

**CITY OF CHICAGO - DEPARTMENT OF TRANSPORTATION
BRIDGE INVENTORY REPORT**

Structure No. 016-6037

**Ewing Avenue (US41 – 92nd Street)
over
the Calumet River**

Inspection Date: August 10, 2021



A Joint Venture Teaming of Alfred Benesch &
Company and Collins Engineers, Inc.

EXECUTIVE SUMMARY

On August 10th and September 13th, 2021, CBIT performed a routine and fracture critical inspection of this structure in accordance with NBIS, FHWA, IDOT, and CDOT guidelines. The findings from this inspection indicate the following general ratings for this structure:

- Deck is in satisfactory condition (overall condition rating = 6)
- Superstructure is in poor condition (overall condition rating = 4)
- Substructure is in fair condition (overall condition rating = 5)

These overall condition ratings correspond to the rating terminology defined by both NBIS and IDOT guidelines. According to the Illinois Highway Information System Structure Information and Procedure Manual, the structural evaluation of a bridge is generally coded no higher than the lower of the deck's overall condition rating, the superstructure's overall condition rating, or the substructure's overall condition rating. Consequently, this structure is in poor overall condition, which corresponds to an NBIS and IDOT general condition rating of 4.

Condition Rating History

	2011	2013	2015	2018	2019
Deck	7	6	6	6	6
Superstructure	4	4	4	4	4
Substructure	6	6	5	5	5

GENERAL STRUCTURE INFORMATION

Structure: Ewing Avenue (92nd Street) over the Calumet River

Structure No.: 016-6037

Bridge Description: The structure is a double-leaf, trunnion type bascule bridge. The structure has an overall length of approximately 338 feet, a roadway width of approximately 36 feet and an overall width of 60 feet.

Year Built: 1914, Reconstructed in 1992

ADT: 2019 – 11,700 (4% trucks)

Inspection Date/Duration: 08/10/21 - 2 inspectors @ 10 hrs. = 20 hrs. (topside & underside)
09/13/21 - 2 inspectors @ 6 hrs. = 12 hrs. (bridge houses)
32 hrs. (total)

Temp./Weather Condition: 80°F / Sunny (08/10/21)
78°F / Sunny (09/13/21)

Required Inspections:

Type	Frequency	Previous Date
Routine	24 months	08/08/2019
Element Level	N/A	
Fracture Critical	12 months	08/24/2020
Special	N/A	
Underwater	60 months	06/04/2019

Bridge Status: The bridge is open to traffic with no restrictions.

Additional Information: See Master Structure Report (S-107) at the end of this report for additional structure information.

Access & Equipment: The underside of the movable span was inspected from a movable bucket boat. Climbing techniques and/or a ladder can be used to inspect the top chords and abutments. The remaining portions of the bridge were visually inspected from the ground. Since this bridge opens for marine traffic upon request, maintain radio contact with the bridge operator while onsite is required. The bridge houses require the CDOT keys to access.

Traffic Control: None

Firm – Inspectors Present: Collins Engineers, Inc. – Joshua Simpson and Brandon Willis
(no initials)

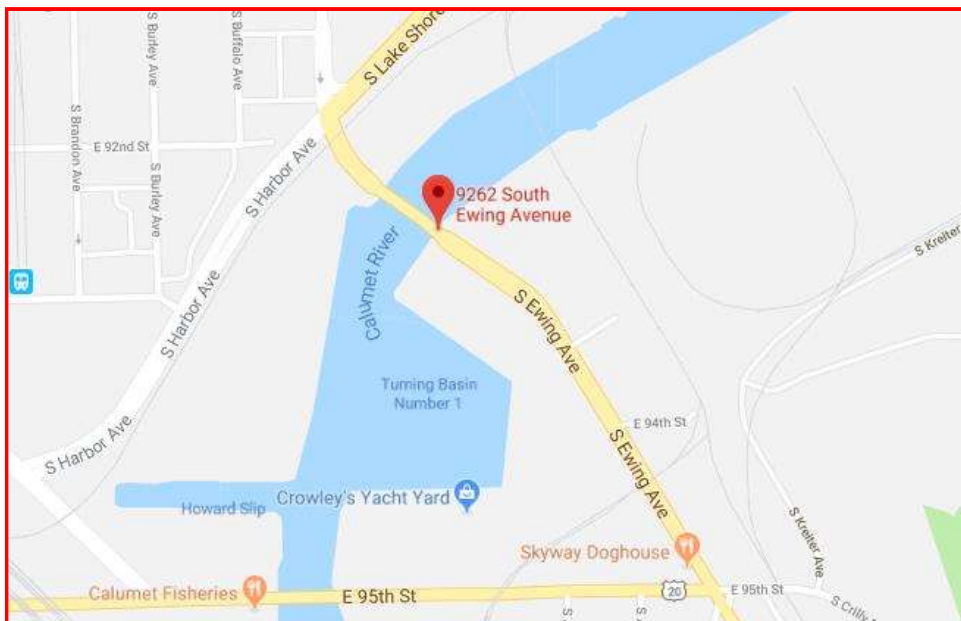
Remarks: The movable leaves of the bridge are operable.

Terminology: For the purpose of this report, the spans are numbered from north to south, and the stringers are numbered from east to west.

Section loss described in this report ranges as follows:

- Minor up to 10%
- Moderate > 10% up to 30%
- Heavy > 30%

Location Map:



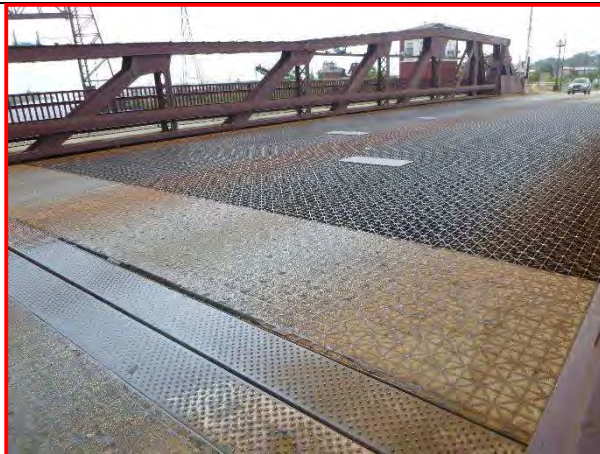
INVENTORY INFORMATION

I. DECK

- The deck is in satisfactory overall condition corresponding to a NBIS and IDOT condition rating of 6.

Wearing Surface

- In the movable span, the open steel grating wearing surface with concrete-filled sections exhibits moderate corrosion, minor broken sections of grating, and welded plate repairs (see Photograph 1).
- The bare concrete wearing surface in the fixed spans exhibits narrow transverse and longitudinal cracking as well as map cracking near the curbs (see Photograph 2).
- The bare concrete wearing surface in the fixed spans exhibits 4 minor spalls along the median.



1. Overall movable span roadway, looking southeast.



2. Typical bare concrete deck, fixed span, looking southeast.

- The concrete filled section along the center break exhibits missing sections of concrete up to 10' in length (see Photograph 3).
- Pavement markings are typically heavily worn and fading.



3. Concrete filled section along center break, looking east.

Parapets / Bridge Railings

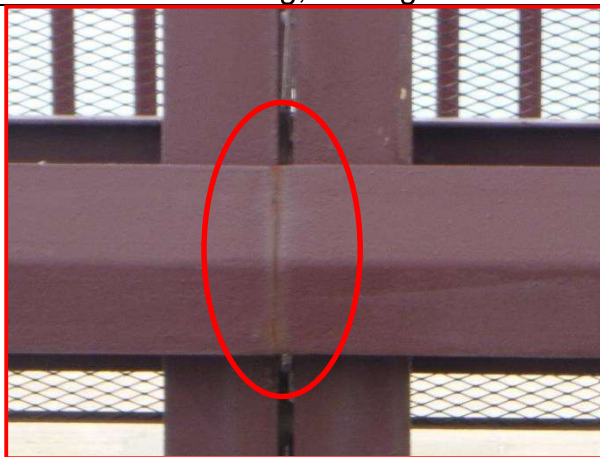
- The bridge railing posts along the fixed spans exhibited areas of 50% to 100% section loss (see Photographs 4 and 5).
- The west brush rail in Span 2 exhibits a full-length vertical crack (see Photograph 6).



4. Northwest railing, looking west.



5. Northwest rail post, looking south.



6. West brush rail, Span 2, looking west.

- The west brush rail in Span 3 exhibits 3' long section that is bent (see Photograph 7).



7. West brush rail, Span 3, looking north.

Curbs

- The curbs in the fixed and movable spans exhibited rust staining, minor edge spalls, and vertical hairline cracking at 3'-4' spacing (see Photograph 8).



8. East curb, Span 1, looking east.

Median

- The striped median along Span 3 exhibits heavy fading (see Photograph 9).



9. Median, Span 3, looking east.

Sidewalks

- The sidewalks in the fixed spans exhibit scattered longitudinal and transverse narrow cracks as well as minor spalls near the expansion joints (see Photograph 10).
- The sidewalks in the movable spans exhibit no notable defects.



10. Southwest sidewalk, looking north.

Drain System

- There are no drains on the structure.

Light Standards

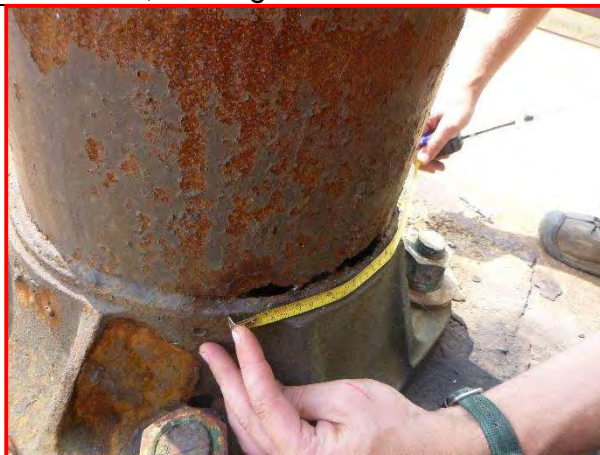
- The light standards exhibit minor to moderate corrosion, missing handhole covers, and missing anchor bolt covers (see Photographs 11).
- Multiple light standards exhibited missing sunshades (see Photograph 12).
- The southwest light standard base exhibited a 7"x1" hole (see Photograph 13).



