



PUBLIC WORKS – UTILITY OPERATIONS

DATE: December 5, 2016
FROM: Michelle Klose, Director of Utility Operations *MK*
ITEM: Change Order Request No. 1 for Wachter Ave Master Lift Station Project

REQUEST

Approve Contract Change Order No. 1 with Northern Plains Construction on the Wachter Avenue Master Lift Station Project.

Please place this item on the December 13, 2016 City Commission meeting.

BACKGROUND INFORMATION

The general contractor, Northern Plains Construction, has submitted a change order request (attached) for \$16,145 related to the helical pier installation depth. The contract documents require that the helical piers be installed until a specified torque is reached. At the time of bid, the anticipated helical pier installation depth was 45' – 47' based on four (4) helical pier quotes provided by the general contractor. The actual helical pier installation depth averaged 91'.

The change order also includes a deduction of building plaque for \$2,040.

RECOMMENDED CITY COMMISSION ACTION

Approve Change Order No. 1 in the amount of \$14,105 with Northern Plains Construction for the Wachter Avenue Master Lift Station Project.

STAFF CONTACT INFORMATION

Michelle Klose, Director of Utility Operations, 701.355.1700, mklose@bismarcknd.gov

CONTRACT CHANGE ORDER FORM

PUBLIC WORKS DEPARTMENT

Contract between the City of Bismarck and **Northern Plains Contracting, Inc.**

Contract Number: **SU 16-63**

Change Order Number: **1**

Project/Subproject: **SANSWRUTIL.LEFTSTATIONREP.WACHTERCONST**

Original Contract Amount: **\$2,511,410**

Project Description: **Wachter Ave Master Lift Station Project Improvements**

Previous Contract Amount: **\$2,511,410**

Change Order Amount: **\$14,105**

Original Contract Date: **7-26-2016** Change in Contract Timeline: **0 days**

Within Project Scope: Y / N*

Within Project Funding: Y / N**

**If not within project scope, attach description of change in scope for Board approval.*

***If not within project funding, attach revised Project Budget for Board approval.*

Type of Change Order

Non Design-related Change Order: These change orders include unforeseen conditions, code-related issues, and building inspector changes.

Design-related Change Order: These change orders include unforeseen conditions that affect the appearance, layout, functionality, dimensions, and/or quality of the project.

Emergency Field Condition Change Orders: These change orders include any condition that causes an emergency situation where safety or other immediate losses may occur.

Other: (describe)

Project Manager Signature: (<\$15,000) _____

Department Head Signature: (<\$25,000) Michele Klose _____ Date 12/5/2016

On agenda for 12/13/16 _____ Date

ADMINISTRATION

City Administrator Signature: (<\$50,000) _____

Date

Add to Commission Consent Agenda

COMMISSION APPROVAL

Commission Approval Date: _____

Attach minutes for Commission Approval

FISCAL

Comments: _____

Signature

Date Completed

TO ALL DEPARTMENTS: Please attach a copy of the change order

Date of Issuance: 11/28/16	Effective Date: 11/28/16
Owner: City of Bismarck, North Dakota	Owner's Contract No.: SU 16-63
Contractor: Northern Plains Contracting, Inc.	Contractor's Project No.: 16-500
Engineer: Apex Engineering Group	Engineer's Project No.: 10.118.0014
Project: Wachter Avenue Master Lift Station Improvements	Contract Name: General Construction

The Contract is modified as follows upon execution of this Change Order:

Description: RFC 1 (Helical Piers) and RFC 2 (Building Plaque).

Attachments: Change Order 1 Summary, RFC 1, RFC 2

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES <i>[note changes in Milestones if applicable]</i>
Original Contract Price: <u>\$ 2,511,410.00</u>	Original Contract Times: Substantial Completion: <u>September 20, 2017</u> Ready for Final Payment: <u>December 13, 2017</u> City of Bismarck Contract Completion: <u>April 11, 2018</u>
[Increase] [Decrease] from previously approved Change Orders No. <u>n/a</u> to No. <u>n/a</u> : <u>\$ 0.00</u>	[Increase] [Decrease] from previously approved Change Orders No. <u>n/a</u> to No. <u>n/a</u> : Substantial Completion: <u>0 days</u> Ready for Final Payment: <u>0 days</u> City of Bismarck Contract Completion: <u>0 days</u>
Contract Price prior to this Change Order: <u>\$ 2,511,410.00</u>	Contract Times prior to this Change Order: Substantial Completion: <u>September 20, 2017</u> Ready for Final Payment: <u>December 13, 2017</u> City of Bismarck Contract Completion: <u>April 11, 2018</u>
[Increase] [Decrease] of this Change Order: <u>\$ 14,105.00</u>	[Increase] [Decrease] of this Change Order: Substantial Completion: <u>0 days</u> Ready for Final Payment: <u>0 days</u> City of Bismarck Contract Completion: <u>0 days</u>
Contract Price incorporating this Change Order: <u>\$ 2,525,515.00</u>	Contract Times with all approved Change Orders: Substantial Completion: <u>September 20, 2017</u> Ready for Final Payment: <u>December 13, 2017</u> City of Bismarck Contract Completion: <u>April 11, 2018</u>

