A d d e n d u m

Iowa Department of Transportation
Office of Contracts

Date of Letting: February 17, 2015
Date of Addendum: February 3, 2015

B.O.	Proposal ID	Proposal Work Type	County	Project Number	Addendum
306	78-0293-102	GRADING	POTTAWATTAMIE	IM-NHS-029-3(102)48--03-78 IM-NHS-029-3(103)48--03-78 IM-NHS-029-3(104)48--03-78 IM-029-3(105)48--13-78 NHS-029-3(106)48--11-78 IM-NHS-029-3(110)48--03-78 IM-NHS-029-3(122)48--03-78 IM-NHS-029-3(146)48--03-78 IM-NHS-080-1(416)3--03-78	17FEB306.A02

Make the following changes to the PROPOSAL SCHEDULE OF PRICES:

Change Proposal Line No. 0030 2102-2625000 EMBANKMENT-IN-PLACE:
From: 1,8740.000 CY
To: 2,826.000 CY

Change Proposal Line No. 0400 2416-1180024 CULVERT, CONCRETE ROADWAY PIPE, 24 IN. DIA. :
From: 865.000 LF
To: 763.000 LF

Change Proposal Line No. 0450 2416-1262024 CULVERT, CONCRETE PIPE, 2000D, TRENCHLESS, 24 IN. DIA.:
From: 67.000 LF
To: 169.000 LF

Change Proposal Line No. 0730 2503-0124218 STORM SEWER GRAVITY MAIN, TRENCHLESS, REINFORCED CONCRETE PIPE (RCP), 2000D (CLASS III), 18 IN.:
From: 123.000 LF
To: 143.000 LF

Change Proposal Line No. 0910 2510-6750600 REMOVAL OF INTAKES AND UTILITY ACCESSES:
From: 3.000 EACH
To: 4.000 EACH

Change Proposal Line No. 0980 2512-1725406 CURB AND GUTTER, P.C. CONCRETE, 4.0 FT:
From: 5,627.000 LF
To: 4,668.800 LF

Change Proposal Line No. 1160 2528-8400157 TEMPORARY FLOODLIGHTING LUMINAIRE :
From: 19.000 EACH
To: 21.000 EACH

Delete Proposal Line No. 1000 2513-0001040 CONCRETE BARRIER, BA-104 MODIFIED; 252.100 LF

Add Proposal Line No. 1511: 2513-0001030 CONCRETE BARRIER, BA-103; 252.100 LF
Estimate Reference Note: See Tab 108-18B for locations and details

Add Proposal Line No. 1512: 2599-9999018 ('SQUARE YARDS' ITEM) ARTICULATED CONCRETE BLOCK EROSION CONTROL SYSTEM; 1,030.000 SY
Estimate Reference Note: See Sheet U.76 for location and details.

Add Proposal Line No. 1513: 2601-2643413 TURF REINFORCEMENT MAT, TYPE 3 ; 60.200 SQ
Estimate Reference Note: See Sheet U. 76 for location and details

If the above changes are not made, they will be made as shown here.

Project IM-NHS-29-3(102)48--03-78

Replace Sheet B.14 with the attached B.14
Add typicals for piggy back levee extensions on the West and East side of Mosquito Creek under IA 92 to the south.

Sheet C.3 2102-2710070 EXCAVATION, CLASS 10, ROADWAY AND BORROW
Change Estimate Reference note: “Includes 576,513 CY of borrow.” To “Includes 576,352 CY of Borrow.”

Sheet C.4 2503-0200136 REMOVE STORM SEWER PIPE GREATER THAN 36 IN.
Add Estimate Reference Note: For Removal of DNR Storm Sewer Pipe in area of replacement as shown on Sheet M.15.

Sheet C.5 2512-1725406 CURB AND GUTTER, P.C. CONCRETE, 4.0 FT:
Add to Estimate Reference note: “and Tab 112-4.”

Sheet C.5 Delete bid item and Estimate reference notes for: 2513-0001040 CONCRETE BARRIER, BA-104 MODIFIED

Sheet C.7
Add Standard Road Plan BA-103 to TAB 105-4.

Replace Sheet C.14 with the attached C.14
Tab 108-18B shows BA-103 instead of BA-104 Mod with no Reinforced shoulders and Concrete Barrier as per plan instead of BA-106.

Replace Sheet C.17 with the attached C.17
Updated TAB 108-27

Replace Sheet C.23 with the attached C.23
Tab 112-4 to show correct quantities for 80123+52.00 and add a row for 80132+07.89

Replace Sheet E. 8 with the attached E.8
To show addition of Piggy Back Levee Extensions.

Replace J.2 with the attached J.2
Tab 108-26A
Add Second paragraph: "Removal of the existing I-29 embankment of the Temporary North Ring Levee must be coordinated with the IM-NHS—29-3(97)48—03-78 Contractor so that the line of protection provided by the Temporary North Ring Levee is maintained at all times. Provide a minimum of 10 weeks notice to the Resident Construction Engineer prior to removal of the embankment. "

Add "and Pier 6" to notes regarding Piggy Back Levees.
At end of Notes, Stage 5, Add " and install scour mitigation per Sheet U.76."

Replace Sheets T.6 and T.7with the attached T.6 & T.7
New Earthwork numbers for West Levee Under IA 92 RMV Spoil Bank and West Lev and East Levee for extensions of Piggy Back Levees.

Replace X.29 to X.32 with new X.29-X.32a cross sections
Reflect the new Piggy Back Levee Extensions.

Replace Sheet U.57 with attached U.57
Removing Standard Road Plan Block information.

