F3ab

City of Hiawatha

Engineering Department

101 Emmons St., Hiawatha Iowa, 52233-1697
PHONE (319) 393-1515 ext. 511 FAX (319) 393-1516

To: Mayor and City Council

Date: July 25, 2017

From: John C Bender PE, City Engineer

Re: Emmons Street/NCPR/Robins Road Phase II Roadway Package

Description: Change Order No. 3

Report:

Change Order No. 3: Is the cost for changing the pavement markings originally planned from Emmons Street to the railroad on North Center Point Road and adding pavement markings removal and new pavement markings from the railroad north to Boyson Road. The proposal is to reconfigure this section of roadway from a 4-lane roadway to a 3-lane roadway with the addition of bike lanes. After this proposed revision, the only section of Center Point Road that is remaining a 4-lane section is the area between Emmons Street and Blair's Ferry Road. Our consultant recommended we do not make any revisions in this area until after the construction is complete and traffic resumes the normal patterns.

A roadway reconfiguration known as a "Road Diet" offers several high-value improvements at a low cost when applied to traditional four-lane undivided highways. In addition to low cost, the primary benefits of a road diet include enhanced safety, mobility and access for all road users and a "complete streets" environment to accommodate a variety of transportation modes.

A road diet typically involves converting an existing four-lane, undivided roadway segment to a three-lane segment consisting of two through lanes and a center, two-way left-turn lane.

The existing paving north of Emmons Street will provide sufficient width for a 3-lane section and 2-bike lanes 6.5 feet wide and a 3 foot buffer area on each side. This will work well with the posted speed limit of 35mph and provide a very safe riding area for bikes and bus stop lanes. The proposed painting plan includes removing all the existing lines and symbols and painting of the lines as shown on the plan.

The proposed painting plan can be accomplished with a change order to our existing contract for the Phase II project. The cost can be calculated using the unit prices we already have. The total cost to complete the reconfiguration, using the existing prices, is included in the table below. The only additional costs are items 1 and 2 for the areas north of the railroad. These items will be included in the change order #3.

Center Point Road - 4-Lane to 3-Lane Conversion

Construction Change - 7/27/2017

ITEM NO	ITEM CODE	ITEM	UNIT	UNIT PRICE	TOTAL QUANTITY	TOTAL PRICE
1	01200-01	TRAFFIC CONTROL	LS	$1,760	1	$ 1,760
2	01400-70	REMOVAL OF EXISTING PAVEMENT MARKINGS	LS	$5,390	1	$ 5,390
3	02850-01	PAVEMENT MARKINGS, PAINTED (LESS MARKINGS FOR INTERSECTION PROJECT)	STA	$60	-53	$ (3,198)
4	02850-01	PAVEMENT MARKINGS, PAINTED (3-LANE CONVERSION)	STA	$60	247.20	$ 14,832
5	02850-20	PAVEMENT SYMBOLS, PAINTED (LESS SYMBOLS FOR INTERSECTION PROJECT)	EA	$80	-6	$ (480)
6	02850-20	PAVEMENT SYMBOLS, PAINTED (3-LANE CONVERSION)	EA	$80	59	$ 4,720

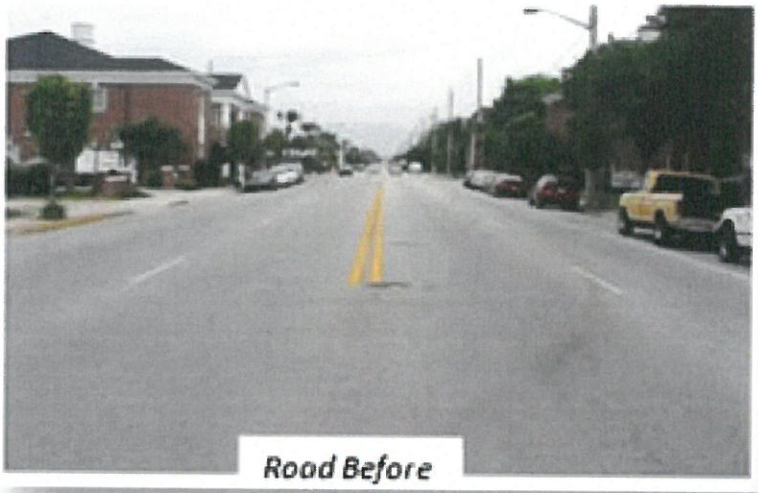
CHANGE ORDER TOTAL **$23,024**

The only additional costs are items 1 and 2 for the areas north of the railroad. These items will be included in the change order #3. The remaining items will be included in the final "balancing change order" we always prepare at the end of the project. Because some of these items are additions and some of the items are deletions, this is the best way to account for this type of change order where we are changing scope. The final items will reflect the scope; however we wanted to make Council aware of the total cost as we move forward. The cost for converting North Center Point Road to a 3-lane section can be covered with the project costs currently allocated.

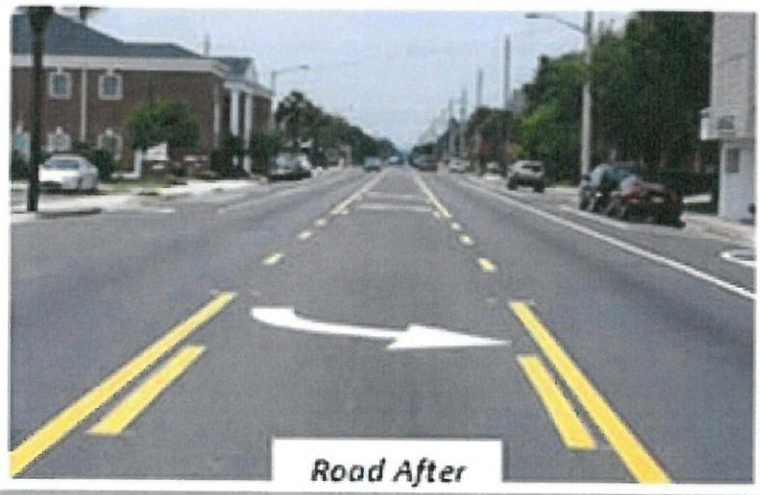
The change order will include:

- **Item 1.5 Increase Traffic Control Item #6** $1,760.00
- **Item 1.6 Increase Removal of Pavement Markings Item #20** $5,390.00

