Rev. 07/23

Application for TRAFFIC CONTROL DEVICE
TSIP FUNDS

GENERAL INFORMATION **DATE:** August 7, 2026

Location / Title of Project 33rd Avenue & 5th Street Crosswalk Improvement

Applicant City of Atkins, Iowa

Contact Person Scott Flory Title City Administrator

Complete Mailing Address 480 3rd Avenue

Atkins, IA 52206

Phone (319) 283-8206 E-Mail sflory@cityofatkins.org
(Area Code)

If more than one highway authority is involved in this project, please indicate and fill in the information below (use additional sheets if necessary).

Co-Applicant(s) _____

Contact Person _____ Title _____

Complete Mailing Address _____

_____

Phone _____ E-Mail _____
(Area Code)

PLEASE COMPLETE THE FOLLOWING PROJECT INFORMATION:

Funding Amount

Total Safety Cost	$	40,658
Total Project Cost	$	69,725
Safety Funds Requested	**$**	**40,658**

Additional Project Safety Documentation (when available):

☐ Project information sheet(s) or "Risk Score">50% from County/City's Local Road Safety Plan
☐ FHWA SS4A Safety Action Plan or similar comprehensive transportation safety plan
☐ Iowa DOT TEAP Study or similar analysis and concept
☐ Project intersection or segment with High or Medium PCR Level (PCR-All or PCR-Severe) from the Iowa DOT Potential for Crash Reduction (PCR) web-based map tool https://pcr.iowadot.gov/

Potential for Crash Reduction (PCR) Information					
Intersection ID (1234567890) or Segment ID (1234)	Intersection or Segment	PCR Level High	PCR Level Medium	PCR-All value	PCR-Severe value
		☐	☐		
		☐	☐		

Rev. 07/23

APPLICATION CERTIFICATION FOR PUBLIC AGENCY

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating public agency(ies). I understand the attached resolution(s), where applicable, binds the participating public agency(ies) to assume responsibility for any additional funds, if required, to complete the project. In addition, the participating public agency(ies) agrees to maintain any new or improved public streets or roadways for a minimum of five years.

I understand that, although this information is sufficient to secure a commitment of funds, a firm contract between the applicant and the Department of Transportation is required prior to the authorization of funds.

Representing the City of Atkins

Signed: Brian Cruise 8-11-26

Signature Date Signed

Brian Cruise, Mayor

Printed Name

Attest: Shelly Annis 8-11-26

Signature Date Signed

Shelly Annis, City Clerk

Printed Name

RESOLUTION NO. 2026-08-01

A RESOLUTION APPROVING OFFICIAL ENDORSEMENT OF FUNDING APPLICATION TO IOWA DEPARTMENT OF TRANSPORTATION FOR THE TRAFFIC SAFETY IMPROVEMENT PROGRAM FOR THE 33rd AVENUE & 5TH STREET CROSSWALK PROJECT

WHEREAS, the Iowa Department of Transportation is accepting applications for the Traffic Safety Improvement Program (TSIP) on August 15, 2026; and,

WHEREAS, the TSIP allows cities and counties throughout Iowa to apply for funding for traffic safety improvements on public roads under local jurisdiction; and

WHEREAS, the City and its consulting civil engineer have determined that the installation of Rectangular Rapid Flashing Beacon(s) on 33rd Avenue & 5th Street will reduce the risk of an accident or personal injury to the public by improving safety through increasing awareness and visibility of pedestrians crossing 33rd Avenue & 5th Street/Pleasant Hill Drive, a high traffic volume (farm-to-market) route through Atkins; and

WHEREAS, the City had previously applied for and been awarded TSIP funding for the Project, but due to the very substantial impact and recovery efforts from the August Derecho of 2020 exhausting the City's limited resources, the City was unable to advance the Project at that time; and

WHEREAS, Rectangular Rapid Flashing Beacons are recognized as Traffic Control Devices in the Manual on Uniform Traffic Control devices; and

WHEREAS, the City of Atkins desires to apply for funding through the Iowa Department of Transportations Traffic Safety Improvement Program.

THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ATKINS, IOWA that the that the City Council is supportive of the Traffic Safety Improvement Program Funding Application for the Pedestrian Crossing Project at 33rd Avenue & 5th Street/Pleasant Hill Drive and hereby authorizes the submittal of the attached application for Traffic Safety Improvement Program Funding for the traffic control device and related improvements.

PASSED and APPROVED this 11th day of August, 2026.

Brian Cruise, Mayor

Attest:

Shelley Annis, City Clerk

Existing Conditions

33rd Avenue is a two-lane, main access road to the City of Atkins from U.S. Highway 30. Entering the city from the south, 33rd Avenue changes from a 55 MPH posted speed limit to 45 MPH and then 25 MPH south of the study intersection. From the north, 33rd Avenue has a 25 MPH speed limit through a 350 foot corner and maintains this speed limit past the study intersection. There is currently no street parking allowed along 33rd Avenue near the study intersection nor are there existing sidewalks for pedestrian use. 33rd Avenue has a rural cross section and is the first intersection when entering Atkins from US Highway 30, so drivers may be speeding and not expecting pedestrians. Access control along 33rd Ave is good for traffic flow, but also conducive for higher speeds that create a potential for higher speed crashes with pedestrians and vulnerable road users.

5th Street/Pleasant Hill Drive is a residential street running perpendicular to 33rd Avenue. 5th St to the west of 33rd Avenue is exclusively single family residential. Pleasant Hill Dr to the east of 33rd Ave is a mixture of single family and multiple family. The intersection is stop controlled on the minor legs.

Pleasant Hill Drive has sidewalk leading east from the intersection for roughly 150 feet, but the intersection does not have any crosswalk markings or signage to warn drivers for potential pedestrians. 5th Street and 33rd Avenue do not have sidewalk. Pedestrians and vulnerable road users are forced to share the traveled way with vehicles.

Traffic Data

Turning movement counts were collected by Snyder & Associates from July 21 to July 23, 2020. The collected counts were adjusted using Iowa DOT seasonal adjustment factors to generate average daily traffic counts. The July seasonal adjustment for secondary roads that year was 0.963. Due to the ongoing COVID-19 pandemic, the turning movement counts were further adjusted using Iowa DOT traffic COVID count factors to determine appropriate traffic volumes at the study intersection.

Collected turning movement counts and adjusted turning movement counts are attached. The existing traffic volumes, based on collected data and adjustment factors, for the intersecting roadways are shown in Table 1.

Table 1. Traffic Volumes

Roadway	Approach	2020 AADT (not adjusted for COVID-19)	2020 AADT (adjusted for COVID-19)
Pleasant Hill Dr	East	1,172	1,301
5th St	West	341	379
33rd Ave	South	2,577	2,860
33rd Ave	North	2,320	2,575

In addition to motorist turning movements, this intersection has a number of pedestrians steadily using the intersection throughout the day. The collected turning movement counts also captured pedestrians crossing 33rd Avenue, with 94 pedestrians observed crossing throughout the day on the 22nd, and 9 pedestrians crossing between 1:00 pm and 2:00 pm alone.

Crash History

Relevant crash data was accessed via the Iowa Crash Analysis Tool, an online application made available by the Iowa DOT. Upon review, there two recorded collisions between 2021 – July 2026 at this intersection. Both were property damage only.

Pedestrian Accommodations

The Federal Highway Administration (FHWA) advises a number of countermeasures to increase the visibility and safety pedestrians at intersections. These countermeasures are intersection specific and rely on the AADT and 85th percentile speed of motorists to determine applicable roadway treatments[1].

[1] Federal Highway Administration, *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.* 2018.

When applied to the conditions for the study intersection, the following is recommended by the FHWA for consideration:

1. High-visibility crosswalk markings;
2. Parking restrictions on crosswalk approach;
3. Curb extensions;
4. Adequate nighttime lighting levels;
5. Crossing warning signs (W11 -2);
6. Pedestrian Refuge island;
7. Rectangular Rapid-Flashing Beacon (RRFB); or
8. Pedestrian Hybrid Beacon (PHB).



Figure 2: RRFB Example

For this intersection parking restrictions, curb extension, and pedestrian refugee islands are not appropriate. Parking is already prohibited on the intersection legs and with only two lanes of travel to traverse (one lane in either direction) pedestrian travel distance is low enough that the reduced travel distance reductions that curb extensions and pedestrian refuge islands provide are unnecessary. The study intersection also already has a streetlight on the southwest corner that provides adequate nighttime illumination.

To warrant the installation of a PHB, thresholds of vehicle travel speed, vehicle volume, crosswalk length, and pedestrian volume should be met[2]. The study intersection does not surpass these thresholds and the use of a RRFB should be considered instead. RRFBs are particularly appropriate for crosswalks on multilane roads with speed limits below 40 mph. Motorist yield rates vary but have been as high as 98 percent at marked crosswalks[3] following the installation of an RRFB.

Proposed Improvements

The City of Atkins is applying for Traffic Safety Improvement Program funds to install a Rectangular Rapid-Flashing Beacon, improved high-visibility crosswalk markings, and pedestrian crossing warning signs at the intersection of 33rd Avenue and 5th St/Pleasant Hill Road. In doing so, Atkins will minimize current and future concerns of pedestrian crossing conflicts, increase the conspicuity and visibility of pedestrian users, improve driver yielding patterns, and counter excessive motorist speed at the study intersection. The intersection seems well suited to the installation of an RRFB.

Vehicles appear to exceed the posted speed limit at this intersection, especially the northbound traffic coming from US Highway 30. The speed limit for northbound traffic on 33rd Ave changes from 45 MPH to 25 MPH approximately 575 ft south of 5th St and there is another 25 MHP sign approximately 85 ft south of 5th St. Proposed improvements include moving the second 25 MPH sign to 150 ft south of the advanced crosswalk warning sign and add a speed feedback sign to encourage proper speeds and enhance pedestrian safety at the intersection even further.

Project Execution

The City was awarded TSIP funding in 2020, but the derecho natural disaster in August of that year, the ongoing COVID19 pandemic, and other local challenges prevented the city from executing the project. The recovery of the events and changes at the city level now position Atkins to complete this project timely and effectively if this grant is funded.

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[2] U.S. Department of Transportation Federal Highway Administration. *Manual on Uniform Traffic Control Devices for Streets and Highways, 2009 Edition.*

[3] Federal Highway Administration, *Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations.* 2018.

OPINION OF PROBABLE PROJECT COSTS

C - EOPC

SNYDER & ASSOCIATES

33rd Ave and 5th St/Pleasant Hill Rd
Atkins, Iowa
126.0021.08
Prepared: August 7, 2026

ITEM #	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	EXTENDED PRICE	Estimated Materials	Estimated Labor
1	RRFB Assembly (1)	2	EA	$ 15,225.00	$ 30,450.00	$ 20,300.00	$ 10,150.00
2	Painted Pavement Markings, Durable	1.25	STA	$ 800.00	$ 1,000.00	$ 666.67	$ 333.33
3	Grinding for Pavement Markings	1.25	STA	$ 2,000.00	$ 2,500.00	$ 1,666.67	$ 833.33
4	Advanced Warning Signs / Posts	5	EA	$ 700.00	$ 3,500.00	$ 2,333.33	$ 1,166.67
5	Sidewalk, PCC, 4 inch	117	SY	$ 70.00	$ 8,190.00	$ 2,500.00	$ 5,690.00
6	Detectable Warning	36	SF	$ 65.00	$ 2,340.00	$ 1,560.00	$ 780.00
7	Relocate Speed Limit Sign and Install Speed Feedback Sign (2)	1	EA	$ 5,000.00	$ 5,000.00	$ 3,500.00	$ 1,500.00
8	Pipe Culvert Extension (3)	20	LF	$ 40.00	$ 800.00		
9	Excavation, Class 10 (3)	50	CY	$ 40.00	$ 2,000.00		
	Subtotal				$ 55,780.00	$ 32,526.67	$ 20,453.33
				25% contingency	$ 13,945.00	$ 8,131.67	$ 5,113.33
				TOTAL	$ 69,725.00	$ 40,658.34	$ 25,566.66

Notes

(1) RRFB Assembly includes post, signs, solar power unit, footing, and RRFB unit.
(2) Speed Feedback Sign to be solar power unit.
(3) These items are not eligible for TSIP funding.

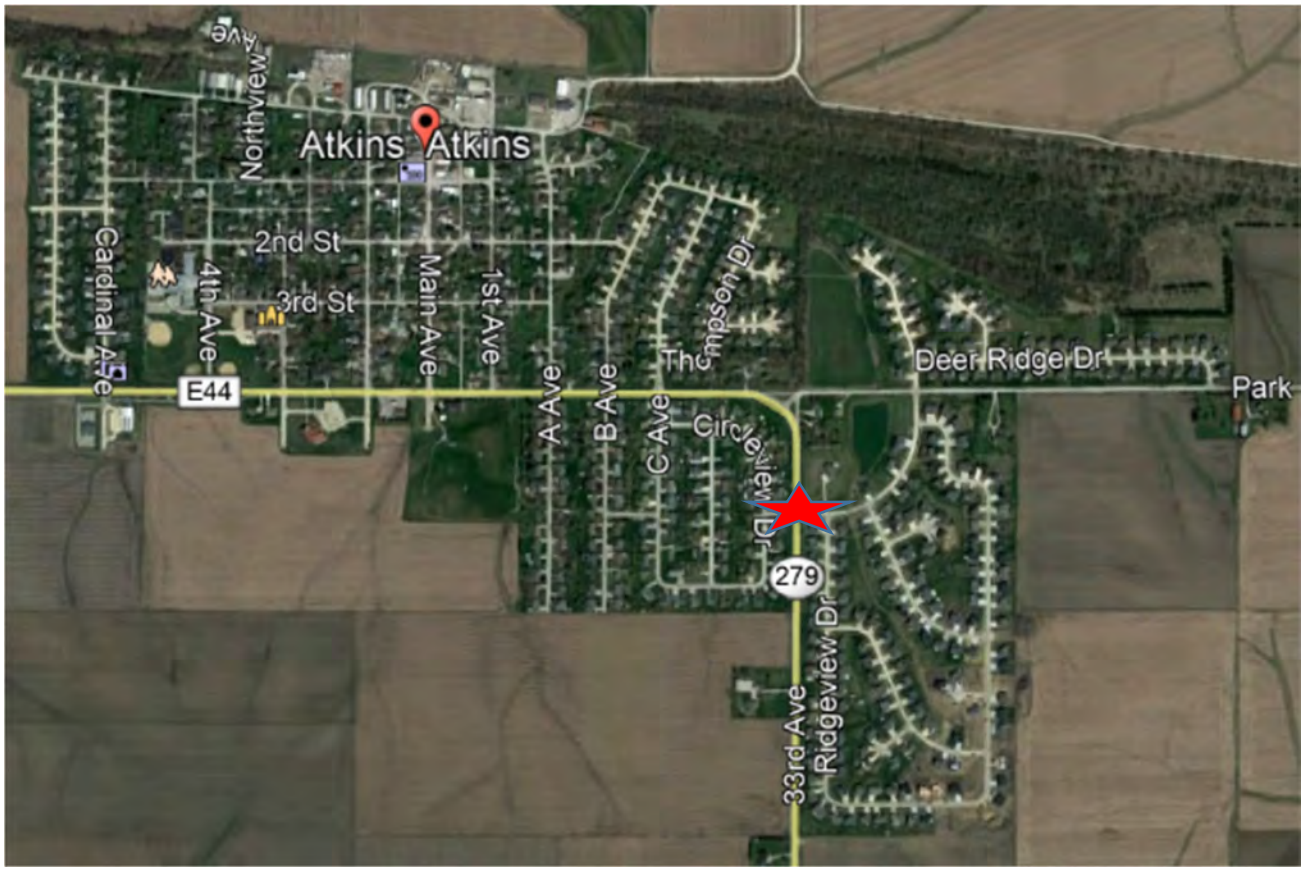
D – Timeline

Project Timeline

The following includes the anticipated project schedule

Task	Completion Date
Traffic Safety Improvement Program Funding Application Submission	August 15, 2026
Design/Plan Development	Winter 2026
Contractor Selection	Summer 2027
Construction	Summer/Fall 2027

E - Project Location Map



Intersection Photos

Iowa 279/33rd Avenue & 5th Street/Pleasant Hill Drive



Aerial View



Facing North

F - Photos

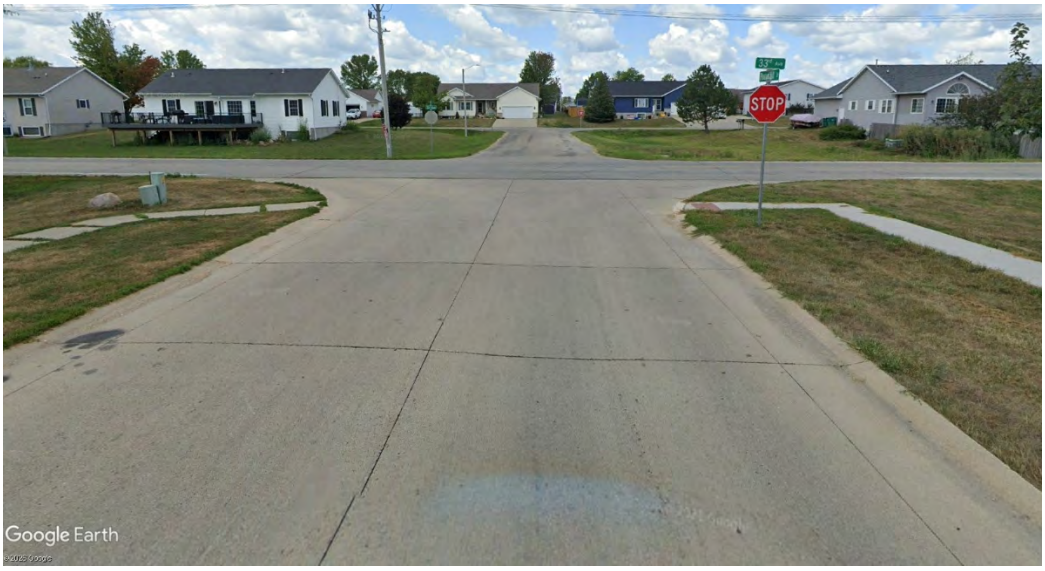


Facing South



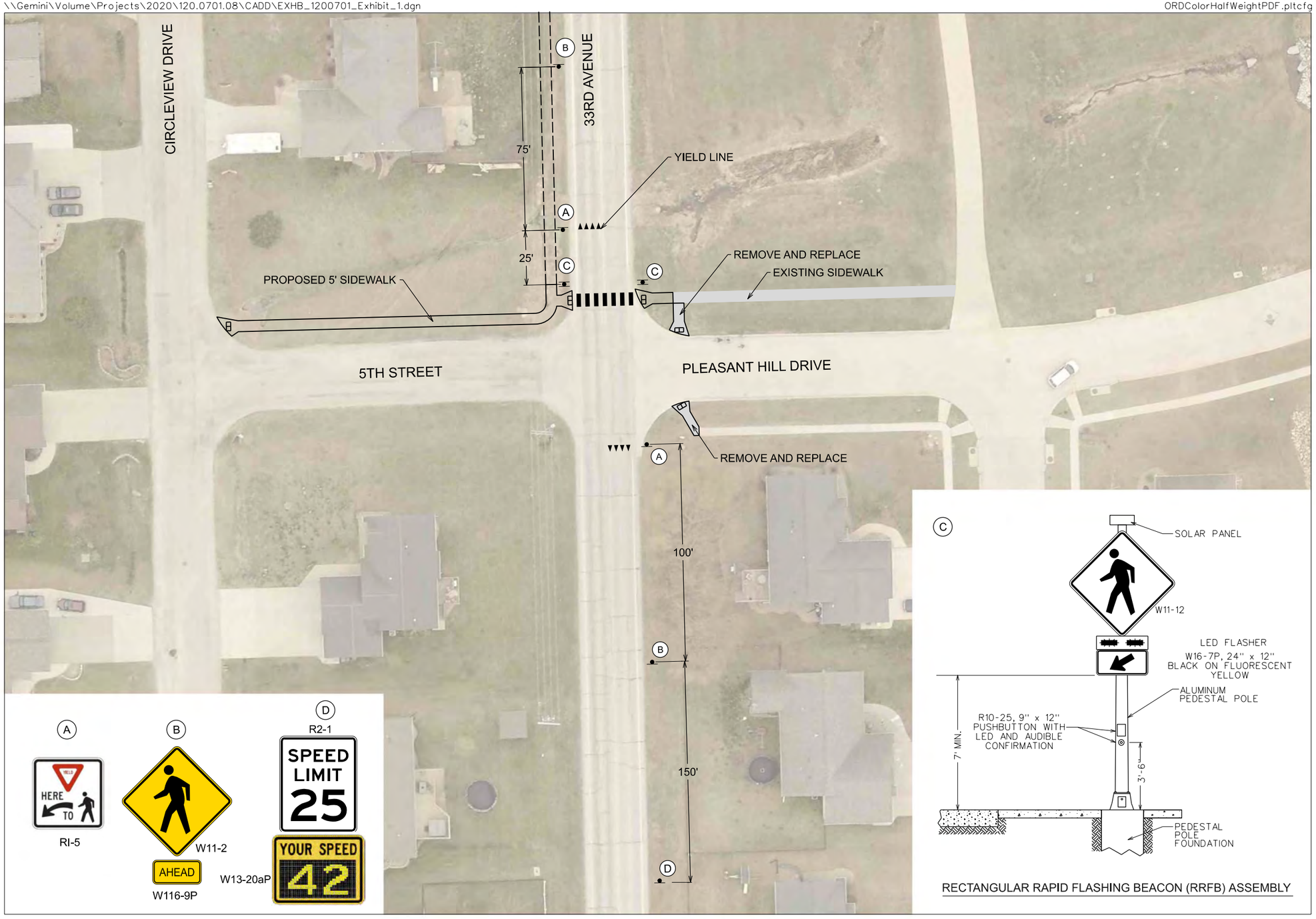
Facing East

F - Photos



Facing West

8/7/2026
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SNYDER & ASSOCIATES

0 30 60
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Exhibit G - Plan View

Concept | Atkins, Iowa | 08/07/2026

Snyder & Associates, Inc.
900 Bell Dr SW
Cedar Rapids, IA 52404

5th St & 33rd Avenue
Atkins, Iowa
07/21/2020 - 07/23/2020
120.0701.08

File Name : AtkinsTMC
Site Code : 00000000
Start Date : 7/21/2020
Page No : 1

Groups Printed- Cars - Trucks

	33rd Avenue From North					Pleasant Hill St From East					33rd Avenue From South					5th Street From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
12:00 AM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
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12:30 AM	0	0	0	0	0	2	0	0	0	2	2	1	0	0	3	0	0	0	0	0	5
12:45 AM	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	2
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01:00 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	2
*** BREAK ***																					
01:30 AM	0	1	0	0	1	0	0	1	0	1	0	1	0	0	1	0	1	0	0	1	4
*** BREAK ***																					
Total	0	1	0	0	1	0	0	1	0	1	0	3	0	0	3	0	1	0	0	1	6
*** BREAK ***																					
02:15 AM	0	0	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	2
02:30 AM	0	0	1	0	1	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	3
*** BREAK ***																					
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03:15 AM	0	0	0	0	0	0	0	1	0	1	2	0	0	0	2	1	0	0	0	1	4
*** BREAK ***																					
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04:30 AM	0	3	0	0	3	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	6
04:45 AM	0	4	0	0	4	0	0	1	0	1	0	1	0	0	1	2	0	0	0	2	8
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05:30 AM	0	6	0	0	6	0	0	4	0	4	0	3	0	2	5	1	0	0	0	1	16
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Snyder & Associates, Inc.
900 Bell Dr SW
Cedar Rapids, IA 52404

5th St & 33rd Avenue
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File Name : AtkinsTMC
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Page No : 2

Groups Printed- Cars - Trucks

	33rd Avenue From North					Pleasant Hill St From East					33rd Avenue From South					5th Street From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
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04:30 PM	0	15	6	0	21	6	0	6	0	12	12	33	3	0	48	3	0	0	0	3	84

Snyder & Associates, Inc.
900 Bell Dr SW
Cedar Rapids, IA 52404

5th St & 33rd Avenue
Atkins, Iowa
07/21/2020 - 07/23/2020
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File Name : AtkinsTMC
Site Code : 00000000
Start Date : 7/21/2020
Page No : 3

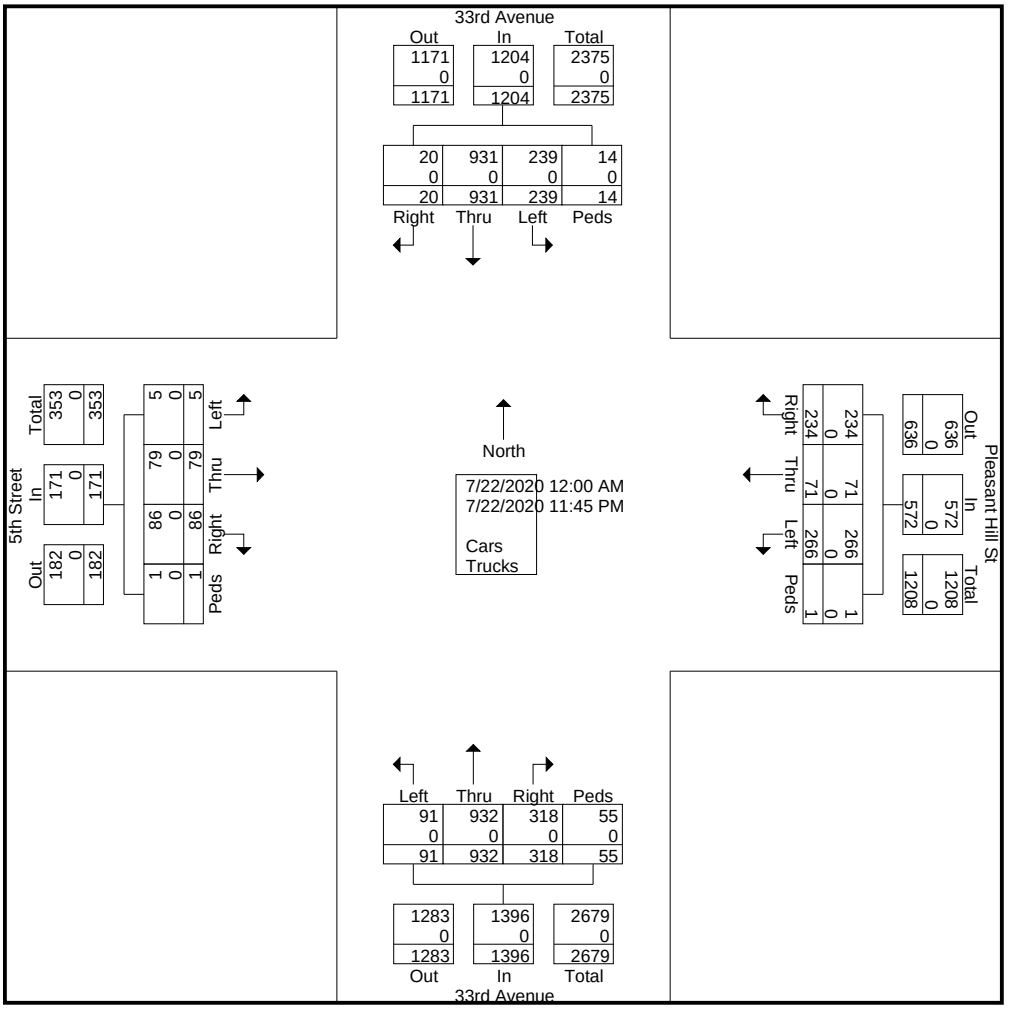
Groups Printed- Cars - Trucks

	33rd Avenue From North					Pleasant Hill St From East					33rd Avenue From South					5th Street From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:45 PM	2	16	4	0	22	10	1	2	0	13	14	29	1	0	44	1	5	0	0	6	85
Total	2	59	21	0	82	25	6	15	0	46	43	118	7	0	168	8	9	0	0	17	313
05:00 PM	1	17	6	0	24	7	5	8	0	20	9	32	6	2	49	1	1	0	0	2	95
05:15 PM	0	24	9	0	33	8	2	3	0	13	8	29	0	0	37	0	0	0	0	0	83
05:30 PM	0	7	7	0	14	9	3	9	0	21	10	27	4	4	45	0	2	0	0	2	82
05:45 PM	0	16	3	0	19	4	2	8	0	14	10	26	1	2	39	1	2	1	0	4	76
Total	1	64	25	0	90	28	12	28	0	68	37	114	11	8	170	2	5	1	0	8	336
06:00 PM	1	10	5	0	16	7	3	3	0	13	12	28	2	0	42	2	0	0	0	2	73
06:15 PM	0	7	4	0	11	3	5	1	0	9	3	26	3	0	32	2	2	0	0	4	56
06:30 PM	0	9	5	0	14	5	1	2	0	8	6	24	2	0	32	1	6	0	0	7	61
06:45 PM	0	6	9	0	15	9	2	7	0	18	5	19	2	0	26	1	1	0	0	2	61
Total	1	32	23	0	56	24	11	13	0	48	26	97	9	0	132	6	9	0	0	15	251
07:00 PM	0	11	4	0	15	5	2	4	0	11	4	12	0	0	16	0	0	0	0	0	42
07:15 PM	1	7	3	0	11	3	1	3	0	7	4	13	1	2	20	0	3	0	1	4	42
07:30 PM	1	10	5	1	17	0	1	1	0	2	3	11	2	0	16	0	4	0	0	4	39
07:45 PM	1	8	2	0	11	1	3	0	0	4	6	10	0	0	16	0	3	0	0	3	34
Total	3	36	14	1	54	9	7	8	0	24	17	46	3	2	68	0	10	0	1	11	157
08:00 PM	0	4	3	1	8	1	3	3	0	7	1	12	2	5	20	2	2	0	0	4	39
08:15 PM	0	4	0	0	4	0	1	0	0	1	6	12	1	2	21	0	2	0	0	2	28
08:30 PM	0	4	2	0	6	1	0	2	0	3	2	6	3	0	11	0	2	0	0	2	22
08:45 PM	0	10	1	1	12	0	1	1	0	2	2	9	1	0	12	0	1	0	0	1	27
Total	0	22	6	2	30	2	5	6	0	13	11	39	7	7	64	2	7	0	0	9	116
09:00 PM	0	1	1	0	2	1	0	0	0	1	5	8	1	1	15	0	3	0	0	3	21
09:15 PM	0	3	0	0	3	2	1	0	0	3	0	5	2	0	7	0	1	0	0	1	14
09:30 PM	0	7	3	0	10	2	0	0	0	2	5	9	1	0	15	1	0	0	0	1	28
09:45 PM	0	4	1	0	5	1	0	1	0	2	3	9	1	0	13	0	0	0	0	0	20
Total	0	15	5	0	20	6	1	1	0	8	13	31	5	1	50	1	4	0	0	5	83
10:00 PM	0	4	2	0	6	0	1	1	0	2	2	6	1	0	9	0	0	0	0	0	17
10:15 PM	0	7	12	0	19	2	0	0	0	2	2	5	0	1	8	0	2	0	0	2	31
10:30 PM	0	8	7	0	15	0	2	0	0	2	4	3	2	0	9	0	1	0	0	1	27
10:45 PM	0	3	3	0	6	1	1	2	0	4	1	0	0	0	1	0	1	0	0	1	12
Total	0	22	24	0	46	3	4	3	0	10	9	14	3	1	27	0	4	0	0	4	87
11:00 PM	0	2	1	0	3	0	0	0	0	0	1	4	0	0	5	1	0	0	0	1	9
11:15 PM	1	3	9	0	13	0	0	0	0	0	1	0	2	0	3	0	0	0	0	0	16
11:30 PM	0	2	2	0	4	1	0	3	0	4	1	9	2	0	12	0	0	0	0	0	20
11:45 PM	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
Total	1	8	12	0	21	1	0	3	0	4	3	14	4	0	21	1	0	0	0	1	47
Grand Total	20	931	239	14	1204	234	71	266	1	572	318	932	91	55	1396	86	79	5	1	171	3343
Apprch %	1.7	77.3	19.9	1.2		40.9	12.4	46.5	0.2		22.8	66.8	6.5	3.9		50.3	46.2	2.9	0.6		
Total %	0.6	27.8	7.1	0.4	36	7	2.1	8	0	17.1	9.5	27.9	2.7	1.6	41.8	2.6	2.4	0.1	0	5.1	
Cars	20	931	239	14	1204	234	71	266	1	572	318	932	91	55	1396	86	79	5	1	171	3343
% Cars	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Snyder & Associates, Inc.
900 Bell Dr SW
Cedar Rapids, IA 52404

5th St & 33rd Avenue
Atkins, Iowa
07/21/2020 - 07/23/2020
120.0701.08

File Name : AtkinsTMC
Site Code : 00000000
Start Date : 7/21/2020
Page No : 4

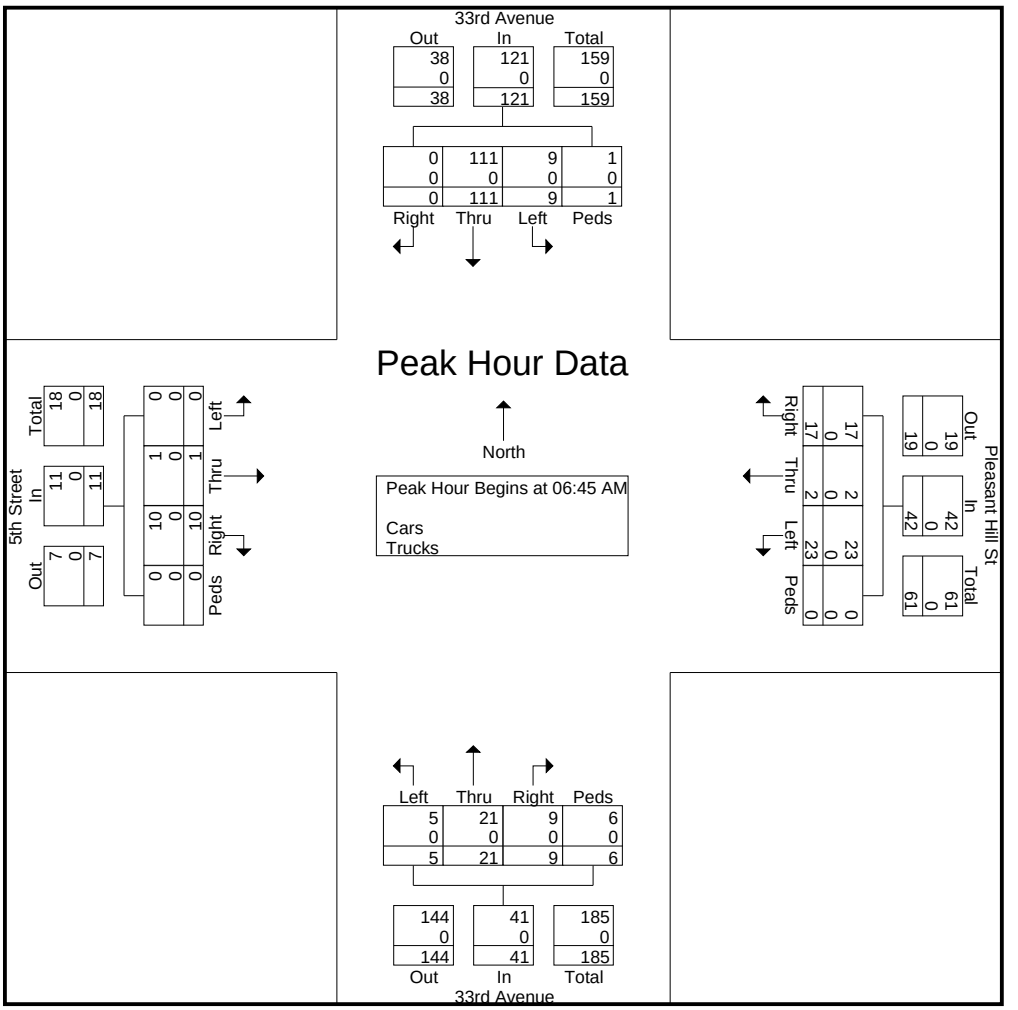


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File Name : AtkinsTMC
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Start Date : 7/21/2020
Page No : 5

	33rd Avenue From North					Pleasant Hill St From East					33rd Avenue From South					5th Street From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 06:00 AM to 09:00 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 06:45 AM																					
06:45 AM	0	31	0	0	31	4	0	5	0	9	**5**	2	1	1	9	3	0	0	0	3	52
07:00 AM	0	21	**4**	0	25	2	**1**	3	0	6	1	6	**2**	**3**	**12**	2	0	0	0	2	45
07:15 AM	0	26	3	**1**	30	**6**	1	4	0	11	2	3	2	1	8	1	0	0	0	1	50
07:30 AM	0	**33**	2	0	**35**	5	0	**11**	0	**16**	1	**10**	0	1	12	**4**	**1**	0	0	**5**	**68**
Total Volume	0	111	9	1	121	17	2	23	0	42	9	21	5	6	41	10	1	0	0	11	215
% App. Total	0	91.7	7.4	0.8		40.5	4.8	54.8	0		22	51.2	12.2	14.6		90.9	9.1	0	0		
PHF	.000	.841	.563	.250	.864	.708	.500	.523	.000	.656	.450	.525	.625	.500	.854	.625	.250	.000	.000	.550	.790
Cars	0	111	9	1	121	17	2	23	0	42	9	21	5	6	41	10	1	0	0	11	215
% Cars	0	100	100	100	100	100	100	100	0	100	100	100	100	100	100	100	100	0	0	100	100
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

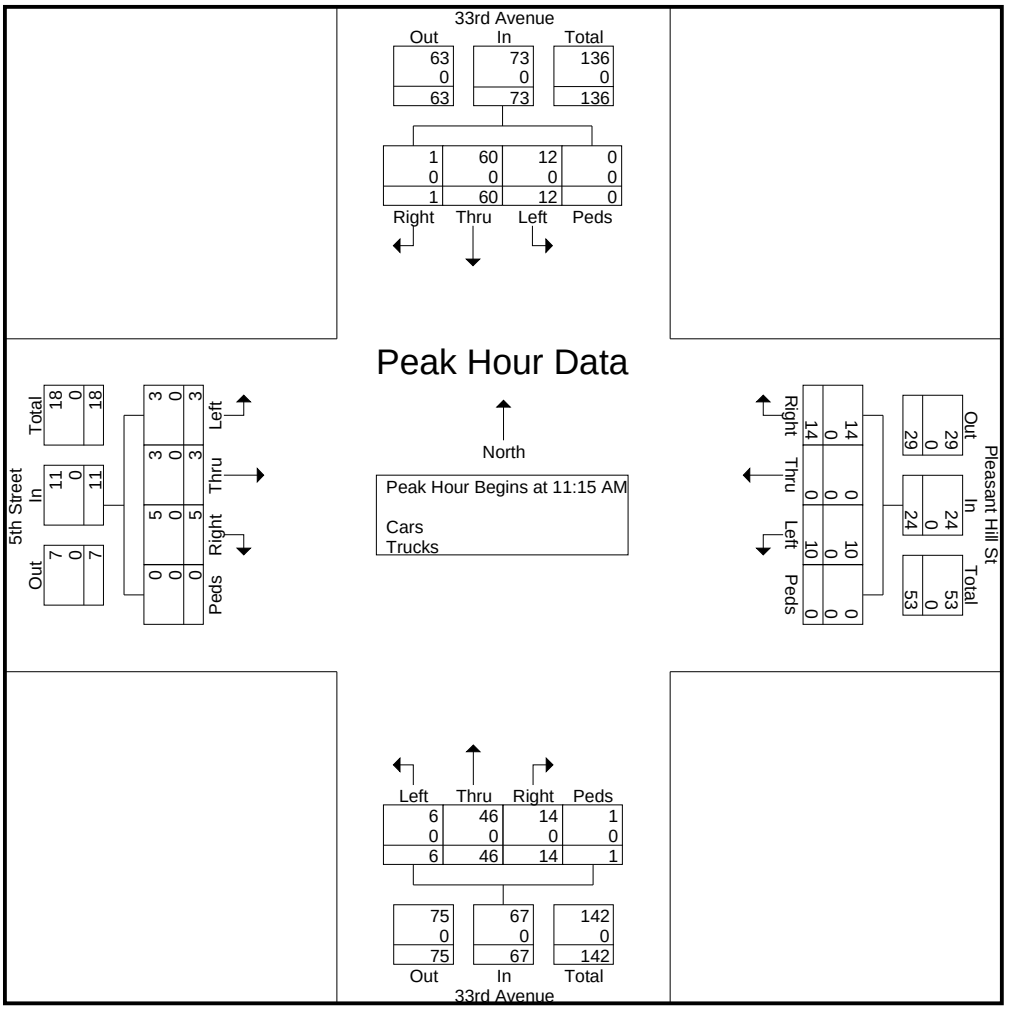


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File Name : AtkinsTMC
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Page No : 6

	33rd Avenue From North					Pleasant Hill St From East					33rd Avenue From South					5th Street From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 01:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:15 AM																					
11:15 AM	0	**17**	**8**	0	**25**	**5**	0	**6**	0	**11**	3	**17**	1	0	**21**	**1**	**3**	0	0	**4**	**61**
11:30 AM	**1**	14	1	**2**	18	3	0	3	0	6	**4**	13	**2**	0	19	1	0	**1**	0	2	45
11:45 AM	1	15	5	0	21	1	1	4	0	6	0	9	1	**2**	12	1	2	0	0	3	42
12:00 PM	1	12	4	0	17	3	**2**	0	0	5	2	13	0	0	15	0	2	0	0	2	39
Total Volume	3	58	18	2	81	12	3	13	0	28	9	52	4	2	67	3	7	1	0	11	187
% App. Total	3.7	71.6	22.2	2.5		42.9	10.7	46.4	0		13.4	77.6	6	3		27.3	63.6	9.1	0		
PHF	.750	.853	.563	.250	.810	.600	.375	.542	.000	.636	.563	.765	.500	.250	.798	.750	.583	.250	.000	.688	.766
Cars	1	60	12	0	73	14	0	10	0	24	14	46	6	1	67	5	3	3	0	11	175
% Cars	33.3	103.4	66.7	0	90.1	116.7	0	76.9	0	85.7	155.6	88.5	150.0	50.0	100	166.7	42.9	300.0	0	100	93.6
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

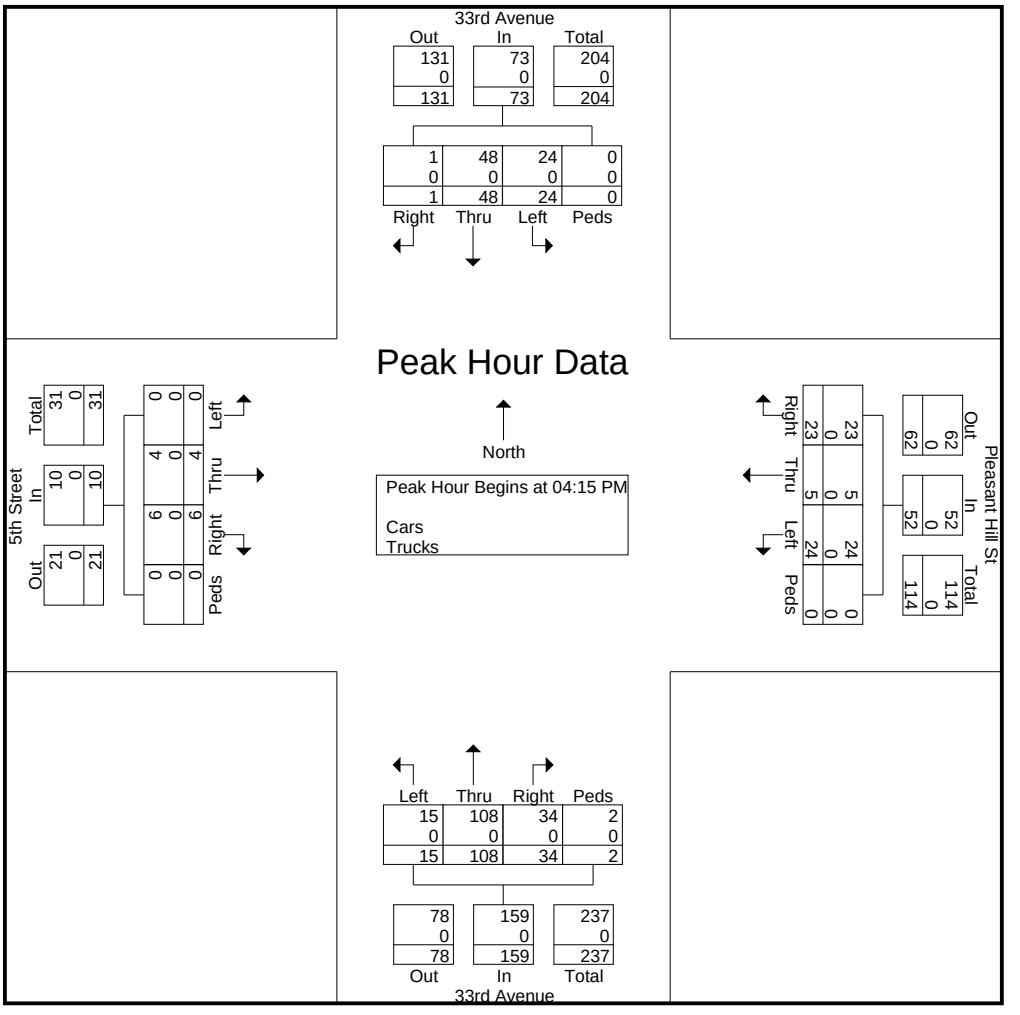


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File Name : AtkinsTMC
Site Code : 00000000
Start Date : 7/21/2020
Page No : 7

	33rd Avenue From North					Pleasant Hill St From East					33rd Avenue From South					5th Street From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:00 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	14	**6**	0	20	6	4	3	0	13	11	16	1	0	28	2	1	0	0	3	64
04:30 PM	0	15	6	0	21	6	0	6	0	12	12	**33**	3	0	48	**3**	0	0	0	3	84
04:45 PM	**2**	16	4	0	22	**10**	1	2	0	13	**14**	29	1	0	44	1	**5**	0	0	**6**	85
05:00 PM	1	**17**	6	0	**24**	7	**5**	**8**	0	**20**	9	32	**6**	**2**	**49**	1	1	0	0	2	**95**
Total Volume	3	62	22	0	87	29	10	19	0	58	46	110	11	2	169	7	7	0	0	14	328
% App. Total	3.4	71.3	25.3	0		50	17.2	32.8	0		27.2	65.1	6.5	1.2		50	50	0	0		
PHF	.375	.912	.917	.000	.906	.725	.500	.594	.000	.725	.821	.833	.458	.250	.862	.583	.350	.000	.000	.583	.863
Cars	1	48	24	0	73	23	5	24	0	52	34	108	15	2	159	6	4	0	0	10	294
% Cars	33.3	77.4	109.1	0	83.9	79.3	50.0	126.3	0	89.7	73.9	98.2	136.4	100	94.1	85.7	57.1	0	0	71.4	89.6
Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Rev. 07/23

Application for TRAFFIC CONTROL DEVICE TSIP FUNDS

GENERAL INFORMATION **DATE:** 8/12/2026

Location / Title of Project: Snow Proof Signal Hardware & Trailer Hitch Mounted DMS

Applicant: City of Marion

Contact Person: Jacob Hahn Title: Deputy City Engineer

Complete Mailing Address: 202 44th Street, Marion, IA 52302

Phone: 319-743-6340 (Area Code) E-Mail: jhahn@cityofmarion.org

If more than one highway authority is involved in this project, please indicate and fill in the information below (use additional sheets if necessary).

Co-Applicant(s):

Contact Person: Title:

Complete Mailing Address:

Phone: (Area Code) E-Mail:

PLEASE COMPLETE THE FOLLOWING PROJECT INFORMATION:

Funding Amount

Total Safety Cost	$	18,350.29
Total Project Cost	$	18,350.29
Safety Funds Requested	**$**	18,350.29

Additional Project Safety Documentation (when available):

- ☐ Project information sheet(s) or "Risk Score">50% from County/City's Local Road Safety Plan
- ☐ FHWA SS4A Safety Action Plan or similar comprehensive transportation safety plan
- ☐ Iowa DOT TEAP Study or similar analysis and concept
- ☐ Project intersection or segment with High or Medium PCR Level (PCR-All or PCR-Severe) from the Iowa DOT Potential for Crash Reduction (PCR) web-based map tool https://pcr.iowadot.gov/

Potential for Crash Reduction (PCR) Information					
Intersection ID (1234567890) or Segment ID (1234)	Intersection or Segment	PCR Level High	PCR Level Medium	PCR-All value	PCR-Severe value
		☐	☐		
		☐	☐		

APPLICATION CERTIFICATION FOR PUBLIC AGENCY

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating public agency(ies). I understand the attached resolution(s), where applicable, binds the participating public agency(ies) to assume responsibility for any additional funds, if required, to complete the project. In addition, the participating public agency(ies) agrees to maintain any new or improved public streets or roadways for a minimum of five years.

I understand that, although this information is sufficient to secure a commitment of funds, a firm contract between the applicant and the Department of Transportation is required prior to the authorization of funds.

Representing the City of Marion

Signed:  8/12/2026

Signature Date Signed

Michael D. Barkalow, PE

Printed Name

Attest:  8/12/2026

Signature Date Signed

Jacob A. Hahn, PE

Printed Name

RESOLUTION NO. 32990

RESOLUTION AUTHORIZING THE SUBMITTAL OF AN APPLICATION FOR TRAFFIC SAFETY IMPROVEMENT PROGRAM (TSIP) FUNDING FOR VARIOUS TRAFFIC CONTROL DEVICES

WHEREAS, the Iowa Department of Transportation has established the TSIP and provides funding for locations where vehicular safety is a concern and documented; and

WHEREAS, various traffic control devices throughout the City of Marion have been identified as items to improve vehicular safety could be improved and funded by TSIP.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MARION, IOWA, that:

1. The City Council supports the application for TSIP funding.
2. The City Council hereby commits the additional City funds necessary for construction of the project beyond any TSIP funding, and;
3. The City Council hereby commits to accepting and maintaining these improvements.

Passed and approved on August 06, 2026.

Nicolas AbouAssaly, Mayor

ATTEST:
I, Rachel Bolender, City Clerk of the City of Marion, Iowa hereby certify that at a meeting of the City Council of said City, held on the above date, among other proceedings the above was adopted.

Rachel Bolender, City Clerk

SYSTEMIC TRAFFIC SIGNAL FACE PROTECTION AGAINST ICE AND SNOW – PROJECT NARRATIVE

Project Description
The City of Marion is requesting Traffic Safety Improvement Program (TSIP) funding to install traffic signal face snow and ice protection devices on one primary traffic signal indication for each approach at the intersection of Highway 13 and Highway 100, one of the City's highest-volume signalized intersections.

The conversion from incandescent traffic signal lamps to LED signal modules has substantially reduced the heat generated at the signal face. During certain winter weather events involving wet, adhesive ("sticky") snow or freezing precipitation, snow and ice accumulate on the signal lens and can completely obscure the signal indication from approaching motorists. The proposed devices are intended to minimize snow and ice accumulation on the protected signal heads, maintaining visibility of at least one signal indication for each through movement during these events.

Problem Statement
Obscured traffic signal indications create a significant safety concern by preventing motorists from recognizing traffic control devices until they are too close to react safely. This hazard is particularly critical during winter storms when drivers are simultaneously managing reduced pavement friction, limited visibility, and increased stopping distances.

