



whks

engineers + planners + land surveyors

Appendix A - Miscellaneous Exhibits

Roadway		Design Criteria for Modified Alignment Alternative			
PIN Number		IA 122 Feasibility Study		Submittal Date	
Project Number					Approval Date
District	District 2	Assistant District Engineer			
County	CERRO GORDO	or			
Route	IA 122	Office Director			
Location	From Lark Avenue to Cerro Gordo/Winnebago Way				
Work Type					
Segment Manager					
Designer	WHKS				
Design Manual Section 1C-1 Last Updated: 04-29-19					
Urban Multilane Roadways (Urban Arterials)					
Design Element		Preferred	Acceptable Criteria	Project Values	
Design speed (mph)		The anticipated posted speed limit	30	45	Matching Current Posted Speeds
Maximum superelevation rate (Refer to Section 2A-2)		4%	8%	4%	GB page 7-38
Design lane width (ft)		12	11	12	GB section 7.3.3
Full depth paved width (ft)	Outside lane	Design lane width + curb and gutter unit or 12 feet for roadways with shoulders	Match design lane width	12 + 2.5	3C-2; gutter width for 4-lane at 45 mph or lower is 2.5' preferred, acceptable is 0 ft. 3A-1, Figures 9 and 10, provide project values, 2.5' curb and gutter on outside lane, 0.5' curb on inside lane, all lanes drain to outside.
	Inside lane(s)	Design lane width + curb and gutter unit. 12' for roadways without a curb and gutter unit	Match design lane width	12 + 0.5	
Right turn lane or an auxiliary lane (ft)		12	10	12, with no curb offset	GB section 9.7.1
Left turn lane (ft)	With raised or painted median	12 ft + median	10 ft + median	12 + 4' median incl. curbs	GB page 7-40, 9-110
	With depressed median	12	10	N/A	GB section 9.7.1
Two-way left turn lane (ft)		14	11	N/A	GB 4-39, 7-42, 9-158
Parking lane width (ft)		10	7	N/A	GB page 7-34
Pavement cross-slope (on tangent sections)	Through lanes	2%, However, when adjacent lanes slope in the same direction, increase slope by 0.5% per lane up to 3%	1.5% minimum, 3% maximum	2%	All lanes draining to outside
	Auxiliary and turn lanes	3%	3% maximum	3%	All lanes draining to outside
	Crown break at centerline	4%	4% maximum	N/A	
Shoulder cross-slope (on tangent sections)	Shoulders	4%	Shoulder cross-slope cannot be less than the adjacent lane, 6% max for paved or granular shoulders, 8% max for earth shoulders	N/A	GB Section 4.4.3
	Curb and gutter units	Match pavement cross-slope	6% maximum	N/A	GB page 4-14
	Parking lanes	1% greater than pavement cross-slope	6% maximum	N/A	GB page 4-14
Curb type (Refer to Section 3C-2)	Design speed ≤ 45 mph	6-inch standard	any shape	6-inch standard	3C-2; standard curb acceptable at 45 MPH & below
Foreslope (For fill areas greater than 40 ft, contact the Soils Design Section for assistance)	Adjacent to shoulder	10:1 for 4' then 6:1	3:1	To be Determined, No steeper than 3:1.	RDG section 3.3.2
	Beyond standard ditch depth and design clear zone	3.5:1	3:1		
	Curbed roadways	2%	not steeper than 3:1		
Backslope (For cut areas greater than 25 feet, contact the Soils Design Section for assistance with backslope benches.)		3:1	2.5:1		
Transverse Slopes	w/ drainage structures	8:1	6:1	8:1	RDG Section 3.2.3
	w/o drainage structures	10:1	6:1	10:1	
Ditches (Refer to Section 3G-1)	Outside ditch (depth x width) (ft)	5 x 10	--		
Median width (ft) (Refer to Section 3E-1)		See Section 3E-1	0	16	Per 3E-1, value is face of curb to face of curb, no provision for ped/bicycle refuge
Bridge width—new*	Bridge length ≤ 200 ft	design lane widths + effective shoulder widths or design lane width + 3 ft each side in curb and gutter section	design lane widths + effective shoulder widths or curb-to-curb width in curb and gutter section**	N/A	GB section 7.3.5
	Bridge length > 200 ft	design lane widths + effective shoulder widths or design lane width + 3 ft each side in curb and gutter section	design lane widths + 4 ft offset each side for roadways with shoulders or curb-to-curb width in curb and gutter section**	N/A	
Bridge width—existing*		design lane widths + no less than 2 ft left and right	design lane widths + 2 ft left and right of the design widths	design lane widths + no less than 2 ft left and right	GB section 7.3.5
Vertical clearance (ft) (above lanes, shoulders and 25 feet left and right of the center of railroad tracks)	Over primary	16.5	16	N/A	GB pages 5-9 and 6-8
	Over non-primary	16.5 at interchange locations, 15 at all other locations	14	N/A	GB pages 5-8 and 6-8
	Over railroad	23.3	23.3	N/A	
	Sign truss and pedestrian crossings	17.5	17	17.5	GB section 7.3.5
Structural Capacity	Contact Office of Bridges and Structures		Contact Office of Bridges and Structures	N/A	
Level of Service	C		D	N/A	GB section 7.3.2
*FHWA notification via email is required if acceptable criteria is not met on the NHS system (No formal design exception required)					
** If travel lanes are less than 12 ft wide contact the Methods Section for assistance.					

- Data Sources:
- 1. Waterways - USGS National Hydrology Dataset (NHD). Acquired 2022
 - 2. Wetlands - USGS National Wetlands Inventory (NWI) Dataset. Acquired 2022
 - 3. Flood Zones - FEMA National Flood Hazard Layer (NFHL). Acquired 2022
 - 4. Hydric Soils - USDA Soil Survey Geographic Dataset (SSURGO). Acquired 2022
 - 5. Hazardous Material Sites - EDR Area/Corridor IDOT Preliminary Regulated Materials. Acquired 2022
 - 6. Threatened and Endangered Species - USFWS iPac Resource List
 - Poweshiek Skipperling
 - Rusty patched bumble bee
 - Northern Long-Eared Bat

IA Highway 122
Corridor Feasibility Study
Mason City, Iowa



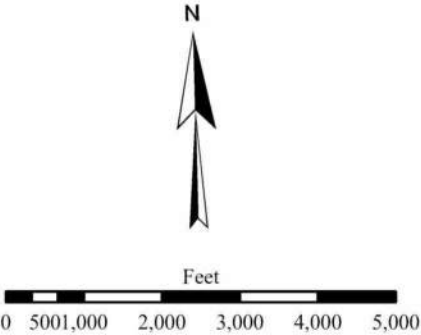
Legend

Hazardous Sites

- Underground Storage Tank
- Solid Waste Facility
- Study Area
- Waterways
- Wetlands
- Hydric Soils

Flood Hazard Zones

- Regulatory Floodway



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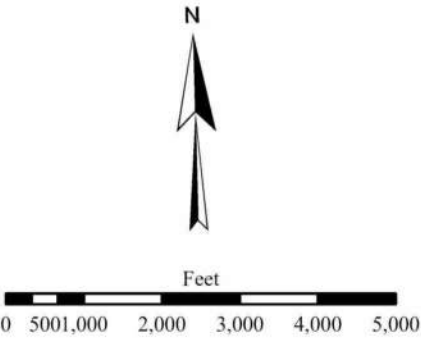


IA Highway 122
Corridor Feasibility Study
Mason City, Iowa



Legend

- Hazardous Sites**
- Underground Storage Tank
 - Above Ground Storage Tank
 - Contaminated Sites Facility
 - Solid Waste Facility
 - Spill Incident
 - Study Area
 - Waterways
 - Wetlands
 - Hydric Soils



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IA Highway 122
Corridor Feasibility Study
Mason City, Iowa



