



City of Grand Island

Tuesday, December 8, 2015

Council Session

Item G-11

**#2015-337 - Approving Change Order No. 3 for Headworks
Improvement Project No. WWTP-2013-1**

Staff Contact: John Collins, P.E. - Public Works Director

Council Agenda Memo

From: Marvin Strong PE; Wastewater Engineer

Meeting: December 8, 2015

Subject: Approving Change Order No. 3 for Headworks Improvement Project No. WWTP-2013-1

Presenter(s): John Collins PE, Public Works Director

Background

Public Works Staff in conjunction with the design engineer, Black & Veatch of Kansas City, Missouri have worked on the Headworks Improvement, Project WWTP-2013-1 to construct a new wastewater pumping station, flow measurement, and grit removal systems at the Wastewater Treatment Plant.

Garney Companies, Inc. of Gardner, Kansas was awarded a \$16,993,000.00 contract by the City Council on May 14, 2013 for construction of Headworks Improvements; Project No. WWTP-2013-1 at the Wastewater Treatment Plant. The City rejected a bid alternative of \$75,000.00 for Plant Interceptor Piping (Fiberglass Reinforced Polymer Mortar), which adjusted the contract amount to \$16,918,000.00.

On August 12, 2013, by Resolution No. 2014-213, City Council approved Change Order No. 1 for a decrease in the original contract amount of \$24,745.00 and addressed:

- Addition of bagging attachments for the screenings washer/compactor units
- Change to fiberglass reinforced plastic manholes for sanitary sewer lines
- Discharge piping modifications for the former sludge injection holding tank
- Engine-generator platform and stairs
- Underground power for existing facilities on the west side of the site
- Surge protection for adjustable frequency drives
- Additional coating of the wet wells at the Raw Wastewater Pump Station
- Deletion of a sanitary sewer manhole for Building #3
- Unit price item adjustments for excavation work

On April 14, 2015, by Resolution No. 2015-99, City Council approved Change Order No. 2 for a decrease in the original contract amount of \$42,498.00 in a revised contract amount of \$16,850,757.00 and addressed:

- Deletion of protective coatings for the lower portion of the wet wells and screen channels at the Raw Wastewater Pump Station.
- Changes to the JBS Meter and Sampler Building.
- Deletion of non-potable well motor protection for high temperature sensors.
- Addition of a buried casing for future ferric chloride lines to the aeration basins.

- Credit for concrete aggregate savings.
- Unit price item adjustments for excavation work and non-potable well construction.
- Addition of anodized aluminum copings for buildings.
- Addition of on-line conductivity and total suspended solids analyzers for raw wastewater.
- Additional underground non potable water lines, drain line for existing raw wastewater pump station.
- Contract Time adjustments for weather delays.

Discussion

An additional change order is necessary to proceed with the construction and project closure of the Headworks Improvements; Project No. WWTP-2013-1. Change Order No. 3 covers changes to pavement and sitework, addition of ferric chloride and polymer feed lines needed to treat process upsets, addition of power and lighting panel in the former grit building, addition of key pad for access control at the new septage area entrance, deletion of suction piping modifications in the former raw wastewater pump station wetwell, addition of manhole for north interceptor High Density Polyethylene (HDPE) lines, deletion of sodding and seeding, credit for sprinkler repair, addition of reinforced steel floor covers in the former mechanical bar screen and sluice gate openings, reimbursement for power of the City's dewatering pumps, City purchase of magnetic flow meter pipe spool, and permitting fees for the existing generators.

The modifications to this project will result in a contract decrease of \$30,583.00, resulting in a revised contract amount of \$16,820,174.00.

Alternatives

It appears that the Council has the following alternatives concerning the issue at hand. The Council may:

1. Move to approve
2. Refer the issue to a Committee
3. Postpone the issue to future date
4. Take no action on the issue

Recommendation

City Administration recommends that the Council approve Change Order No. 3 for Headworks Improvements; Project No. WWTP-2013-1.

Sample Motion

Move to approve the resolution.

**CITY OF GRAND ISLAND, NEBRASKA
WASTEWATER TREATMENT PLANT
HEADWORKS IMPROVEMENTS PROJECT**

**CITY PROJECT WWTP-2013-1
BLACK & VEATCH PROJECT NO. 175144**

CHANGE ORDER NO. 3

Change Order No. 3 covers changes to pavement and sitework, addition of ferric chloride and polymer feed lines if needed to treat JBS process upsets, addition of power and lighting panel in the former grit building, addition of key pad for access control at the new septage area entrance, deletion of suction piping modifications in the former raw wastewater pump station wetwell, addition of manhole for north interceptor HDPE lines, deletion of sodding and seeding, credit for sprinkler repair, addition of reinforced steel floor covers in the former mechanical bar screen and sluice gate openings, reimbursement for power of the City's dewatering pumps, City purchase of magnetic flow meter pipe spool, and permitting fees for the existing generators.

