LAYOUT No._1_ COPY No.___

VSAS(1104)_STURGEON LAKE ROAD VICINITY OF CSAH 18

FROM APPROX. 0.5 MI. E. OF FRONTAGE ROAD TO APPROX. 0.5 MI. E. OF CSAH 18

IN THE CITY OF RED WING, GOODHUE CO. MN. SECTION 33 TOWNSHIP 113 N RANGE 15 W & SECTION 4 TOWNSHIP 112 N RANGE 15 W

Prepared MARCH 20, 2007 Scales Hor. 1 inch = 100 ft.

By HDR ENGINEERING, INC. DESIGN SPEED = 40 MPH

The alignment and profile grade shown on this map are tentative and subject to change without notice.	Layout Approved Date		The alignment and profile grade shown are estimated for year _____
			Prepared _____, 20__

S.P._____ T.H.___ Aut.___ PPMS Activity___

S.P._____ T.H.___ Aut.___ PPMS Activity___

S.P._____ T.H.___ Aut.___ PPMS Activity___

Copy To:_____ For_____

DESIGN FILE: CAD/LAYOUT/STAFF APPROVED LAYOUT - .DGN

DATE: MARCH 20, 2007

HDR

Level 2 LAYOUT APPROVAL

Programmed Letting Date _____

Prepared By _____ 20__

HDR Engineering Inc. 20__

Prairie Island Community Development 20__

Approved By _____ 20__

City of Red Wing Engineer 20__

Approved By _____ 20__

Mn/DOT 20__

Approved By _____ 20__

District State Aid Engineer

LAYOUT HISTORY

SEPTEMBER 9, 2005
PRELIMINARY DESIGN PREPARED FOR SEPTEMBER 13 PUBLIC MEETING AS ONE ALTERNATIVE OF THREE BUILD ALTERNATIVES.

SEPTEMBER 21, 2005
FOLLOWING DESIGN CHANGES MADE BASED ON COMMENTS RECEIVED AT SEPTEMBER 13, 2005 PUBLIC MEETING AND OTHERDAY ROAD ALIGNMENTS MODIFIED.
- XCEL ROAD ALIGNMENT MOVED CLOSER TO STURGEON LAKE ROAD.
- HOLMQUIST ROAD AND OTHERDAY ROAD ALIGNMENTS MODIFIED.

OCTOBER 11, 2005
FOLLOWING DESIGN CHANGES MADE BASED ON SEPTEMBER 28, 2005 MEETING WITH PRAIRIE ISLAND INDIAN COMMUNITY COUNCIL AND OCTOBER 3, 2005 MEETING WITH DAKOTA STATION STORE AND TREASURE ISLAND CASINO REPRESENTATIVES:
- STURGEON LAKE ROAD LANE CONFIGURATION AT DAKOTA STATION STORE AND TREASURE ISLAND CASINO ENTRANCE MODIFIED.
- SOUTH SIDE PEDESTRIAN TRAIL MODIFIED FROM GRAVEL TO PAVED AND WEST LIMIT SHORTENED.
- SOUTH SIDE RETAINING WALL ADDED BETWEEN BRIDGE AND ISLAND BOULEVARD.
- MINOR HORIZONTAL AND VERTICAL ALIGNMENT ADJUSTMENTS MADE TO STURGEON LAKE ROAD.

OCTOBER 27, 2005
FOLLOWING DESIGN CHANGES MADE BASED ON COMMENTS RECEIVED AT OCTOBER 11, 2005 PUBLIC MEETING AND FROM MN/DOT:
- ISLAND BOULEVARD ADDED TO THE WEST AND ADDED DRIVEWAYS)
- ADDED TURN LANES AT STURGEON LAKE ROAD/XCEL ROAD INTERSECTION
- SOUTH SIDE TRAIL ADDED
- FOURTH TRACK ADDED TO SECTION C-C.

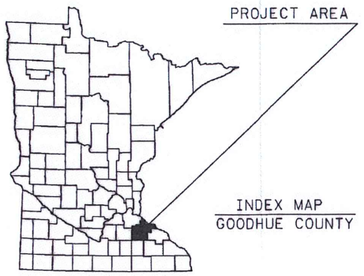
MARCH 6, 2006
FOLLOWING DESIGN CHANGES MADE BASED ON MN/DOT REVIEW COMMENTS:
- MEDIAN WIDTH NARROWED;
- SHOULDER WIDTHS REDUCED FROM 4'TO 2'.

