



Office of Water Resources, Michael A. Bilandic Building, 160 N. LaSalle St., S-703, Chicago, IL 60601

Illinois Department of Natural Resources, Office of Water Resources
Public Notice

**Rehabilitation of the existing 100th Street Bridge over the Calumet River,
in the City of Chicago**

The Chicago Department of Transportation, 2 North LaSalle Street, Suite 1110, Chicago IL 60602, has applied for an Illinois Department of Natural Resources, Office of Water Resources permit for the rehabilitation of the existing 100th Street Bridge over the Calumet River. The project is located at 100th Street and the Calumet River, in the City of Chicago, in Cook County.

The applicant proposes the structural, electrical, and mechanical rehabilitation of the 100th Street Bascule Bridge, constructed in 1927. Rehabilitation of the superstructure will include deck replacement, partial truss and floor system replacement, and repairs to remaining members. Substructure rehabilitation will consist of concrete crack and spall repairs. The bridge houses will be rehabilitated. The electrical rehabilitation will consist of replacement of bridge operational equipment, submarine cables, traffic gates, traffic lights, roadway lighting, and navigation lights. Machinery will be repaired, with some components replaced in kind. Sidewalks and integral reinforced concrete retaining walls in the NW and SE quadrants will be repaired. Approach slabs at each end of the bridge will be replaced. There will be no cofferdams or waterway diversions. Proposed work within the floodway will not cause blockage or fill. Out to out deck width will match the existing width. The limit of roadway work will be the 30 ft approach slabs at each end of the bridge. The total length of the bridge is 328 ft. The bridge will be closed to vehicular, pedestrian, and bicycle traffic for the construction duration. Vessel traffic will be maintained. The low beam of the proposed bridge will be at an elevation of 16.5 ft. (CCD). The bridge will be rehabilitated in-kind, and the dimensions and elevations of the proposed waterway opening, substructure, and superstructure will match existing conditions. The proposed project will be reviewed using the Department's Part 3704 Rules. A location map and plans are attached to this notice.

No work is to start on this project unless and until such a time that the permit is issued.

Inquiries and comments regarding the proposed project can be directed to Eric Otto, Senior Water Resources Engineer, of the Chicago Office at IDNR/OWR, 160 N. LaSalle Street, Suite S-703, Chicago, Illinois 60601 or eric.otto@illinois.gov.

An expanded version of the public notice can be viewed at <https://dnr.illinois.gov/waterresources/publicnotices.htm>.

Comments will be accepted through **April 18, 2025**.

JOINT APPLICATION FORM FOR ILLINOIS

ITEMS 1 AND 2 FOR AGENCY USE

1. Application Number	2. Date Received
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3. and 4. (SEE SPECIAL INSTRUCTIONS) NAME, MAILING ADDRESS AND TELEPHONE NUMBERS

3a. Applicant's Name: Moira Kent Company Name (if any) : Chicago DOT Address: 2 N. LaSalle Street Suite 1110 Chicago, IL 60602 Email Address:	3b. Co-Applicant/Property Owner Name (if needed or if different from applicant): Company Name (if any): Address: Email Address:	4. Authorized Agent (an agent is not required): Anne Zweibel Company Name (if any): Hardesty & Hanover, LLC Address: 566 W. Adams Street Suite 220 Chicago, IL 60661 Email Address:
Applicant's Phone Nos. w/area code Business: Residence: Cell: Fax:	Applicant's Phone Nos. w/area code Business: Residence: Cell: Fax:	Agent's Phone Nos. w/area code Business: Residence: Cell: Fax:

STATEMENT OF AUTHORIZATION

I hereby authorize, Hardesty & Hanover, LLC to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

Applicant's Signature
Feb. 28, 2025

5. ADJOINING PROPERTY OWNERS (Upstream and Downstream of the water body and within Visual Reach of Project)

Name	Mailing Address	Phone No. w/area code
a. Midwest Generation LLC		
b. GTM Chicago LLC		
c. Morton Salt INC		
d. Skyway Properties LLC		

6. PROJECT TITLE:
100th Street Bridge Rehabilitation

7. PROJECT LOCATION:
E. 100th Street, Chicago, IL, 1.7 Miles west of Lake Michigan

LATITUDE: 41.71400 °N LONGITUDE: 87.54300 °W	UTM's Northing: Easting:										
STREET, ROAD, OR OTHER DESCRIPTIVE LOCATION 100th Street Bridge over the Calumet River	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <th style="width: 15%;">LEGAL DESCRIPT</th> <th style="width: 15%;">QUARTER</th> <th style="width: 15%;">SECTION</th> <th style="width: 15%;">TOWNSHIP NO.</th> <th style="width: 15%;">RANGE</th> </tr> <tr> <td>N</td> <td>7</td> <td>37N</td> <td>15E</td> <td></td> </tr> </table>	LEGAL DESCRIPT	QUARTER	SECTION	TOWNSHIP NO.	RANGE	N	7	37N	15E	
LEGAL DESCRIPT	QUARTER	SECTION	TOWNSHIP NO.	RANGE							
N	7	37N	15E								
<input checked="" type="checkbox"/> IN OR <input type="checkbox"/> NEAR CITY OF TOWN (check appropriate box) Municipality Name Chicago	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 75%; text-align: center; vertical-align: middle;"> WATERWAY Calumet River </td> <td style="width: 25%; text-align: center; vertical-align: middle;"> RIVER MILE (If applicable) </td> </tr> </table>	WATERWAY Calumet River	RIVER MILE (If applicable)								
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 25%;">COUNTY</th> <th style="width: 25%;">STATE</th> <th style="width: 50%;">ZIP CODE</th> </tr> <tr> <td>Cook</td> <td>IL</td> <td>60617</td> </tr> </table>	COUNTY	STATE	ZIP CODE	Cook	IL	60617					
COUNTY	STATE	ZIP CODE									
Cook	IL	60617									

8. PROJECT DESCRIPTION (Include all features):

Structural, electrical, and mechanical rehabilitation of the 100th Street Bascule Bridge, constructed in 1927. Rehabilitation of the superstructure will include deck replacement, partial truss and floor system replacement, and repairs to remaining members. Substructure rehabilitation will consist of concrete crack and spall repairs. The bridge houses will be rehabilitated. The electrical rehabilitation will consist of replacement of bridge operational equipment, submarine cables, traffic gates, traffic lights, roadway lighting, and navigation lights. Machinery will be repaired, with some components replaced in kind. Sidewalks and integral reinforced concrete retaining walls in the NW and SE quadrants will be repaired. Approach slabs at each end of the bridge will be replaced. There will be no cofferdams or waterway diversion and there will be no changes to the waterway opening dimensions. Proposed work within the floodway will not cause blockage or fill. Out to out deck width will match the existing width. The limit of roadway work will be the 30 ft approach slabs at each end of the bridge. The total length of the bridge is 328 ft. The bridge will be closed to vehicular, pedestrian, and bicycle traffic for the construction duration. Vessel traffic will be maintained.

9. PURPOSE AND NEED OF PROJECT:

The purpose of the project is to address identified structural, mechanical, and electrical deficiencies of the existing bridge to provide a reliable navigational channel and vehicular/pedestrian/bicycle crossing that meets current design codes and maintains the historic significance of this National Register-eligible bridge. The bridge is in poor condition. The most recent NBIS inspection report assigned a condition rating of 4 to both superstructure and substructure. The deteriorating structural elements are considered structurally deficient. In addition, machinery elements are worn and corroded, and the electrical system has exceeded its useful life and does not conform to current National Electric Code Article 110.27, Guarding of Live Parts.

COMPLETE THE FOLLOWING FOUR BLOCKS IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

10. REASON(S) FOR DISCHARGE:

Replacement of submarine bridge power cables and new aggregate armor/ballast.

11. TYPE(S) OF MATERIAL BEING DISCHARGED AND THE AMOUNT OF EACH TYPE IN CUBIC YARDS FOR WATERWAYS:

TYPE: Engineered aggregate

AMOUNT IN CUBIC YARDS:

135

12. SURFACE AREA IN ACRES OF WETLANDS OR OTHER WATERS FILLED (See Instructions)

0.042

13. DESCRIPTION OF AVOIDANCE, MINIMIZATION AND COMPENSATION (See Instructions)

N/A

14. Date activity is proposed to commence

Date activity is expected to be completed

15. Is any portion of the activity for which authorization is sought now complete? Yes No

Month and Year the activity was completed

NOTE: If answer is "YES" give reasons in the Project Description and Remarks section. Indicate the existing work on drawings.