11. Typical light standard base, southwest corner, looking north.



12. Northwest light standard, looking south.



13. Southwest light standard base, looking southwest.

Expansion Joints / Relief Joints / Breaks

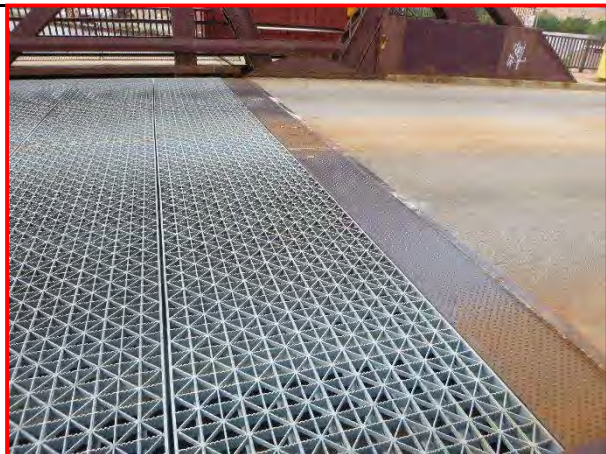
- The expansion joints exhibit sections of depressed and torn glands, moderate to heavy corrosion of the steel rails, and moderate debris accumulation (see Photograph 14).
- The sidewalk expansion joints exhibited heavy corrosion and debris buildup (see Photograph 15).
- The center and rear breaks along Span 3 exhibit moderate corrosion (see Photograph 16).
- At 85° Fahrenheit, the center break at the east sidewalk has a 1.75" gap, and the west sidewalk has a 2.125".
- The north center plate at the east sidewalk exhibits a 1" vertical distortion (see Photograph 17).



14. Typical south expansion joint, looking east.



15. Southwest sidewalk expansion joint, looking east.



16. North break joint, looking northwest.



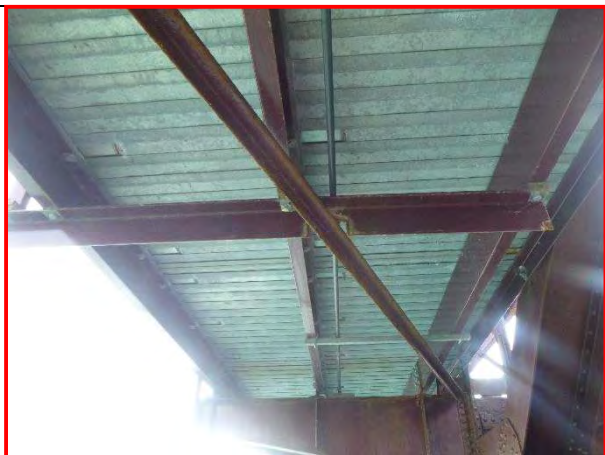
17. East sidewalk center plate, looking south.

Deck Soffit

- The underside of the movable spans exhibit minor to moderate corrosion (see Photograph 18).
- The underside of the sidewalk movable spans exhibit no notable defects (see Photograph 19).
- The underside of the fixed spans exhibit hairline transverse and longitudinal cracking (see Photograph 20).



18. Span 3 underside, looking north.



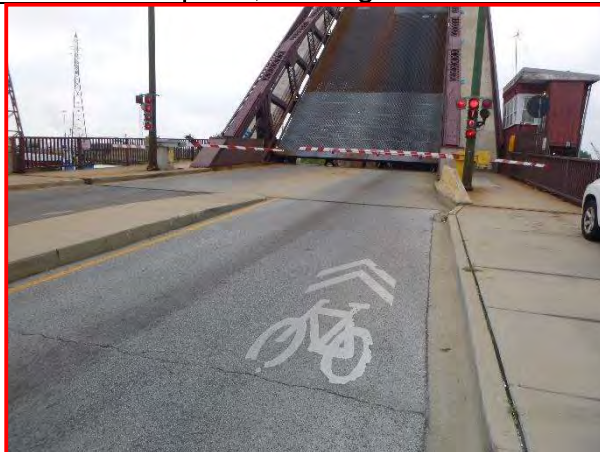
19. Sidewalk underside, looking south.



20. Typical transverse cracks in underside of fixed spans, looking south.

Approaches

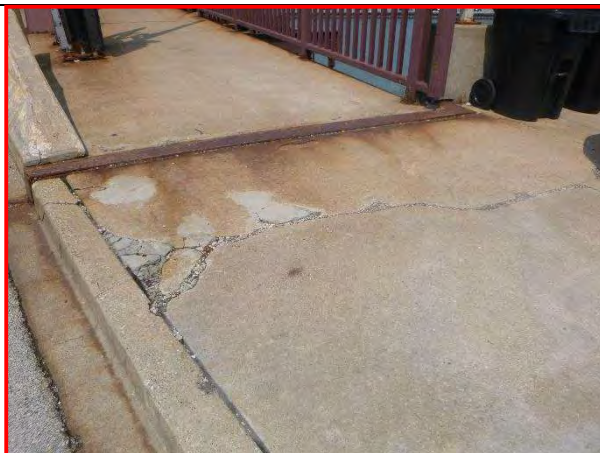
- The asphalt approaches exhibit scattered hairline to narrow transverse and longitudinal cracking throughout (see Photograph 21).
- The approaches have settled $\frac{1}{2}$ " to $\frac{3}{4}$ " in reference to the structure (see Photograph 22).
- The sidewalk approaches exhibit moderate to heavy narrow to wide cracking and spalling (see Photograph 23).



21. Typical approach condition, looking South.



22. North approach expansion joint, looking northeast.



23. Southeast sidewalk approach, looking northeast.

Approach Guardrails

- There are no approach guardrails on the structure.

Fences

- The fencing at the southwest corner of the bridge exhibits no notable deficiencies (see Photograph 24).



24. Southwest fence, looking northwest.

Utilities

- The northwest approach sidewalk contains a gas line and terminal. The utility is protected by a guardrail (see Photograph 25).



25. Gas Utility, northwest approach sidewalk, looking northwest.

Signage

- Signage throughout the structure are typically faded (see Photograph 26).



26. No parking signage, looking east.

Other

- The life preservers were in place (see Photograph 27).



27. No parking signage, looking east.

II. SUPERSTRUCTURE

- The superstructure is in poor overall condition which corresponds to a NBIS and IDOT condition rating of 4.



28. Overall underside, looking north.

Bearings

- The bearing at Stringer 9 at the South Abutment is heavily deteriorated and crushed (see Photograph 29).
- The bearing at Stringer 3 at the South Abutment is rotated west.
- The bearings at Stringers 2 and 3 at the North Abutment exhibit moderate pitting on the front face. The remaining bearings exhibit minor to moderate corrosion.
- The sidewalk stringer bearings exhibit several cracked and broken castings and several missing anchor bolts.
- The live load bearings typically exhibit heavy corrosion and minor section loss. (See Photograph 30).
- The southeast live load bearing is misaligned 1" to the north and 1/4" to the west. The northeast live load bearing is rotated clockwise, misaligned 4" to the south and 1-2" to the west. The northwest live load bearing is misaligned 4" to the south and 2" to the east. The southwest live load bearing is misaligned 2" to the north and 1/4" to the east.
- The trunnion bearings typically exhibit areas of minor corrosion and pitting (see Photograph 31).



29. Stringer 9 bearing at South Abutment, looking south.

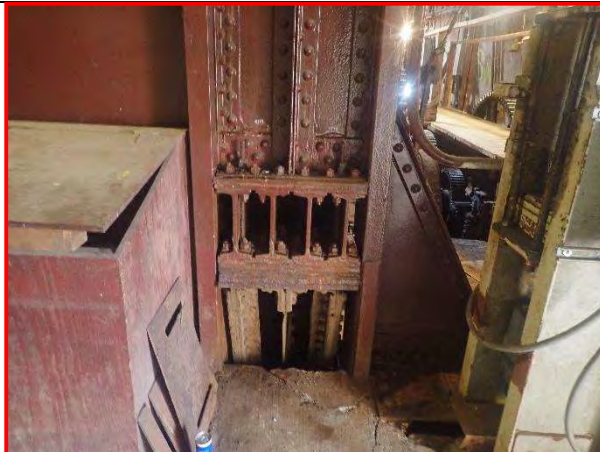


30. Northeast live load bearing, looking north.



31. Typical trunnion bearing, looking southwest.

- Trunnion bearing anchors exhibit minor to moderate section loss, predominately at the bottom.
- The secondary live load bearings have a gap between bumper and anchor shoe of approximately 1/16" to 1/2".
- The secondary live load bearings exhibit moderate to heavy corrosion. (See Photograph 32).



32. Northwest secondary live load bearing, looking south.

Stringers

- The roadway stringers in the movable span exhibit heavy corrosion and moderate section loss on the bottom flange, moderate areas of corrosion and section loss in the web, and moderate corrosion with moderate to heavy section loss in the top flange (see Photograph 33).
- Stringers along the moveable and fixed spans typically exhibit heavy deterioration (see Photograph 34).
- The stringers in the fixed spans have drilled holes in the bottom flanges.
- The sidewalk stringer by the west curb at the South Abutment exhibits heavy corrosion and a corrosion hole above the bearing.



33. Typical movable span roadway stringer, looking east.



34. Stinger 8, north leaf, between floorbeams 4 and 6, looking south.

- The floorbeam to stringer connection typically exhibits heavy corrosion and minor section loss (see Photograph 35).
- Stringer 5 exhibits a bent bottom flange near the anchor column floorbeam in Span 5. (See Photograph 36.)
- The sidewalk framing in the fixed span has no notable defects.
- The stringers in panel 1 have been replaced (see Photograph 37).



35. Typical stinger to floorbeam connection, looking north.



36. Span 5, Stringer 5 at anchor column girder, looking west.



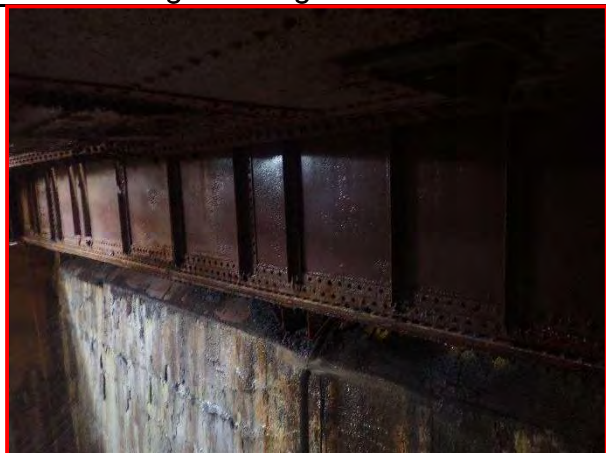
37. Panel 1, between floorbeam 8 and 10, looking northeast.

Girders

- The trunnion cross girders exhibit minor to moderate pitting in the end bays for the full height of the web (See Photograph 38).
- From the river pier to the trunnion cross girder the longitudinal trunnion girders exhibit minor to moderate section loss (See Photograph 39).
- From the trunnion cross girder to the pinion, the longitudinal trunnion girders exhibit moderate to heavy section loss.
- From the pinion to the back of the truss, the longitudinal girders exhibit moderate corrosion and minor section loss.
- The northwest longitudinal girder exhibits a 1' by 3" hole under the pinion in the east web (See Photograph 40).
- The longitudinal girders have limited access.



38. Moderate pitting to end bay of trunnion cross girder, looking south.



39. Southeast longitudinal girder, looking northeast



40. Hole in bottom of web in northwest longitudinal girder, looking southwest.

Floorbeams

- The floorbeams in the movable span exhibit heavy corrosion, moderate debris, heavy section loss, and web holes measuring 1/2" to 4" in diameter (see Photograph 41).



41. Typical moveable span floorbeam condition, looking north.

- The floorbeam stiffeners exhibit moderate to heavy corrosion and scattered areas of section loss (see Photograph 42).
- Floorbeam 8-8N exhibits several web holes measuring 1" to 3" in diameter (see Photograph 43).
- The floorbeam to truss connection exhibits minor to moderate corrosion and isolated areas of holes measuring up to 2" (see Photograph 44).



