

**2016 ROUTINE
BRIDGE INSPECTION REPORT**



**BRIDGE # 62J06
LARPEN TEUR AVE over PED PATH**

DISTRICT: Metro

COUNTY: Ramsey

CITY/TOWNSHIP: Falcon Heights

STATE: Minnesota

Date of Inspection: 08/20/2016

Equipment Used:

Owner: County Highway Agency

Inspected By: Bodelson, Dan

Report Written By: Dan Bodelson

Report Reviewed By: Nicklaus Fischer

Final Report Date: 10/04/2016

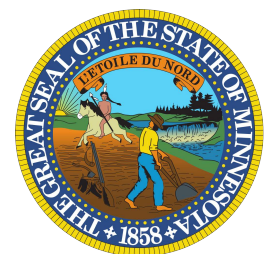


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Minnesota Structure Inventory Report

Bridge ID: 62J06

LARPELVEUR AVE

over PED PATH

Date: 10/04/2016

GENERAL	
Agency Br. No.	
District Metro	
Maint. Area	Crew
County 062 - Ramsey	
City Falcon Heights	
Township	
Desc. Loc. 0.26 MI W OF JCT CSAH 46	
Sect., Twp., Range 20 - 029N - 23W	
Latitude Deg 44 Min 59 Sec 30.07	
Longitude Deg 93 Min 11 Sec 32.86	
Custodian 02 - County Highway Agency	
Owner 02 - County Highway Agency	
BMU Agreement	
Year Built	1999
MN Year Reconstructed	
FHWA Year Reconstructed	
MN Temporary Status	
Bridge Plan Location 3 - COUNTY	
Date Opened to Traffic	
On-Off System 1 - ON	
Legislative District 66B	
ABC Suitable	

STRUCTURE	
Service On 1 - Highway	
Service Under 3 - Pedestrian - bicycle	
Main Span Type	
5 - Prestress or Precast 13 - Box Culvert	
Main Span Detail	
Appr. Span Type	
Appr. Span Detail	
Skew 0	
Culvert Type PCST 108	
Barrel Length 96 ft.	
Cantilever ID	

NUMBER OF SPANS			
MAIN: 1	APPR: 0	TOTAL: 1	
Main Span Length	10.0	ft.	
Structure Length	11.3	ft.	
Deck Width (Out-to-Out)	0.0	ft.	
Deck Material	N - Not Applicable		
Wear Surf Type	6 - Bituminous		
Wear Surf Install Year			
Wear Course/Fill Depth	4.00	ft.	
Deck Membrane	N - Not Applicable (applies onl		
Deck Rebars	N - Not Applicable (no deck)		
Deck Rebars Install Year			
Structure Area (Out-to-Out)	0	sq. ft.	
Roadway Area (Curb-to-Curb)	sq. ft.		
Sidewalk Width	Lt 0.00	ft.	Rt 0.00
Curb Height	Lt 0.67	ft.	Rt 0.67
Rail Type	Lt NN		Rt NN

ROADWAY	
Bridge Match ID (TIS) 0	
Roadway O/U Key Route On Structure	
Route Sys 04 - CSAH Number 30	
Roadway Name or Description	
LARPELVEUR AVE	
Level of Service 1 - MAINLINE	
Roadway Type 2 - 2-way traffic	
Control Section (TH Only)	
Reference Point 000+00.725	
Detour Length 1.0 mi	
Lanes	
On 4 Under 0	
ADT 15600 Year 2007	
HCACT 0 ADTT 0 %	
Functional Class 16 - Urban - Minor Arterial	

RDWY DIMENSIONS			
If Divided	NB-EB	SB-WB	
Roadway Width	39.60	ft.	33.00
Vertical Clearance		ft.	ft.
Max. Vert. Clear.		ft.	ft.
Horizontal Clear.		ft.	ft.
Lateral Clearance		ft.	ft.
Appr. Surface Width	0.0	ft.	
Bridge Roadway Width	0.0	ft.	
Median Width On Bridge	4.00	ft.	