16. List all approvals or certification and denials received from other Federal, interstate, state, or local agencies for structures, construction, discharges or other activities described in this application.

Issuing Agency	Type of Approval	Identification No.	Date of Application	Date of Approval	Date of Denial
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17. CONSENT TO ENTER PROPERTY LISTED IN PART 7 ABOVE IS HEREBY GRANTED.

Yes

No

18. APPLICATION VERIFICATION (SEE SPECIAL INSTRUCTIONS)

Application is hereby made for the activities described herein. I certify that I am familiar with the information contained in the application, and that to the best of my knowledge and belief, such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities.

Signature of Applicant or Authorized Agent

Feb 28, 2025

Date

Signature of Applicant or Authorized Agent

Date

Signature of Applicant or Authorized Agent

Date

Corps of Engineers
Revised 2010

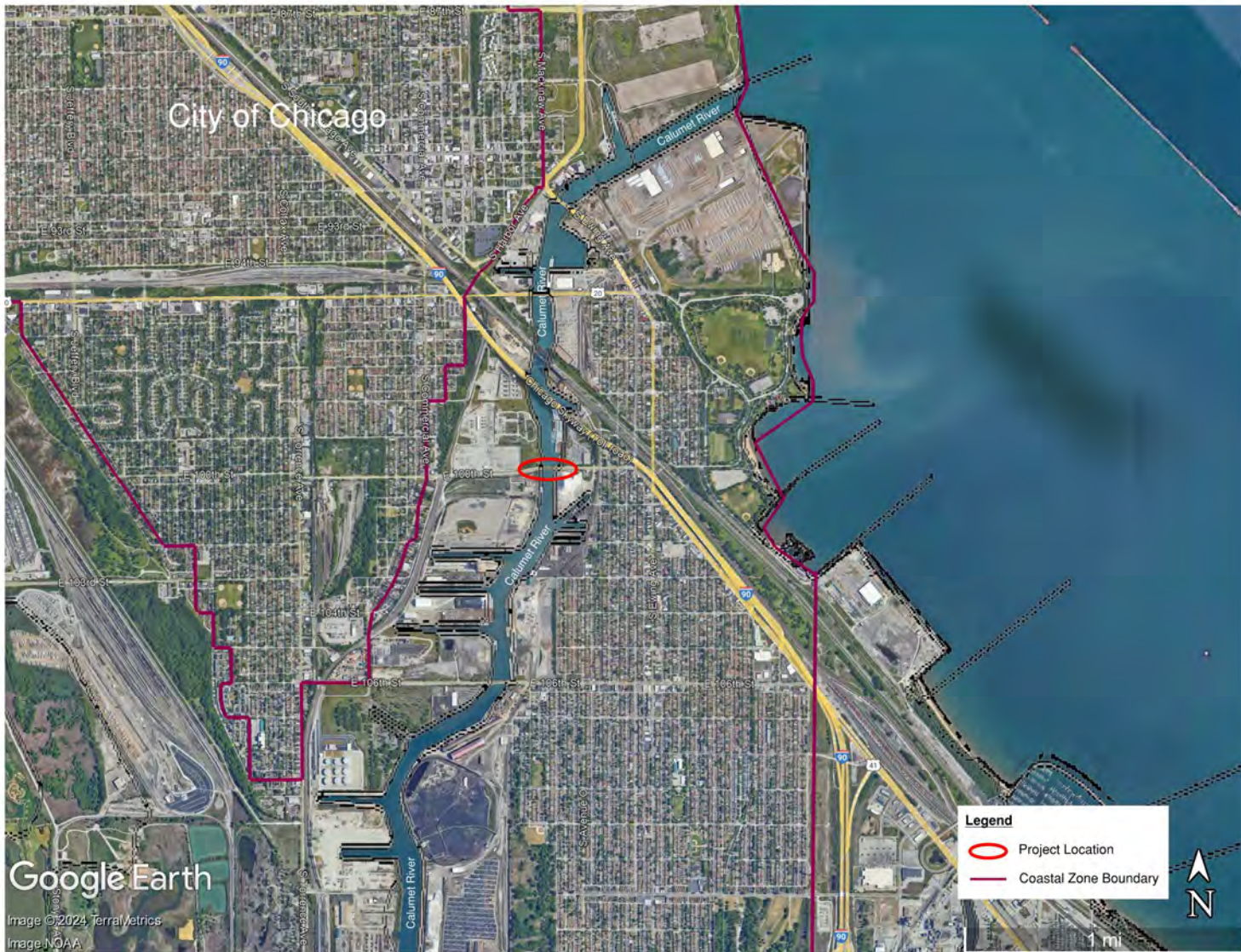
IL Dep't of Natural Resources

IL Environmental Protection
Agency

Applicant's Copy

SEE INSTRUCTIONS FOR ADDRESS

LOCATION MAP



Revised 2010

Corps of Engineers

IL Dep't of Natural Resources

IL Environmental Protection Agency

Applicant's Copy



566 W. Adams Street.
Suite 220
Chicago, IL 60661

www.hardestyhanover.com

February 28, 2025

To: Illinois Department of Natural Resources

Attn: Mr. Eric Otto, PE
Senior Water Resources Engineer
Lake Michigan Programs

Re: IDNR/OWR application-for-permit C20240025 by the Chicago Department of Transportation for the rehabilitation of the 100th Street Bascule Bridge, in the Calumet River, at East 100th Street and the Calumet River, Chicago, IL 60617

Per IDNR's request in the letter dated 12/18/2024, H&H confirms the following:

1. The portion of the 100th St. Bridge over the Calumet River that is over the water will be replaced in kind, and the dimensions and elevations of the proposed waterway opening, substructure, and superstructure will match existing conditions.
2. The existing submarine cable will remain in place.

Very truly yours,

Anne Zweibel, PE
HARDESTY & HANOVER

Existing Structure: The 100th Street Bridge (SN 016-6042) was originally open to traffic in 1927. The bridge is a fully operable, double-leaf, trunnion type bascule bridge which carries two lanes of vehicular traffic, dedicated bike lanes, and pedestrian sidewalks along each side over the Calumet River. There are two bridge houses that are located along the northeast and southwest corners of the bridge. The structure contains five spans with an overall length of 323'-6" measured centerline-to-centerline of abutments. Overall bridge width is 62'-0" out-to-out with a 38'-0" wide roadway. The bridge is not skewed. The structure has been rehabilitated several times. The most recent major rehabilitation was performed in 1992 and included replacement of the movable span floorbeams, stringers, lateral bracing, deck, sidewalks, and center and rear break, replacement of the fixed span deck, sidewalks, roadway stringers, and abutment bearings, and repairs to the bottom chord of the truss and west abutment.

Benchmark: City BM 121, Elev. 10.054, at Northing 1839923.745 and Easting 1197885.125. Location 9.5 ft. N. of N. Line of E. 99th St. and 11.5 ft. W. of the E. line of Commercial Ave.

Salvage: Warning gates.

Traffic Control: The structure is to be completely closed to traffic during construction. Traffic is to be maintained by detouring traffic onto an alternate route. The channel will be open to river traffic throughout construction.

Existing Lightpole and Warning Lights to be Removed, Stored, and Reinstalled, typ.

Warning Gate to be Replaced, typ.

Abut. Btm. Elev. +2.5

Counterweight Pit, typ.

EL. -21.5

Existing Caisson to Remain, typ.

W. Anchor Column

W. Abut. Exp. Brg.

Existing Bridge Balustrade to be Replaced In-Kind, typ.

Lightpole to be Replaced, typ.

Warning Lights to be Replaced, typ.

W. Anchor Column Sta. 7+33.89 EL. 22.77

W. Abut. Brg. Sta. 7+21.89 EL. 22.41

Bk. W. Abut. Sta. 7+19.89 EL. 22.35

Expansion Joint

30' W. Approach Slab

Existing Caisson to Remain, typ.

