



DATE: June 7, 2021

TO: Mayor and Members of the City Council

VIA: Peter Pirnejad, City Manager

FROM: Paul Nagengast, Project Advisor, Regional Government Services

SUBJECT: CONTRACT CHANGE ORDER NO. TEN (10) TO THE AGREEMENT WITH SHIMMICK CONSTRUCTION CO., IN THE AMOUNT OF \$932,030.15 FOR CONCRETE CAP REVISION ON THE SHEET PILE WALL FOR THE LEVEE PROTECTION PLANNING AND IMPROVEMENTS PROJECT (CIP 327-657)

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### RECOMMENDATION

It is recommended that the City Council adopt the attached resolution authorizing the Mayor to execute Contract Change Order No. Ten (10) to the agreement with Shimmick Construction for the Levee Protection Planning and Improvements Project (CIP 327-657) in the Amount of \$932,030.15 for Concrete Cap Revision on the Sheet Pile Wall.

Funding is available in approved construction contingencies in the amount of \$9,000,000 from the budget established for the Levee Protection Planning and Improvements Project (CIP 327-657).

### EXECUTIVE SUMMARY

While constructing the wooden forms for the concrete and reinforcing steel as part of the concrete caps that cover the tops of the sheet pile walls, the contractor observed that the forms were not in a straight line and would produce a wave or bow in the finished concrete caps. It was determined that due to the amount of tolerance specified for the installation of the sheet piles in the Project contract specifications, the sheet piles were not consistently in the same position as the Project contract plan detail for a concrete cap indicated.

By memorandum dated April 8, 2021, and the staff report for the April 19, 2021, City Council meeting, staff provided information to the City Council indicating the wave or bow in the finished cap created an aesthetic concern and not a structural or design deficit. Staff indicated we would return with a complete detailed report in the future for City Council approval if the proposed contract change order work to address this aesthetic concern was greater than \$250,000.

On April 19, 2021, City Council adopted Minute Order No, 1759, directing staff to proceed with various concrete cap design revisions for the sheet pile wall installation in relations to the Levee Protection Planning & Improvements Project (CIP 327-657) with the City reserving the right to challenge the responsibility associated with the revisions. It has now been determined that the cost for the concrete cap revisions is \$932,030.15.

### BACKGROUND

Staff presented to City Council on April 19, 2021, a report indicating the current Project plan sheet details for the concrete cap to be placed on the levee sheet piles did not fully accommodate for the various sheet pile horizontal tolerances specified in the Project specifications.

The report indicated, in order to provide efficiencies in the installation of the sheet piles which would save time and money, the sheet piles were specified to be within 6" of its desired location. Typically, this 6" as a tolerance to install the sheet piles provides the contractor the ability to install the sheet piles without having to slow down his operations, thus less efficient, to meet more stringent tolerances. The Project plan detail for the concrete cap did not provide for the 6" tolerances and actual in-field construction of the forms at one location north of Shorebird Park reflected the wave or bow as the forms move with the sheet pile locations. (See Attachment 3 - Photo indicating wave or bow in the concrete cap near Station 186+00, North of Shorebird Park)

While the wave or bow does not affect the structural integrity of the concrete cap and sheet pile wall, aesthetically the wave would detract from other linear components of the Project once the trail, and lane striping are completed. Time was and is of the essence because the Contractor use of specified time built in the Project timeline (float) for these types of design or other unforeseen circumstances can impact the contractors' schedule. City Council was advised, should all the float time be used up, the contractor may begin to accumulate compensable delay days. The Project is still early in the construction schedule, and any impacts to the float should be kept to a minimum to provide for other potential Project impacts to the schedule.

City Council authorized staff to proceed with various concrete cap revisions and to

negotiate a final cost to provide a revised concrete cap detail to be able to procure the correct type and size of steel reinforcement for the revised concrete caps.

The Schaaf & Wheeler design team has been reviewing various proposed changes to the steel reinforcement and forming for the concrete caps and has found a workable solution to achieve a linear cap with the specified tolerances for the sheet pile installation.

On April 19, 2021, City Council was also advised the City Manager authorized the construction of a revised concrete cap detail utilizing on-site steel that had been purchased to construct the Project plan detail for the concrete cap placed on sheet piles north of Shorebird Park. By doing this the contractor remained on schedule and the City Council was afforded additional time to provide staff with the necessary direction on the remaining concrete cap for the Project sheet pile wall. This approach did not require the City Council to approve a change order for the remainder of the wall nor did it circumvent the City Councils' signing authority by breaking the work into smaller sections. (See Attachment 3 - Photo of finished concrete cap without the wave or bow using a revised cap detail at the same location that indicated a bow near Station 186+00, North of Shorebird Park)

As noted above, the City Council had been advised of the preliminary cost estimates which ranged from \$500K to \$1M for a revised concrete cap to be used on the Project. An updated estimated cost range provided to City Council reduced the cost estimate range to \$600K- \$700K with the understanding the final cost estimates were still subject to the cost of the material and fabrication of the steel reinforcement. The contractor has now provided a cost to construct the revised concrete caps with the updated costs for the reinforced steel. Due to the increased prices of steel (the contractor is starting to see shortages of steel on the market), lumber, and other commodities the revised concrete cap cost has increased from \$700K to \$932,030.15 which is still less than the \$1M original upper limit cost estimate.

## ANALYSIS

On April 19, 2021, City Council adopted Minute Order No. 1759, directing staff to proceed with various concrete cap design revisions for the sheet pile wall installation in relations to the Levee Protection Planning & Improvements Project (CIP 327-657) with the City reserving the right to challenge the responsibility associated with the revisions. Tanner Pacific, Inc., has reviewed the cost for the concrete cap revision in the amount of \$932,030.15 and finds it reasonable for the work to be completed.

Staff recommends City Council approve Contract Change Order No. Ten (10) for the concrete cap revision to be placed on the sheet pile wall installation.

## FISCAL IMPACT

With the execution of Contract Change Order No. Ten (10), the total contract change orders costs to date are summarized below:

Construction Contingency	\$ 9,000,000.00
CCO 1-9 (CCO #2 was a \$585K credit)	- \$ 110,033.63
Contract Change Order #10	- \$ <u>932,030.15</u>
Total Available Construction Contingency	\$ 7,957,936.22

Adequate funding has been provided as construction contingencies for this Project from the Project budget (CIP 327-657).

## CITY COUNCIL VISION, MISSION, AND VALUE/PRIORITY AREA

The Levee Improvements Project is in alignment to the City Council's adopted Vision and Mission statements, in that it seeks to create a sustainable environment through infrastructure improvements for current and future generations to come. This item is also directly related to the "Facilities and Infrastructure" Value/Priority Area. The key outcome is to make substantial progress toward an improved levee on time and budget to protect the community and critical infrastructure from storms and high tide.

### Attachments:

- Attachment 1 – Resolution
- Attachment 2 – Contract Change Order No. Ten (10)
- Attachment 3 – Photo of Concrete Cap Before and After Revision – (Sta 186+00; North of Shorebird Park)
- Attachment 4 – Memorandum to City Council dated April 8, 2021
- Attachment 5 – Staff Report for City Council Meeting dated April 19, 2021