Item CO3-1. Pavement and Sitework Items

Initiated by: Owner

This change covers additional pavement and sitework items including concrete mow strip for new septage receiving area fencing, pavement and sidewalk changes adjacent to the former raw wastewater pumping station, patching concrete pavement near Building No. 3, installation of joint sealant near Buildings 10, 11, and primary clarifiers, and other miscellaneous sidewalk and pavement changes throughout the project area. This change also covers a credit for the City watering sod. Thirteen (13) days will be added to the Contract Time for Final Completion.

Item CO3-2. Ferric Chloride and Polymer Piping for JBS Process Upsets

Initiated by: Owner

If needed to treat JBS process upsets using chemically-enhanced primary treatment, ferric chloride feed piping at the grit basin effluent channel and polymer feed lines from the former grit building to the flow distribution structure were installed. Previous feed points were demolished as part of this contract. Four (4) days will be added to the Contract Time for Final Completion.

Item CO3-3. Power Feed in Former Grit Building

Initiated by: Owner

This item covers the addition of a 480 volt power panel, transformer, and lighting panel in the former grit building to facilitate future installation of equipment by City. Seven (7) days will be added to the Contract Time for Final Completion.

11/24/15

CO3-1

Item CO3-4. Key Pad for Access Controls

Initiated by: Owner

This item covers the installation of a key pad at the low access controls position for the new septage area entrance. Card readers are located at the low and high access controls position. No change in Contract Time.

Item CO3-5. Demolition of the Suction Piping in Former Raw Wastewater Pump Station Wetwell

Initiated by: Contractor

This item covers deletion of the demolition of suction piping modifications in the former raw wastewater pump station wetwell. City intends to fill the wetwell in the future to abandon it in place as well as remove suction piping in the former pump room. Future plans would entail capping the suction piping in the pump room in lieu of demolition of the piping in the wetwell. No change in Contract Time.

Item CO3-6. Manhole for North Interceptor HDPE Lines

Initiated by: Engineer

High density polyethylene (HDPE) lines were installed adjacent to the new north interceptor sewer by the Contractor and by the north interceptor sewer project contractor. One HDPE line would be used if the City has a future need to dose ferric chloride upstream of the new pump station for odor control. The other HDPE line would be used for power and communication cables for future flow sensing at an upstream manhole. This item covers the installation of a manhole to access and connect the HDPE lines installed under different projects. No change in Contract Time.

Item CO3-7. Grass and Sprinkler Restoration

Initiated by: Owner

Since the City plans to install a sprinkler system in the spring 2016, it was decided to delete seeding and sodding under this project and have the City seed and sod after the sprinkler system is complete. This item also includes a credit for sprinklers disturbed or removed during construction that will be repaired by City. No change in Contract Time.

Item CO3-8. Dewatering Power Usage

Initiated by: Owner

This item covers reimbursement for power of the City's dewatering pumps that were utilized by the Contractor. No change in Contract Time.

Item CO3-9. Magnetic Flow Meter Pipe Spool

Initiated by: Owner

Ductile iron flanged spools were used by the Contractor prior to installation of the magnetic flow meters. The City purchased one of the spools in the event a flow meter needs to be removed for repairs in the future. No change in Contract Time.

Item CO3-10. Floor Covers in Former Raw Wastewater Pump Station Screen Room

Initiated by: Owner

This item covers the addition of reinforced steel floor covers in the former mechanical bar screen and sluice gate openings. The covers are designed to allow storage of City's vehicles and materials. Five (5) days will be added to the Contract Time for Final Completion.

Item CO3-11. NDEQ Permit for Existing Generators

Initiated by: Owner

Contractor was required to acquire and pay for the new engine generator permit for air emissions. City elected to have Contractor permit the two existing engine generators under the same permit application. This change covers the fees paid by Contractor to its air quality consultant for the existing generators. No change in Contract Time.

**CITY OF GRAND ISLAND, NEBRASKA
WASTEWATER TREATMENT PLANT
AERATION BASIN IMPROVEMENTS PROJECT**

**CITY PROJECT WWTP-2013-1
BLACK & VEATCH PROJECT NO. 175144**

SUMMARY

CHANGE ORDER NO. 3

The Contract Price shall be modified as follows as a result of the changes described by this modification request. Additions to the Contract Price are indicated by a "+" in front of the amount, deductions by a "-".