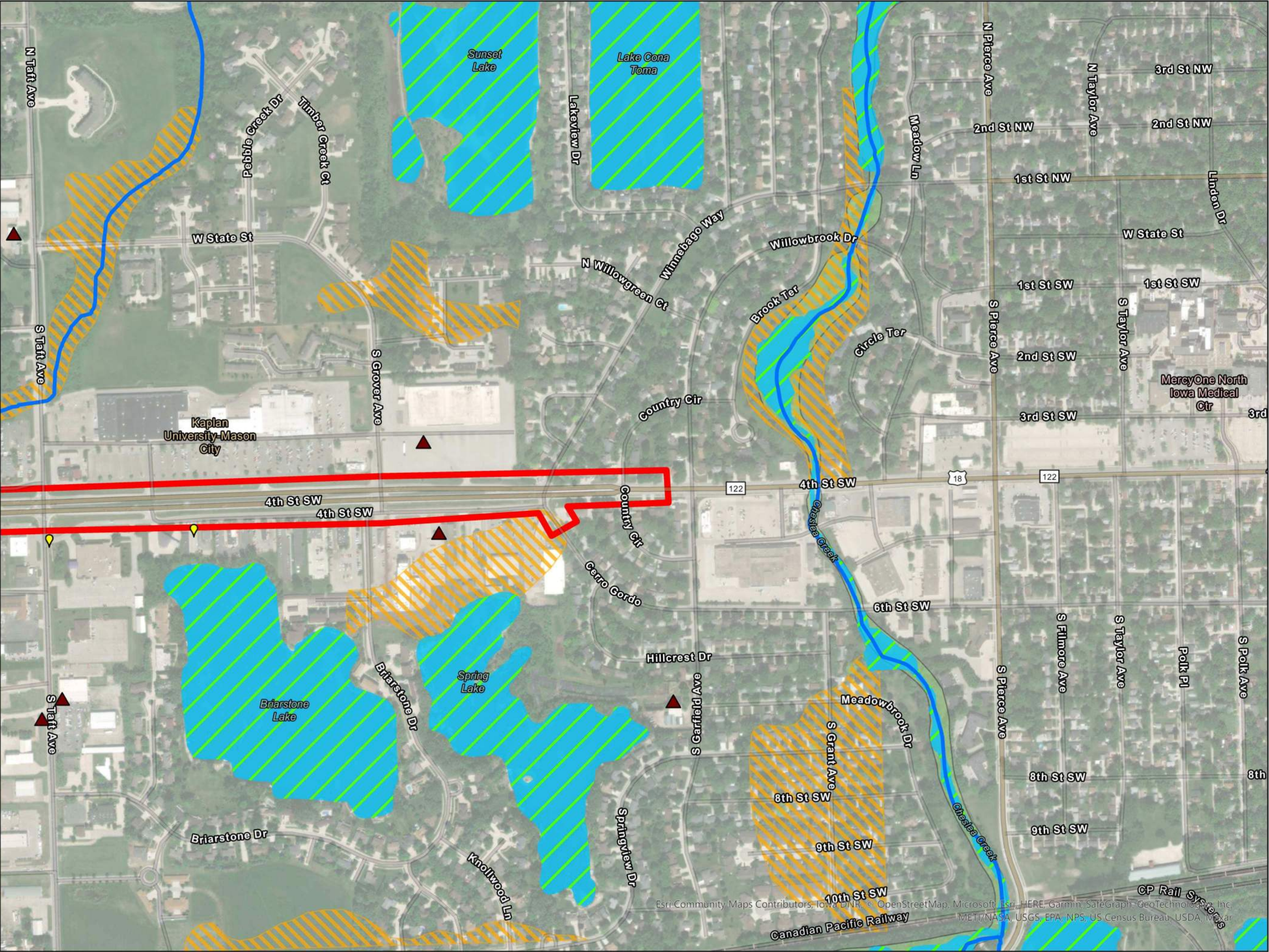
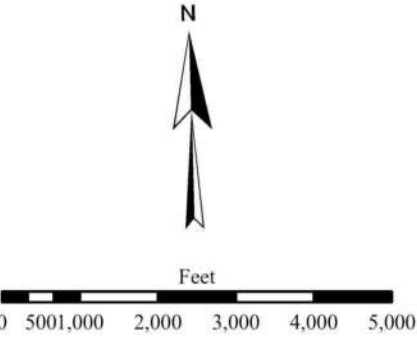
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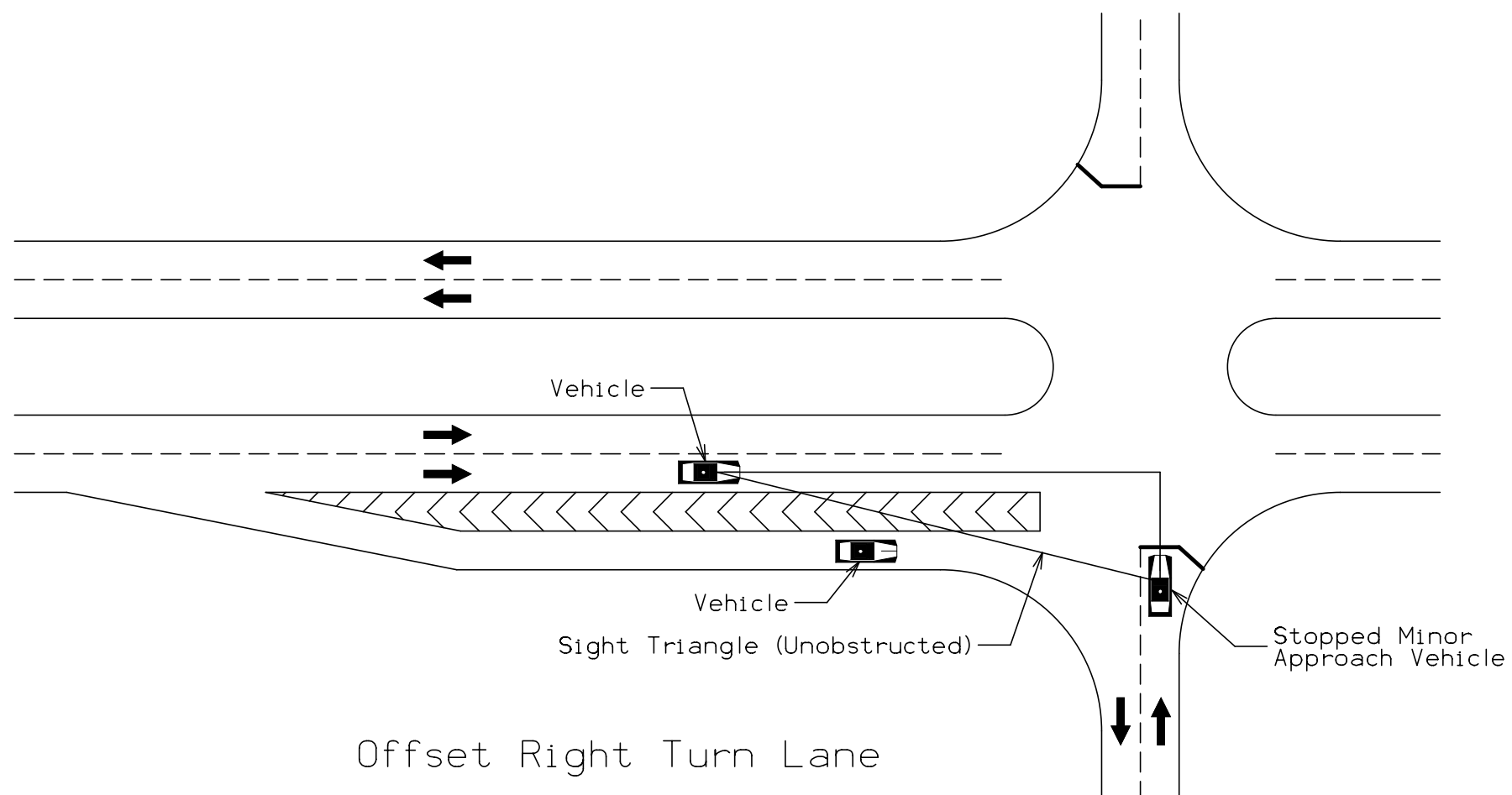
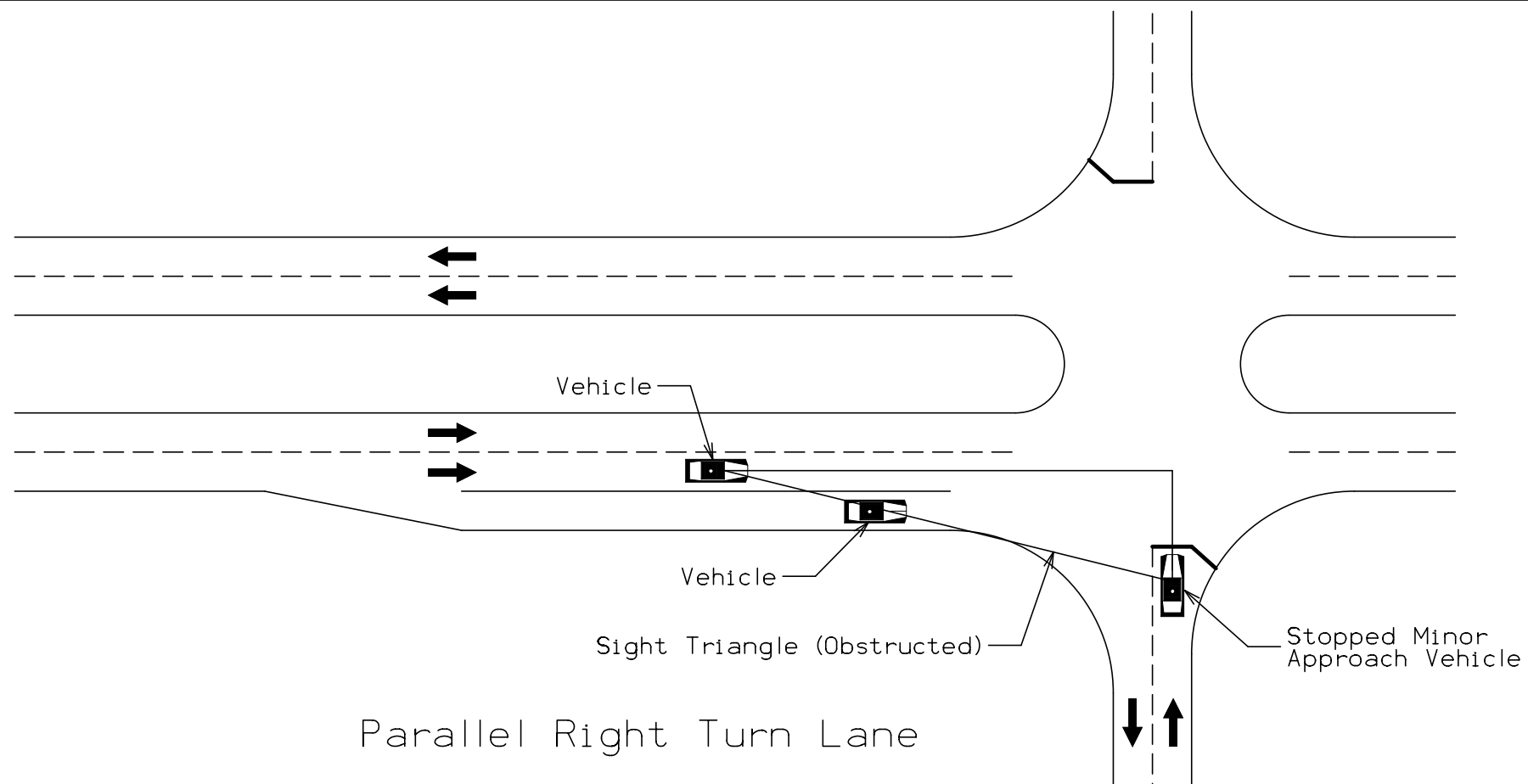
Hazardous Sites

- Underground Storage Tank
- Spill Incident
- Study Area
- Waterways
- Wetlands
- Hydric Soils

Flood Hazard Zones

- Regulatory Floodway





Right Turn Lane
Sight Triangles

IOWA DEPARTMENT OF TRANSPORTATION

To Office District 2 **Date** June 05, 2020

Attention Craig Wood
Jon Ranney **Ref. No.** 456
Cerro Gordo County

From Kurtis Younkin

Office Traffic and Safety

Subject Recommendation to District: Speed Study on IA 122 in Mason City, IA

A TEAP Study in the Subject area noted a crash rate higher than the statewide average. A speed study was requested to determine if the present speed zones were appropriate.

Speed Data was collected (see below) and a review of the area was conducted.

Last Staff Action/Commission Resolution: 13-0178 dated August 31, 2012

The following observations were made of the area reviewed:

- Wide shoulders
- Multiple signalized intersections.
- All intersections in 50mph and 40mph zones had offset, left-turn lanes.
- Four-lane, divided, rural cross-section.
- Sight distance not limited as to merit a warning sign.

The collected data supports:

- Reducing the existing 50mph to 45mph as shown on the attached Proposed Staff Action map.

Please respond to this Recommendation with your concurrence or suggestions for change.

If you have any questions or concerns please contact Ron McDaniel at 515-239-1537 or Ron.McDaniel@iowadot.us.


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SpeedStat Version 2.3 11/96
Project ID      : M1
Street         : IA 122
Capture Zone   : INDIAN HEAD DR

Direction(s)   : BOTH
Posted Speed Limit: 50
Types of Vehicles : ALL
Weather Conditions: 50S SUNNY

*****
                        Filter Settings
Date Range      : 05/13/20 Through 05/13/20
Time Range      : 09:00:00A Through 11:15:00A
Direction(s)    : Approaching & Departing
Types of Vehicles : All Vehicles

*****

Lowest Recorded Speed : 32           15th Percentile : 43
Highest Recorded Speed : 59           50th Percentile : 47
Average Speed         : 46.7          85th Percentile : 51
Vehicles Observed     : 400           95th Percentile : 54

10 MPH Pace Speed      : 42 Through 51
Percent In Pace Speed  : 80.3
Percent Under Pace Speed : 8.3
Percent Over Pace Speed : 11.5

