AGENDA PUBLIC WORKS COMMISSION CITY OF CROSSLAKE MONDAY, MARCH 3, 2025 4:00 P.M. – CITY HALL

- 1. Call to Order
- **2.** Approval of February 3, 2025 Minutes (Motion)
- **3.** Pat 2024 Annual Bridge Inspection Reports for Milinda Shores Road over Channel Rush Lake & Sunrise Island Road over Cross Lake Channel
- **4.** Pat Update on County response to CR 103 recommendation for rumble strips and 11-foot driving lanes
- **5.** Pat Quote for chip sealing West Shore and Daggett Pine Trails and update on review of crack filling previously chip sealed roads
- **6.** Pat Update on receiving final plans for pavement accessing new Bar Stock Building and letters Pat is sending out
- 7. Pat Discussion per request from Warren Stock on Island View Road, make it a City Road and soil borings done
- **8.** Phil Martin Proposal for bidding and construction engineering for Harbor Lane. Final design and construction plan/documents preparation
- 9. Phil Martin Update on 2025 Projects mock assessment roll/Construction Cost Share Agreement
- **10.** Phil Martin Update on Private Developer Road sub-base
- 11. Other Business That May Arise
- 12. Adjourn

CITY OF CROSSLAKE PUBLIC WORKS COMMISSION MEETING MINUTES MONDAY, FEBRUARY 3, 2025 4:00 P.M. – CITY HALL

Pursuant to due notice and call the Public Works Commission held its regular monthly meeting on Monday, February 3, 2025, in City Hall. The following Commission Members were present: Tom Swenson, Gordon Wagner, Tim Berg, and Mary Prescott. Also in attendance were Public Works Director Pat Wehner, City Administrator Lori Conway, City Council Member Robin Sylvester & City Engineer Phil Martin. Dave Schrupp was via zoom from location Estancia Villas, Venice, Florida 34292. There were 4 in the audience.

The meeting was called to order at 4:00 P.M. by Tom Swenson.

Tom Swenson introduced Mary Prescott as our new Commission Member for Public Works and Robin Sylvester as our new Public Works Council Liaison.

Tom Swenson was appointed as the Chairman for Public Works for the upcoming year.

A MOTION WAS MADE BY GORDON WAGNER AND SECONDED BY TIM BERG TO APPROVE TOM SWENSON AS THE NEW CHAIRMAN.
A ROLL CALL VOTE CARRIED WITH ALL AYES.

Tim Berg as the Vice Chairperson for Public Works for the upcoming year.

A MOTION WAS MADE BY TOM SWENSON AND SECONDED BY GORDON WAGNER TO APPROVE TIM BERG AS THE NEW VICE CHAIRMAN.
A ROLL CALL VOTE CARRIED WITH ALL AYES

A MOTION WAS MADE BY TOM SWENSON AND SECONDED BY TIM BERG TO APPROVE THE MEETING MINUTES FROM DECEMBER 2, 2024.
A ROLL CALL VOTE CARRIED WITH ALL AYES.

Pat gave an update on the new Side x Side for clearing the sidewalks and mentioned a sander was installed as well. He also mentioned that their John Deere tractor is also being used for clearing sidewalks and is working well. As of today, we are hauling the snow away. If it continues to snow and having to haul it away, manpower may become an issue for the Public Works Department. Discussion with the County was mentioned for a sidewalk on the east side of the road from Lakes Craft & Cones to the Bridge and the addition of a temporary pedestrian crosswalk. Dave Schrupp would like to see documentation more often from the County on the progress of the sidewalks to stay on top and prevent things from slipping through the cracks.

Pat updated with the status on the current and future County projects. Future projects include, CR 103 Resurfacing in 2026, CSAH 66 Daggett Brook Bridge rehabilitation in 2026, CSAH 3/CSAH 36/CR 103 Roundabout in 2028 and CSAH 66 Resurfacing and CR 120 Resurfacing in 2028.

A MOTION WAS MADE BY DAVE SCHRUPP AND SECONDED BY TIM BERG TO RECOMMEND TO THE CITY COUNCIL THAT THE COUNCIL RECOMMEND TO THE COUNTY TO ADD RUMBLE STRIPS TO THE PROJECT ON CR 103 AND STRIPE THE LANES AT 11' WIDE IN ORDER TO GAIN 1' OF ADDITIONAL SHOULDER.

A ROLL CALL VOTE CARRIED WITH ALL AYES.

Lori Conway spoke regarding her meeting with Park & Rec. Director TJ Graumann and Public Works Director Pat and has agreed to possibly add another committee to coordinate all future trails. The City has filled out and submitted the SS4 Grant for approval. A Feasibility Study is being worked on and when that is published, it will help with all the segments.

Robin Sylvester felt we should wait and do a little more work on this project before moving forward. Phil Martin feels a trail is a better option and adding 1 extra foot to the shoulder will not be sufficient for pedestrian safety. He also feels the city needs to step up and push for easements to add the off-road Trail for safety reasons.

Mike O'Connell in the audience spoke raising his concerns on the trails and agrees with Phil that the city needs to step up and push for the off road trails. Start applying for more grants and push more for this project to happen. He feels the City should not give in to the County so easily. This is a highly traveled and dangerous road. O'Connell offered to work with the City to obtain easements along East Shore Road, Happy Landing and CR 103 in order to do an off road trail.

Phil mentioned that the County is going to do some research on this and see what the best option for the city will be to proceed.

A MOTION WAS MADE BY DAVE SCHRUPP AND SECONDED BY TIM BERG TO RECOMMEND TO THE CITY COUNCIL THAT THEY RECOMMEND TO THE COUNTY THE FOLLOWING DETOURS FOR THE CSAH 3 & 36 ROUNDABOUT PROJECT. COMING FROM THE NORTH AND SOUTH, CONSTRUCT A TEMPORARY ROAD IN THE SOUTH EAST CORNER OF THE INTERSECTION AND UTILIZE NORTHERN TERRACE AND BLACK BEAR PATH FOR THE DETOUR. TRAFFIC COMING FROM THE WEST BE DETOURED TO CR 120. A ROLL CALL VOTE CARRIED WITH ALL AYES.

Pat spoke regarding Reeds & Bar Stock Sewer easement and will speak more with Bill Reed regarding the parking lot. We do not want to own the parking lot or maintain it. Phil is concerned if there are any problems with the sewer line under the blacktop that we will have increased costs to repair the line. Gordon would like more information on this before any commitment is made. Easements need to be checked with the Planning & Zoning Department.

The Public Works Commission would like to see the final drawings of their plan before we commit. However, Pat can let them know we tentatively would approve the blacktopping pending review of the plan.

Phil gave an update on the Year 2 Improvements and the potential range for assessments based on the Nagel benefit analysis. A discussion ensued comparing the 2024 mil and overlay assessments with the 2025 ranges provided by Nagel and whether there should be an inflationary adjustment in 2025. Tom suggested running numbers for all the parcels using Phil's best estimate of project costs to get an idea of the percentage of the cost being paid by assessments.

Phil would like to close out sewer connection charge balances with Moonlite Square Car Wash, Moonlite Square

Convenience Store & Moonlite Bay Restaurant with appropriate refunds or collections from each based on a full year of metered water use.

A MOTION WAS MADE BY DAVE SCHRUPP AND SECONDED BY GORDON WAGNER TO RECOMMEND TO THE CITY COUNCIL TO REIMBURSE MOONLITE SQUARE CAR WASH \$7,360.00 AND COLLECT OUTSTANDING BALANCES FROM MOONLITE BAY CONVENIENCE STORE \$3,680.00 AND MOONLITE BAY RESTAURANT \$7,360.00 FOR THEIR SEWER CONNECTION CHARGES. A ROLL CALL VOTE CARRIED WITH ALL AYES.

Phil gave an update on the Harbor Lane project and stated the easements are being finalized for this project. Plans will be completed in February and the project can be bid in March.

A MOTION WAS MADE BY DAVE SCHRUPP AND SECONDED BY TOM SWENSON TO RECOMMEND TO THE CITY COUNCIL TO MOVE FORWARD WITH THIS PROJECT.

A ROLL CALL VOTE CARRIED WITH ALL AYES.

Phil discussed a Private Development Road which the Developer would like to turn over to the city and stated some concerns about it meeting City standards. The sub-base was not inspected prior to placing class 5. The consensus of the Commission was to have Phil ask for soil borings from a geotechnical firm or have class 5 pulled back to view the sub-base.

Developers need to know what their responsibilities are and to follow the Cities process if they want the City to take over a road.

Tom asked for an update on the Ground rod which was driven through the sewer and who is paying for the incident which resulted in digging up the sewer line. Lori has sent 2 invoices for the damage which has been ignored by the contractor. She will send a certified letter for another attempt to collect and will notify the City Attorney of the situation.

Tom raised some concerns on Sand Point Drive regarding the chip seal which was done in 2023 and he noticed cracks that were opening again.

He mentioned that maybe a year or 2 after chip sealing, the roads should be looked at to determine if any crack filling is necessary.

A MOTION WAS MADE BY GORDON WAGNER AND SECONDED BY TOM SWENSON TO ADJOURN THE MEETING AT 6:00 P.M. A ROLL CALL VOTE CARRIED WITH ALL AYES.

Sharyl Murphy Deputy Clerk/City Treasurer



January 22, 2025

City of Crosslake Char Nelson, Clerk 37028 County Rd 66 Crosslake, Minnesota 56442

Re: Annual Bridge Inspections

Dear Char Nelson,

The annual bridge inspections for 2024 have been completed in accordance with Minnesota Statutes, Chapter 165. A bridge is defined as a drainage structure with a span of 10-feet or more; therefore, large culverts are considered bridges for inspection purposes as well as the more conventional bridge structures. A copy of the inspection report for bridges inspected in 2024 under your jurisdiction is enclosed. Please note that all bridges are not necessarily inspected each year. Depending on the type and condition of a structure the inspection frequency may be as high a 48-month interval.

The key information to look at on the inspection report may be the comments made by the Inspector and any change in an element condition from years prior printed in red. The "Sufficiency Rating" has moved to the first page of the "Minnesota Bridge Inspection Report", located on right, just above the first element in the report.

Since bridges represent a considerable investment of taxpayer dollars, you are encouraged to seriously review each report as well as conduct an on-site review of your bridges to confirm existing conditions and take appropriate action. This office is available to provide advice as to maintenance procedures and answer any questions related to bridges. You may contact the following: Wayne Dosh, Senior Engineering Technician and Certified Bridge Inspector; Rob Hall, Assistant County Highway Engineer and Timothy Bray, County Highway Engineer.

Sincerely,

Timothy Bray P.E. County Highway Engineer

Wayne Dosh
Wayne Dosh Senior Engineering Technician

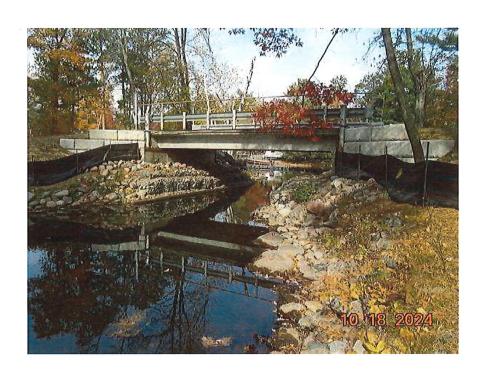
Timothy V. Bray County Engineer Highway Department 16589 County Road 142 Brainerd, MN 56401

Office: (218) 824-1110 www.crowwing.gov

Our Vision: Being Minnesota's favorite place.
Our Mission: Serve well. Deliver value. Drive results.

Our Values: Be responsible. Treat people right. Build a better future.

2024 ROUTINE BRIDGE INSPECTION REPORT



BRIDGE # L4044 MELINDA SHORES RD over CHANNEL RUSH LAKE

DISTRICT: District 3

COUNTY: Crow Wing

CITY/TOWNSHIP: Cross Lake

STATE:

Minnesota

Date of Inspection:

10/18/2024

Equipment Used: Life Jacket, Probing Rod, Other - waders, tape-measure,

flashlight Assisted by Brian Winskowski

Owner: City or Municipal Highway Agency

Inspected By: Dosh, Wayne; Winskowski, Brian

Report Written By: Wayne Dosh Report Reviewed By: Timothy Bray

Final Report Date: 01/13/2025



Inspector:

Inspection Date:

Dosh,Wayne

10/18/2024

Structure Number:

L4044

Facility Carried:

M 205

Bridge Inspection Report

Minnesota Structure Inventory Report

Bridge ID: L4044

MELINDA SHORES RD over CHANNEL RUSH LAKE

+ GENERAL +	+ ROADWAY ON BRIDGE +	+ INSPECTION +				
Agency Br. No. CITY34 Crew	Facility M 205	Last Routine Insp Date 10/18/2024				
District 03 Maint. Area	LRS Functional Class 7 - Local	Routine Insp Frequency 24				
County 018 - Crow Wing	ADT 15 YEAR 1990 Urban Code 99999	Inspector Name Dosh, Wayne				
City Cross Lake	HCADT ADTT %	Status A - Open				
Township	National Highway System 0	7, 5,501				
Desc. Loc. 1.5 MI SW OF JCT CSAH 6	LRS Mile Point I/D 0.090 / 0.090	+ NBI CONDITION RATINGS +				
Sect., Twp., Range 07 137N - 27W	Speed Limit	Deck 7				
Latitude 46.691278	Detour Length 99	Superstructure 7				
Longitude -94.148628	Lanes 1 Lanes ON Bridge	Substructure 5				
Custodian 04 - City or Municipal Highway Agency	Control Section (TH Only)	Channel 6				
Owner 04 - City or Municipal Highway Agency	Function 1 - MAINLINE	Culvert N				
Insp Responsibility Crow Wing County	Type 3 - One lane bridge for 2-way traffic	71				
Year Built 1950	Bridge Match ID 1	+ NBI APPRAISAL RATINGS +				
Date Opened to Traffic 1/1/1989	Roadway Key Route On Structure	Structure Evaluation 5				
MN Year Remodeled 1989	Roughay Noy Route Off Offucture	Deck Geometry 6				
FHWA Year Reconstructed	+ RDWY DIMENSIONS ON BRIDGE +	Underclearances N				
Bridge Plan Location 3 - COUNTY	If Divided: NB-EB SB-WB	Waterway Adequacy 7				
Potential ABC 2 - N/A	Roadway Width 14.00 ft ft	Approach Alignment 5				
Potential ABC 2-19/A	Vertical Clearance ft ft	Approach Anglinient 5				
+ STRUCTURE +	Max, Vert, Clear. ft ft	+ SAFETY FEATURES +				
Service On 1 - Highway	Horizontal Clear, ft ft	Bridge Railing 0 - SUBSTANDARD				
Service Under 5 - Waterway	Appr. Surface Width 20.0 ft	GR Transition N - NOT REQUIRED				
Main Span Type 5 - Prestress or Precast	Bridge Roadway Width 14.0 ft	Appr. Guardrail N - NOT REQUIRED				
20 - Double Tee	Median Width On Bridge 0.0 ft	GR Termini N - NOT REQUIRED				
Main Span Detail	Wedian Width On Bridge 0.0 ft	GK Termini N - NOT KEQUIKED				
Appr. Span Type No Approach Span	+ MISC. BRIDGE DATA +	+ SPECIAL INSPECTIONS +				
Appl. Opan Type Monphodoli Opan	Structure Flared 0 - No flare	Y/N Freq Date				
Appr. Span Detail	Parallel Structure N - No parallel structure	NSTM N				
Skew 0	Field Conn. ID	Underwater N				
Culvert Type	Cantilever ID	Pinned Asbly. N				
Barrel Length	Guillie For 15	i iiiiod Aobiy.				
Number of Spans	Foundations (Material/Type)	+ WATERWAY +				
MAIN: 1 APPR: 0 TOTAL:	Abutment 1 - CONC 1 - SPRD SOIL	Drainage Area (sq mi)				
Main Span Length 28.0 ft	Pier N - N/A N - N/A	Waterway Opening (sq ft) 198				
Structure Length 29.2 ft	Historic Status 5 - Not eligible	Navigation Control 0 - No nav. control on waterway				
Deck Width (Out-to-Out) 16.0 ft	On - Off System 0 - OFF	Pier Protection				
Deck Material 2 - Concrete Precast Panels		Nav. Clr. (ft) Vert. 0.0 Horiz. 0.0				
Wear Surf Type 6 - Bituminous	+ PAINT +	Nav. Vert. Lift Bridge Clear. (ft) 0.0				
Wear Surf Install Year 2018	Year Painted	MN Scour Code I - LOW RISK				
Wear Course/Fill Depth 0.25 ft	Painted Area sq ft	Scour Evaluation Year 2002				
Deck Membrane 0 - None	Primer Type					
Deck Rebars 0 - None	Finish Type	+ CAPACITY RATINGS +				
MN Rebar Coating B0	· Ab-	Design Load 0 - Other/Unknown				
Deck Install Year 1989	+ BRIDGE SIGNS +	Operating Rating 2 - HS TRUCK 37.6				
Structure Area (Out-to-Out) 467 sq ft	Posted Load 0 - Not Required	Inventory Rating 2 - HS TRUCK 24.2				
Roadway Area (Curb-to-Curb) 409 sq ft	Traffic 0 - Not Required	Posting VEH: SEMI: DBL:				
Sidewalk Width - L/R 0.00 0.00 ft	Horizontal 1 - Object Markers	Rating Date 12/24/2012				
Curb Height - L/R 0.00 0.00 ft	Vertical N - Not Applicable	Overweight Permit Codes				
Rail Codes - L/R 00 00	11 Hot Applicable	A: N B: N C: N				
		7.17 5.14 0.14				