W. Anchor Column

W. Abut. Brg.

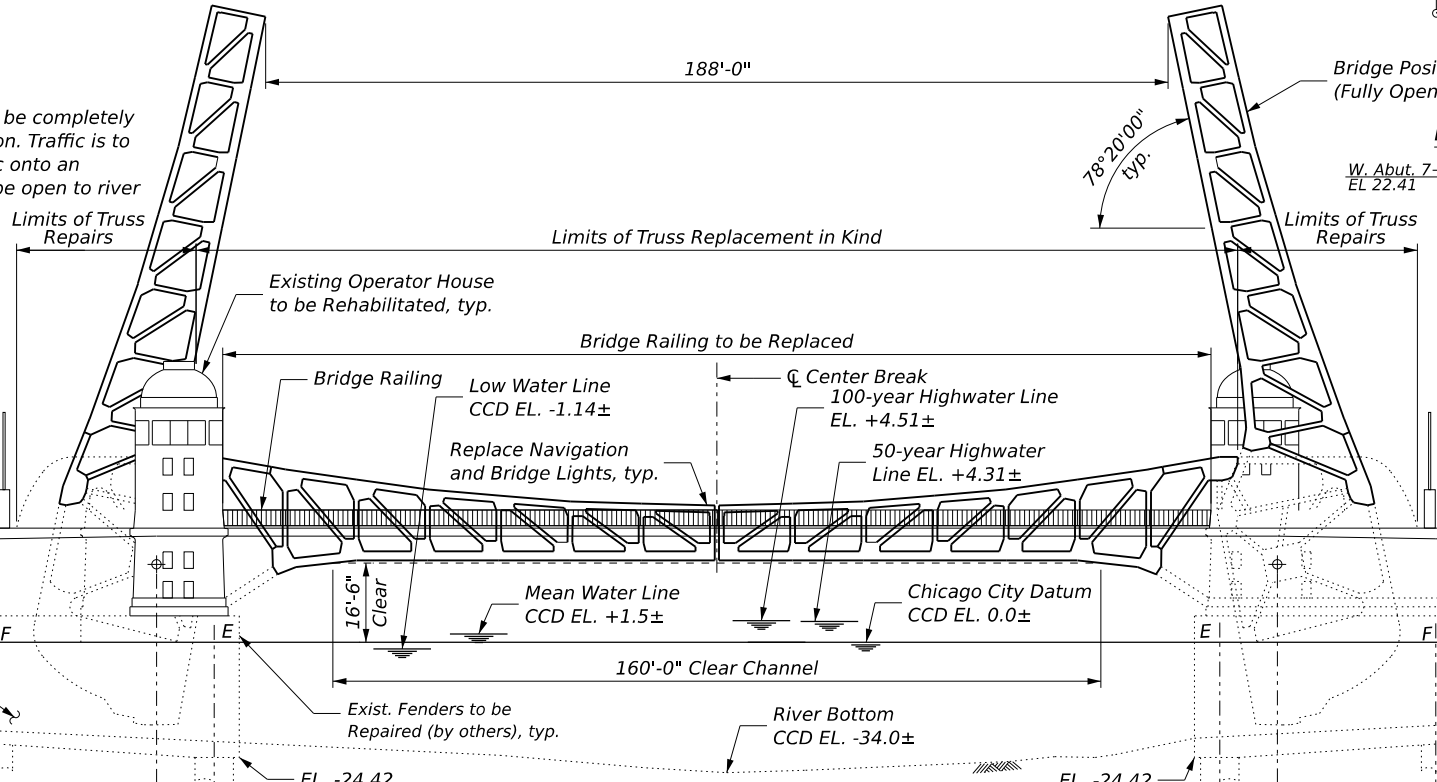
Trunnion

W. Pier

33'-0" Fixed Span 1

45'-0" Fixed Span 2

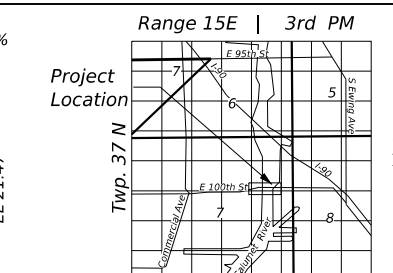
12'-0" Fixed Span 5



PROPOSED PROFILE
(Along C 100th Street)

SCOPE OF WORK

1. Remove and replace the movable span grid deck, stringers, floorbeams, horizontal girders, and lateral bracing.
2. Remove and replace center and rear breaks and supporting brackets.
3. Remove and replace movable and fixed span sidewalk decks, sidewalk stringers, and sidewalk brackets. Existing sidewalk decks to be replaced with fiber reinforced polymer (FRP) panels on movable span and reinforced concrete on fixed spans.
4. Remove and replace truss members from nodes U1-L0 to U15-L12.
5. Rehabilitate truss members from nodes U15-L12 to M18-L19.
6. Rehabilitate floorbeams 16 and 21 and the anchor column floorbeam.
7. Remove and replace bridge railing on movable span.
8. Replace fixed span deck, expansion joints, stringers, and bearings.
9. Rehabilitate truss guards.
10. Repair abutments and piers.
11. Repair steel substructure and replace anchor column shim packs.
12. Rehabilitate machinery.
13. Replace electrical systems.
14. Rehabilitate the operator houses.
15. Cleaning and painting structural steel.



LOCATION SKETCH

DESIGN STRESSES

FIELD UNITS (New Construction)
 $f_c = 4,000$ psi
 $f_y = 60,000$ psi (Reinforcement)
 $F_y = 36,000$ psi (M270 Grade 36)
 $F_y = 50,000$ psi (M270 Grade 50)

FIELD UNITS (1992 Rehabilitation)
 $f_c = 3,500$ psi (Deck)
 $f_y = 60,000$ psi (Reinforcement)
 $F_y = 36,000$ psi (Steel Grating)
 $F_y = 50,000$ psi (M270 Grade 50W)

FIELD UNITS (Original Construction)
 $f_c = 3,000$ psi
 $f_y = 33,000$ psi (Reinforcement)
 $F_y = 30,000$ psi (Structural Steel)

DESIGN LOADS

Live load on new floor system:
 HL-93 & Emergency Vehicles (EV-2 and EV-3)
 CDOT Concrete Ready-Mix Truck
 Live Load on Movable Span Sidewalks: 100 psf
 Live Load on Fixed Span Sidewalks: 150 psf
 All other loads as per AASHTO Specification.
 No Allowance for Future Wearing Surface.

DESIGN SPECIFICATIONS

AASHTO LRFD Bridge Design Specification, 9th Edition, 2020
 AASHTO LRFD Movable Highway Bridge Design Specification, 3rd Edition, 2023
 CDOT Design Standards for Chicago Bascule Bridges, 2019

HIGHWAY CLASSIFICATION

F.A.U. Rte. 1570 (E 100th Street)
 Functional Class: Major Collector
 ADT: 6,200 (2022); 7,500 (2050)
 ADTT: 372 (2022); 450 (2050)
 DHV = 744 (2022)/ 900 (2050)
 Design Speed: 30 m.p.h.
 Posted Speed: 30 m.p.h.
 Two-Way Traffic
 Directional Distribution = 50:50