*****

SPEED  COUNT  PERCENT  CUM.%      SPEED  COUNT  PERCENT  CUM.%
30      0      0.0      0.0      56      5      1.3      98.0
31      0      0.0      0.0      57      3      0.8      98.8
32      1      0.3      0.3      58      2      0.5      99.3
33      1      0.3      0.5      59      3      0.8     100.0
34      0      0.0      0.5      60      0      0.0     100.0
35      2      0.5      1.0      61      0      0.0     100.0
36      1      0.3      1.3      62      0      0.0     100.0
37      6      1.5      2.8      63      0      0.0     100.0
38      4      1.0      3.8      64      0      0.0     100.0
39      4      1.0      4.8      65      0      0.0     100.0
40      6      1.5      6.3      66      0      0.0     100.0
41      8      2.0      8.3      67      0      0.0     100.0
42     21      5.3     13.5      68      0      0.0     100.0
43     32      8.0     21.5      69      0      0.0     100.0
44     23      5.8     27.3      70      0      0.0     100.0
45     41     10.3     37.5      71      0      0.0     100.0
46     45     11.3     48.8      72      0      0.0     100.0
47     46     11.5     60.3      73      0      0.0     100.0
48     33      8.3     68.5      74      0      0.0     100.0
49     36      9.0     77.5      75      0      0.0     100.0
50     24      6.0     83.5      76      0      0.0     100.0
51     20      5.0     88.5      77      0      0.0     100.0
52     14      3.5     92.0      78      0      0.0     100.0
53      5      1.3     93.3      79      0      0.0     100.0
54      9      2.3     95.5      80      0      0.0     100.0
55      5      1.3     96.8
```



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*
SpeedStat Version 2.3 11/96
Project ID      : M2
Street         : IA 122
Capture Zone   : FRONTAGE RD

Direction(s)   : BOTH
Posted Speed Limit: 50
Types of Vehicles : ALL
Weather Conditions: 50S CLOUDY

*****
                        Filter Settings
Date Range      : 05/14/20 Through 05/14/20
Time Range      : 09:39:00A Through 11:28:00A
Direction(s)    : Approaching & Departing
Types of Vehicles : All Vehicles

*****

Lowest Recorded Speed : 30           15th Percentile : 39
Highest Recorded Speed : 56           50th Percentile : 44
Average Speed         : 44.0          85th Percentile : 49
Vehicles Observed      : 400          95th Percentile : 52

10 MPH Pace Speed      : 40 Through 49
Percent In Pace Speed   : 70.3
Percent Under Pace Speed : 16.8
Percent Over Pace Speed : 13.0

*****

SPEED  COUNT  PERCENT  CUM.%      SPEED  COUNT  PERCENT  CUM.%
30      1      0.3      0.3       56      2      0.5     100.0
31      4      1.0      1.3       57      0      0.0     100.0
32      1      0.3      1.5       58      0      0.0     100.0
33      2      0.5      2.0       59      0      0.0     100.0
34      5      1.3      3.3       60      0      0.0     100.0
35      4      1.0      4.3       61      0      0.0     100.0
36      5      1.3      5.5       62      0      0.0     100.0
37      9      2.3      7.8       63      0      0.0     100.0
38     17      4.3     12.0       64      0      0.0     100.0
39     19      4.8     16.8       65      0      0.0     100.0
40     19      4.8     21.5       66      0      0.0     100.0
41     36      9.0     30.5       67      0      0.0     100.0
42     27      6.8     37.3       68      0      0.0     100.0
43     37      9.3     46.5       69      0      0.0     100.0
44     24      6.0     52.5       70      0      0.0     100.0
45     40     10.0     62.5       71      0      0.0     100.0
46     18      4.5     67.0       72      0      0.0     100.0
47     35      8.8     75.8       73      0      0.0     100.0
48     25      6.3     82.0       74      0      0.0     100.0
49     20      5.0     87.0       75      0      0.0     100.0
50     18      4.5     91.5       76      0      0.0     100.0
51     12      3.0     94.5       77      0      0.0     100.0
52      11      2.8     97.3       78      0      0.0     100.0
53      4      1.0     98.3       79      0      0.0     100.0
54      5      1.3     99.5       80      0      0.0     100.0
55      0      0.0     99.5
```


SpeedStat Version 2.3 11/96
Project ID : M3
Street : IA 122
Capture Zone : TIFFANY DR

Direction(s) : BOTH
Posted Speed Limit: 50
Types of Vehicles : ALL
Weather Conditions: 60S CLOUDY

Filter Settings
Date Range : 05/14/20 Through 05/14/20
Time Range : 11:57:00A Through 01:38:00P
Direction(s) : Approaching & Departing
Types of Vehicles : All Vehicles

Lowest Recorded Speed : 30 15th Percentile : 39
Highest Recorded Speed : 67 50th Percentile : 44
Average Speed : 44.1 85th Percentile : 49
Vehicles Observed : 400 95th Percentile : 52

10 MPH Pace Speed : 39 Through 48
Percent In Pace Speed : 73.8
Percent Under Pace Speed : 9.8
Percent Over Pace Speed : 16.5

SPEED	COUNT	PERCENT	CUM. %	SPEED	COUNT	PERCENT	CUM. %
30	1	0.3	0.3	56	1	0.3	99.5
31	0	0.0	0.3	57	0	0.0	99.5
32	0	0.0	0.3	58	0	0.0	99.5
33	1	0.3	0.5	59	0	0.0	99.5
34	3	0.8	1.3	60	0	0.0	99.5
35	3	0.8	2.0	61	0	0.0	99.5
36	9	2.3	4.3	62	0	0.0	99.5
37	7	1.8	6.0	63	0	0.0	99.5
38	15	3.8	9.8	64	0	0.0	99.5
39	24	6.0	15.8	65	1	0.3	99.8
40	19	4.8	20.5	66	0	0.0	99.8
41	38	9.5	30.0	67	1	0.3	100.0
42	27	6.8	36.8	68	0	0.0	100.0
43	36	9.0	45.8	69	0	0.0	100.0
44	43	10.8	56.5	70	0	0.0	100.0
45	27	6.8	63.3	71	0	0.0	100.0
46	40	10.0	73.3	72	0	0.0	100.0
47	22	5.5	78.8	73	0	0.0	100.0
48	19	4.8	83.5	74	0	0.0	100.0
49	17	4.3	87.8	75	0	0.0	100.0
50	15	3.8	91.5	76	0	0.0	100.0
51	7	1.8	93.3	77	0	0.0	100.0
52	10	2.5	95.8	78	0	0.0	100.0
53	12	3.0	98.8	79	0	0.0	100.0
54	2	0.5	99.3	80	0	0.0	100.0
55	0	0.0	99.3				


```
SpeedStat Version 2.3 11/96
Project ID      : M4
Street         : IA 122
Capture Zone   : S. TAFT AVE

Direction(s)   : BOTH
Posted Speed Limit: 40
Types of Vehicles : ALL
Weather Conditions: 50S CLOUDY

*****
                        Filter Settings
Date Range      : 05/18/20 Through 05/18/20
Time Range      : 09:01:00A Through 02:38:00P
Direction(s)    : Approaching & Departing
Types of Vehicles : All Vehicles

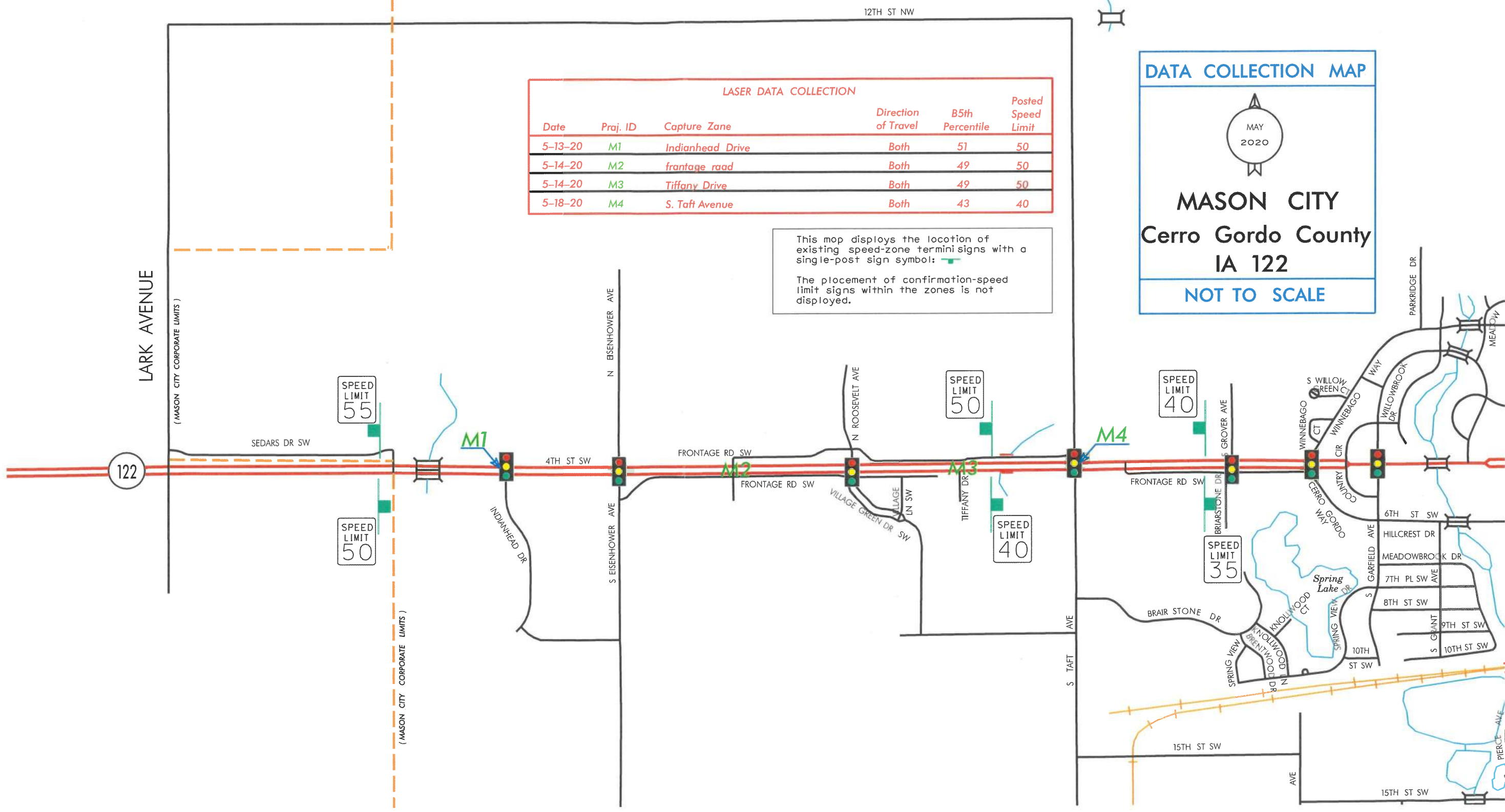
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Lowest Recorded Speed : 30           15th Percentile : 33
Highest Recorded Speed : 51           50th Percentile : 37
Average Speed          : 38.1         85th Percentile : 43
Vehicles Observed      : 383          95th Percentile : 46


10 MPH Pace Speed      : 32 Through 41
Percent In Pace Speed   : 69.7
Percent Under Pace Speed : 6.5
Percent Over Pace Speed : 23.8

*****

SPEED  COUNT  PERCENT  CUM.%      SPEED  COUNT  PERCENT  CUM.%
30      8      2.1      2.1        56      0      0.0     100.0
31     17      4.4      6.5        57      0      0.0     100.0
32     21      5.5     12.0        58      0      0.0     100.0
33     25      6.5     18.5        59      0      0.0     100.0
34     18      4.7     23.2        60      0      0.0     100.0
35     31      8.1     31.3        61      0      0.0     100.0
36     36      9.4     40.7        62      0      0.0     100.0
37     40     10.4     51.2        63      0      0.0     100.0
38     32      8.4     59.5        64      0      0.0     100.0
39     15      3.9     63.4        65      0      0.0     100.0
40     23      6.0     69.5        66      0      0.0     100.0
41     26      6.8     76.2        67      0      0.0     100.0
42     17      4.4     80.7        68      0      0.0     100.0
43     19      5.0     85.6        69      0      0.0     100.0
44     15      3.9     89.6        70      0      0.0     100.0
45     13      3.4     93.0        71      0      0.0     100.0
46     10      2.6     95.6        72      0      0.0     100.0
47      7      1.8     97.4        73      0      0.0     100.0
48      3      0.8     98.2        74      0      0.0     100.0
49      4      1.0     99.2        75      0      0.0     100.0
50      2      0.5     99.7        76      0      0.0     100.0
51      1      0.3    100.0        77      0      0.0     100.0
52      0      0.0    100.0        78      0      0.0     100.0
53      0      0.0    100.0        79      0      0.0     100.0
54      0      0.0    100.0        80      0      0.0     100.0
55      0      0.0    100.0
```





LASER DATA COLLECTION					
Date	Praj. ID	Capture Zone	Direction of Travel	B5th Percentile	Posted Speed Limit
5-13-20	M1	Indianhead Drive	Both	51	50
5-14-20	M2	frontage road	Both	49	50
5-14-20	M3	Tiffany Drive	Both	49	50
5-18-20	M4	S. Taft Avenue	Both	43	40

This map displays the location of existing speed-zone termini signs with a single-post sign symbol: 

The placement of confirmation-speed limit signs within the zones is not displayed.

