

Meeting Date: 3/1/2016

Report Type: Consent

Report ID: 2016-00211

Title: Change Order: Cured-In-Place Pipe (CIPP) Sewer Rehabilitation 2014/2015 Project (X14130702)

Location: Citywide

Recommendation: Pass a Motion authorizing the City Manager or the City Manager's designee to sign Change Order No. 1 to City Agreement No. 2015-0524 with Michels Corporation dba Michels Pipeline Construction, for an amount not-to-exceed \$70,368, bringing the contract total to \$535,897.

Contact: Dan Sherry, Engineering & Water Resources Manager, (916) 808-1419; Brett Grant, Supervising Engineer, (916) 808-1413; Roxanne Dilley, Project Manager, (916) 808-1458, Department of Utilities

Presenter: None

Department: Department Of Utilities

Division: Engineering & Water Resources

Dept ID: 14001311

Attachments:

- 1-Description/Analysis
- 2-Background
- 3-Location Map
- 4-Change Order

City Attorney Review

Approved as to Form
Joe Robinson
2/24/2016 12:25:10 PM

Approvals/Acknowledgements

Department Director or Designee: Bill Busath - 2/16/2016 5:02:00 PM

Description/Analysis

Issue Detail: The Cured-In-Place-Pipe (CIPP) Sewer Rehabilitation project consists of lining approximately 6,000 feet of deteriorated pipeline. As part of this project, 26 manholes were rehabilitated and other associated work was performed. City Council awarded this contract to Michels Corporation dba Michels Pipelines on April 7, 2015, for a contract amount of \$465,529. The Contractor encountered unforeseen conditions that required work to be performed that was not specified in the contract documents. Change Order No. 1 compensates the contractor for the additional work performed to address these unforeseen conditions for a negotiated cost of \$70,368.

Policy Considerations: Rehabilitation of aging and deteriorated sewer pipes is consistent with the Department of Utilities' (DOU's) Capital Improvement Programming Guide to rehabilitate, replace, and expand critical infrastructure to ensure reliability and safety of the City's sewer system.

Economic Impacts: Including Change Order No. 1, this infrastructure rehabilitation project created 2.1 total jobs (1.2 direct jobs and 0.9 job through indirect and induced activities) and create \$330,882 in total economic output (\$208,557 of direct output and another \$122,324 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: The Community Development Department, Environmental Planning Division, reviewed the project prior to contract award and determined that this project was categorically exempt from the California Environmental Quality Act (CEQA) under State Class 1 and 2, Section Numbers 15301(b, d) and 15302(c) of the CEQA Guidelines. The project consists of the repair and maintenance of existing sewerage utilities including the rehabilitation of deteriorated facilities and the replacement and reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity.

Sustainability: The project is consistent with the City's Sustainability Master Plan by reducing sanitary sewer outflows, which is one of the City's sustainability targets; and by improving reliability, which will reduce energy-intensive maintenance efforts.

Commission/Committee Action: Not applicable.

Rationale for Recommendation: Change Order 1 compensates the contractor for additional work necessitated by unforeseen conditions.

Financial Considerations: There are sufficient funds in the Wastewater Collection Pipe Lining Program (X14130700, Fund 6320) to fund Change Order No. 1.

Local Business Enterprise (LBE): The contractor has exceeded the City's minimum LBE participation requirement.

