

PLANS OF PROPOSED IMPROVEMENT ON THE
PRIMARY ROAD SYSTEM
DISTRICT 6
MILLED RUMBLE STRIPS
Various Counties and Routes in District 6

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.14 of the Specifications.



REFER TO SHEET A.2 - A.4 FOR LOCATION MAPS

US 6	IOWA 38	IOWA 64	IOWA 136	IOWA 281
DESIGN DATA RURAL	DESIGN DATA RURAL	DESIGN DATA RURAL	DESIGN DATA RURAL	DESIGN DATA RURAL
2024 AADT 1,800 V.P.D.	2024 AADT 1,480 V.P.D.	2024 AADT 1,760 V.P.D.	2024 AADT 1,080 V.P.D.	2024 AADT 2,310 V.P.D.
20 - AADT - V.P.D.	20 - AADT - V.P.D.	20 - AADT -- V.P.D.	20 - AADT -- V.P.D.	20 - AADT -- V.P.D.
20 - DHV - V.P.H.	20 - DHV - V.P.H.	20 - DHV -- V.P.H.	20 - DHV -- V.P.H.	20 - DHV -- V.P.H.
TRUCKS 25 %	TRUCKS 6 %	TRUCKS 12 %	TRUCKS 15 %	TRUCKS 29 %
Total Design ESALs -	Total Design ESALs -	Total Design ESALs --	Total Design ESALs --	Total Design ESALs --

LICENSED PROFESSIONAL ENGINEER

Seth M. Kjormoe

24111

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 Professional Engineer under the laws of the State of Iowa.

