Le Sueur County, MN

Tuesday, February 7, 2017

Board Meeting

Item 9

10:05 a.m. Darrell Pettis, County Administrator / Engineer

RE: CR29 Information

RE: Le Sueur - Rice County Joint Ditch 5 Appointment Order

RE: Joyride

RE: Out of State Travel Request: NACE Conference, April 9-13, 2017 in Cinncinnati, OH

RE: RFP Update

RE: Public Hearings - CD23, CD43, CD44 on April 18th, 2017

Staff Contact:

Minnesota Department of Transportation

Memo

District 7 – Mankato and Windom
2151 Basset Drive
Mankato, MN 56001-5302

Office Tel: (507) 304-6100
Fax: (507) 304-6119

TO: Darrell Pettis
Le Sueur County Administrator

FROM: Josh Gustafson, EIT
District 7 Traffic
(507) 304 6206
josh.gustafson@state.mn.us

CONCUR: Scott Thompson, PE
District Traffic Engineer
(507) 304 6156
scott.thompson@state.mn.us

DATE: December 1, 2016

SUBJECT: Speed Zones on C.S.A.H. 29 in New Prague, Le Sueur County

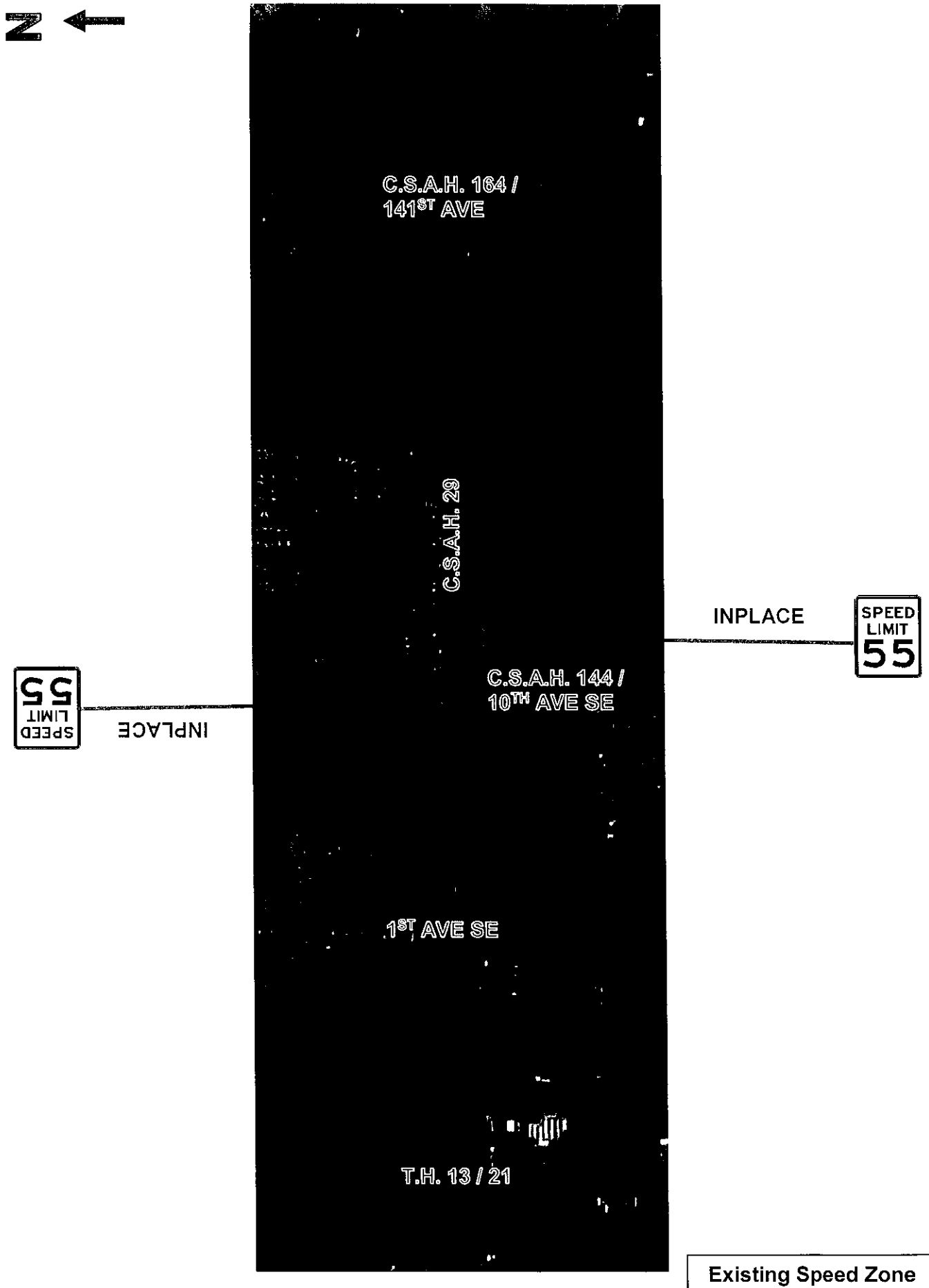
As a result of the request dated September 12, 2016, District 7 staff completed a traffic engineering study to determine the acceptable speed for C.S.A.H. 29 through the City of New Prague. The request was made concerning traffic speeds between T.H. 13 / T.H. 21 and 141st Avenue. Development along C.S.A.H. 29 in the last 10 years has increased traffic volumes, leading to a potential safety issue.

The results of the traffic study do not support adjusting the existing speed limits. Vehicle travel speeds collected during a one hour period suggest that vehicles are comfortable traveling at a 55 mph speed limit. However, the study area has a high crash rate including a fatality. At the intersection of C.S.A.H. 29 and 10th Avenue, the ADT's are 2,300 and 2,900 respectively. Because traffic volumes are similar on both major and minor approaches, MnDOT would recommend converting the intersection to an all way stop. As an alternative, this intersection may be suitable for a mini-roundabout. Both options would improve safety at the intersection, and balance the intersection (at present, the higher volume approaches are stop controlled). The intersection of C.S.A.H. 29 and 141st Avenue, is not recommended for an all way stop due to the unique geometry of the intersection. Consideration for "CROSS TRAFFIC DOES NOT STOP" signs and stop bars painted parallel to C.S.A.H. 29 should be given. Due to the number of run off the road incidents, the fatality, and in consideration of the residential neighborhood, MnDOT recommends installing shoulder sinusoidal rumble strips. Sinusoidal rumble would sufficiently warn motorist of their impending roadway departure while minimizing nuisance noise of nearby residents.

The results of the completed traffic study are enclosed for your review.

CC: Gordy Regenscheid, PE – MnDOT District 7 Assistant District Engineer- State Aid

Chad Fowlds, PE – MnDOT District 7 Assistant District Engineer- Program Delivery



Existing Speed Zone Signing

SPEED ZONE EVALUATION

DATE October 27th, 2016

ROAD C.S.A.H. 29

APPROX. LENGTH OF STUDY 2 MILES

FROM T.H. 13 / T.H. 21 TO 141st Ave.

		SPEED CHECK LOCATIONS			
PREVAILING VEHICLE SPEEDS		1	2	3	
85th Percentile Speeds	E.B.	55	58	59	
	W.B.	53	57	59	
10 MPH Pace	E.B.	41 - 50	49 – 58	50 - 59	
	W.B.	45 - 54	49 – 58	52 - 61	
% In Pace	E.B.	68	72	73	
	W.B.	71	82	85	
Average Test Run Speeds	E.B.	N/A	N/A	N/A	
	W.B.	N/A	N/A	N/A	
Existing Speed Limit		55	55	55	
Design Speed		N/A	N/A	N/A	

MAXIMUM COMFORTABLE SPEED ON CURVES: N/A

SPACING OF INTERSECTIONS: See Map

ROADWAY SURFACE TYPE: Bituminous SURFACE WIDTH: Two Lane Undivided

SHOULDER TYPE: Bituminous SHOULDER WIDTH: Var'

SIGHT DISTANCE RESTRICTION: None

LAND USE ADJACENT TO ROADWAY: Residential

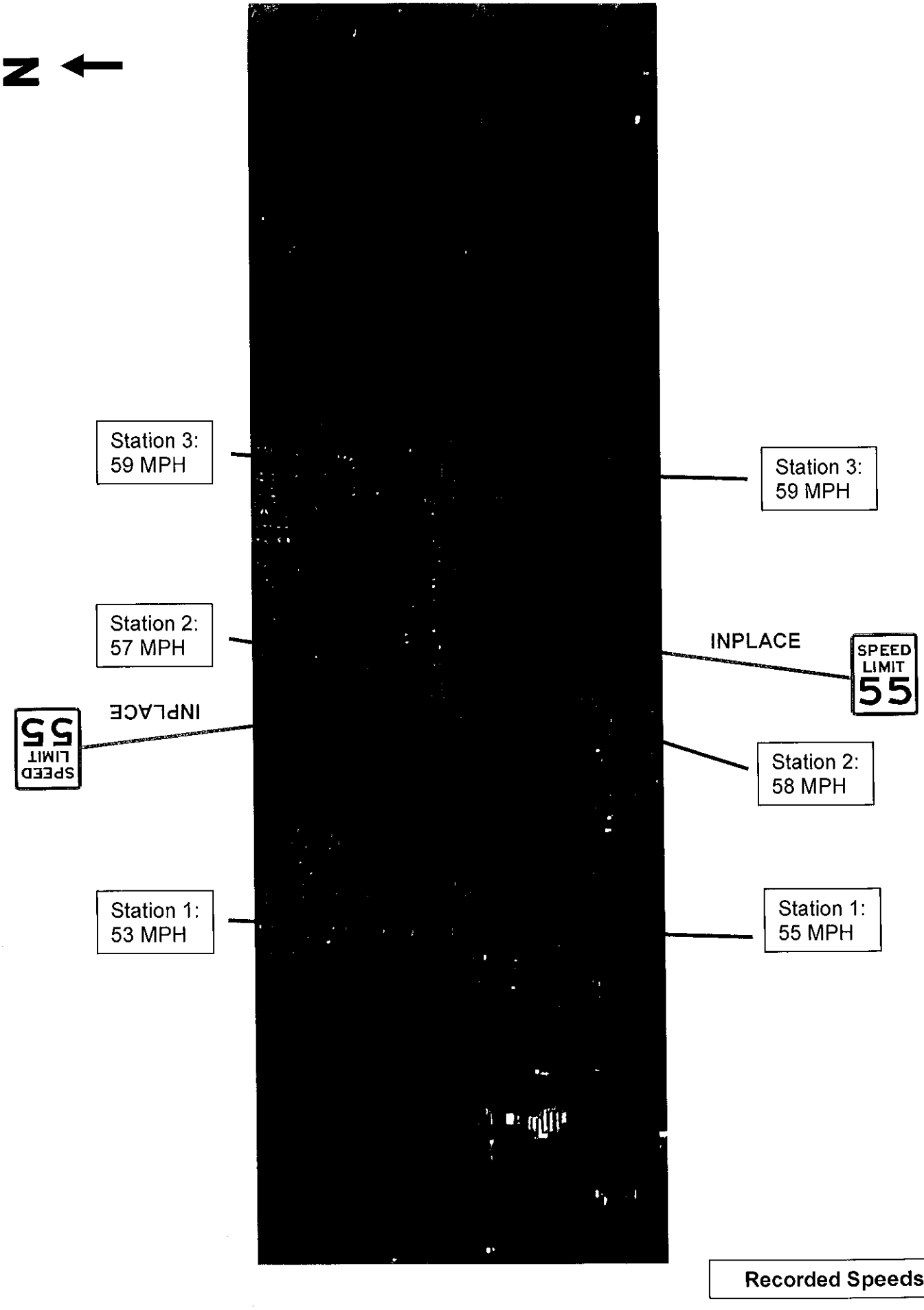
CRASH EXPERIENCE (if available)

CRASH STUDY PERIOD: 2006-2015 NUMBER OF CRASHES: 31

TRAFFIC CHARACTERISTICS AND CONTROL:

ADT: 2300 (2014)

% COMMERCIAL: N/A

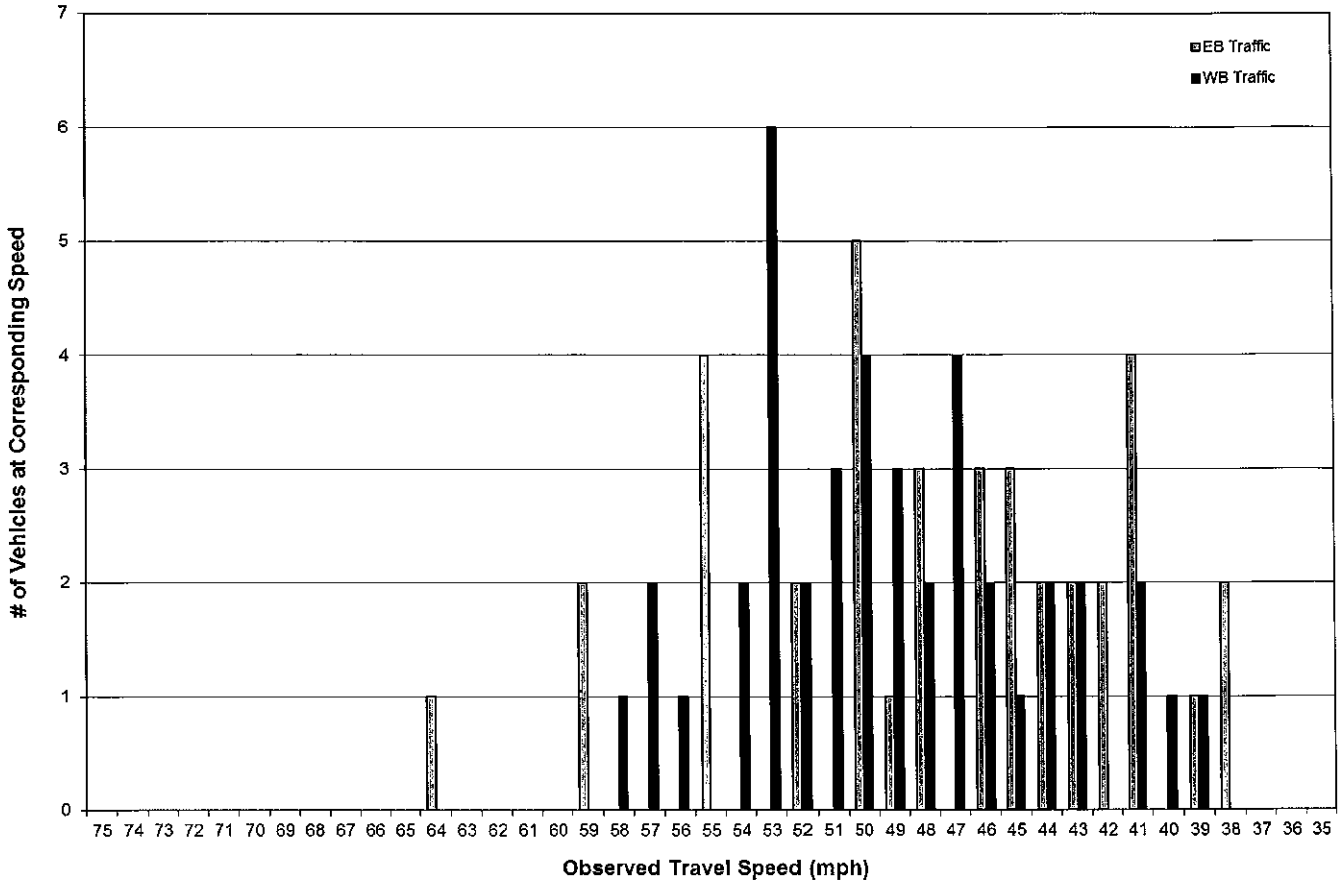

N
Station 3:
59 MPH
Station 2:
57 MPH
INPLACE
SPEED
LIMIT
55
Station 1:
53 MPH
Station 3:
59 MPH
INPLACE
SPEED
LIMIT
55
Station 2:
58 MPH
Station 1:
55 MPH
Recorded Speeds

FIELD SPEED SURVEY SUMMARY

Road # CSAH 29 | Zone 55 MPH | Location 400' E of 1st Ave facing East
Ref. Pt. 1 | Time 10:15
County 40 - Le Sueur | Weather Clear | Road Type Bit
Date 10/27/2016 | Machine | EB: 85th %ile 55 MPH | Pace 41 to 50
Day Thursday | Observer(s) JJG | WB: 85th %ile 53 MPH | Pace 45 to 54

PASSENGER VEHICLES

SPEED (mph)	EAST BOUND				SPEED (mph)	WEST BOUND			
	INDIVIDUAL VEHICLES		ACCUMULATED VEH.			INDIVIDUAL VEHICLES		ACCUMULATED VEH.	
	# of vehicles	% vehicles	# of vehicles	% vehicles		# of vehicles	% vehicles	# of vehicles	% vehicles
75		0.0%	37	100%	75		0.0%	41	100%
74		0.0%	37	100%	74		0.0%	41	100%
73		0.0%	37	100%	73		0.0%	41	100%
72		0.0%	37	100%	72		0.0%	41	100%
71		0.0%	37	100%	71		0.0%	41	100%
70		0.0%	37	100%	70		0.0%	41	100%
69		0.0%	37	100%	69		0.0%	41	100%
68		0.0%	37	100%	68		0.0%	41	100%
67		0.0%	37	100%	67		0.0%	41	100%
66		0.0%	37	100%	66		0.0%	41	100%
65		0.0%	37	100%	65		0.0%	41	100%
64	1	2.7%	37	100%	64		0.0%	41	100%
63		0.0%	36	97%	63		0.0%	41	100%
62		0.0%	36	97%	62		0.0%	41	100%
61		0.0%	36	97%	61		0.0%	41	100%
60		0.0%	36	97%	60		0.0%	41	100%
59	2	5.4%	36	97%	59		0.0%	41	100%
58		0.0%	34	92%	58	1	2.4%	41	100%
57		0.0%	34	92%	57	2	4.9%	40	98%
56		0.0%	34	92%	56	1	2.4%	38	93%
55	4	10.8%	34	92%	55		0.0%	37	90%
54		0.0%	30	81%	54	2	4.9%	37	90%
53		0.0%	30	81%	53	6	14.6%	35	85%
52	2	5.4%	30	81%	52	2	4.9%	29	71%
51		0.0%	28	76%	51	3	7.3%	27	66%
50	5	13.5%	28	76%	50	4	9.8%	24	59%
49	1	2.7%	23	62%	49	3	7.3%	20	49%
48	3	8.1%	22	59%	48	2	4.9%	17	41%
47		0.0%	19	51%	47	4	9.8%	15	37%
46	3	8.1%	19	51%	46	2	4.9%	11	27%
45	3	8.1%	16	43%	45	1	2.4%	9	22%
44	2	5.4%	13	35%	44	2	4.9%	8	20%
43	2	5.4%	11	30%	43	2	4.9%	6	15%
42	2	5.4%	9	24%	42		0.0%	4	10%
41	4	10.8%	7	19%	41	2	4.9%	4	10%
40		0.0%	3	8%	40	1	2.4%	2	5%
39	1	2.7%	3	8%	39	1	2.4%	1	2%
38	2	5.4%	2	5%	38		0.0%	0	0%
37		0.0%	0	0%	37		0.0%	0	0%
36		0.0%	0	0%	36		0.0%	0	0%
35		0.0%	0	0%	35		0.0%	0	0%


EB Traffic
WB Traffic
# of Vehicles at Corresponding Speed
0
1
2
3
4
5
6
7
75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35
Observed Travel Speed (mph)

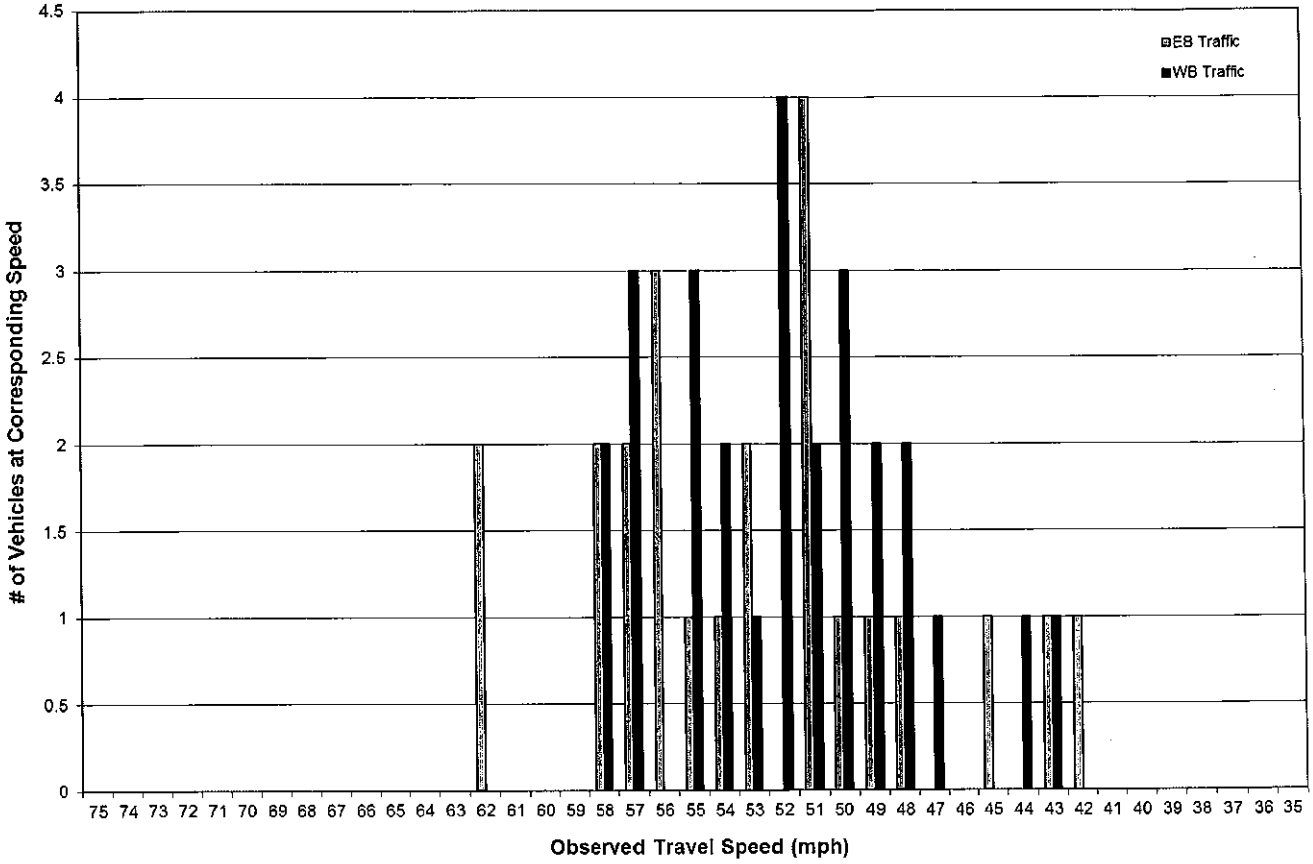
Station 1

FIELD SPEED SURVEY SUMMARY

Road # CSAH 29 | Zone 55 MPH | Location 100' E of 10th Ave facing west
Ref. Pt. 2 | Time 12:30
County 40 - Le Sueur | Weather Clear | Road Type Bit
Date 10/27/2016 | Machine | EB: 85th %ile 58 MPH | Pace 49 to 58
Day Thursday | Observer(s) JJG | WB: 85th %ile 57 MPH | Pace 49 to 58

