

**2016 ROUTINE
BRIDGE INSPECTION REPORT**



**BRIDGE # 62520
CP RAIL over CSAH 23(CR C)**

DISTRICT: Metro

COUNTY: Ramsey

CITY/TOWNSHIP: Little Canada

STATE: Minnesota

Date of Inspection: 10/18/2016

Equipment Used:

Owner: Railroad

Inspected By: Essler, Brian

Report Written By: Brian Essler

Report Reviewed By: Nicklaus Fischer

Final Report Date: 12/02/2016

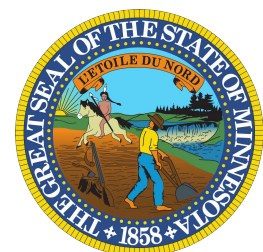


Table of Contents

SECTION

PAGE

Minnesota Structure Inventory Report

Bridge ID: 62520

CP RAIL

over CSAH 23(CR C)

Date: 12/02/2016

GENERAL			
Agency Br. No.			
District Metro			
Maint. Area		Crew	
County 062 - Ramsey			
City Little Canada			
Township			
Desc. Loc. 0.5 MI E OF JCT TH 49			
Sect., Twp., Range		6 - 029N - 22W	
Latitude Deg	Min	Sec	21.70
Longitude Deg	Min	Sec	50.49
Custodian 27 - Railroad			
Owner 27 - Railroad			
BMU Agreement			
Year Built		1971	
MN Year Reconstructed			
FHWA Year Reconstructed			
MN Temporary Status			
Bridge Plan Location 3 - COUNTY			
Date Opened to Traffic			
On-Off System 0 - OFF			
Legislative District 54B			
ABC Suitable			

ROADWAY			
Bridge Match ID (TIS)			
Roadway O/U Key none			
Route Sys		Number	
Roadway Name or Description			
Level of Service			
Roadway Type			
Control Section (TH Only)			
Reference Point			
Detour Length mi			
Lanes		On Under	
		4	
ADT		Year	
HCADT 0		ADTT 0 %	
Functional Class			

INSPECTION	
Userkey	102
Unofficial Structurally Deficient	N
Unofficial Functionally Obsolete	N
Unofficial Sufficiency Rating	-2
Routine Inspection Date	10/18/2016
Routine Inspection Frequency	12
Inspector Name	CO Bridge
Status	A - Open

STRUCTURE	
Service On 2 - Railroad	
Service Under 1 - Highway, w/ or w/out ped.	
Main Span Type	
3 - Steel	05 - Thru Girder
Main Span Detail	
Appr. Span Type	
Appr. Span Detail	
Skew	39 L
Culvert Type	
Barrel Length	ft.
Cantilever ID	

RDWY DIMENSIONS		
If Divided	NB-EB	SB-WB
Roadway Width	ft.	ft.
Vertical Clearance	ft.	ft.
Max. Vert. Clear.	ft.	ft.
Horizontal Clear.	ft.	ft.
Lateral Clearance	ft.	ft.
Appr. Surface Width	ft.	
Bridge Roadway Width	ft.	
Median Width On Bridge	ft.	

NBI CONDITION RATINGS	
Deck	N - Not Applicable
Unsound Deck %	
Superstructure	7 - Good Condition
Substructure	6 - Satisfactory Condition
Channel	N - Not Applicable
Culvert	N - Not Applicable

NUMBER OF SPANS			
MAIN:	1	APPR:	0
TOTAL:	1		
Main Span Length	90.0	ft.	
Structure Length	99.0	ft.	
Deck Width (Out-to-Out)	23.3	ft.	
Deck Material	N - Not Applicable		
Wear Surf Type	N - Not Applicable (applies onl		
Wear Surf Install Year			
Wear Course/Fill Depth	0.00	ft.	
Deck Membrane	0 - None		
Deck Rebars	N - Not Applicable (no deck)		
Deck Rebars Install Year			
Structure Area (Out-to-Out)	2307	sq. ft.	
Roadway Area (Curb-to-Curb)	sq. ft.		
Sidewalk Width	Lt 5.00	ft.	Rt 5.00 ft.
Curb Height	Lt 0.00	ft.	Rt 0.00 ft.
Rail Type	Lt NN	Rt NN	