4/29/26

Signature

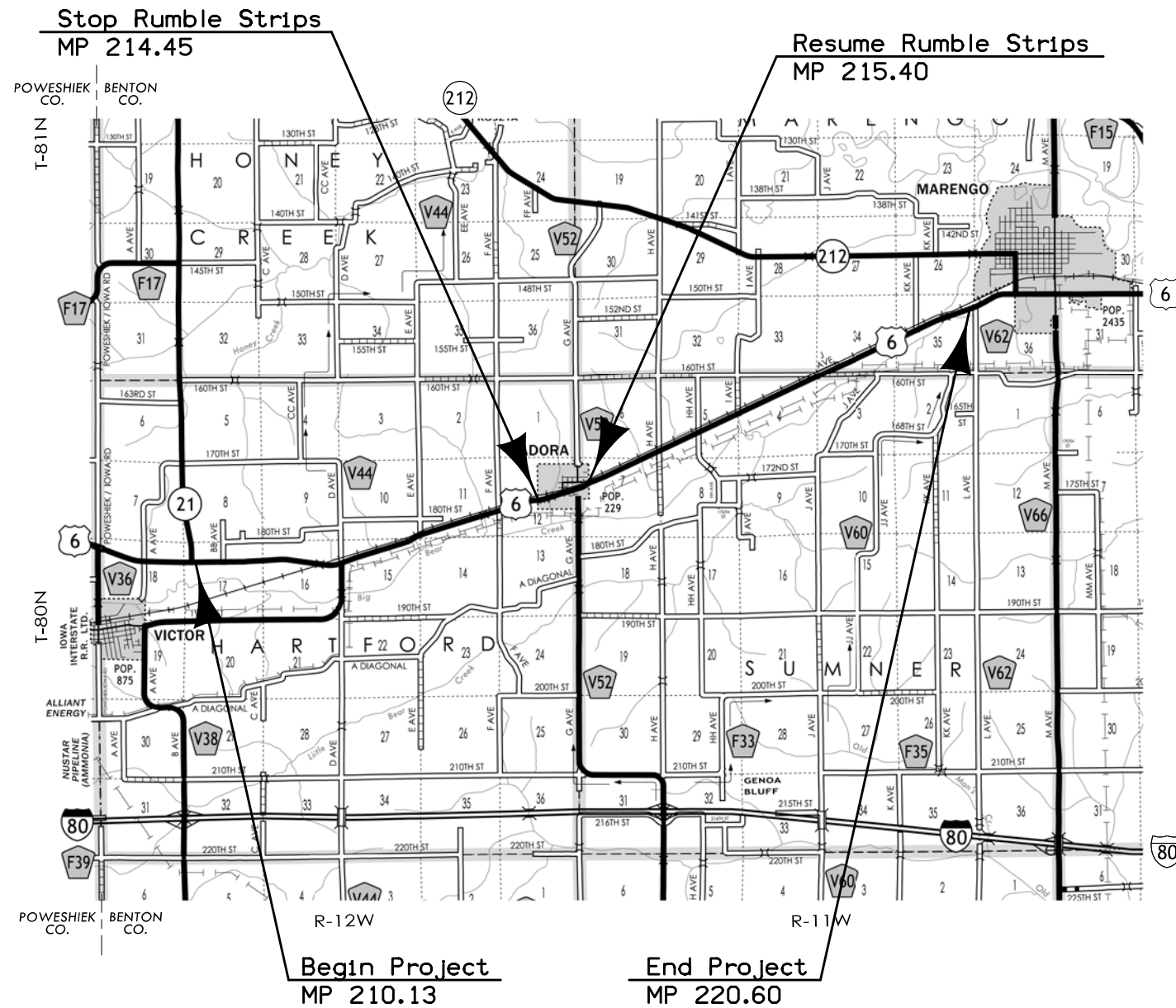
Seth M. Kjormoe

Printed or Typed Name

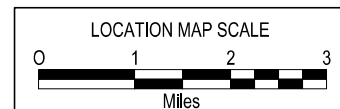