Add New Sheet U.76 for Wabash Trace Nature Trail Foreslope Armoring

Mosquito Creek and Iowa 92
Piggy Back
Levee Details

FILE NO.	ENGLISH	DESIGN TEAM Skogerboe\Ryan\Thede	POTTAWATTAMIE COUNTY	PROJECT NUMBER IM-NHS-029-3(102)48--03-78	SHEET NUMBER B.14	X

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108-18B
10-16-12

CONCRETE BARRIER AT SIDE LOCATIONS

Refer to BA-102, BA-103, BA-104, BA-105, BA-106, BA-107, and BA-150.

(1) Lane(s) to which the installation is adjacent.
(2) Refer to the Shoulders tabulation (112-9) for quantities.
* Bid Item

Location						Side Barrier						Expansion Joints		
No.	Direction of Traffic (1)	Station to Station		Side	Offset (L2) FT	Barrier Type (BA-102, BA-103, or BA-104)	Length of Barrier* (L) LF	BA-105 Transition Section* No.	BA-107 End Section* No.	Reinforced Paved Shoulder (2) (Required?) Yes/No	Remarks	Station	Side	Remarks
		US 275												
1	EB	80137+35.76	80137+96.75	Med		BA-103	61.0			No	* Note 1			
	WB	80137+41.37	80138+07.90	Med		BA-103	66.5			No				
2	EB	80148+88.45	80149+53.89	Med		BA-103	65.1			No	* Note 1			
	WB	80148+99.57	80149+59.07	Med		BA-103	59.5			No				
		ML 29												
3	SB	6637+00.00	6637+17.00	RT			0.0	1	1	Yes				
4	SB	6637+17.00	6643+36.01	RT		Note 3	619.2			Yes				
5	SB	6654+04.14	6660+00.00	RT		Note 3	595.9			Yes	* Note 2			
		ML 29												
6	NB	6651+60.72	6661+46.00	LT		Note 3	986.4			Yes	* Note 2			
7	NB	6661+46.00	6661+62.75	LT		-	-	1	1	Yes				
		Ramp D												
8	SB	84539+82.91	84539+99.98	RT		-	-	1	1	Yes				
9	SB	84539+99.98	84544+26.51	RT		Note 3	424.6			Yes				
10	SB	84537+33.00	84537+50.00	LT		-	-	1	1	Yes				
11	SB	84537+50.00	84544+04.13	LT		Note 3	667.4			Yes	* Note 2			
		Ramp A												
12	NB	81534+75.00	81540+30.10	LT		Note 3	554.6			Yes	* Note 2			

Note 1) Includes 1 Crash Cushion Block See Sheet U.50.
Note 2) See U Sheets for location of conduit and junction boxes.
Note 3) Concrete Barrier as per plan, See U.57.

110-17
04-15-14

CLEARING AND GRUBBING

Location			Trees, Stumps, and Logs and Down Timber Material Diameters													All Other Materials		Estimated Quantities			
Station to Station or Milepost to Milepost or Description	Direction of Travel	Work and Material Type	3"-6"	>6"-9"	>9"-12"	>12"-15"	>15"-18"	>18"-24"	>24"-30"	>30"-36"	>36"-42"	>42"-48"	>48"-60"	>60"-72"	>72"	Length FT	Width FT	Units Units	Area Acres	Herbicide Application Each	Remarks
EXML29NB																					
1255+00 to 1261+50																			2.1		
1263+00 to 1265+00																			0.7		
Ramp A																			1.0		
Ramp B																			0.6		
Ramp D																			0.3		

108-27
10-16-12

TEMPORARY FLOODLIGHTING LUMINAIRES

No.	Location Station	Offset	Number Lumin.	Remarks
1A	1247+25.32		1	EXML_NB29
	1249+25.32		1	
	1251+25.24		1	
	1253+22.24		1	
	1255+22.05		1	
	1257+21.91		1	
	1259+21.91		1	
	1261+21.28		1	
	1263+17.89		1	
2B	6683+81.00		1	MLE029
	6685+81.00		1	
	6687+81.00		1	
	6689+81.00		1	
2C	270+56.00		1	EXML29N
	272+56.00		1	
	274+56.00		1	
	276+56.00		1	
3B	197+39.95		1	EXML29S
	199+47.58		1	
	201+56.18		1	
	203+66.95		1	

108-30
04-16-13

CRASH CUSHIONS

* Bid Item
(1) Lane(s) to which the installation is adjacent.
(2) Complete this section when using the Temporary Crash Cushion bid item and Earthwork is needed for Sand Barrel placement. Refer to BA-500

No.	(1) Direction of Traffic	Location Station	Side	Obstacle Width	Crash Cushion (Select One)*					Sand Barrel Details (2)					Earthwork*		Spare Parts Kit (Select One)*		Obstacle Description	Remarks
					Temporary	Temporary Redirective	Temporary Severe Use	Permanent	Permanent Severe Use	V Length	W Length	X Length	Y Length	Z Length	Excavation Class 10	Embankment in Place	Permanent	Permanent Severe Use		
				FT						FT	FT	FT	FT	FT	CY	CY	EACH	EACH		
1A	NB	1248+69.30	Out	2.25			X													1A
1B	NB	6692+89.60	Med	2.25			X													1B
1B	NB	6662+68.54	out	2.25			x													1B
2A	NB	6688+69.50	out	2.25	x					2.50	24.25	7.75	5.75	12.67						2A
2B	SB	280+64.00	Out	2.25	x					10.00	24.25	15.25	13.25	14.68						2B
2B	NB	6683+82.11	out	2.25			x													2B
2B	SB	1268+97.10	out	2.25			x													
3A	NB	6687+50.40	Med	2.25			x													3A
3A	SB	6666+03.10	Med	2.25			x													3A
3A	SB	6666+77.70	Out	2.25			x													3A
4A	EB	80177+01.50	Out	2.25	x					3.00	24.25	8.25	6.25	12.80						
4B	SB	280+39.20	Out	2.25	x					4.00	24.25	9.25	7.25	13.07						
	EB	80137+35.76	Med	2.00					x									x	Crash Cushion Block	
	WB	80149+59.07	Med	2.00					x									x	Crash Cushion Block	

108-33
04-16-13

TEMPORARY BARRIER RAIL

Refer to BA-400 and BA-401

* Not a bid item. Anchorage requirements are based on TBR locations shown in the plans. TBR alignments that vary from what is shown in the plans may result in additional TBR sections requiring anchorage.