MISC. BRIDGE DATA	
Structure Flared	0 - No flare
Parallel Structure	N - No parallel structure
Field Conn. ID	
Abutment Foundation	1 - CONC
(Material/Type)	3 - FTG PILE
Pier Foundation	N - N/A
(Material/Type)	N - N/A
Historic Status	5 - Not eligible

NBI APPRAISAL RATINGS	
Structure Evaluation N	
Deck Geometry	N
Underclearances	4
Water Adequacy	N - Not Applicable
Approach Alignment	8 - Equal to present desirabl

PAINT	
Year Painted	1971
Unsound Paint %	
Painted Area	sq. ft.
Primer Type	1 - Lead - non 3309
Finish Type	F - - Phenolic Resin Alum

SAFETY FEATURES	
Bridge Railing	N - NOT REQUIRED
GR Transition	0 - SUBSTANDARD
Appr. Guardrail	0 - SUBSTANDARD
GR Termini	0 - SUBSTANDARD

BRIDGE SIGNS	
Posted Load	0 - Not Required
Traffic	0 - Not Required
Horizontal	0 - Not Required
Vertical	0 - Not Required

IN DEPTH INSP.			
	Y/N	Freq	Date
Frac. Critical	N		
Underwater	N		
Pinned Asbly.	N		
Spec. Feat.			

WATERWAY			
Drainage Area (sq. mi.)			
Waterway Opening	sq. ft.		
Navigation Control	N - Not applicable, no waterw		
Pier Protection			
Nav. Clr. (ft.)	Vert.	ft.	Horiz. ft.
Nav. Vert. Lift Bridge Clear. (ft.)			
MN Scour Code	A - NON WATER'	Year	

BRIDGE SIGNS	
Posted Load	0 - Not Required
Traffic	0 - Not Required
Horizontal	0 - Not Required
Vertical	0 - Not Required

CAPACITY RATINGS		
Design Load	8 - RAILROAD	
Operating Rating	2 - AS	HS 80.0
Inventory Rating	2 - AS	HS 80.0
Posting VEH:	SEMI:	DBL:
Rating Date		

Minnesota Permit Codes	
A:	N - N/A
B:	N - N/A
C:	N - N/A

Minnesota Structure Inventory Report

Bridge ID: 62520

CP RAIL over CSAH 23(CR C)