The Highway 13 and Highway 100 intersection carries high traffic volumes, increasing the potential for severe angle and rear-end crashes when signal indications become partially or completely obscured by snow and ice.

In addition to risks to the traveling public, maintenance personnel must manually remove accumulated snow and ice from signal faces during active winter storms. Crews perform this work either from the roadway using extended tools or from aerial bucket trucks while exposed to moving traffic under poor visibility and slippery roadway conditions. City personnel have experienced numerous close calls while performing these emergency maintenance activities.

The 2023 Manual on Uniform Traffic Control Devices (MUTCD) establishes visibility requirements for traffic signals. Sections 4D.06 and 4E.01 require signal indications to be visible for adequate decision and stopping distances. During sticky snow events, accumulated snow and ice can partially or completely block signal indications, preventing the traffic signal from meeting these visibility requirements.

Existing Conditions
Traffic signals throughout Marion are susceptible to snow and ice accumulation during specific winter weather conditions. Once the City becomes aware of an obscured signal, maintenance personnel are dispatched to manually clear the signal faces. Response time depends on notification, crew availability, travel conditions, and the number of affected intersections.

During winter storm events, the same City maintenance personnel responsible for clearing snow and maintaining safe roadways are also required to respond to traffic signals obscured by snow and ice. Diverting these crews from snowplowing operations to manually clear signal faces increases their

exposure to traffic during hazardous weather, delays both snow removal and signal maintenance activities, and often requires overtime responses while crews are already addressing widespread winter maintenance needs.

During this period, motorists may encounter traffic signals with reduced or completely obstructed indications while maintenance personnel remain exposed to traffic hazards during repeated snow removal operations.

Proposed Solution
The City proposes installing snow and ice protection devices on one primary signal head for each through movement approach at the Highway 13 and Highway 100 intersection.

Protecting one signal face per approach ensures motorists retain a visible indication even if other signal heads experience snow accumulation. Through movements represent the highest traffic volumes and greatest potential for severe crashes. Protected left-turn signal heads are not proposed because drivers making permissive left turns are already required to yield to opposing traffic when a protected indication is unavailable, resulting in comparatively lower crash risk.

This project represents a proactive, low-maintenance safety improvement that addresses a known operational issue associated with LED traffic signal technology.

Safety Justification
The proposed improvement reduces the need for emergency maintenance responses during active winter storms, allowing maintenance personnel to remain focused on roadway snow and ice control while maintaining visible traffic signal indications. Eliminating these emergency responses decreases worker exposure to live traffic, reduces overtime emergency callouts, and allows signal inspections and maintenance to be performed after storm conditions have improved rather than during the most hazardous periods.

Maintaining visible signal indications is expected to reduce the likelihood of motorists inadvertently entering the intersection because of obscured displays, thereby reducing the potential for angle and rear-end crashes.

The project also improves worker safety by reducing the frequency and urgency of emergency snow removal operations performed in active traffic during severe winter weather.

This project provides a cost-effective, systemic safety improvement that benefits motorists, pedestrians, bicyclists, and City maintenance personnel while helping maintain compliance with the intent of MUTCD signal visibility requirements during adverse winter weather.

Project Location Selection & Cost
Highway 13 and Highway 100 is one of Marion's highest-volume signalized intersections, serving regional traffic, commercial development, and commuter travel. Because of the traffic volumes and the potential severity of crashes at this location, maintaining visible traffic signal indications during winter storms provides the greatest safety benefit and represents the City's highest-priority installation. The estimated cost of the proposed devices is $6,615.00. The City proposes to fund the purchase solely through the Iowa Traffic Safety Improvement Program (TSIP).

TRAFFIC CONTROL CORPORATION
5651 MEMORIAL AVENUE
OAK PARK HEIGHTS, MN 55082
PHONE: 651-439-1737

QUOTATION

Number 672188

To: 13802
MARION, CITY OF
202 44TH ST
PUBLIC WORKS
MARION IA 52302 USA

Attn:
Email:
Phone: 319-743-6300 **Fax:** 319-377-7892

Quote Date: 8/11/2026 **Expires:** 10/10/2026
Terms: NET 30 BASED ON APPROVED CREDIT
FOB: DESTINATION-FRT INCLUDED
Salesperson: JESSICA ASTROTH
Email: JAstroth@TCC1.com
Phone: 314-779-9245

Letting Date:
Book / Call / Item:
Contract No:

Location: MARION, IA
Description: SNOW PROOF CONE FOR SIGNALS

PRICING IS BASED ON QUANTITIES AND DESCRIPTIONS POSTED BELOW. IF ADDITIONAL EQUIPMENT IS NEEDED, PLEASE REQUEST A QUOTE.
LEAD TIME OF 6 - 8 WEEKS ONCE ORDER IS APPROVED TO RELEASE.

Part Number / Description	Unit Price	Qty/UM	Net Price
SNOW PROOF CONE SNOW PROOF CONE WITH HARDWARE	315.00	21.00 EA	6,615.00

Item Total:	6,615.00
Misc Charges and Adjustments:	0.00
Quote Total:	**6,615.00**

As an authorized purchaser for the above named company, the undersigned agrees to the above quantities, prices, and all terms listed above. Pricing does not include applicable sales taxes. If order is to be exempt sales tax, documentation must be provided at time of order.

Additional terms may apply. Review our full Terms & Conditions of Sale at www.trafficcontrolcorp.com.

PO Number_____ **Auth Date**_____ ☐ **Taxable** ☐ **Exempt**

Signature_____ **Printed Name**_____

Portable Dynamic Message Sign (PDMS) – Project Narrative

1. Existing Conditions

The City of Marion currently utilizes one trailer-mounted Portable Dynamic Message Signs (PDMS) to provide advance warning and traffic control during roadway maintenance activities and incident response operations. These units are effective but require a significant amount of space within the work zone. In urban environments, intersections, and crash scenes, the size of a trailer-mounted sign can limit available work space and complicate traffic control.

Additionally, the City has a limited number of portable message signs, leaving little redundancy when multiple maintenance activities or emergency incidents occur simultaneously.

2. Proposed Concept

The City proposes to purchase a trailer-hitch mounted Portable Dynamic Message Sign that can be installed directly into the receiver hitch of a maintenance pickup truck. The unit will be deployed on higher-volume roadways during maintenance operations, utility work, emergency repairs, and incident response where advance warning and dynamic messaging are needed.

The compact design allows the message sign to be positioned closer to the work activity while requiring substantially less space than a traditional trailer-mounted unit. The device can also be rapidly deployed by Public Works personnel when assisting the Marion Police Department or Fire Department with traffic control during crashes, roadway closures, and other emergency events.

In addition, the portable PDMS will support traffic control during community events that require temporary road closures, such as Independence Day celebrations, farmers markets, parades, festivals, and other special events. Dynamic messaging will provide motorists with advance notice of road closures, detour information, and alternate routes, improving traffic flow and reducing driver confusion.

3. Justification

The proposed project will improve work zone and incident management safety by increasing the City's ability to provide timely, dynamic warning messages to motorists approaching maintenance activities and emergency incidents. Advanced warning messages help motorists reduce speeds, anticipate lane closures or traffic shifts, and make safer driving decisions before reaching the work area.

Compared to a trailer-mounted message board, the trailer-hitch mounted unit reduces the overall footprint of the traffic control setup, making it better suited for constrained urban work zones and crash scenes where available space is limited. This allows Public Works crews to establish traffic control while minimizing conflicts between equipment, workers, and passing vehicles.

The additional portable message sign will also improve the City's ability to respond to multiple work zones or emergency events occurring simultaneously, ensuring that dynamic warning messages remain available when needed to protect both roadway workers and the traveling public.

4. Cost Estimate and Proposed Funding Source

The estimated cost of the proposed trailer-hitch mounted Portable Dynamic Message Sign is $11,735.29. The City proposes to fund the purchase solely through the Iowa Traffic Safety Improvement Program (TSIP).

5. Proposed Schedule

Upon grant approval, the City plans to purchase the trailer-hitch mounted Portable Dynamic Message Sign during Fiscal Year 2028, when funding becomes available.

All Traffic Solutions, LLC
5100 W Brown Deer Rd
Brown Deer, WI 53223
Phone: 814-237-9005
Fax: 814-237-9006
DUNS #: 02-344-3864
Tax ID: 39-0983658
CAGE Code: 0GWV8

QUOTE Q-111283

DATE: 08/07/2026

Mail Purchase Orders to:
5100 W Brown Deer Rd
Brown Deer, WI 53223

Contract:
Sourcewell 090122-ATS
Sourcewell Account #:
32534

Questions contact:
MANUFACTURER:
All Traffic Solutions
Owen Lauerman
(571) 549-3766
x
olauerman@alltrafficsolutions.com

Independent Sales Rep:

BILL TO:
City of Marion IA Public Works
202 44th St
Marion, IA 52302

Billing Contact:

SHIP TO:
City of Marion IA Public Works
202 44th St
Marion, IA 52302
Attn: Matthew Morris

PAYMENT TERMS:
Net 30

CUSTOMER: City of Marion IA Public Works

CONTACT:+13193776367

ITEM NO:	DESCRIPTION:	QTY:	EACH:	EXT. PRICE:
4000750	App, Mobile User Interface perpetual license (only 1 required per account—Bluetooth required, enabled separately)	1	$100.00	$100.00
4000631	Bluetooth: allows wireless control from supported Bluetooth enabled devices (purchased separately)	1	$420.24	$420.24
4000741	SpeedAlert 18 Radar Message Sign (RMS); base unit w/ mounting bracket	2	$3,892.32	$7,784.64
4001299	3 Year Warranty	2	$0.00	$0.00
4001626	VZW communications prep	2	$0.00	$0.00
4000826	Strobe Color: Red and Blue (Requires 4000793 Dual Violator Strobe)	2	$0.00	$0.00
4000793	Violator Strobe, Dual; Hardware for SpeedAlert 18, flash helps draw attention to the driver's speed. Requires color assignment PN.	2	$420.24	$840.48
4000744	LFP Power kit, 16Ah battery (2), internal power controller, charger w/connector	2	$877.20	$1,754.40
4000247	Hitch mount, for 1.25" & 2" hitch, includes: trailer connector & hardware	2	$603.84	$1,207.68
4900081	Carrying Case; SA18, iA18 softcase with storage pockets	2	$252.96	$505.92
4001889	Shipping and Handling	1	$548.00	$548.00
4001190	Discount - New Purchase	1	($1,426.07)	($1,426.07)

Special Notes:	**SALES AMOUNT:**	$11,735.29
	TOTAL USD:	$11,735.29

Duration: This quote is good for 60 days from date of issue.
Shipping Notes: All shipments shall be FOB shipper. Shipping charges shall be additional unless listed on quote.
Taxes: Taxes are not included in quote. Please provide a tax-exempt certificate or sales tax will be applied.
Warranty: Unless otherwise indicated, all products have a one year warranty from date of sale. Warranty extensions are a component of some applications that are available at time of purchase. A Finance Charge of 1.5% per month will be applied to overdue balances. GSA GS-07F-6092R

I am authorized to commit my organization to this order. If your organization will be creating a purchase order for this order, please submit purchase order to either of the following: Email: sales@alltrafficsolutions.com or Physical Address: Listed at top of quote.

Signature: _____ Date: _____

Print Name: _____ Title: _____

Rev. 07/23

Application for TRAFFIC CONTROL DEVICE TSIP FUNDS

GENERAL INFORMATION **DATE:** 7/30/2026

Location / Title of Project: Portable Temporary Traffic Signals

Applicant: Decatur County

Contact Person: Justin L. Savage Title: County Engineer

Complete Mailing Address: 1306 South Main St
Leon, IA 50144

Phone: (641)446-7131 (Area Code) E-Mail: deceng@grm.net

If more than one highway authority is involved in this project, please indicate and fill in the information below (use additional sheets if necessary).

Co-Applicant(s):

Contact Person: Title:

Complete Mailing Address:

Phone: (Area Code) E-Mail:

PLEASE COMPLETE THE FOLLOWING PROJECT INFORMATION:

Funding Amount

Total Safety Cost	$	59,700
Total Project Cost	$	59,700
Safety Funds Requested	**$**	**59,700**

Additional Project Safety Documentation (when available):

- ☐ Project information sheet(s) or "Risk Score">50% from County/City's Local Road Safety Plan
- ☐ FHWA SS4A Safety Action Plan or similar comprehensive transportation safety plan
- ☐ Iowa DOT TEAP Study or similar analysis and concept
- ☐ Project intersection or segment with High or Medium PCR Level (PCR-All or PCR-Severe) from the Iowa DOT Potential for Crash Reduction (PCR) web-based map tool https://pcr.iowadot.gov/

Potential for Crash Reduction (PCR) Information					
Intersection ID (1234567890) or Segment ID (1234)	Intersection or Segment	PCR Level High	PCR Level Medium	PCR-All value	PCR-Severe value
		☐	☐		
		☐	☐		

Rev. 07/23

APPLICATION CERTIFICATION FOR PUBLIC AGENCY

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating public agency(ies). I understand the attached resolution(s), where applicable, binds the participating public agency(ies) to assume responsibility for any additional funds, if required, to complete the project. In addition, the participating public agency(ies) agrees to maintain any new or improved public streets or roadways for a minimum of five years.

I understand that, although this information is sufficient to secure a commitment of funds, a firm contract between the applicant and the Department of Transportation is required prior to the authorization of funds.

Representing the Decatur County

Signed: _____ 1/30/2026
Signature Date Signed

Justin L. Savage
Printed Name

Attest: _____ 1.30.26
Signature Date Signed

Sidney Bethards
Printed Name

Decatur County
Resolution No. 2026-25

Resolution Authorizing the Submission of a Traffic Safety Improvement Program Grant Application to the Iowa Department of Transportation

WHEREAS, the Iowa Department of Transportation is accepting applications for grant funding to support cities or counties; and

WHEREAS, the Traffic Safety Improvement Program (TSIP) provides site-specific traffic safety and operations improvements, traffic control devices, safety research, safety studies, or public information initiatives; and

WHEREAS, the Decatur County Engineer has determined that materials funded by this grant would improve safety on public roadways in Decatur County.

THEREFORE, BE IT RESOLVED by the Board of Supervisors of Decatur County, Iowa on this 20th day of July, 2026 that the County does hereby support the attached application for Traffic Safety Improvement Program funding.

PASSED AND ADOPTED this 20th day of July, 2026

Doug Tharp, Chairperson
Decatur County Board of Supervisors

Attest:
Stephanie Daughton, Decatur County Auditor

B. Narrative

The Decatur County Secondary Roads Department (DCSRD) requests funding from the Iowa DOT Traffic Safety Improvement Program to purchase a set of portable temporary traffic signals (PTTS) to mitigate critical safety risks in our work zones.

DCSRD maintains 122 miles of paved roads and 571 miles of granular surfaced roads, requiring frequent single-lane closures for essential maintenance and repairs. Currently, these closures rely on human flaggers, exposing personnel directly to live traffic. This environment requires constant, high-stress situational awareness from flaggers to protect both themselves and the traveling public.

Transitioning to PTTS directly reduces or eliminate these safety hazards through the following means:

- **Eliminates Injury/Death Risk:** Completely removes human flaggers from the roadway.
- **Reduction of Work Zone Exposure Time:** PTTS allows workers previously flagging traffic to work on maintenance and repairs. The safety benefit is that projects are completed faster. A shorter project duration minimizes the window of time that motorists interact with an active, high-risk work zone.
- **Stabilized Traffic Flow:** PTTS establishes a highly visible, predictable, and steady rhythm for traffic. This reduces driver confusion, erratic behavior, and sudden braking.
- **Positive Guidance During High-Risk Hours:** For overnight or off-hours lane closures, PTTS provides a highly visible and consistent traffic management system. This improves traffic safety compared to passive Yield signage per Iowa DOT TC-211, especially during low-visibility hours.

C. Itemized Cost Breakdown

Item	Cost
Portable Temporary Traffic Signals (1 Set)	$59,700

D. Time Schedule

- **August 15, 2026:** TSIP Application Deadline
- **January 2027:** TSIP Award Notification
- **July 1, 2027:** TSIP Funding Available
- **August 2027:** Final Quote Reviews and Ordering
- **October 2027:** Delivery and Implementation

OMJCSignal
PO Box 1594
Waterloo, IA 50704
403 Chestnut St.
Waterloo, IA 50703
800.776.5999
Fax: 319.236.1554
Email: sales@omjcsignal.com
omjcsignal.com

Quotation

Quote Number
9740REV

Quote Date
July 29, 2026

Page:
1

Quoted to:
ATTN: NOAH THOMAS
DECATUR COUNTY IOWA
1306 S MAIN ST
LEON, IA 50144

PH: 641-446-7131
FAX:

SHIP TO:

Decatur County Road Dept.
Bob Hamilton

Customer ID	Good Thru	Payment Terms	Sales Rep Name
DECATURCOUNTY	8/28/26	Net 30 Days	JENNIFER K. SHIMP

Quantity	Item	Description	Unit Price	Extension
1.00	LDPTS	ONE PAIR OF POP-UP LIGHT DUTY TRAILERS (ONE MASTER, ONE SECONDARY) W/ WIRELESS TRAFFIC CONTROL AND SOLAR POWER	57,300.00	57,300.00
2.00	TC26-B-OMJC	VEHICLE DETECTOR	1,200.00	2,400.00
1.00	FALCON MAX_OMJC03HF	5 BUTTON LONG RANGE YELLOW JACkET	2,000.00	2,000.00
1.00	MISC	DISCOUNT: IOWA COUNTY SPECIAL INCENTIVE ** On-site training included at no additional cost if done on the same date as delivery	2,000.00	-2,000.00

Freight & handling are in addition to the prices quoted above unless otherwise specified. All parts, materials and components are new unless otherwise specifi
OMJC has been in business since July of 1985 to serve you.

Subtota	59,700.00
Sales Ta	
Freight	
Tota	59,700.00

POP-UP LD

INTEGRITY AT THE CORE

The Pop-Up LD (QPNW-234-2070) is designed to control a single lane closure, but it is capable of far more. The 9' arm has two, 3-section, signal heads with 12” RYG that comply with ITE standards and can quickly be in positions mandated by the MUTCD at the mere push of a button. Designed with the narrowest footprint in the industry for max versatility, only 6’ wide. The LD features a Q-Free 2070 ATC Controller running MAXTIME software and an EDI conflict monitor. Our custom radio system allows wireless communication between OMJC Pop-Up units and has the ability for complex phasing. The LD comes standard with a 400+ watt solar panel (adjustable on 2 axes) and 440-660Ah of AGM batteries.

MAXIMUM VISABILITY

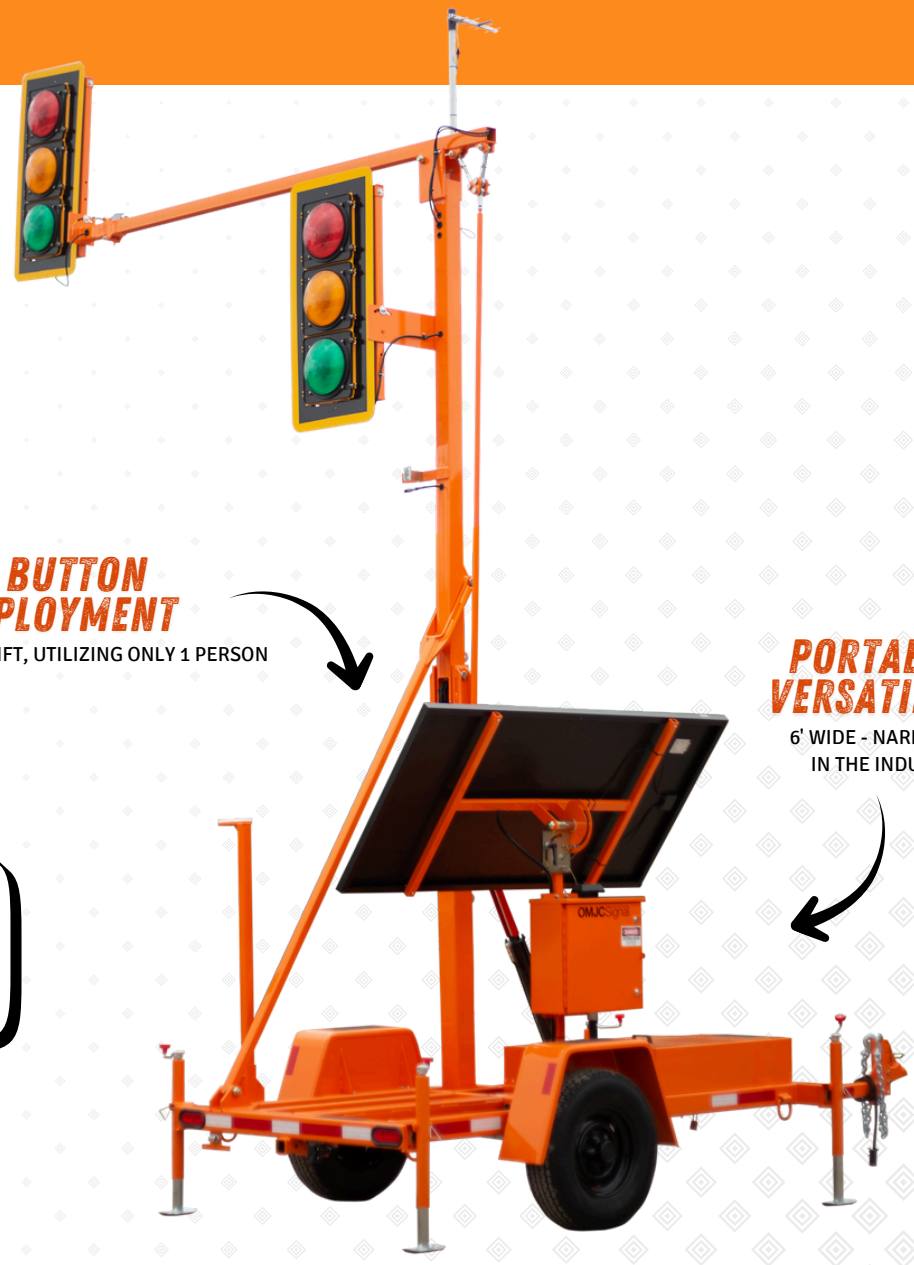
180º SIGNAL ROTATION

1 BUTTON DEPLOYMENT

HYDRAULIC LIFT, UTILIZING ONLY 1 PERSON

PORTABLE VERSATILITY

6' WIDE - NARROWEST IN THE INDUSTRY



1-800-776-5999

sales@omjcsignal.com

QPNW-234-2070

INTEGRITY AT THE CORE

STANDARD FEATURES

DEPLOYMENT

Hydraulic with remote pendant

ARM EXTENSION

9'

SIGNAL HEADS

3-Section overhead

3-Section side of mast

12" RYG LED's, ITE compliant

180º rotation

TRAFFIC CONTROL EQUIPMENT

Q-Free 2070 ATC with MAXTIME software

Actuated 8-phase, dual ring, with pedestrian movements

Encrypted wireless connection between master and secondaries

EDI Real time conflict monitor

CHARGING SOURCE

DC | MPPT solar charge controller

AC | 120V plug-in charger

SPECIFICATIONS

CHASSIS LENGTH	112.0" (Removable hitch adds 56" for 168" total)
CHASSIS WIDTH	72.0" (narrowest in the industry)
TRAVEL HEIGHT	92.0" w/solar
STANDARD WEIGHT	2,700 lbs
CLEARANCE (UNDER ARM)	17' (meets MUTCD requirements)
BATTERIES	440-660 Ah of AGM batteries, no-spill, no-maintenance
SOLAR	(1) - 400+ watt solar panel, adjustable on 2 axes

ADDITIONAL OPTIONS

DETECTION

Microwave | Video | Loop

KNOCKDOWN AVAILABILITY *(EMERGENCY POLE REPLACEMENT)*

Wired Knockdown Board (AC to DC from existing infrastructure)

Wireless Knockdown Kit (AC to DC from existing infrastructure)

PREEMPTION

Strobe

COORDINATION

GPS time based

REMOTE MANAGEMENT & ALERTING

Cellular wireless router (Verizon, AT&T, or Sprint Certified Device)

WIRELESS MANUAL CONTROL

Push button control w/long range antenna (pilot car remote)

ADDITIONAL ADD-ONS

Pedestrian countdown signalization

Work zone lighting

Variable message sign (countdown timer)

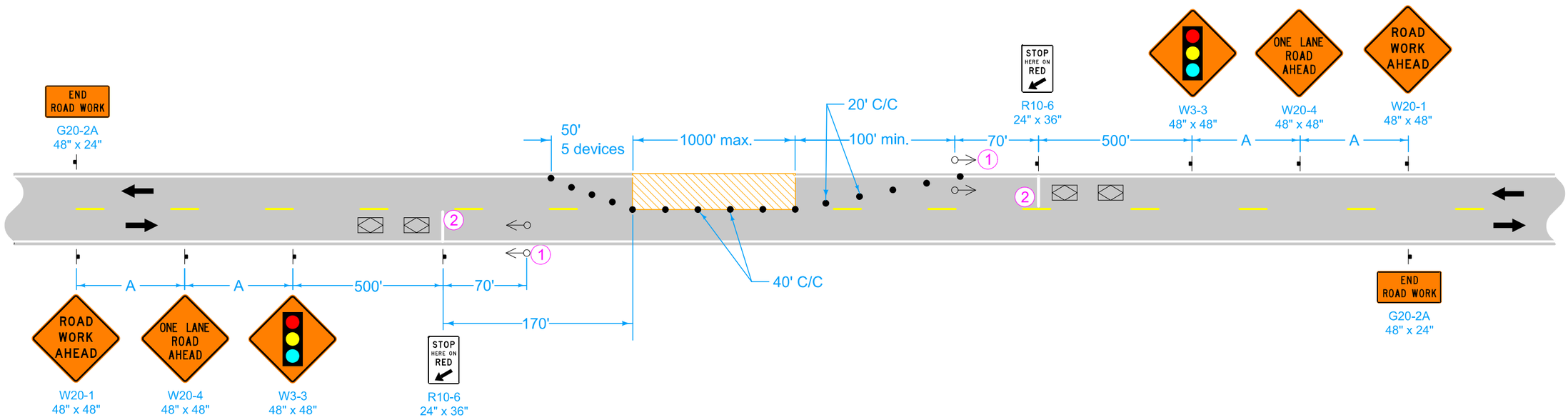
Auto-start generator for on-board ancillary power

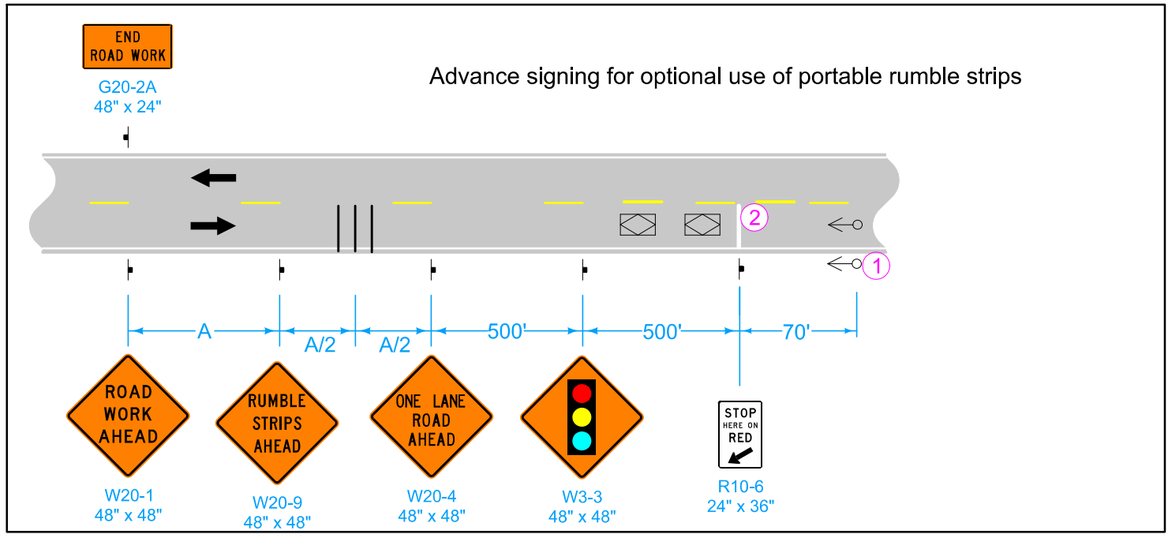
1-800-776-5999

sales@omjcsignal.com

www.omjcsignal.com

Manufactured in USA





SPEED LIMIT (mph)*	A
35 or less	250'
40-45	350'
50 or greater	500'

* Speed Limit refers to regulatory speed limit before road work.

Possible Contract Items:
- Pavement Marking Items
- Pavement Markings Removed
- Temporary Traffic Signals
- Traffic Control

Possible Tabulations:
- 108-22
- 108-28

LEGEND
- Vehicle Detection Area
- Temporary Traffic Signal
- Traffic Sign
- 42" Channelizer
- Work Area
- Direction of Traffic
- Portable rumble strips

TIMING FOR ACTUATED SIGNALS

Recommended Settings (secs)

Initial = 12.0
Extension = 2.5
Max. Green = 45.0
Yellow = 4.0
All Red (see table)

Distance between stop lines	All Red* (secs)	Distance between stop lines	All Red* (secs)
450'	9 - 15	950'	19 - 33
550'	11 - 19	1050'	21 - 36
650'	13 - 22	1150'	23 - 39
750'	15 - 26	1250'	25 - 43
850'	17 - 29	1350'	27 - 46

* All Red values based on operating speeds between 20 mph and 35 mph

This layout is for conditions lasting up to three calendar days. For situations lasting longer than three days refer to TC-216.

(1) For Temporary Traffic Signals, meet the requirements of Section 2528.03 of the Standard Specifications except for the following:
In lieu of a trailer or span-wire mounted system, signal heads may be located on the shoulders, one on each side of the roadway. Mount shoulder signal heads a minimum of 8 feet from the bottom of the signal head to the top of the ground surface.

(2) 24-inch stop lines required during nighttime operation.

IOWA DOT
STANDARD ROAD PLAN

REVISION	
6	4-16-24

TC-215
SHEET 1 of 1

REVISIONS: Added option for portable rumble strips.

APPROVED BY DESIGN METHODS ENGINEER

LANE CLOSURE WITH SIGNALS (UP TO THREE DAYS)

Rev. 07/23

Application for TRAFFIC CONTROL DEVICE
TSIP FUNDS

GENERAL INFORMATION **DATE:** August 12, 2026

Location / Title of Project Over-Height Warning System on Kirkwood Blvd

Applicant City of Davenport

Contact Person Gary Statz Title Traffic Engineer

Complete Mailing Address 1200 E 46th Street

Davenport, IA 52807

Phone 563-326-7754 E-Mail Gary.Statz@Davenportlowa.com

(Area Code)

If more than one highway authority is involved in this project, please indicate and fill in the information below (use additional sheets if necessary).

Co-Applicant(s) _____

Contact Person _____ Title _____

Complete Mailing Address _____

_____

Phone _____ E-Mail _____

(Area Code)

PLEASE COMPLETE THE FOLLOWING PROJECT INFORMATION:

Funding Amount

Total Safety Cost	$	$65,000
Total Project Cost	$	$65,000
Safety Funds Requested	**$**	**$65,000**

Additional Project Safety Documentation (when available):

☐ Project information sheet(s) or "Risk Score">50% from County/City's Local Road Safety Plan

☐ FHWA SS4A Safety Action Plan or similar comprehensive transportation safety plan

☐ Iowa DOT TEAP Study or similar analysis and concept

☒ Project intersection or segment with High or Medium PCR Level (PCR-All or PCR-Severe) from the Iowa DOT Potential for Crash Reduction (PCR) web-based map tool https://pcr.iowadot.gov/

Potential for Crash Reduction (PCR) Information

Intersection ID (1234567890) or Segment ID (1234)	Intersection or Segment	PCR Level High	PCR Level Medium	PCR-All value	PCR-Severe value
133985	Segment, Kirkwood Blvd, eastbound	☒	☐	1.1001	neg
133988	Segment, Kirkwood Blvd, westbound	☒	☐	1.8961	neg

Rev. 07/23

APPLICATION CERTIFICATION FOR PUBLIC AGENCY

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating public agency(ies). I understand the attached resolution(s), where applicable, binds the participating public agency(ies) to assume responsibility for any additional funds, if required, to complete the project. In addition, the participating public agency(ies) agrees to maintain any new or improved public streets or roadways for a minimum of five years.

I understand that, although this information is sufficient to secure a commitment of funds, a firm contract between the applicant and the Department of Transportation is required prior to the authorization of funds.

Representing the City of Davenport

Signed: _____ August 13, 2026
Signature — Date Signed

Jason Gordon
Printed Name

Attest: Brian Krup August 13, 2026
Signature — Date Signed

Brian Krup
Printed Name

Action Item # 2026-363

Resolution No. 2026-363

Resolution offered by Alderman R. Dunn.

RESOLVED by the City Council of the City of Davenport, Iowa.

RESOLUTION authorizing submission of a grant application to the Iowa Department of Transportation's Traffic Safety Improvement Program for financial assistance to install an over-height warning system on Kirkwood Boulevard at the railroad bridge near Mound Street.

WHEREAS, the Traffic Safety Improvement Program is established by the Iowa Department of Transportation (Iowa DOT) and distributes funding for roadway safety improvements, traffic control devices, and studies; and

WHEREAS, the City of Davenport has determined that an over-height warning system on Kirkwood Boulevard would improve safety; and

WHEREAS, if awarded partial funding from the Iowa DOT for this project, the City shall commit any additional funds necessary to complete the project and maintain improvements.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Davenport, Iowa, that staff is hereby authorized to submit a grant application to the Iowa Department of Transportation's Traffic Safety Improvement Program for financial assistance with improvements to traffic signals along Kimberly Road between Elsie Avenue and Elmore Avenue.

Passed and approved this 12th day of August, 2026.

Approved:

Jason Gordon
Mayor

SEAL OF THE CITY OF DAVENPORT IOWA

Attest:

Brian Krup
Deputy City Clerk

B. Narrative

Kirkwood Boulevard is a local street with a posted speed limit of 30 mph and an average daily traffic (ADT) of approximately 2,590 vehicles. Near Mound Street, Kirkwood Boulevard passes beneath a railroad bridge with a vertical clearance of 8 feet 6 inches. Low-clearance warning signs are installed in advance of the bridge in both directions, as well as at the structure itself. In addition, Kirkwood Boulevard is subject to a 7-ton truck restriction, which is posted at major intersections on both approaches to the bridge.

Despite these existing measures, the bridge continues to experience frequent strikes. Over the past five years, there have been 24 reported collisions with the structure, with the potential for additional unreported incidents. Many of these strikes involve rental vehicles, such as U-Haul trucks, and smaller box trucks, indicating that unfamiliar drivers may not recognize or respond appropriately to static warning signage.

The installation of an over-height vehicle detection and warning system is proposed to address this ongoing safety concern. This system would use sensors to identify vehicles exceeding the posted clearance height and activate real-time warnings to approaching drivers. The warnings would consist of flashing beacons mounted on W12-2 (Low Clearance) signs, supplemented with an “OVERHEIGHT WHEN FLASHING” plaque. The system would be solar-powered, allowing for efficient installation and operation without the need for extensive utility connections.

While a specific Crash Modification Factor (CMF) for over-height warning systems is not currently available, multiple studies have demonstrated significant reductions in bridge strikes following installation. Reported reductions typically range from 50% to 80% when active detection systems utilizing infrared or laser technology are deployed. For example, a case study in Athens-Clarke County, Georgia documented an average of eight bridge strikes per year prior to installation of an over-height warning system, with no strikes reported after implementation during the study period (https://www.tapconet.com/resource-center/case-study/athens-clarke-county-georgia).

The estimated cost for the proposed system is $65,000, including approximately $40,000 for equipment and $25,000 for installation, foundations, and associated labor. This investment is expected to substantially reduce bridge strikes and improve safety for motorists.

C. Itemized Breakdown of All Costs

A quote was received from Traffic and Parking Control, LLC (TAPCO) for the over-height warning system in March of 2026. The total was $38,254.60 and included, poles, signs with LED's, controllers, solar panels, over-height sensors, detectors, hardware, and $825 for shipping. The quote is attached. Since this equipment will not be purchased until July, 2027, it is assumed that the cost will increase slightly and cost is rounded to $40,000. A cost of $25,000 is assumed for installation which will include providing the foundations for 5 poles, installing the poles, signs, controller, over-height sensors, and setting up the system.

$40,000 equipment
+$25,000 installation
$65,000 total

SALES QUOTE

Traffic and Parking Control Co., LLC
5100 West Brown Deer Rd
Brown Deer, WI 53223
United States of America
Phone No.:800-236-0112
E-Mail: Tapcosales@tapconet.com

SALES QUOTE DATE
3/25/2026
SALES QUOTE NUMBER
Q26005232
CUSTOMER NO.
C10735

BILL TO
City of Davenport
Jeri Vondera
226 W 4th St
Davenport, IA 52801-1308
United States of America

SHIP TO
City of Davenport
Jeri Vondera
226 W 4th St
Davenport, IA 52801-1308
United States of America

Ext. Document No.	SHIP VIA	TERMS	SALESPERSON	VALID UNTIL
	ABF Quoted	Net 30 DAYS	Zach Feerick	4/24/2026

Item/Description	U/M	Quantity	Unit Price	Total Price
*** Detection - Solar ***				
250249 Over Height Sensor Assembly, Single Sensor Mount	Each	2	4,290.00	8,580.00
500901 Controller, 12V, Prostar-15, 120652, Hollow, Radio, Out1/Out2, CloudGate	Each	2		
500270 Controller, 12V, Prostar-15, 120652, Hollow, Out1/Out2	Each	2	1,592.50	3,185.00
142048 Universal Cabinet Mounting Bracket, SOP Cabinets 108766, 108045, 120652, Includes U-Bolt Hardware	Each	4	119.60	478.40
SLR-85-B 110W/12V Solar Panel Package, Top of Pole Mount 4.5 Dia	Each	4	887.25	3,549.00
2180-35AHAGN-BAT Battery, 35Ah 12V AGM Lead Acid	Each	12	185.25	2,223.00
ESSENTIAL-C Essential Software Annual Subscription, Cellular Network, Intelligent Warning Solutions	Each	2	191.75	383.50
* Poles *				
607028	Each	1	4,875.00	4,875.00

All prices are listed in US Dollar (USD)
For terms and conditions, please visit https://www.tapconet.com/terms-conditions

Traffic and Parking Control Co., LLC
5100 West Brown Deer Rd
Brown Deer, WI 53223
United States of America
Phone No.:800-236-0112
E-Mail: Tapcosales@tapconet.com

SALES QUOTE

SALES QUOTE DATE
3/25/2026
SALES QUOTE NUMBER
Q26005232
CUSTOMER NO.
C10735

BILL TO
City of Davenport
Jeri Vondera
226 W 4th St
Davenport, IA 52801-1308
United States of America

SHIP TO
City of Davenport
Jeri Vondera
226 W 4th St
Davenport, IA 52801-1308
United States of America

Ext. Document No.	SHIP VIA	TERMS	SALESPERSON	VALID UNTIL
	ABF Quoted	Net 30 DAYS	Zach Feerick	4/24/2026

Item/Description	U/M	Quantity	Unit Price	Total Price
Pole Package, Round				
030-00006 Washer Flat 1-1/16"ID x2.5OD"x.125" Galvanized For 1" A/B, for use w/ J-bolts (not incl)	Each	16		
203-00014 Base,Aluminum Square Pedestal, No Paint Door, SP-5444-PNC	Each	4		
3177-00042 J-Bolt,1"x 42"+4" ATSM F1554 GR-105 92k 12" Thread Full Galvanized with Nut & Lock Washer	Each	16		
373-2080 Standard Aluminum Pole,20,Schedule 80,4.5"OD TOE stamped	Each	4		
109482 Collar Assembly, Square Base, Aluminum,Wind Collar PB-5325	Each	4		
*** Warning - Solar ***				
500146 Controller, 12V, 136921, Radio, 30W TOP, No Battery	Each	4	1,530.75	6,123.00
137480 Dual 22AH Battery Pack Harnessed and Fused	Each	4	205.40	821.60

All prices are listed in US Dollar (USD)
For terms and conditions, please visit https://www.tapconet.com/terms-conditions

SALES QUOTE

Traffic and Parking Control Co., LLC
5100 West Brown Deer Rd
Brown Deer, WI 53223
United States of America
Phone No.:800-236-0112
E-Mail: Tapcosales@tapconet.com

SALES QUOTE DATE
3/25/2026
SALES QUOTE NUMBER
Q26005232
CUSTOMER NO.
C10735

BILL TO
City of Davenport
Jeri Vondera
226 W 4th St
Davenport, IA 52801-1308
United States of America

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Jeri Vondera
226 W 4th St
Davenport, IA 52801-1308
United States of America

Ext. Document No.	SHIP VIA	TERMS	SALESPERSON	VALID UNTIL
	ABF Quoted	Net 30 DAYS	Zach Feerick	4/24/2026

Item/Description	U/M	Quantity	Unit Price	Total Price
300017 Blinkersign, 36"x36"x.080, DMD, DG3, Fluor Yellow, 1 Color, DF, 8 Amber LEDs, SnglePostMnt ^ Legend: W12-2	Each	4	786.50	3,146.00
SP SIGN Sign, 36"x18"x.080, REC, DG3, FY, 1160 Overlay, SPM, "Overheight When Flashing"	Each	4	126.75	507.00
111531K Sign Mounting Kit, Banded, Flared Leg, Anti-Vandal For Mounting One Blinker Sign to a Large Pole	Each	4	40.95	163.80
111531N Sign Mounting Kit, Banded, Flared Leg, Standard For Mounting One Static Sign to a Large Pole * Poles *	Each	4	20.475	81.90
607028 Pole Package, Round	Each	1	3,312.40	3,312.40
030-00006 Washer Flat 1-1/16"ID x2.5OD"x.125" Galvanized For 1" A/B, for use w/ J-bolts (not incl)	Each	16		
203-00014 Base,Aluminum Square Pedestal, No Paint Door, SP-5444-PNC	Each	4		
3177-00042	Each	16		

All prices are listed in US Dollar (USD)
For terms and conditions, please visit https://www.tapconet.com/terms-conditions

TAPCO
Safe travels.

SALES QUOTE

Traffic and Parking Control Co., LLC
5100 West Brown Deer Rd
Brown Deer, WI 53223
United States of America
Phone No.:800-236-0112
E-Mail: Tapcosales@tapconet.com

SALES QUOTE DATE
3/25/2026
SALES QUOTE NUMBER
Q26005232
CUSTOMER NO.
C10735

BILL TO
City of Davenport
Jeri Vondera
226 W 4th St
Davenport, IA 52801-1308
United States of America

SHIP TO
City of Davenport
Jeri Vondera
226 W 4th St
Davenport, IA 52801-1308
United States of America

Ext. Document No.	SHIP VIA	TERMS	SALESPERSON	VALID UNTIL
	ABF Quoted	Net 30 DAYS	Zach Feerick	4/24/2026

Item/Description	U/M	Quantity	Unit Price	Total Price
J-Bolt,1"x 42"+4" ATSM F1554 GR-105 92k 12" Thread Full Galvanized with Nut & Lock Washer				
373-15 Pole,Standard Aluminum Pole,15' Schedule 40 6061-T6 4.5" OD T.O.E. .	Each	4		
3200-0000 Freight Sales		1	825.00	825.00

Iowa State Contract

Furnish only quote. Installation is not included.

Zach Feerick
(262)649-5142
zach.feerick@tapconet.com

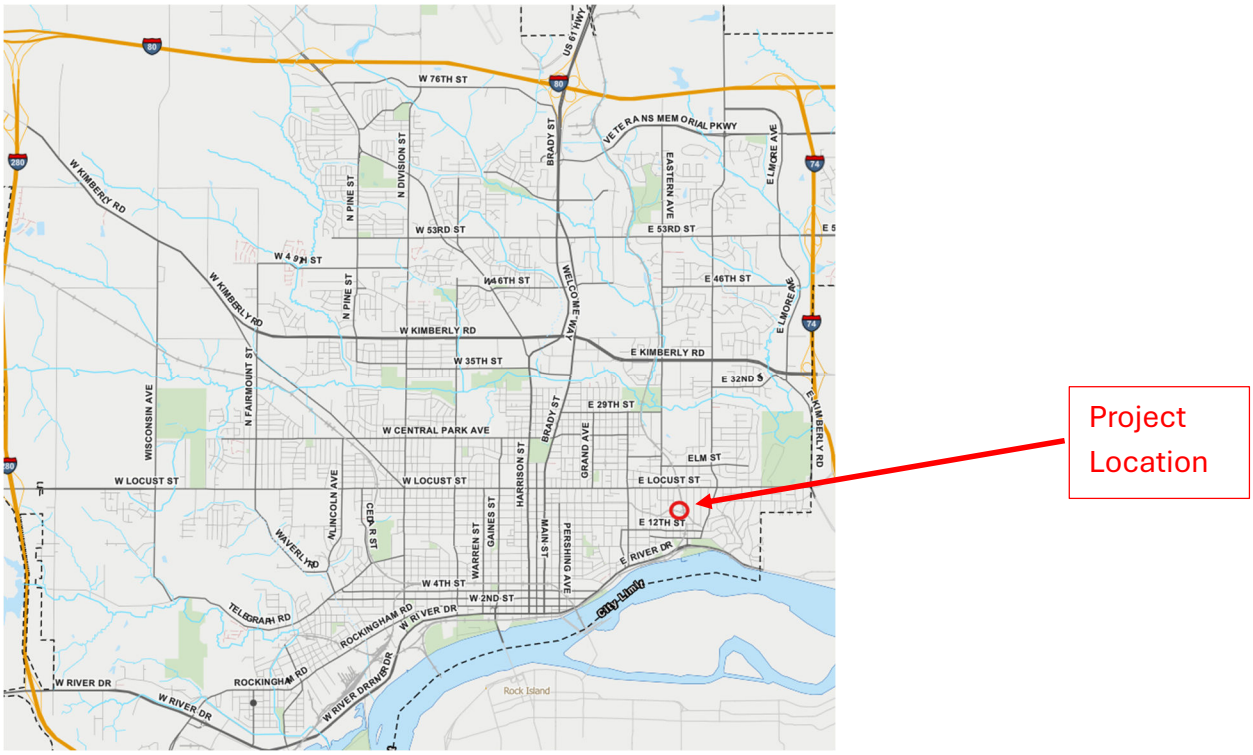
Subtotal:	**38254.60**
Invoice Discount:	0.00
Total Sales Tax:	0.00
Total:	**38,254.60**

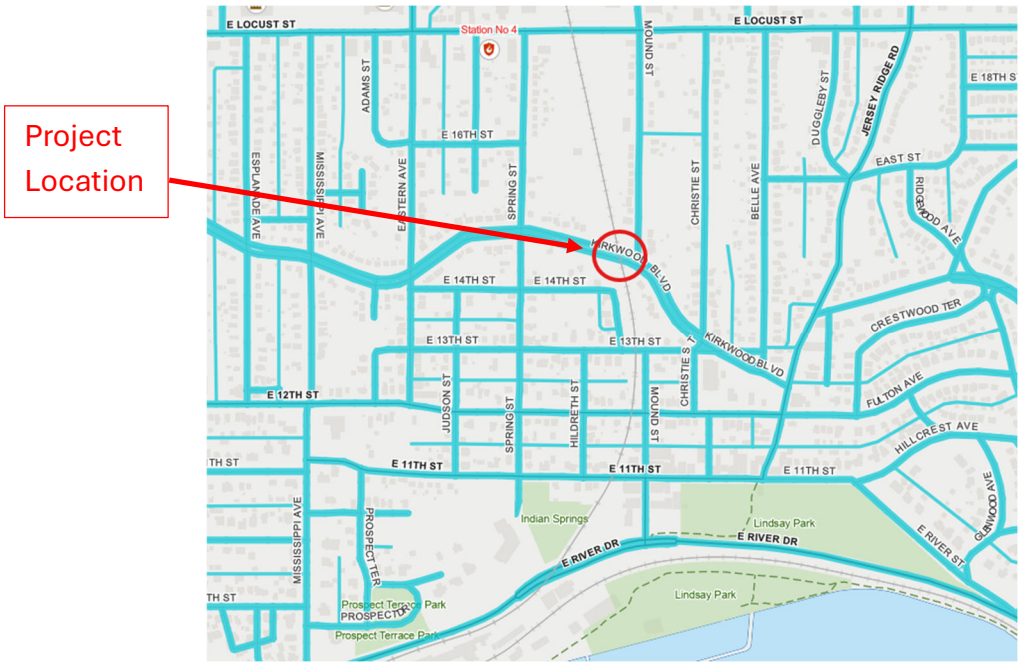
All prices are listed in US Dollar (USD)
For terms and conditions, please visit https://www.tapconet.com/terms-conditions

D. Time Schedule

Equipment would be ordered in July 2027, and installed by October, 2027.

E. Map





F. Pictures

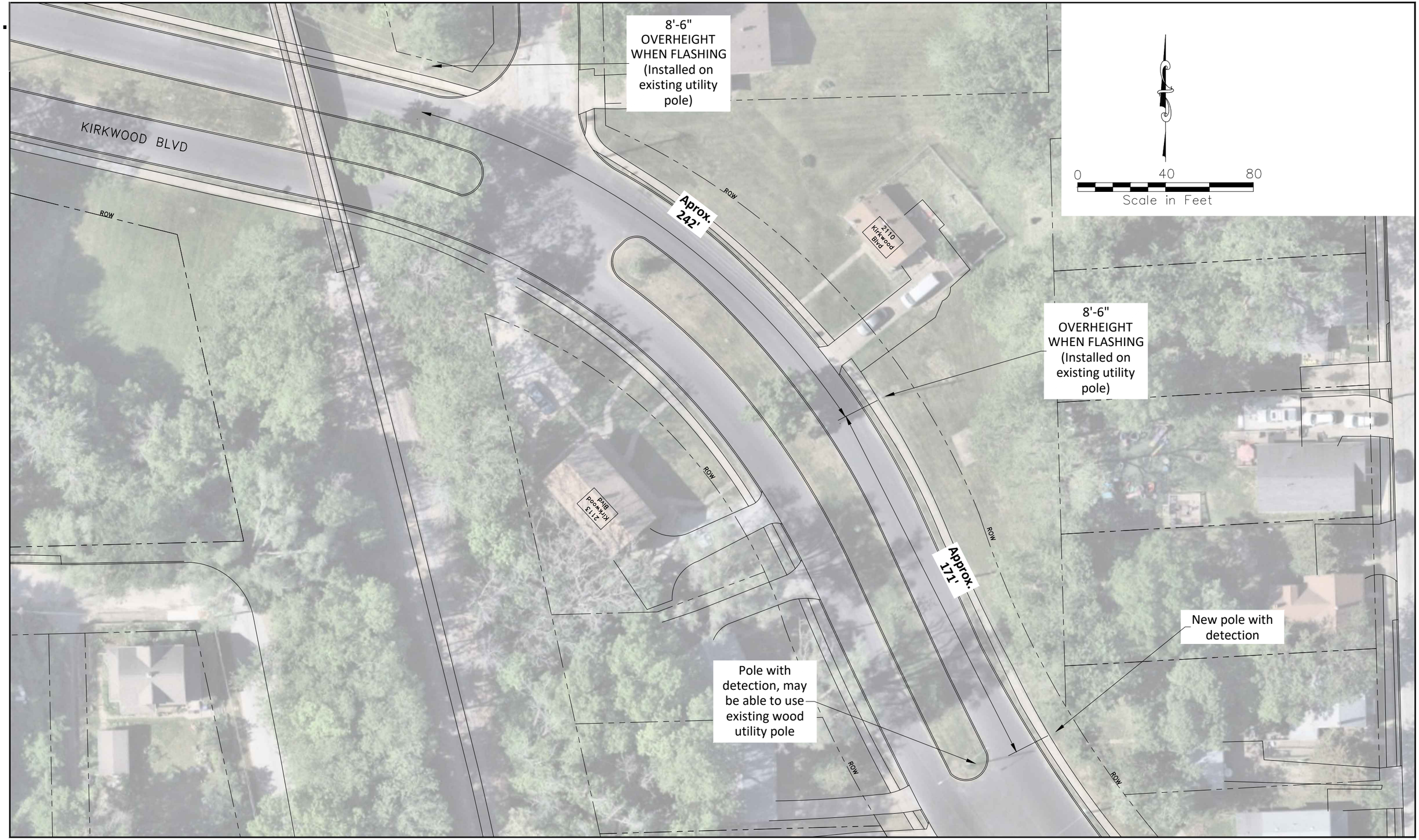


Westbound



Eastbound

G.



