

September 24, 2020

City of Oelwein
Attn: Mayor and City Council
20 2nd Avenue S.W.
Oelwein, Iowa 50662

RE: **Wings East Pavement Improvements – Change Order No. 1**
Fox Ref No. 1002-18A.660

Dear Mayor and City Council,

The Wings East Pavement Improvements Project includes a proposed 3.5-inch HMA pavement overlay of 13th Ave NE (1st ST NE north 385-ft to the existing PCC Pavement) over an existing sealcoat pavement. This section of sealcoat roadway does not have curb/gutter, storm sewer, and has minimum drainage swales. The goal of the project was to extend the pavement life, reduce future sealcoat maintenance costs, and match the proposed HMA pavement improvements throughout the Wings East Development Area.

The recent home construction at 115 13th Ave NE removed portions of the sealcoat roadway for utility connections (sanitary & water) and replaced the sealcoat with granular material. It is probable construction traffic further damaged the roadway.



13th Ave NE (looking south)

Historically this area of roadway has experienced frost boils during very cold winters. Typically a frost boil appears in the spring as a pothole due to ground water trapped under the pavement that freezes and thaws. It is also probable that the soil materials under this roadway section are weak and/or expansive. Below is an aerial image from 2010 that shows pavement failures for reference:



FOX is concerned the proposed 3.5-inches of HMA pavement overlay could fail in the near future unless the subsurface conditions are addressed.

Based on our field observations, it is our recommendation to reconstruct 235-ft of 13th Ave NE. Work includes removal of sealcoat/granular/soils (18-inches), subgrade scarification, geogrid, longitudinal subdrain, drainable granular base, and 5-inches of HMA Pavement. The goal of the reconstruction is to remove the poor soils in this area and drain the subbase in order to reduce the likelihood of pavement failures. The total cost for Change Order No. 1 is \$25,288 (see attachment for detailed information).

The total budget for this project was \$650,000. The construction bid was approximately \$23,000 below budget. The contract price has increased approximately \$13,000 to date due to additions of rock along 12th Ave NE, curb removal/replacement, storm sewer extensions, driveway, and geogrid. If Council determines to proceed with Change Order No. 1 for \$25,288, then the project will be overbudget by approximately \$15,500.

Lodge Construction has stated they can complete this work this year if Council approves Change Order No. 1 at the September 28, 2020 Council Meeting.

Sincerely,
FOX Engineering Associates, Inc.

John Gade

John Gade, P.E.
Project Manager

Enclosures: Change Order No. 1

CC: Lodge Construction, John Senn

Date of Issuance: 9/24/20

Effective Date: 9/28/20

Owner: City of Oelwein

Contractor: Lodge Construction

Engineer: FOX Engineering

Engineer's Project No.: 1022-18A

Project: Wings East Pavement Improvements Project

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

Pavement replacement of 13th AVE NE for a length of approximately 235 feet. Item Adjustments include:

- Add Item 2.05 Remove & Reinstall Sealcoat & Rock in the about of 104 CY @ \$5/CY = \$520.00
- Add Item 2.06 Remove Soil and Take Off-Site in the amount of 244 CY @ \$10/CY = \$2,440.00
- Add Item 2.07 Subgrade Treatment, Geogrid in the amount of 731 SY @ \$3/SY = \$2,193.00
- Add Item 12.04 Granular Surfacing, Modified in the amount of 100 Ton @ \$23/Ton = \$2,300.00
- Add Item 7.17 Pavement, HMA 5-Inch in the amount of 627 SY @ \$30/SY = \$18,810.00
- Add Item 4.06 4-inch Longitudinal Subdrain, Perforated, Type 1 in the amount of 450 LF @ \$13/LF = \$5,850.00
- Add Item 4.06 Connect to Existing Tile, 4-inch in the amount of 2 EA @ \$400/EA = \$800.00
- Add Item 4.07 Subdrain Cleanout in the amount of 2 EA @ \$500.00/EA = \$1,000.00
- Item 2.03 Subgrade Preparation, 6-inch – increase 731 SY @ \$2/SY = \$1,462.00
- Item 2.04 Modified Subbase – increase 731 SY @ \$5/SY = \$3,655.00
- Item 7.04 HMA Overlay, Leveling Course – decrease 35 ton @ \$106/ton = (\$3,710.00)
- Item 7.05 HMA Overlay, 1.0-inch Interlayer - decrease 627 SY @ \$7.50/SY = (\$4,702.50)
- Item 7.06 HMA Overlay, 1.5-inch Surface Course - decrease 627 SY @ \$8.50/SY = (\$5,329.50)

Total price increase = \$25,288.00

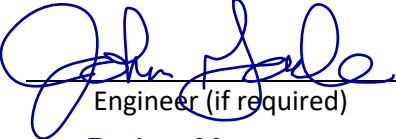
Attachments: Figure CO 1

CHANGE IN CONTRACT PRICE	CHANGE IN CONTRACT TIMES
Original Contract Price: \$ <u>448,671.40</u>	Original Contract Times: Substantial Completion: <u>11/6/20</u> Ready for Final Payment: <u>11/20/20</u>
Increase from previously approved Change Orders \$ <u>0</u>	Increase from previously approved Change Orders: Substantial Completion: <u>N/A</u> Ready for Final Payment: <u>N/A</u>
Contract Price prior to this Change Order: \$ <u>448,671.40</u>	Contract Times prior to this Change Order: Substantial Completion: <u>11/6/20</u> Ready for Final Payment: <u>11/20/20</u>
Increase this Change Order: \$ <u>25,288.00</u>	Increase of this Change Order: Substantial Completion: <u>11/20/20</u> Ready for Final Payment: <u>12/4/20</u>
Contract Price incorporating this Change Order: \$ <u>473,959.40</u>	Contract Times with all approved Change Orders: Substantial Completion: <u>11/20/20</u> Ready for Final Payment: <u>12/4/20</u>