SEISMIC DATA

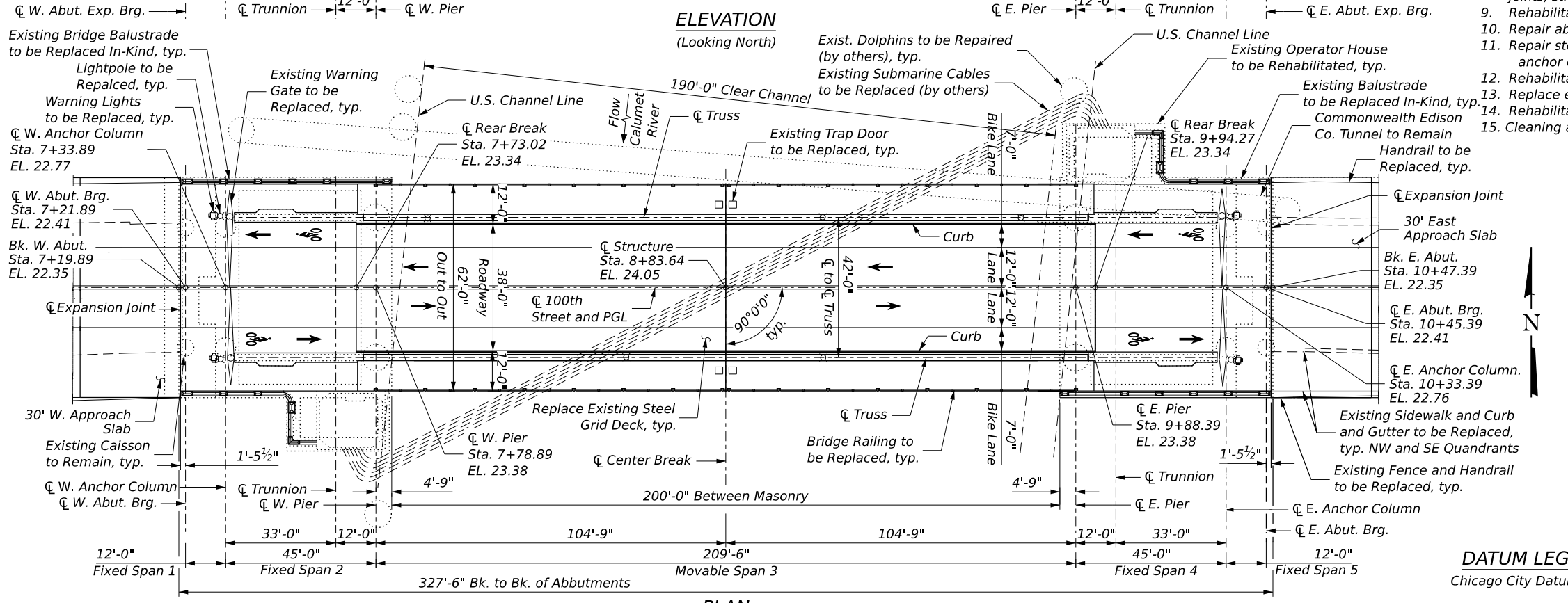
Seismic Performance Zone (SPZ) = 1
 Design Spectral Acceleration at 1.0 sec. (SD1) = 0.104
 Design Spectral Acceleration at 0.2 sec. (SDS) = 0.126
 Soil Site Class = D

DESIGN SCOUR TABLE

Design Scour	W. Pier	E. Pier	Item 113
Elevations (CCD)	-25.4*	-26.7*	8

*Actual Low River Bed Elevations at Pier Locations per Collins Engineers, Inc. Inspection Report dated June 30, 2022.

GENERAL PLAN AND ELEVATION
100TH STREET OVER THE CALUMET RIVER
PUBLIC WATER
F.A.U. ROUTE 1570 - SECTION 18-E8308-00-BR
COOK COUNTY
STATION 8+83.64
STRUCTURE NO. 016-6042



PLAN

DATUM LEGEND
 Chicago City Datum (CCD)



USER NAME =	DESIGNED - HMG/CEB	REVISED -
PLOT SCALE =	CHECKED - AZ	REVISED -
PLOT DATE =	DRAWN - HMG/CEB	REVISED -
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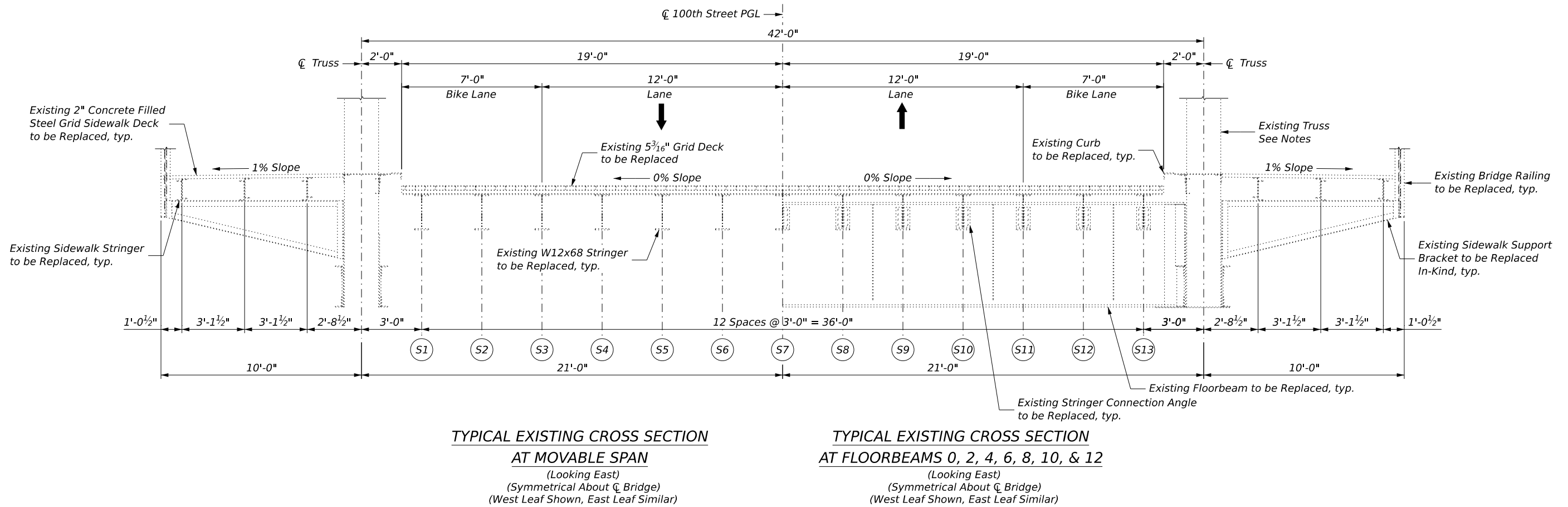
CHICAGO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

BRIDGE GENERAL PLAN & ELEVATION
STRUCTURE NO. 016-6042

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1570	18-E8308-00-BR	COOK	6	1

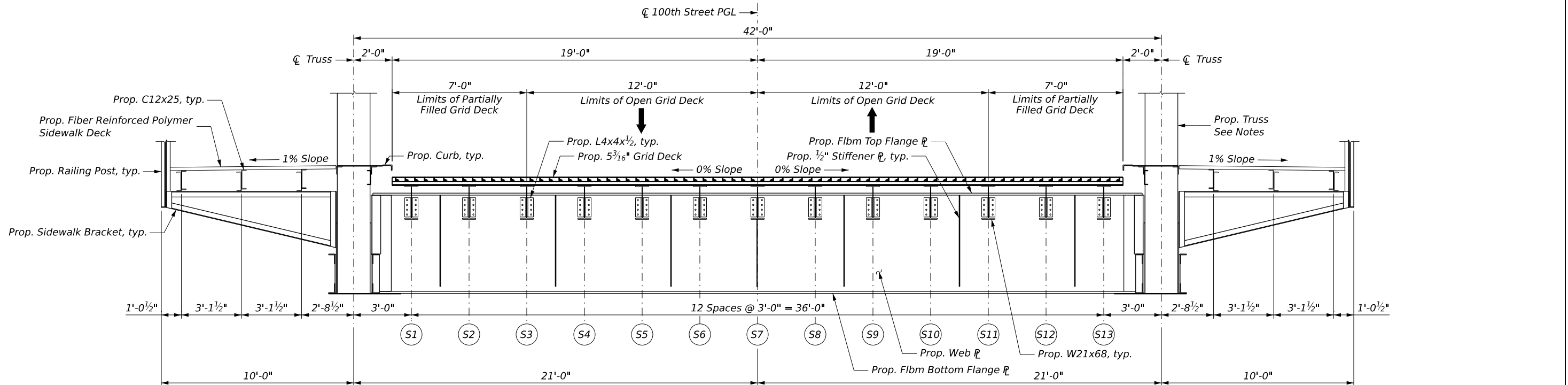
SHEET S-01 OF S-06 SHEETS

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**TYPICAL EXISTING CROSS SECTION
AT MOVABLE SPAN**
(Looking East)
(Symmetrical About \bar{C} Bridge)
(West Leaf Shown, East Leaf Similar)

**TYPICAL EXISTING CROSS SECTION
AT FLOORBEAMS 0, 2, 4, 6, 8, 10, & 12**
(Looking East)
(Symmetrical About \bar{C} Bridge)
(West Leaf Shown, East Leaf Similar)



**TYPICAL PROPOSED CROSS SECTION
AT FLOORBEAMS 0, 2, 4, 6, 8, 10, & 12**
(Looking East)
(West Leaf Shown, East Leaf Similar)

**BRIDGE CROSS SECTIONS - SPAN 3 AT FLOORBEAMS 0 THRU 12
100TH STREET OVER THE CALUMET RIVER
PUBLIC WATER
F.A.U. ROUTE 1570 - SECTION 18-E8308-00-BR
COOK COUNTY
STATION 8+83.64
STRUCTURE NO. 016-6042**

FLOORBEAM TABLE					
FLBM NO.	DEPTH (IN.)	TOP & BOTTOM FLANGE \bar{F}		WEB \bar{F}	
		THICKNESS (IN.)	WIDTH (IN.)	THICKNESS (IN.)	DEPTH (IN.)
0	62 $\frac{1}{2}$	1 $\frac{1}{4}$	12	$\frac{3}{8}$	60
2, 4, 6, 8, 10	62 $\frac{1}{2}$	1 $\frac{1}{4}$	12	$\frac{3}{8}$	60
12	81 $\frac{15}{16}$	1 $\frac{1}{4}$	12	$\frac{3}{8}$	79 $\frac{7}{16}$

- Notes:
- For limits of in-kind movable span replacement, see Sheet S-01 and S-05.
 - Stringers S1 to S13 on the movable span are to be W21x68 members between Flbm 0 and Flbm 12, and W24x84 members between Flbm 12 and Flbm 14.