KIRKWOOD BLVD @
RAILROAD BRIDGE

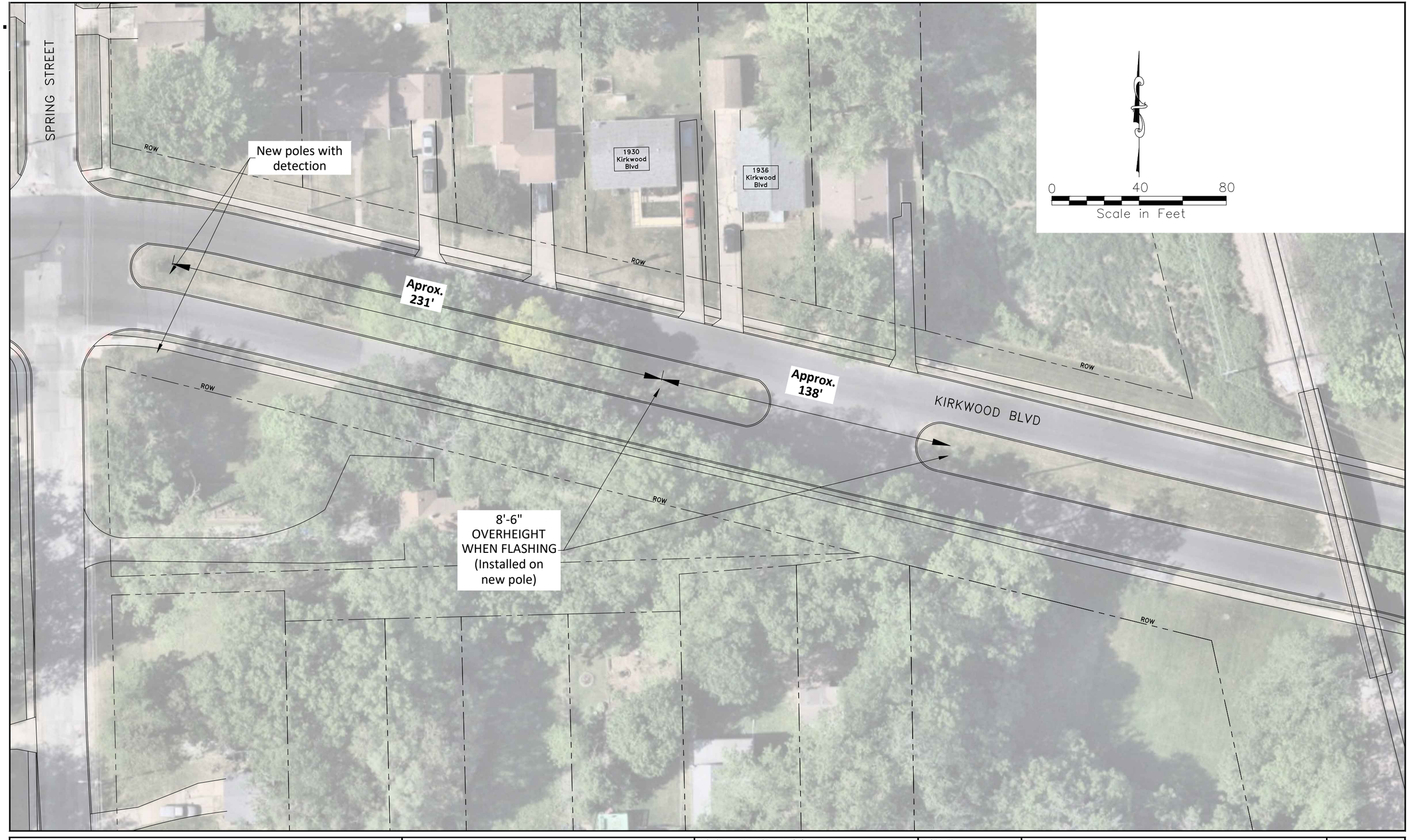
City of Davenport, Iowa
Engineering Division
1200 E. 46th Street
(563) 326-7729
Davenport, Iowa 52807
Fax (563) 327-5182

PROJECT NUMBER: IDOT IM-XX-X(XX)XXX--XX-XX	PLOT DATE: 8/12/2026
CIP NUMBER: XXXXX	PLOT SCALE: 1" = 150'
REVISION: ---- ----	DESIGNED BY: XXX
	DRAWN BY: XXX
	CHECKED BY: XXX
DWG.FILE :Overheight_Kirkwood.dwg	

OVERHEIGHT
DETECTION SYSTEM

SHEET NO. 2
TOTAL SHEETS 2

G.



KIRKWOOD BLVD AT RAILROAD BRIDGE	City of Davenport, Iowa Engineering Division 1200 E. 46th Street (563) 326-7729 Davenport, Iowa 52807 Fax (563) 327-5182	PROJECT NUMBER: IDOT IM-XX-X(XX)XXX--XX-XX CIP NUMBER: XXXXX REVISION: ---- ---- DWG.FILE :Overheight_Kirkwood.dwg	PLOT DATE: 8/12/2026 PLOT SCALE: 1" = 150' DESIGNED BY: XXX DRAWN BY: XXX CHECKED BY: XXX	OVERHEIGHT DETECTION SYSTEM	SHEET NO. 1 TOTAL SHEETS 2

H. RECENT TRAFFIC VOLUMES

From the Iowa DOT, the Iowa Traffic Data site has a 2,590 AADT from 2022 on Kirkwood Blvd at the railroad underpass. From StreetLight traffic data, they have an estimated AADT of 2,135 for 2025.

I. Traffic Signal Layout

Not applicable.

J. B/C worksheet

No Crash Modification Factor was able to be found. However, reported reductions, as discussed in the Narrative, report crash reductions of 50% to 80% with the Over-Height Warning System. Using a CMF of 50, the B/C ratio is 5.37. The worksheet and crash report are attached.

County:	Scott	Prepared By:	Jeri Vondera
Location:	Kirkwood Blvd, RR underpass	Date Prepared:	8/12/2026
Proposed Improvements:	Over-Height Warning System		
Estimated Improvement Cost:	$ 65,000		
Inflation on Crash Costs:	4%	Annual Maintenance:	2%
Discount Rate:	4%	(% of Improvement Cost)	
Estimated Service Life:	10	Annual Maintenance Cost:	$ 1,300

Method Choice: CRF Method

The Crash Reduction Factor (CRF) Method applies one to three CRFs to historical crashes to estimate reductions in future crashes. Crash Modification Factors (CMFs) can be converted to CRFs. For additional information, click the "Learn More" button.

Crash Reduction Factor (CRF) Method

Traffic Growth Factor:	1%
Number of CRFs:	1
Years of Crash History:	5

Combined CRF (Dominant Common Residuals Method)

Iowa DOT's preferred methodology for combining CRFs is Dominant Common Residuals, since it is more conservative than the other options.

	CRF 1:		Combined CRF	
CRF Value (%)	50		**50.0**	
Equivalent CMF	0.50			Is Dom. Com. Resd.
Combined CMF, if # used (DR)	0.50		0.50	TRUE
Combined CMF, if # used (Mult)	0.50			Is data entered befc
Pick Dom Com. Resd. Or Mult. Fo	0.50		0.50	FALSE

Crash Severity	Rounded Societal Costs	Crash History (Total):	CRF (from above)	Crash History - Annual Avg	Crashes Saved Annually
Fatal (K)	$ 4,500,000		50.0	**0.00**	**0.00**
Serious Injury (A)	$ 4,500,000		50.0	**0.00**	**0.00**
Minor Injury (B)	$ 300,000		50.0	**0.00**	**0.00**
Possible/Unknown Injury (C)	$ 145,000		50.0	**0.00**	**0.00**
Property Damage Only (O)	$ 20,000	24	50.0	**4.80**	**2.40**

Crash Severity	Annual Societal Benefit
Fatal (K)	**$** -
Serious Injury (A)	**$** -
Minor Injury (B)	**$** -
Possible/Unknown Injury (C)	**$** -

County:	Scott	Prepared By:	Jeri Vondera
Location:	Kirkwood Blvd, RR underpass	Date Prepared:	8/12/2026
Property Damage Only (O)	**$ 48,000**		

Predictive Method

Existing Condition (All Crashes):		Location Characteristics:	Please Select
Alternative (All Crashes):			Please Select
Percent Change in Crashes	**n/a**		Iowa Crash Distribution 2017-2021

Crash Severity	Crash Distribution Based on Location Characteristics	Existing Condition Expected Crashes - Service Life	Alternative Expected Crashes - Service Life	Crashes Saved Over Service Life	Crashes Saved Annually
Fatal (K)	0.00%	0.00	0.00	**0.00**	**0.00**
Serious Injury (A)	0.00%	0.00	0.00	**0.00**	**0.00**
Minor Injury (B)	0.00%	0.00	0.00	**0.00**	**0.00**
Possible/Unknown Injury (C)	0.00%	0.00	0.00	**0.00**	**0.00**
Property Damage Only (O)	0.00%	0.00	0.00	**0.00**	**0.00**

Crash Severity	Rounded Societal Costs	Annual Societal Benefit
Fatal (K)	$ 4,500,000	**$** -
Serious Injury (A)	$ 4,500,000	**$** -
Minor Injury (B)	$ 300,000	**$** -
Possible/Unknown Injury (C)	$ 145,000	**$** -
Property Damage Only (O)	$ 20,000	**$** -

Total Benefits and Costs

		Implementation Cost	$ 65,000
		Present Value of Maint.	$ 10,544
Present Value Benefits (Societal Benefits)	$ 406,011	Present Value Costs (Impl. and Maint. Costs)	$ 75,544
Present Value Net Return	$ 330,467		
Benefit Cost Ratio	**5.37**		

Form continues on next page

County: Scott
Location: Kirkwood Blvd, RR underpass
Prepared By: Jeri Vondera
Date Prepared: 8/12/2026

No Input Necessary - No Custom Values In Use

General Customizations

No change to Crash Costs

No change to Discount Rate

No change to Maintenance Costs

Method-Specific Customizations

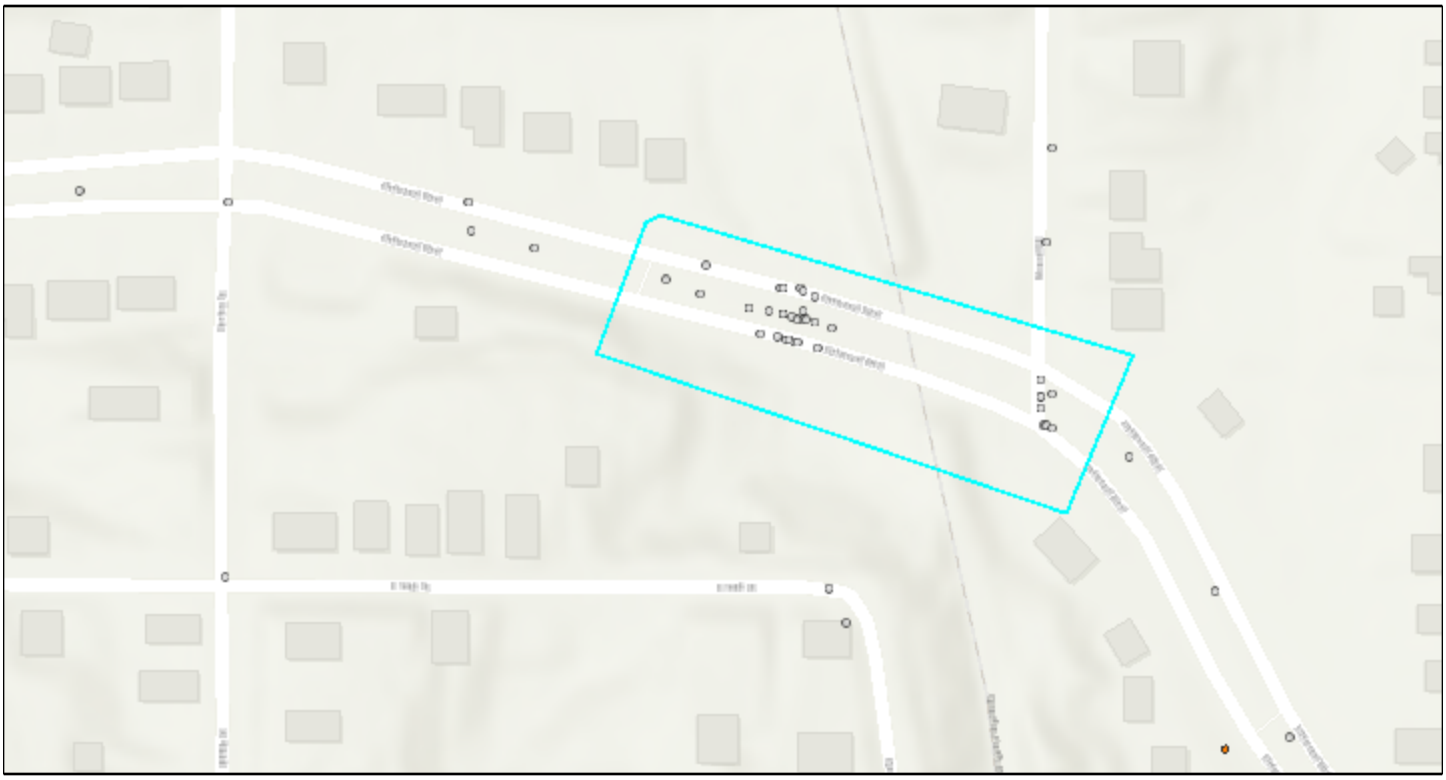
Iowa Crash Analysis Tool
Quick Report
2021-2026

Crash Severity	29
Fatal Crash	0
Suspected Serious Injury Crash	0
Suspected Minor Injury Crash	0
Possible/Unknown Injury Crash	3
Property Damage Only	26

Injury Status Summary	3
Fatalities	0
Suspected serious/incapacitating	0
Suspected minor/non-incapacitating	0
Possible (complaint of pain/injury)	1
Uninjured	0
Unknown	2
Not Reported	0

Property/Vehicles/Occupants	
Property Damage Total (dollars):	250,650.00
Average (per crash dollars):	8,643.10
Total Vehicles:	29.00
Average (per crash):	1.00
Total Occupants:	39.00
Average (per crash):	1.34

Average Severity	
Fatalities/Fatal Crash:	0.00
Fatalities/Crash:	0.00
Injuries/Crash:	0.03
Major Injuries/Crash:	0.00
Minor Injuries/Crash:	0.00
Possible/Unknown Injuries/Crash:	0.03



Major Cause			29
Animal	0	Ran traffic signal	0
Ran stop sign	0	Failed to yield to emergency vehicle	0
FTYROW: At uncontrolled intersection	0	FTYROW: Making right turn on red signal	0
FTYROW: From stop sign	0	FTYROW: From yield sign	0
FTYROW: Making left turn	0	FTYROW: From driveway	0
FTYROW: From parked position	0	FTYROW: To pedestrian	0
FTYROW: Other	0	Drove around RR grade crossing gates	0
Disregarded RR Signal	0	Crossed centerline (undivided)	0
Crossed median (divided)	0	Traveling wrong way or on wrong side of road	0
Aggressive driving/road rage	0	Driving too fast for conditions	0
Exceeded authorized speed	0	Improper or erratic lane changing	0
Operating vehicle in an reckless/erratic/care...	1	Followed too close	0
Passing: On wrong side	0	Passing: Where prohibited by signs/markings	1
Passing: With insufficient distance/inadequa...	0	Passing: Through/around barrier	1
Passing: Other passing	0	Made improper turn	0
Driver Distraction: Manual operation of an e...	0	Driver Distraction: Talking on a hand-held d...	0
Driver Distraction: Talking on a hands free ...	0	Driver Distraction: Adjusting devices (radio...	1
Driver Distraction: Other electronic device ...	0	Driver Distraction: Passenger	0
Driver Distraction: Unrestrained animal	0	Driver Distraction: Reaching for object(s)/f...	0
Driver Distraction: Inattentive/lost in thou...	1	Driver Distraction: Other interior distracti...	0
Driver Distraction: Exterior distraction	0	Ran off road - right	2
Ran off road - straight	0	Ran off road - left	0
Lost control	1	Swerving/Evasive Action	0
Over correcting/over steering	0	Failed to keep in proper lane	0
Failure to signal intentions	0	Traveling on prohibited traffic way	2
Vehicle stopped on railroad tracks	0	Other: Vision obstructed	0
Other: Improper operation	6	Other: Disregarded warning sign	3
Other: Disregarded signs/road markings	5	Other: Illegal off-road driving	0
Downhill runaway	0	Separation of units	0
Towing improperly	0	Cargo/equipment loss or shift	0
Equipment failure	0	Oversized load/vehicle	0
Other: Getting off/out of vehicle	0	Failure to dim lights/have lights on	0
Improper backing	0	Improper starting	0
Illegally parked/unattended	0	Driving less than the posted speed limit	0
Operator inexperience	1	Other	4
Unknown	0	Not reported	0
Other: No improper action	0		

Time of Day/Day of Week

Day of Week	12 AM to 2 AM	2 AM to 4 AM	4 AM to 6 AM	6 AM to 8 AM	8 AM to 10 AM	10 AM to Noon	Noon to 2 PM	2 PM to 4 PM	4 PM to 6 PM	6 PM to 8 PM	8 PM to 10 PM	10 PM to 12 AM	Not reported	Total
Sunday	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Monday	0	0	1	0	0	1	1	0	0	1	0	0	0	4
Tuesday	0	0	0	1	1	1	0	0	1	0	0	0	0	4
Wednesday	0	0	0	0	0	0	2	0	0	0	0	1	0	3
Thursday	0	0	0	0	2	3	2	0	0	0	0	0	0	7
Friday	0	0	0	0	0	1	1	2	1	0	0	0	0	5
Saturday	0	1	0	0	1	0	2	1	0	0	0	0	0	5
Total	0	1	1	1	4	6	8	4	2	1	0	1	0	29

Manner of Crash Collision	29
Non-collision (single vehicle)	29
Head-on (front to front)	0
Rear-end (front to rear)	0
Angle (oncoming left turn)	0
Broadside (front to side)	0
Sideswipe (same direction)	0
Sideswipe (opposite direction)	0
Rear to rear	0
Rear to side	0
Not reported	0
Other	0
Unknown	0

Surface Conditions	29
Dry	25
Wet	2
Ice/frost	0
Snow	1
Slush	0
Mud/dirt	0
Water (standing or moving)	0
Sand	0
Oil	0
Gravel	0
Not reported	0
Other	0
Unknown	1

Fixed Object Struck	29		
Bridge overhead structure	25	Bridge pier or support	0
Bridge/bridge rail parapet	2	Curb/island/raised median	0
Ditch	0	Embankment	0
Ground	0	Culvert/pipe opening	0
Guardrail - face	0	Guardrail - end	0
Concrete traffic barrier (median or right sid...	0	Other traffic barrier	0
Cable barrier	0	Impact attenuator/crash cushion	0
Utility pole/light support	1	Traffic sign support	0
Traffic signal support	0	Other post/pole/support	0
Fire hydrant	0	Mailbox	0
Tree	0	Landscape/shrubbery	0
Snow bank	0	Fence	0
Wall	0	Building	0
Other fixed object	0	None (no fixed object struck)	1

NOTE: 3 of the listed crashes occurred in the first 6 months of 2021, more than 5 years ago.

Driver Age/Driver Gender					
Driver Age - 5 year Bins	Female	Male	Not reported	Unknown	**Total**
< 14	0	0	0	0	0
= 14	0	0	0	0	0
= 15	0	0	0	0	0
= 16	0	0	0	0	0
= 17	0	0	0	0	0
= 18	0	2	0	0	2
= 19	0	0	0	0	0
= 20	0	0	0	0	0
>= 21 and <= 24	0	2	0	0	2
>= 25 and <= 29	3	1	0	0	4
>= 30 and <= 34	2	2	0	0	4
>= 35 and <= 39	0	3	0	0	3
>= 40 and <= 44	0	2	0	0	2
>= 45 and <= 49	0	2	0	0	2
>= 50 and <= 54	2	0	0	0	2
>= 55 and <= 59	2	1	0	0	3
>= 60 and <= 64	1	1	0	0	2
>= 65 and <= 69	1	0	0	0	1
>= 70 and <= 74	0	0	0	0	0
>= 75 and <= 79	0	0	0	0	0
>= 80 and <= 84	0	0	0	0	0
>= 85 and <= 89	0	0	0	0	0
>= 90 and <= 94	0	0	0	0	0
>= 95	0	0	0	0	0
Not reported	0	0	0	0	0
Unknown	0	0	2	0	2
Total	11	16	2	0	29

Drug/Alcohol Related	**29**
Drug	0
Alcohol (< Statutory)	0
Alcohol (Statutory)	0
Drug and Alcohol (< Statutory)	0
Drug and Alcohol (Statutory)	0
Refused	0
Under Influence of Alcohol/Drugs/Medications	1
None Indicated	28

Alcohol Test Given	**29**
None	27
Blood	0
Urine	0
Breath	0
Vitreous	0
Refused	0
Not reported	2

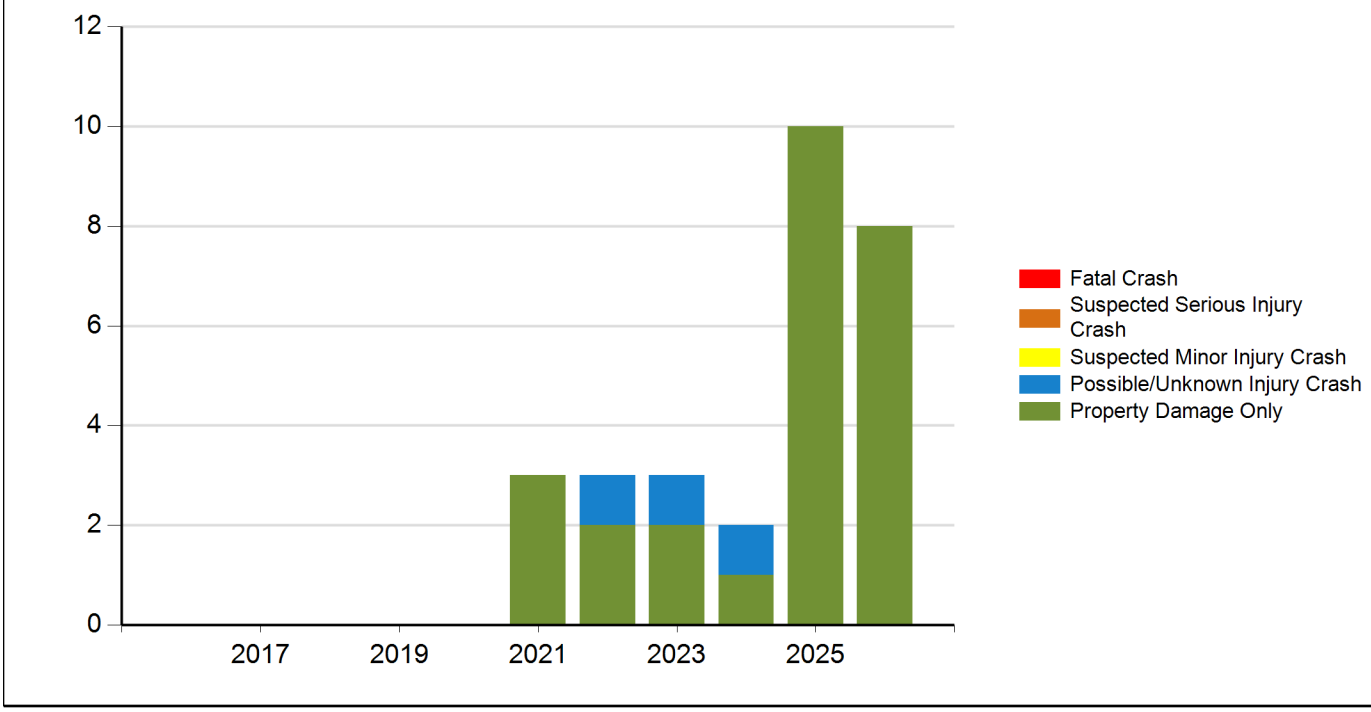
Drug Test Given	**29**
None	27
Blood	0
Urine	0
Breath	0
Vitreous	0
Refused	0
Not reported	2

Drug Test Result	**29**
Negative	0
Cannabis	0
Central Nervous System depressants	0
Central Nervous System stimulants	0
Hallucinogens	0
Inhalants	0
Narcotic Analgesics	0
Dissociative Anesthetic (PCP)	0
Prescription Drug	0
Not reported	29
Other	0

Crash Severity - Annual

Crash Year	Fatal Crash	Suspected Serious Injury Crash	Suspected Minor Injury Crash	Possible/Unknown Injury Crash	Property Damage Only	**Total**
2016	0	0	0	0	0	0
2017	0	0	0	0	0	0
2018	0	0	0	0	0	0
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	0	0	3	3
2022	0	0	0	1	2	3
2023	0	0	0	1	2	3
2024	0	0	0	1	1	2
2025	0	0	0	0	10	10
2026	0	0	0	0	8	8
Total	0	0	0	3	26	29

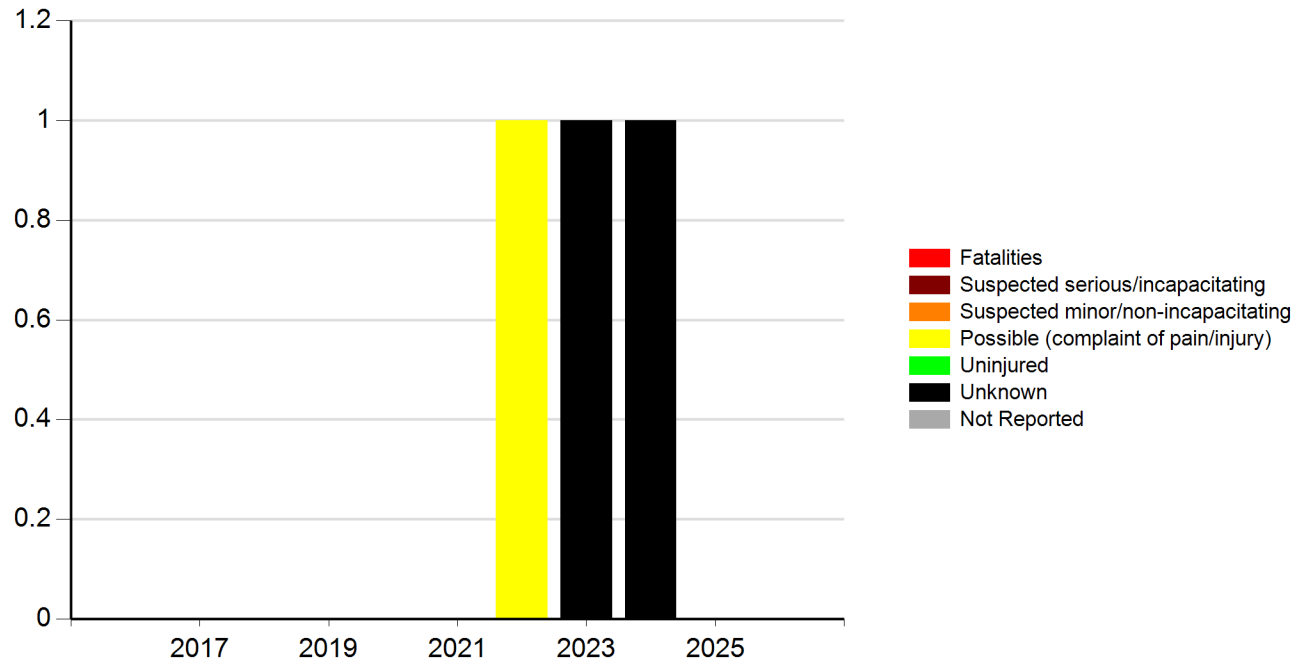
Severity/Year



Injury Status - Annual

Crash Year	Fatalities	Suspected serious/incapacitating	Suspected minor/non-incapacitating	Possible (complaint of pain/injury)	Uninjured	Unknown	Not Reported	**Total**
2016	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0
2022	0	0	0	1	0	0	0	1
2023	0	0	0	0	0	1	0	1
2024	0	0	0	0	0	1	0	1
2025	0	0	0	0	0	0	0	0
2026	0	0	0	0	0	0	0	0
Total	0	0	0	1	0	2	0	3

Injury Status/Year



Meeting the following criteria

Jurisdiction: Statewide
Year: 2021, 2022, 2023, 2024, 2025, 2026
Map Selection: Yes
Filter: None

Analyst Information

Rev. 07/23

Application for TRAFFIC CONTROL DEVICE TSIP FUNDS

GENERAL INFORMATION **DATE:** August 5, 2026

Location / Title of Project 215th St & Floris curves-speed activated Chevrons

Applicant Davis County Highway Department

Contact Person Ryan Schock Title County Engineer

Complete Mailing Address 21585 Lilac Ave

Bloomfield, IA 52537

Phone 641-664-2542 (Area Code) Email schockr@daviscountyiowa.org

If more than one highway authority is involved in this project, please indicate and fill in the information below (use additional sheets if necessary).

Co-Applicant(s) _____

Contact Person _____ Title _____

Complete Mailing Address _____

_____

Phone _____ (Area Code) E-Mail _____

PLEASE COMPLETE THE FOLLOWING PROJECT INFORMATION:

Funding Amount

Total Safety Cost	$	80,000
Total Project Cost	$	80,000
Safety Funds Requested	**$**	80,000

Additional Project Safety Documentation (when available):

- ☐ Project information sheet(s) or "Risk Score">50% from County/City's Local Road Safety Plan
- ☒ FHWA SS4A Safety Action Plan or similar comprehensive transportation safety plan
- ☐ Iowa DOT TEAP Study or similar analysis and concept
- ☐ Project intersection or segment with High or Medium PCR Level (PCR-All or PCR-Severe) from the Iowa DOT Potential for Crash Reduction (PCR) web-based map tool https://pcr.iowadot.gov/

Potential for Crash Reduction (PCR) Information

Intersection ID (1234567890) or Segment ID (1234)	Intersection or Segment	PCR Level High	PCR Level Medium	PCR-All value	PCR-Severe value
Curve 4023	215th St Curve	☐	☐	12	
Curve 4025	Floris Road Curve			13	
Curve 4029	Floris Road Curve	☐	☐	13	

APPLICATION CERTIFICATION FOR PUBLIC AGENCY

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating public agency(ies). I understand the attached resolution(s), where applicable, binds the participating public agency(ies) to assume responsibility for any additional funds, if required, to complete the project. In addition, the participating public agency(ies) agrees to maintain any new or improved public streets or roadways for a minimum of five years.

I understand that, although this information is sufficient to secure a commitment of funds, a firm contract between the applicant and the Department of Transportation is required prior to the authorization of funds.

Representing the Davis County Highway Department

Signed: _____ 3-2-26
Signature Date Signed

Ron Bride
Printed Name

Attest: _____ 3-2-26
Signature Date Signed

Kristi Goodson
Printed Name

B. Narrative

Davis County is applying for the Transportation Safety Improvement Program (TSIP) funds in the amount estimated to be 100% of the cost of speed activated chevrons at (2) locations. The curve locations are on 215th St at a bridge location and in the City of Floris in a "S" curve location. Both roads are Farm-to-Market routes in Davis County.

The Davis County Secondary Roads Department is responsible for the engineering, construction and maintenance of the county's secondary road system. The secondary road system in Davis County consists of 141 bridges, 91 miles of paved roads, 648 miles of granular surfacing, and 56 miles of dirt roads totaling 795 miles. Typical paved route daily traffic county in Davis County ranges from 140 to 1530 vehicles per day.

Section 2C.10 of the MUTCD provides standards, guidance, and support for the use of chevrons.

Both of these locations are listed in our Safety Action plans and are sharp curves with reduced speeds, ranging from 45 mph, 40 mph to 25 mph. The safety benefits of utilizing speed activated chevrons is hard to quantify in dollars. However, a list of safety benefits for motorists in navigating these sharp curves is available below:

- Increased visibility to approaching motorists
- More direct communication with motorist on the sharpness of upcoming curves
- Clearer understanding and familiarity with drivers
- Significantly more viable for nighttime drivers

Davis County is requesting TSIP funding for an amount equal to the cost of (14) – (16) speed activated Chevrons (CS-01: CRF value of 10)

C. Itemized Breakdown of Costs

Quotes listed here are for (14) speed activated chevrons. These preliminary quotes are attached in Appendix A.

Date	Vendor	Cost
3/3/2026	Tapco – 16 Chevrons	$70,184.30
3/23/2026	Newman Signs – 12 Chevrons	$34,531.36
3/20/2026	Sign Solutions – 16 Chevrons	$46,873.07

D. Time Schedule

TSIP Application Due	8/15/26
TSIP Award Notification	1/15/27
TSIP Funding Available	7/1/27
Quote Review	7/31/27
Place Order	8/31/27
Delivery and Deployment Availability	11/1/27

E. Map

Project locations would be any county secondary road where chevrons will be installed.

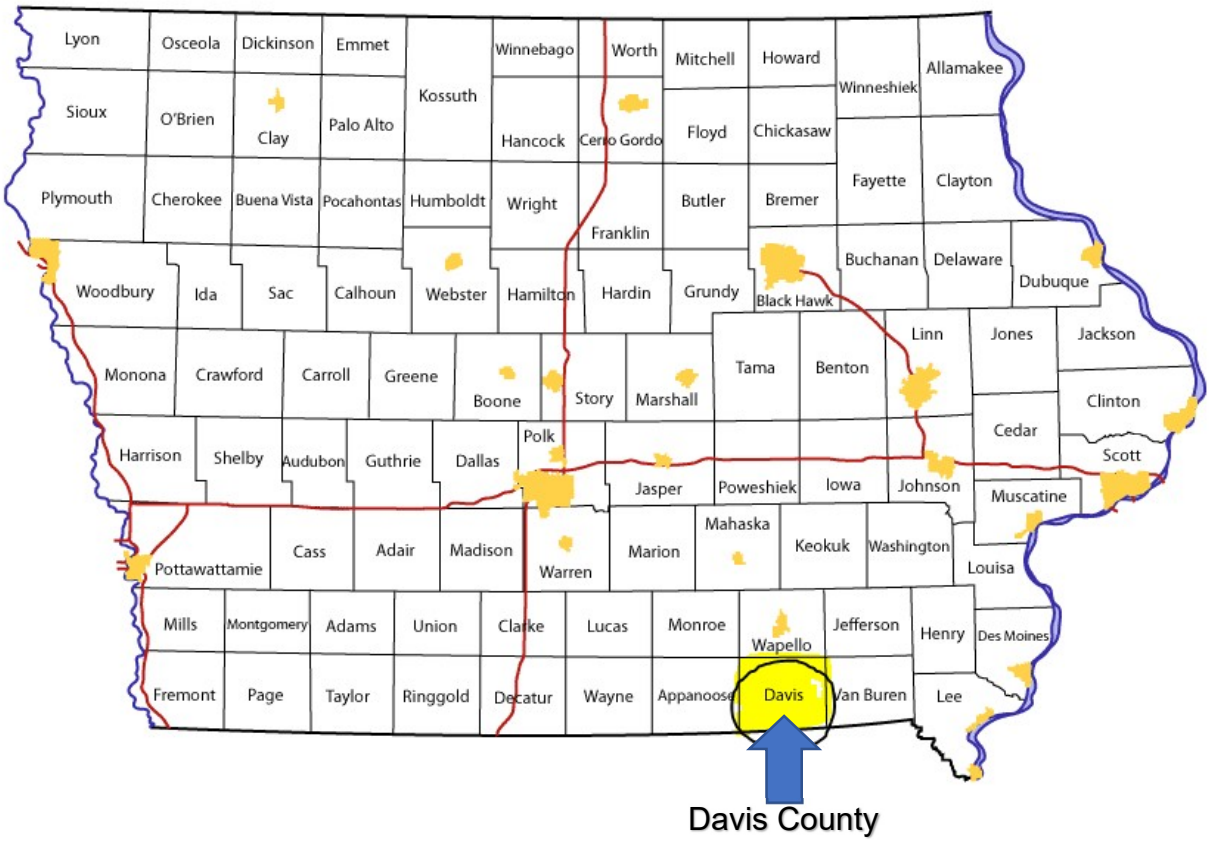
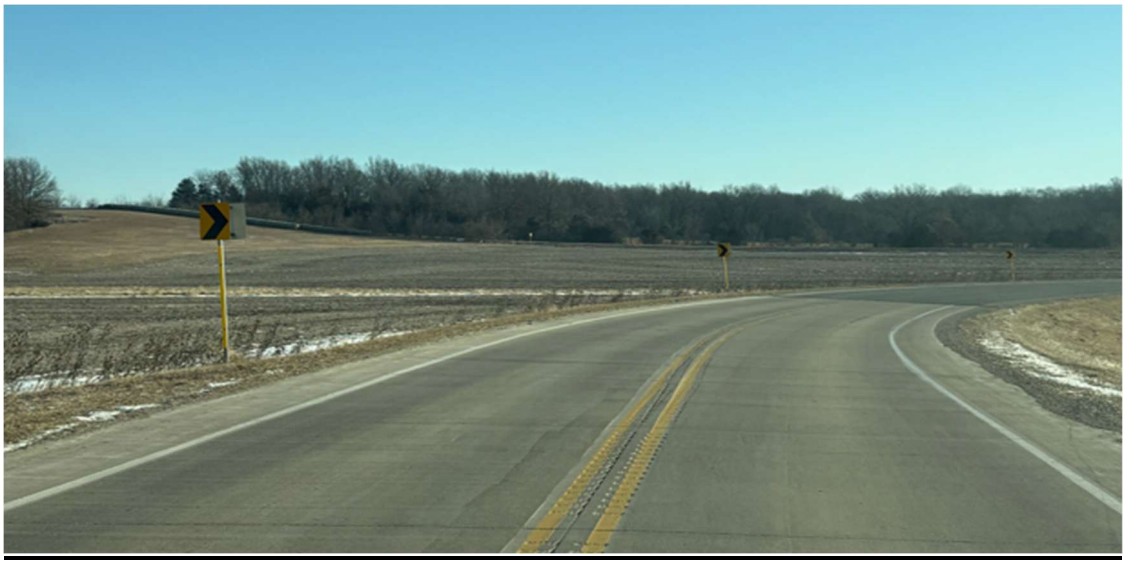


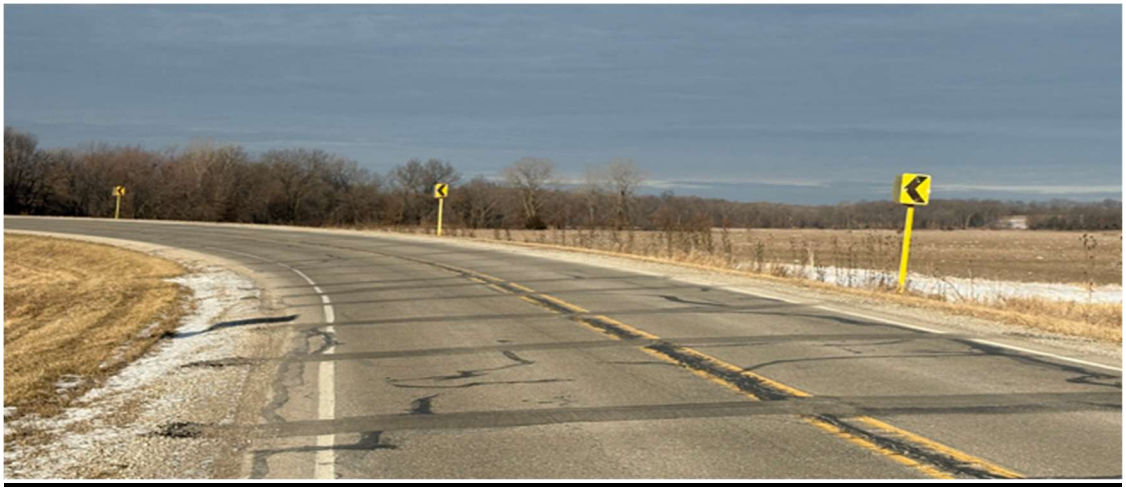
Image Source: https://iowadot.gov/maps/Digital-maps/City-and-county-maps

F. Color Pictures

215th St site photos:







215th St curves:



Floris Road photos:





Floris curves:

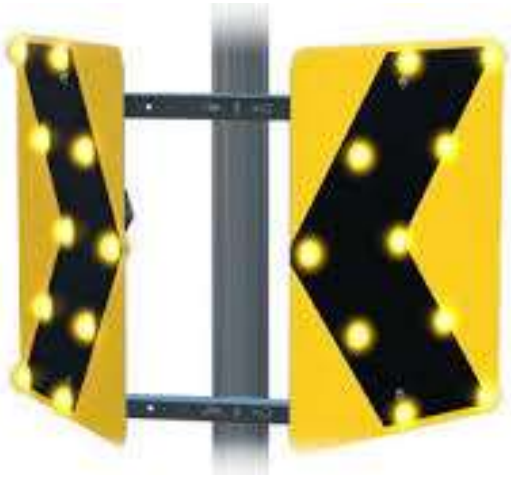


G. Plan View

*Not Applicable for this application

We plan to replace the existing signs with these new signs – stock photos below:







*stock photo

H. Traffic Volumes/Turning Movement

*Not Applicable for this application

ICAT Crash Summary

215th St:

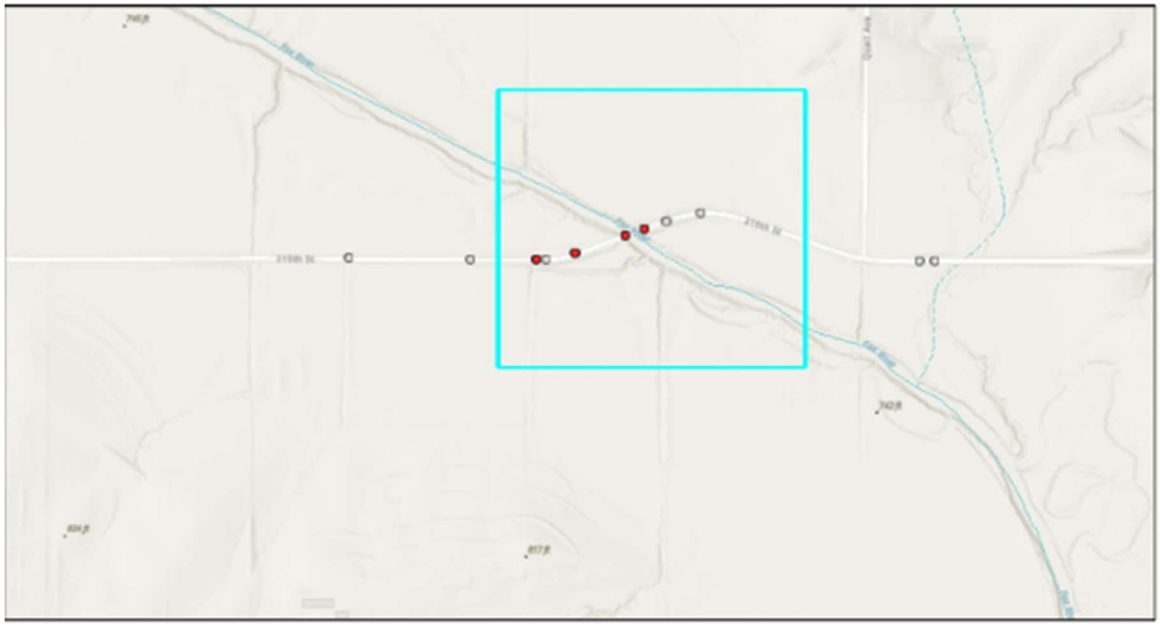
Iowa Crash Analysis Tool
Quick Report
2021-2025

Crash Severity	4
Fatal Crash	0
Suspected Serious Injury Crash	0
Suspected Minor Injury Crash	0
Possible/Unknown Injury Crash	2
Property Damage Only	2

Injury Status Summary	3
Fatalities	0
Suspected serious/incapacitating	0
Suspected minor/non-incapacitating	0
Possible (complaint of pain/injury)	2
Uninjured	0
Unknown	0
Not Reported	1

Property/Vehicles/Occupants	
Property Damage Total (dollars):	174,360.00
Average (per crash dollars):	43,590.00
Total Vehicles:	4.00
Average (per crash):	1.00
Total Occupants:	4.00
Average (per crash):	1.00

Average Severity	
Fatalities/Fatal Crash:	0.00
Fatalities/Crash:	0.00
Injuries/Crash:	0.50
Major Injuries/Crash:	0.00
Minor Injuries/Crash:	0.00
Possible/Unknown Injuries/Crash:	0.50



Floris Road:

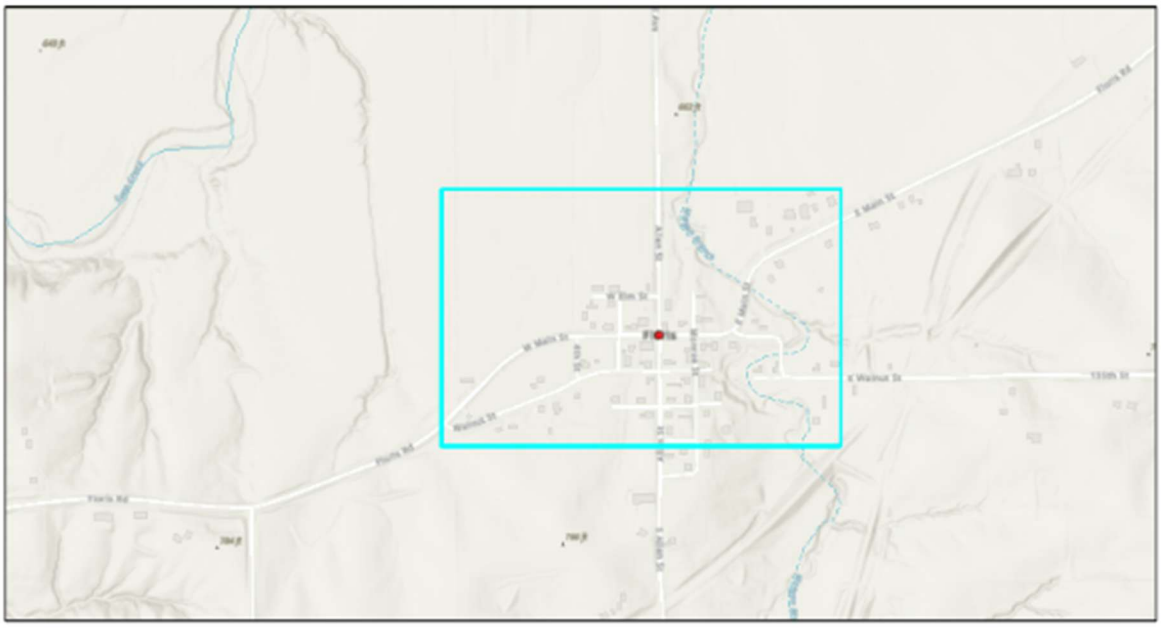
Iowa Crash Analysis Tool
Quick Report
2021-2025

Crash Severity	1
Fatal Crash	0
Suspected Serious Injury Crash	0
Suspected Minor Injury Crash	1
Possible/Unknown Injury Crash	0
Property Damage Only	0

Injury Status Summary	2
Fatalities	0
Suspected serious/incapacitating	0
Suspected minor/non-incapacitating	1
Possible (complaint of pain/injury)	0
Uninjured	0
Unknown	0
Not Reported	1

Property/Vehicles/Occupants	
Property Damage Total (dollars):	35,000.00
Average (per crash dollars):	35,000.00
Total Vehicles:	3.00
Average (per crash):	3.00
Total Occupants:	8.00
Average (per crash):	8.00

Average Severity	
Fatalities/Fatal Crash:	0.00
Fatalities/Crash:	0.00
Injuries/Crash:	1.00
Major Injuries/Crash:	0.00
Minor Injuries/Crash:	1.00
Possible/Unknown Injuries/Crash:	0.00



Appendix A

Quotes & Safety Sheets

Application for TRAFFIC CONTROL DEVICE
TSIP FUNDS

GENERAL INFORMATION **DATE:** 8/11/2026

Location / Title of Project Trailer Mounted Attenuator (TMA)

Applicant Hancock County

Contact Person Jeremy Purvis, P.E. Title County Engineer

Complete Mailing Address 855 State Street

Garner, IA 50438

Phone 641-923-2243 E-Mail jeremy.purvis@hancockcountyia.org
(Area Code)

If more than one highway authority is involved in this project, please indicate and fill in the information below (use additional sheets if necessary).

Co-Applicant(s) Cerro Gordo County

Contact Person Brandon Billings, P.E. Title County Engineer

Complete Mailing Address 17274 Lark Ave

Mason City, IA 50401

Phone 641-424-9037 E-Mail bbillings@cerrogordo.gov
(Area Code)

PLEASE COMPLETE THE FOLLOWING PROJECT INFORMATION:

Funding Amount

Total Safety Cost	$	56,375
Total Project Cost	$	
Safety Funds Requested	**$**	**56,375**

Additional Project Safety Documentation (when available):

☐ Project information sheet(s) or "Risk Score">50% from County/City's Local Road Safety Plan
☐ FHWA SS4A Safety Action Plan or similar comprehensive transportation safety plan
☐ Iowa DOT TEAP Study or similar analysis and concept
☐ Project intersection or segment with High or Medium PCR Level (PCR-All or PCR-Severe) from the Iowa DOT Potential for Crash Reduction (PCR) web-based map tool https://pcr.iowadot.gov/

Potential for Crash Reduction (PCR) Information					
Intersection ID (1234567890) or Segment ID (1234)	Intersection or Segment	PCR Level High	PCR Level Medium	PCR-All value	PCR-Severe value
		☐	☐		
		☐	☐		

APPLICATION CERTIFICATION FOR PUBLIC AGENCY

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating public agency(ies). I understand the attached resolution(s), where applicable, binds the participating public agency(ies) to assume responsibility for any additional funds, if required, to complete the project. In addition, the participating public agency(ies) agrees to maintain any new or improved public streets or roadways for a minimum of five years.

I understand that, although this information is sufficient to secure a commitment of funds, a firm contract between the applicant and the Department of Transportation is required prior to the authorization of funds.

Representing the Hancock County

Signed: _____ 8/11/26
Signature Date Signed

Jeremy Purvis
Printed Name

Attest: _____ 8/11/26
Signature Date Signed

Shaun Hackman
Printed Name

APPLICATION CERTIFICATION FOR PUBLIC AGENCY

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating public agency(ies). I understand the attached resolution(s), where applicable, binds the participating public agency(ies) to assume responsibility for any additional funds, if required, to complete the project. In addition, the participating public agency(ies) agrees to maintain any new or improved public streets or roadways for a minimum of five years.

