



City of Grand Island

Tuesday, August 11, 2015

Council Session

Item G-15

**#2015-214 - Approving Change Order No. 4 for North Interceptor
Phase II; Project No. 2013-S-4**

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

Council Agenda Memo

From: Terry Brown PE, Assistant Public Works Director

Meeting: August 11, 2015

Subject: Approving Change Order No. 4 for North Interceptor Phase II;
Project No. 2013-S-4

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 jointly developed multi-year replacement planning stages for the City of Grand Island's large diameter gravity sanitary sewer interceptor network. The current planned interceptor, entitled the "North Interceptor" will replace aged force main sanitary sewer, reduce or eliminate current sewer pumping station(s), provide additional capacity for existing, and enable new services to areas in and around Grand Island.

The new North Interceptor gravity sewer interceptor route was developed to incorporate and partner with other utilities for the Capital Avenue Widening Project and the new Headworks Pumping Station Project at the Wastewater Treatment Plant.

A phased approach of constructing the North Interceptor was developed as follows:

- Phase I - Wastewater Treatment Plant to 7th Street / Skypark Road (nearing final closeout)
- Phase II (Part A) - 7th Street / Skypark Road to Broadwell Avenue
- Phase II (Part B) - Broadwell Avenue to Webb Road
- Phase II (Part C) - Webb Road to Diers Avenue (Lift Station No. 19)

Phase II Part B reached substantial completion on April 15, 2015. Phase II (Part A) is underway, and a large portion of Phase II (Part C) has been completed. The lift station abandonments (Bid Sections D, E, G, H and I) will follow the completion of Phase II.

On September 9, 2014, Resolution No. 2014-284, City Council awarded, Project 2013-S-4, North Interceptor Phase II to S.J. Louis Construction, Inc. of Rockville, Minnesota, in the amount of \$21,479,537.50.

City Council approved Resolution No. 2015-39 on February 10, 2015, which established new unit prices for installed storm and sanitary sewers which are embedded with native sand material in lieu of the imported granular embedment specified in the contract documents. The potential

savings is anticipated to be around \$300,000 where native sand is thought to be suitable and may be used for up to 20,795 feet of pipe.

On March 23, 2015, by Resolution No. 2015-74, City Council approved Change Order No. 2 which changed the methodology of the trenchless crossing from micro tunneling to a direct jacked tunnel using a tunnel boring machine, resulting in a decreased unit price. Two (2) locations were suggested for this change; Broadwell Avenue at Capital Avenue and Webb Road/Northwest Crossings property at Capital Avenue. An overall contract deduction of \$210,003.48 was achieved, resulting in a revised contract amount of \$21,269,534.02.

On June 23, 2015, by Resolution No. 2015-160, City Council approved Change Order No. 3, which addressed:

- Unknown and unplanned restraint at the existing 18” waterline that crosses Capital Avenue just east of Webb Road;
- Additional storm sewer work near St. Paul Road as needed to fill in a portion of the utility ditch and provide access to the new manhole; and
- Finalization of the As-Built quantities for Phase II (Part B).

An overall net change of the contract amount resulted in an increase of \$56,540.88, for a revised contract amount of \$21,326,074.90.

Discussion

Public Works Administration is requesting Change Order No. 4 for North Interceptor Phase II; Project No. 2013-S-4. Upon the discovery of a gasoline odor an investigation found the safest way to install the north interceptor at the intersection of Capital Avenue and Broadwell Avenue was via open cut rather than the originally planned trenchless crossing. With this construction method change there is some additional work required to reroute the dewatering discharge, as well as several modifications to the existing storm sewer at this intersection to facilitate the open cut.

This change order result in a contract decrease of \$40,651.39, for an adjusted contract amount of \$21,285,423.51.

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. 4 with S.J. Louis Construction, Inc. of Rockville, Minnesota, for North Interceptor Phase II, Project 2013-S-4.

Sample Motion

Move to approve the resolution.

**CITY OF GRAND ISLAND, NEBRASKA
NORTH INTERCEPTOR – PHASE 2**

**CITY PROJECT 2013-S-4
BLACK & VEATCH PROJECT NO. 175144
OLSSON ASSOCIATES PROJECT NO. 011-2347**

CHANGE ORDER NO. 4

Change Order No. 4 covers items CO4-1 through CO4-4. This change order covers costs associated with additional work required at the intersection of Capital Avenue and Broadwell Avenue including open cut pipe installation, additional dewatering measures, and additional storm sewer work.