42. Floorbeam 8-8S stiffener, looking south.



43. Floorbeam 8-8N, looking northwest.



44. Typical condition of anchor column floorbeam, looking northwest.

Lateral Bracing

- The lattice trusses exhibit minor corrosion (see Photograph 45).



45. Southwest lattice truss, looking south.

- The lateral bracing in the fixed and movable spans exhibit heavy corrosion and minor section loss throughout (see Photographs 46 and 47).
- The lateral bracing connections exhibit scattered areas of moderate corrosion and small holes.



46. Typical lateral bracing over counterweight pits, looking west.



47. Lateral bracing, north leaf, looking east.

Trusses

- The trusses typically exhibit scattered areas of minor to moderate corrosion, scattered holes in some members, and section loss of various rivet heads and welded attachments (see Photograph 48).
- Bottom chord member 4-6 at the northeast truss, bottom chord member 6-8 at the northeast truss, and bottom chord member 2-4 at the southeast truss exhibits impact damage with the greatest deflection noted at member 2-4SE (See Photograph 49).
- The lacing bars on the bottom chords exhibit minor to moderate corrosion, isolated areas of bending, and broken bars throughout (see Photograph 50).
- Truss members 2-3NW, 4-6NW, 0-2NW, 4-5NW, 4-6NE, 8-10NE, 4-6SE, and 0-2SW are slightly bent out-of plane (see Photograph 51).



48. Bottom chord, northeast truss, looking northwest.



49. Bottom chord, member 2-4SE, looking south.



50. Typical lacing bars, looking southwest.



51. Northeast truss, member 0-2, looking southwest

- The batten plate of bottom chord 4-6 at the northwest truss exhibits multiple holes up to 3” in diameter and moderate section loss (see Photograph 52).
- The lateral bracing and bottom chord 0-2 connection at the southwest truss exhibits a ½” diameter hole, moderate section loss, and moderate to heavy corrosion (see Photograph 53).
- The gusset plates typically exhibit heavy corrosion and minor to moderate section loss (see Photograph 54).
- The batten plate on bottom chord 6-8 at the southwest truss exhibits heavy section loss and moderate deterioration (see Photograph 55).



52. Batten plate of bottom chord 4-6, northwest truss, looking north.



53. Bottom chord 0-2 and lateral bracing connection, southwest truss, looking west.



54. Gusset plate 8, southeast truss, looking west.



55. Batten plate, southwest truss, looking southeast.

- The bottom chord 2-4 at the southeast truss exhibits a vertical stress crack and moderate corrosion (see Photograph 56).
- Truss member B-12 at the southeast truss exhibits concrete spalling of the counterweight as well as minor to moderate corrosion (see Photograph 57).
- The top chord exhibits poor quality field welds and torch-cut holes for the welded attachments including the brush rails and light fixtures (see Photograph 58).
- The top and bottom of the top chords exhibit 1”-2” strip of minor corrosion along all four trusses for full length (see Photograph 59).



56. Bottom chord 2-4, southeast truss, looking up.



57. Truss member B-12, southeast truss, looking south.



58. Truss and steel angle connection, looking southeast.



59. Typical top chord member, west truss, looking east.

- The rear arms of the trusses between Nodes A, 14, and 15 exhibit large cracks/corrosion holes. The southeast truss exhibits a 22 ½" horizontal crack from the face of member 14-15SE and 30" vertical crack along the connection of the plate and member 14-15SE. The southwest truss exhibits a 25" by 3" corrosion hole. The northeast and southwest trusses exhibit a horizontal 25" corrosion hole/crack from the face of member 14-15NE / 14-15SW. (No change since previous inspection). (See Photographs 60 thru 63).



60. Southeast truss rear arm crack/corrosion hole, looking west.



61. Southwest truss rear arm crack/corrosion hole, looking east.



62. Southwest truss rear arm crack/corrosion hole, looking west.



63. Northeast truss rear arm crack/corrosion hole, looking southwest

Counterweights

- Counterweights exhibit heavy concrete spalling with exposed steel framing and narrow to wide cracks. (See Photograph 64.)
- The steel plates exhibit heavy corrosion and section loss.



64. Top of north counterweight, looking south.

Bridge House

- The bridge houses have spalling around the waterline with exposed rebar (see Photograph 65).
- The exterior bridge house stairs exhibit heavy corrosion on the support members, and the concrete stairs exhibit cracks and spalls (see Photograph 66).
- The bridge house enclosure walls exhibit rust stains and spalls at the edge of the sidewalk (see Photograph 67).



65. South bridge house at the water line, looking south.



66. Northwest stairwell, looking north



67. Overall Northwest bridge house, looking northeast.

Utilities

- There are lights attached to the top chord directly or to angles welded to the trusses above the deck (see Photograph 68).
- There are conduits attached to the lattice truss.



68. Lights attached to the truss, looking south.

Other

- The southeast catwalks below the center break exhibit minor pitting and corrosion on the grating. In lieu of steel grating, the northeast and southwest catwalks have steel plating installed, and the northwest catwalk has fiberglass grating.
- The southeast catwalk grating is deformed (See Photograph 69).
- The supporting angles for the center break catwalks exhibit minor to heavy corrosion and minor section loss.
- A previously dislodged lens and sun shade, has been repaired.



69. Southeast catwalk, looking north.

III. SUBSTRUCTURE

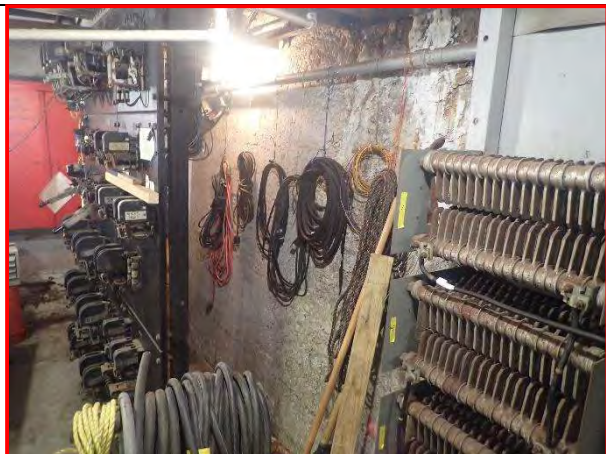
- The substructure is in fair overall condition corresponding to a NBIS and IDOT condition rating of 5.

Abutments/Wingwalls

- The visible portions of the abutments exhibit minor to moderate scaling, various vertical leaching hairline to narrow cracks, minor spalling, and horizontal cracks near the base (see Photographs 70 and 71).
- The abutment bearing seats exhibit various sized vertical cracks.
- Between bearing seats 4-7 on the South Abutment, there is a spall (see Photograph 72).
- The North Abutment has delaminations between bearing seats 1 and 2 and 5 and 6.
- The abutment backwalls have isolated areas of rust stains, signs of moisture, leaching narrow cracks, and spalls with exposed and corroded reinforcement



70. South Abutment, Looking southeast.



71. South Abutment, Looking south.



72. South Abutment bearing seats, looking southeast.

Piers

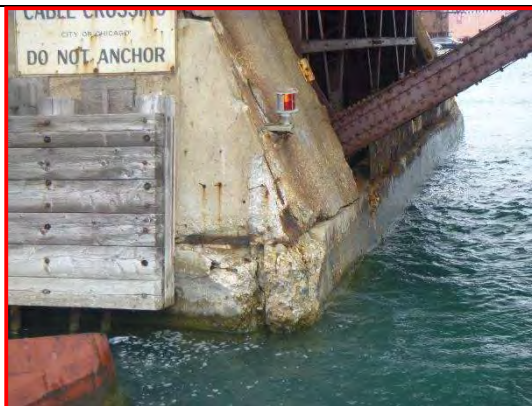
- The north and south river piers have steel guards with heavy corrosion and section loss. The north river pier exhibits impact damage (see Photograph 73).
- The river side of the north river pier exhibits a 6'x3' spall with exposed rebar near the northwest live load bearing.
- The north face of the north river pier exhibits several narrow to wide diagonal, vertical, and horizontal leaching cracks and small spalls (see Photograph 74).
- Both the north and south river piers exhibit narrow leaching cracks, several spalls with exposed reinforcement along the waterline, and a few delaminated areas (see Photograph 75).
- The bottom flange of the north anchor column floorbeam is bent 1¼" near midspan and has a web repair.
- The anchor column floorbeams typically have welded attachments and drilled holes in the bottom flange.
- The south anchor column floorbeam has a bent stiffener.



73. Steel guard rail on the north river pier, looking north.



74. View of north face of north river pier, looking south.



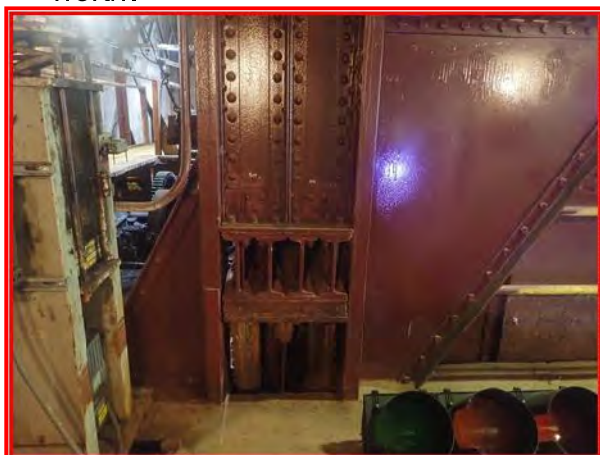
75. View of west corner of north pier, looking northeast.

Columns

- Southeast anchor column has a 5” long crack in the web and a 2 ¾” long crack in the angle leg above bumper west of the stiffener. On the east side of the stiffener, the web has a vertical 1” crack (see Photograph 76).
- The northeast anchor column has a 5 ½” long crack on the west side of the stiffener and a 3 ½” long crack on the east side of the stiffener in the web plate above the bumper (see Photograph 77).
- Northwest anchor column has a 5 ½” long crack on the west side of the stiffener in web plate above bumper and minor pitting (see Photograph 78).
- The southwest anchor column has welded repairs at the locations of the cracks on the other columns but has a 3” x 1” corrosion hole in the west angle (see Photograph 79).
- Anchor columns exhibit up to 1” to 2 ½” diameter corrosion holes near the base.
- The northeast sidewalk column in the south house exhibits heavy section loss in the lacing bars and batten plates, and bent flanges. The sidewalk columns typically exhibit broken lacing bars and minor corrosion.



76. Southeast anchor column, looking north.



77. Northeast anchor column, looking south.



78. Northwest anchor column, looking south.



79. Southwest anchor column, looking north.

Counterweight Pits

- The counterweight pit walls exhibit several narrow to wide diagonal, vertical, and horizontal leaching cracks and small spalls (see Photograph 80).
- The counterweight pits have shallow water and minor debris accumulation.



