Illinois Department of Transportation

Routine Inspection Report

SN: 016-0195	District: 1	Spa	ans: 12	Appr.	Spans	s: 0	Skew: 0		ADT: 685)	Tr	uck Pct:	5	
ADT Un: 0	/laint. Co: 1	6 - C	Cook		Tw	sp: 35 -	Thornton	۱	Statu	is: 5-0	Open,	tempora	ry measures	5
Facility Carried: IL 1 (HALSTED	ST)				Featu	ire Crosse	ed: I	RR - IHB					
Location: 1.1 M N IL 83	3 N	/lunic	ipality: F	Riverdal	е		Team/Su	ub S	ection: 03	32/113	3 In	sp/Rte:	500	
Bridge Name:						Mater	rial & Typ	e: S	Steel Continu	ious /	Multi-	beam		
Insp. Intervals Routine:	12 Fi	actu	re Critica	1: 0	U	Inderwat	er: 0	:	Special: 3M		Elem	ent Leve	ı: 24	
90 - Inspection Date: 9)/15/2023				1	90C - Te	emp (°F):	68		90)B1 - Ir	n Depth:		
Is Delinquent:	Reason:													
90A - Agency Program	Manager: A	\deis	-Dahhan,	Ragha	d									
90A1 - Team Leader:	/alentine, M	ike A	١		9	0A2 - In:	spector:							
			90E	3 - Prev	vious I	Inspecti	on Rema	arks						
2022) This inspection was of that the photos were taken. In-depth completed using bu- ltem 59: Due to Bm end 2 n 2020 LRI showed 44% bear Bearings at Pier 8, Span 9 has been installed near the	ompleted ove ucket truck an orth end over n end section (Beams 1, 2, bearings betw	r mult d pole P8 sp loss f 3, 4, 5 /een tl	iple days, I e camera. oan 8 side. or beam 8, 5, 8 and 10 he concrete	Pier 8, S): Rocker e cap and	all phot Span 8. r bearin d diaph	tos are da gs are mo ragms ne	ted with the oving indep ar beams 1	e initia vende I, 2, 3	al day of the ir ent of the top a 3, 8 and 10 at I	nd bott Pier 8, s	on rega tom bea span 9	rdless of t aring plate side.	he actual date	•
					Res	sources								_
				<u> </u>										_
Time to Inspect (H:M):			Traffic	Control	:									
														_
				Inst	pector	's Appr	aisals							_
						•								_
	Prev	/ New	Tani Niu				مادم المسير م	Com	nments	معماله				_
58 - Deck Condition:	<u>5</u>	5	P5 Jano	m ni-na 1 tinos	rrow tr	ans crao	CKS INTU-0	blio	scatt snallow	spails	SINB õ	x SB, IG S		
			rebar thr	u-out.	nave	wom. o	Jint. Hum			x num	1 311-12	j 1301 Spe		
59 - Superstructure Cor 60 - Substructure Cond	ition: <u>2</u>	2	See Item bm end 3 along wi percenta moderat damage under ar Bay 1: 3. Bay 2: h Bay 3: h Bay 7: E Bay 9: V Memo da analysis 2.	n 90B. 2 @ P8 th bm 9 ages. Br e rust ju to bm 1 e deteri /4" hole ole 8" lo ole 5.5" end of / end of ated 09 of the s eavily s hp's pie	Bm en sp8 s @ P2 ms: Bc ust bey 10 spa iorating to we ong in long i Diaph f Diaph f Diaph f Diaph structu	nds: Hvy ide 53% 2 sp2 sid pttom fla yond 5' f n 12 bot g: st end o W end c n W end c n Buckleo n Buckleo n Buckleo n Buckleo n Buckleo n Buckleo n Buckleo n Column ,8 column	rusting w loss +/ e all have nge freckl rom bm e tom flang f diaphrag of Diaphra d of Diaphra	r/mea Acco e loss led r nds je. P gm (i agm iragr all ho abbing tted bing bing constant abbing tted See i aps.	asureable se ording to 20' s greater tha ust,peeling, on downslop 8 Sp8 diaph found 5-26-2 m ole. g under this e LRI 7/6/202 ⁻² condition ra item 90B. S P8 wall is h	ection 5 LRI in 10% blacke be side ragms 2023 c 2023 c 2025 c 20	loss (l bm 2 % but (ening(les mo s which during during during	ends v 2 & 9 ends do not gi soot) ove st bms, I h cribbin SF) hat due t superst g mappe ed to S fa	vorst P2 & 8 ds @ P8 sp8 ve er RR tracks it impact g is placed	, , , , ,
														_
62 - Culvert Condition:	N	N												
		-	1											_
61 - Channel Condition:	N	N												
			1											_
71 - Waterway Adequa	ev: N	N												
	·)· <u> </u>		1											
72 - Approach Rdwy Ali	gn: <u>8</u>	8												_