No.	Station to Station		Length	(Select One) Steel BA-400	Concrete BA-401	Anchored* (Y/N)	Remarks
			LF				
	239+86.89	242+41.43	375.0		x	No	Stage 1A along Ramp C - No Modular Glare Screen
	1264+17.80	1248+69.30	1562.5		x	No	Stage 1A
	1254+90.30	1250+55.00	437.5		x	No	Stage 1B
	6667+30.80	6692+89.60	2562.5		x	No	Stage 1B
	6632+63.14	6647+03.42	1450.0		x	No	Stage 1B
	285+82.90	292+88.20	712.5		x	No	Stage 1B
	299+64.10	305+05.00	550.0		x	No	Stage 1B
	1248+76.50	1264+05.20	1537.5		x	No	Stage 2A
	1249+29.90	1261+76.90	1250.0		x	No	Stage 2A
	6671+25.40	6688+69.50	1750.0		x	No	Stage 2A
	80123+47.10	80160+41.90	3875.0		x	No	Stage 2A- No Modular Glare Screen
	1268+97.10	260+66.50	925.0		X	No	Stagec2B
	251+88.00	280+64.00	2887.5		x	No	Stage 2B
	257+50.70	271+05.60	1362.5		x	No	Stage 2C
	80133+40.34	80133+82.96	100.0		x	No	Stage 2C- No Modular Glare Screen
	80134+06.52	80135+64.07	200.0		x	No	Stage 2C- No Modular Glare Screen
	271+05.50	262+08.80	900.0		x	No	Stage 3A
	1267+87.40	220+18.20	4875.0		x	No	Stage 3A
	1270+86.80	6690+32.70	9162.5		x	No	Stage 3A
	6666+03.10	6669+99.50	387.5		x	No	Stage 3A
	6666+77.70	6687+50.20	2050.0		x	No	Stage 3A
	257+44.80	262+08.80	475.0		x	No	Stage 3B
	239+62.60	267+31.80	2837.5		x	No	Stage 3B
	181+60.51	215+57.70	3312.5		x	No	Stage 3B
	6666+16.70	6687+75.37	2137.5		x	No	Stage 4A
	6626+24.57	6654+26.87	2812.5		x	No	Stage 4A
	80177+01.50	80122+44.70	575.0		x	No	Stage 4A- No Modular Glare Screen
	6677+73.55	6683+17.48	550.0		x	No	Stage 4B
	280+39.20	99618+05.60	2887.5		x	No	Stage 4B
	80122+44.70	80125+01.00	262.5		x	No	Stage 4B- No Modular Glare Screen

110-9
10-18-11

CULVERT ABANDONMENT

Refer to Details 4315 and 4316

* Not a bid item

Location Station	Description	Fill Material: Flowable Mortar	Fill Material: Granular Backfill*	4" Perforated Subdrain*	Remarks
		CY	TON	LF	
6674+07	36"x196' RCP	50.5	0.3	15.0	RMV Aprons, Abandon Stage 1A
6684+78	2'x3'x262' RCB	57.6	0.2	15.0	Abandon Stage 1A
333+70	18"x66' RCP	4.1	0.1		Abandon Stage 1A
180121+83.94	24" x 170.2'	19.6	0.2	13.0	RMV Aprons, Plug and Abandon Stage 1B
88620+50	24" x 94' RCP	10.7	0.2	13.0	RMV Aprons, Plug and Abandon Stage 2B
6667+90.44	24" x 200' RCP	13.3	0.2	13.0	RMV Aprons, Plug and Abandon 116' LT Stage 3A
6674+32	24"x121' RCP	12.4	0.2	13.0	RMV Aprons, Plug and Abandon LT 109' Stage 3A
Removals:					
81538+18, 200'RT	30" x 46' RCP	-	-	-	Remove Stage 1B
81538+50	36" X 142' RCP	-	-	-	Remove RT. Apron, cap RT end with RF-21, MSE wall subdrain through cap
99616+48.67	24" x 160' CMP	-	-	-	RMV STG 3A
99622+19 26.8' RT	30" x 72" RCP	-	-	-	RMV Stage 3
6667+83.64	18" inlet Apron	-	-	-	RMV Stage 3A
6667+90.44	20 x200' RCP	-	-		RMV 84' RT (rest P&A) Stage 3A
6674+32	24" x 121' RCP	-	-	-	RMV RT 12' and Apron, P&A rest Stage 3A
88616+77	36" x 140' RCP	-	-	-	Remove 26' RT extension and reattach apron, STG 3A
1260+99.84	36" x 139' RCP	-	-	-	Remove Extension and reattach apron Stage 3A
6636+70 199' RT	24" x 55,3' RCP	-	-	-	Remove Stage 4A
6646+70	30" x 215' RCP	-	-	-	Remove Stage 4A
82537+48, 145'RT	30" x 49' RCP	-	-	-	Remove Stage 4
81538+50	36" X 142' RCP	36.4	0.3	15.0	RMV RT 64', Plug and Abandon 78' Stage 1B
	Totals=	**204.5**	**1.7**	**97.0**	