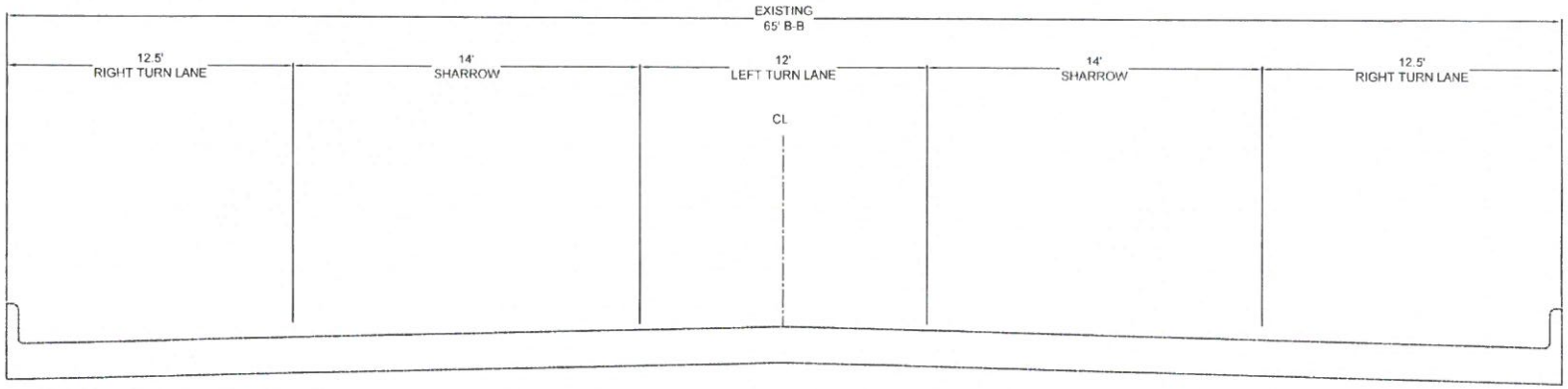
Engineering recommends approval of change order No 3 for a cost increase of $7,150.00. If you need any further information, please let me know.



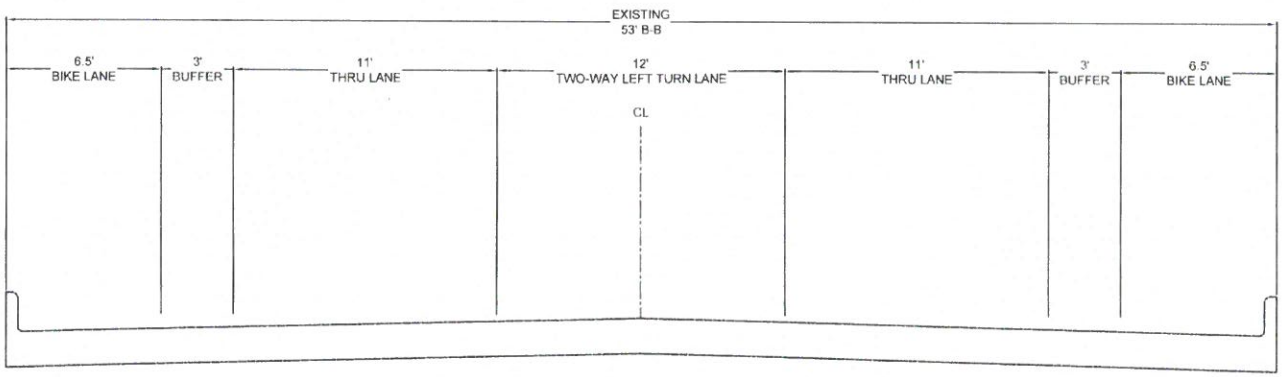
Road Before



Road After



PROPOSED CROSS SECTION
SOUTH APPROACH OF BOYSON RD/CENTER POINT RD INTERSECTION
(LOOKING SOUTH)



PROPOSED CROSS SECTION
NORTH OF RAILROAD TO NORTH OF FISHER ST
(LOOKING SOUTH)

LICENSED PROFESSIONAL ENGINEER
WILLIAM J. BAUER
23816
IOWA

I hereby certify that this Engineering document was prepared by me or under my direct personal supervision and that I am a duly Licensed Engineer under the laws of the State of Iowa.

William J. Bauer 7/7/2017

William J. Bauer Iowa Reg No 23816

My License renewal date is December 31, 2018

Pages covered by this seal: B 01-B 02, C 01-C 02, O2 02A-O2 02E

ABES PROJECT NO: 217028	DRAWN BY: JMS APPROVED BY: WJB DATE: 7/6/2017	NO. / REVISION DESCRIPTION / APPROVED / DATE	Hiawatha! ANDERSON BOGERT	CENTER POINT ROAD 4-LANE TO 3-LANE CONVERSION	TYPICAL SECTIONS	SHEET NO. B.01 or B.02

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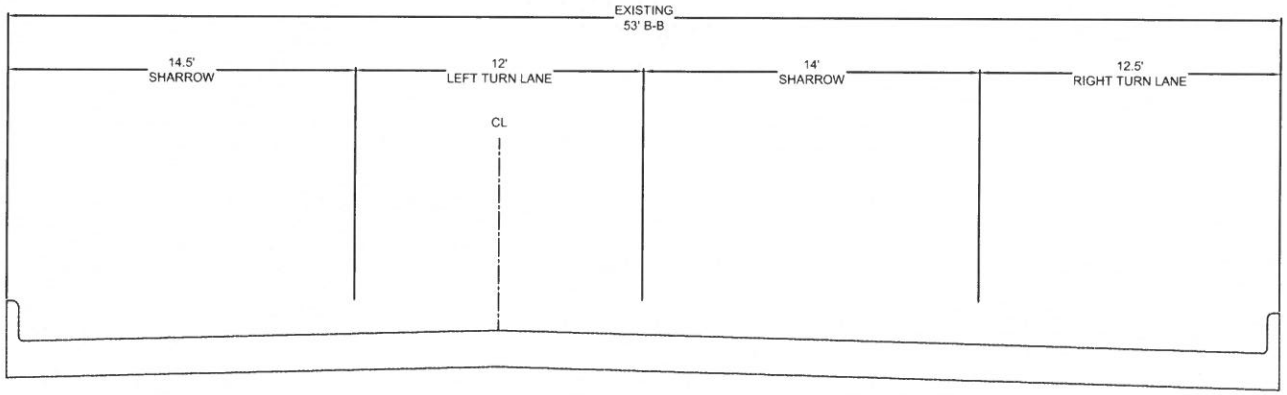

PROPOSED CROSS SECTION
NORTH APPROACH OF EMMONS ST/ROBINS RD INTERSECTION
(LOOKING SOUTH)

ABES PROJECT NO: 217028	DRAWN BY: JMS APPROVED BY: WJB DATE: 7/6/2017	NO. / REVISION DESCRIPTION / APPROVED / DATE	Hiawatha! ANDERSON BOGERT	CENTER POINT ROAD 4-LANE TO 3-LANE CONVERSION	TYPICAL SECTIONS	SHEET NO. B.02 OF B.02