Date: 10/04/2016

+ GENERAL +	+ ROADWAY +	+ INSPECTION +		
Agency Br. No. Crew District 05 Maint. Area County 062 - Ramsey City Little Canada Township Desc. Loc. 0.5 MI E OF JCT TH 49 Sect., Twp., Range 6 - 029N - 22W Latitude 45 ° 1 ' 21.70 " Longitude 93 ° 5 ' 50.49 " Custodian 27 - Railroad Owner 27 - Railroad BMU Agreement Year Built 1971 MN Year Reconstructed FHWA Year Reconstructed MN Temporary Status Bridge Plan Location 3 - COUNTY Date Opened to Traffic On - Off System 0 - OFF Legislative District 54B Potential ABC 2 - N/A	Bridge Match ID (TIS) Roadway O/U Key Route Sys Number Roadway Name or Description Level of Service Roadway Type Control Section (TH Only) Reference Point Detour Length mi. Lanes ON UNDER 4 ADT YEAR HCA DT ADTT % Functional Class	Userkey 102 Structurally Deficient N Functionally Obsolete N Sufficiency Rating -2 Routine Inspection Date 10/18/2016 Routine Inspection Frequency 12 Inspector Name Essler, Brian Status A - Open		
		+ NBI	CONDITION	RATINGS +
		Deck	N	Unsound Deck %
		Superstructure	7	
		Substructure	6	
		Channel	N	
		Culvert	N	
		+ NBI	APPRAISAL	RATINGS +
		Structure Evaluation	N	
		Deck Geometry	N	
		Underclearances	4	
		Waterway Adequacy	N	
		Approach Alignment	8	
		+ SAFETY	FEATURES +	
		Bridge Railing	N - NOT REQUIRED	
		GR Transition	0 - SUBSTANDARD	
		Appr. Guardrail	0 - SUBSTANDARD	
		GR Termini	0 - SUBSTANDARD	
		+ IN	DEPTH	INSP. +
			Y/N	Freq Date
		Frac. Critical	N	
		Underwater	N	
		Pinned Asbly.	N	
		Spec. Feat.		
		+ WATERWAY +		
		Drainage Area (sq. mi.)		
		Waterway Opening (sf.)		
		Navigation Control	N - Not applicable, no	
		Pier Protection	-	
		Nav. Clr. (ft.)	Vert. 0.0	Horiz. 0.0
		Nav. Vert. Lift Bridge Clear. (ft.)		
		MN Scour Code	A - NON	Year
		+ CAPACITY RATINGS +		
		Design Load	8 - RAILROAD	
		Operating Rating	7 - RAILROAD	80.0
		Inventory Rating	7 - RAILROAD	80.0
		Posting VEH:	SEMI:	DBL:
		Rating Date		
		Overweight Permit Codes		
		A N - N/A	B N - N/A	C N - N/A
+ STRUCTURE +	+ RDWY DIMENSIONS +			
Service On 2 - Railroad Service Under 1 - Highway, w/ or w/out ped. Main Span Type 3 - Steel Main Span Design 05 - Thru Girder Main Span Detail Appr. Span Type Appr. Span Design Appr. Span Detail Skew 39 LEFT Culvert Type Barrel Length Cantilever ID Number of Spans MAIN: 1 APPR: 0 TOTAL: Main Span Length 90.0 ft. Structure Length 99.0 ft. Deck Width (Out-to-Out) 23.3 ft. Deck Material N - Not Applicable Wear Surf Type N - Not Applicable (applies Wear Surf Install Year Wear Course/Fill Depth 0.00 ft. Deck Membrane 0 - None Deck Rebars N - Not Applicable (no deck) Deck Rebars Install Year Structure Area (Out-to-Out) 2307 sq. ft. Roadway Area (Curb-to-Curb) sq. ft. Sidewalk Width 50A. Lt 5.00 ft. 50B. Rt 5.00 ft. Curb Height Lt 0.00 ft. Rt 0.00 ft. Rail Type Lt NN Rt NN	If Divided NB-EB SB-WB Roadway Width ft. ft. Vertical Clearance ft. ft. Max. Vert. Clear. ft. ft. Horizontal Clear. ft. ft. Lateral Clearance ft. ft. Appr. Surface Width ft. Bridge Roadway Width ft. Median Width On Bridge ft.			
		+ MISC. BRIDGE DATA +		
		Structure Flared 0 - No flare Parallel Structure N - No parallel structure Field Conn. ID Abutment Foundation (Material/Type) 1 - CONC 3 - FTG PILE Pier Foundation (Material/Type) N - N/A N - N/A Historic Status 5 - Not eligible		
		+ PAINT +		
		Year Painted 1971 Unsound Paint % Painted Area sq. ft. Primer Type 1 - Lead - non 3309 Finish Type F - Phenolic Resin Alum		
		+ BRIDGE SIGNS +		
		Posted Load 0 - Not Required Traffic 0 - Not Required Horizontal 0 - Not Required Vertical 0 - Not Required		

MINNESOTA BRIDGE INSPECTION REPORT

12/02/2016

BRIDGE 62520 CP RAIL OVER CSAH 23(CR C)

ROUTINE INSP. DATE: 10/18/2016

County: Ramsey	Location: 0.5 MI E OF JCT TH 49	Length: 99.0 ft.
City: Little Canada	Route: Ref. Pt.:	Deck Width: 23.3 ft.
Township:	Control Section:	Rdwy. Area/ Pct. Unsnd: sq. ft. / %
Section: 6 Township: 029N Range: 22W Maint. Area:		Paint Area/ Pct. Unsnd: sq. ft. / %
Span Type: 3 - Steel 3 - Girder and Floorbeam	Local Agency Bridge Nbr.:	Culvert: N/A
List: System		Postings:
NBI Deck: N Super: 7 Sub: 6 Chan: N Culv: N		
	Open, Posted, Closed: A - Open	
	MN Scour Code: A - NON WATERWAY	
Appraisal Ratings - Approach: 8 Waterway: N		Unofficial Structurally Deficient N
Required Bridge Signs - Load Posting: 0 - Not Required	Traffic: 0 - Not Required	Unofficial Functionally Obsolete N
Horizontal: 0 - Not Required	Vertical: 0 - Not Required	Unofficial Sufficiency Rating N

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
107	Painted Steel Girder or Beam	2	Routine	10/18/2016	184 LF	0	184	0	0	0
			Routine	10/12/2015	184 LF	0	184	0	0	0

Notes: [2012-2015] There is some paint failure and surface corrosion present.
 [2001-2015] Rivet is missing on east side 1/3 from north end.
 [2004-2015] Graffiti on inside steel girders on both sides of bridge.
 Two 60" deep welded steel "Through Girders" serve as railing.
 [2015] 4" rigid steel utility conduit hanging on west side of bridge.