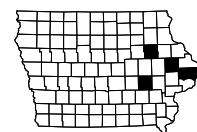
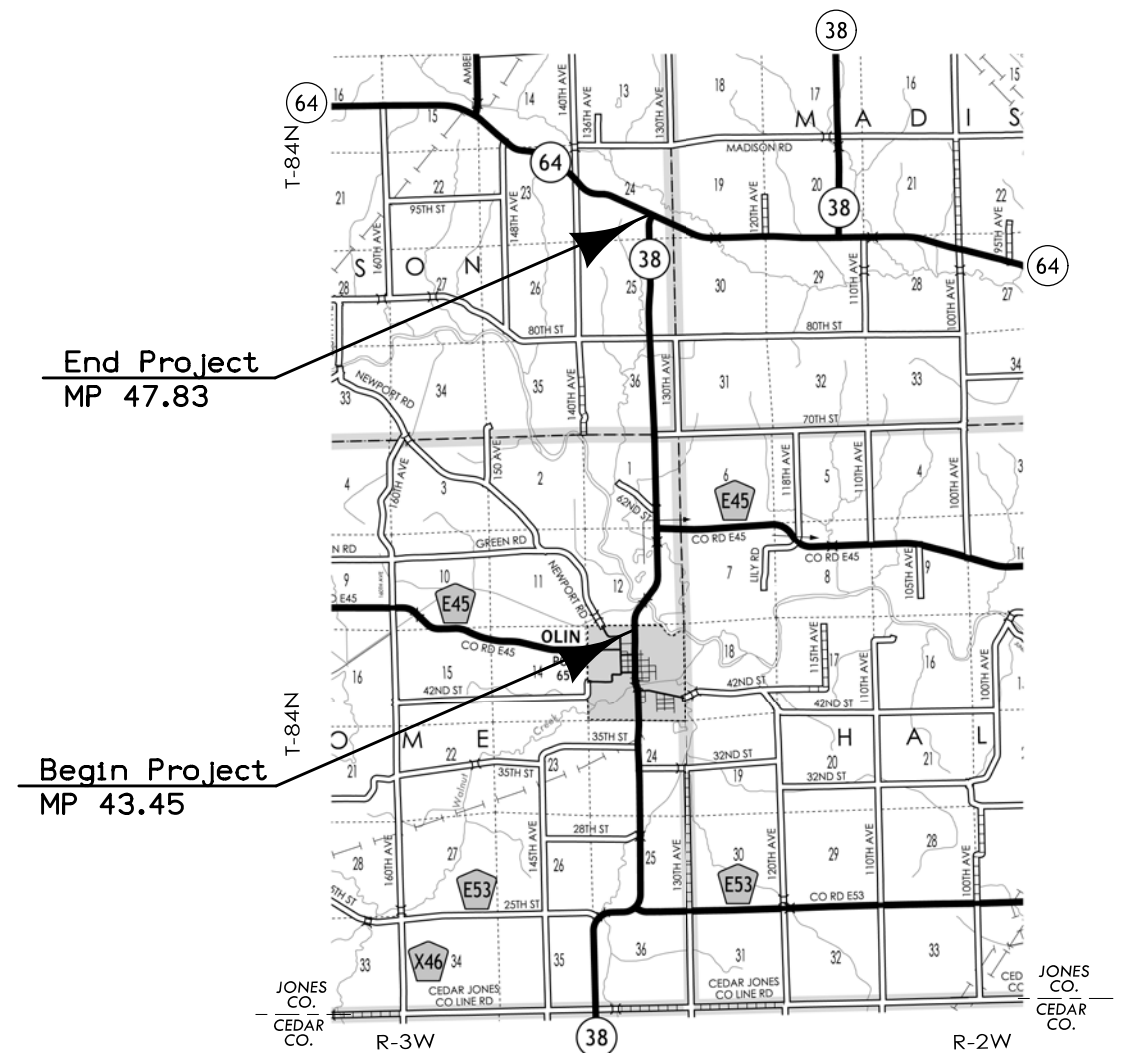
My license renewal date is December 31, 2026