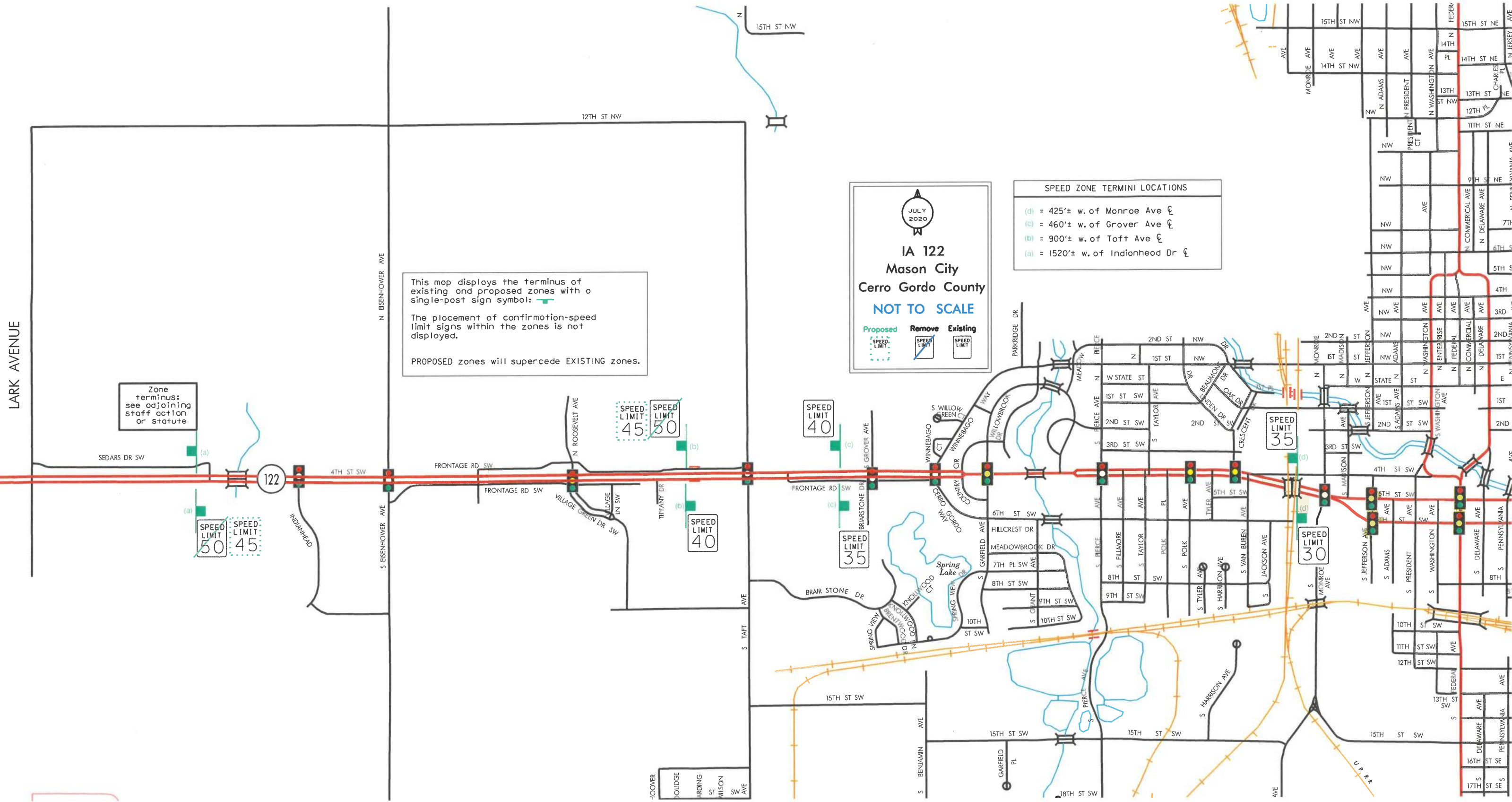
DATA COLLECTION MAP



MAY
2020

MASON CITY
Cerro Gordo County
IA 122

NOT TO SCALE



**Crash Rates per 100 Million Vehicle Miles of Travel (crashes/HMVMT)
by Road System and Severity
Statewide Crashes
10-year Averages: 2007 - 2016**

Road System	Fatal Crash Rates	Fatality Rates	Fatal + Injury Crash Rates	All Crash Rates
Rural				
Interstate	0.49	0.59	12	52
Primary	1.11	1.29	23	85
US	1.01	1.19	22	84
Iowa	1.32	1.52	26	90
Secondary	2.82	3.09	64	179
Rural Totals	1.26	1.43	28	93
Municipal				
Interstate	0.54	0.59	28	103
Primary	0.96	1.05	79	268
US	0.96	1.06	79	263
Iowa	0.98	1.08	86	296
City Streets	0.91	0.98	106	396
Municipal Totals	0.72	0.78	70	261
State				
Interstate	0.50	0.59	17	70
Primary	1.06	1.22	41	143
US	1.00	1.15	40	140
Iowa	1.21	1.38	45	155
Local	1.68	1.83	89	308
State Totals	1.03	1.15	46	167

Note: Rural and Municipal breakdowns are based on Corporate Limits.

**Source: Iowa Department of Transportation, Office of Traffic and Safety
September 22, 2017**

ACCIDENT AND RELATED DATA FOR RURAL AND MUNICIPAL INTERSECTIONS IN IOWA

Based on 1983 thru 1987 Data

BY INTERSECTION CLASS

Field Description	RURAL				MUNICIPAL			
	Primary with Primary	Primary with Secondary	Secondary with Secondary	Total Rural	Primary with Primary	Primary with City Street	City Street with City Street	Total Municipal
Number of Intersections	93	345	134	572	162	1,129	1,553	2,844
Average Number of Accidents / Year	1.6	1.1	0.8	1.1	4.8	4.1	3.0	3.6
Average Dollar Loss / Year *	\$52,200	\$44,200	\$37,300	\$43,900	\$53,800	\$43,100	\$26,800	\$34,800
Average Daily Entering Vehicles	4,500	4,000	2,200	3,600	12,800	12,800	10,500	11,500
Average Accident Rate / MEV	1.0	0.8	1.0	0.9	1.0	0.9	0.8	0.8
Lower Limits of Statistical Rates								
90 % Confidence Level (K=1.282)	1.9	1.8	2.8	2.1	1.7	1.6	1.6	1.6
95 % Confidence Level (K=1.645)	2.1	2.0	3.2	2.4	1.9	1.8	1.8	1.8
99.5 % Confidence Level (K=2.576)	2.8	2.7	4.1	3.2	2.4	2.3	2.4	2.4

BY TRAFFIC VOLUME CLASS

Field Description	RURAL						MUNICIPAL					
	1 - 999	1,000 - 2,499	2,500 - 4,999	5,000 - 9,999	10,000 & Over	Total Rural	1 - 2,499	2,500 - 4,999	5,000 - 9,999	10,000 - 24,999	25,000 & Over	Total Municip.
Number of Intersections	68	191	191	97	25	572	85	363	988	1,238	170	2,844
Average Number of Accidents / Year	0.5	0.8	1.1	1.7	3.8	1.1	0.9	1.5	2.0	4.6	10.6	3.6
Average Dollar Loss / Year *	\$46,400	\$38,200	\$43,700	\$47,600	\$67,100	\$43,900	\$20,600	\$20,500	\$20,100	\$43,500	\$94,700	\$34,800
Average Daily Entering Vehicles	650	1,750	3,600	6,750	14,500	3,650	1,900	3,900	7,450	15,050	30,450	11,500
Average Accident Rate / MEV	2.1	1.2	0.9	0.7	0.7	0.9	1.3	1.0	0.7	0.8	1.0	0.8
Lower Limits of Statistical Rates												
90% Confidence Level (K=1.282)	3.7	2.1	1.4	1.3	1.3	2.1	2.9	1.9	1.4	1.5	1.6	1.6
95% Confidence Level (K=1.645)	4.1	2.4	1.6	1.5	1.5	2.4	3.3	2.2	1.6	1.7	1.8	1.8
99.5% Confidence Level (K=2.576)	5.2	3.0	2.0	1.9	1.9	3.2	4.3	2.8	2.1	2.2	2.2	2.4

* Dollar Loss Value Based on: Fatality - \$435,000
Injury - \$ 15,000
Plus Actual Property Damage

Bureau of Transportation Safety
Iowa Department of Transportation
Prepared January, 1989

10 CULTURAL LOOP

(see Downtown Inset Map)

- Central Park
- Historic Park Inn (Frank Lloyd Wright, Arch.)
- Federal Plaza
- Southbridge Mall
- Music Man Square
- Mason City Public Library
- MacNider Art Museum
- Meredith Willson Footbridge
- Rock Crest/Rock Glen Historic District (Prairie Style Architecture)
- Robert E. McCoy Architectural Interpretive Center/
G. C. Stockman House Museum (Frank Lloyd Wright, Architect)
- City Hall

12 PIERCE AVE ROUTE

Connections to: Routes 1, 3, 9

- Connection to Willow Creek Trail
- Lester Milligan/Ray Rorick Parks and trail (via Route 9)

POINTS OF INTEREST (a l p h a b e t i c a l)

SITE/LOCATION (ROUTE#)

BeJe Clark Residential Center (7)
Cannonball 457 (1,8)
Central Park (1,10)
City Hall (1,10)
CL Bike Trolley Trail Connector (2,7,9)
Downtown Mason City (1,10)
East MC Shopping District (1)
East Park (1,8)
Elmwood St. Joseph Cemetery (4)
Federal Plaza (1,10)
Forest Park Historic Dist. (1)
Frederick Hanford Park
- Adult Softball Complex (7)
Georgia Hanford Park (7)
Highland Golf Course (8)
Historic Park Inn (1,10)
(Frank Lloyd Wright, architect)
John Adams Middle School/
Mason City High School (1)
Lester Milligan/
Ray Rorick Park & Trail (7, 9, 12)
Lime Creek South Entrance (5,6)
MacNider Art Museum (6,10)

SITE/LOCATION (ROUTE#)

MacNider Campground (8)
MC City Dog Park (5,6)
MC Family Aquatic Center (8)
MC Public Library (6,10)
MC Visitor Center (1)
MC Youth Baseball Holnam Complex (4)
Mercy Medical Center - North Iowa (1)
Meredith Willson Footbridge (1,10)
Mohawk Square (1,10)
Monroe Park (4)
Music Man Square (10)
Newman Catholic Schools (2,9)
North Federal Commercial Dist. (5)
NIACC (1)
Parkers Woods/West Park (1)
Robert E. McCoy Architectural
Interpretive Center (1,10)
Rock Crest/Rock Glen Historic District (1,10)
S Federal Ave Commercial District (7)
Southbridge Mall (1,10)
Stockman House Museum (1,10)
West Shopping District (1)

www.masoncity.net • 641-424-7181



SHARROW

Share the road or shared lane markings alert motorists of the location a bicyclist may be expected or occupy within the traveled street.



BIKE LANE

Striped solid line buffer between bike traffic and automobile traffic. Bicyclist should ride within the lane.