PASSENGER VEHICLES

SPEED (mph)	EAST BOUND				SPEED (mph)	WEST BOUND			
	INDIVIDUAL VEHICLES		ACCUMULATED VEH.			INDIVIDUAL VEHICLES		ACCUMULATED VEH.	
	# of vehicles	% vehicles	# of vehicles	% vehicles		# of vehicles	% vehicles	# of vehicles	% vehicles
75		0.0%	23	100%	75		0.0%	27	100%
74		0.0%	23	100%	74		0.0%	27	100%
73		0.0%	23	100%	73		0.0%	27	100%
72		0.0%	23	100%	72		0.0%	27	100%
71		0.0%	23	100%	71		0.0%	27	100%
70		0.0%	23	100%	70		0.0%	27	100%
69		0.0%	23	100%	69		0.0%	27	100%
68		0.0%	23	100%	68		0.0%	27	100%
67		0.0%	23	100%	67		0.0%	27	100%
66		0.0%	23	100%	66		0.0%	27	100%
65		0.0%	23	100%	65		0.0%	27	100%
64		0.0%	23	100%	64		0.0%	27	100%
63		0.0%	23	100%	63		0.0%	27	100%
62	2	8.7%	23	100%	62		0.0%	27	100%
61		0.0%	21	91%	61		0.0%	27	100%
60		0.0%	21	91%	60		0.0%	27	100%
59		0.0%	21	91%	59		0.0%	27	100%
58	2	8.7%	21	91%	58	2	7.4%	27	100%
57	2	8.7%	19	83%	57	3	11.1%	25	93%
56	3	13.0%	17	74%	56		0.0%	22	81%
55	1	4.3%	14	61%	55	3	11.1%	22	81%
54	1	4.3%	13	57%	54	2	7.4%	19	70%
53	2	8.7%	12	52%	53	1	3.7%	17	63%
52		0.0%	10	43%	52	4	14.8%	16	59%
51	4	17.4%	10	43%	51	2	7.4%	12	44%
50	1	4.3%	6	26%	50	3	11.1%	10	37%
49	1	4.3%	5	22%	49	2	7.4%	7	26%
48	1	4.3%	4	17%	48	2	7.4%	5	19%
47		0.0%	3	13%	47	1	3.7%	3	11%
46		0.0%	3	13%	46		0.0%	2	7%
45	1	4.3%	3	13%	45		0.0%	2	7%
44		0.0%	2	9%	44	1	3.7%	2	7%
43	1	4.3%	2	9%	43	1	3.7%	1	4%
42	1	4.3%	1	4%	42		0.0%	0	0%
41		0.0%	0	0%	41		0.0%	0	0%
40		0.0%	0	0%	40		0.0%	0	0%
39		0.0%	0	0%	39		0.0%	0	0%
38		0.0%	0	0%	38		0.0%	0	0%
37		0.0%	0	0%	37		0.0%	0	0%
36		0.0%	0	0%	36		0.0%	0	0%
35		0.0%	0	0%	35		0.0%	0	0%


EB Traffic
WB Traffic
# of Vehicles at Corresponding Speed
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35
Observed Travel Speed (mph)

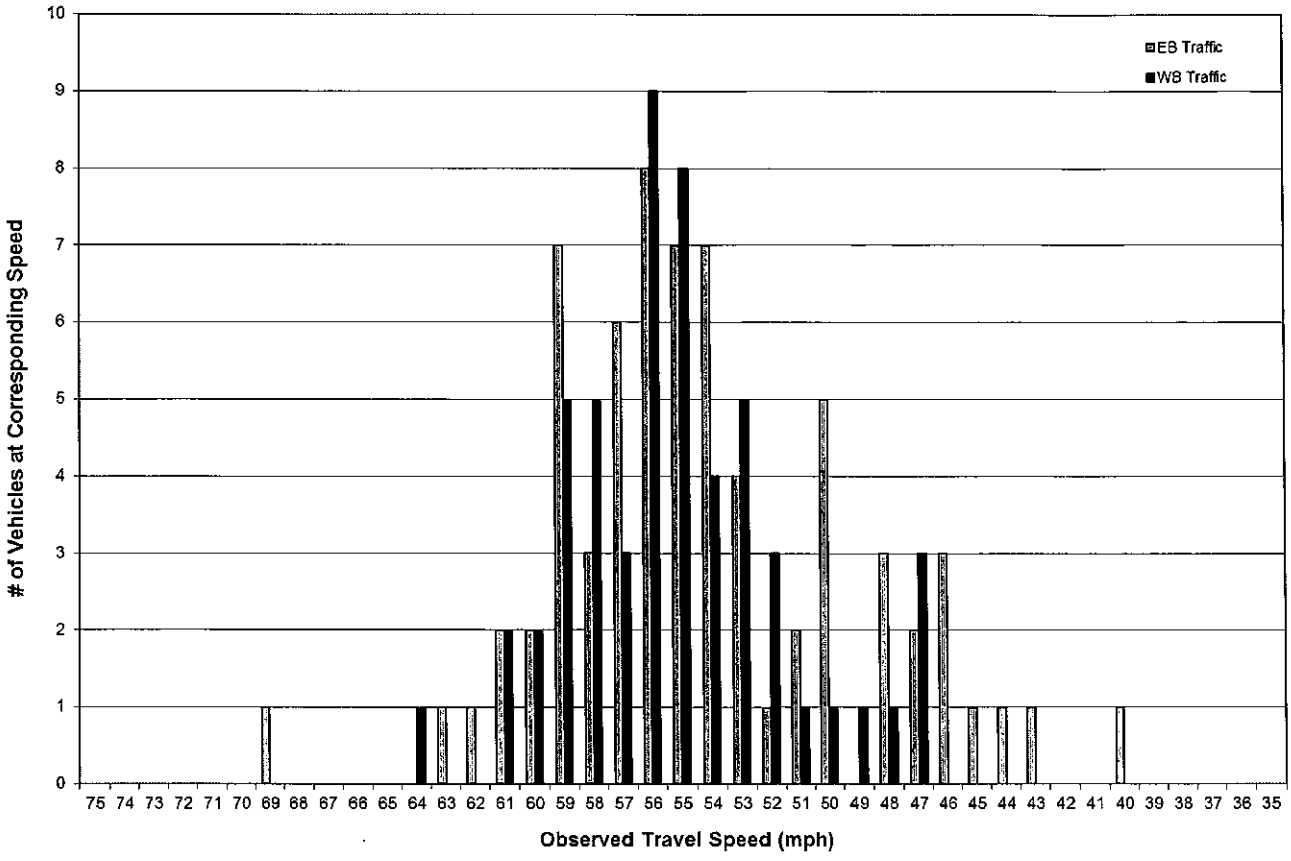
Station 2

FIELD SPEED SURVEY SUMMARY

Road # CSAH 29 | Zone 55 MPH | Location Edge of development facing east
Ref. Pt. 3 | Time 14:15
County 40 - Le Sueur | Weather Clear | Road Type Bit
Date 10/27/2016 | Machine | EB: 85th %ile 59 MPH | Pace 50 to 59
Day Thursday | Observer(s) JJG | WB: 85th %ile 59 MPH | Pace 52 to 61

PASSENGER VEHICLES

SPEED (mph)	EAST BOUND				SPEED (mph)	WEST BOUND			
	INDIVIDUAL VEHICLES		ACCUMULATED VEH.			INDIVIDUAL VEHICLES		ACCUMULATED VEH.	
	# of vehicles	% vehicles	# of vehicles	% vehicles		# of vehicles	% vehicles	# of vehicles	% vehicles
75		0.0%	69	100%	75		0.0%	54	100%
74		0.0%	69	100%	74		0.0%	54	100%
73		0.0%	69	100%	73		0.0%	54	100%
72		0.0%	69	100%	72		0.0%	54	100%
71		0.0%	69	100%	71		0.0%	54	100%
70		0.0%	69	100%	70		0.0%	54	100%
69	1	1.4%	69	100%	69		0.0%	54	100%
68		0.0%	68	99%	68		0.0%	54	100%
67		0.0%	68	99%	67		0.0%	54	100%
66		0.0%	68	99%	66		0.0%	54	100%
65		0.0%	68	99%	65		0.0%	54	100%
64		0.0%	68	99%	64	1	1.9%	54	100%
63	1	1.4%	68	99%	63		0.0%	53	98%
62	1	1.4%	67	97%	62		0.0%	53	98%
61	2	2.9%	66	96%	61	2	3.7%	53	98%
60	2	2.9%	64	93%	60	2	3.7%	51	94%
59	7	10.1%	62	90%	59	5	9.3%	49	91%
58	3	4.3%	55	80%	58	5	9.3%	44	81%
57	6	8.7%	52	75%	57	3	5.6%	39	72%
56	8	11.6%	46	67%	56	9	16.7%	36	67%
55	7	10.1%	38	55%	55	8	14.8%	27	50%
54	7	10.1%	31	45%	54	4	7.4%	19	35%
53	4	5.8%	24	35%	53	5	9.3%	15	28%
52	1	1.4%	20	29%	52	3	5.6%	10	19%
51	2	2.9%	19	28%	51	1	1.9%	7	13%
50	5	7.2%	17	25%	50	1	1.9%	6	11%
49		0.0%	12	17%	49	1	1.9%	5	9%
48	3	4.3%	12	17%	48	1	1.9%	4	7%
47	2	2.9%	9	13%	47	3	5.6%	3	6%
46	3	4.3%	7	10%	46		0.0%	0	0%
45	1	1.4%	4	6%	45		0.0%	0	0%
44	1	1.4%	3	4%	44		0.0%	0	0%
43	1	1.4%	2	3%	43		0.0%	0	0%
42		0.0%	1	1%	42		0.0%	0	0%
41		0.0%	1	1%	41		0.0%	0	0%
40	1	1.4%	1	1%	40		0.0%	0	0%
39		0.0%	0	0%	39		0.0%	0	0%
38		0.0%	0	0%	38		0.0%	0	0%
37		0.0%	0	0%	37		0.0%	0	0%
36		0.0%	0	0%	36		0.0%	0	0%
35		0.0%	0	0%	35		0.0%	0	0%


EB Traffic
WB Traffic
# of Vehicles at Corresponding Speed
0
1
2
3
4
5
6
7
8
9
10
75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40 39 38 37 36 35
Observed Travel Speed (mph)

Station 3

Crash Analysis of the Last Ten Years [2006-2015]

A crash analysis was completed for the years 2006-2015 on C.S.A.H. 29 from T.H. 13 / T.H. 21 to 141st Avenue. Thirty-one crashes were found using the crash mapping analysis tool (MnCMAT), three of which were recorded as incapacitating injury or fatality. Of the thirty-one crashes, 5 crashes were caused by snow, and five were deer hits. The remaining crashes are a nearly even distribution of head on, left turn into traffic, ran off road (left and right), rear end, and right angle. Both incapacitating injuries were caused by vehicles failing to yield ROW when making a left turn. The only fatal injury was a crash between a pedestrian and a distracted driver on the side of C.S.A.H. 29. Many of the crashes are concentrated at 10th Avenue and 141st Avenue.

Minnesota Department of Transportation
Office of Traffic, Safety, & Technology

Memo

TO: Darrell Pettis
Lesueur County Engineer
dpettis@co.le-sueur.mn.us

FROM: Brad Estochen
State Traffic Safety Engineer
bradley.estochen@state.mn.us

DATE: March 11, 2016

SUBJECT: Results from Fall 2015 Greater Minnesota HSIP Solicitation

Your project has been selected to receive HSIP funding. Project numbers have been assigned and are included. State Aid for Local Transportation (SALT) will work with your District State Aid Engineers to coordinate project development and construction via the Delegated Contract Process (DCP) for these federal funds.

A list of funded projects can be found on the last page of this memo.

Solicitation Summary

In August 2015, the Office of Traffic, Safety and Technology (OTST) sent out a solicitation and application to all greater Minnesota counties for local HSIP projects. We thank you for your commitment to transportation safety. Without your efforts, our goal of continuing to reduce fatal and life changing crashes would not be possible.

The following summary provides an overview of the statewide results of this solicitation.

- 76 applications were received for $24.7 M
- $17.2 M in projects were selected
- 41 counties were represented

The selection team ranked and prioritized projects from this solicitation based on the project being identified in the County Road Safety Plan, addressing a high risk area, benefit/cost ratio and available funds. The primary focus of these projects is to reduce fatal and life-changing crashes as a part of the Toward Zero Death objectives; therefore, projects should be installed to high standards that have proven safety benefits.

If you have questions, feel free to contact Brad Estochen:

651-234-7011
bradley.estochen@state.mn.us

cc: DSAE

An Equal Opportunity Employer

ATP 7

Submitting Agency	Project Number	Year	Suggested Award	Project Description
Blue Earth	007-070-004	2018	$ 411,773	Roadway curve and intersection projects
Jackson	032-070-001	2018	$ 178,200	Improved curve delineation
Le Sueur	040-070-005	2018	$ 371,349	Rumble strips/stripes, edgelines and centerline markings
Watonwan	083-070-011	2018	$ 162,000	CSAH 5 : TH 30 to Brown County Line
Brown	008-070-006	2019	$ 750,000	Joint project with D7
Watonwan	083-070-012	2019	$ 10,800	CSAH 21: Cottonwood County Line to CSAH 5
Blue Earth	007-070-005	2020	$ 610,200	Roundabout at intersection TH 22 @ CSAH 90
Jackson	032-070-002	2020	$ 144,810	Rural thru/stop intersection – upgrade signs and markings

Year	Suggested Award
2017	$ 0
2018	$ 1,123,322
2019	$ 760,800
2020	$ 755,010
TOTAL	**$ 2,639,132**

Greater Minnesota

JOINT APPLICATION FOR FEDERAL FUNDS

Minnesota Department of Transportation
Office of Traffic, Safety and Technology
in partnership with State Aid for Transportation

Due Date: November 1, 2015

Project Name: Rumble Strips/StripEs, Edgeline & Centerline Markings

Agency Contact: name, address, phone number, and e-mail (you will receive an electronic confirmation that your application was received):

Darrell Pettis, PE
Le Sueur County Engineer
88 South Park Avenue
Le Center, MN 56057

ATP: 7 County of: Le Sueur

Municipality of: Township of: Various Other:

Requested Year of Funding (State Fiscal Year): ☐ Must be 2017 ☐ Must be 2019 ☒ Any Year* ☐ Must be 2018 ☐ Must be 2020 *Projects will be assigned a funding year by OTST

If this project is funded, do you agree to maintain it for the life of the project? (See Appendix C* for FHWA Recommended Service Life Criteria) ☒ Yes

Roadway type: ☒ CSAH ☒ MSAH ☒ County Road ☒ City Street ☐ Other

Road Number or Street Name: N/A

☒ Attach detailed project description and map

Is this a single or multiple agency application? ☒ Single Agency ☐ Multiple Agencies

Lead Agency: Le Sueur County Other Agency (Agencies) Involved:

Funding Source	Estimated Cost
Federal Funds	$371,349.00
State Aid Funds	
Local Match (10% of Total project cost required)	$41,261.00
Local labor, materials and equipment	
Total Project Cost	$412,610.00

Applicants are advised that local labor, materials, and equipment are NOT reimbursable with Federal funds, or to be included in the local match, but may be used in the total project cost.

☒ Systemic Project Identified in Road Safety Plan **(ATTACH PROJECT SHEET FROM SAFETY PLAN TO THIS SHEET AND SUBMIT)**

☐ Systemic Project **NOT** in Road Safety Plan **(GO TO PAGE 2)**

☐ Reactive Project (B/C > 1) **(GO TO PAGE 4)**

QUALIFYING INFORMATION

Systemic Projects

Type of Project:
- ☐ Lane Departure (**COMPLETE PAGE 2**)
- ☐ Systematic Intersection Improvements (**COMPLETE PAGE 3**)
- ☐ Other (Please specify) Contact Julie Whitcher before submitting a project in this category

Lane Departure Projects

Required Attachments:

- ☐ Attach Location sheet
- ☐ **Attach spreadsheet listing the following for each segment:**
  - ☐ Proposed Strategy
  - ☐ Abbreviated verbal description of segment (IE: Mississippi River to Main Street)
  - ☐ Beginning and ending reference points
  - ☐ ADT (list source of data)
  - ☐ Miles to be upgraded
  - ☐ Fatal and A injury crashes (10 most recently completed calendar years, 2005-2014)
  - ☐ K+A Crashes per mile

Summary Information

Enter the following **TOTALS** from the spreadsheet described above:

Total Miles to be upgraded					
Fatal Crashes		A Injury Crashes		K+A crashes per mile	
Cost per Mile		Amount should include federal funding only (not total project cost)			

☐ Proposed project is a recommendation from a Road Safety Plan or a Road Safety Audit (must provide excerpt from existing plan)

SYSTEMIC LANE DEPARTURE PRIORITIZING INFORMATION

E-mail application and attachments in **ONE** PDF formatted document to:
Julie.Whitcher@state.mn.us
(must print at 11x17 or smaller)

Systemic Projects

Intersection Projects

Required Attachments:

- ☐ Attach Location sheet
- ☐ **Attach spreadsheet listing the following for each intersection:**
  - ☐ Verbal description of intersection
  - ☐ ADT for each leg of the intersection (list source of data)
  - ☐ Fatal and A injury crashes (10 most recently completed calendar years, 2005-2014) Include only crashes within 500 feet on either side of the intersection or that are coded "intersection related."
  - ☐ K+A Crashes per intersection

Summary Information

Enter the following **TOTALS** from the spreadsheet described above:

Total number of intersections to be upgraded

Fatal Crashes | A Injury Crashes | K+A crashes per intersection

☐ Cost per Intersection

Additional Considerations

☐ Proposed project is a recommendation from a Road Safety Plan or a Road Safety Audit (must provide link to or excerpt from existing plan)

E-mail application and attachments in **ONE (1)** PDF formatted document to:
Julie.Whitcher@state.mn.us
(must print at 11x17 or smaller)

SYSTEMIC INTERSECTION PRIORITIZING INFORMATION

Reactive Projects

Required Attachments:

- ☐ Attach Location sheet
- ☐ Verbal description of project
- ☐ Plan sheets
- ☐ All crashes (3 most recently completed years, 2012-2014)
- ☐ Attach critical crash rate calculations
- ☐ Attach HSIP Worksheet B/C Ratio

Summary Information

- ☐ Attach a discussion of the rationale used in the selection of Crash Reduction factors
- ☐ Service Life

REACTIVE PRIORITIZING INFORMATION

E-mail application and attachments in **ONE (1)** PDF formatted document to:
Julie.Whitcher@state.mn.us
(must print at 11x17 or smaller)

1.0 Project Description

Four types of projects were considered for implementation on each of the high priority rural highway segments. The project types and costs are:

- ***Rumble Strip*** - Estimated Cost: $3,000 per mile.
- ***Rumble StripE (Edgeline and/or Centerline)*** - Estimated Cost: $3,500 per mile.
- ***6" Wet Reflective Epoxy in Grooves*** – Estimated Cost: $8,500 per mile. This strategy's relatively higher costs and unproven safety benefits limits its use only to noise sensitive or Amish areas.
- ***6" Latex Marking (Edgeline and/or Centerline)*** - Estimated Cost: $650 per mile.

A decision tree shown in Figure 2-8 was developed to support a consistent approach for developing safety projects. This tool allows counties to choose between five different types of pavement edge and centerline treatments based on factors that include traffic volume and adjacent land use. Where traffic volumes are low, 6" Latex Marking is the suggested treatment. Where the adjacent land use is considered noise sensitive (high density residential, parks, etc.), 6" Wet Reflective Epoxy in Grooves is the suggested treatment. On higher volume roadways, with few noise sensitive land uses, the suggested treatments are either rumble strips or stripEs, depending on these segment's lane width. It is never recommended to have both edgeline and centerline rumble strips, and priority is given to implementation of edgeline rumbles. For this HSIP application 2' shoulder paving is not being pursued for funding.

The attached Table 3-11 summarizes the high priority segments and suggested strategies, which includes 11.9 miles of rumble strip, 43.8 miles of rumble stripEs, 9.6 miles of ground-in wet reflective, 34.7 miles of centerline rumbles and 58.9 miles of 6-inch centerlines.

A project form was completed for each high priority segment. Each project form includes a description of the segment, brief crash history, ranking factors, a picture from the Video Log and the identified strategy. Project forms for all high priority segments for this application are attached.

