

Attachment 4

Phase 1 Pure Water Construction

METRO JPA/TAC
Staff Report
Date: October 23, 2018

Project Title:

Pure Water – Authorization to Execute Construction Contracts to the Lowest Responsible and Reliable Bidders for the North City Pure Water Phase 1 Projects

Requested Action:

Authorization to advertise and execute the Pure Water Phase 1 construction contracts with the lowest responsible and reliable bidders, for the amount, in total, not to exceed \$1,081,722,115.

Recommendations:

Approve the requested action.

Metro TAC:	Approve the subject item and forward to Metro JPA/ Metro Commission for approval
IROC:	N/A
Prior Actions: (Committee/Commission, Date, Result)	N/A

Fiscal Impact:

Is this projected budgeted?	Yes <u>X</u> No ____
Cost breakdown between Metro & Muni:	It is estimated that the funding will be allocated as follows: Water: 57% (approximately \$614M), Wastewater: 43% (approximately \$468M) (Metro: 100%, Muni: 0%).
Fiscal impact to the Metro JPA:	33.5% of Metro cost (approximately \$157M)

Capital Improvement Program:

New Project?	Yes <u>X</u> No ____ N/A ____
Existing Project?	Yes ____ No <u>X</u> Upgrade/addition ____ Change ____

Previous TAC/JPA Action:

None.

Additional/Future Action:

Present item to Metro JPA/ Metro Commission for approval on November 1, 2018.

City Council Action:

City Council approval is anticipated on November 15, 2018.

Background:

Please view discussion below.

Discussion:

San Diego's imported water supplies face increasing stresses from a variety of sources. As a result, the region's supplies are becoming less reliable and more expensive. These circumstances, and the threat limitation on San Diego's water supplies, have intensified the need for new sources of water. Pure Water San Diego is the City of San Diego's (City) 20-year program to provide a safe, secure and sustainable local drinking water supply for San Diego. Recycled water will be turned into drinkable water through the use of water purification technology. Further, Pure Water's system-wide reuse will

significantly reduce flows to the Point Loma Wastewater Treatment Plant (PLWTP) and will make San Diego more water independent. On April 29, 2014, City Council adopted Resolution Number R-308906 supporting the Pure Water Program.

Project Delivery Status

The North City Pure Water Phase 1 project designs will be completed in 2018. Each of the North City Pure Water Phase 1 projects will be bid for construction in multiple construction packages. The estimated not-to-exceed amount of Phase 1 construction is \$1,500,754,049.

Updates from the 10% baseline include updated project cost, inclusion of group Jobs bundled with Pure Water pipelines, owner controller insurance program cost, and the unanticipated San Diego Gas & Electric design and relocation cost. The following tables below show the breakdown of program costs.

Cost Description	Cost
Pure Water Phase I Approximate Program Costs	~\$1.27B
Water Costs	\$743M
Wastewater Costs	\$530M
Pure Water Owner Controlled Insurance Program (OCIP)	~\$24.2M
Water Costs	\$14.0M
Wastewater Costs	\$10.2M
Pure Water Contingency Pool (10%)	\$92.3M
Water Costs	\$53.5M
Wastewater Costs	\$38.8M
Sub-Total Pure Water Cost (uninflated, without estimated SDG&E relocation cost)	~\$1.39B
Pure Water SDG&E Relocation Cost	~ \$47.8M
Water Costs	\$14.3M
Wastewater Costs	\$33.5M
Total Pure Water Cost (uninflated, with estimated SDG&E relocation cost)	~\$1.44B

Non Pure Water CIP's (Bundled with Pure Water Projects)

Cost Description	Cost	
Non Pure Water CIP's (Projects Bundled with Pure Water)	~ \$126M	
Water Costs	\$60M	
Wastewater Costs	\$66M	
Non Pure Water CIP's OCIP	~\$2.6M	
Water Costs	\$1.5M	
Wastewater Costs	\$1.1M	
Non Pure Water CIP's Pure Water Pooled Contingency (10%)	~ \$10.6M	
Water Costs	\$6.2M	
Wastewater Costs	\$4.4M	
Sub-Total Non Pure Water CIP Cost (uninflated, without estimated SDG&E relocation cost)	~\$139M	
Non Pure Water SDG&E Relocation Cost	\$45M	
Water Costs	\$45M	
Total Non Pure Water CIP Cost (uninflated, with estimated SDG&E relocation cost)	~\$184M	