MAPS PROVIDED BY: North Iowa Spin, Bennett's, Wayne's,
Blue Zones Project®-Mason City, City of Mason City

1 CROSS-TOWN NORTH ROUTE: East-West

Connections to: Routes 2, 3, 4, 6, 8, 10, 12

- West Mason City Shopping District
- Mason City Visitor's Center
- Mercy North Iowa - West Campus
- Forest Park Historic District
- Parker's Woods/West Park
- Connection to Willow Creek Trail
- Downtown Mason City
- Central Park
- Mohawk Square
- Robert E. McCoy Architectural Interpretive Center/
G. C. Stockman House Museum (Frank Lloyd Wright, Architect)
- Historic homes on East State Street
- Rock Crest/Rock Glen Historic District
- East Park
Cannonball 457
- John Adams Middle School/Mason City High School
- East Mason City Shopping District
- North Iowa Area Community College

2 TAFT AVE ROUTE

Connections to: Routes 1, 3, 9

- West Mason City Shopping District
- Newman Catholic Schools
- To Clear Lake via Route 9 (Trolley Trail)

3 CROSS-TOWN SOUTH ROUTE: East-West

**Connections to: Route 1 (via Cerro Gordo Way),
Routes 4, 9, 12**

- West Mason City Shopping District

4 QUINCY-ADAMS ROUTE

Connections to: Routes 1, 3, 5, 7, 9

- Mason City Youth Baseball Complex
- Monroe Park
- Downtown Mason City
- Elmwood-St. Joseph Cemetery
- BeJe Clark Residential Center

5 NORTH-TOWN ROUTE

Connections to: Routes 4, 6, 8

- North Federal Ave Commercial District
- Mason City Dog Park
- Connection to East Park Trails
- Connection to Lime Creek-Zerble's Trail

6 PENNSYLVANIA AVE ROUTE

Connections to: Routes 1, 5, 10

- Connection to Lime Creek-Zerble's Trail (via Elm Drive)
- Downtown Mason City
- MacNider Art Museum
- Mason City Public Library
- Music Man Square
- Connection to Willow Creek Trail

7 TROLLEY TRAIL ROUTE: East

Connections to: Routes 4, 8, 9

- Lester Milligan/Ray Rorick Parks and trails
- Frederick Hanford Park
- South Federal Avenue Commercial District
- Georgia Hanford Park

8 VIRGINIA-RHODE ISLAND ROUTE

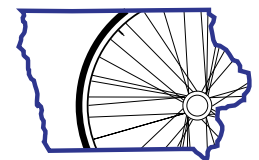
Connections to: Routes 1, 5, 7

- Highland Park Golf Course
- Aquatic Center
- MacNider Campground
- East Park

9 TROLLEY TRAIL ROUTE: West

Connections to: Routes 1, 2, 3, 4

- Clear Lake via Trolley Trail
- Lester Milligan/Ray Rorick Parks and trails
- Connection to Willow Creek Trail
- Downtown Mason City



Iowa Bicycle Coalition

bikeinfo@iowabicyclecoalition.org
www.IowaBicycleCoalition.org

Mason City Bikeways

Phase 1 System

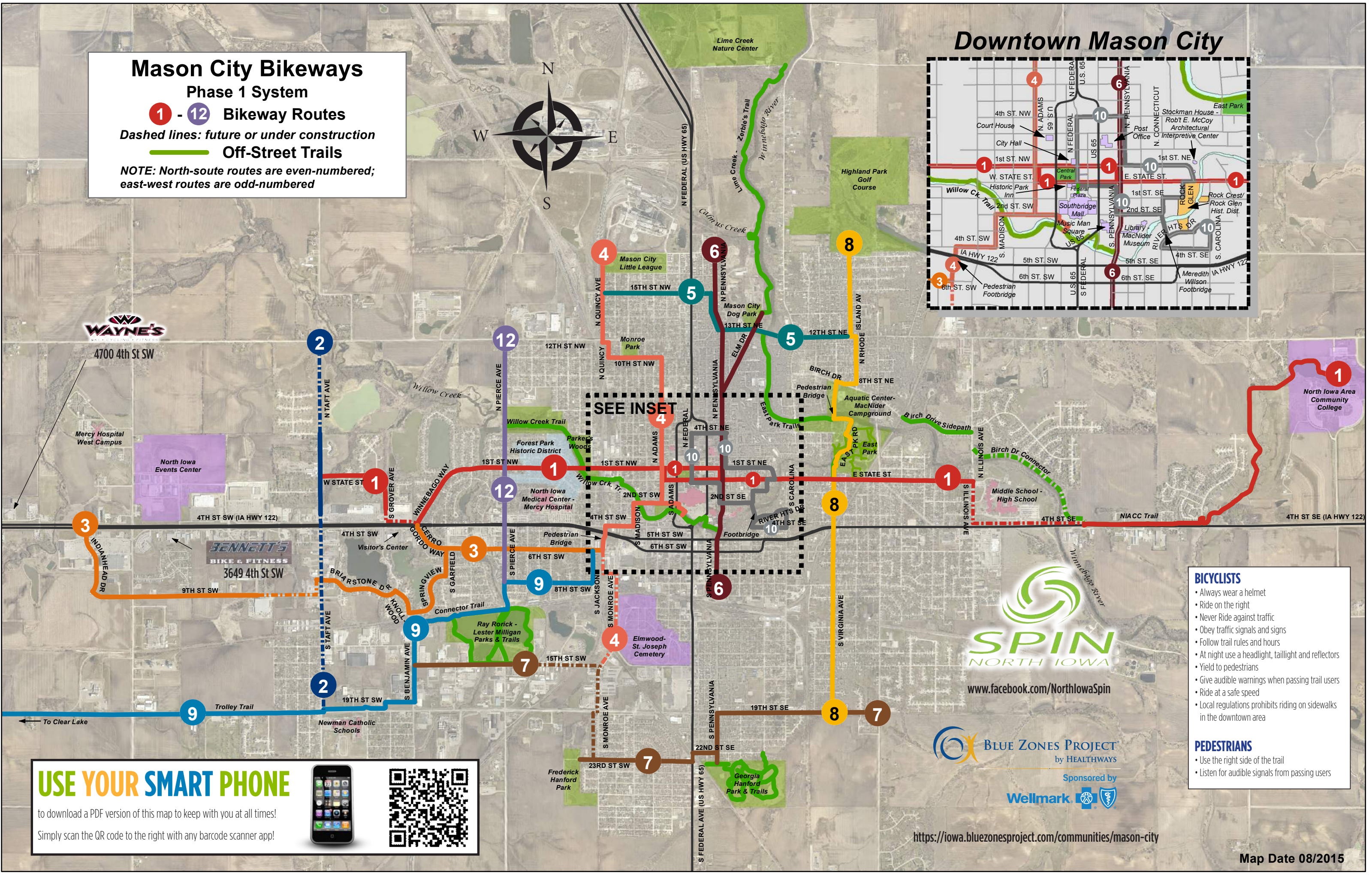
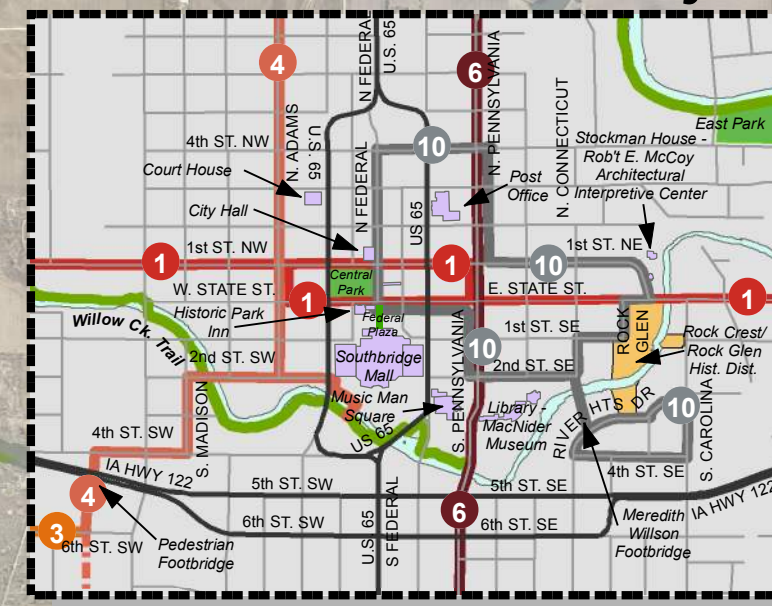
1 - 12 Bikeway Routes

Dashed lines: future or under construction

Off-Street Trails

NOTE: North-south routes are even-numbered;
east-west routes are odd-numbered

Downtown Mason City



BICYCLISTS

- Always wear a helmet
- Ride on the right
- Never Ride against traffic
- Obey traffic signals and signs
- Follow trail rules and hours
- At night use a headlight, taillight and reflectors
- Yield to pedestrians
- Give audible warnings when passing trail users
- Ride at a safe speed
- Local regulations prohibits riding on sidewalks in the downtown area

PEDESTRIANS

- Use the right side of the trail
- Listen for audible signals from passing users

USE YOUR SMART PHONE

to download a PDF version of this map to keep with you at all times!
Simply scan the QR code to the right with any barcode scanner app!

www.facebook.com/NorthIowaSpin

by HEALTHWAYS

Sponsored by

<https://iowa.bluezonesproject.com/communities/mason-city>

Mason City Transit System Routes

West Central Blue Route

Stop Number	Location	Mintues After the Hour
	Central Park	:00 & :30
1	S. Monroe Ave & 1st St SW	:02 & :32
2	Mercy Medical Center	:04 & :34
3	HyVee West Plaza	:08 & :38
4	Target Super Center	:15 & :45
5	Mercy Medical Center West	:20 & :50
6	Wal-Mart	:26 & :56
7	Salvation Army	:30 & :00
8	HyVee West Plaza	:38 & :08
9	Willowbrook Mall	:42 & :12
10	Autumn Park Apartments	:45 & :15
11	Mercy Medical Center	:48 & :18
	Central Park	:52 & :22

North Central Green Route

Stop Number	Location	Minutes After the Hour
	Central Park	:00 & :30
1	Shalom Towers	:02 & :32
2	Fareway	:04 & :34
3	N. Pennsylvania Ave & 13th St NE	:08 & :38
4	Family Dollar	:10 & :40
5	N. Madison Ave & 12th St NW	:12 & :42
6	Hoover Elementary	:15 & :45
7	Community Kitchen	:20 & :50
8	Fareway	:22 & :52
	Central Park	:25 & :55

South Central Orange Route

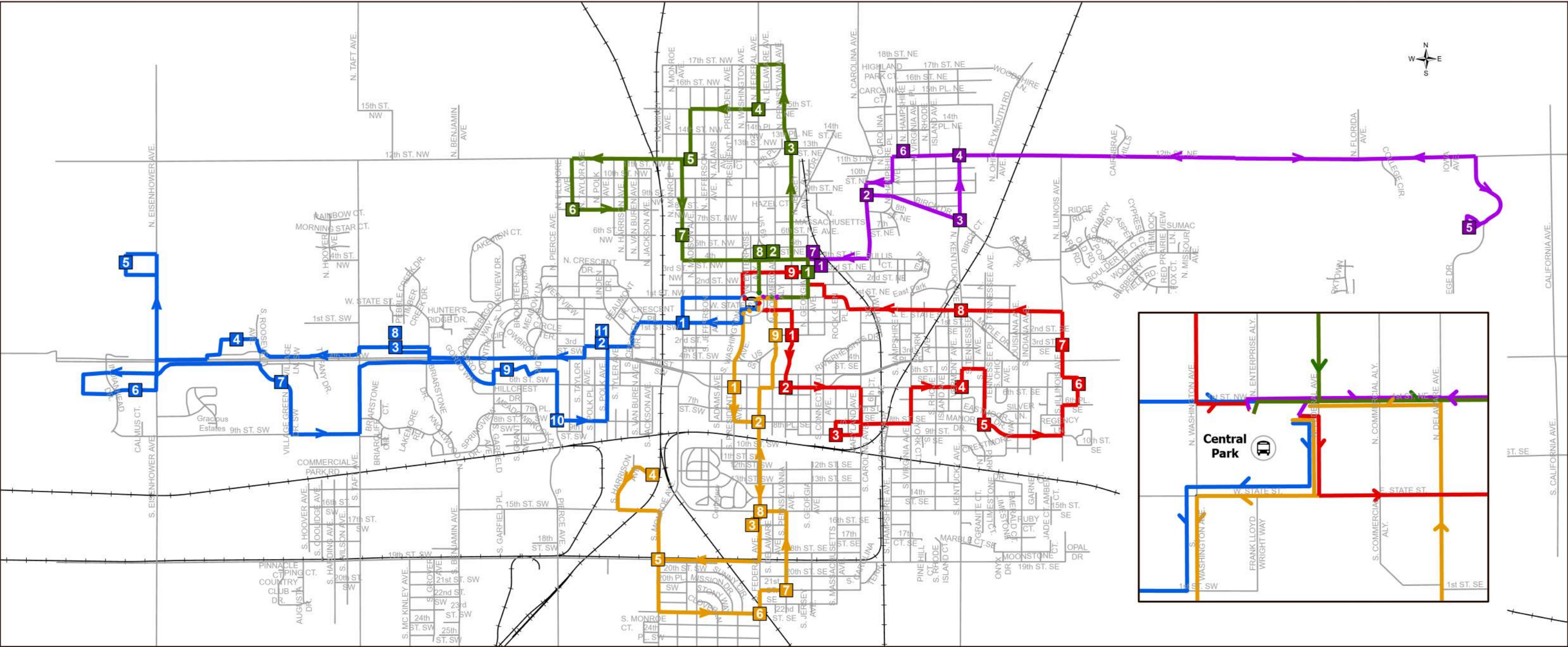
Stop Number	Location	Minutes After the Hour
	Central Park	:00 & :30
1	S. President Ave & 6th St SW	:03 & :33
2	8th St SW & S. Federal Ave	:05 & :35
3	Kwik Star	:06 & :36
4	NIVC	:11 & :41
5	S Monroe Ave & 19th St SW	:14 & :44
6	23rd St SW & S. Federal Ave	:17 & :47
7	21st St SE & S. Pennsylvania Ave	:19 & :49
8	15th St SE & S. Federal Ave	:21 & :51
9	2nd St. SE & S. Delaware Ave	:23 & :53
	Central Park	:25 & :55