01/13/2025

BRIDGE L4044 M 205 OVER CHANNEL RUSH LAKE

29.2 ft. County: Crow Wing Location: 1.5 MI SW OF JCT CSAH 6 Length: Route: 10 - MUN 205 Ref. Pt.: 000+00.077 Deck Width: 16 n ft. City: Cross Lake Rdwy. Area/ Pct. Unsnd: 409 sq. ft. / 6% Township: Control Section: Township: 137N Range: 27W Maint. Area: Paint Area/ Pct. Unsnd: sq. ft. / 0% Section: 07 Span Type: 5 - Prestressed Concrete 4 - Tee Beam Local Agency Bridge Nbr.: CITY34 Culvert: List: Postings: NBI Deck: 7 Super: 7 Sub: 5 Chan: 6 Open, Posted, Closed: A - Open MN Scour Code: I - LOW RISK Appraisal Ratings - Approach: 5 Waterway: 7 Unofficial Structurally Deficient Ν Required Bridge Signs - Load Posting: 0 - Not Required Traffic: 0 - Not Required Unofficial Functionally Obsolete ' Horizntal: 1 - Object Markers Vertical: N - Not Applicable **Unofficial Sufficiency Rating** 67.8 **ELEM** QTY QTY QTY QTY REPORT TYPE **NBR ELEMENT NAME** INSP. DATE QUANTITY CS₁ CS₂ CS₃ CS 4 2 0 Prestressed Concrete Top Flange 467 SF 436 29 15 Routine 10/18/2024 467 SF 0 n 438 29 Routine 10/21/2022 Notes: 10/18/2024: Isolated delamination and spalls w/ exposed steel (CS3 -2) at the bridge railing posts, located on the north outside deck face below the 2 most northwest posts. There is some minor leakage between the beam at the beam joint w/ minor rust staining and rusting of the welded spreader plates. 10/21/2022 - 10/13/2014: There is some minor leakage between the beam at the beam joint w/ minor rust staining and rusting of the welded spreader plates. 510 - Wearing Surfaces 0 Routine 10/18/2024 467 SF 467 Routine 10/21/2022 467 SF 467 0 Notes: 10/18/2024 - 10/06/2020: Pavement over bridge was new in summer of 2018. Pavement was seal coated 2019. 10/04/18: Pavement over bridge was new in summer of 2018. 10/13/16 - 10/13/14: There is an unsealed longitudinal crack at the centerline of the wearing surface. 10/11/12: Single sealed longitudinal crack in bituminous surface over joint between the 2 double "T" beams. Prestressed Concrete Open 10/18/2024 116 LF 114 2 0 0 109 Routine Girder/Beam 2 Routine 10/21/2022 116 LF 114 Notes: 10/18/2024 - 10/21/2022: There is a minor crack and spall at the end of the sole plate in beam #1 over the west abutment at the bottom of the beam. There are hairline diagonal cracks near the abutment on all beams located in the haunch between web and flange. The neoprene pads below beams are starting to walk out. 10/06/2020 - 10/13/2016: Hairline diagonal cracks near the abutment on all beams located in the haunch between web and flange. The neoprene pad at the east abutment below the north beam is starting to walk out. Reinforced Concrete Abutment 40 LF 0 40 0 0 Routine 10/18/2024 215 40 LF n 40 Routine 10/21/2022 Notes: 10/18/2024: Both abutments tip toward the channel. 28.89' South side and 28.97' North side. In both abutments on the inside face, there is a small horizontal crack 6" to 8" below the steel bearing cap and the crack runs the length of both abutments. 10/21/2022: Both abutments tip toward the channel. 28.90' South side and 28.99' North side. In both abutments on the inside face, there is a small horizontal crack 6" to 8" below the steel bearing cap and the crack runs the length of both abutments. 10/06/2020: Both abutments tip toward the channel. 28.91' South side and 29.00' North side. In both abutments on the inside face, there is a small horizontal crack 6" to 8" below the steel bearing cap and the crack runs the length of both abutments. 10/04/18: Both abutments tip toward the channel, 28.92' South side and 28.99' North side. In both abutments on the inside face, there is a small horizontal crack 6" to 8" below the steel bearing cap and the crack runs the length of both abutments. 10/13/16; Both abutments tip toward the channel. 28.96' S side and 29.04' N side. Approx 0.05' of change since 2014 measurement. Gabions installed to resist undermining of abutments.

10/13/14 - 10/11/12: Measurement of abutment out to out 29.00' S side & 29.09' N side. Both abutments tip toward the channel.

11/03/10: Measurement of abutment out to out 29.02' S side & 29.09' N side. Both abutments tip toward the channel.

10/13/08: Measurement of abutment out to out 29.02' S side & 29.12' N side, no change form last measurement. Both abutments tip toward the channel.

10/19/06: Both abutments are tipped toward the channel.

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4		
217	Masonry Abutment	Routine	10/18/2024	48 LF	48	0	0	0		
	Notes: 10/18/2024: The wood wingwall feet long.	s were removed and	d replaced with la	irge landscapin	g block, ea	ich wingwa	ıll measure	s approximately	12	
231	Steel Pier Cap	Routine	10/18/2024	40 LF	0	0	40	0		
		Routine	10/21/2022	40 LF	0	40	0	0		
	Notes: 10/18/2024: Flaking rust in present on the top across the length of both pier caps. 10/21/2022 - 10/04/2018: There is surface rust across the entire top surface w/ flaking rust below the bridge beams and diaphragms. The cap is slightly out of position, as the abutment has shifted the cap has moved forward and is tipping back slightly.									
	515 - Steel Protective Coating	Routine	10/18/2024	70 SF	0	0	0	70		
		Routine	10/21/2022	70 SF	0	0	0	70		
	Notes: 10/18/2024 - 10/04/2018: The pa	aint system has faile	ed.							
 310	Elastomeric Bearing	Routine	10/18/2024	8 EA	0	3	5	0		
,,,	U	Routine	10/21/2022	4 EA	4	0	0	0		
	Notes: 10/18/2024: The very thin elasted pad has walked out from below the sole	omeric pads appear plate 3/4 inch. At th	to be walking ou ne east abutment	t. At the west a (CS3 - 3) pads	butment (0 #'s 2,3 &4	CS3 - 2) the have walk	e #1 pad is cout from b	torn, and the #3 pelow the sole pl	3 late	
	by at least 1/2 inch. 10/21/2022: The very thin elastomeric pabutment cap but are extruding beyond			remain below t	he sole pla	ites and re	main on to	p of the steel		
330	Metal Bridge Railing	Routine	10/18/2024	70 LF	56	14	0	0		
		Routine	10/21/2022	70 LF	56	14	0	0		
	Notes: 10/18/2024 - 10/13/2016: There has been an impact to the SW corner of the bridge railing, bent slightly. Rusting occurring at the bases of the bridge railing. Bridge railing is substandard for all speeds. paint has failed on the lower 1/3 of railing posts. 11/03/10: Bridge railing is substandard for all speeds. Rusting occurring at the bases of the bridge railing. 10/13/08: Rusting occurring at the bases of the bridge railing.									
	515 - Steel Protective Coating	Routine	10/18/2024	291 SF	0	153	0	138		
		Routine	10/21/2022	291 SF	0	153	0	138		
	Notes: 10/18/2024 - 10/13/2016: Light C (13 SF). Coating failure on all 5"x2" post SF).	chalking of galvanize ts (62 SF). Coating f	ed coating along g ailure on full leng	guardrail full len ith of handrail (:	igth (140 S 36 SF). Co	SF). Light cl ating failur	halking on e on all 8"	2" square tubing round posts (40	J	
800	Critical Deficiencies or Safety Hazards	Routine	10/18/2024	1 EA	1	0	0	0		
		Routine	10/21/2022	1 EA	1	0	0	0		
	Notes: NO CRITICAL FINDINGS OBSERVED DURING THE LAST INSPECTION.									
	Bituminous Approach Roadway	Dautina	40/40/2024	2 EA	2	0	0	0		
322	Bituminous Approach Roadway	Routine Routine	10/18/2024 10/21/2022	2 EA	2	0	0	0		
	Notes: 10/18/2024 - 10/06/2020: The efficiency the west abutment, the west approach in 10/04/18: The east approach is new supavement which is in good condition. 10/13/16: Durapatched-smooth transitic 10/13/14: The E approach is settled 1 3 10/11/12: E approach has been durrapt 11/03/10: E approach has been durrapt 10/13/08: E approach has a slight bumpt 10/19/06: E approach has a slight bumpt 10/19/06:	east approach only we mains the old pave mmer of 2018. The on. 6/4" below the top of eatched and rubber seatched. There is a so.	was paved summ ment which is in new pavement e the deck, sealed. There is	er 2018 and sea good condition nds at the west a slight dip at th	al coated s abutment	ummer 20	19. The ne	ew pavement en	ds a	
 855	Secondary Members (Superstructure)	Routine	10/18/2024	1 EA	0	1	0	0		
000	2223 (act) monitorio (ouperonatato)	Routine	10/10/2024	1 EA	1	0	0	0		
	Notes: 10/18/2024: There is delamination bridge beam. Cracks are on the inside a 10/21/2022 - 10/11/2012: Minor cracks beam.	ion in the NW corner and outside of the be	r, outside of the t eam.	eam. Minor cr	acks in the	diaphragn	n at the we	st end of the no		

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
881	Steel Section Loss	Routine	10/18/2024	1 EA	0	1	0	0
		Routine	10/21/2022	1 EA	1	0	0	0
	Notes: 10/18/2024: Estimate 2% - 500 the abutment stem wall the section lost 10/21/2022 - 10/04/2018: There is so by the abutment stem wall the section	ss is considered minor me section loss occuri	at this time. ring on the abutn					
884	Substructure Settlement & Movement	Routine	10/18/2024	1 EA	0	1	0	0
		Routine	10/21/2022	1 EA	0	1	0	0
	Notes: 10/18/2024 - 10/21/2022: The 10/04/18: A difference of 0.04' and 0. 10/13/16: A difference of 0.05' from 2' 10/13/14: Measurements from 2014 to 0.03' between the measurement taken 11/03/10: The abutments are tipping to measured in 2008.	05' from measurement 014 measurements. Go o 2012 are the same, h n in 2012 and those tal	ts taken in 2016. abions installed to nowever the ther ken in 2008.	o resist underm e was a differen	ining of at ce of 0.02	outments. ' on the so	uth side an	
885	Scour	Routine	10/18/2024	1 EA	1	0	0	0
		Routine	10/21/2022	1 EA	1	0	0	0
	Notes: 10/18/2024: Counter measure	es are present and in g	good condition.					
891	Other Bridge Signing	Routine	10/18/2024	1 EA	1	0	0	0
		Routine	10/21/2022	1 EA	0	1	0	0
	Notes: 10/18/2024: New signing inst 10/21/2022 - 10/13/2014: 3 of the 4 c		maged. All 4 sho	ould be replaced	d due to re	flectivity pu	ırposes.	
892	Slopes & Slope Protection	Routine	10/18/2024	1 EA	1	0	0	0
		Routine	10/21/2022	1 EA	1	0	0	0
	10/21/2022: Channel has been dredge 10/21/2022 - 10/13/2016: Channel she between and from under the diaphrage 10/13/14: The backer boards have far backfill into the channel. There are votifill by a couple of inches to a couple of 11/03/10: Backer boards on the lower through gaps between the boards at 10/13/08: Backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards on the lower through gaps between the boards at 10/19/06: 2 backer boards at 10	opes have been repair ms. iled in the on east reta ids behind the retainin f feet. r slope protection cont both abutments. The protection at the ooth abutments. The poth abutments. The poth abutments. The poth abutments.	ed with rip-rap g ining wall. The g wall that exten inue to deteriora baved inslopes had baved inslopes had	abions. There i backer boards i ds 3' - 4' behind te. Backfill is sp ave settled. e broke. Backfi ave settled.	s sand on nave settle it. The sl billing into	top of the I ad and pust ope paving the channe g into the c	ned toward is suspend	the channel spilling ded above the slop he breaks and
894	Deck & Approach Drainage	Routine	10/18/2024	1 EA	1	0	0	0
		Routine	10/21/2022	1 EA	1	0	0	0
	Notes: 10/18/2024: Functioning as in	ntended.						
899	Miscellaneous Items	Routine	10/18/2024	1 EA	1	0	0	0
		Routine	10/21/2022	1 EA	1	0	0	0
	Notes: 10/18/2024 - 10/06/2020: Util of the bridge. 10/04/18 - 10/13/16: Bush and trees 11/03/10: Bush and trees need to be	have been removed.		ridge. There ar	e 2 lines o	on the sout	n side and	1 on the north side
900	Protected Species	Routine	10/18/2024	1 EA	0	1	0	0
-		Routine	10/21/2022	1 EA	0	1	0	0
	Notes: 10/18/2024 - 10/06/2020: No 10/04/18: Birds nest observed today. 10/13/16: None noticed today>Use the	evidence of birds or ba	ats today.	tected species	living on th	nis structur	9 .	