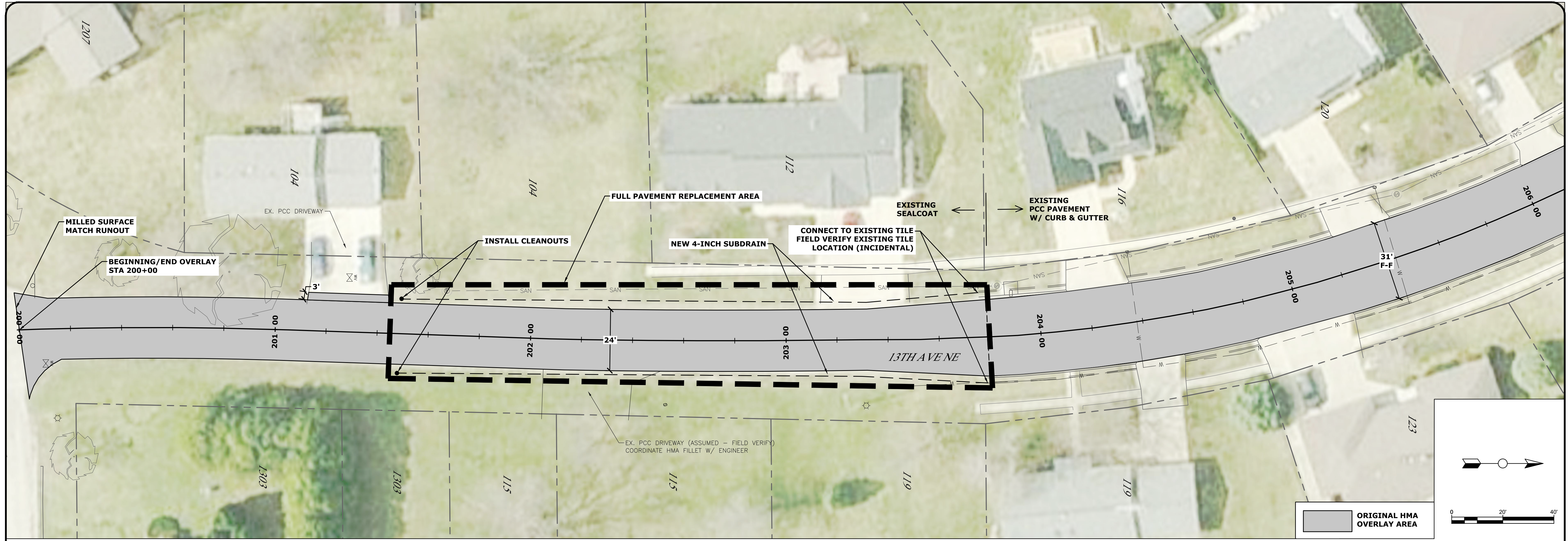
RECOMMENDED:

ACCEPTED:

ACCEPTED:

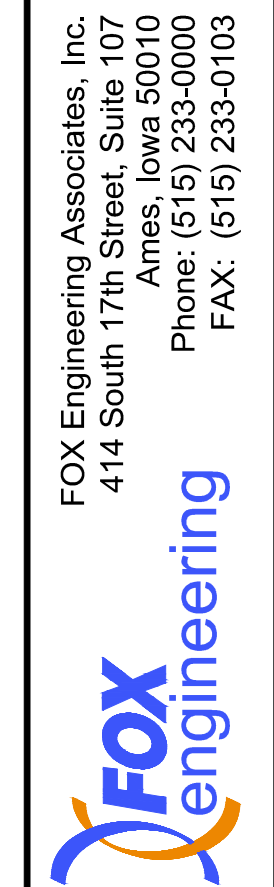
By:  By: _____ By: _____
Engineer (if required) Owner (Authorized Signature) Contractor (Authorized
Title: Project Manager Title: _____ Title: _____
Date: 09.24.2020 Date: _____ Date: _____

DRAWING FILENAME
 K:\proj\1000\1022-18A - Wings East\Drawings\Civil\1022-18A_BASE.dwg
 PLOT STYLE TABLE
 FoxGrayScale.ctb
 LAYER MGR NAME
 CO 1
 LAYOUT NAME
 CO 1



REVISION	DATE	BY	DATE
DESIGNED:	09/20	JMG	09/20
DRAWN:	09/20	SPB	09/20
CHECKED:			
LAST UPDATE:	09/17/20		

FOX Engineering Associates, Inc.
 414 South 17th Street, Suite 107
 Ames, Iowa 50010
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 FAX: (515) 233-0103



PROJECT NO.
 1022-18A
 SHEET
 CO 1

PAVEMENT DETAILS
 WINGS EAST PAVEMENT IMPROVEMENTS PROJECT
 CITY OF OELWEIN
 OELWEIN, IA