113-1
04-16-13

SIDEWALKS

See MI-220 and S Sheets

Road Identification	Station to Station		Side	A	B	S	8" HMA Trail	6" PCC Sidewalk	_" PCC Sidewalk	Detectable Warnings	Remarks
				FT	FT	%	SY	SY	SY	SF	
TRAIL_LEV_MC	9012+35.27	9019+50.48			10.00		794.7				
HLTRL_NW	200339+00.00	200339+37.87		Var.	Var.			46.9		10	
HLTRL_NE	510325+26.70	510325+81.87		Var.	Var.			67.2		35	
HLTRL	200326+65.50	200327+17.61		Var.	10.00			55.6		27	
275_TRAIL2	5080143+77.52	5080151+35.58			10.00			857.2			

110-15
04-16-13

REMOVAL OF INTAKES AND UTILITY ACCESSES

No.	Location/Description	Type	Remarks
1	6636+00, 110.5' RT	Intakes	SW-512 REMOVE Stage 4
2	80120+29.55, 0.78' LT	Intakes	US 275
3	80121+29.71, 1.45' RT	Intakes	US 275
4	333+70 Median	Intakes	EXUS275

110-16
04-16-13

REMOVAL OF LIGHT POLES AND CONCRETE FOOTINGS

Location: No.	Station	Offset: Left	Offset: Right	Removal of Light Pole	Removal of Concrete Footing for Light Pole	Remarks
3	Temp from (97)			3		
	247+05.27		209	1	1	
	245+12.59		198.9	1	1	
	243+29.42		329.9	1	1	
	241+59.23		433	1	1	
	301+17.10	48.5		1	1	
	302+80.24	48.5		1	1	
	304+80.42	48.5		1	1	
	306+85.00	48.5		1	1	
	300+76.00		52.5	1	1	
	300+07.87		93.5	1	1	
	299+03.18		238.1	1	1	
	297+99.22		384.6	1	1	
	296+95.43		531.94	1	1	
	295+89.32		682.74	1	1	
	295+06.75		844.18	1	1	

112-5
08-01-08

TABULATION OF CONCRETE MEDIANS

Begin Station	End Station	Area	Remarks
		SY	
84530+38.84	84534+73.50	225.7	Ramp B & D

112-4
10-21-14

CURBS AND RAISED ISLANDS

Refer to PV-20, PV-102, and 6000s Detail Series.

(1) Bid Item

Point No.	Station	Offset	Island Interior Area (1)	Curb and Gutter: Curb Type	Curb and Gutter: Gutter Width	Curb and Gutter: Length (1)	Remarks
			SY		FT	LF	
P1	80134+19.28	76.26	65.3	6" Sloped PCC	Var	118.5	
P2	80134+53.14	43		6" Sloped PCC	Var		
P3	80134+26.59	41.73		6" Sloped PCC	Var		
US 275	80116+29.47	6		6" Sloped PCC	4.0	1205.0	
	80123+52.00	6		6" Sloped PCC	4.0	665.4	
	80132+07.89	6		6" Sloped PCC	4.0	268.4	
	80134+20.02	3.55		6" Sloped PCC	4.0	482.0	
	80150+34.00	0		6" Sloped PCC	4.0	1960.0	
	80161+50.94	6.23		6" Sloped PCC	2.0	88.0	
HL	100326+19.29	0.7		6" Sloped PCC	2.0	50.4	
275HL Rtn	80159+49.91	46 LT		6" Sloped PCC	2.0	127.0	
	80159+53.13	52 RT		6" Sloped PCC	2.0	105.5	
	80162+13.95	34.82 RT		6" Sloped PCC	2.0	118.0	
	80162+25.26	45.72 LT		6" Sloped PCC	2.0	144.0	
Denmark Dr	180121+36.18	7.3 RT		6" Sloped PCC	Var	128.8	
	180121+36.18	7.3 LT		6" Sloped PCC	Var	153.2	

FILE NO.	ENGLISH	DESIGN TEAM Skogerboe\Ryan\Thede	POTTAWATTAMIE COUNTY	PROJECT NUMBER IM-NHS-029-3(102)48--03-78	SHEET NUMBER E.8

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STAGING NOTES

The construction limits for this project include the Mosquito Creek Levees. It is required that construction impacting the levees and Mosquito Creek will be staged to maintain protection against flooding.

Removal of the existing I-29 embankment of the Temporary North Ring Levee must be coordinated with the IM-NHS–29-3(97)48–03-78 Contractor so that the line of protection provided by the Temporary North Ring Levee is maintained at all times. Provide a minimum of 10 weeks notice to the Resident Construction Engineer prior to removal of the embankment.

The proposed piggy back levees will need to be completed prior to any grading or bridge construction within the existing Mosquito Creek and levee section. The Grading Contractor will promptly notify the Engineer 1 week prior to construction of the piggy back levees and once the piggy back levees are complete. The Department will secure approval from the City for approval of the piggy back levees. (Allow up to 2 weeks for approval)

Work in Levee Area Staging Notes:
- Piggy Back Levees at pier 3 and pier 6 of the IA 92 Bridge shall not be constructed until bridge removal is complete. And drilled shaft construction at Pier 3 and Pier 6 shall not commence prior to completion of the piggy back levees at Pier 3 and Pier 6.
- Restore levees, install piggy back levees and obtain approval of completed piggy back levees construction from City as required before bridge construction.
- Stage excavation of roadway embankment, abutment removal, and levee restoration to maintain a continuous line of protection against flooding. The abutment removal and levee restoration including fill on the wet side of levee will need to be completed prior to removal of the roadway embankment.
- Levee crossing will be allowed only at designated locations as shown in U sheets.