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

PAINT	
Year Painted	
Unsound Paint %	
Painted Area sq. ft.	
Primer Type	
Finish Type	

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

INSPECTION	
Userkey 102	
Unofficial Structurally Deficient	N
Unofficial Functionally Obsolete	N
Unofficial Sufficiency Rating	83.2
Routine Inspection Date	08/20/2016
Routine Inspection Frequency	48
Inspector Name CO Bridge	
Status	A - Open

NBI CONDITION RATINGS	
Deck	N - Not Applicable
Unsound Deck %	
Superstructure	N - Not Applicable
Substructure	N - Not Applicable
Channel	N - Not Applicable
Culvert	7 - Shrinkage cracks, light scali

NBI APPRAISAL RATINGS	
Structure Evaluation 7	
Deck Geometry	N
Underclearances	N
Water Adequacy	N - Not Applicable
Approach Alignment 8 - Equal to present desirabl	

SAFETY FEATURES	
Bridge Railing	N - NOT REQUIRED
GR Transition	N - NOT REQUIRED
Appr. Guardrail	1 - MEETS STANDARDS
GR Termini	1 - MEETS STANDARDS

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.
Nav. Vert. Lift Bridge Clear. (ft.)			
MN Scour Code	A - NON WATER' Year		

CAPACITY RATINGS		
Design Load	9 - HS 25 (OR GREATER)	
Operating Rating	A - Assigned ratir	42.0
Inventory Rating	A - Assigned ratir	25.0
Posting VEH:	SEMI:	DBL:
Rating Date	07/08/2013	

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

Minnesota Structure Inventory Report

Bridge ID: 62J06 LARPELLEUR AVE over PED PATH

Date: 09/26/2016

+ GENERAL +	+ ROADWAY +	+ INSPECTION +																				
Agency Br. No. Crew District 05 Maint. Area County 062 - Ramsey City Falcon Heights Township Desc. Loc. 0.26 MI W OF JCT CSAH 46 Sect., Twp., Range 20 - 029N - 23W Latitude 44 ° 59 ' 30.07 '' Longitude 93 ° 11 ' 32.86 '' Custodian 02 - County Highway Agency Owner 02 - County Highway Agency BMU Agreement Year Built 1999 MN Year Reconstructed FHWA Year Reconstructed MN Temporary Status Bridge Plan Location 3 - COUNTY Date Opened to Traffic On - Off System 1 - ON Legislative District 66B Potential ABC 2 - N/A	Bridge Match ID (TIS) 0 Roadway O/U Key Route On Structure Route Sys 04 - CSAH Number 30 Roadway Name or Description LARPELLEUR AVE Level of Service 1 - MAINLINE Roadway Type 2 - 2-way traffic Control Section (TH Only) Reference Point 000+00.725 Detour Length 1.0 mi. Lanes ON 4 UNDER 0 ADT 15600 YEAR 2007 HCA DT ADTT % Functional Class 16 - Urban - Minor Arterial	Userkey 102 Structurally Deficient N Functionally Obsolete N Sufficiency Rating 83.2 Routine Inspection Date 08/20/2016 Routine Inspection Frequency 48 Inspector Name Bodelson, Dan Status A - Open																				
		+ NBI CONDITION RATINGS +																				
		Deck N Unsound Deck % Superstructure N Substructure N Channel N Culvert 7																				
		+ NBI APPRAISAL RATINGS +																				
		Structure Evaluation 7 Deck Geometry N Underclearances N Waterway Adequacy N Approach Alignment 8																				
		+ SAFETY FEATURES +																				
		Bridge Railing N - NOT REQUIRED GR Transition N - NOT REQUIRED Appr. Guardrail 1 - MEETS STANDARDS GR Termini 1 - MEETS STANDARDS																				
		+ IN DEPTH INSP. +																				
		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 10%; text-align: center;">Y/N</th> <th style="width: 15%; text-align: center;">Freq</th> <th style="width: 15%; text-align: center;">Date</th> </tr> </thead> <tbody> <tr> <td>Frac. Critical</td> <td style="text-align: center;">N</td> <td></td> <td></td> </tr> <tr> <td>Underwater</td> <td style="text-align: center;">N</td> <td></td> <td></td> </tr> <tr> <td>Pinned Asbly.</td> <td style="text-align: center;">N</td> <td></td> <td></td> </tr> <tr> <td>Spec. Feat.</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>		Y/N	Freq	Date	Frac. Critical	N			Underwater	N			Pinned Asbly.	N			Spec. Feat.			
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		+ 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 9 - HS 25 (OR GREATER) Operating Rating 2 - HS TRUCK 42.0 Inventory Rating 2 - HS TRUCK 25.0 Posting VEH: SEMI: DBL: Rating Date 07/08/2013 Overweight Permit Codes A N - N/A B N - N/A C N - N/A																				
+ STRUCTURE +	+ RDWY DIMENSIONS +																					
Service On 1 - Highway Service Under 3 - Pedestrian - bicycle Main Span Type 5 - Prestress or Precast Main Span Design 13 - Box Culvert Main Span Detail Appr. Span Type Appr. Span Design Appr. Span Detail Skew 0 Culvert Type PCST 108 Barrel Length 96 Cantilever ID Number of Spans MAIN: 1 APPR: 0 TOTAL: Main Span Length 10.0 ft. Structure Length 11.3 ft. Deck Width (Out-to-Out) 0.0 ft. Deck Material N - Not Applicable Wear Surf Type 6 - Bituminous Wear Surf Install Year Wear Course/Fill Depth 4.00 ft. Deck Membrane N - Not Applicable (applies Deck Rebars N - Not Applicable (no deck) Deck Rebars Install Year Structure Area (Out-to-Out) 0 sq. ft. Roadway Area (Curb-to-Curb) sq. ft. Sidewalk Width 50A. Lt 0.00 ft. 50B. Rt 0.00 ft. Curb Height Lt 0.67 ft. Rt 0.67 ft. Rail Type Lt NN Rt NN	If Divided NB-EB SB-WB Roadway Width 39.60 ft. 33.00 ft. Vertical Clearance ft. ft. Max. Vert. Clear. ft. ft. Horizontal Clear. ft. ft. Lateral Clearance ft. ft. Appr. Surface Width 0.0 ft. Bridge Roadway Width 0.0 ft. Median Width On Bridge 4.00 ft.																					
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		+ PAINT +																				
		Year Painted Unsound Paint % Painted Area sq. ft. Primer Type Finish Type																				
		+ BRIDGE SIGNS +																				
		Posted Load 0 - Not Required Traffic 0 - Not Required Horizontal 0 - Not Required Vertical N - Not Applicable																				