80. North counterweight pit walls, looking east.

Fender System

- There are no fenders protecting the river piers. The timber pile and steel plate protection systems are in place but exhibit deterioration. A section of the northeast and northwest timber pile dolphins are broken due to impact (see Photograph 81).



81. Typical condition of timber pile and steel plate protection system, looking north.

Other

- The navigational lights attached to the substructure are in place and functioning (see Photograph 82).



82. Navigation lights on the south river pier, looking south.

IV. STEEL PROTECTIVE COAT SYSTEM

- On a scale of 5 to 1 (5 being new; 1 being failed), the paint system for this structure is rated a 1 (failed).

Superstructure

- The paint system has failed in most of the movable span elements below the deck (see Photograph 83).
- The paint system in the truss members above the deck and the fixed spans exhibit minor deterioration with scattered locations of moderate deterioration. The longitudinal trunnion girders exhibit worse deterioration.



83. Superstructure paint, looking east.

Substructure

- The paint system exhibits moderate deterioration in the bottom 1’-3’ of the anchor columns and various sidewalk columns (see Photograph 84).



84. Substructure paint system, looking down.

V. CHANNEL

- The channel is in very good condition which corresponds to a NBIS and IDOT general condition rating of 8.

VI. UNDERWATER INVESTIGATION

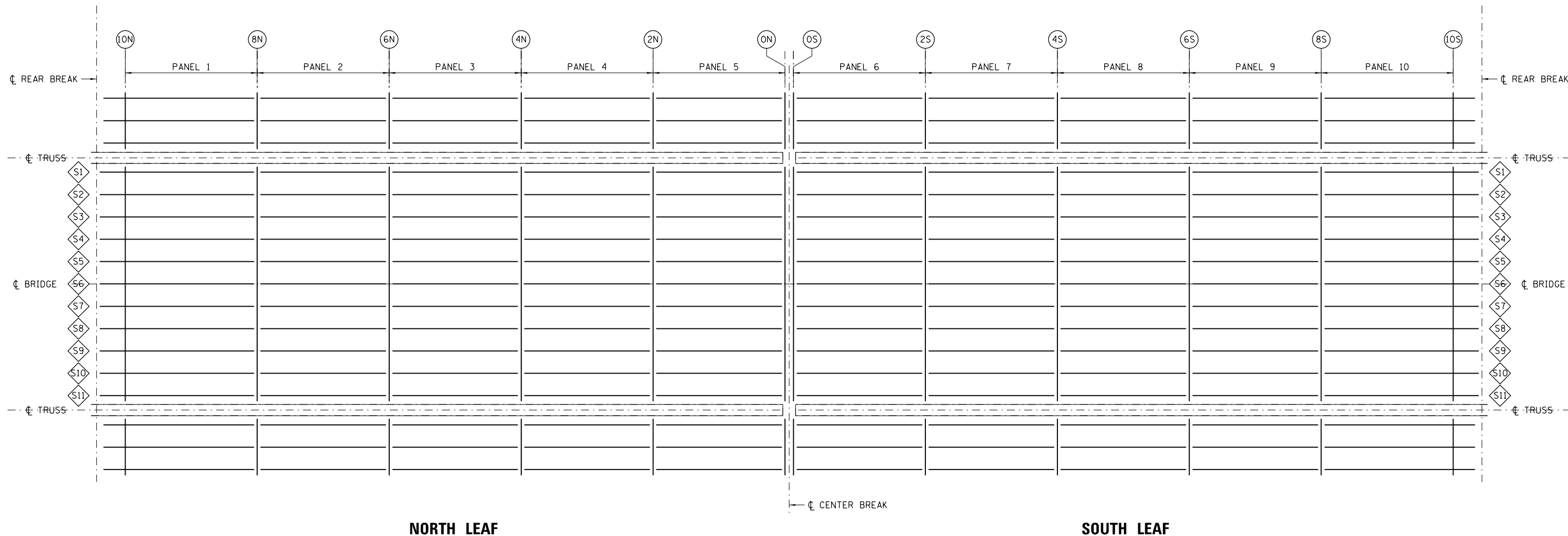
- An underwater investigation was conducted by Collins Engineers, Inc. on June 4, 2019. At the time of inspection, the affected elements were rated fair and given a NBIS and IDOT general condition rating of 5. Please refer to the underwater inspection report for specific inspection findings regarding the underwater bridge elements.

VII. MECHANICAL INSPECTION

- The mechanical inspection was conducted by HNTB Corporation on October 6, 2016. Please refer to the mechanical bridge inspection report for specific inspection findings regarding the mechanical bridge elements.

VIII. ELECTRICAL INSPECTION

- The electrical inspection was conducted by HNTB Corporation on October 6, 2016. Please refer to the electrical bridge inspection report for specific inspection findings regarding the electrical bridge elements.



NOTES:

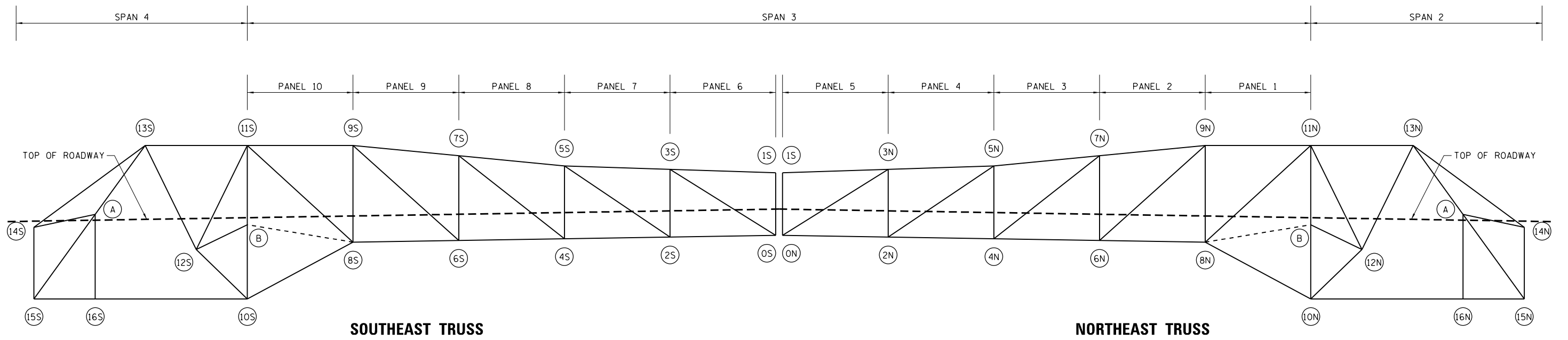
1. FRAMING PLAN BASED OFF OF EXISTING BRIDGE DRAWINGS.



FRAMING PLAN – MOVABLE SPAN
NOT TO SCALE

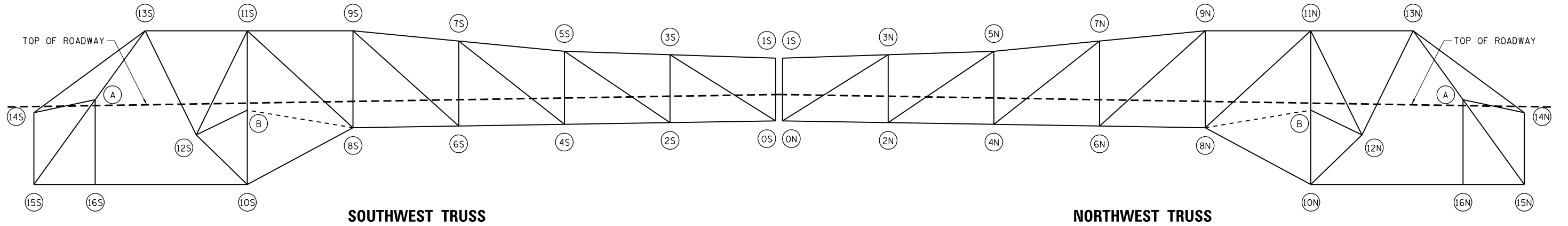
LEGEND

- E PANEL POINT DESIGNATION
- ◇S1 STRINGER NUMBER " 1 "



SOUTHEAST TRUSS

NORTHEAST TRUSS



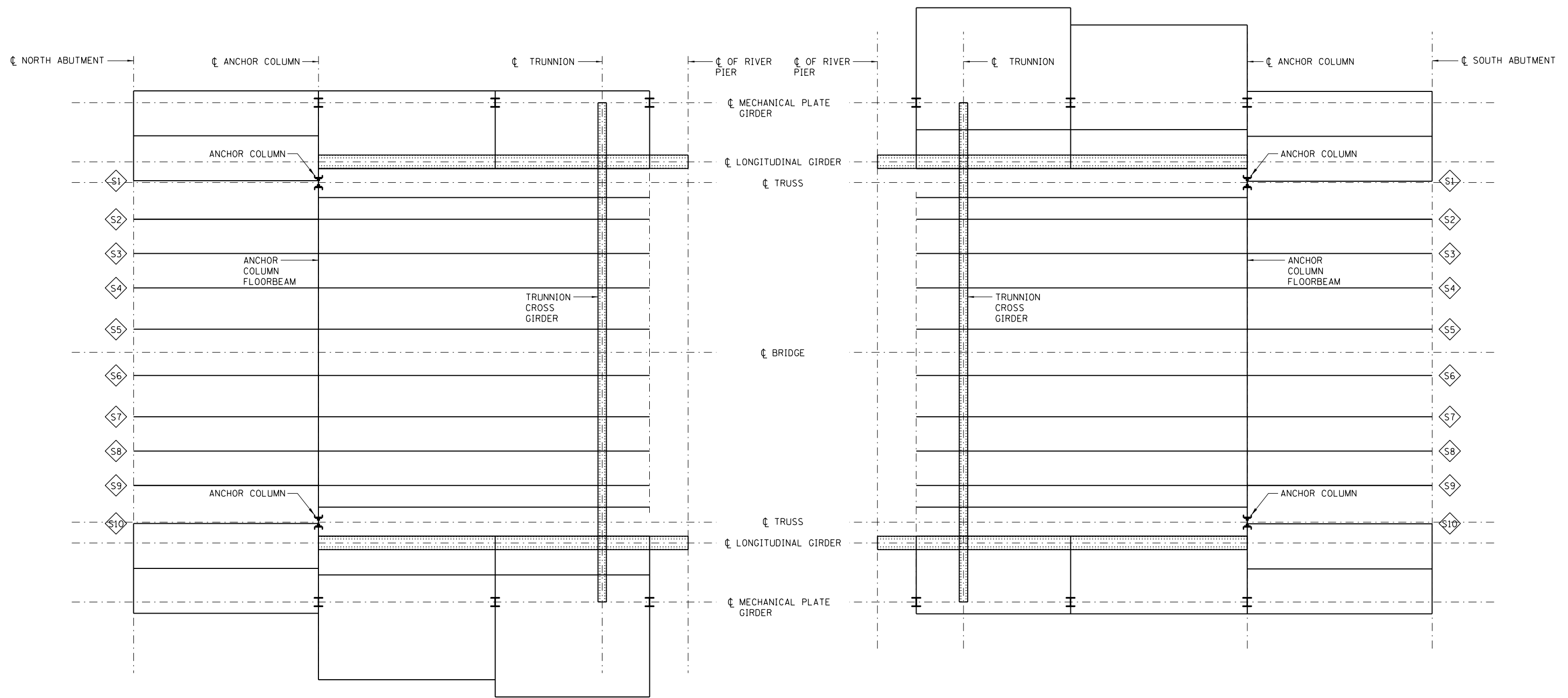
SOUTHWEST TRUSS

NORTHWEST TRUSS

TRUSS ELEVATIONS
NOT TO SCALE

NOTES:

- ELEVATIONS BASED OFF OF EXISTING BRIDGE DRAWINGS.



