

MEMORANDUM

TO: Claire Powell, City Manager

FROM: David Salmon, P.E., City Engineer

VIA Jim Proce, ICMA-CM, Assistant City Manager

DATE: March 4, 2024

SUBJECT: **Approval of Change Order #3 with Belt Construction, Inc., in the Amount of \$315,827.97 for the Timber Creek Aerial Sewer Capital Project and Authorization for the City Manager, or Her Designee, to Execute the Change Order.**

BACKGROUND

The original project includes replacing 7 aerial sanitary sewer crossings along Timber Creek at various locations throughout the City. The subject change order covers three separate items related to the subject project.

1. In June 2023, the Contractor, Belt Construction was instructed to stop working on Line 20 of the subject project by the City, as it became apparent the City did not have an easement in the required location across property owned by TNMP. Subsequently, the City requested an easement, and TNMP had issues with the proposed location relative to their substation. After a lengthy back and forth negotiation between the City and TNMP, an easement was obtained 150ft west of the substation, over 100 feet from the original planned location. The easement documents were signed by TNMP officials on January 23, 2024, and the revised drawing for Line 20, accommodating TNMP's requirements, was provided by the consulting engineer (Huitt-Zollars, Inc.) on Jan. 29, 2024. The new drawings included a realignment of the sanitary sewer line across Bellaire to meet TNMP's specifications, including the addition of two new 6-ft manholes, and additional encasement pipe across Bellaire Blvd. This portion of the change order cost is \$106,938.57.
2. Also in June 2023, Belt Construction submitted RFI No. 2 regarding the existing manhole condition at Sta: 8+97 located in the median of Bellaire Blvd. near Fox Creek, Line 20. During construction, they discovered that the bottom of the manhole is constructed of brick and any attempt to modify the structure could cause failure. The consulting engineer revised the original drawings proposing the existing manhole to be removed and replaced at this location at the same time they revised the alignment due to the easement issue. To remove and replace the old manhole, bypass pumping of the sewer flow is required making the removal and replacement much more costly than normal. This portion of the change order cost is \$161,034.40.

3. At Line 12, the plans did not show or call out an existing stormwater pipe parallel to the proposed sanitary sewer line and the quantities to remove and replace the stormwater pipes were not included in the original contract. To construct the proposed sanitary sewer crossing, the Contractor had to remove and replace the 36" storm sewer pipe, reinstall the gabion retaining wall around the storm sewer outfall and stabilize the soil between the gabion wall and the Creek within the City easement. A product called Flexmat was determined to be the most efficient option for stabilizing the soil at this location, with the recommendation of the consulting engineer. This portion of the change order cost is \$47,855.00. This work has been completed to avoid additional creek erosion. The consultant indicated that the storm sewer was not shown on as-builts provided by the City although staff believes the storm sewer outfall should have been picked up during the consultant's topography survey. The consultant agreed to provide the surveying and design for the realignment of Line 20 at no additional cost.

ANALYSIS

To date, there have already been two change orders approved by staff. Change order # 1 for an increase of \$57,260.93 covered the cost of an additional 10-foot drop manhole. Change Order #2, a deduction of \$37,200.48 included several items related to adjusting the location of one of the lines to avoid a conflict with bike and ped trail, upsizing two manholes and additional pavement replacement on Continental Drive. The big savings was not having to replace the bike and ped trail pavement. With the originally approved contingency amount of \$229,549.46, the total amount of Change Order No. 1 (\$57,260.93), No. 2 (-\$37,200.48) and No. 3 (\$315,827.97) exceeds the contingency amount by \$106,338.95 for a total of \$335,888.42, thus requiring City Council approval.

The additional cost of change order No. 3 would bring the total cost of the project from \$4,820,538.71 to \$4,926,877.67. Funding for this change order is available in the Timber Creek Aerial Sewer capital project. This change order will also add an additional 90 days to the original 365-day timeline, pushing the completion date from April 4, 2024, to July 23, 2024.

The change order also adds 90 days to the contract to account for delays caused by needing to redesign line 20 and obtain easements along with the other additional work.

CITY'S STAFF RECOMMENDATION

That the City Council approve the change order and authorize the City Manager, or her designee, to execute the change order as set forth in the caption above.