MINNESOTA BRIDGE INSPECTION REPORT

10/04/2016

BRIDGE 62J06 LARPEN TEUR AVE OVER PED PATH

ROUTINE INSP. DATE: 08/20/2016

County: Ramsey	Location: 0.26 MI W OF JCT CSAH 46	Length: 11.3 ft.
City: Falcon Heights	Route: 04 - CSAH 30 Ref. Pt.: 000+00.725	Deck Width: 0.0 ft.
Township:	Control Section:	Rdwy. Area/ Pct. Unsnd: sq. ft. / %
Section: 20 Township: 029N Range: 23W Maint. Area:		Paint Area/ Pct. Unsnd: sq. ft. / %
Span Type: 1 - Concrete 19 - Culvert (includes Local Agency Bridge Nbr.:		Culvert: PCST 108
List: frame culverts)		Postings:
NBI Deck: N Super: N Sub: N Chan: N Culv: 7		
	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: N - Not Applicable	Unofficial Sufficiency Rating 83.2

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
241	Reinforced Concrete Culvert	2	Routine	08/20/2016	95 LF	0	95	0	0	N/A
			Routine	08/20/2012	95 LF	0	95	0	0	N/A

Notes: [2012] Culvert has minor deterioration- condition state 2.
 [2008-2012] There are minor cracks @ joint #2 and #14. Minor spalls are present. Culvert interior was painted by U of M.
 [2012] There are minor- moderate spalls at the NW corner north end of culvert.
 [2003-2012] No movement of culverts. Bottom of culvert has bituminous overlay. [2012] Bituminous overlay is starting to let loose

388	Culvert Headwall, Wingwall or Other End Treatment	2	Routine	08/20/2016	2 EA	0	1	1	0	N/A
			Routine	08/20/2012	2 EA	0	1	1	0	N/A

Notes: [2001-2012] Minor spalls on each side. [2004-2012] Minor deterioration with some efflorescence.
 [2003-2012] Some vertical cracking @ colored grout above culvert north end.
 [2012] Should replace the caps for modular block wall above culvert at north end due to deterioration. The modular wall blocks are OK, but the wall caps should be replaced.
 [2004-2012] There is 12 LF of deterioration of north end cap blocks.
 Versa-lok block retaining walls.