Pages or sheets covered by this seal: ALL

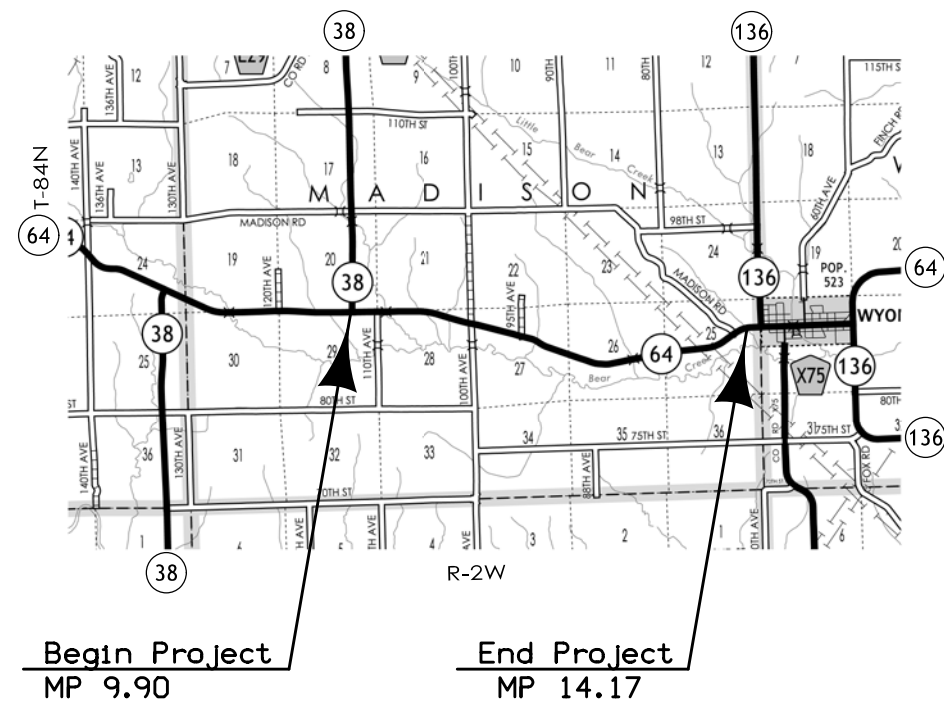
US 6 IOWA CO



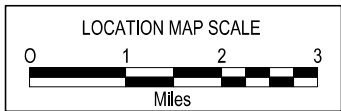
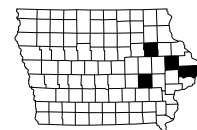
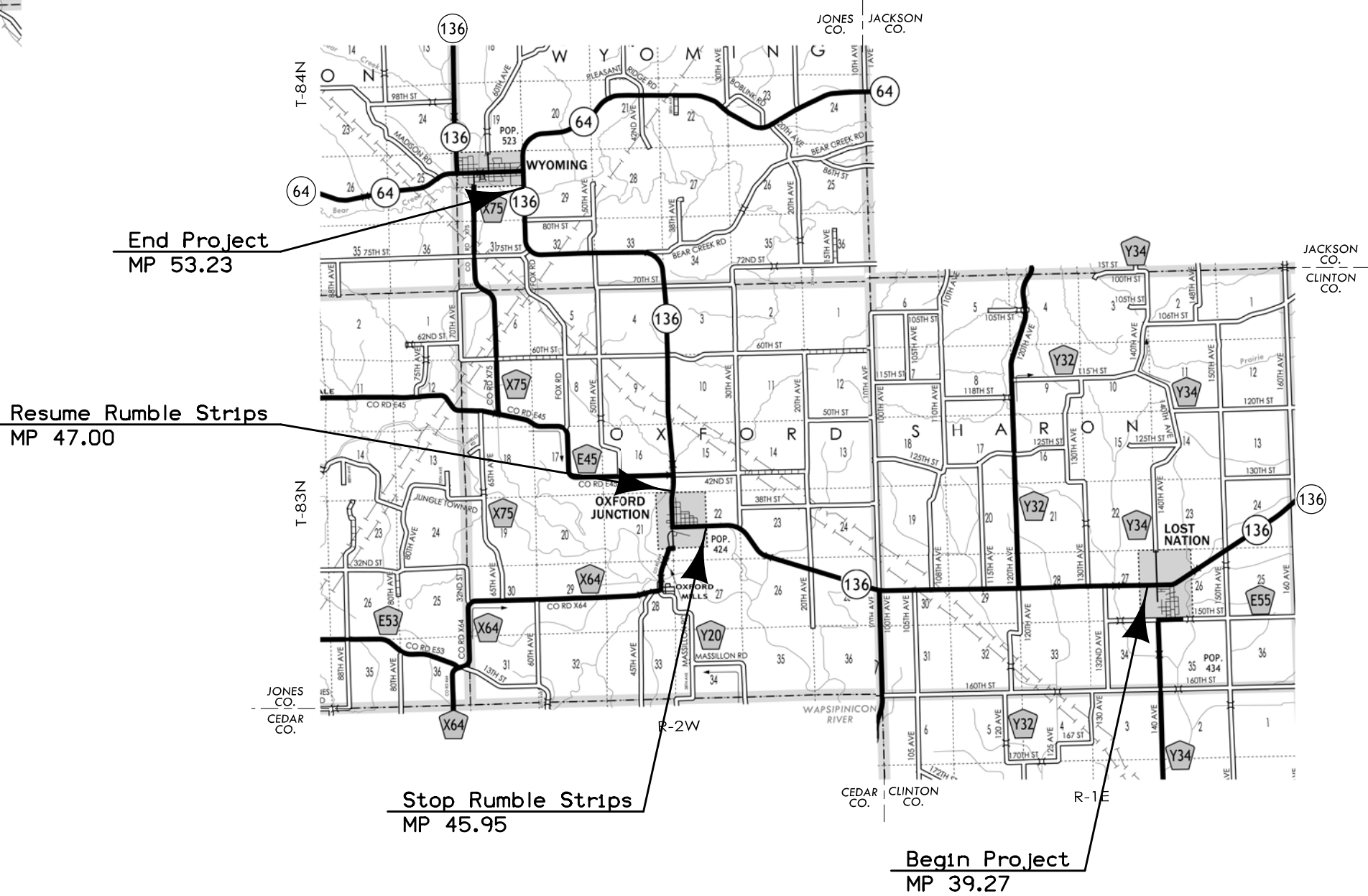
IOWA 38 JONES CO



