

**CITY MANAGER'S REPORT
FEBRUARY 15, 2016 CITY COUNCIL MEETING**

ITEM: 4E

RECOMMENDATION:

APPROVE AND AUTHORIZE THE MAYOR TO SIGN THE CERTIFICATE OF SUBSTANTIAL COMPLETION, CHANGE ORDER #2 AND PAY APPLICATION NUMBER 6-FINAL FOR THE RENOVATION OF THE HEAT EXCHANGER, DIGESTER GAS PIPING AND REPLACEMENT OF THE MOTOR CONTROL CENTER (MCC) IMPROVEMENTS.

BACKGROUND:

The replacement of the gas piping and renovation of the heat exchanger is completed. As part of the piping renewal for the heat exchanger the piping was relocated to provide a streamlined working environment for the WWTF operators. The heat exchanger is now operating 24 hours per day for 2 to 3 days at a time. The run times will increase as the sludge temperature increases from its current 71° to an optimum temperature of 90 to 95 degrees. This is the first that the heat exchanger has been able to operate solely on digester gas since November 2014. By operating on digester gas we are back to recovering almost free energy for heating the sludge.

The most apparent change in this project is a new excess digester gas burner located just to the south of the heat exchanger building. The torch which extends a number of feet above the surrounding structures is designed to dispose of excess digester gas during the warmer months when the digester produce more gas than is needed to heat the sludge. The flame is visible during the night time hours when it is in operation. The flame provides a safe method of disposing of the gas unlike the "old days" when it was simply vented to the atmosphere.

As with most renovation project we encountered a couple of unforeseen problem, one in the form of a non-functional gas release valve (PRV/VAC valve) which is a critical piece of safety equipment located on the top of the floating digester lid. This and changing a non-operational gas control valve comprise Change Order # 2.

This contract also included the replacement of the Motor Control Center (MCC) for the Rotating Biological Contactors (RBCs) treatment train. The all new MCC replaces the 1978 antiquated electrical equipment and is fully operational.

FISCAL IMPACT:

Budget Expenditure Sewer Capital Outlay

RECOMMENDATION:

APPROVE AND AUTHORIZE THE MAYOR TO SIGN THE CERTIFICATE OF SUBSTANTIAL COMPLETION, CHANGE ORDER #2 AND PAY APPLICATION

NUMBER 6-FINAL FOR THE RENOVATION OF THE HEAT EXCHANGER,
DIGESTER GAS PIPING AND REPLACEMENT OF THE MOTOR CONTROL CENTER
(MCC) IMPROVEMENTS.

APPROVALS:

_____ submitted electronically _____
Chris A. Miller, Project Engineer

Date: _____

Jesse Dutcher

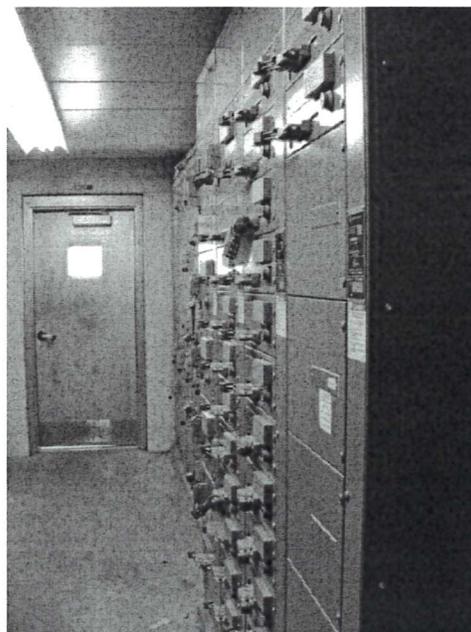
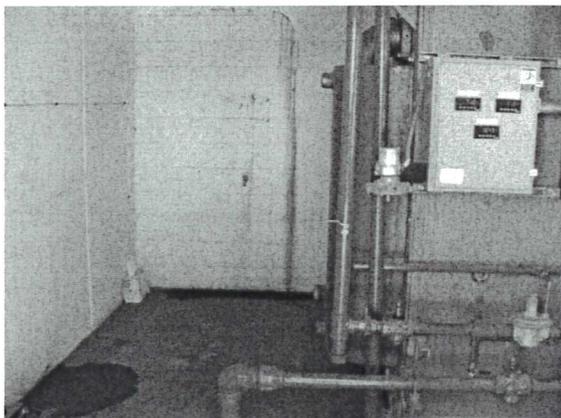
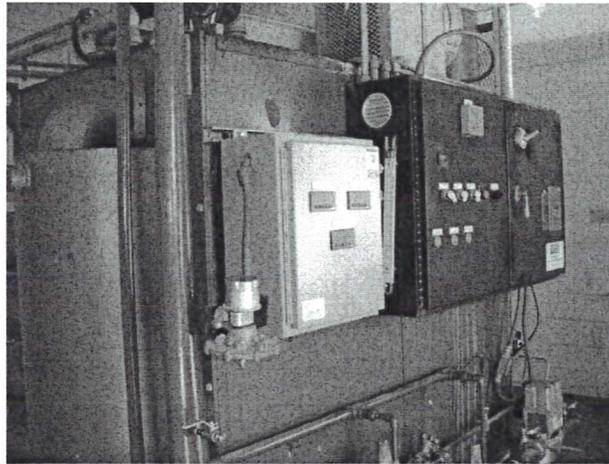
Jesse Dutcher, City Utility Director

Date: 2-9-16

Nate Schneider

Nate Schneider, City Manager

Date: 2-10-16



This certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of CONTRACTOR's obligation to complete the Work in accordance with the Contract Documents.