Costs not Identified During 10% Design Baseline

Cost Description	Cost
Pure Water 10% Design Cost Estimate (uninflated)	~\$1.2B
Costs not identified during 10% Design Baseline (uninflated)	~\$350M
Non Pure Water CIP Projects	~\$126M
Pure Water and Non Pure Water OCIP	~\$28M
Pure Water and Non Pure Water Contingency Pool	~ \$103M
Pure Water and Non Pure Water SDG&E Relocation Costs	~ \$93M
Total Pure Water Program and Non Pure Water CIP's (uninflated)	~\$1.62B*
Pure Water – Phase I Cost (uninflated)	~\$1.44B*

Non Pure Water CIP Cost (uninflated)

~\$184M*

Pure Water and Non Pure Water Cashflows											
	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY15 - FY24 TOTAL
Total	\$0.9 M	\$9.3 M	\$22.7 M	\$53.7 M	\$77.7 M	\$477.9 M	\$518.0 M	\$312.5 M	\$135.5 M	\$13.5 M	\$1.62 B
Water	\$0.4 M	\$5.2 M	\$15.3 M	\$28.0 M	\$52.3 M	\$247.9 M	\$288.0 M	\$191.1 M	\$97.5 M	\$11.8 M	\$937.5 M
Wastewater	\$0.5 M	\$4.1 M	\$7.4 M	\$25.8 M	\$25.4 M	\$229.9 M	\$230.0 M	\$121.4 M	\$38.0 M	\$1.7 M	\$684.3 M
Metro JPA Share	\$0.2 M	\$1.4 M	\$2.5 M	\$8.6 M	\$8.5 M	\$77.0 M	\$77.1 M	\$40.7 M	\$12.7 M	\$0.6 M	\$229.2 M

The City recently selected and hired construction management firms to support the oversight of all Phase 1 construction activities. Their first order of business was to perform constructability reviews of all the Phase 1 construction packages. Each package has challenging site constraints, whether it is a pipeline being built in highly-trafficked corridors, or a treatment facility that is being expanded while remaining operational. Construction activity sequencing, contractor routes, and available staging areas are examples of key considerations in the constructability review process. In addition to project- and site-specific constraints, the projects and packages are all linked into a single operating system, and as such, have multiple interdependencies. These interdependencies and their timing were a major focus of the recent reviews. The outcome is that the estimated Phase 1 completion date has been extended to end of second quarter of calendar year 2023.

Construction Change Order Limit

Per City Charter, Article VII, Section 98 San Diego Municipal Code, Chapter II, Division 30, Section 22.3018, only City Council can authorize construction contract alterations (Construction Change Orders) over \$500,000 to major public works Capital Improvement Program (CIP) contracts. This request is to increase the limit of alteration authorization from \$500,000 to \$1,000,000 for Pure Water Phase 1 construction contracts. These contracts include construction of non-Pure CIP projects bundled with Pure Water projects in the same construction corridor. Increasing the change order limit will facilitate project efficiency and help to avoid delays by reducing the time required to execute change orders. The facilities being built as part of Pure Water Phase 1 will operate as a single interconnected system, wherein each individual facility is needed to deliver Pure Water to the Miramar Reservoir. Therefore, a schedule delay on any single project could delay all of Phase 1. Additionally, City staff have engaged community working groups for input on ways to minimize construction impacts; all delays will prolong these impacts.

In 2012 City Council approved the current change order limit of \$500,000 for major CIP projects. At that time the average construction contract value was approximately \$1.5 million and the maximum was approximately \$20 million. The average estimated contract value among the eleven Pure Water Phase 1 construction packages is \$90 million.