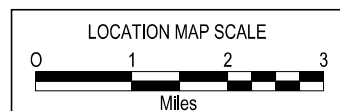
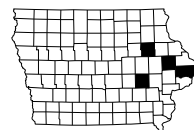
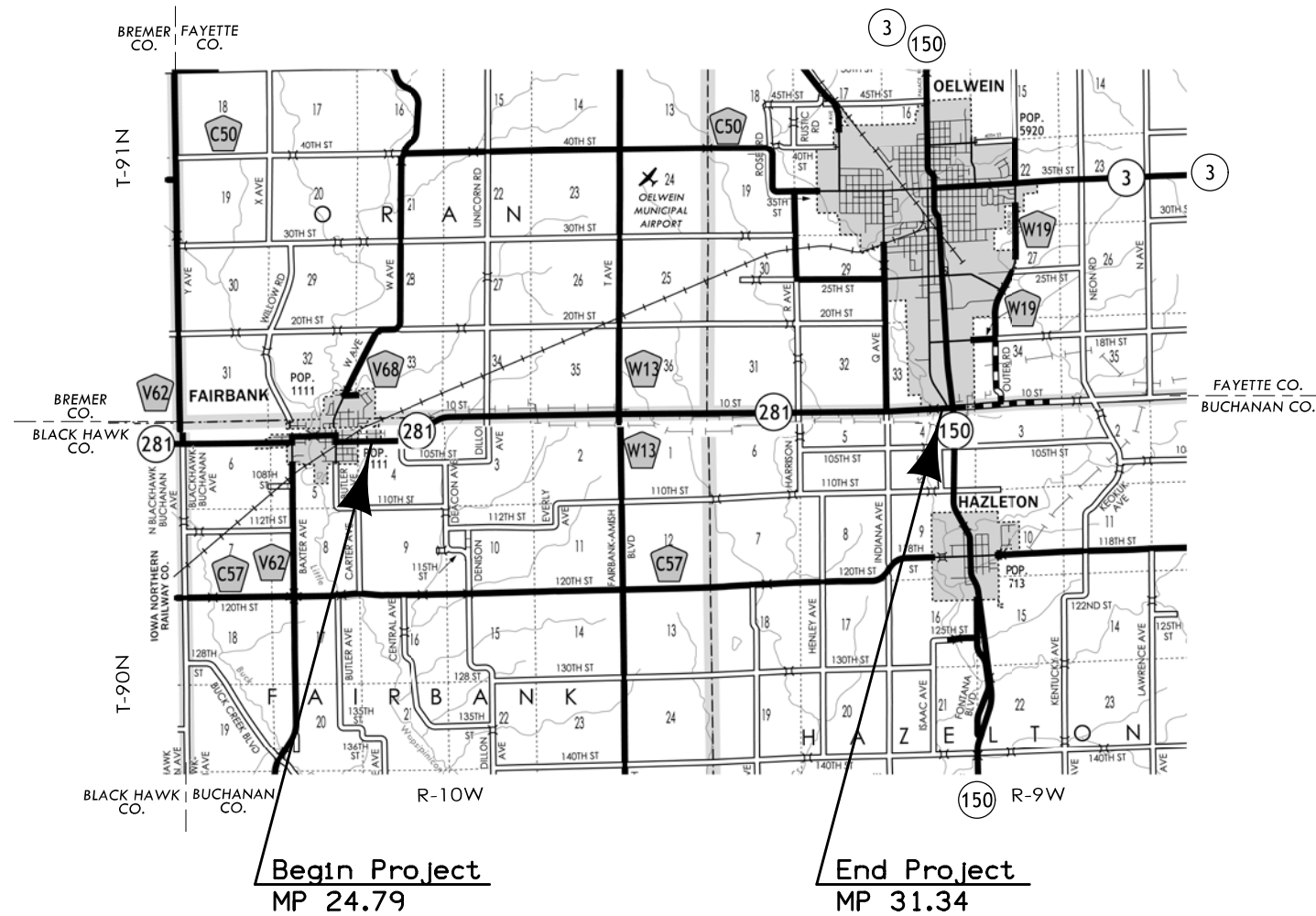
IOWA 64 JONES CO



IOWA 136 CLINTON/JONES CO



IOWA 281 BUCHANAN CO



ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Roadway Items : HSIPX-000-T(453)--3L-00

