

Department of Public Works

Bureau of Engineering  
Report No. 3

November 2, 2009  
CD No. 10

**AUTHORITY TO ISSUE CREDIT CHANGE ORDER NO. 25 TO COLICH AND SONS/JR PIPELINE JOINT VENTURE (CONTRACT NO. C-111610) FOR THE CONSTRUCTION INCENTIVE CHANGE PROPOSAL IN CONNECTION WITH THE ECIS JUNCTION STRUCTURE FOR NORTH OUTFALL SEWER (NOS) REHABILITATION - SIPHON TO LCIS JUNCTION STRUCTURE PROJECT (W.O. No. SZC11307)**

**RECOMMENDATIONS**

1. Authorize the City Engineer to issue deductive Change Order No. 25 to Colich & Sons/J.R. Pipeline, a joint venture, for a credit amount of \$226,000 on Bid Item No. 34, titled LCSFVRS-ECIS Connection, for the NOS Rehabilitation - Siphon to LCIS Junction Structure Project to modify the ECIS Junction Structure.
2. Instruct the Office of Accounting to reduce future contract encumbrances by \$226,000

**TRANSMITTAL**

1. Copy of the Bureau of Engineering Report No. 1, adopted on June 30, 2008, authorizing the City Engineer to issue Change Order No. 2.
2. Preliminary Change Order No. 25.

**DISCUSSION**

***Background***

On May 2, 2007, the Board of Public Works (BPW) awarded a contract to Colich & Sons/J.R. Pipeline, a Joint Venture, in the amount of \$55,692,300 with a contingency amount of \$5,569,230 for a total approved construction budget of \$61,261,530 to construct the North Outfall Sewer (NOS) Rehabilitation - Siphon to LCIS Junction Structure Project. On June 30, 2008, the Board approved an increase in the contingency to \$5,719,230, for a revised approved construction budget of \$61,411,530 (Transmittal No. 1). This project is to rehabilitate a portion of the existing North Outfall Sewer (NOS). The portions being rehabilitated include segments of semi-elliptical, non-reinforced concrete arch sewer pipes approximately 10'-6" and 7'-9" in diameter. The rehabilitation extends from the existing Centinela Siphon under the 405 Freeway to the La Cienega Interceptor Sewer (LCIS) Junction Structure located at the intersection of Jefferson Boulevard and Rodeo Drive. The total length is 16,874 feet.

The project includes cleaning and removing sewer debris, rehabilitating the sewer pipe interiors with new concrete and plastic lining, rehabilitating siphon barrels with cured-in-place

plastic lining and construction of a sewer diversion from the La Cienega San Fernando Valley Relief Sewer (LCSFVRS) to the East Central Intercept Sewer (ECIS).

***Change Order No. 25***

The contract documents require the contractor to construct a sewer junction structure over the ECIS pipe to allow diversion of sewer from the LCSFVRS to the ECIS at the south-east side of the Jefferson Boulevard and La Cienega Boulevard intersection. In order to construct the junction structure, the ECIS would be exposed, a containment structure would be built and an entire 24 feet long section of ECIS pipe would be removed. Then a pre-cast insert structure for flow diversion would be installed in the containment structure to replace the removed section of the ECIS pipe. The upper portion of the junction structure would be constructed over the installed pre-cast insert and containment structure. This was the City proposed design to avoid the need to cut the steel wires embedded in the pre-stressed ECIS pipes.

The contractor proposed to construct a smaller alternate junction structure to save construction costs. The contractor proposed to remove only the top half of a 12 feet section of the ECIS pipe instead of removing an entire 24 feet long section of the ECIS pipe. Removing only the top half of a 12 feet section of the ECIS pipe would eliminate the need for a containment structure and a pre-cast insert structure and would reduce the overall dimensions and the size of the junction structure. It would also reduce the amount of shoring and excavation required to expose the ECIS and construct the junction structure. Removing a portion of an ECIS pipe, however, involves utilizing specialized equipment and expertise in cutting pre-stressed steel wires while maintaining the integrity of the pipe.

The Contract Specifications, General Requirements, Section 01252 includes a provision for "Construction Incentive Change Proposal" (CICP) with the following requirements:

1. CICP shall be initiated, fully designed and developed and identified by the contractor.
2. CICP must result in a net capital savings of \$100,000 or more.
3. When the net savings is less than \$1,000,000 the contractor receives 50 percent of the savings.

The CICP provision also requires the contractor's proposal to meet several requirements including a requirement for the quality, function, reliability, and safety of the project to be maintained. Contractor's proposal was evaluated by the Engineer. The contractor conducted a demonstration of their ability to execute the specialized pre-stressed steel cutting. The Engineer then determined that the proposal was feasible and acceptable.

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Based on these contract provisions, the contractor initiated a CICIP for constructing the smaller alternate junction structure over the ECIS. The contractor and the CM team negotiated and agreed on a cost savings of \$452,000 for this alternate construction method. After sharing 50 percent of the savings with the contractor, the total credit to the City will be \$226,000.

**Status of Change Orders**

To date a total of 45 change orders have been issued, not including the one associated with this Board Report. 17 have been fully executed, 25 are preliminary change orders and 3 have been canceled. A summary of the current change order status is presented below.

<b>Summary of Change Orders as of August 2009</b>			
<b>Category</b>	<b>Total No. of Change Orders</b>	<b>Dollar (\$) Amount</b>	<b>Percent (%) of Contract Amount</b>
Fully Executed Change Orders	17	\$203,990.20	0.37%
Preliminary Change Orders	25	\$420,000.00	0.75%
Canceled Change Orders	3	\$ 0	0%
Change Order #25 per this Board Report	1	(\$226,000.00)	(0.41%)
<b>Total</b>	<b>46</b>	<b>\$397,990.20</b>	<b>0.71%</b>

**Program Review Committee (PRC) Briefing**

PRC was briefed on this change order at its August 12, 2009 meeting.

**Conclusion**

Based on the CICIP provision in the Contract Specifications, it is requested that the BPW authorize the City Engineer to issue Change Order No. 25 for the modification of the ECIS Junction Structure for a credit amount of \$226,000 on Bid Item No. 34.

**STATUS OF FINANCING**

No funding is required for Credit Change Order No. 25. The Office of Accounting is instructed to reduce future contract encumbrances by \$226,000 upon receipt of the final change order.

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( HBS RTH )

Report reviewed by:

Respectfully submitted,

BOS (FMD)

Report prepared by:



Gary Lee Moore, P.E.  
City Engineer

Wastewater Conveyance  
Construction Division

Harshad B. Shah, P.E.  
Division Engineer  
Phone No. (213) 485-1525

Statement as to Funds Approved by:



Jean C. Su, Acting Director  
Office of Accounting

Date: 10/26/09

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Questions regarding this report  
may be referred to:  
Construction Manager: Yoon Cho, P.E.  
Phone No. (213)485-5857  
E-mail: Yoon.Cho@lacity.org