Stage 1A
Traffic
Maintain traffic on existing I-29 and interchange at North end Shift I-29 traffic on to new detour pavement
Maintain one lane in each direction on US 275/ IA 92 EB lanes
Construction
Pave US 275/IA 92 WB from Harry Langdon Blvd. to E. of Metro Dr. (Gap Ramp C terminal)
Continue construction of IA 92 bridge over Mosquito Creek and Railroad
Continue construction of US 275/IA 92 bridge over I-29
Continue construction of I-29 NB and SB bridges over Mosquito Creek
Build interim I-29 NB and interim Ramp C pavement from Sta. 88612+12.5 to 88626+41.1
Replace inside shoulders on I-29 SB from the split of I-80 EB/I-29 SB to entrance ramp of I-80 to I-29 SB
Replace outside shoulder on I-29 NB from STA. 6662+68.4 to 6686+13.0
Pave I-29 NB from Sta. 6653+16 to 6673+00 and I-29 SB from Sta. 6654+63 to 6660+00 as shown on J sheets.
Grade Portion of US275 Loop B not affecting traffic.
Grade foreslopes of I-29 on South end of project.

Stage 1B
Traffic
Maintain traffic on existing I-29
Maintain one lane in each direction on US 275/ IA 92 EB lanes
Close Denmark Dr.
Close Ramp C
Close Ramp A
Construction
Grade and pave Ramp C terminal
Grade I-29 interim from Sta. 88621+20 to 88627+50 (IMLE029N) and proposed I-29 NB from Sta. 6627+50.0 to 6629+66.0
Grade and Pave detour on Existing I-29 NB from Sta. 6668+81.2 to 6685+65.74 and permanent pavement from Sta. 6682+03.4 to 6687+50.0 use shoulder closure and lane closure TC-402 and TC-418.
Grade and Pave US 275/ IA 92 WB from Sta. 80119+52.22 to 80126+85.23 and Denmark Dr.
Install Tower lighting on East side of I-29 and between NB and SB I-29 as shown in the lighting plan, IM-NHS-029-3(110)48--03-78.

Stage 2A
Traffic
Maintain traffic on existing I-29
Move US 275/ IA 92 traffic on to new WB lanes and continue one lane in each direction
Open new Ramp C to traffic to EB I-80
Ramp A remains closed
Construction
Grade and Pave US 275 Ramp A terminal
Remove Existing US 275/ IA 92 EB Mosquito Creek bridge.
Build new US 275/IA 92 EB Mosquito Creek bridge.
Grade and pave I-29 NB from 6672+15 to 6687+50
Resurface connection from WB US 275/IA 92 to Ramp B and D Terminal

Stage 2B
Traffic
Maintain traffic on I-29 existing
Open up new I-29 NB lane and Ramp A to Ramp A traffic
Maintain one lane in each direction on new US 275/ IA 92 WB lanes
Maintain traffic on new Ramp C to EB I-80 only
Construction
Build new US 275/ IA 92 EB bridge over Mosquito Cr
Grade and pave US 275/ IA 92 EB
Grade and pave I-29 SB detour 351800(Sta 351800+91 to 351808+50), 351900 and on existing inside I-29 SB shoulder area from Sta. 6666+33.8 to 6685+08.0
Grade and pave I29 NB from 6627+50 to 6640+44
Grade and pave Interim I-29 NB from Sta. 88609+98.5 to 88627+50.0
Pave new shoulders along I-29 SB insde and outside as shown on J sheets

Stage 2C
Traffic
Maintain traffic on I-29 existing
Maintain Ramp A traffic per Stage 2B
Maintain one lane in each direction on new US 275/ IA 92 WB lanes

108-26A
08-01-08

STAGING NOTES

Maintain traffic on new Ramp C to EB I-80 only
Construction
Continue construction on US 275 EB bridge over Mosquito Cr.
Continue G&P US 275 EB
Grade and Pave remaining detour 351800 and overlay in same area using nighttime lane closures

Stage 3A
Traffic
Move traffic I-29 NB on to new I-29 NB
Maintain one lane in each direction on new US 275/ IA 92 WB lanes
Maintain traffic on new Ramp A and C
Construction
Remove existing I-29 NB bridge over mosquito creek (by others)
Construct remaining I-29 SB bridge over Mosquito Cr. (by others) Excluding the Ramp D connection
Remove existing US 275/IA 92 bridge over I-29
Construct new US 275 EB bridge over I-29
Continue Grade and pave of US 275/ IA 92 EB
Grade and Pave I-29 SB from station 6627+50 to 6687+50
Grade and Pave detours 352000 and 352300
Grade and Pave I-29 Interim SB from station 99603+60 to 99627+50 as shown on J sheets

Stage 3B
Traffic
Maintain traffic on new I-29 NB
Maintain traffic on existing I-29 SB
IA 92/ US 275 remains on new WB lanes
Maintain traffic on new Ramp A and C
Close I-80 WB/ I-29 SB Ramp to IA 92 Loop B Movement
Construction
Grade and Pave Interim SB I-29 from 99601+49 to 99612+17 as shown on the J sheets
Grade and Pave I-29 SB from station 6667+50 to 6687+50 as shown on the J sheets
Continue Construction on SB I-29 bridge

Stage 4A
Traffic
Maintain traffic on new I-29 NB
Move I-29 SB traffic to new SB lanes
Maintain traffic on New WB IA 92/ US 275
Maintain closure of I-80 WB/ I-29 SB Ramp to IA 92 Loop B Movement
Maintain Traffic on Loop B as shown in J sheets
Maintain bike trail under I-29
Close Ramp D
Construction
Remove existing I-29 SB bridge over Mosquito Cr.
Grade and Pave portion of bike trail under I-29 not impacting trail traffic
Build I-29 SB Ramp D Stub bridge
Grade and Pave Ramp B from station 82533+25 to 82540+27 as shown on J sheets
Grade and Pave Ramp D from station 84534+74 to 84544+29 as shown on J sheets
Grade and pave remaining SB I-29 on South End as shown in the J sheets

Stage 4B
Traffic
Maintain traffic on new I-29 NB
Maintain I-29 SB traffic in new SB lanes
Maintain traffic on New WB IA 92/ US 275 Lanes until Gap at Ramps B/D reconstructed then switch to final 4 lane configuration
Close bike trail under I-29 (Maximum closure period is 2 weeks)
Close Ramp B
Maintain Ramp D Closure
Construction
Continue construction of I-29 SB Ramp D Stub bridge
Grade and Pave bike trail under I-29
Grade and Pave remaining portions of Ramps B and D
Grade and Pave remaining IA 92/ US 275 through Ramp B/D terminal
Construct permanent Bike Trail connections and raised median on I-92/ US275
Install Tower lighting on the South side of I-29

Stage 5
Traffic
Open all traffic to I-29 and US 275/IA 92
Open Ramps B and D
Construction
Complete removals and grading not affecting traffic
Following completion of removal of existing track (by others), construct new bike path under IA 92 bridge over Mosquito Creek and install scour mitigation per Sheet U.76.