Item no.	Item Code	Item	Unit	Quantities	Estimate Reference Notes
				Estimated	
				Roadway Items	
1	2527-9263137	PAINTED SYMBOLS AND LEGENDS, WATERBORNE OR SOLVENT-BASED	EACH	2	Refer to Tab. 108-29.
2	2527-9263209	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED	STA	5,740.9	Refer to Tab. 108-22.
3	2527-9270112	GROOVES CUT FOR PAVEMENT MARKINGS	STA	4,069.71	
4	2527-9270120	GROOVES CUT FOR SYMBOLS AND LEGENDS	EACH	2	Refer to Tab. 108-29.
5	2528-8445110	TRAFFIC CONTROL	LS	1	Refer to Tab. 108-23A.
6	2533-4980005	MOBILIZATION	LS	1	
7	2548-0000100	MILLED SHOULDER RUMBLE STRIPS, HMA SURFACE	STA	3,973.8	Refer to Tab. 112-10.
8	2548-0000110	ASPHALT EMULSION FOR FOG SEAL (SHOULDER RUMBLE STRIPS)	GAL	4,305	Refer to Tab. 112-10.

PROJECT DESCRIPTION

This project is located on various routes in District 6. US 6 in Iowa County, Iowa 38 in Jones County, Iowa 64 in Jones County, Iowa 136 in Clinton and Jones Counties, and Iowa 281 in Buchanan County.

The work includes milling shoulder rumble strips and application of pavement markings.

100_01D
8/15/22

FILE NO.	ENGLISH	DESIGN TEAM Kiormoe/Holub	STATEWIDE COUNTY	PROJECT NUMBER HSIPX-000-T(453)--3L-00	SHEET NUMBER C.2	
----------	---------	----------------------------------	-------------------------	---	-------------------------	--

<div>105_04 4/21/26</div> <div>STANDARDS</div> <div>The following Standards apply to construction work on this project.</div>		
Number	Date	Title
PM-110	10-15-24	Line Types
PM-111	04-21-20	Symbols and Legends
PM-115	04-15-25	Grooving for Line Types
PM-116	04-16-24	Grooving for Symbols and Legends
PM-521	10-15-24	Two-Lane Roadway with Right Turn Lanes
PV-12	04-16-24	Milled Shoulder Rumble Strips
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-231	04-18-23	Slow Moving Vehicle Operating in the Traffic Lane
TC-232	10-21-14	Shoulder Rumble Strip Operations
TC-233	10-17-17	Pavement Marking Operations Two-Lane

Road Identification	Begin Ref. Location Sign	End Ref. Location Sign	Shoulder Pavement Type	Rumble Strip Lane	Rumble Strip Type	Fog Seal Type	L (IN)	PCC Length (STA)	HMA Length (STA)	Fog Seal* Shoulder (GAL)	Fog Seal (SY)**	Effective Shoulder Width PCC (FT)	Effective Shoulder Width HMA (FT)	Effective Shoulder Width Granular\Earth (FT)	Remarks
US 6	210.13	214.45	HMA	Right Shoulder	Milled	Asphalt Emulsion	12"		228.10	247.1	3801.7		2.0		
US 6	210.13	214.45	HMA	Left Shoulder	Milled	Asphalt Emulsion	12"		228.10	247.1	3801.7		2.0		
US 6	214.45	215.4													Omit Ladora
US 6	215.4	220.60	HMA	Right Shoulder	Milled	Asphalt Emulsion	12"		274.60	297.5	4576.7		2.0		
US 6	215.4	220.60	HMA	Left Shoulder	Milled	Asphalt Emulsion	12"		274.60	297.5	4576.7		2.0		
Iowa 38	43.45	47.83	HMA	Right Shoulder	Milled	Asphalt Emulsion	12"		231.30	250.6	3855.0		2.0		
Iowa 38	43.45	47.83	HMA	Left Shoulder	Milled	Asphalt Emulsion	12"		231.30	250.6	3855.0		2.0		
Iowa 64	9.90	14.17	HMA	Left Shoulder	Milled	Asphalt Emulsion	12"		225.50	244.3	3758.3		2.0		
Iowa 64	9.90	14.17	HMA	Right Shoulder	Milled	Asphalt Emulsion	12"		225.50	244.3	3758.3		2.0		
Iowa 136	39.27	45.95	HMA	Right Shoulder	Milled	Asphalt Emulsion	12"		352.70	382.1	5878.3		2.0		
Iowa 136	39.27	45.95	HMA	Left Shoulder	Milled	Asphalt Emulsion	12"		352.70	382.1	5878.3		2.0		
Iowa 136	45.95	47.00													Omit Oxford Junction
Iowa 136	47.00	53.23	HMA	Right Shoulder	Milled	Asphalt Emulsion	12"		328.90	356.3	5481.7		2.0		
Iowa 136	47.00	53.23	HMA	Left Shoulder	Milled	Asphalt Emulsion	12"		328.90	356.3	5481.7		2.0		
Iowa 281	24.79	31.34	HMA	Right Shoulder	Milled	Asphalt Emulsion	12"		345.80	374.6	5763.3		2.0		
Iowa 281	24.79	31.34	HMA	Left Shoulder	Milled	Asphalt Emulsion	12"		345.80	374.6	5763.3		2.0		
Total:									3973.8	4305					