Public Utilities has provided regular updates about Pure Water Implementation to the Environment Committee and City Council since 2015. And prior to 2015, Public Utilities provided monthly updates on the progress of the Water Purification Demonstration Project, which proved the feasibility of the Pure Water concept. Such updates will continue throughout Pure Water Phase 1 construction and will include reports on construction change orders occurrences and dollar amounts.

This request will require City Charter, Article VII, Section 98 San Diego Municipal Code, Chapter II, Division 30, Section 22.3018, to be modified from its current limit of construction change orders from \$500,000 to \$1 million for all Pure Water projects and other group Jobs bundled with Pure Water Phase I.

Pooled Contingency

This action is requesting authorization to create a Pure Water Program Pooled Contingency annual allocation for the purpose of funding construction change orders. Although not anticipated, project costs may exceed budget due to challenges in estimating, construction complexities, and unforeseen site conditions, among other reasons. Creating a pooled contingency for the Pure Water Program will allow all projects within the program to share contingency resources in the event of a construction change order. By pooling contingency budgets between multiple projects, risk is distributed among these projects and overall contingency budgets can be reduced. A contingency of 10% or \$102,930,920 will be applied to the Pure Water Program Phase 1.

Working Groups

During the public hearing for the North City Project EIR/EIS on April 10, 2018, City Council encouraged Public Utilities to create working groups comprised of members of the communities impacted by Pure Water construction. Four groups were formed: Scripps/Miramar, University City, Clairemont, Morena/Bay Park. Members included business owners, residents, school administrators, and planning group/town council representatives. Four meetings have been held with each working group (16 meetings total) to obtain informed input regarding construction impacts and opportunities to avoid, minimize, or mitigate them. Community members provided input and concerns relative to: coordination with other projects, street restoration, air quality/odor/noise, staging areas/parking, environmental monitoring, traffic control/signage, special stakeholder access needs, communication and notifications, work restrictions and phasing, working days and hours, and construction monitoring. The groups provided over 100 recommendations; 69% of recommendations were adopted or will inform the Construction Outreach Plan; 23% of recommendations are being evaluated; and 8% of recommendations are not able to be adopted. Additional meetings will be held prior to advertising and awarding construction contracts to provide updates to the Working Groups.

Regulatory Approvals

Regulatory approvals from the Regional Water Quality Control Board (Regional Board) and Division of Drinking Water (DDW) are required for the operation of Pure Water Phase 1. The Regional Board will issue a national pollutant discharge elimination system (NPDES) permit for the discharge of purified water into Miramar Reservoir. Embedded within the NPDES permit will be DDW's requirements regarding public health and the use of purified water as a drinking water supply.

With DDW's approval, the Title 22 Engineering Report for the project was finalized in June 2018 and three public hearings to receive public comment were conducted in August 2018, with DDW presiding. The public comment period extended from July 13th to August 24th. The majority of comments did not pertain to the Project's public health considerations; and those that did are not expected to require any changes to the Report. DDW reviewed and approved the City's responses to comments and those responses are now posted on the City's Pure Water website.

Now that the public hearings have been held, DDW is preparing its conditional approval letter for the project and eventual incorporation to the Regional Board's NPDES permit. The final approval letter is anticipated sometime in November 2018.

The application process for the NPDES permit has occurred in parallel to efforts related to DDW. The City submitted the NPDES permit application in May 2018. In June 2018, the City received a letter from the RWQCB that the submission was complete and the RWQCB is currently drafting the NPDES permit. After responding to comments from the Regional Board and including the DDW conditional approval letter, the NPDES permit will go out for public comment at the end of 2018, with a target for approval at the March 2019 Regional Board meeting. The NPDES permit is not required until the project goes on-line after construction is completed and water is discharged to Miramar Reservoir. Therefore, this permitting

schedule is significantly ahead of the required timeline and shows the City's commitment to regulatory approval.