East Central Red Route

Stop Number	Location	Minutes After the Hour
	Central Park	:00 & :30
1	S. Pennsylvania Ave & 2nd St SE	:02 & :32
2	S. Pennsylvania Ave & 6th St SE	:04 & :34
3	Department of Human Services	:06 & :36
4	6th St SE & S. Kentucky Ave	:08 & :38
5	S. Tennessee Ave & Manor Dr.	:10 & :40
6	Regency Mall (HyVee East)	:14 & :44
7	Mason City Middle & High School	:16 & :46
8	E. State St & N. Kentucky Ave	:18 & :48
9	3rd St. NE & N. Pennsylvania Ave	:20 & :50
	Central Park	:25 & :55

Northeast Purple Route

Stop Number	Location	Minutes After the Hour
	Central Park	:00 & :30
1	N. Georgia Ave & 4th St NE	:02 & :32
2	N. Carolina & 9th St NE	:04 & :34
3	Birch Dr. & N. Kentucky Ave	:05 & :35
4	N. Kentucky Ave. & 12th St NE	:06 & :36
5	NIACC	:12 & :42
6	12th St. NE & N. Hampshire Ave	:19 & :49
7	4th St. NE & N. Georgia Ave	:23 & :53
	Central Park	:25 & :55



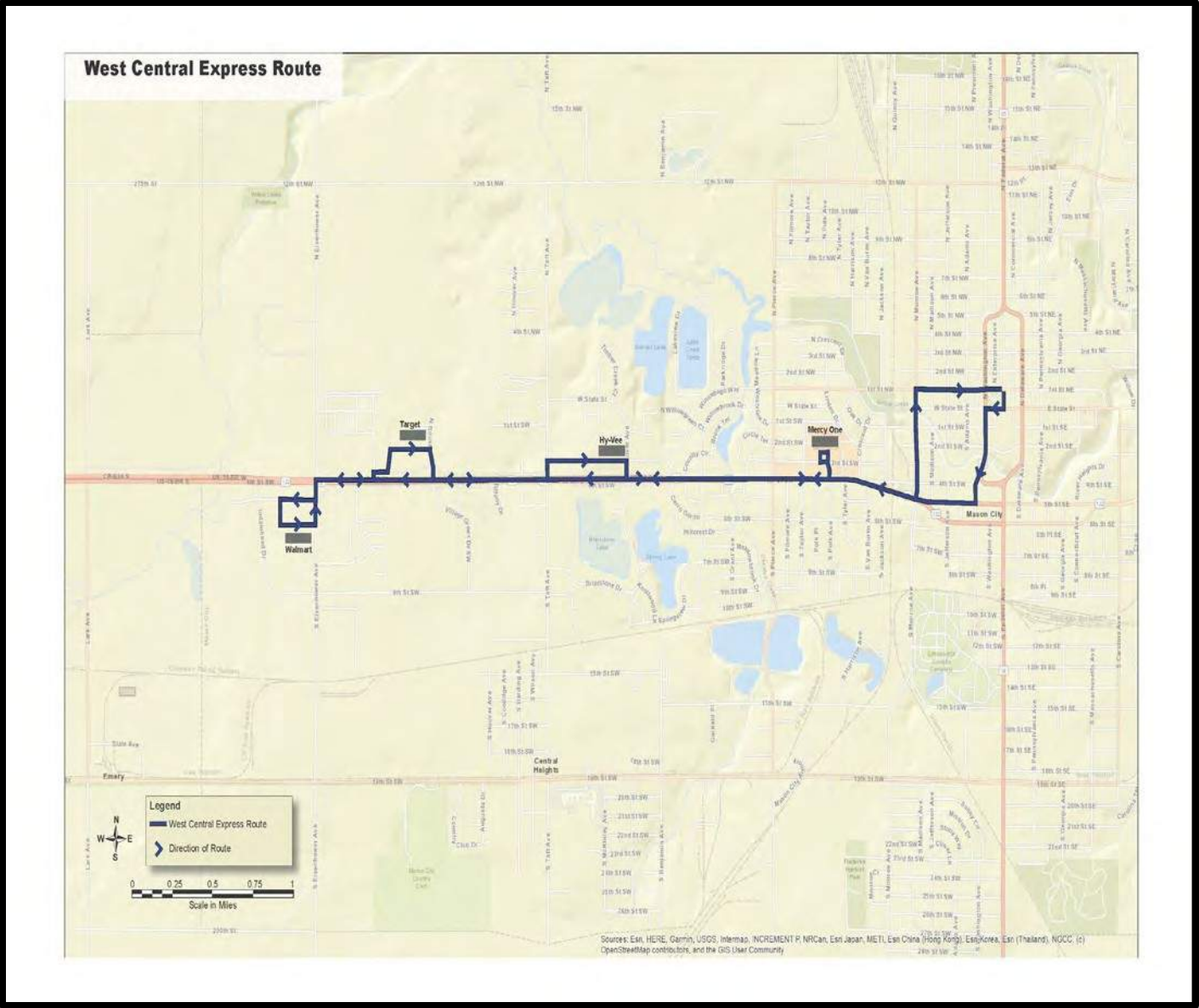
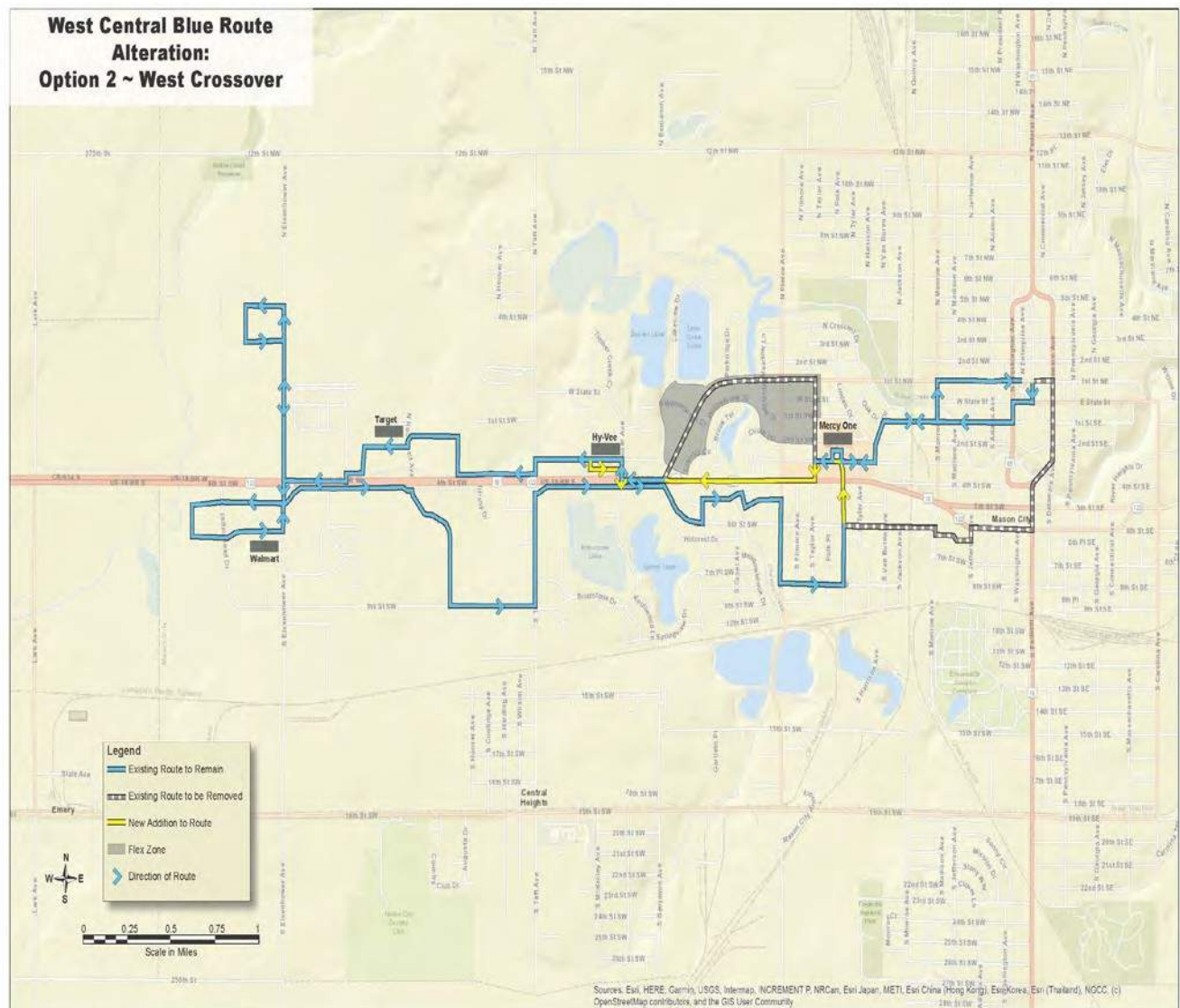
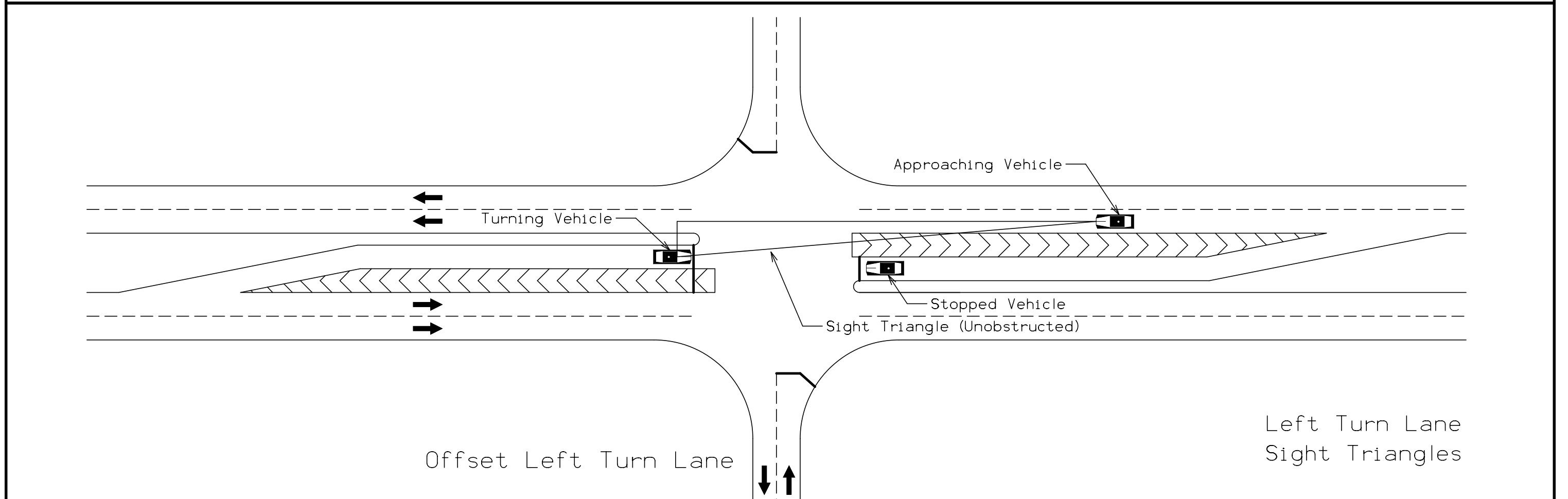
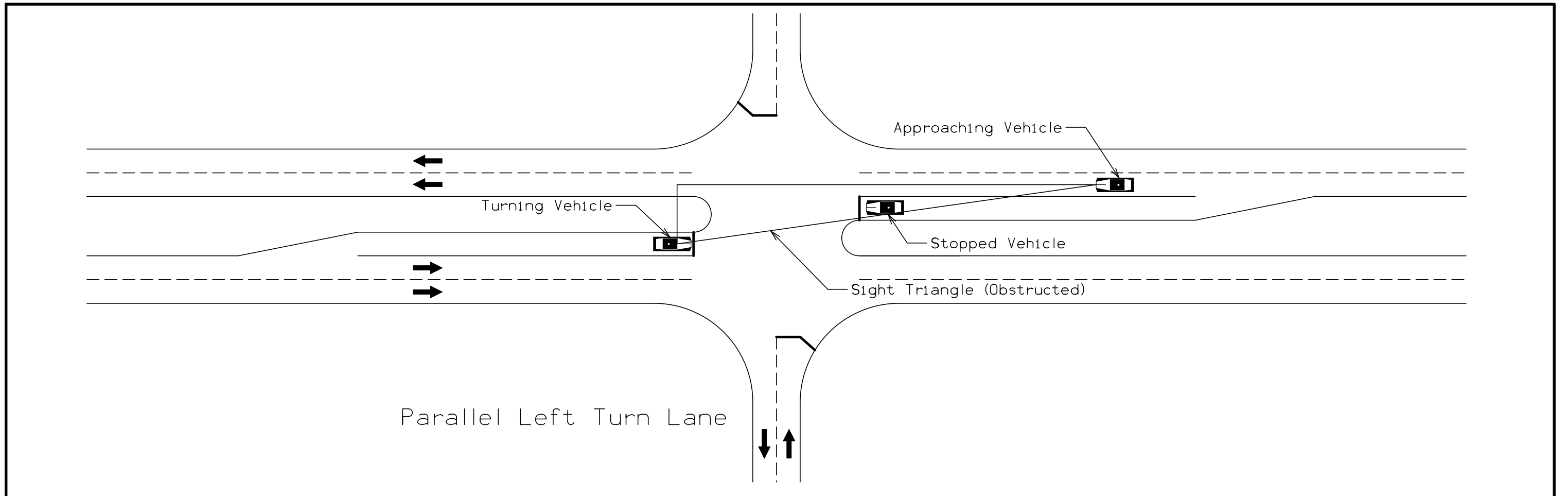