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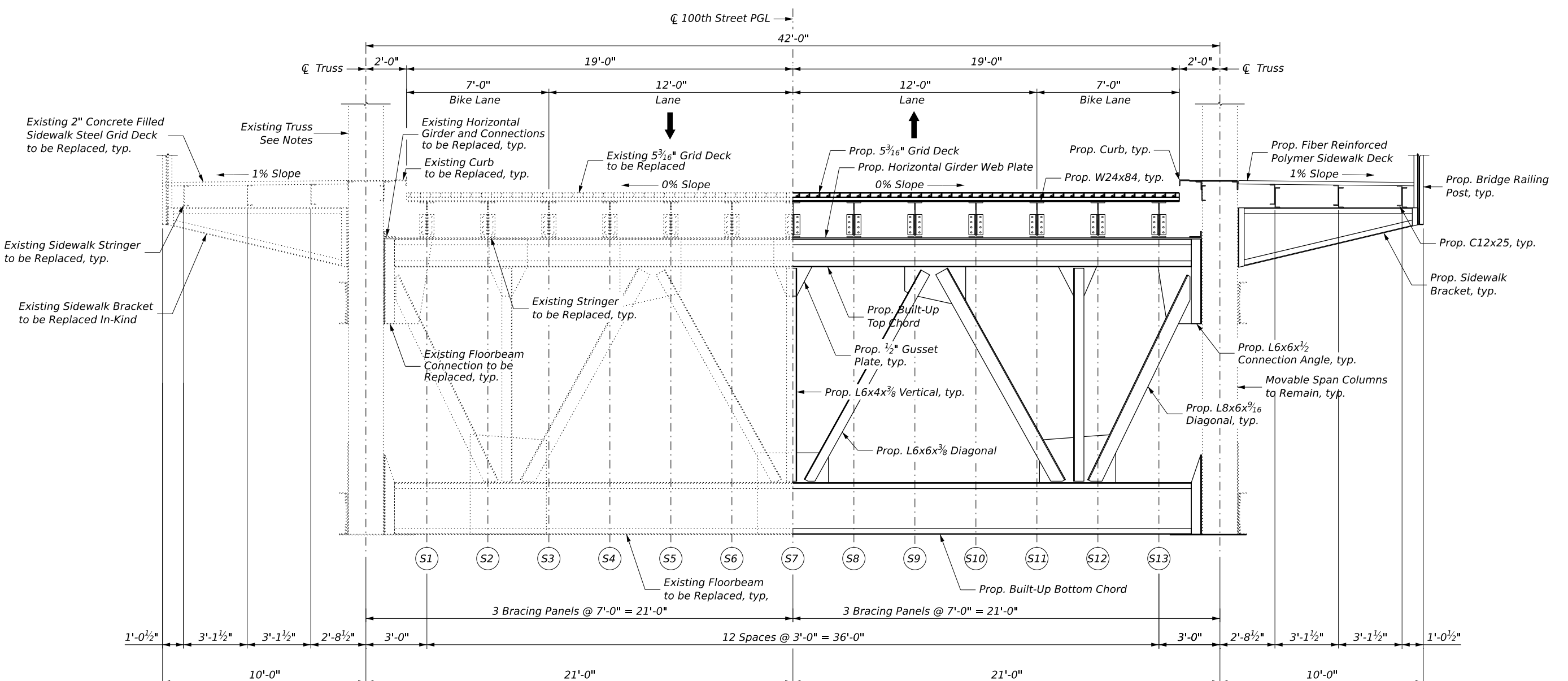
**CHICAGO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING**

**BRIDGE CROSS SECTIONS I
STRUCTURE NO. 016-6042**

SHEET S-02 OF S-06 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1570	18-E8308-00-BR	COOK	6	2

ILLINOIS FED. AID PROJECT



TYPICAL EXISTING CROSS SECTION
SPAN 3 AT FLOORBEAM 14
 (Looking East)
 (Symmetrical About ζ Bridge)
 (West Leaf Shown, East Leaf Similar)

TYPICAL PROPOSED CROSS SECTION
SPAN 3 AT FLOORBEAM 14
 (Looking East)
 (Symmetrical About ζ Bridge)
 (West Leaf Shown, East Leaf Similar)

WATERWAY INFORMATION

Drainage Area = N/A *		Low Beam Elevation = 16'-6"								
Flood	Freq. Yr.	Q C.F.S.	Opening Sq. Ft.		Nat. H.W.E.		Head - Ft.		Headwater El.	
			Exist.	Prop.	CCD	IGLD85	Exist.	Prop.	Exist.	Prop.
Design	50				4.31**	582.95**				
Base	100				4.51**	583.15**				
Overtopping	>500				***					
Max. Calc.										

Note: Water level flows from Lake Michigan at mouth of Calumet River. The maximum historic water level at Calumet Harbor is 4.85 CCD based on Station 9087044 (May 31, 1998).

* Calmet River flows inland from Lake Michigan.
 ** Based on FEMA FIRM Panel Number 17031C0656K Revised September 10, 2021, Panel Number 17031C0658J Revised August 19, 2008 and FIS 17031CV004J Revised September 10, 2021, Table 16, Transect 119.
 *** Cannot overtop.

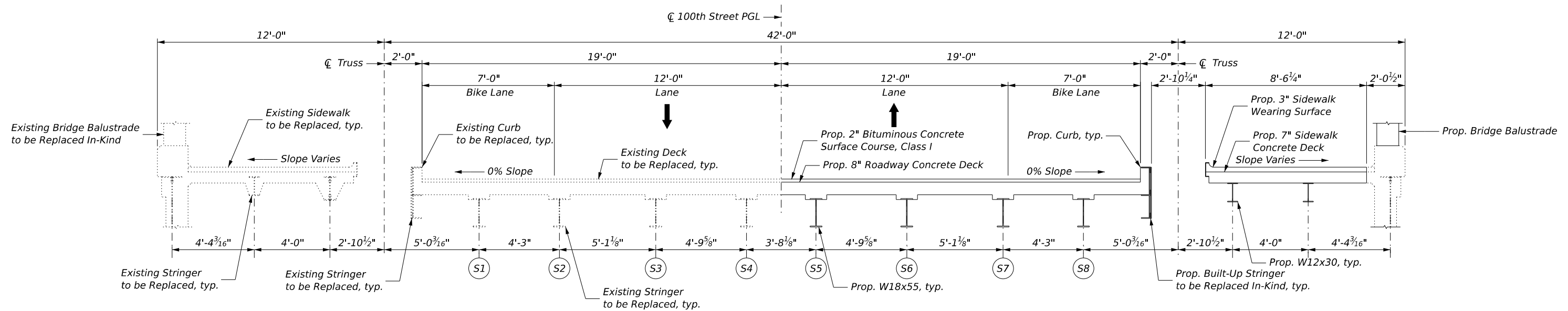
Geometry of existing substructure will not be modified. The waterway opening clear width will not be altered.
 Conversion between NAVD 88, IGLD 85 and CCD datum:
 0.00 CCD = +579.19 NAVD 88 = +578.64 IGLD 85

Notes:
 1. For limits of in-kind movable span replacement, see Sheet S-01 and S-05.