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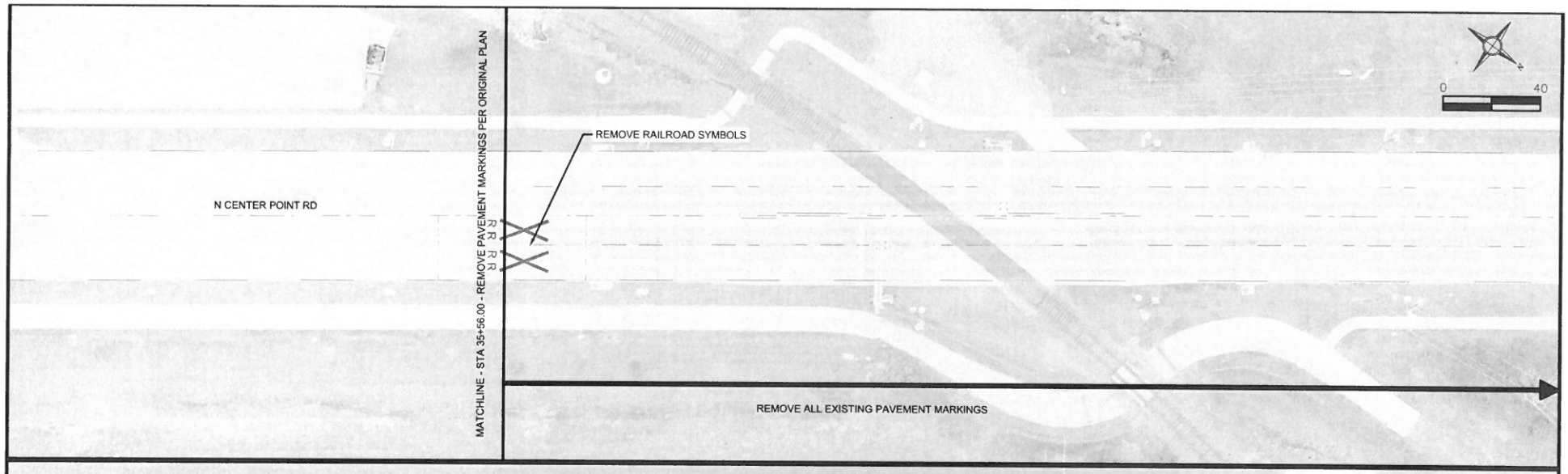

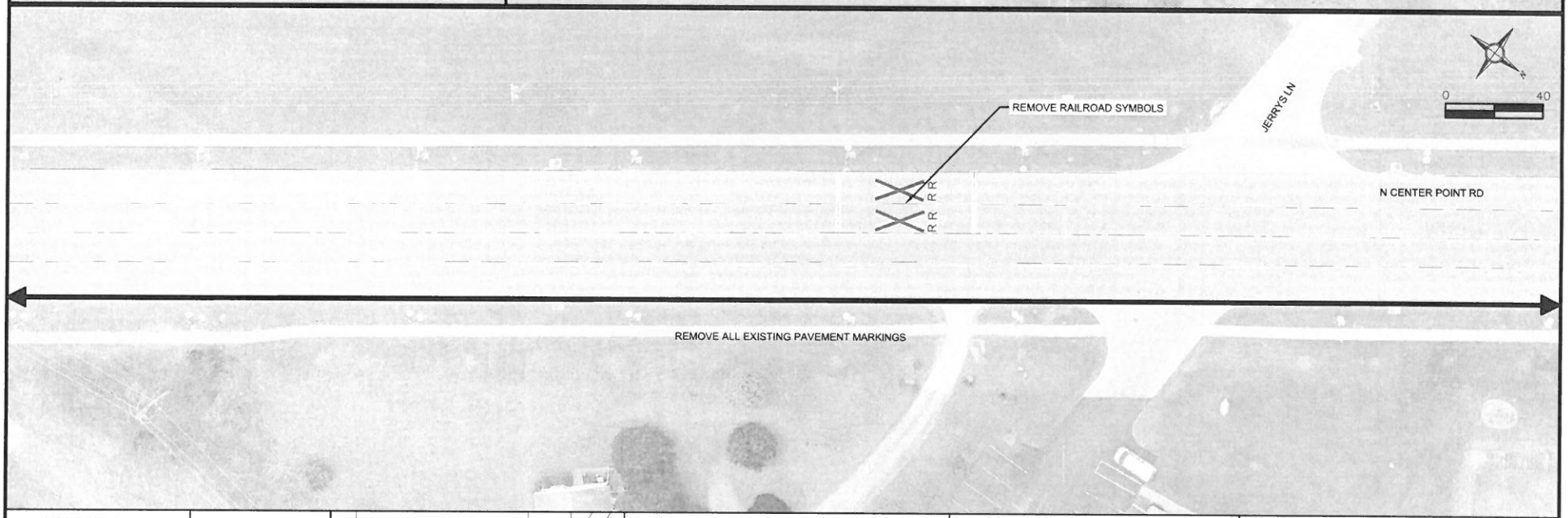

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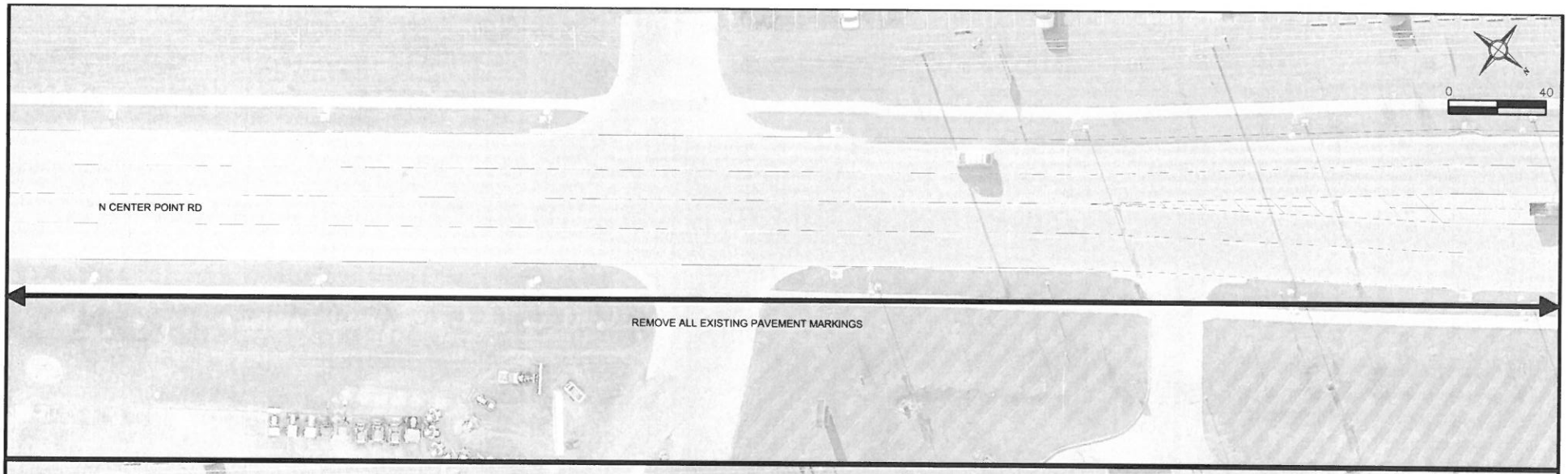