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By: <u>Mike Berg</u> Engineer (if required)	By: _____ Owner (Authorized Signature)	By: <u>Spenny Johnson</u> Contractor (Authorized Signature)
Title: <u>Project Manager</u>	Title: _____	Title: <u>Project Manager</u>
Date: <u>12/2/16</u>	Date: _____	Date: <u>11/29/16</u>

Approved by Funding Agency (if applicable)

By: _____ Date: _____
Title: _____



Water | Transportation | Municipal | Facilities

Change Order 1 Summary

General Construction Contract

July 2016 – November 2016

Wachter Ave. Master Lift Station Improvements City of Bismarck, ND

City of Bismarck Project No. SU 16-63
Apex Project No. 10.118.0014

RFC 1 Helical Pier Installation Depth	\$16,145
RFC 2 Building Plaque Deduct	<u>-\$2,040</u> (deduct)
Total Change Order #1	\$14,105
Original Contract Price:	\$2,511,410
Net changes from previously approved Change Orders:	0
Contract Price Prior to this Change Order:	\$2,511,410
Contract Price Incorporating This Change Order:	\$2,525,515
Original General Construction Contingencies (5%):	\$125,570
Remaining General Construction Contingencies:	\$111,465

Descriptions:

RFC 1 Helical Pier Installation Depth: The new building addition is supported by helical piers. This type of pier is screwed into the soil until a design torque is reached. In the bid phase the contractors designed and bid the helical piers based on soil borings provided in the contract documents. During construction the actual required installation depth was much greater than expected. It is believed that the increased installation depth is due to soil conditions that were materially different from those reasonably anticipated at the time of bid.

RFC 2 Building Plaque Deduct: The building plaque was deleted from the project.

NORTHERN PLAINS CONTRACTING CHANGE ORDER PROPOSAL

Project: Wachter Ave Master Lift Station Improvements
Date: 10/10/2016
CO Description: Helical Pile Installation Adjustment

Bond: 2.00%
 Change Order No. 16-500-CO01

Labor

Description	Quantity	Unit	Unit Price	Total
Project Manager (1/2 hour minimum)		Whr	\$ 90.00	\$ -
Superintendent		Whr	\$ 70.00	\$ -
Associate		Whr	\$ 60.00	\$ -
Labor Total				\$ -

Material

Description	Quantity	Unit	Unit Price	Total
				\$ -
Material Total				\$ -

Subcontracts

Description	Quantity	Unit	Unit Price	Total
Veit (\$22.5/LF Over 47')	750	LF	\$ 22.50	\$ 16,875.00
Subcontract Total				\$ 16,875.00

Supplemental & Equipment Costs

Description	Quantity	Unit	Unit Price	Total
Equipment Total				\$ -

Apex Response: Approved in the amount of \$16,145 as shown below (MAB 11/10/16).

Estimated 10' Pier Lengths (5 lengths x 16 piers)	80		
Reasonable variability (+/- 10%)	8		
Contractors Responsibility	88		
Installed 10' Pier Lengths	155		
Contractors Responsibility	-88		
Owner's Responsibility	67		
67 additional 10' pier lengths, \$225 per extension		\$15,075	
Contractor Profit & Overhead (5%)		\$754	
Subtotal		\$15,829	
Bond & Insurance (2%)		\$317	
Total Cost		\$16,145	