Item CO4-1. Adjust Quantity of Trenchless Crossing No. 3 (Bid Section A)

Initiated by: Contractor

While excavating the launching pit for Trenchless Crossing No. 3 (intersection of Broadwell Ave. and Capital Ave.), a gasoline odor was detected which led to further investigations into the safety of performing this trenchless crossing. It was determined that the safest method to install this portion of the North Interceptor would be to install by open-cut methods. This trenchless crossing was therefore eliminated.

This change order item changes the trenchless crossing quantity (Bid Item 2.18_CO2) to zero.

Item CO4-2. Establish Open-Cut Installation Price for the Capital Ave. and Broadwell Ave. Intersection (Bid Section A)

Initiated by: Contractor

As discussed above in Item CO4-1, it was determined that the safest method to install this portion of the North Interceptor would be to install by open-cut methods, so this change order item establishes a new bid item to install the North Interceptor in this intersection (STA 132+87 to STA 134+99) by open-cut methods in lieu of trenchless methods. This unit price covers all ancillary costs associated with the open-cut installation.

The new Bid Item is 2.15_CO4 with a unit price of \$1,445/LF and a quantity of 212 LF.

Item CO4-3. Re-route Dewatering Discharge at Northwest Corner of Capital Ave. and Broadwell Ave. (Bid Section A)

Initiated by: Owner

In order to facilitate construction activities associated with the Capital Avenue Widening Project and to ensure that excess dewatering discharge wasn't being sent east and potentially negatively affecting downstream residents, such as those living along the Warm Slough, the dewatering wells on the west side of Broadwell Avenue had their discharge re-routed to the north. This change order item includes all costs associated with installing and maintaining the dewatering re-route.

Item CO4-4. Additional Storm Sewer Work in the Capital Ave. and Broadwell Ave. Intersection (Bid Section A)

Initiated by: Owner

In order to facilitate the open-cut installation of the North Interceptor through the intersection of Capital Ave. and Broadwell Ave., several modifications to the existing storm sewer system were necessary. The storm sewer modifications include a combination of new storm sewer pipe and new concrete structures. This change order item includes all costs associated with the materials and installation of the storm sewer modifications.

Attachment 1 includes a figure depicting the extent of the storm sewer modifications as well as a detailed cost breakdown.

**CITY OF GRAND ISLAND, NEBRASKA
NORTH INTERCEPTOR – PHASE 2**

**CITY PROJECT 2013-S-4
BLACK & VEATCH PROJECT NO. 175144
OLSSON ASSOCIATES PROJECT NO. 011-2347**

SUMMARY

CHANGE ORDER NO. 4

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>		
CO4-1	Adjust Quantity of Trenchless Quantity No. 3	-\$511,579.32
CO4-2	Establish Open-Cut Installation Price for the Capital Ave. and Broadwell Ave. Intersection	+\$306,340.00
CO4-3	Re-route Dewatering Discharge at Northwest Corner of Capital Ave. and Broadwell Ave.	+\$5,142.28
CO4-4	Additional Storm Sewer Work in the Capital Ave. and Broadwell Ave. Intersection	+\$159,445.65
NET CHANGE IN CONTRACT PRICE		-\$40,651.39
BID AMOUNT OF ORIGINAL CONTRACT		\$21,479,537.50
PREVIOUS CHANGE ORDER ADJUSTMENTS		<u>-\$153,462.60</u>
CURRENT CONTRACT AMOUNT		\$21,326,074.90
CHANGE ORDER NO. 4		-\$40,651.39
ADJUSTED CONTRACT AMOUNT		\$21,285,423.51

7/28/2015

CO4-3

Effect on Contract Time

--	Substantial Completion for Original Contract (Bid Section B)	April 15, 2015
--	Final Completion for Original Contract (Bid Section B)	April 15, 2015
--	Substantial Completion for Original Contract (Bid Sections A-C)	June 1, 2016
--	Final Completion for Original Contract (Bid Sections A-C)	June 30, 2016
--	Substantial Completion for Original Contract (Bid Sections D-I)	June 1, 2017
--	Final Completion for Original Contract (Bid Sections D-I)	June 30, 2017
CO4-1	No additional time given for Contract	
CO4-2	Contract Time Extension for Substantial Completion for Original Contract (Bid Sections A-C), Calendar Days (Date)	11 (June 12, 2016)
CO4-2	Contract Time Extension for Final Completion for Original Contract (Bid Sections A-C), Calendar Days (Date)	11 (July 11, 2016)
CO4-3	No additional time given for Contract	
CO4-4	No additional time given for Contract	

No additional claims shall be made for changes in Contract Time arising from these work items.