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

Refer to Standard Plan EW-101 and RL-1B.

STATION	TOTAL CUT	TOPSOIL CLASS 10 SAVED -C	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 25% SHRINK	TOTAL FILL WITH SHRINK						
US275A													
81530+14.38	1509	224			4042	5053	5053						Stage 2
81530+50.00	2202	338	1864	1864	6132	7665	7665						Stage 2
81531+00.00	2170	352	1818	1818	6367	7959	7959						Stage 2
81531+50.00	2345	383	1962	1962	6780	8475	8475						Stage 2
81532+00.00	2405	390	2015	2015	7173	8966	8966						Stage 2
81532+50.00	2260	395	1865	1865	7442	9303	9303						Stage 2
81533+00.00	1552	286	1266	1266	6202	7753	7753						Stage 2
81533+50.00	174	32	142	142	796	995	995						Stage 2
81533+60.00	428	65	363	363	1878	2348	2348						Stage 2
81534+00.00	176	20	156	156	501	626	626						Stage 2
81534+50.00	40	16	24	24	583	729	729						Stage 2
81535+00.00	6	6	0	0	586	733	733						Stage 2
81535+50.00	0	0	0	0	508	635	635						Stage 2
81536+00.00	0	0	0	0	429	536	536						Stage 2
81536+50.00	0	0	0	0	354	443	443						Stage 2
81537+00.00	0	0	0	0	284	355	355						Stage 2
81537+50.00	0	0	0	0	222	278	278						Stage 2
81538+00.00	0	0	0	0	167	209	209						Stage 2
81538+50.00	0	0	0	0	122	153	153						Stage 2
81539+00.00	0	0	0	0	88	110	110						Stage 2
81539+50.00	2	0	2	2	45	56	56						Stage 2
81540+00.00	8	0	8	8	12	15	15						Stage 2
81540+50.00	4	0	4	4	8	10	10						Stage 2
81540+72.99	0	0	0	0	0	0	0						
Subtotals:	15281	2507	11489	11489	50721	63405	63405						
US275/IA92													
80117+50.00	695	194	501	501	21	26	26						Stages 1-4
80118+00.00	664	197	467	467	28	35	35						Stages 1-4
80118+50.00	702	198	504	504	24	30	30						Stages 1-4
80119+00.00	684	195	489	489	19	24	24						Stages 1-4
80119+50.00	35	10	25	25	1	1	1						Stages 1-4
80119+52.23	913	245	668	668	14	18	18						Stages 1-4
80120+00.00	1017	263	754	754	9	11	11						Stages 1-4
80120+50.00	1058	243	815	815	6	8	8						Stages 1-4
80121+00.00	1386	398	988	988	328	410	410						Stages 1-4
80122+00.00	223	105	118	118	168	210	210						Stages 1-4
80122+50.00	84	23	61	61	7	9	9						Stages 1-4
80123+00.00	13		13	13	36	45	45						Stages 1-4
80123+50.00	6	5	1	1	134	168	168						Stages 1-4
80124+00.00	5	5			166	208	208						Stages 1-4
80124+50.00	846	78	768	768	191	239	239						Stages 1-4
80125+00.00	1313	162	1151	1151	308	385	385						Stages 1-4
80125+50.00	269	55	214	214	129	161	161						Stages 1-4
80125+66.17	406	122	284	284	358	448	448						Stages 1-4
80126+00.00	249	113	136	136	433	541	541						Stages 1-4
80126+29.88	136	78	58	58	357	446	446						Stages 1-4
80126+50.00	428	172	256	256	773	966	966						Stages 1-4
80127+00.00	533	174	359	359	299	374	374						Stages 1-4
80127+50.00	0	0	0	0	0	0	0						Stages 1-4
80131+50.00	186	186			1263	1579	1579						Stages 1-4
80132+00.00	478	384	94	94	2794	3493	3493						Stages 1-4
80132+50.00	609	457	152	152	3574	4468	4468						Stages 1-4
80133+00.00	249	191	58	58	3360	4200	4200						Stages 1-4
80133+50.00	0	0	0	0	2080	2600	2600						Stages 1-4
80134+00.00	5	5	0	0	1337	1671	1671						Stages 1-4
80134+50.00	52	52	0	0	1300	1625	1625						Stages 1-4
80135+00.00	47	47	0	0	912	1140	1140						Stages 1-4
80135+50.00	88	88	0	0	1373	1716	1716						Stages 1-4
80136+00.00	190	188	2	2	2381	2976	2976						Stages 1-4
80136+50.00	200	199	1	1	2586	3233	3233						Stages 1-4
80137+00.00	198	189	9	9	2471	3089	3089						Stages 1-4
80137+50.00	191	149	42	42	1459	1824	1824						Stages 1-4
80138+00.00	709	88	621	621	296	370	370						Stages 1-4
80138+50.00	1853	75	1778	1778	4	5	5						Stages 1-4
80139+00.00	2527	93	2434	2434	5	6	6						Stages 1-4
80139+50.00	2630	95	2535	2535	5	6	6						Stages 1-4
80140+00.00	2776	100	2676	2676	5	6	6						Stages 1-4
80140+50.00	1887	68	1819	1819	4	5	5						Stages 1-4
80141+00.00	547	113	434	434	1970	2463	2463						Stages 1-4
80148+00.00	189	186	3	3	4089	5111	5111						Stages 1-4
80148+50.00	287	264	23	23	3107	3884	3884						Stages 1-4
80149+00.00	410	280	130	130	1251	1564	1564						Stages 1-4
80149+50.00	436	207	229	229	508	635	635						Stages 1-4
80150+00.00	455	209	246	246	448	560	560						Stages 1-4
80150+50.00	465	203	262	262	388	485	485						Stages 1-4
80151+00.00	441	191	250	250	376	470	470						Stages 1-4
80151+50.00	421	187	234	234	374	468	468						Stages 1-4
80152+00.00	401	181	220	220	351	439	439						Stages 1-4
80152+50.00	345	175	170	170	339	424	424						Stages 1-4
80153+00.00	385	267	118	118	372	465	465						Stages 1-4
80153+50.00	442	356	86	86	421	526	526						Stages 1-4
80154+00.00	411	342	69	69	464	580	580						Stages 1-4
80154+50.00	388	325	63	63	544	680	680						Stages 1-4
80155+00.00	367	297	70	70	622	778	778						Stages 1-4
80155+50.00	361	277	84	84	591	739	739						Stages 1-4
80156+00.00	360	266	94	94	533	666	666						Stages 1-4
80156+50.00	344	248	96	96	545	681	681						Stages 1-4
80157+00.00	319	229	90	90	538	673	673						Stages 1-4
80157+50.00	298	210	88	88	475	594	594						Stages 1-4
80158+00.00	273	184	89	89	430	538	538						Stages 1-4
80158+50.00	236	161	75	75	422	528	528						Stages 1-4
80159+00.00	359	255	104	104	503	629	629						Stages 1-4
80159+50.00	0	0	0	0	0	0	0						
Subtotals:	35480	11302	24178	24178	50679	63355	63355						
West Levee													
Under IA 92													
NV Spoil Bar													
25+15.00	189	31	158	158	3	4	4						Stage 2
25+50.00	103	0	103	103	0	0	0						Stage 2
25+67.00	352	0	352	352	0	0	0						Stage 2
26+00.00	254	0	254	254	0	0	0						Stage 2
26+15.00	301	4	297	297	0	0	0						Stage 2
26+30.00	383	20	363	363	0	0	0						Stage 2
26+50.00	538	70	468	468	0	0	0						Stage 2
27+00.00	59	28	31	31	0	0	0						Stage 2
27+29.00	0	0	0	0	0	0	0						
Subtotals:	2179	153	2026	2026	3	4	4						
Totals	71763	20602	49876	49876	122788	153509	153509	0					