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	
216	Timber Abutment	Routine	10/18/2024	0-EA	θ	θ	θ	θ	
228	Timber Pile	Routine	10/18/2024	0-EA	0	0	0	0	

General Notes:

10/18/2024 - 10/04/2018: Was able to wade under the bridge today, Water depth 2.5' deep today. The steel channel on top of the concrete abutment has flaking rust under the concrete beams. The neoprene pad at the east abutment and under the north beam is walking out. Deck was overlaid summer 2018.

10/13/16: Sediment on top bridge seat coming from behind beam diagrams. Full length of west bridge seat. Slope under bridge has been repaired with rock gabions. Paint on bridge seat has failed. Paint failed on lower third of railing posts. 10/13/14 - 10/11/12: Was able to wade beneath the bridge and see all elements. No changes to the crack across the E abutment 6" below the bridge seat. Voids found throughout the full depth of the knee walls. The knee wall under the bridge continues to deteriorate allowing the continued loss of backfill. The slope paving has settled 1' to 2' since it was placed. (2014: The paved slope and retention wall continues to deteriorate.)

11/03/10: Was able to wade under the bridge and see all elements. A crack was found across the E abutment 6" below the bridge seat. Voids found throughout the full depth of the knee walls. The knee wall under the bridge continues to deteriorate allowing the continued loss of backfill. The slope paving has settled 1' to 2' since it was placed

10/13/08: Was able to wade under the bridge and see all elements. Voids found under the slope paving on both slopes throughout, but more extensive on the E. The knee wall under the bridge continues to deteriorate allowing the continued loss of backfill. The slope paving has settled 1' to 2' since it was placed in the early 90's.

10/19/06: Was able to walk under the bridge and see all structural elements. The piling in the channel providing the lower slope protection are severely deteriorated. Need to repair the broken boards to prevent any additional settlement or tipping of the abutments.

11-02-2004: NO APPARENT STRUCTURAL PROBLEMS.

10-09-2002: NO APPARENT STRUCTURAL PROBLEMS. BRUSH CUTTINGS HAVE BEEN REMOVED.

05-19-1999: ABUTMENT WALLS TIP TOWARD THE CHANNEL ABOUT 3/8 INCH PER FOOT. REMOVE BRUSH

CUTTINGS FROM UNDER BRIDGE NEAR ABUTMENTS.

58. Deck NBI: 10/18/2024: Deck has minor deterioration. Rust staining in the deck joint between the "T" beams.

36A. Brdg Railings NBI:

36B. Transitions NBI:

36C. Appr Guardrail NBI:

36D. Appr Guardrail Terminal NBI:

59. Superstructure NBI: 10/18/2024: Isolated spalling in the diaphragms over the abutments.

60. Substructure NBI: 10/18/2024 - 10/04/2018: There is some minor rotation of the abutments occurring. Both abutments are tipping toward the

10/13/14: There has been some minor movement of the abutments in the past. Both abutments tip toward the channel.

61. Channel NBI: 10/18/2024: Channel banks are slumping from erosion and wave action. Counter measures are in place protecting the bridge

10/13/16: A gabion wall restoration project was completed to fix the slopes between the abutments and channel.

10/13/14: The Knee walls in front of the abutments are badly deteriorated allowing the revetment fill in front of the abutment to spill into the channel.

62. Culvert NBI:

71. Waterway Adeq NBI:

72. Appr Roadway Horizontal Alignment and Vertical Profile are substandard for this approach. Alignment NBI:

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	
Wayne Dosh					Т	imothy B	ray		
Inspector's Signature				Reviewer's Signature					





36. 10-18-2024 (82).JPG



37. 10-18-2024 (83).JPG



38. 10-18-2024 (84).JPG



39. 10-18-2024 (85).JPG



40. 10-18-2024 (86).JPG



41. 10-18-2024 (87).JPG



42. 10-18-2024 (88).JPG



Photo 1 - 10-18-2024 (47)



Photo 2 - 10-18-2024 (48)

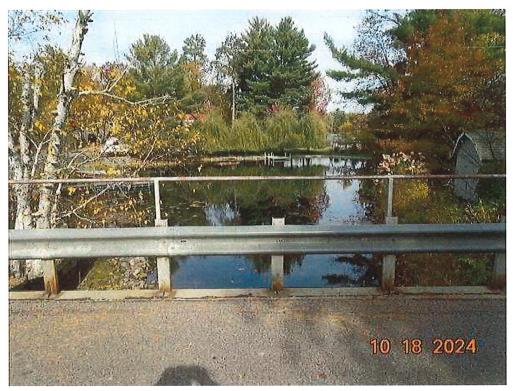


Photo 3 - 10-18-2024 (49)



Photo 4 - 10-18-2024 (50)



Photo 5 - 10-18-2024 (51)

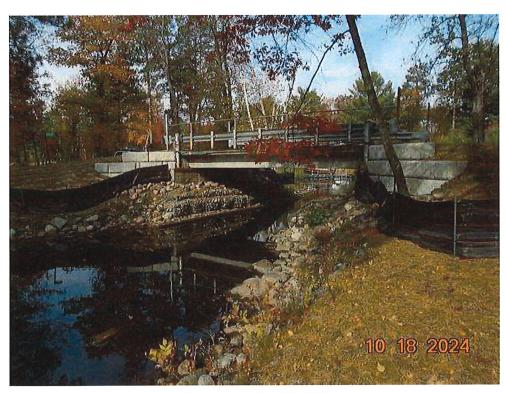


Photo 6 - 10-18-2024 (52)

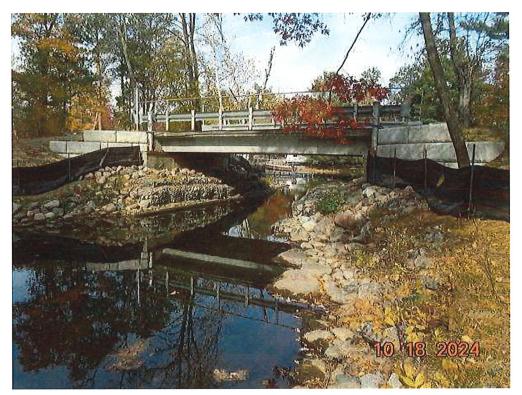


Photo 7 - 10-18-2024 (53)

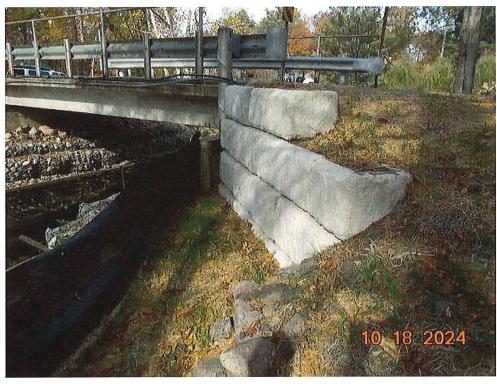


Photo 8 - 10-18-2024 (54)

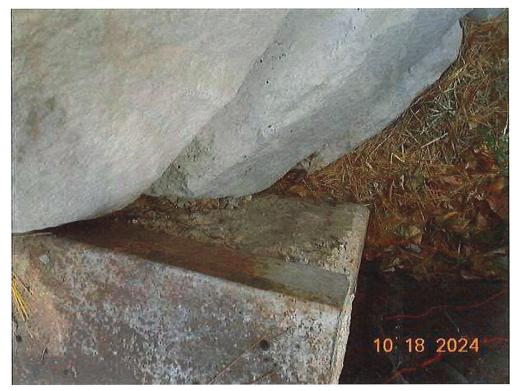


Photo 9 - 10-18-2024 (55)

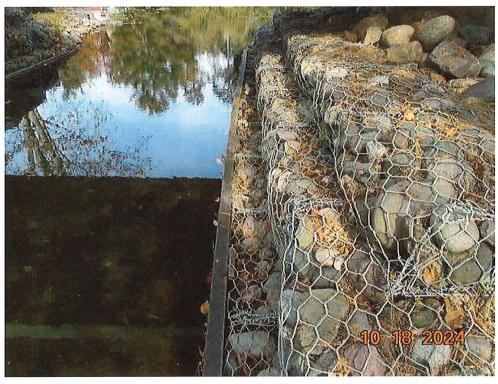


Photo 10 - 10-18-2024 (56)



Photo 11 - 10-18-2024 (57)



Photo 12 - 10-18-2024 (58)

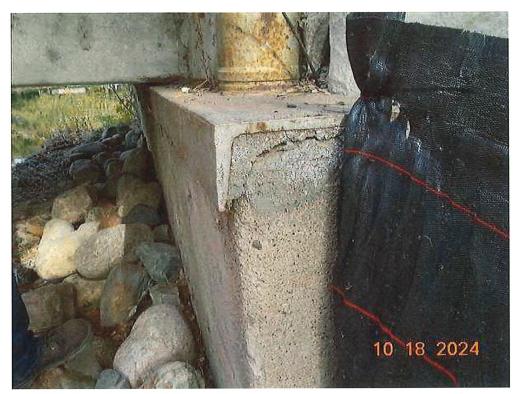


Photo 13 - 10-18-2024 (59)

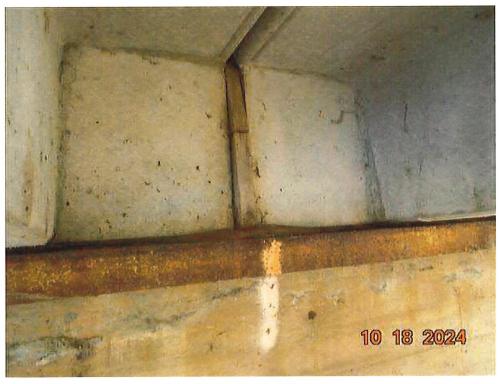


Photo 14 - 10-18-2024 (60)

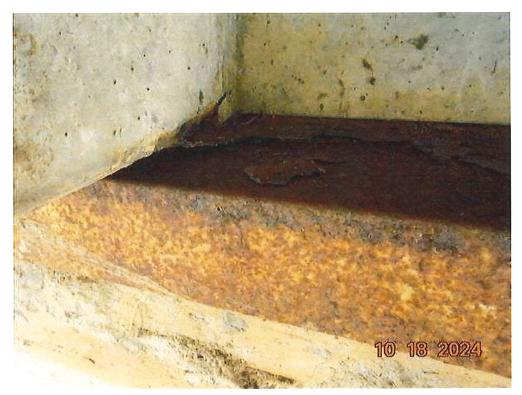


Photo 15 - 10-18-2024 (61)



Photo 16 - 10-18-2024 (62)

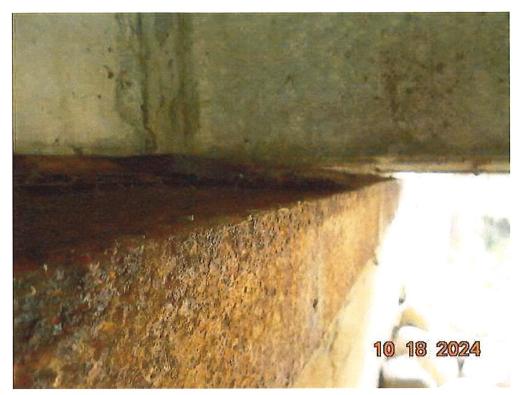


Photo 17 - 10-18-2024 (63)



Photo 18 - 10-18-2024 (64)



Photo 19 - 10-18-2024 (65)



Photo 20 - 10-18-2024 (66)

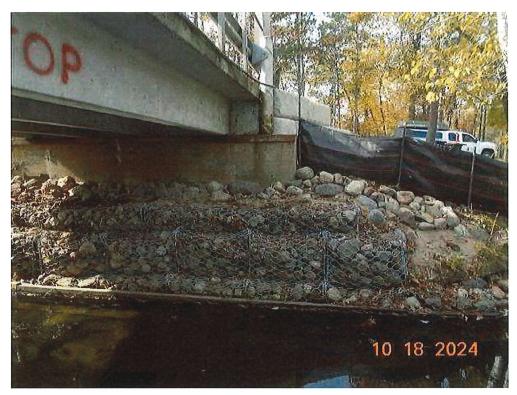


Photo 21 - 10-18-2024 (67)



Photo 22 - 10-18-2024 (68)

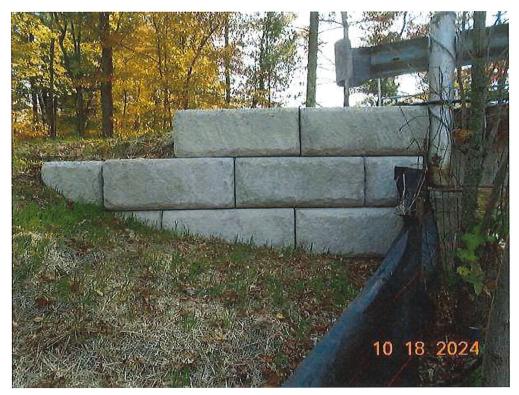


Photo 23 - 10-18-2024 (69)



Photo 24 - 10-18-2024 (70)



Photo 25 - 10-18-2024 (71)



Photo 26 - 10-18-2024 (72)



Photo 27 - 10-18-2024 (73)

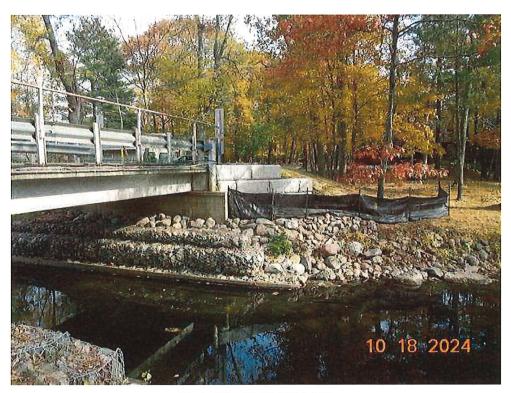


Photo 28 - 10-18-2024 (74)



Photo 29 - 10-18-2024 (75)



Photo 30 - 10-18-2024 (76)



Photo 31 - 10-18-2024 (77)



Photo 32 - 10-18-2024 (78)



Photo 33 - 10-18-2024 (79)



Photo 34 - 10-18-2024 (80)



Photo 35 - 10-18-2024 (81)



Photo 36 - 10-18-2024 (82)



Photo 37 - 10-18-2024 (83)



Photo 38 - 10-18-2024 (84)



Photo 39 - 10-18-2024 (85)



Photo 40 - 10-18-2024 (86)



Photo 41 - 10-18-2024 (87)



Photo 42 - 10-18-2024 (88)



February 4, 2025

City of Crosslake Char Nelson, Clerk 37028 County Road 66 Crosslake, Minnesota 56442

Re: Bridge Maintenance

Dear Char Nelson,

Bridges represent a considerable investment and as such to get the maximum life out of a bridge they require periodic maintenance. The current funding levels are not adequate to replace all bridges in need of replacement, as a result there is a need to make existing bridges last longer. Often a little preventative maintenance can add 20 or more years of life to a bridge.

Repairs and Routine Maintenance for Bridge Number 18530 (Sunrise Island Rd over Breezy Channel).

- The Type III object markers are installed too low. They should measure a minimum of 4 feet from the bottom of the sign to the road surface.
- The Type III object marker at the NE corner is bent/damaged, should be replaced.
- Every spring the deck should be flushed to remove any salt or sand left from winter snow removal operations and remove any dirt and debris from the bridge scuppers.
- The city may consider sealing the top surface of the bridge railing with rubber.