Cost Summary

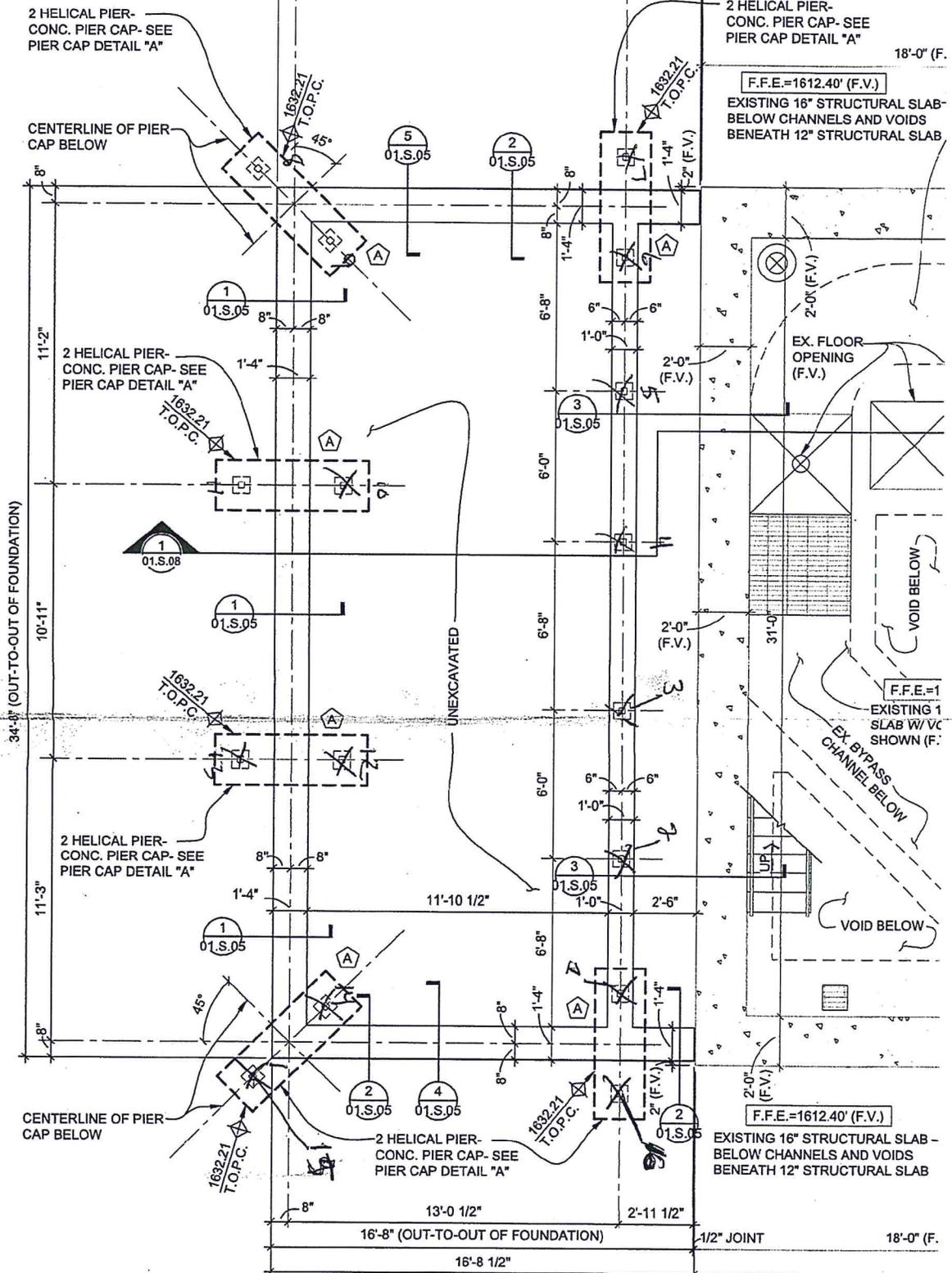
Labor		\$	-
Material		\$	-
Subcontracts		\$	16,875.00
Equipment		\$	-
Sub-Total		\$	16,875.00
Margin @ 15%		\$	-
Sub - Margin @ 5%		\$	843.75
Sub-Total		\$	17,718.75
Bond & Insurance @: 2.00%		\$	354.38
Total Cost (addition)		\$	18,073.13