ENGLISH	IOWA DOT	Design Team Skogerboe/Ryan/Thede	Pottawattamie COUNTY	Project Number IM-NHS-029-3(102)48--03-78	Sheet Number T.6

TABULATION OF TEMPLATE QUANTITIES AND ADJUSTMENTS

Refer to Standard Plan EW-101 and RL-1B.

STATION	TOTAL CUT	TOPSOIL CLASS 10 SAVED -C	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 25% SHRINK	TOTAL FILL WITH SHRINK	Embankment In Place					
West_Lev													
24+00.01	35	35	0	0	0	0	0	0					Stage 2
24+50.00	20	20	0	0	0	0	0	45					Stage 2
24+80.00	7	7	0	0	0	0	0	28					Stage 2
25+00.00	0	0	0	0	0	0	0	15					Stage 2
25+15.00	0	0	0	0	0	0	0	9					Stage 2
25+50.00	0	0	0	0	0	0	0	34					Stage 2
25+67.00	102	6	96	96	21	26	26	45					Stage 2
26+00.00	51	8	43	43	21	26	26	167					Stage 2
26+15.00	9	9	0	0	16	20	20	91					Stage 2
26+30.00	10	10	0	0	6	8	8	88					Stage 2
26+50.00	29	28	1	1	0	0	0	117					Stage 2
27+00.00	12	12	0	0	0	0	0	156					Stage 2
27+29.00	0	0	0	0	0	0	0	6					Stage 2
Subtotals:	275	135	140	140	64	80	80	801					
East Levee													
Under IA-92	0	0	0	0	0	0	0	0					Stage 2
399+88.88	1	0	1	1	0	0	0	0					Stage 2
400+00.00	1	0	1	1	0	0	0	0					Stage 2
400+25.00	0	0	0	0	0	0	0	3					Stage 2
400+50.00	0	0	0	0	0	0	0	8					Stage 2
400+75.00	0	0	0	0	0	0	0	15					Stage 2
401+00.00	0	0	0	0	0	0	0	17					Stage 2
401+09.10	0	0	0	0	0	0	0	3					Stage 2
401+25.00	1	0	1	1	0	0	0	0					Stage 2
401+40.00	0	0	0	0	0	0	0	0					Stage 2
401+50.00	0	0	0	0	0	0	0	46					Stage 2
401+75.00	0	0	0	0	0	0	0	128					Stage 2
402+00.00	0	0	0	0	0	0	0	150					Stage 2
402+25.00	0	0	0	0	0	0	0	148					Stage 2
402+50.00	0	0	0	0	0	0	0	121					Stage 2
402+65.00	0	0	0	0	0	0	0	30					
Subtotals:	3	0	3	3	0	0	0	736					
Totals	278	135	143	143	64	80	80	1537					

