Project: 3873.1 City of Minot, North Dakota

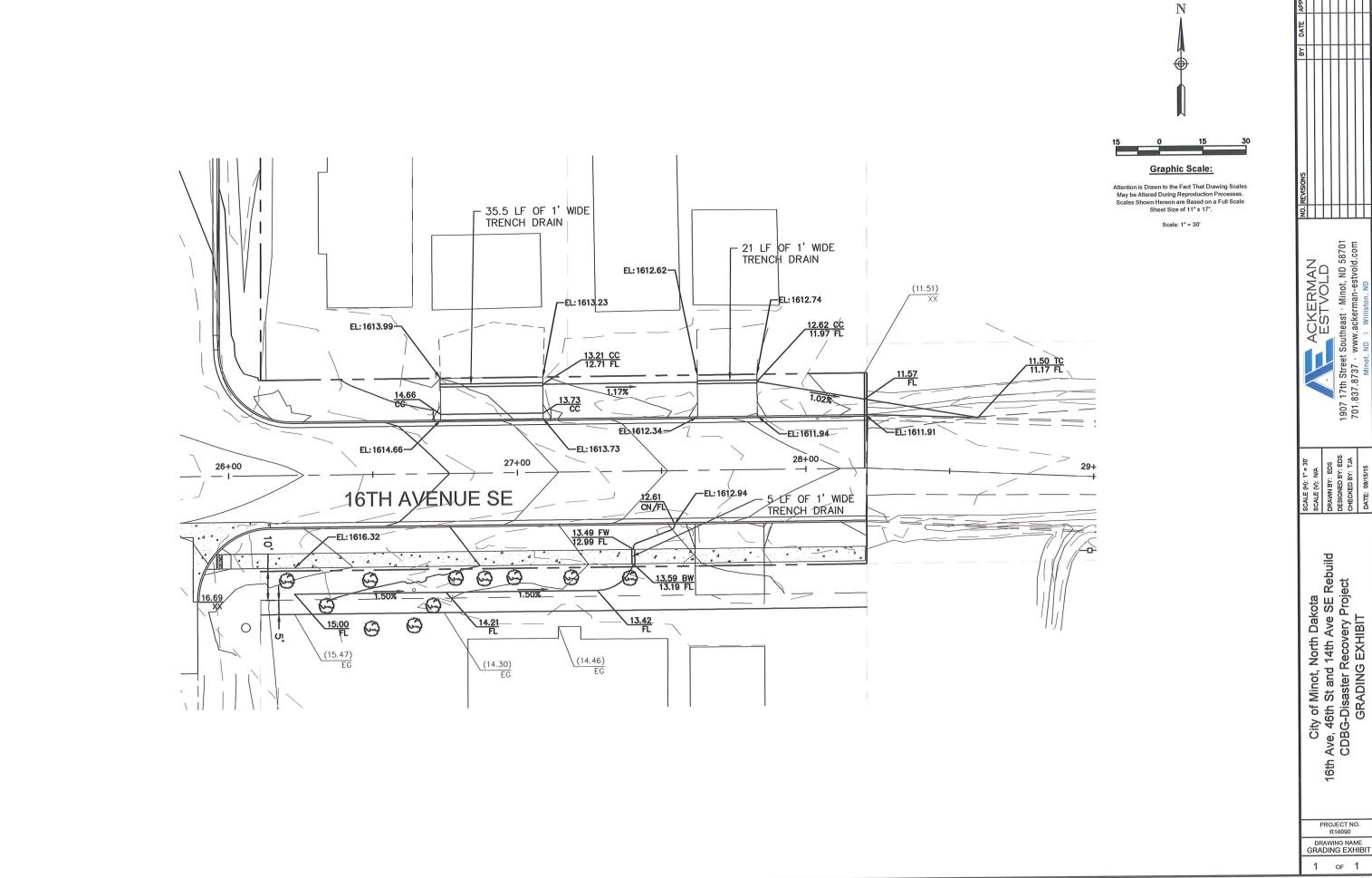
### **Change Order**

No. 4 Date of Issuance: October 24, 2015 Effective Date: October 24, 2015 Project: 16Th Ave, 46th St, 14Th Ave Rebuild & 16th Ave Owner: City of Minot Owner's Contract No.: 3873.1 Contract: 16Th Ave, 46th St, 14Th Ave Rebuild & 16th Ave Water line Date of Contract: 9 April 2015 Contractor: Wagner Construction Engineer's Project No. R14090.01 The Contract Documents are modified as follows upon execution of this Change Order: Item #1: The area on 16th Ave SE behind the curb and gutter from Sta. 26+50 to 27+60 Lt and behind the sidewalk from Sta. 26+50 to 27+60 Rt required that the water drain from west to east, across the existing driveways before existing to the roadway drainage. Due to safety and future maintain concerns of water freezing on the driveways, trench drains are to be installed across the driveways at Sta. 26+91.4 Lt and Sta. 27+72.96 Lt as well as across the sidewalk prior to the driveway at Sta. 27+73.31 Rt. Additional grading is to be completed to drain water to the project limits. The additional costs include: 64 LF of Trench Drain at the accepted unit price of \$264.50, Grading & Excavation at the accepted unit price of \$1,250.00/LS, and 10 LF of Saw Cutting at the accepted unit price of \$5.00/LF. Net effect of this revision is an increase of \$18,228.00 to the contract amount. Attachments: (List documents supporting change): Grading Exhibit, Submitted Prices/Work Orders **CHANGE IN CONTRACT PRICE: CHANGE IN CONTRACT TIMES:** Original Contract Price: X Calendar date Substantial completion (days or date): October 16, 2015 \$2,103,067.00 Ready for final payment (days or date): November 2, 2015 [Increase] [Decrease] from previously approved Change [Increase] [Decrease] from previously approved Change Orders Orders No.