16-0293 WACHTER LIFT STATION HELICAL PILE RECAP
 DESIGN CAPACTIY 40 KIPS
 ULTIMATE CAPACITY 80 KIPS

<u>PILE #</u>	<u>LENGTH</u>	<u>10' LEADS</u>	<u>10' EXT</u>	<u>5' Lead</u>	<u>Torque</u> <u>Ave. Last 3 feet</u>	<u>Ultimate</u> <u>Capacity</u>
1	94	1	9		9800	83.3 Kips
2	96	1	9		9700	82.5 Kips
3	102	1	10		9733	82.7 Kips
4	96	1	9		9633	81.9 Kips
5	95	1	9		9600	81.6 Kips
6	96	1	9		9566	81.3 Kips
7	91	1	9		9866	83.9 Kips
8	40	1	4		9616	81.7 Kips
9	92	1	9		9633	81.9 Kips
10	94	1	9		9600	81.6 Kips
11	94	1	9		9633	81.9 Kips
12	96	1	9		9533	81 Kips
13	96	1	9		9633	81.9 Kips
14	96	1	9		9533	81 Kips
15	85	1	8		9666	82.2 Kips
16	<u>92</u>	<u>1</u>	<u>9</u>	<u>0</u>	<u>9600</u>	81.6 Kips
	1455	16	139	0		

Ave Depth 90.9 Feet

1632.06
EX. T.O.P.



REVISIONS

Description	Date





Greg Norris
Project Manager
14000 Veit Place
Minneapolis, MN 55374

Office 763.428.6756
Mobile 612.282.5002
Fax 763.428.8348
gnorris@VeitUSA.com

18 July, 2016

Bidding Contractors

PROJECT: Helical Piles for Wachter Avenue Lift Station, Bismarck, North Dakota

QUOTE: Helical Piles - Lump Sum: \$28,970.00

NOTE: This quote is based on using Helical Anchors, Inc. (HAI) materials.

INCLUDES:

- One Mobilization and all work done in one continuous operation.
- Furnish and Install sixteen (16) galvanized helical piles and black pile caps for encasement in concrete foundation. Work will take at least two (2) days.
- Helical piles will have a design depth, ultimate load capacity and quantities as listed below:
16 Piles – 80 Kips Compressive 47'
- Piles will be placed to a design depth. For depths beyond the design depth, an additional charge of \$225.00 per 10 foot section used.
- Professional Engineering Design

EXCLUDES:

- Testing and Third Party Observation of Pile Installation and Testing
- Permits, Fees, and Licenses, Layout/Surveying Services
- Due to the specialized nature of our work, limited/competitive crew sizes, training and experience required of our personnel in the means and methods of our work, we cannot be responsible for full or partial participation in or compliance with specified EEO workforce goals that may be applicable to the contract. After award, we will work with you in trying to meet these goals
- Relocation of buried or concealed utilities, which may interfere with or be affected by our work.
- Installing helical piles through frozen ground.
- Excavation, to include, but not limited to any pot-holing, hydro-excavation, or other means and methods to locate, expose, or clear area to facilitate installation of helical piles. An OSHA Compliant Excavation is required.

NOTE:

- Veit assumes access to immediate work area for crew and equipment to be provided.
- Lead time on the material is approximately 2-3 weeks.
- Quote is valid for 30 days and if required, Bonds will be 1% of the above price.

Any questions, please feel free to call me at 763-428-6756

Respectfully,

Gregory A. Norris LEED AP
Project Manager
Foundation Group
Veit & Company, Inc.
gnorris@veitusa.com

NORTHERN PLAINS CONTRACTING CHANGE ORDER PROPOSAL

Project: Wachter Ave Master Lift Station Improvements

Date: 10/14/2016

CO Description: Building Plaque Deduct

Bond: 2.00%
Change Order No. 16-500-CO02

Labor

Description	Quantity	Unit	Unit Price	Total
Project Manager (1/2 hour minimum)		Whr	\$ 90.00	\$ -
Superintendent		Whr	\$ 70.00	\$ -
Associate		Whr	\$ 60.00	\$ -
Labor Total				\$ -

Material

Description	Quantity	Unit	Unit Price	Total
Building Plaque Deduct	1	LS	\$ (2,000.00)	\$ (2,000.00)
Material Total				\$ (2,000.00)

Subcontracts

Description	Quantity	Unit	Unit Price	Total
				\$ -
Subcontract Total				\$ -

Supplemental & Equipment Costs

Description	Quantity	Unit	Unit Price	Total
Equipment Total				\$ -

Additional Notes

Cost Summary			
Labor		\$	-
Material		\$	(2,000.00)
Subcontracts		\$	-
Equipment		\$	-
Sub-Total		\$	(2,000.00)
Margin @		\$	-
Sub - Margin @		\$	-
Sub-Total		\$	(2,000.00)
Bond & Insurance @:	2.00%	\$	(40.00)
Total Cost (addition)		\$	(2,040.00)

Apex Response: Approved. This will be incorporated into a future change order.

(MAB 10/14/16)