



SN: 016-0195	District: 1	Spans: 12	Appr. Spans: 0	Skew: 0	ADT: 6850	Truck Pct: 5
ADT Un: 0	Maint. Co: 16 - Cook	Twsp: 35 - Thornton		Status: 5-Open, temporary measures		
Facility Carried: IL 1 (HALSTED ST)			Feature Crossed: RR - IHB			
Location: 1.1 M N IL 83		Municipality: Riverdale		Team/Sub Section: 032/113		Insp/Rte: 500
Bridge Name:			Material & Type: Steel Continuous / Multi-beam			
Insp. Intervals Routine: 12		Fracture Critical: 0		Underwater: 0		Special: 3M
90 - Inspection Date: 9/15/2023		90C - Temp (°F): 68			90B1 - In Depth: <input type="checkbox"/>	
Is Delinquent: <input type="checkbox"/>		Reason:				
90A - Agency Program Manager: Adeis-Dahhan, Raghad						
90A1 - Team Leader: Valentine, Mike A			90A2 - Inspector:			

90B - Previous Inspection Remarks

2022) This inspection was completed over multiple days, however all photos are dated with the initial day of the inspection regardless of the actual date that the photos were taken.
In-depth completed using bucket truck and pole camera.

Item 59: Due to Bm end 2 north end over P8 span 8 side.
2020 LRI showed 44% beam end section loss for beam 8, Pier 8, Span 8.
Bearings at Pier 8, Span 9 (Beams 1, 2, 3, 4, 5, 8 and 10): Rocker bearings are moving independent of the top and bottom bearing plates. Cribbing has been installed near the bearings between the concrete cap and diaphragms near beams 1, 2, 3, 8 and 10 at Pier 8, span 9 side.

Resources

Time to Inspect (H:M):	Traffic Control:
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Inspector's Appraisals

	Prev	New	Comments
58 - Deck Condition:	<u>5</u>	5	Top: Num hl-narrow trans cracks thru-out, scatt shallow spalls NB & SB, lg spall @ NB P5 lane 1, tines have worn. Soffit: num hl leach cracks & num sm-lg isol spalls w/ exp rebar thru-out.
59 - Superstructure Condition:	<u>2</u>	2	See Item 90B. Bm ends: Hvy rusting w/measurable section loss @ ends worst P2 & 8, bm end 2 @ P8 sp8 side 53% loss +/- . According to 2015 LRI bm 2 & 9 ends @ P8 sp8 along with bm 9 @ P2 sp2 side all have loss greater than 10% but do not give percentages. Bms: Bottom flange freckled rust,peeling, blackening(soot) over RR tracks, moderate rust just beyond 5' from bm ends on downslope sides most bms, It impact damage to bm 10 span 12 bottom flange. P8 Sp8 diaphragms which cribbing is placed under are deteriorating: Bay 1: 3/4" hole to west end of diaphragm (found 5-26-2023 during SF) Bay 2: hole 8" long in W end of Diaphragm Bay 3: hole 5.5" long in W end of Diaphragm Bay 7: E end of Diaph Buckled with small hole. Bay 9: W end of Diaph Buckled (no cribbing under this end) Memo dated 09/03/2021 (due to submitted LRI 7/6/2021) indicate that due to LRI and analysis of the structure, the recommended condition ratings for the superstructure is a 2.
60 - Substructure Condition:	<u>3</u>	3	Due to heavily spalled columns to P8. See item 90B. Several sm-lg mapped cracked areas & hp's piers 2,5,8 columns and caps. P8 wall is heavily spalled to S face and ends.
62 - Culvert Condition:	<u>N</u>	N	
61 - Channel Condition:	<u>N</u>	N	
71 - Waterway Adequacy:	<u>N</u>	N	
72 - Approach Rdwy Align:	<u>8</u>	8	



111 - Pier Navig Protection:

Prev New

36A - Bridge Railing Adequacy:

Prev New

Prev New

Prev New

Approach Guardrail Adequacy: 36B - Transitions: 36C - Guardrail: 36D - Ends:

Additional Inventory Data - To Be Verified During Routine Inspection

108A - Wearing Surface Type: 108B - Type of Membrane: 108C - Deck Protection:

108D - Total Deck Thickness (In.):

59A - Paint Date (Mo/Yr): 59B - Paint Type:

59C - Utilities Attached:

113A - Scour Critical Analysis Date: 113 - Scour Critical Rating: 113B - Evaluation Method:

Weight Limit Posting:	70A2 - Single Unit Vehicles:	<input type="text" value="LL"/>
	70B2 - Combination Type 3S-1 (3 or 4 axles):	<input type="text" value=":"/>
	70C2 - Combination Type 3S-2 (5 or more axles):	<input type="text" value=":"/>
	70D2 - One Truck at a Time:	<input type="text" value="0"/>

90B - Inspection Remarks



Item 59: Due to Bm end 2 north end over P8 span 8 side. 2020 LRI showed 44% beam end section loss for beam 8, Pier 8, Span 8. Bearings at Pier 8, Span 9 (Beams 1, 2, 3, 4, 5, 8 and 10): Rocker bearings are moving independent of the top and bottom bearing plates. Cribbing has been installed near the bearings between the concrete cap and diaphragms near beams 1, 2, 3, 8 and 10 at Pier 8, span 9 side.