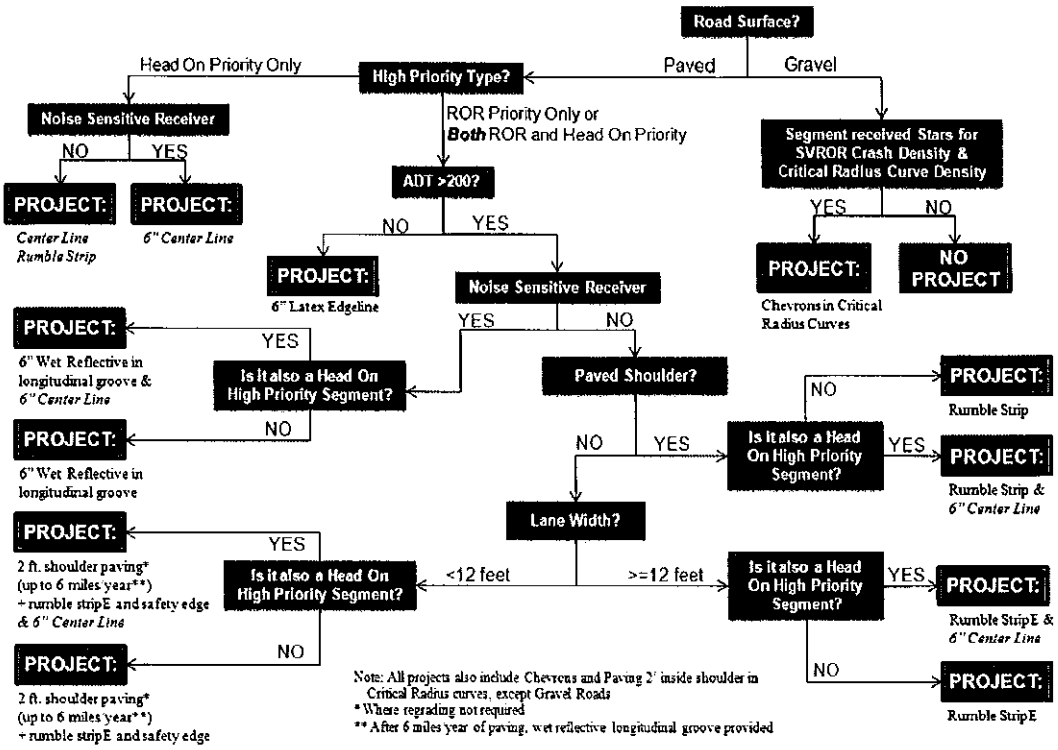
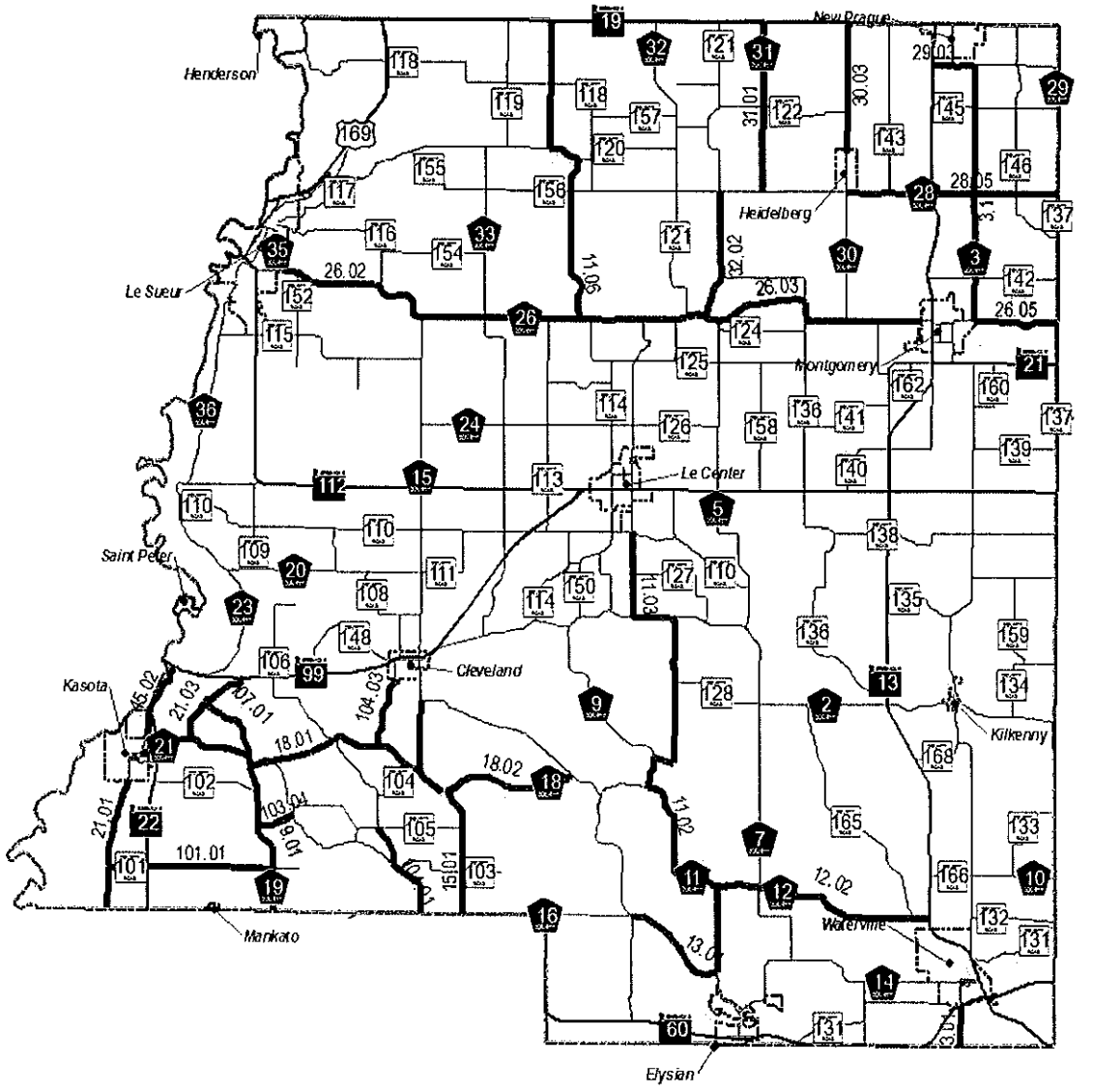


Figure 2-8
Segment Project Identification Process

TABLE 3-11
Le Sueur County Segment Project Summary

Rank	Corridor #	Route #	Start	End	Length	Ranking	2' Shoulder Pave+RS + Safety Edge	Rumble Strip	Rumble StripE	6" Edgeline	6" Wet Reflective Epoxy In Grooves	Centerline Rumble 6" Strip	Centerline Rumble 6" Latex	Project Cost
1	45.02	CSAH 45	Kasota CL	MNTH 99	2.0	****	0.0	0.0	1.0	0.0	1.0	0.0	2.0	$13,300
2	21.01	CSAH 21	Blue Earth CO	Kasota CL	3.0	****	0.0	2.3	0.0	0.0	0.8	0.0	3.0	$15,075
4	23.01	CSAH 23	MNTH 99	MNTH 112	7.8	****	0.0	2.6	5.0	0.0	0.2	0.0	7.8	$32,253
5	21.03	CSAH 21	Kasota CL	MNTH 99	3.0	****	0.0	2.1	0.0	0.0	0.9	0.0	3.0	$15,900
7	12.02	CSAH 12	CSAH 11 (E)	MNTH 13	5.3	****	0.0	2.9	0.0	0.0	2.4	0.0	5.3	$32,463
9	101.01	CNTY 101	CSAH 21	CSAH 19	4.0	***	0.0	0.0	3.2	0.0	0.8	0.0	0.0	$18,000
10	107.01	CNTY 107	CSAH 18	CSAH 21	1.8	***	0.0	0.0	0.8	0.0	1.0	0.0	1.8	$12,420
11	29.03	CSAH 29	New Prague CL	MNTH 13	1.0	***	0.0	0.0	0.0	0.0	0.0	0.0	1.0	$650
12	15.01	CSAH 15	Blue Earth CO	Cleveland CL	6.1	***	0.0	2.0	3.7	0.0	0.4	0.0	6.1	$26,444
13	26.02	CSAH 26	Le Sueur CL	CSAH 33 CR-112	5.2	***	0.0	0.0	4.9	0.0	0.3	0.0	5.2	$22,880
14	19.01	CSAH 19	Blue Earth CO	CSAH 18	3.6	***	0.0	0.0	3.6	0.0	0.0	0.0	3.6	$14,940
15	26.03	CSAH 26	CSAH 33	Montgomery CL	10.7	***	0.0	0.0	10.0	0.0	0.7	0.0	0.0	$41,195
16	103.04	CNTY 103	CSAH 19,	CR 103	1.0	***	0.0	0.0	1.0	0.0	0.0	0.0	1.0	$4,150
17	11.06	CSAH 11	CSAH 26 (W)	Scott CO	7.7	***	0.0	0.0	6.9	0.0	0.8	0.0	7.7	$35,805
18	104.03	CNTY 104	CSAH 18 (W)	Cleveland CL	1.5	***	0.0	0.0	1.5	0.0	0.0	0.0	1.5	$6,225
19	13.01	CSAH 13	MNTH 60	CSAH 16	2.5	*	0.0	0.0	2.2	0.0	0.3	0.0	2.5	$12,000
							Head On Priority Only							
20	3.10	CSAH 3	Montgomery CL	CSAH 29	6.0	****	0.0	0.0	0.0	0.0	0.0	6.0	0.0	$18,000
21	11.03	CSAH 11	CSAH 2 (E)	S Lim. Le Center	3.0	***	0.0	0.0	0.0	0.0	0.0	3.0	0.0	$9,000
22	28.05	CSAH 28	Heidelberg CL	Rice CO	5.0	***	0.0	0.0	0.0	0.0	0.0	4.0	1.0	$12,650
23	18.02	CSAH 18	CSAH 15 (S)	CSAH 13	3.2	***	0.0	0.0	0.0	0.0	0.0	0.0	3.2	$2,080
24	18.01	CSAH 18	CSAH 21	CSAH 15 (N)	6.2	***	0.0	0.0	0.0	0.0	0.0	6.2	0.0	$18,600
25	31.01	CSAH 31	CSAH 28	MNTH 19	4.0	***	0.0	0.0	0.0	0.0	0.0	4.0	0.0	$12,000
26	11.02	CSAH 11	Elysian CL	CSAH 2 (E)	10.0	***	0.0	0.0	0.0	0.0	0.0	9.0	1.0	$27,650
28	104.01	CNTY 104	CSAH 16	CR 105	2.5	***	0.0	0.0	0.0	0.0	0.0	2.5	0.0	$7,500
				TOTAL (miles)			0.0	11.9	43.8	0.0	9.6	34.7	58.9	$412,610.00

Local Match (10%) $41,261.00
Local Labor & Equipment
Total Project Cost $412,610.00



Source: CRSP Safety Analysis, 2012

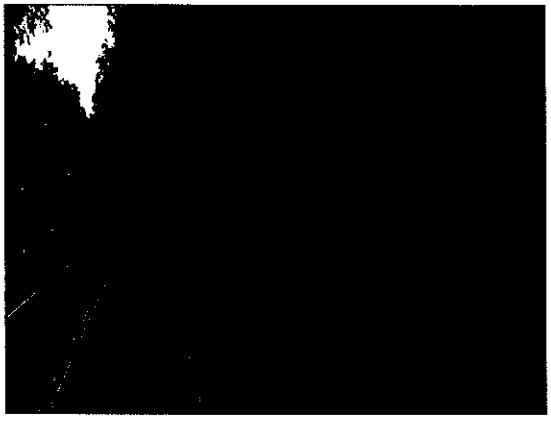
CSAH 45 from Kasota CL to MNTH 99 Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 45

	Verbal
Start:	Kasota CL
End:	MNTH 99
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	2100
Facility Type:	2-Lane
Lane Width:	12
Shoulder Width:	0'
Shoulder Type:	Turf
Length (miles):	2
Rumble Installed:	No



Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	18	9	1
Density (per mile per year)	1.80	0.90	0.10
Rate (per MVM)	2.35	1.17	0.13

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	2100	> 600	★	★
RD Density	0.90	0.19	★	
Access Density	17.00	12.30	★	★
Curve Critical Radius Density	0.00	0.58		
Edge Risk	3.00	2 or 3	★	
Severe Head On Crash	0.00	> 1		
% No Passing	1.00	> 50%		★
			★★★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	0.0	$0
Rumble StripE	Proactive	$3,500	1.0	$3,500
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	1.0	$8,500
Center Line Rumble Strip	Proactive	$3,000	0.0	$0
6" Center Line	Proactive	$650	2.0	$1,300

Notes - The south half of the segment assumed as a noise sensitive area due to residential development.

Implementation Cost

Federal Funds	$11,970
Local Match (10% of Total project cost)	$1,330
Total Project Cost	**$13,300**

Page 1
Segment ID: 45.02
Date: 9/7/2012

CSAH 21 from CSAH 21 Begins, Blue Earth CO to Kasota CL Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 21

Verbal
Start: CSAH 21 Begins, Blue Earth CO
End: Kasota CL
City/Rural: Rural
County: Le Sueur
ATP: 7
ADT: 1950
Facility Type: 2-Lane
Lane Width: 12
Shoulder Width: 2'
Shoulder Type: Paved
Length (miles): 3
Rumble Installed: No

Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	29	11	1
Density (per mile per year)	1.93	0.73	0.07
Rate (per MVM)	2.72	1.03	0.09

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	1950	> 600	★	★
RD Density	0.73	0.19	★	
Access Density	13.67	12.30	★	★
Curve Critical Radius Density	0.33	0.58		
Edge Risk	3.00	2 or 3	★	
Severe Head On Crash	0.00	> 1		
% No Passing	0.50	> 50%		★
			★★★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	2.3	$6,750
Rumble StripE	Proactive	$3,500	0.0	$0
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	0.8	$6,375
Center Line Rumble Strip	Proactive	$3,000	0.0	$0
6" Center Line	Proactive	$650	3.0	$1,950

Notes - Approximately 0.75 miles assumed as a noise sensitive area due to proximity to residential development.

Implementation Cost

Federal Funds	$13,568
Local Match (10% of Total project cost)	$1,508
Total Project Cost	**$15,075**

Page 2
Segment ID: 21.01
Date: 9/7/2012

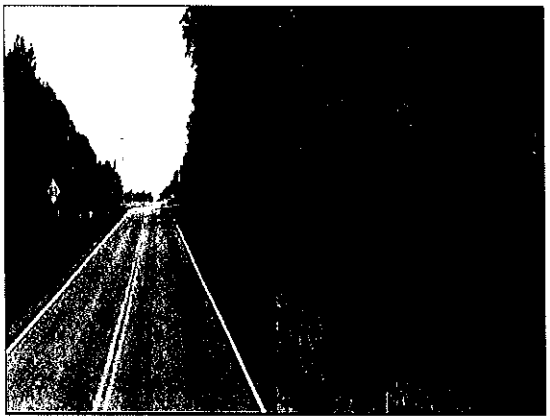
CSAH 26 from Montgomery CL to CSAH 26 Ends, Rice CO Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 26

Verbal
Start: Montgomery CL
End: CSAH 26 Ends, Rice CO
City/Rural: Rural
County: Le Sueur
ATP: 7
ADT: 1300
Facility Type: 2-Lane
Lane Width: 12
Shoulder Width: 2'
Shoulder Type: Gravel
Length (miles): 2.2
Rumble Installed: No



Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	11	9	1
Density (per mile per year)	1.00	0.82	0.09
Rate (per MVM)	2.11	1.72	0.19

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	1300	> 600	★	★
RD Density	0.82	0.19	★	
Access Density	15.00	12.30	★	★
Curve Critical Radius Density	0.00	0.58		
Edge Risk	3.00	2 or 3	★	
Severe Head On Crash	0.00	> 1		
% No Passing	0.70	> 50%		★
			★★★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost	Notes -
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	2.2	$88,000	
Rumble Strip	Proactive	$3,000	0.0	$0	
Rumble StripE	Proactive	$3,500	0.0	$0	
6" Edge Lines	Proactive	$650	0.0	$0	
Ground In Wet-Reflective Markings	Proactive	$8,500	0.0	$0	
Center Line Rumble Strip	Proactive	$3,000	0.0	$0	
6" Center Line	Proactive	$650	2.2	$1,430	

Implementation Cost

Federal Funds	$80,487
Local Match (10% of Total project cost)	$8,943
Total Project Cost	**$89,430**

Page 3
Segment ID: 26.05
Date: 9/7/2012

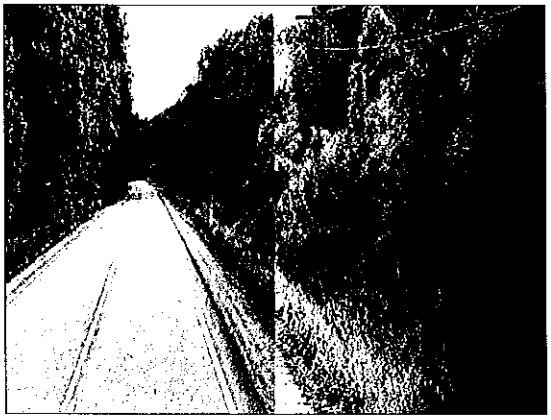
CSAH 23 from MNTH 99 to MNTH 112 Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 23

	Verbal
Start:	MNTH 99
End:	MNTH 112
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	1335
Facility Type:	2-Lane
Lane Width:	12
Shoulder Width:	2'
Shoulder Type:	Paved
Length (miles):	7.8
Rumble Installed:	No



Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	45	21	3
Density (per mile per year)	1.15	0.54	0.08
Rate (per MVM)	2.37	1.11	0.16

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	1335	> 600	★	★
RD Density	0.54	0.19	★	
Access Density	8.97	12.30		
Curve Critical Radius Density	1.28	0.58	★	★
Edge Risk	2.00	2 or 3	★	
Severe Head On Crash	0.00	> 1		
% No Passing	0.62	> 50%		★
			★★★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	2.6	$7,722
Rumble StripE	Proactive	$3,500	5.0	$17,472
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	0.2	$1,989
Center Line Rumble Strip	Proactive	$3,000	0.0	$0
6" Center Line	Proactive	$650	7.8	$5,070

Notes - Approximately 0.25 miles through Ottawa assumed to be a noise sensitive area.

Implementation Cost

Federal Funds	$29,028
Local Match (10% of Total project cost)	$3,225
Total Project Cost	**$32,253**

Page 4
Segment ID: 23.01
Date: 9/7/2012

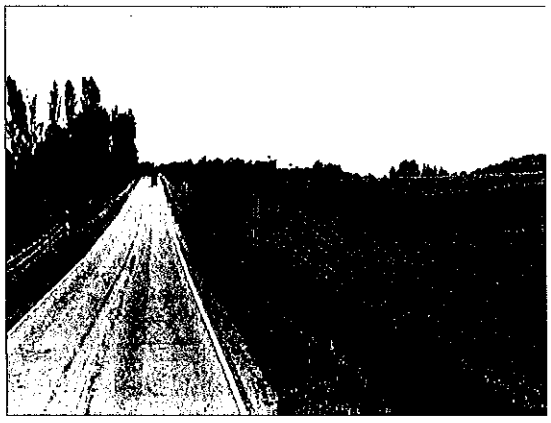
CSAH 21 from Kasota CL to MNTH 99 Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 21

	Verbal
Start:	Kasota CL
End:	MNTH 99
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	1950
Facility Type:	2-Lane
Lane Width:	12
Shoulder Width:	3'
Shoulder Type:	2' Paved + 1' Gravel
Length (miles):	3
Rumble Installed:	No



Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	31	8	2
Density (per mile per year)	2.07	0.53	0.13
Rate (per MVM)	2.90	0.75	0.19

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	1950	> 600	★	★
RD Density	0.53	0.19	★	
Access Density	13.67	12.30	★	★
Curve Critical Radius Density	2.00	0.58	★	★
Edge Risk	1.00	2 or 3		
Severe Head On Crash	1.00	> 1		★
% No Passing	0.75	> 50%		★
			★★★★	★★★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	2.1	$6,300
Rumble StripE	Proactive	$3,500	0.0	$0
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	0.9	$7,650
Center Line Rumble Strip	Proactive	$3,000	0.0	$0
6" Center Line	Proactive	$650	3.0	$1,950

Notes - Approximately 0.90 miles past Lake Emily residential development and golf course assumed to be a noise sensitive area.

Implementation Cost

Federal Funds	$14,310
Local Match (10% of Total project cost)	$1,590
Total Project Cost	**$15,900**

Page 5
Segment ID: 21.03
Date: 9/7/2012

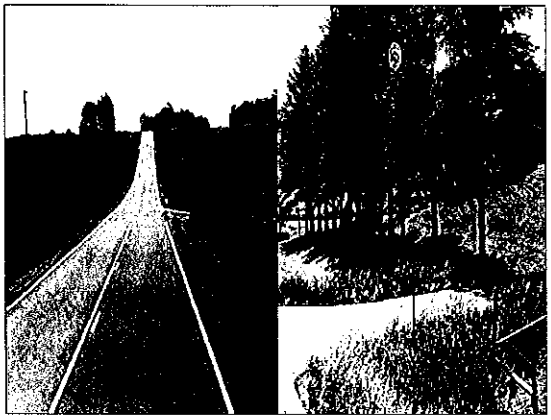
CSAH 12 from CSAH 11 (East Jct.) to MNTH 13 Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 12

	Verbal
Start:	CSAH 11 (East Jct.)
End:	MNTH 13
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	680
Facility Type:	2-Lane
Lane Width:	12
Shoulder Width:	5'
Shoulder Type:	2' Paved + 3' Gravel
Length (miles):	5.3
Rumble Installed:	No



Crash Data

2006-2010 MnCMAT Crash Data 5 years

	Total	Road Dept	K+A
Crashes	23	15	4
Density (per mile per year)	0.87	0.57	0.15
Rate (per MVM)	3.50	2.28	0.61

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	680	> 600	★	★
RD Density	0.57	0.19	★	
Access Density	14.72	12.30	★	★
Curve Critical Radius Density	0.75	0.58	★	★
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.44	> 50%		
			★★★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	2.9	$8,745
Rumble StripE	Proactive	$3,500	0.0	$0
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	2.4	$20,273
Center Line Rumble Strip	Proactive	$3,000	0.0	$0
6" Center Line	Proactive	$650	5.3	$3,445

Notes - Approximately 2.5 miles adjacent to Lake Tetonka assumed to be a noise sensitive area.