NORTH ROADWAY AND SIDEWALK FRAMING

SOUTH ROADWAY AND SIDEWALK FRAMING

LEGEND

◊ S1 STRINGER NUMBER " 1 "

NOTES:

1. FRAMING PLAN BASED OFF OF EXISTING BRIDGE DRAWINGS.



FRAMING PLAN – FIXED SPANS
NOT TO SCALE

SOUTH EWING AVENUE (92ND STREET)
OVER THE
CALUMET RIVER
STRUCTURE NUMBER 016-6037

EXHIBIT 1
PAGE 2 OF 3





SN: 016-6037	District: 1	Spans: 1	Appr. Spans: 4	Skew: 0	ADT: 11700	Truck Pct: 4
ADT Un:	Maint. Co: COOK	Twsp: HYDE PARK (CHICAGO)	Status: OPEN - NO RESTRICT			
Facility Carried: EWING AVE(US-41)	Feature Crossed: CALUMET RIVER					
Location 3331 E. 92ND STREET	Municipality: CHICAGO	Team/Sub: /	Insp/Rte:			
Bridge Name: EWING AVE. BRIDGE	Material & Type: STEEL/MOVEABLE - BASCULE					
Insp. Intervals Routine: 24	Fracture Critical: 24	Underwater: 60	Special: N/A	Element Level:		

90 – Inspection Date: 8 / 10 / 21	90C – Temp. (°F) 80	90B1 – In-Depth <input checked="" type="checkbox"/>
Is Delinquent: <input type="checkbox"/> Reason:		
90A – Agency Program Manager: V. Jurca	90A3 – Consultant Program Manager: M. Bendok	
90A1 – Team Leader: J. Simpson	90A2 – Inspector: B. Willis	

90B – Inspection Remarks:

Previous Inspection	Jt. Openings: N. Abut.=1"; S. Abut.=1" (Measured at W. Gutterline)NE, NW, & SE anchor cols have cracks up to 6" in length above the bumper on ea. side of stiffener. Floorbeams in the movable span have heavy corr., SL, & holes. Both faces of the bottom chord member 2-4SE are bent out-of-plane. Member 2-4SE has an out-of-plane bending crack in the outside bottom flange. The bottom chord has corr. holes in the webs & inner diaphragms. The rear arms of the trusses have large
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Resources

Time to Inspct (H:M): 16:15	16:00	Traffic Control: N	Boat: N	Waders: N	Snooper: N
Ladder: Y	Manlift: M	N	Bucket Truck: N	Other: Barge	Bucket Boat

Inspector's Appraisals

	Prev	New	Comments
58 – Deck Condition:	6	6	The steel deck grating exhibits moderate corrosion and isolated broken grids.
59 – Superstructure Cond:	4	4	The steel superstructure exhibits cracks and out of plane bending in primary members.
60 – Substructure Cond:	5	5	The steel substructure exhibits heavy corrosion and moderate section loss up to 10%.
62 – Culvert Condition:	N	N	
61 – Channel Condition:	8	8	
71 – Waterway Adequacy:	9	9	
72 – Approach Rdw Align:	6	6	
111 – Pier Navig Protection:	3	3	Sections of the NE & NW timber pile dolphins are broken

90B – Inspector Remarks:

The movable span grating exhibits isolated broken sections and moderate corrosion. Floorbeams in the movable span exhibit heavy corrosion and section loss with section thru holes present. Both faces of the bottom chord member 2-4SE are bent out-of-plane with bending cracks in the outside bottom flange. The bottom chord exhibits corrosion holes in the web and inner diaphragms. The rear arms of the trusses exhibit large cracks and holes. The live load bearings are all misaligned typically between 1" to 4". One bearing is crushed on the S Abutment below Stringer 9. Several bearings at the abutments exhibit crack and broken castings.

Routine Inspection Report

Structure Number: 0166037

Additional Inspection Data

36A – Bridge Railing Adequacy:	Prev	New		Rail Types:						
	2	2			Prev	New	New	New	New	New

Approach Guardrail Adequacy:	36B – Transitions:	1	1	36C – Guardrail:	1	1	36D – Ends:	1	1
------------------------------	--------------------	---	---	------------------	---	---	-------------	---	---

108A – Wearing Surface Type:	Prev	New		If "L-Other" Describe: _____
	P	P		
108B – Type of Membrane:	F	F		If "E-Other" Describe: _____
108C – Deck Protection:	J	J		If "I-Other" Describe: _____
108D – Total Deck Thickness (in):	5.0	5.0		

59A – Paint Date (Mo/Yr):	Prev	New		
	09/2012	09/2012		
59B – Paint Type:	IZ	I Z		Color: Fascia - ____: Inter. - ____: Railing - ____.


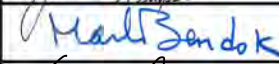
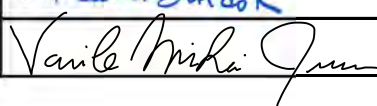
59C – Utilities Attached:	Prev	New		If "B-Other" Describe: _____
	9NN	9 N N		

Weight Limit Posting:	70A2 – Single Unit Vehicles:	Prev	New	
				Ton
	70B2 – Combination Type 3S-1 (3 or 4 axles):			Ton
	70C2 – Combination Type 3S-2 (5 or more axles):			Ton
	70D2 – One Truck at a Time:	0		

Joint Openings (In.) N. Abut = 1", S. Abut = 1" (Measured at W. Gutterline)

90B – Inspector Remarks Continued:

The NE, NW, and SE anchor columns exhibit cracks up to 6" in length above the bumper on each side of the stiffener with crack arrest holes present. The concrete abutments exhibit vertical leaching hairline to narrow cracks, scaling, and small spalls.

	Signature	Date
Inspection Team Leader:		09 / 27 / 21
Consultant Program Manager:		10 / 12 / 21
Agency Program Manager:		10 / 13 / 2021

**Illinois Department of Transportation
Structures Information Management System
Inventory Turnaround Report (S-105)**

Date: 6/28/2021

Structure Number: 016-6037

District: 1 Maintenance County: COOK Municipality: CHICAGO Bridge Status: OPEN - NO RESTRICT
 Maintenance Township: HYDE PARK (CHICAGO) Status Date: 2/1/2018
 Key Route On: FEDERAL-AID URBAN 2942 Sta: 0.7000 Seg: Spur/Alt: Main Route Sufficiency Rating: 47.7
 Key Rt Under: Sta: Seg: Spur/Alt: HBP Eligible: Yes

***** Screen 1 *****

Item No. / Name	Existing Values	Revisions	Item No. / Name	Existing Values	Revisions
(7) Facility Carried: EWING AVE(US-41)			(101) Parallel Designation:	N	
(6) Feature Crossed: CALUMET RIVER			Parallel SN:		
(9) Location: 3331 E. 92ND STREET			(8E) Replaced By Struct Number:		
(7A) Bridge Name: EWING AVE. BRIDGE			(8D) Replaces Structure Number:		
(3B) Maintenance County: 016			(49) Structure Length (Ft.):	338.0	
(3B1) Maintenance Township: 60			(112) AASHTO Bridge Length (Ft.):	99.9	
(21) Maintenance Resp: 40			(51) Bridge Roadway Width (Ft.):	36.0	
Other Resp:			(32) Approach Roadway Width (Ft.):	56.4	
Other Sec Resp:			(52) Deck Width (Ft.):	60.0	
(42) Service On/Under: 1.5			(107/A) Deck Type/Thickness (In.):	G 5.0	
Other Service On:			Other Deck Type:		
Other Service Under:			(48) Length of Longest Span (Ft.):	228.0	
(22A) Reporting Agency: 4			(45/6) Nbr Spans Main/Approach:	1 4	
Other Reporting Agcy:			(43A/B) Main Span Material/Type:	3 16	
(20) Toll Facility: 0			Other Span Material:		
(35) Structure Flared: 0			Other Span Type:		
(31) Design Load: 02			(44AN/BN) Near Appr Span Matr/Type #1:	3 02	
(31A) Struct Steel Weight (Lbs.): 0			(44AN/BN) Near Appr Span Matr/Type #2:		
(60A/B) Substr Matr: 33			(44AF/BF) Far Appr Span Matr/Type #1:	3 02	
(8A1) Bridge Remarks (Existing):			(44AF/BF) Far Appr Span Matr/Type #2:		
			Bridge Remarks (Revised):		

***** Screen 2 *****

Item No. / Name	Existing Values	Revisions	Item No. / Name	Existing Values	Revisions
(34A) Skew Dir/Angle (DEG): N / 0			(202) Traffic Permits Rte Sec Nbr:		
(33) Bridge Median Type: 2			(8B) Multi-Level Structure Number:		
(33A) Bridge Median Width (Ft): 7			(62A) Culvert Cells (Count):	0	
(38) Navigation Control: 1			(62B) Culvert Cell Width (Ft.):	0.00	
(39) Navigation Vert Clear (Ft): 16			(62C) Culvert Cell Height (Ft.):	0.00	
(40) Navigation Horiz Clea (Ft): 116			(62D) Culvert Opening Area (Sq. Ft.):	0.0	
(50A) Sidewalk Width On - Right (Ft): 8.5			(62E) Culvert Fill Depth (Ft.):	0.0	
(50B) Sidewalk Width On - Left (Ft): 8.5			(16) Latitude:	41.72766513	
(50C) Sidewalks Under Structure: 0			(17) Longitude:	-87.54179087	
(36E) Guardrails On - Right: 0			(98A) Border Bridge State Number:		
Other Guardrail Right:			(98B) BorderBridge Adj State (% Resp):	0	
(36F) Guardrails On - Left: 0			(99) Border Bridge Number Existing:		
Other Guardrail Left:			Border Bridge Remarks (Existing):		
(8C) RR Crossing Numbers:					
(55B1) RR Lateral Underclearance (Ft.): 0.0					
(54B3) RR Vert Underclearance (Ft. - In.): 0 - 0					

**Illinois Department of Transportation
Structures Information Management System
Key Route Turnaround Report (S-111)**

Date: 6/28/2021

Structure Number: 016-6037

District: 1 Maintenance County: COOK
Maintenance Township: HYDE PARK (CHICAGO)

Municipality: CHICAGO

Facility Carried: EWING AVE(US-41)

Bridge Name: EWING AVE. BRIDGE

Sufficiency Rating: 47.7

Feature Crossed: CALUMET RIVER

Location: 3331 E. 92ND STREET

HBP Eligible: Yes

Bridge Remarks:

Bridge Status: OPEN - NO RESTRICT

Bridge Status Date: 2/1/2018

Status Remarks

<u>KEY ROUTE ON</u>				<u>KEY ROUTE UNDER</u>			
Item No. / Name	Value	Revision		Item No. / Name	Value	Revision	
(1A, B, C) Key Route Number:	9 2942	_____	_____	(1A, B, C) Key Route Number:		_____	_____
(1D) Appurtenance Type:	0	_____	_____	(1D) Appurtenance Type:		_____	_____
(1E) Key Route Segment:		_____	_____	(1E) Key Route Segment:		_____	_____
(1F) Appurtenance Number:	00000	_____	_____	(1F) Appurtenance Number:		_____	_____
(1G) Key Route Station:	0.7000	_____	_____	(1G) Key Route Station:		_____	_____
(1H) Dir Of Inventory:		_____	_____	(1H) Dir Of Inventory:		_____	_____
(3A) Inventory County:	016	_____	_____	(3A) Inventory County:		_____	_____
(3A1) Inv Township/Rd Dist:	60	_____	_____	(3A1) Inv Township/Rd Dist:		_____	_____
(4) Municipality:	1051	_____	_____	(4) Municipality:		_____	_____
(25) Urban Area:	1051	_____	_____	(25) Urban Area:		_____	_____
(26) Functional Class:	4	_____	_____	(26) Functional Class:		_____	_____
(104) National Hwy System:	0	_____	_____	(104) National Hwy System:		_____	_____
(30) Estimated AADT Year:	2019	_____	_____	(30) Estimated AADT Year:		_____	_____
(29) Estimated AADT:	11700	_____	_____	(29) Estimated AADT:		_____	_____
(28) Number Of Lanes:	2	_____	_____	(28) Number Of Lanes:		_____	_____
(102) One Or Two Way Traffic:	2	_____	_____	(102) One Or Two Way Traffic:		_____	_____
(109) Estimated % Trucks:	4	_____	_____	(109) Estimated % Trucks:		_____	_____
(115) Future AADT Year:	2032	_____	_____	(115) Future AADT Year:		_____	_____
(114) Future AADT:	8652	_____	_____	(114) Future AADT:		_____	_____
(110) Desig Natl Truck Rte:	0	_____	_____	(110) Desig Natl Truck Rte:		_____	_____
(19) Bypass Length:	5	_____	_____	(19) Bypass Length:		_____	_____
Key Rte On Remarks:				Key Rte Under Remarks:			

<u>KEY ROUTE ON</u>				<u>CLEARANCE INFORMATION</u>				<u>KEY ROUTE UNDER</u>			
<u>South Or East</u>		<u>North Or West</u>		<u>South Or East</u>		<u>North Or West</u>		<u>South Or East</u>		<u>North Or West</u>	
Value	Revision	Value	Revision	Value	Revision	Value	Revision	Value	Revision	Value	Revision
(47) Max Rdwy Width (Ft.):	36.0	_____	_____	(47) Max Rdwy Width (Ft.):		_____	_____	(47) Max Rdwy Width (Ft.):		_____	_____
(47A/B) Horizontal (Ft.):	36.0	_____	_____	(47A/B) Horizontal (Ft.):	0.0	_____	_____	(47A/B) Horizontal (Ft.):		_____	_____
(53A/B) Min Vert (Ft.-In.):	9911	_____	_____	(53A/B) Min Vert (Ft.-In.):	0000	_____	_____	(54B1/2) Min Vert (Ft.-In.):		_____	_____
(10A/B) 10 Ft Vert (Ft.-In.):	9911	_____	_____	(10A/B) 10 Ft Vert (Ft.-In.):	0000	_____	_____	(10A/B) 10 Ft Vert (Ft.-In.):		_____	_____
								(55B/56) Min Lateral (Ft.):		_____	_____

<u>KEY ROUTE ON</u>						<u>MARKED ROUTE INFORMATION</u>						<u>KEY ROUTE UNDER</u>						
<u>Route #1</u>		<u>Route #2</u>		<u>Route #3</u>		<u>Route #1</u>		<u>Route #2</u>		<u>Route #3</u>		<u>Route #1</u>		<u>Route #2</u>		<u>Route #3</u>		
Value	Revision	Value	Revision	Value	Revision	Value	Revision	Value	Revision	Value	Revision	Value	Revision	Value	Revision	Value	Revision	
(5B) Kind:	2	_____	_____	(5B) Kind:		_____	_____	(5B) Kind:		_____	_____	(5B) Kind:		_____	_____	(5B) Kind:		_____
(5C) Desig:	1	_____	_____	(5C) Desig:	1	_____	_____	(5C) Desig:		_____	_____	(5C) Desig:		_____	_____	(5C) Desig:		_____
(5D) Number:	041	_____	_____	(5D) Number:		_____	_____	(5D) Number:		_____	_____	(5D) Number:		_____	_____	(5D) Number:		_____

**Illinois Department of Transportation
Structures Information Management System
Inspector's Inventory Report (S-114)**

Date: 6/28/2021

Structure Number: 016-6037

District: 1
Municipality: CHICAGO
Facility Carried: EWING AVE(US-41)
Feature Crossed: CALUMET RIVER
(21) Maintenance Resp: MUNICIPALITY
Other Resp:
(22A) Reporting Agency: MUNICIPALITY
Other Reporting Agency:

Maintenance County: COOK
Maint Township: HYDE PARK (CHICAGO)
Bridge Name: EWING AVE. BRIDGE
Location: 3331 E. 92ND STREET
UNKNOWN
Other Sec Resp:

Item No. / Name	Construction Information	
	Original	Existing Values
(27/27A) Year/Type:	1914	1992
(27B) Route:		FAU2942
(27C) Section:	92ND STREET 1515 C	80-E1212-00-BR
(27D) Station:		
(27E) Contract :		81030
(27F) Project:	00000000000	M-5000(074)
(27G) Built By:	CITY	

(41) Bridge Status: 1 (OPEN - NO RESTRICT)
(41A) Status Date: 2/1/2018
(41B) Status Remarks:

(42) Service On/Under: 1 HIGHWAY 5 WATERWAY
Other Service On: Other Service Under:

Item No. / Name	Existing Values	Revisions	Item No. / Name	Existing Values	Revisions
(101) Parallel Designation:	N	_____	(49) Structure Length (Ft.):	338.0	_____
Parallel SN:		_____	(112) AASHTO Bridge Length (Ft.):	99.9	_____
(35) Structure Flared:	0	_____	(51) Bridge Roadway Width (Ft.):	36.0	_____
(31) Design Load:	02	_____	(32) Approach Roadway Width (Ft.):	56.4	_____
(31A) Struct Steel Weight (Lbs.):	0	_____	(52) Deck Width (Ft.):	60.0	_____
(60A/B) Substr Matr:	33	_____	(48) Length of Longest Span (Ft.):	228.0	_____
(8A1) Bridge Remarks (Existing):		_____	(107/A) Deck Type/Thickness (In.):	G 5.0	____/____
Bridge Remarks (Revised):		_____	Other Deck Type:		
		_____	(45/6) Nbr Spans Main/Approach:	1 4	____/____
		_____	(43A/B) Main Span Material/Type:	3 16	____/____
		_____	Other Span Material:		
Border Bridge Remarks:		_____	(44AN/BN) Near Appr Span Matr/Type #1:	3 02	____/____
		_____	(44AN/BN) Near Appr Span Matr/Type #2:		____/____
		_____	(44AF/BF) Far Appr Span Matr/Type #1:	3 02	____/____
		_____	(44AF/BF) Far Appr Span Matr/Type #2:		____/____

Item No. / Name	Existing Values	Revisions	Item No. / Name	Existing Values	Revisions
(34A) Skew Dir/Angle (DEG):	N / 0	____/____	(36E) Guardrails On - Right:	0	_____
(33) Bridge Median Type:	2	_____	(36F) Guardrails On - Left:	0	_____
(33A) Bridge Median Width (Ft):	7	_____	(55B1) RR Lateral Underclearance (Ft.):	0.0	_____
(38) Navigation Control:	1	_____	(54B3) RR Vert Underclearance (Ft. - In.):	0 - 0	____-____
(39) Navigation Vert Clear (Ft):	16	_____	(62A) Culvert Cells (Count):	0	_____
(40) Navigation Horiz Clea (Ft):	116	_____	(62B) Culvert Cell Width (Ft.):	0.00	_____
(50A) Sidewalk Width On - Right (Ft):	8.5	_____	(62C) Culvert Cell Height (Ft.):	0.00	_____
(50B) Sidewalk Width On - Left (Ft):	8.5	_____	(62D) Culvert Cell Opening Area (Sq. Ft.):	0.0	_____
(50C) Sidewalks Under Structure:	0	_____	(62E) Culvert Fill Depth (Ft.):	0.0	_____

**Illinois Department of Transportation
Structures Information Management System
Inspector's Inventory Report (S-114)**

Date: 6/28/2021

<u>Key Route On</u>			<u>Key Route Under</u>		
<u>Item No. / Name</u>	<u>Existing Values</u>	<u>Revisions</u>	<u>Item No. / Name</u>	<u>Existing Values</u>	<u>Revisions</u>
(28) Number Of Lanes:	2	____	(28) Number Of Lanes:		____
(102) One Or Two Way Traffic:	2	____	(102) One Or Two Way Traffic:		____
	<u>South Or East</u>	<u>North Or West</u>		<u>South Or East</u>	<u>North Or West</u>
	<u>Value</u> <u>Revisions</u>	<u>Value</u> <u>Revisions</u>		<u>Value</u> <u>Revisions</u>	<u>Value</u> <u>Revisions</u>
(47) Max Rdwy Width (Ft.):	36.0 ____		(47) Max Rdwy Width (Ft.):	____	____
(47A/B) Horizontal (Ft.):	36.0 ____	0.0 ____	(47A/B) Horizontal (Ft.):	____	____
			(55B/56) Min Lateral:	____	____
KR On Remarks:			KR Under Remarks:		



SN: 016-6037	District: 1	Spans: 1	Appr. Spans: 4	Skew: 0	ADT: 11700	Truck Pct: 4
ADT Un:	Maint. Co: COOK	Twsp: HYDE PARK (CHICAGO)	Status: OPEN - NO RESTRICT			
Facility Carried: EWING AVE(US-41)	Feature Crossed: CALUMET RIVER					
Location 3331 E. 92ND STREET	Municipality: CHICAGO	Team/Sub: /	Insp/Rte:			
Bridge Name: EWING AVE. BRIDGE	Material & Type: STEEL/MOVEABLE - BASCULE					
Insp. Intervals Routine: 24	Fracture Critical: 24	Underwater: 60	Special: N/A	Element Level:		

93A – Inspection Date: 8 /10 /21	93A4 – Temp. (°F): 80
Is Delinquent: <input type="checkbox"/>	Reason:
90A – Agency Program Manager: V. Jurca	90A3 – Consultant Program Manager: M. Bendok
93A3 – Team Leader: J. Simpson	93A5 – Inspector: B. Willis

Resources

Time to Inspect (H:M): 16:0	16:00	Traffic Control: N	Boat: N	Waders: N	Snooper: N
Ladder: L	Y	Manlift: N	Bucket Truck: N	Other: Barge	Bucket Boat

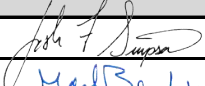
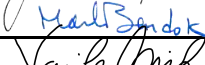

Inspector's Appraisals

92A1 – Type: E2	If "X4-Other" Description:
93A1 – Rating: Prev 7 New: 7	FC Method: Prev V New: MP <input type="checkbox"/> DP <input type="checkbox"/> UT <input type="checkbox"/> V <input checked="" type="checkbox"/>
93A2 – Remarks: The anchor column floorbeams typically exhibit minor pitting that has been painted over. There are also welded attachments and drilled holes in the bottom flange and web of both floorbeams. The northeast, northwest, and southeast anchor columns exhibit cracks up to 6" in length with crack arrest holes present.	