\_1\_ to No.\_3\_ \_\_ to No.\_\_\_\_3\_\_ Substantial completion (days): 12 Calendar Days \$70,373.00 Ready for final payment (days): 12 Calendar Days Contract Times prior to this Change Order: Contract Price prior to this Change Order: Substantial completion (days or date): October 28, 2015 \$2,173,440.00 Ready for final payment (days or date): November 14, 2015 [Increase] of this Change Order: [Increase] [Decrease] of this Change Order: Substantial completion (days or date): 2 Calendar Days Ready for final payment (days or date): 2 Calendar Days \$18,228.00 Contract Price incorporating this Change Order: Contract Times with all approved Change Orders: Substantial completion (days or date): October 30, 2015 \$2,191,668.00 Ready for final payment (days or date): November 16, 2015 RECOMMENDED: 11/5/15 Date: ///3/15

Change Order 00941 - 1

Approved by Funding Agency (if applicable):





outheast · Minot, ND 58701 ww.ackerman-estvold.com

City of Minot, North Dakota 16th Ave, 46th St and 14th Ave SE Rebuild CDBG-Disaster Recovery Project GRADING EXHIBIT

PROJECT NO. R14090



# Work Change Directive/Work Order

Engineer/Owner
Wagner Project Number/Name
Date:
Work Change Directive Number:

Ackerman-Estvold/City of Minot
16th Rebuild (Minot#3873.1)
October 7, 2015
Wagner CO#18 (Revised)

Ī	escri	otion o	f Add	ed/M	odified	Wor

Proposed Trench Drain to be installed at driveways located at 46th St Se & 16th Ave Se. There will also be an additional 6	' installed at the sidewalk
--	-----------------------------

Trench Drain is a 12" Solid Plate provided by Neenah Foundry (Plate Number R4990CX)

The proposed plates come in (2' Sections). The length of the trench drain was recalculated to be 58' for both driveways