Implementation Cost

Federal Funds	$29,216
Local Match (10% of Total project cost)	$3,246
Total Project Cost	**$32,463**

Page 7
Segment ID: 12.02
Date: 9/7/2012

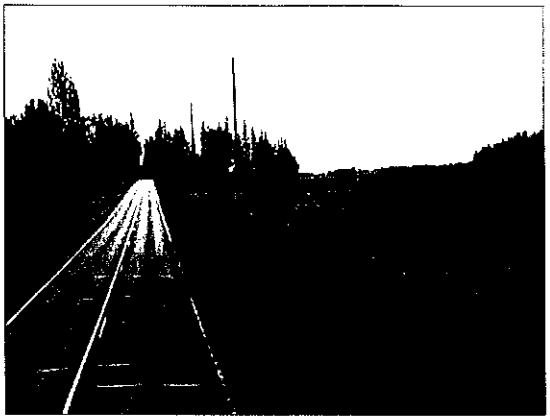
CNTY 101 from CSAH 21 to CSAH 19 Project

Agency: Le Sueur County

Roadway Data

Type: CNTY
Number: 101

	Verbal
Start:	CSAH 21
End:	CSAH 19
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	710
Facility Type:	2-Lane
Lane Width:	12
Shoulder Width:	0'
Shoulder Type:	Turf
Length (miles):	4
Rumble Installed:	No



Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	19	7	2
Density (per mile per year)	0.95	0.35	0.10
Rate (per MVM)	3.67	1.35	0.39

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	710	> 600	★	★
RD Density	0.35	0.19	★	
Access Density	12.00	12.30		
Curve Critical Radius Density	0.00	0.58		
Edge Risk	2.00	2 or 3	★	
Severe Head On Crash	0.00	> 1		
% No Passing	0.67	> 50%		★
			★★★	★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	0.0	$0
Rumble StripE	Proactive	$3,500	3.2	$11,200
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	0.8	$6,800
Center Line Rumble Strip	Proactive	$3,000	0.0	$0
6" Center Line	Proactive	$650	0.0	$0

Notes - Approximately 0.75 miles at west end of segment assumed to be a noise sensitive area due to residential development.

Implementation Cost

Federal Funds	$16,200
Local Match (10% of Total project cost)	$1,800
Total Project Cost	**$18,000**

Page 9
Segment ID: 101.01
Date: 9/7/2012

CNTY 107 from CSAH 18 to CSAH 21 Project

Agency: Le Sueur County

Roadway Data

Type: CNTY
Number: 107

	Verbal
Start:	CSAH 18
End:	CSAH 21
City/Rural:	#N/A
County:	Le Sueur
ATP:	7
ADT:	560
Facility Type:	#N/A
Lane Width:	#N/A
Shoulder Width:	#N/A
Shoulder Type:	#N/A
Length (miles):	1.8
Rumble Installed:	No

Photo Not Available

Crash Data

2006-2010 MnCMAT Crash Data 5 years

	Total	Road Dept	K+A
Crashes	#N/A	#N/A	#N/A
Density (per mile per year)	#N/A	#N/A	#N/A
Rate (per MVM)	#N/A	#N/A	#N/A

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	560	> 600		
RD Density	0.00	0.19		
Access Density	18.33	12.30	★	★
Curve Critical Radius Density	2.78	0.58	★	★
Edge Risk	2.00	2 or 3	★	
Severe Head On Crash	0.00	> 1		
% No Passing	1.00	> 50%		★
			★★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	0.0	$0
Rumble StripE	Proactive	$3,500	0.8	$2,835
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	1.0	$8,415
Center Line Rumble Strip	Proactive	$3,000	0.0	$0
6" Center Line	Proactive	$650	1.8	$1,170

Notes - Approximately 1 mile at the north end of the corridor assumed to be a noise sensitive area due to residential development.

Implementation Cost

Federal Funds	$11,178
Local Match (10% of Total project cost)	$1,242
Total Project Cost	**$12,420**

Page 10
Segment ID: 107.01
Date: 9/7/2012

CSAH 29 from New Prague CL to MNTH 13, T-9 Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 29

	Verbal
Start:	New Prague CL
End:	MNTH 13, T-9
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	2150
Facility Type:	2-Lane
Lane Width:	12
Shoulder Width:	6'
Shoulder Type:	Gravel
Length (miles):	1
Rumble Installed:	No

Crash Data

2006-2010 MnCMAT Crash Data 5 years

	Total	Road Dept	K+A
Crashes	3	1	0
Density (per mile per year)	0.60	0.20	0.00
Rate (per MVM)	0.76	0.25	0.00

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	2150	> 600	★	★
RD Density	0.20	0.19	★	
Access Density	17.00	12.30	★	★
Curve Critical Radius Density	0.00	0.58		
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.67	> 50%		★
			★★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost	Notes -
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	1.0	$40,000	
Rumble Strip	Proactive	$3,000	0.0	$0	
Rumble StripE	Proactive	$3,500	0.0	$0	
6" Edge Lines	Proactive	$650	0.0	$0	
Ground In Wet-Reflective Markings	Proactive	$8,500	0.0	$0	
Center Line Rumble Strip	Proactive	$3,000	0.0	$0	
6" Center Line	Proactive	$650	1.0	$650	

Implementation Cost

Federal Funds	$36,585
Local Match (10% of Total project cost)	$4,065
Total Project Cost	**$40,650**

Page 11
Segment ID: 29.03
Date: 9/7/2012

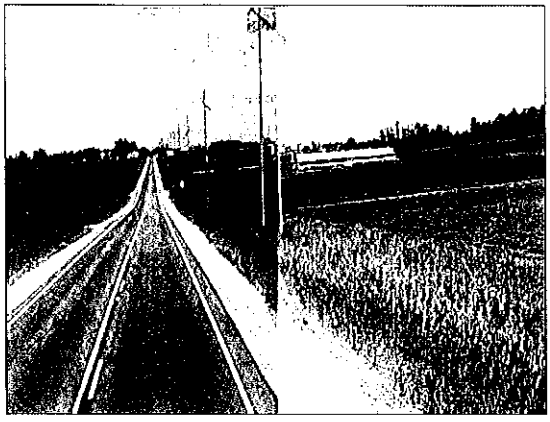
CSAH 15 from CSAH 16, Blue Earth CO to Cleveland CL Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 15

Verbal
Start: CSAH 16, Blue Earth CO
End: Cleveland CL
City/Rural: Rural
County: Le Sueur
ATP: 7
ADT: 1542.5
Facility Type: 2-Lane
Lane Width: 12
Shoulder Width: 3 / 6'
Shoulder Type: Gravel / 2' Paved + 4' Gravel
Length (miles): 6.1
Rumble Installed: No



Crash Data

2006-2010 MnCMAT Crash Data 5 years

	Total	Road Dept	K+A
Crashes	16	10	0
Density (per mile per year)	0.52	0.33	0.00
Rate (per MVM)	0.93	0.58	0.00

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	1543	> 600	★	★
RD Density	0.33	0.19	★	
Access Density	10.82	12.30		
Curve Critical Radius Density	0.66	0.58	★	★
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.55	> 50%		★
			★★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	2.0	$6,039
Rumble StripE	Proactive	$3,500	3.7	$12,810
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	0.4	$3,630
Center Line Rumble Strip	Proactive	$3,000	0.0	$0
6" Center Line	Proactive	$650	6.1	$3,965

Notes - Approximately 0.5 miles adjacent to Lake Jefferson were assumed to be a noise sensitive area.

Implementation Cost

Federal Funds	$23,799
Local Match (10% of Total project cost)	$2,644
Total Project Cost	**$26,444**

Page 12
Segment ID: 15.01
Date: 9/7/2012

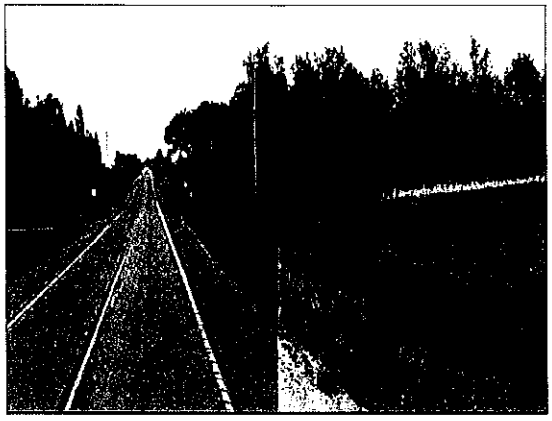
CSAH 26 from Le Sueur CL to CSAH 33 CR-112 Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 26

	Verbal
Start:	Le Sueur CL
End:	CSAH 33 CR-112
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	1167.5
Facility Type:	2-Lane
Lane Width:	12
Shoulder Width:	6'
Shoulder Type:	Gravel
Length (miles):	5.2
Rumble Installed:	No



Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	34	21	2
Density (per mile per year)	1.31	0.81	0.08
Rate (per MVM)	3.07	1.90	0.18

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	1168	> 600	★	★
RD Density	0.81	0.19	★	
Access Density	13.27	12.30	★	★
Curve Critical Radius Density	0.58	0.58		
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.56	> 50%		★
			★★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	0.0	$0
Rumble StripE	Proactive	$3,500	4.9	$17,290
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	0.3	$2,210
Center Line Rumble Strip	Proactive	$3,000	0.0	$0
6" Center Line	Proactive	$650	5.2	$3,380

Notes - Approximately 0.25 miles at west end of segment assumed to be a noise sensitive area due to residential development.

Implementation Cost

Federal Funds	$20,592
Local Match (10% of Total project cost)	$2,288
Total Project Cost	**$22,880**

Page 13
Segment ID: 26.02
Date: 9/7/2012

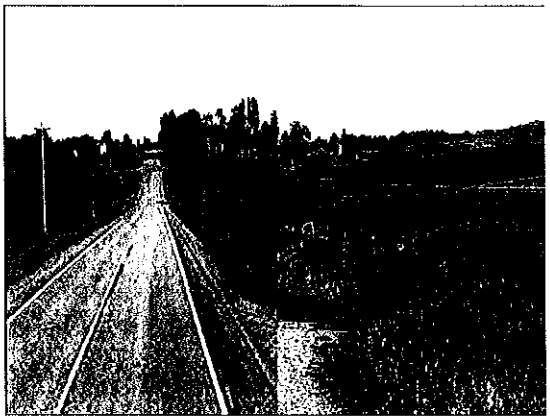
CSAH 19 from CSAH 19 Begins, Blue Earth CO to CSAH 18 Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 19

	Verbal
Start:	CSAH 19 Begins, Blue Earth CO
End:	CSAH 18
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	1150
Facility Type:	2-Lane
Lane Width:	12
Shoulder Width:	6'
Shoulder Type:	Gravel
Length (miles):	3.6
Rumble Installed:	No



Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	11	1	0
Density (per mile per year)	0.61	0.06	0.00
Rate (per MVM)	1.46	0.13	0.00

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	1150	> 600	★	★
RD Density	0.06	0.19		
Access Density	13.89	12.30	★	★
Curve Critical Radius Density	1.39	0.58	★	★
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.67	> 50%		★
			★★★	★★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost	Notes -
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0	
Rumble Strip	Proactive	$3,000	0.0	$0	
Rumble StripE	Proactive	$3,500	3.6	$12,600	
6" Edge Lines	Proactive	$650	0.0	$0	
Ground In Wet-Reflective Markings	Proactive	$8,500	0.0	$0	
Center Line Rumble Strip	Proactive	$3,000	0.0	$0	
6" Center Line	Proactive	$650	3.6	$2,340	

Implementation Cost

Federal Funds	$13,446
Local Match (10% of Total project cost)	$1,494
Total Project Cost	**$14,940**

Page 14
Segment ID: 19.01
Date: 9/7/2012

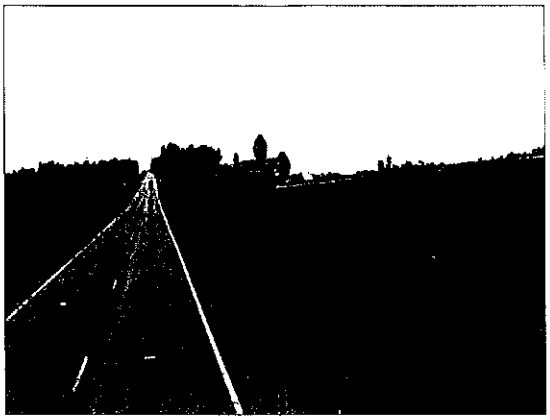
CSAH 26 from CSAH 33 CR-112 to Montgomery CL Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 26

	Verbal
Start:	CSAH 33 CR-112
End:	Montgomery CL
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	996.5
Facility Type:	2-Lane
Lane Width:	12
Shoulder Width:	3'
Shoulder Type:	Gravel
Length (miles):	10.7
Rumble Installed:	No



Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	33	19	1
Density (per mile per year)	0.62	0.36	0.02
Rate (per MVM)	1.70	0.98	0.05

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	997	> 600	★	★
RD Density	0.36	0.19	★	
Access Density	12.71	12.30	★	★
Curve Critical Radius Density	0.09	0.58		
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.34	> 50%		
			★★★	★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	0.0	$0
Rumble StripE	Proactive	$3,500	10.0	$34,829
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	0.7	$6,367
Center Line Rumble Strip	Proactive	$3,000	0.0	$0
6" Center Line	Proactive	$650	0.0	$0

Notes - Approximately 0.75 miles around Clear Lake assumed to be a noise sensitive area.

Implementation Cost

Federal Funds	$37,076
Local Match (10% of Total project cost)	$4,120
Total Project Cost	**$41,195**

Page 15
Segment ID: 26.03
Date: 9/7/2012

CNTY 103 from CSAH 19, SEG #4 Begins to CR 103 Project

Agency: Le Sueur County

Roadway Data

Type: CNTY
Number: 103

Verbal
Start: CSAH 19, SEG #4 Begins
End: CR 103
City/Rural: Rural
County: Le Sueur
ATP: 7
ADT: 750
Facility Type: 2-Lane
Lane Width: 12
Shoulder Width: 6'
Shoulder Type: Gravel
Length (miles): 1
Rumble Installed: No

Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	1	0	0
Density (per mile per year)	0.20	0.00	0.00
Rate (per MVM)	0.73	0.00	0.00

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	750	> 600	★	★
RD Density	0.00	0.19		
Access Density	14.00	12.30	★	★
Curve Critical Radius Density	2.00	0.58	★	★
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	1.00	> 50%		★
			★★★	★★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost	Notes -
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0	
Rumble Strip	Proactive	$3,000	0.0	$0	
Rumble StripE	Proactive	$3,500	1.0	$3,500	
6" Edge Lines	Proactive	$650	0.0	$0	
Ground In Wet-Reflective Markings	Proactive	$8,500	0.0	$0	
Center Line Rumble Strip	Proactive	$3,000	0.0	$0	
6" Center Line	Proactive	$650	1.0	$650	

Implementation Cost

Federal Funds	$3,735
Local Match (10% of Total project cost)	$415
Total Project Cost	**$4,150**

Page 16
Segment ID: 103.04
Date: 9/7/2012

CSAH 11 from CSAH 26 (West Jct.) to MNTH 19, Scott CO Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 11

	Verbal
Start:	CSAH 26 (West Jct.)
End:	MNTH 19, Scott CO
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	674.5
Facility Type:	2-Lane
Lane Width:	12
Shoulder Width:	3'
Shoulder Type:	Gravel
Length (miles):	7.7
Rumble Installed:	No

Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	7	4	1
Density (per mile per year)	0.18	0.10	0.03
Rate (per MVM)	0.74	0.42	0.11

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	675	> 600	★	★
RD Density	0.10	0.19		
Access Density	12.99	12.30	★	★
Curve Critical Radius Density	0.78	0.58	★	★
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.38	> 50%		
			★★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	0.0	$0
Rumble StripE	Proactive	$3,500	6.9	$24,255
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	0.8	$6,545
Center Line Rumble Strip	Proactive	$3,000	0.0	$0
6" Center Line	Proactive	$650	7.7	$5,005

Notes - Approximately 0.75 miles through St. Thomas assumed to be a noise sensitive area.

Implementation Cost

Federal Funds	$32,225
Local Match (10% of Total project cost)	$3,581
Total Project Cost	**$35,805**

Page 17
Segment ID: 11.06
Date: 9/7/2012

CNTY 104 from CSAH 18 (West Jct.) to Cleveland CL Project

Agency: Le Sueur County

Roadway Data

Type: CNTY
Number: 104
Verbal
Start: CSAH 18 (West Jct.)
End: Cleveland CL
City/Rural: Rural
County: Le Sueur
ATP: 7
ADT: 552.5
Facility Type: 2-Lane
Lane Width: 12
Shoulder Width: 6'
Shoulder Type: Gravel
Length (miles): 1.5
Rumble Installed: No

Photo Not Available

Crash Data

2006-2010 MnCMAT Crash Data 5 years

	Total	Road Dept	K+A
Crashes	3	2	0
Density (per mile per year)	0.40	0.27	0.00
Rate (per MVM)	1.98	1.32	0.00

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	553	> 600		
RD Density	0.27	0.19	★	
Access Density	14.00	12.30	★	★
Curve Critical Radius Density	3.33	0.58	★	★
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.90	> 50%		★
			★★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost	Notes -
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0	
Rumble Strip	Proactive	$3,000	0.0	$0	
Rumble StripE	Proactive	$3,500	1.5	$5,250	
6" Edge Lines	Proactive	$650	0.0	$0	
Ground In Wet-Reflective Markings	Proactive	$8,500	0.0	$0	
Center Line Rumble Strip	Proactive	$3,000	0.0	$0	
6" Center Line	Proactive	$650	1.5	$975	

Implementation Cost

Federal Funds	$5,603
Local Match (10% of Total project cost)	$623
Total Project Cost	**$6,225**

Page 18
Segment ID: 104.03
Date: 9/7/2012

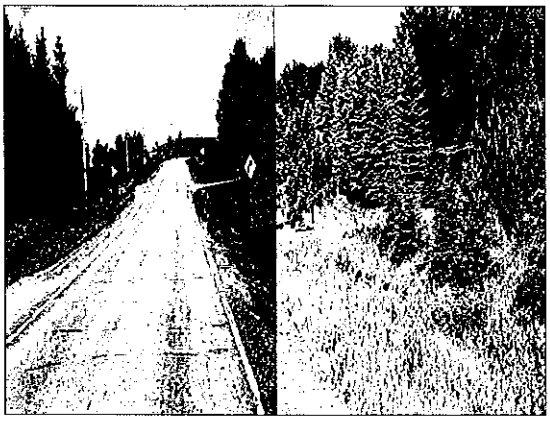
CSAH 13 from MNTH 60 to CSAH 16 Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 13

	Verbal
Start:	MNTH 60
End:	CSAH 16
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	480
Facility Type:	2-Lane
Lane Width:	12
Shoulder Width:	2'
Shoulder Type:	Gravel
Length (miles):	2.5
Rumble Installed:	No



Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	1	0	0
Density (per mile per year)	0.08	0.00	0.00
Rate (per MVM)	0.46	0.00	0.00

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	480	> 600		
RD Density	0.00	0.19		
Access Density	8.80	12.30		
Curve Critical Radius Density	0.80	0.58	★	★
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.00	> 50%		
			★	★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	0.0	$0
Rumble StripE	Proactive	$3,500	2.2	$7,613
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	0.3	$2,763
Center Line Rumble Strip	Proactive	$3,000	0.0	$0
6" Center Line	Proactive	$650	2.5	$1,625

Notes - Approximately 1.1 miles between Lake Jefferson and German Lake were assumed to be a noise sensitive area.

Implementation Cost

Federal Funds	$10,800
Local Match (10% of Total project cost)	$1,200
Total Project Cost	**$12,000**

Page 19
Segment ID: 13.01
Date: 9/7/2012

CSAH 3 from Montgomery CL to CSAH 29 Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 3
Verbal
Start: Montgomery CL
End: CSAH 29
City/Rural: Rural
County: Le Sueur
ATP: 7
ADT: 1605
Facility Type: 2-Lane
Lane Width: 12
Shoulder Width: 2'
Shoulder Type: Gravel
Length (miles): 6
Rumble Installed: No

Photo Not Available

Crash Data

2006-2010 MnCMAT Crash Data 5 years

	Total	Road Dept	K+A
Crashes	20	5	3
Density (per mile per year)	0.67	0.17	0.10
Rate (per MVM)	1.14	0.28	0.17

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	1605	> 600	★	★
RD Density	0.17	0.19		
Access Density	14.50	12.30	★	★
Curve Critical Radius Density	0.00	0.58		
Edge Risk	1.00	2 or 3		
Severe Head On Crash	1.00	> 1		★
% No Passing	0.50	> 50%		★
			★★	★★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost	Notes -
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0	
Rumble Strip	Proactive	$3,000	0.0	$0	
Rumble StripE	Proactive	$3,500	0.0	$0	
6" Edge Lines	Proactive	$650	0.0	$0	
Ground In Wet-Reflective Markings	Proactive	$8,500	0.0	$0	
Center Line Rumble Strip	Proactive	$3,000	6.0	$18,000	
6" Center Line	Proactive	$650	0.0	$0	

Implementation Cost

Federal Funds	$16,200
Local Match (10% of Total project cost)	$1,800
Total Project Cost	**$18,000**

Page 20
Segment ID: 3.10
Date: 9/7/2012

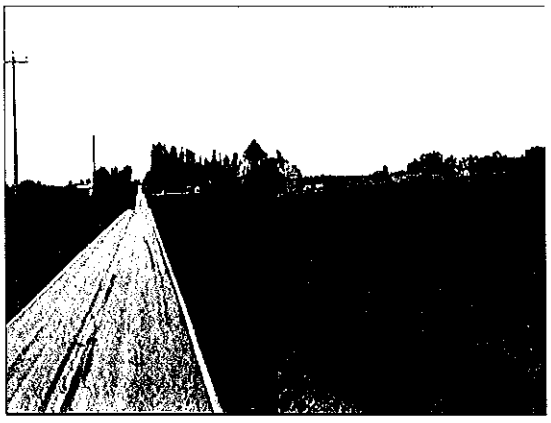
CSAH 11 from CSAH 2 (East Jct.) to S Lim. Le Center Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 11

	Verbal
Start:	CSAH 2 (East Jct.)
End:	S Lim. Le Center
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	960
Facility Type:	2-Lane
Lane Width:	11.5
Shoulder Width:	3'
Shoulder Type:	Gravel
Length (miles):	3
Rumble Installed:	No



Crash Data

2006-2010 MnCMAT Crash Data 5 years

	Total	Road Dept	K+A
Crashes	9	4	1
Density (per mile per year)	0.60	0.27	0.07
Rate (per MVM)	1.71	0.76	0.19

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	960	> 600	★	★
RD Density	0.27	0.19	★	
Access Density	9.67	12.30		
Curve Critical Radius Density	0.33	0.58		
Edge Risk	1.00	2 or 3		
Severe Head On Crash	1.00	> 1		★
% No Passing	0.50	> 50%		★
			★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost	Notes -
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0	
Rumble Strip	Proactive	$3,000	0.0	$0	
Rumble StripE	Proactive	$3,500	0.0	$0	
6" Edge Lines	Proactive	$650	0.0	$0	
Ground In Wet-Reflective Markings	Proactive	$8,500	0.0	$0	
Center Line Rumble Strip	Proactive	$3,000	3.0	$9,000	
6" Center Line	Proactive	$650	0.0	$0	

Implementation Cost

Federal Funds	$8,100
Local Match (10% of Total project cost)	$900
Total Project Cost	**$9,000**

Page 21
Segment ID: 11.03
Date: 9/7/2012

CSAH 28 from E Lim. Heidelberg CL to CSAH 28 Ends, Rice CO Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 28
Verbal
Start: E Lim. Heidelberg CL
End: CSAH 28 Ends, Rice CO
City/Rural: Rural
County: Le Sueur
ATP: 7
ADT: 1560
Facility Type: 2-Lane
Lane Width: 12
Shoulder Width: 6 / 8'
Shoulder Type: Gravel / Paved
Length (miles): 5
Rumble Installed: No / Yes

Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	18	3	1
Density (per mile per year)	0.72	0.12	0.04
Rate (per MVM)	1.26	0.21	0.07

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	1560	> 600	★	★
RD Density	0.12	0.19		
Access Density	16.60	12.30	★	★
Curve Critical Radius Density	0.00	0.58		
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.56	> 50%		★
			★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	0.0	$0
Rumble StripE	Proactive	$3,500	0.0	$0
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	0.0	$0
Center Line Rumble Strip	Proactive	$3,000	4.0	$12,000
6" Center Line	Proactive	$650	1.0	$650

Notes - Approximately 1 mile as corridor passes Lake Sanborn was assumed to be a noise sensitive area.