152	Painted Steel Floorbeam	2	Routine	10/18/2016	1050 LF	0	262	787	0	0
			Routine	10/12/2015	1050 LF	0	262	787	0	0

Notes: [2009-2015] Needs to be repainted. 75% has surface rust with minor to moderate corrosion. Steel diagonal bracing is in place.
 [1983-2009] Paint is flaking & floor beam has surface corrosion. Spot painted in 1985.

215	Reinforced Concrete Abutment	2	Routine	10/18/2016	75 LF	0	75	0	0	N/A
			Routine	10/12/2015	75 LF	0	75	0	0	N/A

Notes: [2015] 2" spall by name plate on NE corner.
 [2015] 3" spall on SW corner 6' up from ground.
 [2013-2015] Minor paint failure on both abutments
 [2013-2015] 2 - 6" spalls on north abutment, (east side, bottom)
 [2008-2015] Minor scrapes to north abutment from snow plows. North abutment has numerous minor to moderate spalling, moderate vertical and horizontal cracking w/leaching & efflorescence.
 [2013-2015] There is a crack located at top of backwall at the NW corner.
 [2001-2015] South abutment has minor but numerous vertical and horizontal cracking w/leaching & efflorescence.
 [2012-2015] Also some minor to moderate spalling is present on both abutments.
 [1983-2015] Hairline cracks @ steel girder base all corners.
 4" rigid steel conduit drilled through north and south backwall of each abutment on the west side.

311	Expansion Bearing	2	Routine	10/18/2016	4 EA	0	4	0	N/A	N/A
			Routine	10/12/2015	4 EA	0	4	0	N/A	N/A

Notes: [2012-2015] Minor to moderate corrosion of rocker bearings at the south end is present.

313	Fixed Bearing	2	Routine	10/18/2016	2 EA	0	2	0	N/A	N/A
			Routine	10/12/2015	2 EA	0	2	0	N/A	N/A

Notes: [2012-2015] Minor to moderate corrosion of fixed bearings at the north end is present. Support member is sound.

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
387	Reinforced Concrete Wingwall	2	Routine	10/18/2016	4 EA	0	4	0	0	N/A
			Routine	10/12/2015	4 EA	0	4	0	0	N/A

Notes: [2013-2015] Minor paint failure on all four wingwalls.
 [2009-2015] Minor to moderate horizontal & vertical cracking with spalling present at all wingwalls. Expansion joint material is coming loose @ all 4 corners of abutments.
 [2010-2015] SE WW contains moderate spalling at the east end of and some minor vertical cracking. Also some movement of grouted rip rap slope protection at SE wing wall.
 [2008-2015] The SW wingwall has minor spalling & numerous minor vertical cracking.
 [2009-2015] NE WW contains numerous minor vertical and horizontal cracks approximately 40+ LF.
 [2007-2015] The NW WW has 3 diagonal cracks approx. 26 LF. Also contains numerous minor vertical cracks.

401	Steel Ballast Plate Deck (Railroad Bridges)	1	Routine	10/18/2016	1948 SF	0	1948	0	0	0
			Routine	10/12/2015	1948 SF	0	1948	0	0	0

Notes: [2012-2015] There is some paint failure and surface corrosion present.
 [2007-2015] There is some minor leakage.
 [2012-2015] There are two ballast hold down plates hanging by chain- one at the north end on the east side and one at centerline on the east side.
 Element # 30 was deleted. Element #401 was created in 2007. One set of RR tracks are still active.

964	Critical Finding Smart Flag	2	Routine	10/18/2016	1 EA	1	0	N/A	N/A	N/A
			Routine	10/12/2015	1 EA	1	0	N/A	N/A	N/A

Notes: DO NOT DELETE THIS CRITICAL FINDING SMART FLAG.

981	Signing	1	Routine	10/18/2016	1 EA	1	0	0	0	0
			Routine	10/12/2015	1 EA	1	0	0	0	0

Notes: [2006-2015] Horizontal clearance signs are in place. Horizontal clearance signs were installed March, 2004.