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. 4. 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: _____

By: _____

Date: _____

Date: _____

Approved:
S.J. Louis Construction, Inc.

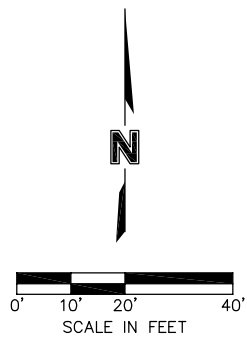
By: _____

Date: _____

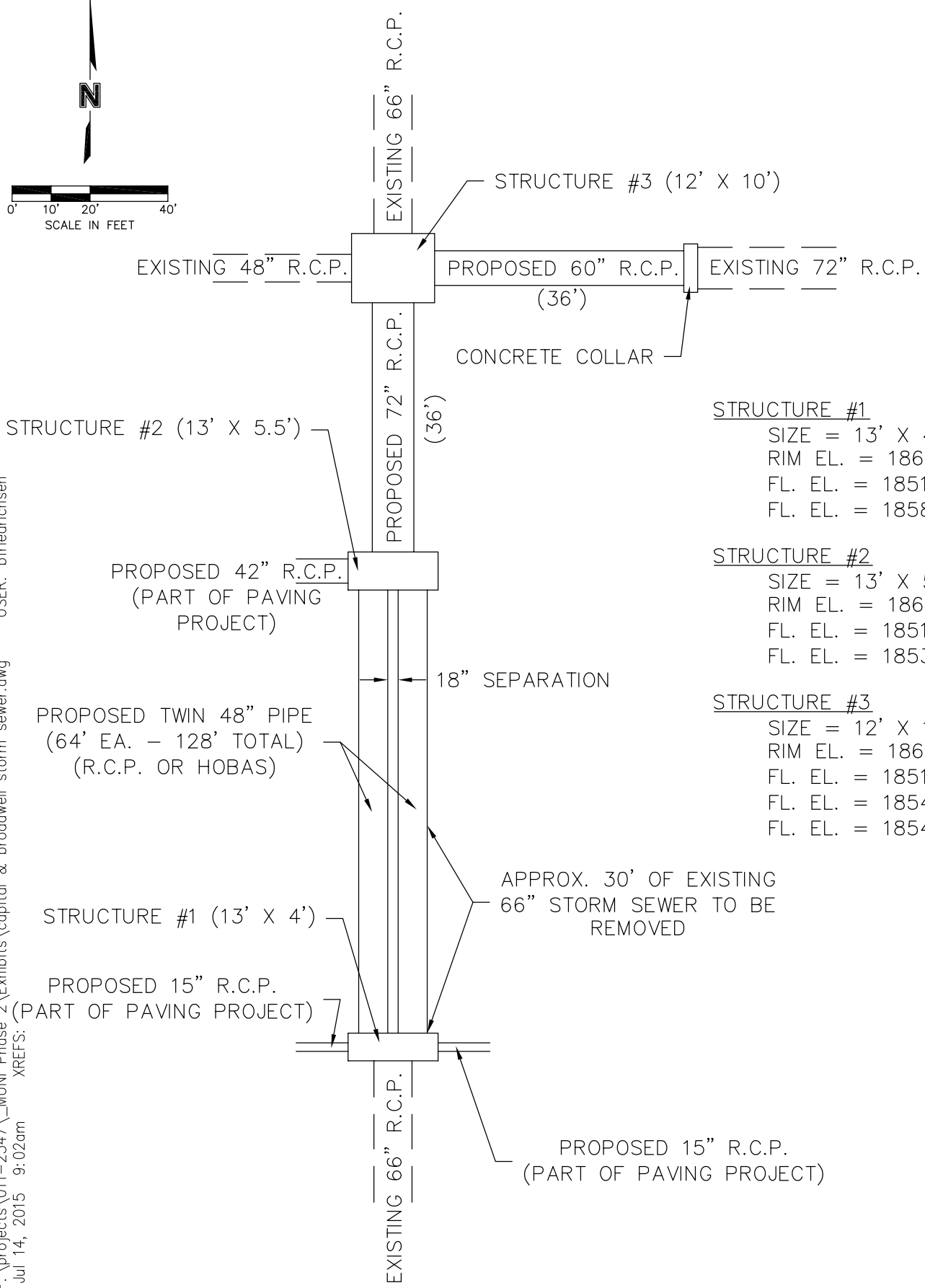
Approved as to Form _____ August , 2015 City Attorney
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ATTACHMENT 1
ITEM CO4-4
ADDITIONAL STORM SEWER WORK IN THE
CAPITAL AVE. AND BROADWELL AVE.
INTERSECTION