<u>Effect on Contract Price</u>		<u>Increase/Decrease In Contract Price (+/-)</u>
<u>Item</u>	<u>Description</u>	
CO3-1	Pavement and Sitework Items	\$12,066.00
CO3-2	Ferric Chloride and Polymer Piping for JBS Process Upsets	\$10,518.00
CO3-3	Power Feed-in Former Grit Building	\$4,385.00
CO3-4	Key Pad for Access Controls	\$1,003.00
CO3-5	Demolition of the Suction Piping in Former Raw Wastewater Pump Station Wetwell	-\$1,109.00
CO3-6	Manhole for North Interceptor HDPE Lines	\$2,620.00
CO3-7	Grass and Sprinkler Restoration	-\$63,855.00
CO3-8	Dewatering Power Usage	-\$8,840.00
CO3-9	Magnetic Flow Meter Pipe Spool	\$3,128.00
CO3-10	Floor Covers in Former Raw Wastewater Pump Station Screen Room	\$6,813.00
CO3-11	NDEQ Permit for Existing Generators	<u>\$2,688.00</u>
NET CHANGE IN CONTRACT PRICE		-\$30,583.00
BID AMOUNT OF ORIGINAL CONTRACT		\$16,918,000.00
PREVIOUS CHANGE ORDER ADJUSTMENTS		-\$67,243.00
CURRENT CONTRACT AMOUNT		\$16,850,757.00
CHANGE ORDER NO. 3		-\$30,583.00
ADJUSTED CONTRACT AMOUNT		\$16,820,174.00

Effect on Contract Time

Intermediate Milestone for Original Contract, Calendar Days (Date)	580 (February 15, 2015)
Substantial Completion for Original Contract, Calendar Days (Date)	640 (April 16, 2015)
Final Completion for Original Contract, Calendar Days (Date)	730 (July 15, 2015)
Adjusted Contract Time for Intermediate Milestone Completion per Change Order No. 1, Calendar Days (Date)	594 (March 1, 2015)
Adjusted Contract Time for Substantial Completion per Change Order No. 1, Calendar Days (Date)	669 (May 15, 2015)
Adjusted Contract Time for Final Completion per Change Order No. 1, Calendar Days (Date)	730 (July 15, 2015)
Contract Time Extension for Change Order No. 2 Items Intermediate Milestone, Calendar Days	29
Contract Time Extension for Change Order No. 2 Items Substantial Completion, Calendar Days	48
Contract Time Extension for Change Order No. 2 Items Final Completion, Calendar Days	55
Adjusted Contract Time for Intermediate Milestone Completion, Calendar Days (Date)	623 (March 30, 2015)
Adjusted Contract Time for Substantial Completion, Calendar Days (Date)	717 (July 2, 2015)
Adjusted Contract Time for Final Completion, Calendar Days (Date)	785 (September 8, 2015)
Contract Time Extension for Change Order No. 3 Items Intermediate Milestone, Calendar Days	0
Contract Time Extension for Change Order No. 3 Items Substantial Completion, Calendar Days	0
Contract Time Extension for Change Order No. 3 Items Final Completion, Calendar Days	29
Adjusted Contract Time for Intermediate Milestone Completion, Calendar Days (Date)	623 (March 30, 2015)
Adjusted Contract Time for Substantial Completion, Calendar Days (Date)	717 (July 2, 2015)
Adjusted Contract Time for Final Completion, Calendar Days (Date)	814 (October 7, 2015)

This change order includes all costs, direct, indirect, and consequential, and all changes in Contract Time arising from the work included in the items for Change Order No. 3. No additional claims shall be made for changes in Contract Price or Contract Time arising from these work items.

All other provisions of the contract remain unchanged.