984	Deck & Approach Drainage	1	Routine	10/18/2016	1 EA	1	0	0	N/A	N/A
			Routine	10/12/2015	1 EA	1	0	0	N/A	N/A

Notes: [2006-2015] There is some minor erosion behind all wingwalls.
 [2002-2015] Drain in NW wingwall at the sidewalk edge should be covered.

General Notes: [2016] Bridge safety inspection was completed by Brian Essler & Dan Bodelson on 10/18/2016.
 [2015] Bridge safety inspection was completed by Dan Bodelson & Brian Essler on 10/12/2015.
 [2014] Bridge safety inspection was completed by Dan Bodelson & Brian Essler on 10/17/2014.
 [2014] New track and ballast was installed. Asphalt was milled and overlaid.
 [2013] Bridge safety inspection was completed by Dan Bodelson & Brian Essler on 10/11/2013.
 [2012] Bridge safety inspection was completed by B. Wieman and D. Bodelson on 11/16/2012.
 [2011] Bridge safety inspection was completed by B. Wieman and D. Bodelson on 11/15/2011.
 [2010] Bridge safety inspection was completed by B. Wieman and D. Bodelson 11/29/2010.
 [2009] Bridge safety inspection was completed by B. Wieman 9/23/2009.
 [2008] Bridge safety inspection was completed by B. Paine & B. Wieman 10/01/2008.
 [2007] Bridge safety inspection was completed by B. Wieman & B. Essler 8/14/2007.
 [2006] Bridge safety inspection was completed by Bret Wieman 10/19/2006.
 [2006-2015] There is some settlement of the south side sidewalk underneath the bridge.
 The orthotropic steel ballast plate deck is 21.2' W X 92.0' L = 1,950 SF
 Under roadway overlaid in 1988.

58. Deck NBI: CP Rail over CSAH # 23 (County Road C)

36A. Brdg Railings NBI: No bridge railing

36B. Transitions NBI: No bridge railing

36C. Appr Guardrail NBI: No guardrail

36D. Appr Guardrail
Terminal NBI: No guardrail

59. Superstructure NBI: Steel girders & floor beams have minor to moderate corrosion.

ELEM NBR	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4	QTY CS 5
60.	Substructure NBI:		Concrete abutments have minor cracking & scaling.							
61.	Channel NBI:		CP Rail over CSAH # 23 (County Road C)							
62.	Culvert NBI:		CP Rail over CSAH # 23 (County Road C)							
71.	Waterway Adeq NBI:		CP Rail over CSAH # 23 (County Road C)							
72.	Appr Roadway Alignment NBI:		CP Rail over CSAH # 23 (County Road C)							
	Inventory Notes:									

Brian Essler
Inspector's Signature

Nicklaus Fischer
Reviewer's Signature

MINNESOTA BRIDGE INSPECTION REPORT

12/02/2016

Inspector: CO Bridge

BRIDGE 62520 CP RAIL OVER CSAH 23(CR C)

County: Ramsey	Location: 0.5 MI E OF JCT TH 49	Length: 99.0 ft.
City: Little Canada	Route: Ref. Pt.:	Deck Width: 23.3 ft.
Township:	Control Section:	Rdwy. Area/ Pct. Unsnd: sq. ft. / %
Section: 6 Township: 029N Range: 22W Maint. Area:		Paint Area/ Pct. Unsnd: sq. ft. / %
Span Type: 3 - Steel 3 - Girder and Floorbeam	Local Agency Bridge Nbr.:	Culvert: N/A
List: System		Postings:
NBI Deck: N Super: 7 Sub: 6 Chan: N Culv: N		
	Open, Posted, Closed: A - Open	
	MN Scour Code: A - NON WATERWAY	
Appraisal Ratings - Approach: 8 Waterway: N		Unofficial Structurally Deficient N
Required Bridge Signs - Load Posting: 0 - Not Required	Traffic: 0 - Not Required	Unofficial Functionally Obsolete N
Horizontal: 0 - Not Required	Vertical: 0 - Not Required	Unofficial Sufficiency Rating N