Figure 7.5- Proposed Adjustment to West Central -Crossover





Lark Avenue (S34) and IA 122 - Turning Lane Warrant Analysis (D. Little, 6-7-22)

Reference: Iowa DOT Design Manual Section 6C-5, 2004.

Right-turn lanes:

Warranting criteria:

Right-turn lanes are warranted if right turning traffic flow rate is greater than 30 vehicles per hour measured over a minimum of 15 minutes and either: a) approach volume is greater than 400 vehicles per hour, or b) approach truck traffic volume is greater than 20 vehicles per hour.

Traffic Volumes and Turning Movements:

Available Iowa DOT Turning movements date to 2005, which show a WB volume of 7370 vehicles per day (VPD) and an EB volume of 7664 VPD for an indicated daily traffic (ADT) at the intersection of 15,034 VPD. The Iowa DOT's 2020 *Volume of Traffic on the Primary Road System* gives the average annual daily traffic as being 12,300 VPD, which suggests the current traffic is somewhat lower than what it was in 2005.

For this analysis, it is assumed that the mainline traffic volumes of 2005 are conservative and will be used. Due to recent developments of the Cerro Gordo County Law Enforcement Center and the Engineer's Office/Garage, additional traffic will be added to the 2005 counts for the south leg of the intersection as follows:

- Add 150 trucks per day for the traffic associated with the County Engineer's garage, assume to be evenly distributed – i.e. 50% of the trucks are turning right from EB IA 122, and 50% are turning left from WB IA 122.
- Add 1000 vehicles per day associated with county law enforcement center, assuming all are passenger vehicles. Distribution will be assumed to be 60% turning left from WB IA 122 and 40% turning right from EB IA 122.
- Conservatively, it's assumed that 15% of these added volumes will occur in the peak hour.

Warrants: WB Right Turn Lane

WB Right-Turning Traffic = 1 vehicle in peak hour (2005 counts) unmodified by recent developments as this turn is onto the north leg – **Warrant not met.**

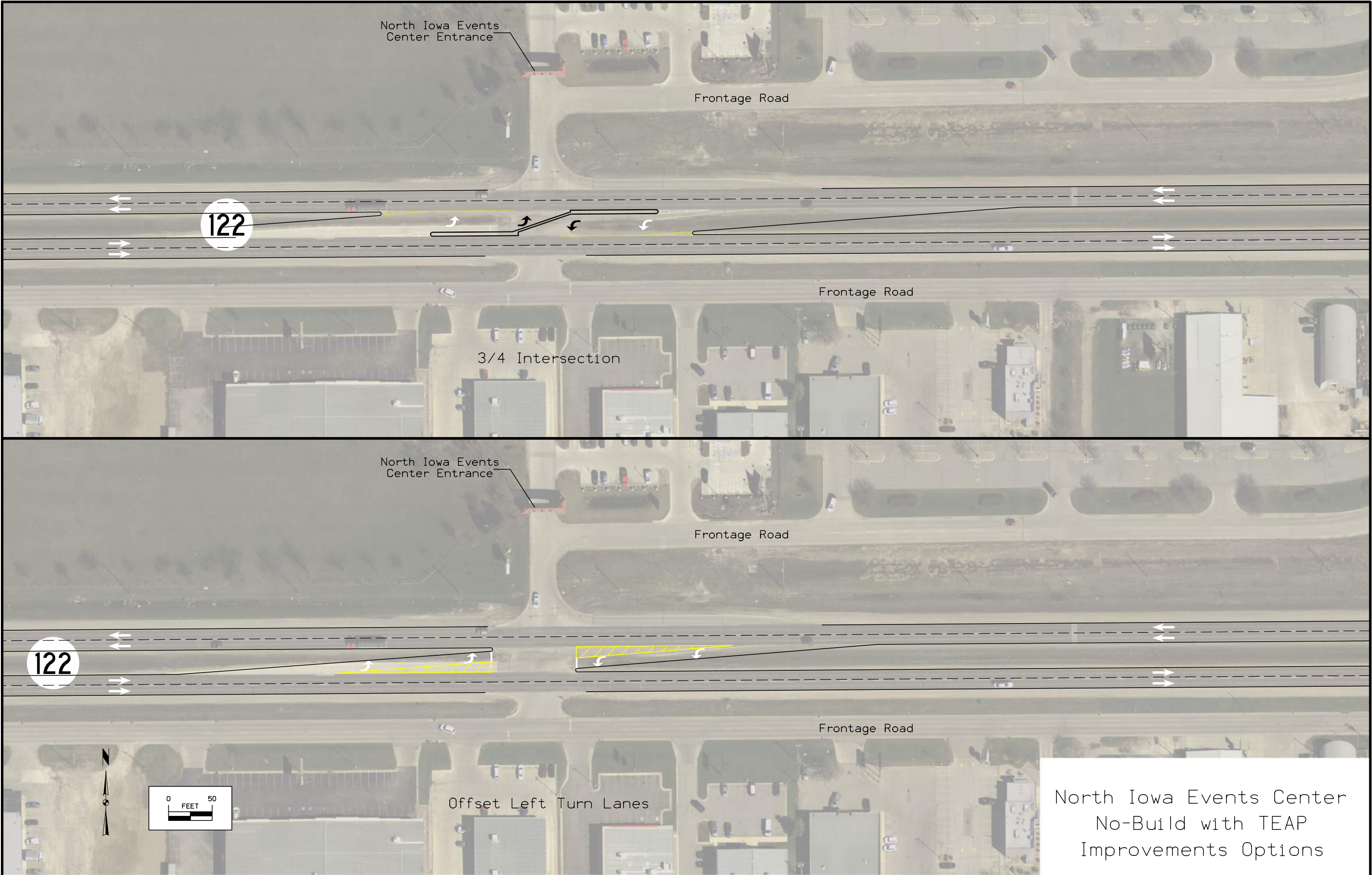
Warrants: EB Right Turn Lane

EB Right-Turning Traffic = 21 VPH peak hour + $0.15 \times 0.5 \times 150$ (allowance for Engineer) + $0.15 \times 0.40 \times 1000$ (Jail) = 32 VPH peak hour. **Warrant minimally met.**

