

Committee:	Climate, Conservation and Parks
Item:	Northside Pedestrian Bridge Engineering Change Order #2
Date:	January 31, 2023
Sponsor(s):	David Selvage
Prepared by:	David Selvage
Ward(s) Affected:	 ☑ Ward 1 □ Ward 2 □ Ward 3 □ Ward 6

Action Required:

Approve Change Order Number Two (2) for with HDR Engineers for Northside Pedestrian Bridge Rehabilitation Engineering and Design in amount of \$107,108.92 and authorize the Mayor to sign.

Recommended Motion(s):

I move the City Council: Approve Change Order Number Two (2) with HDR Engineers for the Northside Pedestrian Bridge Rehabilitation Engineering and Design to increase the contract value in the amount of \$107,108.92 and authorize the Mayor to sign

Timeline:

Committee discussion: Council action (or sets hearing): Public Hearing (if required): Final Consideration Deadline: February 8, 2023 February 13, 2023 Click or tap here to enter text. Click or tap here to enter text. Click or tap here to enter text.

Background and Alternatives Explored:

HDR Engineering, Inc is under contract with the City to engineer and design rehabilitation of the Northside Pedestrian bridge's access ramps. Change Order #1 to the HDR contract was approved in October 2022 to provide for material testing of the masonry walls for both tower access structures and to provide for project administration and inspection services for bidding and during construction. Materials testing results were delivered to the City at the end of December, 2022. The test results confirmed that salt levels in the masonry are as much as five (5) times higher that engineering specifications – meaning the structural integrity of the masonry is compromised such that the walls must be replaced as part of the larger project.

Two viable options for replacing the masonry walls were considered. The solutions must be resistant to use of salts for winter maintenance – 1) replace walls with an all-concrete option. The concrete solution has a probable cost of \$2.5M for construction for new access ramps and walls. The concrete is locally available and there are local construction contractors capable of doing the work. Concrete walls would have a serviceable life of 50 plus years 2) replace walls with a steel frame. A steel solution has a probable construction cost of just over \$3.0 million and a service life of 50 plus years. In addition to higher construction and engineering design costs, steel cannot be sourced locally, and supply challenges could delay the project. Both options are likely to require

access to, and work within, the Missoula rail yard. MRL and BNSF have been contacted to initiate coordination.

Proposed Change Order Two (2) costs an addition \$107K for engineering design of concrete replacement walls inclusive of all connections to the new walls for items such as ramp stringers, railings, electrical systems, and drainage, etc.

Financial Implications:

The total probable cost for construction of the bridge rehabilitation project will be increased to around \$2.5 million due to the wall replacement aspect of the project.

This change order increases the total engineering contract value to just under \$415K. If the change order is approved, the value of project engineering services reflect a 14% of the estimated total project cost. This is in line with other comparable projects requiring engineering.

Links to external websites: None