92A1 – Type: X2	If "X4-Other" Description:
93A1 – Rating: Prev 5 New: 5	FC Method: Prev V New: MP <input type="checkbox"/> DP <input type="checkbox"/> UT <input type="checkbox"/> V <input checked="" type="checkbox"/>
93A2 – Remarks: The floorbeams typically exhibit moderate to heavy rust delaminations, minor pitting, and areas of section loss up to 10%. Floorbeam 8-8S exhibits five web holes up to 6" in diameter. Floorbeam 10-10 exhibits minor to moderate corrosion and minor to heavy section loss predominately in the webs. The trunnion cross girders typically exhibit minor to moderate pitting near the ends.	

92A1 – Type: X1	If "X4-Other" Description:
93A1 – Rating: Prev 5 New: 5	FC Method: Prev V New: MP <input type="checkbox"/> DP <input type="checkbox"/> UT <input type="checkbox"/> V <input checked="" type="checkbox"/>
93A2 – Remarks: The bottom chord typically exhibits minor corrosion holes in the webs and diaphragms. The bottom chord gusset plates have moderate to heavy corrosion consisting of pitting. The rear arms at all four trusses exhibit large corrosion holes and cracks between Nodes A, 14, and 15. The Bascule truss members typically exhibit areas of minor to moderate corrosion and section loss predominately along the web and flange interfaces.	

92A1 – Type: X3	If "X4-Other" Description:
93A1 – Rating: Prev 5 New: 5	FC Method: Prev V New: MP <input type="checkbox"/> DP <input type="checkbox"/> UT <input type="checkbox"/> V <input checked="" type="checkbox"/>
93A2 – Remarks: The longitudinal girders typically exhibit minor to moderate corrosion and section loss and moderate to heavy corrosion, pitting, and section loss between the trunnion cross girder and the pinion. The northwest longitudinal girder exhibits an approximate 1'x3" hole on the east web below the pinion.	

	Signature	Date
Inspection Team Leader:		09/ 27 / 21
Consultant Program Manager:		10 / 12 / 21
Agency Program Manager:		10 / 13 /2021

Two Girder

- A1- Suspension Link & Pin
- A2- Suspension Single Pin
- A3- Tension Flanges Riveted/
Bolted Plate Girders
- A4- Bearing Seat of Suspended
Spans
- A5- Tension Flange of Rolled
Beam
- A6- Tension Flange of Welded
Plate Girders
- A7- Tension Flanges of Lattice
Truss Web Girders

Truss System

- B1- Eyebar & Pin Tension Members
- B2- Simple Span Welded Truss
Tension Members
- B3- Hanger Link & Pin of Suspended
Trusses
- B4- Single element Tension Members
- B5- Simple Span riveted/Bolted
Tension Members
- B6- Continous Truss System-Welded,
Riveted or Bolted Tension Members

Cable Stayed & Suspension

- C1- Suspension Bridge-Cables
- C2- Cable Stayed-Cables

Tied Arches

- D1- Welded Box Ties
- D2- Riveted/Bolted Box Ties
- D3- Stiffened Girders

Framed Steel Substructure

- E1- Welded or Rolled Pier Cap
- E2- Riveted or Bolted Pier Cap
- E3- Welded or Rolled Pier Column
- E4- Riveted or Rolled Pier Column

Box Beams

- F1- Single Welded Box
- F2- Single Riveted/Bolted Box
- F3- Double Box Beam-Welded,
Riveted or Bolted

Other Types

- X1- Bascule
- X2- Floorbeams supporting other
steel members or spacing > 15 ft.
- X3- Cross Frames or Transfer
Beams
- X4- Other

**Illinois Department of Transportation
Structures Information Management System
Master Structure Report (S-107)**

Structure Number: 016-6037 District: 1

Inventory Data

Facility Carried:	EWING AVE(US-41)	Bridge Name:	EWING AVE. BRIDGE	Sufficiency Rating:	47.7	Structure Length:	338.0
Feature Crossed:	CALUMET RIVER	Location:	3331 E. 92ND STREET	HBP Eligible:	Yes	AASHTO Bridge Length:	99.9
Bridge Remarks:				Replaced By:		Length of Long Span:	228.0
Bridge Status:	1 OPEN - NO RESTRICT	StatusDate:	2/1/2018	Replaces:		Bridge Roadway Width:	36.0
Status Remarks:				Last Update Date:	03/30/2021	Appr Roadway Width:	56.4
Maint County:	016 COOK	Maint Township:	60 HYDE PARK (CHICAGO)	Parallel Structure:	None	Deck Width:	60.0
Maint Responsibility:	40 MUNICIPALITY		UNKNOWN	Multi-Level Structure Nbr:		Sidewalk Width Right:	8.5
Service On/Under:	1 HIGHWAY	/	5 WATERWAY	Skew Direction:	None	Sidewalk Width Left:	8.5
Reporting Agency:	4 MUNICIPALITY			Skew Angle:	0 D	Navigation Control:	1 Yes
Main Span Matl/Type:	3 STEEL	/	16 MOVEABLE - BASCULE	Structure Flared:	No	Navigation Horiz Clear:	116
Nbr Of Main Spans:	1	Nbr Of Approach Spans:	4	Historical Significance:	No	Navigation Vert Clear:	16
Approaches				Border Bridge State:		Culvert Fill Depth:	0.0
Near #1 Matl/Type:	3 STEEL	/	02 STRINGER/MULTI-BEAM/GIRDER	Bdr State SN:		Number Culvert Cells:	0
Near #2 Matl/Type:		/		Bdr State % Responsibility:	0	Culvert Opening Area:	0.0
Far #1 Matl/Type:	3 STEEL	/	02 STRINGER/MULTI-BEAM/GIRDER	Structural Steel Wt:	0	Culvert Cell Height:	0.00
Far #2 Matl/Type:		/		Substructure Material:	33	Culvert Cell Width:	0.00
Median Width/Type:	7 Ft.	/	2 Mountable, all types	Rated By:	3 Consultant	Rate Method:	6 LOAD FACTOR (LF) REP
Guardrail Type L/R:	0 None	/	0 None	Inventory Rating:	0.810 (29)	Load Rating Date:	01/31/2019
Toll Facility Indicator:	0 No Toll			Operating Rating:	1.350 (48)	***Railroad Crossing Info***	
Latitude:	41.72766513	Longitude:	87.54179087	Design Load:	02 HS20	Crossing 1 Nbr:	
Deck Structure Type:	G OPEN STEEL GRATING	Deck Structure Thickness:	5.0	SD:	Y	FO:	N
Sidewalks Under Structure:	0 None					RR Lateral Underclear:	0.0
						RR Vertical Underclear:	0 Ft 0 In

Key Route On Data

Key Route Nbr:	FEDERAL-AID URBAN	2942	Station:	0.7000
Appurtenances	Main Route	00000	Segment:	
Inventory County:	016 COOK		Linked:	Y
Township/Road Dist	60 HYDE PARK (CHICAGO)		Natl. Hwy System:	Not on NHS
Municipality	1051 CHICAGO		Inventory Direction:	
Urban Area:	1051		Curr AADT Yr/Count:	2019 / 11700
Functional Class:	4 MINOR ARTERIAL		Est Truck Percentage:	4 %
** CLEARANCES **	South/East	North/West	Number Of Lanes:	2
Max Rdwy Width:	36.0		One Or Two Way:	2 Two-Way
Horizontal:	36.0	0.0	Bypass Length:	5
Min Vertical:	99Ft 11In	00Ft 00In	Future AADT Yr/Cnt:	2032 / 8652
10 Ft Vertical:	99Ft 11In	00Ft 00In	Designated Truck Rte:	NONE
Lateral:			Special Systems:	No

Key Route Under Data

		Station:	
		Segment:	
		Linked:	
		Natl. Hwy System:	
		Inventory Direction:	
		Curr AADT Yr/Count:	/
		Est Truck Percentage:	%
		Number Of Lanes:	
		One Or Two Way:	
		Bypass Length:	
		Future AADT Yr/Cnt:	/
		Designated Truck Rte:	
		Special Systems:	

*** Marked Route On Data ***

	Designation	Kind	Number
Route #1:	1 Mainline	2 U.S. Highways	041
Route #2:	1 Mainline		
Route #3:	1 Mainline		

*** Marked Route Under Data ***

	Designation	Kind	Number

**Illinois Department of Transportation
Structures Information Management System
Master Structure Report (S-107)**

Date: 6/28/2021

Page 2

Structure Number: 016-6037 District: 1

Data Related to Inspection Information

Inspection Intervals
 Routine NBIS: MOS Underwater: MOS
 Fracture Critical: MOS Special:

*** Maximum Allowable Posting Limits ***
 One Truck At A Time: Tons
 Single Unit Vehicles: Tons
 Combination Type 3S-1: Tons
 Combination Type 3S-2: Tons