I understand that, although this information is sufficient to secure a commitment of funds, a firm contract between the applicant and the Department of Transportation is required prior to the authorization of funds.

Representing the Cerro Gordo County

Signed: Brandon Billings 8-10-26
Signature Date Signed

Brandon Billings
Printed Name

Attest: Michele Eiklenborg 8-10-26
Signature Date Signed

Michele Eiklenborg
Printed Name

A. RESOLUTION - HANCOCK

RESOLUTION NO. 2026-028

APPROVAL OF TRANSPORTATION SAFETY IMPROVEMENT PROGRAM
APPLICATION FOR TRAFFIC CONTROL DEVICES

WHEREAS, the Iowa Department of Transportation has adopted Administrative Rule 761 - Chapter 164, which created the Traffic Safety Improvement Program (TSIP) to allow for funding to be provided to local jurisdictions for eligible traffic safety improvement projects; and

WHEREAS, Hancock County has determined that providing trailer mounted attenuators for use during maintenance activities will aid in improving safety for maintenance workers and the traveling public in road work zones; and

WHEREAS, trailer mounted attenuators are recognized traffic control devices in the Manual on Uniform Traffic Control Devices, 2023 Edition; and

WHEREAS, the Hancock County Engineer recommends a TSIP application be submitted to the Iowa Department of Transportation for possible safety funding of the above-mentioned traffic control devices.

IT IS THEREFORE RESOLVED by the Hancock County Board of Supervisors to endorse the above-mentioned project and hereby commits to accepting and maintaining these trailer mounted attenuators;

BE IT FURTHER RESOLVED that the Chairperson of the Hancock County Board of Supervisors authorize and direct the County Engineer to submit the said funding application to the Iowa Department of Transportation for possible Traffic Safety Improvement Funding.

Passed and approved this 10th **day of** August**, 2026.**

Hancock County Board of Supervisors

Osmund "Bud" Jermeland, Chair

Gary Raymons

Florence "Sis" Greiman

ATTEST:

Michelle K. Eisenman, Auditor

A. RESOLUTION – CERRO GORDO

RESOLUTION NO. 2026-57

APPROVAL OF TRANSPORTATION SAFETY IMPROVEMENT PROGRAM
APPLICATION FOR TRAFFIC CONTROL DEVICES

WHEREAS, the Iowa Department of Transportation has adopted Administrative Rule 761 - Chapter 164, which created the Traffic Safety Improvement Program (TSIP) to allow for funding to be provided to local jurisdictions for eligible traffic safety improvement projects; and

WHEREAS, Cerro Gordo County has determined that providing truck mounted attenuators for use during maintenance activities will aid in improving safety for maintenance workers and the traveling public in road work zones; and

WHEREAS, truck mounted attenuators are recognized traffic control devices in the Manual on Uniform Traffic Control Devices, 2023 Edition; and

WHEREAS, the Cerro Gordo County Engineer recommends a TSIP application be submitted to the Iowa Department of Transportation for possible safety funding of the above-mentioned traffic control devices.

IT IS THEREFORE RESOLVED by the Cerro Gordo County Board of Supervisors to endorse the above-mentioned project and hereby commits to accepting and maintaining these truck mounted attenuators;

BE IT FURTHER RESOLVED that the Chairperson of the Cerro Gordo County Board of Supervisors authorize and direct the County Engineer to submit the said funding application to the Iowa Department of Transportation for possible Traffic Safety Improvement Funding.

Passed and approved this 10th day of August, 2026.

Cerro Gordo County Board of Supervisors

Casey M. Callanan, Chairman

ATTEST:

Bob Peshak, Deputy Auditor

B. NARRATIVE

The Hancock County and Cerro Gordo County Secondary Roads Departments are seeking Traffic Safety Improvement Program (TSIP) funding to purchase a Trailer Mounted Attenuator (TMA) to enhance the safety of maintenance personnel operating in active roadway environments. County crews routinely perform critical maintenance activities—including pavement patching, shoulder repair, and traffic control setup—on roadways that remain open to the traveling public. These operations frequently occur under live traffic conditions, often with limited visibility, reduced reaction times, and exposure to high-speed vehicles.

Together, both counties maintain 2,084 miles of roads with 521 miles paved and they maintain 286 bridges. The traffic volumes on the paved road system range from 70 AADT to 5,900 AADT. Currently, each department has limited impact protection available for mobile and short-duration work zones. The addition of a TMA will provide a mobile, energy-absorbing crash cushion designed to reduce the severity of vehicle impacts in the event of an errant or inattentive driver entering a work zone. This equipment serves as a critical barrier between oncoming traffic and roadway workers, significantly lowering the risk of serious injury or fatality. Given the increasing prevalence of distracted driving and the inherent risks associated with roadside operations, the need for enhanced protective measures has become more urgent.

The proposed TMA will be deployed across a wide range of maintenance activities and locations throughout the county, maximizing its utility and safety impact. It will be integrated into standard traffic control practices and used in accordance with MUTCD guidelines for work zone safety. By improving each department's ability to safely conduct operations on high-volume and higher-speed roadways, the TMA will directly support the reduction of crash severity and improve overall work zone safety for both employees and the traveling public.

Funding this request will allow Hancock County and Cerro Gordo County to proactively address a recognized safety gap and align with statewide goals of reducing roadway fatalities and serious injuries. The investment in a TMA represents a cost-effective, proven countermeasure that will provide long-term safety benefits, reduce liability exposure, and support the continued delivery of essential roadway services in a safe and efficient manner.

C. ITEMIZED BREAKDOWN OF COST

RoadSafe Traffic Systems		**Cost**
Scorpion II Trailer Mounted Attenuator		$30,467.50
Ver-Mac 3812 PCMS w/ Uprights and Hydraulic Lift		$14,750.00
Waterproof Controller Box		$ 312.50
Freight		$ 3,495.00
	Subtotal	$49,025.00
	Contingency (15%)	$ 7,350.00
	Total Project Cost	**$56,375.00**

RoadSafe®
TRAFFIC SYSTEMS
Life on the road

Customer: 49555 CASH/COUNTER SALES Woodridge | Quote Type: **Customer** | Quote No: **234464** | Expires By: **6/24/26** | Required By: **5/25/26**

Customer Job: 234464	Cust PO#:	Ship To Address: TBD	
Quote Date: 03/26/26	Quoted By: Brett Porzel		
Contact: Jeremy Purvis	Tax Code: IL60517NSA	City:	State: Zip:
Phone: 641-923-2243	**Terms: Due on Receipt**		
	Status: Active	Ship Via: Drop Ship	
	Entered By: Brett Porzel	Salesperson: Brett Porzel	

Notes: Budgetary Number as of 3/26/26

Material	Bill of Materials	Description	Dimensions	Matl Phase	SF/SM	Artwork	Ink Color	Finished Date	Pack Date	By	U/M	Quantity	Unit Price	Extended Price
CUSTOMBRET T		Traffic Scorpion II Trailer Mounted Attenuator - "Assembled"									EA	1.00	30,467.50000	30,467.50
T		Arrow Board w/ Uprights and Winch Lift									EA	1.00	5,562.50000	5,562.50
T		Arrow Board w/ Uprights and Hydraulic Lift												
T		Scorpion w/ Uprights and Winch Lift									EA	1.00	12,750.00000	12,750.00
CUSTOMBRET T		Ver-Mac 3812 PCMS Scorpion w/ Uprights and Hydraulic Lift									EA	1.00	14,750.00000	14,750.00
CUSTOMBRET T		Waterproof Controller Box									EA	1.00	312.50000	312.50
DELIVERY		Vendor Freight									EA	1.00	3,495.00000	3,495.00

Quote Subtotal	74,900.00
Sales Tax	0.00
Quote Total	[redacted]

$49,025
Contingency 15% - $7,350
Total Project Cost - $56,375

1740 INTERNATIONALE PKWY
WOODRIDGE, IL 60517

Title and risk of loss passes to Customer upon receipt of the goods sold hereunder. Customer is solely responsible for securing the goods and for transit of the same. DUE TO VOLATILE MARKET CONDITIONS AFFECTED BY CURRENT TARIFF LAWS THE PRICING CONTAINED WITHIN THIS QUOTE CAN ONLY BE HELD FOR (14) DAYS--AFTER (14) DAYS ROADSAFE WILL HAVE TO REQUOTE.

Delivered by _____ Date _____

Received by _____ Date _____

From: Brett Porzel
To: Jeremy Purvis
Subject: Scorpion Trailer
Date: Thursday, March 26, 2026 3:29:57 PM
Attachments: image001.png
Hancock County 234464.pdf

Good afternoon Jeremy,

Please see the attached quote per your request. I priced up two different upright configurations. The price listed would be for a purchase made within the next 30 days. If this is a purchase for a future date, I'd add 10%-15% to be safe as I am unsure of future pricing due to the political climate.

I did call to discuss and you're welcome to reach back out to me at 630-926-4287 with any questions.

Thank you,

***** Due to volatile market conditions affected by the current tariff situation, the pricing within this quote is subject to change without notice. Pricing typically unaffected for fourteen (14) days. Please reach out prior to issuing a PO to ensure pricing is unchanged. *****

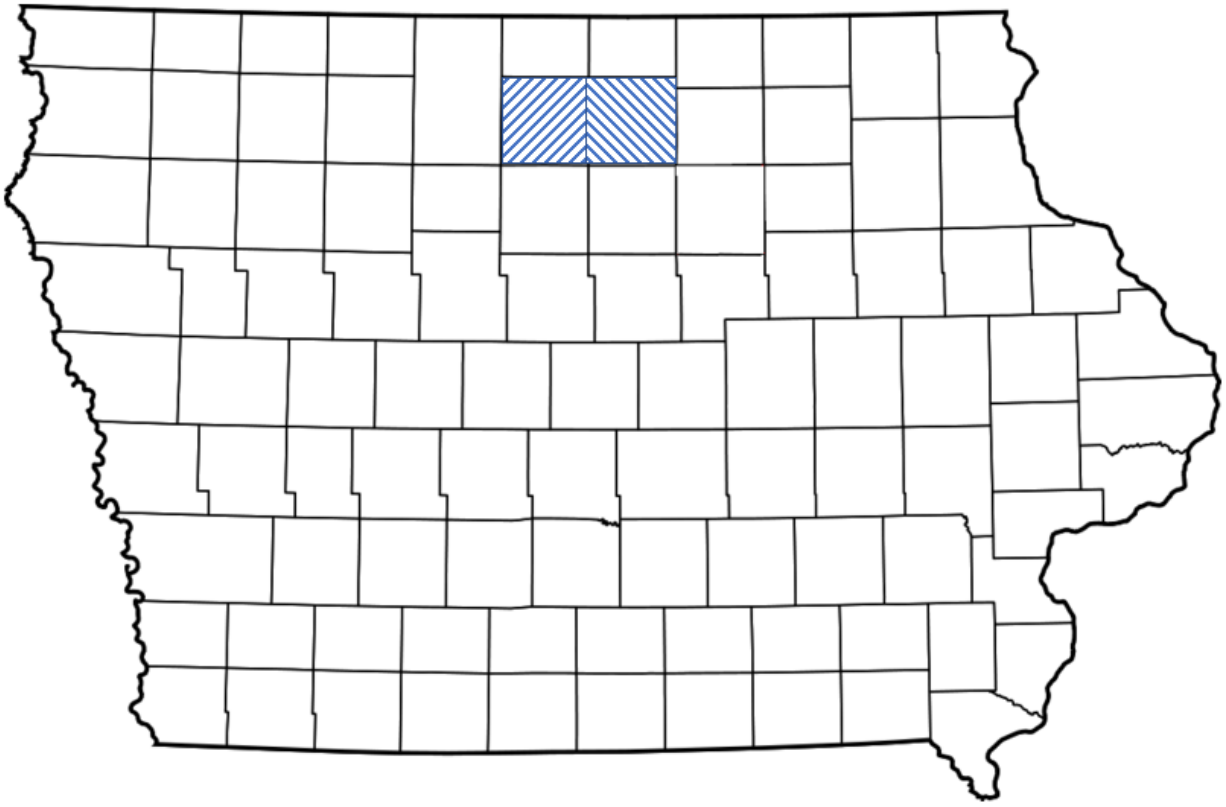
RoadSafe®

Brett Porzel | Account Manager | RoadSafe Traffic Systems, Inc.
1740 Internationale Parkway | Woodridge, IL 60517
Phone: (630) 926-4287 | Office: (630)972-7772
RoadSafe is an Equal Opportunity Employer / Including Disabled/Veterans
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D. TIME SCHEDULE

- TSIP Application Due — August 15, 2026
- TSIP Award Notification — January 15, 2027
- TSIP Funding Available — July 1, 2027
- Purchase of TMA — July 1, 2027
- Use of TMA — August 1, 2027

E. MAP



F. COLOR PICTURES



Scorpion II® TA

Towable Attenuator

Scorpion II TL-3 Towable Attenuator
MASH Tested, Passed and Eligible



MASH ✓
Manual for Assessing Safety Hardware
TESTED, PASSED AND ELIGIBLE

Scorpion II TL-3 (62.5 mph/100 kph) Towable Attenuator

Specification

The Towable Attenuator (TA) is a mobile crash cushion designed with a trailer tongue and axle/wheel that connects directly to the support vehicle's trailer connection and from a lunette eye on the attenuator. The TA can be used on support vehicles with a minimum actual/curb weight of 12,000 lbs with no upper weight limit (infinite weight). The TA has overall dimensions of 17.8 ft (5.4 m) x 8 ft (2.4 m) x 4.3 ft (1.3 m) with ground clearance of 12.0 in ± 1.0 in (305 mm±25 mm). The TA consists of three main components: the trailer tongue, front Strut, and rear Cartridge. The trailer tongue is positioned nearest to the support vehicle, the Strut is bolted to the tongue and Cartridge. The Cartridge is the rear most component, furthest away from the support vehicle. The trailer tongue acts as a standard single point connection under normal towing conditions. The trailer tongue is designed with an integral Telescoping Anti-Rotation System (TARS) that is activated when the TA is impacted. The forward sliding action occurs during an impact, upon completion of the full telescoping action the outboard anti-rotation supports come into contact with support vehicle frame plate which in turn prevents angular rotation about the rear of the host vehicle. The Strut consists of four outboard convex aluminum tubes forming an aluminum structural weldment. The aluminum structural weldments bolt directly to the TARS tongue and the rear Cartridge. The structural assembly encompasses the aluminum crush Module D. The Cartridge consists of four outboard convex aluminum tubes forming an aluminum structural weldment. The aluminum structural weldments bolt directly the Struts steel angles and rear trailer diaphragm. The TA uses a Cartridge Trailer Diaphragm with an axle/wheel attachment for towing the TA. The structural assembly encompasses the two aluminum crushModule C's. Attached to the rear most end of the Cartridge is the single crush Module A.

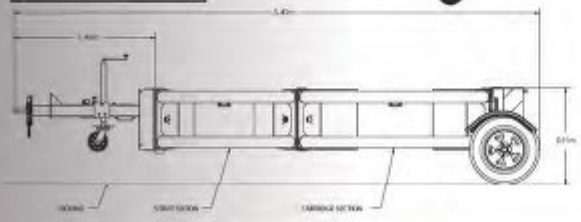


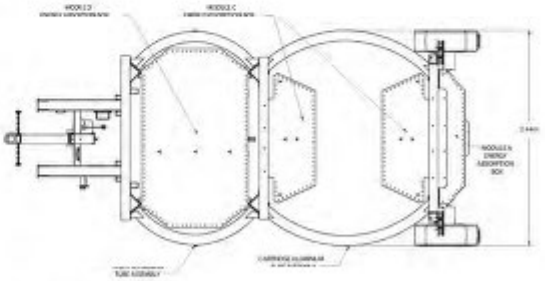
Scorpion II® TL-3 Towable Attenuator with Display Panel Impactec by 5,006 lbs (2,271 kg) Pick-Up Truck

TL-3 SPECIFICATIONS	
Length:	17.8 ft (5.4 m)
Width:	7.8 ft (2.4 m)
Height from the ground:	12.0 in ± 1.0 in (3045 mm ± 25.4 mm)



1. Steel tongue section including TARS™
2. Aluminum strut section
3. Aluminum cartridge section
4. Axle wheel assembly
5. Curved re-directing aluminum tube





Distrbuted by:

TrafFix Devices Inc.

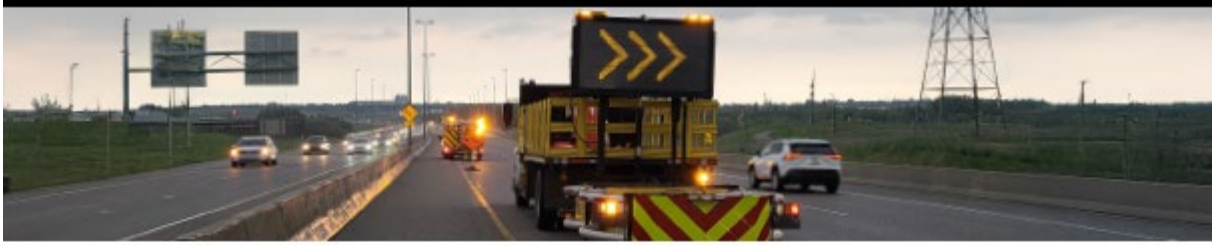
Engineered Products for Safer Highways

160 Avenida La Pata. San Clemente. CA 92673
(949) 361-5663 FAX (949) 361-9205
www.traffixdevices.com

PB102220

VER-MAC

TA-3812 SCORPION II



TOWABLE ATTENUATOR FULL-MATRIX MESSAGE SIGN

Ver-Mac's TA-3812 Scorpion II is a full-matrix message sign designed for a TrafFix towable Scorpion attenuator. With 27 x 48 pixels, the sign displays up to 3 lines of 8 characters (5 x 7 pixels, or 12 in.) per line.

This message sign is fully integrated with the hydraulic deployment system and automatically rises or lowers in sequence with the Scorpion II deployment. It weighs under 175 pounds, meeting the FHWA MASH requirement.

The V-Touch Controller conveniently plugs into the cigarette lighter for power and offers full graphic capabilities, including several one-touch buttons to quickly activate messages or arrows. The controller has an embedded 4G modem and 10-year cell plan that can be set up to push advance warning messages to Waze.





FEATURES & BENEFITS

POWER LIFT SUPPORT (OPTION)

HYDRAULIC POWER LIFT OPTION
The hydraulic option provides an additional level of safety, as it allows the worker to lift and lower the sign without getting out of the truck.

APPLICATIONS

- → Construction trucks
- → Road striping trucks
- → Road sweeping trucks
- → Pothole repair trucks
- → Smart work zones
- → Connected work zones

FEATURES

V-TOUCH CONTROLLER

DISPLAY IN MINUTES

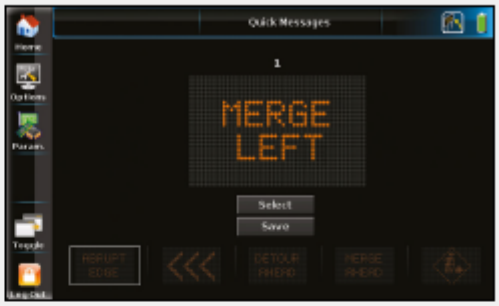
- Intuitive point-and-go icons make it easy to raise and lower the sign, and display a message or arrow with a single click
- Save up to five messages or arrow patterns to save time
- Easy-to-read color LCD touchscreen display – 7 in. (178 mm)

10-YEAR FLEET CELL SERVICE
Fully-integrated cellular 4G LTE modem

MONITORING
Track your truck on a map and see if your sign has active messages

LOGGING CAPABILITY
Keep a log of what was displayed and where

EASY INSTALLATION
Our wireless V-Touch Controller makes installation quick and easy. Simply connect the controller to the cigarette lighter socket and you are ready to go!





SPECIFICATIONS

DISPLAY

- Display panel: 50 1/4 x 96 in. (1276 x 2438 mm)
- Full-matrix of 27 x 48 pixels
- 4 LEDs per pixel
- 3 lines of 8 characters per line (5 x 7 pixels (12 in.)) per line
- Plug-and-play display modules for simplified maintenance
- Up to 11 characters per line (3 x 7 font)

DIMENSIONS & WEIGHTS

- Operating height: 135 1/4 in (3435 mm)
- Operating width: 96 in. (2438 mm)
- Operating length: 24 1/2 in. (622 mm)
- Traveling height: 95 3/4 in. (2432 mm)
- Traveling width: 96 in. (2438 mm)
- Weight (approx.): 165 lbs (75 kg)
- Support weight (approx.): 244 lbs (108 kg)

OPTIONS

- Hydraulic lift mechanism
- Real-time integration into Waze and WZDx
- Strobe lights
- Doppler radar

Other options are available to meet your needs. Contact us for more information.

WARRANTY

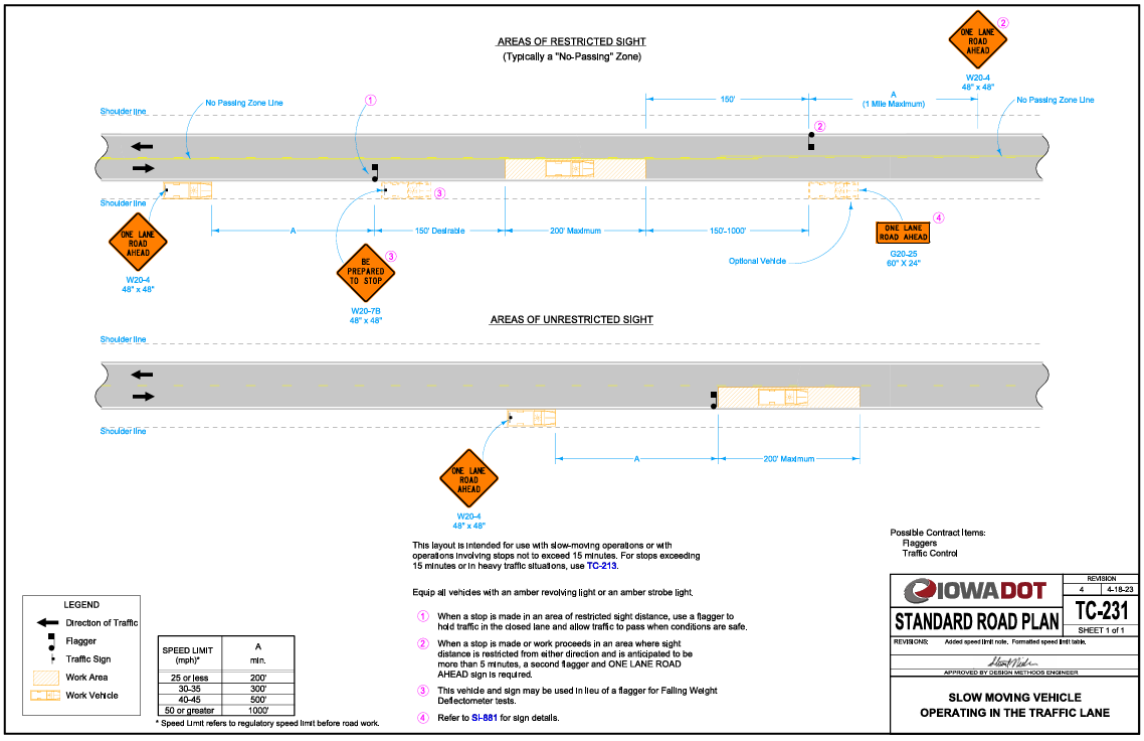
- 1 year on complete trailer
- 2 years on electronic components manufactured by Ver-Mac

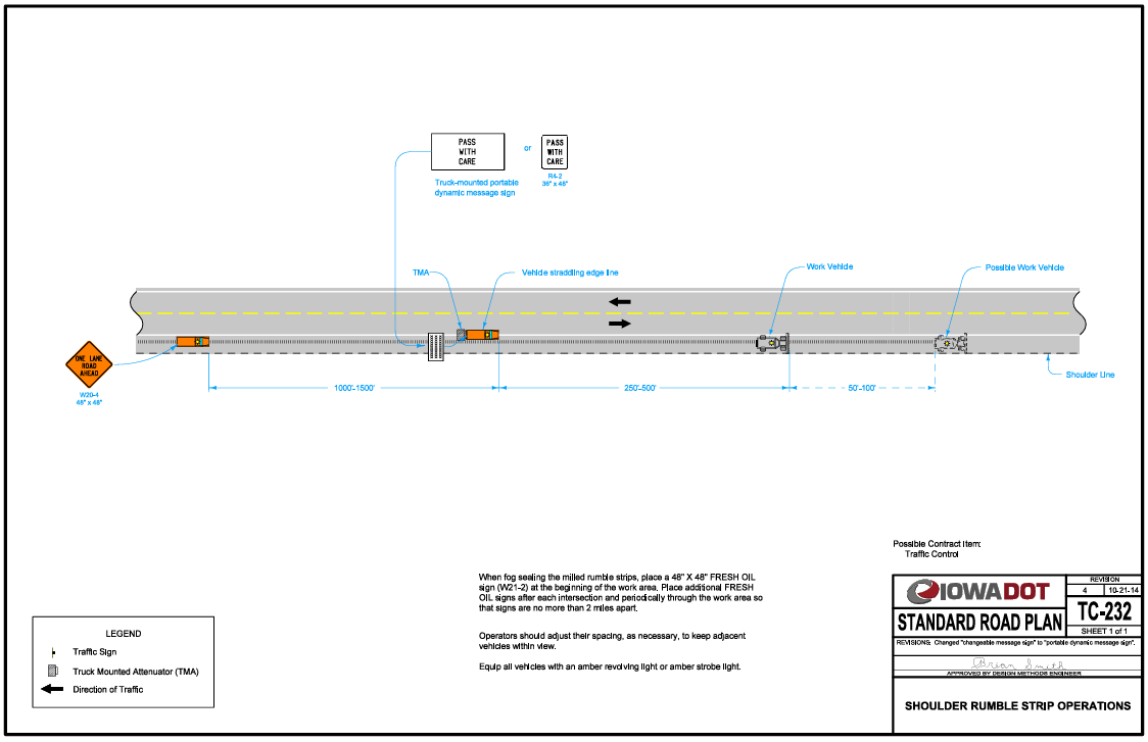
16,04 © 2025, Signalisation Ver-Mac inc. All rights reserved.

QUEBEC, CANADA OFFICE: 1781 BRESSE STREET, QUEBEC CITY, QC, G2G 2V2, CANADA
CONROE, TX OFFICE: 3479 POLLOK DR, CONROE, TEXAS, 77303, US
T. **418-654-1303** TF. **888-488-7446** F. **418-654-0517**

G. PLAN VIEW

We propose modifying Iowa DOT Road Standard TC-231 to include an advance warning vehicle (shadow vehicle) positioned partially over the edge line, equipped with a Trailer Mounted Attenuator (TMA), incorporating elements of Iowa DOT Road Standard TC-232. This modification reflects typical county roadway conditions, where shoulder widths are often insufficient to accommodate a vehicle fully off the traveled lane, requiring partial encroachment to provide effective work zone protection.

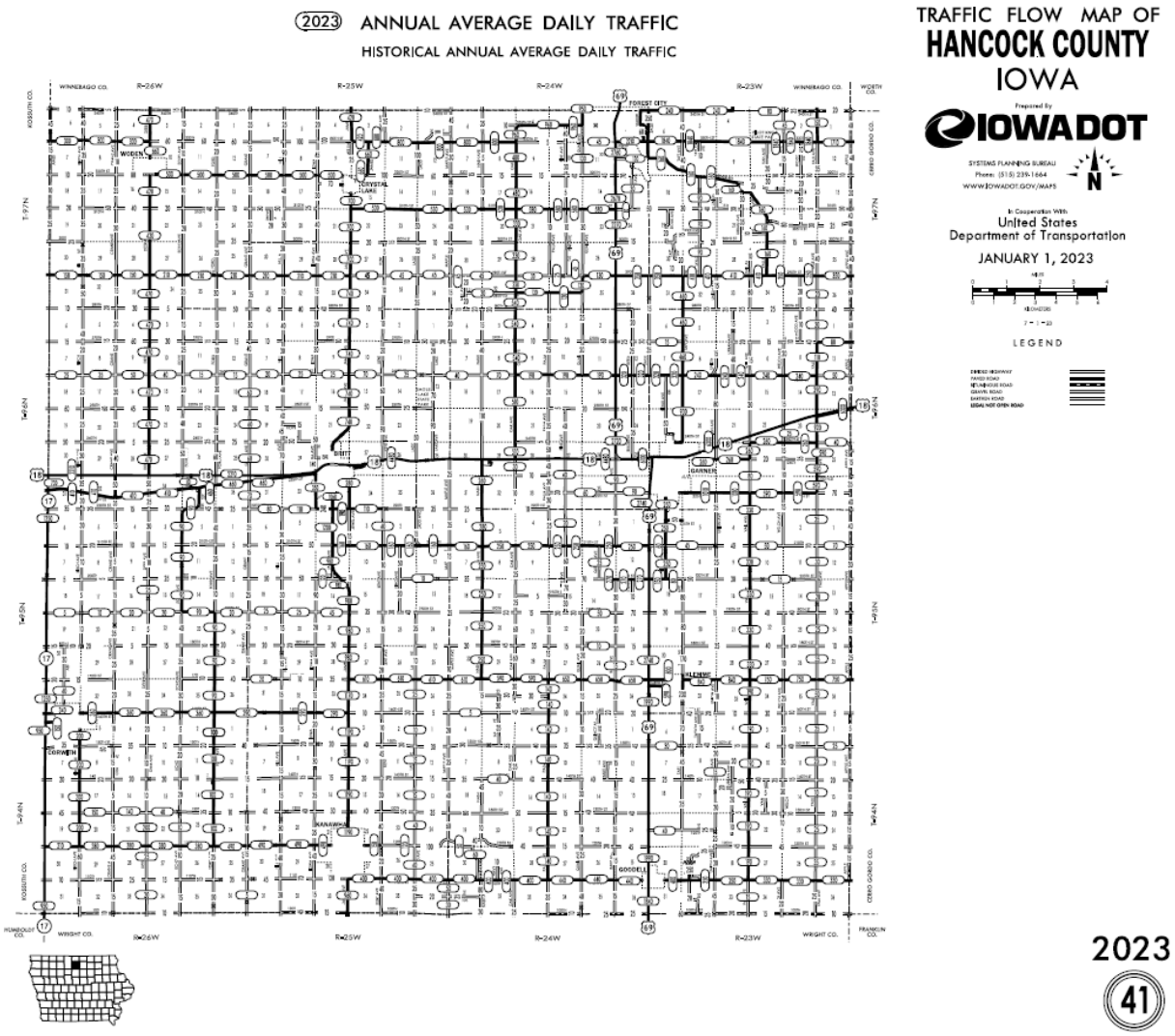




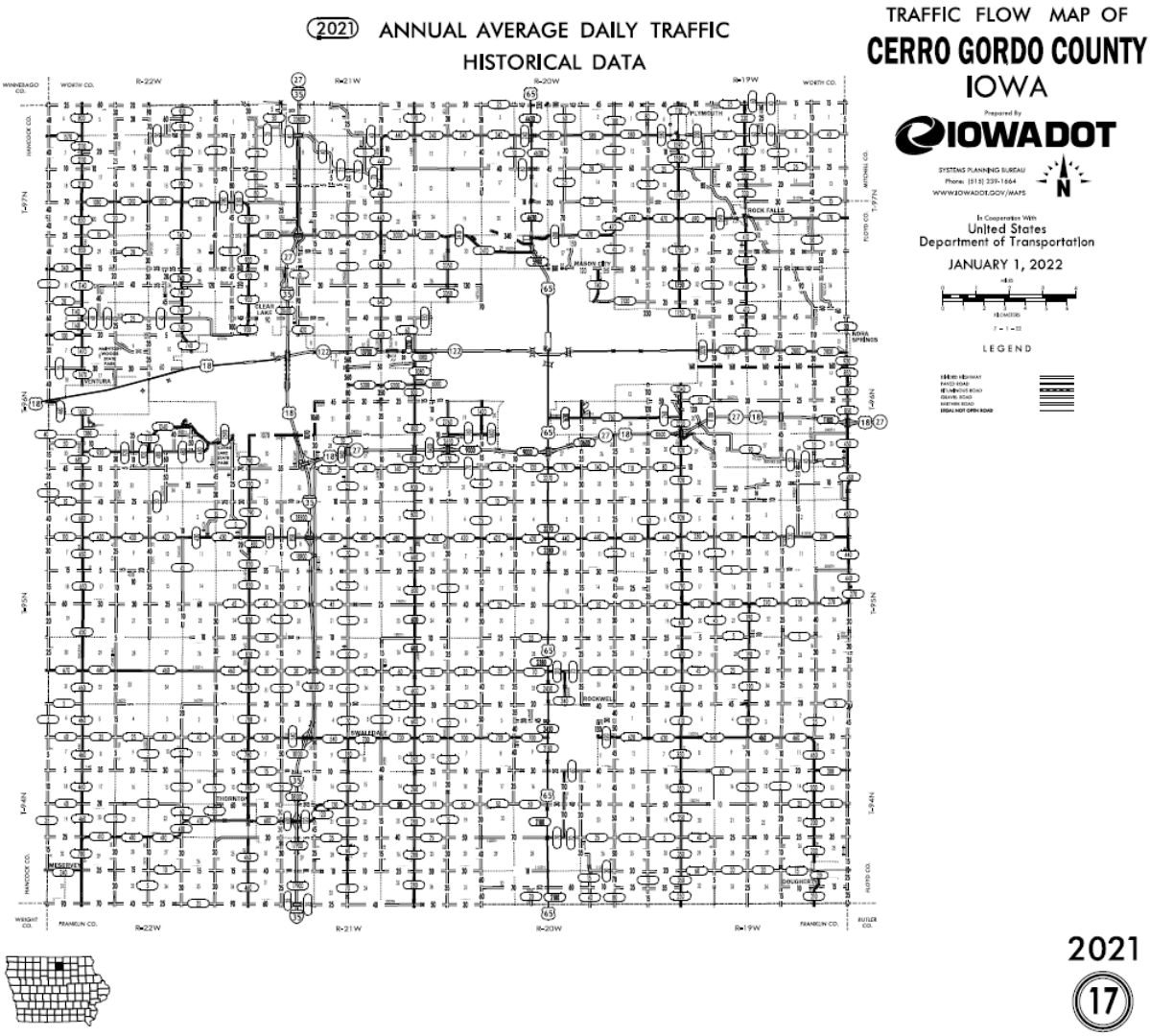
H. TRAFFIC VOLUMES

See Iowa DOT Iowa Traffic Data online interactive map. (Direct Links Below)

https://experience.arcgis.com/experience/291d4e2c64cf490a95a6660b1349a088/page/Traffic-Volume



H. TRAFFIC VOLUMES CONT.



Rev. 07/23

Application for TRAFFIC CONTROL DEVICE TSIP FUNDS

GENERAL INFORMATION **DATE:** August 7, 2026

Location / Title of Project: Flashing beacon and warning sign installation at various locations on Kossuth County's paved Secondary Road System.

Applicant: Kossuth County

Contact Person: Doug Miller Title: County Engineer

Complete Mailing Address: 114 West State Street, Suite 5
Algona, IA 50511

Phone: 515-295-3320 (Area Code) E-Mail: engineer@kossuthcounty.iowa.gov

If more than one highway authority is involved in this project, please indicate and fill in the information below (use additional sheets if necessary).

Co-Applicant(s):

Contact Person: Title:

Complete Mailing Address:

Phone: (Area Code) E-Mail:

PLEASE COMPLETE THE FOLLOWING PROJECT INFORMATION:

Funding Amount

Total Safety Cost	$	59,827.58
Total Project Cost	$	59,827.58
Safety Funds Requested	**$**	**57,000**

Additional Project Safety Documentation (when available):

- ☐ Project information sheet(s) or "Risk Score">50% from County/City's Local Road Safety Plan
- ☐ FHWA SS4A Safety Action Plan or similar comprehensive transportation safety plan
- ☐ Iowa DOT TEAP Study or similar analysis and concept
- ☐ Project intersection or segment with High or Medium PCR Level (PCR-All or PCR-Severe) from the Iowa DOT Potential for Crash Reduction (PCR) web-based map tool https://pcr.iowadot.gov/

Potential for Crash Reduction (PCR) Information					
Intersection ID (1234567890) or Segment ID (1234)	Intersection or Segment	PCR Level High	PCR Level Medium	PCR-All value	PCR-Severe value
		☐	☐		

Rev. 07/23

APPLICATION CERTIFICATION FOR PUBLIC AGENCY

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating public agency(ies). I understand the attached resolution(s), where applicable, binds the participating public agency(ies) to assume responsibility for any additional funds, if required, to complete the project. In addition, the participating public agency(ies) agrees to maintain any new or improved public streets or roadways for a minimum of five years.

I understand that, although this information is sufficient to secure a commitment of funds, a firm contract between the applicant and the Department of Transportation is required prior to the authorization of funds.

Representing the Kossuth County Engineer's Office

Signed: Douglas A. Miller — August 11, 2026
Signature — Date Signed

Douglas A. Miller, Kossuth County Engineer
Printed Name

Attest: Lisa Hefty — August 11, 2026
Signature — Date Signed

Lisa Hefty, Kossuth County Office Manager
Printed Name

Motion by Haas and Second by Garman to approve the following resolution:

Waechter: A Garman: Y Stecker: Y Haas: Y Nath: A

RESOLUTION OF SUPPORT OF KOSSUTH COUNTY SECONDARY ROAD TRANSPORTATION SAFETY IMPROVEMENT PROGRAM APPLICATION

Kossuth County Resolution No. 08-11-26-02

WHEREAS, The Iowa Department of Transportation (Iowa DOT) through the Traffic Safety Improvement Fund provides funding for various Traffic Safety Improvement Program (TSIP) eligible projects, and

WHEREAS, Traffic Control Devices are eligible uses of TSIP funds, and

WHEREAS, The Board of Supervisors of Kossuth County desires to have safe roads, and

WHEREAS, the Board of Supervisors of Kossuth County endorses the Secondary Road Department's TSIP application that contains a project named Flashing beacon and warning sign installation at various locations on Kossuth County's paved Secondary Road System.

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF SUPERVISORS OF KOSSUTH COUNTY that;

1. Kossuth County commits initial funds as required by the Iowa Department of Transportation TSIP.
2. Kossuth County commits to adequately maintain the completed project for its intended public use for a minimum of 10 years following completion.
3. The Kossuth County Board of Supervisors hereby authorizes Doug Miller, Kossuth County Engineer to sign the project agreement on behalf of Kossuth County and administer the project to completion.

Resolution adopted this 11th day of August, 2026.

Kossuth County Board of Supervisors

~~Carter Nath~~ Howard Haas
Board of Supervisors Chairperson
Vice

ATTEST:
Tammy Eden
Tammy Eden
Kossuth County Auditor

Kossuth County, Iowa
Secondary Road Department

Courthouse
114 West State St.-Suite 5
Algona, Iowa 50511
Phone: 515-295-3320
FAX: 515-295-4973
engineer@kossuthcounty.iowa.gov
http://www.kossuthcounty.iowa.gov

Douglas A. Miller, P.E. & P.L.S.
County Engineer

Office Staff
Doug Crouch, P.E. & P.L.S.
Zac Thompson E.I.
Nick Roethler, P.E. & LSI
Lisa Hefty, Office Manager

Traffic Control Device Narrative

Kossuth County Traffic Safety Improvement Program Application for flashing beacon and warning sign installation at various location on Kossuth County's paved Secondary Road System.

The Kossuth County Secondary Road Department requests Transportation Safety Improvement Program (TSIP) funds to install 19 flashing red beacons, an additional Stop Ahead Sign (W3-1), a Cross Traffic Does Not Stop Sign (W4-4P), and Post Reflector Strips at various locations in Kossuth County.

A fatal accident occurred on April 27, 2026 at the intersection of B40 and P30. The driver of a south bound semi tractor and trailer ran the stop sign on P30 and collided with an east bound automobile on B40 killing the driver. This intersection had other accidents that drivers ran both the north and south stop signs. This caused Kossuth County to review all accidents that are available using the Iowa Crash Analysis Tool (ICAT).

The stop locations included in the TSIP grant application were chosen by filtering ICAT to show crashes that occurred between now and 2016, on Paved Kossuth County Roads, and where the major cause of the crash was the driver running the stop sign. This report can be provide upon request if required. The purpose of the installation of these additional warning devices and signs is to enhance visibility of the Stop Signs as well as attempting to draw more attention of the stopping condition to the traveling public.

The Kossuth County Engineer's Office is responsible for the construction and maintenance of Kossuth County's Secondary Roads. The road system consists of approximately 1,650 miles of roads, approximately 500 of the 1,650 miles are paved. Kossuth County has approximately 250 structures that have lengths greater than 20 feet and many smaller structures.

The Kossuth County Engineer's Office is requesting TSIP funding for the purchase of 19 solar powered flashing red beacons, 19 W3-1 Stop Ahead signs, 19 W4-49 Cross Traffic Does Not Stop signs and 57 Post Reflector Strips. The Kossuth County Secondary Road Department will install the signs

The goal of these safety improvements is to provide additional warning to drivers of approaching stopping conditions. With the additional improvements, Kossuth County hopes that a fatal crash due to an operator running a stop sign does not reoccur.

2026 Kossuth County TSIP Estimate of Cost

Kossuth County TSIP Estimate of Costs				
Item	**Quantity**	**Unit**	**Unit Cost**	**Estimated Cost**
Flashing Beacon	1	each	$2,852.00	$2,852.00
Stop Ahead Sign	1	each	$74.87	$74.87
Cross Traffic Does Not Stop Sign	1	each	$39.33	$39.33
Verticle Reflctive Strip	3	each	$12.40	$37.20
Sign Post	1	each	$41.26	$41.26
Labor	1	Hour	$47.14	$47.14
Sign Truck	1	Hour	$57.02	$57.02
Cost per Installation				$3,148.82
Total for 19 Installations	19			$59,827.58
TSIP request for 19 installations	19		$3,000.00	$57,000.00
Kossuth County Costs	19		$148.82	$2,827.58

Kossuth County, Iowa
Secondary Road Department

Courthouse
114 West State St.-Suite 5
Algona, Iowa 50511
Phone: 515-295-3320
FAX: 515-295-4973
engineer@kossuthcounty.iowa.gov
http://www.kossuthcounty.iowa.gov

Douglas A. Miller, P.E. & P.L.S.
County Engineer

Office Staff
Doug Crouch, P.E. & P.L.S.
Zac Thompson E.I.
Nick Roethler, P.E. & LSI
Lisa Hefty, Office Manager

Time Schedule

Kossuth County Traffic Safety Improvement Program Application for flashing beacon and warning sign installation at various location on Kossuth County's paved Secondary Road System.

If this application is approved in Calendar Year 2027, all necessary materials would be ordered. Assuming 30-day delivery time, receipt of the materials will be in the middle of February. Materials would be installed as soon as weather allows for signposts to be installed.

HIGHWAY AND TRANSPORTATION MAP

KOSSUTH COUNTY
IOWA

Flashing Beacon and Warning Sign Installation Location Map.

Kossuth County August 10, 2026

Prepared By

IOWA DOT

SYSTEMS PLANNING BUREAU
Phone: (515) 239-1664
WWW.IOWADOT.GOV/MAPS

In Cooperation With
United States
Department of Transportation

JANUARY 1, 2025

7 - 1 - 25

LEGEND

INTERSTATE HIGHWAY
PRIMARY HIGHWAY-DIVIDED
PRIMARY HIGHWAY
PORTLAND CEMENT CONCRETE ROAD
ASPHALT ROAD
BITUMINOUS ROAD
GRAVEL ROAD
EARTHEN ROAD

INTERSTATE HIGHWAY
UNITED STATES HIGHWAY
STATE HIGHWAY
COUNTY HIGHWAY

RAILROAD
PIPELINE
AIRPORT
HYDROLOGY
BRIDGE

STATE BOUNDARY
COUNTY BOUNDARY
CORPORATE BOUNDARY
TOWNSHIP LINE
SECTION LINE
ROAD NAMES (ABBEY ROAD)
UNINCORPORATED PLACE (ELWOOD)

STATE PARKS
STATE INSTITUTIONS
FEDERAL LAND

Intersection #9

Intersection #1

Intersection #8

Intersection #2

Intersection #3

Intersection #11

Intersection #4

Intersection #5

Intersection #10

Intersection #6

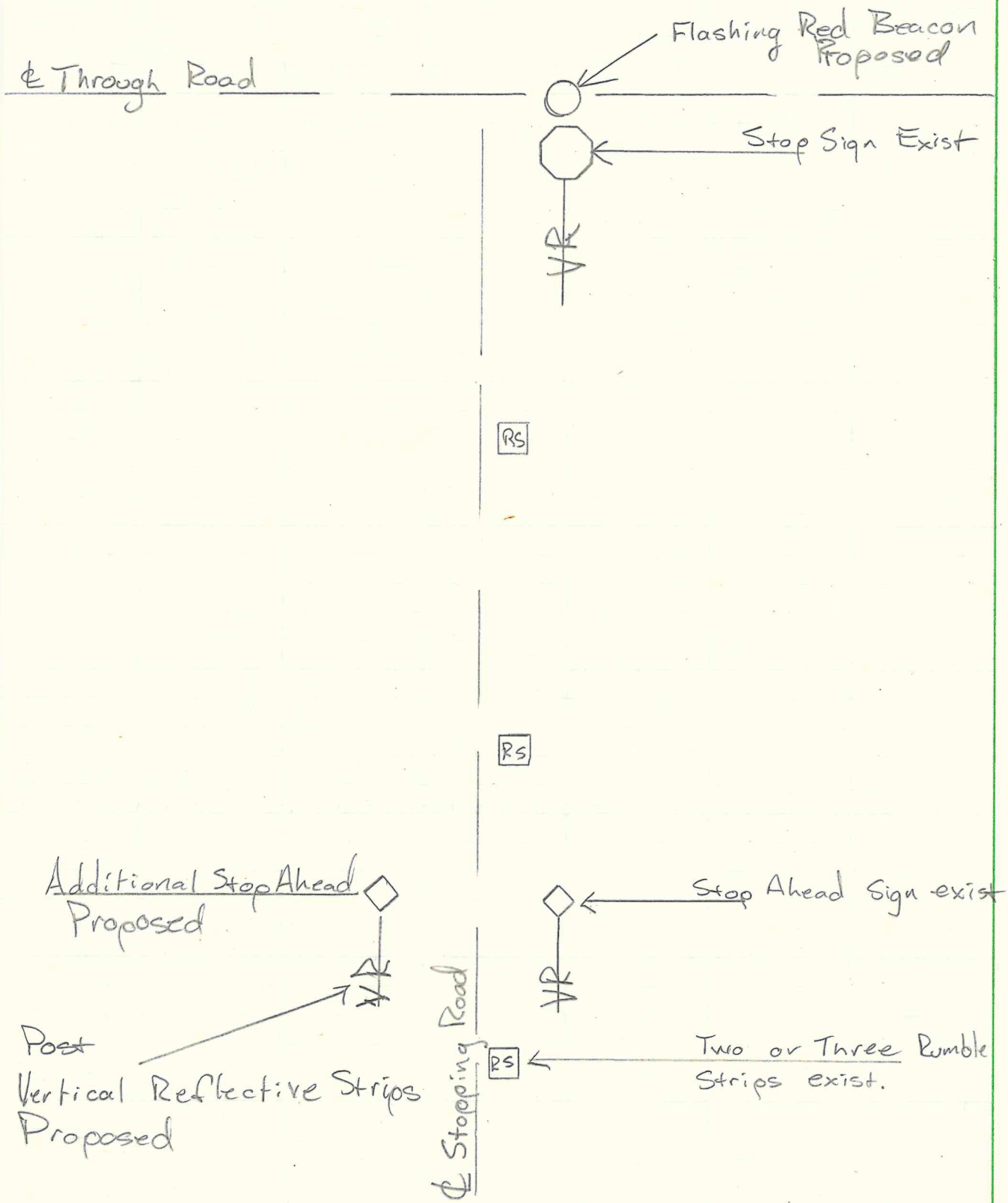
Intersection #7

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2026 Kossuth TSIP Intersection Table

Intersection Reference #	Stopping Road	Through Road	Number of Stop Signs
1	P16	A42	2
2	B30	P20	2
3	B44	P20	1
4	P56	B58	2
5	P60	A42	2
6	P66	B14	2
7	P60	B14	2
8	P44	A42	2
9	P50	A16	1
10	R14	A42	2
11	P56	C12	1

Typical Plan View	Kossuth 2026 TSIP	Aug. 14, 2026



TRAFFIC FLOW MAP OF
KOSSUTH COUNTY
IOWA

LEGEND

- INTERSTATE HIGHWAY
- PRIMARY HIGHWAY-DIVIDED
- PRIMARY HIGHWAY
- PORTLAND CEMENT CONCRETE ROAD
- ASPHALT ROAD
- BITUMINOUS ROAD
- GRAVEL ROAD
- EARTHEN ROAD

(2023) ANNUAL AVERAGE DAILY TRAFFIC

HISTORICAL ANNUAL AVERAGE DAILY TRAFFIC

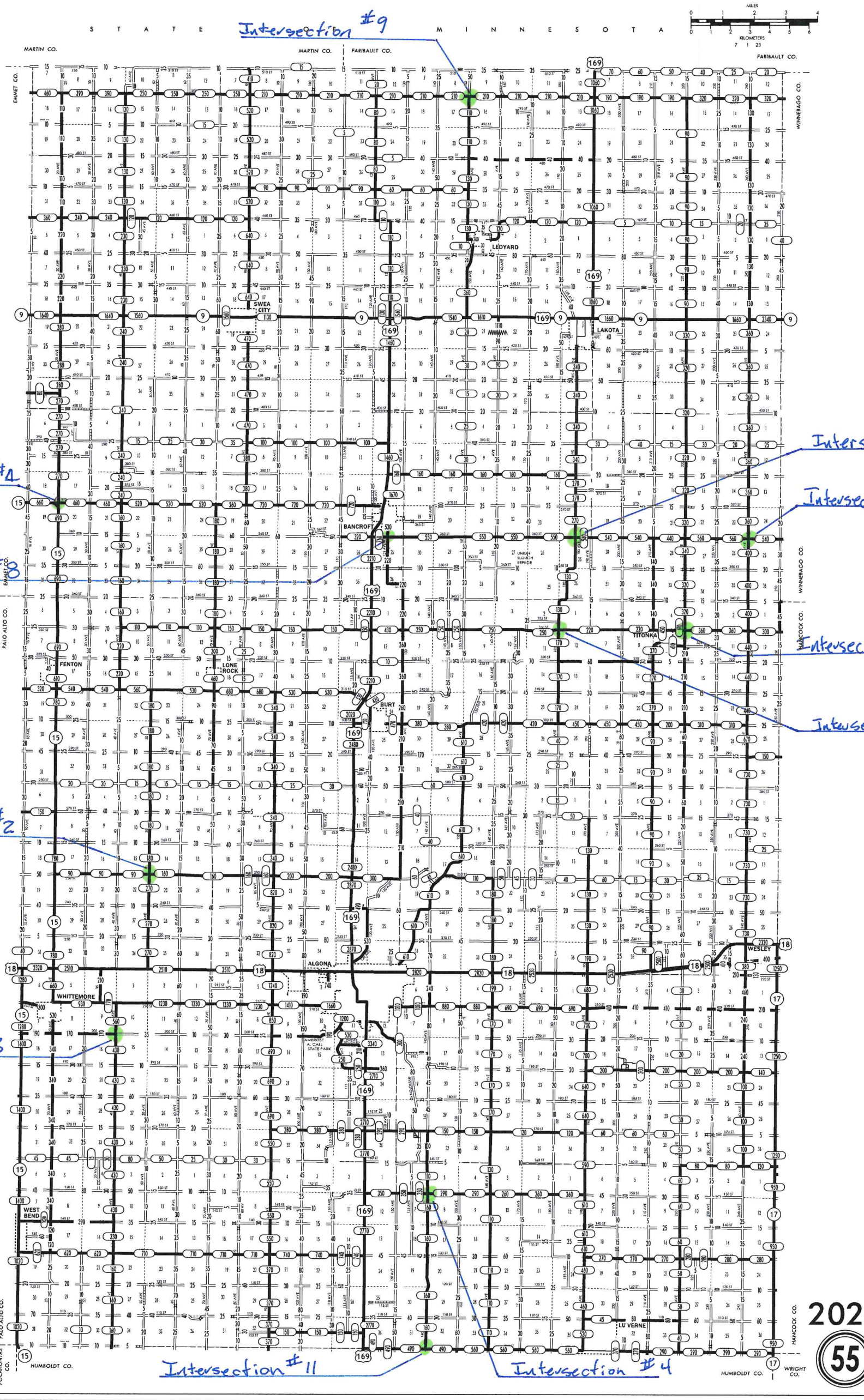
Flashing Beacon and Warning Sign Installation
ADT Map

Kossuth County Aug 10, 2026

Prepared By
IOWADOT
SYSTEMS PLANNING BUREAU
Phone: (515) 239-1664
WWW.IOWADOT.GOV/MAPS

In Cooperation With
United States
Department of Transportation

JANUARY 1, 2020



2023

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Rev. 5/18

Application for TRAFFIC CONTROL DEVICE
TSIP FUNDS

GENERAL INFORMATION **DATE:** 08/01/2026

Location / Title of Project Sign Replacement Program for Cities/Counties

Applicant Iowa Department of Transportation

Contact Person Mary Beth Sprouse Title Reports & Operations Specialist

Complete Mailing Address 800 Lincoln Way

Ames, IA 50010

Phone 515-290-5431 E-Mail marybeth.sprouse@iowadot.us
(Area Code)

If more than one highway authority is involved in this project, please indicate and fill in the information below (use additional sheets if necessary).