Submitted By	Work Requested By:				
Matt Guerton	Ackerman-Estvold				
Description Labor:	# Men	Qty.	Units	Rate	Total Hours
					41
Description Equipment:	Unit#	Qty.	Units	Unit Price	Total
Description Materials:		Qty.	Units	Unit Price	Total
Driveway Trench Drain		64.0	LF	\$264.50	\$16,928.00
Additional Grading & Excavation		1.0	LS	\$1,250.00	\$1,250.00
Saw Cutting .		10.00	LF	\$5.00	\$50.00
Misc/Dumpfees/Survey/Q/C Testing/	Ser Are	Qty.	Units	Unit Price	Total
				Total:	\$18,228.00

1/1	// ~	1			_
Vagner Rep.	11-	Ţ	Date: 10/07/15	Owner Rep:	Date:

White/Owner-Engineer Yellow/Wagner Office Pink/Wagner Foreman





1907 17th Street Southeast Minot, ND 58701 701.837.8737 www.ackerman-estvold.com

#### **MEMORANDUM**

To: Ben Cofell, City of Minot

From: Ackerman-Estvold

Date: October 6, 2015

e: Change Order #4 – Independent Cost Estimate

Project 3873.1 - 16th Ave, 46th St and 14th Ave SE Rebuild

This independent cost analysis is for the addition of trench drains in two driveways and one sidewalk to improve the drainage of water from behind the new curb and gutter or sidewalk. The area on 16th Ave SE behind the curb and gutter from Sta. 26+50 to 27+60 Lt and behind the sidewalk from Sta. 26+50 to 27+60 Rt required that the water drain from west to east, across the existing driveways before existing to the roadway drainage. Due to safety and future maintain concerns of water freezing on the driveways, trench drains are to be installed across the driveways at Sta. 26+91.4 Lt and Sta. 27+72.96 Lt as well as across the sidewalk prior to the driveway at Sta. 27+73.31 Rt. Additional grading is to be completed to drain water to the project limits.

The estimated quantity of trench drain is 64 LF. Since trench drains are uncommon and difficult to price, an alternative would be to install a storm drain system consisting of 15" RCP, end sections, and storm sewer structures. The estimated cost of the alternative option is as follows:

- 200 to 350 LF of 15" RCP at estimate unit price of \$80/LF
- 1 to 2 EA of Catch Basin Manholes at contract unit price of \$4,000.00/EA
- 1 to 2 EA of 15" RCP end section at estimated unit price of \$1,000/EA
- Removals (C&G, pavement, and sidewalk) at estimated unit price of \$1,000/LS

The estimated unit prices are based on current contract bid items. The total estimated cost to install a storm drain system would range from \$22,000 to \$39,000. The submitted price for the trench drains is expected to be less; otherwise further consideration should be given to the storm drain option.

Minot, ND | Williston, ND



1907 17th Street Southeast Minot, ND 58701 701.837.8737 www.ackerman-estvold.com

October 24, 2015

Mr. Ben Cofell City of Minot 1025 31st St. SE Minot, ND 58701

RE: Change Order #4- Cost Justification for Trench Drain Project 3873.1 - 16<sup>th</sup> Ave, 46<sup>th</sup> St and 14<sup>th</sup> Ave SE Rebuild

This cost justification analysis includes the addition of trench drains in two driveways and one sidewalk crossing. The concrete driveways have yet to be completed and the sidewalk will require a strip to be saw cut out for placement of the trench drain. The following items have been submitted by the contractor to complete this work:

• Trench Drain: 64 LF @ \$264.50/LF

Grading & Excavation: 1 LS @ \$1,250/LS

• Saw Cutting: 10 LF @ \$5.00/LF

The submitted unit price of \$264.50/LF for the trench drain is significantly less the accepted unit price of \$384.00/LF for City of Minot project #4774 for 33<sup>rd</sup> Ave & 1<sup>st</sup> St SE. See attached approved change order for Project #4774. Additionally, the work to install the trench drain for project #4474 included an item for saw cutting, excavation, subgrade prep, and gravel in the amount of \$2,350 per lump sum. The submitted unit price to complete this similar work is less than the comparable project.

After thorough review of the contractor's submitted prices and comparison to related projects and work, it is recommended that the additional work be authorized via change order to Wagner Construction as the most time and cost effective option.