 This helps to keep moisture from penetrating the end-grain of the bridge rail posts and glue laminated wood railing. Functionally the rubber works great, however cosmetically the rubber lacks public appeal and can be a mess until the rubber cures over a period of hours.
- This bridge is on a 2-year inspection cycle.

Deficiencies and potential repairs for Bridge Number L4044 (Melinda Shores Road over Rush Lake).

- The Type III object markers are mounted low on the bridge. The "Minnesota Manual on Uniform Traffic Control Devices" states that the distance from the bottom of the sign to the near edge of the pavement should measure 4 feet.
- Clean the bridge seats of dirt and debris. Dirt holds moisture and will speed rusting on the abutment bridge cap. The city could also consider spot painting the bridge rail posts and abutment cap to slow the rust progression.

Timothy V. Bray County Engineer Highway Department 16589 County Road 142 Brainerd, MN 56401

Office: (218) 824-1110 Fax: (218) 824-1111 www.crowwing.us

Our Vision: Being Minnesota's favorite place.
Our Mission: Serve well. Deliver value. Drive results.

Our Values: Be responsible. Treat people right. Build a better future.

- This bridge has a history of minor settlement occurring between the abutments. The settlement appears to have stabilized. This office will continue to monitor for movement during future inspections.
- If the city has any plan drawing of the new wing walls (Very Nice) I would request copies so that they may be included in the bridge file kept by this office.
- This bridge is on a 2-year inspection cycle.



Please consult this office when planning any bituminous surfacing across a bridge deck. The addition of a 2-inch overlay on a typical bridge, 20 feet long, results in 6 tons of dead load being added to the bridge. At a minimum an overlay does result in the need of a new load rating if additional material is added to the bridge deck

Since bridges represent a considerable investment of taxpayer dollars, you are encouraged to conduct an on-site review of your bridges to confirm existing conditions and take appropriate action. This office is available to provide advice as to maintenance procedures and answer any questions related to bridges. You may contact the following: Wayne Dosh, Senior Engineering Technician and Certified Bridge Inspector; Rob Hall, Assistant County Highway Engineer; and Tim Bray, County Highway Engineer.

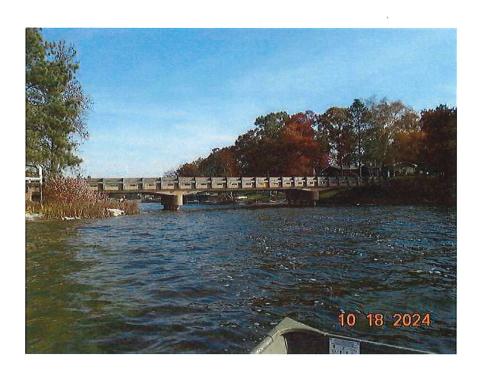
Sincerely,

Timothy Bray P.E. County Highway Engineer

By:

Wayne Dosh
Wayne Dosh Senior Engineering Technician

2024 ROUTINE BRIDGE INSPECTION REPORT



BRIDGE # 18530 SUNRISE ISLAND RD over CROSS LAKE CHANNEL

DISTRICT: District 3

COUNTY: Crow Wing

CITY/TOWNSHIP: Cross Lake

STATE:

Minnesota

Date of Inspection:

10/18/2024

Equipment Used: Life Jacket, Boat, Probing Rod, Other - waders & flashlight

Assisted by Brian Winskowski

Owner: City or Municipal Highway Agency

Inspected By: Dosh, Wayne; Winskowski, Brian

Report Written By: Wayne Dosh Report Reviewed By: Timothy Bray

Final Report Date: 01/13/2025



Inspector:

Dosh, Wayne

Inspection Date:

10/18/2024

Structure Number:

18530

Facility Carried:

M 9

Bridge Inspection Report

Minnesota Structure Inventory Report

Bridge ID: 18530

SUNRISE ISLAND RD over CROSS LAKE CHANNEL

+ GENERAL +	+ ROADWAY ON BRIDGE +	+ INSPECTION +
Agency Br. No. CITY34 Crew	Facility M 9	Last Routine Insp Date 10/18/2024
District 03 Maint. Area	LRS Functional Class 7 - Local	Routine Insp Frequency 24
County 018 - Crow Wing	ADT 50 YEAR 2010 Urban Code 99999	Inspector Name Dosh, Wayne
City Cross Lake	HCADT ADTT %	Status A - Open
Township	National Highway System 0	
Desc. Loc. 1.0 MI N OF JCT CR 103	LRS Mile Point I/D 0.162 / 0.162	+ NBI CONDITION RATINGS +
Sect., Twp., Range 30 137N - 27W	Speed Limit	Deck 7
Latitude 46.646533	Detour Length 99	Superstructure 7
Longitude -94.150986	Lanes 2 Lanes ON Bridge	Substructure 7
Custodian 04 - City or Municipal Highway Agency	Control Section (TH Only)	Channel 7
Owner 04 - City or Municipal Highway Agency	Function 1 - MAINLINE	Culvert
Insp Responsibility Crow Wing County	Type 2 - 2-way traffic	Guivert
Year Built 2011	Bridge Match ID 1	+ NBI APPRAISAL RATINGS +
Date Opened to Traffic 06/29/2011	Roadway Key Route On Structure	Structure Evaluation 7
1 .	Roadway Key Roule Off Structure	
MN Year Remodeled FHWA Year Reconstructed	+ RDWY DIMENSIONS ON BRIDGE +	Deck Geometry 5 Underclearances N
Bridge Plan Location 3 - COUNTY	If Divided: NB-EB SB-WB	Waterway Adequacy 9
Potential ABC 2 - N/A	Roadway Width 20.0 ft ft	Approach Alignment 6
	Vertical Clearance ft ft	
+ STRUCTURE +	Max. Vert. Clear. ft ft	+ SAFETY FEATURES +
Service On 1 - Highway	Horizontal Clear, 20.0 ft ft	Bridge Railing 1 - MEETS STANDARDS
Service Under 5 - Waterway	Appr. Surface Width 24.0 ft	GR Transition N - NOT REQUIRED
Main Span Type 2 - Concrete Continuous	Bridge Roadway Width 20.0 ft	Appr. Guardrail N - NOT REQUIRED
09 - Slab Span	Median Width On Bridge 0.0 ft	GR Termini N - NOT REQUIRED
Main Span Detail		
Appr. Span Type No Approach Span	+ MISC. BRIDGE DATA +	+ SPECIAL INSPECTIONS +
1	Structure Flared 0 - No flare	Y/N Freq Date
Appr. Span Detail	Parallel Structure N - No parallel structure	NSTM N
Skew 0	Field Conn. ID	Underwater N
Culvert Type	Cantilever ID	Pinned Asbly. N
Barrel Length	_ ,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Number of Spans	Foundations (Material/Type)	+ WATERWAY +
MAIN: 3 APPR: 0 TOTAL:	Abutment 1 - CONC 8 - INTEGRAL	Drainage Area (sq mi) 562.0
Main Span Length 60.0 ft	Pier 1 - CONC 4 - PILE BENT	Waterway Opening (sq ft) 630
Structure Length 154.1 ft	Historic Status 5 - Not eligible	Navigation Control 0 - No nav. control on waterway
Deck Width (Out-to-Out) 22.0 ft	On - Off System 0 - OFF	Pier Protection
Deck Material 1 - Concrete Cast-in-Place		Nav. Clr. (ft) Vert. 0.0 Horiz. 0.0
Wear Surf Type 1 - Monolithic Concrete (concurrently placed with structural deck)	+ PAINT +	Nav. Vert. Lift Bridge Clear. (ft) 0.0
Wear Surf Install Year 2011	Year Painted	MN Scour Code L - STBL - LOW RISK
Wear Course/Fill Depth 0.00 ft	Painted Area sq ft	Scour Evaluation Year 2009
Deck Membrane 0 - None	Primer Type	
Deck Rebars 1 - Epoxy Coated Reinforcing	Finish Type	+ CAPACITY RATINGS +
MN Rebar Coating	· ····-·· · y p -	Design Load A - HL 93
Deck Install Year 2011	+ BRIDGE SIGNS +	Operating Rating 2 - HS TRUCK 45.7
Structure Area (Out-to-Out) 3390 sq ft	Posted Load 0 - Not Required	Inventory Rating 2 - HS TRUCK 27.4
Roadway Area (Curb-to-Curb) 3082 sq ft	Traffic 0 - Not Required	Posting VEH: SEMI: DBL:
Luongand Vien formationalist 2005 2d if		roung term Ocian, DDL,
Sidovalk Width - L/P 0.00 0.00 #	Horizontal 1 - Object Markers	Rating Date 12/28/2010
Sidewalk Width - L/R 0.00 0.00 ft	Horizontal 1 - Object Markers	Rating Date 12/28/2010
Sidewalk Width - L/R	Horizontal 1 - Object Markers Vertical N - Not Applicable	Rating Date 12/28/2010 Overweight Permit Codes A: N B: N C: N

01/13/2025

38

BRIDGE 18530 M 9 OVER CROSS LAKE CHANNEL

Reinforced Concrete Slab

County: 1.0 MIN OF JCT CR 103 154.1 ft. Crow Wing Location: Length: City: Cross Lake Route: 10 - MUN 9 Ref. Pt.: 000+00.160 Deck Width: 22.0 ft. Rdwy. Area/ Pct. Unsnd: 3082 sq. ft. / % Township: Control Section: Section: 30 Township: 137N Range: 27W Maint. Area: Paint Area/ Pct. Unsnd: sq. ft. / % Span Type: 2 - Concrete Continuous 1 - Slab Local Agency Bridge Nbr.: CITY34 Culvert: Postings: List: NBI Deck: 7 Super: 7 Chan: 7 Culv: N Sub: 7 Open, Posted, Closed: A - Open MN Scour Code: L - STBL - LOW RISK Appraisal Ratings - Approach: Waterway: Unofficial Structurally Deficient Ν Required Bridge Signs - Load Posting: 0 - Not Required Traffic: 0 - Not Required Unofficial Functionally Obsolete Horizntal: 1 - Object Markers Vertical: N - Not Applicable **Unofficial Sufficiency Rating** 88.6 **ELEM** QTY QTY QTY QTY REPORT TYPE INSP. DATE QUANTITY CS₁ CS₂ CS₃ CS 4 **NBR ELEMENT NAME**

Routine 10/20/2022 3390 SF 3328 62 0 0

Notes: 10/18/2024 - 10/15/2020: 2% of moved to CS2 because of leaking over the piers and moderate transverse cracks over the piers. There are random cracks radiating out from the abutments and transverse cracks directly over the piers and diagonal transverse cracks from 1/4 span to 1/4 span centered over the piers. Longitudinal underside crack at CL in main span under the north pier extending out to the center of bridge. 15' long. All of the cracks found are insignificant in size with no leakage coming through the deck at this time. There is some minor cracking and efflorescence appearing on the outside face of the deck over the piers. There is a longitudinal crack on the bottom of the deck located at the centerline of the bridge found at the abutments and piers.

10/18/2024

Routine

3390 SF

3328

62

0

0

10/25/18: 1% moved to CS2 because of leaking over piers. There are small, tight transverse cracks directly over the piers and diagonal transverse cracks from 1/4 span to 1/4 span centered over the piers. Longitudinal underside crack at CL in main span under the north pier extending out to the center of bridge. 15' long. All of the cracks found are insignificant in size with no leakage coming through the deck at this time. There is some minor cracking and efflorescence appearing on the outside face of the deck over the piers.

10/25/16: There are small, tight transverse cracks directly over the piers and diagonal transverse cracks from 1/4 span to 1/4 span centered over the piers. Longitudinal underside crack at CL in main span under the north pier extending out to the center of bridge. 15' long. All of the cracks found are insignificant in size with no leakage coming through the deck at this time. There is some minor cracking and efflorescence appearing on the outside face of the deck over the piers.

10/22/14: There are cracks in all of the spans at the mid point of the spans every 2 to 4 feet apart. The cracks appear to follow the "chairs" used to hold the steel when the bridge was built. All of the cracks found are insignificant in size with no leakage coming through the deck at this time. There is some minor cracking and efflorescence appearing on the outside face of the deck over the piers.

10/11/12: 3 minor transverse cracks found at the mid-span of the middle span. 1 minor transverse crack was found at the mid-span of both approach spans. All of the cracks appear to be following the rebar chairs.

[2011-October] 3 minor transverse cracks found at the mid-span of the middle span. 1 minor transverse crack was found at the mid-span of both approach spans. All of the cracks appear to be following the rebar chairs.

510 - Wearing Surfaces	Routine	10/18/2024	3082 SF	3020	62	0	0
	Routine	10/20/2022	3082 SF	3020	62	0	0

Notes: 10/18/2024 - 10/20/2022: Cracks have been epoxy sealed. Estimate cracking effects 2% of the deck area (CS 2). All sealed cracks less than 1/8 inch in width.

10/15/2020: 2% moved to CS2 because of unsealed cracks. The epoxy has deteriorated to the point that all cracks need to be sealed again. 10/25/18: 2% moved to CS2 because of unsealed cracks. The epoxy sealant remains in good shape on the cracks that have been sealed, however there are some new cracks have appeared since the bridge was last sealed in 2012. All of the cracks are insignificant in size but are of moderate density over the piers. There are small, tight transverse cracks directly over the piers and diagonal transverse cracks from 1/4 span centered over the piers.

10/25/16: There are new unsealed cracks appearing since the bridge was last sealed. There are small, tight transverse cracks directly over the piers and diagonal transverse cracks from 1/4 span to 1/4 span centered over the piers.

Concrete Slab with Bituminous Overlay Notes:

10/22/14: There are new unsealed cracks appearing since the bridge was last sealed. There are small, tight transverse cracks over the piers. 10/11/12: There are small, tight transverse cracks over the piers. All cracks have been epoxy sealed at this time.

[2011-June] 2 minor transverse cracks found over each side of the west pier-cap and 1 minor transverse crack found over the east pier-cap. [2011-October] 2 to 3 transverse cracks found over each side of the piers on top of the deck.