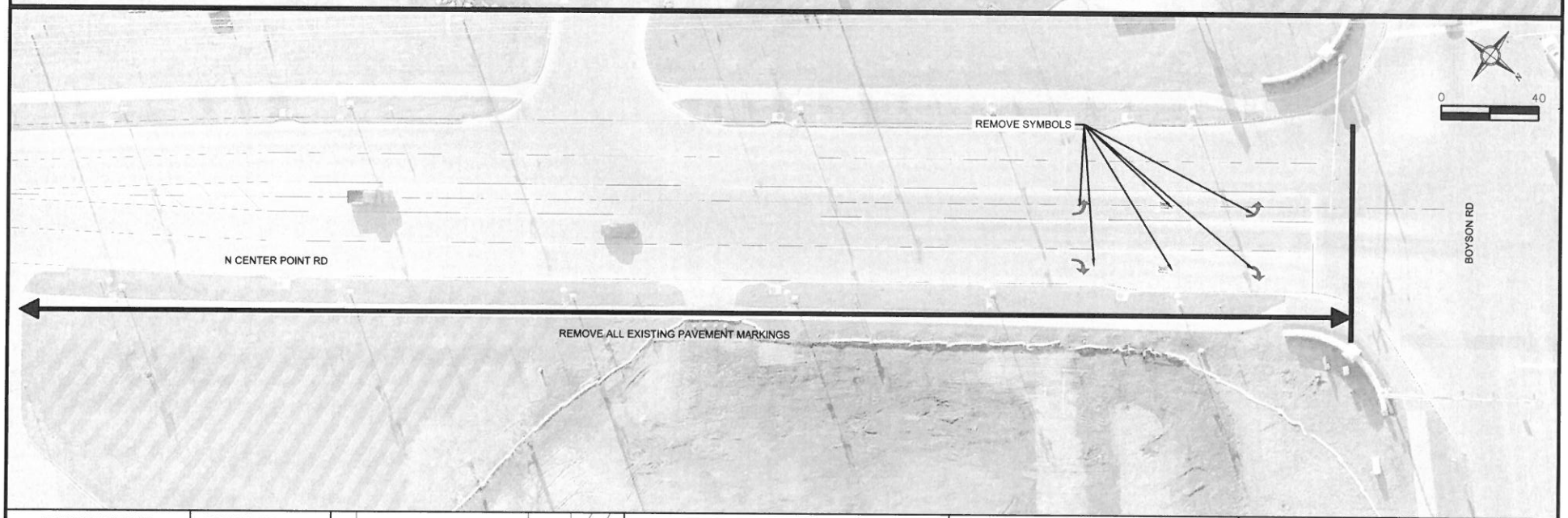

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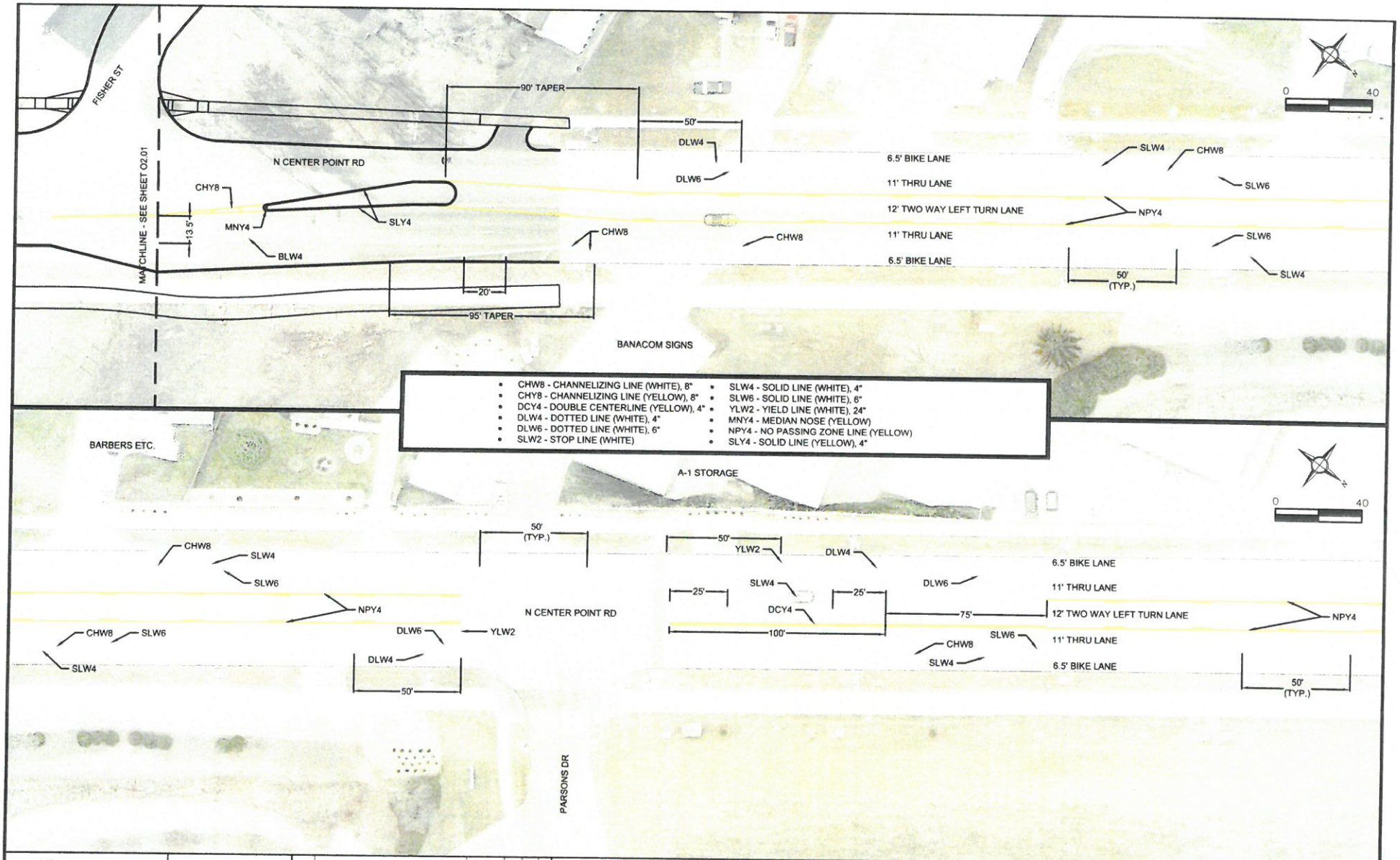