Sincerely,

Timothy Arens, PE Project Manager Ackerman-Estvold

Minot, ND | Williston, ND



## Work Change Directive/Work Order

Engineer/Owner
Wagner Project Number/Name
Date:
Work Change Directive Number:

Ackerman-Estvold/City of Minor 16th Rebuild (Minor#3873.1) October 7, 2015 Wagner CO#18 (Revised)

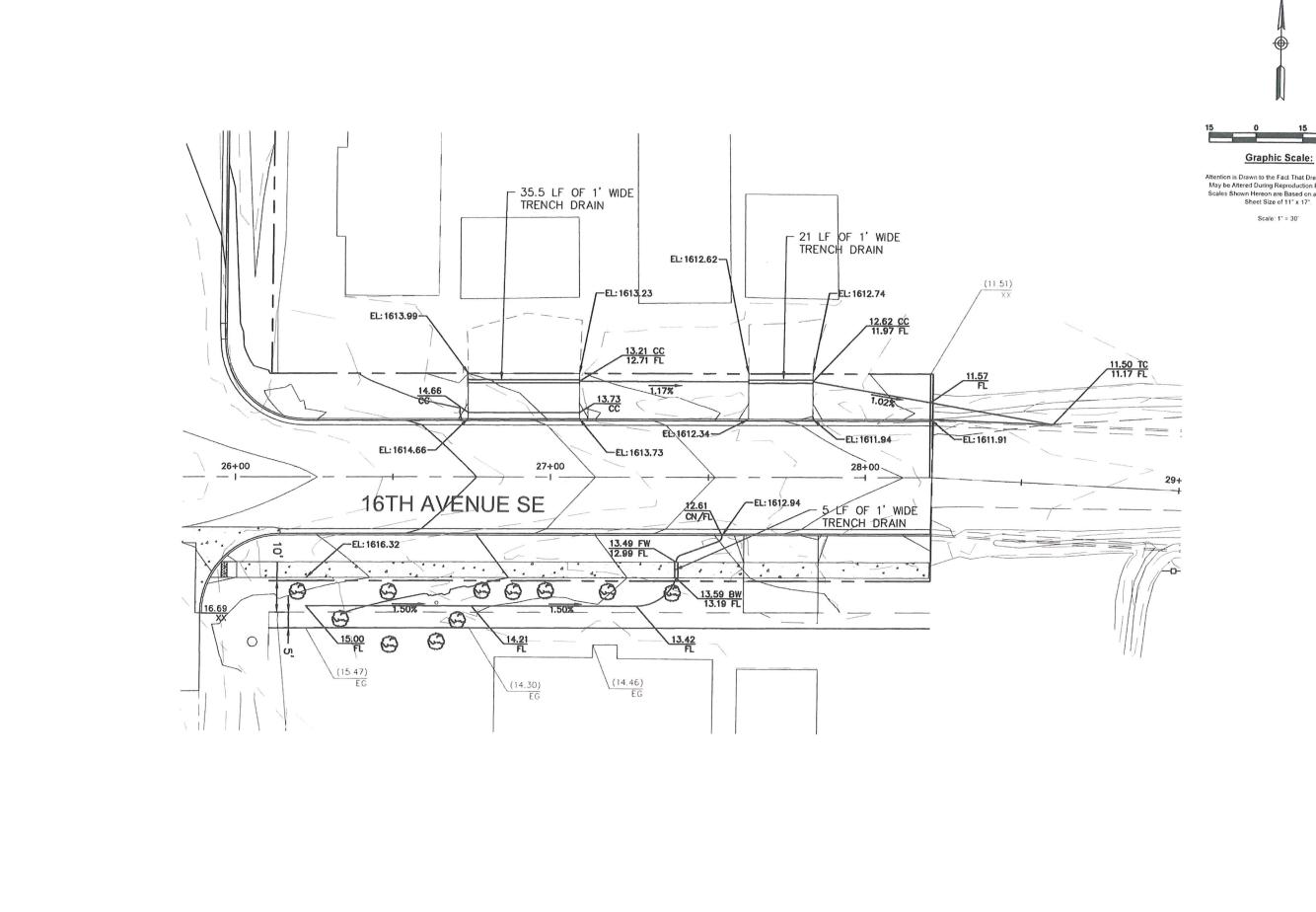
www.tintio	A	Ideal/ MI	and HClassel	10 Character