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
30	Steel Deck Corrugated/Orthotropic/Etc.	Routine	10/18/2016	2307 SF	2261	0	46	0
		Migrated Values		2307 SF	2261	0	46	0
	Notes: [2012-2016] There is some paint failure and surface corrosion present. [2007-2016] There is some minor leakage. [2012-2016] There are two ballast hold down plates hanging by chain- one at the north end on the east side and one at centerline on the east side. Element # 30 was deleted. Element #401 was created in 2007. One set of RR tracks are still active.							
	510 - Wearing Surfaces	Routine	10/18/2016	2307 SF	2307	0	0	0
		Migrated Values		2307 SF	2307	0	0	0
	Notes: [2016] Steel deck with ballast.							
107	Steel Open Girder/Beam	Routine	10/18/2016	184 LF	0	184	0	0
		Migrated Values		184 LF	0	184	0	0
	Notes: [2012-2016] There is some paint failure and surface corrosion present. [2001-2016] Rivet is missing on east side 1/3 from north end. [2004-2016] Graffiti on inside steel girders on both sides of bridge. Two 60" deep welded steel "Through Girders" serve as railing. [2015] 4" rigid steel utility conduit hanging on west side of bridge.							
	515 - Steel Protective Coating	Routine	10/18/2016	3864 SF	0	3864	0	0
		Migrated Values		3864 SF	0	3864	0	0
	Notes: [2012-2016] There is some paint failure and surface corrosion present. [2016] 2 92' through girders with a 8' 4" web and a 18" flange. 2 X 92' (2 X 8' 4" + 3 X 18") = 3864 SF							
152	Steel Floor Beam	Routine	10/18/2016	987 LF	247	740	0	0
		Migrated Values		987 LF	247	740	0	0
	Notes: [2009-2016] Needs to be repainted. 75% has surface rust with minor to moderate corrosion. Steel diagonal bracing is in place. [1983-2009] Paint is flaking & floor beam has surface corrosion. Spot painted in 1985.							
	515 - Steel Protective Coating	Routine	10/18/2016	3812 SF	952	2860	0	0
		Migrated Values		3812 SF	952	2860	0	0
	Notes: [2009-2016] Needs to be repainted. 75% has surface rust with minor to moderate corrosion. Steel diagonal bracing is in place. [2016] 45 Beams at 21' with a 14.2" web and a 5.5" flange. 45 X 21' X (2 X 14.2" + 3 X 5.5") = 3536 SF 2 Beams at 21' with a 20" web and a 13" flange. 2 X 21' X (2 X 20" + 3 X 13") = 276 SF [1983-2009] Paint is flaking & floor beam has surface corrosion. Spot painted in 1985.							

BRIDGE 62520 CP RAIL OVER CSAH 23(CR C)

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	10/18/2016	208 LF	0	208	0	0
		Migrated Values		208 LF	0	208	0	0
<p>Notes: [2016] Abutments 37 LF, wing walls SE 33 LF, SW 35 LF, NE 34 LF & NW 32 LF. [2016] 3" & 8" moderate spall by name plate on NE corner. [2015-2016] 3" spall on SW corner 6' up from ground. [2013-2016] Minor paint failure on both abutments [2013-2016] 2 - 6" spalls on north abutment, (east side, bottom) [2008-2016] Minor scrapes to north abutment from snow plows. North abutment has numerous minor to moderate spalling, moderate vertical and horizontal cracking w/leaching & efflorescence. [2013-2016] There is a crack located at top of backwall at the NW corner. [2001-2016] South abutment has minor but numerous vertical and horizontal cracking w/leaching & efflorescence. [2012-2016] Also some minor to moderate spalling is present on both abutments. [1983-2016] Hairline cracks @ steel girder base all corners. [2015] 2" spall by name plate on NE corner. 4" rigid steel conduit drilled through north and south backwall of each abutment on the west side.</p> <p>Wingwall notes: [2013-2016] Minor paint failure on all four wingwalls. [2009-2016] Minor to moderate horizontal & vertical cracking with spalling present at all wingwalls. Expansion joint material is coming loose @ all 4 corners of abutments. [2010-2016] SE WW contains moderate spalling at the east end of and some minor vertical cracking. Also some movement of grouted rip rap slope protection at SE wing wall. [2008-2016] The SW wingwall has minor spalling & numerous minor vertical cracking. [2009-2016] NE WW contains numerous minor vertical and horizontal cracks approximately 40+ LF. [2007-2016] The NW WW has 3 diagonal cracks approx. 26 LF. Also contains numerous minor vertical cracks.</p>								
311	Movable Bearing	Routine	10/18/2016	4 EA	0	4	0	0
		Migrated Values		4 EA	0	4	0	0
<p>Notes: [2012-2016] Minor to moderate corrosion of rocker bearings at the south end is present.</p>								
313	Fixed Bearing	Routine	10/18/2016	2 EA	0	2	0	0
		Migrated Values		2 EA	0	2	0	0
<p>Notes: [2012-2016] Minor to moderate corrosion of fixed bearings at the north end is present. Support member is sound.</p>								
800	Critical Deficiencies or Safety Hazards	Routine	10/18/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
<p>Notes: NO CRITICAL FINDINGS OBSERVED DURING THE LAST INSPECTION.</p>								
891	Other Bridge Signing	Routine	10/18/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
<p>Notes: [2006-2016] Horizontal clearance signs are in place. Horizontal clearance signs were installed March, 2004.</p>								
892	Slopes & Slope Protection	Routine	10/18/2016	1 EA	0	1	0	0
		Migrated Values		1 EA	0	1	0	0
<p>Notes: [2016] There is moderate erosion & minor settlement behind all wingwalls [2006-2015] There is some minor erosion behind all wingwalls.</p>								
894	Deck & Approach Drainage	Routine	10/18/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
<p>Notes: [2002-2016] Drain in NW wingwall at the sidewalk edge should be covered.</p>								
900	Protected Species	Routine	10/18/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
<p>Notes: [2016] No protected species found living on this structure.</p>								