Co-Applicant(s) _____

Contact Person _____ Title _____

Complete Mailing Address _____

_____

Phone _____ E-Mail _____
(Area Code)

PLEASE COMPLETE THE FOLLOWING PROJECT INFORMATION:

Funding Amount

Total Safety Cost	$ 250,000
Total Project Cost	$ 250,000
Safety Funds Requested	$ 250,000

Does this project appear on a Safety Improvement Candidate List or is there a safety study recommendation for this project?

☒Yes – Explain

Items for the installation and enhancement of various warning and regulatory signs and reflective strips are included in each of the county's Safety Action Plans in the systemic and location specific categories as countermeasure options for roadway segments, intersections, and curves.

☐No

A. APPLICATION CERTIFICATION OR RESOLUTION - Not applicable

B. NARRATIVE

Continued funding of the Department's Sign Replacement Program for Cities and Counties (SRPFCC) is being sought. This program is operated by the Local Systems Bureau and provides funding for the replacement of damaged, worn out, obsolete, or substandard signs, signposts and reflective strips by cities and counties in Iowa. Under the current program, replacement sign eligibility is limited to regulatory, warning, and school area signs. These signs are critical to providing a safe environment for both motorists and pedestrians.

Each city/county is allowed to submit one application per year for the replacement of signs eligible within the program guidelines. Recipients with recent awards will be given lower priority to allow more cities and counties to benefit from this program. The applications have previously been limited to a maximum of $10,000 per county and $5,000 per city. The popularity of this program is demonstrated by the consistent and continual receipt of applications each year from a large number of county and city jurisdictions.

The 2026 grant (for payment in FY 27) received just over $400k in request for the $200,000 available. We closed the application window 24 hours after it opened. We were able to fund 21 counties and 1 city in this cycle. Continued funding is needed to meet the expected demand for this program. Since 2017, 202 grants have been awarded through this program to increase safety across the state.

C. ITEMIZED BREAKDOWN OF COST

Approval of this application will provide funding that will allow the program to continue next fiscal year.

D. TIME SCHEDULE

If awarded funding, applications will be accepted from cities/counties starting the 2nd Monday in January with funds being dispersed after July 1st.

E. MAP

This program will be applicable to all counties and cities in Iowa.

F. COLOR PICTURES



Example of replacement signs

G. PLAN VIEW

This program will be applicable to all counties and cities in Iowa.

H. TRAFFIC VOLUMES AND/OR TURNING MOVEMENT

This program applies to signs on routes with a wide variety of traffic volumes and movement patterns.

I. SIGNALS - Not applicable

J. B/C WORKSHEET - Not applicable

Rev. 07/23

Application for TRAFFIC CONTROL DEVICE
TSIP FUNDS

GENERAL INFORMATION **DATE:** 06/25/2026

Location / Title of Project Vine Street and Finley Avenue Stop Sign Enhancement

Applicant City of Ottumwa

Contact Person Phillip Burgmeier Title City Engineer

Complete Mailing Address 105 E. 3rd St

Ottumwa, IA 52501

Phone (641) 683-0680 E-Mail burgmeierp@ci.ottumwa.ia.us

(Area Code)

If more than one highway authority is involved in this project, please indicate and fill in the information below (use additional sheets if necessary).

Co-Applicant(s) _____

Contact Person _____ Title _____

Complete Mailing Address _____

_____

Phone _____ E-Mail _____

(Area Code)

PLEASE COMPLETE THE FOLLOWING PROJECT INFORMATION:

Funding Amount

Total Safety Cost	$	172,975.00
Total Project Cost	$	172,975.00
Safety Funds Requested	**$**	**138,380.00**

Additional Project Safety Documentation (when available):

- ☐ Project information sheet(s) or "Risk Score">50% from County/City's Local Road Safety Plan
- ☐ FHWA SS4A Safety Action Plan or similar comprehensive transportation safety plan
- ☐ Iowa DOT TEAP Study or similar analysis and concept
- ☐ Project intersection or segment with High or Medium PCR Level (PCR-All or PCR-Severe) from the Iowa DOT Potential for Crash Reduction (PCR) web-based map tool https://pcr.iowadot.gov/

Potential for Crash Reduction (PCR) Information					
Intersection ID (1234567890) or Segment ID (1234)	Intersection or Segment	PCR Level High	PCR Level Medium	PCR-All value	PCR-Severe value
SI_129972	Intersection	X	☐	1.1757	-0.0086
SI_45947	Intersection		X	0.2910	-0.0033

SI_16141	Intersection		X	0.2709	-0.0055
SI_16008	Intersection		X	0.2794	0.0328
SI_57331	Intersection		X	0.2811	-0.0148
SI_96364	Intersection		X	0.3212	0.1079
SI_122515	Intersection		X	0.7637	0.0884
SI_21308	Intersection			-0.0477	-0.0039
SI_2651	Intersection			-0.0294	0.0208
SI_2652	Intersection			0.0733	-0.0112

APPLICATION CERTIFICATION FOR PUBLIC AGENCY

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating public agency(ies). I understand the attached resolution(s), where applicable, binds the participating public agency(ies) to assume responsibility for any additional funds, if required, to complete the project. In addition, the participating public agency(ies) agrees to maintain any new or improved public streets or roadways for a minimum of five years.

I understand that, although this information is sufficient to secure a commitment of funds, a firm contract between the applicant and the Department of Transportation is required prior to the authorization of funds.

Representing the City of Ottumwa, Iowa

Signed: B_F-C 8.4.26

Signature Date Signed

Benjamin Foote, Mayor

Printed Name

Attest: Christina Reinhard 8-04-2026

Signature Date Signed

Christina Reinhard, City Clerk

Printed Name

RESOLUTION #175-2026

A RESOLUTION APPROVING THE TRANSPORTATION SAFETY IMPROVEMENT PROGRAM (TSIP) APPLICATION FOR VINE STREET AND FINLEY AVENUE STOP SIGN ENHANCEMENT PROJECT

WHEREAS, this resolution specifies the installation of enhanced stop control treatments at ten intersections; and,

WHEREAS, the proposed improvements include solar-powered LED-enhanced flashing stop signs; advanced warning signs; and stop bars.

WHEREAS, the proposed enhanced stop control treatments will include the following ten intersections:

1. E. Vine Street and N. Ward Street
2. E. Vine Street and N. Davis Street
3. E. Vine Street and N Moore Street
4. E. Vine Street and N. Sheridan Street
5. E. Vine Street and N. Ransom Street
6. E. Finley Avenue and N. Ward Street
7. E. Finley Avenue and N. Davis Street
8. E. Finley Avenue and N. Moore Street
9. E. Finley Avenue and N. Sheridan Street
10. E. Finley Avenue and N. Ransom Street

NOW, THEREFORE, BE IT RESOLVED, BY THE CITY COUNCIL OF THE CITY OF OTTUMWA, IOWA THAT:

1. The Transportation Safety Improvement Program (TSIP) Application for the enhanced stop control treatments at ten intersections is hereby approved;
2. The City Council hereby commits to additional City funds necessary for construction of the project beyond any TSIP funding, and;
3. The City Council hereby commits to accepting and maintaining these improvements for a minimum of 5 years.

APPROVED, PASSED, AND ADOPTED, this 4th day of August 2026.

CITY OF OTTUMWA, IOWA

B Foote

Benjamin Foote, Mayor

ATTEST:

Christina Reinhard

Christina Reinhad, City Clerk

IOWA DEPARTMENT OF TRANSPORTATION

TRAFFIC SAFETY IMPROVEMENT PROGRAM (TSIP)

CITY OF OTTUMWA, IOWA

Part B. Narrative

The City of Ottumwa is applying for Traffic Safety Improvement Program (TSIP) funds to improve safety along the E. Vine Street and E. Finley Avenue corridors through the installation of enhanced stop control treatments at ten intersections with a documented history of stop sign violations and severe crashes.

The ten intersections included in this proposal are

- E. Vine Street and N. Ward Street
- E. Vine Street and N. Davis Street
- E. Vine Street and N Moore Street
- E. Vine Street and N. Sheridan Street
- E. Vine Street and N. Ransom Street
- E. Finley Avenue and N. Ward Street
- E. Finley Avenue and N. Davis Street
- E. Finley Avenue and N. Moore Street
- E. Finley Avenue and N. Sheridan Street
- E. Finley Avenue and N. Ransom Street

EXISTING CONDITIONS: The E. Vine Street and E. Finley Avenue corridors serve established residential neighborhoods and provide important east-west connections within the City of Ottumwa. Ten intersections along these corridors are currently controlled by conventional stop signs and have experienced a recurring pattern of crashes resulting from motorists failing to stop at the intersections.

Crash history indicates that drivers frequently run the stop signs due to a combination of factors, including driver inattention, failure to recognize the upcoming stop condition, and limited visibility of the existing traffic control devices under certain conditions. Several of these crashes have involved right-angle and turning movements that are commonly associated with severe injury outcomes. A number of the crashes at these intersections have resulted in serious injuries, creating an ongoing safety concern for motorists, pedestrians, and nearby residents.

The city has identified these intersections as locations where additional traffic control enhancements are warranted to increase driver awareness and reduce the frequency and severity of crashes.

PROPOSED CONCEPT: The City of Ottumwa is seeking TSIP funding to install new solar-powered flashing stop signs, advanced warning signs, and pavement striping enhancements at ten intersections along the E. Vine Street and E. Finley Avenue corridors.

The proposed improvements include:

- Installation of solar-powered LED-enhanced flashing stop signs on the stop-controlled approaches.
- Installation of advanced warning signs to provide motorists with additional notice of the upcoming stop condition.
- Installation and enhancement of pavement markings and stop bars to improve visibility and driver expectancy.

The proposed countermeasures are low-cost, proven safety treatments that can be implemented quickly and with minimal maintenance requirements while providing substantial safety benefits.

SAFETY JUSTIFICATION: The proposed improvements are intended to increase the conspicuity of stop-controlled intersections and provide multiple layers of warning to motorists approaching the intersections. The flashing stop signs draw additional attention to the stop condition, while the advanced warning signs and enhanced pavement markings provide earlier recognition and reinforce the need to stop.

Research has shown that enhanced stop signing and warning treatments are effective countermeasures for reducing crashes related to stop sign violations, particularly severe right-angle crashes. By improving driver awareness and increasing compliance with the stop control, the city expects the project to reduce the number of motorists running stop signs and decrease both the frequency and severity of crashes along these corridors.

Given the history of serious injury crashes at these ten intersections, the city believes these improvements represent a cost-effective investment that will significantly improve safety for all users and help advance Iowa's goal of reducing fatal and serious injury crashes on the transportation system.

Part C. Cost Breakdown

Client Name: City of Ottumwa

Location: Vine and Finley Avenue
ISG Project Number:
Date:

Engineer's Opinion of Probable Cost

No.	ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	TOTAL AMOUNT
1	Solar Powered LED Stop Sign	20.00	EA	$7,000.00	$140,000.00
2	Stop Ahead Sign	20.00	EA	$250.00	$5,000.00
3	Stop Bar Pavement Marking	20.00	EA	$125.00	$2,500.00
4	Double Yellow Pavement Marking	1000.00	LF	$0.25	$250.00
5	Traffic Control	1.00	LS	$2,000.00	$2,000.00
6	Mobilization	1.00	LS	$7,500.00	$7,500.00
7					
				Construction Costs	**$157,250.00**
				10% Contingency	$15,725.00
				TOTAL PROJECT COST	$172,975.00

Part D. Time Schedule

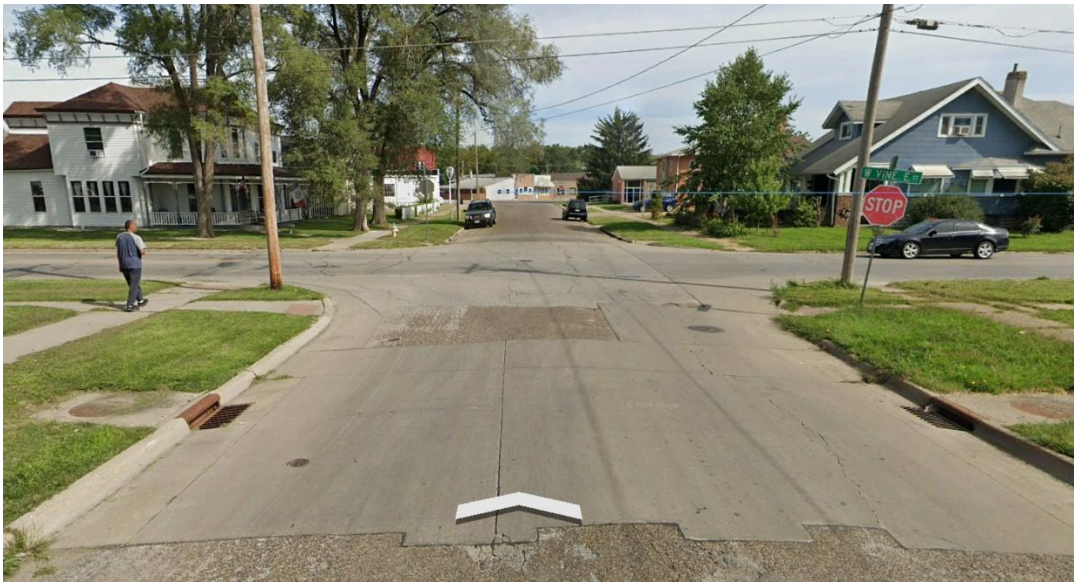
- August 15, 2026 – TSIP Application Due
- December 2026 – TSIP Funds Approval
- July 1, 2027 – TSIP Funds Available
- August-October 2027 – Installation Complete

Part E. Map

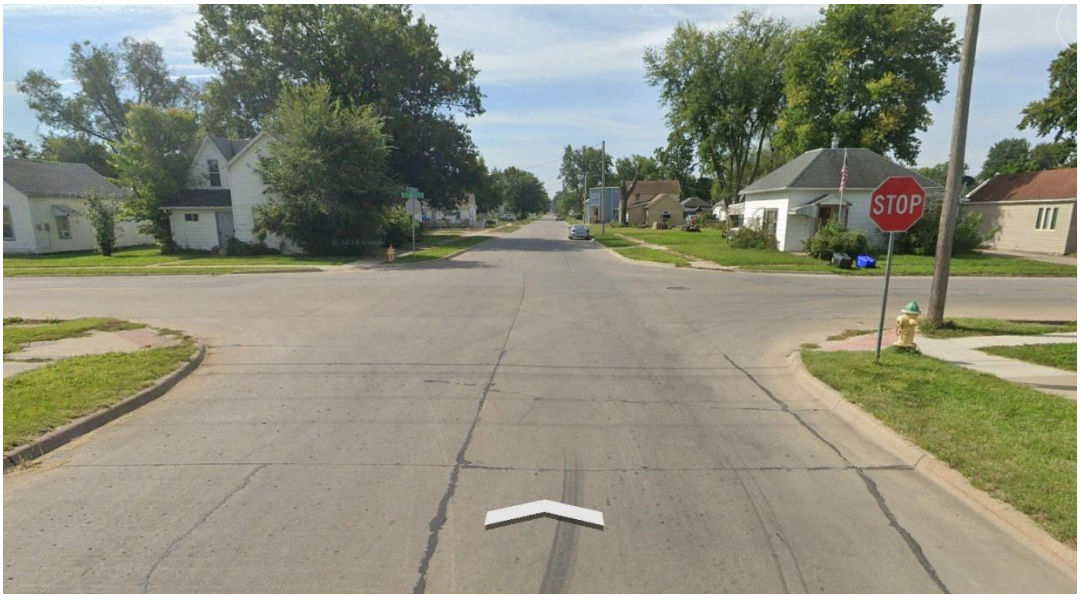


Enhanced Stop Sign Improvement Intersection

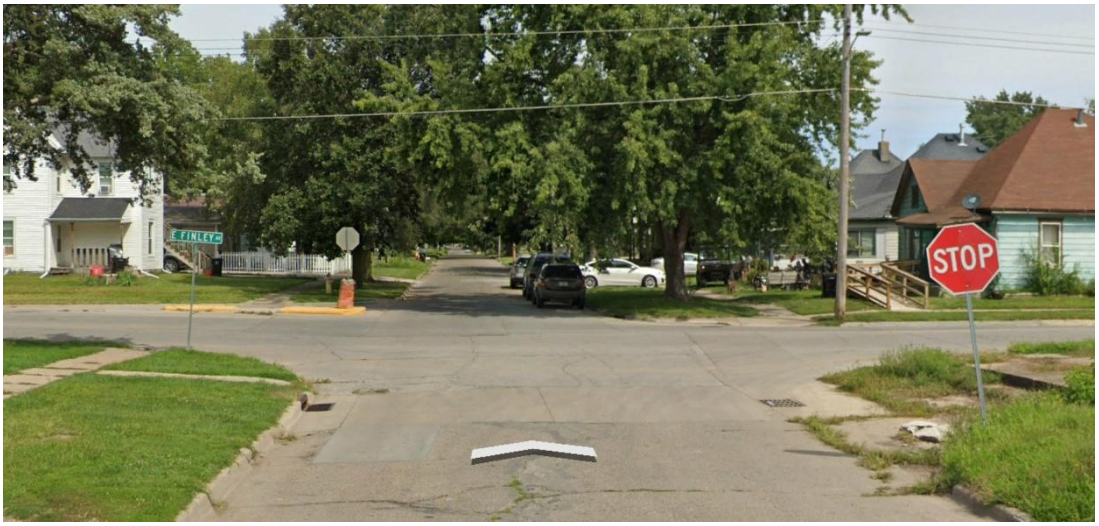
Part F. Pictures



N. Ward Street at E. Vine Street, heading northbound



N. Sheridan Street at E. Finley, heading southbound



N. Moore Street at E. Finely Avenue, heading northbound



N. Davis Street at E. Vine Street, heading northbound

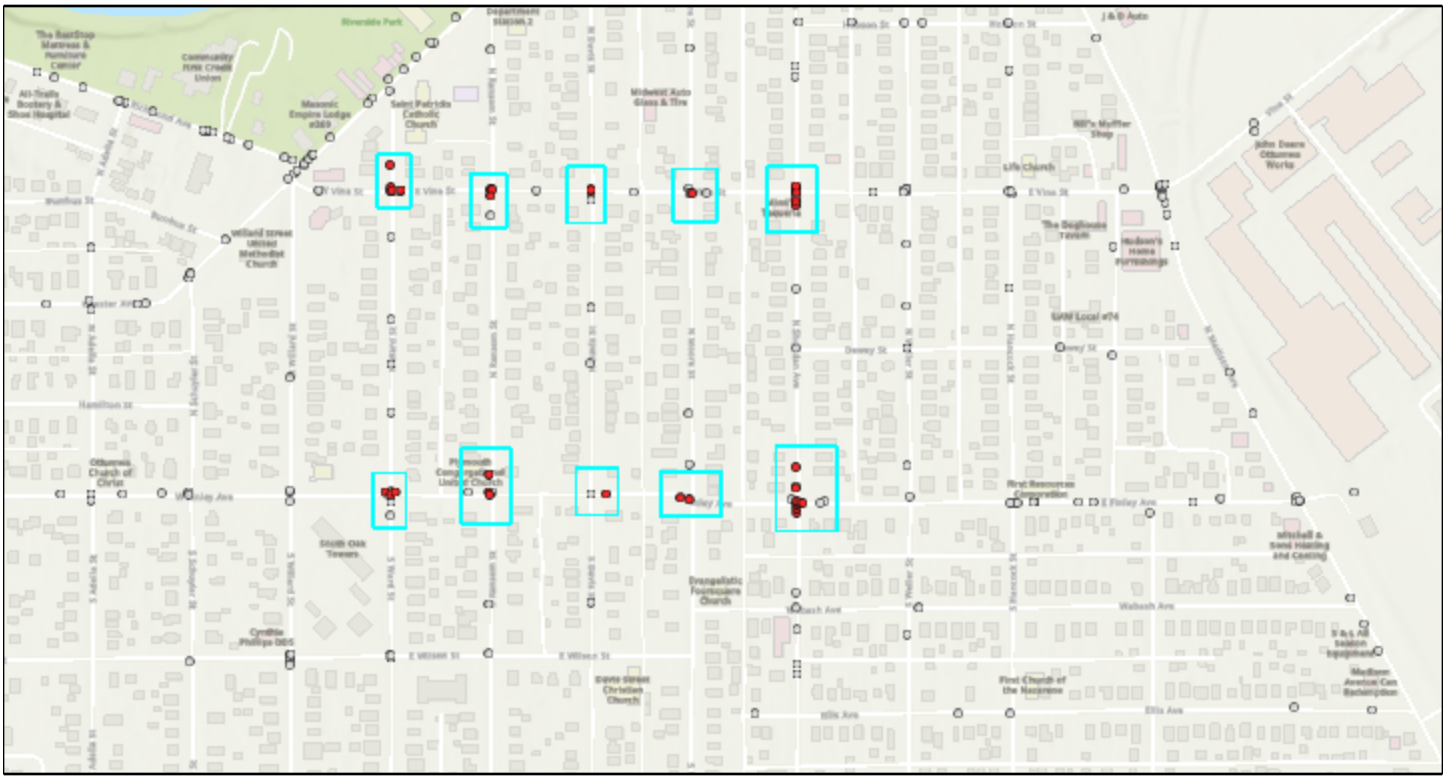
Iowa Crash Analysis Tool
Quick Report
2021-2026

Crash Severity	42
Fatal Crash	0
Suspected Serious Injury Crash	2
Suspected Minor Injury Crash	8
Possible/Unknown Injury Crash	14
Property Damage Only	18

Injury Status Summary	33
Fatalities	0
Suspected serious/incapacitating	2
Suspected minor/non-incapacitating	10
Possible (complaint of pain/injury)	19
Uninjured	0
Unknown	0
Not Reported	2

Property/Vehicles/Occupants	
Property Damage Total (dollars):	365,548.00
Average (per crash dollars):	8,703.52
Total Vehicles:	86.00
Average (per crash):	2.05
Total Occupants:	108.00
Average (per crash):	2.57

Average Severity	
Fatalities/Fatal Crash:	0.00
Fatalities/Crash:	0.00
Injuries/Crash:	0.74
Major Injuries/Crash:	0.05
Minor Injuries/Crash:	0.24
Possible/Unknown Injuries/Crash:	0.45



Major Cause			42
Animal	0	Ran traffic signal	0
Ran stop sign	16	Failed to yield to emergency vehicle	0
FTYROW: At uncontrolled intersection	0	FTYROW: Making right turn on red signal	0
FTYROW: From stop sign	16	FTYROW: From yield sign	0
FTYROW: Making left turn	2	FTYROW: From driveway	0
FTYROW: From parked position	0	FTYROW: To pedestrian	0
FTYROW: Other	0	Drove around RR grade crossing gates	0
Disregarded RR Signal	0	Crossed centerline (undivided)	0
Crossed median (divided)	0	Traveling wrong way or on wrong side of road	0
Aggressive driving/road rage	0	Driving too fast for conditions	0
Exceeded authorized speed	0	Improper or erratic lane changing	0
Operating vehicle in an reckless/erratic/care...	0	Followed too close	2
Passing: On wrong side	0	Passing: Where prohibited by signs/markings	0
Passing: With insufficient distance/inadequa...	0	Passing: Through/around barrier	0
Passing: Other passing	0	Made improper turn	1
Driver Distraction: Manual operation of an e...	0	Driver Distraction: Talking on a hand-held d...	0
Driver Distraction: Talking on a hands free ...	0	Driver Distraction: Adjusting devices (radio...	0
Driver Distraction: Other electronic device ...	0	Driver Distraction: Passenger	0
Driver Distraction: Unrestrained animal	0	Driver Distraction: Reaching for object(s)/f...	1
Driver Distraction: Inattentive/lost in thou...	0	Driver Distraction: Other interior distracti...	0
Driver Distraction: Exterior distraction	0	Ran off road - right	0
Ran off road - straight	0	Ran off road - left	0
Lost control	2	Swerving/Evasive Action	0
Over correcting/over steering	0	Failed to keep in proper lane	0
Failure to signal intentions	0	Traveling on prohibited traffic way	0
Vehicle stopped on railroad tracks	0	Other: Vision obstructed	0
Other: Improper operation	0	Other: Disregarded warning sign	0
Other: Disregarded signs/road markings	0	Other: Illegal off-road driving	0
Downhill runaway	0	Separation of units	0
Towing improperly	0	Cargo/equipment loss or shift	0
Equipment failure	0	Oversized load/vehicle	0
Other: Getting off/out of vehicle	0	Failure to dim lights/have lights on	0
Improper backing	0	Improper starting	0
Illegally parked/unattended	1	Driving less than the posted speed limit	0
Operator inexperience	0	Other	1
Unknown	0	Not reported	0
Other: No improper action	0		

Time of Day/Day of Week

Day of Week	12 AM to 2 AM	2 AM to 4 AM	4 AM to 6 AM	6 AM to 8 AM	8 AM to 10 AM	10 AM to Noon	Noon to 2 PM	2 PM to 4 PM	4 PM to 6 PM	6 PM to 8 PM	8 PM to 10 PM	10 PM to 12 AM	Not reported	Total
Sunday	0	0	0	0	0	1	0	1	0	0	0	0	0	2
Monday	0	0	0	0	1	0	1	2	2	0	0	0	0	6
Tuesday	0	0	0	0	0	1	2	1	1	0	0	0	0	5
Wednesday	0	0	0	2	0	0	0	1	1	0	0	0	0	4
Thursday	0	0	0	1	0	3	1	1	2	0	0	0	0	8
Friday	0	0	1	2	1	0	3	0	0	2	0	0	0	9
Saturday	0	0	0	0	2	0	1	0	4	1	0	0	0	8
Total	0	0	1	5	4	5	8	6	10	3	0	0	0	42

Manner of Crash Collision	**42**
Non-collision (single vehicle)	2
Head-on (front to front)	2
Rear-end (front to rear)	4
Angle (oncoming left turn)	0
Broadside (front to side)	32
Sideswipe (same direction)	0
Sideswipe (opposite direction)	0
Rear to rear	0
Rear to side	0
Not reported	0
Other	2
Unknown	0

Surface Conditions	**42**
Dry	36
Wet	1
Ice/frost	0
Snow	5
Slush	0
Mud/dirt	0
Water (standing or moving)	0
Sand	0
Oil	0
Gravel	0
Not reported	0
Other	0
Unknown	0

Fixed Object Struck			**86**
Bridge overhead structure	0	Bridge pier or support	0
Bridge/bridge rail parapet	0	Curb/island/raised median	0
Ditch	0	Embankment	0
Ground	1	Culvert/pipe opening	0
Guardrail - face	0	Guardrail - end	0
Concrete traffic barrier (median or right sid...	0	Other traffic barrier	0
Cable barrier	0	Impact attenuator/crash cushion	0
Utility pole/light support	0	Traffic sign support	0
Traffic signal support	0	Other post/pole/support	0
Fire hydrant	0	Mailbox	0
Tree	0	Landscape/shrubbery	0
Snow bank	0	Fence	0
Wall	0	Building	0
Other fixed object	0	None (no fixed object struck)	85

Driver Age/Driver Gender					
Driver Age - 5 year Bins	Female	Male	Not reported	Unknown	**Total**
< 14	0	0	0	0	0
= 14	0	0	0	0	0
= 15	0	0	0	0	0
= 16	0	1	0	0	1
= 17	1	0	0	0	1
= 18	0	1	0	0	1
= 19	1	2	0	0	3
= 20	1	1	0	0	2
>= 21 and <= 24	2	5	0	0	7
>= 25 and <= 29	4	8	0	0	12
>= 30 and <= 34	0	2	0	0	2
>= 35 and <= 39	1	5	0	0	6
>= 40 and <= 44	3	5	0	0	8
>= 45 and <= 49	3	3	0	0	6
>= 50 and <= 54	2	3	0	0	5
>= 55 and <= 59	0	6	0	0	6
>= 60 and <= 64	3	2	0	0	5
>= 65 and <= 69	4	3	0	0	7
>= 70 and <= 74	1	3	0	0	4
>= 75 and <= 79	3	0	0	0	3
>= 80 and <= 84	1	1	0	0	2
>= 85 and <= 89	1	1	0	0	2
>= 90 and <= 94	0	0	0	0	0
>= 95	0	0	0	0	0
Not reported	0	0	0	0	0
Unknown	0	0	3	0	3
Total	31	52	3	0	86

Drug/Alcohol Related	**42**
Drug	0
Alcohol (< Statutory)	0
Alcohol (Statutory)	0
Drug and Alcohol (< Statutory)	0
Drug and Alcohol (Statutory)	0
Refused	0
Under Influence of Alcohol/Drugs/Medications	0
None Indicated	42

Alcohol Test Given	**86**
None	83
Blood	0
Urine	0
Breath	0
Vitreous	0
Refused	0
Not reported	3

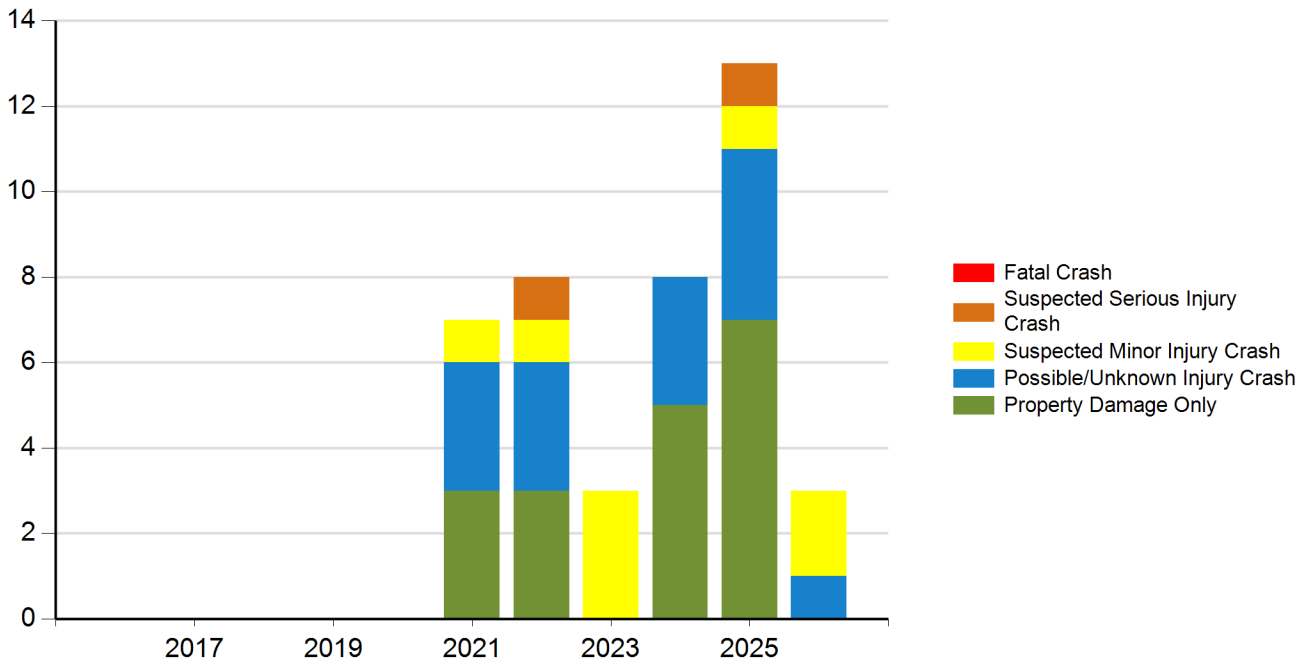
Drug Test Given	**86**
None	83
Blood	0
Urine	0
Breath	0
Vitreous	0
Refused	0
Not reported	3

Drug Test Result	**86**
Negative	0
Cannabis	0
Central Nervous System depressants	0
Central Nervous System stimulants	0
Hallucinogens	0
Inhalants	0
Narcotic Analgesics	0
Dissociative Anesthetic (PCP)	0
Prescription Drug	0
Not reported	86
Other	0

Crash Severity - Annual

Crash Year	Fatal Crash	Suspected Serious Injury Crash	Suspected Minor Injury Crash	Possible/Unknown Injury Crash	Property Damage Only	**Total**
2016	0	0	0	0	0	0
2017	0	0	0	0	0	0
2018	0	0	0	0	0	0
2019	0	0	0	0	0	0
2020	0	0	0	0	0	0
2021	0	0	1	3	3	7
2022	0	1	1	3	3	8
2023	0	0	3	0	0	3
2024	0	0	0	3	5	8
2025	0	1	1	4	7	13
2026	0	0	2	1	0	3
Total	0	2	8	14	18	42

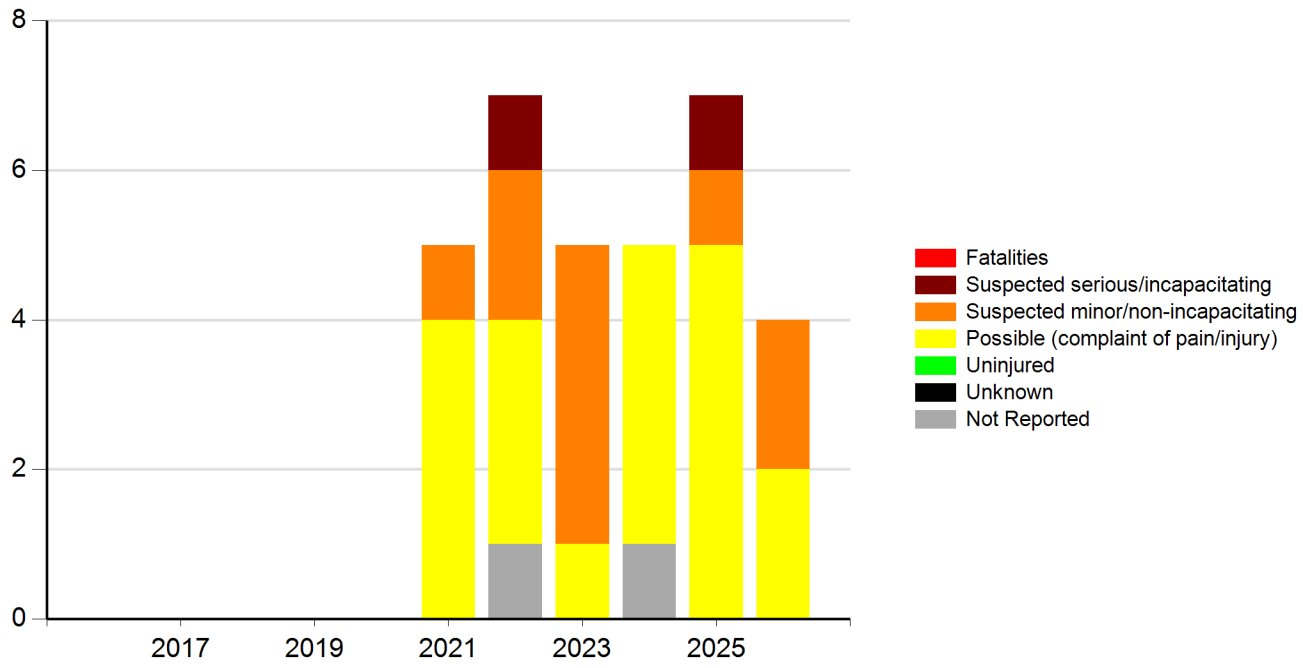
Severity/Year



Injury Status - Annual

Crash Year	Fatalities	Suspected serious/incapacitating	Suspected minor/non-incapacitating	Possible (complaint of pain/injury)	Uninjured	Unknown	Not Reported	**Total**
2016	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0
2021	0	0	1	4	0	0	0	5
2022	0	1	2	3	0	0	1	7
2023	0	0	4	1	0	0	0	5
2024	0	0	0	4	0	0	1	5
2025	0	1	1	5	0	0	0	7
2026	0	0	2	2	0	0	0	4
Total	0	2	10	19	0	0	2	33

Injury Status/Year



Meeting the following criteria

Jurisdiction: Statewide
Year: 2021, 2022, 2023, 2024, 2025, 2026
Map Selection: Yes
Filter: None

Analyst Information

County:	Wapello	Prepared By:	Barrett Hubbard
Location:	Ottumwa Vine Street and Finley Ave	Date Prepared:	6/25/2026
Proposed Improvements:	Improved Signing and Striping at intersections to reduce running of stop signs		
Estimated Improvement Cost:	$ 172,975		
Inflation on Crash Costs:	4%	Annual Maintenance:	2%
Discount Rate:	4%	(% of Improvement Cost)	
Estimated Service Life:	6	Annual Maintenance Cost:	$ 3,460

Method Choice: CRF Method

The Crash Reduction Factor (CRF) Method applies one to three CRFs to historical crashes to estimate reductions in future crashes. Crash Modification Factors (CMFs) can be converted to CRFs. For additional information, click the "Learn More" button.

Crash Reduction Factor (CRF) Method

Traffic Growth Factor:	1%
Number of CRFs:	2
Years of Crash History:	5

Combined CRF (Dominant Common Residuals Method)

Iowa DOT's preferred methodology for combining CRFs is Dominant Common Residuals, since it is more conservative than the other options.

	CRF 1:	CRF 2:		Combined CRF	
CRF Value (%)	5	8		**11.7**	
Equivalent CMF	0.95	0.92			Is Dom. Com. Resd.
Combined CMF, if # used (DR)	0.95	0.88		0.88	TRUE
Combined CMF, if # used (Mult)	0.95	0.87			Is data entered befc
Pick Dom Com. Resd. Or Mult. Fo	0.95	0.88	0.88	0.88	FALSE

Crash Severity	Rounded Societal Costs	Crash History (Total):	CRF (from above)	Crash History - Annual Avg	Crashes Saved Annually
Fatal (K)	$ 4,500,000		11.7	**0.00**	**0.00**
Serious Injury (A)	$ 4,500,000	2	11.7	**0.40**	**0.05**
Minor Injury (B)	$ 300,000	10	11.7	**2.00**	**0.23**
Possible/Unknown Injury (C)	$ 145,000	14	11.7	**2.80**	**0.33**
Property Damage Only (O)	$ 20,000	10	11.7	**2.00**	**0.23**

Crash Severity	Annual Societal Benefit
Fatal (K)	**$ -**
Serious Injury (A)	**$ 209,759**
Minor Injury (B)	**$ 69,920**
Possible/Unknown Injury (C)	**$ 47,312**
Property Damage Only (O)	**$ 4,661**

Total Benefits and Costs

		Implementation Cost	$ 172,975
		Present Value of Maint.	$ 18,135
Present Value Benefits (Societal Benefits)	$ 1,780,586	Present Value Costs (Impl. and Maint. Costs)	$ 191,110
Present Value Net Return	$ 1,589,476		

County:	Wapello	Prepared By:	Barrett Hubbard
Location:	Ottumwa Vine Street and Finley Ave	Date Prepared:	6/25/2026

Benefit Cost Ratio **9.32**

Form continues on next page

County: Wapello
Location: Ottumwa Vine Street and Finley Ave
Prepared By: Barrett Hubbard
Date Prepared: 6/25/2026

No Input Necessary - No Custom Values In Use

General Customizations

No change to Crash Costs

No change to Discount Rate

No change to Maintenance Costs

Method-Specific Customizations

A

Rev. 07/23

Application for TRAFFIC CONTROL DEVICE
TSIP FUNDS

GENERAL INFORMATION **DATE:** AUGUST 15, 2026

Location / Title of Project SCOTT COUNTY - Y40 & HWY 130 ICWS

Applicant SCOTT COUNTY SECONDARY ROADS DEPARTMENT

Contact Person ANGIE KERSTEN Title COUNTY ENGINEER

Complete Mailing Address 950 E. BLACKHAWK TRAIL
ELDRIDGE, IA 52748

Phone 563-326-8640 (Area Code) E-Mail Angela.Kersten@scottcountyiowa.gov

If more than one highway authority is involved in this project, please indicate and fill in the information below (use additional sheets if necessary).

Co-Applicant(s) IOWA DEPARTMENT OF TRANSPORTATION

Contact Person ERYN STONE Title DIST. 6 TSMO ENGINEER

Complete Mailing Address 800 LINCOLN WAY
AMES, IA 50010

Phone 515-450-4103 (Area Code) E-Mail ERYN.STONE@IOWADOT.US

PLEASE COMPLETE THE FOLLOWING PROJECT INFORMATION:

Funding Amount

Total Safety Cost	$	77,000
Total Project Cost	$	77,000
Safety Funds Requested	$	77,000

Additional Project Safety Documentation (when available):

- ☒ Project information sheet(s) or "Risk Score">50% from County/City's Local Road Safety Plan
- ☒ FHWA SS4A Safety Action Plan or similar comprehensive transportation safety plan
- ☐ Iowa DOT TEAP Study or similar analysis and concept
- ☒ Project intersection or segment with High or Medium PCR Level (PCR-All or PCR-Severe) from the Iowa DOT Potential for Crash Reduction (PCR) web-based map tool https://pcr.iowadot.gov/

Potential for Crash Reduction (PCR) Information

Intersection ID (1234567890) or Segment ID (1234)	Intersection or Segment	PCR Level High	PCR Level Medium	PCR-All value	PCR-Severe value
232371	IA 130 E (S001930130E)	☐	☒	0.363615	-0.003774
		☐	☐		

Rev. 07/23

APPLICATION CERTIFICATION FOR PUBLIC AGENCY

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating public agency(ies). I understand the attached resolution(s), where applicable, binds the participating public agency(ies) to assume responsibility for any additional funds, if required, to complete the project. In addition, the participating public agency(ies) agrees to maintain any new or improved public streets or roadways for a minimum of five years.

I understand that, although this information is sufficient to secure a commitment of funds, a firm contract between the applicant and the Department of Transportation is required prior to the authorization of funds.

Representing the SCOTT COUNTY

Signed: _____ 8/13/26
Signature Date Signed

Jean E. Dickson
Printed Name

Attest: _____ 8/13/26
Signature Date Signed

Deborah Dierkes
Printed Name

Existing Conditions

The intersection of Y40 (60th Avenue) and Iowa Highway 130 is located in rural Scott County in the unincorporated Plainview area. Y40 is a paved two-lane secondary road and Highway 130 is a paved two-lane primary road. The intersection is skewed and operates under two-way stop control, with Y40 traffic required to stop and Highway 130 operating as the uncontrolled through roadway. Based on traffic counts collected by the Iowa DOT in 2022, the annual average daily traffic (AADT) is approximately 1,330 vehicles per day on Highway 130 and 1,280 vehicles per day on Y40.

The posted speed limit on both roadways is 35 mph through the intersection area and 55 mph outside the intersection area. Development exists in all four quadrants, including residential and agricultural buildings in the southwest and southeast quadrants, a residential property in the northwest quadrant, and a restaurant in the northeast quadrant. Due to the existing development, acquiring the right-of-way necessary to substantially reconstruct the intersection and reduce the skew would be cost prohibitive.

The intersection has a documented pattern of crashes involving motorists on Y40 failing to yield the right-of-way to Highway 130 traffic. During the five-year period from August 5, 2021, through August 5, 2026, six crashes occurred at the intersection. All six were coded as failure to yield the right-of-way from a stop sign. All crashes involved property damage only. All occurred between approximately 8:00 a.m. and 4:00 p.m., with five crashes under dry pavement conditions. The consistency of the crash type indicates a persistent problem with motorists entering or crossing Highway 130 from the stop-controlled Y40 approaches.

The intersection received the highest intersection risk-factor ranking in Scott County's 2019 Local Road Safety Plan and again received the highest risk-factor ranking in the Scott County Safety Action Plan updated in July 2025. Iowa DOT's 2020–2024 Potential for Crash Reduction (PCR) screening identifies the Highway 130 segment containing the intersection as having a Medium PCR Level for all crashes (KABCO), with a PCR-All value of 0.364 crash/mile/year.

Previous Safety Improvements

In 2023, Scott County received Highway Safety Improvement Program (HSIP) funding to implement enhanced traffic-control measures intended to address the failure-to-yield crash pattern. Improvements completed on July 10, 2023, included solar-powered flashing beacons on the STOP signs on Y40 and intersection warning signs on Highway 130, recutting transverse rumble-strip panels on the Y40 approaches, replacement of a STOP sign, and installation of CROSS TRAFFIC DOES NOT STOP supplemental plaques on all four STOP signs. STOP signs are installed on both the right and left sides of each Y40 approach to increase their visibility.

Despite these improvements, the crash pattern has persisted. Four of the six crashes during the five-year analysis period occurred after completion of the 2023 HSIP improvements. The continued occurrence of the same failure-to-yield crash type demonstrates that additional safety intervention is warranted.

Proposed Improvement and Safety Justification

Scott County proposes to install a solar-powered Intersection Conflict Warning System (ICWS) utilizing radar vehicle detection at the intersection of Y40 and Highway 130. The system would provide active warning devices on both roadways. Detection of a vehicle on a stop-controlled

Y40 approach would activate flashing warning beacons for Highway 130 motorists, alerting them to the presence of a vehicle that may enter or cross the highway. Detection of approaching Highway 130 traffic would activate warning devices for Y40 motorists, providing real-time notification that cross traffic is approaching.

Unlike the existing warning devices, which provide the same message regardless of whether conflicting traffic is present, the proposed ICWS would provide a dynamic warning associated with the actual presence of potentially conflicting traffic. The system is intended to improve awareness and gap-selection decisions for Y40 motorists while providing Highway 130 motorists additional warning of a developing conflict and an opportunity to reduce speed or take defensive action if necessary. The proposed improvement directly addresses the documented failure-to-yield crash pattern while avoiding the substantial property impacts and costs associated with geometric reconstruction of the intersection.

The proposed ICWS is consistent with Section 2C.42 of the Manual on Uniform Traffic Control Devices (MUTCD), which addresses Actuated Advance Intersection Signs (W2-10 and W2-11) and identifies their application at stop-controlled intersections associated with restricted sight distance and gap selection. The proposed system will utilize TRAFFIC ENTERING WHEN FLASHING (W2-10) signs on the uncontrolled Highway 130 approaches to warn of vehicles entering from Y40 and TRAFFIC APPROACHING WHEN FLASHING (W2-11) signs on the stop-controlled Y40 approaches to warn of traffic approaching on Highway 130. In accordance with Section 2C.42, the signs will be supplemented with Warning Beacons that activate when a vehicle is detected on the conflicting approach. The final installation will be designed and installed in accordance with applicable MUTCD requirements.

According to Iowa DOT Instructional Memorandum to Local Public Agencies No. 3.240, *Clear Zone Guidelines*, the recommended clear zone at this location is 10 to 12 feet from the edge of traveled way. There are currently no non-breakaway objects within the clear zone. Proposed ICWS signs will be installed on breakaway supports, and the installation will maintain applicable clear-zone and crashworthiness requirements.

The proposed ICWS is the next logical safety improvement at this location. The intersection has repeatedly been identified as Scott County's highest-risk intersection, has experienced a consistent failure-to-yield crash pattern, and has continued to experience crashes following implementation of enhanced conventional traffic-control measures. The proposed ICWS will supplement the existing stop control with real-time information about conflicting traffic and is expected to improve driver awareness and reduce the potential for right-angle crashes at the intersection.

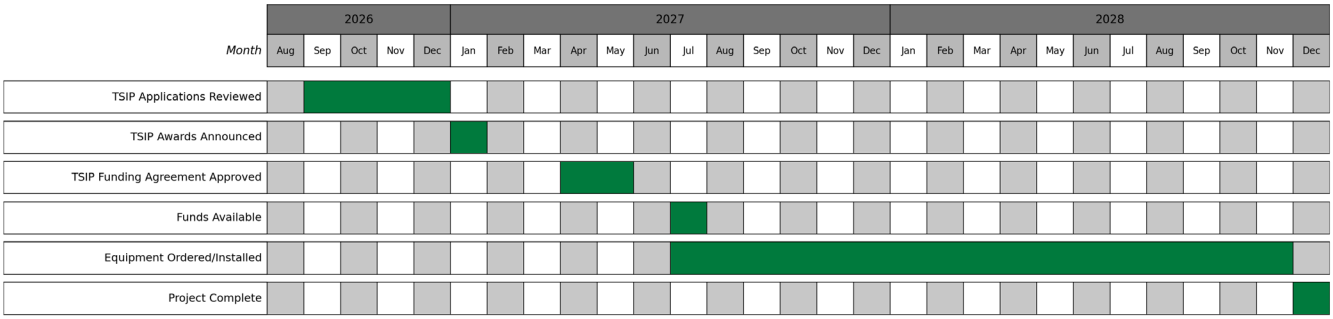
Cost Estimate

The conceptual project cost estimate is based on the installation of a solar-powered Intersection Conflict Warning System utilizing radar vehicle detection and active warning devices on both Y40 and Highway 130. The estimate conservatively assumes four radar detection systems. Final equipment configuration and quantities will be determined during project design.