111 - Pier Navig Protect	ion: <u>N</u>	N
	Prev	New
36A - Bridge Railing Ade	equacy: <u>3</u>	3
		Prev New Prev New Prev New
Approach Guardrail Ade	quacy: 36B	Transitions:N36C - Guardrail:1136D - Ends:11
	Additio	al Inventory Data - To Be Verified During Routine Inspection
4004 14/2010 0 1/201	Τ	
108A - Wearing Surface	Type: <u>A</u>	108B - Type of Membrane: <u>F</u> 108C - Deck Protection: <u>A</u>
108D - Total Deck Thick	mess (In.):	<u>7.5</u>
59A - Paint Date (Mo/Yr): <u>06/20</u>	<u>8</u> 59B - Paint Type: <u>A Z - </u>
59C - Utilities Attached:	<u>9</u> <u>N</u>	<u>l</u>
113A - Scour Critical An	alysis Date:	<u>-</u> 113 - Scour Critical Rating: <u>-</u> 113B - Evaluation Method: <u>-</u>
	70A2 - Sing	e Unit Vehicles:
Weight Limit Posting:	70B2 - Com	bination Type 3S-1 (3 or 4 axles):
	70C2 - Com	bination Type 3S-2 (5 or more axles):
	70D2 - One	Truck at a Time: O

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 ties w/0 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



Element Level Inspection Report

SN: 016-0195	District: 1	Spans: 12	Appr. Spa	ans: 0	Skew: 0	ADT: 6850	Truck Pct: 5		
ADT Un: 0	Maint. Co:	16 - Cook		Twsp: 35	- Thornton	Status: 5-0	pen, temporary measures		
Facility Carried: IL 1 (HALSTED ST)					Feature Crossed: RR - IHB				
Location: 1.1 M N IL 83 Municipality: Riverdale				Team/Sub Se	ection: 032/113	Insp/Rte: 500			
Bridge Name:				Mate	Material & Type: Steel Continuous / Multi-beam				
Insp. Intervals Routine:	: 12 F	Fracture Critical	0	Underwa	ter: 0 S	Special: 3M	Element Level: 24		
93C - Inspection Date:	9/15/2023			93C6 -	Temp (°F): 6	8			
Is Delinquent:	Reason:								
90E - Agency Program	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 Appraisais									
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 (1080) CS3 - scatt shallow spalls an	VS: (1130)(1190) CS2 - HL-narrow trans & isol hI diag cracks, many tines wearing. (1080) CS3 - scatt shallow spalls and delams NB & SB, Ig spall @ NB P5 lane 1.						
			rebar. (1120) CS2 - numerous hI leach crac	bar. 120) CS2 - numerous hI leach cracks						
520	12	Concrete R	einforcing Steel Protective System	4	49420	SF	49420	0	0	0
		Remarks:	Top matt only.							
521	12	Concrete P	rotective 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 (3 just beyond 5' from bm ends on downslope sides most bms.	420), bl	ackening so	ot over F	R tracks	. Modera	te rust (1	000)
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, It 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 Prote	ctive Coating	4	71700	SF	0	63700	0	8000
		Remarks:	(3440) CS4 - Paint failure to most be Paint chalking throughout and blacke	eam bott	om fl's and t ot over RR tr	om end v acks.	webs and	flanges.	(3410) (CS2:
205		Reinforced	Concrete Column	3	55	EA	40	0	10	5
		Remarks:	(1080) (1090) CS4 Large spalls w/ hv col 1; sevral mapped cracked (1130) several col's P2 ,5, 8.	vly ruste areas, ł	d bars & bro ıp's to	ken tie t	bars P8 c	ol 1, 2, 3	& 5 along	ј w/Р2
210		Reinforced	Concrete Pier Wall	3	684	LF	394	40	250	0
		Remarks:	(1080)(1090) CS3 - Pier 8 very Ig 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 ledge & man cracking, thruout							
215		Reinforced	Concrete Abutment	3	168	LF	116	12	40	0
		Remarks:	(1130) CS2 - Numerous hl-narrow ve to stems and caps (No undermining of	(1130) CS2 - Numerous hl-narrow vert cracks both abts (1080) CS3 - Ig 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	ĹF	636	75	45	0
		Remarks:	(1080)(1090) CS3 - Ig spalls with exp face along w/(1130)(1120) narrow cra horizontal and vertical cracking most	oosed he acking to to P's 2	eavily rusted P8 cap bot , 5, 8.	bars P8 tom w/ru	SF and I ust stains	bottom; P . (1130) (25 west e CS2 - hl-r	nd north arrow



