


# COUNCIL COMMUNICATION

	Number:	<b>21-350</b>	Meeting:	<b>August 9, 2021</b>
	Agenda Item:	<b>9</b>	Roll Call:	<b>21-1197</b>
	Submitted by:	<b>Steven L. Naber, P.E., City Engineer</b>		

## AGENDA HEADING:

Approving Change Order No. 9 with Jasper Construction Services, Inc. for additional work on Court Avenue, SW 1st Street, and Scott Avenue Bridge Rehabilitations, in an amount of \$348,456.57.

## SYNOPSIS:

Recommend approval of Change Order No. 9 with Jasper Construction Services, Inc. (Cliff Rhoads, President, 928 N. 19th Avenue East, Newton, IA, 50208), for additional work on Court Avenue, SW 1st Street, and Scott Avenue Bridge Rehabilitations, in an amount not to exceed \$348,456.57. This project provides for the rehabilitation of three (3) structurally deficient bridges as part of the City's Transportation Investment Generating Economic Recovery (TIGER) Grant project.

## FISCAL IMPACT:

Amount: \$348,456.57

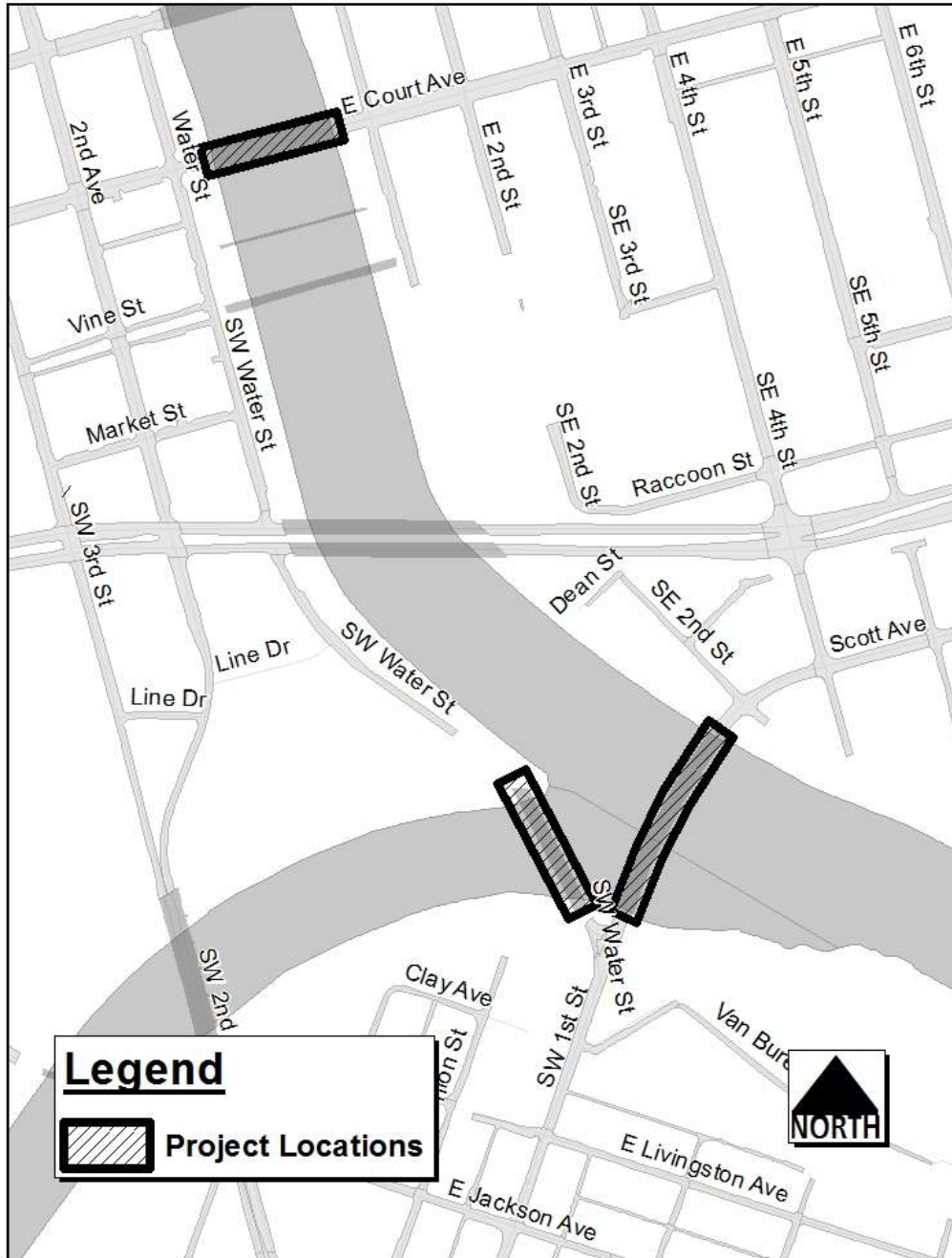
Funding Source: Scott Avenue Bridge: 2021-2022 CIP, Page 20, Scott Avenue Bridge over the Des Moines River, BR051, Gaming Monies.

