

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

Inspection Report for B-16-038-0002

USH 2 over LAND Oct 19,2015



Туре	Prior	Frequency (mos)	Performed
Routine	10-19-15	24	Х
Interim	09-27-05	0	
SI&A	08-19-13	48	

	46°44'33.66"N
Longitude	92°09'14.64"W

Owner STATE HIGHWAY DEPT Maintainer STATE HIGHWAY DEPT

	Time Log		Team membe	rs	
	Hours 1	Minutes			
		0	I		
Inspector	Name		Number	Signature	Date
·	Bjorklund, Allan M		8003	Completed by HSI System Account(HSI)	
Reviewer					

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Identification & Location

Feature On: USH 2	Section Town Range: S08 T49N R14W	Structure Number:
Feature Under: LAND	County: DOUGLAS(16)	B-16-038-0002
Location 1.1M W MINN STATE LINE	Municipality: CITY-SUPERIOR(16281)	Structure Name:

Geometry

Geometry				Traffic			
measurements in feet, except w	here noted			Lanes	ADT	ADT year	Traffic Pattern
Approach Roadway Width: 54	Bridge Roadway Width: 66.0	Total Length: 144.0	On	4	17500	2010	TWO WAY TRAFFIC
Approach Pavement Width: 0	Deck Width: 76.0	Deck Area (sq ft): 10944	Under	0	0		NO TRAFFIC

Capacity

Capacity	Load Rating					
Inventory rating: HS21	Overburden depth (in): 1.5	Last rating date:	Controlling:			
Operating rating: HS38	Deck surface material: Re-rate for capacity (Y/N): Control location: CONCRETE Y Y Y		Control location:			
Posting:	Re-rate notes: Concrete Overlay complete	Re-rate notes: Concrete Overlay completed 2015 under project 8680-04-71				

Hvdraulic

Hydraulic		Classification
Scour Critical Code(113): (N) NO WATERWAY	Q100 (ft3/sec): 0	
High water elevation (ft): 0.0	Velocity (ft/sec): 0.0	Sufficieny #: 92.6

Span(s)

Span #	Material	Configuration	Depth (in)	Length (ft)	Main
1	CONT CONCRETE	HAUNCHED SLAB		40.0	
2	CONT CONCRETE	HAUNCHED SLAB		48.0	Y
3	CONT CONCRETE	HAUNCHED SLAB		30.0	
4	CONT CONCRETE	HAUNCHED SLAB		26.0	

Expansion joint(s)

Temperature: File:

New:

Vertical Clearance

	Measurement file (ft)	File Date	Measurement new (ft)
Highway Minimum Under Cardinal			
Highway Minimum Under Non-Cardinal			
Highway Minimum On	17.22	19-Oct-2015	17.22
Railroad Minimum Under			

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Elements

Structure No.: B-16-038-0002

Quantity in Condition State Chk Element Defect Description UOM Total 4 Reinforced Concrete Slab SF 10,944 10,932 0 12 0 ride has sag/bump over piers. Cloride content (LB/CY) is high enough to warrent a NBI 4. Border Bridge agreement to place Deck at NBI 5. Testing report in files NWR/Superior. Cracks in side of deck 6 ft east of P3a. Cracks SW corner of deck edge at P3. horzontal cracking on south side of deck over access doors pier 3a in Х 38 2011. Six LF spall w/ rebar exposed south side near access door on bottom drip edge, heavy rust on exposed rebar 2013. Deck overlay complete in 2015. Delamination - Spall - Patched Area SF 0 0 12 0 Six LF spall w/ rebar exposed south side near access door on botttom drip edge, heavy rust on exposed rebar 1080 2013 Concrete Overlay SF 10,287 0 10,287 0 0 8514 PCC overlay completed 2015. Crack (Wearing Surface) SF 0 10,287 0 0 3220 Random map cracking through out. Coated Reinforcing SF 10,944 0 0 0 0 ride has sag/bump over piers. Cloride content (LB/CY) is high enough to warrent a NBI 4. Border Bridge agreement to place Deck at NBI 5. Testing report in files NWR/Superior. Cracks in side of deck 6 ft east of P3a. Cracks SW corner of deck edge at P3. horzontal cracking on south side of deck over access doors pier 3a in 8522 2011. Six LF spall w/ rebar exposed south side near access door on bottom drip edge, heavy rust on exposed rebar 2013. Steel Column 0 0 ΕA 27 27 0 Rust forming. Extensive rust on pilings and 24 inch deep settlement around piles piers 3A, 3B, 3C (2013) deep 202 Х settlement continues 2014 monitor. Corrosion ΕA 0 27 0 0 1000 Piles have no paint on them from start. Settlement 0 10 0 ΕA 0 24 inch deep settlement around piles piers 3A,3B, 3C deepest settlement on north piles pier 3A, As-built 4000 shows abandoned 16" gas main in that area, monitor. Painted Steel SF 855 0 855 0 0 Rust forming. Extensive rust on pilings and 24 inch deep settlement around piles piers 3A, 3B, 3C (2013) Piles 8516 have no paint on them from start. seem to be Core 10 steel. Effectiveness (Steel Protective Coatings) 0 SF 0 855 0 3440 Reinforced Concrete Pier Wall LF 72 3 0 0 75 210 Х Cracking (RC) LF 0 3 0 0 SW corner cracked vertical 1130 **Reinforced Concrete Cap** LF 229 229 0 0 0 234 Х Strip Seal Expansion Joint LF 75 75 0 0 0 Х 300 New WB 2014 and EB 2015. Leakage, Seal Adhesion, Damage, Cracking 0 0 0 I F 0 2310