PAVEMENT MARKING LINE TYPES

Line factors based on 6-inch wide continuous line.

*BCY4 - Place on the same side of the roadway to match existing markings near the project.

**NPY4 - Estimating purposes only. No Passing Zone Lines will be located in the field.

***MNY6 - Factor of 1.00 includes number of 6-inch passes to cover median nose area.

BCY4: Broken Centerline (Yellow) @ 0.17

BCY6: Broken Centerline (Yellow) @ 0.25

BLC6: Broken Line Contrast (White/Black) @ 0.50

BLW4: Broken Lane Line (White) @ 0.17

BLW6: Broken Lane Line (White) @ 0.25

CBW6: Crosswalk Bar (White) @ 10.00

CHW8: Channelizing Line (White) @ 1.33

CHW10: Channelizing Line (White) @ 1.67

CHY8: Channelizing Line (Yellow) @ 1.33

CHY10: Channelizing Line (Yellow) @ 1.67

CLW6: Crosswalk Line (White) @ 2.00

DCY4: Double Centerline (Yellow) @ 1.34

DCY6: Double Centerline (Yellow) @ 2.00

DDY4: Double Dotted Line (Yellow) @ 0.44

DDY6: Double Dotted Line (Yellow) @ 0.67

DLW4: Dotted Line (White) @ 0.22

DLW6: Dotted Line (White) @ 0.33

DLY4: Dotted Line (Yellow) @ 0.22

DLY6: Dotted Line (Yellow) @ 0.33

ELW4: Edge Line Right (White) @ 0.67

ELW6: Edge Line Right (White) @ 1.00

ELY4: Edge Line Left (Yellow) @ 0.67

ELY6: Edge Line Left (Yellow) @ 1.00

LDW8: Lane Drop (White) @ 0.33

LDW10: Lane Drop (White) @ 0.42

MNY6: Median Nose (Yellow) @ 1.00

NPY4: No Passing Zone Line (Yellow) @ 0.84

NPY6: No Passing Zone Line (Yellow) @ 1.25

RLW4: Ramp Edge Line Right (White) @ 0.67

RLW6: Ramp Edge Line Right (White) @ 1.00

RLY4: Ramp Edge Line Left (Yellow) @ 0.67

RLY6: Ramp Edge Line Left (Yellow) @ 1.00

SLW2: Stop Line (White) @ 4.00

SLW4: Solid Lane Line (White) @ 0.67

SLW6: Solid Lane Line (White) @ 1.00

SPW4: Sloped Curb 4" (White) @ 2.16

SPW6: Sloped Curb 6" (White) @ 2.28

SPY4: Sloped Curb 4" (Yellow) @ 2.16

SPY6: Sloped Curb 6" (Yellow) @ 2.28

STW6: Standard Curb 6" (Yellow) @ 2.03

STY6: Standard Curb 6" (Yellow) @ 2.03

YLW2: Yield Line (White) @ 1.15

Road ID	Begin Ref. Location Sign	End Ref. Location Sign	Lane	Marking Type	Left	Center	Right	Groove Marking Needed?	Groove Qty. (STA)	BCY6 (STA)	BCY6 Factored (STA)	DCY6 (STA)	DCY6 Factored (STA)	DLW6 (STA)	DLW6 Factored (STA)	ELW6 (STA)	ELW6 Factored (STA)	NPY6** (STA)	NPY6** Factored (STA)	SLW6 (STA)	SLW6 Factored (STA)	Remarks
US 6	210.13	214.45	Both	Waterborne/Solvent Paint	x		x	Yes	450.63					1.90	0.63	450.00	450.00					Iowa 21 to Ladora
US 6	210.13	214.45	Both	Waterborne/Solvent Paint		X		No		192.60	48.15	11.50	23.00					23.90	29.88			Iowa 21 to Ladora
US 6	214.45	215.4	Both	Waterborne/Solvent Paint		X		Yes	112.20	26.80	6.70	4.00	8.00			73.50	73.50	19.20	24.00			Ladora