ABES PROJECT NO: 217028	DRAWN BY: JMS APPROVED BY: WJB DATE: 7/6/2017	NO. REVISION DESCRIPTION APPROVED DATE	Hiawatha! ANDERSON BOGERT	CENTER POINT ROAD 4-LANE TO 3-LANE CONVERSION	PAVEMENT MARKINGS CENTER POINT ROAD	SHEET NO. O2.02A of O2.02E

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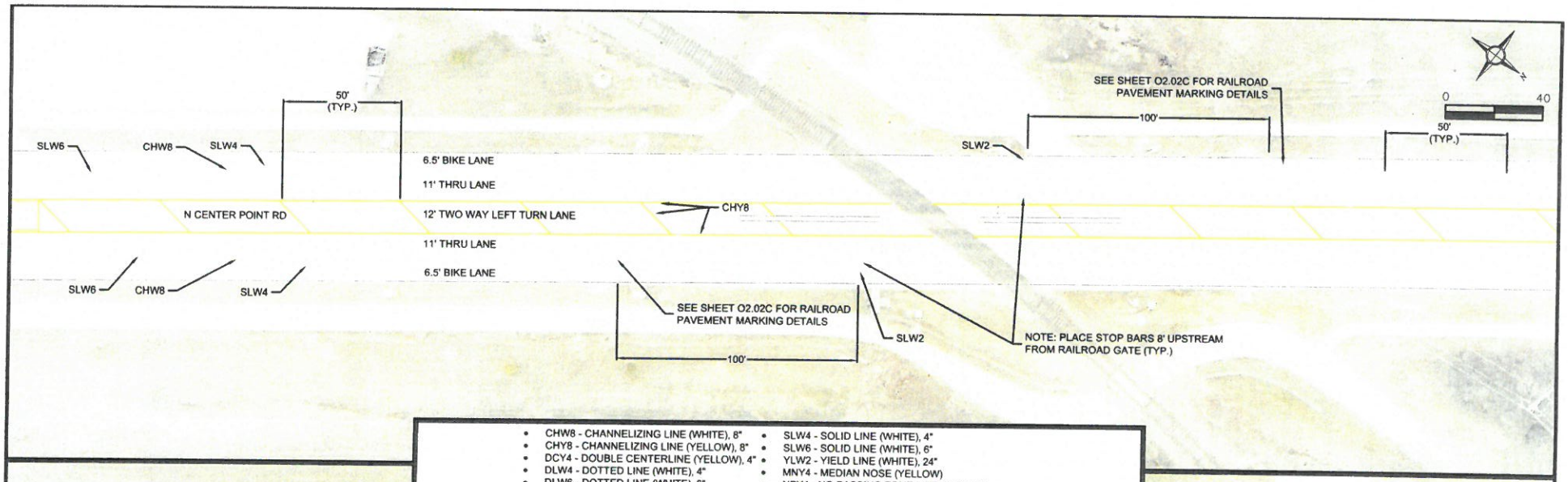
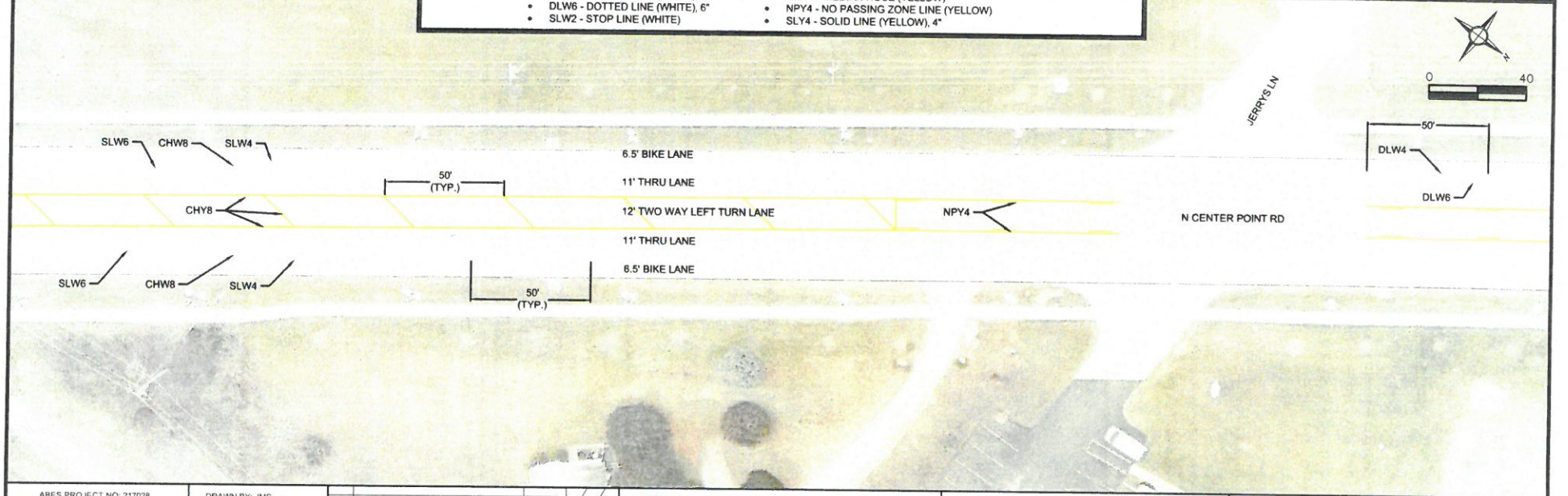


- CHW8 - CHANNELIZING LINE (WHITE), 8"
- CHY8 - CHANNELIZING LINE (YELLOW), 8"
- DCY4 - DOUBLE CENTERLINE (YELLOW), 4"
- DLW4 - DOTTED LINE (WHITE), 4"
- DLW6 - DOTTED LINE (WHITE), 6"
- SLW2 - STOP LINE (WHITE)
- SLW4 - SOLID LINE (WHITE), 4"
- SLW6 - SOLID LINE (WHITE), 6"
- YLW2 - YIELD LINE (WHITE), 24"
- MNY4 - MEDIAN NOSE (YELLOW)
- NPY4 - NO PASSING ZONE LINE (YELLOW)
- SLY4 - SOLID LINE (YELLOW), 4"