Element Level Inspection Report Structure Number: 016-0195

301	Pourable Jo	pint Seal	4	216	LF	0	0	0	216
	Remarks:	(2310)(2320) CS4 - N & S Abutments	s and at	P2. Heavy le	eaking a	long w/m	ajority of	seals de	-bonded
		along w/(2370) sections of steel joint along N abt NB & SB	armor n	nissing at P2	NB and	IS abt SI	B. (1080)) Small -	lg spalls
306	Other Joint		4	144	LF	0	0	0	144
	Remarks:	(2310) CS4 - Neoprene at P5 and P8 Seal and Polymer concrete header m torn and missing.	310) CS4 - Neoprene at P5 and P8. Heavy leaking to all. (2360)(2330) CS4 - Large Portions of al and Polymer concrete header missing/broken P8 and P5. (2330) joint seals are compressed, in and missing.						
311	Movable Be	earing	4	120	EA	0	57	63	0
	Remarks:	Piers 2, 4, 5, 7, 8, 9 & 11: (1000)(22 5, 8, noted misalignment to P5 & 8 bi side & brg 2 @ P2 sp 3 side not brg j 11,.	20) CS: rgs w/ma properly	3 - Hvy surf r asonry plate: . (1000) C	rust alon s along v S2 - It su	g w/pack w/brg 2 @ ırf rust @	∎rust & se	ection los org 3 @ F I piers 4,	s @ P2, 28 sp 8 7, 9,
313	Fixed Bear	ing	4	40	EA	0	40	0	0
	Remarks:	Piers 1, 3, 6 and 10: (1000) CS2 - Lt	surf rust	t.					
321	Reinforced	Concrete Approach Slab	4	10800	SF	9225	1100	475	0
	Remarks:	narks: (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 Bridg	e Railing	4	1436	LF	1430	0	6	0
	Remarks:	Impact (7000) damage to metal rail N	IB span	9					
331	Reinforced	Concrete Bridge Railing	4	1436	LF	0	1430	6	0
	Remarks:	(1130) CS2 - HL vert cracks, scatt h spall W wall top span 6.	oriz edg	e cracking to	NB & S	B to fron	t and bac	kfaces, I	impact

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

Use Additional Forms as Needed



Structure Number:

Location & Inventory Information

Facility Carried:

Location:

_Feature Crossed: ____ Team Section:

Mat/Type/#Spans:

	*** <u>PROPOSED MAIN</u>	ITENANCE	REPAIRS *	* *		
Repair	Repair Description	Date o	of Assigned-to	Priority	Quantity	Inspector
Code	Comments	mopeou		0000		<u> </u>
			I		-	
		_				
	-					
						1
			I			
	-					
						1
						-
						1
		I				
GENCY CODE	S: Bridge Crew, Team Section, Contract Maintenance,	Day Labor, PR	ORITY CODES: H -	- High, M –	Medium, L	- Low
	Multi-Year Program, Other					

(Add new sheets as needed)

Illinois Department of Transportation

Bridge Maintenance Request Form

Structure Number:	016-0195	Prepared By:	M. Valentine
Facility / Feature:	IL. 1 (Halsted St.)/IHB RR	Date Prepared:	9-29-2023
Location:	1.1 miles north of IL. 83	Work Type:	Loose concrete removal
Team Section:	Harvey		
Inspection Section	South	Priority:	Medium

Work Description & E	stimated Duration	_ Need to remove	Need to remove apparent loose concrete from span 1 in bays 2 & 8. Check all bays.					
Estimated Duration:		1	Estimated Crew Size:	?				
Special Needs Equipm	ent or Material	Bucket truck						

<u>Special needs Equ</u>	<u>apment or Material -</u>	Bucket fruck	
Traffic Control -	Our crew for span 1.	Flagging needed	

Crew Information

Sketches & Photos

	Date :		
	Cre	ew	Hours
S			
ord			
Rec			
len			
son			
Per			
	Quantity	:	
	Invent	ory #	Hours
ds			
cor			
t Re			
ient			
ipn			
Equ			