Item	Quantity	Estimated Unit Cost	Estimated Cost
Solar-Powered Radar Detection System	4 EA	$6,500	$26,000
Solar-Powered ICWS Warning Sign & Beacon Assembly	4 EA	$6,500	$26,000
ICWS Controller, Wireless Communication, Programming & System Integration	1 LS	$7,000	$7,000
Installation, Breakaway Supports & Miscellaneous Hardware	1 LS	$8,000	$8,000
Estimated Construction Cost			**$67,000**
Contingency (15%)			**$10,000**
Total Estimated Project Cost			**$77,000**

Total TSIP Funding Request: $77,000

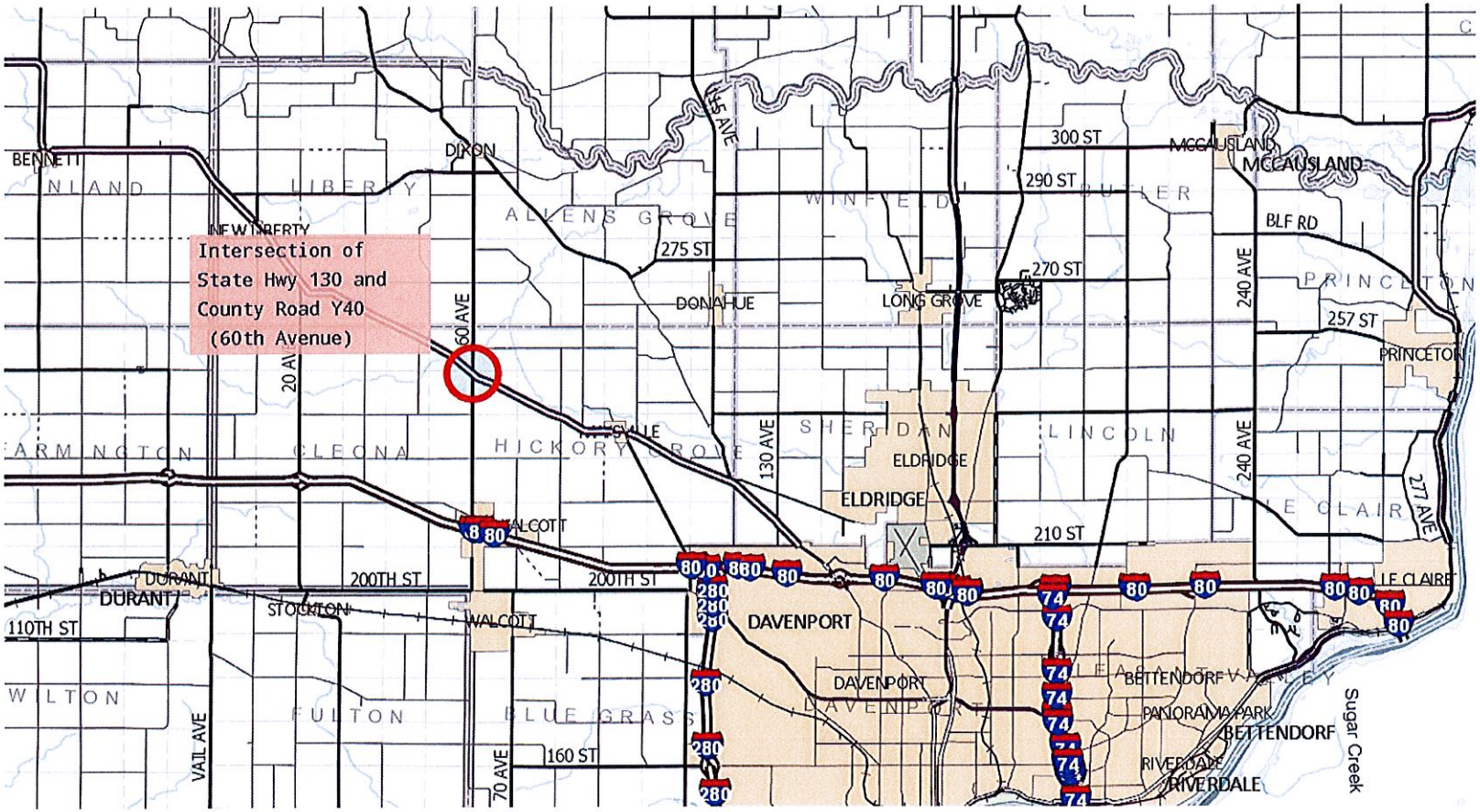
Time Schedule



HSIP Application Y40 + Hwy 130

Scott - ICEASB Easy Map

10:50 AM, Tue, Nov 10, 2020



Feature Key

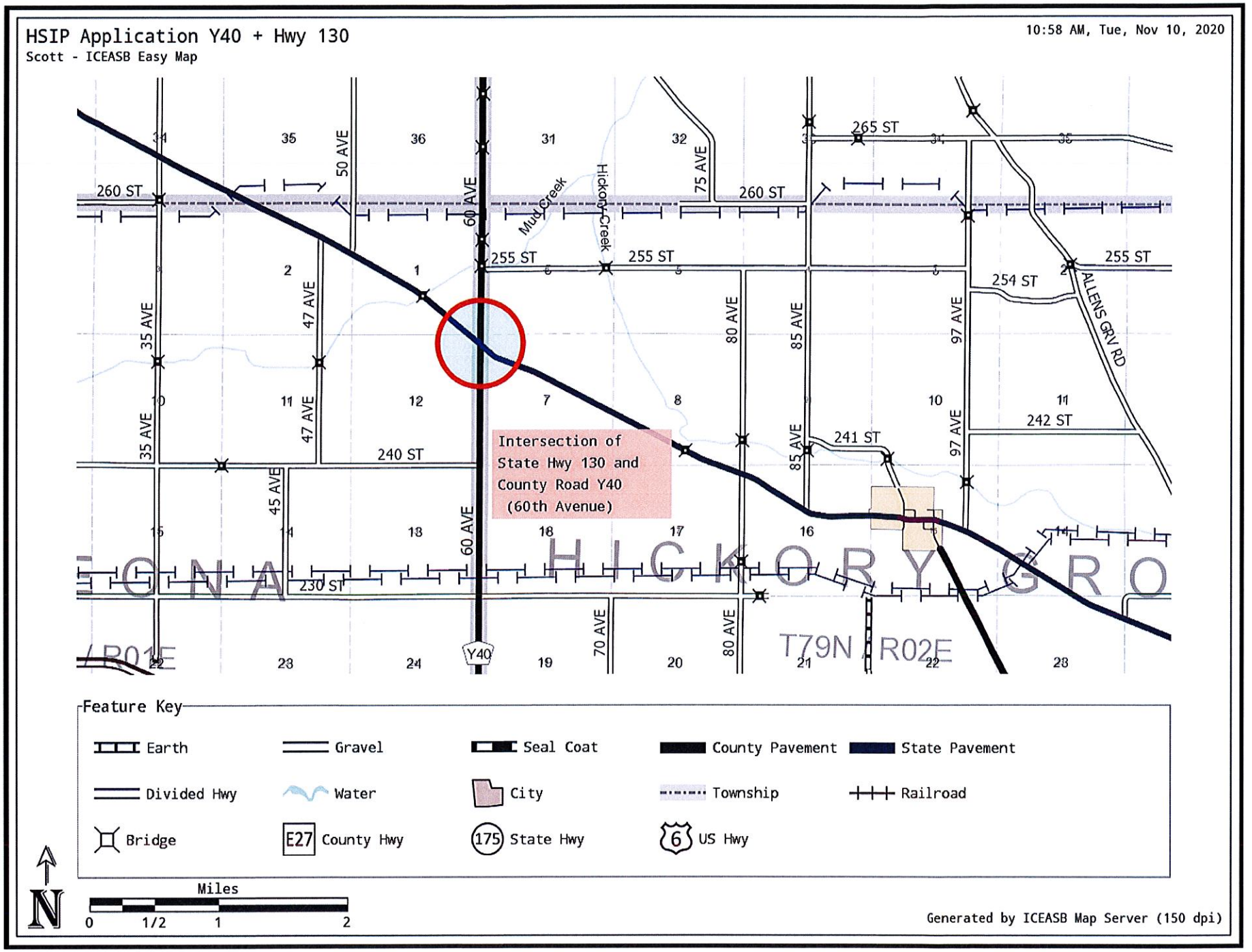
Earth	Gravel	Seal Coat	County Pavement	State Pavement
Divided Hwy	Water	City	Township	Railroad
Bridge	E27 County Hwy	175 State Hwy	6 US Hwy	

N

Miles

0 2 4 8

Generated by ICEASB Map Server (150 dpi)


HSIP Application Y40 + Hwy 130
Scott - ICEASB Easy Map
10:58 AM, Tue, Nov 10, 2020
260 ST
255 ST
265 ST
254 ST
242 ST
241 ST
240 ST
230 ST
50 AVE
60 AVE
75 AVE
35 AVE
47 AVE
45 AVE
80 AVE
85 AVE
97 AVE
70 AVE
ALLENS GRV RD
Mud Creek
Hickory Creek
Intersection of
State Hwy 130 and
County Road Y40
(60th Avenue)
Y40
T79N R01E
T79N R02E
Feature Key
Earth
Gravel
Seal Coat
County Pavement
State Pavement
Divided Hwy
Water
City
Township
Railroad
Bridge
E27 County Hwy
175 State Hwy
6 US Hwy
N
Miles
0 1/2 1 2
Generated by ICEASB Map Server (150 dpi)

Pictures

Northbound on Y40



Southbound on Y40



Eastbound on Hwy 130

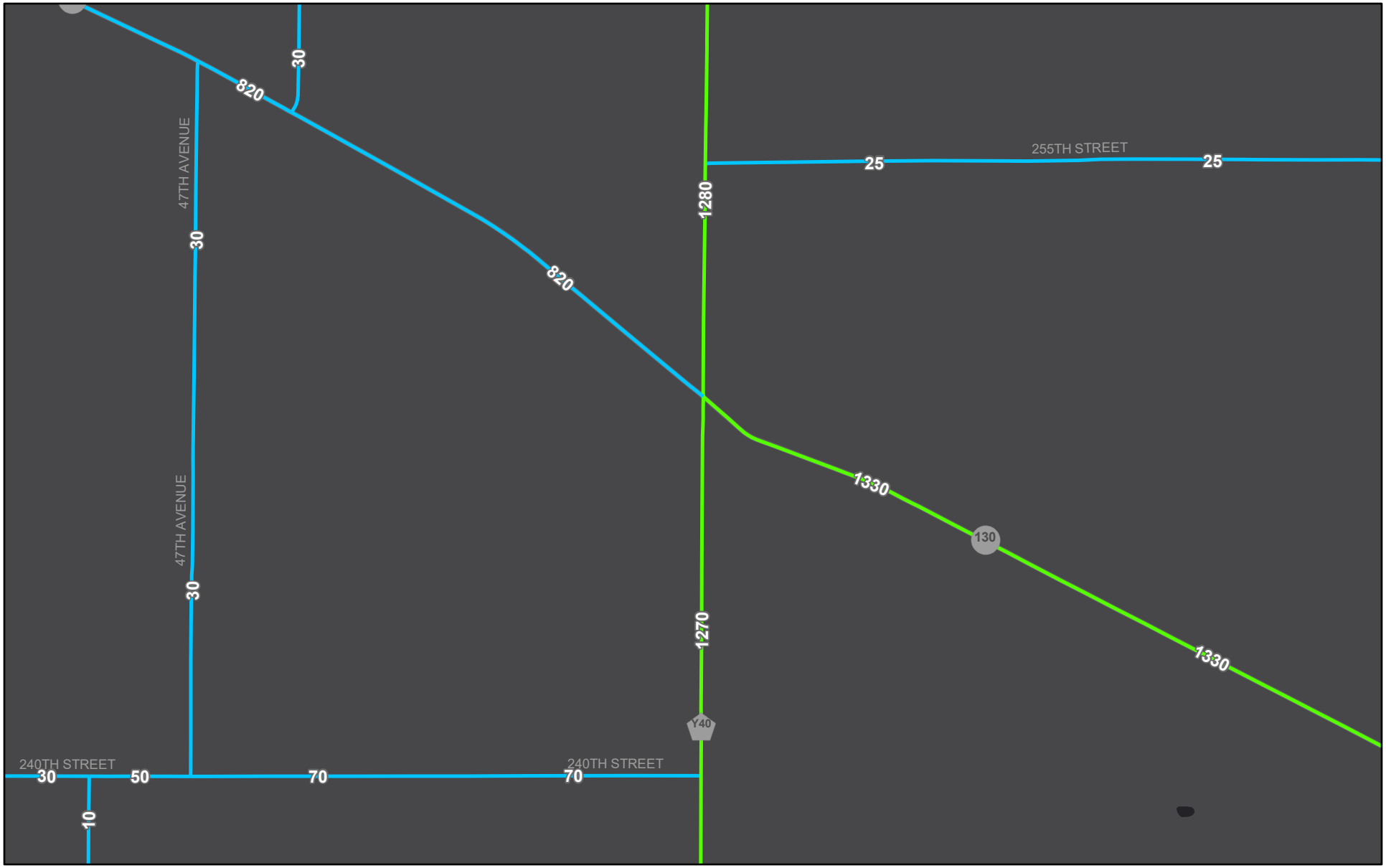


Westbound on Hwy 130




NEW LIBERTY RD
60TH AVE
Y40
130
LEGEND
SYMBOL
PROPOSED SOLAR-POWERED
RADAR DETECTION SYSTEM
INSTALLED ON EXISTING STOP SIGN
PROPOSED W2-10, 36"X36"
W/WARNING BEACON, SOLAR-POWERED,
INSTALLED ON ALUMINUM POLE
(BEACONS ACTIVATED BY TRAFFIC ON Y40)
PROPOSED W2-11, 36"X36"
W/WARNING BEACON, SOLAR-POWERED,
INSTALLED ON ALUMINUM POLE
(BEACONS ACTIVATED BY TRAFFIC ON HWY 130)

Average Traffic Volume Map



8/14/2026, 3:42:26 PM

1:28,683

0 0.17 0.35 0.7 mi

0 0.28 0.55 1.1 km

Primary Non-Divided

- 0 - 999
- 1000 - 1999

Secondary & Municipal Non-Divided

- 0 - 999
- 1000 - 1999

Local Road Safety Plan
Project Description for Intersection Improvements

Risk Factor Points: 18

Project Name: IA 130 & 60th Ave/Co Rd Y40
Agency Name: Scott County
Contact Name: Burgstrum, Jon
E-mail: jon.burgstrum@scottcountyiowa.com

Date: 9/17/18
Prepared By: DJG/DVM
Checked By: MMO

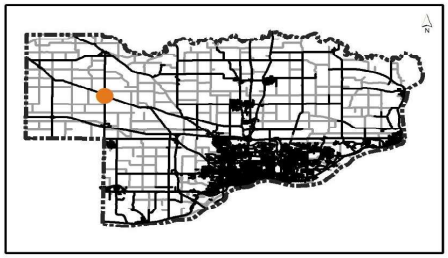
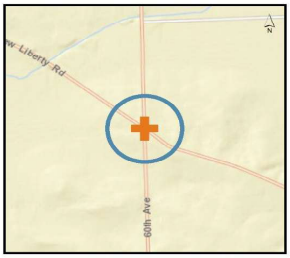
INTERSECTION

Location Description

Road: **IA 130**
Road: **60th Ave/Co Rd Y40**
Closest City: **WALCOTT**
GPS ID: 484865

County to coordinate with local agency to implement improvements that are on right-of-way that is not under control of the County.

Project Location Maps



Intersection Information and Systemic Ranking Summary

Systemic Ranking Summary	Value	Points
Distance from Previous Stop	5 mi	4
Approach Angle (Degrees)	50	4
Intersection within Curve	No	0
Daily Entering Vehicles	2,290	3
Minor Street Volume	1,180	2
Roads/Driveways within 250 Feet	5	2
K or A Crashes	1	2
Number of Approaches	4	1
Total Risk Factor Points (22 max)		**18**

Other Information	
Number of Approaches	4
Number of Paved Approaches	4
Major ADT	1,380
Minor ADT	1,180
Destination Lighting	Yes
Transverse Rumble Strips (Number of Approaches)	2
Control Type	Two-way stop

Crash Data, 2008-2017	
Total Crashes	7
K and A Crashes	1
Right Angle,Rear-end,or Turning Crashes	5
Total Nighttime Crashes	0
Nighttime/Daytime Crash Ratio**	0.0

Opinion of Probable Cost (Project Selection Decision Tree Results)

Item Description	Quantity	Unit	Unit Price	Item Cost
Coordinate with Local Jurisdiction on Signal Modifications	0	EA	$ 2,500	$ -
Signal Warrant Analysis to Consider Removal of Signal	0	EA	$ 5,000	$ -
Intersection Configuration Evaluation (ICE)	0	EA	$ 25,000	$ -
Implement Results of ICE	0	EA	$ 750,000	$ -
All-Way Stop Analysis and Converting Two-Way Stop to All-Way Stop	0	EA	$ 5,000	$ -
All-Way Stop Analysis and Removal of Stop Signs on Major Approaches	0	EA	$ 5,000	$ -
Install Destination Lighting	0	LEG	$ 8,000	$ -
Upgrade Signs and Pavement Markings	**2**	**LEG**	**$ 2,200**	**$ 4,400**
Upgrade Signs (Unpaved Approaches)	0	LEG	$ 1,000	$ -
Install Second Stop Sign and Stop Ahead Sign	**2**	**LEG**	**$ 1,200**	**$ 2,400**
Install Solar-Powered Flashing Beacon on Stop Sign	**4**	**EA**	**$ 2,500**	**$ 10,000**
Install Transverse Rumble Strips	0	LEG	$ 1,000	$ -
Install Intersection Warning Signs and Advance Street Name Plaques on Major Approaches	**2**	**LEG**	**$ 1,200**	**$ 2,400**
Clear and Grub within Sight Triangle	**4**	**LEG**	**$ 1,500**	**$ 6,000**
			Project Selection Decision Tree Systemic Improvements Subtotal:	$ 25,200

Continued on back of this page.

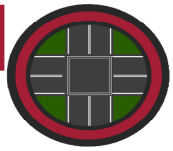
** Nighttime/Daytime Crash Ratio = 3 x nighttime crashes/daytime crashes per Iowa DOT I.M. 2.110 Attachment A.

Project Location Map Sources:
Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Kimley»Horn

Local Road Safety Plan
Project Description for Intersection Improvements

Risk Factor Points: 18



Project Name: IA 130 & 60th Ave/Co Rd Y40
Agency Name: Scott County
Contact Name: Burgstrum, Jon
E-mail: jon.burgstrum@scottcountyiowa.com

Date: 9/17/18

Prepared By: DJG/DVM
Checked By: MMO

INTERSECTION

Opinion of Probable Cost (Additional Potential Improvements)

GPS ID: 484865

There are a variety of other safety improvements that could be considered that were not included on the front page of the project sheet due to availability of data, the need for site-specific information, and/or the appetite for the countermeasure to be deployed throughout the county. The following countermeasures could be considered appropriate by the county and included below as additional potential improvements.

Item Description	NB	SB	EB	WB	Quantity	Unit	Unit Price	Item Cost
Provide Left-Turn Lane at Intersection						LEG	$ 75,000	$ -
Provide Right-Turn Lane at Intersection						LEG	$ 75,000	$ -
Realign Intersection Approach to Reduce or Eliminate Intersection Skew						LEG	$ 200,000	$ -
Provide Bypass Lane on Shoulder at T-intersection						EA	$ 50,000	$ -
Convert Offset T-Intersection to Four-Legged Intersection						EA	$ 300,000	$ -
Use Indirect Left-Turn Treatment to Minimize Conflicts at Divided Highway Intersection						LEG	$ 75,000	$ -
Convert Four-Legged Intersection to Offset T-Intersection						EA	$ 300,000	$ -
Install Solar-Powered Flashing Beacon on Intersection Warning Sign						LEG	$ 2,500	$ -
Install Stop Signs with LED Flashing Lights						LEG	$ 2,500	$ -
Install Retroreflective Strip on Stop Sign Post	**X**	**X**			**4**	**EA**	**$ 10**	**$ 40**
Low-Cost Intersection Conflict Warning System (ICWS)						EA	$ 15,000	$ -
Flashing Beacon on Intersection Warning Sign						SIGN	$ 2,500	$ -
Other:								
Other:								

Additional Potential Improvements Subtotal:		$ 40
Project Selection Decision Tree Systemic Improvements Subtotal:		$ 25,200
Subtotal:		$ 25,240
Mobilization: (% +/-)*	10%	$ 2,530
Traffic Control: (% +/-)	5%	$ 1,446
Contingency: (% +/-)	20%	$ 5,784
Estimated Project Cost		**$ 35,000**

*Mobilization is 10% +/- of the subtotal with a minimum of $2,500 and a maximum of $75,000

Opinion of Probable Construction Cost Disclaimer:
Kimley-Horn has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Kimley-Horn at this time and represent only Kimley-Horn's judgment as a design professional familiar with the construction industry. Kimley-Horn cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

Project Description Form Disclaimer:
The recommended improvements contained in this project description form were developed through a Geographic Information System (GIS) database risk assessment and project decision tree selection process, as specifically stated in our scope of services. Kimley-Horn has no control over the accuracy of the GIS databases nor the suitability of the specific improvements for the location, and has provided recommended improvements for consideration by the County Engineer. The County Engineer may use this project description form to aid in the selection and development of projects, but this project description form should not be used as the sole basis for the County Engineer's decision making process. We endeavored to research issues and constraints to the extent practical given the scope, budget, and schedule agreed to with the Client. Our assessment is based in large part on information provided to us by others (DOT, county staff, etc.) and therefore is only as accurate and complete as the information provided to us. No formal assessment was made for the improvement recommendations contained on this page, if in question, it is recommended that a study/analysis of this location be made to warrant the above indicated improvements. This project description form is based on our knowledge as of September 2018.

End of Project Description

Back Page

6.3.3. Prioritized Intersection Recommendations

Project sheets were developed for intersection locations with the greatest amount of risk factor points. The intersections for which project sheets were developed (those with the greatest amount of risk factor points) are summarized in **Table 16** and the project sheets are in **Appendix C2**. For intersections located on a high-scoring roadway segment, the GPS ID of the segment is listed in the table.

Table 16 - Prioritized Intersection Recommendations

GPS ID	Intersection	Risk Factor Points	High Scoring Segment (GPS ID)	Estimated Project Cost
County-County / County-Other Intersections				
72052	F55 & Utica Ridge Road	15		$1,098,000
71958	F41 & Scott Park Road	15	7780, 7880	$232,000
71990	Z30 & Valley Drive	15	7818	$30,000
72049	F51 & Wells Ferry Road	15	7818	$88,000
72036	F45 & Utica Ridge Road	14		$1,119,000
County-County / County-Other Total (5 Intersections)				**$2,567,000**
County-State Intersections				
71935*	IA 130 & 60th Avenue/Co Road Y40	17		-
151094	IA 130/New Liberty Road & 210 Street	14		$33,000
71941	IA 130/New Liberty Road & Y52/115th Avenue	14	7760	$30,000
71845	US 61 & Coonhunters Road	13	7748	$37,000
71919	US 67 & 235th Street	13		$24,000
161074	Great River Road & 244th Avenue	12		$45,000
County-State Total (6 Intersections)†				**$169,000**
Intersection Total (11 Intersections)†				**$2,736,000**

*Intersection removed at the request of the County Engineer. No project sheets will be developed.
†Total cost excludes intersections that are no longer prioritized.

Figure 29 illustrates the locations of the intersections with highest risk factor ranking, where project sheets and specific intersection improvement recommendations were made. The intersection risk factor ranking results and relevant data for every analyzed intersection is included in the summary spreadsheet included in **Appendix C3**.

Crash Detail Report

20221295888	04/18/2022 11:51	IA 130 E AND 60 AVE
County: Scott	City:	

Major Cause: FTYROW: From stop sign

Roadway Type: Intersection: Four-way intersection

Severity:: Property Damage Only **Manner of Crash:** Broadside (front to side)

Fatalities: 0 **Surface Conditions:** Dry

Major Injuries: 0 **Light Conditions:** Daylight

Minor Injuries: 0 **Weather Conditions:** Cloudy

Possible Injuries: 0 **Drug/Alc Involved:** None Indicated

Severity:: Property Damage Only **Property Damage:** $5,500 **Number of Vehicles:** 2

	Unit 1	Unit 2	Unit
Init Trav Dir:	South	East	
Veh Action:	Movement essentially straight	Movement essentially straight	
Configuration:	Passenger car	Four-tire light truck (pick-up)	
Driver Age:	48	70	
Driver Gender:	F	M	
Driver Cond:	Apparently normal	Apparently normal	
Driver Contr 1:	FTYROW: From stop sign	No improper action	
Driver Contr 2:	Not reported	Not reported	
Fixed Object:	Curb/island/raised median	None (no fixed object struck)	

20221311040	07/23/2022 15:40	IA 130 E
County: Scott	City:	

Major Cause: Ran stop sign

Roadway Type: Intersection: Four-way intersection

Severity:: Property Damage Only **Manner of Crash:** Broadside (front to side)

Fatalities: 0 **Surface Conditions:** Dry

Major Injuries: 0 **Light Conditions:** Daylight

Minor Injuries: 0 **Weather Conditions:** Clear

Possible Injuries: 0 **Drug/Alc Involved:** None Indicated

Severity:: Property Damage Only **Property Damage:** $15,500 **Number of Vehicles:** 2

	Unit 1	Unit 2	Unit
Init Trav Dir:	North	East	
Veh Action:	Movement essentially straight	Movement essentially straight	
Configuration:	Passenger car	Passenger car	
Driver Age:	21	49	
Driver Gender:	M	M	
Driver Cond:	Apparently normal	Apparently normal	
Driver Contr 1:	Ran stop sign	No improper action	
Driver Contr 2:	Not reported	Not reported	
Fixed Object:	None (no fixed object struck)	None (no fixed object struck)	

Crash Detail Report

20251487606	06/17/2025 08:25	60 AVE
County: Scott	City:	

Major Cause: FTYROW: From stop sign

Roadway Type: Intersection: Four-way intersection

Severity:: Property Damage Only **Manner of Crash:** Broadside (front to side)

Fatalities: 0 **Surface Conditions:** Dry

Major Injuries: 0 **Light Conditions:** Daylight

Minor Injuries: 0 **Weather Conditions:** Clear

Possible Injuries: 0 **Drug/Alc Involved:** None Indicated

Severity:: Property Damage Only **Property Damage:** $3,002 **Number of Vehicles:** 2

	Unit 1	Unit 2	Unit
Init Trav Dir:	South	West	
Veh Action:	Movement essentially straight	Movement essentially straight	
Configuration:	Four-tire light truck (pick-up)	Four-tire light truck (pick-up)	
Driver Age:	25	49	
Driver Gender:	M	M	
Driver Cond:	Apparently normal	Apparently normal	
Driver Contr 1:	FTYROW: From stop sign	No improper action	
Driver Contr 2:	Not reported	Not reported	
Fixed Object:	None (no fixed object struck)	None (no fixed object struck)	

20251502660	09/23/2025 13:20	IA 130 E AND 60 AVE
County: Scott	City:	

Major Cause: FTYROW: From stop sign

Roadway Type: Intersection: Four-way intersection

Severity:: Property Damage Only **Manner of Crash:** Broadside (front to side)

Fatalities: 0 **Surface Conditions:** Dry

Major Injuries: 0 **Light Conditions:** Daylight

Minor Injuries: 0 **Weather Conditions:** Clear

Possible Injuries: 0 **Drug/Alc Involved:** None Indicated

Severity:: Property Damage Only **Property Damage:** $3,002 **Number of Vehicles:** 2

	Unit 1	Unit 2	Unit
Init Trav Dir:	North	West	
Veh Action:	Movement essentially straight	Movement essentially straight	
Configuration:	Passenger car	Four-tire light truck (pick-up)	
Driver Age:	38	86	
Driver Gender:	F	M	
Driver Cond:	Apparently normal	Apparently normal	
Driver Contr 1:	FTYROW: From stop sign	No improper action	
Driver Contr 2:	Not reported	Not reported	
Fixed Object:	None (no fixed object struck)	None (no fixed object struck)	

Crash Detail Report

20251504512	10/04/2025 10:56	IA 130 E
County: Scott	City:	

Major Cause: FTYROW: From stop sign

Roadway Type: Intersection: Four-way intersection

Severity:: Property Damage Only **Manner of Crash:** Rear-end (front to rear)

Fatalities: 0 **Surface Conditions:** Gravel

Major Injuries: 0 **Light Conditions:** Daylight

Minor Injuries: 0 **Weather Conditions:** Clear

Possible Injuries: 0 **Drug/Alc Involved:** None Indicated

Severity:: Property Damage Only **Property Damage:** $4,500 **Number of Vehicles:** 2

	Unit 1	Unit 2	Unit
Init Trav Dir:	South	East	
Veh Action:	Movement essentially straight	Movement essentially straight	
Configuration:	Sport utility vehicle	Four-tire light truck (pick-up)	
Driver Age:	24	72	
Driver Gender:	F	M	
Driver Cond:	Apparently normal	Apparently normal	
Driver Contr 1:	FTYROW: From stop sign	No improper action	
Driver Contr 2:	Not reported	Not reported	
Fixed Object:	None (no fixed object struck)	None (no fixed object struck)	

20261555621	08/05/2026 15:55	IA 130 E AND 60 AVE
County: Scott	City:	

Major Cause: FTYROW: From stop sign

Roadway Type: Intersection: Four-way intersection

Severity:: Property Damage Only **Manner of Crash:** Broadside (front to side)

Fatalities: 0 **Surface Conditions:** Wet

Major Injuries: 0 **Light Conditions:** Daylight

Minor Injuries: 0 **Weather Conditions:** Cloudy

Possible Injuries: 0 **Drug/Alc Involved:** None Indicated

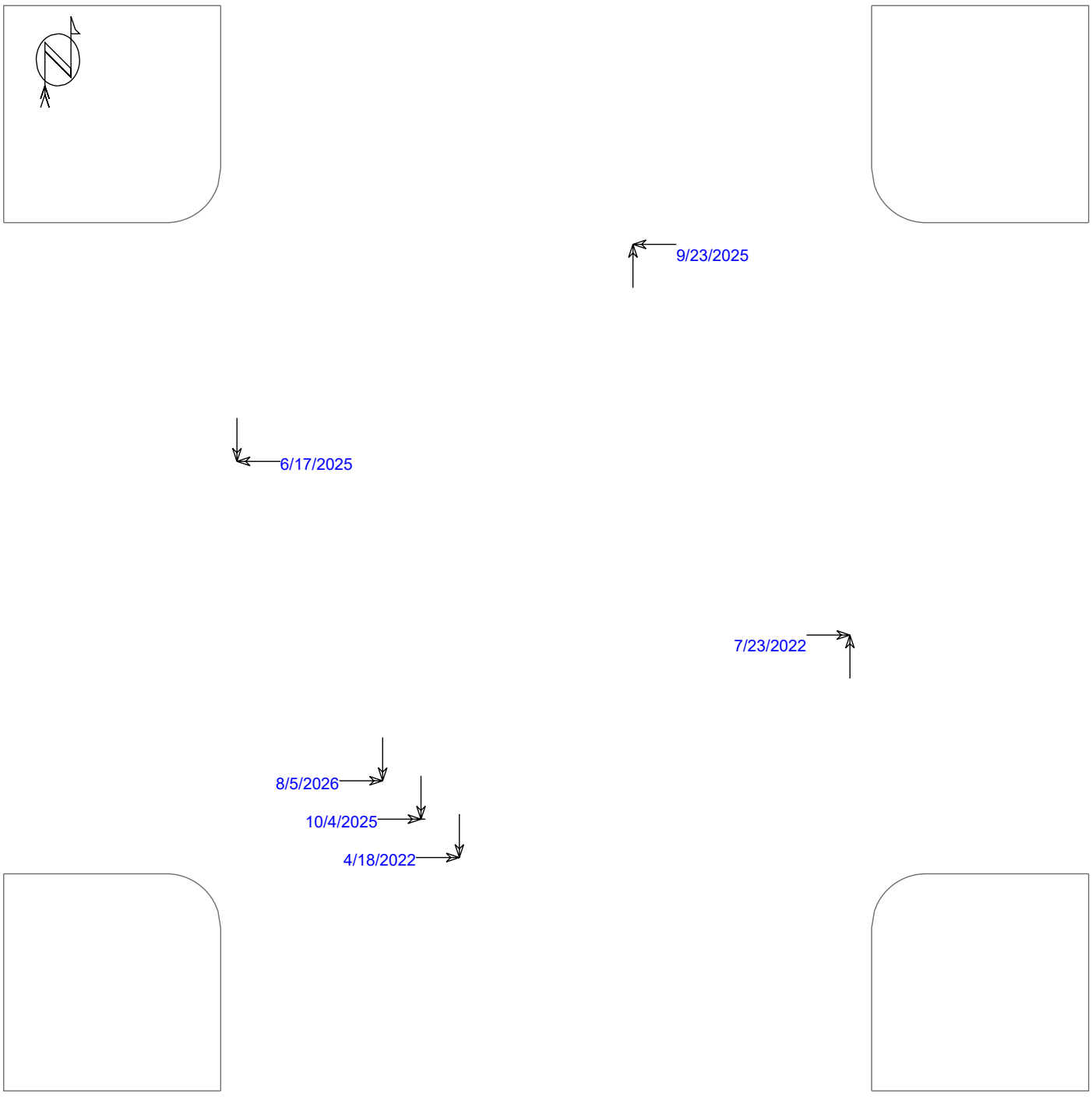
Severity:: Property Damage Only **Property Damage:** $3,002 **Number of Vehicles:** 2

	Unit 1	Unit 2	Unit
Init Trav Dir:	South	East	
Veh Action:	Starting in road	Movement essentially straight	
Configuration:	Sport utility vehicle	Passenger car	
Driver Age:	29	23	
Driver Gender:	M	F	
Driver Cond:	Apparently normal	Apparently normal	
Driver Contr 1:	FTYROW: From stop sign	No improper action	
Driver Contr 2:	Not reported	Not reported	
Fixed Object:	None (no fixed object struck)	None (no fixed object struck)	

Collision Diagram

6 Crashes

Clear



Straight
Stopped
Unknown
Backing
Overtaking
Sideswipe

Parked
Erratic
Out of control
Right turn
Left turn
U-turn

Fatal
Major
Minor
Injury
Pedestrian
Bicycle

Fixed objects:
General
Signal
Tree
Pole
Curb
Animal
DUI
3rd vehicle
Nighttime

Crash Magic Online

A. APPLICATION

Rev. 07/23

IOWA DOT

Application for TRAFFIC CONTROL DEVICE TSIP FUNDS

GENERAL INFORMATION **DATE:** August 10, 2026

Location / Title of Project: Storm Lake, Community Safe Streets

Applicant: City of Storm Lake

Contact Person: Keri Navratil Title: City Manager

Complete Mailing Address: City of Storm Lake, 620 Erie Street
Storm Lake, IA 50588

Phone: 712-732-8000 (Area Code) E-Mail: Navratil@stormlake.org

If more than one highway authority is involved in this project, please indicate and fill in the information below (use additional sheets if necessary).

Co-Applicant(s): _____

Contact Person: _____ Title: _____

Complete Mailing Address: _____

_____

Phone: _____ (Area Code) E-Mail: _____

PLEASE COMPLETE THE FOLLOWING PROJECT INFORMATION:

Funding Amount

Total Safety Cost	$	$324,720
Total Project Cost	$	$324,720
Safety Funds Requested	**$**	**$310,720**

Additional Project Safety Documentation (when available):

- ☐ Project information sheet(s) or "Risk Score">50% from County/City's Local Road Safety Plan
- ☐ FHWA SS4A Safety Action Plan or similar comprehensive transportation safety plan
- ☐ Iowa DOT TEAP Study or similar analysis and concept
- ☐ Project intersection or segment with High or Medium PCR Level (PCR-All or PCR-Severe) from the Iowa DOT Potential for Crash Reduction (PCR) web-based map tool https://pcr.iowadot.gov/

Potential for Crash Reduction (PCR) Information					
Intersection ID (1234567890) or Segment ID (1234)	Intersection or Segment	PCR Level High	PCR Level Medium	PCR-All value	PCR-Severe value
		☐	☐		
		☐	☐		

Rev. 07/23

APPLICATION CERTIFICATION FOR PUBLIC AGENCY

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating public agency(ies). I understand the attached resolution(s), where applicable, binds the participating public agency(ies) to assume responsibility for any additional funds, if required, to complete the project. In addition, the participating public agency(ies) agrees to maintain any new or improved public streets or roadways for a minimum of five years.

I understand that, although this information is sufficient to secure a commitment of funds, a firm contract between the applicant and the Department of Transportation is required prior to the authorization of funds.

Representing the City of Storm Lake

Signed: Keri Navratil 8/14/2024

Signature Date Signed

Keri Navratil, City Manager

Printed Name

Attest: Margaret J. McKeon 8-14-2024

Signature Date Signed

Margaret J. McKeon, Mayor

Printed Name

RESOLUTION 2026-27

Pending approval of grant funding

WHEREAS, the Iowa Department of Transportation Traffic Safety Improvement Program operates under the rules of the Iowa Administrative Code 761-Ch. 164; and

WHEREAS said program allows for distribution of traffic safety funds to cities, counties, and the Iowa DOT for roadway safety improvements, research, studies or public information initiatives; and

WHEREAS the Storm Lake City Council has determined that highly-used pedestrian crossings in the City would achieve significant and vital safety improvements with the equipment funded by this grant; and

WHEREAS, the locations for the proposed equipment is particularly aimed at safety for children, the most vulnerable population; and

WHEREAS, the proposed safety improvements include thermoplastic reflective crossing markings, rectangular rapid flashing beacons (RRFB) and driver speed feedback systems (DFS).

THEREFORE, BE IT RESOLVED by the Storm Lake City Council of Storm Lake, Iowa, that the City does hereby support the attached application for Traffic Safety Improvement funding.

PASSED AND APPROVED this_____, 2026.

Margaret J. McKeon, Mayor of Storm Lake

Attest: _____

Mayra Martinez, City Clerk of Storm Lake

B. NARRATIVE: *Traffic Safety Improvement Program grant application*

City of Storm Lake / August, 2026

THE PROBLEM: Included crossings in this project are particularly used by children and families accessing popular recreation, retail, tourism and school locations in the community. With growing population and increasing traffic, along with tremendous increase in use of e-bike and e-scooter vehicles, a tragedy is not a question of "if," but "when." In two separate accidents earlier this season, juveniles suffered injuries during use of electric vehicles in collisions with automobiles.

IMPROVING SAFETY: The Community Safe Streets project is a carefully curated set of improvements addressing heavily used crossing areas in the City. The project is designed to significantly enhance safety for motorists and pedestrians at busy crossing locations, and to slow traffic transitioning from highway speed to residential and retail City streets to reduce risk of collisions and injuries.

In various locations as indicated on the accompanying map, the following equipment is proposed:

- Thermoplastic reflective crossing markings (six crossings)
- Rectangular rapid flashing beacons (RRFB) (four locations)
- Driver speed feedback systems (DFS) (three locations)

The speed feedback systems on the map, plus additional systems already budgeted by the City of Storm Lake, are to be located in areas where Highway 110 and Highway 7 traffic transitions to City streets. These two areas are highly used by children and families, and currently, cars and trucks often fail to reduce speed properly.

Reflective crossings are to be located in the downtown retail area and two points where children cross traffic to access middle and elementary schools.

Flashing beacons are planned for crossings in the area of park, campground, beach and playground.

From east to west, the locations addressed in the plan include:

- 1. Sunrise Park Road (RFB) – crossing area between the municipal campground and tourism cottages to the lakefront and multi-use trail. The area is heavily used by pedestrians and bicyclists, and the road is heavily trafficked with users of the recreation facilities and through traffic between the communities of Storm Lake, Lakeside and South Shore. The City hopes to invest in a speed feedback sign here also.
- 2. East Lakeshore (RFB) - the location is a crossing point of the four-lane Highway 110 corridor, located between the outdoor and indoor waterparks of King's Pointe Resort, and nearby retailers including convenience stores, a coffee shop, bike shop and tavern. The crossing is heavily used by all ages, including children.
- 3. East Lakeshore (RFB) – the location is the unmarked crossing point between the City's popular Awaysis Park, and a newly-developed Kwik Star store. Children and particularly vulnerable here, crossing from the beach, playground, trail, lighthouse and sports green area to

purchase snacks at the store. Children cross here on foot, on bike, e-bikes, e-scooters and skateboards. “Close calls” are common. This will be a vital safety need to address because of the heavy use.

- 4-7. Lake Avenue between Railroad and 7th Street (thermoplastic crossings) – the more visible crossings are proposed for the four blocks of intersections of the main downtown thoroughfare. As the heart of the City’s retail business area, and accessing its key public buildings, the area sees much pedestrian traffic and potential for vehicle-pedestrian accidents. Children are particularly vulnerable here, as the area houses the community’s theater, an ice cream-candy shop, the public library, Harmony Garden outdoor musical instruments and other locations in mid-block areas. Downtown also hosts several celebration events where large numbers of children are present and need to be encouraged to safely cross.
- 8. West 5th Street (DFS) – the area where traffic entering the City from Highway 110 meets slower traffic accessing the downtown business district. Many pedestrians also use this area as a crossing, on what is Storm Lake’s most heavily-trafficked residential street. It is vital to slow traffic down as they enter the area.
- 9. West 5th Street and College Avenue (DFS) – this location is the main crossing to access the Buena Vista University campus. Students often cross here to access the restaurants, stores and entertainment areas. Again, W. 5th is heavily traveled by vehicles both local and incoming highway traffic. Slowing traffic will be key to establishing a safer crossing.
- 10. West 5th Street and Barton Street (RFB) – the location sees highway traffic from Hwy. 110 entering a residential area, where backing from driveways or leaving parking areas of multiple churches can be dangerous. The location also sees pedestrian traffic moving toward parks and schools. This is a vital point to slow traffic with a flashing beacon, and provide a safer crossing for student pedestrians.
- 11. Highway 110 area – this location serves popular Frank Starr Park and Discovery Center recreation areas, with schools directly to the north, highway-adjacent neighborhoods to the west, and a hospital immediately to the east. Highway 110 and the Highway 110 spur (Abner Bell Road) as well as a short stretch of bike trail meet in this area, creating a potentially dangerous situation. Many school children also cross the heavily-used street in this area. Slowing traffic as it enters the area will be beneficial for safety of vehicles and pedestrians.
- 12. Hyland Drive – this location is the direct crossing point between adjacent middle and elementary schools. There is much foot traffic with children and families. While a flashing beacon is currently installed, a reflective crossing to help guide foot traffic to the safety crossing site would be a significant safety improvement for our most vulnerable population.

SPEED LIMITS: E. Lakeshore 35 mph, W. 5th Street 30-20 mph, Hyland Dr. 20 mph, Sunrise Park Road 20 mph. **CLEAR ZONES:** none.

The City plans to further enhance this Community Safe Streets package with in-kind labor installing two areas of concrete walkway to access new crossing points, as well as budgeted funding for additional driver feedback systems for the Highway 7/E. Lakeshore corridor area.

The improvements are anticipated for the summer 2027 through spring 2028, and will be heavily promoted as a major traffic safety transformation thanks to the Department of Transportation funding.

C. ITEMIZED BREAKDOWN OF COST

CITY OF STORM LAKE

Storm Lake Proud

BOLTON & MENK

Real People. Real Solutions.

PROJECT ITEMIZED BREAKDOWN OF COST

Cost estimates: Bolton & Menk Ink Engineering

LOCATION	*PROJECT*	*COST*
Hyland Drive at Elementary School	Thermoplastic Cross walk	$11,000
1818 W. 5th (school route)	DFS	$4,500
W5th/Barton (school and hospital route)	RFB	$12,000
	Thermoplastic	$14,000
W5th/RR Crossing (university route)	DFS	$8,500
Lake/7th (downtown retail crossing)	Thermoplastic	$50,000
Lake/6th (downtown retail crossing)	Thermoplastic	$55,160
Lake/5th (downtown retail crossing)	Thermoplastic	$48,020
Lake/Railroad (downtown retail crossing)	Thermoplastic	$38,500
East Lakeshore (playground, beach crossing)	Thermoplastic	$14,840
	RFB	$12,000
	Concrete work	$12,000
E. Lakeshore/Memorial Rd. (waterpark)	Thermoplastic	$12,600
	RFB	$12,000
Sunrise Road (campground/park crossing)	Thermoplastic	$5,600
	RFB	$12,000
	Concrete work	$2,000

Grant Request - $310,720

City matching, concrete work, $14,000

PROJECT TOTAL – $324,720

PROPOSED EQUIPMENT

DRIVER FEEDBACK SYSTEM

Three locations

(City plans to fund two additional

$16,000 budgeted, 2027)



RECTANGULAR RAPID FLASHING BEACON

Four locations



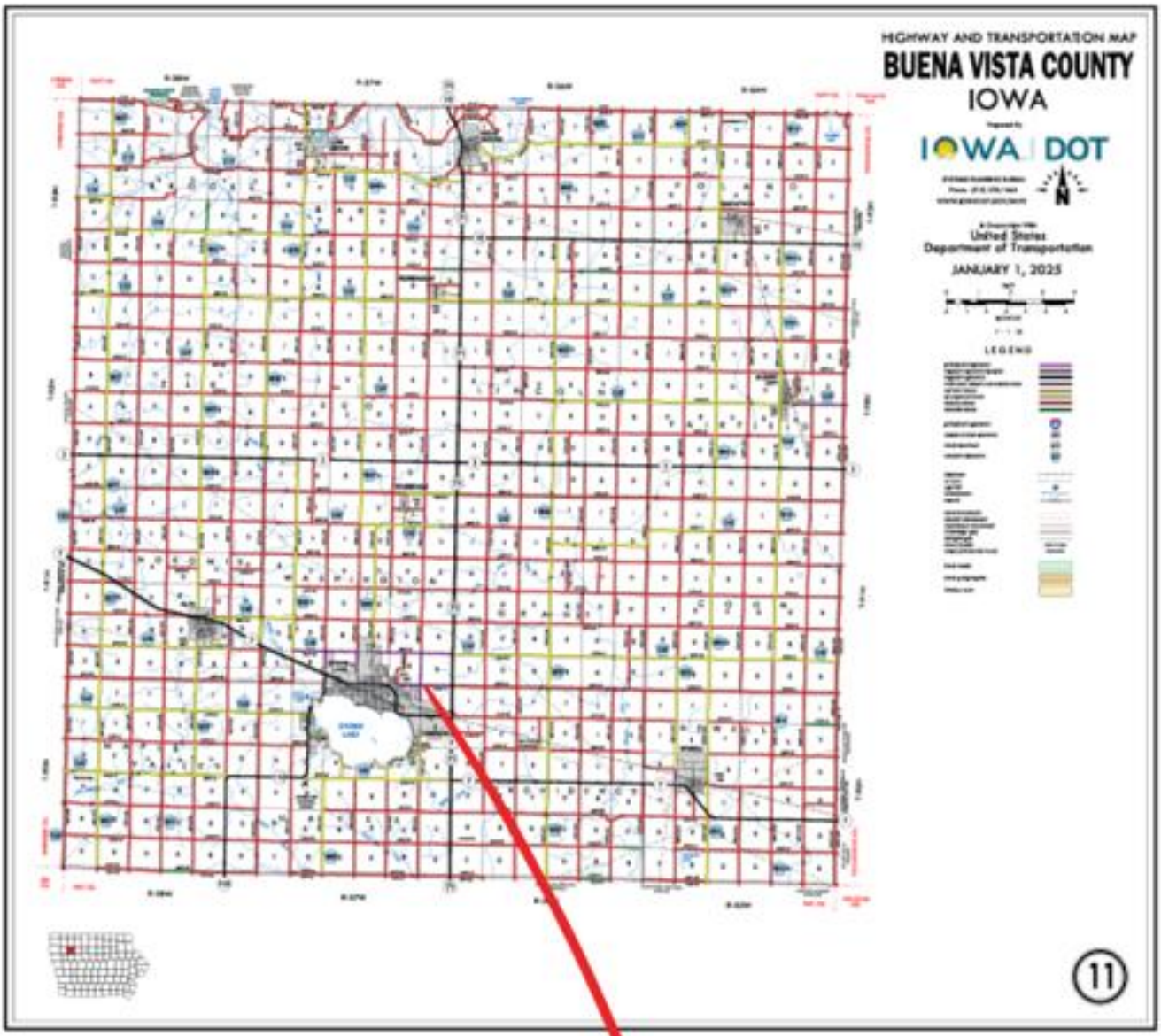
THERMOPLASTIC REFLECTIVE CROSSINGS

Five locations



D. TIME SCHEDULE

- **TSIP application due: 8/15/2026**
- **TSIP award notification: Mid-January 2027**
- **Project planning: February-March 2027**
- **TSIP funding available: July 1, 2027**
- **Equipment orders: July 2027**
- **Installation: September-October 2027**
- **Completion: Spring 2028**



E. PROJECT MAP

(see also attachment)



F. PROJECT LOCATION PHOTOS





Sunrise Park Road crossing, between campground and Sunrise Park/LakeTrail





Hwy. 7/East Lakeshore, between King's Pointe waterparks and retail area





East Lakeshore, between Awaysis park/beach/playground and Kwik Star retail area.





Hyland Drive, crossing between elementary school and middle school.





West 5th/Otsego, area where traffic from Highway 110 enters downtown retail area.

CENTRAL BUSINESS DISTRICT THEMOPLASTIC CROSSINGS LOCATIONS



Lake Avenue and Railroad Street



Lake Avenue and 5th Street



Lake Avenue and 6th Street



Lake Avenue and 7th Street



Highway 110/W. 5th Street, near Frank Starr Park, Discovery Center and hospital.



West. 5th and College, primary pedestrian crossing to BVU campus, Scout Park

EMERGING SAFETY CONCERN



Rapidly rising numbers of young people riding e-bikes and e-scooters create dangerous conditions. Crossing in traffic to reach playground, beach, trail and stores exposes children to four lane traffic in some of the proposed areas, and to high levels of pickup/dropoff traffic in the schools area of the plan.