964	Critical Finding Smart Flag	2	Routine	08/20/2016	1 EA	1	0	N/A	N/A	N/A
			Routine	08/20/2012	1 EA	1	0	N/A	N/A	N/A

Notes: DO NOT DELETE THIS CRITICAL FINDING SMART FLAG.

982	Approach Guardrail	2	Routine	08/20/2016	1 EA	1	0	0	N/A	N/A
			Routine	08/20/2012	1 EA	1	0	0	N/A	N/A

Notes: [2002-2012] Guardrail system is in place and functioning properly.

984	Deck & Approach Drainage	2	Routine	08/20/2016	1 EA	0	1	0	N/A	N/A
			Routine	08/20/2012	1 EA	0	1	0	N/A	N/A

Notes: [2008-2012] There are some puddles on the east side of culvert due to a flat grade. The drain is at the south end of the culvert, which drains into dry well is functioning properly.
 Drain is at the south end of the culvert and drains into dry well.

987	Roadway over Culvert	2	Routine	08/20/2016	1 EA	0	1	0	N/A	N/A
			Routine	08/20/2012	1 EA	0	1	0	N/A	N/A

Notes: [2012] The eastbound outside lane has some minor- moderate settlement.
 [2004-2012] Some cracking exists on the south side of Larpenteur Avenue- curb + 4' (moderate crack) shoulder + 12' (minor cracking) outside lane = 18 LF.
 [2001-2012] Concrete pavement is over culvert. No movement of roadway.
 Minor started cracking on south side at shoulder in 2003.

ELEM	ELEMENT NAME	ENV	REPORT TYPE	INSP. DATE	QUANTITY	QTY	QTY	QTY	QTY	QTY
NBR						CS 1	CS 2	CS 3	CS 4	CS 5

General Notes: [2016] Bridge Safety inspection by Dan Bodelson & Randy Bussiere On 8/20/2016.
.Bridge #62J06 was built in 1997. Concrete culvert is 8' wide X 10' high X 95 LF in length.
[2012] Bridge Safety inspection by B. Wieman & D. Bodelson. There is a loose rail on chain link fence at the SW corner.
[2008] Bridge inspection was conducted by B. Wieman 8/27/2008.

- 58. Deck NBI: Structure is a Pedestrian Tunnel.
 - 36A. Brdg Railings NBI: Structure is a culvert w/ No bridge railing.
 - 36B. Transitions NBI: Guardrail is over culver & no connected to culvert.
 - 36C. Appr Guardrail NBI: Approach guardrail meets current standards.
 - 36D. Appr Guardrail Terminal NBI: Guardrail terminations meet current standards.
 - 59. Superstructure NBI: Structure is a Pedestrian Tunnel.
 - 60. Substructure NBI: Structure is a Pedestrian Tunnel.
 - 61. Channel NBI: Structure is a Pedestrian Tunnel - no water.
 - 62. Culvert NBI: Concrete culvert has minor weathering cracking & leaching.
 - 71. Waterway Adeq NBI: Structure is a Pedestrian Tunnel - no water.
 - 72. Appr Roadway Alignment NBI: No speed reduction required.
- Inventory Notes:

Dan Bodelson
Inspector's Signature

Nicklaus Fischer
Reviewer's Signature

MINNESOTA BRIDGE INSPECTION REPORT

10/04/2016

Inspector: CO Bridge

BRIDGE 62J06 LARPEN TEUR AVE OVER PED PATH

County: Ramsey	Location: 0.26 MI W OF JCT CSAH 46	Length: 11.3 ft.
City: Falcon Heights	Route: 04 - CSAH 30 Ref. Pt.: 000+00.725	Deck Width: 0.0 ft.
Township:	Control Section:	Rdwy. Area/ Pct. Unsnd: sq. ft. / %
Section: 20 Township: 029N Range: 23W Maint. Area:		Paint Area/ Pct. Unsnd: sq. ft. / %
Span Type: 1 - Concrete 19 - Culvert (includes frame culverts)	Local Agency Bridge Nbr.:	Culvert: PCST 108
List:		Postings:
NBI Deck: N Super: N Sub: N Chan: N Culv: 7		
	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	Unofficial Functionally Obsolete N
Horizontal: 0 - Not Required	Unofficial Sufficiency Rating 83.2
Traffic: 0 - Not Required	
Vertical: N - Not Applicable	