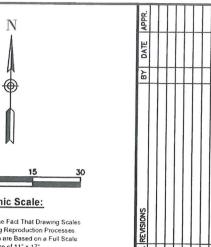
Proposed Trench Drain to be installed at driveways located at 46th St Se & 16th Ave Se. There will also be an additional 6' installed at the sidewalk.
Trench Drain is a 12" Solid Plate provided by Neenah Foundry (Plate Number R4990CX)
The prepared plates some in (2) Sections). The length of the trench drain was recolculated to be 58! for both driveways

Submitted By	Work Requ	Work Requested By:				
Matt Guerton	Ackerman-E	stvold				
Description Labor:	# Men	Qty.	Units	Rate	Total Hours	
Description Equipment:	Unit#	Qty.	Units	Unit Price	Total	
Description Materials:		Qty.	Units	Unit Price	Total	
Driveway Trench Drain		64.0	LF	\$264.50	\$16,928.00	
Additional Grading & Excavation		1.0	LS	\$1,250.00	\$1,250.00	
Saw Cutting		10.00	LF	\$5.00	\$50.00	
Misc/Dumpfees/Survey/Q/C Testing/		Qty.	Units	Unit Price	Total	
				Total:	\$18,228.00	

4/1/	0.1-2		
agner Rep.	Date: 10/07/15	Owner Rep:	Date:

White/Owner-Engineer Yellow/Wagner Office Pink/Wagner Foreman





Attention is Drawn to the Fact That Drawing Scales May be Attered During Reproduction Processes Scales Shown Hereon are Based on a Full Scale Sheet Size of 11" x 17".

ACKERMAN ESTVOLD

City of Minot, North Dakota 16th Ave, 46th St and 14th Ave SE Rebuild CDBG-Disaster Recovery Project GRADING EXHIBIT

PROJECT NO. R14090

1 of 1

DRAWING NAME GRADING EXHIBIT

Comparable Project: Pg. 1 of 3

Change Order

No. \_1\_

Date of Issuance: 7/2	2/2015	Effe	ective Date: 7/6/2015
Project: 33rd Ave & 1st St SI	E Owner: Ci	ity of Minot	Owner's Contract No.: 4774
Contract: 33 <sup>rd</sup> Ave &1 <sup>st</sup> St			Date of Contract: 4/16/2015
Contractor:			Engineer's Project No.: 6027-028
The Contract Documents a	re modified as fo	ollows upon execu	tion of this Change Order:
Description:			
Various extra work items de	escribed on the at	tached sheet	
Attachments (list document Description of extra work its	t <b>s supporting ch</b> ems; Wagner Cor	ange): nstruction price br	eakdown for extra work items
CHANGE IN CONTRA	ACT PRICE:	Cl	HANGE IN CONTRACT TIMES: N/A
Original Contract Price:	•	Original Contra	ct Times: Working days Calendar days
			npletion (days or date):
\$ 928,533.86		Ready for final	payment (days or date):
[Increase] [Decrease] from pr	eviously approve	d [Increase] [Decr	ease] from previously approved Change Orders
Change Orders No to No.	·:	No to No	:
			pletion (days):
\$0		Ready for final	payment (days):
Contract Price prior to this Ch	ange Order:	Contract Times	prior to this Change Order:
\$_928,533.86		Substantial com	pletion (days or date):
Ψ		Ready for tiliar	payment (days or date):
[Increase] <del>[Decrease]</del> of this C	Change Order:		ease] of this Change Order:
A 20 252 00		Substantial com	pletion (days or date):
\$28,253.00		Ready for final	payment (days or date):
Contract Price incorporating th	nis Change Order		with all approved Change Orders: pletion (days or date):
\$_956,786.86			payment (days or date):
		1	
RECOMMENDED:		PTID:	ACCEPTED
Engineer (Authorized Signature	By:	ner (Authorized Sign	By: Make the state of the state
Date: 7-13 15		7/15/15	(*************************************
pproved by Funding Agency (		(1(3)13	Date: 7.7.1.
	11		D 1-
			Date:

EJCDC C-941 Change Order
Prepared by the Engineers Joint Contract Documents Committee and endorsed by the Construction Specifications Institute.