Background

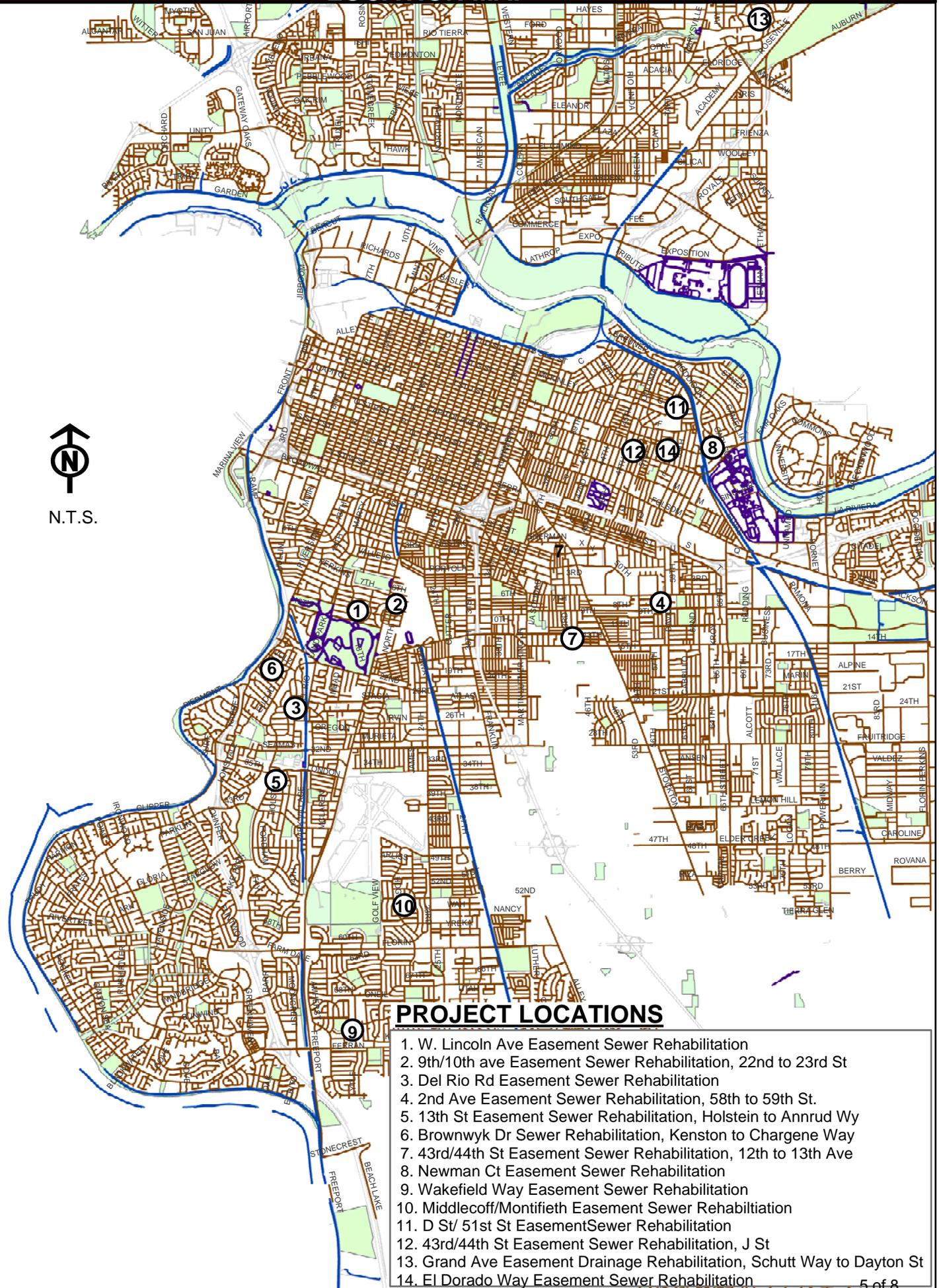
In the City of Sacramento, many sewer mains were constructed in back yard or side yard easements. These sewer mains are difficult to access with conventional equipment and are costly and disruptive to repair, maintain or replace. The Department of Utilities (DOU) currently uses trenchless or “no dig” technologies to repair and maintain these sewer mains. Cured-in-place-pipe (CIPP) rehabilitation repairs the pipeline with minimal public disruption and surface damage because the majority of the work occurs remotely within the pipeline itself and access is through existing manholes.

On an annual basis, pipelines requiring trenchless repairs are prioritized per DOU's CIP Programming Guide and funded as budgets allow. This CIPP construction contract repaired approximately 6000 feet of sewer pipeline. The repair consisted of inserting a resin impregnated liner into an existing pipe, forming a seamless pipe within a pipe. Also, twenty six manholes were rehabilitated by installing a coating on the manhole walls to repair any degradation caused by hydrogen sulfide attack, repairing any holes or cracks, and effectively sealing the manholes.

The project was awarded to Michels Corporation dba Michels Pipeline Construction for \$465,529 on April 7, 2015, with a Notice to Proceed issued on April 22, 2015.