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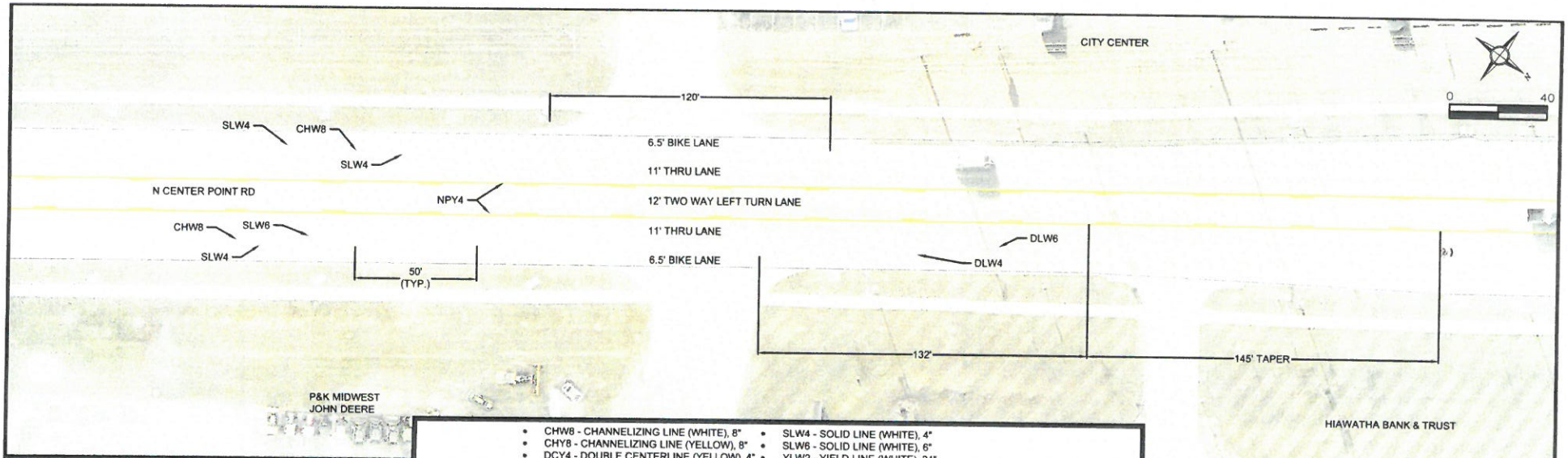

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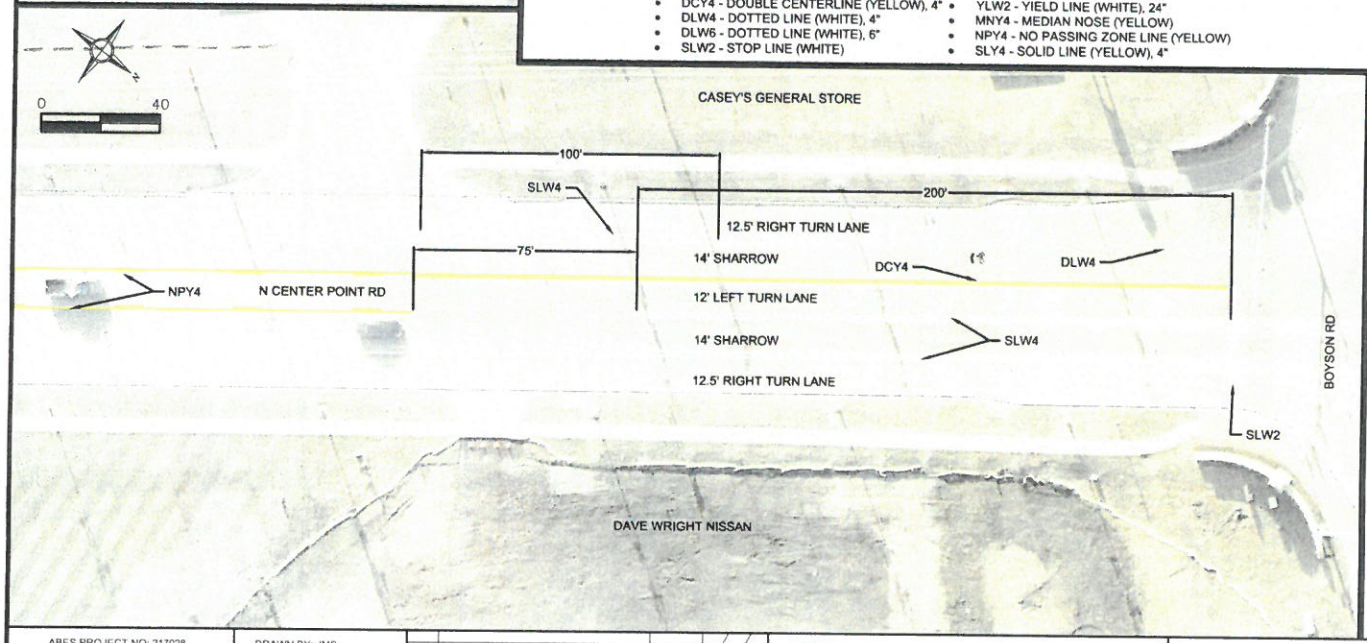

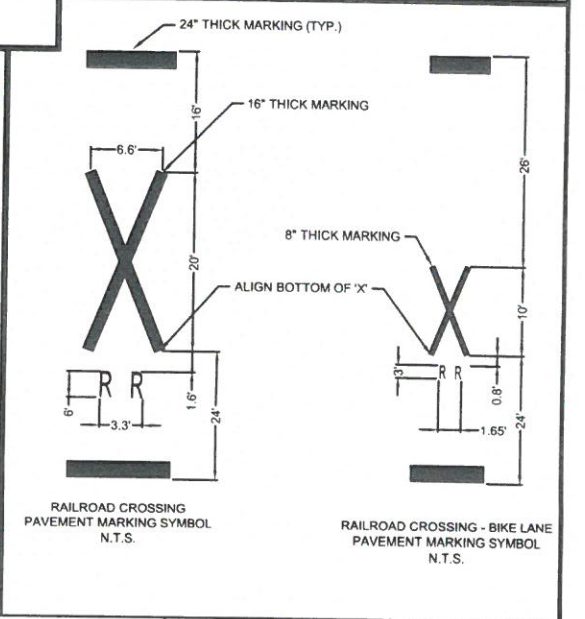

RAILROAD CROSSING
PAVEMENT MARKING SYMBOL
N.T.S.

RAILROAD CROSSING - BIKE LANE
PAVEMENT MARKING SYMBOL
N.T.S.