Implementation Cost

Federal Funds	$11,385
Local Match (10% of Total project cost)	$1,265
Total Project Cost	**$12,650**

Page 22
Segment ID: 28.05
Date: 9/7/2012

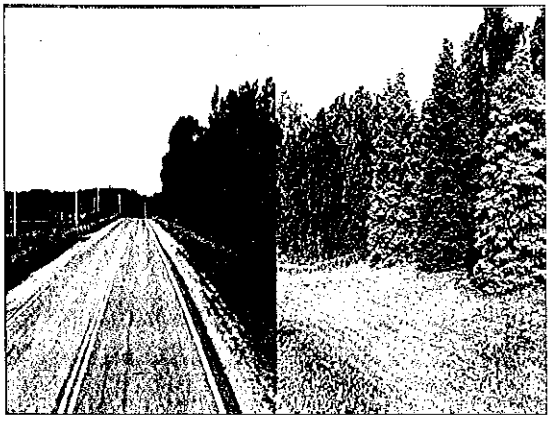
CSAH 18 from CSAH 15 (South Jct.) to CSAH 13 Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 18

	Verbal
Start:	CSAH 15 (South Jct.)
End:	CSAH 13
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	770
Facility Type:	2-Lane
Lane Width:	12
Shoulder Width:	6'
Shoulder Type:	Gravel
Length (miles):	3.2
Rumble Installed:	No



Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	4	2	0
Density (per mile per year)	0.25	0.13	0.00
Rate (per MVM)	0.89	0.44	0.00

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	770	> 600	★	★
RD Density	0.13	0.19		
Access Density	9.69	12.30		
Curve Critical Radius Density	2.19	0.58	★	★
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.67	> 50%		★
			★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	0.0	$0
Rumble StripE	Proactive	$3,500	0.0	$0
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	0.0	$0
Center Line Rumble Strip	Proactive	$3,000	0.0	$0
6" Center Line	Proactive	$650	3.2	$2,080

Notes - Corridor assumed to be a noise sensitive area.

Implementation Cost

Federal Funds	$1,872
Local Match (10% of Total project cost)	$208
Total Project Cost	**$2,080**

Page 23
Segment ID: 18.02
Date: 9/7/2012

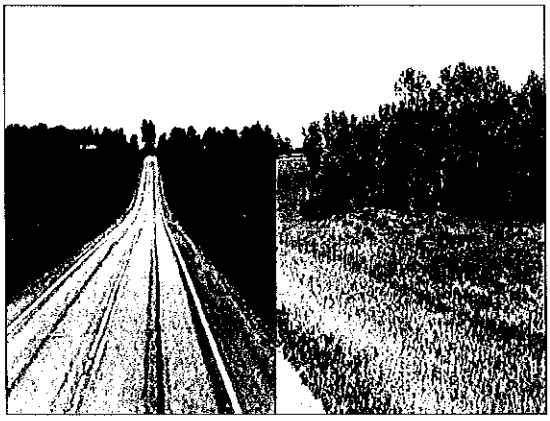
CSAH 18 from CSAH 21 to CSAH 15 (North Jct.) Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 18

Verbal
Start: CSAH 21
End: CSAH 15 (North Jct.)
City/Rural: Rural
County: Le Sueur
ATP: 7
ADT: 742.5
Facility Type: 2-Lane
Lane Width: 12
Shoulder Width: 6'
Shoulder Type: Gravel
Length (miles): 6.2
Rumble Installed: No



Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	12	5	0
Density (per mile per year)	0.39	0.16	0.00
Rate (per MVM)	1.43	0.60	0.00

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	743	> 600	★	★
RD Density	0.16	0.19		
Access Density	10.00	12.30		
Curve Critical Radius Density	1.13	0.58	★	★
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.64	> 50%		★
			★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost	Notes -
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0	
Rumble Strip	Proactive	$3,000	0.0	$0	
Rumble StripE	Proactive	$3,500	0.0	$0	
6" Edge Lines	Proactive	$650	0.0	$0	
Ground In Wet-Reflective Markings	Proactive	$8,500	0.0	$0	
Center Line Rumble Strip	Proactive	$3,000	6.2	$18,600	
6" Center Line	Proactive	$650	0.0	$0	

Implementation Cost

Federal Funds	$16,740
Local Match (10% of Total project cost)	$1,860
Total Project Cost	**$18,600**

Page 24
Segment ID: 18.01
Date: 9/7/2012

CSAH 31 from CSAH 28 to MNTH 19 Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 31

	Verbal
Start:	CSAH 28
End:	MNTH 19
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	646.25
Facility Type:	2-Lane
Lane Width:	12
Shoulder Width:	2'
Shoulder Type:	Paved
Length (miles):	4
Rumble Installed:	No

Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	8	3	0
Density (per mile per year)	0.40	0.15	0.00
Rate (per MVM)	1.70	0.64	0.00

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	646	> 600	★	★
RD Density	0.15	0.19		
Access Density	18.00	12.30	★	★
Curve Critical Radius Density	0.00	0.58		
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.57	> 50%		★
			★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost	Notes -
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0	
Rumble Strip	Proactive	$3,000	0.0	$0	
Rumble StripE	Proactive	$3,500	0.0	$0	
6" Edge Lines	Proactive	$650	0.0	$0	
Ground In Wet-Reflective Markings	Proactive	$8,500	0.0	$0	
Center Line Rumble Strip	Proactive	$3,000	4.0	$12,000	
6" Center Line	Proactive	$650	0.0	$0	

Implementation Cost

Federal Funds	$10,800
Local Match (10% of Total project cost)	$1,200
Total Project Cost	**$12,000**

Page 25
Segment ID: 31.01
Date: 9/7/2012

CSAH 11 from Elysian CL to CSAH 2 (East Jct.) Project

Agency: Le Sueur County

Roadway Data

Type: CSAH
Number: 11

	Verbal
Start:	Elysian CL
End:	CSAH 2 (East Jct.)
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	377
Facility Type:	2-Lane
Lane Width:	11.5
Shoulder Width:	2'
Shoulder Type:	Gravel
Length (miles):	10
Rumble Installed:	No

Crash Data

2006-2010 MnCMAT Crash Data — 5 years

	Total	Road Dept	K+A
Crashes	17	8	2
Density (per mile per year)	0.34	0.16	0.04
Rate (per MVM)	2.47	1.16	0.29

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	377	> 600		
RD Density	0.16	0.19		
Access Density	12.40	12.30	★	★
Curve Critical Radius Density	0.80	0.58	★	★
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.66	> 50%		★
			★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0
Rumble Strip	Proactive	$3,000	0.0	$0
Rumble StripE	Proactive	$3,500	0.0	$0
6" Edge Lines	Proactive	$650	0.0	$0
Ground In Wet-Reflective Markings	Proactive	$8,500	0.0	$0
Center Line Rumble Strip	Proactive	$3,000	9.0	$27,000
6" Center Line	Proactive	$650	1.0	$650

Notes - Approximately 1 mile as corridor passes German Lake was assumed to be a noise sensitive area.

Implementation Cost

Federal Funds	$24,885
Local Match (10% of Total project cost)	$2,765
Total Project Cost	**$27,650**

Page 26
Segment ID: 11.02
Date: 9/7/2012

CNTY 104 from CSAH 16 to CR 105 Project

Agency: Le Sueur County

Roadway Data

Type: CNTY
Number: 104

	Verbal
Start:	CSAH 16
End:	CR 105
City/Rural:	Rural
County:	Le Sueur
ATP:	7
ADT:	310
Facility Type:	2-Lane
Lane Width:	12
Shoulder Width:	3'
Shoulder Type:	Gravel
Length (miles):	2.5
Rumble Installed:	No

Photo Not Available

Crash Data

2006-2010 MnCMAT Crash Data 5 years

	Total	Road Dept	K+A
Crashes	1	0	0
Density (per mile per year)	0.08	0.00	0.00
Rate (per MVM)	0.71	0.00	0.00

Ranking Criteria

	Value	Critical	Road Departure Risk Ranking	Head On Risk Ranking
ADT Range	310	> 600		
RD Density	0.00	0.19		
Access Density	14.00	12.30	★	★
Curve Critical Radius Density	0.80	0.58	★	★
Edge Risk	1.00	2 or 3		
Severe Head On Crash	0.00	> 1		
% No Passing	0.70	> 50%		★
			★★	★★★

Short List of Strategies Considered

Description	Type	Cost per mi	Mileage	Cost	#N/A
2' Shoulder Pave+RS+Safety Wedge	Proactive	$40,000	0.0	$0	
Rumble Strip	Proactive	$3,000	0.0	$0	
Rumble StripE	Proactive	$3,500	0.0	$0	
6" Edge Lines	Proactive	$650	0.0	$0	
Ground In Wet-Reflective Markings	Proactive	$8,500	0.0	$0	
Center Line Rumble Strip	Proactive	$3,000	2.5	$7,500	
6" Center Line	Proactive	$650	0.0	$0	

Implementation Cost

Federal Funds	$6,750
Local Match (10% of Total project cost)	$750
Total Project Cost	**$7,500**

Page 28
Segment ID: 104.01
Date: 9/7/2012

Rank	Road Number	Municipality	Segment Length (Miles)	Termini Location	Traffic Count
1	26	LE SUEUR	0.1	TH 112 TO PARK LANE ON FERRY STREET	4150
2	26	MONTGOMERY	0.21	TH 13 TO UP RR ON BOULVARD AVE	3250
3	26	MONTGOMERY	0.3	UP RR TO 5TH STREET (CSAH 3) ON BOULEVARD	3250
4	36	LE SUEUR	0.08	FERRY ST TO BRIDGE ST (TH 112) ON SECOND STREET	3250
5	26	LE SUEUR	0.4	PARK LANE TO KINGSWAY DRIVE (CSAH 35) ON FERRY STREET	3000
6	14	WATERVILLE	0.37	1ST ST (CSAH 52) TO TH 13 ON MAIN ST	2950
7	26	MONTGOMERY	0.05	BOULEVARD TO MILL ON 5TH STREET IN MONTGOMERY	2900
8	36	LE SUEUR	0.07	MAIN ST TO 2ND ST ON FERRY STREET	2800
9	36	LE SUEUR	0.14	2ND ST TO TH 112 ON FERRY STREET	2800
10	21	KASOTA	0.18	RIDGELY ST TO MILL ST ON HILL ST	2600
11	26	MONTGOMERY	0.3	5TH ST TO 0.3 MI E OF 5TH ST ON MILL AVE	2600
12	3		5.3	0.7 MILES NORTH CSAH 26 TO CSAH 29	2500
13	11	LE CENTER	0.2	TH 99 TO 0.2 MI NORTH ON CORDOVA AVE	2300
14	11	LE CENTER	0.62	0.2 MI N OF TH 99 TO SPORS STREET ON CORDOVA AVE	2300
15	11	LE CENTER	0.11	SPORS STREET TO N LIM LE CENTER (6TH STREET) ON CORDOVA AVE	2300
16	14	WATERVILLE	0.08	REED ST TO 1ST ST (CSAH 52) ON MAIN ST	2300
17	29		1	E CO LINE TO EAST JCT CSAH 3	2300
18	29		0.5	E JCT CSAH 3 TO EAST LIMITS OF NEW PRAGUE	2300
19	29	NEW PRAGUE	0.5	E LIM OF NEW PRAGUE TO W LIM NEW PRAGUE W JCT CSAH 3	2300
20	21		1	TH 22 TO CSAH 18	2200
21	21		2	CSAH 18 TO TH 99	2200
22	**29**		**0.5**	**W JCT CSAH 3 (10th Ave) TO CSAH 60 (1st Ave)**	**2200**
23	3	MONTGOMERY	0.67	0.30 MI N OF TH 21 TO BOULEVARD AVE (CSAH 26) ON 5TH STREET	2150
24	60	NEW PRAGUE	0.07	TH 19 TO 1ST STREET SE ON 1ST AVE SE	2150
25	26	MONTGOMERY	0.35	0.3 MI E OF 5TH ST TO E LIM MONTGOMERY (CSAH 3) ON MILL AVE	2100
26	45		1.8	NORTH CITY LIMITS OF KASOTA TO T.H. 99	2100
27	3	MONTGOMERY	0.3	SOUTH LIMIT OF MONTGOMERY TH 21 TO 0.30 MI NO	1950
28	39	LE CENTER	0.19	LEXINGTON AVE TO MONTGOMERY AVE ON MINNESOTA STREET	1950
29	21		3.1	SO CO LINE TO SOUTH LIM KASOTA (KENYON ST)	1900
30	21	KASOTA	0.5	S LIMS KASOTA (KENYON ST) TO MAIN ST (CSAH 42) ON RIDGELY ST	1900
31	21	KASOTA	0.16	MAIN ST (CSAH 42) TO HILL ST ON RIDGELY ST	1900
32	26	LE SUEUR	0.3	KINGSWAY DR (CSAH 35) TO E LIMS LESUEUR ON FERRY ST	1900
33	26		2.3	EAST LIMT OF LESUER TO CO RD 116	1900
34	28		3	TH 13 TO EAST COUNTY LINE	1900
35	15		2.4	0.3 MI SE OF NORTH JCT CSAH 18 TO SOUTH LIMITS OF CLEVELAND	1850
36	15	CLEVELAND	0.23	SOUTH LIMITS CLEVELAND TO COLUMBIA ST (CSAH 47) ON 10TH ST	1850
37	15	CLEVELAND	0.27	COLUMBIA ST (CSAH 47) TO TH 99 ON 10TH ST	1850
38	3		1	CSAH 29 TO TRUNK HIGHWAY 19	1800
39	21	KASOTA	0.24	MILL ST TO E LIMS KASOTA	1750
40	62		0.1	S CO LINE TO TH 60	1750
41	38	LE CENTER	0.35	TH 99 TO MINNESOTA ST ON MAPLE AVE	1700
42	45	KASOTA	0.35	HILL ST (CSAH 21) TO NORTH LIMITS KASOTA ON RABBIT RD	1700
43	57	MONTGOMERY	0.42	OAK ST (CSAH 56) TO BOULEVARD ST (CSAH 26) ON 1ST ST	1700
44	60	NEW PRAGUE	0.39	1ST STREET SE TO 0.11 MI SOUTH OF 5TH STREET ON 1ST AVE SE	1700
45	60	NEW PRAGUE	0.33	0.11 MI S 5TH ST TO SO LIMITS OF NEW PRAGUE ON 1ST AVE	1700
46	**60**		**0.2**	**SO LIM NEW PRAGUE TO CSAH 29 (15th St)**	**1700**
47	15		3.9	CSAH 16 TO 0.3 MI SE OF NORTH JCT CSAH 18	1600
48	26		2.8	CO ROAD 136 TO W LIM MONTGOMERY	1600
49	26	MONTGOMERY	0.26	WEST LIMITS OF MONTGOMERY TO TH 13 ON LEXINGTON AVE	1600
50	37	LE SUEUR	0.07	TH 112 TO 5TH ST ON BRIDGE ST	1600
51	37	LE SUEUR	0.12	BRIDGE ST TO DEXTER ST ON FIFTH ST	1600
52	37	LE SUEUR	0.77	DEXTER ST TO PECK ST ON FIFTH AND FOURTH STREET	1600
53	11	ELYSIAN	0.32	TH 60 TO 0.35 MILES SOUTH OF CSAH 14	1550
54	11	ELYSIAN	0.26	0.35 MI SOUTH OF CSAH 14 TO 0.09 MI SOUTH OF CSAH 14	1550
55	11	ELYSIAN	1.27	0.09 MI SO OF CSAH 14 TO NORTH LIMITS OF ELYSIAN (CSAH 13)	1550
56	**29**		**0.5**	**CSAH 60 (1st Ave) TO TH 13**	**1550**
57	36	LE SUEUR	0.3	SO LIM LESUEUR TO DAVIS ST ON MAIN ST	1550
58	36	LE SUEUR	0.2	DAVIS ST TO 0.05 MI SO OF FERRY ST ON MAIN STREET	1550
59	36	LE SUEUR	0.05	0.05 MI SO OF FERRY ST TO FERRY ST ON MAIN ST	1550
60	35	LE SUEUR	0.14	TH 112 TO 4TH ST (CSAH 37) ON DAKOTA ST	1500
61	21		0.2	E LIMS KASOTA TO TH 22	1450
62	23		4.73	TH 99 TO 1.09 MILES S OF 390TH STREET	1450
63	23		1.09	1.09 MILES S OF 390TH ST TO 390TH ST (EAST CSAH 23)	1450
64	23		0.1	SOUTH JCT CSAH 23 TO CSAH 36	1450
65	56	MONTGOMERY	0.5	TH 13 TO 5TH ST (CSAH 3) ON OAK ST	1400
66	16		0.4	ALONG SO CO LINE 2.7 MI W OF CSAH 15 TO 2.3 MI W OF CSAH 15	1350
67	16		2.3	2.3 M. WEST OF CSAH 15 TO CSAH 15	1350
68	52	WATERVILLE	0.06	PAQUIN ST (CSAH 53) TO MAIN ST (CSAH 14) ON 3RD ST	1350
69	19		3.6	SOUTH COUNTY LINE TO CSAH 18	1300
70	26		2	EAST JCT CSAH 11 TO WEST JCT CSAH 32	1300
71	26		0.2	WEST JCT CSAH 32 TO 0.05 MI W OF CR 121	1300
72	26		0.1	0.05 MI W TO 0.05 MI E OF CR 121 IN LEXINGTON	1300
73	26		0.6	0.05 MI E CR 121 TO 0.20 MI W CSAH 5	1300
74	26		2.9	0.2 MI W OF CSAH 5 TO CO RD 136	1300
75	40	LE CENTER	0.26	TH 99 TO SHARON ST ON PARK AVENUE	1300

