

SUBJECT

BOARD RESOLUTION NO. 22-351

Pertaining to an Amendment No. 3 to a Progressive Design-Build Agreement with CH2M Hill Engineers, Inc. for the McCarron's Treatment Process Improvements Project.

BACKGROUND INFORMATION

Staff is seeking approval of Amendment No.3 to the Progressive Design-Build Agreement with CH2M Hill Engineers, Inc. for the McCarron's Treatment Process Improvements Project approved at the Board's January 12, 2021 meeting.

See attached Staff Report and Amendment.

RECOMMENDATION

Board approval is recommended.

McCarron's WTP Project

Staff Report: Contract Amendment 3

March 8, 2022

Executive Summary: SPRWS staff is seeking a third contract amendment with CH2M Hill Engineers. The total value of the contract amendment is \$21,754,445.00. There are two relevant contract changes associated with this contract amendment: the inclusion of Work Package 3 and a design-phase change order to account for the inclusion of a new Chemical facility. Both changes are described in more detail in the remainder of this report.

Staff Recommendation: Staff recommends approval of this contract amendment for the reasons outlined on the following pages.

Work Package 3

Executive Summary: SPRWS staff has worked with the Design-Builder to develop Work Package 3, which is valued at \$21,084,570. This work package will enable the Design-Builder to begin demolition and earthwork in a timely manner to utilize the full 2022 construction season.

Background: The Board of Water Commissioners has previously approved two contract amendments that allowed for the purchase of vital equipment and the completion of vital portions of work. This contract amendment is an extension of the previous two. The work contained herein allows for optimal utilization of the warm-weather months for construction while allowing design work on facilities to be more fully completed.

Scope of Package: This work package includes the following work and purchases:

- Vibration monitoring during peak periods of demolition and construction activity.
- All exterior demolition work (including demolition of the Secondary Settling Basins, Clarifiers 1-5, the Floc 3/Recarb basin, miscellaneous paving, etc.) for the project.
- All excavation work, soils storage/disposal, soil importation, filling of soils, and final grading of the site.
- Establishment of construction laydown areas, craft labor parking areas, construction roadway, and other such facilities as needed for management of the construction site.
- Stormwater protection for the construction site.
- Extensive shoring work to protect existing, critical facilities.
- Dewatering of the construction site to ensure a work environment sufficiently dry for construction activities.
- Installation of a permanent underdrain system within the excavated area.
- Final paving work on the site.
- All bonds, insurance, and taxes required for the scope of work described herein.
- Installation of certain schedule-critical piping and facilities (specifically piping and vaults located between the clarifier units).
- Establishing field offices for PCL construction, providing staffing for them until Sept. 30, 2022.
- Erecting a tower crane on site to facilitate construction.

- Installing a “concrete skip wall” beneath the Floc 2 structure to ensure that the structure is adequately supported following the removal of the Secondary Settling Basins.
- The Design-Builder’s fee for all work specified herein.

Rationale for Early Purchases

All work included in this package is necessary to keep construction plans on schedule for the summer of 2022. Many items have auxiliary benefits as well. Auxiliary benefits include providing an early proof-of-concept for a critical bypass of some facility components (reduces later risk) and securing pricing in an uncertain economic environment.

Pricing

The total value of the contract amendment is **\$21,084,570**.

\$17,224,060 is guaranteed to the Design-Builder as a Lump Sum value.

An additional **\$1,967,100** is available to the Design-Builder (upon Owner approval) for project risks encountered during the work (Contingency Funds).

Finally, an additional **\$1,893,410** is available to the Design-Builder (upon Owner approval) for Allowance Items. Allowance items are utilized for costs which may or may not materialize and for which the owner retains the risk.

Any unspent funds from the Contingency Fund and the Allowance Items will be returned to the Owner in full.

Project Management Considerations/Notes

- The cost of this work is generally in alignment with the \$220M project estimate that was shared with the BWC at the Dec. 2021 meeting. At this point, we are tracking under budget.
- Contracting early for this work should not meaningfully alter the cash flow timeline for SPRWS
- SPRWS staff recommends that we deliver this package under a hybridized Lump Sum agreement, the terms of which were negotiated in the past several weeks. The arrangement saves about \$29k over a Guaranteed Maximum Price delivery. As described above, the Owner receives back any unspent Contingency or Allowance funds. The hybridized Lump Sum arrangement combines the best features of a Lump Sum delivery and a Guaranteed Maximum Price delivery, and SPRWS staff feels confident that it’s the best way to deliver this work package.
- The “Off-ramp” for the project remains open. For equipment ordered, SPRWS will be able to cancel orders, delay delivery, or accept delivery of the equipment in the event that we do not proceed with Jacobs for the construction phase of the contract. For work performed, SPRWS will be responsible for paying for completed work and for demobilization costs if we elect to take the “off-ramp”.

Staff Recommendation: Staff recommends approval of this work package. The work scope and the pricing have been reviewed thoroughly with the Owner’s Representative, and SPRWS staff believes that the deal is favorable to SPRWS.

Change Order for Chemical Facility

Executive Summary: SPRWS is seeking a change order to the design-phase contract with Jacobs engineering in the amount of \$669,875.00. This is a not-to-exceed value. These funds will allow for the design of a new chemical facility on campus. SPRWS staff strongly believes that the addition of this new facility to the project provides substantial long-term benefits to SPRWS customers and operational staff.

Background: At the inception of the McCarron's Water Treatment Plant project, SPRWS and the Design-Builder expected to utilize existing lime and chemical facilities to supply the new water treatment plant. The use of existing equipment and facilities was always viewed as a short-term solution, but we believed that we could get another 10 years or so of life out of the existing facilities. SPRWS staff expected to invest in upgrades to these facilities roughly a decade from now.

As design progressed, however, it became apparent that now is the optimal time to invest in this facility. The costs associated with a temporary solution were comparable to the costs of building a new facility that will last for decades. Additionally, constructing a new facility considerably reduced project risks (both financial and operational.)

In light of these discovery, SPRWS staff has decided to add the new chemical facility to the scope of the project.

Scope of Work: This change order covers all design scope associated with the facility circled in orange below. In order to keep design on schedule, much of the design work has already been completed.



Staff Recommendation: Staff recommends approval of the change order. It offers clear long-term benefits to the utility and ensures that the Design-Builder is fairly compensated for the increase in work scope.