CRASH DATA (City of Storm Lake 2016-2026)

Source: Iowa DOT ICAT tool

Total crashes: 1,431

Total occupants: 3,545

Total vehicles: 2,746

Fatalities: 1

Serious injuries: 15

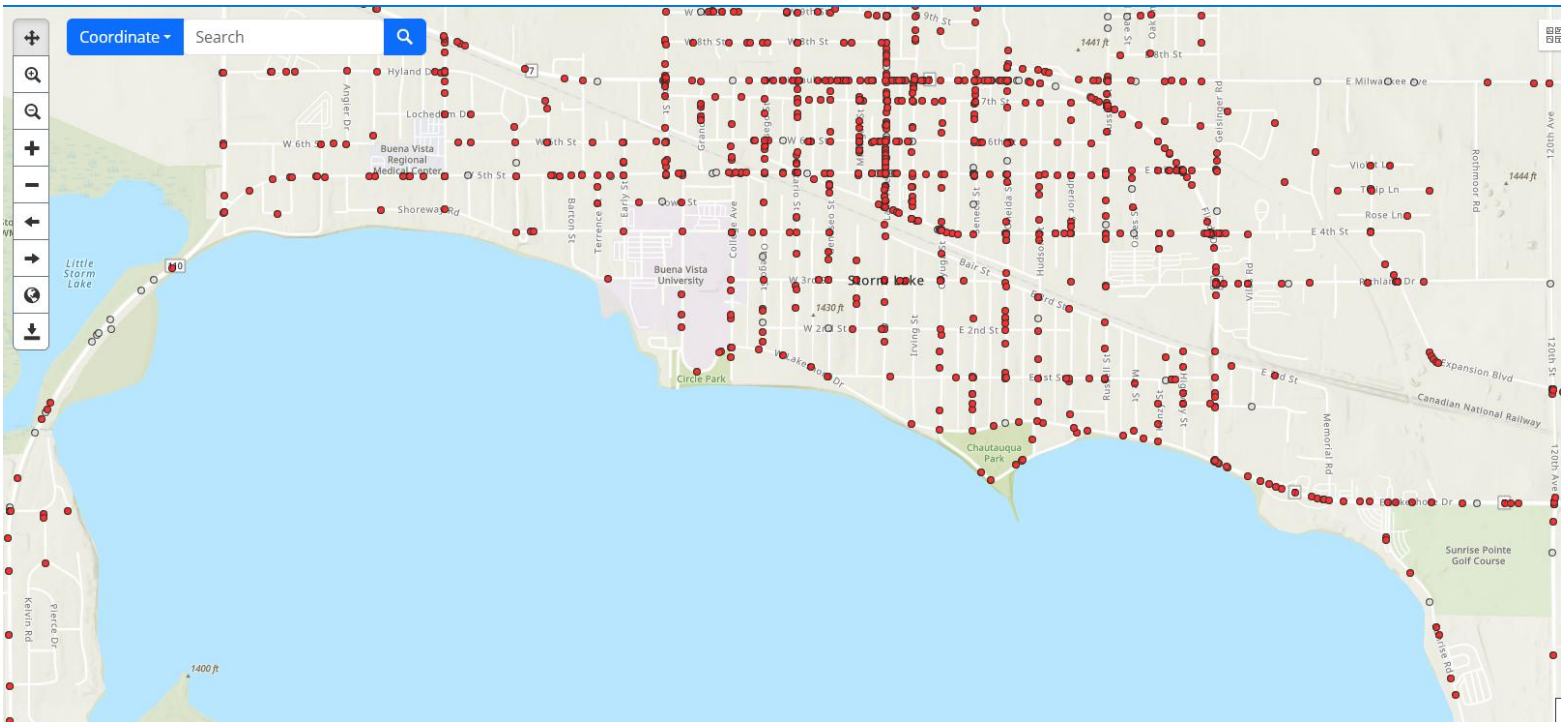
Minor injuries: 138

Possible injuries: 221

Unknown injuries: 45

Project locations breakdown

- Highland Drive: 5 accidents. Elementary school crossing: 3 accidents
- Highway 110/W. 5th: 41 accidents. 8 in area of west DES. 5 in area of College intersection. 3 in area of Otsego intersection.
- Lake Avenue Central Business District: Approximately 37 accidents.
- Highway 7/E. Lakeshore Drive: 24 accidents.
- Sunrise Park Road: 11 accidents



H. RECENT TRAFFIC VOLUMES

Average vehicles per day/project sites east to west

Sunrise Park Road – 2,190 vehicles

IA Highway 7 – 5,000 vehicles, 138 trucks (2023)

Highway 7/E. Lakeshore Drive – 2,730 vehicles (2023)

Lake Avenue Central Business District intersections – 3,960 vehicles (2023)

Lake Avenue and 7th/Milwaukee – 3,800 vehicles (2023)

West 5th and College – 6,500 vehicles (2019)

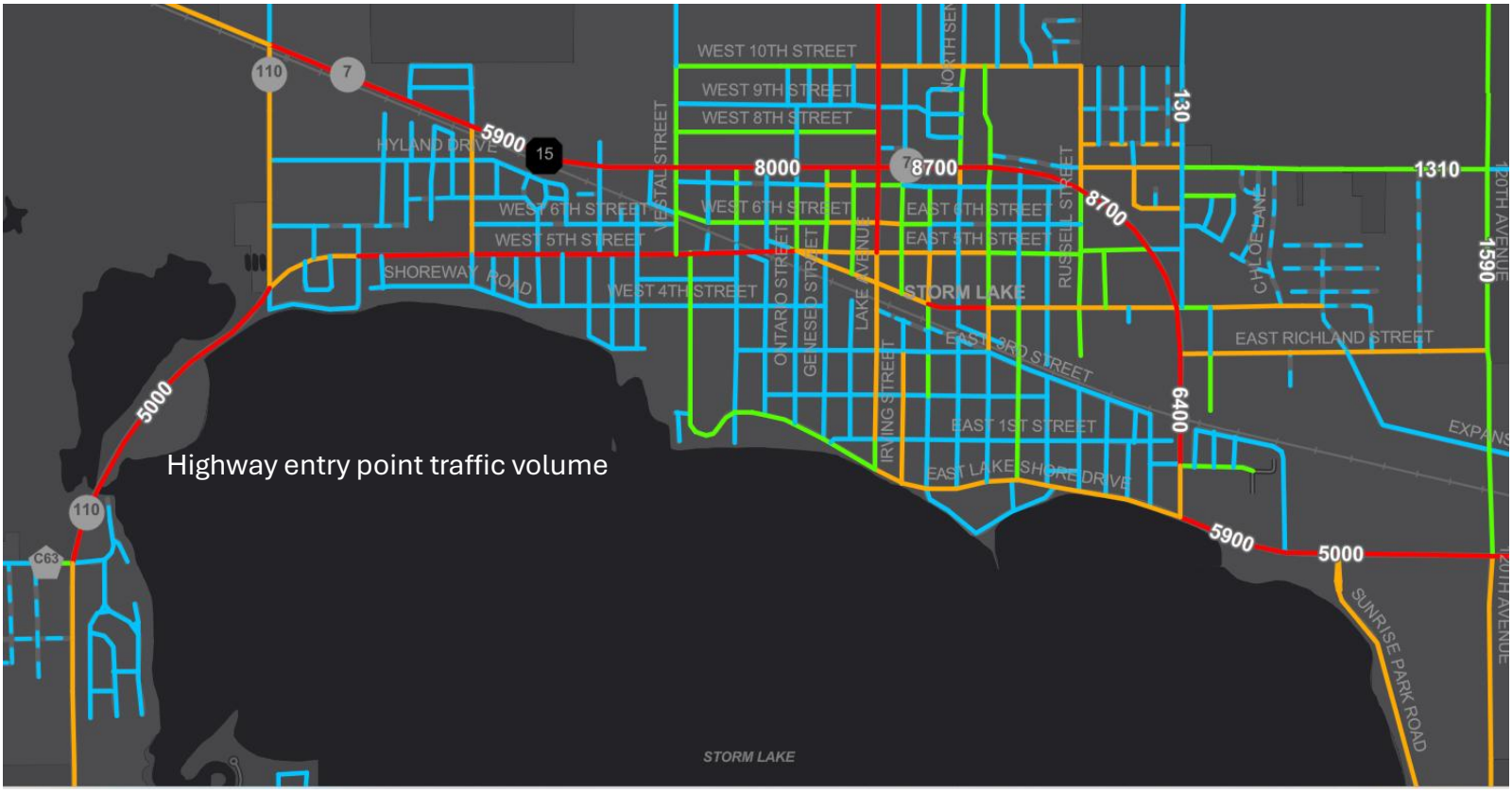
West 5th Street and Otsego – 4,100 vehicles (2023)

West 5th Street and Barton – 2,399 (2026)

West 5th and Renshaw Drive – 4,100 (2019)

Hyland Drive at elementary school – 960 (2019), outside school year 177 (2026

Source: Iowa Traffic Data interactive map and City of Storm Lake counts



Rev. 07/23

Application for TRAFFIC CONTROL DEVICE
TSIP FUNDS

GENERAL INFORMATION **DATE:** 8/14/2026

Location / Title of Project I-80 and S Division Street Ramp Terminals

Applicant City of Stuart

Contact Person Jolly Omar Title City Administrator

Complete Mailing Address 119 East Front Street; PO Box 370

Stuart, Iowa 50250

Phone 515-523-1455 (Area Code) E-Mail jolly.omar@stuartia.gov

If more than one highway authority is involved in this project, please indicate and fill in the information below (use additional sheets if necessary).

Co-Applicant(s) _____

Contact Person _____ Title _____

Complete Mailing Address _____

_____

Phone _____ (Area Code) E-Mail _____

PLEASE COMPLETE THE FOLLOWING PROJECT INFORMATION:

Funding Amount

Total Safety Cost	$	831,500
Total Project Cost	$	831,500
Safety Funds Requested	**$**	**500,000**

Additional Project Safety Documentation (when available):

- ☐ Project information sheet(s) or "Risk Score">50% from County/City's Local Road Safety Plan
- ☐ FHWA SS4A Safety Action Plan or similar comprehensive transportation safety plan
- ☐ Iowa DOT TEAP Study or similar analysis and concept
- ☐ Project intersection or segment with High or Medium PCR Level (PCR-All or PCR-Severe) from the Iowa DOT Potential for Crash Reduction (PCR) web-based map tool https://pcr.iowadot.gov/

Potential for Crash Reduction (PCR) Information					
Intersection ID (1234567890) or Segment ID (1234)	Intersection or Segment	PCR Level High	PCR Level Medium	PCR-All value	PCR-Severe value
		☐	☐		
		☐	☐		

Rev. 07/23

APPLICATION CERTIFICATION FOR PUBLIC AGENCY

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating public agency(ies). I understand the attached resolution(s), where applicable, binds the participating public agency(ies) to assume responsibility for any additional funds, if required, to complete the project. In addition, the participating public agency(ies) agrees to maintain any new or improved public streets or roadways for a minimum of five years.

I understand that, although this information is sufficient to secure a commitment of funds, a firm contract between the applicant and the Department of Transportation is required prior to the authorization of funds.

Representing the City of Stuart

Signed: _____ 08/12/26
Signature Date Signed

Salatama Omar
Printed Name

Attest: _____ 08/12/2026
Signature Date Signed

Sarah J. Stouffer
Printed Name

A

CITY OF STUART

119 E. Front St., P.O. Box 370
Stuart, IA 50250

Phone: 515-523-1455
Fax: 515-523-2578

August 11, 2026

TO: Iowa Department of Transportation- Traffic and Safety Bureau
FROM: Mayor Cory Kirkpatrick
RE: Letter of Support – Traffic Safety Improvement Program (TSIP) Application, Traffic Control Devices Category – I-80 & Division Street Interchange Signalization, City of Stuart, Iowa

Dear Traffic and Safety Bureau Staff,

On behalf of the City of Stuart I am writing to express the City's support for our application to the Traffic Safety Improvement Program (TSIP) Traffic Control Devices category for the installation of traffic signals at the I-80 north and south ramp intersections with South Division Street in our community.

The I-80 & Division Street interchange is the primary point of access between the interstate and a fast-growing commercial corridor in Stuart, including existing businesses like Kwik Star, Casey's, Maverick, and potentially a new TA Travel Center immediately south of the interchange. To evaluate the need for signalization, the City's engineer Veenstra & Kimm, Inc. studied the corridor and evaluate whether the two interchange intersections met state signal warrants. Due to the Travel America site being close to the interchange, the Iowa Department of Transportation (IDOT) also required the developer to commission its own traffic impact study, prepared by Shive-Hattery, and the study findings carry forward for both ramp intersections.

These studies show that with additional traffic expected once the TA Travel Center opens, both the north ramp and south ramp intersections will meet the Peak Hour signal warrant in 2027, with the south ramp also meeting the Roadway Network warrant.

The estimated cost to signalize both ramps is $700,000. As this project involves the installation of traffic signals, the City is applying under the Traffic Control Devices category. The City plans to cover the remaining project gap using Tax Increment Financing (TIF) revenue generated by the adjacent commercial development.

The City intends to meet every deadline the program requires and recognize that award notifications will go out by mid-January, with funds available for use beginning July 1, 2027. The plan is to bid for the project and start construction in the summer of 2027.

The City of Stuart is grateful for the opportunity to partner with the Iowa DOT through the TSIP program. We are fully committed to maintaining these signals once installed.

Thank you for your consideration. Please feel free to reach out to Stuart City Hall with any questions about the application.

Sincerely,

Mayor Cory Kirkpatrick

Division Street and Interstate 80 within the City of Stuart continue to see an increase in commercial development. North of the interstate, Casey's rebuilt a larger convenience center that services larger over-the-road truck traffic. Across the street is a McDonalds, a Maverick convenience store, and a hotel. Just off of Division Street is a larger, newly improved Karl Cheverolet dealership along with access to large industrial type uses. South of interstate 80, a new Kwik Star has recently opened and a planned TravelCenters America will start construction. Both of these businesses will be immediately south of the interstate.

Division Street is a 2-lane rural road with a full interchange with Interstate 80. Several studies have been developed and reviewed and ultimately approved by the Iowa Department of Transportation citing the need for the installation of traffic signals at the 2 ramp terminals at Exit 93 along Interstate 80. A hyperlink to the study is provided on the seal of the engineer who prepared the study and the title sheet of that study is the last page of this application.

An original analysis showed that pre-south of the interstate development, one of the ramps met traffic signal warrants. A deeper, more detailed analysis was requested by the Iowa Department of Transportation and is provided as part of the hyperlink attached. During the review process, comments and questions with follow ups provided, by both the City study provider and the TravelCenters America study provider, that led to the approval of the recommendation for traffic signal installations at the 2 ramp terminals.

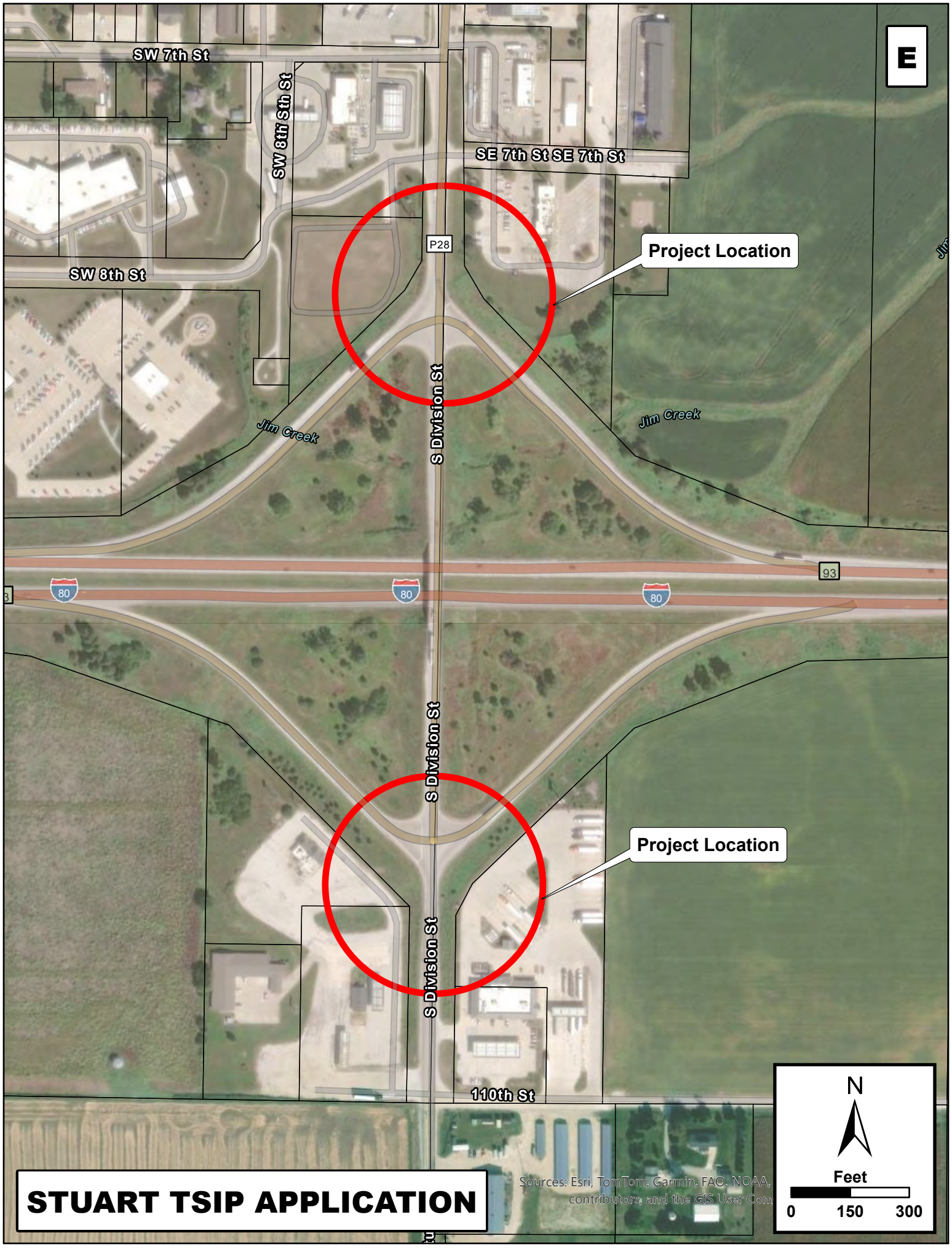
All of the proposed improvements will stay within the existing right of way and will not involve geometric changes to the ramps, ramp terminals, or Division Street. The installation of the signals will have little to no impact on traffic during the implementation period.

C

Mobilization	$45,000
Construction Staking	$4,000
Traffic Control	$12,500
Control Cabinets 2 @ $40,000	$80,000
Electrical	$30,000
Signals 2 @ $215,000	$430,000
Labor for Installation	$50,000
Pavement Markings	$25,000
Site Restoration & Grading	$25,000
Subtotal	$71,500
ELA	$60,000
Contingency	$70,000
Total	$831,500

D

Funding Application	August 2026
Survey	February 2027
Preliminary Plans	March 2027
DOT Review/Comments	May 2027
Final Plans	July 2027
Bid Opening	August 2027
City Award Project	September 2027
Preconstruction Meeting	October 2027
Construction Start Up	Spring 2028
Construction Completion	August 2028
Close Out	October 2028



STUART TSIP APPLICATION



Looking South at I-80



Westbound Exit Ramp at Division



Looking North at North Terminal



Looking North at South Ramp Terminal



Eastbound Exit Ramp at Division



Looking South at South Terminal

TRAVELCENTER OF AMERICA

I-80 EB OFF-RAMP

42

41

42

B2

35 FT

61

62

DIVISION STREET

21

61

22

21

20 FT

B1

1127.84'

41

42

43

B3

50 FT

I-80 EB ON-RAMP

KWIK STAR

0'

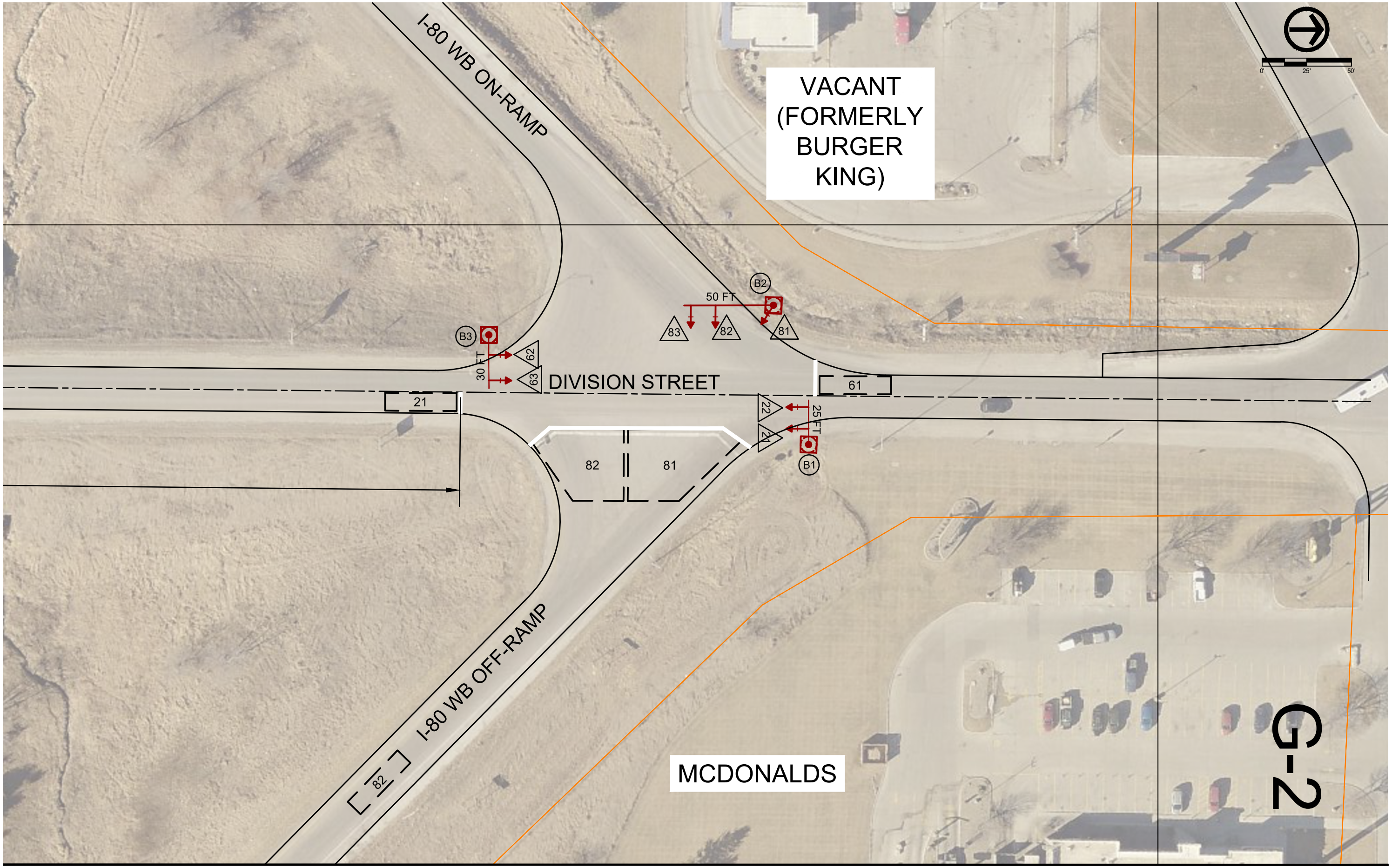
25'

50'

G-1

VEENSTRA & KIMM INC.
A Kleinfelder Company

G - 1
SOUTH TRAFFIC SIGNAL
CITY OF STUART



VEENSTRA & KIMM INC.
A Kleinfelder Company

G-2
NORTH TRAFFIC SIGNAL
CITY OF STUART

TRAFFIC INFORMATION

In the Interchange Signalization Study, page 7 speaks to traffic counts taken and Appendix A within the Study has traffic counts and turning movements. A hyperlink to the study is provided on the seal of the engineer who prepared the study and the title sheet of that study is the last page of this application.

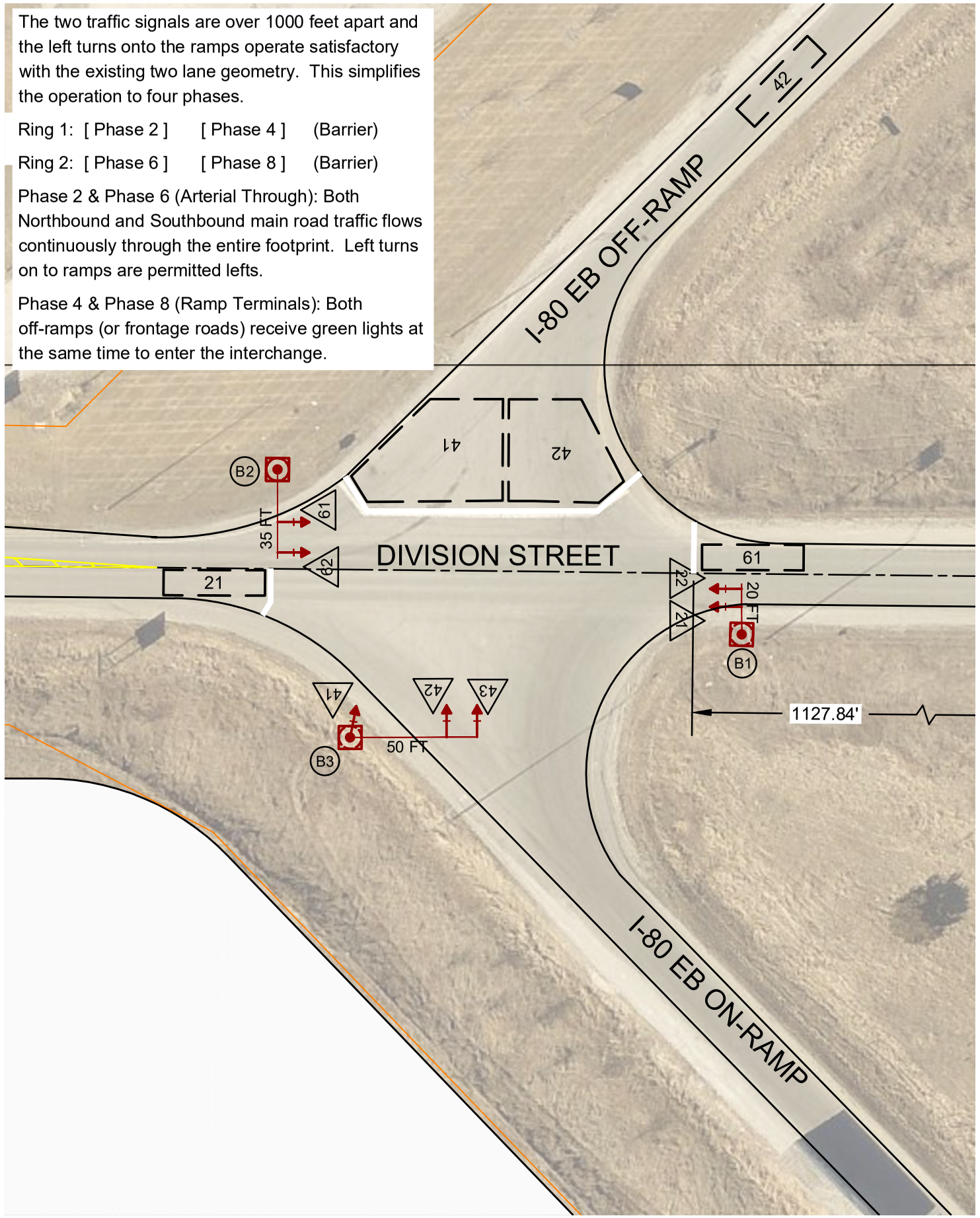
The two traffic signals are over 1000 feet apart and the left turns onto the ramps operate satisfactory with the existing two lane geometry. This simplifies the operation to four phases.

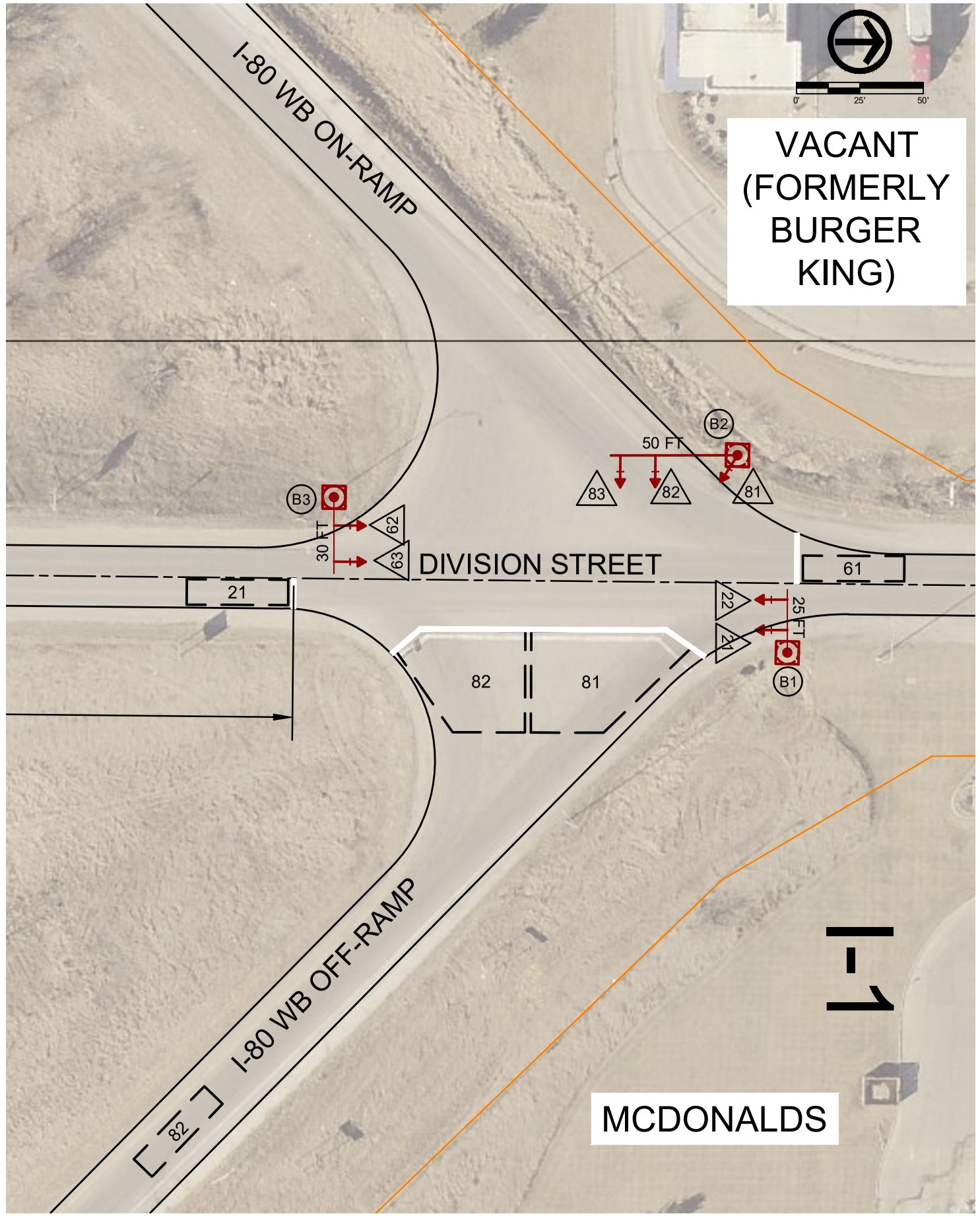
Ring 1: [Phase 2] [Phase 4] (Barrier)

Ring 2: [Phase 6] [Phase 8] (Barrier)

Phase 2 & Phase 6 (Arterial Through): Both Northbound and Southbound main road traffic flows continuously through the entire footprint. Left turns on to ramps are permitted lefts.

Phase 4 & Phase 8 (Ramp Terminals): Both off-ramps (or frontage roads) receive green lights at the same time to enter the interchange.





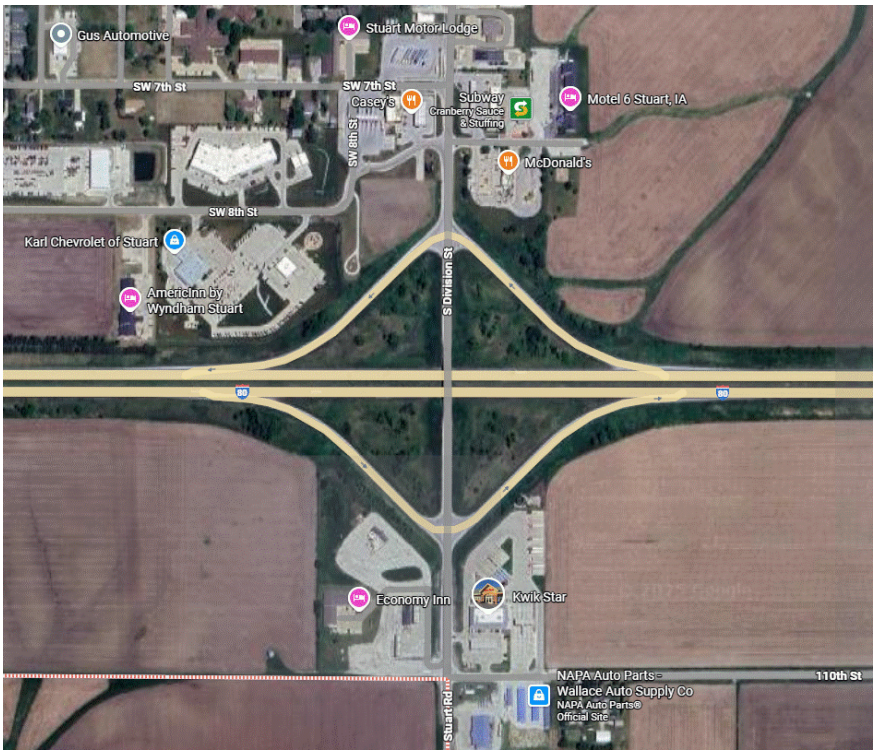
VEENSTRA & KIMM INC.
A Kleinfelder Company

I - 1
TRAFFIC SIGNAL PHASING
CITY OF STUART

APPENDIX

I-80 & Division Street Interchange Signalization Study
Stuart, Iowa

Prepared by:
Veenstra & Kimm, INC.



Prepared for:
The City of Stuart, Iowa
August 3, 2026

DOUBLE CLICK CENTER OF LELAND'S STAMP BELOW TO ACCESS THE REPORT

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.

Signed: _____ Date: 8-3-2026

Leland J. Belding, III., PE, PTOE
Iowa License No. 15046
My license renewal date is December 31, 2027

Parts covered by this seal:

All



Van Buren County

FY28 TSIP Traffic Control Devices Application

for

Speed Feedback Signs on J40 near Pittsburg

8/14/2026

Table of Contents

Page	Item
3-4	Application Form
5	Supporting Resolution
6	Application Narrative & Itemized Breakdown of Cost
7	Time Schedule
8	Location Map
9-17	Project Location Photos
18	Plan View of Locations
19	AADT Map
20-21	SAP Project Page

Rev. 07/23

Application for TRAFFIC CONTROL DEVICE
TSIP FUNDS

GENERAL INFORMATION **DATE:** 8/14/2026

Location / Title of Project: Van Buren County, J40, Pittsburg Safety Improvements

Applicant: Van Buren County

Contact Person: Ryne Thornburg Title: County Engineer

Complete Mailing Address: PO Box 494

Keosauqua, Iowa 52565

Phone: (319) 293-3663 (Area Code) E-Mail: rthornburg@vanburencounty.iowa.gov

If more than one highway authority is involved in this project, please indicate and fill in the information below (use additional sheets if necessary).

Co-Applicant(s):

Contact Person: Title:

Complete Mailing Address:

Phone: (Area Code) E-Mail:

PLEASE COMPLETE THE FOLLOWING PROJECT INFORMATION:

Funding Amount

Total Safety Cost	$	8,602.00
Total Project Cost	$	8,602.00 (Not including labor)
Safety Funds Requested	**$**	**8,602.00**

Additional Project Safety Documentation (when available):

- ☐ Project information sheet(s) or "Risk Score">50% from County/City's Local Road Safety Plan
- ☒ FHWA SS4A Safety Action Plan or similar comprehensive transportation safety plan
- ☐ Iowa DOT TEAP Study or similar analysis and concept
- ☒ Project intersection or segment with High or Medium PCR Level (PCR-All or PCR-Severe) from the Iowa DOT Potential for Crash Reduction (PCR) web-based map tool https://pcr.iowadot.gov/

Potential for Crash Reduction (PCR) Information

Intersection ID (1234567890) or Segment ID (1234)	Intersection or Segment	PCR Level High	PCR Level Medium	PCR-All value	PCR-Severe value
89617	J40, Ivy Trail to Keosauqua	☐	☒		
		☐	☐		

Rev. 07/23

APPLICATION CERTIFICATION FOR PUBLIC AGENCY

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating public agency(ies). I understand the attached resolution(s), where applicable, binds the participating public agency(ies) to assume responsibility for any additional funds, if required, to complete the project. In addition, the participating public agency(ies) agrees to maintain any new or improved public streets or roadways for a minimum of five years.

I understand that, although this information is sufficient to secure a commitment of funds, a firm contract between the applicant and the Department of Transportation is required prior to the authorization of funds.

Representing the Van Buren County

Signed: _____ 8/14/26
Signature Date Signed

Ryne Thornburg
Van Buren County Engineer
Printed Name

Attest: _____ 8-14-26
Signature Date Signed

Bethany Smith
Clerk, Van Buren County Auditor
Printed Name

RESOLUTION FOR SUPPORT OF APPLICATION FOR A TRAFFIC SAFETY IMPROVEMENT PROGRAM TRAFFIC CONTROL DEVICES GRANT FOR FY28

Van Buren County
Resolution No. 08-10-2026C

WHEREAS, Iowa Code Chapter 164 establishes the Traffic Safety Improvement Program which provides funding for traffic safety improvements on public roads in Iowa and

WHEREAS, Van Buren County is an eligible jurisdiction in the State of Iowa for use of the established program and

WHERAS, the Van Buren County Board of Supervisors and Van Buren County Engineer have identified the curves on J40 on each end of the Des Moines River Bridge at Pittsburg as high incident location and that additional traffic control devices (speed feedback signs) can be installed for the improvement of traffic safety.

BE IT THEREFORE RESOLVED by the Van Buren County Board of Supervisors that application be made to the Traffic Safety Improvement Program for a Traffic Control Devices Grant for FY28 for intersection improvements.

BE IT FURTHER RESOLVED that should Van Buren County be awarded such grant that the Board of Supervisors ensures that funding be in place for the maintenance of the proposed installations for the expected service life of the devices.

Adopted this 10th day of August 2026.

Robert V. Waugh
Robert Waugh, Chairman
County Board of Supervisors

ATTEST: Lisa Plecker
Lisa Plecker
County Auditor

8/10/2026
Date

Project Narrative

Project Background

For the past several years Van Buren County has experienced a number of accidents on the curves approaching the J40, Des Moines River Bridge by Pittsburg. The road itself has had a speed limit of 55 MPH, but the curves in question are unsuitable for that posted speed limit and have a posted advisory speed of 40 MPH. While the curve on the west side of the Des Moines River Bridge has been identified in the recently completed SAP as a priority, ICAT indicates the curve on the east side of the Bridge has a higher incident rate. Not only does the east side curve have a greater incident rate but when an accident occurs at the location frequently it damages the approach guardrail to the river bridge which then needs to be repaired or replaced depending on the extent of the damage reducing the safety of the location even further until the repair/replacement is made.

The location in question already has retroreflective pavement markings, curve warning signs with advisory speeds posted and chevrons around the curve with retroreflective post strips.

The Board of Supervisors and the County Engineer have recently taken steps to mitigate these accidents with a reduction in the legal speed limit to match the 40 MPH advisory speed for the curves but would like to take yet another step to attempt to mitigate these accidents though the use of the TSIP Traffic Control Device Program to bring emphasis to that speed limit.

Proposal

We propose installing solar powered speed feedback signs in concert with the newly installed speed limit signs as you approach the curves. These signs will make drivers aware of their current speed, reminding them to reduce their speed to the reasonable posted speed limit thereby reducing the number of incidents that occur on the curves. It is our intent to purchase the speed feedback signs through one of the DOT's selected vendors and mounting posts and bases through the Iowa DOT Catalog.

Itemized Breakdown of Cost

Itemized Breakdown of Cost				
Item	Units	Quantity	Unit Cost	Total
Speed Feedback Sign	EA	2	$ 3,500.00	$ 7,500.00
Post	EA	2	$ 60.00	$ 120.00
Post Base	EA	2	$ 100.00	$ 200.00
			Sub-Total	$ 7,820.00
			Contingency (10%)	$ 782.00
			Total	**$ 8,602.00**

Time Schedule

August 2026	Make TSIP Application
January 2027	Receive Award of TSIP Funds
July 2027	Purchase Traffic Control Devices
Fall 2027	Installation of Traffic Control Devices

HIGHWAY AND TRANSPORTATION MAP

VAN BUREN COUNTY
IOWA

Prepared By

IOWA DOT

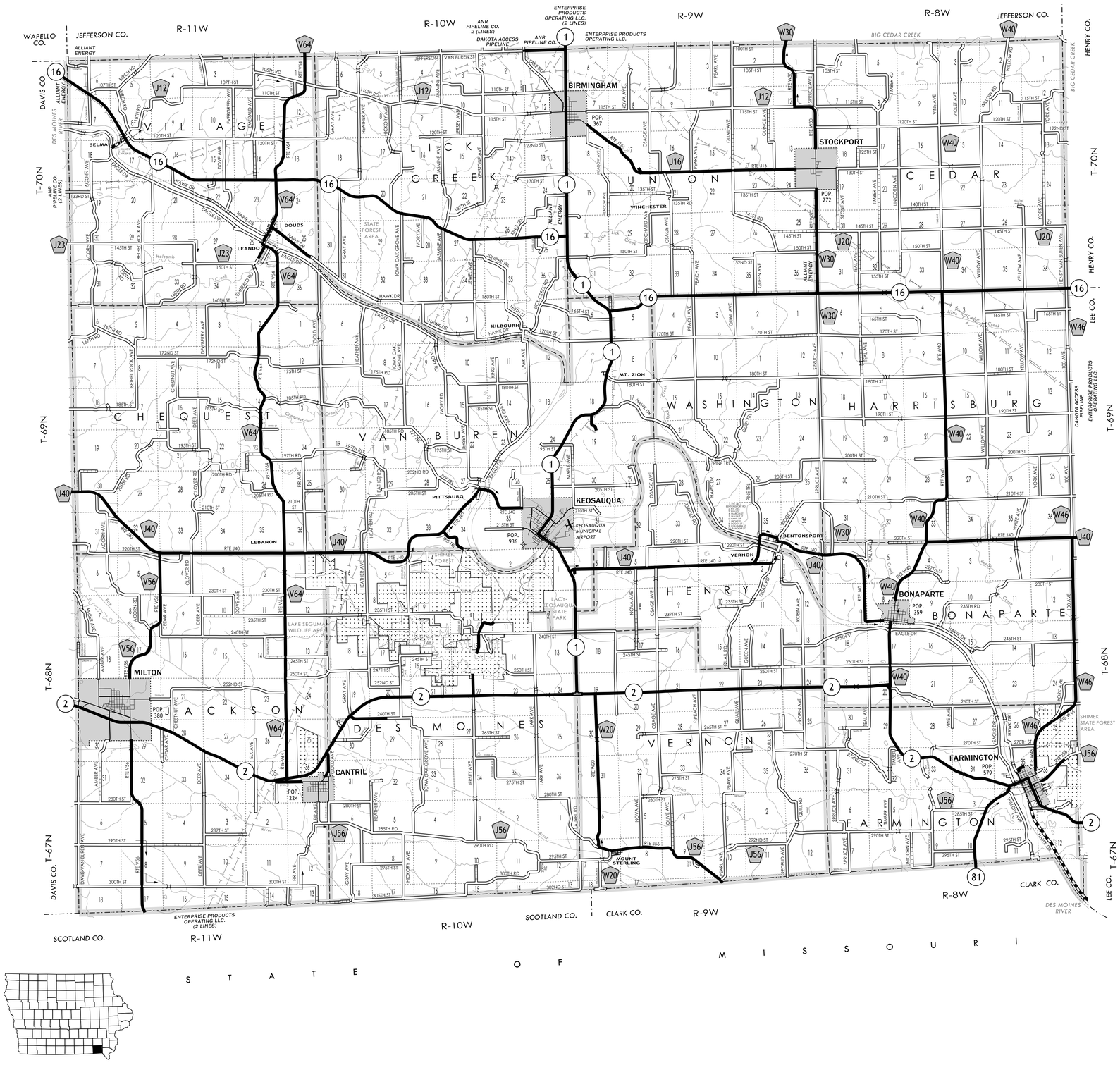
SYSTEMS PLANNING BUREAU
Phone: (515) 239-1664
WWW.IOWADOT.GOV/MAPS

In Cooperation With
United States
Department of Transportation

JANUARY 1, 2025

MILES 0 1 2 3 4
KILOMETERS 0 1 2 3 4 5 6

7 - 1 - 25



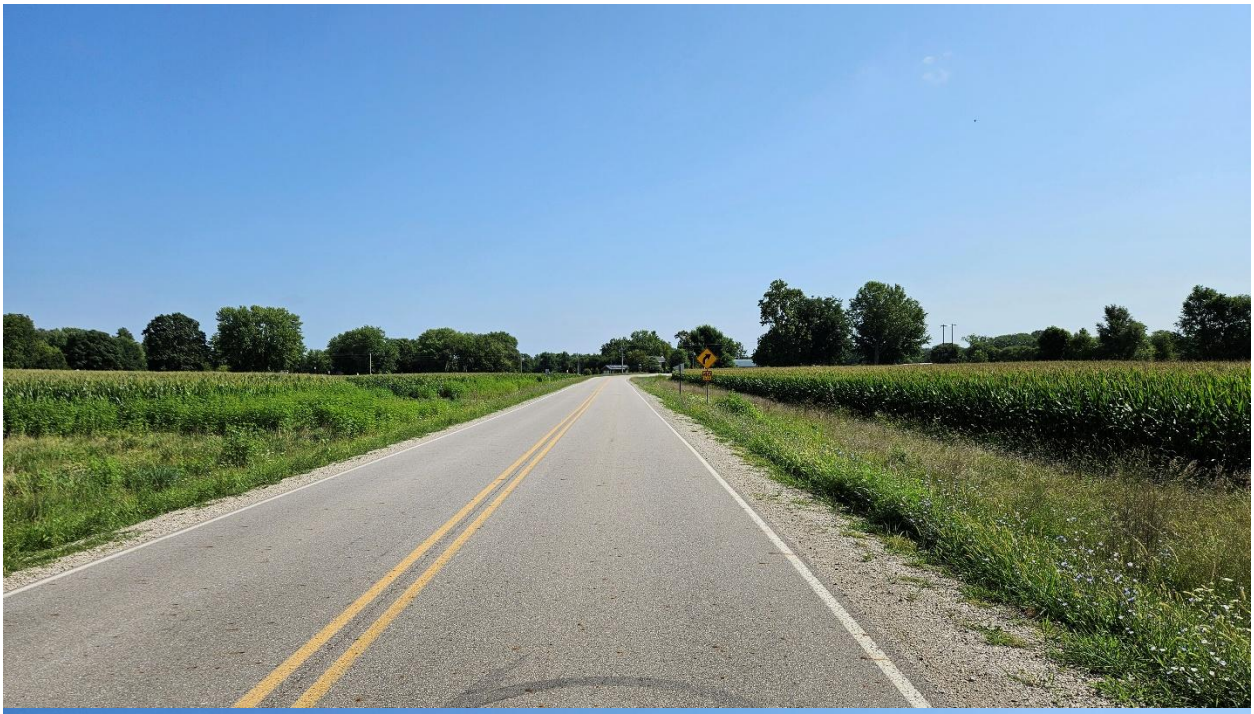
LEGEND

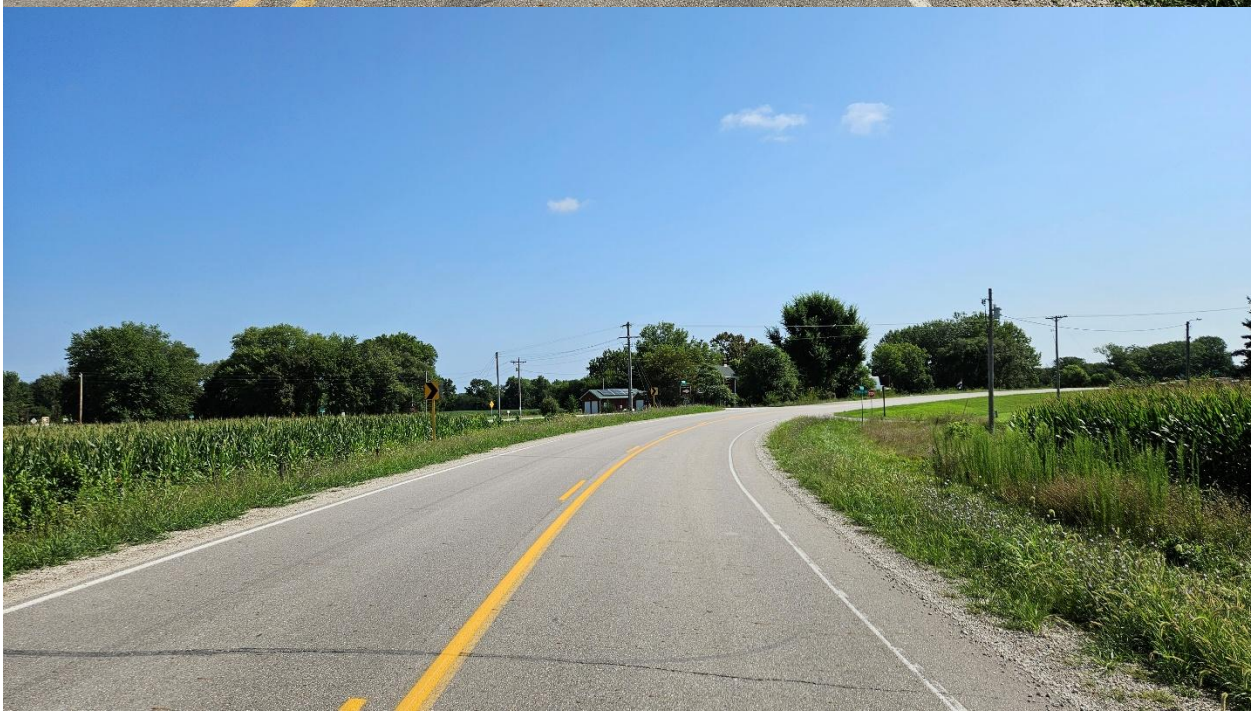
- DIVIDED HIGHWAY
- PAVED ROAD
- BITUMINOUS ROAD
- GRAVEL ROAD
- EARTHEN ROAD
- INTERSTATE HIGHWAY (80)
- UNITED STATES HIGHWAY (65)
- STATE HIGHWAY (237)
- COUNTY HIGHWAY (527)
- RAILROAD
- PIPELINE
- AIRPORT
- HYDROLOGY
- BRIDGE
- STATE BOUNDARY
- COUNTY BOUNDARY
- CORPORATE BOUNDARY
- TOWNSHIP LINE
- SECTION LINE
- ROAD NAMES (ABBEY ROAD)
- UNINCORPORATED PLACE (ELWOOD)
- STATE PARKS
- STATE INSTITUTIONS
- FEDERAL LAND

Site Photos

(Taken before speed limit change)