76	40	LE CENTER	0.08	SHARON ST TO MINNESOTA ST ON PARK AVENUE	1300
77	45		0.1	CSAH 45 TO T.H. 22 ON 446TH STREET	1300
78	3		0.5	CSAH 26 TO SOUTH LIMITS OF MONTGOMERY	1250
79	3	MONTGOMERY	0.2	SOUTH LIMITS TO NORTH LIMITS MONTGOMERY	1250
80	28		6.4	S JCT CSAH 11 TO 0.25 MI W OF CSAH 30 EAST LIMS HEIDELBURG	1250
81	28	HEIDELBERG	0.2	WEST LIMITS OF HEIDLBERG TO CSAH 30	1250
82	28	HEIDELBERG	0.2	CSAH 30 TO EAST LIMITS OF HEIDELBERG	1250
83	28		1.7	0.3 MI E OF CSAH 30 TO TH 13	1250
84	35	LE SUEUR	0.44	4TH ST (CSAH 37) TO 0.1 MI S OF PECK ST ON DAKOTA ST	1250
85	35	LE SUEUR	0.66	0.1 MI S OF PECK ST TO BARONY ROAD ON KINGSWAY DR	1250
86	35	LE SUEUR	0.13	BARONY ROAD TO CSAH 26 ON KINGSWAY DRIVE	1250
87	14	WATERVILLE	0.09	450 FT W OF HERBERT ST TO HERBERT ST ON PAQUIN ST	1200
88	39	LE CENTER	0.25	MAPLE AVE (CSAH 38) TO LEXINGTON AVE ON MINNESOTA STREET	1150
89	39	LE CENTER	0.06	MONTGOMERY AVE TO CORDOVA AVE (CSAH 11) ON MINNESOTA STREET	1150
90	52	WATERVILLE	0.09	HOOSAC ST TO PACQUIN ST (CSAH 53) ON 3RD ST	1150
91	3	WATERVILLE	0.14	TH 60 S LIMS WATERVILLE TO 0.14 MI N ON REED ST	1100
92	3	WATERVILLE	0.13	0.14 MI N OF TH 60 TO GREEN STREET ON REED STREET	1100
93	3	WATERVILLE	0.24	GREEN ST TO PAQUIN ST (CSAH 14/53) ON REED ST	1100
94	14	WATERVILLE	0.18	HERBERT ST TO BUCHANAN ST ON PAQUIN	1100
95	14	WATERVILLE	0.06	BUCHANAN ST TO REED ST (CSAH 3) ON PAQUIN ST	1100
96	26		1.7	CO RD 116 TO 0.2 MI EAST OF CSAH 15	1100
97	26		3.5	0.2 MI E OF CSAH 15 TO WEST JCT OF CSAH 11	1050
98	46	CLEVELAND	0.37	TH 99 TO 6TH ST (CSAH 47) ON BROADWAY ST	1050
99	53	WATERVILLE	0.09	REED ST TO 1ST STREET (CSAH 52) ON PAQUIN ST	1000
100	53	WATERVILLE	0.08	1ST STREET (CSAH 52) TO 2ND STREET ON PAQUIN STREET	1000
101	53	WATERVILLE	0.08	2ND ST TO 3RD ST (CSAH 52) ON PAQUIN STREET	1000
102	53	WATERVILLE	0.13	3RD ST TO 5TH ST ON PAQUIN ST	1000
103	53	WATERVILLE	0.12	5TH ST TO TH 13 ON PAQUIN STREET	1000
104	26		2	E LIMS MONTGOMERY (CSAH 3) TO E CO LINE (CR 137)	980
105	14	WATERVILLE	0.06	PAQUIN ST (CSAH 3/53) TO MAIN ST ON REED ST	960
106	11		3	NO JCT CSAH 28 TO TH 19	950
107	28	LE SUEUR	0.73	TH 112 TO EAST LIMIT OF LE SUEUR	900
108	28		0.9	E LIM OF LE SUEUR TO S LIM OF LE SUEUR (.19 MI S OF E 28)	900
109	28	LE SUEUR	0.98	SOUTH LIMIT LE SUEUR (.19 MI S OF EAST CSAH 28) TO TH 169	900
110	49	CLEVELAND	0.3	SOUTH LIMITS CLEVELAND TO MAIN STREET ON 2ND STREET	900
111	49	CLEVELAND	0.14	MAIN ST TO BROADWAY ST (CSAH 46) ON 2ND ST	900
112	11		2.1	NORTH LIMITS LE CENTER (6TH STREET) TO CSAH 32	890
113	15	CLEVELAND	0.11	TH 99 TO NORTH LIM CLEVELAND	890
114	15		4.1	N LIM CLEVELAND TO 0.2 MI N OF TH 112	890
115	11		1	EAST JCT CSAH 2 TO WEST JCT CSAH 2	880
116	11		2	WEST JCT CSAH 2 TO S LIMITS LE CENTER (CR 110)	880
117	11	LE CENTER	0.63	SOUTH LIMITS LE CENTER (CR 110) TO 0.63 MI NORTH	880
118	11	LE CENTER	0.4	0.63 MI N OF CR 110 TO TH 99	880
119	32		1.9	CSAH 11 TO CSAH 26	850
120	26		0.3	W JCT CSAH 11 TO E JCT CSAH 11	810
121	30	HEIDELBERG	1	SOUTH LIMIT (CSAH 28) TO NORTH LIMIT OF HEIDELBERG	810
122	30		3.1	NO LIM HEIDELBERG TO TH 19	810
123	29		1.5	1.5 MI N OF CSAH 28 TO 3.0 MI N OF CSAH 28 ALONG COUNTY LINE	800
124	32		3	CSAH 26 TO CSAH 28	800
125	36		4.9	CSAH 23 TO 0.5 MI NORTH OF CR 115 (SOUTH LIMITS LE SUEUR)	790
126	15		3.8	0.2 MI NO OF TH 112 TO CSAH 26	770
127	16		4	CSAH 15 TO CSAH 13	760
128	18		6.3	CSAH 21 TO CSAH 15	750
129	31		4	CSAH 28 TO TH 19	750
130	33		4	CSAH 26 TO CSAH 28	740
131	50	ELYSIAN	0.67	TH 60 TO TH 60	740
132	18		3.2	SOUTH JCT CSAH 15 TO CSAH 13	720
133	3	WATERVILLE	0.64	TH 13 TO NORTH LIMITS OF WATERVILLE	710
134	3		1.3	NORTH LIMITS WATERVILLE TO CSAH 10	710
135	12		5.4	TH 13 TO SO JCT CSAH 11	700
136	14		3.2	NORTH LIMITS OF ELYSIAN TO CSAH 6	660
137	14		1.5	CSAH 6 TO WEST LIMITS OF WATERVILLE	660
138	14	WATERVILLE	0.25	WEST LIMITS WATERVILLE TO 0.25 MILE EAST ON PAQUIN ST	660
139	14	WATERVILLE	0.17	0.25 MI E OF W LIMITS WATERVILLE TO .09 MI W HERBERT ST	660
140	47	CLEVELAND	0.2	BROADWAY ST (CSAH 46) TO COLUMBIA ST ON 6TH ST	660
141	16		2.2	CSAH 13 TO W. LIMITS ELYSIAN	650
142	16	ELYSIAN	0.4	WEST LIMITS OF ELYSIAN TO CSAH 11	650
143	2		1.8	CSAH 11 TO N JCT CSAH 5	630
144	2		0.2	N JCT CSAH 5 TO 0.2 MI SE OF CSAH 5 IN CORDOVA	630
145	2		2.7	0.2 MI SE OF N JCT CSAH 5 TO CR 165	630
146	46	CLEVELAND	0.28	6TH ST (CSAH 47) TO 10TH ST (CSAH 15) ON BROADWAY AVE	630
147	11		0.6	CO RD 120 TO NO JCT CSAH 28	590
148	2	KILKENNY	0.12	LINDEN AVE (CSAH 3) TO 0.12 MI EAST	550
149	2	KILKENNY	0.1	0.12 MI E OF CSAH 3 TO EAST LIM KILKENNY	550
150	28	LE SUEUR	0.11	NORTH / SOUTH JCT CSAH 28 TO EAST LIMIT OF LE SUEUR	540
151	28		5.3	EAST LIMITS LE SUEUR (.11 MI EAST OF N/S CSAH 28) TO CSAH 11	540
152	13		1.1	CSAH 12 TO CSAH 18	530
153	13		3.6	CSAH 18 TO 0.3 MI EAST OF CSAH 15	530

154	13		0.3	0.3 MI EAST OF CSAH 15 TO CSAH 15	530
155	14	ELYSIAN	1.1	CSAH 11 TO NORTH LIMITS OF ELYSIAN	530
156	52	WATERVILLE	0.25	PAQUIN TO HOOSAC ON 1ST AND 1ST TO 3RD ON HOOSAC	520
157	3		0.6	CR 168 TO SO LIM KILKENNY	495
158	3	KILKENNY	0.26	S LIMS KILKENNY TO DODD ROAD (CSAH 2) ON LINDEN AVE	495
159	3	KILKENNY	0.15	DODD RD (CSAH 2) TO 0.15 MI N ON LINDEN AVE	495
160	3		5	NORTH JCT CR 135 TO TH 21	495
161	11		2	CSAH 32 TO E JCT CSAH 26	480
162	12		1	NORTH JCT CSAH 11 TO 0.2 MI EAST OF CSAH 13	480
163	12		0.2	0.2 MI EAST OF CSAH 13 TO CSAH 13 IN BEAVER DAM	480
164	30		3	CSAH 26 TO S LIM HEIDELBERG (CSAH 28)	480
165	11		3.1	W JCT CSAH 26 TO S JCT CSAH 28	475
166	11		0.9	SO JCT CSAH 28 TO CO RD 120	475
167	13		2.5	FROM T.H. 60 NORTH TO THE INTERSECTION OF CSAH 16	475
168	37	LE SUEUR	0.08	PECK ST TO DAKOTA ST (CSAH35) ON FOURTH ST	440
169	11		2	CSAH 13 TO EAST JCT OF CSAH 12	435
170	11		3.5	SOUTH JCT CSAH 12 TO NORTH JCT CSAH 12	435
171	11		1.3	NORTH JCT CSAH 12 TO RICE LAKE RD (OLD CSAH 9)	435
172	11		3.4	RICE LAKE ROAD (OLD CSAH 9) TO E JCT CSAH 2	435
173	2	CLEVELAND	0.23	CSAH 15 TO E LIM OF CLEVELAND	430
174	2		0.2	E LIM CLEVELAND TO 0.2 MI NE	430
175	2		5.1	0.2 MI NE OF E LIM CLEVELAND TO CSAH 11	430
176	2		.2	CR 165 TO TH 13	420
177	24		5	CSAH 15 TO CSAH 11	415
178	2		1.5	TH 13 TO WEST LIMITS KILKENNY	410
179	2	KILKENNY	0.18	W LIMS KILKENNY TO LAUREL AVE (CSAH 55) ON DODD ROAD	410
180	2	KILKENNY	0.07	LAUREL AVE (CSAH 55) TO LINDEN AVE (CSAH 3) ON DODD ROAD	410
181	44	KASOTA	0.07	CHERRY ST(CSAH 41) TO HILL ST (CSAH 21) ON RICE ST	410
182	2		2.4	EAST LIM KILKENNY TO E CO LINE	400
183	61		0.4	SO CO LINE TO TH 60	395
184	3		1	S CO LINE TO TH 60 S LIMS WATERVILLE	390
185	5		7.9	CSAH 2 TO CSAH 26	380
186	7		4.3	CSAH 12 TO CSAH 2	380
187	13		2.9	CSAH 16 TO 2.9 MI NORTH OF CSAH 16	380
188	13		0.6	2.9 MI. N. CSAH 16 TO CSAH NO 12	380
189	6		1.5	TRUNK HIGHWAY 60 TO CSAH 14	355
190	3		3.4	CSAH 10 TO CR 168	345
191	10		2	CSAH 3 TO E CO LINE	340
192	41	KASOTA	0.16	RIDGELY ST (CSAH 21) TO RICE ST (CSAH 44) ON CHERRY ST	330
193	41	KASOTA	0.21	RICE TO MILL ON CHERRY AND CHERRY TO PEARL ON MILL	330
194	43	KASOTA	0.07	CHERRY ST(CSAH 41) TO HILL ST (CSAH 21) ON WEBSTER ST	325
195	63	WATERVILLE	0.08	REED ST (CSAH 3) TO 1ST ST (CSAH 52) ON HOOSAC ST	305
196	3	KILKENNY	0.14	0.15 MI N OF CSAH 2 TO N LIMIT OF KILKENNY	300
197	3		3	NORTH LIMIT OF KILKENNY TO NORTH JCT CR 135	300
198	47	CLEVELAND	0.07	6TH ST TO 7TH ST ON COLUMBIA ST	300
199	47	CLEVELAND	0.2	7TH ST TO 10TH ST (CSAH 15) ON COLUMBIA ST	300
200	52	WATERVILLE	0.06	MAIN ST (CSAH 14) TO PAQUIN ST (CSAH 53) ON 1ST ST	280
201	23		1.24	EXISITING ROADWAY ON 390TH TO TH 112	270
202	1		0.8	0.8 MILES S. OF CSAH 2 TO CSAH 2 ALONG E. CO. LINE	240
203	32		4.2	CSAH 28 TO TH 19	240
204	41	KASOTA	0.03	MILL ST TO 0.03 MI E ON PEARL ST	195
205	41	KASOTA	0.43	0.03 MI E OF MILL ST TO TH 22 IN KASOTA ON PEARL STREET	195
206	7		2.4	CSAH 14 TO CSAH 12	185
207	55	KILKENNY	0.38	ON MAPLE ST, LAUREL AVE, AND ASH ST	158
208	9		4.3	CSAH 11 TO CSAH 2	135
209	20		4.7	CSAH 23 TO CSAH 15	120
210	23		0.44	CSAH 36 TO EXISITING PAVEMENT	0

SEH

Building a Better World for All of Us®

MEMORANDUM

TO: Darrell Pettis, PE
Le Sueur County Engineer

FROM: Thomas A. Sohrweide, PE, PTOE

DATE: January 25, 2017

RE: CSAH 29 at 1st Avenue Intersection Control
SEH No. LESUR 129794 Task 7.0 14.00

At your request we have reviewed data for the intersection of CSAH 29/1st Avenue to determine if it is appropriate to install an all-way stop.

Traffic signing and control is guided by the Minnesota Manual on Uniform Traffic Control Devices. The Manual contains warrants for the installation of all-way stops. All-way stops can be warranted if defined traffic volume thresholds are met or if there has been five or more reported crashes in a 12-month period that are susceptible to correction with the installation of an all-way stop.

From the Minnesota Department of Transportation (MnDOT) crash mapping tool (MnCMAT), we found two reported crashes at this intersection from 2006 – 2015. One crash in 2009 involved a vehicle leaving the roadway in snow/ice conditions and hitting a utility pole. The second crash occurred in 2011 and involved a two vehicles in the intersection.

The traffic volume warrants are based on hourly traffic volumes entering the intersection and require that the main roadway has 300 vehicles per hour (vph) entering while the side roadway has 200 vph entering during the same hour. These thresholds are reduced at this intersection to 210 vph and 140 vph respectively, due to CSAH 29 having a 55 mph speed limit. These thresholds need to be met for eight hours of a day.

Traffic counts available for this intersection are daily counts from 2014 of 2,200 on CSAH 29 east of 1st Avenue and 1,700 on 1st Avenue north of CSAH 29. To estimate hourly traffic counts from this daily data, we used data from a MnDOT Automatic Traffic Recorder (ATR) on CSAH 2, 3.4 miles west of TH 19 (Lonsdale). From the ATR data the percent of the daily count was calculated for each hour. These hourly percentages were then applied to the daily traffic counts at this intersection.

The estimated hourly traffic counts were then compared to the warrant volume thresholds as shown on the attached warrant summary. The warrant threshold is met for one of the required eight hours and relatively close to meeting two more hours with a 10 vph increase of traffic on CSAH 29. To meet the required eight hours, the hourly traffic volumes on CSAH 29 and 1st Avenue would have to increase by 30% for one additional hour and more than double for four additional hours.

In summary, the intersection of CSAH 29/1st Avenue does not warrant the installation of an all-way stop at this time.

Attachment

Engineers | Architects | Planners | Scientists
Short Elliott Hendrickson Inc., 3535 Vadnais Center Drive, St. Paul, MN 55110-5196
SEH is 100% employee-owned | sehinc.com | 651.490.2000 | 800.325.2055 | 888.908.8166 fax

SHORT ELLIOTT HENDRICKSON INC.

3535 Vadnais Center Drive
St. Paul, MN 55110

Estimated - CSAH 29 / 1st Avenue
ALL WAY STOP
WARRANT ANALYSIS

LOCATION: CSAH 29 / 1st Avenue
COUNTY: LeSueur
REF. POINT: 0
DATE: 1/25/2017

OPERATOR: TAS

85th% Speed	Approach Description		Lanes	Approach Total
55	Major App1:	EB CSAH 29	1	1764
55	Major App3:	WB CSAH 29	1	0
30	Minor App2:	SB CSAH 60	1	1361
30	Minor App4:	NB 1st Avenue	1	0

0.70 SPEED FACTOR USED? Yes

Minimum Volume Requirement	
210	140

HOUR	MAJOR APP. 1	MAJOR APP. 3	MINOR APP. 2	MINOR APP. 4	MAJOR APPROACH TOTAL Σ (APP.1 + APP. 3)	MINOR APPROACH TOTAL Σ (APP.2 + APP. 4)	WARRANT MET MAJOR / MINOR
0:00 - 1:00	0	0	0	0	0	0	NO / NO
1:00 - 2:00	0	0	0	0	0	0	NO / NO
2:00 - 3:00	0	0	0	0	0	0	NO / NO
3:00 - 4:00	0	0	0	0	0	0	NO / NO
4:00 - 5:00	0	0	0	0	0	0	NO / NO
5:00 - 6:00	0	0	0	0	0	0	NO / NO
6:00 - 7:00	92	0	71	0	92	71	NO / NO
7:00 - 8:00	148	0	114	0	148	114	NO / NO
8:00 - 9:00	200	0	155	0	200	155	NO / YES
9:00 - 10:00	108	0	84	0	108	84	NO / NO
10:00 - 11:00	88	0	68	0	88	68	NO / NO
11:00 - 12:00	69	0	53	0	69	53	NO / NO
12:00 - 13:00	65	0	50	0	65	50	NO / NO
13:00 - 14:00	80	0	62	0	80	62	NO / NO
14:00 - 15:00	96	0	74	0	96	74	NO / NO
15:00 - 16:00	95	0	73	0	95	73	NO / NO
16:00 - 17:00	162	0	125	0	162	125	NO / NO
17:00 - 18:00	211	0	163	0	211	163	YES / YES
18:00 - 19:00	199	0	153	0	199	153	NO / YES
19:00 - 20:00	151	0	116	0	151	116	NO / NO
20:00 - 21:00	0	0	0	0	0	0	NO / NO
21:00 - 22:00	0	0	0	0	0	0	NO / NO
22:00 - 23:00	0	0	0	0	0	0	NO / NO
23:00 - 24:00	0	0	0	0	0	0	NO / NO
Daily	1764	0	1361	0			

	Met (Hr)	Required (Hr)
Hours met for warrant:	1	8

All-way Stop Warrant: **Not satisfied**

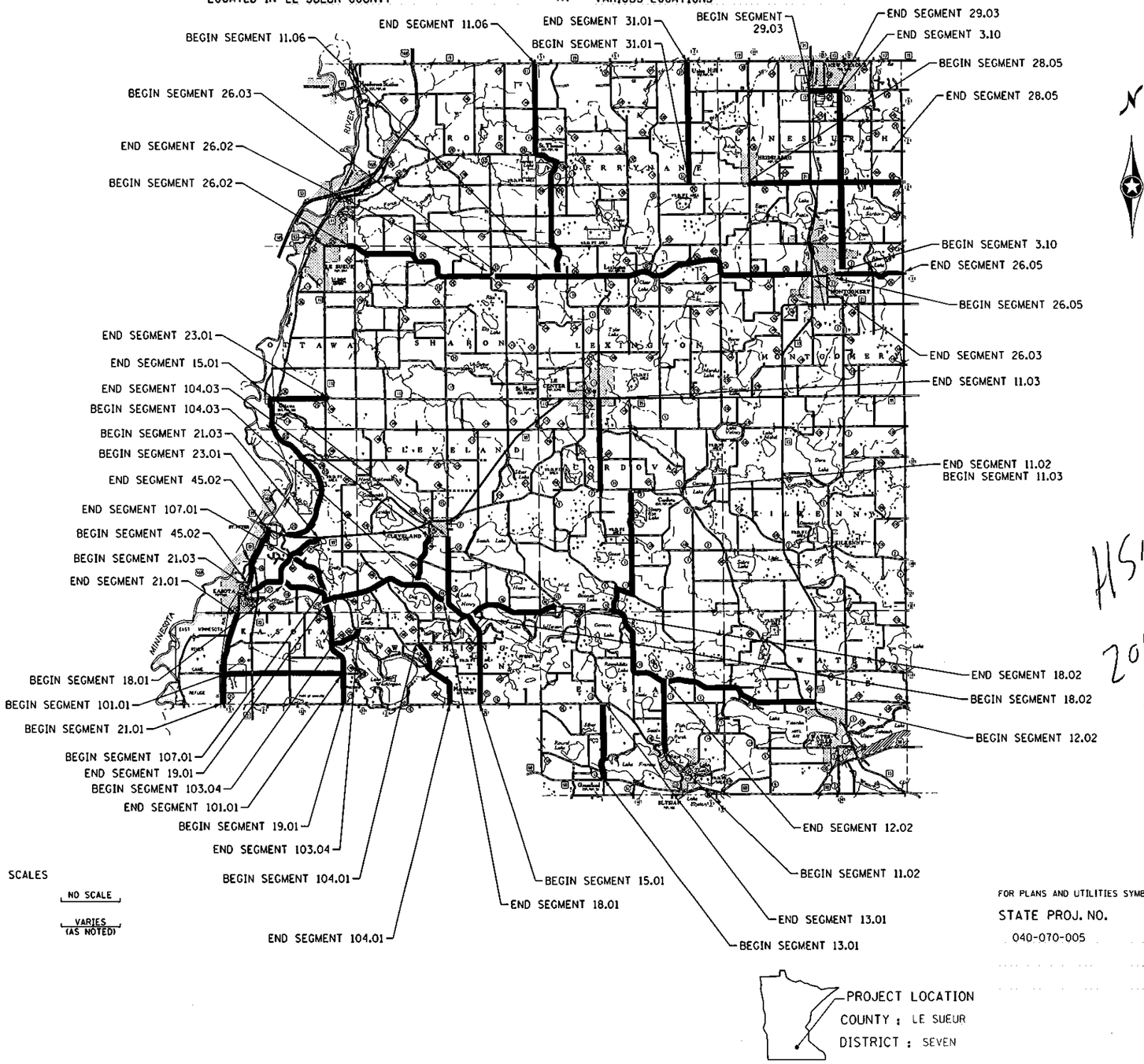
REMARKS:

C:\Users\tsohrweide\Documents\mankato\lesuer co\[Warrant Worksheet -Signal and All Way 121616.xlsx]INFORMATION

MINNESOTA DEPARTMENT OF TRANSPORTATION
& LESUEUR COUNTY

CONSTRUCTION PLAN FOR GRADING, BASE, BITUMINOUS/GRAVEL SHOULDER, RUMBLE STRIPS, STRIPING

LOCATED IN LE SUEUR COUNTY AT VARIOUS LOCATIONS



SCALES

INDEX MAP — NO SCALE

PLAN — VARIES (AS NOTED)

FOR PLANS AND UTILITIES SYMBOLS SEE TECHNICAL MANUAL

STATE PROJ. NO. 040-070-005 CHARGE IDENTIFIER

FED. PROJ. NO.