## 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 improvement includes the structural rehabilitation of three (3) bridges: Court Avenue and Scott Avenue bridges over the Des Moines River, and SW 1st Street pedestrian bridge over the Raccoon River, primarily consisting of the following:
  - Court Avenue - includes concrete removal and repair, replacement and strengthening of bridge sidewalks, high performance concrete deck overlay, installation of galvanic corrosion anodes, longitudinal grooving, replacement of existing limestone railing with new limestone railing with a granite base, limestone cleaning and repairs to the exterior bridge elements and facing, replacement of bridge joints, replacement of bridge approach paving, removing and installing new architectural street lighting, traffic control, pavement markings, and mobilization.

- Scott Avenue - includes concrete removal and repair, high performance concrete deck overlay, concrete barrier rail repairs, ornamental metal rail and steel pipe handrail, replacement of bridge joints with new steel extrusion joints and neoprene glands, installation of galvanic corrosion anodes, longitudinal grooving, replacement of bridge approach pavement and sidewalks, traffic control, pavement markings, and mobilization.
- SW 1st Street - includes concrete removal and repair, high performance concrete deck overlay, replacement of bridge joints with new steel extrusion joints and neoprene glands, installation of galvanic corrosion anodes, lighting, traffic control, pavement markings, and mobilization.
- Change Order No. 1 for \$227,777.72, approved by City Council under Roll Call No. 18-1141 on July 9, 2018, added work to the Court Avenue Bridge Rehabilitation, including adding complete re-pointing of stone mortar on both bridge facades, added limestone and granite base adjustments, added stone anchor straps, added new conduit on both sides of bridge for City use, and reduced elastomeric pad thickness.
- Change Order No. 2 for \$45,064.04, approved August 29, 2018 by the City Engineer, added work the Court Avenue Bridge Rehabilitation, including increased concrete repair areas, added alternate concrete repair method, added removal and replacement of concrete duct bank with six-way 5-inch PVC conduit under the sidewalk at the northeast and northwest corners, and added replacement of sidewalk.
- Change Order No. 3 for \$225,592.50, approved by City Council under Roll Call No. 18-1975 on December 3, 2018, added work to the Court Avenue Bridge Rehabilitation, including increased deck repairs and established renegotiated prices for Class B repairs and Embedded Anodes, added new reinforcing steel for deck repairs, added solvent pavement markings and HMA transition on the west approach, and adjusted contract completion provisions.
- Change Order No. 4 for \$208,701.64, approved by City Council under Roll Call No. 19-1079 on July 15, 2019, added work to the Court Avenue Bridge Rehabilitation, including increased contract quantities for several deck repair items, increased Concrete Repair for additional repairs needed to the bridge superstructure and substructures based on field conditions, added rebar corrosion inhibitor and rail connection modifications to match the new railing into the existing wings/floodwalls, and adjusted contract completion dates.
- Change Order No. 5 for \$743,398.21, approved by City Council under Roll Call No. 19-1983 on December 16, 2019, added work to the Court Avenue Bridge Rehabilitation, including increased contract quantities for several repair items, including large increases to concrete repair due to extensive deterioration of the Court Avenue bridge elements that were not visible at the time of plan development, as well as adjustments to the limestone elements of the bridge. Change Order No. 5 also included added work to the SW 1st Street Bridge Rehabilitation, including repairing the existing railing on SW 1st Street due to corrosion and adding an inlay aesthetic element in coordination with the Parks and Recreation Department.