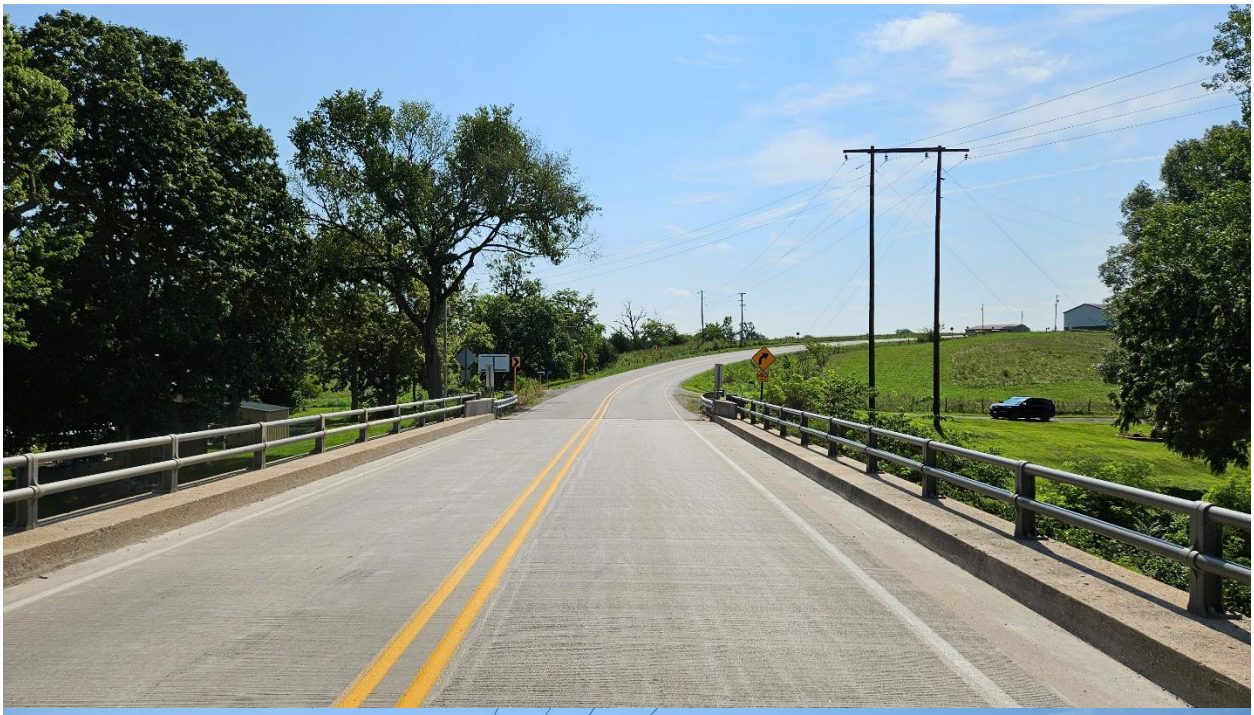
J40 Eastbound

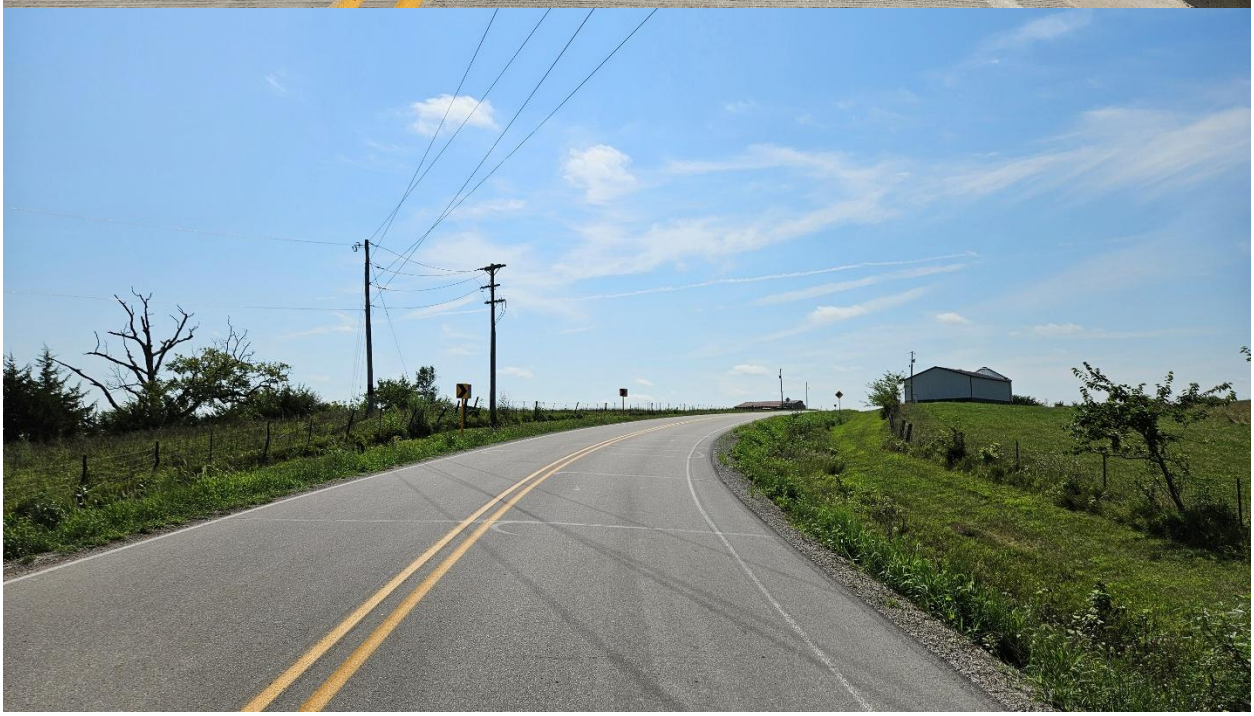






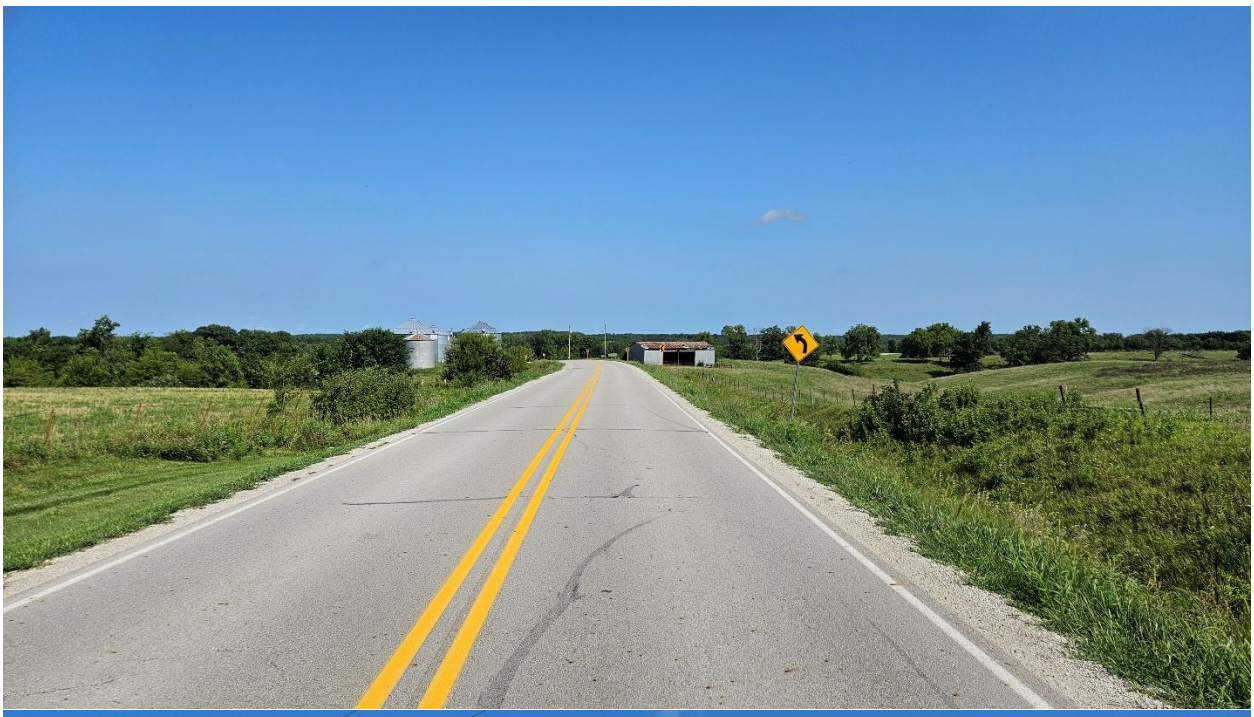


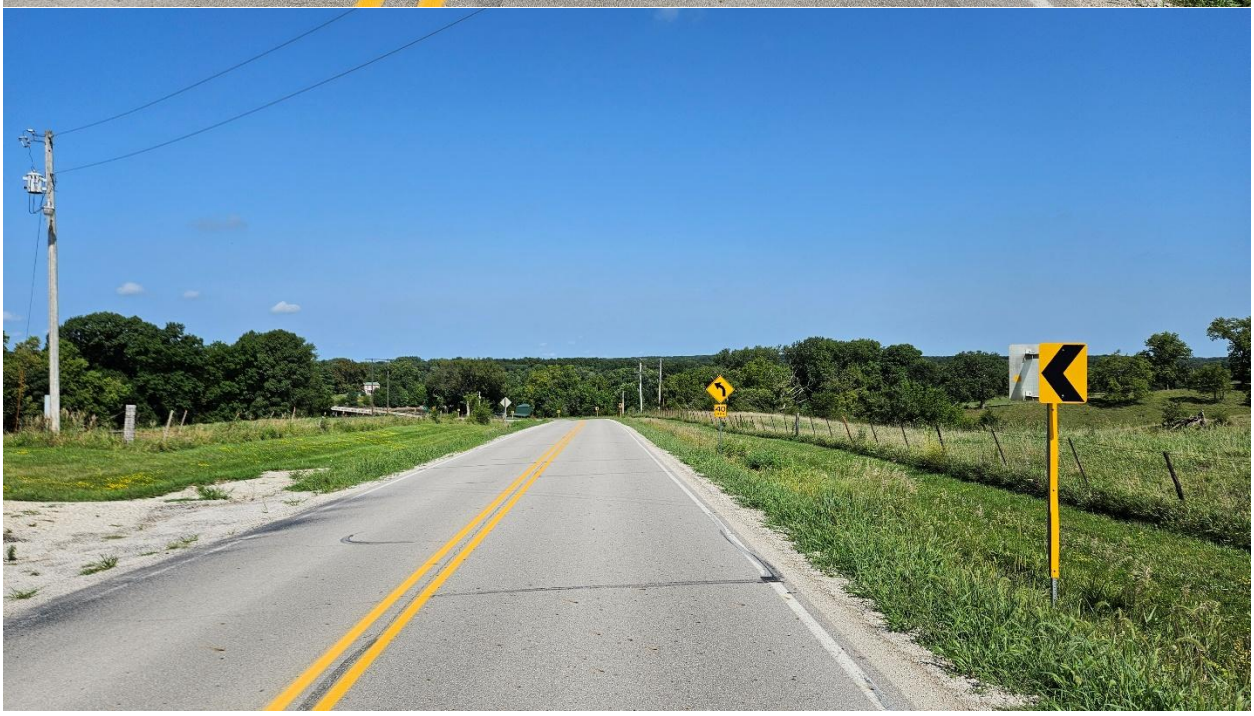


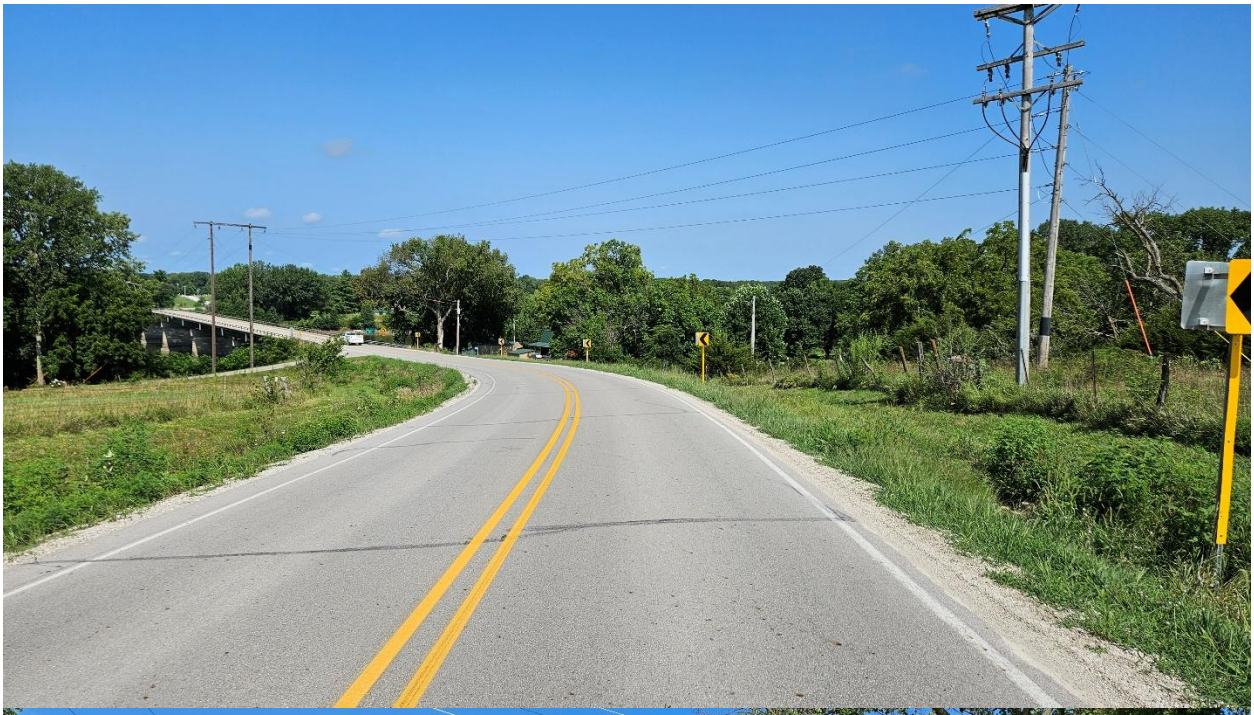


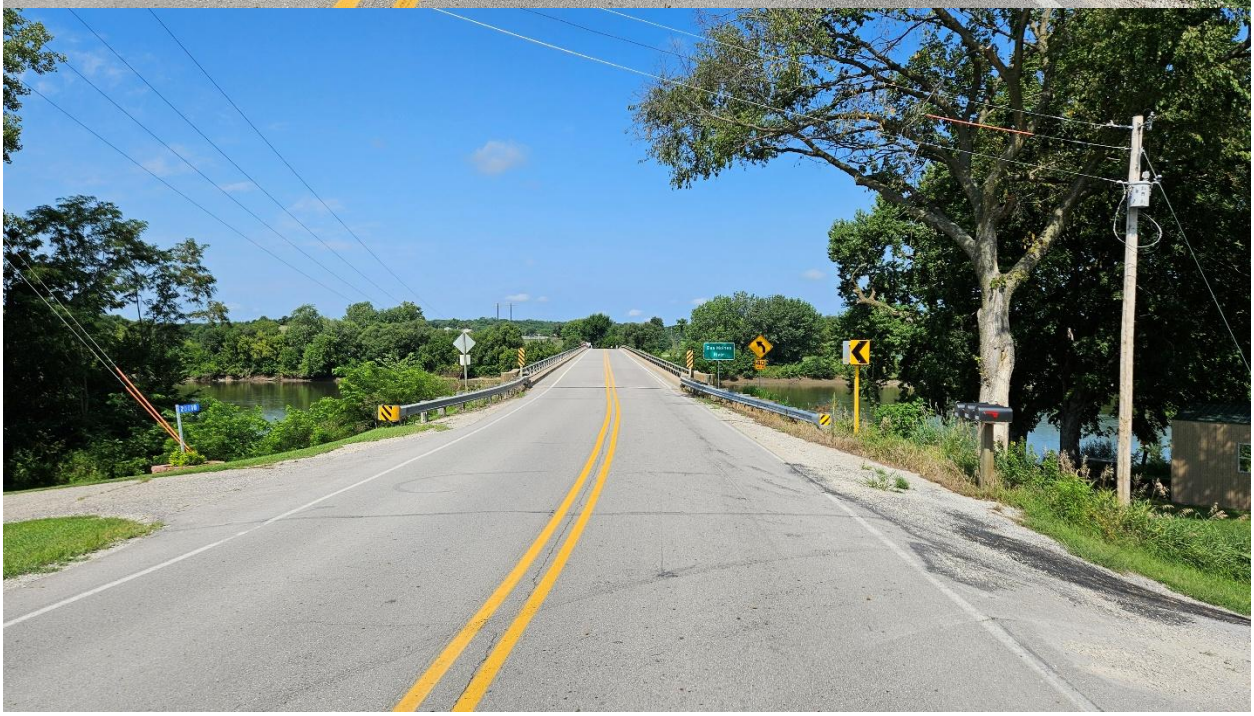


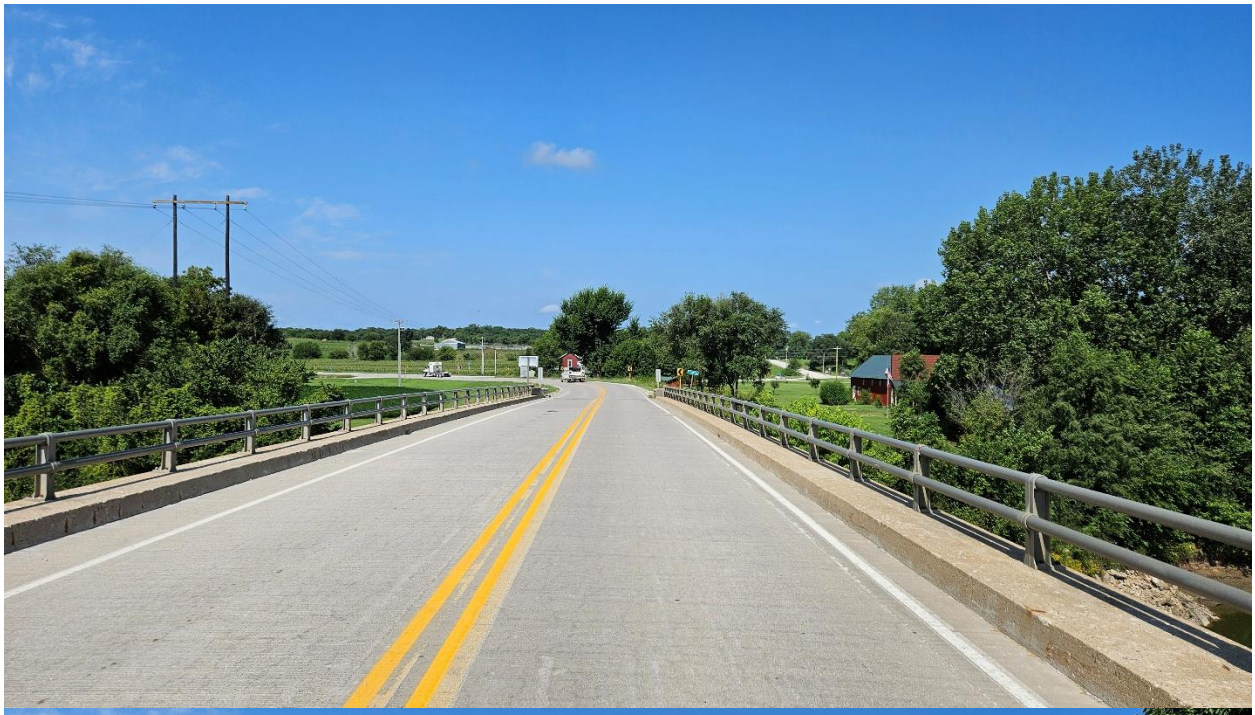
J40 Westbound

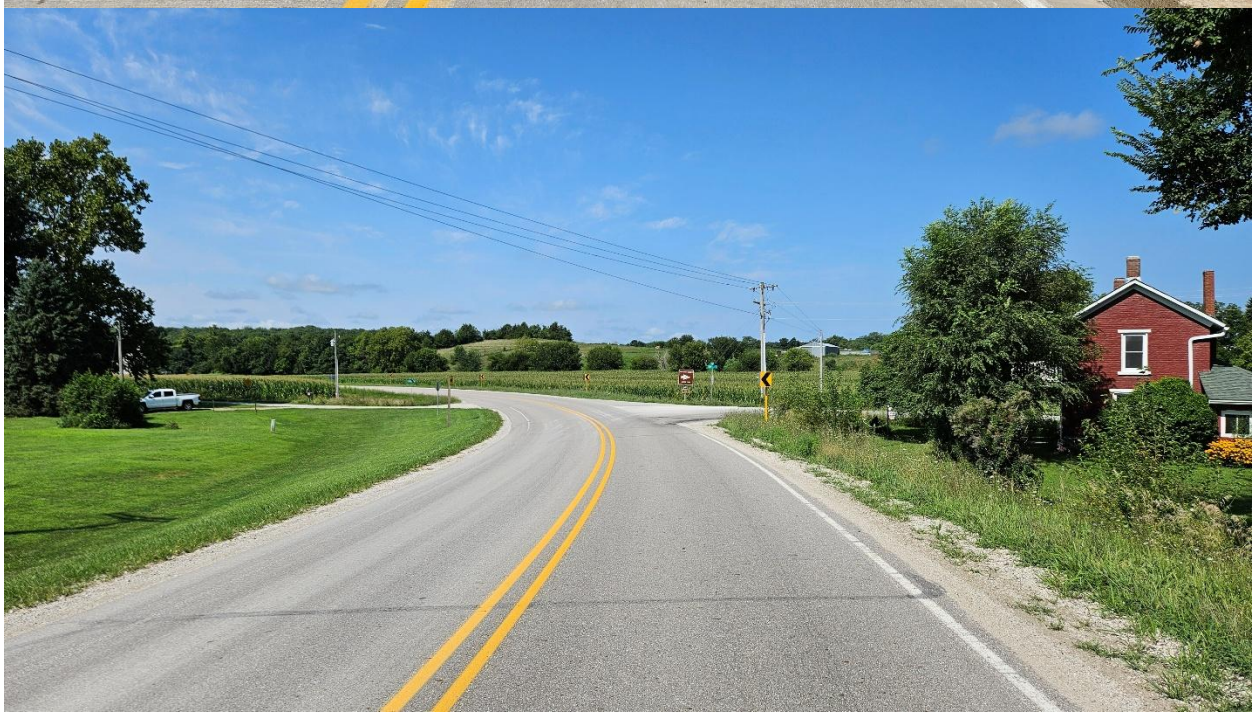














After Accident Guardrail Damage Photos



Guardrail damage following accident (Taken 2/2/26)

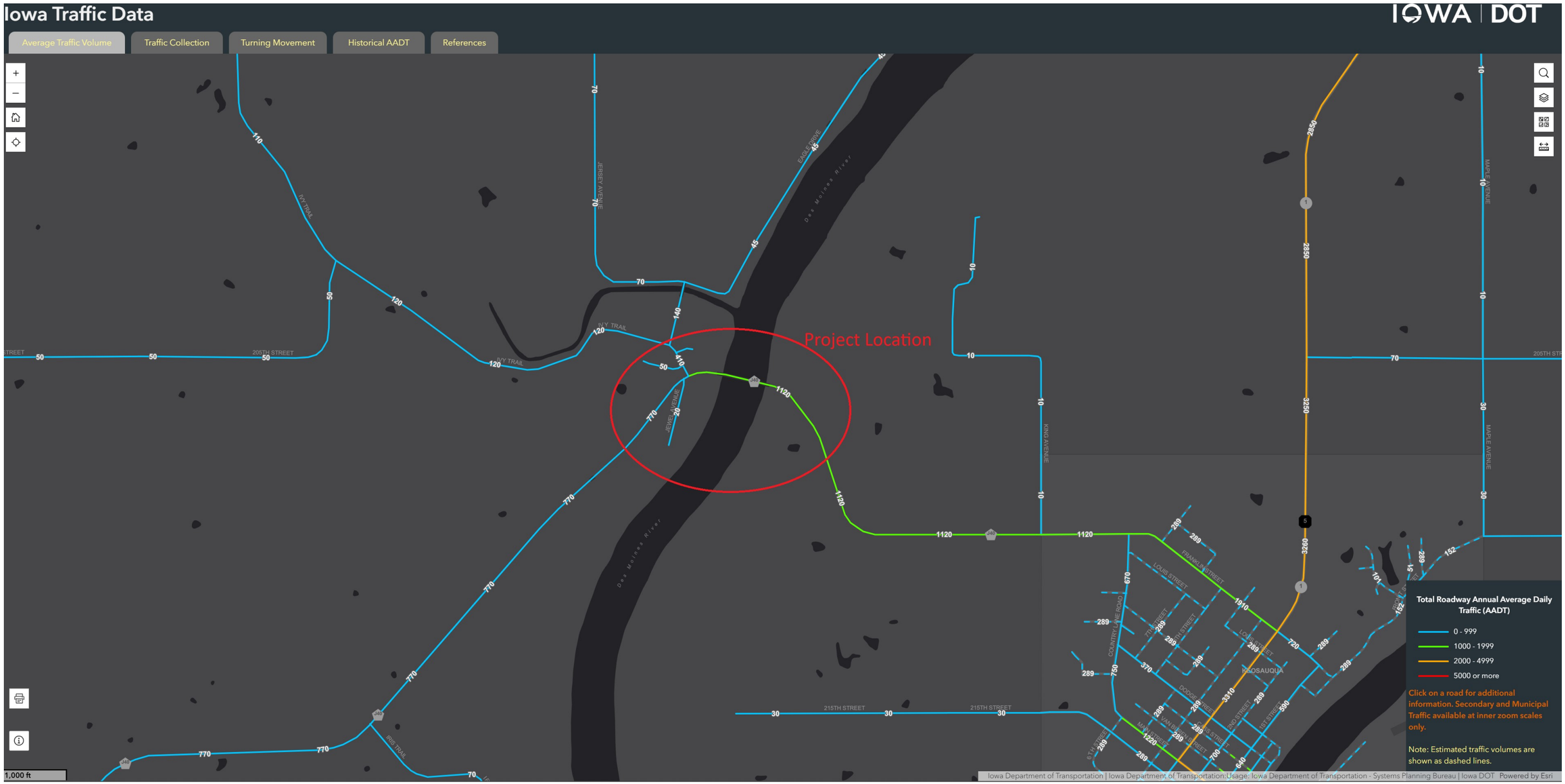


Guardrail damage following accident (Taken 8/28/24)



Guardrail damage following accident (Taken 4/13/22)


IVY TR.
JADE AVE.
205th ST.
JEWEL AVE.
CH J40
CH J40
CH J40
N
SPEED LIMIT 40
YOUR SPEED 36
Install Speed Feedback Sign /w 40MPH Speed Limit Sign
SPEED LIMIT 40
YOUR SPEED 36
Install Speed Feedback Sign /w 40MPH Speed Limit Sign


Iowa Traffic Data
IOWA | DOT
Average Traffic Volume
Traffic Collection
Turning Movement
Historical AADT
References
Project Location
Des Moines River
IVY TRAIL
JERSEY AVENUE
EAGLE DRIVE
KING AVENUE
MAPLE AVENUE
205TH STREET
215TH STREET
IRIS TRAIL
COUNTRY LANE ROAD
FRANKLIN STREET
LOUIS STREET
TYLER STREET
ELM STREET
LOCUST STREET
2ND STREET
1ST STREET
MAIN STREET
VAN BUREN STREET
DODGE STREET
6 1/4 STREET
MOSAUQUA
Total Roadway Annual Average Daily Traffic (AADT)
0 - 999
1000 - 1999
2000 - 4999
5000 or more
Click on a road for additional information. Secondary and Municipal Traffic available at inner zoom scales only.
Note: Estimated traffic volumes are shown as dashed lines.
1,000 ft
Iowa Department of Transportation | Iowa Department of Transportation Usage: Iowa Department of Transportation - Systems Planning Bureau | Iowa DOT Powered by Esri

Safety Action Plan
Project Description for Curve Improvements

Risk Factor Points: 13

Project Name: Curve 4331 on RTE J40
Agency Name: Van Buren County
Contact Name: Ryne Thornburg
E-mail: rthornburg@vanburencounty.iowa.gov

Date: 5/28/25
Prepared By: AKT
Checked By: DJG

CURVE

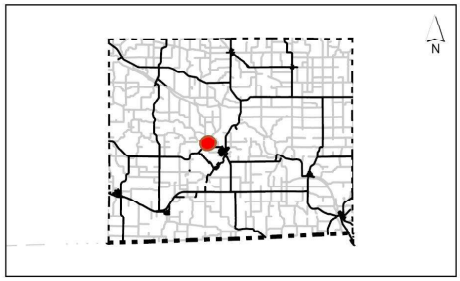
Location Description

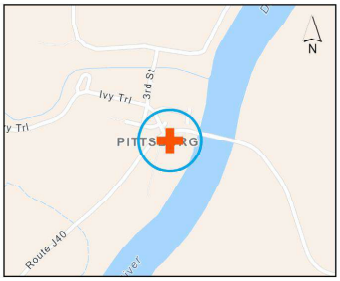
Road: **RTE J40**
Length (feet): **900** Length (Miles): **0.17**
Closest City: **Keosauqua**

Project is within an Underserved Community?†No **GPS ID: 4331**

This curve is located within the following high scoring segment: GPS ID 8425

Project Location Maps







Curve Information and Systemic Ranking Summary

Systemic Ranking Summary	Value	Points
Average Daily Traffic (ADT)	833	6
Curve Radius (ft)	786	3
Shoulder Width (ft)	6	0
Avg. Pavement Condition (IRI)	118	1
Intersections | Driveways	2 | 2	3
K or A Crash	0	0
Total Risk Factor Points (21 max)		**13**

Other Information	
Paved Shoulder	No
Shoulder Width (ft)	6
Speed Limit (mph)	55
Lane Width (ft)	11
Number of Lanes	2
Edgeline Rumble Strips	No
Centerline Rumble Strips	No
Existing Curve Chevrons	Yes

Crash Data, 2014-2023	
Total Crashes	4
K and A Crashes	0
Lane Departure Crashes	4
Lane Departure K and A Crashes	0
Total Crash Rate (per HMVMT)	773.9
K and A Crash Rate (per HMVMT)	0

Opinion of Probable Cost (Countermeasure Selection Threshold Results)

Item Description	Quantity	Unit	Unit Price	Item Cost
Install 4" Retroreflective Edgeline (Both Sides of Road)	**0.17**	**MILE**	**$ 3,000**	**$ 510**
Install 6" Retroreflective Edgeline (Both Sides of Road)	0	MILE	$ 6,000	$ -
Install 4" Retroreflective Centerline	**0.17**	**MILE**	**$ 3,000**	**$ 510**
Pave 2' Shoulder with Safety Edge (Both Sides of Road)	**0.17**	**MILE**	**$ 150,000**	**$ 25,500**
Install Edgeline Rumble Strips (Both Sides of Road)	**0.17**	**MILE**	**$ 5,000**	**$ 850**
Install Centerline Rumble Strips	0	MILE	$ 2,000	$ -
Review Curve and Provide Signage to Meet MUTCD and Iowa DOT Standards, if Needed	0	CURVE	$ 3,500	$ -
Review and Upgrade Curve Signage to Meet MUTCD and Iowa DOT Standards, if Needed	**1**	**CURVE**	**$ 1,000**	**$ 1,000**
Clear and Grub (15 ft Both Sides of Road)	**1**	**CURVE**	**$ 5,000**	**$ 5,000**
			Project Selection Decision Tree Systemic Improvements Subtotal:	$ 33,370

Continued on back of this page.

†USDOT Equitable Transportation Community (Disadvantage Indicator)
‡Climate and Economic Justice Screening Tool

Project Location Map Sources:
Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community

Kimley»Horn

Safety Action Plan
Project Description for Curve Improvements

Risk Factor Points: 13



Project Name: Curve 4331 on RTE J40
Agency Name: Van Buren County
Contact Name: Ryne Thornburg
E-mail: rthornburg@vanburencounty.iowa.gov

Date: 5/28/25
Prepared By: AKT
Checked By: DJG

CURVE

Opinion of Probable Cost (Additional Potential Improvements)

GPS ID: 4331

There are a variety of other safety improvements that could be considered that were not included on the front page of the project sheet due to availability of data, the need for site-specific information, and/or the appetite for the countermeasure to be deployed throughout the county. The following countermeasures could be considered appropriate by the county and included below as additional potential improvements.

Item Description	Quantity	Unit	Unit Price	Item Cost
Additional Curve Signage		CURVE	$ 1,000	$ -
Retroreflective Strip on Chevron Sign Post	**1**	**CURVE**	**$ 500**	**$ 500**
Transverse Rumble Strips Prior to Curve		CURVE	$ 5,000	$ -
Superelevation Correction		EA	$ 50,000	$ -
Install High Friction Surface Treatment (HFST) on Curve		CURVE	$ 60,000	$ -
Speed Activated Flasher on Chevron Sign	**2**	**EA**	**$ 4,000**	**$ 8,000**
Guardrail		FOOT	$ 80	$ -
On-Pavement Marking for Speed Control		EA	$ 3,000	$ -
Post-Mounted Delineators		MILE	$ 5,000	$ -
Other:				
Other:				
Other:				
Other:				
Other:				
Other:				

Additional Potential Improvements Subtotal:		$ 8,500
Project Selection Decision Tree Systemic Improvements Subtotal:		$ 33,370
Subtotal:		$ 41,870
Mobilization: (% +/-)*	10%	$ 4,190
Traffic Control: (% +/-)	5%	$ 2,188
Contingency: (% +/-)	20%	$ 8,752
Estimated Project Cost		**$ 57,000**

*Mobilization is 10% +/- of the subtotal with a minimum of $2,500 and a maximum of $75,000

†Note on Underserved Communities Indicator:
As part of the SS4A program an Underserved Community shares the same definition as an Area of Persistent Poverty (APP). According to the Bipartisan Infrastructure Law, an area is defined as an APP if it meets the following criteria: (A) the County consistently had greater than or equal to 20 percent of the population living in poverty in all three of the following datasets: the 1990 decennial census, the 2000 decennial census; and the most recent (2023, for the purposes of this report) Small Area Income Poverty Estimates; OR (B) the Census Tract has a poverty rate of at least 20 percent as measured by the 2014-2018 5-year data series available from the American Community Survey of the Bureau of the Census; OR (C) any territory or possession of the United States.

Opinion of Probable Construction Cost Disclaimer:
Kimley-Horn has no control over the cost of labor, materials, equipment, or over the Contractor's methods of determining prices or over competitive bidding or market conditions. Opinions of probable costs provided herein are based on the information known to Kimley-Horn at this time and represent only Kimley-Horn's judgment as a design professional familiar with the construction industry. Kimley-Horn cannot and does not guarantee that proposals, bids, or actual construction costs will not vary from its opinions of probable costs.

Project Description Form Disclaimer:
The recommended improvements contained in this project description form were developed through a Geographic Information System (GIS) database risk assessment and project decision tree selection process, as specifically stated in our scope of services. Kimley-Horn has no control over the accuracy of the GIS databases nor the suitability of the specific improvements for the location, and has provided recommended improvements for consideration by the County Engineer. The County Engineer may use this project description form to aid in the selection and development of projects, but this project description form should not be used as the sole basis for the County Engineer's decision making process. Kimley-Horn endeavored to research issues and constraints to the extent practical given the scope, budget, and schedule agreed to with the Client. The assessment is based in large part on information provided to us by others (DOT, county staff, etc.) and therefore is only as accurate and complete as the information provided to us. No formal assessment was made for the improvement recommendations contained on this page. If in question, it is recommended that a study/analysis of this location be made to warrant the above indicated improvements. This project description form is based on our knowledge as of July 2024.

End of Project Description

Back Page

Application for TRAFFIC CONTROL DEVICE TSIP FUNDS

GENERAL INFORMATION **DATE:** 07/23/2026

Location / Title of Project Portable Temporary Traffic Signals

Applicant Woodbury County

Contact Person Laura Sievers Title Woodbury Co Engineer

Complete Mailing Address 759 E. Frontage Road

Moville, Iowa 51039

Phone (712) 279-6484 E-Mail lsievers@woodburycountyiowa.gov
(Area Code)

If more than one highway authority is involved in this project, please indicate and fill in the information below (use additional sheets if necessary).

Co-Applicant(s) Plymouth County

Contact Person Tom Rohe Title Plymouth Co Engineer

Complete Mailing Address 32802 170th St./P.O. Box 1227

Le Mars, Iowa 51031

Phone (712) 546-4559 E-Mail engineer@plymouthcountyiowa.gov
(Area Code)

PLEASE COMPLETE THE FOLLOWING PROJECT INFORMATION:

Funding Amount

Total Safety Cost	$	74,280
Total Project Cost	$	74,280
Safety Funds Requested	**$**	**74,280**

Additional Project Safety Documentation (when available):

- ☐ Project information sheet(s) or "Risk Score">50% from County/City's Local Road Safety Plan
- ☐ FHWA SS4A Safety Action Plan or similar comprehensive transportation safety plan
- ☐ Iowa DOT TEAP Study or similar analysis and concept
- ☐ Project intersection or segment with High or Medium PCR Level (PCR-All or PCR-Severe) from the Iowa DOT Potential for Crash Reduction (PCR) web-based map tool https://pcr.iowadot.gov/

Potential for Crash Reduction (PCR) Information					
Intersection ID (1234567890) or Segment ID (1234)	Intersection or Segment	PCR Level High	PCR Level Medium	PCR-All value	PCR-Severe value
		☐	☐		
		☐	☐		

Rev. 07/23

APPLICATION CERTIFICATION FOR PUBLIC AGENCY

To the best of my knowledge and belief, all information included in this application is true and accurate, including the commitment of all physical and financial resources. This application has been duly authorized by the participating public agency(ies). I understand the attached resolution(s), where applicable, binds the participating public agency(ies) to assume responsibility for any additional funds, if required, to complete the project. In addition, the participating public agency(ies) agrees to maintain any new or improved public streets or roadways for a minimum of five years.

I understand that, although this information is sufficient to secure a commitment of funds, a firm contract between the applicant and the Department of Transportation is required prior to the authorization of funds.

Representing the Woodbury County Board of Supervisors

Signed: _____ 7/28/2026
Signature Date Signed

Mark Nelson
Printed Name

Attest: _____ 7-28-26
Signature Date Signed

Michelle K. Skaff
Printed Name

TRAFFIC SAFETY IMPROVEMENT PROGRAM GRANT APPLICATION

PORTABLE TRAFFIC SIGNAL IMPROVEMENT

RESOLUTION NO. 14085

WHEREAS, the Iowa Department of Transportation Traffic Safety Improvement Program operates under the provisions of Iowa Administrative Code 761—Chapter 164; and

WHEREAS, the Traffic Safety Improvement Program provides funding to cities, counties, and the Iowa Department of Transportation for roadway safety improvements, research, studies, and public information initiatives; and

WHEREAS, the Woodbury County Engineer has determined that the purchase of portable temporary traffic control signals would improve the safety of roadway workers and the traveling public during maintenance and construction operations in Woodbury County; and

WHEREAS, Woodbury County desires to submit an application for funding through the Iowa Department of Transportation Traffic Safety Improvement Program.

NOW, THEREFORE, BE IT RESOLVED by the Woodbury County Board of Supervisors that the Board hereby authorizes and supports the submission of the attached application for Traffic Safety Improvement Program funding for the purchase of portable temporary traffic control signals.

Passed and approved this 28TH day of July, 2026, by the Woodbury County Board of Supervisors.

Mark Nelson, Board Chair

Daniel Bittinger II, Member

Kent Carper, Member

David Dietrich, Member

Matthew Ung, Member

Recommended:

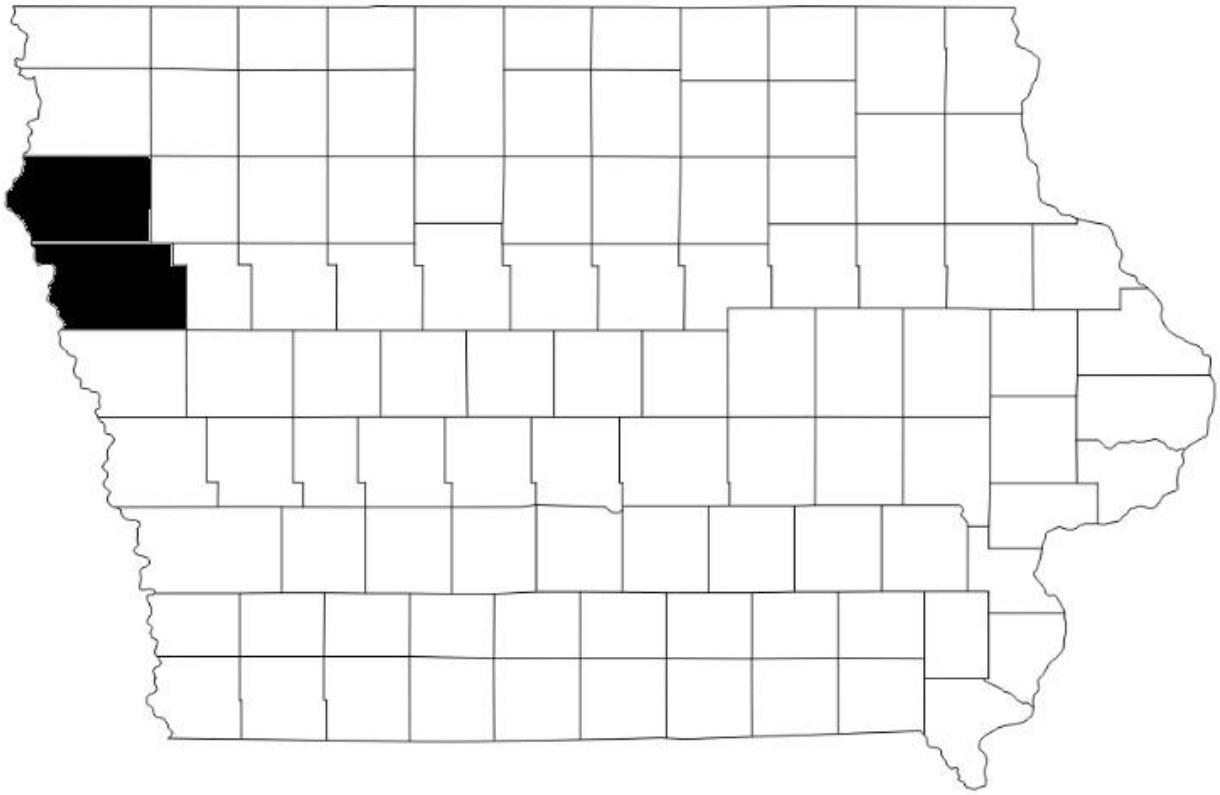
Laura Sievers, PE Woodbury County Engineer

ATTEST:

Michelle K. Skaff, Woodbury County Auditor

PROJECT

The Woodbury County and Plymouth County Secondary Roads Departments are jointly applying for funding through the Iowa Department of Transportation Traffic Safety Improvement Program (TSIP) to purchase a portable temporary traffic signal system for use during roadway maintenance and construction operations.



The primary purpose of this project is to reduce the exposure of county employees to moving traffic during temporary one-lane road closures. Currently, neither county owns portable traffic signals and must rely on flaggers to safely alternate traffic during pavement patching, bridge repairs, culvert replacements, shoulder repairs, emergency maintenance, and other activities. These operations require employees to stand adjacent to live traffic for extended periods, placing them at risk of serious injury or death from distracted, impaired, or errant motorists.

Together, Woodbury County and Plymouth County maintain over 700 miles of paved roads, 2,000 miles of unpaved roads, and 700 bridges. Throughout each construction season, the counties complete numerous roadway maintenance, pavement preservation, bridge replacement, culvert replacement, and emergency repair projects requiring temporary one-lane traffic control. It is estimated that portable temporary traffic signals could replace traditional flagging operations on

over 50 work zones annually in each county, eliminating hundreds of hours of employee exposure to live traffic each construction season.

Traditional flagging operations require a minimum of two employees to remain in close proximity to moving traffic while maintaining constant communication and situational awareness. Although flaggers are trained and follow the requirements of the Manual on Uniform Traffic Control Devices (MUTCD), the greatest risk remains the unpredictable actions of motorists. Portable temporary traffic signals remove workers from this hazardous environment while providing motorists with consistent, highly visible, and automated traffic control that is familiar and easy to understand.

The project will purchase a Portable Temporary Traffic Signal System equipped with radar vehicle detection, solar-powered battery charging, wireless remote operation, motion sensors, and an enclosed transport trailer. The system is fully MUTCD compliant and allows operators to remotely monitor and adjust signal timing when necessary while maintaining safe and efficient traffic flow through one-lane work zones.



Implementation of this equipment will significantly improve work zone safety by:

- Eliminating the need for employees to serve as flaggers adjacent to live traffic.
- Reducing the potential for crashes involving county employees.
- Providing motorists with consistent and automated traffic control.
- Reducing the potential for human error associated with manual flagging operations.
- Allowing one-lane traffic operations to remain safely open during overnight or multi-day construction activities when appropriate.
- Allowing employees to focus on roadway repairs rather than traffic control.
- Improving traffic flow and reducing unnecessary delays for the traveling public.

This project also represents an outstanding example of regional cooperation and responsible stewardship of public funds. Rather than each county independently purchasing portable traffic control equipment, Woodbury County and Plymouth County have entered into a cooperative partnership to share the portable traffic signal system. Woodbury County, located just south of Plymouth, will purchase, maintain, and store the equipment while coordinating its availability for use by both counties based on construction schedules and operational needs.

This collaborative approach maximizes the value of the State's investment by increasing equipment utilization, eliminating duplicate purchases, reducing costs to local taxpayers, and extending the

safety benefits across two county secondary road departments. The shared ownership model ensures the equipment will be used on a greater number of projects each year, providing measurable safety improvements throughout northwest Iowa.

The proposed project directly supports the goals of the Iowa Traffic Safety Improvement Program by reducing worker exposure to traffic hazards, improving temporary traffic control, and enhancing safety for both highway workers and the traveling public. Because the portable signal system will be used repeatedly on roadway, bridge, culvert, and pavement maintenance projects for many years, the safety benefits will continue long after the initial purchase. The anticipated reduction of hundreds of employee exposure hours each year represents a substantial and ongoing improvement in work zone safety.

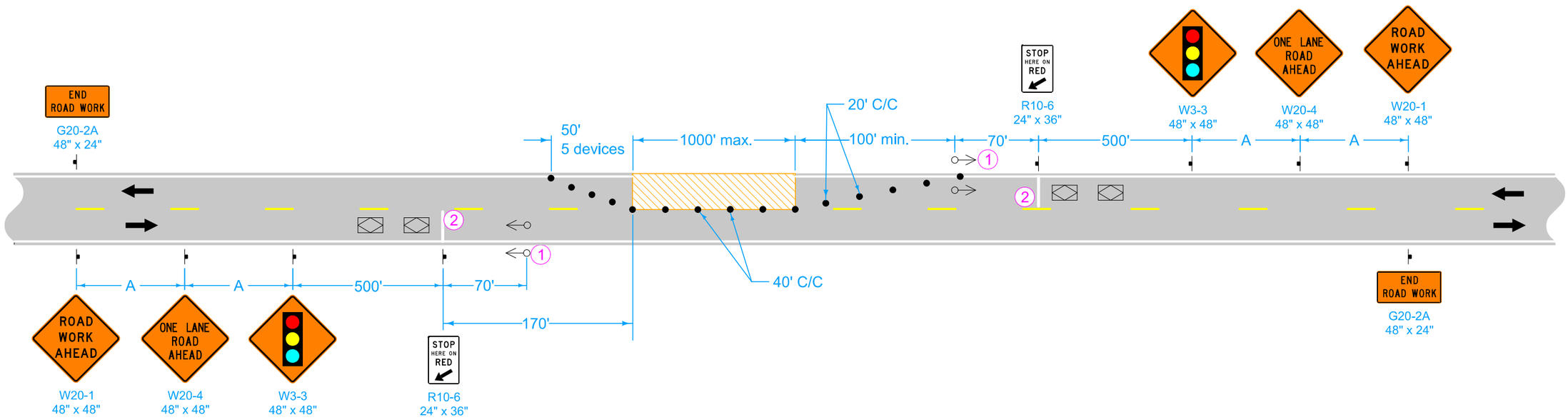
Woodbury County and Plymouth County greatly appreciate the Iowa Department of Transportation's consideration of this application. This project represents a cost-effective, long-term investment that will improve work zone safety, strengthen regional cooperation, and provide lasting benefits to the traveling public. Every hour a county employee is removed from standing alongside live traffic is an opportunity to prevent serious injury or fatality. By investing in portable temporary traffic signals, the Iowa DOT will help protect the men and women who maintain our transportation system while providing safer, more efficient work zones for the traveling public throughout northwest Iowa.

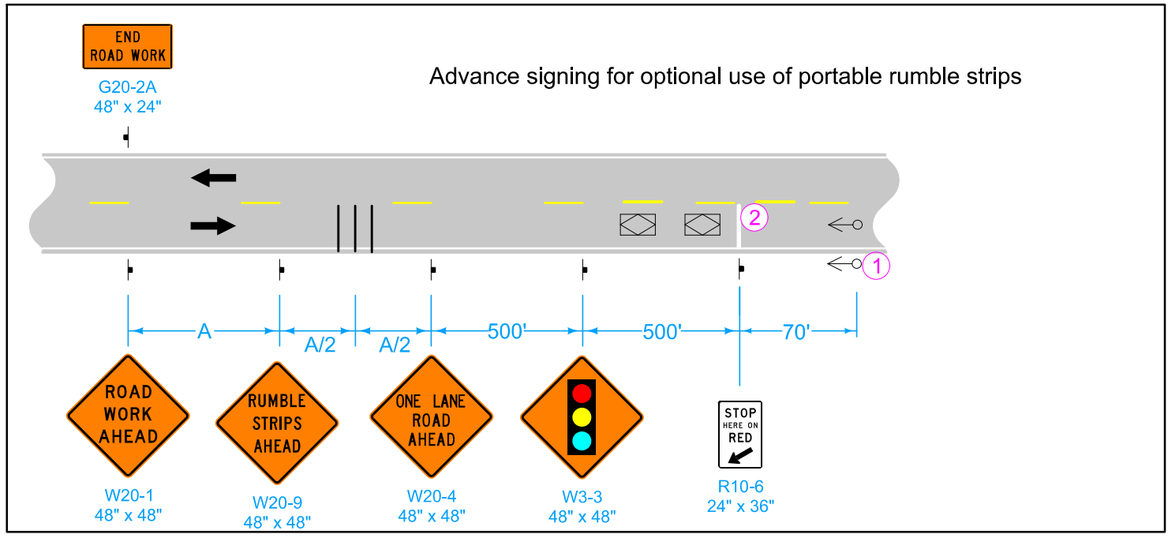
COST

Woodbury County and Plymouth County are requesting $74,280 in TSIP funding for the purchase of a portable temporary traffic signal system and required traffic control signs. The estimated project cost includes portable temporary traffic signal system for $61,400, required traffic control signs for $500, and a 20% price adjustment, which is included in the above estimates to account for anticipated price increases between the application and purchase in 2027.

TIME SCHEDULE

Application due date	August 15, 2026
Award notification	January 15, 2027
Funding available	July 1, 2027
Purchase of traffic signal	July 7, 2027
Usage of traffic signal	July 14, 2027





SPEED LIMIT (mph)*	A
35 or less	250'
40-45	350'
50 or greater	500'

* Speed Limit refers to regulatory speed limit before road work.

Possible Contract Items:
- Pavement Marking Items
- Pavement Markings Removed
- Temporary Traffic Signals
- Traffic Control

Possible Tabulations:
- 108-22
- 108-28

LEGEND
- Vehicle Detection Area
- Temporary Traffic Signal
- Traffic Sign
- 42" Channelizer
- Work Area
- Direction of Traffic
- Portable rumble strips

TIMING FOR ACTUATED SIGNALS

Recommended Settings (secs)

Initial = 12.0
Extension = 2.5
Max. Green = 45.0
Yellow = 4.0
All Red (see table)

Distance between stop lines	All Red* (secs)	Distance between stop lines	All Red* (secs)
450'	9 - 15	950'	19 - 33
550'	11 - 19	1050'	21 - 36
650'	13 - 22	1150'	23 - 39
750'	15 - 26	1250'	25 - 43
850'	17 - 29	1350'	27 - 46

* All Red values based on operating speeds between 20 mph and 35 mph

This layout is for conditions lasting up to three calendar days. For situations lasting longer than three days refer to TC-216.

(1) For Temporary Traffic Signals, meet the requirements of Section 2528.03 of the Standard Specifications except for the following:
In lieu of a trailer or span-wire mounted system, signal heads may be located on the shoulders, one on each side of the roadway. Mount shoulder signal heads a minimum of 8 feet from the bottom of the signal head to the top of the ground surface.

(2) 24-inch stop lines required during nighttime operation.

IOWA DOT
STANDARD ROAD PLAN

REVISION	
6	4-16-24

TC-215
SHEET 1 of 1

REVISIONS: Added option for portable rumble strips.

APPROVED BY DESIGN METHODS ENGINEER

LANE CLOSURE WITH SIGNALS (UP TO THREE DAYS)