GOVERNING SPECIFICATIONS

THE 2016 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" AND THE 2016 EDITION OF THE "MATERIAL LAB SUPPLEMENTAL SPECIFICATIONS FOR CONSTRUCTION" SHALL GOVERN.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	STATEMENT OF ESTIMATED QUANTITIES
3-6	RUMBLE STRIP/STRIPE DETAILS
7-31	LOCATION MAPS, PROPOSED IMPROVEMENTS & NOTES
32	PAVEMENT MARKING TYPICALS
33	TEMPORARY TRAFFIC CONTROL LAYOUTS

THIS PLAN CONTAINS 33 SHEETS

SEH

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

PRINT NAME: MARK A. WAGNER LICENSE # 51660

SIGNATURE: DATE: 12/23/2016

HSIP 2017 or 2018

APPROVED 20
COUNTY ENGINEER

RECOMMENDED FOR APPROVAL 20
DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE-AID RULES/POLICY

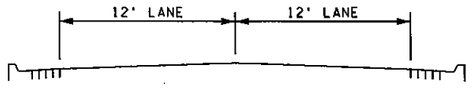
APPROVED FOR STATE AND FEDERAL FUNDING: 20
STATE AID ENGINEER

STATE PROJ. NO. 040-070-005 SHEET NO. 1 OF 33 SHEETS

12:09:20 PM
12/23/2016
S:\MKO\L\Lesur\126243\5-final-dsgn\51-drawings\40-TransHwy\2017 HSIP Rumble Stripes\StripEs\137418_tsh.dgn
Default

EXISTING TYPICAL SECTION

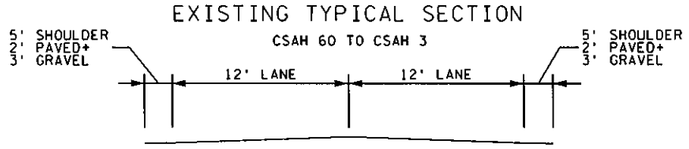
MNTH 13 TO CSAH 60



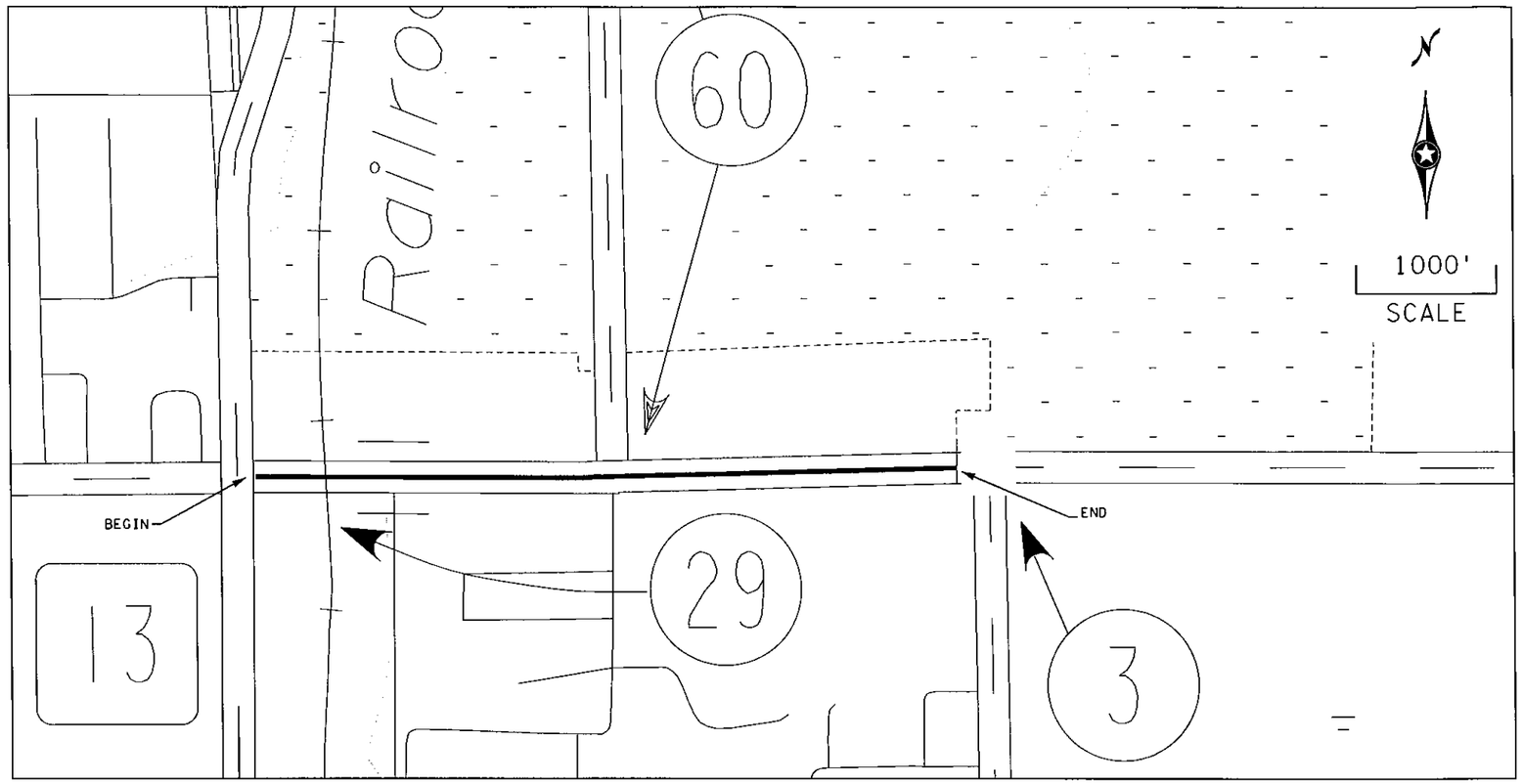
(NO EXISTING CENTERLINE OR EDGELINE RUMBLE STRIPS)
ADT (2013) = 1,550

EXISTING TYPICAL SECTION

CSAH 60 TO CSAH 3



(NO EXISTING CENTERLINE OR EDGELINE RUMBLE STRIPS)
ADT (2013) = 2,200



CSAH 29 FROM NEW PRAGUE CITY LIMITS TO MNTH 13

	SEGMENT 29.03 QUANTITIES							
	ITEM	UNIT	ESTIMATED QUANTITIES				NOTES	COMMENTS
			LEFT	CENTER	RIGHT	TOTAL		
	MILLED RUMBLE STRIPS	LIN FT	2,640		2,640	5,280	(2)	
	6" SOLID LINE EPOXY	LIN FT		863		863		YELLOW, ENTIRE SEGMENT
(1)	PAVEMENT MARKING SPECIAL	LIN FT		4,228		4,228	(3)	YELLOW, ENTIRE SEGMENT

QUANTITY NOTES:
(1) PAVEMENT MARKING SPECIAL BREAKDOWN:
325 LIN FT 6" BROKEN LINE EPOXY
3,903 LIN FT 6" DOUBLE SOLID LINE EPOXY
(2) LENGTH IS APPROXIMATE AND INCLUDES GAPS.
(3) LENGTH IS APPROXIMATE AND DOES NOT INCLUDE GAPS.

CONSTRUCTION NOTES-THIS SEGMENT:
1. INSTALL 0.5 MILES OF RUMBLE STRIPS FROM CSAH 60 TO CSAH 3.
2. SEE SHEET 3, FIGURE 2A FOR DETAILED TYPICAL SECTION.
3. SEE SHEETS 3 TO 6 FOR RUMBLE STRIP INSTALLATION DETAILS.
4. PLACE 6" CENTERLINE MARKINGS ALONG ENTIRE SEGMENT. MATCH EXISTING STRIPING PATTERNS.
5. SEE SHEET 33 FOR TRAFFIC CONTROL TYPICALS FOR THIS SEGMENT.

S.P. 040-070-005

DESIGN TEAM	NO.	BY	DATE	REVISIONS
DRAWN BY: LKC				
DESIGNER: MAW				
CHECKED BY: ---				

I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota.
Certified By: MARK A. WAGNER (Licensed Professional Engineer) Lic. No. 51660
Printed Name: _____ Date: 00/00/2016

SEH
PHONE: (651)490-2000
3535 VADNAIS CENTER DR.
ST. PAUL, MN 55110

LE SUEUR COUNTY
HIGHWAY SAFETY
IMPROVEMENT PROGRAM

LOCATION MAP
SEGMENT ID 29.03

SEH FILE NO. 137418

24 / 33

S:\RO\LN\Lesur\126243\5-final-dsgn\5f-drawings\40-Transhwy\2017 HSIP Rumble Strips_StripEs\137418_sect mapsO1.dgn 12:09:34 PM 12/23/2016 sht 24

Le Sueur County

Rural Segment Listing

*High Priority Segments Project Sheet Page Number

Project Sheet Page*	Corridor	Route	#	Start	End	Length (miles)	Road Departure Crashes	Severe Head On Crashes	ADT	RD Density	Access Density	Curves w/ Critical Radius / Mile	% No Passing	Edge Risk Assesment	Road Departure Rank	Head On Rank	Sum of Ranks	Tie Breaker ADT
	1.01	CSAH	1	CSAH 12, Rice County	CSAH 2	0.9	0	0	255	0.00	20.0	0.00	38%	1	1 (1)	48 (48)	49	255
	2.02	CSAH	2	Cleveland CL	CSAH 11 (West Jct.)	5.2	4	0	420	0.15	11.2	1.54	38%	1	2 (2)	49 (48)	50	420
	2.03	CSAH	2	CSAH 11 (East Jct.)	Kilkenny CL	8.1	4	0	521	0.10	12.0	0.62	53%	1	3 (3)	27 (27)	30	521
	2.05	CSAH	2	Kilkenny CL	CSAH 2 Ends, Rice CO	2.3	0	0	430	0.00	12.2	0.43	50%	1	4 (4)	50 (48)	52	430
27	3.01	CSAH	3	CSAH 3 Begins, Waseca CO	MNTH 60	1.0	0	0	345	0.00	14.0	1.00	88%	1	5 (5)	5 (5)	10	345
	3.04	CSAH	3	Waterville CL	Kilkenny CL	5.3	4	0	502	0.15	15.1	0.19	45%	1	6 (6)	51 (48)	54	502
	3.06	CSAH	3	Kilkenny CL	MNTH 21 (East Jct.)	7.7	1	0	440	0.03	10.8	0.39	42%	1	7 (7)	67 (48)	55	440
	3.08	CSAH	3	CSAH 26	Montgomery CL	0.5	0	0	1400	0.00	8.0	0.00	100%	1	8 (8)	28 (28)	36	1400
20	3.10	CSAH	3	Montgomery CL	CSAH 29	6.0	5	1	1605	0.17	14.5	0.00	50%	1	9 (9)	2 (2)	11	1605
	3.11	CSAH	3	CSAH 29	MNTH 13	2.0	2	0	70	0.20	18.5	0.00	60%	1	10 (10)	29 (29)	39	70
	5.02	CSAH	5	CSAH 2 (North Jct.)	CSAH 26	7.8	3	0	243	0.08	10.5	0.26	43%	1	11 (11)	68 (48)	59	243
	6.01	CSAH	6	MNTH 60	CSAH 14	1.5	0	0	395	0.00	11.3	0.00	70%	1	12 (12)	52 (48)	60	395
	7.02	CSAH	7	CSAH 12	CSAH 2	4.3	0	0	375	0.00	13.0	0.00	8%	1	13 (13)	53 (48)	61	375
	8.01	CSAH	8	MNTH 13	CSAH 3	1.2	1	0	115	0.17	15.8	0.00	100%	1	14 (14)	30 (30)	44	115
	10.01	CSAH	10	CSAH 3	CSAH 10 Ends, Rice CO	2.0	0	0	370	0.00	11.5	0.00	42%	1	15 (15)	69 (48)	63	370
26	11.02	CSAH	11	Elysian CL	CSAH 2 (East Jct.)	10.0	8	0	377	0.16	12.4	0.80	66%	1	16 (16)	6 (6)	22	377
21	11.03	CSAH	11	CSAH 2 (East Jct.)	S Lim. Le Center	3.0	4	1	960	0.27	9.7	0.33	50%	1	17 (17)	7 (7)	24	960
	11.05	CSAH	11	N.Lim. Le Center	CSAH 26 (East Jct.)	4.0	4	0	845	0.20	12.0	0.25	58%	1	18 (18)	31 (31)	49	845
17	11.06	CSAH	11	CSAH 26 (West Jct.)	MNTH 19, Scott CO	7.7	4	0	675	0.10	13.0	0.78	38%	1	19 (19)	8 (8)	27	675
	12.01	CSAH	12	CSAH 13	CSAH 11 (West Jct.)	1.3	1	0	330	0.15	11.5	3.08	88%	3	20 (20)	32 (32)	52	330
7	12.02	CSAH	12	CSAH 11 (East Jct.)	MNTH 13	5.3	15	0	680	0.57	14.7	0.75	44%	1	21 (21)	9 (9)	30	680
19	13.01	CSAH	13	MNTH 60	CSAH 16	2.5	0	0	480	0.00	8.8	0.80	0%	1	22 (22)	54 (48)	70	480
	13.02	CSAH	13	CSAH 16	CSAH 15	8.3	10	0	450	0.24	14.6	0.84	65%	1	23 (23)	10 (10)	33	450
	14.02	CSAH	14	Elysian CL	Waterville CL	4.8	5	0	702	0.21	9.4	0.42	67%	1.5	24 (24)	33 (33)	57	702
12	15.01	CSAH	15	CSAH 16, Blue Earth CO	Cleveland CL	6.1	10	0	1543	0.33	10.8	0.66	55%	1	25 (25)	11 (11)	36	1543
	15.03	CSAH	15	Cleveland CL	CSAH 26	8.0	4	0	875	0.10	13.1	0.00	14%	1	26 (26)	34 (34)	60	875
	16.01	CSAH	16	CSAH 16 Begins, Blue Earth CO	CSAH 13	6.7	4	0	981	0.12	11.6	0.15	50%	1	27 (27)	35 (35)	62	981
	16.02	CSAH	16	CSAH 13, CSAH 16	CSAH 11	2.6	1	0	0	0.00	16.2	1.54	63%	1	28 (28)	12 (12)	40	0
24	18.01	CSAH	18	CSAH 21	CSAH 15 (North Jct.)	6.2	5	0	743	0.16	10.0	1.13	64%	1	29 (29)	13 (13)	42	743
23	18.02	CSAH	18	CSAH 15 (South Jct.)	CSAH 13	3.2	2	0	770	0.13	9.7	2.19	67%	1	30 (30)	14 (14)	44	770
14	19.01	CSAH	19	CSAH 19 Begins, Blue Earth CO	CSAH 18	3.6	1	0	1150	0.06	13.9	1.39	67%	1	31 (31)	3 (3)	34	1150
2	21.01	CSAH	21	CSAH 21 Begins, Blue Earth CO	Kasota CL	3.0	11	0	1950	0.73	13.7	0.33	50%	3	32 (32)	15 (15)	47	1950
5	21.03	CSAH	21	Kasota CL	MNTH 99	3.0	8	1	1950	0.53	13.7	2.00	75%	1	33 (33)	1 (1)	34	1950
4	23.01	CSAH	23	MNTH 99	MNTH 112	7.8	21	0	1335	0.54	9.0	1.28	62%	2	34 (34)	16 (16)	50	1335
	24.01	CSAH	24	CSAH 15	CSAH 11	5.0	2	0	490	0.08	14.6	0.00	27%	1	35 (35)	55 (48)	83	490
13	26.02	CSAH	26	Le Sueur CL	CSAH 33 CR-112	5.2	21	0	1168	0.81	13.3	0.58	56%	1	36 (36)	17 (17)	53	1168
15	26.03	CSAH	26	CSAH 33 CR-112	Montgomery CL	10.7	19	0	997	0.36	12.7	0.09	34%	1	37 (37)	36 (36)	73	997
3	26.05	CSAH	26	Montgomery CL	CSAH 26 Ends, Rice CO	2.2	9	0	1300	0.82	15.0	0.00	70%	3	38 (38)	18 (18)	56	1300
	28.02	CSAH	28	CSAH 28	CSAH 11 (North Jct.)	6.0	2	0	585	0.07	10.3	0.33	61%	1	39 (39)	56 (48)	87	585
	28.03	CSAH	28	CSAH 11 (South Jct.)	W Lim. Heidelberg CL	6.5	6	0	767	0.18	11.4	0.00	32%	1	40 (40)	57 (48)	88	767
22	28.05	CSAH	28	E Lim. Heidelberg CL	CSAH 28 Ends, Rice CO	5.0	3	0	1560	0.12	16.6	0.00	56%	1	41 (40)	19 (19)	59	1560
	29.01	CSAH	29	CSAH 29 Begins, Rice CO	New Prague CL	2.7	2	0	2055	0.15	14.8	0.00	43%	1	42 (40)	37 (37)	77	2055
11	29.03	CSAH	29	New Prague CL	MNTH 13, T-9	1.0	1	0	2150	0.20	17.0	0.00	67%	1	43 (40)	20 (20)	60	2150
	30.01	CSAH	30	CSAH 26	S Lim. Heidelberg CL	3.0	0	0	475	0.00	11.0	0.00	33%	1	44 (40)	70 (48)	88	475
8	30.03	CSAH	30	Heidelberg CL	MNTH 19, Scott CO	3.0	1	0	900	0.07	12.7	0.00	25%	2	45 (40)	38 (38)	78	900
25	31.01	CSAH	31	CSAH 28	MNTH 19	4.0	3	0	646	0.15	18.0	0.00	57%	1	46 (40)	21 (21)	61	646
	32.01	CSAH	32	CSAH 11	CSAH 26 (West Jct.)	2.0	5	0	900	0.50	7.5	0.00	50%	1	47 (40)	39 (39)	79	900
6	32.02	CSAH	32	CSAH 26 (East Jct.)	CSAH 28 (East Jct.)	3.0	4	0	1000	0.27	4.0	0.67	50%	1	48 (40)	22 (22)	62	1000
	32.03	CSAH	32	CSAH 28 (West Jct.)	MNTH 19, Scott CO	8.0	0	0	523	0.00	10.4	0.25	57%	1	49 (40)	58 (48)	88	523
	33.01	CSAH	33	CSAH 26	CSAH 28	4.0	2	0	660	0.10	9.8	0.00	21%	1	50 (40)	59 (48)	88	660
	36.01	CSAH	36	CSAH 23	S Lim. Le Sueur CL	4.8	3	0	880	0.13	8.8	1.67	40%	1	51 (40)	40 (40)	80	880
1	45.02	CSAH	45	Kasota CL	MNTH 99	2.0	9	0	2100	0.90	17.0	0.00	100%	3	52 (40)	23 (23)	63	2100
	100.01	CNTY	100	CSAH 36	CSAH 23	1.2	0	0	390	0.00	5.1	0.00	100%	1	0 ()	60 (48)	48	390
9	101.01	CNTY	101	CSAH 21	CSAH 19	4.0	7	0	710	0.35	12.0	0.00	67%	2	53 (40)	41 (41)	81	710
	102.02	CNTY	102	MNTH 22 (Middle Jct.)	Kasota CL	0.3	0	0	440	0.00	30.0	0.00	100%	3	54 (40)	42 (42)	82	440
	103.01	CNTY	103	CR 105, SEG #1 Begins	CR 104, SEG #1 Ends	3.1	1	0	218	0.06	7.7	0.00	100%	2	55 (40)	61 (48)	88	218
	103.03	CNTY	103	CR 103, SEG #3 Begins	CR 105	0.2	0	0	190	0.00	15.0	0.00	100%	1	56 (40)	43 (43)	83	190
16	103.04	CNTY	103	CSAH 19, SEG #4 Begins	CR 103	1.0	0	0	750	0.00	14.0	2.00	100%	1	57 (40)	4 (4)	44	750
28	104.01	CNTY	104	CSAH 16	CR 105	2.5	0	0	310	0.00	14.0	0.80	70%	1	58 (40)	24 (24)	64	310
18	104.03	CNTY	104	CSAH 18 (West Jct.)	Cleveland CL	1.5	2	0	553	0.27	14.0	3.33	90%	1	59 (40)	25 (25)	65	553
	105.02	CNTY	105	CR 103	CSAH 15	2.4	1	0	385	0.08	13.3	0.00	44%	1	60 (40)	62 (48)	88	385
10	107.01	CNTY	107	CSAH 18	CSAH 21	1.8	0	0	560	0.00	18.3	2.78	100%	2	61 (40)	26 (26)	66	560
	114.03	CNTY	114	Le Center CL	CSAH 11 (West Jct.)	2.5	0	0	270	0.00	14.8	0.00	50%	1	62 (40)	44 (44)	84	270
	115.01	CNTY	115	CSAH 36	Le Sueur CL	0.6	0	0	310	0.00	18.3	0.00	50%	1	63 (40)	45 (45)	85	310
	115.03	CNTY	115	Le Sueur CL	CSAH 15	4.1	1	0	408	0.05	11.7	0.00	63%	1	64 (40)	63 (48)	88	408
	116.02	CNTY	116	CR 154	CSAH 26	0.9	0	0	130	0.00	11.1	0.00	50%	1	65 (40)	64 (48)	88	130
	126.01	CNTY	126	CSAH 11	CSAH 5	2.0	1	0	305	0.10	13.0	0.00	58%	1	66 (40)	46 (46)	86	305
	131.02	CNTY	131	CSAH 6 (North Jct.)	Waterville CL	1.9	0	0	210	0.00	12.6	0.00	58%	3	67 (40)	47 (47)	87	210

1/6

Le Sueur County

Rural Segment Listing

*High Priority Segments Project Sheet Page Number

Project Sheet Page*	Corridor	Route	#	Start	End	Length (miles)	Road Departure Crashes	Severe Head On Crashes	ADT	RD Density	Access Density	Curves w/ Critical Radius / Mile	% No Passing	Edge Risk Assesment	Road Departure Rank	Head On Rank	Sum of Ranks	Tie Breaker ADT
	136.02	CNTY	136	0.5 miles south of CR 138	MNTH 99	2.1	0	0	158	0.00	11.9	0.48	100%	3	0 ()	65 (48)	48	158
	154.01	CNTY	154	CR 116	CSAH 33	2.5	0	0	255	0.00	11.2	0.00	56%	1	68 (40)	66 (48)	88	255
						265.6	247	3										

Critical % No Passing **50%**

# of High Priority Segments	
ROR	Head On
39	47

Edge Risk Legend

3 -- Risky' - NEITHER shoulder or good clear zone
2 -- Either a shoulder OR good clear zone
1 -- BOTH shoulder and a good clear zone

	Critical ADT Range - Road Departure	Critical ADT Range - Head On
Min	600	600
Max	10,000,000	10,000,000

	Access	Road Departure	Critical Radius Curves
Total	3260	247	155
Total Mileage	265.6	265.6	265.6
Years		5	
Average Density (Total/Mile)	**12.3**	**0.19**	**0.58**