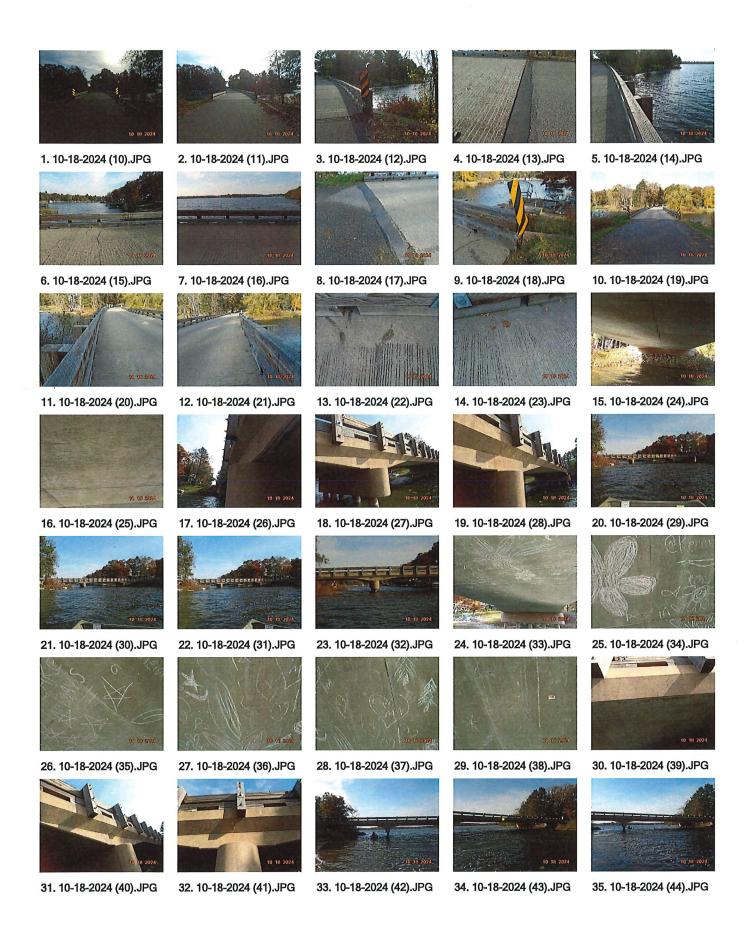
BRIDGE 18530 M 9 OVER CROSS LAKE CHANNEL

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
215	Reinforced Concrete Abutment	Routine	10/18/2024	75 LF	75	0	0	0
		Routine	10/20/2022	75 LF	75	0	0	0
	Notes: 10/18/2024 - 10/20/2022: The center. Abutment #2 crack is south a 10/15/2020 - 10/22/2014: From the appears to be from road run-off. Wingwall notes: 10/25/16 - 10/22/14	of center. Water has be staining water has been	en draining acro draining across	ss the bridge se the bridge seat.	eats as indi Some mi	cated by s nor erosio	taining. n at the SE	
225	Steel Pile	Routine	10/18/2024	10 EA	10	0	. 0	0
		Routine	10/20/2022	10 EA	10	0	0	0
	Notes: 10/18/2024 - 10/20/2022: No	o notable damage or de	iciencies observ	ed.				
	515 - Steel Protective Coating	Routine	10/18/2024	84 SF	0	84	0	0
		Routine	10/20/2022	84 SF	0	84	0	0
	Notes: 10/18/2024 - 10/20/2022: Mii 10/15/2020 - 10/25/2018: Paint rem 10/25/16: Painted 1 1/2' south pier a [2016] Migrator assumed CS1 and a	ains in good condition. and 2' north pier.	nish coat.					
234	Reinforced Concrete Pier Cap	Routine	10/18/2024	46 LF	46	0	0	0
		Routine	10/20/2022	46 LF	46	0	0	0
	Notes: 10/18/2024 - 10/20/2022: Pi #4, crack is visible from both side of 10/15/2020 - 10/25/2016: 1 crack in	the pier. There is a min	or crack in pier #			pile #5 to	the bottom	of cap above p
332	Timber Bridge Railing	Routine	10/18/2024	309 LF	245	37	27	0
332	Notes: 10/18/2024: 27 Posts (CS3 cracks or checks that penetrate 5%)	Routine - 27') have cracks or che to 50% of the post thickr	10/20/2022 ecks that penetra	309 LF ate more than 50	276 0% of the p	33 oost thickn	0 ess. 27 Po	0 ests (CS2 - 27')
332	Notes: 10/18/2024: 27 Posts (CS3	Routine - 27') have cracks or che to 50% of the post thickr ail. loose bolts in the railing he post. There is an iso on checks extending 5% - ose, but the connection he north rail. ss extending 5% - 50% t and today on lower outsi colted connections to be	10/20/2022 ecks that penetra ecks. There is a found, connectic lated check in th 50% through the was still function through the full le de nuts. The tin loose.	309 LF ate more than 50 isolated check on semained fure upper railing 2 e full length of thing. There is a ength of the post	276 0% of the p (CS2 - 10') nctional. T 20 to 30 fe ne post. S isolated cl	33 post thicknown in the uppose are 2 the from the everal of the control of the c	0 ess. 27 Po eer railing 2 23 posts wit west end o ne lower nu upper raili	0 sts (CS2 - 27') 0 to 30 feet from the checks exter of the bridge on tts on the outside the game of t
	Notes: 10/18/2024: 27 Posts (CS3 cracks or checks that penetrate 5% west end of the bridge on the north r 10/20/2022: Only a couple isolated 5% - 50% through the full length of the north rail. 10/15/2020: There are 23 posts with face of the railing was found to be lofrom the west end of the bridge on the 10/25/18: 23 posts found with check 10/25/16: Only loose connection for 10/23/14: Found about 50% of the bridge of the bolted	Routine - 27') have cracks or che to 50% of the post thickr ail. loose bolts in the railing he post. There is an iso on checks extending 5% - ose, but the connection he north rail. ts extending 5% - 50% t and today on lower outsi colted connections to be connections to be loose	10/20/2022 ecks that penetra ecks. There is a found, connectic lated check in th 50% through the was still function hrough the full le de nuts. The tin loose.	309 LF ate more than 50 isolated check on semained fure upper railing 2 e full length of thing. There is a ength of the post	276 0% of the p (CS2 - 10') nctional. T 20 to 30 fe ne post. S isolated cl	33 post thicknown in the uppose are 2 the from the everal of the control of the c	0 ess. 27 Po eer railing 2 23 posts wit west end o ne lower nu upper raili	0 sts (CS2 - 27') 0 to 30 feet from the checks exter of the bridge on tts on the outside the game of t
	Notes: 10/18/2024: 27 Posts (CS3 cracks or checks that penetrate 5% west end of the bridge on the north r 10/20/2022: Only a couple isolated 5% - 50% through the full length of the north rail. 10/15/2020: There are 23 posts with face of the railing was found to be lofrom the west end of the bridge on the 10/25/18: 23 posts found with check 10/25/16: Only loose connection for 10/23/14: Found about 50% of the bridge of the bridge on the second seco	Routine - 27') have cracks or che to 50% of the post thickr rail. loose bolts in the railing he post. There is an iso n checks extending 5% - ose, but the connection ne north rail. ts extending 5% - 50% t and today on lower outsi colted connections to be connections to be loose	10/20/2022 ecks that penetraless. There is a found, connectic lated check in the 50% through the was still function through the full lede nuts. The tin loose.	309 LF ate more than 50 isolated check on sremained fure upper railing 2 e full length of thing. There is a ength of the postuper curb has marked to the postu	276 0% of the p (CS2 - 10') nctional. T 20 to 30 fectors ne post. S isolated cl t. ninor check	33 post thicknown in the upp There are 2 et from the everal of the neck in the	0 ess. 27 Po eer railing 2 23 posts wit west end o ne lower nu upper railin	0 sts (CS2 - 27') 0 to 30 feet fro th checks exter of the bridge on tts on the outsid ng 20 to 30 fee
	Notes: 10/18/2024: 27 Posts (CS3 cracks or checks that penetrate 5% west end of the bridge on the north r 10/20/2022: Only a couple isolated 5% - 50% through the full length of the north rail. 10/15/2020: There are 23 posts with face of the railing was found to be lofrom the west end of the bridge on the 10/25/18: 23 posts found with check 10/25/16: Only loose connection for 10/23/14: Found about 50% of the bridge of the bolted	Routine - 27') have cracks or che to 50% of the post thickr rail. loose bolts in the railing he post. There is an iso on checks extending 5% - ose, but the connection he north rail. It is extending 5% - 50% to connections to be connections to be connections to be loose Routine Routine	10/20/2022 ecks that penetraless. There is a found, connectic lated check in the 50% through the was still function through the full lede nuts. The tin loose. 10/18/2024 10/20/2022	309 LF ate more than 50 isolated check ons remained fure upper railing 2 e full length of thing. There is a singth of the postable curb has marked 1 EA 1 EA	276 0% of the p (CS2 - 10') nctional. T 20 to 30 fe ne post. S isolated cl t. ninor check	33 post thicknown in the upp There are 2 et from the everal of the neck in the king in isola	0 ess. 27 Po eer railing 2 23 posts with west end of the lower nu upper railing ated location	0 sts (CS2 - 27') 0 to 30 feet from the checks exter of the bridge on tts on the outsiding 20 to 30 feet ans 0
3000	Notes: 10/18/2024: 27 Posts (CS3 cracks or checks that penetrate 5% west end of the bridge on the north r 10/20/2022: Only a couple isolated 5% - 50% through the full length of the north rail. 10/15/2020: There are 23 posts with face of the railing was found to be to from the west end of the bridge on the 10/25/18: 23 posts found with check 10/25/16: Only loose connection for 10/23/14: Found about 50% of the best 10/11/12: Found some of the bolted Critical Deficiencies or Safety Hazards	Routine - 27') have cracks or che to 50% of the post thickr rail. loose bolts in the railing he post. There is an iso on checks extending 5% - ose, but the connection he north rail. ss extending 5% - 50% t and today on lower outsi bolted connections to be connections to be loose Routine Routine BSERVED DURING TH	10/20/2022 ecks that penetral eess. There is a found, connectic lated check in th 50% through the was still function hrough the full le de nuts. The tin loose. 2. 10/18/2024 10/20/2022 E LAST INSPEC	309 LF ate more than 50 isolated check ons remained fure upper railing 2 e full length of thing. There is a singth of the postaber curb has many 1 EA 1 EA 1 EA	276 0% of the p (CS2 - 10') nctional. The post of the	33 post thicknown in the upp There are 2 et from the everal of the neck in the king in isola	0 ess. 27 Poper railing 2 23 posts with west end of the lower number railing attention of the location of the	0 sts (CS2 - 27') 0 to 30 feet from the checks extern of the bridge on the outsiding 20 to 30 feet ins 0 0
300	Notes: 10/18/2024: 27 Posts (CS3 cracks or checks that penetrate 5% west end of the bridge on the north r 10/20/2022: Only a couple isolated 5% - 50% through the full length of the north rail. 10/15/2020: There are 23 posts with face of the railing was found to be lofrom the west end of the bridge on the 10/25/18: 23 posts found with check 10/25/16: Only loose connection for 10/23/14: Found about 50% of the bridge of the 10/11/12: Found some of the bolted Critical Deficiencies or Safety Hazards	Routine - 27') have cracks or che to 50% of the post thickr rail. loose bolts in the railing he post. There is an iso on checks extending 5% - ose, but the connection he north rail. It is extending 5% - 50% t and today on lower outsi colted connections to be connections to be loose Routine Routine BSERVED DURING TH	10/20/2022 ecks that penetral ress. There is a found, connectic lated check in the 50% through the was still function through the full lede nuts. The tin loose. 10/18/2024 10/20/2022 E LAST INSPECTION 10/20/2024	309 LF ate more than 50 isolated check on remained further entered to the construction of the construction of the post of the curb has make the curb has mak	276 0% of the p (CS2 - 10') nctional. The post of the	33 post thicknown in the upp There are 2 pet from the everal of the the ck in the sting in isola 0 0	0 ess. 27 Pc eer railing 2 23 posts wir west end o ne lower nu upper railin ated location 0 0	0 sts (CS2 - 27') 0 to 30 feet from the checks extern of the bridge on the outsiding 20 to 30 feet the checks externs 0 0 0
300	Notes: 10/18/2024: 27 Posts (CS3 cracks or checks that penetrate 5% west end of the bridge on the north r 10/20/2022: Only a couple isolated 5% - 50% through the full length of the north rail. 10/15/2020: There are 23 posts with face of the railing was found to be to from the west end of the bridge on the 10/25/18: 23 posts found with check 10/25/16: Only loose connection for 10/23/14: Found about 50% of the best 10/11/12: Found some of the bolted Critical Deficiencies or Safety Hazards	Routine - 27') have cracks or che to 50% of the post thickr rail. loose bolts in the railing he post. There is an iso on checks extending 5% - ose, but the connection he north rail. ss extending 5% - 50% t and today on lower outsi bolted connections to be connections to be loose Routine Routine BSERVED DURING TH Routine Routine inor settlement at the abit at bridge approaches	10/20/2022 ecks that penetral ress. There is a found, connectic lated check in the 50% through the was still function through the full lede nuts. The tin loose. 10/18/2024 10/20/2022 E LAST INSPECTION 10/20/2022 enutment approact 1/4" - 1/2" at ploy	309 LF ate more than 50 isolated check on remained fure upper railing 2 er full length of thing. There is a rength of the post	276 0% of the p (CS2 - 10') nctional. The post of the	33 post thicknown in the upp There are 2 pet from the everal of the neck in the sing in isola 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 ess. 27 Pc eer railing 2 23 posts with west end of the lower nu upper railing attention of the location of t	0 sts (CS2 - 27') 0 to 30 feet from the checks extern of the bridge on the outsiding 20 to 30 feet ins 0 0
300	Notes: 10/18/2024: 27 Posts (CS3 cracks or checks that penetrate 5% west end of the bridge on the north r 10/20/2022: Only a couple isolated 5% - 50% through the full length of the north rail. 10/15/2020: There are 23 posts with face of the railing was found to be lofrom the west end of the bridge on the 10/25/18: 23 posts found with check 10/25/16: Only loose connection for 10/23/14: Found about 50% of the bridge of the 10/11/12: Found some of the bolted Critical Deficiencies or Safety Hazards Notes: NO CRITICAL FINDINGS Of Bituminous Approach Roadway Notes: 10/18/2024 - 10/20/2022: Mright 10/15/2020 - 10/25/2018: Settlemer	Routine - 27') have cracks or che to 50% of the post thickr rail. loose bolts in the railing he post. There is an iso on checks extending 5% - ose, but the connection he north rail. ss extending 5% - 50% t and today on lower outsi bolted connections to be connections to be loose Routine Routine BSERVED DURING TH Routine Routine inor settlement at the abit at bridge approaches	10/20/2022 ecks that penetral ress. There is a found, connectic lated check in the 50% through the was still function through the full lede nuts. The tin loose. 10/18/2024 10/20/2022 E LAST INSPECTION 10/20/2022 enutment approact 1/4" - 1/2" at ploy	309 LF ate more than 50 isolated check on remained fure upper railing 2 er full length of thing. There is a rength of the post	276 0% of the p (CS2 - 10') nctional. The post of the	33 post thicknown in the upp There are 2 pet from the everal of the neck in the sing in isola 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 ess. 27 Pc eer railing 2 23 posts with west end of the lower nu upper railing attention of the location of t	0 sts (CS2 - 27') 0 to 30 feet from the checks extern of the bridge on the outsiding 20 to 30 feet the checks externs 0 0 0
300	Notes: 10/18/2024: 27 Posts (CS3 cracks or checks that penetrate 5% west end of the bridge on the north r 10/20/2022: Only a couple isolated 5% - 50% through the full length of the north rail. 10/15/2020: There are 23 posts with face of the railing was found to be lofrom the west end of the bridge on the 10/25/18: 23 posts found with check 10/25/16: Only loose connection for 10/23/14: Found about 50% of the bridge of the 10/11/12: Found some of the bolted Critical Deficiencies or Safety Hazards Notes: NO CRITICAL FINDINGS Of Bituminous Approach Roadway Notes: 10/18/2024 - 10/20/2022: M 10/15/2020 - 10/25/2018: Settlemer 10/25/16 - 10/22/14: There has been	Routine - 27') have cracks or che to 50% of the post thickr rail. loose bolts in the railing he post. There is an iso on checks extending 5% - ose, but the connection he north rail. ss extending 5% - 50% t und today on lower outsi holted connections to be connections to be loose Routine Routine BSERVED DURING TH Routine inor settlement at the abut at bridge approaches n some minor settlement	10/20/2022 ecks that penetral ress. There is a found, connectic lated check in the 50% through the was still function through the full lede nuts. The tin loose. 10/18/2024 10/20/2022 E LAST INSPECTION 10/20/2022 et utment approach 1/4" - 1/2" at ploy tat the abutment	309 LF ate more than 50 isolated check on remained fure upper railing 2 er full length of thing. There is a rength of the post	276 0% of the process of the process of the post. So isolated of the process of t	33 post thicknown in the upp There are 2 pet from the everal of the neck in the sing in isola 0 0 0 0 0 oneen dura-patch	0 ess. 27 Pc eer railing 2 23 posts with west end of the lower nu upper railing attention of the location of t	0 sts (CS2 - 27') 0 to 30 feet from the checks externed the bridge on the outsiding 20 to 30 feet the checks externed the bridge on the outsiding 20 to 30 feet the checks externed the bridge on the outside the checks of the bridge of the br
300	Notes: 10/18/2024: 27 Posts (CS3 cracks or checks that penetrate 5% west end of the bridge on the north r 10/20/2022: Only a couple isolated 5% - 50% through the full length of the north rail. 10/15/2020: There are 23 posts with face of the railing was found to be lofrom the west end of the bridge on the 10/25/18: 23 posts found with check 10/25/16: Only loose connection for 10/23/14: Found about 50% of the bridge of the 10/11/12: Found some of the bolted Critical Deficiencies or Safety Hazards Notes: NO CRITICAL FINDINGS Of Bituminous Approach Roadway Notes: 10/18/2024 - 10/20/2022: M 10/15/2020 - 10/25/2018: Settlemer 10/25/16 - 10/22/14: There has been	Routine - 27') have cracks or che to 50% of the post thickr ail. loose bolts in the railing he post. There is an iso on checks extending 5% - ose, but the connection ne north rail. us extending 5% - 50% t und today on lower outsi colted connections to be connections to be loose Routine Routine BSERVED DURING TH Routine inor settlement at the abit at bridge approaches n some minor settlemen Routine Routine inor diagonal crack obse	10/20/2022 ecks that penetral ress. There is a found, connectic lated check in the 50% through the was still function through the full lede nuts. The tin loose. 10/18/2024 10/20/2022 E LAST INSPECTION 10/20/2022 Enutment approach 1/4" - 1/2" at ploy that the abutmen 10/18/2024 10/20/2022 Enved in pier #1 between 15 and 15	309 LF ate more than 50 isolated check on sremained fure upper railing 2 er full length of thing. There is a singth of the postable curb has many at the same at t	276 0% of the p (CS2 - 10") nctional. The post of the	33 post thicknown in the upp There are 2 et from the everal of the evera	0 ess. 27 Poper railing 2 23 posts with west end of the lower number railing attention of the location of the	0 sts (CS2 - 27') 0 to 30 feet from the checks extern of the bridge on the outside and 20 to 30 feet the checks extern of the bridge on the outside and 20 to 30 feet the checks extern of the bridge on the outside and 20 to 30 feet the checks extern of the bridge of the checks extern of the checks exter
300 322 383	Notes: 10/18/2024: 27 Posts (CS3 cracks or checks that penetrate 5% west end of the bridge on the north r 10/20/2022: Only a couple isolated 5% - 50% through the full length of the north rail. 10/15/2020: There are 23 posts with face of the railing was found to be lofrom the west end of the bridge on the 10/25/18: 23 posts found with check 10/25/16: Only loose connection for 10/23/14: Found about 50% of the bridge of the 10/11/12: Found some of the bolted Critical Deficiencies or Safety Hazards Notes: NO CRITICAL FINDINGS Of Bituminous Approach Roadway Notes: 10/18/2024 - 10/20/2022: Mright 10/25/16 - 10/22/14: There has bee Concrete Shear Cracking Notes: 10/18/2024 - 10/20/2022: Mright 10/25/16 - 10/22/14: Do not belief	Routine - 27') have cracks or che to 50% of the post thickr rail. loose bolts in the railing he post. There is an iso n checks extending 5% - ose, but the connection ne north rail. as extending 5% - 50% to ind today on lower outsi bolted connections to be connections to be loose Routine Routine BSERVED DURING TH Routine Routine inor settlement at the ab at at bridge approaches n some minor settlemen Routine Routine inor diagonal crack observe this crack is a shear of	10/20/2022 ecks that penetraless. There is a found, connectic lated check in the 50% through the was still function through the full lede nuts. The tin loose. 10/18/2024 10/20/2022 E LAST INSPECTION 10/20/2022 Enter the abutment approach 1/4" - 1/2" at ploy that the abutment 10/18/2024 10/20/2022 Enved in pier #1 Ecrack.	309 LF ate more than 50 isolated check on sremained fure upper railing 2 er full length of thing. There is a singth of the postable curb has many at the same at t	276 0% of the p (CS2 - 10") nctional. The post of the	33 post thicknown in the upp There are 2 et from the everal of the evera	0 ess. 27 Poper railing 2 23 posts with west end of the lower number railing attention of the location of the	0 sts (CS2 - 27') 0 to 30 feet from the checks extern of the bridge on the outside and 20 to 30 feet the checks extern of the bridge on the outside and 20 to 30 feet the checks extern of the bridge on the outside and 20 to 30 feet the checks extern of the bridge of the checks extern of the checks exter
332 332 3800 3822 3883	Notes: 10/18/2024: 27 Posts (CS3 cracks or checks that penetrate 5% west end of the bridge on the north r 10/20/2022: Only a couple isolated 5% - 50% through the full length of the north rail. 10/15/2020: There are 23 posts with face of the railing was found to be lofrom the west end of the bridge on the 10/25/18: 23 posts found with check 10/25/16: Only loose connection for 10/23/14: Found about 50% of the bridge of the 10/11/12: Found some of the bolted Critical Deficiencies or Safety Hazards Notes: NO CRITICAL FINDINGS Of Bituminous Approach Roadway Notes: 10/18/2024 - 10/20/2022: M 10/15/2020 - 10/25/2018: Settlement 10/25/16 - 10/22/14: There has bee Concrete Shear Cracking	Routine - 27') have cracks or che to 50% of the post thickr ail. loose bolts in the railing he post. There is an iso on checks extending 5% - ose, but the connection ne north rail. us extending 5% - 50% t und today on lower outsi colted connections to be connections to be loose Routine Routine BSERVED DURING TH Routine inor settlement at the abit at bridge approaches n some minor settlemen Routine Routine inor diagonal crack obse	10/20/2022 ecks that penetral ress. There is a found, connectic lated check in the 50% through the was still function through the full lede nuts. The tin loose. 10/18/2024 10/20/2022 E LAST INSPECTION 10/20/2022 Enutment approach 1/4" - 1/2" at ploy that the abutmen 10/18/2024 10/20/2022 Enved in pier #1 between 15 and 15	309 LF ate more than 50 isolated check on remained fure upper railing 2 and full length of the post of	276 0% of the p (CS2 - 10") nctional. The post of the	33 post thicknown in the upp There are 2 et from the everal of the evera	0 ess. 27 Pc eer railing 2 23 posts wir west end one lower nu upper railing ated location 0 0 0 patched. ned. 0 bove pile #	0 sts (CS2 - 27') 0 to 30 feet from the checks extern of the bridge on the sts on the outsiding 20 to 30 feet the state of the outsiding 20 to 30 feet the state of the state

