



## City Council Report

915 I Street, 1<sup>st</sup> Floor

Sacramento, CA 95814

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**File ID:** 2018-00334

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**Review Item 01**

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**Title: (Agreement/Contract for Review) Change Order: Shasta Park Water Facility**

**Location:** District 8

**Recommendation:** Accept and publish for review a Resolution: 1) authorizing the City Manager or the City Manager's designee to execute Change Order No. 7 to City Agreement No. 2016-1073 with Sierra National Construction, Inc., for an amount not-to-exceed \$1,109,120, bringing the agreement's total not-to-exceed amount to \$13,536,863; 2) resetting the City Manager's authority to issue Change Orders for the Agreement; and, 3) approving budget related transfers; and continuing to April 3, 2018 for approval.

**Contact:** Ofelia Avalos, Project Manager, (916) 808-1474; Michelle Carrey, Supervising Engineer, (916) 808-1438; Dan Sherry, Engineering & Water Resources Division Manager, (916) 808-1419; Department of Utilities

**Presenter:** None

**Attachments:**

1-Description/Analysis

2-Resolution

3-Change Order No. 7

## Description/Analysis

**Issue Detail:** Staff recommends Council approve Change Order No. 7 with Sierra National Construction, Inc. for the City Agreement No. 2016-1073, to complete the construction of Well 167 and make modifications to the Shasta Park Water Facility per the City-directed changes to meet future water demands.

**Policy Considerations:** This Change Order exceeds the City Manager's approval authority and requires Council approval.

**Economic Impacts:** This Change Order is expected to create 4.44 total jobs (2.55 direct jobs and 1.89 jobs through indirect and induced activities) and create \$684,809.51 in total economic output (\$431,640.67 of direct output and another \$253,168.84 of output through indirect and induced activities).

*The indicated economic impacts are estimates calculated using a calculation tool developed by the Center for Strategic Economic Research (CSER). CSER utilized the IMPLAN input-output model (2009 coefficients) to quantify the economic impacts of a hypothetical \$1 million of spending in various construction categories within the City of Sacramento in an average one-year period. Actual impacts could differ significantly from the estimates and neither the City of Sacramento nor CSER shall be held responsible for consequences resulting from such differences.*

**Environmental Considerations:** An Initial Study, Mitigated Negative Declaration, and a Mitigation Reporting Program were prepared for this project in accordance with the California Environmental Quality Act (CEQA). The City Council adopted the Mitigated Negative Declaration and Mitigation Reporting Program on May 22, 2012 (Resolution No. 2012-138). No additional environmental review is required.

**Sustainability:** The project has been reviewed for consistency with the goals, policies, and targets of the Sustainability Master Plan and the 2035 General Plan. The project will advance these goals, policies, and targets by ensuring that the City continues to provide a safe, clean, and reliable water supply to its customers.

**Commission/Committee Action:** Not applicable.

**Rationale for Recommendation:** The proposed change order is needed to complete the construction of Shasta Park Well 167 and necessary adjustments to the Shasta Park Water Facility to accommodate this new well.

The City received grant funding to install Well 167 and its original location was not feasible due to water quality issues. The original plan for the Shasta Water Facility was designed to allow for a future additional well to be added and this site was identified as the alternative location for Well 167 in order to meet the deadlines for grant funding. Well 167 will double the capacity of this water facility and work towards the goal of the City's Well Masterplan.

**Financial Considerations:** The Shasta Park Water Facility has an original contract not-to-exceed amount of \$11,595,790. The net change by previous change orders in the amount of \$831,953, increased the contract not-to-exceed amount to \$12,427,743. Proposed Change Order No. 7 in the amount of \$1,109,120 will increase the contract not-to-exceed amount to \$13,536,863.

Staff is recommending the budget transfers below. In order to facilitate this transfer, staff is also recommending the reallocation of the existing expenses in the FWTP Groundwater Well (Z14120200) project from the Water Reimbursable fund (6205) to the Water fund (6005). Funding for the FWTP Groundwater Well (Z14120200) has been identified from FWTP Improvements (Z14130200). The grant funding associated with the FWTP Groundwater Well (Z14120200) project will be reallocated to the Shasta Water Park Facility (Z14005400) project. Sufficient funds will be available to execute the change order and complete the project upon completion of the recommended budget transfers and reallocation of expenses.