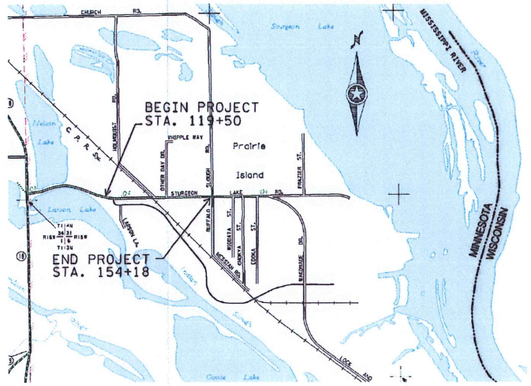
MAY 18, 2006
PRELIMINARY DESIGN CHANGES MADE BASED ON PIC REVIEW COMMENTS:
- SHIFT XCEL ROADWAY GEOMETRICS.

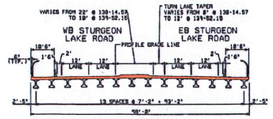
TRAFFIC DATA

EXISTING (2005) ADT - STURGEON LAKE ROAD = 11,500 VPD (TH0=847)

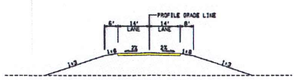
FUTURE (2025) ADT - STURGEON LAKE ROAD = 17,500 VPD (TH0=847)



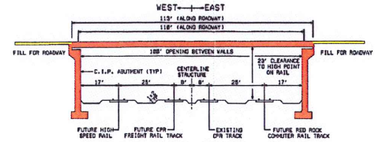




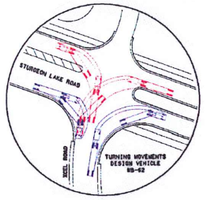
TYPICAL SECTION
STURGEON LAKE ROAD AT BRIDGE
SECTION B-B

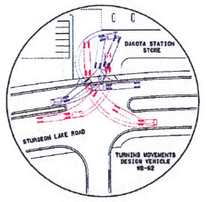


TYPICAL SECTION
OTHERDAY ROAD & HOLMQUIST ROAD
SECTION E-E

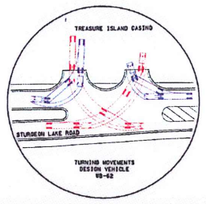


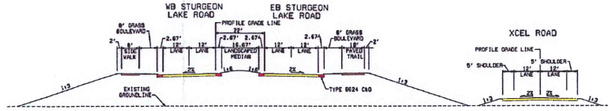
TYPICAL SECTION
CANADIAN PACIFIC RAILWAY AT STURGEON LAKE ROAD
SECTION C-C



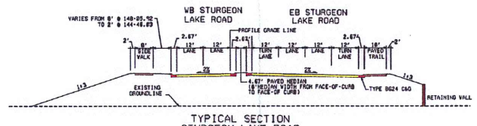


DESIGN FILE COLOR KEY	
FEATURE	
BRIDGES	
ROADWAYS (INCLUDING TURN LANES)	
RAISED MEDIAN & CURBS	
PONDING	
EXISTING R/W	
RETAINING WALLS	
TRAIL	
CONSTRUCTION LIMITS	
BARRIER	
LANDSCAPING	