ELEM NBR	ELEM	ENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
891	Other Bridge Sign	ning	Routine	10/18/2024	1 EA	0	1	0	0
			Routine	10/20/2022	1 EA	0	1	0	0
	damaged. All (10/20/2022: N 10/15/2020 - 1	2024: Required signing object markers are insta E object marker is dam 0/25/2016: All markers I Object markers have b	illed too low. aged. All object mark are good.		•				
892	Slopes & Slope F	Protection	Routine	10/18/2024	1 EA	1	0	0	0
			Routine	10/20/2022	1 EA	1	0	0	0
	Notes: 10/18/2	2024 - 10/20/2022: No i	notable damage or de	ficiencies observ	ved.				
894	Deck & Approach	n Drainage	Routine	10/18/2024	1 EA	1	0	0	0
			Routine	10/20/2022	1 EA	1	0	0	0
		2024 - 10/25/2018: Was 22/14: Runoff from the i						wingwall.	
899	Miscellaneous Ite	ems	Routine	10/18/2024	1 EA	1	0	0	0
			Routine	10/20/2022	1 EA	1	0	0	0
	Notes: 10/18/2	2024 - 10/20/2022: Tree	es and brush are grow	ving around the a	butments.				
900	Protected Specie	s	Routine	10/18/2024	1 EA	0	1	0	0
			Routine	10/20/2022	1 EA	0	1	0	0
		10/22/14: Was able to in the railing are loose through cracks in the of 10/11/12: Was able to loose. Inspection dated 06-2: Inspection dated 10-0: [2011 October] Was a	and am able to spin to deck over the piers vison wade beneath the bis 3-2011 by WD and Ref 5-2011 by WD and Ref	he nut off by har sible only on the ridge to probe an B was entered by I was entered by	nd. Water is lea outside edge of id see all eleme MnDOT Bridge MnDOT Bridge	king over the bridge nts. The h Office.	the bridge e. nardware c	seat at the	abutments and
	58. Deck NBI:	10/18/2024 - 10/15/20 abutments.		_		•		king radiat	ing out from the
36A. E	Brdg Railings NBI:								
36B	. Transitions NBI:								
36C. Ap	pr Guardrail NBI:								
36	D. Appr Guardrail Terminal NBI:								
59. Su	perstructure NBI:	10/18/2024 - 10/15/20 abutments.	20: Transverse crack	ing in top of the	deck over the pi	ers and ra	andom crac	king radiat	ing out from the
60.	Substructure NBI:	10/18/2024 - 10/20/20	22: Isolated minor ve	rtical cracks nea	r the center of b	oth abutm	ents.		
	61. Channel NBI:	10/18/2024: Minor ero	sion of the banks.						
	62. Culvert NBI:								
71. Wa	terway Adeq NBI:								
7	2. Appr Roadway Alignment NBI:								

BRIDGE 18530 M 9 OVER CROSS LAKE CHANNEL

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	
	Wayne Dosh		_		~~~~~	imothy B			
	Inspector's Signature				Rev	iewer's Sig	nature		







36. 10-18-2024 (45).JPG

37. 10-18-2024 (46).JPG



Photo 1 - 10-18-2024 (10)



Photo 2 - 10-18-2024 (11)



Photo 3 - 10-18-2024 (12)



Photo 4 - 10-18-2024 (13)



Photo 5 - 10-18-2024 (14)



Photo 6 - 10-18-2024 (15)

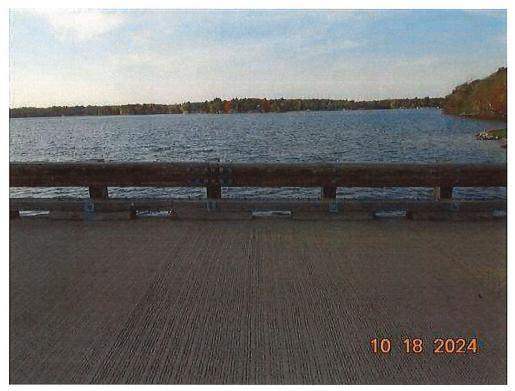


Photo 7 - 10-18-2024 (16)



Photo 8 - 10-18-2024 (17)



Photo 9 - 10-18-2024 (18)



Photo 10 - 10-18-2024 (19)



Photo 11 - 10-18-2024 (20)



Photo 12 - 10-18-2024 (21)



Photo 13 - 10-18-2024 (22)



Photo 14 - 10-18-2024 (23)

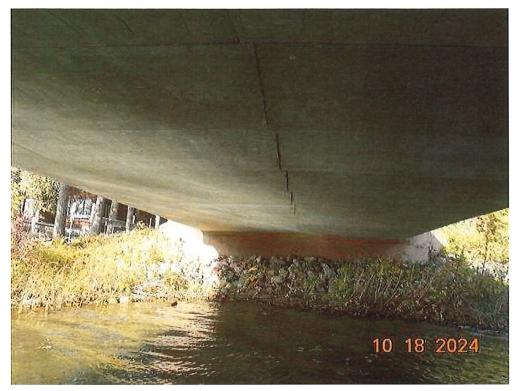


Photo 15 - 10-18-2024 (24)



Photo 16 - 10-18-2024 (25)

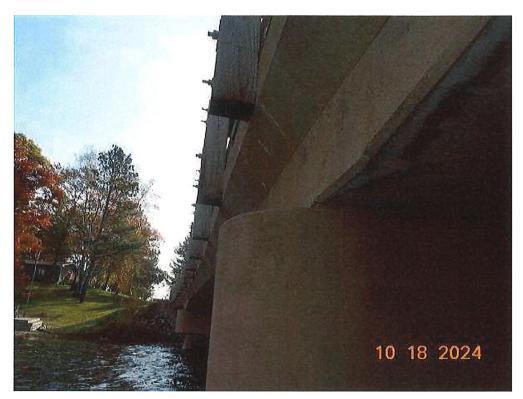


Photo 17 - 10-18-2024 (26)

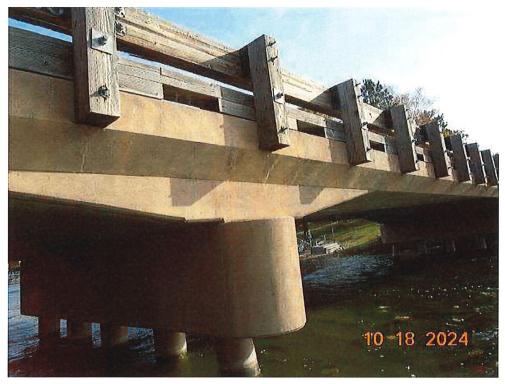


Photo 18 - 10-18-2024 (27)

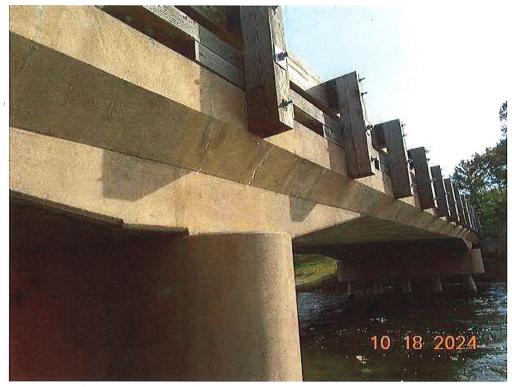


Photo 19 - 10-18-2024 (28)

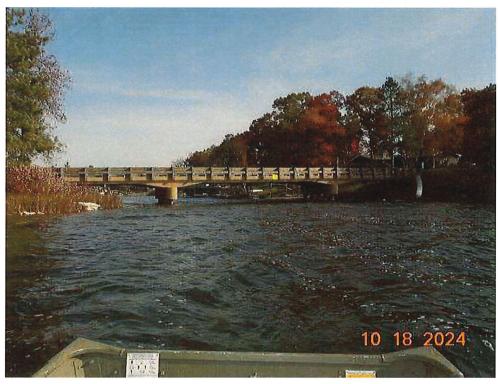


Photo 20 - 10-18-2024 (29)