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PAVEMENT MARKING LINE TYPES

See PM-110

CHW8: Channelizing Line (White) @ 2.00
DLW6: Dotted Line (White) @ 0.50
YLW2: Yield Line (White) @ 1.71
CHY8: Channelizing Line (Yellow) @ 2.00
SLW2: Stop Line (White) @ 6.00
MNY4: Median Nose (Yellow) @ 1.00
DCY4: Double Centerline (Yellow) @ 2.00
SLW4: Solid Lane Line (White) @ 1.00
NPY4: No Passing Zone Line (Yellow) @ 1.25
DLW4: Dotted Line (White) @ 0.33
SLW6: Solid Lane Line (White) @
SLY4: Solid Lane Line (Yellow) @ 1.00

Location								Length by Line Type (Unfactored)																			
ROAD ID	FROM	TO	DIR. OF TRAVEL	MARKING TYPE	SIDE			CHW8	CHY8	DCY4	DLW4	DLW6	SLW2	SLW4	SLW6	YLW2	MNY4***	NPY4**	SLY4							REMARKS
					L	C	R	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	EA	EA	EA	EA	EA	EA	
N CENTER POINT RD	FISHER ST	PARSONS ST	NB	Waterborne/Solvent Paint			X																			
			BOTH	Waterborne/Solvent Paint		X			1.06																	
			BOTH	Waterborne/Solvent Paint		X											12.48									
			NB	Waterborne/Solvent Paint			X												0.83							
			SB	Waterborne/Solvent Paint	X														0.84							
			SB	Waterborne/Solvent Paint	X																	1				
			NB	Waterborne/Solvent Paint			X	1.27																		
			NB	Waterborne/Solvent Paint			X											5.79								
			SB	Waterborne/Solvent Paint	X													5.78								
			SB	Waterborne/Solvent Paint	X							0.50														
			SB	Waterborne/Solvent Paint	X						0.50															
			SB	Waterborne/Solvent Paint	X																		1	1		
			NB	Waterborne/Solvent Paint			X								3.91											
			NB	Waterborne/Solvent Paint			X							3.91												
			NB	Waterborne/Solvent Paint			X	0.38																		
			SB	Waterborne/Solvent Paint	X										5.26											
			SB	Waterborne/Solvent Paint	X									5.26												
			SB	Waterborne/Solvent Paint	X			0.42																		
			NB	Waterborne/Solvent Paint			X																1	1		
			BOTH	Waterborne/Solvent Paint		X														2						
			NB	Waterborne/Solvent Paint			X																1	1		
			NB	Waterborne/Solvent Paint			X					0.50														
			NB	Waterborne/Solvent Paint			X				0.50															
			BOTH	Waterborne/Solvent Paint		X														2						
			SB	Waterborne/Solvent Paint	X																		1	1		
			NB	Waterborne/Solvent Paint			X									0.17										
	PARSONS ST	RAILROAD	NB	Waterborne/Solvent Paint			X																1	1		
			NB	Waterborne/Solvent Paint			X								7.18											
			NB	Waterborne/Solvent Paint			X							7.20												
			NB	Waterborne/Solvent Paint			X	0.68																		
			NB	Waterborne/Solvent Paint			X			1.75																
			SB	Waterborne/Solvent Paint	X									1.00												
			SB	Waterborne/Solvent Paint	X										6.72											
			SB	Waterborne/Solvent Paint	X									6.68												
			SB	Waterborne/Solvent Paint	X			0.55																		
			SB	Waterborne/Solvent Paint		X														1						
			SB	Waterborne/Solvent Paint	X											0.17										
			SB	Waterborne/Solvent Paint		X														1						
			SB	Waterborne/Solvent Paint	X																		1	1		
			NB	Waterborne/Solvent Paint			X											1.57								
			SB	Waterborne/Solvent Paint	X													1.57								
			BOTH	Waterborne/Solvent Paint		X														2						
			BOTH	Waterborne/Solvent Paint		X			8.66																	
			NB	Waterborne/Solvent Paint			X																		2	
			NB	Waterborne/Solvent Paint			X																1	1		
			SB	Waterborne/Solvent Paint	X																		1	1		
			NB	Waterborne/Solvent Paint			X						0.21													

ABES PROJECT NO: 217028	DRAWN BY: JMS APPROVED BY: WJB DATE: 7/6/2017	NO. REVISION DESCRIPTION APPROVED DATE	Hiawatha! ANDERSON BOGERT	CENTER POINT ROAD 4-LANE TO 3-LANE CONVERSION TRAFFIC SIGNING CENTER POINT ROAD

SHEET NO. O2.02D OF O2.02E

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PAVEMENT MARKING LINE TYPES

See PM-110

CHW8: Channelizing Line (White) @ 2.00
DLW6: Dotted Line (White) @ 0.50
YLW2: Yield Line (White) @ 1.71

CHY8: Channelizing Line (Yellow) @ 2.00
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SLW4: Solid Lane Line (White) @ 1.00
NPY4: No Passing Zone Line (Yellow) @ 1.25

DLW4: Dotted Line (White) @ 0.33
SLW6: Solid Lane Line (White) @
SLY4: Solid Lane Line (Yellow) @ 1.00

Location								Length by Line Type (Unfactored)																		
ROAD ID	FROM	TO	DIR. OF TRAVEL	MARKING TYPE	SIDE L	SIDE C	SIDE R	CHW8	CHY8	DCY4	DLW4	DLW6	SLW2	SLW4	SLW6	YLW2	MNY4***	NPY4**	SLY4							REMARKS
								STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	STA	EA	EA	EA	EA	EA	EA	
N CENTER POINT RD	RAILROAD	JERRYS LN	SB	Waterborne/Solvent Paint	X									6.72												
			SB	Waterborne/Solvent Paint	X										6.68											
			SB	Waterborne/Solvent Paint	X			0.55																		
			BOTH	Waterborne/Solvent Paint		X			13.20																	
			NB	Waterborne/Solvent Paint			X								7.26											
			NB	Waterborne/Solvent Paint			X							7.21												
			NB	Waterborne/Solvent Paint			X	0.68																		
			SB	Waterborne/Solvent Paint	X								0.21													
			NB	Waterborne/Solvent Paint			X																1	1		
			SB	Waterborne/Solvent Paint	X																		1	1		
			NB	Waterborne/Solvent Paint			X											0.93								
			SB	Waterborne/Solvent Paint	X													0.93								
			SB	Waterborne/Solvent Paint	X																				2	
			BOTH	Waterborne/Solvent Paint		X														2						
			SB	Waterborne/Solvent Paint	X																		1	1		
	JERRYS LN	BOYSON RD	NB	Waterborne/Solvent Paint			X								3.48											
			NB	Waterborne/Solvent Paint			X							3.48												
			NB	Waterborne/Solvent Paint			X	0.34																		
			NB	Waterborne/Solvent Paint			X																1	1		
			NB	Waterborne/Solvent Paint			X											7.86								
			SB	Waterborne/Solvent Paint	X													7.86								
			SB	Waterborne/Solvent Paint	X							0.50														
			SB	Waterborne/Solvent Paint	X						0.50															
			SB	Waterborne/Solvent Paint	X																		1	1		
			SB	Waterborne/Solvent Paint	X										2.07											
			SB	Waterborne/Solvent Paint	X									2.07												
			SB	Waterborne/Solvent Paint	X			0.17																		
			SB	Waterborne/Solvent Paint	X							1.20														
			SB	Waterborne/Solvent Paint	X						1.20															
			BOTH	Waterborne/Solvent Paint		X														2						
			NB	Waterborne/Solvent Paint			X																1	1		
			NB	Waterborne/Solvent Paint			X					2.77														
			NB	Waterborne/Solvent Paint			X				1.32															
			SB	Waterborne/Solvent Paint	X										1.04											
			SB	Waterborne/Solvent Paint	X									1.04												
			SB	Waterborne/Solvent Paint	X			0.13																		
			SB	Waterborne/Solvent Paint	X																		1	1		
			NB	Waterborne/Solvent Paint			X															1				
			NB	Waterborne/Solvent Paint			X							4.33												
			BOTH	Waterborne/Solvent Paint		X														2						
			SB	Waterborne/Solvent Paint	X					2.75																
			SB	Waterborne/Solvent Paint	X									1.00												
			SB	Waterborne/Solvent Paint	X																2					
			NB	Waterborne/Solvent Paint			X							2.00												
			SB	Waterborne/Solvent Paint	X						1.73															
			NB	Waterborne/Solvent Paint			X						0.41													
			NB	Waterborne/Solvent Paint		X														3						
			NB	Waterborne/Solvent Paint			X														3					
			SB	Waterborne/Solvent Paint	X																	1				
				LENGTH SUBTOTALS				5.17	22.92	4.50	5.75	5.47	0.83	51.90	43.58	0.34	12.48	32.29	1.67	17	5	3	15	15	4	
				QUANTITY FACTORS				2.00	2.00	2.00	0.33	0.50	6.00	1.00	1.50	1.71	1.00	1.25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
				PAVEMENT MARKING TOTALS				**10.34**	**45.84**	**9.00**	**1.92**	**2.74**	**4.98**	**51.90**	**65.37**	**0.59**	**12.48**	**40.37**	**1.67**	**17**	**5**	**3**	**15**	**15**	**4**	
				TOTAL (STA)				**247.20**																		
				SYMBOLS TOTAL (EA)				**59**																		