Agreed to this _____ day of _____, 2015

Recommended:
Black & Veatch Corporation

Approved:
City of Grand Island

By: _____
Engineering Manager

By: _____

Date: _____

Date: _____

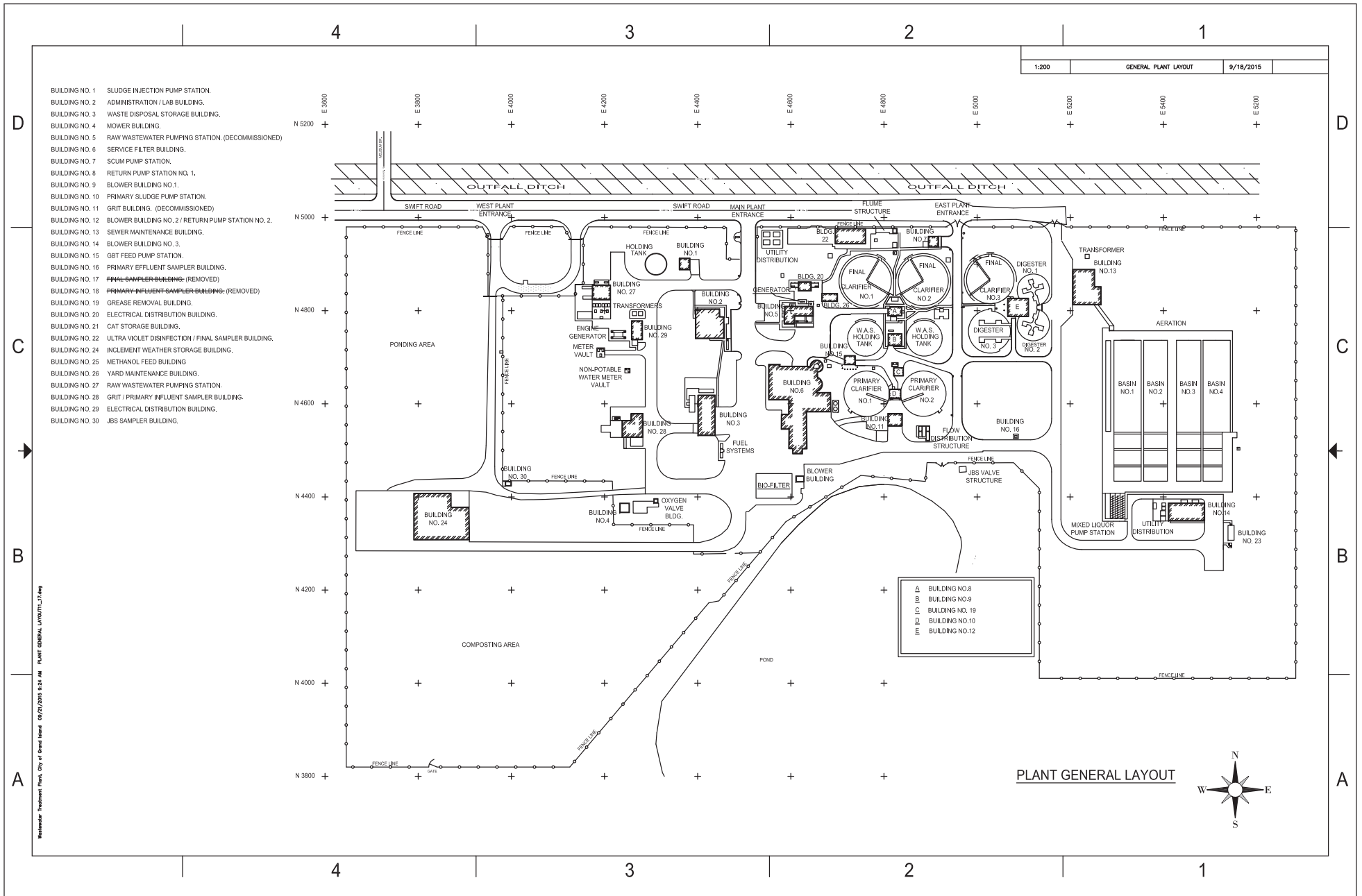
Approved:
Garney Construction Co.

By: _____

Date: _____

DRAFT

Approved as to Form _____
Date: _____ City Attorney



RESOLUTION 2015-337

WHEREAS, on May 14, 2013, by Resolution 2013-146, the City of Grand Island awarded Garney Companies, Inc. of Gardner, Kansas the bid in the amount of \$16,993,000.00 for construction of Headworks Improvements; Project No. WWTP-2013-1; and

WHEREAS, the City rejected a bid alternative of \$75,000.00 for Plant Interceptor Piping (FRPM), which adjusted the contract amount to \$16,918,000.00; and

WHEREAS, on August 12, 2014, by Resolution No. 2014-213, City Council approved Change Order No. 1 for a decrease in the original contract amount of \$24,745.00, for a revised contract amount of \$16,893,255.00; and

WHEREAS, on April 14, 2015, by Resolution No. 2015-99, City Council approved Change Order No. 2 for a decrease in the original contract amount of \$42,498.00, for a revised contract amount of \$16,850,757.00; and

WHEREAS, it has been determined that modifications are necessary to proceed with such construction, which have been incorporated into Change Order No. 3; and

WHEREAS, the result of such modifications will decrease the contract amount by \$30,583.00 for a revised contract price of \$16,820,174.00.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that the Mayor be, and hereby is, authorized and directed to execute Change Order No. 3 between the City of Grand Island and Garney Companies, Inc. of Gardner, Kansas to provide the modifications.

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Adopted by the City Council of the City of Grand Island, Nebraska, December 8, 2015.

Jeremy L. Jensen, Mayor

Attest:

RaNae Edwards, City Clerk

Approved as to Form	☐ _____
December 4, 2015	☐ City Attorney