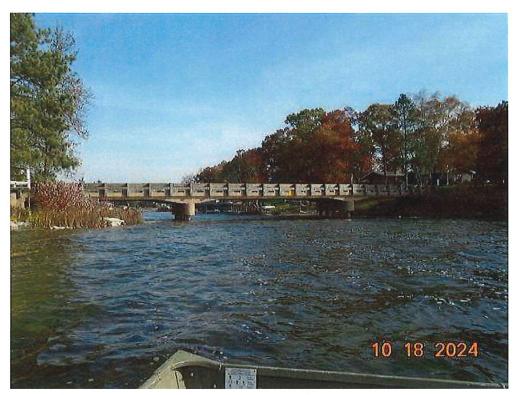


Photo 21 - 10-18-2024 (30)

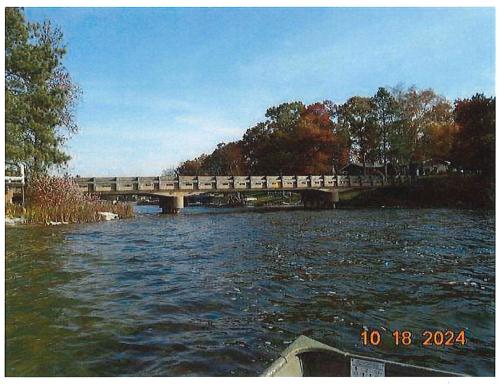


Photo 22 - 10-18-2024 (31)

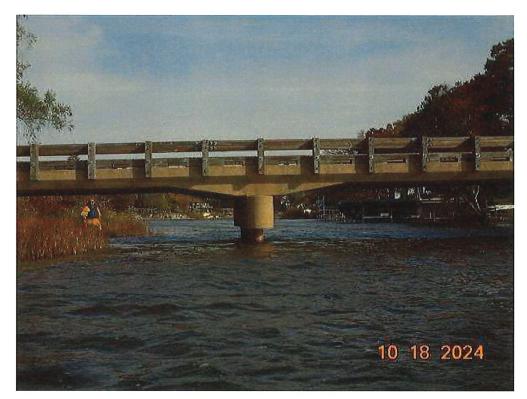


Photo 23 - 10-18-2024 (32)

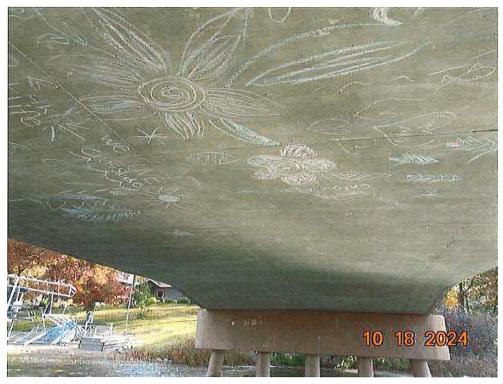


Photo 24 - 10-18-2024 (33)



Photo 25 - 10-18-2024 (34)



Photo 26 - 10-18-2024 (35)



Photo 27 - 10-18-2024 (36)



Photo 28 - 10-18-2024 (37)



Photo 29 - 10-18-2024 (38)

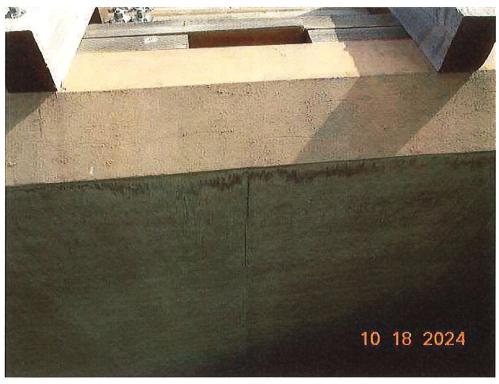


Photo 30 - 10-18-2024 (39)

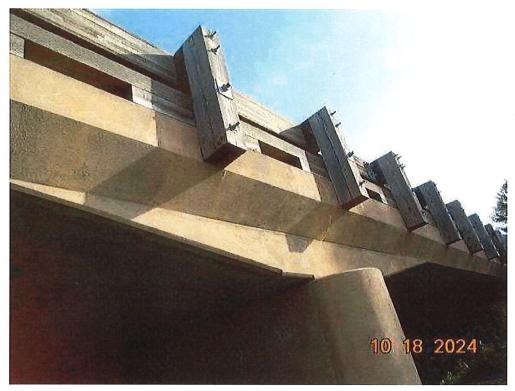


Photo 31 - 10-18-2024 (40)

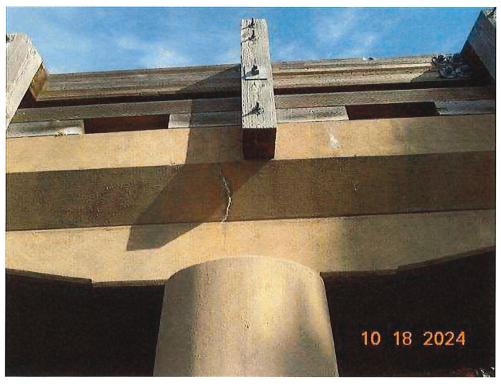


Photo 32 - 10-18-2024 (41)

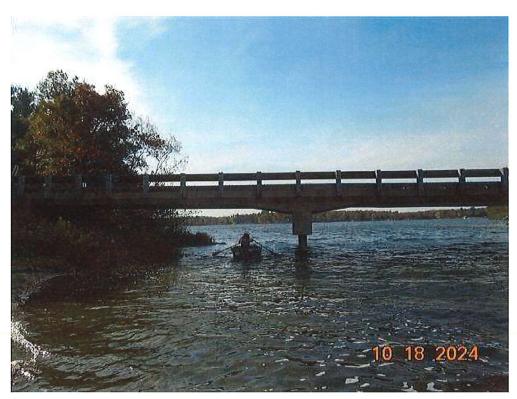


Photo 33 - 10-18-2024 (42)

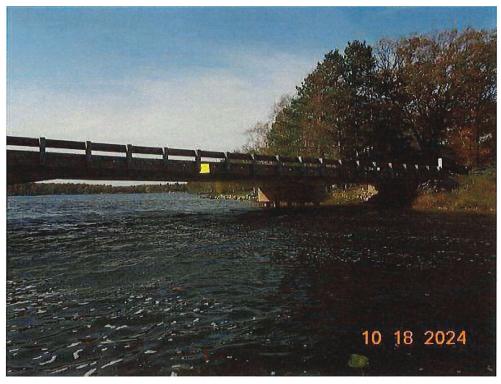


Photo 34 - 10-18-2024 (43)

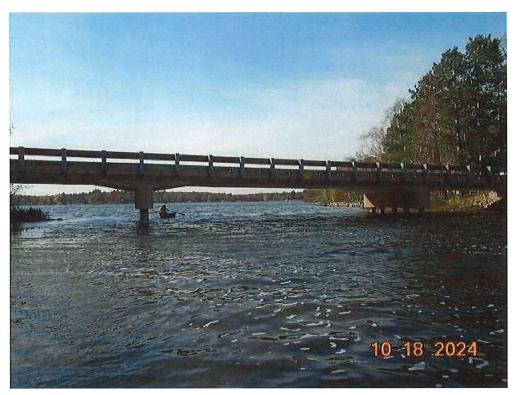


Photo 35 - 10-18-2024 (44)

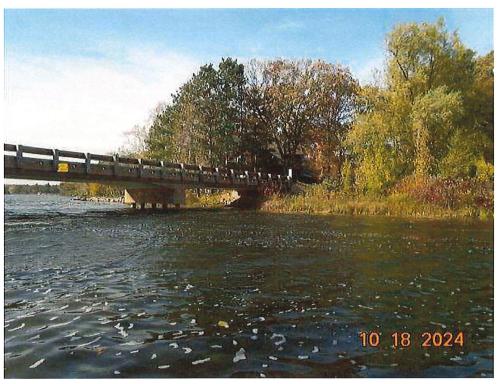


Photo 36 - 10-18-2024 (45)

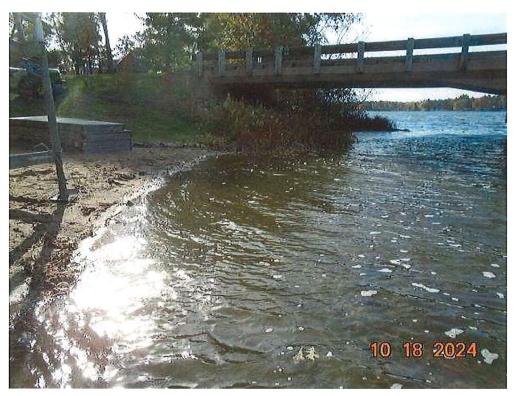


Photo 37 - 10-18-2024 (46)

Sharyl Murphy

From:

Lori Conway

Sent:

Wednesday, February 19, 2025 8:33 AM

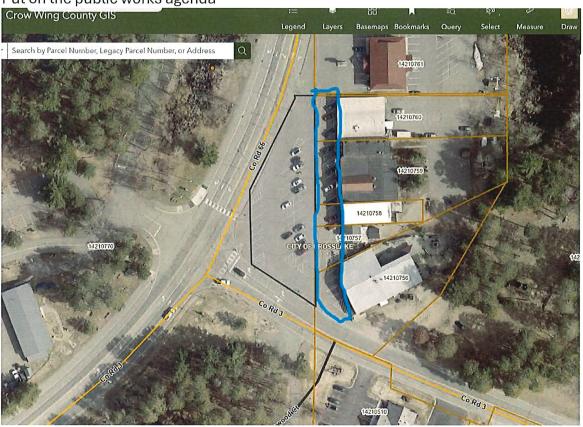
To:

Patrick Wehner; Sharyl Murphy

Subject:

FW: andys parking lot

Put on the public works agenda



Lori A Conway City Administrator 1-218-692-9803



From: Patrick Wehner <pwehner@cityofcrosslake.org>

Sent: Tuesday, February 18, 2025 9:35 AM

To: Lori Conway < lconway@cityofcrosslake.org>

Subject: andys parking lot

Be for we can do anything I'm guessing we have to bring this to public works and council for their ok to charge the owners along andys parking lot for stripping and sealcoating



Real People. Real Solutions.

MEMORANDUM

Date: February 27, 2025

To: Pat Wehner, Public Works Director

From: Phil Martin, PF

Subject: Update for March 2025 Public Works Meeting

Year 2 Road Improvements

Plans have been submitted to Crow Wing County for both pavement improvements and aggregate chip sealcoat improvements.

We are working on preparing a mock assessment roll at the low range value for the PW Commission to review which we will have ready for the April 7, 2025 PW Meeting. The County anticipates receiving bids in late March.

Harbor Lane Improvements

Construction plans are complete. Our proposed plan is to open bids the week beginning March 24th or March 31st. Our goal is to have a recommendation to present to the PW Commission on April 7, 2025 so a recommendation can be presented to the City Council at the April 14, 2025 meeting.

For information only:

- 1. Existing private utility coordination
- 2. Wetland impact permitting Meeting set for March 4, 2025 with the Technical Evaluation Panel (TEP) at the Crow Wing County Courthouse.
- 3. Stormwater Easement (Kavanaugh) Attorney preparing conveyance document. Correspondence with parcel owner has been positive.
- 4. Stormwater Easement (Arvig) Attorney preparing conveyance document. Correspondence with parcel owner has been positive.

For discussion and direction:

- 1. Construction Schedule From past experience, we recognize that residents prefer that construction activities and detours do not impact holidays and summer tourism. Unfortunately we don't believe the project can be completed prior to Memorial Day or within acceptable weather conditions if started after Labor Day. As a result, we are suggesting a construction period of August through September. We believe this allows the project area to only be impacted during the Labor Day holiday. What are the PW Commission's thoughts on this approach?
- 2. Proposal for Bidding and Construction Engineering We have provided a proposal for public bidding and construction engineering services to complete the project.

<u>Private Development Road (Cunningham)</u> – Based on PW Commission input, we plan to provide Mr. Cunningham with the following options. We have not done that but will make contact before the April 7, 2025 meeting:

- 1. Require the Developer to pull back the class 5 aggregate so we can inspect the subgrade and conduct a roll test.
- 2. In lieu of pulling back class 5 aggregate, we will accept soil borings to a depth of 6 feet at 50' intervals throughout the 900' road segment.
- 3. Do nothing and keep road privately owned and maintained.



Real People. Real Solutions.

7656 Design Road Suite 200 Baxter, MN 56425-8676

> Ph: (218) 825-0684 Fax: (218) 825-0685 Bolton-Menk.com

February 27, 2025

Pat Wehner, Public Works Director City of Crosslake 37028 County Road 66 Crosslake, MN 56442

RE: Proposal for Bidding and Construction Engineering Services – Harbor Lane Improvement

Dear Pat:

With completion of the final design engineering and preparation of the construction documents, Bolton & Menk has prepared this updated proposal for engineering services for public bidding, contract award, and construction engineering services for the road and trail improvements to Harbor Lane. We understand that the City intends to construct the improvements during the 2025 construction season and assess a portion of the project cost in conjunction with Year 2 of the adopted 5-Year Road Improvement Plan.

Scope:

To assist the City of Crosslake, we propose the following scope of services:

Public Bidding, Award, and Contract Preparation – Our services include facilitating public bidding, reviewing and recommending award based on the bids received, and assembling contracts for the City with the selected contractor.

Construction Staking, Observation, Contract Administration, Assessment — We will provide survey staking for easement and construction activities, construction observation, testing coordination, project communication with the City staff and residents, labor wage compliance, and project close out.

Professional Fee:

Based on our understanding of the City request and the current improvement, we have provided our estimated costs below to provide the professional services outlined previously. We propose to provide our fee on an actual hour basis for the work elements described in this proposal.

Service Provided	Fee
Public Bidding, Award, and Contract Preparation	\$7,850
Construction Staking, Observation*, Contract Administration, Assessment	\$83,800
*Includes a budget of \$6,000 for quality control and materials testing	

Name: Pat Wehner Date: February 27, 2025

Page: 2

Schedule:

We propose to begin immediately upon receipt of a notice to proceed with the following general schedule:

Public Bid & Award

March/April 2025 August/September 2025

Construction (8 weeks assumed)

, tagast, coptomics, con

We appreciate the opportunity to assist the City of Crosslake. Please feel free to contact me at 218-821-7265 or via email at Phillip.Martin@bolton-menk.com if you have any questions regarding our proposal for professional services to the City of Crosslake.

Respectfully submitted, Bolton & Menk, Inc.

Phillip M. Martin, P.E. Principal Engineer

CONSTRUCTION COST SHARE AGREEMENT WITH THE CITY OF CROSSLAKE (CP 18-200-139 & CP 18-300-47) FOR THE BITUMINOUS SEAL COAT OF ROADWAYS UNDER THE JURISDICTION OF CROW WING COUNTY, FIRST ASSESSMENT DISTRICT, CITY OF CROSSLAKE, CITY OF LAKESHORE, PELICAN TOWNSHIP, ROSS LAKE TOWNSHIP, AND DEERWOOD TOWNSHIP.

This Agreement is made and entered into this day of _______, 2025, by and between the County of Crow Wing, State of Minnesota, a political subdivision of the State of Minnesota, 326 Laurel Street, Brainerd, Minnesota, 56401, hereinafter referred to as "County", and the City of Crosslake, City Hall, 13888 Daggett Bay Road, Crosslake, MN 56442 hereinafter referred to as the "City".