STATION	TOTAL CUT	TOPSOIL CLASS 10 SAVED -C	CLASS 10 SUITABLE CUT	ADJUSTED CLASS 10 TOTAL	TOTAL FILL	CLASS 10 SUITABLE + 25% SHRINK	TOTAL FILL WITH SHRINK	Embankment In Place					

FILE NO.	ENGLISH	DESIGN TEAM Skogerboe\Ryan\Thede	POTTAWATTAMIE COUNTY	PROJECT NUMBER IM-NHS-029-3(102)48--03-78	SHEET NUMBER X.29

2:11:37 PM 1/8/2015 sryan pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7802901004\Design_LETTING_FOLDERS\102_SECTION_3\78029102X2.sht

FILE NO.	ENGLISH	DESIGN TEAM Skogerboe\Ryan\Thede	POTTAWATTAMIE COUNTY	PROJECT NUMBER IM-NHS-029-3(102)48--03-78	SHEET NUMBER X.30

2:11:38 PM 1/8/2015 sryan pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7802901004\Design_LETTING_FOLDERS\102_SECTION_3\78029102X2.sht

East Levee under IA 92

FILE NO.	ENGLISH	DESIGN TEAM Skogerboe\Ryan\Thede	POTTAWATTAMIE COUNTY	PROJECT NUMBER IM-NHS-029-3(102)48--03-78	SHEET NUMBER X.31

2:11:40 PM 1/8/2015 sryan pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7802901004\Design_LETTING_FOLDERS\102_SECTION_3\78029102X2.sht

FILE NO.	ENGLISH	DESIGN TEAM Skogerboe\Ryan\Thede	POTTAWATTAMIE COUNTY	PROJECT NUMBER IM-NHS-029-3(102)48--03-78	SHEET NUMBER X.32

2:11:42 PM 1/8/2015 sryan pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7802901004\Design_LETTING_FOLDERS\102_SECTION_3\78029102X2.sht

FILE NO.	ENGLISH	DESIGN TEAM Skogerboe\Ryan\Thede	POTTAWATTAMIE COUNTY	PROJECT NUMBER IM-NHS-029-3(102)48--03-78	SHEET NUMBER X.32a

2:11:43 PM 1/8/2015 sryan pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7802901004\Design_LETTING_FOLDERS\102_SECTION_3\78029102X2.sht

ELEVATION

5c1
BENT BAR

SECTION A-A

BARRIER FACE

Use Grade 60 epoxy-coated reinforcing bars. Provide 2 inches minimum cover. Anchor all reinforcement to prevent movement. Secure each section at the front, back, and at 3'-6" intervals using a method approved by the Engineer.

① Expansion joints are necessary only where specifically required by project plans. Conform expansion material to the shape of the barrier. No sealer is required.

② Where abutting sections are placed as separate pours, a butt joint may be used. Extend longitudinal reinforcement into the abutting section a minimum of 1'-6". Contraction joint locations shall match pavement joint locations.

③ Fillet all exposed corners with a $\frac{3}{4}$ inch dressed and beveled strip.

④ Place barrier markers at 100 foot increments in areas with non-continuous lighting, or 250 foot increments in areas with continuous lighting. Marker color to be the same as adjacent edge line.

⑤ Refer to BA-106 for details of 5g2 bars, 5g3 bars, and reinforced paved shoulder.

Possible Contract Item:
Concrete Barrier, Reinforced, As Per Plan

Possible Tabulation:
108-18B

ESTIMATED QUANTITIES FOR BARRIER Per Linear Foot	
Concrete - Cu. Yds.	0.13
Reinforcing Steel - Lbs.	27.3

REINFORCING BAR LIST Per Section (Approximately 20')			
Bar	Number of Bars	Length	Spacing
5c1	20	7'-5"	1'-0"
6d1	13	19'-4"	—

SAWED CONTRACTION JOINT

Saw cut top and front face. Saw cut back if exposed.

44" CONCRETE BARRIER FOR USE WITH REINFORCED PAVED SHOULDER

FILE NO.	ENGLISH	DESIGN TEAM Skogerboe\Ryan\Thede	POTTAWATTAMIE COUNTY	PROJECT NUMBER IM-NHS-029-3(102)48--03-78	SHEET NUMBER U.57

9:26:30 AM 2/2/2015 sryan pw:\\projectwise.dot.int.lan:PWMain\Documents\Projects\7802901004\Design_LETTING_FOLDERS\102_SECTION_3\78029102U2.SHT

DETAIL 'A'

DETAIL 'B'

SECTION A-A

SECTION B-B

DETAIL 'C'

DETAIL 'D'

DETAIL 'E'

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

LICENSED PROFESSIONAL ENGINEER CRAIG J. HUNTER 15566 IOWA

Signature: Craig J. Hunter Date: 12/30/2014

Craig J. Hunter
Printed or Typed Name

My license renewal date is December 31, 20 16

Pages or sheets covered by this seal: U.76

ESTIMATED FORESLOPE ARMORING QUANTITIES

*Bid Item

ARTICULATED CONCRETE BLOCK EROSION CONTROL SYSTEM* (SY)	POLYMER GRID (SY)	GEOTEXTILE (SY)	PCC CA BEDDING (TONS)	TURF REINFORCEMENT MAT, TYPE 3* (SQ)	EXCAVATION (CY)
1030	1030	1030	192.81	60.2	458

NOTE: AFFECTED UTILITIES SHALL HAVE A FIELD REPRESENTATIVE ON-SITE PRIOR TO EXCAVATION.

WABASH TRACE NATURE TRAIL
FORESLOPE ARMORING

FILE NO.	ENGLISH	DESIGN TEAM Skogerboe\Ryan\Thede	POTTAWATTAMIE COUNTY	PROJECT NUMBER IM-NHS-029-3(102)48--03-78	SHEET NUMBER U.76

6:57:29 PM 12/30/2014 johsmith c:\pwworking\oma\d1602536\78029102U76.sht