Project No.	Project Name	Fund	Amount
Z14130200	FWTP Improvements	6005	(755,000)
Z14120200	FWTP Ground Water Well	6005	755,000
Z14120200	FWTP Ground Water Well	6205	(988,198)
Z14005400	Shasta Park Water Facility	6205	988,198

There are no General Funds planned or allocated for these projects.

**Local Business Enterprise (LBE):** Sierra National is an LBE.

**Background:** The 2005 Water Master Plan concluded that a finished water reservoir should be constructed in the southeast portion of Sacramento to help maintain service pressure through peak demand periods, and to provide additional emergency and fire suppression water supply.

The original Shasta Park Reservoir Project (Project) includes the construction, operation and maintenance of an above-ground four million-gallon water reservoir, groundwater well, water treatment system, and pump station on a 5.31-acre parcel. This change order will add a second ground water well which will double the capacity of this water facility. Each

groundwater well will have a capacity of two million gallons per day. Other site improvements will include a perimeter wall and landscaping.

The Shasta Park Water Facility project went out to bid on April 18, 2016 and bids were opened on June 1. The project was awarded to the lowest responsible bidder which was Sierra National Construction, Inc. with a bid of \$11,595,790 on September 9, 2016.

Change Order No. 4 went to Council on June 25, 2017 and authorized the contractor to begin construction of the second groundwater well (Well 167) at the Shasta Park Reservoir facility. This location was selected as an alternative for the use of Prop 84 grant funds that were intended for a groundwater well that was to be constructed at the Fairbairn Water Treatment Plant (FWTP). This change order mainly compensated the contractor for drilling and encasement of the second well. Future change orders would cover the remaining costs of Well 167.

Change Order No. 5 compensated the contractor for adding equipment (radar units and high-level float) to the Methane Structure and Reservoir for improved operations control, foundation improvements beneath the filter tanks and control building, adding an NSF-61 coating to several structures, additional conductor drilling and casing required by Sacramento County, and minor control building modifications.

Change Order No. 6 compensated the contractor for modifications to the Shasta Park Water Facility's control panel and instrumentation required due to the addition of Well 167.

Change Order No. 7 compensates the contractor for additional construction components of Well 167 and modifications to the Water Facility. These modifications include the addition of the third water filter and required water pipe fluoride room secondary containment coating system improvements; PLC, SCADA and Motor Control Center modifications; the well pump, motor, pump pedestal and appurtenances for Well 167, the well's interconnection site and accessory piping for the chlorine, camera panel design, potholing, and cathodic protection for the new water main. This change order is needed to continue the construction of Well 167 and complete the Shasta Park Water Facility.

## **RESOLUTION NO. 2018-**

Adopted by the Sacramento City Council

April 3, 2018

### **Approving a Change Order for the Shasta Park Water Facility and Approving Budget Related Transfers**

#### **BACKGROUND**

- A. The 2005 Water Master Plan concluded that a finished water reservoir should be constructed in the southeast portion of Sacramento to help maintain service pressure through peak demand periods, and to provide additional emergency and fire suppression water supply.
- B. The Shasta Park Water Facility project went out to bid on April 18, 2016 and bids were opened on June 1. The project was awarded to the lowest responsible bidder which was Sierra National Construction, Inc. with a bid of \$11,595,790 on September 9, 2016.
- C. The original Shasta Park Reservoir Project (Project) includes the construction, operation and maintenance of an above-ground four million gallon water reservoir, groundwater well, water treatment system, and pump station on a 5.31 acre parcel. This change order will add a second ground water well which will double the capacity of this water facility. Each groundwater well will have a capacity of two million gallons per day. Other site improvements will include a perimeter wall and landscaping.
- D. Change Order No. 4 went to Council on June 25, 2017 and authorized the contractor to begin construction of the second groundwater well (Well 167) at the Shasta Park Reservoir facility. This location was selected as an alternative for the use of Prop 84 grant funds that were intended for a groundwater well that was to be constructed at the Fairbairn Water Treatment Plant (FWTP). This change order mainly compensated the contractor for the drilling and encasement of this second well. Future change orders would cover the remaining costs of Well 167.