WITNESSETH

WHEREAS, the parties mutually agree that a bituminous seal coat desired by the City to be applied to the roadways listed in Attachment A has the potential to result in overall costs savings when combined with the County Project to provide a bituminous seal coat to County roadways and other local agency roadways, and,

WHEREAS, the County has budgeted funds to complete the project; and,

WHEREAS, the Crow Wing County Highway Department has prepared plans and specifications for the project entitled BITUMINOUS SEAL COAT, which plans and specifications are on file in the office of the County Engineer;

NOW, THEREFORE, IT IS MUTUALLY STIPULATED AND AGREED:

I. PURPOSE

The parties have joined together for the purpose of constructing project CP 18-200-139 & CP 18-300-47. This agreement identifies funding responsibilities and also future responsibilities upon project completion. Attachment B (estimate) is considered a part of this agreement.

II. Duties

A. Design and Construction

For this project, the County shall provide all design-engineering services unless otherwise stated in this agreement. The County shall provide all construction-engineering services, with the City being responsible for its share of design engineering/project development as identified in Attachment B. Attachment B is an estimate and final costs will be determined upon project completion. The County shall do the calling for all bids and the acceptance of all bid proposals and shall enter into a construction contract as the "owner" for purposes of the project.

B. Inspection and Approval

The County shall provide construction inspection and staking for the Project and approval for acceptance of the work as it is completed. The County shall also be available to inspect said work and notify the City of any concerns that arise during or after the completion of the Project. Approval of the completed construction shall be completed by the County and the City.

CONSTRUCTION COST SHARE AGREEMENT WITH THE CITY OF CROSSLAKE (CP 18-200-139 & CP 18-300-47) FOR THE BITUMINOUS SEAL COAT OF ROADWAYS UNDER THE JURISDICTION OF CROW WING COUNTY, FIRST ASSESSMENT DISTRICT, CITY OF CROSSLAKE, CITY OF LAKESHORE, PELICAN TOWNSHIP, ROSS LAKE TOWNSHIP, AND DEERWOOD TOWNSHIP.

This Agreement is made and entered into this day of _______, 2025, by and between the County of Crow Wing, State of Minnesota, a political subdivision of the State of Minnesota, 326 Laurel Street, Brainerd, Minnesota, 56401, hereinafter referred to as "County", and the City of Crosslake, City Hall, 13888 Daggett Bay Road, Crosslake, MN 56442 hereinafter referred to as the "City".

WITNESSETH

WHEREAS, the parties mutually agree that a bituminous seal coat desired by the City to be applied to the roadways listed in Attachment A has the potential to result in overall costs savings when combined with the County Project to provide a bituminous seal coat to County roadways and other local agency roadways, and,

WHEREAS, the County has budgeted funds to complete the project; and,

WHEREAS, the Crow Wing County Highway Department has prepared plans and specifications for the project entitled BITUMINOUS SEAL COAT, which plans and specifications are on file in the office of the County Engineer;

NOW, THEREFORE, IT IS MUTUALLY STIPULATED AND AGREED:

I. PURPOSE

The parties have joined together for the purpose of constructing project CP 18-200-139 & CP 18-300-47. This agreement identifies funding responsibilities and also future responsibilities upon project completion. Attachment B (estimate) is considered a part of this agreement.

II. Duties

A. Design and Construction

For this project, the County shall provide all design-engineering services unless otherwise stated in this agreement. The County shall provide all construction-engineering services, with the City being responsible for its share of design engineering/project development as identified in Attachment B. Attachment B is an estimate and final costs will be determined upon project completion. The County shall do the calling for all bids and the acceptance of all bid proposals and shall enter into a construction contract as the "owner" for purposes of the project.

B. Inspection and Approval

The County shall provide construction inspection and staking for the Project and approval for acceptance of the work as it is completed. The County shall also be available to inspect said work and notify the City of any concerns that arise during or after the completion of the Project. Approval of the completed construction shall be completed by the County and the City.

COUNTY PROJECT 18-200-139 & 18-300-47 CITY OF CROSSLAKE COST SHARE AGREEMENT

XI. INDEMNIFICATION

To the extent allowed by law, the County and the City mutually agree to indemnify and hold harmless each other from any claims, losses, costs, expenses or damages resulting from the acts or omissions of the respective officers, agents, or employees relating to activities conducted by either party under this Agreement.

XII. ENTIRE AGREEMENT

It is understood and agreed that the entire agreement of the parties is contained herein and that this Agreement supersedes all oral agreements and all negotiations between the parties relating to the subject matter hereof, as well as any previous agreement presently in effect between the parties to the subject matter hereof. Any alterations, variations, or modifications of the provisions of this Agreement shall be valid only when they have been reduced to writing and duly signed by the parties.

IN WITNESS WHEREOF, the parties of this Agreement have hereunto set their hands on the dates written below:

COUN	TY OF CROW WING	CITY	OF CROSSLAKE
Ву:	Robert Hall, P.E. Assistant County Engineer	Ву:	Lori A. Conway City Administrator
Dated:	·	Dated:	

III. COSTS

A. Project Costs

The project costs identified in this agreement are based upon current estimates. Attachment B identifies the agreed upon cost share quantities and estimated costs. Actual final costs for each agency will be determined by actual final quantities.

B. SUMMARY OF ESTIMATED COSTS - The estimated construction and engineering costs of the projects are shown in Attachment B and are summarized as follows:

Total Estimated Construction Costs	\$ 2,595,517.09
Estimated City Construction Costs	\$ 135,735.65
Estimated City Engineering Costs	\$ 13,573.57
Total Estimated City Costs	\$ 149,309.22

IV. TERM

This Agreement shall continue until terminated as provided hereinafter.

V. DISBURSEMENT OF FUNDS

All funds disbursed by the County or City pursuant to this Agreement shall be disbursed pursuant to law. Upon project completion, a final cost accounting will be performed totaling costs related to the Project. An invoice will be prepared by the County and submitted to the City. The City shall reimburse the County within 30 days of receipt of invoice.

VI. CONTRACTS AND PURCHASES

All contracts let and purchases made pursuant to this Agreement shall be made by the County in conformity with State law.

VII. ACCOUNTABILITY

An accounting shall be made of all receipts and disbursements upon request by either party.

VIII. TERMINATION

This Agreement shall terminate upon completion of all obligations of the parties under this Agreement. This Agreement may be terminated prior to completion by either party only for breach of this Agreement or by mutual consent of the parties.

X. NOTICE

For purposes of deliver of any notices hereunder, the notice shall be effective if delivered to the Office of the Crow Wing County Highway Department, 16589 CR 142, Brainerd, MN 56401, on behalf of the County, and the City of Crosslake, 13888 Daggett Bay Road, Crosslake, MN, on behalf of the City.

Attachment A County Project 18-200-139 County Project 18-300-47 Cost Share Agreement

2025 SEAL COAT PROJECT PROJECT NO. CP 18-200-139 & CP 18-300-47 CROW WING COUNTY, FIRST ASSESSMENT DISTRICT, CITY OF CROSSLAKE, CITY OF LAKESHORE, ROSS LAKE TOWNSHIP, PELICAN TOWNSHIP, AND DEERWOOD TOWNSHIP.

Crow Wing County

CSAH 15	CSAH 32	CR 121
CSAH 24	CSAH 16	CR 127
CSAH 1	CR 109	CR 128
CSAH 13	CR 107	

First Assessment District

LANDMARK DR	RIVER RIDGE DR	HARTLEY DR
HERITAGE RD	INDIGO RD	SHELLISA LN
CAROLYN I N		

City of Crosslake

DAGGETT PINE RD	MARGARET LN
CROSSLAKE FIRE HALL PARKING LOT	CROSSLAKE CITY HALL PARKING LOT
CROSSLAKE JOINT P.W. PARKING LOT	ANDY'S RESTAURANT PARKING LOT

City of Lakeshore

BALSAM LN	WOODLAND RD
ABBY WAY	LINCOLN GREEN RD

Deerwood Township

RICE LAKE RD

Pelican Township

PELICAN LAKE RD (S)	MIDDLE CULLEN RD	UPPER CULLEN RD
TRAILS END RD	CREE BAY CIR	LINDOVE LN
BAY POINT DR	STEWARTS BAY DR	CANTHOOK DR
LAKEVIEW LN	PELICAN WAY	PELICAN LAKE RD (N)
SHELSTAD LN	CIMINO BAY DR	RED OAK RD
TOWN HALL PARKING	LOT	

Ross Lake Township

MCNEIL RD

ATTACHMENT B

NOTES	ITEM NUMBER	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY	CROW WING COUNTY	FAD ROADS	CITY OF LAKE SHORE	CITY OF CROSSLAKE	DEERWOOD TOWNSHIP		ROSS LAKE TOWNSHIP	UNIT PRICE	CROW WING COUNTY	FAD ROADS	CITY OF LAKE SHORE	CITY OF CROSSLAKE	DEERWOOD TOWNSHIP	PEUCAN TOWNSHIP	ROSS LAKE TOWNSHIP	TOTAL COST
	2021.501	MOBILIZATION	LUMP SUM	1	0.79	0.03	0.02	0.05	0.02	0.08	0.01	155,000.00	122,450.00	4,650.00	3,100.00	7,750.00	3,100.00	12,400.00	1,550.00	155,000.00
1	2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	21			4	15		2		105.00			420.00	1,575.00		210.00		2,205.00
2	2355.506	BITUMINOUS MATERIAL FOR FOG SEAL	GALLON	113678	91086	2946	1051	5617	2262	9167	1549	5.25	478,201.50	15,466.50	5,517.75	29,489.25	11,875.50	48,126.75	8,132.25	596,809.50
3	2356.504	BITUMINOUS SEAL COAT FA- 2.0	SQYD	23322				22211		1111		0.80				17,768.80		888.80		18,657.60
3	2356.504	BITUMINOUS SEAL COAT FA- 2.5	SQYD	816300	649883	24315	8760	26115	18853	75467	12907	0.90	584,894.70	21,883.50	7,884.00	23,503.50	16,967.70	67,920.30	11,616.30	734,670.00
4,5	2356.506	BITUMINOUS MATERIAL FOR SEAL COAT	GALLON	297458	232096	8522	3066	15912	6599	26746	4517	3.00	696,288.00	25,566.00	9,198.00	47,736.00	19,797.00	80,238.00	13,551.00	892,374.00
6	2563.601	TRAFFIC CONTROL	LUMP SUM	1	0.79	0.03	0.02	0.05	0.02	0.08	0.01	50,000.00	39,500.00	1,500.00	1,000.00	2,500.00	1,000.00	4,000.00	500.00	50,000.00
	2580.503	INTERIM PAVEMENT MARKING	LIN FT	316487	295103	1700		19684				0.15	44,265.45	255.00		2,952.60				47,473.05
	2582.503	4" SOLID LINE PAINT	LIN FT	517562	517562							0.12	62,107.44							62,107.44
	2582.503	24" SOLID LINE PAINT	LIN FT	189	189							3.85	727.65							727.65
	2582.503	4" BROKEN LINE PAINT	LIN FT	23800	23800							0.12	2,856.00							2,856.00
	2582.503	8" DOTTED LINE PAINT	LIN FT	447	447							0.55	245.85							245.85
	2582.503	4" DOUBLE SOLID LINE PAINT	SQFT	125994	115302	850		9842				0.25	28,825.50	212.50		2,460.50				31,498.50
	2582.518	PAVEMENT MESSAGE PAINT	SQFT	357	357							2.50	892.50							892.50
												TOTAL	2,061,254.59	69,533.50	27,119.75	135,735.65	52,740.20	213,783.85	35,349.55	2,595,517.09

10% Design, Construction, and Contract Admin.		\$2,711.98	\$13,573.57	\$5,274.02	\$21,378.39	\$3,534.96
Г	Estimated Total	\$29,831.73	\$149,309.22	\$58,014.22	\$235,162.24	\$38,884.51

ATTACHMENT B

NOTES	ITEM NUMBER	ITEM DESCRIPTION	UNITS	ESTIMATED QUANTITY	CROW WING COUNTY	FAD ROADS	CITY OF LAKE SHORE	CITY OF CROSSLAKE	DEERWOOD TOWNSHIP		ROSS LAKE TOWNSHIP	UNIT PRICE	CROW WING COUNTY	FAD ROADS	CITY OF LAKE SHORE	CITY OF CROSSLAKE	DEERWOOD TOWNSHIP	PEUCAN TOWNSHIP	ROSS LAKE TOWNSHIP	TOTAL COST
	2021.501	MOBILIZATION	LUMP SUM	1	0.79	0.03	0.02	0.05	0.02	0.08	0.01	155,000.00	122,450.00	4,650.00	3,100.00	7,750.00	3,100.00	12,400.00	1,550.00	155,000.00
1	2123.610	STREET SWEEPER (WITH PICKUP BROOM)	HOUR	21			4	15		2		105.00			420.00	1,575.00		210.00		2,205.00
2	2355.506	BITUMINOUS MATERIAL FOR FOG SEAL	GALLON	113678	91086	2946	1051	5617	2262	9167	1549	5.25	478,201.50	15,466.50	5,517.75	29,489.25	11,875.50	48,126.75	8,132.25	596,809.50
3	2356.504	BITUMINOUS SEAL COAT FA- 2.0	SQYD	23322				22211		1111		0.80				17,768.80		888.80		18,657.60
3	2356.504	BITUMINOUS SEAL COAT FA- 2.5	SQYD	816300	649883	24315	8760	26115	18853	75467	12907	0.90	584,894.70	21,883.50	7,884.00	23,503.50	16,967.70	67,920.30	11,616.30	734,670.00
4,5	2356.506	BITUMINOUS MATERIAL FOR SEAL COAT	GALLON	297458	232096	8522	3066	15912	6599	26746	4517	3.00	696,288.00	25,566.00	9,198.00	47,736.00	19,797.00	80,238.00	13,551.00	892,374.00
6	2563.601	TRAFFIC CONTROL	LUMP SUM	1	0.79	0.03	0.02	0.05	0.02	0.08	0.01	50,000.00	39,500.00	1,500.00	1,000.00	2,500.00	1,000.00	4,000.00	500.00	50,000.00
	2580.503	INTERIM PAVEMENT MARKING	LIN FT	316487	295103	1700		19684				0.15	44,265.45	255.00		2,952.60				47,473.05
	2582.503	4" SOLID LINE PAINT	LIN FT	517562	517562							0.12	62,107.44							62,107.44
	2582.503	24" SOLID LINE PAINT	LIN FT	189	189							3.85	727.65							727.65
	2582.503	4" BROKEN LINE PAINT	LIN FT	23800	23800							0.12	2,856.00							2,856.00
	2582.503	8" DOTTED LINE PAINT	LIN FT	447	447							0.55	245.85							245.85
	2582.503	4" DOUBLE SOLID LINE PAINT	SQFT	125994	115302	850		9842				0.25	28,825.50	212.50		2,460.50				31,498.50
	2582.518	PAVEMENT MESSAGE PAINT	SQFT	357	357							2.50	892.50							892.50
												TOTAL	2,061,254.59	69,533.50	27,119.75	135,735.65	52,740.20	213,783.85	35,349.55	2,595,517.09

10% Design, Construction, and Contract Admin.		\$2,711.98	\$13,573.57	\$5,274.02	\$21,378.39	\$3,534.96
Г	Estimated Total	\$29,831.73	\$149,309.22	\$58,014.22	\$235,162.24	\$38,884.51