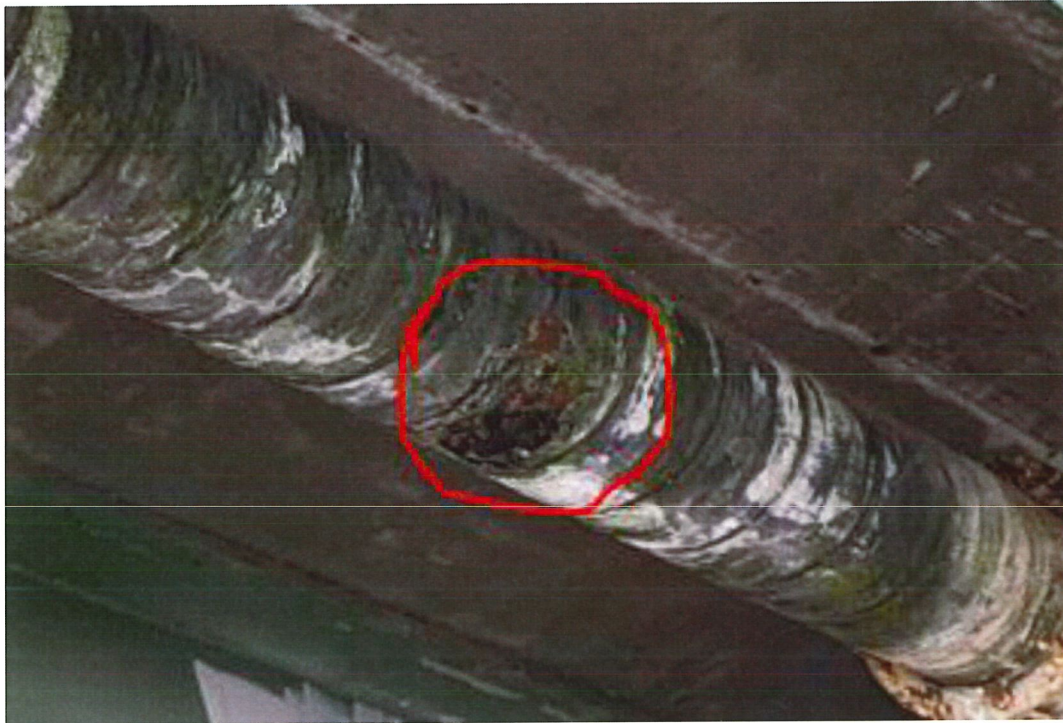
Install Denso Profiling Mastic, Denso Paste, Denso LT Tape, and Denso Glass Outerwrap over each coupling. Follow manufacturers instructions for product application (product literature included at the end of this document). Provide 50% overlap



Unwrapped locations, damaged exiting wrapping (60 ft. of 16" water main estimated length)

Install Denso Paste, Denso LT Tape, and Denso Glass Outerwrap in locations where existing wrap is damaged or missing. Follow manufacturers instructions for product application (product literature included at the end of this document). Provide 50% overlap. Locations to install wrap include:

- Where no wrap has been installed adjacent to north and south abutments (10 LF per abutment).
- Locations where existing wrap is damaged.



Bridge Pipe Supports: Install Denso Paste, Denso LT Tape, and Denso Glass Outerwrap in locations where existing wrap is damaged. Install products to accessible locations as feasible, but do not attempt to move the pipe to apply to inaccessible locations. Follow manufacturers instructions for product application (product literature included at the end of this document).



Anticipated material Denso quantities:

- 5 cases of Denso Tape (4-inch width, 18 rolls per case)
- 1 case of Denso Paste (4-5.5 lbs tubs)
- 10 cases of Denso Glass Outerwrap (8-inch width, 3 rolls per case)
- 8 Cases of Denso Profiling Mastic (24 lbs per case)