Le Sueur County
Rural Segment Prioritization - Head On Crash Priority

#	Corridor	Route	#	Start	End	Length	ADT	ADT Range	Access Density	Curve Critical Radius Density	% No Passing	Severe Head On Crash	Totals	Tiebreakers Severe Head On Crashes	Tiebreakers ADT
1	21.03	CSAH	21	Kasota CL	MNTH 99	3.0	1,950	★	★	★	★	★		1	1950
2	3.1	CSAH	3	Montgomery CL	CSAH 29	6.0	1,605	★	★		★	★		1	1605
3	19.01	CSAH	19	CSAH 19 Begins, Blue Earth CO	CSAH 18	3.6	1,150	★	★	★	★			0	1150
4	103.04	CNTY	103	CSAH 19, SEG #4 Begins	CR 103	1.0	750	★	★	★	★			0	750
5	3.01	CSAH	3	CSAH 3 Begins, Waseca CO	MNTH 60	1.0	345		★	★	★			0	345
6	11.02	CSAH	11	Elysian CL	CSAH 2 (East Jct.)	10.0	377		★	★	★			0	377
7	11.03	CSAH	11	CSAH 2 (East Jct.)	S Lim. Le Center	3.0	960	★			★	★		1	960
8	11.06	CSAH	11	CSAH 26 (West Jct.)	MNTH 19, Scott CO	7.7	675	★	★	★				0	675
9	12.02	CSAH	12	CSAH 11 (East Jct.)	MNTH 13	5.3	680	★	★	★				0	680
10	13.02	CSAH	13	CSAH 16	CSAH 15	8.3	450		★	★	★			0	450
11	15.01	CSAH	15	CSAH 16, Blue Earth CO	Cleveland CL	6.1	1,543	★		★	★			0	1543
12	16.02	CSAH	16	CSAH 13, CSAH 16	CSAH 11	2.6	-		★	★	★			0	0
13	18.01	CSAH	18	CSAH 21	CSAH 15 (North Jct.)	6.2	743	★		★	★			0	743
14	18.02	CSAH	18	CSAH 15 (South Jct.)	CSAH 13	3.2	770	★		★	★			0	770
15	21.01	CSAH	21	CSAH 21 Begins, Blue Earth CO	Kasota CL	3.0	1,950	★	★		★			0	1950
16	23.01	CSAH	23	MNTH 99	MNTH 112	7.8	1,335	★		★	★			0	1335
17	26.02	CSAH	26	Le Sueur CL	CSAH 33 CR-112	5.2	1,168	★	★		★			0	1168
18	26.05	CSAH	26	Montgomery CL	CSAH 26 Ends, Rice CO	2.2	1,300	★	★		★			0	1300
19	28.05	CSAH	28	E Lim. Heidelberg CL	CSAH 28 Ends, Rice CO	5.0	1,560	★	★		★			0	1560
20	29.03	CSAH	29	New Prague CL	MNTH 13, T-9	1.0	2,150	★	★		★			0	2150
21	31.01	CSAH	31	CSAH 28	MNTH 19	4.0	646	★	★		★			0	646
22	32.02	CSAH	32	CSAH 26 (East Jct.)	CSAH 28 (East Jct.)	3.0	1,000	★		★	★			0	1000
23	45.02	CSAH	45	Kasota CL	MNTH 99	2.0	2,100	★	★		★			0	2100
24	104.01	CNTY	104	CSAH 16	CR 105	2.5	310		★	★	★			0	310
25	104.03	CNTY	104	CSAH 18 (West Jct.)	Cleveland CL	1.5	553		★	★	★			0	553
26	107.01	CNTY	107	CSAH 18	CSAH 21	1.8	560		★	★	★			0	560
27	2.03	CSAH	2	CSAH 11 (East Jct.)	Kilkenny CL	8.1	521			★	★			0	521
28	3.08	CSAH	3	CSAH 26	Montgomery CL	0.5	1,400	★			★			0	1400
29	3.11	CSAH	3	CSAH 29	MNTH 13	2.0	70		★		★			0	70
30	8.01	CSAH	8	MNTH 13	CSAH 3	1.2	115		★		★			0	115
31	11.05	CSAH	11	N.Lim. Le Center	CSAH 26 (East Jct.)	4.0	845	★			★			0	845
32	12.01	CSAH	12	CSAH 13	CSAH 11 (West Jct.)	1.3	330			★	★			0	330
33	14.02	CSAH	14	Elysian CL	Waterville CL	4.8	702	★			★			0	702
34	15.03	CSAH	15	Cleveland CL	CSAH 26	8.0	875	★	★					0	875
35	16.01	CSAH	16	CSAH 16 Begins, Blue Earth CO	CSAH 13	6.7	981	★			★			0	981
36	26.03	CSAH	26	CSAH 33 CR-112	Montgomery CL	10.7	997	★	★					0	997
37	29.01	CSAH	29	CSAH 29 Begins, Rice CO	New Prague CL	2.7	2,055	★	★					0	2055
38	30.03	CSAH	30	Heidelberg CL	MNTH 19, Scott CO	3.0	900	★	★					0	900
39	32.01	CSAH	32	CSAH 11	CSAH 26 (West Jct.)	2.0	900	★			★			0	900
40	36.01	CSAH	36	CSAH 23	S Lim. Le Sueur CL	4.8	880	★		★				0	880
41	101.01	CNTY	101	CSAH 21	CSAH 19	4.0	710	★			★			0	710
42	102.02	CNTY	102	MNTH 22 (Middle Jct.)	Kasota CL	0.3	440		★		★			0	440
43	103.03	CNTY	103	CR 103, SEG #3 Begins	CR 105	0.2	190		★		★			0	190
44	114.03	CNTY	114	Le Center CL	CSAH 11 (West Jct.)	2.5	270		★		★			0	270
45	115.01	CNTY	115	CSAH 36	Le Sueur CL	0.6	310		★		★			0	310
46	126.01	CNTY	126	CSAH 11	CSAH 5	2.0	305		★		★			0	305
47	131.02	CNTY	131	CSAH 6 (North Jct.)	Waterville CL	1.9	210		★		★			0	210
48	1.01	CSAH	1	CSAH 12, Rice County	CSAH 2	0.9	255		★				★	0	255
49	2.02	CSAH	2	Cleveland CL	CSAH 11 (West Jct.)	5.2	420			★			★	0	420
50	2.05	CSAH	2	Kilkenny CL	CSAH 2 Ends, Rice CO	2.3	430				★		★	0	430
51	3.04	CSAH	3	Waterville CL	Kilkenny CL	5.3	502		★				★	0	502
52	6.01	CSAH	6	MNTH 60	CSAH 14	1.5	395				★		★	0	395
53	7.02	CSAH	7	CSAH 12	CSAH 2	4.3	375		★				★	0	375
54	13.01	CSAH	13	MNTH 60	CSAH 16	2.5	480			★			★	0	480
55	24.01	CSAH	24	CSAH 15	CSAH 11	5.0	490		★				★	0	490
56	28.02	CSAH	28	CSAH 28	CSAH 11 (North Jct.)	6.0	585				★		★	0	585
57	28.03	CSAH	28	CSAH 11 (South Jct.)	W Lim. Heidelberg CL	6.5	767	★					★	0	767
58	32.03	CSAH	32	CSAH 28 (West Jct.)	MNTH 19, Scott CO	8.0	523				★		★	0	523
59	33.01	CSAH	33	CSAH 26	CSAH 28	4.0	660	★					★	0	660
60	100.01	CNTY	100	CSAH 36	CSAH 23	1.2	390				★		★	0	390
61	103.01	CNTY	103	CR 105, SEG #1 Begins	CR 104, SEG #1 Ends	3.1	218				★		★	0	218
62	105.02	CNTY	105	CR 103	CSAH 15	2.4	385		★				★	0	385
63	115.03	CNTY	115	Le Sueur CL	CSAH 15	4.1	408				★		★	0	408
64	116.02	CNTY	116	CR 154	CSAH 26	0.9	130				★		★	0	130
65	136.02	CNTY	136	0.5 miles south of CR 138	MNTH 99	2.1	158				★		★	0	158
66	154.01	CNTY	154	CR 116	CSAH 33	2.5	255				★		★	0	255
67	3.06	CSAH	3	Kilkenny CL	MNTH 21 (East Jct.)	7.7	440							0	440
68	5.02	CSAH	5	CSAH 2 (North Jct.)	CSAH 26	7.8	243							0	243

5/6

Le Sueur County
Rural Segment Prioritization - Head On Crash Priority

#	Corridor	Route	#	Start	End	Length	ADT	ADT Range	Access Density	Curve Critical Radius Density	% No Passing	Severe Head On Crash	Totals	Tiebreakers Severe Head On Crashes	Tiebreakers ADT
69	10.01	CSAH	10	CSAH 3	CSAH 10 Ends, Rice CO	2.0	370							0	370
70	30.01	CSAH	30	CSAH 26	S Lim. Heidelberg CL	3.0	475							0	475
							Total Stars --	32	37	22	50	3			
							% That Gets Star --	46%	53%	31%	71%	4%			

	#	%	Mileage	%
	1	1%	3.0	1%
	3	4%	10.6	4%
	22	31%	92.4	35%
★★	21	30%	71.3	27%
★	19	27%	67.8	26%
	4	6%	20.5	8%
	70	100%	265.6	100%

Stars	
ADT Range -	If segment has an ADT in the range of most at risk ADT based on ATP totals. (> 600)
Access Density	If segment has access density than the county average (12.3).
Curve Critical Radius Density -	If segment has higher density of curves with critical radius than the county average (0.58).
% No Passing -	If segment has higher % No Passing than the county average (0.5).
Severe Head On Crash -	If segment has a Severe Head On Crash

6/6

Le Sueur County
Rural Segment Prioritization - Road Departure Priority

#	Corridor	Route	#	Start	End	Length	ADT	ADT Range	RD Density	Access Density	Curve Critical Radius Density	Edge Risk	Totals	Tiebreakers	
														Edge Risk	ADT
1	12.02	CSAH	12	CSAH 11 (East Jct.)	MNTH 13	5.3	680	★	★	★	★			1	680
2	21.01	CSAH	21	CSAH 21 Begins, Blue Earth CO	Kasota CL	3.0	1,950	★	★	★		★		3	1950
3	21.03	CSAH	21	Kasota CL	MNTH 99	3.0	1,950	★	★	★	★			1	1950
4	23.01	CSAH	23	MNTH 99	MNTH 112	7.8	1,335	★	★		★	★		2	1335
5	26.05	CSAH	26	Montgomery CL	CSAH 26 Ends, Rice CO	2.2	1,300	★	★	★		★		3	1300
6	45.02	CSAH	45	Kasota CL	MNTH 99	2.0	2,100	★	★	★		★		3	2100
7	13.02	CSAH	13	CSAH 16	CSAH 15	8.3	450		★	★	★			1	450
8	11.06	CSAH	11	CSAH 26 (West Jct.)	MNTH 19, Scott CO	7.7	675	★		★	★			1	675
9	15.01	CSAH	15	CSAH 16, Blue Earth CO	Cleveland CL	6.1	1,543	★	★		★			1	1543
10	19.01	CSAH	19	CSAH 19 Begins, Blue Earth CO	CSAH 18	3.6	1,150	★		★	★			1	1150
11	26.02	CSAH	26	Le Sueur CL	CSAH 33 CR-112	5.2	1,168	★	★	★				1	1168
12	26.03	CSAH	26	CSAH 33 CR-112	Montgomery CL	10.7	997	★	★	★				1	997
13	29.03	CSAH	29	New Prague CL	MNTH 13, T-9	1.0	2,150	★	★	★				1	2150
14	30.03	CSAH	30	Heidelberg CL	MNTH 19, Scott CO	3.0	900	★		★		★		2	900
15	32.02	CSAH	32	CSAH 26 (East Jct.)	CSAH 28 (East Jct.)	3.0	1,000	★	★		★			1	1000
16	101.01	CNTY	101	CSAH 21	CSAH 19	4.0	710	★	★			★		2	710
17	103.04	CNTY	103	CSAH 19, SEG #4 Begins	CR 103	1.0	750	★		★	★			1	750
18	104.03	CNTY	104	CSAH 18 (West Jct.)	Cleveland CL	1.5	553		★	★	★			1	553
19	107.01	CNTY	107	CSAH 18	CSAH 21	1.8	560			★	★	★		2	560
20	3.01	CSAH	3	CSAH 3 Begins, Waseca CO	MNTH 60	1.0	345			★	★			1	345
21	3.1	CSAH	3	Montgomery CL	CSAH 29	6.0	1,605	★		★				1	1605
22	3.11	CSAH	3	CSAH 29	MNTH 13	2.0	70		★	★				1	70
23	11.02	CSAH	11	Elysian CL	CSAH 2 (East Jct.)	10.0	377			★	★			1	377
24	11.03	CSAH	11	CSAH 2 (East Jct.)	S Lim. Le Center	3.0	960	★	★					1	960
25	11.05	CSAH	11	N.Lim. Le Center	CSAH 26 (East Jct.)	4.0	845	★	★					1	845
26	12.01	CSAH	12	CSAH 13	CSAH 11 (West Jct.)	1.3	330				★	★		3	330
27	14.02	CSAH	14	Elysian CL	Waterville CL	4.8	702	★	★					1.5	702
28	15.03	CSAH	15	Cleveland CL	CSAH 26	8.0	875	★		★				1	875
29	16.02	CSAH	16	CSAH 13, CSAH 16	CSAH 11	2.6	0			★	★			1	0
30	18.01	CSAH	18	CSAH 21	CSAH 15 (North Jct.)	6.2	743	★			★			1	743
31	18.02	CSAH	18	CSAH 15 (South Jct.)	CSAH 13	3.2	770	★			★			1	770
32	28.05	CSAH	28	E Lim. Heidelberg CL	CSAH 28 Ends, Rice CO	5.0	1,560	★		★				1	1560
33	29.01	CSAH	29	CSAH 29 Begins, Rice CO	New Prague CL	2.7	2,055	★		★				1	2055
34	31.01	CSAH	31	CSAH 28	MNTH 19	4.0	646	★		★				1	646
35	32.01	CSAH	32	CSAH 11	CSAH 26 (West Jct.)	2.0	900	★	★					1	900
36	36.01	CSAH	36	CSAH 23	S Lim. Le Sueur CL	4.8	880	★			★			1	880
37	102.02	CNTY	102	MNTH 22 (Middle Jct.)	Kasota CL	0.3	440			★		★		3	440
38	104.01	CNTY	104	CSAH 16	CR 105	2.5	310			★	★			1	310
39	131.02	CNTY	131	CSAH 6 (North Jct.)	Waterville CL	1.9	210			★		★		3	210
40	1.01	CSAH	1	CSAH 12, Rice County	CSAH 2	0.9	255			★			★	1	255
41	2.02	CSAH	2	Cleveland CL	CSAH 11 (West Jct.)	5.2	420				★		★	1	420
42	2.03	CSAH	2	CSAH 11 (East Jct.)	Kilkenny CL	8.1	521				★		★	1	521
43	3.04	CSAH	3	Waterville CL	Kilkenny CL	5.3	502			★			★	1	502
44	3.08	CSAH	3	CSAH 26	Montgomery CL	0.5	1,400	★					★	1	1400
45	7.02	CSAH	7	CSAH 12	CSAH 2	4.3	375			★			★	1	375
46	8.01	CSAH	8	MNTH 13	CSAH 3	1.2	115			★			★	1	115
47	13.01	CSAH	13	MNTH 60	CSAH 16	2.5	480				★		★	1	480
48	16.01	CSAH	16	CSAH 16 Begins, Blue Earth CO	CSAH 13	6.7	981	★					★	1	981
49	24.01	CSAH	24	CSAH 15	CSAH 11	5.0	490			★			★	1	490
50	28.03	CSAH	28	CSAH 11 (South Jct.)	W Lim. Heidelberg CL	6.5	767	★					★	1	767
51	33.01	CSAH	33	CSAH 26	CSAH 28	4.0	660	★					★	1	660
52	103.01	CNTY	103	CR 105, SEG #1 Begins	CR 104, SEG #1 Ends	3.1	218					★	★	2	218
53	103.03	CNTY	103	CR 103, SEG #3 Begins	CR 105	0.2	190			★			★	1	190
54	105.02	CNTY	105	CR 103	CSAH 15	2.4	385			★			★	1	385
55	114.03	CNTY	114	Le Center CL	CSAH 11 (West Jct.)	2.5	270			★			★	1	270
56	115.01	CNTY	115	CSAH 36	Le Sueur CL	0.6	310			★			★	1	310
57	126.01	CNTY	126	CSAH 11	CSAH 5	2.0	305			★			★	1	305
58	136.02	CNTY	136	0.5 miles south of CR 138	MNTH 99	2.1	158					★	★		
59	2.05	CSAH	2	Kilkenny CL	CSAH 2 Ends, Rice CO	2.3	430							1	430
60	3.06	CSAH	3	Kilkenny CL	MNTH 21 (East Jct.)	7.7	440							1	440
61	5.02	CSAH	5	CSAH 2 (North Jct.)	CSAH 26	7.8	243							1	243
62	6.01	CSAH	6	MNTH 60	CSAH 14	1.5	395							1	395
63	10.01	CSAH	10	CSAH 3	CSAH 10 Ends, Rice CO	2.0	370							1	370
64	28.02	CSAH	28	CSAH 28	CSAH 11 (North Jct.)	6.0	585							1	585
65	30.01	CSAH	30	CSAH 26	S Lim. Heidelberg CL	3.0	475							1	475
66	32.03	CSAH	32	CSAH 28 (West Jct.)	MNTH 19, Scott CO	8.0	523							1	523
67	100.01	CNTY	100	CSAH 36	CSAH 23	1.2	390							1	390
68	115.03	CNTY	115	Le Sueur CL	CSAH 15	4.1	408							1	408

3/6

Le Sueur County
Rural Segment Prioritization - Road Departure Priority

#	Corridor	Route	#	Start	End	Length	ADT	ADT Range	RD Density	Access Density	Curve Critical Radius Density	Edge Risk	Totals	Tiebreakers: Edge Risk	Tiebreakers: ADT
69	116.02	CNTY	116	CR 154	CSAH 26	0.9	130							1	130
70	154.01	CNTY	154	CR 116	CSAH 33	2.5	255							1	255
							Total Stars --	32	19	37	22	12			
							% That Gets Star --	46%	27%	53%	31%	17%			

	#	%	Mileage	%
	0	0%	0.0	0%
	6	9%	23.3	9%
	13	19%	56.9	21%
★★	20	29%	75.3	28%
★	19	27%	63.1	24%
	12	17%	47.0	18%
	70	100%	265.6	100%

Stars	
ADT Range -	If segment has an ADT in the range of most at risk ADT based on ATP totals. (> 600)
RD Density -	If segment has higher road departure density than the county average (0.19).
Access Density	If segment has access density than the county average (12.3).
Curve Critical Radius Density -	If segment has higher density of curves with critical radius than the county average (0.58).
Edge Risk Assessment -	Edge risk of 2 or 3, based on assessment of roadway edge and clear zone.

STATE OF MINNESOTA
LE SUEUR COUNTY BOARD OF COMMISSIONERS
RICE COUNTY BOARD OF COMMISSIONERS
SEATED CONCURRENTLY PURSUANT TO MINNESOTA STATUTES SECTION 103E.235 FOR THE PURPOSE OF REAPPOINTING MEMBERS TO THE JOINT DRAINAGE AUTHORITY BOARD FOR LE SUEUR / RICE COUNTIES JOINT DITCH 5

The matter of the petition of the Appointment of Members to the Joint Drainage Authority Board	**Appointment Order**

The County Boards of Commissioners of Le Sueur and Rice Counties, meeting concurrently at their regular meetings on February 7th and February 14th, 2017 respectively, considered appointments to the Joint Drainage Authority Board of Le Sueur / Rice Counties Joint Ditch (JD) 5. After consideration of the matter and upon motion and second duly noted in the minutes of meeting, the Boards adopt the following Findings and Order:

WHEREAS, the Le Sueur / Rice Counties JD 5 is an existing Joint Ditch between the two Counties and the Joint Drainage Authority for JD 5 was established by previous joint action of the County Boards of Commissioners; and

WHEREAS, the resolution establishing the Joint Drainage Authority did not address the filling of vacancies or re-appointment of membership to the Joint Drainage Authority Board; and

WHEREAS, vacancies exist on the Joint Drainage Authority Board.

THEREFORE, based on the forgoing, the Boards of Commissioners of Le Sueur and Rice Counties, seated concurrently, adopt the following:

ORDER

1. The Boards acknowledge and reestablish the Joint Drainage Authority pursuant to Minnesota Statutes Section 103E.235 for Le Sueur / Rice Counties JD 5.
2. Vacancies on the Joint Drainage Authority Board are filled by following initial members:

Gliszinski (Le Sueur County, District 1)

Connolly	(Le Sueur County, District 2)
Wetzel	(Le Sueur County, District 4)
Gillen	(Rice County, District 1)
Docken	(Rice County, District 5)

3. Future vacancies on the Joint Drainage Authority Board shall be filled by the successor Commissioner from the district indicated.
4. Le Sueur County is designated as the "majority" county for the Joint Drainage System. The Le Sueur County Auditor shall coordinate with the Rice County Auditor and proceed with future management and administration of the resulting Joint System according to Minnesota Statutes Chapter 103E.
5. The Joint Drainage Authority acknowledged and reestablished herein shall be perpetual until either dissolved or modified by future action of the Le Sueur and Rice County Boards of Commissioners, seated jointly.
6. This Order may be signed in counterparts and the counter parts together constitute the full Order.

After discussion, the motion **Passed** and the Findings and Order were **Adopted**.

Dated this 7th day of February, 2017 LE SUEUR COUNTY BOARD OF COMMISSIONERS

By_____
Chairperson

Dated this 14th day of February, 2017 RICE COUNTY BOARD OF COMMISSIONERS

By_____
Chairperson

JOYRIDE is a sober ride home shuttle service. See your hostess or bartender for a sober ride home!

AVAILABLE March 11 8 p.m.-2 a.m.

Thank you to our sponsor for the support to offer the program at no charge!

Bus will cover Le Center and a 10 mile radius

JOYRIDE is a sober ride home shuttle service. See your hostess or bartender for a sober ride home!

AVAILABLE March 11 8 p.m.-2 a.m.

Thank you to our sponsor for the support to offer the program at no charge!

Bus will cover Le Center and a 10 mile radius

JOYRIDE is a sober ride home shuttle service. See your hostess or bartender for a sober ride home!

AVAILABLE March 11 8 p.m.-2 a.m.

Thank you to our sponsor for the support to offer the program at no charge!

Bus will cover Le Center and a 10 mile radius

JOYRIDE is a sober ride home shuttle service. See your hostess or bartender for a sober ride home!

AVAILABLE March 11 8 p.m.-2 a.m.

Thank you to our sponsor for the support to offer the program at no charge!

Bus will cover Le Center and a 10 mile radius