Department of Public Works

Bureau of Engineering
Bureau of Sanitation
Joint Report No. 2

July 21, 2020
CD No. 15

ISSUE CHANGE ORDER NO. 025 TO OHL USA, INC. FOR THE MACHADO LAKE PIPELINE PROJECT-EASTERN REACH (WORK ORDER NO. SZC13450, CONTRACT NO. C- 131470)

RECOMMENDING THE BOARD OF PUBLIC WORKS (BOARD):

AUTHORIZE the City Engineer to issue a change order to OHL USA, Inc. (OHL) for a not-to-exceed amount of $763,489 for the Machado Lake Pipeline Project-Eastern Reach (Project) to change the shoring type in Work Area 17.

TRANSMITTALS


2. Copy of confirmation e-mail for Emergency Change Authorization from the BOE Liaison Commissioner, dated April 10, 2020.


DISCUSSION

Background
On May 25, 2018, the Board awarded a contract to OHL in the amount of $15,921,294 with a contingency amount of $3,184,259 for a total approved construction budget of $19,105,533 to construct the Project (Transmittal No. 1). This Project is a joint project between the Los Angeles Department of Water and Power (LADWP) and the Department of Public Works and is governed by the Memorandum of Agreement WR-12-1050, approved by the Board on February 15, 2013. The agreement states that the Project will be designed and funded by the LADWP and awarded through the Board. The contract duration is 954 calendar days.

Construction of this pipeline will complete the loop network of the recycled water distribution system in the Harbor area and allow water produced by LA Sanitation and Environment at Terminal Island Water Reclamation Plant to be conveyed to additional end-users.
The Project consists of the installation of approximately 6,500 linear-feet of 24-inch ductile iron recycled water pipe. The Project consists of three segments. The alignment starts at E Street and Quay Avenue, travels north on Quay Avenue, east on Anaheim Street, to tee off and connect to existing pipe on Mahar Avenue and on Anaheim Street east of Alameda Street. An additional portion of pipe is to be installed along L Street between Hyatt Avenue and McFarland Avenue. A map of the Project site is shown in Figure No. 1 below:

Figure No. 1 - Project Site Map

**Change Order No. 025**

In order to eliminate the potential of mobilizing a known plume of ground water contamination, the contractor was directed to change the method of shoring for Work Area 17 located on Anaheim Street (at the intersection of Anaheim Street and Alameda Street). During the design phase anticipated dewatering flow rates were used to calculate the dewatering area of influence to evaluate potential impact to the nearby contamination plume. During construction the actual dewatering flow rates were five times larger than anticipated and this was to flow continuously for six months. Under this actual construction scenario the risk of mobilizing the contaminated plume was so great that the decision to modify the method of shoring was taken. The contractor had previously planned to install a
“slide rail” shoring system with continuous dewatering but will instead install a watertight sheet pile shoring system which will eliminate the need to continuously dewater. To prevent potential further construction delays and delays in providing recycled water to end users, an emergency authorization to issue a change order for a not-to-exceed amount of $840,000 for changing the shoring type for Work Area 17 was requested, and approval was received from the BOE Liaison Commissioner (Transmittal No. 2). Actual Emergency Change Order No. 025 (Transmittal No. 3) was issued on April 13, 2020. Subsequently, negotiations with the contractor resulted with the final cost of Change Order No. 025 (Transmittal No. 4) in the amount of $763,489 pending Board approval.

**Status of Change Orders**
A summary of the current change order status is presented below:

<table>
<thead>
<tr>
<th>Category</th>
<th>Total No. of Change Orders</th>
<th>Dollar ($) Amount</th>
<th>Percent (%) Contract Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully Executed Change Orders</td>
<td>23</td>
<td>$709,201</td>
<td>4.45%</td>
</tr>
<tr>
<td>Emergency/Preliminary Change Orders</td>
<td>5</td>
<td>($675,416)</td>
<td>(4.24%)</td>
</tr>
<tr>
<td>Change Order per this Board Report</td>
<td>1</td>
<td>$763,489</td>
<td>4.80%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
<td><strong>$797,274</strong></td>
<td><strong>5.01%</strong></td>
</tr>
</tbody>
</table>

**Program Review Committee (PRC)**
The PRC was briefed on this change order, which is within the approved contingency amount, on May 13, 2020.

**STATUS OF FUNDING**

There is no impact to the General Fund. The total funding for Change Order No. 025 is $763,489. Funding in the amount of $763,489 is available in Sewer Capital Fund No. 761, Department No. 50, and Appropriation Unit No. 50RGC5.

Funds and appropriations for future fiscal years are not yet identified, and existing appropriations may change based on available cash balances; therefore, funds and appropriations, will be determined by the Director of LA Sanitation and Environment or designee.

The City of Los Angeles’ (City) liability under this contract shall only be to the extent of the present City appropriation to fund the contract. However, if the City shall appropriate funds for any succeeding years, the City’s liability shall be extended to the extent of such appropriation, subject to the terms and conditions of the contract.
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( CFJ RMK KRR LBM )

Report reviewed by:

BOE (ADM and CWD) and LASAN (FMD)

Report prepared by:

Clean Water Division

Christopher F. Johnson, PE, GE Division Engineer
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Statement as to funds approved by:

Miguel De La Peña, Director
Office of Accounting
Fund Ref. 761/50/50RGC5/$763,489
Date: 07/08/2020

Lisa B. Mowery, PE
Chief Financial Officer
Bureau of Sanitation
Date: 6/19/20

Respectfully submitted,

Gary Lee Moore, PE, ENV SP
City Engineer
Bureau of Engineering

Enrique C. Zaldivar, PE
Director and General Manager
Bureau of Sanitation

Questions regarding this report may be referred to:
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