Structure No. B-16-038-0002

nade 4

paye	; 4						Structure	e No.: D-10-	030-0002
			Metal Bridge Rail	LF	285	285	0	0	0
X 330									
			Reinforced Concrete Bridge Rail	LF	288	285	0	3	0
Х	331		Leaking south side between panels over spall are	a in drip	edge				
			Delamination - Spall - Patched Area	LF		0	0	3	0
		1080 Leaking south side between panels over spall area in drip edge							
Ī			Cracking (RC)	LF		0	0	0	0
		1130		•	•	•			

Assessments

								Quantity in C	ondition State	
	Chk	Element	Defect	Description	UOM	Total	1	2	3	4
ſ				Median	EA	144	144	0	0	0
	Х	9007		Curb repair done under overlay project.						

NBI Ratings

_	File	New
Deck	5	7
Superstructure	7	7
Substructure	7	7
Culvert	N	N
Channel	N	N
Waterway	N	N

Structure Specific Notes

West bound USH 2 minimum vertical distance over measured after overlay in place 17.51 feet at north fog line at east fascia girder Ramp "B" (IH 35 SB to USH 2 EB) 2014 djh.

Inspection Specific Notes

Repair/replace expansion strip seal over Pier #4. Delam survey. (03) Inspected by Minnesota DOT copy of inspection report on in District 8 office. (04) Traffic ADT from MNDOT. (06) Access secure when we arrived, inspected under and resecured door. (07) Access secure, inspected and resecurred door.

Inspection done 8/17 thru 8/30/2007.

Inspected by MNDOT 2008 file in bridge office Superior NWR. entered for date by DJH.

Inspected by DJH etal between 8-24-2009 and 9-4-2009. Tunnel dug under wall NW corner, We filled it in, access secured when we left.

Inspected 2010 by Mndot, Gary Elmquist et al. Signed copy of inspection in bridge file Superior office. Entered for date only by D. harrington.

Inspected by DJH etal between 8-22-2011 and 8-31-2011. New Wisdot lock needed on door old one broken 2011 replaced. Inspected by DJH etal between 8/15/12 and 8/30/12.

Inspected by DJH etal between 8/12/13 and 8/29/13. Conc. overlay project let date January 2014. Inspected by DJH etal between 8/19/14 and 8/28/14. Project 8680-04-71 in progress, complete in 2015.

Inspector Site-Specific Safety Considerations

Structure Inspection Procedures

Special Requirements

	Chk	Comments
Traffic Control		
ReachAll Vehicle		
Access Equipment		
Other		

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Construction History

Structure No.: B-16-038-0002

Year		FOS id			
9999	9999 NOT BUILT			8680-04-00	
1984	NEW SUPERSTRUCTURE	8680-01-85			
1983	NEW STRUCTURE		8680-01-81		
Maintenance Items History	Recommended by	Status	Status change	Year completed	
Maintenance Items	Priority Recommended by		Status	Status change	

Routine Document Comment/Description Settlement around pile pier 3A



Routine Document Comment/Description



Routine Document Comment/Description Name Plate

Structure No.:B-16-038-0002



Routine Document Comment/Description



Routine Document Comment/Description Undermine of wall at NW corner, also NE similar.



Routine Document Comment/Description



Routine Document Comment/Description

Access doors under.

