



RESOLUTION NO. \_\_\_\_\_

BOARD LETTER APPROVAL

  
**RICHARD F. HARASICK**  
Senior Assistant General Manager  
Water System

  
**MARTIN L. ADAMS**  
Chief Operating Officer

  
**DAVID H. WRIGHT**  
General Manager

**DATE:** October 18, 2018

**SUBJECT:** Amendment No. 3 to Agreement No. 47071-2 -  
Webcor|Obayashi|Lyles, a Joint Venture, for the Silver Lake Reservoir  
Complex Storage Replacement Project/Headworks Reservoir Project

**SUMMARY**

The proposed Amendment No. 3 (Amendment) will extend Agreement No. 47071-2 (Agreement) by three years from December 31, 2018 to December 31, 2021. The extension is requested as a result of changes, improvements, and modifications from lessons learned during the first phase. In addition, the Amendment will increase the General Conditions (GC) Cost and Construction Manager at Risk (CMAR) Fee to 15 percent and 10 percent, respectively.

Previously under Amendment No. 2, the Board of Water and Power Commissioners (Board) authorized LADWP to spend up to \$353 million (budgeted) on a task assignment basis for construction of all four Project phases. Staff requests approval of the Board to release \$40 million for Phase 3 of the overall Project, which is the estimated cost of the flow regulating station, hydroelectric power plant, River Supply Conduit (RSC) Unit 1A West Part 2, and includes contingency of \$4.1 million.

City Council approval is required for this Amendment pursuant to Section 373 of the Los Angeles City Charter.

## **RECOMMENDATION**

It is requested that the Board adopt the attached Resolution recommending City Council's approval of Amendment No. 3 to Agreement No. 47071-2, as required in Charter Section 373, and approve \$40 million in funding for pre-construction and construction services for Phase 3 of the Project.

## **ALTERNATIVES CONSIDERED**

Alternatives were not considered as part of this Amendment request for this Agreement. LADWP is currently midway through Phase 2. The Agreement will expire prior to the completion of Phase 2. The requested Amendment is necessary to continue work with the current contractor as originally planned and to approve Phase 3 funding of the Project. Any alternatives to the current course of action at this time would significantly delay the project delivery schedule further.

## **FINANCIAL INFORMATION**

The Board authorized LADWP to spend up to \$353 million (budgeted) on a task assignment basis, contingent upon availability of funds, for construction of all four Project phases. This amount is sufficient to complete all four phases of the Project.

The following table illustrates actual expenditures and estimated costs for each phase of the Project:

<b>Project Phase</b>	<b>Cost</b>
<b>Phase 1</b> Headworks Reservoir East and RSC Unit 1A East	\$142 million - Actual
<b>Phase 2</b> Headworks Reservoir West and RSC Unit 1A West Part 1	\$141 million - Estimate
<b>Phase 3</b> Headworks Flow Regulating Station, Hydroelectric Power Plant, and RSC Unit 1A West Part 2	\$ 40 million - Estimate
<b>Phase 4</b> Headworks Reservoir Restoration	\$ 30 million - Estimate
<b>Grand Total</b>	<b>\$353 million</b>

In the original Agreement, which was signed in December 2011, Webcor|Obayashi|Lyles, a Joint Venture (WOL) planned the commitment of its financial resources to December 2018, and in its proposal for this project its GC and CMAR Fee Rates were based on that timeline. Because the Amendment extends the duration of

the Agreement by three years, it commits WOL's resources beyond their originally planned timeline. The GC and CMAR Fee Rates have increased industry wide based on market research, which included outreach to a number of construction contractors and construction industry organizations such as the Western Council of Construction Consumers. For these reasons, LADWP determined it is fair and reasonable to increase WOL's GC and CMAR Fee Rates to 15 percent and 10 percent, respectively and are reflective of current market conditions and cost increases from 2011.

The cost estimate for the construction of the flow regulating station, hydroelectric power plant, and RSC 1A West Part 2 is based on a June 2018 report from WOL and includes LADWP contingency in the amount of \$4.1 million.

## **BACKGROUND**

The original construction schedule as approved by the Board shows a completion date of November 2018 for the construction of the fourth and final Phase of the Project. The following illustrates the difference between the original and revised construction schedules by Project Phase:

### **PHASE 1:**

Headworks Reservoir East/  
River Supply Conduit (RSC)  
Lower Reach Unit 1A East

ISS Earthwork (Foundation)  
October 2010 – June 2011

Reservoir Construction (Concrete Structure)  
November 28, 2012 – January 15, 2016

### **PHASE 2:**

Headworks Reservoir West  
RSC Lower Reach Unit 1A West  
Part 1

November 2014 – December 2017  
**REVISED** July 2015 – April 2021

### **PHASE 3:**

Regulating Station  
RSC Lower Reach Unit 1A West  
Part 2

August 2013 – November 2017  
**REVISED** September 2019 – December 2021

### **PHASE 4:**

Ecosystem Restoration

November 2017 – November 2018  
**(Revised schedule to be determined)**

Several design modifications and improvements impacted the original proposed Project completion date of November 2018. During the design of Headworks Reservoir West, Water System Operations Division determined that the size of the reservoir needed to be increased in order to have a combined total operational capacity for 110 million

gallons. As a result, additional time was needed to conduct a supplemental geotechnical investigation of the added footprint and to account for the engineering design changes. Also during the construction of Headworks Reservoir East, cracks in the concrete developed as a result of heat generated during the curing of the mass concrete. These cracks were repaired for the east reservoir but in an effort to improve the concrete for the west reservoir, time was spent in design to research and develop a concrete mix that would generate less heat during curing, resulting in less cracks. The west reservoir is over 50 percent complete and there are significantly less cracks than what was shown on the east reservoir during the same milestone. Therefore, due to the modifications needed to increase the total operational capacity and the improvements to the concrete mix and placement, additional time was added to the Headworks Reservoir West construction schedule, overall impacting the Project schedule for all phases.

Due to modifications and improvements of Headworks Reservoir West, the estimated completion date for construction of Phase 3 has been extended from November 2017 to December 2021. The increase in budget for Phase 2, associated with the modification to increase the reservoir operational capacity, was addressed under Amendment No. 2 by Board Resolution No. 017 079 adopted on October 25, 2016.

Finally, although the Amendment extends the Agreement only through the completion of Phase 3, the Agreement may be extended in the future if it is mutually agreed that WOL should proceed with the construction of Phase 4 of the Project. There are currently a number of stakeholders involved and concepts being considered for the Headworks site once construction of the Water System facilities is complete. Determining whether or not WOL will be selected for that work will come at a later date.

Since execution of the Agreement, WOL has performed satisfactorily by being proactive and working well with LADWP staff on the Project.

In accordance with the Mayor's Executive Directive No. 4, the City Administrative Officer's (CAO) report was approved on October 26, 2018.

### **ENVIRONMENTAL DETERMINATION**

In accordance with the California Environmental Quality Act, it has been determined that the Project has potential to have significant effect on the environment. As such, a draft Environmental Impact Report (EIR) was prepared in July 2005 to provide objective information to public decision-makers and the general public regarding potential effects of the proposed Project.

The Final EIR was prepared in April 2006, which includes a Summary of Project Impacts and Mitigation Measures and was subsequently approved by the Board on May 16, 2006.

Due to State Revolving Funding requirements, LADWP updated the Final EIR in April 2017.

**CITY ATTORNEY**

The Office of the City Attorney reviewed and approved the Resolution and Amendment as to form and legality.

**ATTACHMENTS**

- Procurement Summary
- Resolution
- Amendment
- CAO Report