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
241	Reinforced Concrete Culvert	Routine	08/20/2016	95 LF	0	95	0	0
		Migrated Values		95 LF	0	95	0	0
	Notes: [2012-2016] Culvert has minor deterioration- condition state 2. [2008-2016] There are minor cracks @ joint #2 and #14. Minor spalls are present. Culvert interior was painted by U of M. [2012-2016] There are minor- moderate spalls at the NW corner north end of culvert. [2003-2016] No movement of culverts. Bottom of culvert has bituminous overlay. [2012] Bituminous overlay is starting to let loose							
800	Critical Deficiencies or Safety Hazards	Routine	08/20/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
	Notes: [2016] NO CRITICAL FINDINGS OBSERVED DURING THE LAST INSPECTION.							
870	Culvert End Treatment	Routine	08/20/2016	2 EA	0	1	1	0
		Migrated Values		2 EA	0	1	1	0
	Notes: [2016] Should replace the caps for modular block wall above culvert at south end due to deterioration. [2001-2016] Minor spalls on each side. [2004-2016] Minor deterioration with some efflorescence. [2003-2016] Some vertical cracking @ colored grout above culvert north end. [2012] Should replace the caps for modular block wall above culvert at north end due to deterioration. The modular wall blocks are OK, but the wall caps should be replaced. -Repaired in 2016 [2004-2012] There is 12 LF of deterioration of north end cap blocks. - repaired in 2016 Versa-lok block retaining walls.							
871	Roadway Over Culvert	Routine	08/20/2016	1 EA	0	1	0	0
		Migrated Values		1 EA	0	1	0	0
	Notes: [2016] damage to 4'high chain link fence on south side. [2016] eastbound lanes have a 4' x 8" spall - westbound is OK. [2012-2016] The eastbound outside lane has some minor- moderate settlement. [2004-2016] Some cracking exists on the south side of Larpenteur Avenue- curb + 4' (moderate crack) shoulder + 12' (minor cracking) outside lane = 18 LF. [2001-2012] Concrete pavement is over culvert. No movement of roadway. Minor started cracking on south side at shoulder in 2003.							
892	Slopes & Slope Protection	Routine	08/20/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
	Notes: {2016} slopes are OK Use this element to rate the condition of slopes and slope protection.							
893	Guardrail	Routine	08/20/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0
	Notes: [2002-2016] Guardrail system is in place and functioning properly.							

BRIDGE 62J06 LARPENTEUR AVE OVER PED PATH

ELEM NBR	ELEMENT NAME	REPORT TYPE	INSP. DATE	QUANTITY	QTY CS 1	QTY CS 2	QTY CS 3	QTY CS 4
894	Deck & Approach Drainage	Routine	08/20/2016	1 EA	0	1	0	0
		Migrated Values		1 EA	0	1	0	0

Notes: [2008-2016] There are some puddles on the east side of culvert due to a flat grade. The drain is at the south end of the culvert, which drains into dry well is functioning properly.
 Drain is at the south end of the culvert and drains into dry well.

900	Protected Species	Routine	08/20/2016	1 EA	1	0	0	0
		Migrated Values		1 EA	1	0	0	0

Notes: [2016] no species seen
 Use this element to track the presence of protected species living on this structure.

General Notes: [2016] Bridge Safety inspection by Dan Bodelson & Randy Bussiere On 8/20/2016.
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 [2012] Bridge Safety inspection by B. Wieman & D. Bodelson. There is a loose rail on chain link fence at the SW corner.
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36C. Appr Guardrail NBI: Approach guardrail meets current standards.

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60. Substructure NBI: Structure is a Pedestrian Tunnel.

61. Channel NBI: Structure is a Pedestrian Tunnel - no water.

62. Culvert NBI: Concrete culvert has minor weathering cracking & leaching.

71. Waterway Adeq NBI: Structure is a Pedestrian Tunnel - no water.

72. Appr Roadway Alignment NBI: No speed reduction required.

Inventory Notes:

Dan Bodelson
 Inspector's Signature

Nicklaus Fischer
 Reviewer's Signature

Pictures



Photo 1 - InsideTunnelLookingNorth



Photo 2 - InsideTunnelLookingSouth

Pictures



Photo 3 - Larp.Ave.LookingWest



Photo 4 - SpallInNorthEndTunnel

Pictures



Photo 5 - TunnelLookingNorth