- E. This change order No. 7 compensates the contractor for additional construction components of Well 167 which will double the capacity of this water facility. It includes the addition of the third water filter, fluoride room secondary containment improvements, PLC, SCADA and Motor Control Center modifications, the well pump, motor, pump pedestal and appurtenances, the well's interconnection site and accessory piping for the chlorine, the camera panel design, potholing, cathodic protection for the new water main and other site improvements. This change order is needed to continue the construction of Well 167.
- F. The reallocation of expenses in the FWTP Groundwater Well (Z14120200), from the Water Reimbursable fund (6205) to the Water fund (6005) is required to facilitate the budget transfers for the Shasta Park Water Facility (Z14005400) project.
- G. Budget transfers are required to provide sufficient funds to complete the second ground water well for the Shasta Park Water Facility (Z14005400) project and to facilitate the reallocation expenses in the FWTP Groundwater Well (Z14120200) project.

**BASED ON THE FACTS SET FORTH IN THE BACKGROUND, THE CITY COUNCIL RESOLVES AS FOLLOWS:**

Section 1. The City Manager or the City Manager's designee is authorized to execute Change Order No. 7 to City Agreement No. 2016-1073 with Sierra National Construction, Inc., for an amount not-to-exceed \$1,109,120.

Section 2. The following budget transfers are approved:

<b>Project No.</b>	<b>Project Name</b>	<b>Fund</b>	<b>Amount</b>
Z14130200	FWTP Improvements	6005	(755,000)
Z14120200	FWTP Ground Water Well	6005	755,000
Z14120200	FWTP Ground Water Well	6205	(988,198)
Z14005400	Shasta Park Water Facility	6205	988,198

Section 3. Reallocation of expenses from the Water Reimbursable fund (6205) to the Water fund (6005) in the FWTP Groundwater Well (Z14120200) project are approved.

Section 4. The City Manager's authority for City Agreement No. 2016-1073 with Sierra National Construction, Inc is reset.

Adopted by the City of Sacramento City Council on April 3, 2018, by the following vote:

Ayes:

Noes:

Abstain:

Absent:

Attest:

*The presence of an electronic signature certifies that the foregoing is a true and correct copy as approved by the Sacramento City Council.*

CITY OF SACRAMENTO

CHANGE ORDER

Contract # & Date: 2016-1073 09/09/2016

Budget #: 47211-50000-6205-51000000- Z14005402

Purchase Order #: 0000035671

Change Order No: 7

Sacramento, California

April 03, 2018

TO: Sierra National Construction, Inc., Contractor

CONTRACT FOR: **Shasta Park Water Facility**

(B16141321030)

Upon mutual acceptance of this document by the City of Sacramento, hereinafter referred to as "CITY", and your firm, hereinafter referred to as "CONTRACTOR", in accordance with the terms and conditions of the original contract documents, you are hereby directed to make the following change or changes for the consideration set forth below:

**Description: See Exhibit A, attached and incorporated herein.**

The original contract sum was:	\$ <u>11,595,790.00</u>
Net change by previous change orders:	\$ <u>831,953.00</u>
The contract sum prior to this change order was:	\$ <u>12,427,743.00</u>
The contract sum will be <u>increased</u> by this Change Order:	\$ <u>1,109,120.00</u>
New contract sum including all Change Orders:	\$ <u>13,536,863.00</u>

CONTRACTOR agrees that the amount of increase or decrease in the contract sum specified in this change order shall constitute full compensation for the work required by this change order, including but not limited to all compensation for the additional and/or revised work specified herein, and shall fully compensate CONTRACTOR for any and all direct and indirect costs that may be incurred by CONTRACTOR in connection with such additional and/or revised work, including any changes, disruptions or delays in work schedules or in the performance of other work by CONTRACTOR. The time for performance of the Contract will increase twenty (20) working days by reason of the work required by this Change Order. Except as herein above expressly provided, CONTRACTOR further agrees that the performance of the work specified in this Change Order or the rescheduling of other project work made necessary by this Change Order, shall not constitute a delay which will extend the time limit for completion of the work as said term is used in the Contract between CITY and CONTRACTOR for the project.

**Approval Recommended By:**

  
Project Manager – Ofelia Avalos

**Approved as to Form by:**

\_\_\_\_\_  
Michael Voss, Senior Deputy City Attorney

**Approved By:**

  
Contractor – Sierra National Construction, Inc.