Executed by ENGINEER on this 28 day of JAN, in the year 2016.

MILLER & ASSOCIATES
CONSULTING ENGINEERS, P.C.

By Chris A Miller

The CONTRACTOR accepts this Certificate of Substantial Completion on the 25 day of January, in the year 2016.

INDUSTRIAL PROCESS TECHNOLOGY, INC.

By [Signature]

The OWNER accepts this Certificate of Substantial Completion on the ____ day of _____, in the year 2016.

CITY OF MCCOOK

By _____

CERTIFICATE OF SUBSTANTIAL COMPLETION

ENGINEER'S PROJECT NO.: 200-D1-019

PROJECT NAME: Digester Gas System Upgrade and Motor Control Center Replacement, RBC

CONTRACTOR: Industrial Process Technology, Inc.

CONTRACT FOR: \$400,250.00

AGREEMENT DATE: 5/4/2015

This Certificate of Substantial Completion applies to all work under the Contract Documents or to the following specified parts thereof:

Item No.	Description	Quantity	Unit	Unit Price	Total Amount
Digester Gas System Upgrade					
1	Bonds, Insurance, and Mobilization (not to exceed 4%)	1	L.S.		\$ 10,000.00
2	Digester Gas Equipment	1	L.S.		\$ 108,000.00
3	Digester Gas Equipment Installation	1	L.S.		\$ 17,600.00
4	Sludge Heater Rehabilitation	1	L.S.		\$ 115,000.00
5	HVAC Modifications	1	L.S.		\$ 3,200.00
6	Start-Up and Commissioning	1	L.S.		\$ 5,000.00
7	Balance of Construction	1	L.S.		\$ 66,000.00
Motor Control Center Replacement, RCB					
8	Bonds, Insurance, and Mobilization (not to exceed 4%)	1	L.S.		\$ 1,650.00
9	Motor Control Center Equipment	1	L.S.		\$ 50,450.00
10	Equipment Installation	1	L.S.		\$ 15,000.00
11	Start-Up and Commissioning	1	L.S.		\$ 1,550.00
12	Balance of Construction	1	L.S.		\$ 6,800.00
A	Change Order #1	1	L.S.		\$ (61,243.00)
B	Change Order #2	1	L.S.		\$ 10,306.84
TOTAL CONSTRUCTION COST					\$ 349,313.84

TO: INDUSTRIAL PROCESS TECHNOLOGY, INC.

AND TO: CITY OF MCCOOK

The Work to which this Certificate applies has been inspected by authorized representatives of OWNER, CONTRACTOR, and ENGINEER, and that Work is hereby declared to be substantially complete in accordance with the Contract Documents on:

Date of Completion: 1/25/2016

The following documents are attached to and made a part of this Certificate:

FINAL PAY ESTIMATE
CHANGE ORDER #2

Order No. 2
Effective Date: 1/25/2016
Agreement Date: 5/4/2015
Project No. 200-D1-019

NAME OF PROJECT: Digester Gas System Upgrade and Motor Control Center Replacement, RBC

OWNER: City of McCook

CONTRACTOR: Industrial Process Technology, Inc.

The following changes are hereby made to the CONTRACT DOCUMENTS:

CHANGE ORDER NO. 2

ITEM NO.	DESCRIPTION	APPROXIMATE QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
<u>ADDITION - 3" GAS VALVE</u>					
A	Materials	1	L.S.	\$318.74	\$318.74
B	Labor	1	L.S.	\$127.94	\$127.94
C	Overhead/Profit	1	L.S.	\$74.50	\$74.50
				Subtotal	\$521.18
<u>ADDITION - PRV/VAC VALVE</u>					
D	Materials	1	L.S.	\$8,258.89	\$8,258.89
E	Labor	1	L.S.	\$109.45	\$109.45
F	Overhead/Profit	1	L.S.	\$1,417.32	\$1,417.32
				Subtotal	\$9,785.66
TOTAL ADJUSTED CHANGE ORDER PRICE					\$10,306.84

JUSTIFICATION: Per Owner and Contractor mutual agreement.

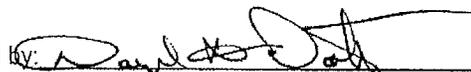
Change to CONTRACT PRICE:

ORIGINAL CONTRACT PRICE:	\$400,250.00
Net decrease resulting from previous CHANGE ORDER:	-\$61,243.00
Net increase resulting from this CHANGE ORDER:	\$10,306.84
The new CONTRACT PRICE including this CHANGE ORDER will be:	\$349,313.84

Change to CONTRACT TIME:

The CONTRACT TIME will not be altered.

