


COUNCIL COMMUNICATION

	Number:	19-543	Meeting:	December 16, 2019
	Agenda Item:	10	Roll Call:	19-1983
	Submitted by:	Steven L. Naber, P.E., City Engineer		

AGENDA HEADING:

Approving Change Order No. 5 with Jasper Construction Services, Inc. for additional work on Court Avenue, S.W. 1st Street, and Scott Avenue Bridge Rehabilitation, in the amount of \$743,398.21.

SYNOPSIS:

Recommend approval of Change Order No. 5 in an amount not to exceed \$743,398.21 with Jasper Construction Services, Inc., (Cliff Rhoads, 928 N. 19th Avenue East, Newton, IA, 50208), for additional work on the Court Avenue, S.W. 1st Street, and Scott Avenue Bridge Rehabilitation.

FISCAL IMPACT:

Amount: \$743,398.21 (Court Avenue - \$454,600.69, SW 1st Street - \$288,797.52)

Funding Source: 2019-20 CIP, Page Bridge – 5, Court Avenue Bridge over the Des Moines River, BR054

ADDITIONAL INFORMATION:

- On March 19, 2018, under Roll Call No. 18-0517, the City Council approved plans and specifications and designated the lowest responsible bidder as Jasper Construction Services, Inc. for \$8,419,431.30. The project provides for the rehabilitation of three (3) deficient bridges as part of the City's TIGER Grant project including Court Avenue Bridge, SW 1st Street Multi-Use Trail Bridge, and Scott Avenue Bridge.

Court Avenue Bridge:

- Change Order No. 5 includes the additional concrete repair necessary to remove and replace deteriorated concrete.
- The deck structural concrete (under the deck overlay) was in worse condition than expected. Similarly, the concrete condition of various bridge elements, such as the bridge arches, piers, and underside of the bridge deck, were also in worse condition than anticipated. The original areas identified were only visually inspected from the river as the old sidewalks could not support proper bridge inspection equipment.

- Change Order No. 5 includes updating several contract items to as-built quantities:
 - Decreasing the number of days the advance message boards were used.
 - Deleting the parking meter bases as parking is now free.
 - Decreasing the overall quantity of old railing that was salvaged by the Parks and Recreation Department.
 - Increasing the quantity of new limestone added.
 - Increasing the number of existing limestone pieces that needed resetting.

- Change Order No. 5 includes adding the following new items of work:
 - Granite railing base extensions to extend below the sidewalk.
 - New stainless steel beltcourse dowels.
 - Joint caulking along the base between the sidewalk and the granite railing base.
 - Traffic control markings.
 - Concrete sealer to the bridge deck.

- As the Court Avenue Bridge phase of this project begins the final out process and all quantities are reviewed, a future change order will be prepared to update the remaining contract items to as-built quantities.