Item 60: Lg spalls to P8 col's 1, 2 & 5 w/col 1 having a total 10 exposed and heavily corroded column ties w/8 broken along w/ 5 vertical bars exposed and heavily corroded w/4 debonded; col 2 has a total of 5 exposed and heavily corroded column ties w/0 broken along w/3 exposed and heavily rusted vertical bars that are all bonded; col 3 has a total of 5 exposed and heavily corroded column tie w/ 3 broken along w/5 exposed and heavily rusted vertical bars w/2 debonded; col 4 has a total of 2 exposed and heavily rusted column ties w/0 broken along w/2 heavily corroded but bonded vertical bars; col 5 has a total of 7 heavily corroded column ties w/6 broken along with 3 heavily corroded vertical bars w/3 debonded.. P2 col 1 has a total of 6 heavily corroded column ties w/0 broken along with 2 heavily corroded vertical bars that are still bonded.

Memo dated November 6, 2020: LL posting required. to remove the restriction, permanent repairs must be made at the following locations:
Span 8, Beams 2 and 8, Pier 8.

According to the 2015 LRI section loss, beam 2 end at N over P8 span 8 side was measured to have 53%. Also, beam 9 end at N over P8 span 8 side along with beam 9 end at N over P2 span 2 side have loss of 18% & 10% respectively. Note: the LRI report completed in 2015 does not include the percent loss for each beam end detail. The 2018 inspection was based off IDOT's measurements from 2014 findings. Bill Vegrzyn from V3 was contacted 10-11-19 via email and he sent the percent loss for each detail. See attached 2015 LRI report. Percent loss quantities were inserted in orange by MV on 10-11-19.

In-depth inspection details: Bm ends at both abts & piers 2,5,8. Bm ends @ N abt along w/ piers 2,5,8 are accessible w/A52 and S abt use a bucket truck due to roadway traffic. In-depth completed in 2022. For Item 108C: the top mat of reinforcement is epoxy coated and the bottom mat is black bar.

All elements #ed & labeled per plans(S-N & W-E).

2023 LL signs still in place

	Signature	Date
Inspection Team Leader:	Mike Valentine	09/28/2023
Agency Program Manager:	Raghad Adeis-Dahhan	12/11/2023

Use Additional Forms as Needed

SN: 016-0195	District: 1	Spans: 12	Appr. Spans: 0	Skew: 0	ADT: 6850	Truck Pct: 5
ADT Un: 0	Maint. Co: 16 - Cook	Twsp: 35 - Thornton		Status: 5-Open, temporary measures		
Facility Carried: IL 1 (HALSTED ST)			Feature Crossed: RR - IHB			
Location: 1.1 M N IL 83		Municipality: Riverdale		Team/Sub Section: 032/113		Insp/Rte: 500
Bridge Name:			Material & Type: Steel Continuous / Multi-beam			
Insp. Intervals Routine: 12		Fracture Critical: 0		Underwater: 0		Special: 3M
93C - Inspection Date: 9/15/2023			93C6 - Temp (°F): 68			
Is Delinquent: <input type="checkbox"/> Reason:						
90E - Agency Program Manager: Adeis-Dahhan, Raghad						
90E1 - Team Leader: Valentine, Mike A				90E2 - Inspector:		

Resources

Time to Inspect (H:M): Traffic Control:

Inspector's Appraisals

EN	EPN	Element Description	Env	Quantity	Unit	CS1	CS2	CS3	CS4
12		Reinforced Concrete Deck	4	49420	SF	41620	3300	4500	0
		Remarks: WS: (1130)(1190) CS2 - HL-narrow trans & isol hl diag cracks, many times wearing. (1080) CS3 - scatt shallow spalls and delams NB & SB, lg spall @ NB P5 lane 1. Soffit: (1080) CS3 - numerous small to medium spalls w/scattered lg spalls w/(1090) exposed rusted rebar. (1120) CS2 - numerous hl leach cracks							
520	12	Concrete Reinforcing Steel Protective System	4	49420	SF	49420	0	0	0
		Remarks: Top matt only.							
521	12	Concrete Protective Coating	4	49420	SF	49420	0	0	0
		Remarks:							
107		Steel Open Girder/Beam	4	7122	LF	6422	700	0	0
		Remarks: Btm fl freckled rust (1000), peeling (3420), blackening soot over RR tracks. Moderate rust (1000) just beyond 5' from bm ends on downslope sides most bms.							
8102	107	Steel Beam/Girder/Stringer End Under Joint	4	80	EA	0	60	20	0
		Remarks: (1000) Mod-hvy surf rust (1000) @ P2,5,8, lt surf rust (1000) at abts, small hole (1000) w/>50% loss bm end 2 P8 sp8 side along w/bm 9 P8 sp8 having 18% and bm 9 P2 sp2 side having 10% (The ends that have >10% have been analyzed and were put back into CS3)							
515	107	Steel Protective Coating	4	71700	SF	0	63700	0	8000
		Remarks: (3440) CS4 - Paint failure to most beam bottom fl's and bm end webs and flanges. (3410) CS2: Paint chalking throughout and blackening soot over RR tracks.							
205		Reinforced Concrete Column	3	55	EA	40	0	10	5
		Remarks: (1080) (1090) CS4 Large spalls w/ hvly rusted bars & broken tie bars P8 col 1, 2, 3 & 5 along w/P2 col 1; sevrsl mapped cracked (1130) areas, hp's to several col's P2 ,5, 8.							
210		Reinforced Concrete Pier Wall	3	684	LF	394	40	250	0
		Remarks: (1080)(1090) CS3 - Pier 8 very lg spalls w/ exp and heavily rusted and broken rebar along w/small to medium delams and an isolated spall at P5. (1130) CS2 - numer hl-narrow vert cracking, horizontal edge & map cracking thruout.							
215		Reinforced Concrete Abutment	3	168	LF	116	12	40	0
		Remarks: (1130) CS2 - Numerous hl-narrow vert cracks both abts.. (1080) CS3 - lg spalls w/(1090) exp rebar to stems and caps (No undermining of any bearings) majority at N abt.							
234		Reinforced Concrete Pier Cap	3	756	LF	636	75	45	0
		Remarks: (1080)(1090) CS3 - lg spalls with exposed heavily rusted bars P8 SF and bottom; P5 west end north face along w/(1130)(1120) narrow cracking to P8 cap bottom w/rust stains. (1130) CS2 - hl-narrow horizontal and vertical cracking most to P's 2, 5, 8.							



301	Pourable Joint Seal	4	216	LF	0	0	0	216
	Remarks: (2310)(2320) CS4 - N & S Abutments and at P2. Heavy leaking along w/majority of seals de-bonded along w/(2370) sections of steel joint armor missing at P2 NB and S abt SB. (1080) Small -lg spalls along N abt NB & SB							
306	Other Joint	4	144	LF	0	0	0	144
	Remarks: (2310) CS4 - Neoprene at P5 and P8. Heavy leaking to all. (2360)(2330) CS4 - Large Portions of Seal and Polymer concrete header missing/broken P8 and P5. (2330) joint seals are compressed, torn and missing.							
311	Movable Bearing	4	120	EA	0	57	63	0
	Remarks: Piers 2, 4, 5, 7, 8, 9 & 11: (1000)(2220) CS3 - Hvy surf rust along w/pack rust & section loss @ P2, 5, 8, noted misalignment to P5 & 8 brgs w/masonry plates along w/brg 2 @ N abt, brg 3 @ P8 sp 8 side & brg 2 @ P2 sp 3 side not brg properly. (1000) CS2 - Lt surf rust @ abts and piers 4, 7, 9, 11,.							
313	Fixed Bearing	4	40	EA	0	40	0	0
	Remarks: Piers 1, 3, 6 and 10: (1000) CS2 - Lt surf rust.							
321	Reinforced Concrete Approach Slab	4	10800	SF	9225	1100	475	0
	Remarks: (1130) CS3 - NB N. appr exhibiting wide trans & diag cracking. (1080) CS3 spalling along longitudinal bonded jts all appr's.. (1130) CS2 - numerous hl transverse and scattered random cracking to all.							
330	Metal Bridge Railing	4	1436	LF	1430	0	6	0
	Remarks: Impact (7000) damage to metal rail NB span 9							
331	Reinforced Concrete Bridge Railing	4	1436	LF	0	1430	6	0
	Remarks: (1130) CS2 - HL vert cracks, scatt horiz edge cracking to NB & SB to front and backfaces, It impact spall W wall top span 6.							

	Signature	Date
Inspection Team Leader:	Mike Valentine	09/28/2023
Agency Program Manager:	Raghad Adeis-Dahhan	12/11/2023

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