BRIDGE CROSS SECTIONS - SPAN 3 AT FLOORBEAM 14
100TH STREET OVER THE CALUMET RIVER
PUBLIC WATER
F.A.U. ROUTE 1570 - SECTION 18-E8308-00-BR
COOK COUNTY
STATION 8+83.64
STRUCTURE NO. 016-6042

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	USER NAME = _____	DESIGNED - CEB/DSD	REVISED - _____	CHICAGO DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING	BRIDGE CROSS SECTIONS II STRUCTURE NO. 016-6042	F.A.U. RTE. = 1570	SECTION = 18-E8308-00-BR	COUNTY = COOK	TOTAL SHEETS = 6	SHEET NO. = 3	
	PLOT SCALE = _____	DRAWN - CEB/DSD	REVISED - _____			SHEET S-03 OF S-06 SHEETS	ILLINOIS FED. AID PROJECT				
	PLOT DATE = _____	CHECKED - AZ	REVISED - _____								



TYPICAL EXISTING CROSS SECTION

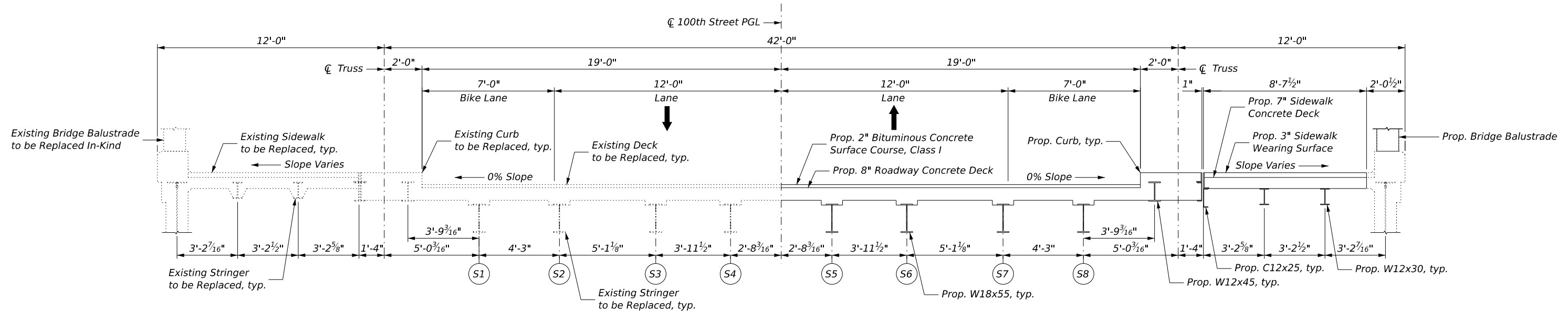
FIXED SPANS 2 & 4

(Sta. 7+33.89 to Sta. 7+78.89 & Sta. 9+88.39 to Sta. 10+33.39)
 (Span 2 Shown, Span 4 Similar)
 (Looking East)
 (Symmetrical About ζ Bridge)
 (Operator House Not Shown for Clarity)

TYPICAL PROPOSED CROSS SECTION

FIXED SPANS 2 & 4

(Sta. 7+33.89 to Sta. 7+78.89 & Sta. 9+88.39 to Sta. 10+33.39)
 (Span 2 Shown, Span 4 Similar)
 (Looking East)
 (Symmetrical About ζ Bridge)
 (Operator House Not Shown for Clarity)



TYPICAL EXISTING CROSS SECTION

FIXED SPANS 1 & 5

(Sta. 7+21.89 to Sta. 7+33.89 & Sta. 10+33.39 to Sta. 10+45.39)
 (Span 1 Shown, Span 5 Similar)
 (Looking East)
 (Symmetrical About ζ Bridge)
 (Operator House Not Shown for Clarity)

TYPICAL PROPOSED CROSS SECTION

FIXED SPANS 1 & 5

(Sta. 7+21.89 to Sta. 7+33.89 & Sta. 10+33.39 to Sta. 10+45.39)
 (Span 1 Shown, Span 5 Similar)
 (Looking East)
 (Symmetrical About ζ Bridge)
 (Operator House Not Shown for Clarity)

BRIDGE CROSS SECTIONS - FIXED SPANS
100TH STREET OVER THE CALUMET RIVER
PUBLIC WATER
F.A.U. ROUTE 1570 - SECTION 18-E8308-00-BR
COOK COUNTY
STATION 8+83.64
STRUCTURE NO. 016-6042

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	CHECKED - AZ	REVISED -

CHICAGO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

BRIDGE CROSS SECTIONS III
STRUCTURE NO. 016-6042
 SHEET S-04 OF S-06 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1570	18-E8308-00-BR	COOK	6	4

STAGE 1 PREP WORK:

1. Remove fixed span deck and stringers to provide pit access for installing counterweight shoring and Stage III materials.
2. Install a temporary shoring tower in the bridge pit to shore the counterweight. Shoring to remain in place until Stage IV.
3. Begin existing electrical system replacement.

STAGE II DEMOLISH STRUCTURE:

1. Position barge below river span and engage truss.
2. Torch cut truss at U15-U13, U15-L12, U13-L12 and L12-L10. Float out river span.
 - a. Continuously brace and shore the remaining portions of the truss as necessary during all construction processes.
3. Remove remainder of fixed span deck and framing.

STAGE III REBUILD TAIL SPAN:

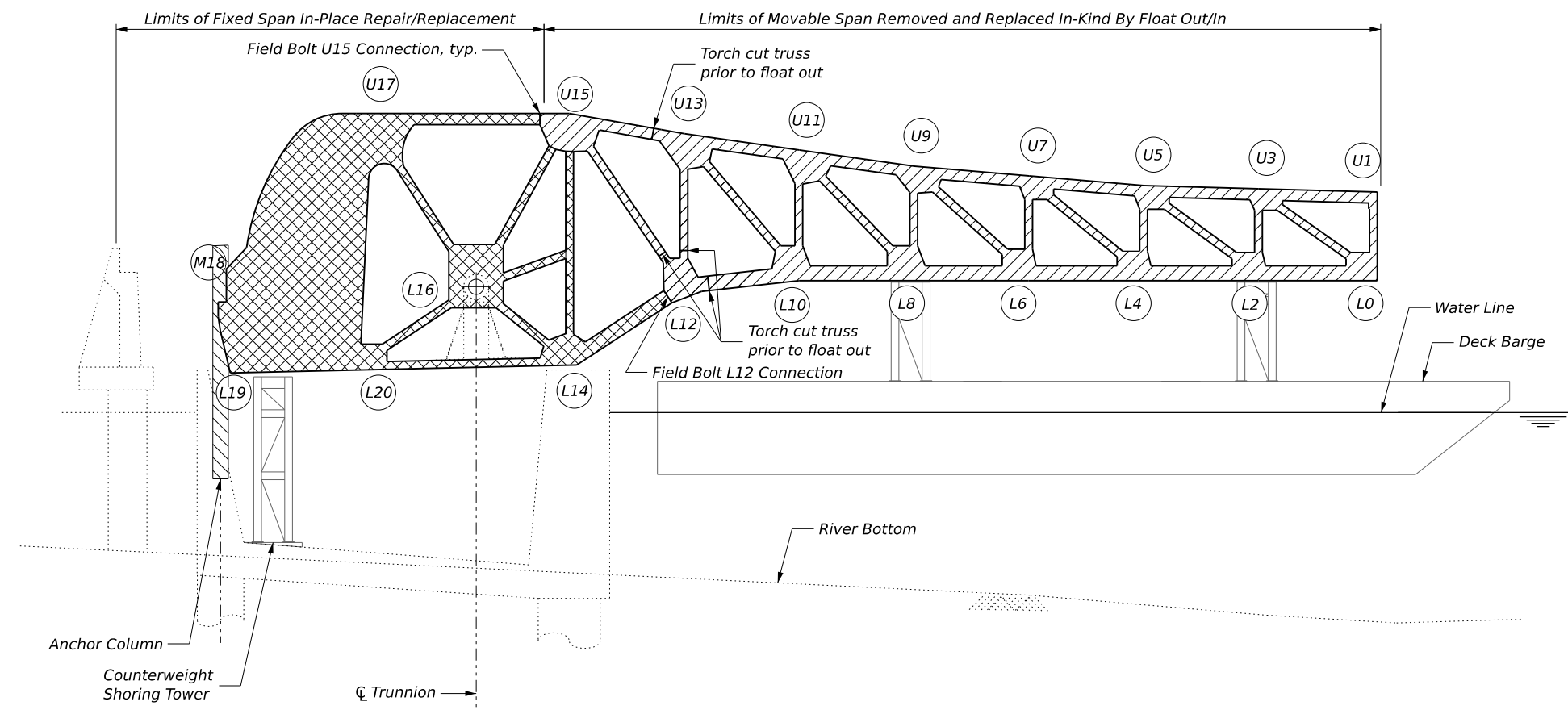
1. Rebuild truss tail portion supported on the temporary shoring tower.
2. Perform repairs/upgrades of the existing mechanical elements, existing architectural elements, and existing bridge substructure elements.