Pg. Z of 3

Item 2 – Conflict with CB #4l, at approximately station 9+00, and underground power lines servicing street lights. Power lines were relocated behind inlet in order to construct storm inlet. See attached work order from Wagner for cost breakdown.

Cost for item 2: \$1,897.50

Item 3 – Storm system connection to existing manhole, at approximately station 1+50, conditions were different than shown on plan. Plan conditions shown were based on design by others as system was not constructed at time of design. Additional work required to make connection. See attached work order from Wagner for cost breakdown.

Cost of item 3: \$1,335.00

Item 4 - Conflict with CB #2, at approximately station 4+60, and underground power lines servicing street lights. Power lines were relocated behind inlet in order to construct storm inlet. See attached work order from Wagner for cost breakdown.

Cost for item 4: \$1,267.50

Item 5 – Water service line to Home Depot conflict with storm pipe, at approximately station 9+40. Water service line adjusted vertically to allow storm pipe to be constructed on grade. See attached work order from Wagner for cost breakdown.

Cost for item 5: \$8,693.00

Item 6 – Grade adjustment of sanitary manholes at approximately stations 2+75 and 12+40 could not be adjusted to grade by removal of rings due to elevation difference required and configuration of manhole construction. Grade adjustments made by replacing manhole barrel and cone sections as necessary. Work also includes the installation of chimney seals on all sanitary manhole per City specifications. See attached work order from Wagner for cost breakdown.

Cost for item 6: \$6,850.00

Item 7 – A trench drain is required to convey runoff from the Home Depot parking lot to 33<sup>rd</sup> Ave. at approximately station 2+40. No bid item was provided for the trench drain. See attached work order from Wagner for cost breakdown.

Cost for item 7: \$8,210.00

Pg. 3 of 3



## Work Change Directive/Work Order

Engineer/Owner
Wagner Project Number/Name
Date:
Work Change Directive Number:

Houston Engineering
Isl SI SE & 33rd Ave SE
July 1, 2015

Description of Added/ Modified Work:				e Directive tvumber.	6
Trench Drain Quotation per Houston Engineering ema	il (06/23/15). Doug Dilli	plane			
Plans attached in email					
Submitted By		mested By:		<b>""</b>	
Matt Guerton	Houston Engineering				
Description Labor:	# Men	Qiv.	Units	Rate	Total Hours
		-			
		-			
Description Equipment:	Unit#	Qiy.	Units	Unit Price	Total
			-		
			-		
		-			
Description Materials:		0	No the Control of the		
Installation of Neenah 4999 EX -Type D		Qiy.	Units	Unit Price	Total
Saw Cutting, Excavation, Subgrade Prep, & Gravel		15.0	LF	\$384.00	\$5,760.00
Saw Cutting, Excavation, Subgrade Fiep, & Graver		0.1	LS	\$2,350.00	\$2,350.00
Description of Hems Installed	64 CC 10 C	Qty.	Units	Unit Price	Total
			Cims	One Price	Lotal
And the second s					
Subcontractors		Qty.	Units	Unit Price	Total
lise/Dumpfees/Survey/Q/C Testing/	ALL WARDS OF STREET	Qty.	Units	Unit Price	Total
Disposal of Concrete Curb		1.0	LS	\$100.00	\$100 00
				Total:	\$8,210.00
Wagner Rep.	Date:	Owner Rep:		1	Date:

White/Owner-Engineer Yellow/Wagner Office Pink/Wagner Foreman