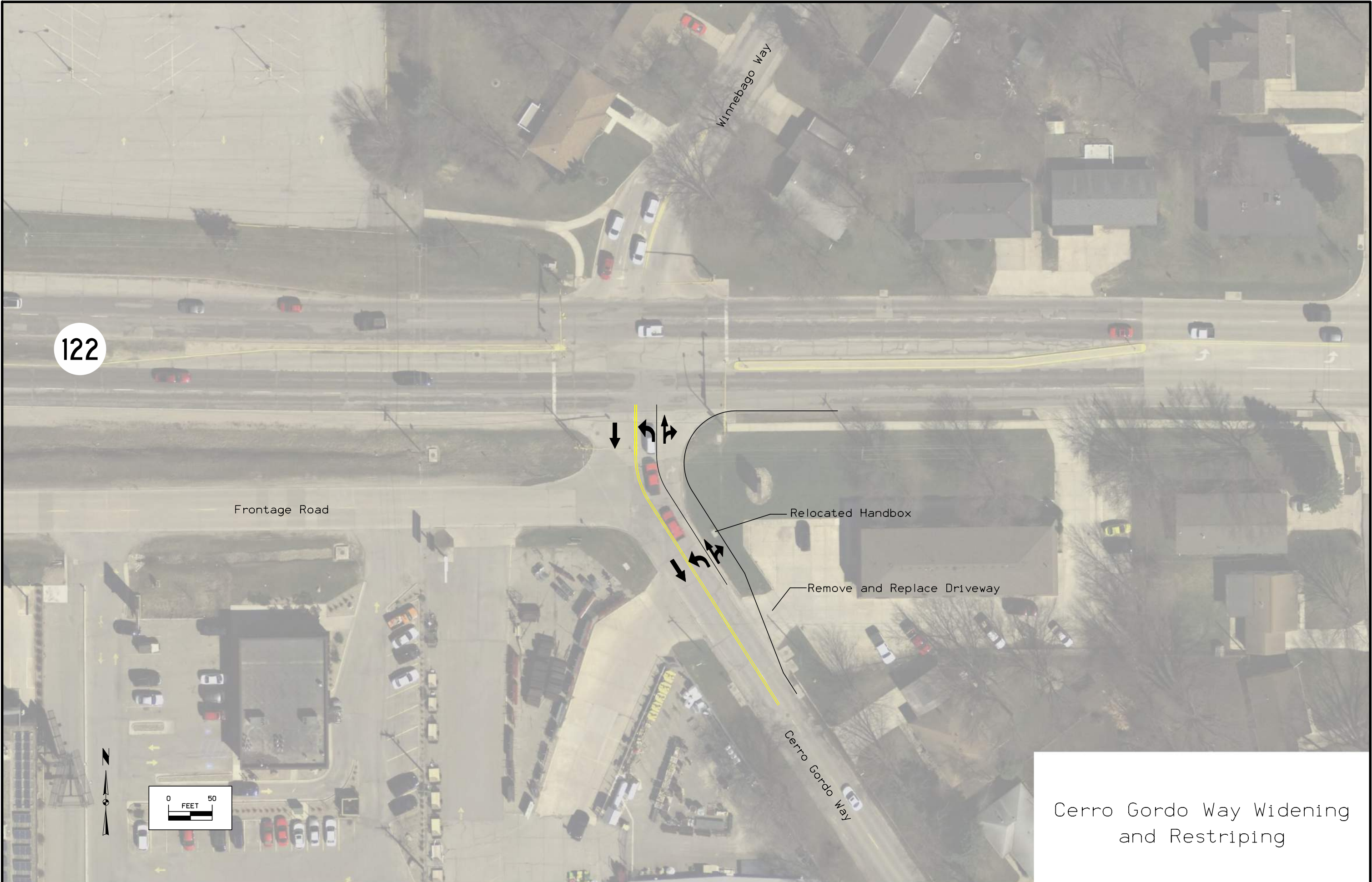
And EB approach volume = 652 VPH (2005 counts) > 400 VPH – **Warrant met**

Or EB approach truck traffic = 44 trucks (2005 counts without modification for developments) > 20 VPH – **Warrant Met**

Left-Turn lanes already exist at this intersection, so warrants are not considered for this intersection.



North Iowa Events Center
No-Build with TEAP
Improvements Options



Cerro Gordo Way Widening
and Restriping

ATTENDANCE ROLL
PUBLIC INFORMATION MEETING
FOR
IA 122 Corridor Feasibility Study
Mason City, Iowa

DATE: July 13, 2022

TIME: 5:30 p.m.

Mason City Public Library – Mason City Room

NAME / E-MAIL	ADDRESS
Maureen Way	843 7th St SE
Nancy Z. Nelson	315 Willowbrook Dr.
Pat Otto	2800 12th St NE
Rachelle L. McLaughlin	1402 S. Delaware: Mason City
Jerome B. Hogeman	630 Briarstone Dr #206 M.C.
Cheryl Faby	78 Lakeview Dr. MC
Marvin Katinin	252 3rd NW MC
LeAnne Clausen ^{de} Montes	502 S Fillmore Ave MC
Tancy Kozman	630 Briarstone Dr. #206 MC
Amanda Ragan	361 S. Penn 1-D M.C.
Rich Alverson	819 S. Fillmore, M.C.
John Alverson	819 S. Fillmore Ave.
Scott K	1104 1st St SW MC
Jim Karver	17 N. L. Langren Ct MC
Jim RAGAN	361 S. Penn M.C.
Daniel Kirchbride	
R. B. Bunn	2721 Rainbow Court
Will Symonds	Will Symonds@gmail.com 1021 N Pierce

ATTENDANCE ROLL
PUBLIC INFORMATION MEETING
FOR
IA 122 Corridor Feasibility Study
Mason City, Iowa

DATE: July 13, 2022

TIME: 5:30 p.m.

Mason City Public Library – Mason City Room

NAME / E-MAIL	ADDRESS
DOUG BROWN doug.brown7466@gmail	53 W. WILLOW GREEN CT MC
Mark & Nelson	320 1st St. NE #109 MC
Ji Fanni	1519 ~ Adams
Steve Meyer	38 Country Circle, MC
Jessie Hardy	2 Old Farm Rd MC
Steven Van Steenhuyse	904 6th St SE MC
Shirleen Marzen	923 S Gayfield Ave MC
Alan Hansen	380 S. Yorktown Dr
PAUL & SANDY BINGSTROM	37 RIVER HTS DR
Susan Lebecke	2260 Country Club Dr
Angie Weterman	4275-12th St NE MC
Lloyd Vellmer	353 W. Willowbrook Dr
Pat & Cinda Gurdien	1401 S. Louisiana Ave.
Craig Clark	2821 1st SW
Ann Harbo	15833 N St.
Nancy Larry Gallagher	173 Lakewood Dr.
Dean & Marilyn Rasmussen	172 Lakewood Dr.

ATTENDANCE ROLL
PUBLIC INFORMATION MEETING FOR IA 122 Corridor Feasibility Study Mason City, Iowa
DATE: July 13, 2022 TIME: 5:30 p.m. Mason City Public Library – Mason City Room

NAME / E-MAIL	ADDRESS
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2	
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Gene Anderson aggetheh@msn.com 1403 South Kentucky Ave Mendenhall LA.

T. Tuzencki tuzencki@gmail.com

John Jazecny	Jazecny John
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Todd GASH	10631 285 th St MC
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From (collected)	1944 Aug 27
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May 1942	May 1942
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Country	Year	Value
Algeria	2010	0.00
Algeria	2011	0.00
Algeria	2012	0.00
Algeria	2013	0.00
Algeria	2014	0.00
Algeria	2015	0.00
Algeria	2016	0.00
Algeria	2017	0.00
Algeria	2018	0.00
Algeria	2019	0.00
Algeria	2020	0.00
Algeria	2021	0.00
Algeria	2022	0.00
Algeria	2023	0.00
Algeria	2024	0.00
Algeria	2025	0.00
Algeria	2026	0.00
Algeria	2027	0.00
Algeria	2028	0.00
Algeria	2029	0.00
Algeria	2030	0.00
Algeria	2031	0.00
Algeria	2032	0.00
Algeria	2033	0.00
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Algeria	2119	0.00
Algeria	2120	0.00
Algeria	2121	0.00
Algeria	2122	

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[illegible]

COMMENT FORM
PUBLIC INFORMATION MEETING
FOR
IA 122 Corridor Feasibility Study
Mason City, Iowa

DATE: July 13, 2022

TIME: 5:30 p.m.

Mason City Public Library - Mason City Room

Name and Address

Marlys Nelson 320 1st St. NE #109 Mason City.

Comment: I am a senior citizen. The reason I live in Mason City is so I can get to the shopping centers & grocery store. Most of these are now either east or west in Mason City.

I have experienced the roundabouts in Cedar Falls and it was a total night mare. The speed was fast and cars were coming in all directions. This is very confusing.

I live at Prairie Place and most of the residences are older drivers!

I was very disappointed to see the notice for this meeting was in the newspaper the same day as the meeting. It said that it would be an open forum format. I thought we would hear pros & cons regarding this proposal.

COMMENT FORM

PUBLIC INFORMATION MEETING
FOR
IA 122 Corridor Feasibility Study
Mason City, Iowa

DATE: July 13, 2022

TIME: 5:30 p.m.

Mason City Public Library – Mason City Room

Name and Address

Steven Van Steenburg - 904 6th St SE

Comment: Roundabouts - yes.

They are safer

They are ~~not~~ difficult to navigate

They move traffic much more efficiently

COMMENT FORM
PUBLIC INFORMATION MEETING
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Mason City, Iowa

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Name and Address

Comment:

Not a good idea. The age of the population in Mason City is average 56 yr. + Older. They will have a hard time figuring this out in the short period of time it takes to negotiate the round about as traffic will be in constant motion. Consider grain trucks, & semi trucks. Their length is a problem.

It is cheaper to change a few turn signals than to put in these roundabouts. People understand traffic lights. Insurance companies understand roundabouts.

COMMENT FORM

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Mason City, Iowa

DATE: July 13, 2022

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Mason City Public Library – Mason City Room

Name and Address

Jim Karkos

Comment:

I'm ~~still~~ hesitant as to how well our city population as well as the extensive number of persons coming for ~~commercial~~ commercial business to our community, will safely navigate roundabouts.

COMMENT FORM

PUBLIC INFORMATION MEETING
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Mason City, Iowa

DATE: July 13, 2022

TIME: 5:30 p.m.

Mason City Public Library – Mason City Room

Name and Address

Robert Buesing

2771 Rainbow Cir Mason City

Comment:

I believe the Best design is with
the Roundabouts.

There are way to many cars coming
at you. Ones trying to beat the lights.
Cars coming out from the Frontage Roads
into Traffic and those exiting on the
Frontage Roads.

I do recomend you should have
35mph Speed limit the entire Length
Once you past that now it goes
to 45mph - ~~35~~ That speed will
make entrance into the roundabouts
dangerous

COMMENT FORM

PUBLIC INFORMATION MEETING
FOR
IA 122 Corridor Feasibility Study
Mason City, Iowa

DATE: July 13, 2022

TIME: 5:30 p.m.

Mason City Public Library – Mason City Room

Name and Address

TODD CASH 10631 285th ST MC 50401-9114

Comment:

ROUNDABOUTS!!!

Get rid of as many signals as possible

Flash the yellow left arrows at all intersections in MC

COMMENT FORM

PUBLIC INFORMATION MEETING
FOR
IA 122 Corridor Feasibility Study
Mason City, Iowa

DATE: July 13, 2022

TIME: 5:30 p.m.

Mason City Public Library – Mason City Room

Name and Address

DOUG BROWN 53 N. WILLOWGREEN CT
M.C.

Comment:

I AM AN OWNER OF PAPA'S &
PRIME WINE, I AM WORRIED
THE IMPROVEMENTS WILL HURT
BUSINESS DURING CONSTRUCTION.
ALSO THE IMPROVEMENTS IN FRONT
OF MY PROPERTY DOES NOT HELP
IMPROVE TRAFFIC FLOW BY MY
OPINION.

COMMENT FORM
PUBLIC INFORMATION MEETING
FOR
IA 122 Corridor Feasibility Study
Mason City, Iowa

DATE: July 13, 2022

TIME: 5:30 p.m.

Mason City Public Library – Mason City Room

Name and Address

LeAnne Clausen de Montes

Comment:

I am equally happy with either the roundabout or signal option, or a combination of both.

I am most concerned (and I'm glad to see the red pathways) with safe pedestrian and bicycle access along + across this stretch of highway - for seniors in Briarstone and Pebble Creek out walking, for employees of the businesses who must cross traffic (I was once one myself back in Kmart days), for parents with young children in strollers, for clients of Prairie Ridge or inmates of the jail, for tourists crossing between hotels, restaurants + shopping. So far I'm very pleased, and just hope crosswalk signage will be ample. Thanks!

(Also please consider extending a foot/bike trail to the airport + bus station) as an amenity as well as a necessity

COMMENT FORM
PUBLIC INFORMATION MEETING
FOR
IA 122 Corridor Feasibility Study
Mason City, Iowa

DATE: July 13, 2022

TIME: 5:30 p.m.

Mason City Public Library – Mason City Room

Name and Address

Rachelle L McLaughlin

Comment:

1402 S. Delaware MC

No Rounda Bouts.

Too many older people that
don't drive well here anyway.

I also had a friend killed
on one by a semi - deal
instantly.

COMMENT FORM
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Name and Address

Craig Clark 7881 1st SE.

Comment:

I love the round about plan. It's the future. I live in Florida in the winter, they are all over the place. Traffic flows great.