STAGE IV FLOAT IN RIVER SPAN:

1. Float in and install the truss river arm from U1/L0 to U15/L12, including the floor framing system, deck, and lateral bracing from Panel Points L0 to L8.
 - a. Continuously brace and shore the truss as necessary during all construction processes.
2. Install floor framing system between Panel Points L12 to the rear break. Fully detail truss.
3. Complete electrical system replacement.
4. Install center lock.
5. Remove counterweight shoring.
6. Install fixed span floor framing and deck.
7. Balance and test bridge.
8. Open movable leaf.

LEGEND:

-  Structural Improvement: Truss Section to be Removed and Replaced In-Kind
-  Structural Improvement: Anchor Column to be Rehabilitated
-  Structural Improvement: Truss Section Repairs in Place



BRIDGE TRUSS REPAIR/REPLACEMENT LIMITS

(West Leaf Looking North)
 (East Leaf Opposite Hand)
 (Additional Superstructure Details Not Shown for Clarity.)

CONSTRUCTION SEQUENCE
100TH STREET OVER THE CALUMET RIVER
PUBLIC WATER
F.A.U. ROUTE 1570 - SECTION 18-E8308-00-BR
COOK COUNTY
STATION 8+83.64
STRUCTURE NO. 016-6042

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USER NAME =	DESIGNED - SZ/EC	REVISED -
CHECKED - AZ	REVISIONS -	
PLOT SCALE =	DRAWN - SZ/EC	REVISED -
PLOT DATE =	CHECKED - AZ	REVISED -

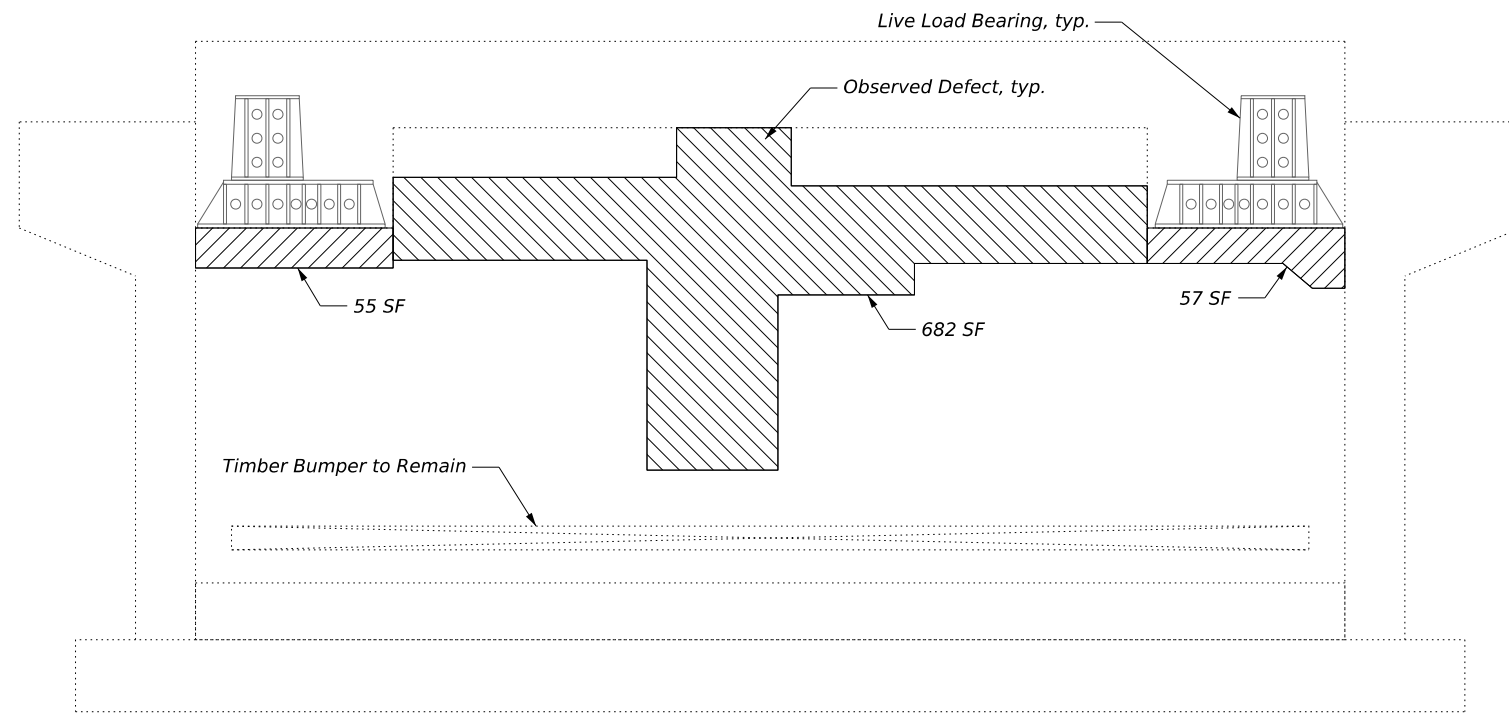
CHICAGO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

CONSTRUCTION SEQUENCE
STRUCTURE NO. 016-6042

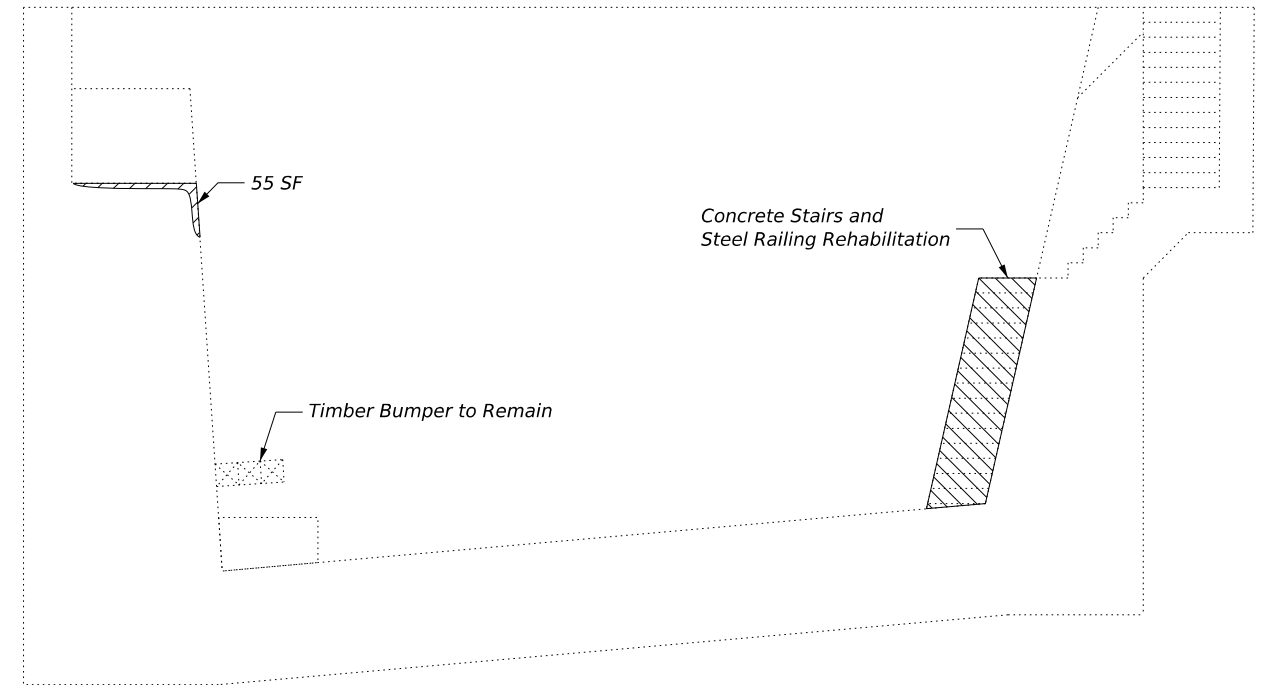
SHEET S-05 OF S-06 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1570	18-E8308-00-BR	COOK	6	5