General Notes: [2016] Bridge safety inspection was completed by Brian Essler & Dan Bodelson on 10/18/2016.
 [2015] Bridge safety inspection was completed by Dan Bodelson & Brian Essler on 10/12/2015.
 [2014] Bridge safety inspection was completed by Dan Bodelson & Brian Essler on 10/17/2014.
 [2014] New track and ballast was installed. Asphalt was milled and overlaid.
 [2013] Bridge safety inspection was completed by Dan Bodelson & Brian Essler on 10/11/2013.
 [2012] Bridge safety inspection was completed by B. Wieman and D. Bodelson on 11/16/2012.
 [2011] Bridge safety inspection was completed by B. Wieman and D. Bodelson on 11/15/2011.

BRIDGE 62520 CP RAIL OVER CSAH 23(CR C)

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
	[2010] Bridge safety inspection was completed by B. Wieman and D. Bodelson 11/29/2010. [2009] Bridge safety inspection was completed by B. Wieman 9/23/2009. [2008] Bridge safety inspection was completed by B. Paine & B. Wieman 10/01/2008. [2007] Bridge safety inspection was completed by B. Wieman & B. Essler 8/14/2007. [2006] Bridge safety inspection was completed by Bret Wieman 10/19/2006. [2006-2015] There is some settlement of the south side sidewalk underneath the bridge. The orthotropic steel ballast plate deck is 21.2' W X 92.0' L = 1,950 SF Under roadway overlaid in 1988.							
	58. Deck NBI: CP Rail over CSAH # 23 (County Road C)							
	36A. Brdg Railings NBI: No bridge railing							
	36B. Transitions NBI: No bridge railing							
	36C. Appr Guardrail NBI: No guardrail							
	36D. Appr Guardrail Terminal NBI: No guardrail							
	59. Superstructure NBI: Steel girders & floor beams have minor to moderate corrosion.							
	60. Substructure NBI: Concrete abutments have minor cracking & scaling.							
	61. Channel NBI: CP Rail over CSAH # 23 (County Road C)							
	62. Culvert NBI: CP Rail over CSAH # 23 (County Road C)							
	71. Waterway Adeq NBI: CP Rail over CSAH # 23 (County Road C)							
	72. Appr Roadway Alignment NBI: CP Rail over CSAH # 23 (County Road C)							
	Inventory Notes:							

 Brian Essler
 Inspector's Signature

 Nicklaus Fischer
 Reviewer's Signature

Pictures



Photo 1 - drain on nw cor



Photo 2 - floorbeams

Pictures



Photo 3 - looking east



Photo 4 - looking north

Pictures



Photo 5 - looking south



Photo 6 - looking west

Pictures



Photo 7 - north bearings



Photo 8 - north bearings-2

Pictures



Photo 9 - spalls on NE cor