North City Project EIR/EIS

On April 10, 2018, the City Council approved the North City Pure Water Project - Phase I (Pure Water Phase I/Project) which included a Site Development Permit (SDP), MHPA Boundary Line Adjustment, and Environmental Impact Report (EIR). On May 23, 2018, the University City Community Foundation (UCCF) served a Petition for Writ of Mandate under the California Environmental Quality Act (CEQA) on the City. UCCF challenges the approval of the Pure Water Phase I Project and certification of the EIR. The lawsuit has been assigned to Judge Kenneth J. Medel and the court scheduled a Civil Case Management Conference for January 11, 2019. The parties held a settlement conference on July 19, 2018. The lawsuit is anticipated to move forward but does not prohibit the City and the UCCF to continue settlement negotiations.

Bid Results: *If bidding was done provide bidding format and results*
N/A

METRO JPA/TAC
Staff Report
Date: October 23, 2018

Project Title:

Pure Water – Authorization to execute a contract for an Owner-Controlled Insurance Program for the North City Phase 1 Project

Requested Action:

Approve a contract for an Owner-Controlled Insurance Program for the Phase 1 Pure Water Program in an amount not to exceed \$28,230,660.

Recommendations:

Approve the requested action.

Metro TAC:	Approve the subject item and forward to Metro JPA/ Metro Commission for approval
IROC:	N/A
Prior Actions: (Committee/Commission, Date, Result)	N/A

Fiscal Impact:

Is this projected budgeted?	Yes <u>X</u> No ____
Cost breakdown between Metro & Muni:	It is estimated that the funding will be allocated as follows: Water: 58% (approximately \$16.4 Million), Wastewater: 42% (approximately \$11.8 Million) (Metro: 100%, Muni: 0%).
Fiscal impact to the Metro JPA:	33.5% of Metro cost (approximately \$3.95 Million)

Capital Improvement Program:

New Project?	Yes <u>X</u> No ____ N/A ____
Existing Project?	Yes ____ No <u>X</u> Upgrade/addition ____ Change ____

Previous TAC/JPA Action:

None.

Additional/Future Action:

Present item to Metro JPA/ Metro Commission for approval on November 1, 2018.

City Council Action:

City Council approval is anticipated on November 15, 2018.

Background:

Please view discussion below.

Discussion:

San Diego's imported water supplies face increasing stresses from a variety of sources. As a result, the region's supplies are becoming less reliable and more expensive. These circumstances, and the threat limitation on San Diego's water supplies, have intensified the need for new sources of water. Pure Water San Diego is the City of San Diego's (City) 20-year program to provide a safe, secure and sustainable local drinking water supply for San Diego. Recycled water will be turned into drinkable

water through the use of water purification technology. Further, Pure Water's system-wide reuse will significantly reduce flows to the Point Loma Wastewater Treatment Plant (PL WTP) and will make San Diego more water independent. On April 29, 2014, City Council adopted Resolution Number R-308906 supporting the Pure Water Program.

Through the implementation of an Owner-Controlled Insurance Program (OCIP), the City will furnish workers' compensation, general, excess, pollution liability, and builder's risk insurance associated with the construction of Pure Water Phase 1. The insurance will cover the City, the prime contractors, and all subcontractors at all tiers. The initial insurance coverage period will be for up to five years to cover the construction activities from Contractor Notice-To-Proceed (NTP) until Notice of Completion (NOC). At the NOC date, the Builder's Risk policy will end coverage. General Liability and Workers Comp will have an additional 10 year period starting at the NOC date to process claims. At the end of the 10 year "tail," the General Liability policy will end. The City will have the option to close all Workers Comp claims and buy out any future exposure to keep the Workers Comp policy from being in force in perpetuity. OCIPs have been utilized in many large public works programs, including the San Diego County Water Authority's recent \$1 billion Emergency Storage Project.

The key benefits of an OCIP are economies of scale, improved claims management and a uniformed safety program, which in turn leads to savings. Coverage is consistent, and claims administration is centralized with one insurance provider for the entire program. OCIPs also typically require a consolidated safety program across all projects, and this facilitates the enforcement of worker and site safety.

The estimated cost for the OCIP is \$28,230,660. The City is currently in the process of retaining an OCIP broker to manage the insurance coverages and the program and anticipates issuing the notice-to-proceed in December 2018. With that, coverage is expected to be in place in the third quarter of 2019.

Bid Results: *If bidding was done provide bidding format and results*
N/A