HONOLULU AUTHORITY for RAPID TRANSPORTATION

July 18, 2019

To: HART Board of Directors

Through: Andrew S. Robbins
Executive Director and CEO

Through: Charles S. Carnagie
Project Director and Officer-in-Charge

Through: Francis X. Kosich
Director of Design and Construction

From: Jason Chung
Project Manager

Subject: Honolulu Rapid Transit Project (HRTP)
Request for Change Order Approval
Kamehameha Highway Guideway
Change Order No. 1 for Engineering Services
Contract No. SC-HRT-1400025

Overview
HART has a cost reimbursement agreement with Hawaiian Electric Company (HECO) for costs associated with utility relocations for the Kamehameha Highway Guideway (KHG) section of the Rail. The previous not-to-exceed contract amount was $4,031,000, which included labor, materials, and overhead for relocations, however, excludes profit.

This request is for Change Order No. 1, and it is to increase the not-to-exceed contract amount by $1,900,000, for a revised total not-to-exceed contract amount of $5,931,000. This change order is for HECO’s engineering services that are required for the KHG 138kV/46kV relocation project. This is an area where relocation work is required because HECO’s facilities are too close to HART’s rail guideway.

Justification
HECO requires horizontal working clearances of 50 feet, 40 feet, and 30 feet between HECO’s existing overhead line conductors to the edge of the rail guideway for HECO’s 138kV, 46kV, and 12kV overhead lines, respectively, to safely perform ongoing maintenance and repair of HECO’s existing facilities along HART’s rail guideway and stations. HECO and HART created a task force in July 2015 to address the clearance issues in the KHG section of the Honolulu Rapid Transit Project (HRTP). A vehicle solution was selected and approved for the 46kV located along the mauka side of KHG and the 138kV/46V along the makai side of KHG.

This vehicle solution was able to resolve the majority of the west side clearance issues. However, there are (3) three areas where the vehicle solution did not work, and relocation/undergrounding are necessary. Two areas were previously included in the West O‘ahu/Farrington Highway (WOFH) Change Order, and the last of these areas is the relocation of the 138kV existing overhead lines located along Kamehameha Highway (east of Waiau...
power plant) together with the 46kV overhead lines to shorter poles along the Kamehameha Highway (east of Waiau power plant) as stated in the February 16, 2017 Board presentation on working clearance.

**Recommendation**

HART staff recommends that the Board approve this Utility Engineering Change Order in the amount of $1,900,000 for the reimbursement of HECO's engineering services for this project.

**Fiscal Impact**

Allocation from the utility's contingency for the West side clearance is required to fund this $1,900,000 change.
1. Purpose:
   - To seek Board approval for the utility engineering service agreement, Change Order (CCO) No. 01 for reimbursement to HECO for the design/engineering services for the "Relocation of existing 138kV overhead lines at KHG project."
   - CCO No. 01 is to increase the not-to-exceed contract amount by $1,900,000.

2. Background/Justification:
   - HART has a cost reimbursement agreement with HECO for costs associated with utility relocations for KHG.
   - HECO requires horizontal working clearances of 50 feet, 40 feet, and 30 feet between HECO’s existing overhead line conductors to the edge of the rail guideway for HECO’s 138kV, 46kV, and 12kV overhead lines, respectively, in order to safely perform ongoing maintenance and repair of their existing facilities along the HART’s rail guideway and stations.
   - HECO and HART created a task force to address the clearance issues in the KHG section of the Honolulu Rapid Transit Project (HRT). A vehicle solution was selected and approved for the 46kV located along the mauka side of Kamehameha Highway and the 138kV/46kV along the makai side of Kamehameha Highway.
   - There are areas whereby the vehicle solution could not address the horizontal clearance issue. This area is the 138kV overhead lines at Kamehameha Highway located east of Waiau Power Plant.

3. Board Authority
HART’s Board is required to approve all change order/contract amendment over $1M. The total amount of this CCO exceeds $1M.

4. Procurement Background
CCO No. 01 has been processed in accordance with contract terms and construction change order procedures.

5. Financial/Budget Impact
CCO No. 01 will be allocated from the utility’s contingency fund for the West side clearance.

6. Policy Impact
Not applicable

7. Public Involvement
Not applicable

8. Alternatives
Not applicable

9. Exhibits
PowerPoint presentation, Staff Summary
HECO Utility Agreement Amendments
Kamehameha Highway Guideway

Change Order No. 1 • Engineering Service Agreement
Change Order No. 2 • Construction Service Agreement

Board of Directors Project Oversight Committee
July 10, 2019 • Honolulu, Hawai‘i
Purpose

- To seek Board approval for two change orders for the procurement of:
  1) Hawaiian Electric Company (HECO) engineering services, and
  2) HECO construction services

Both are required for the 138kV/46kV relocation project located on Kamehameha Highway Guideway (KHG).

- This area is where the specialized vehicles could not resolve the horizontal clearance issue and that the undergrounding of the 138kV/46kV lines was still required.
KHG Engineering Service Agreement (ESA)  
Change Order No. 1

- HART has a cost reimbursement agreement with HECO for engineering services associated with utility relocations for KHG. The original not-to-exceed (NTE) contract amount is $4,031,000.00, which includes engineering labor and overhead for the relocation work, but excludes profit.

- The proposed KHG ESA Change Order No. 1 amount is $1,900,000; the revised NTE will be $5,931,000.
KHG Construction Service Agreement (UCA) Change Order No. 2

- HART has a cost reimbursement agreement with HECO for construction costs associated with utility relocations for KHG. The original NTE contract amount was $12,958,111, which included construction labor and overhead for relocation work, but excluded profit.

- Change Order No. 1 was for the purchase of specialized vehicles which was executed on March 15, 2018, and it increased the NTE to $26,150,711.

- The proposed KHG UCA Change Order No. 2 amount is for $22,600,000 and the revised NTE will be $48,750,711.
Recommendation

- HART Staff recommends the Board to approve the HECO ESA Change Order No. 1 and the HECO UCA Change Order No. 2 which will allow for the reimbursement of costs related to the KHG 138kV/46kV relocation project.

- Funded from the utility’s contingency for the West side clearance.
Mahalo!