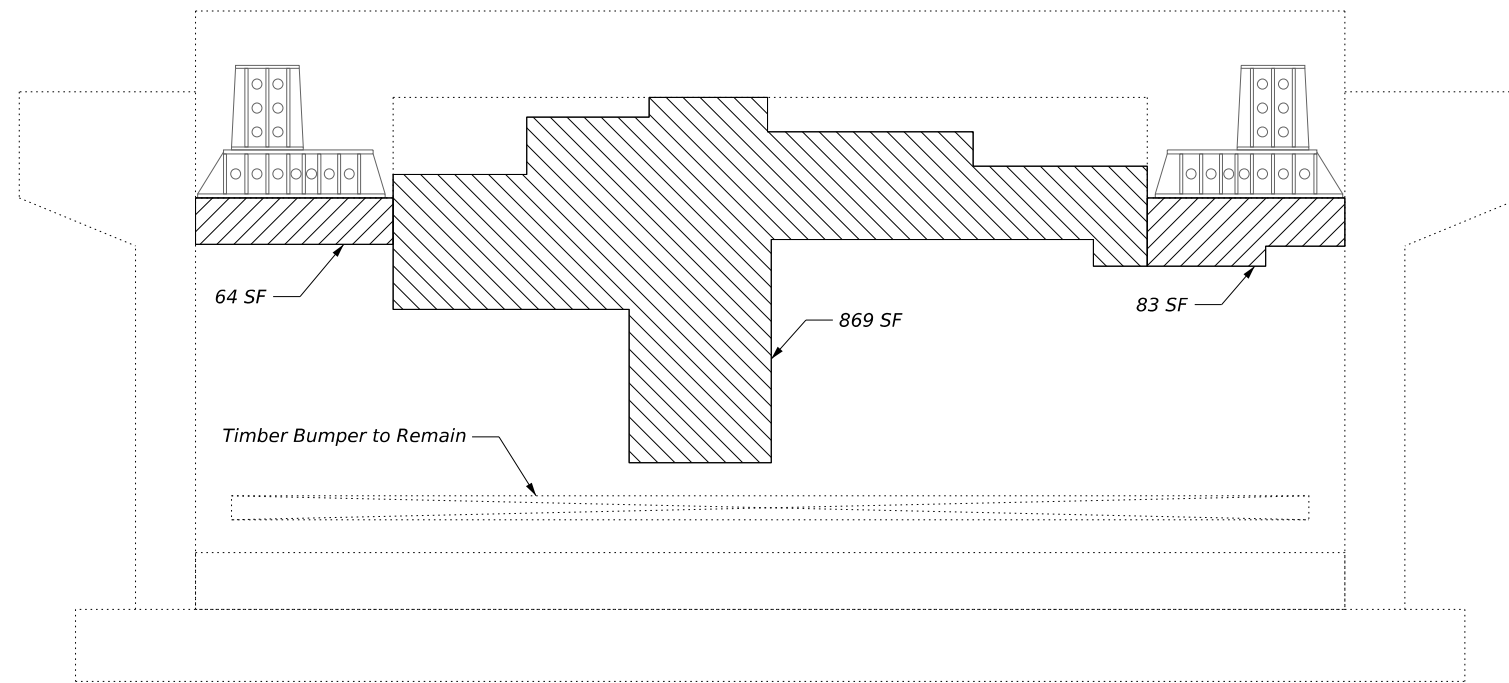
ILLINOIS FED. AID PROJECT



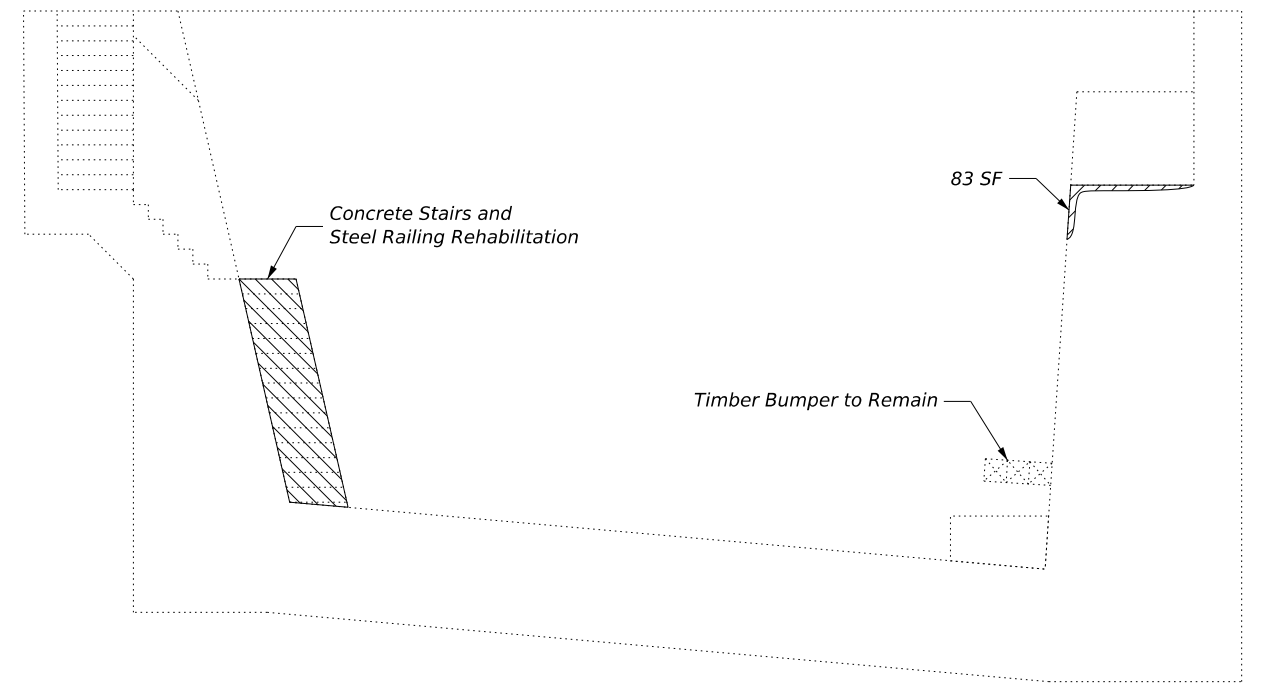
EAST RIVER PIER WALL
(Looking West)
Caissons not shown for clarity.



EAST RIVER PIER WALL
(Looking North)
Caissons not shown for clarity.

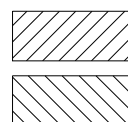


WEST RIVER PIER WALL
(Looking East)
Caissons not shown for clarity.



WEST RIVER PIER WALL
(Looking North)
Caissons not shown for clarity.

LEGEND:



Area of Distressed Concrete Requiring Structural Repair of Concrete and Anchor Bolt Repair

Area of Distressed Concrete Requiring Structural Repair of Concrete

SUBSTRUCTURE REPAIRS
100TH STREET OVER THE CALUMET RIVER
PUBLIC WATER
F.A.U. ROUTE 1570 - SECTION 18-E8308-00-BR
COOK COUNTY
STATION 8+83.64
STRUCTURE NO. 016-6042

MODEL: 0990101-62M79-S06
FILE NAME: pwr/hardesty-pw-bentley.com/hardesty-pw-01/Documents/0514/CADD/Structural/S01-6114-General Plan and Elevation.dgn



USER NAME =	DESIGNED - SZ/EC	REVISED -
CHECKED - AZ	REVISIONS -	
PLOT SCALE =	DRAWN - SZ/EC	REVISED -
PLOT DATE =	CHECKED - AZ	REVISED -

CHICAGO DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING

SUBSTRUCTURE REPAIRS
STRUCTURE NO. 016-6042

SHEET S-06 OF S-06 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1570	18-E8308-00-BR	COOK	6	6

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