



CITY OF WHEATLAND

CITY COUNCIL MEETING STAFF REPORT

July 9, 2019

SUBJECT: Approve Plans and Specifications, and Authorize Bidding of the Malone Avenue Culvert Replacement Project Phase 2

PREPARED BY: Dane H. Schilling – City Engineer, and
Asa Utterback – Coastland Engineering

Recommendation

Adopt a resolution approving the plans and technical specifications, and authorize the City Engineer to proceed with the bidding process for the construction of the Malone Avenue Culvert Replacement Project Phase 2.

Background/Discussion

On March 22, 2018, City staff became aware that the culvert was failing catastrophically during a storm event and the road was closed due to safety concerns. Malone Avenue is the primary access to the City's wastewater treatment plant. Staff made arrangements with Reclamation District 2103 to use the Bear River Levee as an alternative means of access. However, making left-turns from the levee road onto Highway 65 is difficult due to limited sight distance combined with highway speeds, and even more difficult in larger utility vehicles.

Staff recommended performing the removal of the existing structure under an emergency resolution to ensure removal can be completed before seasonal run-off began in the 2018-19 rain season. On September 24, 2018, the City received bids for the removal of the failed culvert and awarded a contract to B&M Builders in the amount of \$41,725.

During the course of the removal work (Phase 1) it was discovered that a City-owned sewer force main, a small waterline, a telephone cable and an abandoned natural gas service were placed over the old culvert causing the need to revise the scope of the contractor's work and issue a change order relocate, remove or protect these utilities in-place. The most notable cost item of this change order was due to the City's 8-inch sewer force main. This change order totaled \$70,222 plus the associated design work provided by Coastland. It should be noted that this change order work would have been required in Phase 2 if timing and physical constraints hadn't necessitated its removal in Phase 1.

The removal of the old culvert and utility relocation work is now complete and the waterway is now clear of obstructions. The roadway remains closed until Phase 2 is complete.

In the course of the design of Phase 2, Coastland examined various options for the replacement culvert including a steel plate arch (similar to the old structure), precast reinforced concrete pipe, galvanized steel pipe and precast concrete arch designs. In that process Coastland determined that the costs associated with trying to preserve the natural bottom of the waterway to avoid environmental permitting was more costly than obtaining a permit and employing conventional methods for the culvert construction. This revised approach is expected to save \$120,000 or more in construction costs which will more than offset the additional design and environmental efforts.

The environmental consultant performed the necessary environmental surveys. Staff has obtained a streambed alteration permit from the State which included the purchase of wetland mitigation bank credits to offset the minor loss of natural streambed habitat. Raney Planning and Management prepared a CEQA Notice of Exception for the project.

Staff is recommending that the construction of the project and procurement of the culvert materials be done in two separate contracts to save time and eliminate the contractor's mark-up for the culvert materials.

Staff also recommends using an informal bid procedure in accordance with the California Uniform Public Construction Cost Accounting Act. According to the Act public projects in the amount of \$200,000 or less may use the informal bidding procedures set forth in Section 22032(b) of the Act.

Staff anticipates that the replacement work will be complete, and the roadway re-opened before the 2019 rain season begins.

Alternatives

Alternatively, the City Council may choose to not to authorize the bidding of the project or modify the scope of the project.

Fiscal Impact

The current estimate of project costs is also given below. The current 2019-20 Fiscal Year Budget include \$280,000 for the replacement of the culvert. Costs are estimated as follows:

**Malone Ave Culvert Replacement Project Phase 2 -
Budget Estimate**

Funding

General Fund Reserves	\$	280,000
TOTAL	\$	280,000

Expenditures

Project Management, Design and Environ.	\$	57,500
Procurement - Culvert Materials	\$	15,000
Construction	\$	165,000
Construction Management & Inspection	\$	16,500
Subtotal	\$	254,000
Contingency 10%	\$	25,400
TOTAL	\$	279,400

Attachments

1. Resolution
2. Construction Drawings for the Project