Due to the sewer services and pipe alignments residing in back yard and side yard easements, it is difficult to know the precise extent of the work needed to conduct repairs and excavate each active sewer service. Some of the extra work needed to complete the project included extra man hours to conduct 41 additional sewer services locates above the estimated number of services; additional concrete work; repairs associated with sewer services that were determined to be abandoned; rerouting sewer services that crossed a property line and connected to a pipe underneath a structure; difficult repairs needed prior to lining; and a pipe segment in a side yard that was confirmed to not be in an easement, which necessitated rerouting of the sewer services from an adjacent property, soils testing from an independent lab, backfill and compaction of excavation pits using alternative materials, independent inspection, and the creation of a new CIP to abandon this pipe segment after re-routing sewer flows away from this pipe segment. Change Order No. 1 compensates the contractor for additional work caused by these unforeseen conditions.

CIPP SEWER REHABILITATION 2014/2015 (X14130702) LOCATION MAP



PROJECT LOCATIONS

1. W. Lincoln Ave Easement Sewer Rehabilitation
2. 9th/10th ave Easement Sewer Rehabilitation, 22nd to 23rd St
3. Del Rio Rd Easement Sewer Rehabilitation
4. 2nd Ave Easement Sewer Rehabilitation, 58th to 59th St.
5. 13th St Easement Sewer Rehabilitation, Holstein to Annrud Wy
6. Brownwyk Dr Sewer Rehabilitation, Kenston to Chargene Way
7. 43rd/44th St Easement Sewer Rehabilitation, 12th to 13th Ave
8. Newman Ct Easement Sewer Rehabilitation
9. Wakefield Way Easement Sewer Rehabilitation
10. Middlecoff/Montifieth Easement Sewer Rehabilitation
11. D St/ 51st St Easement Sewer Rehabilitation
12. 43rd/44th St Easement Sewer Rehabilitation, J St
13. Grand Ave Easement Drainage Rehabilitation, Schutt Way to Dayton St
14. El Dorado Way Easement Sewer Rehabilitation

CITY OF SACRAMENTO

CHANGE ORDER

Contract # & Date: 2015-0524 04/07/15

Budget #: 6005-500000-51000000-X14130702

Purchase Order #: 0000028182

Change Order No: 1

Sacramento, California

March 1, 2016

TO: Michels Corporation dba Michels Pipeline Construction, Contractor

CONTRACT FOR: Cured In Place Pipe Sewer Rehabilitation 2014/2015

(B15141321015)

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:	\$ 465,529.00
Net change by previous change orders:	\$ 0.00
The contract sum prior to this change order was:	\$ 465,529.00
The contract sum will be <i>increased</i> by this C.O.:	\$ 70,368.00
New contract sum including all Change Orders:	\$ 535,897.00

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. Noncompensatory time for performance of the Contract will be increased by 10 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:

Roxanne Dilley

2/5/16

Project Manager – Roxanne Dilley

Date

Approved as to Form by:

Joe Robinson

Joe Robinson, Senior Deputy City Attorney

Approved By:

W. Odell

2/2/16

Contractor – Michels Pipeline Construction

Date

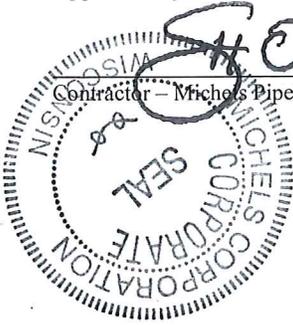
Approved By:

William O. Busath, Director, Department of Utilities

Approved By:

Shirley Concolino – City Clerk

Date



**CITY OF SACRAMENTO
CHANGE ORDER
EXHIBIT A**

Contract # & Date: 2015-0524 4/17/15

Budget #: 6005-500000-51000000-X14130702

Purchase Order #: 0000028182

Change Order No: 1

- | | | |
|----|--|---------------------------------------|
| 1. | Bid Item #4, CCTV and Clean Sewer Pipe, <i>increase</i> quantity by 36LF @ \$6.25/LF
Database Code: Unforeseen Conditions | Total This Item: \$225.00 |
| 2. | Bid Item #6, 8-inch CIPP Liner to Install, <i>increase</i> quantity by 109 LF @ \$28.00/LF.
Database Code: Unforeseen Conditions | Total This Item: \$3,052.00 |
| 3. | Bid Item #11, Laterals to Reinstate Externally, <i>increase</i> quantity by 20 EA @ \$1,158.00/EA.
Database Code: Unforeseen Conditions | Total This Item: \$23,160.00 |
| 4. | Bid Item #12, Inside Drop Connection to Construct, <i>increase</i> quantity by 1 EA @ \$2,211.00/EA.
Database Code: Unforeseen Conditions | Total This Item: &2,211.00 |
| 5. | Bid Item #13, Manhole Flow Channel & Bench to Construct, <i>increase</i> quantity by 9 EA @ \$2,106.00/EA..
Database Code: Unforeseen Condition | Total This Item: \$18,954.00 |

Sub-Total for Line Item overruns: \$47,602.00

- | | | |
|-----|--|---------------------------------------|
| 6. | Bid Item #3, Point Repairs, <i>decrease</i> quantity by 35 LF @ \$526.00/LF.
Database Code: Unforeseen Conditions | Total This Item: \$ -18,410.00 |
| 7. | Bid Item #7, 12-inch CIPP Liner to Install, <i>decrease</i> quantity by 325 LF @ \$37.00/LF.
Database Code: Unforeseen Conditions | Total This Item: \$ -12,025.00 |
| 8. | Bid Item #8, 15-Inch CIPP Liner to Install, <i>decrease</i> quantity by 150 LF @ \$96.00/LF.
Database Code: Unforeseen Conditions | Total This Item: \$ -14,400.00 |
| 9. | Bid Item #10, Laterals to Reinstate Internally, <i>decrease</i> quantity by 15 EA @ \$218.00 EA.
Database Code: Unforeseen Conditions | Total This Item: \$ -3,270.00 |
| 10. | Bid Item #15, Manhole to Rehabilitate, <i>decrease</i> quantity by 1EA @ \$1,426.00 EA.
Database Code: Unforeseen Conditions | Total This Item: \$ -1,426.00 |

Sub-Total for remaining quantities: \$ - 49,531.00

NOTE: Above items 1 through 10 are listed to reconcile the contract quantities with the actual amounts measured in the field

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|-----|---|--------------------------------------|
| 11. | PCO #1: Man hour reimbursement for extra locates
Estimates for the surface location of sewer laterals is built into Bid Item #4, CCTV and Clean Sewer Pipe, and was based on the estimated number of sewer laterals identified in bid items #10 & #11. The estimated number of laterals together totaled 108 locates, but the actual number of laterals totaled 149. There were 41 additional locates that required extra man hours.

Database Code: Unforeseen Conditions | Total This Item: \$ 13,895.00 |
|-----|---|--------------------------------------|

12. PCO #2: Relocation of two sewer laterals
During the construction phase of the project, it was discovered that the City did not have an easement for one of the sewer mains to be lined. The sewer main is situated along the side yard of a property, and there are two sewer laterals connected to this main that served an adjacent property. The City has decided to reroute sewer flows from this main and to abandon this main in a future project. The two sewer services connected to the main to be abandoned were rerouted to a nearby main.

Database Code: Unforeseen Conditions

Total This Item: \$ 12,600.00

13. PCO #3: Additional Work
The additional work contained in this item includes point repairs associated with: additional concrete work; extra CCTV and surface location to evaluate sewer services that were in conflict with structures; repairs associated with sewer services that were determined to be abandoned and not reinstated; rerouting a sewer service that crossed a property line and was situated underneath the neighboring garage; standby time for digging crews waiting to remove a broken piece of pipe in the main that needed to be located, but the broken piece of pipe was flushed into the manhole; overtime hours for crews needed to work during the night; and the temporary connections and backfill of two sewer-lateral excavation pits associated with sewer main that was discovered to not be in an easement and further investigation needed to be conducted.

Database Code: Unforeseen Conditions

Total This Item: \$ 39,502.00

14. PCO #4: Additional Work
The additional work contained in this item includes backfill and compaction work associated with two excavation pits for sewer main that was determined to not be in an easement described in PCO#3.

Database Code: Unforeseen Conditions

Total This Item: \$ 6,300.00

Net Extra Work Items: \$ 72,297.00

Total This Change Order: \$ 70,368.00