US 6	215.4	220.6	Both	Waterborne/Solvent Paint	X		X	Yes	542.70							542.70	542.70					Ladora to Marengo
US 6	215.4	220.6	Both	Waterborne/Solvent Paint		X		No		221.10	55.27							53.50	66.88			Ladora to Marengo
Iowa 38	43.45	47.83	Both	Waterborne/Solvent Paint	X		X	Yes	455.30							455.30	455.30					
Iowa 38	43.45	47.83	Both	Waterborne/Solvent Paint		X		No		102.80	25.70	61.20	122.40					66.60	83.25			
Iowa 64	9.90	14.17	Both	Waterborne/Solvent Paint	X		X	Yes	445.66					2.00	0.66	445.00	445.00					
Iowa 64	9.90	14.17	Both	Waterborne/Solvent Paint		X		No		97.20	24.30	61.80	123.60					66.50	83.13			
Iowa 136	39.27	45.95	Both	Waterborne/Solvent Paint	X		X	Yes	692.56					1.10	0.36	692.20	692.20					Lost Nation to Oxford Junction
Iowa 136	39.27	45.95	Both	Waterborne/Solvent Paint		X		No		127.10	31.77	64.30	128.60					161.10	201.38			Lost Nation to Oxford Junction
Iowa 136	45.95	47.00	Both	Waterborne/Solvent Paint	X	X	X	Yes	46.68	55.50	13.88					32.80	32.80					Oxford Junction
Iowa 136	47.00	53.23	Both	Waterborne/Solvent Paint	X		X	Yes	644.79					4.50	1.49	643.30	643.30					Oxford Junction to Wyoming
Iowa 136	47.00	53.23	Both	Waterborne/Solvent Paint		X		No		82.90	20.73	80.20	160.40					165.40	206.75			Oxford Junction to Wyoming
Iowa 281	24.79	31.34	Both	Waterborne/Solvent Paint	X		X	Yes	679.19					1.50	0.49	676.40	676.40			2.30	2.30	
Iowa 281	24.79	31.34	Both	Waterborne/Solvent Paint		X		No		210.00	52.50	20.50	41.00					114.00	142.50			
Total:									4069.71		279		607		3.63		4011.2		837.77		2.3	

GRAND TOTAL PAVEMENT MARKINGS = 5740.90 STA.

GRAND TOTAL GROOVES CUT = 4069.71 STA.

<div>PAVEMENT MARKING SYMBOLS AND LEGENDS</div> <div>Refer to PM-111</div>						108_29 4/15/25
Roadway Identification	Station	Side	Pavement Symbol	Quantity (EA)	Groove Marking Needed?	Remarks
Iowa 281		Left	RTAW	2	Yes	at MP 25.2

262_06
9/28/22

UTILITIES (NOT A POINT 25 PROJECT)

This is NOT a POINT 25 project and is not subject to the provisions of IAC 761-115.25.

TRAFFIC CONTROL PLAN

108_23A
8/15/22

1. Through traffic will be maintained on the project at all times.

COORDINATED OPERATIONS

Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.

Project	Type of Work
MB-038-6(502)43--77-53	Deck Joint Repair
BRF-038-3(62)--38-53	Bridge Deck Overlay
BRF-038-3(63)--38-53	RCB Culvert Replacement-Triple Box
MP-064-6(711)0--76-53	HMA Joint & Crack Sealing
STP-136-2(046)--2C-53	HMA Resurfacing
HSIPX-136-2(047)--3L-53	HMA Paved Shoulder
MB-000-6(512)0--77-00	HMA Resurfacing-Approach Leveling
HSIPX-000-T(459)--3L-00	Pavement Markings