**Approved By:**

\_\_\_\_\_  
William O. Busath, Director, Department of Utilities

**Approved By:**

\_\_\_\_\_  
Mindy Cuppy – City Clerk

\_\_\_\_\_  
Date



**CITY OF SACRAMENTO  
CHANGE ORDER  
EXHIBIT A**

**Contract # & Date:** 2016-1073 09/09/2016

**Budget #:** 47211-50000-6205-51000000- Z14005402

**Purchase Order #:** 0000035671

**Change Order No:** 7

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**Change Order Items:**

- 1) **PCO#052, RFQ#036, (Parts 1-3), Addition of Third Filter:** RFQ#036 was issued to the CONTRACTOR requesting that an additional three cell horizontal pressure filter be provided to match the two Contract filter vessels already set on the foundation at the Project site. Part 1 - costs associated with the additional filter include the filter, media, face pipe, valves and associated installation for an agreed lump sum cost of \$412,670.00. Part 2 includes underground piping work associated with the added filter for a cost an agreed lump sum cost of \$77,038.00. Part 3 includes exterior coating of the added filter and associated above ground piping for an agreed lump sum cost of \$9,995.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 499,703.00

- 2) **PCO#065, RFQ#044, Fluoride Room Secondary Containment:** RFQ#044 was issued to the CONTRACTOR requesting that a chemical resistant single source coating system for the Fluoride Room Containment sump, floor, and up 12" on the interior surface of the masonry walls be provided to protect the integrity of the concrete surface against the corrosive fluoride chemical in the event of an accidental spill. The CONTRACTOR will be compensated at an agreed lump sum cost of \$13,382.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 13,382.00

- 3) **PCO#067, RFQ#046, SCADA Computer and Monitor (OI Replacement):** RFQ#046 was issued to the CONTRACTOR requesting that the original contract operator interface screen be replaced, because the City electrical staff explained that because of the number of devices being monitored that the information would not fit on the panel due to its size, and a larger 19.5" color monitor and small form factor computer be provided and installed. The changes include modifications to the electrical panel, purchasing the new equipment, and startup and coordination. The CONTRACTOR will be compensated at an agreed lump sum cost of \$12,377.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 12,377.00

- 4) **PCO#047, RFQ#032, Fluoride Room Floor & Sump:** RFQ#032 was issued to the CONTRACTOR requesting that the floor in the fluoride room be lowered and a sump be installed to contain the fluoride within the room in case of a leak or spill to protect the reinforced concrete sump against chemical contamination and corrosion. The CONTRACTOR will be compensated at a cost tracked by extra work at force account of \$8,337.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 8,337.00

- 5) **PCO#051, RFQ#035, Fire Protection Work:** RFQ#035 (Design Clarification No.006) was issued to the CONTRACTOR requesting that the layout of the 8" water line as well as the fire hydrant be modified from what was shown on the original contract drawings and that a 4" fire line and fire connection be added, and to provide an accessible hydrant location and to minimize congestion of buried pipelines. The CONTRACTOR will be compensated at an agreed lump sum cost of \$69,250.00. Ten (10) additional days of Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 69,250.00

- 6) **PCO#057, RFQ#041, Well Pump Control:** RFQ#041 was issued to the CONTRACTOR requesting modifications be made to the control system for Well #165 which will provide additional mechanical safe guards and provide more operator interface parameters. The CONTRACTOR will be compensated at an agreed lump sum cost of \$4,088.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change)

Total This Item: \$ 4,088.00

- 7) **PCO#062, MCC Modifications:** The CITY requested that modifications be made to the Motor Control Center (MCC) because the originally bid equipment did not provide the level of control and monitoring needed by the City operations staff..... The CONTRACTOR will be compensated at an agreed lump sum cost of \$36,118.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 36,118.00

- 8) **PCO#063, Additional Conduits in the Chlorine Room:** The CONTRACTOR received field direction from the City, to provide and install additional conduits in the Chlorine Room before the concrete slab was poured. The wires in these conduits will be pulled at a later time and will be used to monitor the fluoride tank level and provide a gauge that can be field read during the refilling of the fluoride tank. The CONTRACTOR will be compensated at an agreed lump sum cost of \$1,265.00, which was reviewed and approved by the CITY. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 1,265.00

- 9) **PCO#068, Well Column Pipe Exterior Coating:** The CITY requested that the exterior of the deep well pump column be coated with an NSF approved coating to -provide enhanced corrosion protection of the column pipe to increase its design life. The CONTRACTOR will be compensated at an agreed lump sum cost of \$23,846.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 23,846.00