- Change Order No. 6 for \$409,223.25, approved by City Council under Roll Call No. 20-1645 on October 19, 2020, increased contract quantities for several concrete repair items on Scott Avenue bridge, including large increases in barrier rail repairs. Additional concrete repair items were added for SW 1st Street bridge as the underside of the bridge deck was in worse condition than expected. When the SW 1st Street bridge was converted to a trail bridge in 2005, minimal repairs were made to underside elements of the bridge. Also included is the final rail installation on SW 1st Street and the associated removal of the old corroded embedded posts.
- Change Order No. 7 for \$46,978.45, approved February 9, 2021 by the City Engineer, increased contract quantities for epoxy-coated reinforcing steel and added deck repair reinforcing steel on the S.W. 1st Street bridge; and increased contract quantities for concrete barrier railing and structural concrete on the Scott Avenue bridge and added deck repair reinforcing steel and temporary pavement markings for opening Scott Avenue bridge through the winter shut-down period. Change Order No. 7 also allowed for the completion date to be re-negotiated in early 2021 based on extensive concrete arch repair quantity associated with the Scott Avenue Bridge and the requirement that no traffic live load is allowed on the bridge during the arch repairs.
- Change Order No. 8, approved May 21, 2021 by the City Engineer, adjusted the contract to allow Scott Avenue Bridge to be fully closed to traffic for the remaining arch repairs beginning May 10, 2021 and re-open to vehicular traffic by July 19, 2021. The closure was required for the bridge arch repairs to be completed without additional traffic live load on the bridge. Additional work may be necessary to complete the remaining contract items of work, but those items could be completed after the bridge is re-opened to traffic. The substantial completion date for the contract was moved to August 10, 2021.
- Change Order No. 9 will adjust all bid items to final as-built quantities for the Court Avenue Bridge, which was completed in fall 2019. Additional items on this change order increase the concrete arch repairs on the Scott Avenue Bridge, as well concrete repairs to the deck underside and additional sidewalk removals necessary for the sidewalk overlay.
  - As revealed in Change Orders 7 and 8, the Scott Avenue Bridge arches were in worse condition than anticipated causing a large increase in the repair quantity needed. This was in large part due to the time elapsed between the initial delineation and the completion of the repairs as well as due to the large uncertainty in accurately delineating the repair area on overhead concrete elements. Additionally, during the repair process, the area repaired is often slightly larger than the delineated area to ensure the deteriorated concrete is fully removed.
  - The additional sidewalk removals necessary for the sidewalk overlay were caused by the existing reinforcing steel being in a different location than shown in the original drawings. This required the contractor to extensively hand chip large areas of the sidewalk to avoid damage to the reinforcing steel versus a conventional approach of using a milling machine to obtain the correct removal depth.



**PREVIOUS COUNCIL ACTION(S):**

Date: October 19, 2020

Roll Call Number: [20-1645](#)

Action: [Approving](#) Change Order No. 6 with Jasper Construction Services, Inc. for additional work on Court Avenue, SW 1<sup>st</sup> Street, and Scott Avenue Bridge Rehabilitation, \$409,223.25. ([Council Communication No. 20-452](#)) Moved by Boesen to adopt. Motion Carried 7-0.

**BOARD/COMMISSION ACTION(S): NONE**

**ANTICIPATED ACTIONS AND FUTURE COMMITMENTS:**

An additional change order is anticipated for the final adjustments of quantities to final as-built quantities for SW 1st Street Bridge over Raccoon River and Scott Avenue Bridge over Des Moines River will be needed.

For more information on this and other agenda items, please call the City Clerk's Office at 515-283-4209 or visit the Clerk's Office on the first floor of City Hall, 400 Robert D Ray Drive. Council agendas are available to the public at the City Clerk's Office on Thursday afternoon preceding Monday's Council meeting. Citizens can also request to receive meeting notices and agendas by email by calling the Clerk's Office or sending their request via email to [cityclerk@dmgov.org](mailto:cityclerk@dmgov.org).