Bridge Posting Level: No Posting Required

Inspection/Appraisal Information

Inspection Date:	<input type="text" value="08/08/2019"/>	Inspection Temperature:	<input type="text" value="78"/> Deg. F	Insp by (Name):	<input type="text" value="Soehrman, Denise M"/>	** Actual Posted Limits **
Deck:	<input type="text" value="6"/>	<input type="text" value="SATISFACTORY CONDITION - MINOR DETERIORATION"/>		Insp by (Name):	<input type="text" value="Kenny, W. K."/>	Single Unit Vehicles: <input type="text"/> Tons
Superstructure:	<input type="text" value="4"/>	<input type="text" value="POOR CONDITION - ADVANCED DETERIORATION"/>		Utilities Attached:	<input type="text" value="9"/> ELECTRIC	Combination Type 3S-1: <input type="text"/> Tons
Substructure:	<input type="text" value="5"/>	<input type="text" value="FAIR CONDITION - MINOR SECTION LOSS, CRACKS"/>			<input type="text" value="N"/> N/A	Combination Type 3S-2: <input type="text"/> Tons
Culvert:	<input type="text" value="N"/>	<input type="text" value="NOT APPLICABLE"/>			<input type="text" value="N"/> N/A	One Truck At A Time: <input type="text" value="0"/>
Channel and Protection:	<input type="text" value="8"/>	<input type="text" value="VERY GOOD CONDITION - NO PROBLEMS NOTED"/>		Deck Wearing Surf:	<input type="text" value="P"/> GRATING	Last Paint Type:
Structural Evaluation:	<input type="text" value="4"/>	<input type="text" value="MINIMUM ADEQUACY TO BE LEFT IN PLACE"/>		Deck Membrane:	<input type="text" value="F"/> NONE	<input type="text" value="IZ"/>
Deck Geometry:	<input type="text" value="4"/>	<input type="text" value="MINIMUM ADEQUACY TO BE LEFT IN PLACE"/>		Deck Protection:	<input type="text" value="J"/> NONE	<input type="text"/>
Underclearance-Vert/Lat.:	<input type="text" value="N"/>	<input type="text" value="NOT APPLICABLE"/>		Total Deck Thick:	<input type="text" value="5.0"/>	<input type="text"/>
Waterway Adequacy:	<input type="text" value="9"/>	<input type="text" value="SUPERIOR TO PRESENT DESIRABLE CRITERIA"/>		Last Paint Date:	<input type="text" value="09/2012"/>	<input type="text"/>
Approach Roadway Align:	<input type="text" value="6"/>	<input type="text" value="EQUAL TO PRESENT MINIMUM CRITERIA"/>		Inspection Remarks:	<input type="text"/>	
Bridge Railing Appraisal:	<input type="text" value="2"/>	<input type="text" value="Doesn't Meet Standards"/>		Jt. Openings: N. Abut.=1"; S. Abut.=1" (Measured at W. Gutterline)NE, NW, & SE anchor cols have cracks up to 6" in length above the bumper on ea. side of sti ffener. Floorbeams in the movable span have heavy corr., SL, & holes. Both face		
Approach Guardrail:	<input type="text" value="111"/>	<input type="text" value="Does Not Exist"/>	<input type="text" value="Does Not Exist"/>	<input type="text" value="Does Not Exist"/>		
Pier Navig Protection:	<input type="text" value="3"/>	<input type="text" value="IN PLACE BUT IN A DETERIORATED CONDITION"/>				

Underwater Inspection/Appraisal Information

Inspection Date:

Temperature: Inspection Method: Diver Probe Sonar Visual

Inspected By: Inspected By: Appraisal Rating: FAIR CONDITION

Inspection Remarks:

Scour Critical Information

Rating: CALCULATED SCOUR ABOVE FOOTING Evaluation Method: Rational Analysis

Analysis Date: Analysis By:

Miscellaneous

Fracture Critical Members: Yes
 Microfilm Data Recorded: Yes

Construction Information

Year:	<input type="text" value="1914"/> Original	<input type="text" value="1992"/> Reconstructed
Route:	<input type="text"/>	FAU2942 Sta: <input type="text"/>
Section Nbr:	<input type="text" value="92ND STREET 1515 CS"/>	<input type="text" value="80-E1212-00-BR"/>
Contract Nbr:	<input type="text"/>	<input type="text" value="81030"/>
Fed Aid Pr #:	<input type="text" value="0000000000000000"/>	<input type="text" value="M-5000(074)"/>
Built By:	<input type="text" value="4"/> CITY	<input type="text" value="4"/> CITY

Proposed Improvement

Cost Estimate Year:	<input type="text"/>	Length:	<input type="text"/>	*** Costs in Dollars ***
Type of Work:	<input type="text"/>	Bridge Cost:	<input type="text"/>	
Done By:	<input type="text"/>	Roadway Cost:	<input type="text"/>	
Remarks:	<input type="text"/>	Total Project Cost:	<input type="text"/>	

**Illinois Department of Transportation
Structures Information Management System
Structure Summary Report**

Date: 05/03/2022

Page: 1

Structure Number: 016-6037

District: 1

Inventory Data

Facility Carried:	EWING AVE (92ND ST)	Bridge Name:	EWING AVE. BRIDGE	Sufficiency Rating:	47.9	Structure Length:	338.0
Feature Crossed:	CALUMET RIVER	Location:	3331 E. 92ND STREET	HBP Eligible:	Yes	AASHTO Bridge Length:	99.9
Bridge Remarks:				Replaced By:	-	Length of Long Span:	228.0
Bridge Status:	1 OPEN - NO RESTRICT	Status Date:	2/1/2018 12:00:00 AM	Replaces:	-	Bridge Roadway Width:	36.0
Status Remarks:				Last Update Date:	04/04/2022	Appr Roadway Width:	56.4
Maint County:	016 COOK	Maint Township:	60 HYDE PARK (CHICAGO)	Parallel Structure:	None	Deck Width:	60.0
Maint Responsibility:	40 MUNICIPALITY		UNKNOWN	Multi-Level Structure Nbr:		Sidewalk Width Right:	8.5
Service On/Under:	1 HIGHWAY		5 / WATERWAY	Skew Direction:	N None	Sidewalk Width Left:	8.5
Reporting Agency:	4 MUNICIPALITY			Skew Angle:	0 D	Navigation Control:	1 Yes
Main Span Matl/Type:	3 STEEL		/ 16 MOVEABLE - BASCULE	Structure Flared:	No	Navigation Horiz Clear:	116
Nbr Of Main Spans:	1	Nbr Of Approach Spans:	4	Historical Significance:	No	Navigation Vert Clear:	16
Approaches				Border Bridge State:		Culvert Fill Depth:	0.0
Near #1 Matl/Type:	3 STEEL		/ 02 STRINGER/MULTI-BEAM/GIRDER	Bdr State SN:		Number Culvert Cells:	0
Near #2 Matl/Type:			/	Bdr State % Responsibility:	0	Culvert Opening Area:	0.0
Far #1 Matl/Type:	3 STEEL		/ 02 STRINGER/MULTI-BEAM/GIRDER	Structural Steel Wt	0	Culvert Cell Height:	0.00
Far #2 Matl/Type:			/	Substructure Material:	33	Culvert Cell Width:	0.00
Median Width/Type:	7 Ft. / 2	Mountable, all types		Rated By:	3 Consultant	Rate Method:	6 LOAD FACTOR (LF) REPORTED BY RATING FACTOR (RF)
Guardrail Type L/R:	0None	/ 0	None	Inventory Rating:	0.810(29)	Load Rating Date:	01/31/2019
Toll Facility Indicator:	0	No Toll		Operating Rating:	1.350(48)	Railroad Crossing Info	
Latitude:	41.72766513	S Longitude:	87.54179087	S	Design Load:	02 HS20	Crossing 1 Nbr:
Deck Structure Type:	G	OPEN STEEL GRATING		Deck Structure Thickness:	5	SD:	Y
Sidewalks Under Structure:	0	None		FO:	N	RR Lateral Underclear:	0.0
				RR Vertical Underclear:	0	Ft	0
				In			

Key Route On Data

Key Route Nbr:	FEDERAL-AID URBAN	2942	Station:	0.7000
Appurtenances	Main Route	00000	Segment:	
Inventory County:	016 COOK		Linked:	Y
Township/Road Dist	60 HYDE PARK (CHICAGO)		Natl. Hwy System:	Not on NHS
Municipality	1051 CHICAGO		Inventory Direction:	
Urban Area:	1051 1051		Curr AADT Yr/Count:	2021 / 11400
Functional Class:	4 MINOR ARTERIAL		Est Truck Percentage:	6
** CLEARANCES **	South/East	North/West	Number Of Lanes:	2
Max Rdwy Width:	36.0		One Or Two Way:	2 Two-Way
Horizontal:	36.0	0.0	Bypass Length:	5
			Future AADT Yr/Cnt:	2032 / 8652
			Designated Truck Rte:	NONE
Lateral:			Special Systems:	No

Key Route Under Data

Station:	
Segment:	
Linked:	
Natl. Hwy System:	
Inventory Direction:	
Curr AADT Yr/Count:	/
Est Truck Percentage:	
Number Of Lanes:	
One Or Two Way:	
Bypass Length:	
Future AADT Yr/Cnt:	/
Designated Truck Rte:	
Special Systems:	

***** Marked Route On Data *****

Designation	Kind	Number
Route #1: 1 Mainline	2 U.S. Highways	041
Route #2: 1 Mainline		
Route #3: 1 Mainline		

***** Marked Route Under Data *****

Designation	Kind	Number
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**Illinois Department of Transportation
Structures Information Management System
Structure Summary Report**

Date: 05/03/2022

Page: 2



**Illinois Department of Transportation
Structures Information Management System
Structure Summary Report**

Date: 05/03/2022

Page: 3

Structure Number: 016-6037

District: 1

Data Related to Inspection Information

*** Inspection Intervals ***

*** Maximum Allowable Posting Limits ***

Bridge Posting Level:

Routine NBIS:	24 MOS	Underwater:	60 MOS	One Truck At A Time:	0	Combination Type 3S-1:	Tons	5	No Posting Required
		Special:	N	Single Unit Vehicles:	Tons	Combination Type 3S-2:	Tons		

Inspection/Appraisal Information

** Actual Posted Limits **

Inspection Date:	08/10/2021	Inspection Temperature:	80Deg. F						
Deck:	6	SATISFACTORY CONDITION - MINOR DETERIORATION				Single Unit Vehicles:	Tons		
Superstructure:	4	POOR CONDITION - ADVANCED DETERIORATION				Combination Type 3S-1:	Tons		
Substructure:	5	FAIR CONDITION - MINOR SECTION LOSS, CRACKS				Combination Type 3S-2:	Tons		
Culvert:	N	NOT APPLICABLE				One Truck At A Time:	0		
Channel and Protection:	8	VERY GOOD CONDITION - NO PROBLEMS NOTED		Deck Wearing Surf:	P GRATING	Last Paint Type:	IZ		
Structural Evaluation:	4	MINIMUM ADEQUACY TO BE LEFT IN PLACE		Deck Membrane:	F NONE	ALUM EPOXY MASTIC			
Deck Geometry:	4	MINIMUM ADEQUACY TO BE LEFT IN PLACE		Deck Protection:	J NONE	FIELD O Z E&P			
Underclearance-Vert/Lat.:	N	NOT APPLICABLE				Total Deck Thick:	5.0		
Waterway Adequacy:	9	SUPERIOR TO PRESENT DESIRABLE CRITERIA		Last Paint Date:	09/2012				
Approach Roadway Align:	6	EQUAL TO PRESENT MINIMUM CRITERIA							
Bridge Railing Appraisal:	2	Doesn't Meet Standards							
Approach Guardrail:	111	Does Not Exist	Does Not Exist	Does Not Exist					
Pier Navig Protection:	3	IN PLACE BUT IN A DETERIORATED CONDITION							

Underwater Inspection/Appraisal Information

Inspection Date:	06/04/2019							
Temperature:	60	Inspection Method:	DPSV Diver	Probe	Sonar	Visual		
		Appraisal Rating:	5	FAIR CONDITION				

Scour Critical Information

Miscellaneous

Rating:	8	CALCULATED SCOUR ABOVE FOOTING	Evaluation Method:	B Rational Analysis		
Analysis Date:	08/18/1997				Microfilm Data Recorded:	Yes

Construction Information

Year:	1914	Original	1992	Reconstructed
Route:		Sta:	FAU2942	Sta:
Section Nbr:	92ND STREET 1515 CS		80-E1212-00-BR	
Contract Nbr:			81030	
Fed Aid Pr#:	00000000000000		M-5000(074)	
Built By:	4	CITY	4	CITY