- 10) **PCO#061, PLC & SCADA Modifications:** The CITY requested that modifications to the PLC & SCADA programming be made based on the revised Control Descriptions, P&ID and I/O spreadsheet provided by the CITY. These changes include programming the third filter and the fluoride modifications from dry to liquid

fluoride. Additional electrical conduit installation will be included in a future change request. The CONTRACTOR will be compensated at an agreed lump sum cost of \$27,893.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 27,893.00

- 11) **PCO#071, RFQ#048, Well 167 Surface Facilities:** RFQ#048 was issued to the CONTRACTOR requesting that they procure and install surface facilities for the new Well 167, which includes the deep well vertical turbine pump, motor, construction of concrete pump pedestal and appurtenances. The CONTRACTOR will be compensated at an agreed lump sum cost of \$186,499.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 186,499.00

- 12) **PCO#070, RFQ#047, ARV Drains at Well 165 and Well 167:** RFQ#047 was issued to the CONTRACTOR requesting that they install a drainage system to collect ARV water from the 3" and 1" ARV drains from both Well 165 and 167 and route the water to the 4-million-gallon reservoir drainage pump station. The CONTRACTOR will be compensated at an agreed lump sum cost of \$13,915.00. Three (3) additional days of Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 13,915.00

- 13) **PCO#056, RFQ#040, Well 167 Interconnection Site and Accessory Piping:** RFQ#040 was issued to the CONTRACTOR requesting that they procure and install new site interconnection piping and perform modifications to the chlorine feed piping resulting from the installation of the new Well 167. The CONTRACTOR will be compensated at an agreed lump sum cost of \$69,879.00. Seven (7) additional days of Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 69,879.00

- 14) **PCO#054, RFQ#038, Camera Panel Design:** RFQ#038 was issued to the CONTRACTOR requesting that they provide and install camera back panels, which had not been included in the original contract. These back panels are needed because the cameras require a termination box near the camera location to house required switching and terminals. The CONTRACTOR will be compensated at an agreed lump sum cost of \$64,073.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 64,073.00

- 15) **PCO#050, RFQ#034, Added AC Paving on Imagination Parkway:** RFQ#034 was issued to the CONTRACTOR requesting that during the final paving of Imagination Parkway, they remove a 3' wide orphan section of paving and pave the area to the new cut-line. The CONTRACTOR will be compensated per the contractor's bid quote price of \$6.00 per square foot for approximately 2,029 square feet of AC paving. The submitted cost was at an agreed unit price and totals \$12,783.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 12,783.00

- 16) **PCO#041, Cathodic Protection on 24" DIP Waterline:** The CITY requested that cathodic protection (CadWeld bonded jumpers) be installed on the 24" DIP waterline to protect the water main from accelerated corrosion from pipe material reacting with backfilled soils induced electrical potential. The CONTRACTOR will be compensated at a cost tracked by extra work at force account of \$37,985.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 37,985.00

- 17) **PCO#078, SMUD Line Potholing:** The CITY requested that the CONTRACTOR pothole for the SMUD line that was marked by Underground service alert outside the limits of the new 24" watermain as shown on the contract plans. The CONTRACTOR will be compensated by extra work at force account for a cost of \$8,069.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 8,069.00

- 18) **PCO#073, Well Pump Control (Well 167):** The CITY requested that modifications be made to the control system for Well #167 to make it compatible with the modifications made to the Well 165 controls (RFQ #041). The CONTRACTOR will be compensated at an agreed lump sum cost of \$4,088.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 4,088.00

- 19) **PCO#046 (Part 2), Relocating the Storm Drain on Imagination Parkway:** During the installation of the 24" watermain on Imagination Parkway, an existing storm drain not shown on the contract drawings was encountered and the 24" alignment could not be changed so the existing 10" storm drain had to be relocated. The CONTRACTOR will be compensated on an extra work at force account cost of \$4,940.00. No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 4,940.00

- 20) **PCO#076, Change to MOV at Well 165 (MOV Purchase Only):** The CITY requested that one 16" Pratt BFV Valve with IQT2000 120VAC Rotork Actuator be procured for Well 165 to be installed in the process piping for isolation during well startup. The change order price includes applicable specification requirements including Operation and Maintenance manuals, and product warranties, but does not include spare parts or startup services. The CONTRACTOR will be compensated at an agreed lump sum cost of \$10,630.00 (extra work resulting from the addition of the valve will be addressed in a separate proposal). No additional Contract Time is added by this change.

(Database Code: Owner Requested Change

Total This Item: \$ 10,630.00

**Total This Change Order: \$ 1,109,120.00**