ABES PROJECT NO: 217028

DRAWN BY: JMS
APPROVED BY: WJB
DATE: 7/6/2017

NO.	REVISION DESCRIPTION	APPROVED	DATE

Hiawatha! ANDERSON BOGERT

CENTER POINT ROAD
4-LANE TO 3-LANE CONVERSION

TRAFFIC SIGNING
CENTER POINT ROAD

SHEET NO. O2.02E OF O2.02E

MJP339I: \ACAD\217028\Sheets\7028_P.dwg 7-07-17 11:59:49 AM

CHANGE ORDER NO. 3

PROJECT: **EMMONS STREET/NORTH CENTER POINT ROAD/ROBINS ROAD INTERSECTION IMPROVEMENTS PHASE II-ROADWAYPACKAGE**

DATE: July 25, 2017

CONTRACTOR: Rathje Construction
Marion, Iowa

ORIGINAL CONTRACT AMOUNT: $ 2,813,734.76

ORIGINAL CONTRACT

COMPLETION DATE: November 1, 2017

The City of Hiawatha plans to proceed with the reconfiguration of North Center Point Road between Emmons Street and Boyson Road from a 4-lanes section to a 3-lane section according to the plans prepared by the Consultant dated 7/07/2017.

ITEM #1.5: **ADD NEW ITEM- Increase cost of bid item #6 Traffic Control** to add additional traffic control needed to add the painting needed to convert the area north of the railroad to Boyson Road from a 4-lane section to a 3-lane section with bike lanes. Lump sum cost increase of $1,760.00.

ITEM #1.6: **ADD NEW ITEM- Increase cost of bid item #20 Removal of Pavement Markings** to include additional removals of pavement markings north of the railroad to Boyson Road. This work is needed to provide for the conversion of the existing 4-lane section to a 3-lane section with bike lanes. Lump sum cost increase of $5,390.00.

CHANGES IN SCHEDULE: No additional time change for this change order.

CHANGE ORDER No. 3 SUMMARY:

Item No.	Description	Unit	Unit Price	Quantity	Total Amount
1.5	Increase cost of Item #6	LS	$1,760.00	1	$1,760.00
1.6	Increase cost of Item #20	LS	$4,900.00	1	$5,390.00
					$7,150.00

Total Change Order No.3 Cost: $7,150.00

Rathje Construction

By: _____

Title: _____

Date: _____

Attest

By: _____

Title: _____

Date: _____

City of Hiawatha, Iowa

By: _____

Title: _____

Date: _____

RATHJE CONSTRUCTION CO.
305 44th Street • P.O. Box 408 • Marion, IA 52302
Office (319)377-3179 • Fax (319)377-3827

July 25, 2017

To: City of Hiawatha
Hiawatha, Iowa

Project: Emmons St
Reconstruction
Hiawatha

Re: COR-7
Extra striping North of RR Tracks

Rathje #: 6778

The Price below is for extra striping North of the RR tracks on Center Point road. This price reflects the removals needed to remove old striping.

Description	Qty.	Unit	Cost	Mark Up	Extended Price
Removals of Pavement Markings	1.00	LS	$ 4,900.00	$ 490.00	$ 5,390.00
Traffic Control for Pavement Markings	1.00	LS	$ 1,600.00	$ 160.00	$ 1,760.00

COR Total $ 7,150.00

Please let me know if you have any questions.

Matt Bockenstedt

Matt Bockenstedt

DRAFT

RESOLUTION NO. 17-
City Council

RESOLUTION APPROVING CHANGE ORDER #3
2016-2017 Emmons Street/North Center Point Road/Robins Road Intersection Improvements Phase 2 Roadway Package Project
(Project #2151330)

WHEREAS, the City Council of the City of Hiawatha, Iowa, has contracted for the 2016-2017 Emmons Street/North Center Point Road/Robins Road Intersection Improvements Phase 2 Roadway Package Project with Rathje Construction Co., of Marion, Iowa, and

WHEREAS, the City Engineer has recommended Change Order #3 for the addition of lighted bollards, poured in place street light footings, and relocation of a controller cabinet to the northwest corner of the intersection, with a increase of $7,150.00, bringing the total revised contract amount to $2,826,676.26 for the 2016-2017 Emmons Street/North Center Point Road/Robins Road Intersection Improvements Phase 2 Roadway Package Project with Rathje Construction Co., of Marion, Iowa, and

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF HIAWATHA, IOWA, to approve Change Order #3 for the 2016-2017 Emmons Street/North Center Point Road/Robins Road Intersection Improvements Phase 2 Roadway Package Project with Rathje Construction Co., of Marion, Iowa, with an increase in contract amount of $7,150.00, resulting in a revised total project contract amount of $2,826,676.26.

AYES:
NAYS:
ABSENT:

PASSED AND APPROVED this 2nd day of August, 2017.

_____
Bill Bennett, Mayor

ATTEST:

_____
Kelly Kornegor, City Clerk