DRAWINGS AND DETAILED COST BREAKDOWN



DWG: F:\projects\011-2347\MUNI Phase 2\Exhibits\capital & broadwell storm sewer.dwg
 DATE: Jul 14, 2015 9:02am
 USER: bifriedrichsen
 XREFS:



STRUCTURE #1
 SIZE = 13' X 4'
 RIM EL. = 1862.53
 FL. EL. = 1851.96 (N-S)
 FL. EL. = 1858.59 (E-W)

STRUCTURE #2
 SIZE = 13' X 5.5'
 RIM EL. = 1863.21
 FL. EL. = 1851.92 (N-S)
 FL. EL. = 1853.01 (W)

STRUCTURE #3
 SIZE = 12' X 10'
 RIM EL. = 1863.31
 FL. EL. = 1851.87 (N-S)
 FL. EL. = 1854.03 (W)
 FL. EL. = 1854.59 (E)

	Item Description	Quantity	Unit	Unit Cost	Total Cost
3	Storm Sewer Pipe and Open Drainage Channels				
CO4-4A	Structure No. 1 (13' x 4')	1	EA	\$23,170.35	\$23,170.35
CO4-4B	Structure No. 2 (13' x 5.5')	1	LS	\$27,369.30	\$27,369.30
CO4-4C	Structure No. 3 (12' x 10')	1	LS	\$38,236.80	\$38,236.80
CO4-4D	Concrete Collar (60" x 72")	2	EA	\$3,675.00	\$7,350.00
CO4-4E	72" RC Storm Sewer Pipe	36	LF	\$357.00	\$12,852.00
CO4-4F	60" RC Storm Sewer Pipe	36	LF	\$331.80	\$11,944.80
CO4-4G	48" Pipe (Hobas Thick Walled or RC Pipe)	128	LF	\$270.11	\$34,574.40
CO4-4H	Remove Existing 66" Storm Sewer Pipe	30	LF	\$44.10	\$1,323.00
CO4-4I	Remove and Haul Weir Manhole	1	LS	\$2,625.00	\$2,625.00
				Total	\$159,445.65

RESOLUTION 2015-214

WHEREAS, On September 9, 2014, by Resolution No. 2014-284, City Council awarded, Project 2013-S-4, North Interceptor Phase II to S.J. Louis Construction, Inc. of Rockville, Minnesota, in the amount of \$21,479,537.50; and

WHEREAS, on February 10, 2015, by Resolution No. 2015-39, City Council approved Change Order No. 1, which established new unit prices for installed storm and sanitary sewers which are embedded with native sand material in lieu of the imported granular embedment specified in the contract documents; and

WHEREAS, on March 24, 2015, by Resolution No. 2015-74, City Council approved Change Order No. 2, which changed the methodology of the trenchless crossing from micro tunneling to a direct jacked tunnel using a tunnel boring machine at both Broadwell Avenue/Capital Avenue and Webb Road/Northwest Crossings property at Capital Avenue and resulted in a deduction of \$210,003.48, for a revised contract amount of \$21,269,534.02; and

WHEREAS on June 23, 2015, by Resolution No. 2015-160, City Council approved Change Order No. 3, which addressed unknown and unplanned restraint at the existing 18" waterline that crosses Capital Avenue just east of Webb Road; additional storm sewer work near St. Paul Road as needed to fill in a portion of the utility ditch and provide access to the new manhole; and finalization of the As-Built quantities for Phase II (Part B) and resulted in an increase of \$56,540.88, for a revised contract amount of \$21,326,074.90; and

WHEREAS, Change Order No. 4 allows for an open cut at the intersection of Capital Avenue and Broadwell Avenue for installation of the north interceptor, rerouting of the dewatering discharge, and several modifications to the existing storm sewer at this intersection; and

WHEREAS, an overall net change of the contract amount will be a decrease of \$40,651.39, which results in an adjusted contract amount of \$21,285,423.51.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND COUNCIL OF THE CITY OF GRAND ISLAND, NEBRASKA, that authorization to proceed with Change Order No. 4 with S.J. Louis Construction, Inc. of Rockville, Minnesota is hereby approved; and

BE IT FURTHER RESOLVED, that the Mayor is hereby authorized and directed to execute such Change Order No. 3, North Interceptor Phase II, Project 2013-S-4 on behalf of the City of Grand Island.

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Approved as to Form	□ _____
September 10, 2013	□ City Attorney

Adopted by the City Council of the City of Grand Island, Nebraska, August 11, 2015.

Jeremy L. Jensen, Mayor

Attest:

RaNae Edwards, City Clerk