Approvals Required: To be effective, this order must be approved as required by the General Conditions.

Approved by:  INDUSTRIAL PROCESS TECHNOLOGY, INC.

Approved by: _____ CITY OF McCOOK

Approved by:  MILLER & ASSOCIATES

EJCDC

Contractor's Application For Payment No.

6

T0 (Owner) City of McCook
Project DIGESTER GAS/MCC
Owners Contract No.

Application Period 10-25-15 - 1-25-16
From (Contractor) IPT
Contract
Contractor's Project No. 194-15

Application Date: 1-25-16
Via (Engineer) MILLER & ASSOCIATES
Engineer's Project No. 200-D1-019-14

Application For Payment

Change Order Summary

Approved Change Orders

Number	Additions	Deductions
CO-2	10306.84	
TOTALS	10306.84	0
Net Change By Change Orders	10306.84	

1. ORIGINAL CONTRACT PRICE.....	\$339,007.00
2. Net change By Change Orders.....	\$10,306.84
3. CURRENT CONTRACT PRICE (Line 1 + 2).....	\$349,313.84
4. TOTAL COMPLETED AND STORED TO DATE (Column F on Progress Estimate).....	\$349,313.84
5. RETAINAGE	
a. 0 % x \$349,313.84 Work Completed.....	\$0.00
b. 0 % x \$0.00 Stored Materials.....	\$0.00
c. Total Retainage (Line 5a - Line 5b).....	\$0.00
6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5c).....	\$349,313.84
7. LESS PREVIOUS PAYMENTS (Line 6 from prior Application)	\$298,872.00
8. AMOUNT DUE THIS APPLICATION.....	\$50,441.84
9. BLANCE TO FINISH, PLUS RETAINAGE..... (Column G on Progress Estimate + Line 5 above).....	\$0.00

Contractors Certification

The undersigned Contractor certifies that: (1) all previous progress payments recieved from Owner on account of Work done under Contract have been applied on account to discharge Contractors legitimate obligations incurred in connection with Work covered by prior Applications for Payment; (2) title of all work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to Owner at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to Owners indemnifying Owner against any such Liens, security interest or encumbrances); and (3) all Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

Payment of: \$ 50,441.84
(Line 8 or other - attach explanation of other amount)

is recomended by Chris A Miller 1/28/16
(Engineer) (Date)

Payment of: \$ 50,441.84
(Line 8 or other - attach explanation of other amount)

is approved by: _____ (Owner) _____ (Date)

By: Paul A. [Signature] Date: 1-25-16

APPLICATION AND CERTIFICATE FOR PAYMENT-CONTINUATION SHEET

APPLICATION NUMBER: 6

APPLICATION DATE: 1/25/2016

FOR WORK ACCOMPLISHED THROUGH : 1/25/2016

ENGINEER'S PROJECT #: 200-D1-019

ITEM NO.	DESCRIPTION OF WORK	ESTIMATED QUANTITY	UNIT	UNIT PRICE	QUANTITY COMPLETED TO DATE	TOTAL COMPLETED	STORED TO DATE	TOTAL COMPLETED AND STORED TO
Digester Gas System Upgrade								
1	Bonds, Insurance, and Mobilization (not to exceed 4%)	1	L.S.					
2	Digester Gas Equipment	1	L.S.		1	\$ 10,000.00		\$ 10,000.00
3	Digester Gas Equipment Installation	1	L.S.		1	\$ 108,000.00		\$ 108,000.00
4	Sludge Heater Rehabilitation	1	L.S.		1	\$ 17,600.00		\$ 17,600.00
5	HVAC Modifications	1	L.S.		1	\$ 115,000.00		\$ 115,000.00
6	Start-Up and Commissioning	1	L.S.		1	\$ 3,200.00		\$ 3,200.00
7	Balance of Construction	1	L.S.		1	\$ 5,000.00		\$ 5,000.00
Motor Control Center Replacement, RCB								
8	Bonds, Insurance, and Mobilization (not to exceed 4%)	1	L.S.					
9	Motor Control Center Equipment	1	L.S.		1	\$ 1,650.00		\$ 1,650.00
10	Equipment Installation	1	L.S.		1	\$ 50,450.00		\$ 50,450.00
11	Start-Up and Commissioning	1	L.S.		1	\$ 15,000.00		\$ 15,000.00
12	Balance of Construction	1	L.S.		1	\$ 1,550.00		\$ 1,550.00
A	Change Order #1	0	L.S.		1	\$ 6,800.00		\$ 6,800.00
B	Change Order #2	0	L.S.		1	\$ (61,243.00)		\$ (61,243.00)
	TOTALS				1	\$ 10,306.84		\$ 10,306.84
						\$ 349,313.84		\$ 349,313.84