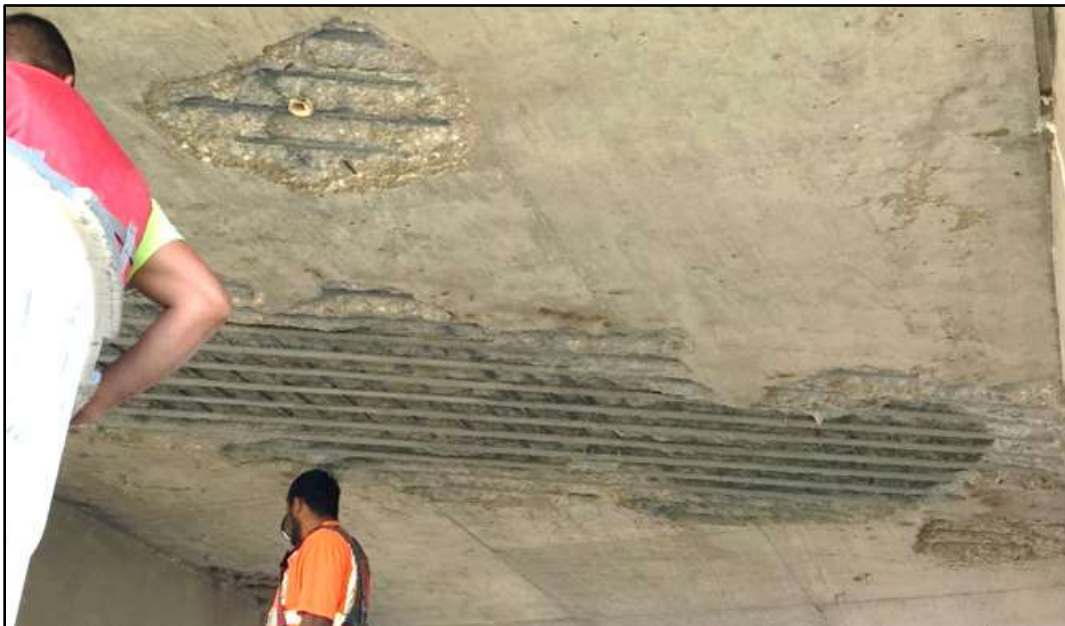


*Note: The picture above illustrates the extensive concrete deterioration on the existing bridge arch. Poor concrete was removed with small chipping hammers down to sound concrete. Additional steel mesh and concrete anchors are added prior to placing new concrete material to repair the deteriorated area.

SW 1st Street Multi-Use Trail Bridge:

- Change Order No. 5 includes the following additional work on the SW 1st Street Multi-Use Trail Bridge Rehabilitation.
 - Change the deck overlay material from an HPC deck mix to a standard C4 deck mix. This is largely due to past experience with cracking of the HPC mix and the C4 deck mix should be less prone to cracking and easier to properly cure.
 - Increase quantities for concrete repair – transverse frames and clean, cover, and seal for deck underside repair. The existing concrete under the bridge deck is in poor condition and the limits of the repairs areas have increased from when the repair areas were initially quantified in 2013.
 - Add significant repairs to the existing railing. Upon field inspection during construction, the existing rail post connections to the bridge deck are severely corroded. To restore the railing system, the existing railing is being removed to have a new base plate welded on to the existing posts and will be painted to match. The work covered by this change order is for the rail panel modification only. The removal, installation, and patching of the existing deck concrete will be addressed in a future change order.
 - Add two (2) additional deck drains to minimize water ponding.
 - Add additional electrical circuits for future use.
 - Provide for the installation of a concrete overlay inlay in the center of the bridge. The concrete overlay inlay was designed by the Parks and Recreation Department and will be completed in the future through a future project.

- Change Order No. 5 also moves back the contract completion date for Court Avenue Bridge from October 15, 2019 to October 18, 2019. Additionally, the completion requirements for SW 1st Street Bridge are adjusted to allow the bridge to remain closed through the winter and shall be open to a minimum path width of 20 feet by April 1, 2020. The completion date of June 1, 2020 for SW 1st Street Bridge remains unchanged.



Underside of bridge deck, severe concrete deterioration and spalling.

PREVIOUS COUNCIL ACTION(S):

Date: July 15, 2019

Roll Call Number: [19-1079](#)

Action: [Approving](#) Change Order No. 4 with Jasper Construction Services, Inc. for additional work on Court Avenue, SW 1st Street and Scott Avenue Bridge Rehabilitation, \$208,701.64. ([Council Communication No. 19-299](#)) Moved by Gatto to adopt. Motion Carried 7-0.

BOARD/COMMISSION ACTION(S): NONE

ANTICIPATED ACTIONS AND FUTURE COMMITMENTS:

Based on the conditions encountered to date, and as work on the rehabilitation of the Scott Avenue Bridge commences, it is possible that additional concrete deterioration will be encountered in subsequent spans with repair quantities needing to be increased. Additional costs associated with the rail panel removal and reinstallation will also be added in a subsequent change order once the final costs are tracked and documented. As with typical rehabilitation projects, unanticipated conditions found during rehabilitation of these older bridges may require additional work resulting in the need for a subsequent change order(s).

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