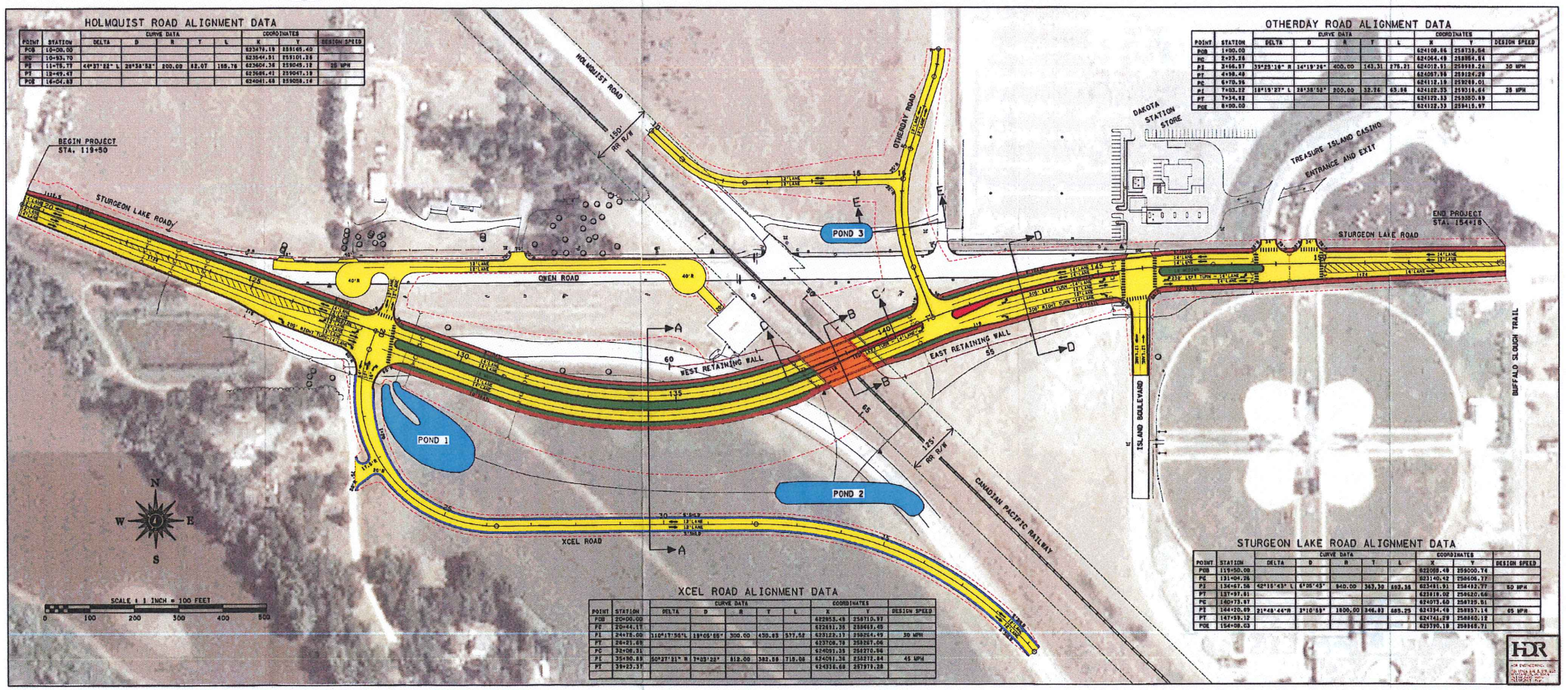




TYPICAL SECTION
STURGEON LAKE ROAD & XCEL ROAD
SECTION A-A



TYPICAL SECTION
STURGEON LAKE ROAD
SECTION D-D



HOLMQUIST ROAD ALIGNMENT DATA

POINT	STATION	CURVE DATA DELTA	D	R	T	L	COORDINATES X	Y	DESIGN SPEED
POB	10+00.00						6253479.19	259169.40	
PC	10+33.70						6253541.51	259169.38	
PE	11+78.77	44°37'52" L	28°38'52"	200.02	82.07	155.78	6253601.38	259049.10	30 MPH
PT	13+45.47						6253685.45	259021.19	
POE	14+04.89						6254061.66	259059.18	

OTHERDAY ROAD ALIGNMENT DATA

POINT	STATION	CURVE DATA DELTA	D	R	T	L	COORDINATES X	Y	DESIGN SPEED
POB	1+00.00						6254108.66	258733.84	
PC	1+23.33						6254164.49	258861.64	
PI	2+66.57	39°29'16" R	14°19'24"	400.00	143.31	275.81	6254019.61	259009.26	30 MPH
PC	4+88.49						6253817.95	259107.28	
PC	6+70.35						6253119.18	259269.01	
PI	7+03.32	18°19'27" L	28°38'52"	200.00	32.76	63.84	6253127.35	259311.64	25 MPH
PT	7+34.53						6253173.33	259305.99	
POE	8+00.00						6253122.33	259415.97	

XCEL ROAD ALIGNMENT DATA

POINT	STATION	CURVE DATA DELTA	D	R	T	L	COORDINATES X	Y	DESIGN SPEED
POB	20+00.00						6253915.48	258715.97	
PC	20+44.13						6253613.28	258669.48	
PI	24+78.60	110°17'50"L	19°05'05"	300.00	430.69	577.52	6253123.17	258264.92	30 MPH
PT	29+31.65						6253106.79	258387.06	
PC	30+08.31						6254051.35	258372.96	
PI	35+80.69	60°27'31" R	9°33'33"	610.00	380.58	718.08	6254511.36	258672.64	45 MPH
PT	38+27.37						6254836.66	257979.28	

STURGEON LAKE ROAD ALIGNMENT DATA

POINT	STATION	CURVE DATA DELTA	D	R	T	L	COORDINATES X	Y	DESIGN SPEED
POB	119+50.00						6252008.48	259000.76	
PC	131+05.15						6251140.42	258606.37	
PI	134+67.56	42°15'45" L	6°28'45"	840.00	363.30	619.56	6250951.91	258412.77	50 MPH
PT	137+87.81						6250719.02	258420.66	
PC	140+73.87						6250771.60	258735.51	
PI	144+20.69	31°48'44"R	3°10'15"	1800.00	346.83	685.25	6249391.49	259057.14	65 MPH
PT	147+35.12						6247416.89	258682.19	
POE	154+08.03						6247196.18	259348.71	